

ENG

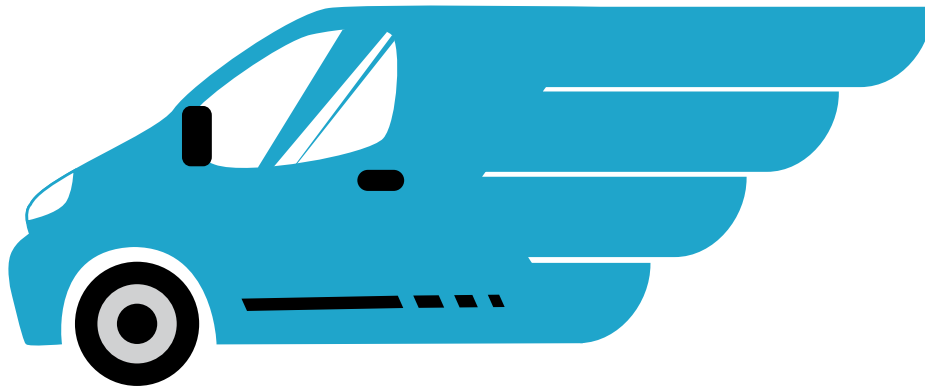
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CONTROLLERS AND PROGRAMMERS

a	BASIC SERIES		VALUE SERIES		PERFORMANCE SERIES	
	SINGLE LOOP					
	Double display		Double/Triple Display		Double display	
		Controllers /Valve controllers Programmers			Valve controllers - Programmers	
						
	1300	1350	1800	1800V	1800P	
						
	1200	1250	1600	1600V	1600P	
						
	450	600	650	800	800V	800P
		600 OF				
Cold, Plastics, Packaging, Laboratory furnaces, Chillers, Life Science				Furnaces, plants, process industry, test benches, laboratory equipment, life science		

a

MULTIFUNCTION SERIES				
SINGLE LOOP	MULTILOOP			
Triple display	LCD Display Graphic touch screen			
High speed - accuracy	Programmers with Data Logger	Controllers with Data Logger		
FIELDBUS*				
				169x120 mm
				96x96 mm (1/4 DIN)
				48x96 mm (1/8 DIN)
				48x48 mm (1/16 DIN)
				90x45x45 mm (Open frame)
				25x140x140 mm (DIN bar)
Plastics, textile, process	Furnaces, heat treatments, climatic chambers, food, process heat			

CONTROLLERS AND PROGRAMMERS

48x48x99 faceplate version

Basic models

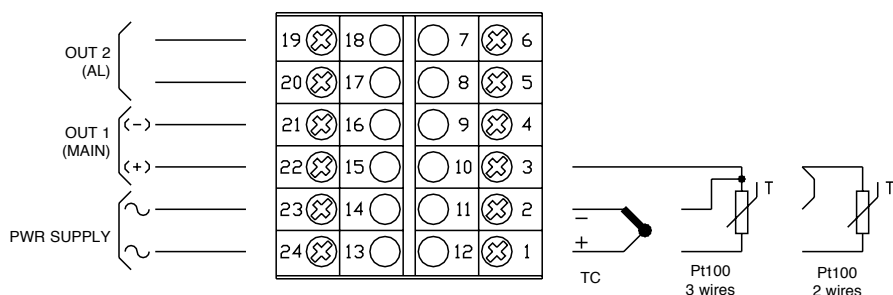
450



DOUBLE DISPLAY CONFIGURABLE CONTROLLER

Microprocessor temperature controller, configurable from faceplate keys. Universal input, 4-digit double display, two outputs.

- Inputs: TC, RTD
- Faceplate protection: IP65
- Control: PID heat/cool
- Configurable alarms



CE UL pending

Outputs	Power supply	Order code	SAP/METEL code	
1 relay + 1 logic	11..27Vac/Vdc	450-D-R-0	F056775	A
1 relay + 1 logic	100..240Vac/Vdc	450-D-R-1	F056773	A
2 relays	11..27Vac/Vdc	450-R-R-0	F056776	A
2 relays	100..240Vac/Vdc	450-R-R-1	F056774	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

48x48x99 faceplate version

Value models

600



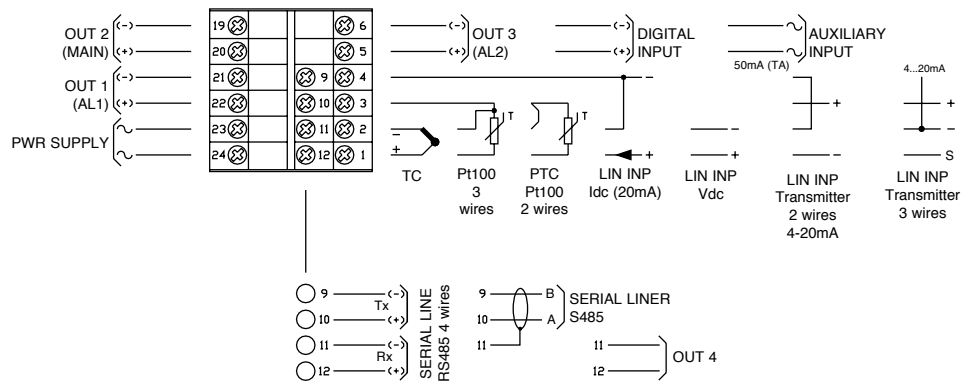
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CONTROLLER WITH CONFIGURABLE ALARMS

Microprocessor controller, configurable from faceplate keys. Universal input, 4-digit double display.



- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Faceplate protection: IP65
- Control: PID heat/cool
- Analog output
- RS485



CE UL

Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code	
2 relays + 1 logic	-		20..27Vac/Vdc	600-R-D-R-0-0	F000537	
2 relays + 1 logic	-		100..240Vac/Vdc	600-R-D-R-0-1	F000060	A
3 relays	-		20..27Vac/Vdc	600-R-R-R-0-0	F023397	
3 relays	-		100..240Vac/Vdc	600-R-R-R-0-1	F000053	A
3 relays + 1 logic	-		20..27Vac/Vdc	600-R-D-R-R-0	F000538	A
3 relays + 1 logic	-		100..240Vac/Vdc	600-R-D-R-R-1	F000540	
4 relays	-		20..27Vac/Vdc	600-R-R-R-R-0	F000519	
4 relays	-		100..240Vac/Vdc	600-R-R-R-R-1	F000522	A
1 relay + 1 logic	Analog output		20..27Vac/Vdc	600-R-D-W-0-0	F026524	
1 relay + 1 logic	Analog output		100..240Vac/Vdc	600-R-D-W-0-1	F000546	
2 relays + 1 logic	Analog output		20..27Vac/Vdc	600-R-D-W-R-0	F027407	
2 relays + 1 logic	Analog output		100..240Vac/Vdc	600-R-D-W-R-1	F031074	
2 relays	Analog output		20..27Vac/Vdc	600-R-R-W-0-0	F026579	A
2 relays	Analog output		100..240Vac/Vdc	600-R-R-W-0-1	F000056	A
3 relays	Analog output		20..27Vac/Vdc	600-R-R-W-R-0	F027158	
3 relays	Analog output		100..240Vac/Vdc	600-R-R-W-R-1	F027849	
1 relay + 1 logic	TA input		20..27Vac/Vdc	600-R-D-H-0-0	F026417	
1 relay + 1 logic	TA input		100..240Vac/Vdc	600-R-D-H-0-1	F026756	
2 relays + 1 logic	TA input		20..27Vac/Vdc	600-R-D-H-R-0	F027394	
2 relays + 1 logic	TA input		100..240Vac/Vdc	600-R-D-H-R-1	F000550	
2 relays + 1 logic	-	RS485	20..27Vac/Vdc	600-R-D-R-2-0	F032295	
2 relays + 1 logic	-	RS485	100..240Vac/Vdc	600-R-D-R-2-1	F000061	A
2 relays	Analog output	RS485	20..27Vac/Vdc	600-R-R-W-2-0	F000525	
2 relays	Analog output	RS485	100..240Vac/Vdc	600-R-R-W-2-1	F000527	

All configurations can be seen on www.gefran.com

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650



PID 1/16 DIN TEMPERATURE CONTROLLERS

PID controller with LCD operator interface, universal input, white/green 4- and 5-digit double display.

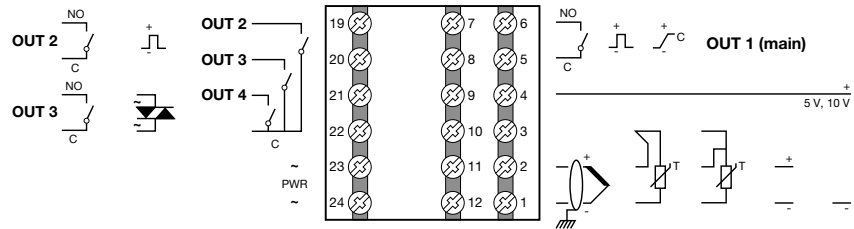
Configurable scrolling messages.

Counters for KWh and number of output cycles.

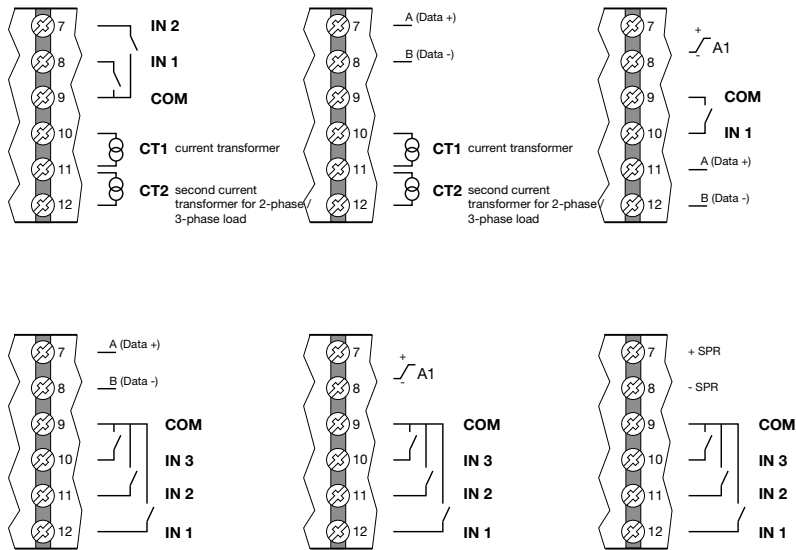
Configurable logic functions

Valve control models and setpoint programmer models.

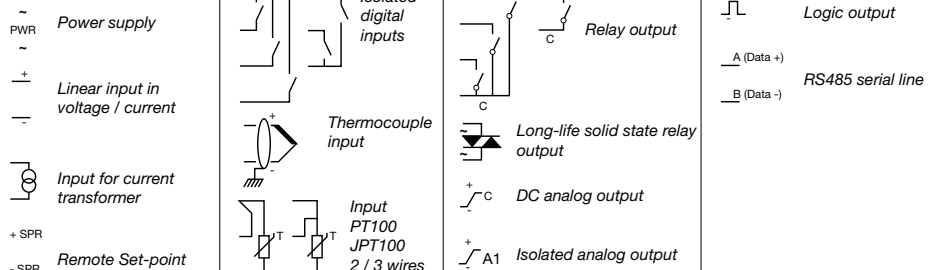
- Inputs TC, RTD, mV, V, mA linear inputs
- Faceplate protection: IP65
- Control: PID heat/cool
- Isolated analog output
- RS485



OPTIONS



LEGEND



Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
1 Logic + 1 Relay			20...27Vac/dc	650-D-R00-00000-0-G	F065795
1 Logic + 1 Relay			100...240Vac/dc	650-D-R00-00000-1-G	F060558
2 Relays			20...27Vac/dc	650-R-R00-00000-0-G	F065796
2 Relays			100...240Vac/dc	650-R-R00-00000-1-G	F059574
1 Logic + 1 Relay	1 TA input + 2 digital inputs		20...27Vac/dc	650-D-R00-00120-0-G	F065797
1 Logic + 1 Relay	1 TA input + 2 digital inputs		100...240Vac/dc	650-D-R00-00120-1-G	F060566
1 Logic + 2 Relays			20...27Vac/dc	650-D-RR0-00000-0-G	F065798
1 Logic + 2 Relays			100...240Vac/dc	650-D-RR0-00000-1-G	F060562
3 Relays			20...27Vac/dc	650-R-RR0-00000-0-G	F065799
3 Relays			100...240Vac/dc	650-R-RR0-00000-1-G	F065788
1 Logic + 2 Relays	3 digital inputs		20...27Vac/dc	650-D-RR0-00030-0-G	F065801
1 Logic + 2 Relays	3 digital inputs		100...240Vac/dc	650-D-RR0-00030-1-G	F065790
1 Logic + 2 Relays	2 TA inputs		20...27Vac/dc	650-D-RR0-00200-0-G	F065802
1 Logic + 2 Relays	2 TA inputs		100...240Vac/dc	650-D-RR0-00200-1-G	F060567
2 Relays	1 Isolated analog mA		20...27Vac/dc	650-C-RR0-00000-0-G	F065803
2 Relays	1 Isolated analog mA		100...240Vac/dc	650-C-RR0-00000-1-G	F060564
1 Logic + 1 Relay	1 Isolated analog V/mA + 3 digital inputs		20...27Vac/dc	650-D-R00-01030-0-G	F065804
1 Logic + 1 Relay	1 Isolated analog V/mA + 3 digital inputs		100...240Vac/dc	650-D-R00-01030-1-G	F060573
2 Relays	1 Isolated analog V/mA + 3 digital inputs		20...27Vac/dc	650-R-R00-01030-0-G	F065805
2 Relays	1 Isolated analog V/mA + 3 digital inputs		100...240Vac/dc	650-R-R00-01030-1-G	F065791
3 Relays	1 TA input	RS485	20...27Vac/dc	650-R-RR0-00101-0-G	F065806
3 Relays	1 TA input	RS485	100...240Vac/dc	650-R-RR0-00101-1-G	F060574
1 Logic + 3 Relays			20...27Vac/dc	650-D-RRR-00000-0-G	F065807
1 Logic + 3 Relays			100...240Vac/dc	650-D-RRR-00000-1-G	F060563
4 Relays			20...27Vac/dc	650-R-RRR-00000-0-G	F065808
4 Relays			100...240Vac/dc	650-R-RRR-00000-1-G	F065792

All configurations can be seen on www.gefran.com

Accessories	Description	Order code	SAP/METEL code
	Cable for programming with PC, USB-TTL 3V with USB-microUSB connectors, length 1.8 m.		F060800
	Zapper portable battery-powered configurator, complete with cable.	GF_ZAP	F060908
	GF_eXpress software on CD-ROM, complete with cable for programming with PC, USB-TTL 3V with USB-microUSB connectors, length 1.8 m.	GF_eXK-3-0-0	F060909

A= high rotating codes available on stock. For the remainig codes into the catalogue, we kindly suggest you to contact Gefran sales team

CONTROLLERS AND PROGRAMMERS

48x48x129 faceplate version

Performance models

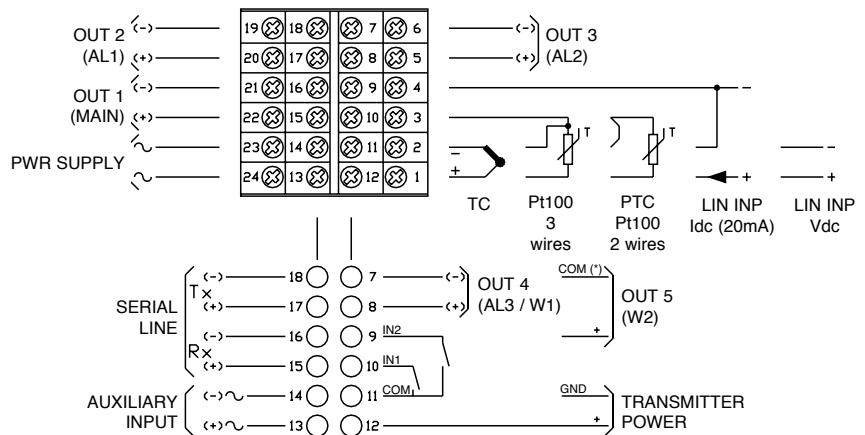
800



CONTROLLER

Microprocessor controller, IP65 faceplate protection, universal input, accuracy 0.2% f.s., heat/cool control, up to 4 relay or logic outputs, isolated analog outputs, 2 configurable digital inputs, setpoint input remote or from current transformer, RS485 / RS232C serial line Modbus or Cencal, 3 alarms, interrupted load alarm, selftuning, autotuning, softstart, manual/auto with bumpless, local/remote, multiset, set ramp, internal timer.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Faceplate protection: IP65
- Configurable alarms



(*) COM is on terminal 7 for OUT4 continuous (W1).
COM is on terminal 11 for OUT4 relay or logic.

Outputs	Special functions	Power supply	Order code	SAP/METEL code
3 relays + 1 logic	TA input	20..27Vac/Vdc	800-DRRR-00520	F058190
3 relays + 1 logic	TA input	100..240Vac/Vdc	800-DRRR-00521	F026850
4 relays	2 digital inputs + analog input	20..27Vac/Vdc	800-RRRR-03320	F058191
4 relays	2 digital inputs + analog input	100..240Vac/Vdc	800-RRRR-03321	F001157

All configurations can be seen on www.gefran.com

48x48x129 faceplate version

Performance models

800V



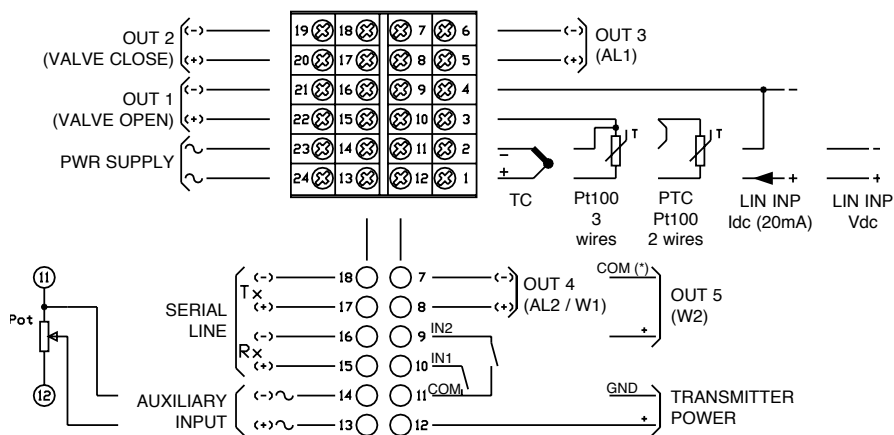
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CONTROLLER WITH VALVE CONTROL



Microprocessor controller for motorized valves, IP65 faceplate protection, universal input, accuracy 0.2% f.s., heat/cool control, open/close relay outputs, up to 2 alarm relay outputs, 2 configurable digital inputs, remote setpoint input, RS485 / RS232C serial line Modbus or Cencal, 3 alarms, interrupted load alarm, selftuning, autotuning, softstart, manual/auto with bumpless, local/remote, multiset, set ramp, internal timer.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Faceplate protection: IP65
- Open/close valve control
- 4 relay outputs
- 2 configurable alarms



(*) COM is on terminal 7 for OUT4 continuous (W1).
COM is on terminal 11 for OUT4 relay or logic..



Outputs	Special functions	Power supply	Order code	SAP/METEL code
4 relays	Valve position pot. input	20..27Vac/Vdc	800V-RRRR-03220	F058192
4 relays	Valve position pot. input	100..240Vac/Vdc	800V-RRRR-03221	F030979

All configurations can be seen on www.gefran.com

800P



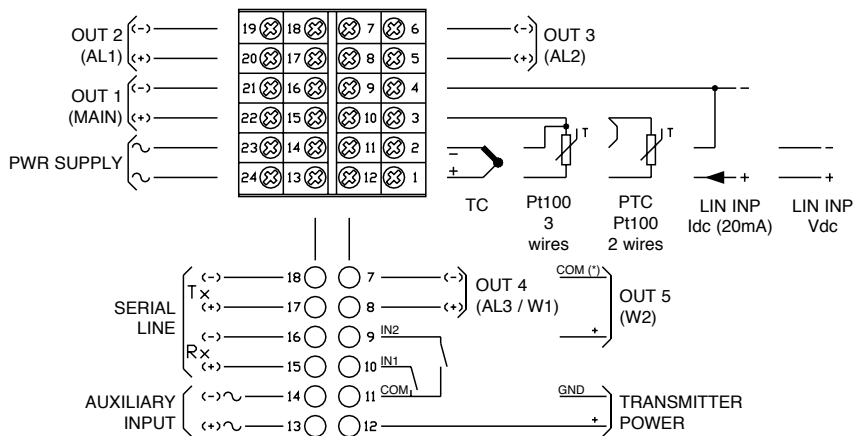
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CONTROLLER / PROGRAMMER

Microprocessor controller/programmer, format 48x48, IP65 faceplate protection, universal input, accuracy 0.2% f.s., heat/cool control, 2 relay outputs, 1 configurable logic output, 1 isolated analog output, 2 configurable digital inputs RS485 / RS232C serial line Modbus or Cencal, 3 alarms, 4 programs, up to 16 steps, 4 events, Hold back band, 4 control parameter groups.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Faceplate protection: IP65
- Configurable alarms



(*) COM is on terminal 7 for OUT4 continuous (W1).
COM is on terminal 11 for OUT4 relay or logic.



Outputs	Special functions	Power supply	Order code	SAP/METEL code
2 relays + 1 logic	2 digital inputs + analog input	20..27Vac/Vdc	800P-DRRI-04020	F058193
2 relays + 1 logic	2 digital inputs + analog input	100..240Vac/Vdc	800P-DRRI-04021	F058194

All configurations can be seen on www.gefran.com

48x96x113 faceplate version

Value models

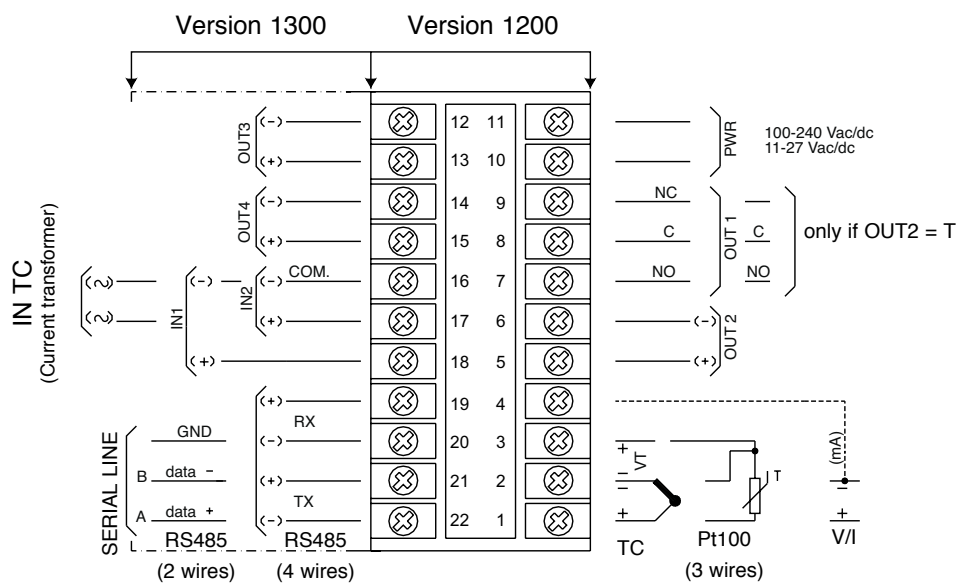
1200



CONFIGURABLE CONTROLLER

Microprocessor temperature controller configurable from faceplate keys, universal input, self-tuning, auto-tuning "one shot", 4-digit double display, IP65 faceplate protection, dimensions 48x96mm, RS485/RS232C serial line Modbus or Cencal.

- Inputs: TC, RTD, PTC, NTC, mV, V, mA
- Faceplate protection: IP65



Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
1 relay + 1 logic	-		11..27Vac/Vdc	1200-RD00-00-0-0	F026905 A
1 relay + 1 logic	-		100..240Vac/Vdc	1200-RD00-00-0-1	F023423 A
2 relays	-		11..27Vac/Vdc	1200-RR00-00-0-0	F023430 A
2 relays	-		100..240Vac/Vdc	1200-RR00-00-0-1	F023210 A
1 relay + 1 logic	-		11..27Vac/Vdc	1200-RD00-00-0-0	F026905 A
1 relay + 1 logic	-		100..240Vac/Vdc	1200-RD00-00-0-1	F023423 A
2 relays	-		11..27Vac/Vdc	1200-RR00-00-0-0	F023430 A
2 relays	-		100..240Vac/Vdc	1200-RR00-00-0-1	F023210 A
2 relays + 1 logic	-		20..27Vac/Vdc	1200-RDR0-00-0-0	F024902
2 relays + 1 logic	-		100..240Vac/Vdc	1200-RDR0-00-0-1	F024894 A
3 relays	-		20..27Vac/Vdc	1200-RRR0-00-0-0	F024903
3 relays	-		100..240Vac/Vdc	1200-RRR0-00-0-1	F023421 A
3 relays + 1 logic	-		20..27Vac/Vdc	1200-RDRR-00-0-0	F024904
3 relays + 1 logic	-		100..240Vac/Vdc	1200-RDRR-00-0-1	F024897
4 relays	-		20..27Vac/Vdc	1200-RRRR-00-0-0	F026419
4 relays	-		100..240Vac/Vdc	1200-RRRR-00-0-1	F023422 A
1 relay + 1 logic	Analog output		20..27Vac/Vdc	1200-RDW0-00-0-0	F033976
1 relay + 1 logic	Analog output		100..240Vac/Vdc	1200-RDW0-00-0-1	F026723
2 relays + 1 logic	Analog output		20..27Vac/Vdc	1200-RDWR-00-0-0	F042269
2 relays + 1 logic	Analog output		100..240Vac/Vdc	1200-RDWR-00-0-1	F027435

CONTROLLERS AND PROGRAMMERS

Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code	
2 relays	Analog output		20..27Vac/Vdc	1200-RRW0-00-0-0	F028520	
2 relays	Analog output		100..240Vac/Vdc	1200-RRW0-00-0-1	F023426	A
3 relays	Analog output		20..27Vac/Vdc	1200-RRWR-00-0-0	F024394	
3 relays	Analog output		100..240Vac/Vdc	1200-RRWR-00-0-1	F027053	
1 relay + 1 logic	TA input		20..27Vac/Vdc	1200-RD00-02-0-0	F041232	
1 relay + 1 logic	TA input		100..240Vac/Vdc	1200-RD00-02-0-1	F027054	
2 relays + 1 logic	TA input		20..27Vac/Vdc	1200-RDR0-02-0-0	F043044	
2 relays + 1 logic	TA input		100..240Vac/Vdc	1200-RDR0-02-0-1	F024895	
2 relays + 1 logic	-	RS485	20..27Vac/Vdc	1200-RDR0-00-2-0	F028285	
2 relays + 1 logic	-	RS485	100..240Vac/Vdc	1200-RDR0-00-2-1	F026418	
2 relays	Analog output	RS485	20..27Vac/Vdc	1200-RRW0-00-2-0	F046971	
2 relays	Analog output	RS485	100..240Vac/Vdc	1200-RRW0-00-2-1	F029297	
3 relays + 1 logic	TA input	RS485	20..27Vac/Vdc	1200-RDRR-02-2-0	F051729	
3 relays + 1 logic	TA input	RS485	100..240Vac/Vdc	1200-RDRR-02-2-1	F024900	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

48X96X80 faceplate version

Value models

1250



a



PID 1/8 DIN TEMPERATURE CONTROLLERS

PID controller with LCD operator interface, universal input, PID controller with LCD operator interface, universal input, white/green/amber 4- and 5-digit triple display with bar-graph.

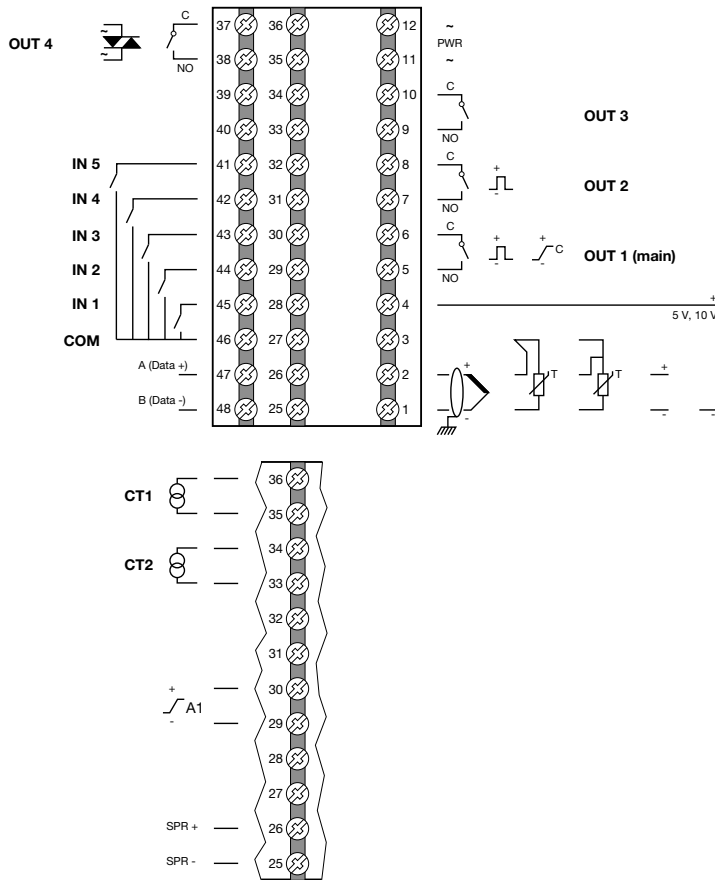
Configurable scrolling messages.

Counters for KWh and number of output cycles.

Configurable logic functions

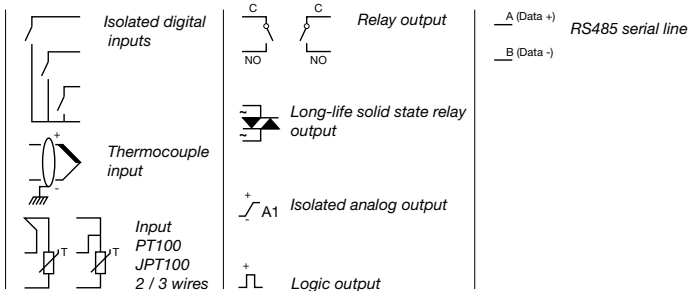
Valve control models and setpoint programmer models.

- Inputs TC, RTD, mV, V, mA linear inputs
- Faceplate protection: IP65
- Control: PID heat/cool
- Isolated analog output
- RS485



LEGEND

- ~ PWR Power supply
- + Linear input in voltage/current
- ⊗ Input for current transformer
- SPR + Remote Set-point
- SPR - Remote Set-point



CONTROLLERS AND PROGRAMMERS

Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
1 Logic + 1 Relay			20...27Vac/dc	1250-D-R00-00000-0-G	F060861
1 Logic + 1 Relay			100...240Vac/dc	1250-D-R00-00000-1-G	F060836
2 Relays			20...27Vac/dc	1250-R-R00-00000-0-G	F060862
2 Relays			100...240Vac/dc	1250-R-R00-00000-1-G	F060837
1 Logic + 1 Relay	1 TA input + 5 digital inputs		20...27Vac/dc	1250-D-R00-00150-0-G	F060863
1 Logic + 1 Relay	1 TA input + 5 digital inputs		100...240Vac/dc	1250-D-R00-00150-1-G	F060838
1 Logic + 2 Relays			20...27Vac/dc	1250-D-RR0-00000-0-G	F060864
1 Logic + 2 Relays			100...240Vac/dc	1250-D-RR0-00000-1-G	F060839
3 Relays			20...27Vac/dc	1250-R-RR0-00000-0-G	F060865
3 Relays			100...240Vac/dc	1250-R-RR0-00000-1-G	F060840
1 Logic + 2 Relays	5 digital inputs		20...27Vac/dc	1250-D-RR0-00050-0-G	F060866
1 Logic + 2 Relays	5 digital inputs		100...240Vac/dc	1250-D-RR0-00050-1-G	F060841
1 Logic + 2 Relays	2 TA inputs		20...27Vac/dc	1250-D-RR0-00200-0-G	F060867
1 Logic + 2 Relays	2 TA inputs		100...240Vac/dc	1250-D-RR0-00200-1-G	F060842
2 Relays	1 Isolated analog mA		20...27Vac/dc	1250-C-RR0-00000-0-G	F060868
2 Relays	1 Isolated analog mA		100...240Vac/dc	1250-C-RR0-00000-1-G	F060843
1 Logic + 1 Relay	1 Isolated analog V/mA + 5 digital inputs		20...27Vac/dc	1250-D-R00-01050-0-G	F060869
1 Logic + 1 Relay	1 Isolated analog V/mA + 5 digital inputs		100...240Vac/dc	1250-D-R00-01050-1-G	F060844
2 Relays	1 Isolated analog V/mA + 5 digital inputs		20...27Vac/dc	1250-R-R00-01050-0-G	F060870
2 Relays	1 Isolated analog V/mA + 5 digital inputs		100...240Vac/dc	1250-R-R00-01050-1-G	F060845
3 Relays	1 TA input	RS485	20...27Vac/dc	1250-R-RR0-00101-0-G	F060871
3 Relays	1 TA input	RS485	100...240Vac/dc	1250-R-RR0-00101-1-G	F060846
1 Logic + 3 Relays			20...27Vac/dc	1250-D-RRR-00000-0-G	F060872
1 Logic + 3 Relays			100...240Vac/dc	1250-D-RRR-00000-1-G	F060847
4 Relays			20...27Vac/dc	1250-R-RRR-00000-0-G	F060873
4 Relays			100...240Vac/dc	1250-R-RRR-00000-1-G	F060848

All configurations can be seen on www.gefran.com

Accessories	Description	Order code	SAP/METEL code
	Cable for programming with PC, USB-TTL 3V with USB-microUSB connectors, length 1.8 m.		F060800 A
	Zapper portable battery-powered configurator, complete with cable.	GF_ZAP	F060908
	GF_eXpress software on CD-ROM, complete with cable for programming with PC, USB-TTL 3V with USB-microUSB connectors, length 1.8 m.	GF_eXK-3-0-0	F060909

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

48x96x113 faceplate version

Performance models

1600



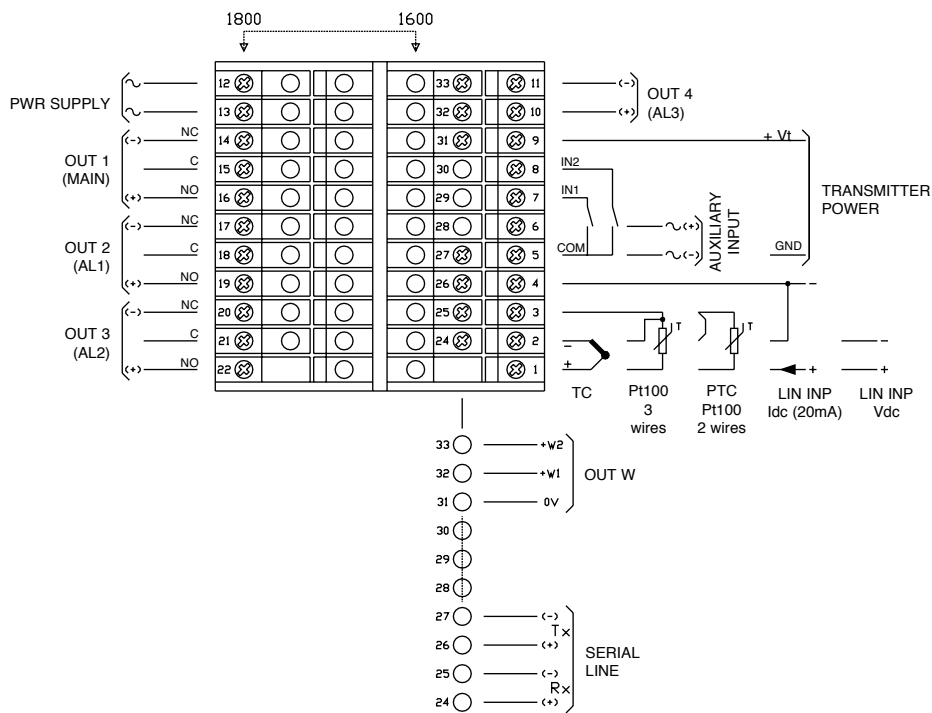
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CONTROLLER

Microprocessor controller, IP65 faceplate protection, universal input, accuracy 0.2% f.s., heat/cool control, up to 4 relay or logic outputs, up to 2 isolated analog outputs, 2 configurable digital inputs, setpoint input remote or from current transformer, RS485 / RS232C serial line Modbus or Cencal, 3 alarms, interrupted load alarm, selftuning, autotuning, softstart, manual/auto with bumpless, local/remote, multiset, set ramp, internal timer.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Faceplate protection: IP65
- Control: PID heat/cool
- Configurable alarms



CE UL

Outputs	Special functions	Power supply	Order code	SAP/METEL code
4 relays	2 digital inputs + analog input + 2 analog outputs	20..27Vac/Vdc	1600-RRRR11-1120	F058195
4 relays	2 digital inputs + analog input + 2 analog outputs	100..240Vac/Vdc	1600-RRRR11-1121	F001461

All configurations can be seen on www.gefran.com

CONTROLLERS AND PROGRAMMERS

48x96x113 faceplate version

Performance models

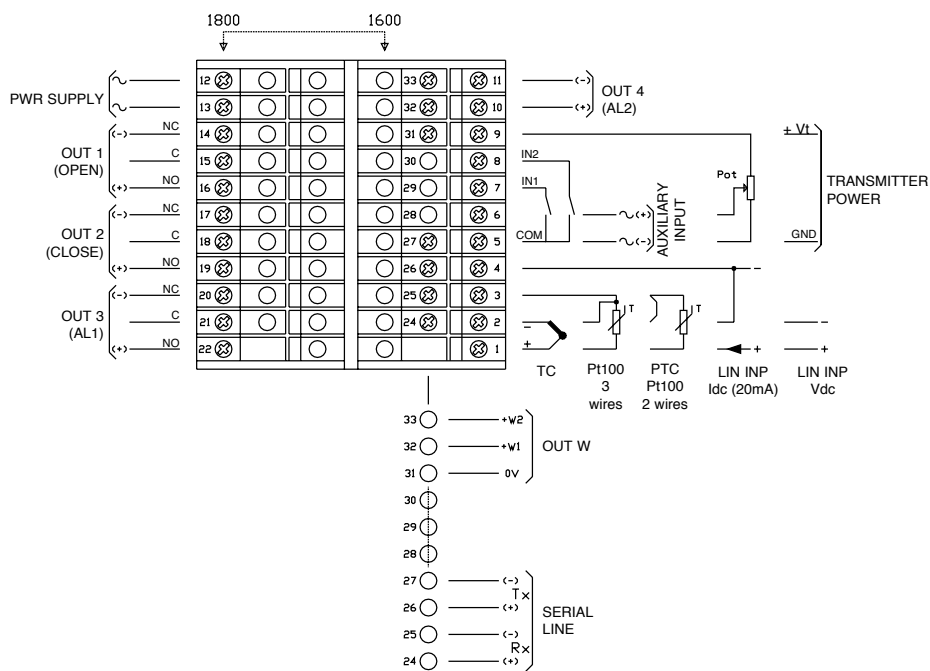
1600V



CONTROLLER WITH VALVE CONTROL

Microprocessor controller for motorized valves, IP65 faceplate protection, universal input, accuracy 0.2% f.s., heat/cool control, open/close relay outputs, up to 2 alarm relay outputs, 2 configurable digital inputs, remote setpoint input, RS485 / RS232C serial line Modbus or Cencal, 3 alarms, selftuning, autotuning, softstart, manual/auto with bumpless, local/remote, multiset, set ramp, internal timer.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- 4 relay outputs
- Faceplate protection: IP65
- Open/close valve control
- Configurable alarms



CE UL

Outputs	Special functions	Power supply	Order code	SAP/METEL code
4 relays	Valve position pot. input + 2 digital inputs	20..27Vac/Vdc	1600V-RRRR00-1120	F045071
4 relays	Valve position pot. input + 2 digital inputs	100..240Vac/Vdc	1600V-RRRR00-1121	F032659

All configurations can be seen on www.gefran.com

48x96x113 faceplate version

Performance models

1600P



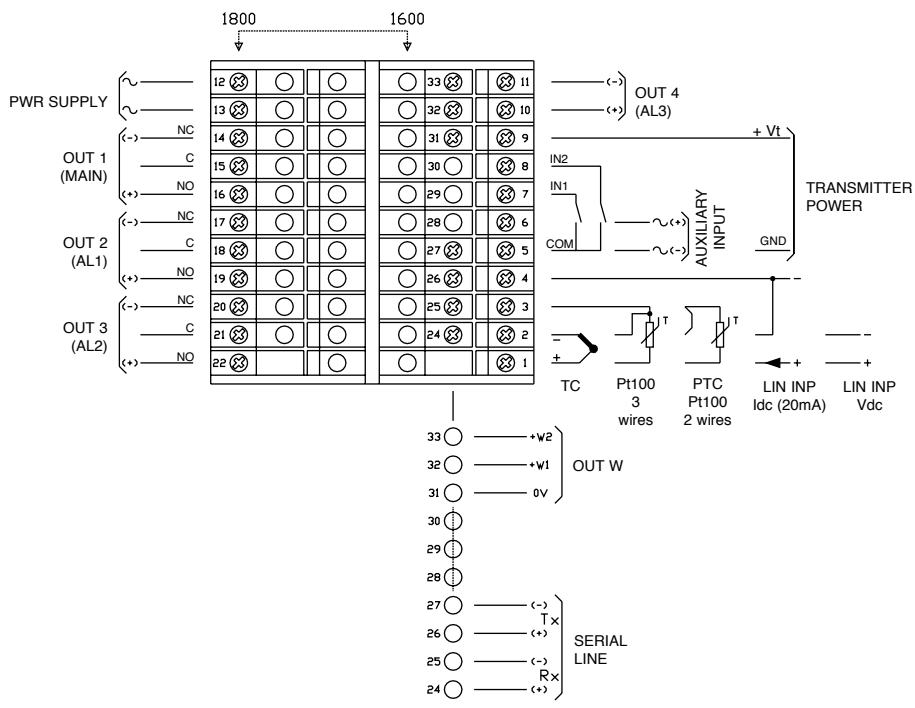
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CONTROLLER / PROGRAMMER



Microprocessor controller/programmer, IP65 faceplate protection, universal input, accuracy 0.2% f.s., heat/cool control, 4 relay or logic outputs, 2 isolated analog outputs, 2 configurable digital inputs, remote setpoint input, RS485 or RS232C serial line Modbus or Cencal, 3 alarms.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Outputs: 3 relays + 1 logic
- Faceplate protection: IP65
- Configurable alarms
- RS485 / RS232C serial line
- Programmer: 4 programs, up to 16 steps



CE UL

Outputs	Special functions	Power supply	Order code	SAP/METEL code
3 relays + 1 logic	2 digital inputs + analog input + 2 analog outputs	20..27Vac/Vdc	1600P-DRR0II-1320	F058197
3 relays + 1 logic	2 digital inputs + analog input + 2 analog outputs	100..240Vac/Vdc	1600P-DRRRIO-1321	F058198

All configurations can be seen on www.gefran.com

CONTROLLERS AND PROGRAMMERS

96x96x100 faceplate version

Value models

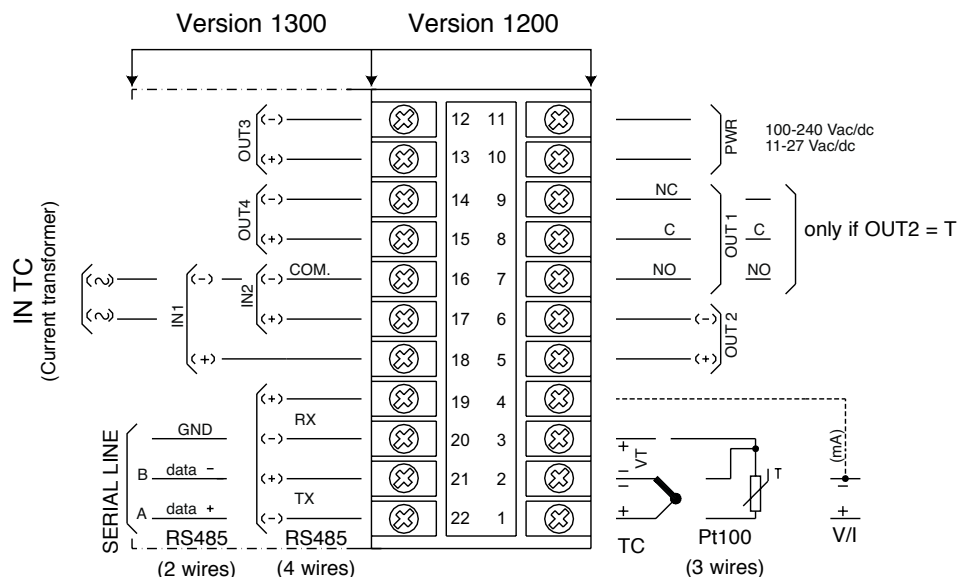
1300



CONFIGURABLE CONTROLLER

Microprocessor temperature controller configurable from faceplate keys, universal input, self-tuning, auto-tuning "one shot", 4-digit double display, IP65 faceplate protection, dimensions 96x96mm, RS485/RS232C serial line Modbus or Cencal, 3 alarms, softstart, manual/auto with bumpless, local/remote multiset, set ramp, internal timer.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Faceplate protection: IP65



Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
1 relay + 1 logic	-		11..27Vac/Vdc	1300-RD00-00-0-0	F024931
1 relay + 1 logic	-		100..240Vac/Vdc	1300-RD00-00-0-1	F024912
2 relays	-		11..27Vac/Vdc	1300-RR00-00-0-0	F024932
2 relays	-		100..240Vac/Vdc	1300-RR00-00-0-1	F023211 A
1 relay + 1 logic	-		11..27Vac/Vdc	1300-RD00-00-0-0	F024931
1 relay + 1 logic	-		100..240Vac/Vdc	1300-RD00-00-0-1	F024912
2 relays	-		11..27Vac/Vdc	1300-RR00-00-0-0	F024932
2 relays	-		100..240Vac/Vdc	1300-RR00-00-0-1	F023211 A
2 relays + 1 logic	-		20..27Vac/Vdc	1300-RDR0-00-0-0	F029362
2 relays + 1 logic	-		100..240Vac/Vdc	1300-RDR0-00-0-1	F024913
3 relays	-		20..27Vac/Vdc	1300-RRR0-00-0-0	F031207
3 relays	-		100..240Vac/Vdc	1300-RRR0-00-0-1	F024914
3 relays + 1 logic	-		20..27Vac/Vdc	1300-RDRR-00-0-0	F058257
3 relays + 1 logic	-		100..240Vac/Vdc	1300-RDRR-00-0-1	F024919
4 relays	-		20..27Vac/Vdc	1300-RRRR-00-0-0	F024933
4 relays	-		100..240Vac/Vdc	1300-RRRR-00-0-1	F024122
1 relay + 1 logic	Analog output		20..27Vac/Vdc	1300-RDWO-00-0-0	F058258
1 relay + 1 logic	Analog output		100..240Vac/Vdc	1300-RDWO-00-0-1	F030570
2 relays + 1 logic	Analog output		20..27Vac/Vdc	1300-RDWR-00-0-0	F058259
2 relays + 1 logic	Analog output		100..240Vac/Vdc	1300-RDWR-00-0-1	F026940
2 relays	Analog output		20..27Vac/Vdc	1300-RRWO-00-0-0	F027113
2 relays	Analog output		100..240Vac/Vdc	1300-RRWO-00-0-1	F028801
3 relays	Analog output		20..27Vac/Vdc	1300-RRWR-00-0-0	F058260
3 relays	Analog output		100..240Vac/Vdc	1300-RRWR-00-0-1	F039611
1 relay + 1 logic	TA input		20..27Vac/Vdc	1300-RD00-02-0-0	F035566

Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
1 relay + 1 logic	TA input		100..240Vac/Vdc	1300-RD00-02-0-1	F024915
2 relays + 1 logic	TA input		20..27Vac/Vdc	1300-RDR0-02-0-0	F058261
2 relays + 1 logic	TA input		100..240Vac/Vdc	1300-RDR0-02-0-1	F025279
2 relays + 1 logic	-	RS485	20..27Vac/Vdc	1300-RDR0-00-2-0	F058262
2 relays + 1 logic	-	RS485	100..240Vac/Vdc	1300-RDR0-00-2-1	F024917
2 relays	Analog output	RS485	20..27Vac/Vdc	1300-RRW0-00-2-0	F058263
2 relays	Analog output	RS485	100..240Vac/Vdc	1300-RRW0-00-2-1	F033531
3 relays + 1 logic	TA input	RS485	20..27Vac/Vdc	1300-RDRR-02-2-0	F056806
3 relays + 1 logic	TA input	RS485	100..240Vac/Vdc	1300-RDRR-02-2-1	F058264

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

CONTROLLERS AND PROGRAMMERS

96X96X80 faceplate version

Value models

1350



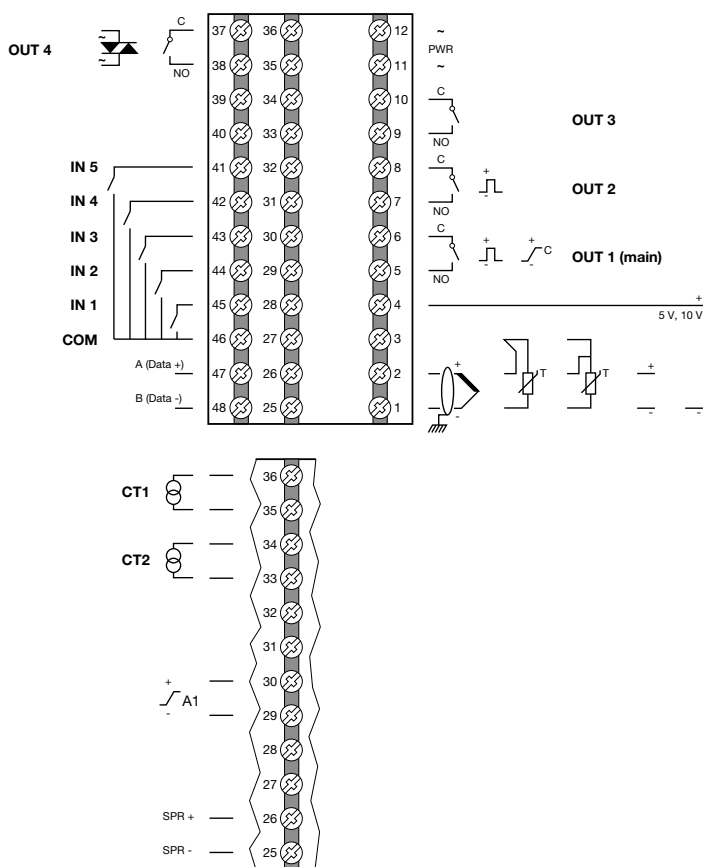
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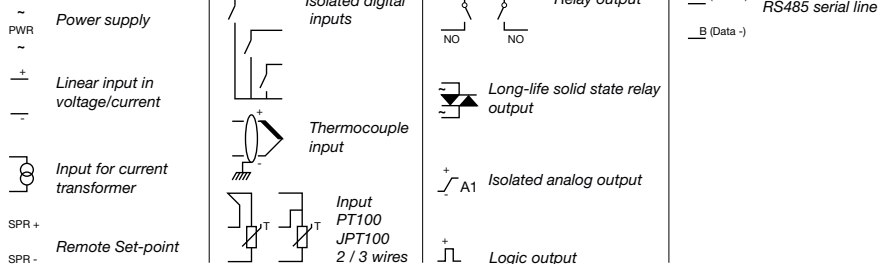
PID 1/4 DIN TEMPERATURE CONTROLLERS

PID controller with LCD operator interface, universal input, PID controller with LCD operator interface, universal input, white/green/amber 4- and 7-digit triple display with bargraph. Configurable scrolling messages. Counters for KWh and number of output cycles. Configurable logic functions. Valve control models and setpoint programmer models.

- Inputs TC, RTD, mV, V, mA linear inputs
- Faceplate protection: IP65
- Control: PID heat/cool
- Isolated analog output
- RS48



LEGEND



Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
1 Logic + 1 Relay			20...27Vac/dc	1350-D-R00-00000-0-G	F061854
1 Logic + 1 Relay			100...240Vac/dc	1350-D-R00-00000-1-G	F061830
2 Relays			20...27Vac/dc	1350-R-R00-00000-0-G	F061855
2 Relays			100...240Vac/dc	1350-R-R00-00000-1-G	F061831
1 Logic + 1 Relays	1 TA input + 5 digital inputs		20...27Vac/dc	1350-D-R00-00150-0-G	F061856
1 Logic + 1 Relays	1 TA input + 5 digital inputs		100...240Vac/dc	1350-D-R00-00150-1-G	F061832
1 Logic + 2 Relays			20...27Vac/dc	1350-D-RR0-00000-0-G	F061857
1 Logic + 2 Relays			100...240Vac/dc	1350-D-RR0-00000-1-G	F061833
3 Relays			20...27Vac/dc	1350-R-RR0-00000-0-G	F061858
3 Relays			100...240Vac/dc	1350-R-RR0-00000-1-G	F061834
1 Logic + 2 Relays	5 digital inputs		20...27Vac/dc	1350-D-RR0-00050-0-G	F061859
1 Logic + 2 Relays	5 digital inputs		100...240Vac/dc	1350-D-RR0-00050-1-G	F061835
1 Logic + 2 Relays	2 TA inputs		20...27Vac/dc	1350-D-RR0-00200-0-G	F061860
1 Logic + 2 Relays	2 TA inputs		100...240Vac/dc	1350-D-RR0-00200-1-G	F061836
2 Relays	1 Isolated analog mA		20...27Vac/dc	1350-C-RR0-00000-0-G	F061861
2 Relays	1 Isolated analog mA		100...240Vac/dc	1350-C-RR0-00000-1-G	F061837
1 Logic + 1 Relay	1 Isolated analog V/mA + 5 digital inputs		20...27Vac/dc	1350-D-R00-01050-0-G	F061862
1 Logic + 1 Relay	1 Isolated analog V/mA + 5 digital inputs		100...240Vac/dc	1350-D-R00-01050-1-G	F061838
2 Relays	1 Isolated analog V/mA + 5 digital inputs		20...27Vac/dc	1350-R-R00-01050-0-G	F061863
2 Relays	1 Isolated analog V/mA + 5 digital inputs		100...240Vac/dc	1350-R-R00-01050-1-G	F061839
3 Relays	1 TA input	RS485	20...27Vac/dc	1350-R-RR0-00101-0-G	F061864
3 Relays	1 TA input	RS485	100...240Vac/dc	1350-R-RR0-00101-1-G	F061840
1 Logic + 3 Relays			20...27Vac/dc	1350-D-RRR-00000-0-G	F061865
1 Logic + 3 Relays			100...240Vac/dc	1350-D-RRR-00000-1-G	F061841
4 Relays			20...27Vac/dc	1350-R-RRR-00000-0-G	F061866
4 Relays			100...240Vac/dc	1350-R-RRR-00000-1-G	F061842

All configurations can be seen on www.gefran.com

Accessories	Description	Order code	SAP/METEL code
	Cable for programming with PC, USB-TTL 3V with USB-microUSB connectors, length 1.8 m.		F060800 A
	Zapper portable battery-powered configurator, complete with cable.	GF_ZAP	F060908
	GF_eXpress software on CD-ROM, complete with cable for programming with PC, USB-TTL 3V with USB-microUSB connectors, length 1.8 m.	GF_eXK-3-0-0	F060909

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

CONTROLLERS AND PROGRAMMERS

96x96x113 faceplate version

Performance models

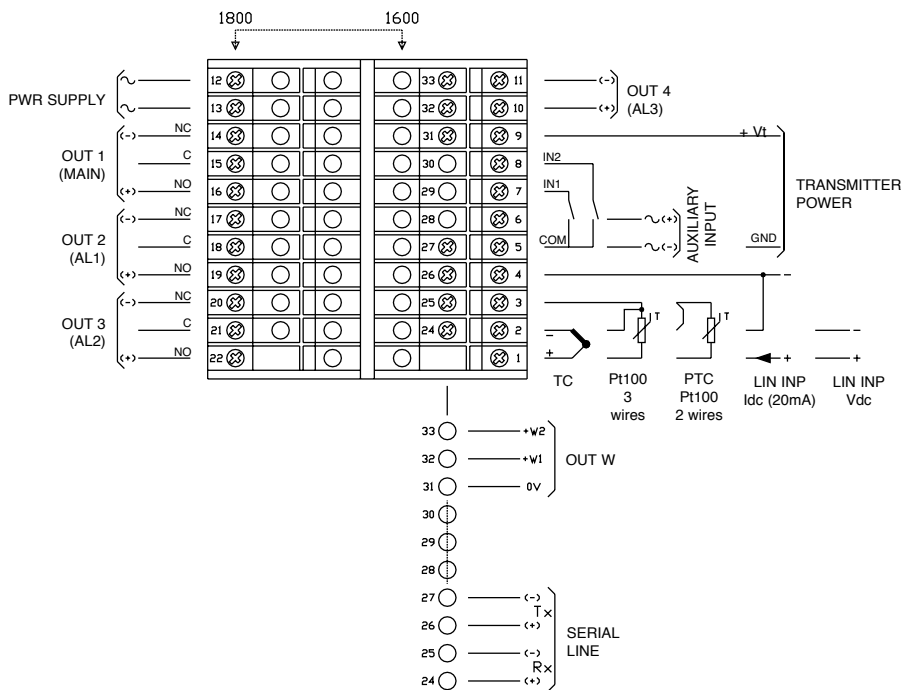
1800



CONFIGURABLE DOUBLE DISPLAY TEMPERATURE CONTROLLER

Microprocessor temperature controller, configurable from faceplate keys. Universal input, 4-digit double display, dimensions 96x96mm.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- 4 relay outputs
- Faceplate protection: IP65
- Control: PID heat/cool
- Configurable alarms
- RS485 or RS232C serial line



Outputs	Special functions	Power supply	Order code	SAP/METEL code
4 relays	2 digital inputs + analog input + 2 analog outputs	20..27Vac/Vdc	1800-RRRR11-1120	F058222
4 relays	2 digital inputs + analog input + 2 analog outputs	100..240Vac/Vdc	1800-RRRR11-1121	F001832

All configurations can be seen on www.gefran.com

96x96x113 faceplate version

Performance models

1800V



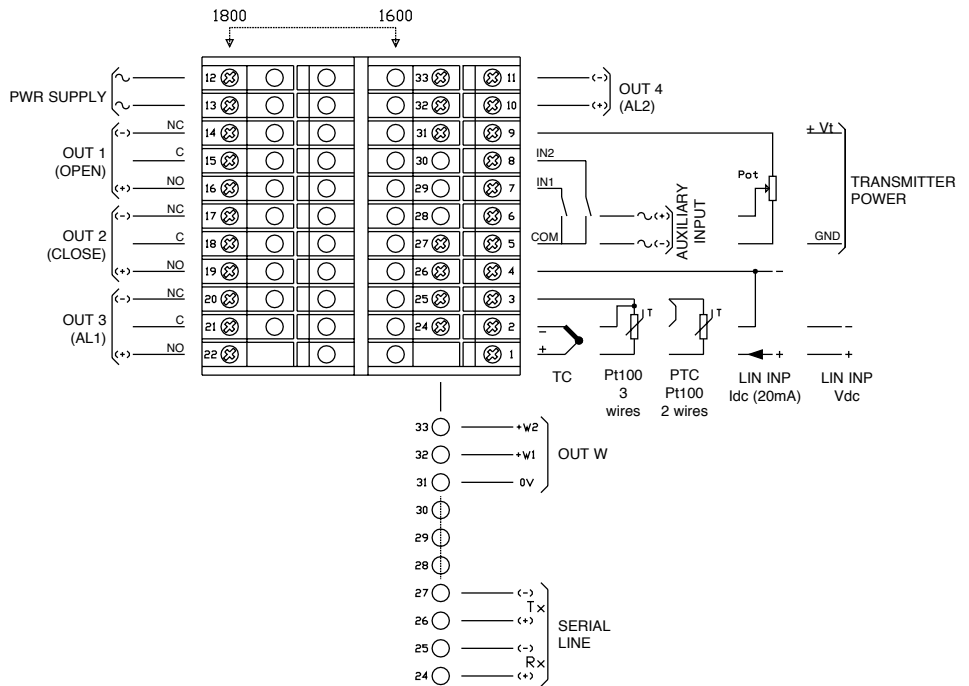
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CONTROLLER WITH VALVE CONTROL

Microprocessor controller for motorized valves, IP65 faceplate protection, universal input, accuracy 0.2% f.s., heat/cool control, open/close relay outputs, up to 2 alarm relay outputs, 2 configurable digital inputs, remote setpoint input, RS485 / RS232C serial line Modbus or Cencal, 3 alarms, selftuning, autotuning, softstart, manual/auto with bumpless, local/remote, multiset, set ramp, internal timer.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- 4 relay outputs
- Faceplate protection: IP65
- Open/close valve control
- Configurable alarms
- RS485 / RS232C serial line



CE UL

Outputs	Special functions	Power supply	Order code	SAP/METEL code
4 relays	Valve position pot. input + 2 digital inputs	20..27Vac/Vdc	1800V-RRRR00-1120	F058223
4 relays	Valve position pot. input + 2 digital inputs	100..240Vac/Vdc	1800V-RRRR00-1121	F001927

All configurations can be seen on www.gefran.com

CONTROLLERS AND PROGRAMMERS

96x96x113 faceplate version

Performance models

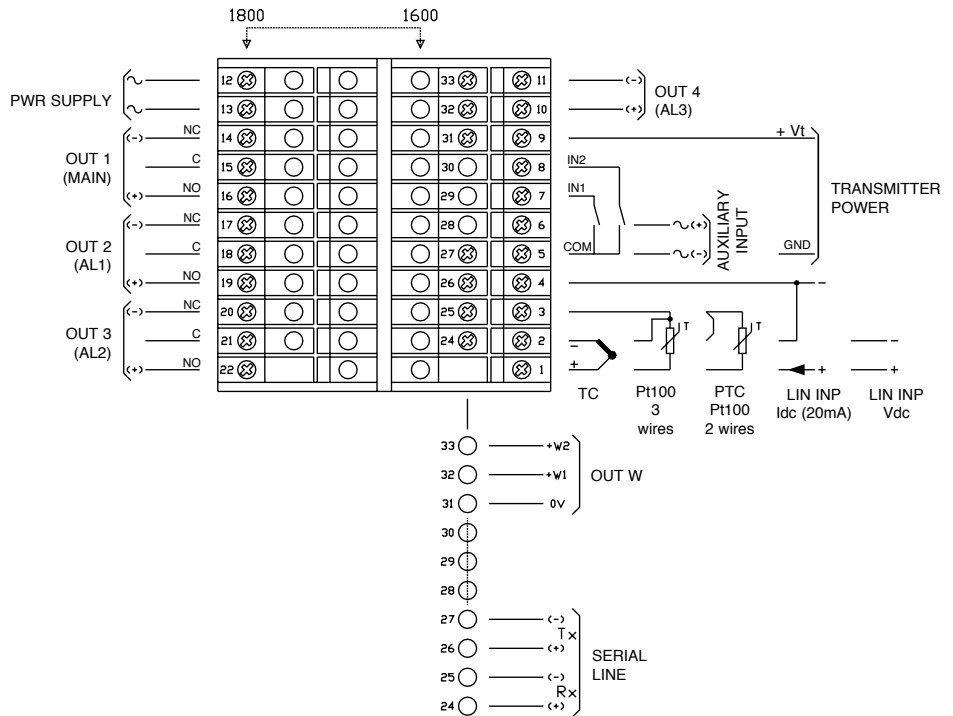
1800P



CONTROLLER / PROGRAMMER

Microprocessor controller/programmer, IP65 faceplate protection, universal input, accuracy 0.2% f.s., heat/cool control, up to 4 configurable relay or logic outputs, up to 2 isolated analog outputs, 2 configurable digital inputs, remote setpoint input, RS485 or RS232C serial line Modbus or Cencal, 3 alarms, 4 events, Hold back band, 4 control parameter groups.

- **Inputs:** TC, RTD
- **Outputs:** 3 relays + 1 logic
- **Faceplate protection:** IP65
- **Control:** PID heat/cool
- **Configurable alarms**
- **Programmer:** 4 programs, up to 16 steps



Outputs	Special functions	Power supply	Order code	SAP/METEL code
3 relays + 1 logic	2 digital inputs + analog input + 2 analog outputs	20..27Vac/Vdc	1800P-DRR0II-1320	F058226
3 relays + 1 logic	2 digital inputs + analog input + 2 analog outputs	100..240Vac/Vdc	1800P-DRRRIO-1321	F058227

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

96x96x170 faceplate version

Multifunction models

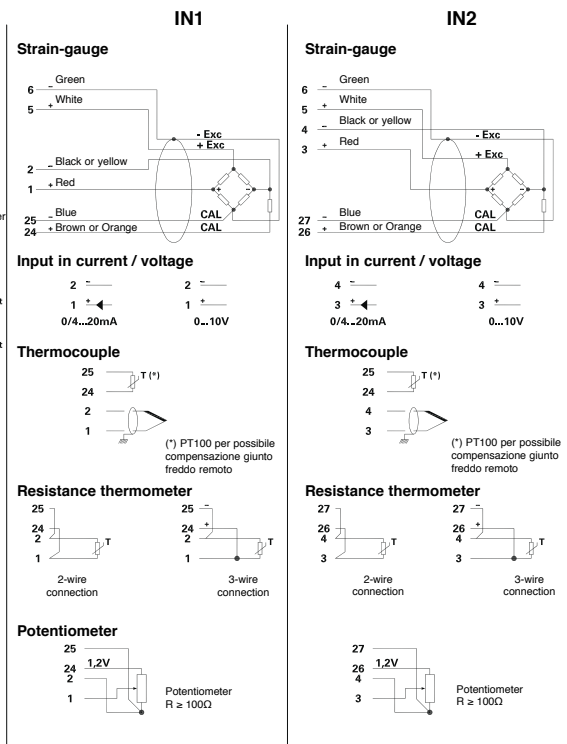
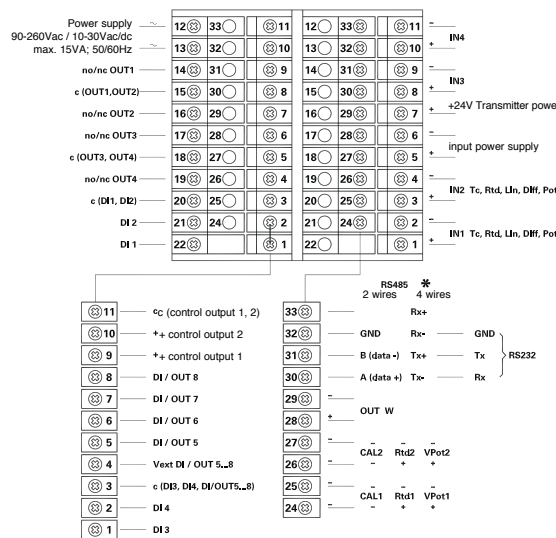
2500



CONFIGURABLE HIGH-PERFORMANCE CONTROLLER

Configurable microprocessor controller. Up to 2 universal inputs for strain-gauge/TC/RTD/linear/potentiometer, two auxiliary analog linear/pot. inputs, 2 isolated analog control outputs, 4 digital PNP/NPN inputs, 4 relay outputs, isolated analog retransmission, RS485, transmitter and strain-gauge input power supply, differential and math functions, three 5-digit displays (one 2-color), bargraph, IP54 faceplate, dimensions 96x96mm.

- 4 relay outputs
- Faceplate protection: IP65
- Direct/Reverse control
- Ratio controller
- Differential pressure controller
- 2 configurable alarms
- Accuracy: 0.1%
- 8 sets of PID parameters
- Math functions
- Min. sampling time: 2 msec



* For Profibus connection as single-input version

Input	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
Pressure sensor	Fast PID control		20...27Vac/Vdc	2500-0-0-0-0-0-0	F028679
Pressure sensor	Fast PID control		100...240Vac/Vdc	2500-0-0-0-0-0-1	F028429 A
Load cell	Fast PID control		20...27Vac/Vdc	2500-0-0-0-0-0-0	F028679
Load cell	Fast PID control		100...240Vac/Vdc	2500-0-0-0-0-0-1	F028429 A
Pressure sensor	Fast PID control + Analog output	RS485	20...27Vac/Vdc	2500-0-0-0-W-2-0	F045058
Pressure sensor	Fast PID control + Analog output	RS485	100...240Vac/Vdc	2500-0-0-0-W-2-1	F028681
Load cell	Fast PID control + Analog output	RS485	20...27Vac/Vdc	2500-0-0-0-W-2-0	F045058
Load cell	Fast PID control + Analog output	RS485	100...240Vac/Vdc	2500-0-0-0-W-2-1	F028681

All configurations can be seen on www.gefran.com

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GFXTERMO4



4-ZONE MODULAR CONTROLLER

Stand-alone unit for independent control of four PID process loops.
Power supply 24VDC ± 25%.

- Inputs: TC, RTD, mA, VDC
- 4 logic outputs for SSR
- 2 configurable alarms
- DIN rail attachment

Modbus_{RTU}

PROFIBUS

PROFINET

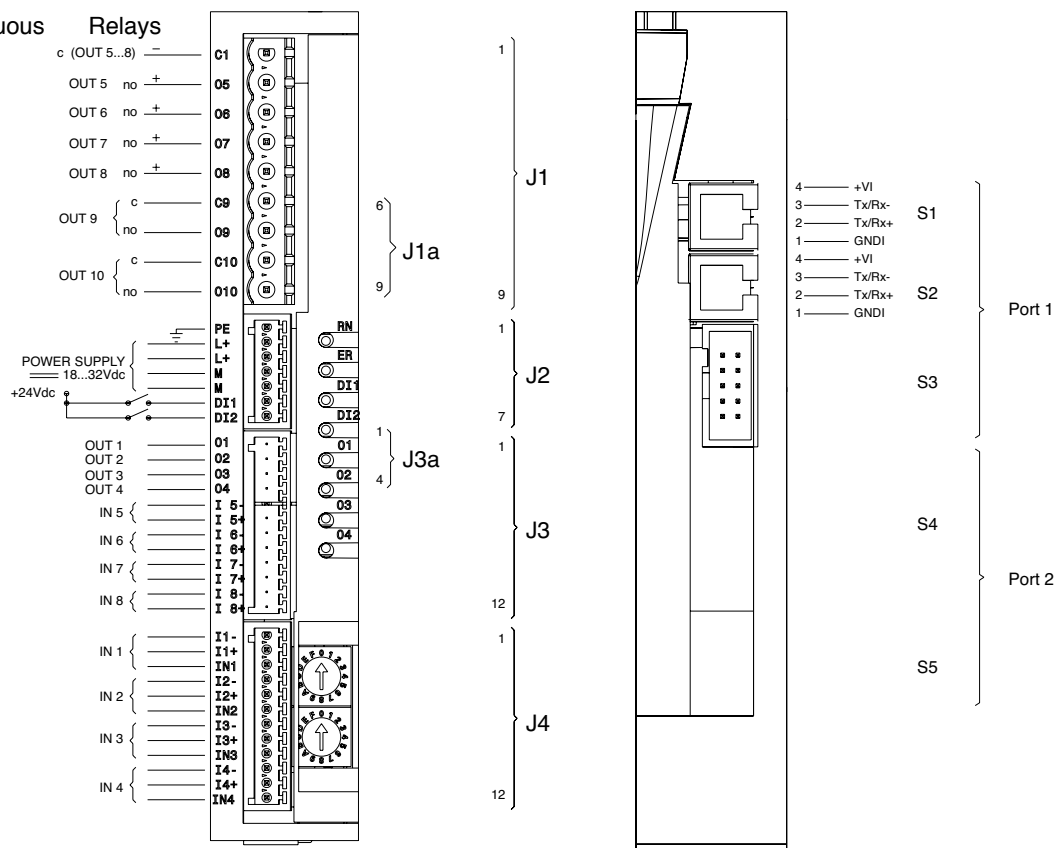
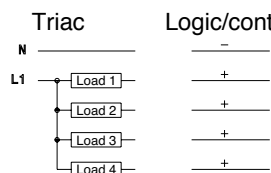
CANopen

EtherCAT

DeviceNet

EtherNet/IP

logic / communication



CE UL

Réglage	Special functions	Serial Communication	Order code	SAP/METEL code	
Hot	2 digital inputs	Modbus RTU (slave)	GFXTERMO4-0-0-0	F030922	A
Hot + Cold	2 digital inputs + 4 TC inputs	Modbus RTU (slave)	GFXTERMO4-R-1-0	F029790	A
Hot + Cold	2 digital inputs + 4 TC inputs	N. 2 Modbus RTU (slave)	GFXTERMO4-R-1-M	F033048	
Hot + Cold	2 digital inputs + 4 TC inputs	Profibus DP (slave)	GFXTERMO4-R-1-P	F036208	
Hot + Cold	2 digital inputs + 4 TC inputs	CANopen (slave)	GFXTERMO4-R-1-C	F032855	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

CONTROLLERS AND PROGRAMMERS

Accessories

Current transformer	Description	Order code	SAP/METEL code	
	Current transformer (input 50AAC / output 50mAAC)		330200	
	Current transformer (input 25AAC / output 50mAAC)		330201	

GF_eXpress configuration kit	Description	Order code	SAP/METEL code	
Configuration software for Gefran products: Instruments, Drives, Sensors, Automation. Compatible with Windows 2000, XP, Vista. Supplied on CD ROM in Italian/English (selectable) and complete with cable and connectors for direct connection of PC-programming serial.	GF_eXpress software on CD-ROM, USB/485/TTL converter complete with connection cables to PC, Geflex and instrument.	GF_eXK-2-0-0	F049095	A
	USB-RS485 conv. (for GFXTERMO4)	USBR485	F055002	A
	USB - TTL conv. + cable (1 M8+RJ) (Ordered with code F057076 *)	USB TTL	F055001	A
	RJ10 - 3 PIN adapter + Protection		F057076	A

N.B: Not necessary with 2500 instruments

Supports for fixing to DIN rail	Description	Order code	SAP/METEL code	
	Base for DIN rail fixing. EN50022 (vertical fixing) (48x48mm)		51155	
	Base for DIN rail fixing. EN50022 (horizontal fixing) (48x96mm)		51156	
	Base for DIN rail fixing. (48x48mm) for series 800/400/4-40/600 versions		51399	
	Base for DIN rail fixing. (48x96mm) for series 1600 & 1800 versions		51479	

Connectors	Description	Order code	SAP/METEL code	
Available for GFX4 and GFXTERMO4	9-pin connector for alarm and cooling outputs (J1)	COUT4-9	353483	
	4-pin connector for alarm outputs (J1a)	COUT4-4	353493	
	7-pin connector for power supply-digital inputs (J2)	CSIG4-7	353485	
	12-pin connector for auxiliary analog inputs and control outputs (J3); analog process inputs (J4)	CSIG4-12	353487	
	4-pin connector for main outputs (J3a)	CSIG4-4	353489	












Cables	Description	Order code	SAP/METEL code	
Series of cables for field bus and for extending connections among Geflex instruments.	Shielded cable,1 pair, 22 AWG, L=1m conforms to MODBUS	Cable 2x0.35	343409	
	Shielded cable,1 pair, 22 AWG, L=1m conforms to Profibus	Cable PROFIBUS	397240	
	Shielded cable, 2 pairs,22 AWG L=1m conforms to CANopen	Cable CANBUS	343430	
	4-pin telephone cable	CV4-RJ10	59192	
	Connection cable for GFX-OP ↔ Geflex or Geflex ↔ Geflex complete with connectors; length 1m	CV-1	F023140	
	Connection cable for GFX-OP ↔ Geflex or Geflex ↔ Geflex complete with connectors; length 2,5m	CV-2	F023141	
	Connection cable for GFX-OP ↔ Geflex or Geflex ↔ Geflex complete with connectors; length 5m	CV-5	F023142	
	Cable L=0,3m for serial connection of Modbus (RJ10) (local bus) GFX4 ↔ GFX4	CV4-03	F032861	A
	Cable L=1m for serial connection of Modbus (RJ10) (local bus) GFX4 ↔ GFX4	CV4-1	F032862	
	Cable L=2m for serial connection of Modbus (RJ10) (local bus) GFX4 ↔ GFX4	CV4-2	F032863	A
	Cable L=5m for serial connection of Modbus (RJ10) (local bus) GFX4 ↔ GFX4	CV4-5	F032864	
	Cable L=2m or serial connection of Modbus (RJ10) GF_PROMER/GF_LOOPER ↔ GFXM 1/2	CV3-2	F047232	

Covers	Description	Order code	SAP/METEL code
IP54 / IP65 faceplate covers	Dust-protection cover in polycarbonate. Transparent. Mod. CFA110. For instruments with format 48x48mm (1/16 DIN)		51060
	Dust-protection cover in polycarbonate. Transparent. Mod. CFA120. For instruments with format 48x96mm (1/8 DIN)		51061
	Dust-protection cover in polycarbonate. Transparent. Mod. CFA220. For instruments with format 96x96mm (1/4 DIN)		51062
	Polycarbonate cover. IP54 protection rating. Gray (frame) / transparent (door). For instruments with format 48x96mm (1/8 DIN)		51066
	Polycarbonate cover. IP54 protection rating. Gray (frame) / transparent (door). For instruments with format 96x96mm (1/4 DIN)		51065
	Polycarbonate cover with rubber seal. IP65 protection rating. Gray (frame) / transparent (door). For instruments with format 48x96mm (1/8 DIN)		51067
	Polycarbonate cover with rubber seal. IP65 protection rating. Gray (frame) / transparent (door). For instruments with format 96x96mm (1/4 DIN)		51064

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

INDICATORS / ALARM UNITS

b

		72X36	48X48 (1/16 DIN)
Multichannel versions 			
	High-performance versions High speed High resolution 		
Universal versions 	RPM Frequency		
	V/Aac		 4A48 40A48 
	Pressure Force Position		 4B48 40B48 
	Temperature Linears Potentiomet.	 40T72 	 4T48 40T48 ● 

LEGEND:



Configurable via PC



Modbus TCP/RTU

48X96 (1/8 DIN)	96X96 (1/4 DIN)	
<p>8 Channels °C/°F bar 0...10V 4...20mA 2308 </p> 	<p>2 Channels °C/°F bar 0...10V 4...20mA 40TB </p> 	<p>Plastics, Plants</p>
<p>4 Channels 2400 </p> 	<p>°C/°F Kg bar 0...10V 4...20mA Potentiometers</p> 	<p>Climatic chambers, Dosers, Plastics, Test benches, Laboratories</p>
<p>40F96 </p> 	<p>Hz RPM</p>	<p>Plastics, Misc.</p>
<p>4A96 - 40A96 </p> 	<p>V/Aac</p>	<p>Plastics, Misc.</p>
<p>4B96 - 40B96 </p> 	<p>Kg Potentiometers bar Magnetostrictives</p> 	<p>Plastics, Packaging</p>
<p>4T96 - 40T96 </p> 	<p>°C/°F 0...10V 4...20mA Potentiometers</p> 	<p>Plastics, Packaging, Wood, Metal, Furnaces</p>

b

INDICATORS / ALARM UNITS

48x48x99 faceplate version

Universal Versions

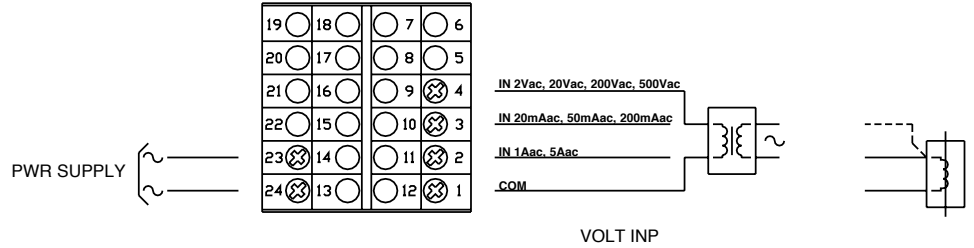
4A 48



CONFIGURABLE AC CURRENT/VOLTAGE INDICATOR

AC current and voltage indicator, 4-digit display, microprocessor-based, configurable from faceplate keys and from PC.

- Inputs: VAC, AAC
- Faceplate protection: IP65



Power supply	Order code	SAP/METEL code	
11..27Vac/Vdc	4A-48-4-00-0	F000177	
100..240Vac/Vdc	4A-48-4-00-1	F000178	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaingin codes into the catalogue, we kindly suggest you to contact Gefran sales team

48x48x99 faceplate version

Universal Versions

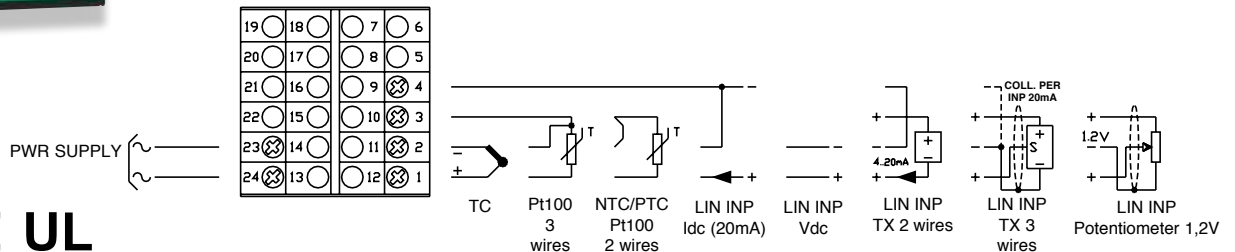
4T 48



TEMPERATURE INDICATOR, UNIVERSAL INPUT

Universal indicator, 4-digit display, microprocessor-based, configurable from faceplate keys and from PC; temperature, linear inputs. Faceplate protection: IP 65

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Faceplate protection: IP65
- Power supply for external sensor



Input	Special functions	Power supply	Order code	SAP/METEL code	
TC, PT100, Lin.	-	11..27Vac/Vdc	4T-48-4-00-0	F000165	A
TC, PT100, Lin.	-	100..240Vac/Vdc	4T-48-4-00-1	F000166	A
TC, PT100, Lin., Potentiometer	Transm. power supply 1,25 Vdc	11..27Vac/Vdc	4T-48-4-01-0	F000885	
TC, PT100, Lin., Potentiometer	Transm. power supply 1,25 Vdc	100..240Vac/Vdc	4T-48-4-01-1	F000169	
TC, PT100, Lin.	Transm. power supply 24 Vdc	11..27Vac/Vdc	4T-48-4-24-0	F000167	A
TC, PT100, Lin.	Transm. power supply 24 Vdc	100..240Vac/Vdc	4T-48-4-24-1	F000168	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaingin codes into the catalogue, we kindly suggest you to contact Gefran sales team

48x48x99 faceplate version

Universal Versions

40A 48



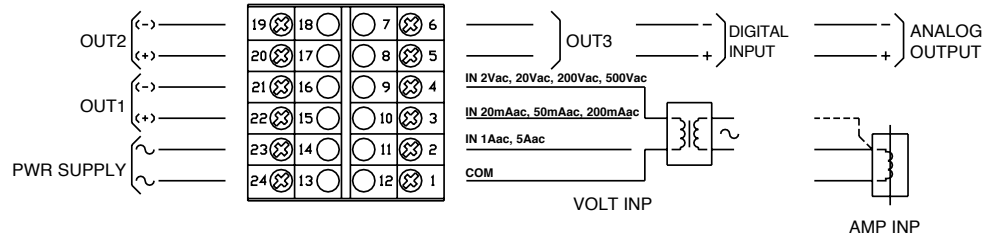
AC CURRENT/VOLTAGE INDICATOR - ALARM UNIT

AC current and voltage indicator and alarm unit, 4-digit display, microprocessor-based, configurable from faceplate keys and from PC.

- **Inputs: VAC, AAC**
- **Faceplate protection: IP65**
- **Alarms: 2 (configurable)**



CE UL



Power supply	Order code	SAP/METEL code
11..27Vac/Vdc	40A-48-4-00-RR-0-0-0	F000213
100..240Vac/Vdc	40A-48-4-00-RR-0-0-1	F000213

All configurations can be seen on www.gefran.com

48x48x99 faceplate version

Universal Versions

40B 48



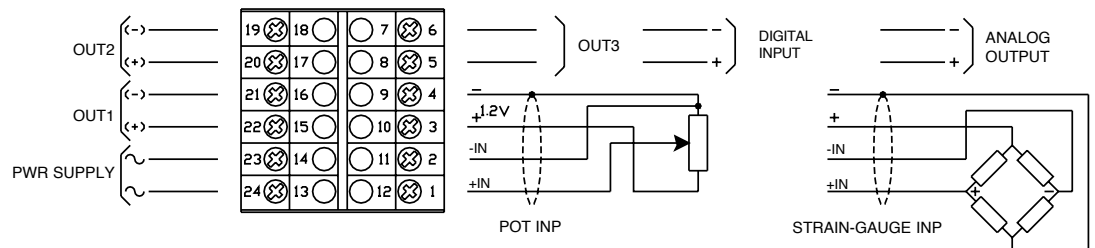
POSITION, FORCE AND PRESSURE INDICATOR - ALARM UNIT WITH INPUT FOR STRAIN-GAUGE AND POTENTIOMETER

Indicator - alarm unit for load cells, strain-gauge pressure transducers and potentiometers, microprocessor-based, configurable from faceplate keys and from PC.

- **Inputs: Strain Gauge and potentiometer**
- **Retransmitted output**
- **Faceplate protection: IP65**
- **Alarms: 2 (configurable)**
- **Power supply for external sensor**



CE UL



Outputs	Special functions	Power supply	Order code	SAP/METEL code
2 relays	Transm. power supply 10 Vdc	11..27Vac/Vdc	40B-48-4-10-RR-0-0-0	F000996
2 relays	Transm. power supply 10 Vdc	100..240Vac/Vdc	40B-48-4-10-RR-0-0-1	F000206
2 relays+ Analog	Transm. power supply 10 Vdc	11..27Vac/Vdc	40B-48-4-10-RR-0-2-0	F001000
2 relays+ Analog	Transm. power supply 10 Vdc	100..240Vac/Vdc	40B-48-4-10-RR-0-2-1	F001001

All configurations can be seen on www.gefran.com

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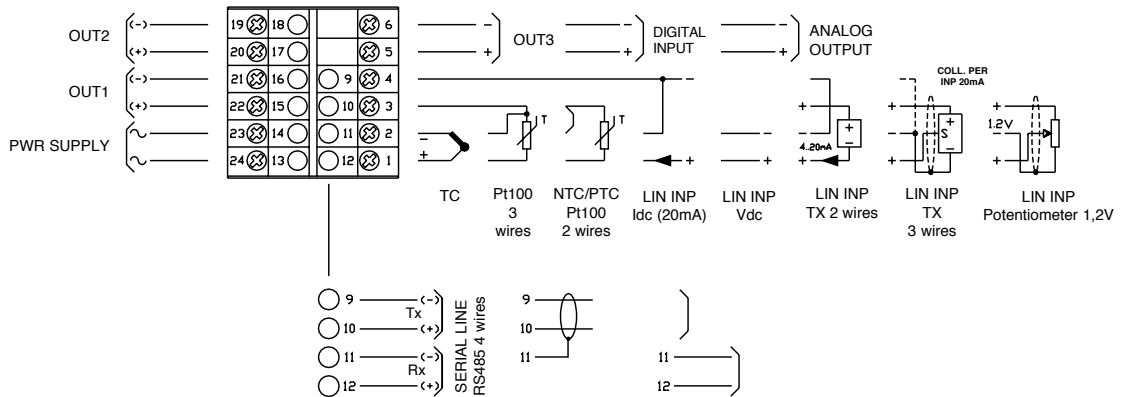
40T 48



UNIVERSAL TEMPERATURE INDICATOR - ALARM UNIT

Universal indicator and alarm unit, 4-digit display, microprocessor-based, configurable from faceplate keys and from PC, temperature, linear, potentiometer inputs.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Retransmitted output
- Faceplate protection: IP65
- Configurable alarms
- RS485 serial line



Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
2 relays	-	-	11..27Vac/Vdc	40T-48-4-00-RR-0-0-0-0	F000187 A
2 relays	-	-	100..240Vac/Vdc	40T-48-4-00-RR-0-0-0-1	F000188 A
2 relays+ Analog	-	-	11..27Vac/Vdc	40T-48-4-00-RR-0-2-0-0	F000934
2 relays+ Analog	-	-	100..240Vac/Vdc	40T-48-4-00-RR-0-2-0-1	F000189
3 relays	-	-	11..27Vac/Vdc	40T-48-4-00-RR-R-0-0-0	F000935
3 relays	-	-	100..240Vac/Vdc	40T-48-4-00-RR-R-0-0-1	F000936
2 relays+ Analog	Transm. power supply 24 Vdc	-	11..27Vac/Vdc	40T-48-4-24-RR-0-2-0-0	F000937
2 relays+ Analog	Transm. power supply 24 Vdc	-	100..240Vac/Vdc	40T-48-4-24-RR-0-2-0-1	F000938 A
3 relays	Transm. power supply 24 Vdc	-	11..27Vac/Vdc	40T-48-4-24-RR-R-0-0-0	F000939
3 relays	Transm. power supply 24 Vdc	-	100..240Vac/Vdc	40T-48-4-24-RR-R-0-0-1	F000192 A
2 relays	Transm. power supply 24 Vdc + Input digitale	RS485 Modbus	11..27Vac/Vdc	40T-48-4-24-RR-0-1-2-0	F048509
2 relays	Transm. power supply 24 Vdc + Input digitale	RS485 Modbus	100..240Vac/Vdc	40T-48-4-24-RR-0-1-2-1	F058307

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

36x72x54 faceplate version

Universal Versions

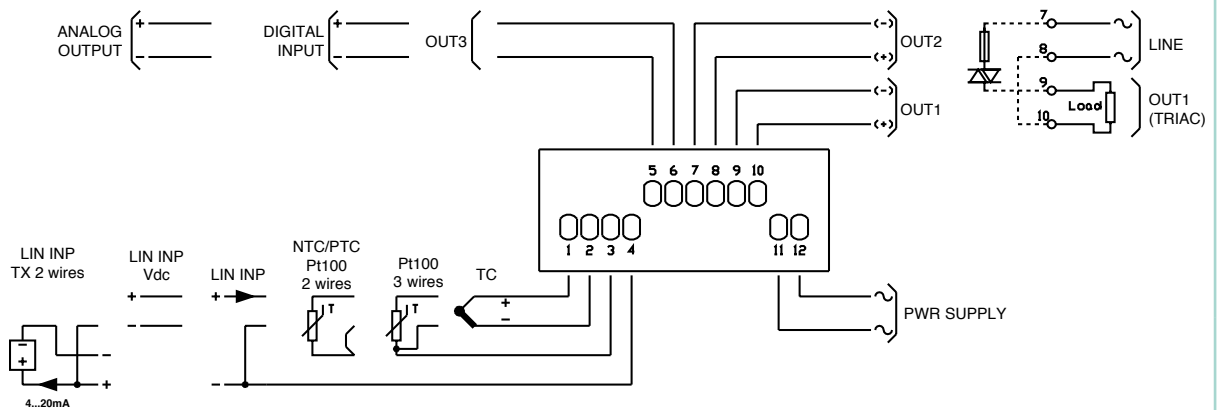
40T 72



UNIVERSAL TEMPERATURE INDICATOR - ALARM UNIT

Universal indicator and alarm unit, microprocessor-based, configurable from faceplate keys and from PC.

- **Inputs:** TC, RTD, PTC, NTC, mV, V, mA, potentiometer linear inputs
- **Retransmitted output**
- **Faceplate protection:** IP65
- **3 Alarms:** (configurable)



CE UL

Input	Outputs	Special functions	Power supply	Order code	SAP/METEL code
TC, PT100, Lin.	2 relays	-	11..27Vdc /18..27Vac	40T-72-3-00-RR-00-9	F000182 A
TC, PT100, Lin.	2 relays+ Analog	-	11..27Vdc /18..27Vac	40T-72-3-00-RR-02-9	F000183
TC, PT100, Lin.	3 relays	-	11..27Vdc /18..27Vac	40T-72-3-00-RR-R0-9	F000184
TC, PT100, Lin.	2 relays	4 digits	11..27Vdc /18..27Vac	40T-72-4-00-RR-00-9	F000185 A
TC, PT100, Lin.	2 relays+ Analog	4 digits	11..27Vdc /18..27Vac	40T-72-4-00-RR-02-9	F000915
TC, PT100, Lin.	3 relays	4 digits	11..27Vdc /18..27Vac	40T-72-4-00-RR-R0-9	F000916
TC, PT100, Lin., Potentiometer	2 relays	4 digits + transmitter power supply 1.25 VDC	11..27Vdc /18..27Vac	40T-72-4-01-RR-00-9	F000186 A
TC, PT100, Lin., Potentiometer	3 relays	4 digits + transmitter power supply 1.25 VDC	11..27Vdc /18..27Vac	40T-72-4-01-RR-R0-9	F041099
TC, PT100, Lin., Potentiometer	2 relays+ Analog	4 digits + transmitter power supply 1.25 VDC	11..27Vdc /18..27Vac	40T-72-4-01-RR-02-9	F026040 A
TC, PT100, Lin.	2 relays	4 digits + transmitter power supply 24 VDC	11..27Vdc /18..27Vac	40T-72-4-24-RR-00-9	F000917
TC, PT100, Lin.	2 relays+ Analog	4 digits + transmitter power supply 24 VDC	11..27Vdc /18..27Vac	40T-72-4-24-RR-02-9	F000918
TC, PT100, Lin.	3 relays	4 digits + transmitter power supply 24 VDC	11..27Vdc /18..27Vac	40T-72-4-24-RR-R0-9	F000919

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

INDICATORS / ALARM UNITS

48x96x105 faceplate version

Universal Versions

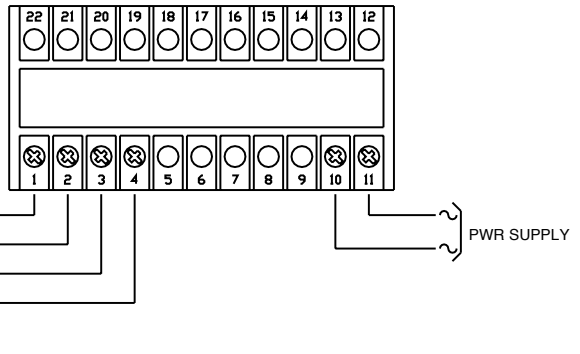
4A 96



CONFIGURABLE AC CURRENT AND VOLTAGE INDICATOR

AC current and voltage indicator, 4-digit display, microprocessor-based, configurable from faceplate keys and from PC.

- Inputs: VAC, AAC
- Faceplate protection: IP65



CE UL

Power supply	Order code	SAP/METEL code
11..27Vac/Vdc	4A-96-4-00-0	F000180
100..240Vac/Vdc	4A-96-4-00-1	F000181

All configurations can be seen on www.gefran.com

48x96x105 faceplate version

Universal Versions

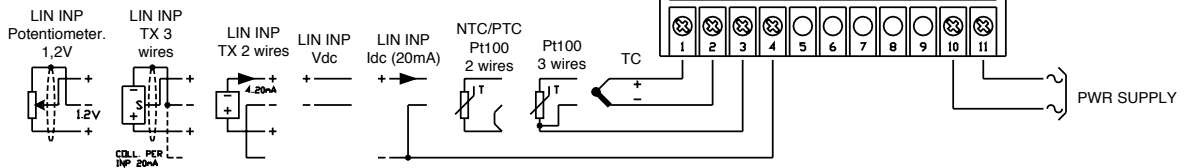
4T 96



UNIVERSAL TEMPERATURE INDICATOR

Universal indicator, 4-digit display, microprocessor-based, configurable from faceplate keys and from PC, temperature and linear inputs.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Faceplate protection: IP65
- Power supply for external sensor



CE UL

Input	Special functions	Power supply	Order code	SAP/METEL code
TC, PT100, Lin.	-	11..27Vac/Vdc	4T-96-4-00-0	F000171 A
TC, PT100, Lin.	-	100..240Vac/Vdc	4T-96-4-00-1	F000172 A
TC, PT100, Lin., Potentiometer	Transm. power supply 1,25 Vdc	11..27Vac/Vdc	4T-96-4-01-0	F000175
TC, PT100, Lin., Potentiometer	Transm. power supply 1,25 Vdc	100..240Vac/Vdc	4T-96-4-01-1	F000176 A
TC, PT100, Lin.	Transm. power supply 24 Vdc	11..27Vac/Vdc	4T-96-4-24-0	F000173 A
TC, PT100, Lin.	Transm. power supply 24 Vdc	100..240Vac/Vdc	4T-96-4-24-1	F000174 A

All configurations can be seen on www.gefran.com

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48x96x105 faceplate version

Universal Versions

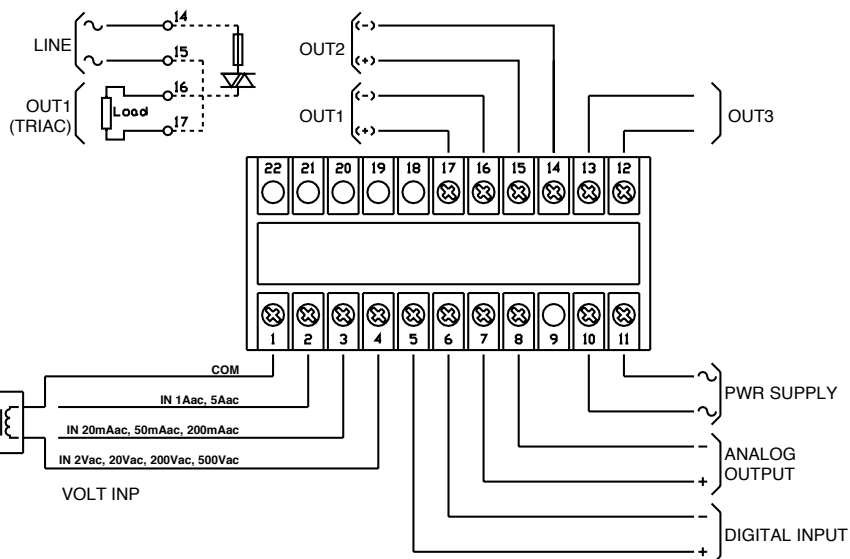
40A 96



AC CURRENT AND VOLTAGE INDICATOR - ALARM UNIT

AC current and voltage indicator and alarm unit, microprocessor-based, configurable from faceplate keys and from PC.

- **Inputs: VAC, AAC**
- **Faceplate protection: IP65**
- **Alarms: 2 (configurable)**



CE UL

Power supply	Order code	SAP/METEL code
11..27Vac/Vdc	40A-96-4-00-RR-0-0-0	FO00214
100..240Vac/Vdc	40A-96-4-00-RR-0-0-1	FO00215

All configurations can be seen on www.gefran.com

b

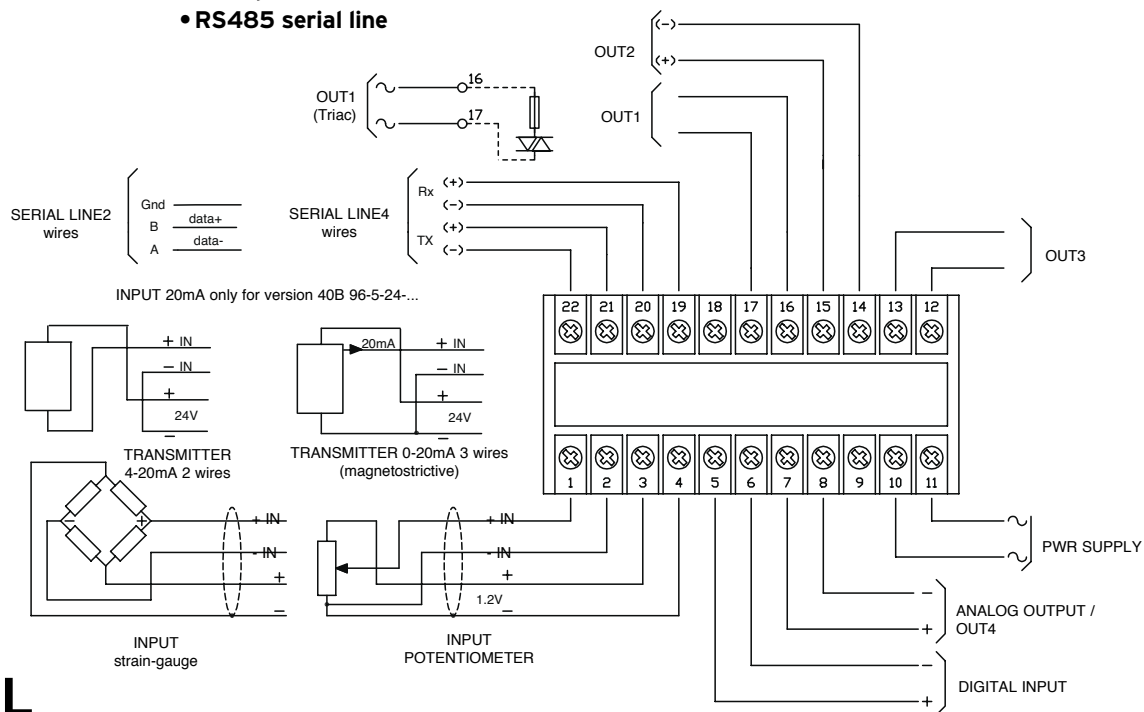
40B 96



POSITION, FORCE AND PRESSURE INDICATOR - ALARM UNIT WITH INPUT FOR STRAIN-GAUGE AND POTENTIOMETER

Indicator - alarm unit for load cells, strain-gauge pressure transducers, potentiometers, and magnetostrictive position sensors, microprocessor-based, configurable from faceplate keys and from PC.

- **Inputs: Strain Gauge and potentiometer**
- **Retransmitted output**
- **Faceplate protection: IP65**
- **Configurable alarms**
- **RS485 serial line**



Input	Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
Strain Gauge, Lin.	2 relays	Transm. power supply 10 Vdc	-	11..27Vac/Vdc	40B-96-5-10-RR-00-0-0-0	F026435
Strain Gauge, Lin.	2 relays	Transm. power supply 10 Vdc	-	100..240Vac/Vdc	40B-96-5-10-RR-00-0-0-1	F026436 A
Strain Gauge, Lin.	2 relays+ Analog	Transm. power supply 10 Vdc	-	11..27Vac/Vdc	40B-96-5-10-RR-00-2-0-0	F028340 A
Strain Gauge, Lin.	2 relays+ Analog	Transm. power supply 10 Vdc	-	100..240Vac/Vdc	40B-96-5-10-RR-00-2-0-1	F027728
Strain Gauge, Lin.	3 relays+ Analog	Transm. power supply 10 VDC + digital input	-	11..27Vac/Vdc	40B-96-5-10-RR-R0-3-0-0	F026438
Strain Gauge, Lin.	3 relays+ Analog	Transm. power supply 10 VDC + digital input	-	100..240Vac/Vdc	40B-96-5-10-RR-R0-3-0-1	F027945 A
Strain Gauge, Lin. Potentiometer	4 relays	Transm. power supply 10 VDC + digital input	RS485 Modbus	11..27Vac/Vdc	40B-96-5-99-RR-RR-1-2-0	F058308
Strain Gauge, Lin. Potentiometer	4 relays	Transm. power supply 10 VDC + digital input	RS485 Modbus	100..240Vac/Vdc	40B-96-5-99-RR-RR-1-2-1	F058309

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

48x96x105 faceplate version

Universal Versions

40F 96



CONFIGURABLE FREQUENCY INDICATOR - ALARM UNIT

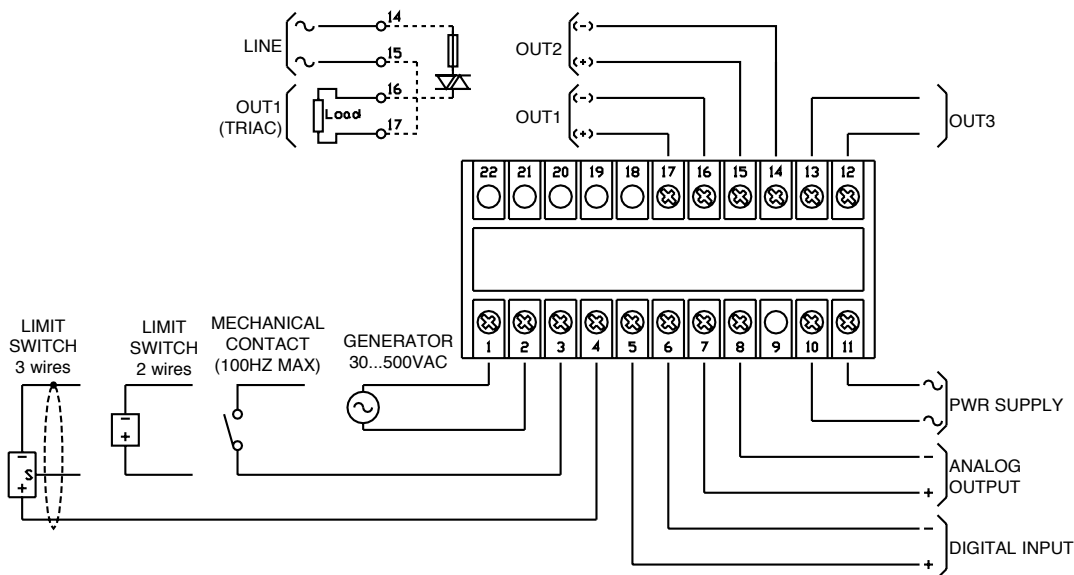
Indicator - alarm unit for frequency signals, 4-digit display, microprocessor-based, configurable from faceplate keys and from PC.

- **Inputs: Frequency/Prox/Encoder 100KHz with 50% duty cycle**
- **Retransmitted output**
- **Faceplate protection: IP65**
- **Configurable alarms**

b



CE UL



Outputs	Special functions	Power supply	Order code	SAP/METEL code
2 relays+ Analog	Transm. power supply 12 VDC + digital input	11..27Vac/Vdc	40F-96-4-12-RR-0-3-0	F030556
2 relays+ Analog	Transm. power supply 12 VDC + digital input	100..240Vac/Vdc	40F-96-4-12-RR-0-3-1	F026629
3 relays+ Analog	Transm. power supply 24 VDC + digital input	11..27Vac/Vdc	40F-96-4-24-RR-0-3-0	F026287
3 relays+ Analog	Transm. power supply 24 VDC + digital input	100..240Vac/Vdc	40F-96-4-24-RR-0-3-1	F001037
3 relays+ Analog	Transm. power supply 24 VDC + digital input	11..27Vac/Vdc	40F-96-4-24-RR-R-3-0	F001040
3 relays+ Analog	Transm. power supply 24 VDC + digital input	100..240Vac/Vdc	40F-96-4-24-RR-R-3-1	F001041

All configurations can be seen on www.gefran.com

INDICATORS / ALARM UNITS

48x96x105 faceplate version

Universal Versions

40T 96

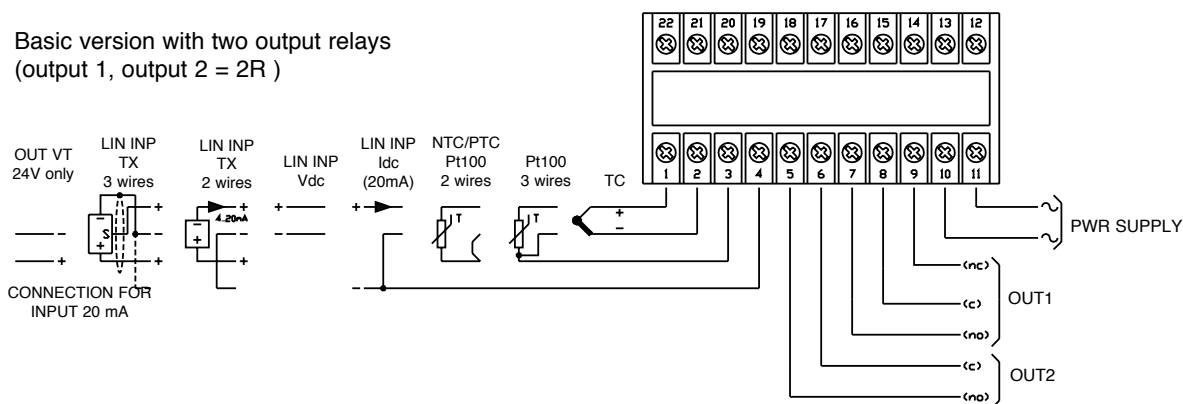


UNIVERSAL TEMPERATURE INDICATOR - ALARM UNIT

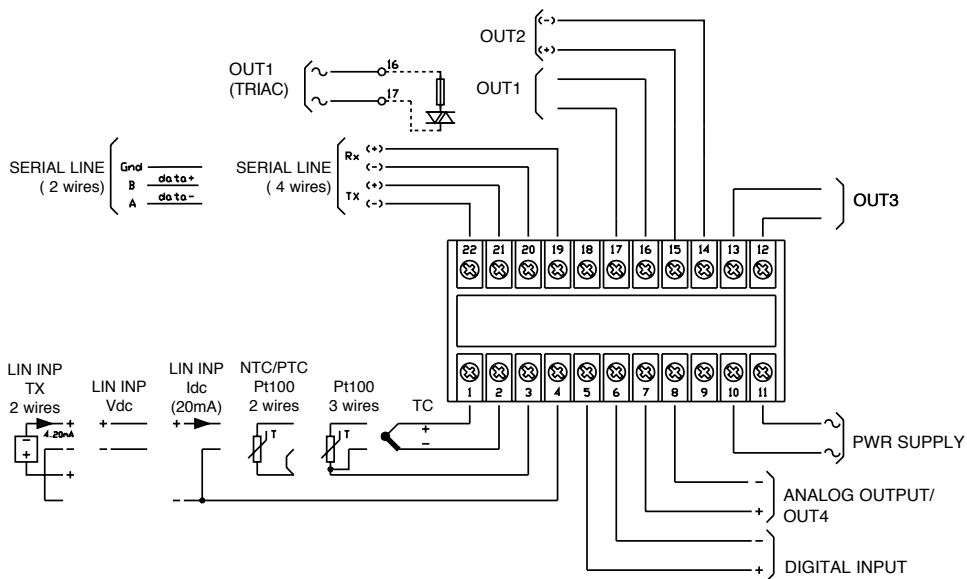
Universal indicator - alarm unit, 4-digit display, microprocessor-based, configurable from faceplate keys and from PC, temperature and linear inputs.

- Inputs TC, RTD, PTC, NTC, mV, V, mA linear inputs
- Retransmitted output
- Faceplate protection: IP65
- Configurable alarms
- RS485 serial line

Basic version with two output relays (output 1, output 2 = 2R)



Expandable version



Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
2 relays	-	-	11..27Vac/Vdc	40T96-4-00-RR00-000	F000193 A
2 relays	-	-	100..240Vac/Vdc	40T96-4-00-RR00-001	F000194 A
2 relays+ Analog	-	-	11..27Vac/Vdc	40T96-4-00-RR00-200	F000958
2 relays+ Analog	-	-	100..240Vac/Vdc	40T96-4-00-RR00-201	F000960
3 relays	-	-	11..27Vac/Vdc	40T96-4-00-RRR0-000	F000962

Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code	
3 relays	-	-	100..240Vac/Vdc	40T96-4-00-RRR0-001	F000195	A
3 relays+ Analog	-	-	11..27Vac/Vdc	40T96-4-00-RRR0-200	F027057	
3 relays+ Analog	-	-	100..240Vac/Vdc	40T96-4-00-RRR0-201	F000963	
4 relays	-	-	11..27Vac/Vdc	40T96-4-00-RRRR-000	F027184	
4 relays	-	-	100..240Vac/Vdc	40T96-4-00-RRRR-001	F026532	A
2 relays	Transm. power supply 24 Vdc	-	11..27Vac/Vdc	40T96-4-24-RR00-000	F000196	A
2 relays	Transm. power supply 24 Vdc	-	100..240Vac/Vdc	40T96-4-24-RR00-001	F000197	A
2 relays+ Analog	Transm. power supply 24 Vdc	-	11..27Vac/Vdc	40T96-4-24-RR00-200	F000971	
2 relays+ Analog	Transm. power supply 24 Vdc	-	100..240Vac/Vdc	40T96-4-24-RR00-201	F000973	A
3 relays	Transm. power supply 24 Vdc	-	11..27Vac/Vdc	40T96-4-24-RRR0-000	F000974	
3 relays	Transm. power supply 24 Vdc	-	100..240Vac/Vdc	40T96-4-24-RRR0-001	F000199	A
3 relays+ Analog	Transm. power supply 24 Vdc	-	11..27Vac/Vdc	40T96-4-24-RRR0-200	F032600	
3 relays+ Analog	Transm. power supply 24 Vdc	-	100..240Vac/Vdc	40T96-4-24-RRR0-201	F000976	
3 relays+ Analog	Transm. power supply 24 VDC + digital input	-	11..27Vac/Vdc	40T96-4-24-RRR0-300	F000200	
3 relays+ Analog	Transm. power supply 24 VDC + digital input	-	100..240Vac/Vdc	40T96-4-24-RRR0-301	F000201	A
4 relays	Transm. power supply 24 Vdc	RS485 Modbus	11..27Vac/Vdc	40T96-4-24-RRRR-020	F043687	
4 relays	Transm. power supply 24 Vdc	RS485 Modbus	100..240Vac/Vdc	40T96-4-24-RRRR-021	F049252	
4 relays	Selectable transm. power supply	-	11..27Vac/Vdc	40T96-4-99-RRRR-000	F029295	
4 relays	Selectable transm. power supply	-	100..240Vac/Vdc	40T96-4-99-RRRR-001	F029368	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

INDICATORS / ALARM UNITS

48x96x157 faceplate version

Multichannel version

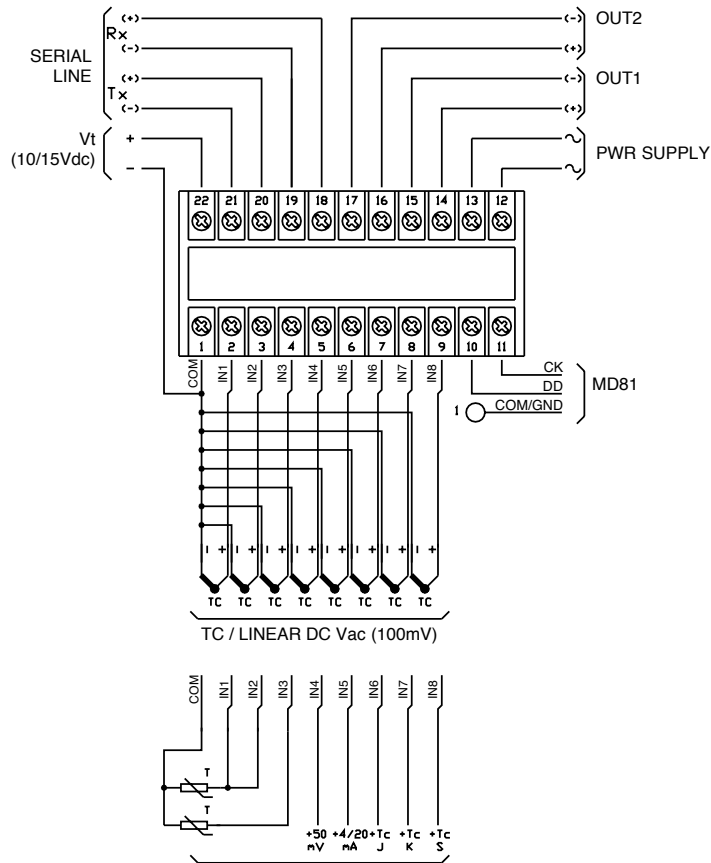
2308



MULTIZONE INDICATOR - ALARM UNIT

Indicator - alarm unit with 8 channels for inputs from thermocouple, resistance thermometer, linear signals, potentiometers, with 5-digit display, microprocessor-based.

- 8 Inputs: TC, RTD, mV, V, mA linear
- Outputs: 2 (configurable)
- Faceplate protection: IP65
- Power supply for sensor
- Serial line



HETEROGENEOUS INPUTS: The 3-wire resistance thermometers occupy two inputs: the actual input, which must be odd (1-3-5-7) and the next even channel for the third wire.



Serial Communication	Power supply	Order code	SAP/METEL code
Current loop	11..27Vac/Vdc	2308-1-R0-0	F000476 A
Current loop	100..240Vac/Vdc	2308-1-R0-1	F000477 A
RS485 Modbus	11..27Vac/Vdc	2308-2-R0-0	F000481
RS485 Modbus	100..240Vac/Vdc	2308-2-R0-1	F000040

All configurations can be seen on www.gefran.com

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48x96x170 faceplate version

High-performance versions

2400

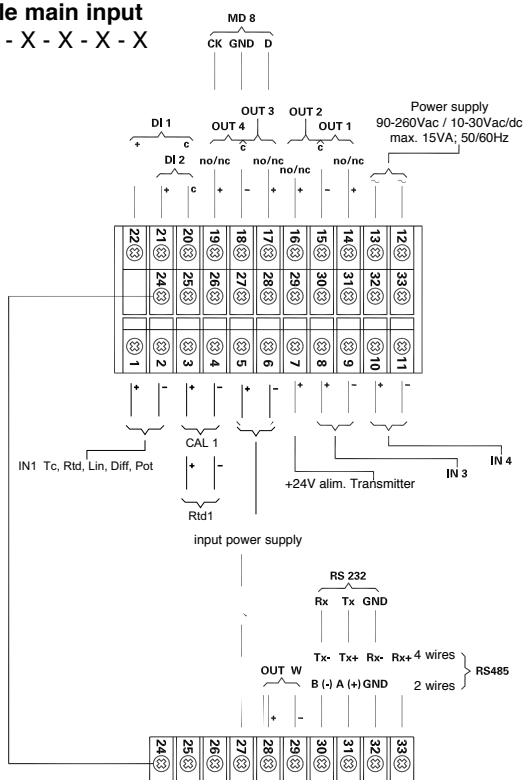


CONFIGURABLE FAST INDICATOR / ALARM UNIT

Indicator - alarm unit for load cells and strain-gauge pressure transducers. Up to 2 universal inputs for strain gauge/TC/RTD/linear/potentiom., 2 aux. analog inputs for linears/pot., 2 digital inputs PNP/NPN, 4 relay outputs, isolated analog retransmission, RS485, Profibus DP slave, transmitter and strain gauge power supply, math functions, 5-digit 2-color display, IP54 faceplate protection.

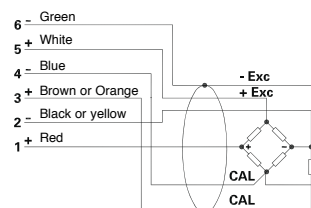
- Inputs: TC, RTD, mV, V, mA linear inputs, Strain gauge, Potentiometer.
- Retransmitted output
- Faceplate protection: IP65
- Accuracy: 0.1 %
- Sampling time: 2 msec

Version with single main input
Version: 2400 - 0 - X - X - X - X



IN1

Strain-gauge



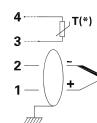
Current input



Voltage input

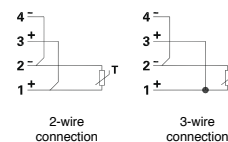


Thermocouple

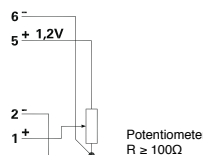


(*) PT 100 for possible compensation of external cold junction

Resistance thermometer



Potentiometer



Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
4 relays	Selectable transm. power supply	-	20..27Vac/Vdc	2400-0-0-4R-0-0	F032204 A
4 relays	Selectable transm. power supply	-	100..240Vac/Vdc	2400-0-0-4R-0-1	F028431 A
4 relays + analog	Selectable transm. power supply	-	20..27Vac/Vdc	2400-0-W-4R-0-0	F035857 A
4 relays + analog	Selectable transm. power supply	-	100..240Vac/Vdc	2400-0-W-4R-0-1	F028816 A
4 relays	Selectable transm. power supply	RS485 Modbus	20..27Vac/Vdc	2400-0-0-4R-2-0	F035475
4 relays	Selectable transm. power supply	RS485 Modbus	100..240Vac/Vdc	2400-0-0-4R-2-1	F030659
4 relays	Selectable transm. power supply	PROFIBUS DP	20..27Vac/Vdc	2400-0-0-4R-P-0	F039775
4 relays	Selectable transm. power supply	PROFIBUS DP	100..240Vac/Vdc	2400-0-0-4R-P-1	F041522
4 relays	Selectable transm. power supply	RS485 Modbus	20..27Vac/Vdc	2400-1-0-4R-2-0	F039405
4 relays	Selectable transm. power supply	RS485 Modbus	100..240Vac/Vdc	2400-1-0-4R-2-1	F031317
4 relays	Selectable transm. power supply	PROFIBUS DP	20..27Vac/Vdc	2400-1-0-4R-P-0	F035048
4 relays	Selectable transm. power supply	PROFIBUS DP	100..240Vac/Vdc	2400-1-0-4R-P-1	F041945

All configurations can be seen on www.gefran.com

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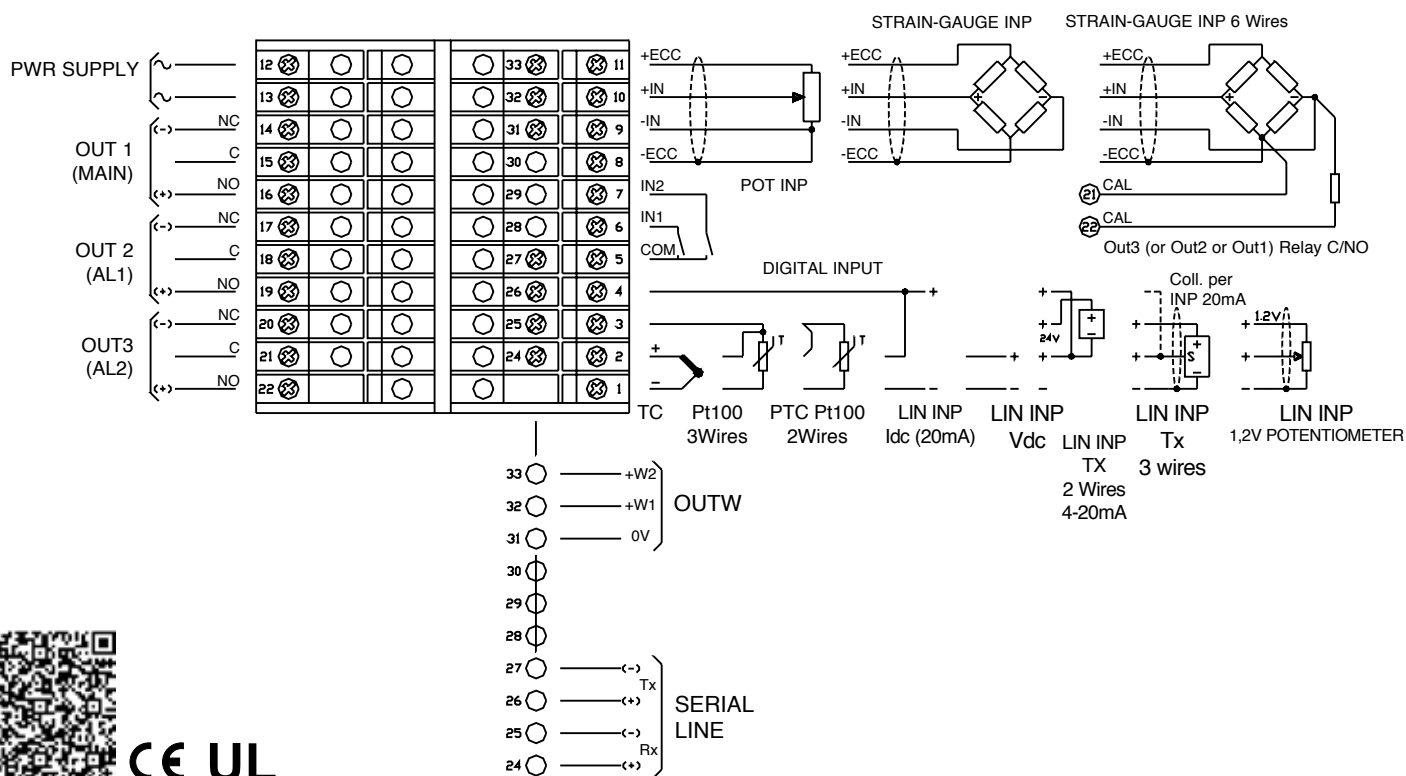
40TB



TEMPERATURE AND PRESSURE DOUBLE INDICATOR - ALARM UNIT

Two-channel indicator - alarm unit. First channel for strain-gauge, potentiometer and 4...20mA sensors; universal second channel for temperature, linear inputs; dimensions 96x96mm, double 4-digit display; 2 digital inputs; three relay outputs; microprocessor-based, configurable from faceplate keys and from PC.

- Inputs: TC, RTD, mV, V, mA linear inputs, Strain gauge, Potentiometer.
- Retransmitted output
- Faceplate protection: IP65
- Configurable alarms
- Power supply for external sensor
- RS485 serial line



Outputs	Special functions	Serial Communication	Power supply	Order code	SAP/METEL code
3 relays	Transm. power supply 10 Vdc	-	20..27Vac/Vdc	40TB-10-RRR-0-0-0	F031044
3 relays	Transm. power supply 10 Vdc	-	100..240Vac/Vdc	40TB-10-RRR-0-0-1	F000220
3 relays+ Analog	Transm. power supply 10 Vdc	-	20..27Vac/Vdc	40TB-10-RRR-1-0-0	F001047
3 relays+ Analog	Transm. power supply 10 Vdc	-	100..240Vac/Vdc	40TB-10-RRR-1-0-1	F001049
3 relays	Transm. power supply 10 Vdc	RS485 MODBUS	20..27Vac/Vdc	40TB-10-RRR-0-2-0	F028432
3 relays	Transm. power supply 10 Vdc	RS485 MODBUS	100..240Vac/Vdc	40TB-10-RRR-0-2-1	F001046

All configurations can be seen on www.gefran.com

Accessories

Current transformer	Description	Order code	SAP/METEL code	
	Current transformer (input 50AAC / output 50mAAC)		330200	
	Current transformer (input 25AAC / output 50mAAC)		330201	











GF_eXpress configuration kit	Description	Order code	SAP/METEL code	
Configuration software for Gefran products: Instruments, Drives, Sensors, Automation. Compatible with Windows 2000, XP, Vista. Supplied on CD ROM in Italian/English (selectable) and complete with cable and connectors for direct connection of PC-programming serial.	GF_eXpress software on CD-ROM, USB/485/TTL converter complete with connection cables to PC, Geflex and instrument.	GF_eXK-2-0-0	F049095	A
	Conv. USB - TTL + Cable 1M8+RJ (Ordered with code F057076)	USB TTL	F055001	A
	Conv. RJ10 - 3 PIM + Protection for Controllers & Indicators		F057076	A




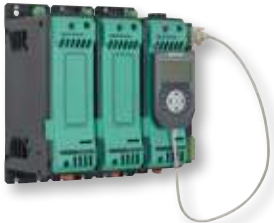








Supports for fixing to DIN rail	Description	Order code	SAP/METEL code	
	Base for DIN rail fixing. EN50022 (vertical fixing) (48x48mm)		51155	
	Base for DIN rail fixing. EN50022 (horizontal fixing) (48x96mm)		51156	
	Base for DIN rail fixing. (48x48mm) for models of series 800/400/4-40/600		51399	
	Base for DIN rail fixing. (48x96mm) for models of series 1600 e 1800		51479	

Covers	Description	Order code	SAP/METEL code	
IP54 / IP65 faceplate covers	Dust-protection cover in polycarbonate. Transparent. Mod. CFA110. For instruments with format 48x48mm (1/16 DIN)		51060	
	Dust-protection cover in polycarbonate. Transparent. Mod. CFA120. For instruments with format 48x96mm (1/8 DIN)		51061	
	Dust-protection cover in polycarbonate. Transparent. Mod. CFA220. For instruments with format 96x96mm (1/4 DIN)		51062	
	Polycarbonate cover. IP54 protection rating. Gray (frame) / transparent (door). For instruments with format 48x96mm (1/8 DIN)		51066	
	Polycarbonate cover. IP54 protection rating. Gray (frame) / transparent (door). For instruments with format 96x96mm (1/4 DIN)		51065	
	Polycarbonate cover with rubber seal. IP65 protection rating. Gray (frame) / transparent (door). For instruments with format 48x96mm (1/8 DIN)		51067	
	Polycarbonate cover with rubber seal. IP65 protection rating. Gray (frame) / transparent (door). For instruments with format 96x96mm (1/4 DIN)		51064	

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POWER UNITS

<p>PHOTOVOLTAICS, PLASTICS, OVENS, WOOD, GLASS, PAPER, FOOD</p>	<p>Power controllers</p>	<div style="text-align: center;"> <p>GFX4 (16,32,40A) [4 CHANNELS] FIELDBUS*</p>  </div>				
<p>PLASTICS, PACKAGING, FURNACES</p>	<p>Solid state power units</p>	<p>GTS (15... 120A)</p> 	<p>GTZ (25... 55A) (3-PHASE)</p> 	<p>GTD (25,40A)</p> 	<p>W211 (400, 600A)</p> 	<p>W212 (400, 600A)</p> 
<p>PLASTICS, PACKAGING</p>	<p>Solid state relays</p>	<p>GQ (15... 90A)</p> 	<p>GS (15... 120A)</p> 	<p>GZ (10... 55A) (3-PHASE)</p> 	<p>GD (40A)</p> 	

Zero crossing		
Interrupted load alarm		
Zero crossing "BURST FIRING"		
	Half single cycle, phase angle, feedback	
	<p>GTF-Xtra (25...60A)</p>  <p>GTF (25...250A)</p>  <p>Modbus TCP/RTU PC Configurable</p>	<p>GFW-Xtra (40...100A) FIELDBUS*</p>  <p>GFW (40...250A) FIELDBUS*</p>  <p>GFX4-IR (16, 32, 40A) (4 CHANNELS) FIELDBUS*</p> 
<p>GTT (25... 120A)</p> 		<p>FIELDBUS*</p>   <p>Modbus TCP/RTU</p> <p>CANopen</p>    <p>PC Configurable</p>
<p>GT (25... 120A)</p> 		

C

POWER UNITS

Monophase solid state relay with logic input

Universal Versions

GS

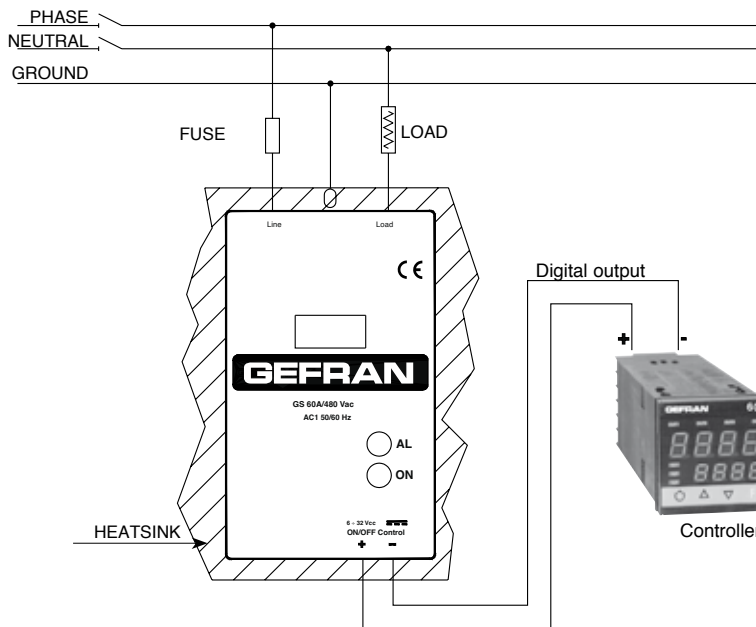


MONOPHASE SOLID STATE RELAY

Monophase solid state relay for resistive loads. Zero crossing. Double SCR output in antiparallel. Logic controller in VDC and VAC. Signal LEDs.

- Control logic input 3- 32VDC; 20-260VAC/DC
- Faceplate protection: IP20
- Nominal working temperature 40°C
- Optional interrupted load alarm
- Nominal load voltages 230VAC, 480VAC, 600VAC

Monophase connection



CE UL

Current	Working voltage	Control type	Control	Order code	SAP/METEL code
15 A	Up to 230 Vac	Logic	5-32 Vdc	GS-15/230-0 (230V/15A SCR)	F022273
15 A	Up to 480 Vac	Logic	5-32 Vdc	GS-15/480-0 (480V/15A SCR)	F022277
25 A	Up to 230 Vac	Logic	5-32 Vdc	GS-25/230-0 (230V/25A SCR)	F000712
25 A	Up to 480 Vac	Logic	5-32 Vdc	GS-25/480-0 (480V/25A SCR)	F000715
40 A	Up to 230 Vac	Logic	5-32 Vdc	GS-40/230-0 (230V/40A SCR)	F022274
40 A	Up to 480 Vac	Logic	5-32 Vdc	GS-40/480-0 (480V/40A SCR)	F022278
50 A	Up to 230 Vac	Logic	5-32 Vdc	GS-50/230-0 (230V/50A SCR)	F000713
50 A	Up to 480 Vac	Logic	5-32 Vdc	GS-50/480-0 (480V/50A SCR)	F000716
60 A	Up to 230 Vac	Logic	5-32 Vdc	GS-60/230-0 (230V/60A SCR)	F022275
60 A	Up to 480 Vac	Logic	5-32 Vdc	GS-60/480-0 (480V/60A SCR)	F022279
75 A	Up to 230 Vac	Logic	5-32 Vdc	GS-75/230-0 (230V/75A SCR)	F022918
75 A	Up to 480 Vac	Logic	5-32 Vdc	GS-75/480-0 (480V/75A SCR)	F022919
90 A	Up to 230 Vac	Logic	5-32 Vdc	GS-90/230-0 (230V/90A SCR)	F000714
90 A	Up to 480 Vac	Logic	5-32 Vdc	GS-90/480-0 (480V/90A SCR)	F000717
120 A	Up to 230 Vac	Logic	5-32 Vdc	GS-120/230-0 (230V/120A SCR)	F022276
120 A	Up to 480 Vac	Logic	5-32 Vdc	GS-120/480-0 (480V/120A SCR)	F022280

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Monophase solid state relay with logic input

Universal Versions

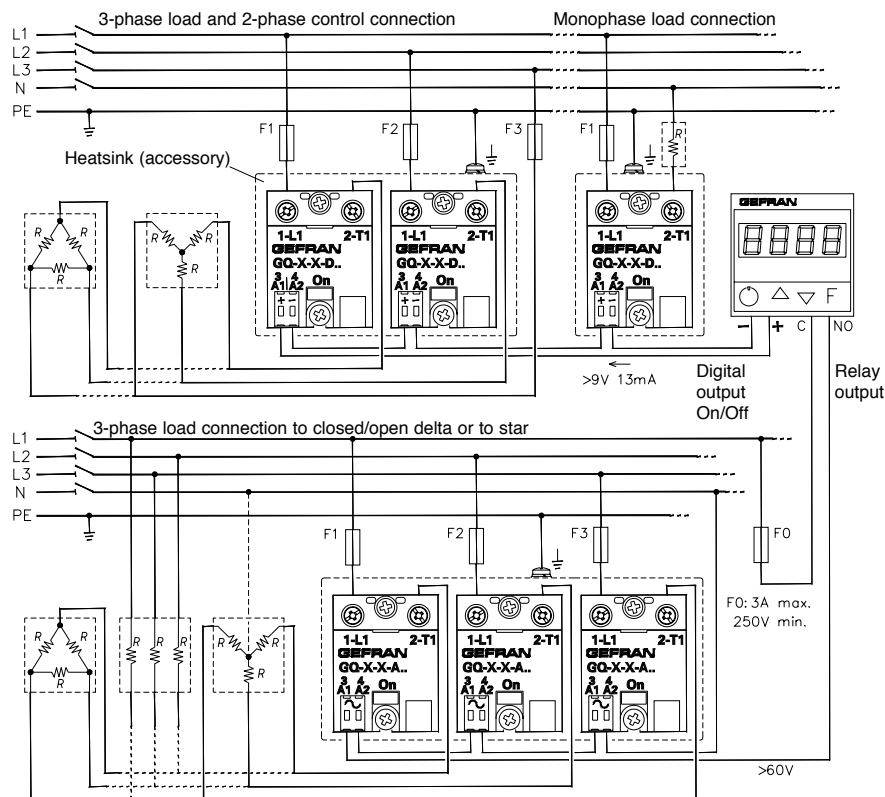
GQ



MONOPHASE SOLID STATE RELAY WITH SCR

Monophase solid state relay for resistive and inductive loads. Zero crossing. Double SCR output in antiparallel. Logic controller in VDC (3...32VDC). Signal LEDs.

- Integrated IP20 cover.
- Control logic input 3- 32VDC
- Faceplate protection: IP20
- Nominal working temperature 40°C
- Internal MOV overvoltage protection



CE UL

Current	Working voltage	Control type	Control	Order code	SAP/METEL code
15 A	Up to 230 Vac	Logic	3-32 Vdc	GQ-15-24-D-1-1 (230V/15A)	F041186
15 A	Up to 480 Vac	Logic	3-32 Vdc	GQ-15-48-D-1-1 (480V/15A)	F059630
25 A	Up to 230 Vac	Logic	3-32 Vdc	GQ-25-24-D-1-1 (230V/25A)	F040879
25 A	Up to 480 Vac	Logic	3-32 Vdc	GQ-25-48-D-1-1 (480V/25A)	F040880
25 A	Up to 600 Vac	Logic	3-32 Vdc	GQ-25-60-D-1-1 (600V/25A)	F046825
50 A	Up to 230 Vac	Logic	3-32 Vdc	GQ-50-24-D-1-1 (230V/50A)	F040881
50 A	Up to 480 Vac	Logic	3-32 Vdc	GQ-50-48-D-1-1 (480V/50A)	F040882
50 A	Up to 600 Vac	Logic	3-32 Vdc	GQ-50-60-D-1-1 (600V/50A)	F041269
90 A	Up to 230 Vac	Logic	3-32 Vdc	GQ-90-24-D-1-1 (230V/90A)	F040883
90 A	Up to 480 Vac	Logic	3-32 Vdc	GQ-90-48-D-1-1 (480V/90A)	F040884
90 A	Up to 600 Vac	Logic	3-32 Vdc	GQ-90-60-D-1-1 (600V/90A)	F046826

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

POWER UNITS

Monophase solid state relay with logic input

Universal Versions

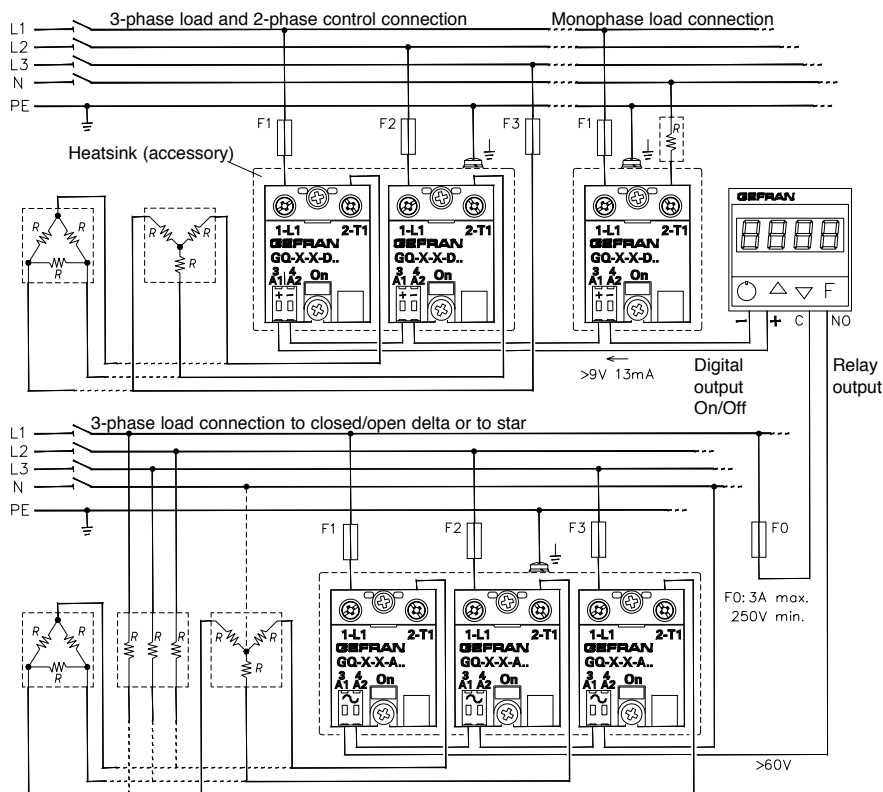
GQ



MONOPHASE SOLID STATE RELAY WITH SCR

Monophase solid state relay for resistive and inductive loads. Zero crossing. Double SCR output in antiparallel. Logic controller in VAC/VDC (20...260 VAC/DC). Signal LEDs. Integrated IP20 cover.

- Control logic input 20-260VAC/DC
- Faceplate protection: IP20
- Nominal working temperature 40°C
- Internal MOV overvoltage protection



CE UL

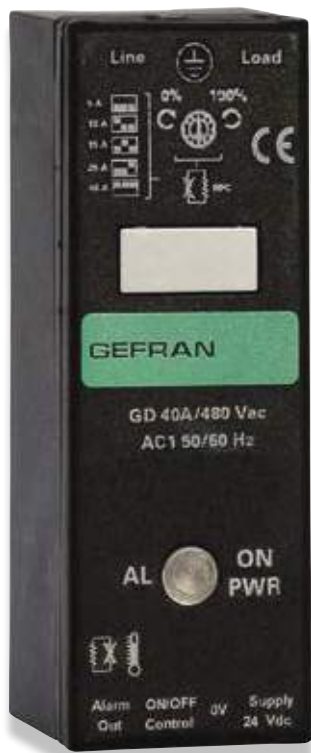
Current	Working voltage	Control type	Control	Order code	SAP/METEL code
15 A	Up to 230 Vac	Logic	20...260Vac/Vdc	GQ-15-24-A-1-1 (230V/15A)	F045251
25 A	Up to 230 Vac	Logic	20...260Vac/Vdc	GQ-25-24-A-1-1 (230V/25A)	F040885
25 A	Up to 480 Vac	Logic	20...260Vac/Vdc	GQ-25-48-A-1-1 (480V/25A)	F042271
50 A	Up to 230 Vac	Logic	20...260Vac/Vdc	GQ-50-24-A-1-1 (230/50A)	F040886
50 A	Up to 480 Vac	Logic	20...260Vac/Vdc	GQ-50-48-A-1-1 (480V/50A)	F041187
90 A	Up to 230 Vac	Logic	20...260Vac/Vdc	GQ-90-24-A-1-1 (230V/90A)	F046827
90 A	Up to 480 Vac	Logic	20...260Vac/Vdc	GQ-90-48-A-1-1 (480V/90A)	F041046

All configurations can be seen on www.gefran.com

Monophase solid state relay with logic input

Universal Versions

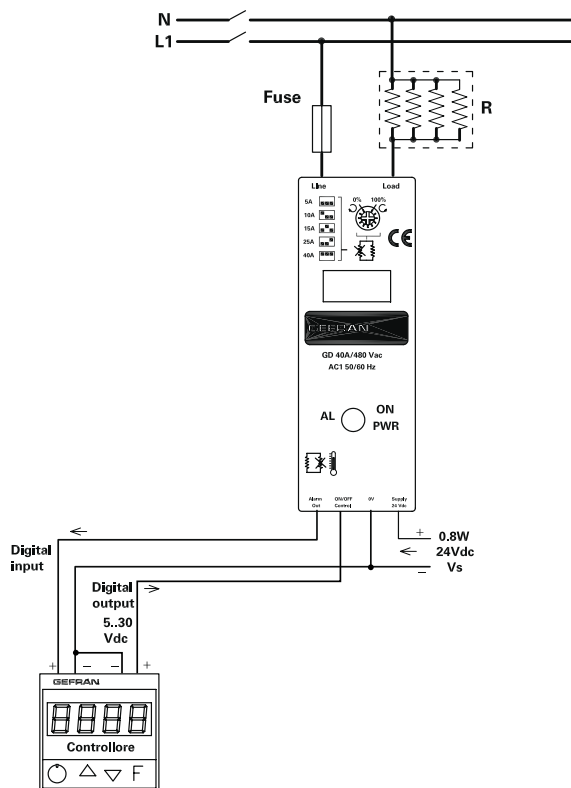
GD



SOLID STATE RELAY WITH LOGIC CONTROL AND DIAGNOSTICS

Zero crossing monophase solid state relay with VDC logic control for resistive loads, with diagnostics for interrupted load (Hb function) and alarm output, overtemperature protection.

- Control logic input 5- 30VDC
- Faceplate protection: IP20
- Nominal working temperature 40°C
- Load interrupt protection



Current	Working voltage	Control type	Control	Special functions	Order code	SAP/METEL code
40 A	Up to 480 Vac	Logic	5-30 Vdc	Load interrupt (HB)	GD-40/480-0 (480V/40A)	F028719
40 A	Up to 480 Vac	Logic	5-30 Vdc	Load interrupt (HB) + SCR overtemperature	GD-40/480-1 (480V/40A)	F028720

All configurations can be seen on www.gefran.com

POWER UNITS

Monophase solid state relay with analog input

Advanced versions

GT

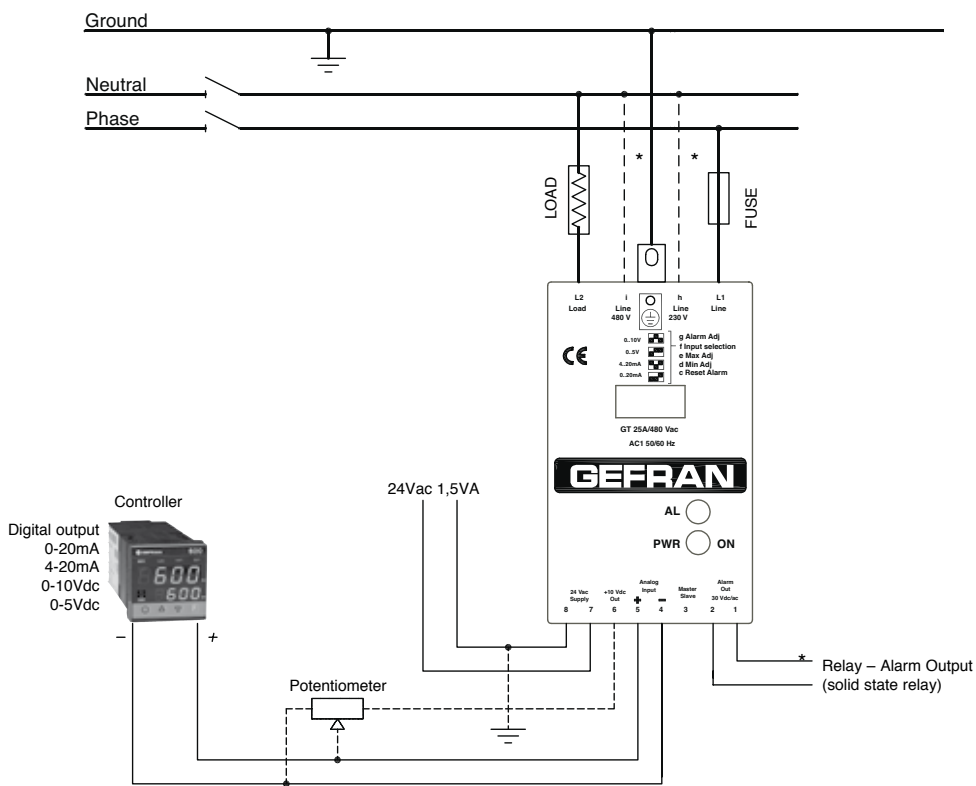


MONOPHASE SOLID STATE RELAY WITH ANALOG CONTROL

Monophase solid state power relay for resistive loads; "fast-cycling, zero-crossing" firing to drive double SCR connected in antiparallel; proportional analog control; signal LEDs.

- **Analog control input 0- 10VAC, 4- 20mA**
- **Faceplate protection: IP20**
- **Power control: Fast-cycling, Zero-crossing mode**
- **Internal MOV overvoltage protection**
- **Nominal working temperature 40°C**

Monophase connection (control from analog signal or from potentiometer)



CE UL

Current	Working voltage	Control type	Control	Special functions	Order code	SAP/METEL code
25 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GT-25/480-0 (480V/25A)	F023696
25 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GT-25/480-1 (480V/25A)	F023697
40 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GT-40/480-0 (480V/40A)	F023698
40 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GT-40/480-1 (480V/40A)	F023699
50 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GT-50/480-0 (480V/50A)	F023700
50 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GT-50/480-1 (480V/50A)	F023701
60 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GT-60/480-0 (480V/60A)	F023702
60 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GT-60/480-1 (480V/60A)	F023703
75 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GT-75/480-0 (480V/75A)	F023704
75 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GT-75/480-1 (480V/75A)	F023705
90 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GT-90/480-0 (480V/90A)	F023706
90 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GT-90/480-1 (480V/90A)	F023707
120 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GT-120/480-0 (480V/120A)	F023708
120 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GT-120/480-1 (480V/120A)	F023709

All configurations can be seen on www.gefran.com

Monophase solid state power units with logic input

Universal Versions

GTS

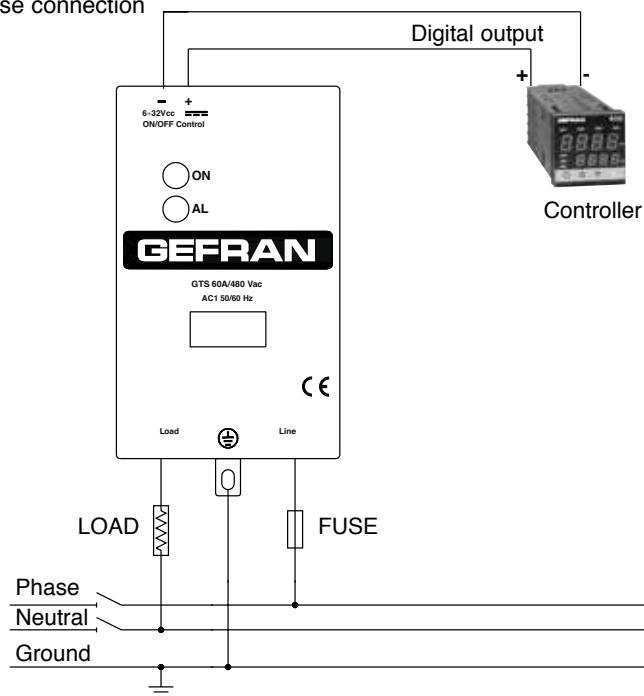


MONOPHASE SOLID STATE POWER UNITS WITH HEATSINK

Monophase solid state power unit for resistive loads, complete with heatsink; "zero crossing" firing to drive double SCR connected in antiparallel. Logic control in VDC and VAC. DIN rail attachment.

- Control logic input 3- 32VDC; 20-260VAC
- Front Panel Protection: IP20
- Load Interrupt Protection
- Over-temperature and interrupted load alarm function
- Integrated Heatsink
- Nominal Operating Temperature 40°C
- Nominal load voltages 230VAC, 480VAC, 600VAC

Monophase connection



CE UL

Current	Working voltage	Control type	Control	Special functions	Order code	SAP/METEL code	
15 A	Up to 230 Vac	Logic	5-32 Vdc		GTS-15/230-0 (230V/15A SCR)	F000116	A
15 A	Up to 480 Vac	Logic	5-32 Vdc		GTS-15/480-0 (480V/15A SCR)	F000117	A
25 A	Up to 230 Vac	Logic	5-32 Vdc		GTS-25/230-0 (230V/25A SCR)	F000120	A
25 A	Up to 480 Vac	Logic	5-32 Vdc		GTS-25/480-0 (480V/25A SCR)	F000121	A
40 A	Up to 230 Vac	Logic	5-32 Vdc		GTS-40/230-0 (230V/40A SCR)	F000124	A
40 A	Up to 480 Vac	Logic	5-32 Vdc		GTS-40/480-0 (480V/40A SCR)	F000125	A
50 A	Up to 230 Vac	Logic	5-32 Vdc		GTS-50/230-0 (230V/50A SCR)	F023535	
50 A	Up to 480 Vac	Logic	5-32 Vdc		GTS-50/480-0 (480V/50A SCR)	F000127	A
60 A	Up to 230 Vac	Logic	5-32 Vdc		GTS-60/230-0 (230V/60A SCR)	F023536	
60 A	Up to 480 Vac	Logic	5-32 Vdc		GTS-60/480-0 (480V/60A SCR)	F000129	A
75 A	Up to 230 Vac	Logic	5-32 Vdc		GTS-75/230-0 (230V/75A SCR)	F023537	
75 A	Up to 480 Vac	Logic	5-32 Vdc		GTS-75/480-0 (480V/75A SCR)	F023538	A
90 A	Up to 230 Vac	Logic	5-32 Vdc		GTS-90/230-0 (230V/90A SCR)	F023539	
90 A	Up to 480 Vac	Logic	5-32 Vdc		GTS-90/480-0 (480V/90A SCR)	F000131	A
120 A	Up to 230 Vac	Logic	5-32 Vdc	Fan 230VAC	GTS-120/230-0-VEN90 (230V/120A SCR)	F023541	
120 A	Up to 480 Vac	Logic	5-32 Vdc	Fan 230VAC	GTS-120/480-0-VEN90 (480V/120A SCR)	F000135	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

POWER UNITS

Monophase solid state power units with logic input

Universal Versions

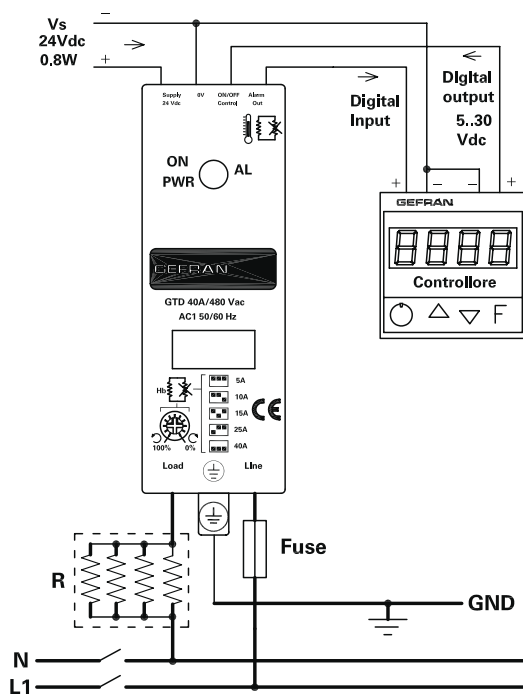
GTD



SOLID STATE POWER UNIT WITH LOGIC CONTROL AND DIAGNOSTICS

Zero crossing monophase solid state power unit with VDC logic control for resistive loads, with diagnostics for interrupted load (Hb function) and alarm output. Complete with aluminium heatsink and DIN rail attachment. Optional overtemperature protection.

- Control logic input 3- 32VDC
- Faceplate protection: IP20
- Load interrupt protection
- Overtemperature function alarm
- Integrated heatsink
- Nominal working temperature 40°C



Current	Working voltage	Control type	Control	Special functions	Order code	SAP/METEL code	
25 A	Up to 480 Vac	Logic	5-30 Vdc	Load interrupt (HB)	GTD-25/480-0 (480V/25A)	F028717	
25 A	Up to 480 Vac	Logic	5-30 Vdc	Load interrupt (HB) + SCR overtemperature	GTD-25/480-1 (480V/25A)	F028653	
40 A	Up to 480 Vac	Logic	5-30 Vdc	Load interrupt (HB)	GTD-40/480-0 (480V/40A)	F028718	A
40 A	Up to 480 Vac	Logic	5-30 Vdc	Load interrupt (HB) + SCR overtemperature	GTD-40/480-1 (480V/40A)	F028554	A

All configurations can be seen on www.gefran.com

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Monophase solid state power units with analog input

Advanced versions

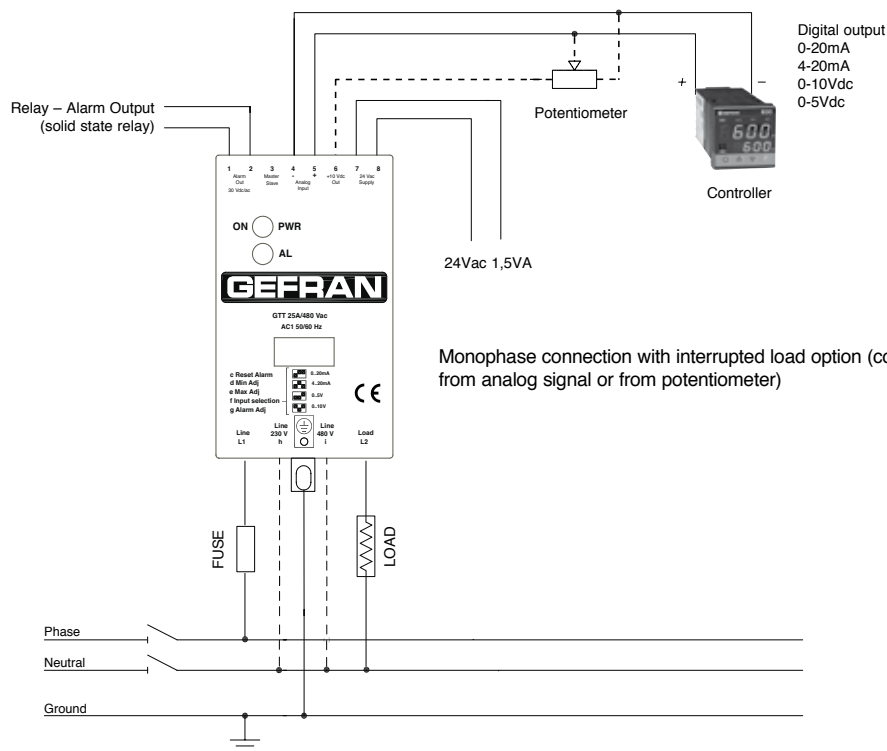
GTT



MONOPHASE SOLID STATE POWER UNITS WITH HEATSINK AND ANALOG CONTROL

Monophase solid state power unit for resistive loads, complete with heatsink, "fast-cycling, zero-crossing" firing to drive double SCR connected in antiparallel; proportional analog control with 0...10VAC, 0...20mA, 4...20mA, potentiometer signal. DIN rail attachment, signal and diagnostics LEDs.

- **Analog control input 0- 10VAC, 4- 20mA**
- **Faceplate protection: IP20**
- **Internal MOV overvoltage protection**
- **Power control: Fast-cycling, Zero-crossing mode**
- **Nominal working temperature 40°C**



CE UL

Current	Working voltage	Control type	Control	Special functions	Order code	SAP/METEL code
25 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GTT-25/480-0 (480V/25A)	F000140 A
25 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GTT-25/480-1 (480V/25A)	F000760
40 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GTT-40/480-0 (480V/40A)	F000142 A
40 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GTT-40/480-1 (480V/40A)	F000764
50 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GTT-50/480-0 (480V/50A)	F023692
50 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GTT-50/480-1 (480V/50A)	F023693
60 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GTT-60/480-0 (480V/60A)	F000144
60 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GTT-60/480-1 (480V/60A)	F000766
75 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GTT-75/480-0 (480V/75A)	F023694
75 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GTT-75/480-1 (480V/75A)	F023695
90 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA		GTT-90/480-0 (480V/90A)	F000146 A
90 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Load interrupt (HB)	GTT-90/480-1 (480V/90A)	F000769
120 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Fan 230VAC	GTT-120/480-0-VEN90 (480V/120A)	F000150 A
120 A	Up to 480 Vac	Analog	0-5V, 0-10V, 0-20mA, 4-20mA	Fan 230VAC + Interrupted load (HB)	GTT-120/480-1-VEN90 (480V/120A)	F000773

All configurations can be seen on www.gefran.com

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POWER UNITS

3-phase solid state relays with logic input

Advanced versions

GZ

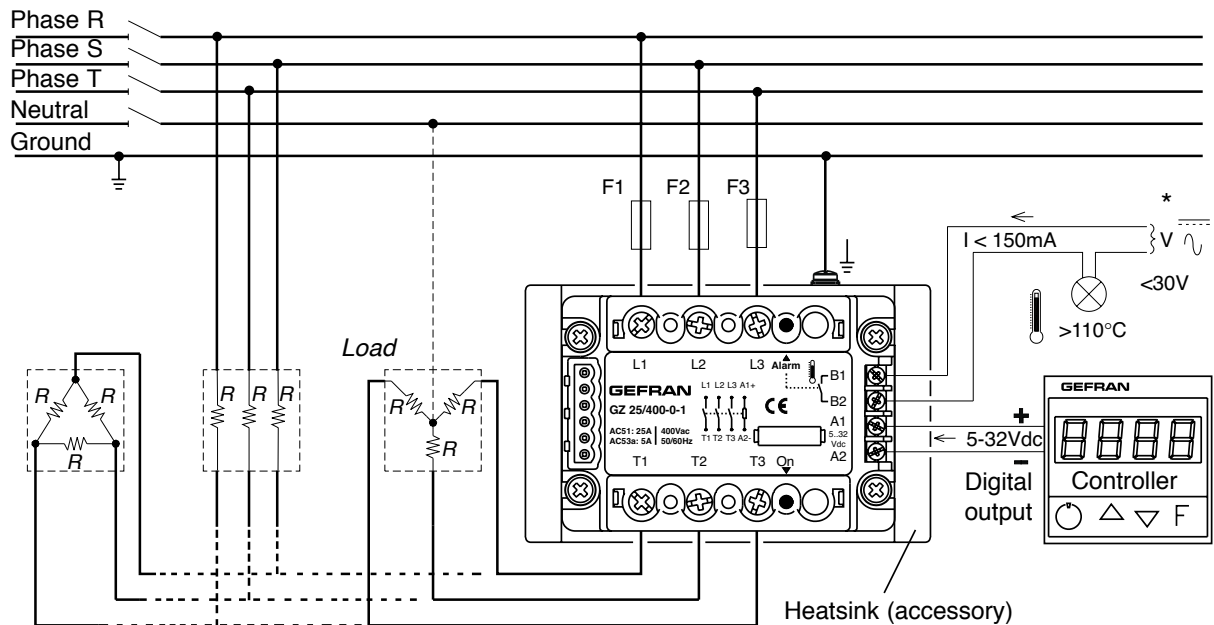


3-PHASE SOLID STATE RELAY WITH LOGIC CONTROL

Zero crossing 3-phase solid state relay with VDC and VAC logic control for 3-phase loads up to 3 x 55A (AC51) at 400/480/600VAC. Protection against overvoltage and overtemperature of incorporated junction. Alarm output.

- Control logic input 3- 32VDC; 20-260VAC/DC
- Faceplate protection: IP20
- Internal MOV overvoltage protection
- Nominal working temperature 40°C

Connection of 3-phase load to delta or star (with or without neutral)



CE UL

Current	Working voltage	Control type	Control	Special functions	Order code	SAP/METEL code
3 x 10 A	Up to 400 Vac	Logic	5-32 Vdc	Overtemperature protection alarm output	GZ-10/400-0-1	F027760
3 x 25 A	Up to 480 Vac	Logic	5-32 Vdc	Overtemperature protection alarm output	GZ-25/480-0-1	F027765
3 x 40 A	Up to 480 Vac	Logic	5-32 Vdc	Overtemperature protection alarm output	GZ-40/480-0-1	F027766
3 x 40 A	Up to 600 Vac	Logic	5-32 Vdc	Overtemperature protection alarm output	GZ-40/600-0-1	F0272762
3 x 55 A	Up to 480 Vac	Logic	5-32 Vdc	Overtemperature protection alarm output	GZ-55/480-0-1	F027767
3 x 55 A	Up to 600 Vac	Logic	5-32 Vdc	Overtemperature protection alarm output	GZ-55/600-0-1	F027763

All configurations can be seen on www.gefran.com

3-phase solid state power units with logic input

Advanced versions

GTZ

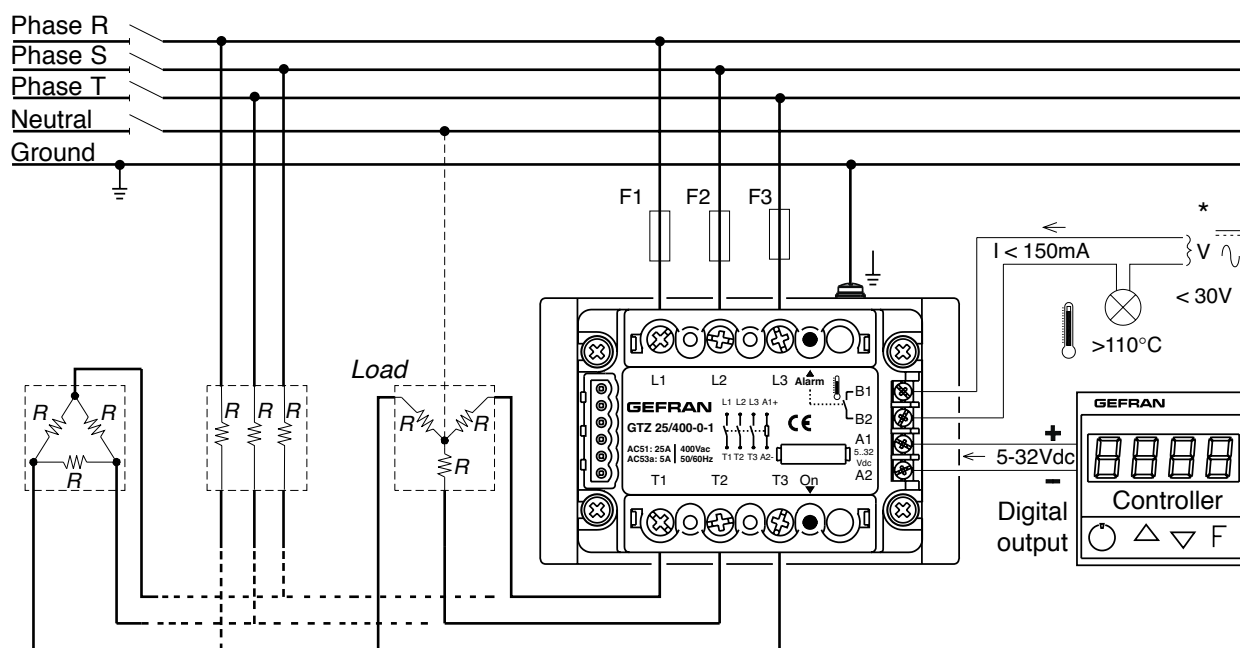


3-PHASE SOLID STATE POWER UNIT WITH LOGIC CONTROL

Zero crossing 3-phase solid state power unit with VDC and VAC logic control for loads up to 3 x 55A (AC51) at 400/480/600VAC, complete with aluminium heatsink and DIN rail attachment. Protection against overvoltage and overtemperature of incorporated junction. Overtemperature alarm output.

- Control logic input 3- 32VDC; 20-260VAC/DC
- Faceplate protection: IP20
- Internal MOV overvoltage protection
- Integrated heatsink
- Nominal working temperature 40°C

Connection of 3-phase load to delta or star (with or without neutral)



CE UL

Current	Working voltage	Control type	Control	Special functions	Order code	SAP/METEL code
3 x 25 A	Up to 480 Vac	Logic	5-32 Vdc	Overtemperature protection alarm output	GTZ-25/480-0-1	F027786
3 x 40 A	Up to 480 Vac	Logic	5-32 Vdc	Fan 230 VAC + Overtemperature protection alarm output	GTZ-40/480-0-1-VEN90	F027787
3 x 40 A	Up to 600 Vac	Logic	5-32 Vdc	Fan 230 VAC + Overtemperature protection alarm output	GTZ-40/600-0-1-VEN90	F027778
3 x 55 A	Up to 480 Vac	Logic	5-32 Vdc	Fan 230 VAC + Overtemperature protection alarm output	GTZ-55/480-0-1-VEN90	F027788
3 x 55 A	Up to 600 Vac	Logic	5-32 Vdc	Fan 230 VAC + Overtemperature protection alarm output	GTZ-55/600-0-1-VEN90	F027779

All configurations can be seen on www.gefran.com

POWER UNITS

Smart power controllers from one to three phases

High-performance versions

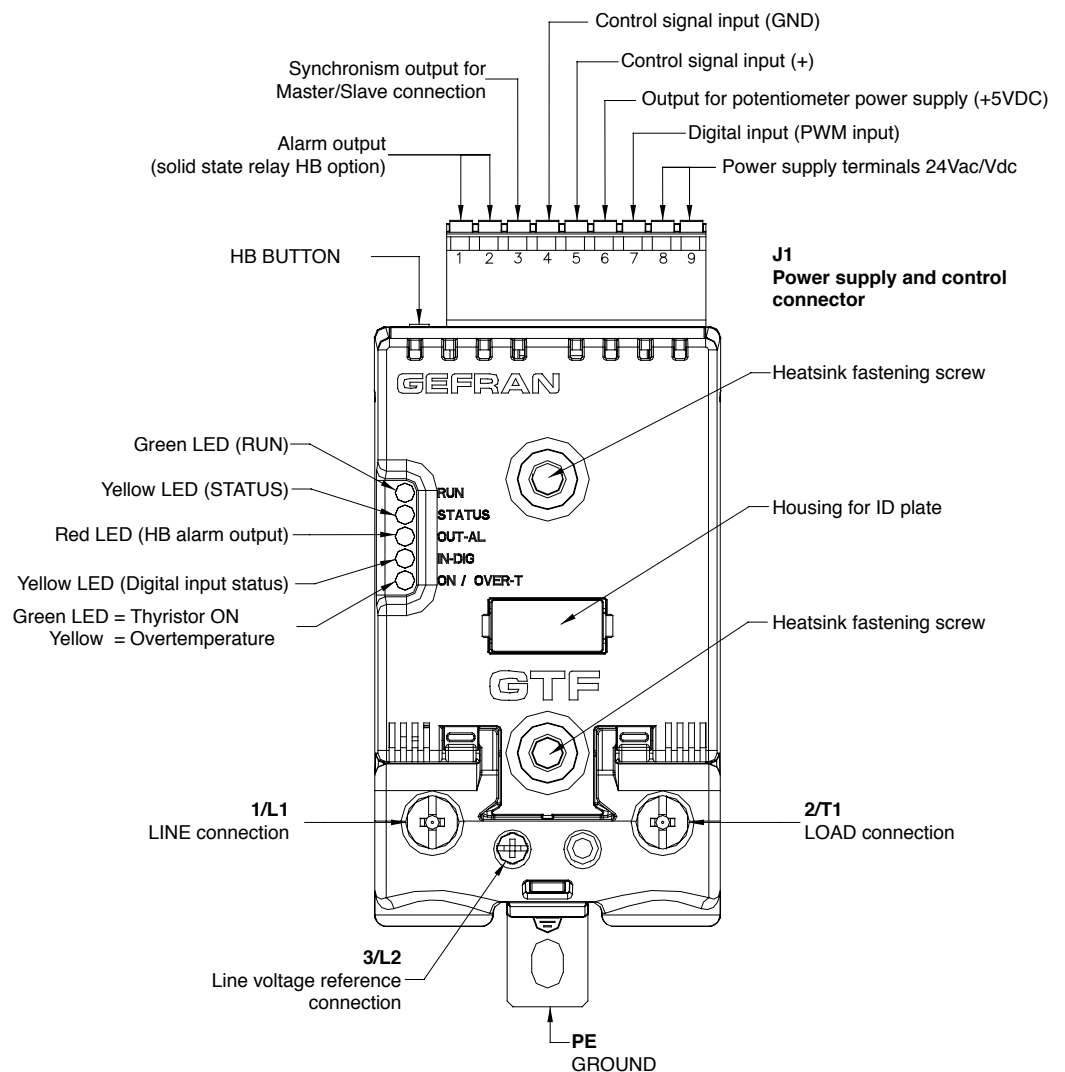
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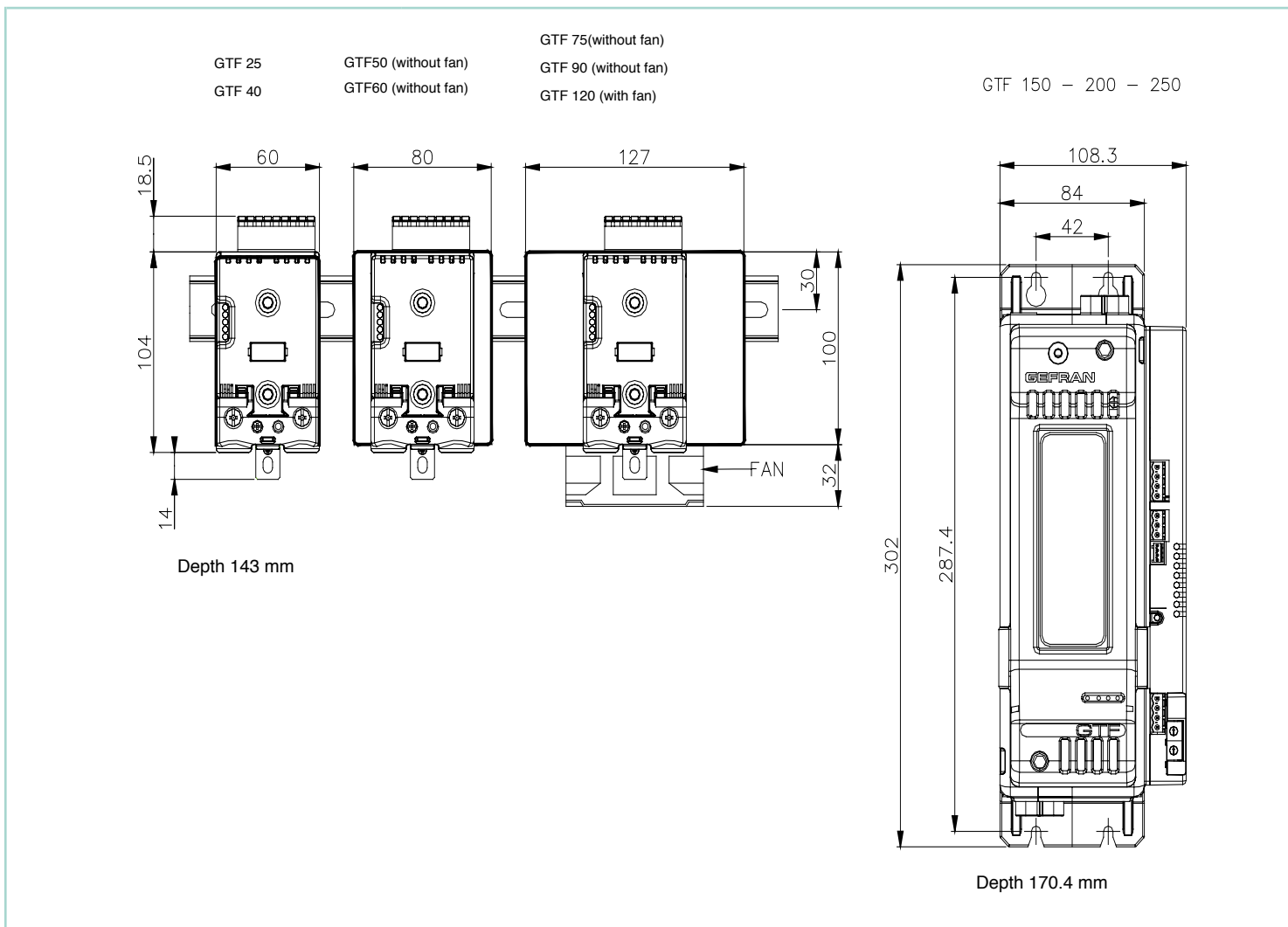
CONFIGURABLE POWER CONTROLLERS WITH SERIAL COMMUNICATION IN MODBUS RTU

Modular monophasic power controller with heatsink, 25A / 480VAC (25A at 40°C, voltage range 90 - 530 VAC). Control inputs: digital, programmable analog V, I, Potentiometer. Firing type configurable for: ZC "zero crossing", BF "burst firing", HSC "half single cycle", PA "phase angle".

- Configurable analog control input (0- 10V, 4- 20mA)
- Faceplate protection: IP20
- Overvoltage protection
- Overtemperature function alarm
- Current V, I, P limit
- Modbus RTU digital communication
- Integrated fuse
- PID temperature control function
- Nominal working temperature 40°C



CE UL



Current	Work modes (configurable via software)	Integrated functions	Communication	Options included	Order code	SAP/METEL code	
25 A	Master	-	-	-	GTF-25-480-0-0-0-0 1-B-M	F052376	A
25 A	Master	HB load interrupt alarm	-	-	GTF-25-480-0-1-0-0 1-B-M	F053125	
25 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	-	GTF-25-480-2-1-0-0 1-B-M	F054058	
25 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	-	GTF-25-480-2-1-0-M 1-B-M	F052299	
40 A	Master	-	-	-	GTF-40-480-0-0-0-0 1-B-M	F050677	
40 A	Master	HB load interrupt alarm	-	-	GTF-40-480-0-1-0-0 1-B-M	F050678	
40 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	-	GTF-40-480-2-1-0-0 1-B-M	F052323	
40 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	-	GTF-40-480-2-1-0-M 1-B-M	F054982	
50 A	Master	-	-	-	GTF-50-480-0-0-0-0 1-B-M	F052386	
50 A	Master	HB load interrupt alarm	-	-	GTF-50-480-0-1-0-0 1-B-M	F055291	
50 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	-	GTF-50-480-2-1-0-0 1-B-M	F059632	
50 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	-	GTF-50-480-2-1-0-M 1-B-M	F052298	



POWER UNITS

Current	Work modes (configurable via software)	Integrated functions	Communication	Options included	Order code	SAP/METEL code
60 A	Master	-	-	-	GTF-60-480-0-0-0-0 1-B-M	F052387
60 A	Master	HB load interrupt alarm	-	-	GTF-60-480-0-1-0-0 1-B-M	F053310
60 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	-	GTF-60-480-2-1-0-0 1-B-M	F057283
60 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	-	GTF-60-480-2-1-0-M 1-B-M	F053311
75 A	Master	-	-	-	GTF-75-480-0-0-0-0 1-B-M	F052388
75 A	Master	HB load interrupt alarm	-	-	GTF-75-480-0-1-0-0 1-B-M	F052322
75 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	-	GTF-75-480-2-1-0-0 1-B-M	F054885
75 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	-	GTF-75-480-2-1-0-M 1-B-M	F057084
90 A	Master	-	-	-	GTF-90-480-0-0-0-0 1-B-M	F052389
90 A	Master	HB load interrupt alarm	-	-	GTF-90-480-0-1-0-0 1-B-M	F051238
90 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	-	GTF-90-480-2-1-0-0 1-B-M	F053734
90 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	-	GTF-90-480-2-1-0-M 1-B-M	F052303
120 A	Master	-	-	-	GTF-120-480-0-0-0-0 1-B-M	F052390
120 A	Master	HB load interrupt alarm	-	-	GTF-120-480-0-1-0-0 1-B-M	F059633
120 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	-	GTF-120-480-2-1-0-0 1-B-M	F055924
120 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	-	GTF-120-480-2-1-0-M 1-B-M	F056620
150 A	Master	-	-	High-speed fuse	GTF-150-480-0-0-1-0 1-B-M	F059634
150 A	Master	HB load interrupt alarm	-	High-speed fuse	GTF-150-480-0-1-1-0 1-B-M	F059635
150 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	High-speed fuse	GTF-150-480-2-1-1-0 1-B-M	F059636
150 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	High-speed fuse	GTF-150-480-2-1-1-M 1-B-M	F059640
200 A	Master	-	-	High-speed fuse	GTF-200-480-0-0-1-0 1-B-M	F053624
200 A	Master	HB load interrupt alarm	-	High-speed fuse	GTF-200-480-0-1-1-0 1-B-M	F059641
200 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	High-speed fuse	GTF-200-480-2-1-1-0 1-B-M	F059642
200 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	High-speed fuse	GTF-200-480-2-1-1-M 1-B-M	F059643
250 A	Master	-	-	High-speed fuse	GTF-250-480-0-0-1-0 1-B-M	F059644
250 A	Master	HB load interrupt alarm	-	High-speed fuse	GTF-250-480-0-1-1-0 1-B-M	F053735
250 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	-	High-speed fuse	GTF-250-480-2-1-1-0 1-B-M	F059645
250 A	Master	HB load interrupt alarm Limit I_Pk, I_RMS Feedback (P,V,I,V2,I2)	Modbus	High-speed fuse	GTF-250-480-2-1-1-M 1-B-M	F059646

All configurations can be seen on www.gefran.com

Smart power controllers from one to three phases

GFW_1PH

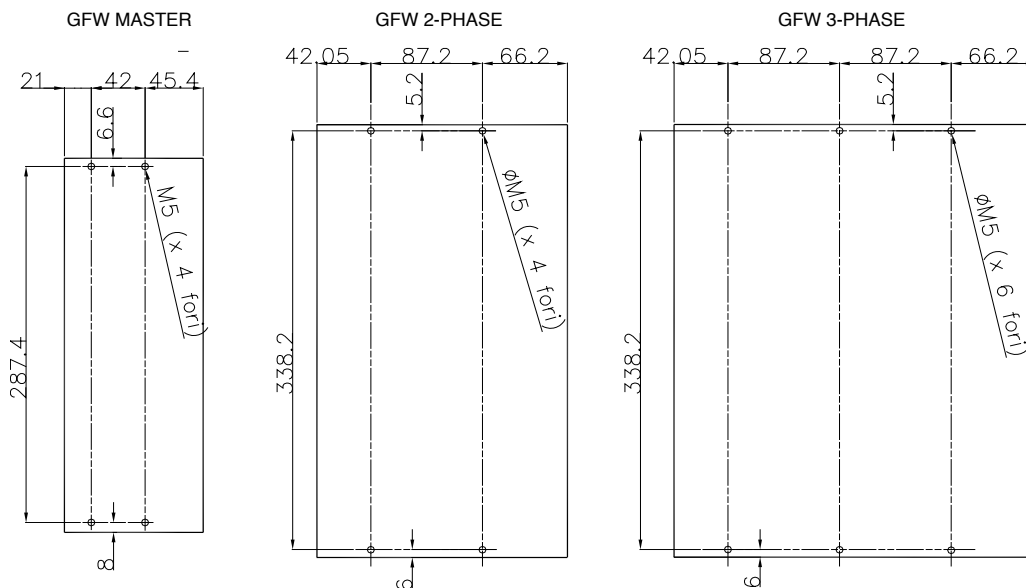


CONFIGURABLE MODULAR POWER CONTROLLERS WITH FIELDBUS COMMUNICATION

Monophase power controller with heatsink, 40A/480VAC (40A at 40°C, voltage range 90 -480VAC). Control inputs: digital, programmable analog V, I, Potentiometer. Firing type configurable for: ZC "zero crossing", BF "burst firing", HSC "half single cycle", PA "phase angle". Modbus RTU communication.

- Configurable analog control input (0- 10V, 4- 20mA)
- Faceplate protection: IP20
- Overvoltage protection
- Overtemperature function alarm
- Current V, I, P limit
- Modbus RTU digital communication
- Integrated fuse
- PID temperature control function
- Integrated heatsink
- Nominal working temperature 40°C
- Fieldbus connection

GFW FACEPLATE FASTENING DRILLING TEMPLATE



Current	Integrated functions	Communication	Options included	Order code	SAP/METEL code
150 A	HB load interrupt alarm Limite I_Pk, I_RMS	-	High-speed fuse	GFW-M-150-480-0-0-1-0-1-1-0	F054712
200 A	HB load interrupt alarm Limite I_Pk, I_RMS	-	High-speed fuse	GFW-M-200-480-0-0-1-0-1-1-0	F056969

All configurations can be seen on www.gefran.com

POWER UNITS

Smart power controllers from one to three phases

High-performance versions

GFW_3PH



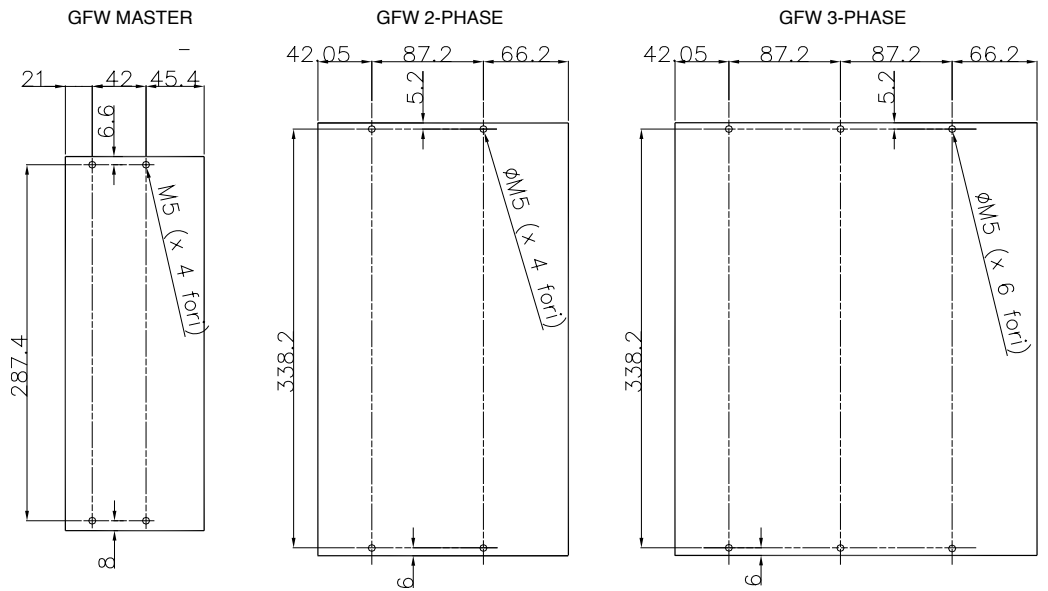
CONFIGURABLE MODULAR POWER CONTROLLERS FOR 3-PHASE APPLICATIONS, WITH FIELDBUS COMMUNICATION

BASIC VERSION - 3-phase power controller with heatsink, 40A/480VAC (40A per phase at 40°C, voltage range 90 -480VAC). Control inputs: digital, programmable analog V, I, Potentiometer.

Firing type configurable for: ZC "zero crossing", BF "burst firing", HSC "half single cycle", PA "phase angle". Modbus RTU communication.

- Configurable analog control input (0- 10V, 4- 20mA)
- Faceplate protection: IP20
- Overvoltage protection
- Overtemperature function alarm
- Current V, I, P limit
- Modbus RTU digital communication
- Integrated fuse
- PID temperature control function
- Integrated heatsink
- Nominal working temperature 40°C
- Fieldbus connection

GFW FACEPLATE FASTENING DRILLING TEMPLATE



Current	Integrated functions	Communication	Options included	Order code	SAP/METEL code	
3 x 150 A	HB load interrupt alarm Limite I_Pk, I_RMS	-	High-speed fuse	GFW-3PH-150-480-0-0-1-0-1-1-0	F054715	A
3 x 200 A	HB load interrupt alarm Limite I_Pk, I_RMS	-	High-speed fuse	GFW-3PH-200-480-0-0-1-0-1-1-0	F056968	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainig codes into the catalogue, we kindly suggest you to contact Gefran sales team

Solid state relay, special version

High-performance versions

GI

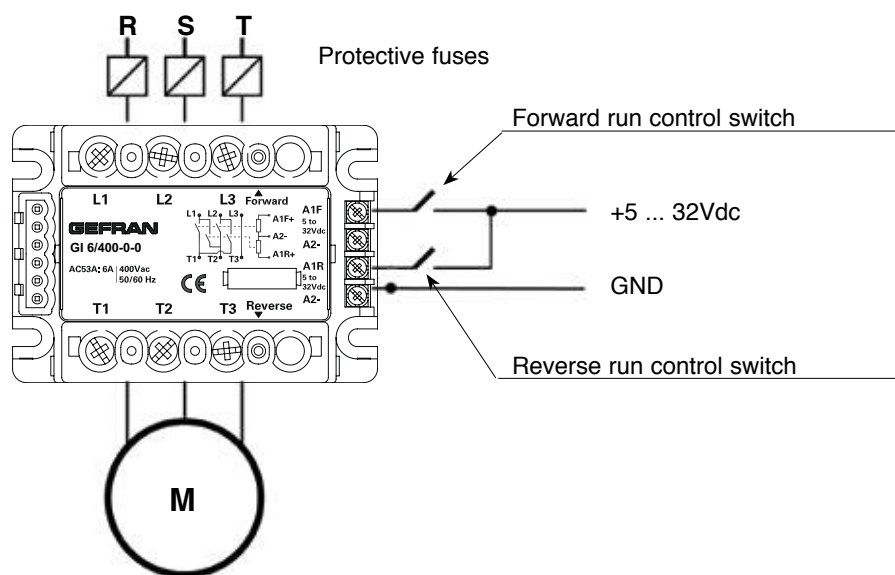


SOLID STATE INVERTER FOR 3-PHASE MOTORS, WITH LOGIC CONTROL

Zero crossing 3-phase solid state relay with VDC logic control, for 3-phase asynchronous motors up to 3 x 6A (AC53) at 400VAC. Protection against overvoltage and control signal polarity inversion.

- Control logic input 5- 32VDC
- Faceplate protection: IP20
- Overvoltage protection
- Overtemperature function alarm
- Nominal working temperature 40°C

Recommended connection



Current	Working voltage	Control type	Control	Special functions	Order code	SAP/METEL code
3 x 6A	Up to 400Vac	Logic	5-32 Vdc	Phase inversion function for motor control	GI 6/400-0-0	F032252

All configurations can be seen on www.geffran.com

POWER UNITS

Accessories

GF_eXpress configuration kit	Description	Order code	SAP/METEL code	
Configuration software for Gefran products: Instruments, Power controllers, Drives, Sensors, Automation. Compatible with Windows 2000, XP, Vista. Supplied on CD ROM in Italian/English (selectable) and complete with cable and connectors for direct connection of PC-programming serial.	GF_eXpress software on CD-ROM, RS232/TTL converter complete with connection cables to PC, GTF (-0)	GF_eXK-0-0-0	F043956	
	GF_eXpress software on CD-ROM, RS232/485 converter complete with connection cables to PC and Geflex, GTF (-M), GFW.	GF_eXK-1-1-0	F043957	
	GF_eXpress software on CD-ROM, USB/485/TTL converter complete with connection cables to PC, Geflex, GTF, GFW and instrument.	GF_eXK-2-0-0	F049095	A
	RS232/TTL cable for GTF (-0)	CAV 3	F033142	
	RS232/RS485 Serial line converter	ADAM-4520	330185	
	RJ10 cable, 1.5 meters for connection to ADAM converter	CAV 4	F033145	
	USB/RS232 serial adapter	USB/RS232	S5A20	
	USB-TTL conv. + cable 1M8 + RJ (for GTF without MODBUS option)	USBTTL	F055001	A
	USB-RS485 conv. + cable 1M8 + RJ (for GFX4, GFX4_IR, GFW e GTF with MODBUS option)	USBR485	F055002	A

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Heatsinks	Description	Order code	SAP/METEL code
Heatsinks in extruded aluminum for monophas solid state relays Heatsink h=100mm for series GS-T, GS, GT, GS-L, GQ solid state relays	for GS-T 10A, 20A and GS 15A, 20A, 25A (24x65) solid state relays	DIS-25G	F022905
	for GS 40A, GS-T 25A and GD 40A (35x100) solid state relays	DIS-40G	F022906
	for GS 50A, GT 25A, 40A and 50A, GQ 25A and 50A (60 x 78.2) solid state relays	DIS-50G	F022907
	for GS and GT 60A (82x98.2) solid state relays	DIS-60G	F022908
	for GS and GT 75A, 90A and 120A, GQ 90A (126.5 x 101.7) solid state relays	DIS-90G	F022909
Heatsinks in extruded aluminum for 3-phase solid state relays Heatsink for series GZ solid state relays	for series GZ 10A and 25A h=80mm 3-phase solid state relays	DIS-908	F000006
	for series GZ 40A and 55A h=100mm 3-phase solid state relays	DIS-910	F000007
Cooling plate heatsink h=100mm Cooling plate for assembly of solid state relay (GZ)	80x110x20 aluminum plate (ready for 2 DIN-2 attachments)	DIS-26G	F029207
Heatsinks in extruded aluminum for assembling batteries of solid state relays (*) (*) supplied without holes	heatsinks for solid state relays profile as per DIS25G (24x65)	DIS-25G-1M	F026222
	heatsinks for solid state relays profile as per DIS40G (35x100)	DIS-40G-1M	F024793
	for solid state relays profile as peDIS50G (60 x 78,2)	DIS-50G-1M	F026282
	heatsinks for solid state relays profile as per DIS 60G (82x98,2)	DIS-60G-1M	F026283
	heatsinks for solid state relays profile as per DIS90G (126,5 x 101,7)	DIS-90G-1M	F026281
Ground terminals for heatsinks (**) Minimum order: 10 pieces	Ground terminals for DIS 25G (**)	TERM-25	56372
	Ground terminals for DIS 40G (**)	TERM-40	56375
	Ground terminals for DIS 50G-60G-90G (**)	TERM-120	56378

Accessories

Fans	Description	Order code	SAP/METEL code
Fans (for GTZ, GTS, GTT)	24VDC fan kit for DIS-50G, DIS-60G (60x60x25 fan, 24VDC, with 4 screws, 4 plastic fastening rivets for connection to heatsink. Incorporated fingerguard)	VEN-60	F023363
	230VAC fan kit for DIS-90G, DIS-910 (80x80x40 fan, 230VAC, 14W, 50Hz, with 4 M4 screws, 4 toothed washers, 4 plastic fastening rivets for connection to heatsink that mounts Relay type GZ ≥ 40A, GTS120, GTT120. Incorporated fingerguard)	VEN-90	F022911
	115VAC fan kit for DIS-90G, DIS-910 (80x80x40 fan, 115VAC, 14W, 50Hz, with 4 M4 screws, 4 toothed washers, 4 plastic fastening rivets for connection to heatsink that mounts Relay type GZ ≥ 40A, GTS120, GTT120. Incorporated fingerguard)	VEN-91	1960109
	24VDC fan kit for DIS90G, DIS-910 (80x80x25 fan, 24VDC, 4W, 50Hz, with 4 M4 screws, 4 toothed washers, 4 plastic fastening rivets for connection to heatsink that mounts Relay type GZ ≥ 40A, GTS120, GTT120. Incorporated fingerguard)	VEN-92	F022914

N.B. : Screws included in packaging; entire package is shrink-wrapped.

Fuses	Description	Order code	SAP/METEL code
Fuses (for GQ, GS, GS-T, GD, GT, RA, GZ, GRA, GTZ, GTS, GTS-T, GTT, GTD, WATTCOR)	Fuses for GS-L and GTS-L 5A (10x38mm) (*)	FUS-06-L	338237
	Fuses for GTS-T 10A, GST-10 (10x38mm) (*)	FUS-010	338476
	Fuses for GS-L and GTS-L 10A, GZ and GTZ 10A (10x38mm) (*)	FUS-10-L	338238
	Fuses for GQ, GS and GTS 15A (10x38mm) (*)	FUS-016	338470
	Fuses for GS-L and GTS-L 15A (10x38mm) (*)	FUS-16-L	338239
	Fuses for GS-T, GTS-T 20/25A, GQ, GS, GTS 25A, GT, GTT 25A, GTD 25A, GZ and GTZ 25A (10x38mm) (*)	FUS-025	338474
	Fuses for RA, RA (Triac) (*)	FUS-030	338029
	Fuses for GS, GTS 40A, GD 40A, GTD 40A, GZ 40A, GTZ 40A, GT, GTT 40A (14x51mm) (*)	FUS-040	338147
	Fuses for W21x 25A, W312 25A (22x58mm) (*)	FUS-050	338127
	Fuses for RA 50A (14x51mm) (*)	FUS-051	338079
	Fuses for GQ, GS, GTS 50A, GT, GTT 50A, GZ 55A, GTZ 55A, W21x 40A, W312 40° (22x58mm) (*), W401 40A	FUS-063	338191
	Fuses for GS, GTS, GT and GTT 60A and 75A (22x58mm) (*)	FUS-080	338199
	Fuses for GQ, GS, GTS, GT and GTT 90A, W21x 75A (22x58mm) (*)	FUS-100	338478
	Fuses for RA 90A. Non-removable (*)	FUS-100N	338052
	Fuses for GS, GT, GTS, GTT 120A, Non-removable (*)	FUS-125N	338106
	Fuses for W21x 100 and 150A, W401 100A	FUS-250	338193
	Fuses for W21x 250A: Non-removable	FUS-450N	338159
	Fuses for W21x de 400A: Non-removable	FUS-630N	338158
	Fuses for W21x de 600A: Non-removable	FUS-900N	338154
	Microswitch for blown fuse, WATTCOR series (**)	SW-FUS	338150

N.B. : (*) Minimum order: 10 pieces

(**) SW-FUS is installed as standard on W21x with current ≥ 250°

POWER UNITS

Accessories

MOV-Protection for overvoltage	Description	Order code	SAP/METEL code
MOV-Protection for overvoltage (for GQ)	MOV - working voltage 120-290Vac	RV03	11009
	MOV - working voltage 291-400Vac	RV04	11004
	MOV - working voltage 401-500Vac	RV05	11008

N.B. :
 Versions GS, GS-T, GTS, GTS-T, GD, GTD, GT, GTT, GZ, GTZ and Wattcor already contain MOV protection.
 Versions GQ offer internal MOV protection as option

Fuseholders	Description	Order code	SAP/METEL code
Fuseholders (for GQ, GS, GT, GTS, GTD, GTF, GFW_3PH)	Fuseholders for FUS-010, FUS-016, FUS-025 fuses	PF-10x38	337132
	Fuseholders for FUS-025, FUS-030, FUS-040, FUS-051 fuses	PF-14x51	337131
	Fuseholders for FUS-050, FUS-063, FUS-080, FUS-100 fuses	PF-22x58	337130
Fuseholders (for GTF, GFW)	Fuseholders for FUS-100N, FUS-125N fuses	PF-DIN	337092
	Fuseholders for FUS-250 fuses	PF-27x60	337002

Supports for fastening to DIN rail and to faceplate	Description	Order code	SAP/METEL code
	Support for fastening solid state power units version: GTS-T10, GTS-T20, GTS-L5, GTS-L10, GTS-L15, GTD 25, GTS15, GTS25, DIS25G to DIN rail, with screw	DIN-2	1960012
	Metal support with spring for fastening solid state power units version: W211, W212 and W312 25/40/75/100/150A to DIN rail, with screws	DIN-4	1960014
	Metal support with spring for fastening versions: GTS-T10, GTS-T20, GTS-T25, GTS-L10, GTS-L15, GTS 15/25/40/75/90/120, GTD 25/40, GTT 75/90/120, DIS-908, DIS-910, GTS50, GTS60, GTT25, GTT40, GTT50, GTT60, DIS50G, DIS60G to DIN rail, with screws, Dis-P, DIS25G, DIS40G, DIS90G.	DIN-5	1960033
	Bag with 2 plastic supports + 2 screws + 4 washers for fastening GTS, GTS-L10, GTS-L15, GTS-T, GTT (***) to faceplate	PAN-1	1960090

N.B.: (***) As standard, Versions GTS, GTD, GTT ≥ 90A, GTZ are also supplied with supports for fastening to faceplate.

Power controllers for 4-zone applications

High-performance versions

GFX4



4-ZONE MODULAR POWER CONTROLLER

Stand-alone unit for independent control of four PID control loops, complete with SSR and current transformer (TC). Suitable for monophase or 3-phase electric heating systems (30, 60, 80kW, 16-32-40A).

- Configurable analog control input (0-10V, 4-20mA)
- Faceplate protection: IP20
- Overvoltage protection
- TC input load interrupt protection
- Overtemperature function alarm
- Modbus RTU digital communication
- Integrated fuse
- Integrated heatsink
- Nominal working temperature 40°C
- Fieldbus connection

Modbus TCP/RTU

PROFIBUS

PROFIBUS

CANopen

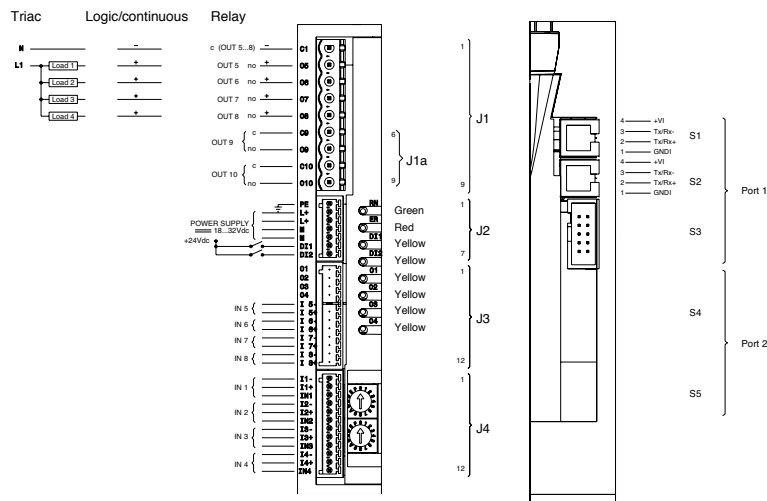
EtherNet/IP

EtherCAT

DeviceNet



CE UL



Current	Working voltage	Inputs	Outputs	Integrated functions	Options included	Communication	Order code	SAP/METEL code
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	2 relays	4 PID, 1 TA	4 high-speed fuses	Modbus	GFX4-30-0-1-F-0	F030917
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus	GFX4-30-R-2-F-0	F029788 A
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + ETH (TCP)	GFX4-30-R-2-F-E	F042639
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + PROFIBUS DP	GFX4-30-R-2-F-P	F040414
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + CANOPEN	GFX4-30-R-2-F-C	F051532
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	2 relays	4 PID, 1 TA	4 high-speed fuses	Modbus	GFX4-60-0-1-F-0	F030919
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus	GFX4-60-R-2-F-0	F029789 A
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + ETH (TCP)	GFX4-60-R-2-F-E	F050019
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + PROFIBUS DP	GFX4-60-R-2-F-P	F035909
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + CANOPEN	GFX4-60-R-2-F-C	F033640
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	2 relays	4 PID, 1 TA		Modbus	GFX4-80-R-1-0-0	F031367
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA		Modbus	GFX4-80-R-2-0-0	F029787
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA		Modbus + ETH (TCP)	GFX4-80-R-2-0-E	F045539
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA		Modbus + PROFIBUS DP	GFX4-80-R-2-0-P	F039406
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA		Modbus + CANOPEN	GFX4-80-R-2-0-C	F035098

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

MODULAR POWER CONTROLLERS

Power controllers for 4-zone applications

High-performance versions

GFX4-IR



4-ZONE MODULAR POWER CONTROLLER FOR INFRARED LAMPS AND INDUCTIVE LOADS



Stand-alone unit for independent control of four control loops, complete with SSR, current transformer (TC), volumetric transformers (VT). Suitable for loads such as infrared lamps (long-wave, medium-wave, short-wave) and mono-phase and 3-phase transformer primaries. Available with configurable functions: firing with zero crossing, pulse train, half single cycle, phasing, delay on first cycle, soft start, current limits, voltage feedback, power feedback.

- Configurable analog control input (4-20mA)
- Faceplate protection: IP20
- Overvoltage protection
- TC input load interrupt protection
- Overtemperature function alarm
- Current V, I, P limit
- Modbus RTU digital communication
- Integrated fuse
- PID temperature control function
- Integrated heatsink
- Nominal working temperature 40°C
- Fieldbus connection

Modbus TCP/RTU

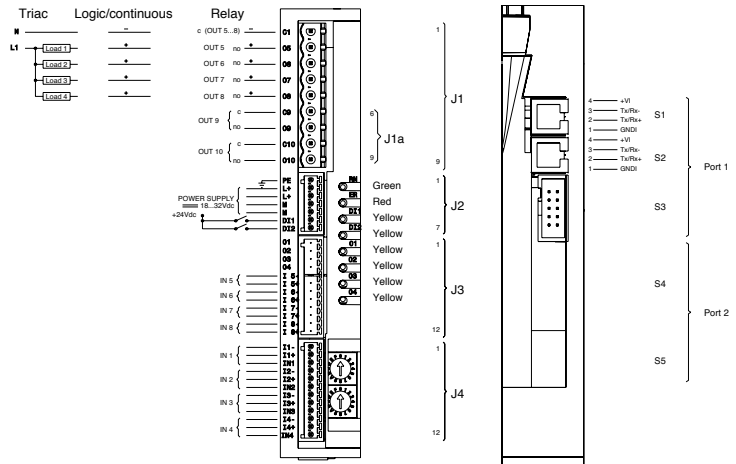


CANopen

EtherNet/IP

EtherCAT

DeviceNet



Current	Working voltage	Inputs	Outputs	Integrated functions	Options included	Communication	Order code	SAP/METEL code	
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	2 relays	4 PID, 1 TA	4 high-speed fuses	Modbus	GFX4-IR-30-0-2-F-0	F047611	
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus	GFX4-IR-30-R-2-F-0	F050648	
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + ETH (TCP)	GFX4-IR-30-R-2-F-E	F051245	
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + PROFIBUS DP	GFX4-IR-30-R-2-F-P	F055227	
4 x 16A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + CANOPEN	GFX4-IR-30-R-2-F-C	NO CODE	
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	2 relays	4 PID, 1 TA	4 high-speed fuses	Modbus	GFX4-IR-60-0-2-F-0	F048690	A
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus	GFX4-IR-60-R-2-F-0	F046414	
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + ETH (TCP)	GFX4-IR-60-R-2-F-E	F050109	
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + PROFIBUS DP	GFX4-IR-60-R-2-F-P	F050469	
4 x 30A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA	4 high-speed fuses	Modbus + CANOPEN	GFX4-IR-60-R-2-F-C	F051714	
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	2 relays	4 PID, 1 TA		Modbus	GFX4-IR-80-0-2-0-0	F052025	
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA		Modbus	GFX4-IR-80-R-2-0-0	F045607	
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA		Modbus + ETH (TCP)	GFX4-IR-80-R-2-0-E	F047868	
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA		Modbus + PROFIBUS DP	GFX4-IR-80-R-2-0-P	F050082	
4 x 40A	Up to 480 Vac	4 universals (TC,PT100 Lin.)	6 relays	4 PID, 4 TA		Modbus + CANOPEN	GFX4-IR-80-R-2-0-C	F053279	

All configurations can be seen on www.gefran.com

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Accessories

GF_eXpress configuration kit	Description	Order code	SAP/METEL code
Configuration software for Gefran products: Instruments, Power controllers, Drives, Sensors, Automation. Compatible with Windows 2000, XP, Vista. Supplied on CD ROM in Italian/English (selectable) and complete with cable and connectors for direct connection of PC-programming serial.	GF_eXpress software on CD-ROM, USB/485/TTL converter complete with connection cables to PC, Geflex and instrument.	GF_eXK-2-0-0	F049095 A
	USB TTL Conv. USB-TTL with 1.8 MT cable with RJ10	USB / TTL	F055001 A
	USB/RS485 Conv. USB-RS485 with 1.8 MT cable with RJ	USB / S485	F055002 A

Power supply	Description	Order code	SAP/METEL code
Grid power supply for powering Geflex instruments on test bench.	Stabilized power supply (24 VDC,12W) complete with adapter for powering Geflex (maximum 2 Geflex powered simultaneously)	PWS24	F023193

Geflex programming terminal	Description	Order code	SAP/METEL code
Operator terminal for on-site configuration of all Geflex instruments. With double display, diagnostic LEDs for inputs/outputs, six function keys Two types of terminal: - for mounting on heatsink of Geflex or on DIN rail - for mounting on faceplate Terminal that mounts on DIN rail includes a kit for communication with PC. Available for Geflex from 25A up to 120A and for Geflex Multifunction and Valves from 5A up to 15A	Geflex programming terminal (mounts on DIN rail or on heatsink), complete with cable for connection to Geflex (L=0.2m) Note: see Cables section for different-length cables.	GFX-OP-D	F023121 A
	Geflex programming terminal (mounts on faceplate) Note: see Cables section for connection cable.	GFX-OP-P	F023122
	Kit includes: power supply; cable for connection to PC <-> GFX-OP (L=2m); adapter for Geflex power supply. DOES NOT include programming terminal.	GFX-OP-K	F023123

Fuses / Fuseholders	Description	Order code	SAP/METEL code
Available for GFX4/GFX4-IR	Fuses for GFX4-30	FUS-016	338470
	Fuses for GFX4-60	FUS-032	338483
	Fuses forGFX4-80	FUS-063	338191
	Fuseholders for GFX4-30 / GFX-60	PF-10x38	337132
	Fuseholders for GFX4-80	PF-22x58	337130

Fans	Description	Order code	SAP/METEL code
	Fan (flow 39m³/h) for GFX4-30	VEN-61	F032592
	Fan (flow 56m³/h) for GFX4-60 and GFX4-80	VEN-62	F032593
	Fan grid for GFX4	GRI-4	51839
	Fan filter	FLT-4	363145

Connectors	Description	Order code	SAP/METEL code
Available for GFX4, GFXTERMO4 et GFX4-IR	9-pin connector for alarm outputs and cooling (J1)	COU4-9	353483
	4-pin connector for alarm outputs (J1a)	COU4-4	353493
	7-pin connector for power supply-digital inputs (J2)	CSIG4-7	353485
	12-pin connector for auxiliary analog inputs and control outputs (J3); analog process inputs (J4)	CSIG4-12	353487
	4-pin connector for main outputs (J3a)	CSIG4-4	353489

Cables	Description	Order code	SAP/METEL code
Series of cables for field bus and for extending connections among Geflex instruments.	Shielded cable,1 pair, 22 AWG, L=1m conforms to MODBUS	Cable 2x0.35	343409
	Shielded cable,1 pair, 22 AWG, L=1m conforms to Profibus	Cable PROFIBUS	397240
	Shielded cable, 2 pairs,22 AWG L=1m conforms to CANopen	Cable CANBUS	343430
	4-pin telephone cable	CV4-RJ10	59192
	Connection cable for GFX-OP <-> Geflex or Geflex <-> Geflex complete with connectors; length 1m	CV-1	F023140
	Connection cable for GFX-OP <-> Geflex or Geflex <-> Geflex complete with connectors; length 2,5m	CV-2	F023141
	Connection cable for GFX-OP <-> Geflex or Geflex <-> Geflex complete with connectors; length 5m	CV-5	F023142
	Cable L=0,3m for serial connection of Modbus (RJ10) (local bus) GFX4 <-> GFX4	CV4-03	F032861 A
	Cable L=1m for serial connection of Modbus (RJ10) (local bus) GFX4 <-> GFX4	CV4-1	F032862
	Cable L=2m for serial connection of Modbus (RJ10) (local bus) GFX4 <-> GFX4	CV4-2	F032863 A
	Cable L=5m for serial connection of Modbus (RJ10) (local bus) GFX4 <-> GFX4	CV4-5	F032864
	Cable L=2m or serial connection of Modbus (RJ10) GF_PROMER/GF_LOOPER <-> GFXM 1/2	CV3-2	F047232

POSITION TRANSDUCERS

POTENTIOMETRIC TECHNOLOGY



Installation	Strokes	Mechanics
Standard	Long strokes	Rod
		Cursor
		Cursor with magnetic drag
	Short strokes (compact)	
Control rod		Ball tip
		Bearing tip
Inside cylinder	Short strokes (compact)	
	Long strokes	

MAGNETOSTRICTIVE TECHNOLOGY










Installation	Mechanics
Standard	Profile
Inside cylinder	Threaded head
	Flanged head

	Mounting	Housing	Protection	Outputs	Series
	With brackets		IP60/65		SERIESS LT
			IP67		SERIES LT67
	With self-aligning joints		IP65		SERIES PC
			IP67		SERIES PC67
					SERIES PK
	With brackets				SERIES PME
	With self-aligning joints				SERIES PMA
	With brackets	Standard			SERIES PA1
		With double rod support			SERIES PY1
	Cylindrical body, universal mount	Diameter 1/2"			SERIES PZ12
		Diameter 3/4"	IP60		SERIES PZ34
			IP67		SERIES PZ67
					SERIES PY2
					SERIES PY3
					SERIES IC
		Diameter 12,7 mm		Potentiometric	SERIES PMI-SL
				Analog 4...20mA	SERIES PMI-SLE
		Diameter 16 mm		Potentiometric with high linearity	SERIES PMI



	Performance	Interface	Series
	Optimized version		SERIES ONP1-A
	Version for pneumatic cylinders		SERIES ONPP-A
	High-performance	Analogue	SERIES MK4-A
		SSI	SERIES MK4-S
		CANopen	SERIES MK4-C
		Profibus	SERIE MK4-P
	Optimized version		SERIES RK4
	High-performance	Analogue	SERIES IK4-A/SK4-A
		SSI	SERIES IK4-S
		CANopen	SERIES IK4-C
		Profibus	SERIE IK4-P
	Optimized version	Analogue	SERIES RK2
	High performance	Analogue	SERIES RK5

POSITION TRANSDUCERS














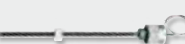




CONTACTLESS POSITION TRANSDUCERS

Magnetostrictive 24VDC power supply 0-10V or 4-20mA or CanOpen or SSI output signal														
MODEL		IP					MIN. S.	MAX. S.	MOUNTING			ACTUATOR		OUTPUT
		40	60	65	67	69			Brackets	Self-aligning ball joints	Flange	Rod	Cursor	
ONP1				X			50	1500	X				X	Voltage
														Current
ONPP				X			50	900					Magnet inside cylinder	Voltage
														Current
MK4					X		50	4000	X				X	Voltage
														Current
														SSI
														CanOpen
IK4					X		50	4000			X		X	Voltage
														Current
														SSI
														CanOpen
RK2					X		50	4000			X		X	Voltage
														Current
														SSI
														CanOpen
RK4					X		50	4000			X		X	Voltage
														Current
RK5					X	X	50	2500			X		X	Voltage
														Current

ROTARY POSITION TRANSDUCERS

MODEL		IP				MIN. S.	MAX. S.	MOUNTING			ACTUATOR
		40	60	65	67			Brackets	Self-aligning ball joints	Flange	Shaft material
PS		X					360°			X	X
PR65				X			360°			X	X

LINEAR POSITION TRANSDUCERS

Potentiometer - Maximum applicable voltage: 20 and 60V depending on model and stroke length													
MODEL	IP					MIN. S.	MAX. S.	MOUNTING			ACTUATOR		OUTPUT
	40	60	65	67	68			Brackets	Self-aligning ball joints	Flange	Rod	Cursor	
LT 		X	X			50	900	X			X		Voltage
LT67 				X		50	900	X			X		Voltage
PC 			X			50	750		X		X		Voltage
PC67 				X		50	750		X		X		Voltage
PK 	X					100	2000	X				X	Voltage
PZ67A 				X		10	300		X		X		Voltage
PZ67S 				X		25	300	X			X		Voltage
PZ12 		X	X			25	250	X	X	X	X		Voltage
PZ34 		X	X			25	300	X	X	X	X		Voltage
PA1 	X					25	150	X			X		Voltage
PY1 	X					25	150	X			X		Voltage
PY2 	X					10	100	X			X		Voltage
PY3 	X					10	50	X			X		Voltage
IC 				X	X	100	550			X		X	Voltage
PMA 				X		50	1000		X			X	Voltage
PME 				X		50	1000	X				X	Voltage
PMI 				X		50	1000			X		X	Voltage
PMI SL / SLE 				X		50	1000			X		X	4...20mA Voltage

POSITION TRANSDUCERS

Fastening to self-aligning ball joints

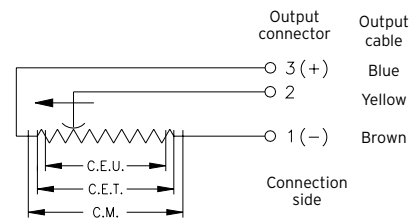
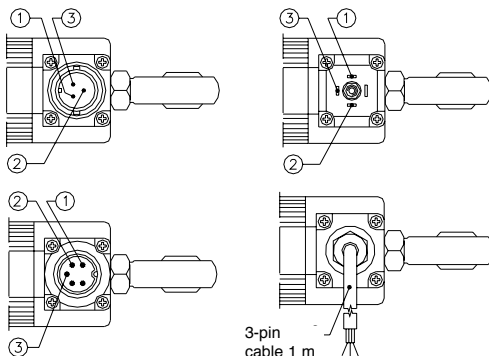
PC



SELF-LOADING LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE

50 to 750mm stroke. Mechanical fixing and self-aligning linkage with 2 ball joints; maximum angular movement up to $\pm 30^\circ$. Independent linearity up to $\pm 0.05\%$. Repeatability 0.01 mm.; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed up to 5m/s. Working temperature: $-30...+100^\circ\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations. IP65 protection rating.

- **IP65 protection rating**
- **Version: Transducer case diameter 35mm**
- **Electrical connection: EV DIN43650 MicroConnector**



Useful electrical stroke (mm)	Order code	SAP/METEL code	
0050	PC-M-0050 0000X000X00	F003843	A
0100	PC-M-0100 0000X000X00	F003846	A
0130	PC-M-0130 0000X000X00	F003851	A
0150	PC-M-0150 0000X000X00	F003855	A
0175	PC-M-0175 0000X000X00	F003861	A
0200	PC-M-0200 0000X000X00	F003864	A
0225	PC-M-0225 0000X000X00	F003869	A
0275	PC-M-0275 0000X000X00	F003874	A
0300	PC-M-0300 0000X000X00	F003878	A
0360	PC-M-0360 0000X000X00	F006124	
0375	PC-M-0375 0000X000X00	F003884	A
0400	PC-M-0400 0000X000X00	F003887	A
0450	PC-M-0450 0000X000X00	F003891	A
0500	PC-M-0500 0000X000X00	F003894	A
0600	PC-M-0600 0000X000X00	F003898	A
0750	PC-M-0750 0000X000X00	F003901	A
0825	PC-M-0825 0000X000X00	F003905	
0950	PC-M-0950 0000X000X00	F041580	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PC	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031
Connectors	4-pin female connector (DIN43650C)	CON008	CON008

Fastening to self-aligning ball joints

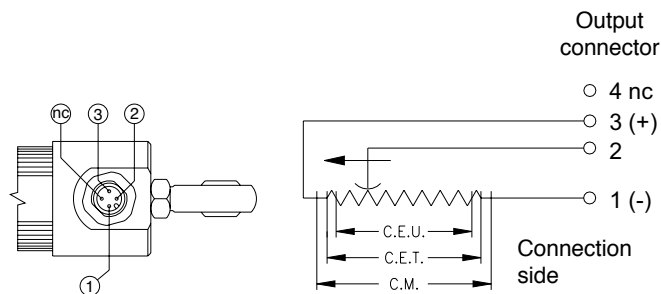
PC67



SELF-LOADING LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE

50 to 750mm stroke. Mechanical fixing and self-aligning linkage with 2 ball joints; maximum angular movement up to $\pm 30^\circ$. Independent linearity up to $\pm 0.05\%$. Repeatability 0.01 mm.; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed up to 5m/s. Working temperature: $-30...+100^\circ\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations. IP67 protection rating.

- **IP67 protection rating**
- **Version: Transducer case diameter 35mm**
- **Electrical connection: 4-pin M12 female connector**



Useful electrical stroke (mm)	Order code	SAP/METEL code	
0050	PC-67-0050 0000X000X00	F036889	
0100	PC-67-0100 0000X000X00	F033215	
0130	PC-67-0130 0000X000X00	F042201	
0150	PC-67-0150 0000X000X00	F033216	
0175	PC-67-0175 0000X000X00	F035902	
0200	PC-67-0200 0000X000X00	F033217	A
0225	PC-67-0225 0000X000X00	F033218	
0275	PC-67-0275 0000X000X00	F033219	
0300	PC-67-0300 0000X000X00	F032311	
0360	PC-67-0360 0000X000X00	F036324	
0375	PC-67-0375 0000X000X00	F040691	
0400	PC-67-0400 0000X000X00	F040258	
0450	PC-67-0450 0000X000X00	F033220	
0500	PC-67-0500 0000X000X00	F041666	
0600	PC-67-0600 0000X000X00	F033812	
0750	PC-67-0750 0000X000X00	F035613	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PC67	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031
Connectors	4-pin M12 angular connector; IP67	CON050	CON050
	4-pin female connector; IP67	CON293	CON293

POSITION TRANSDUCERS

Fastening to self-aligning ball joints

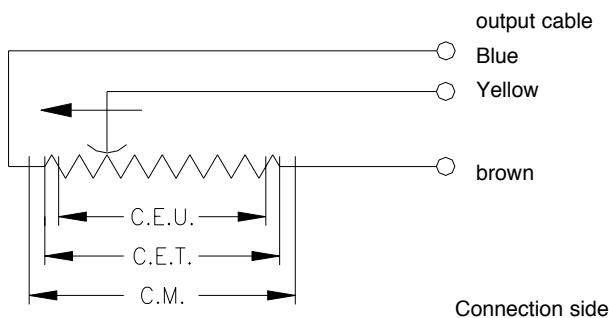
PZ-12



LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE

25 to 250mm stroke. Mechanical fixing with brackets, self-aligning joints or flange. Independent linearity up to $\pm 0.05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 10 m/s. Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP60 protection rating.

- **IP60 protection rating**
- **Version: Transducer case diameter 12.7mm**
- **Electrical connection: 3-pin cable, 1 metre**



Useful electrical stroke (mm)	Order code	SAP/METEL code	
025	PZ-12-A-025 0000X000X00	F004280	A
050	PZ-12-A-050 0000X000X00	F004286	A
075	PZ-12-A-075 0000X000X00	F004293	A
100	PZ-12-A-100 0000X000X00	F004301	A
125	PZ-12-A-125 0000X000X00	F004310	A
150	PZ-12-A-150 0000X000X00	F004311	A
200	PZ-12-A-200 0000X000X00	F031166	
250	PZ-12-A-250 0000X000X00	F034217	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PZ-12	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031

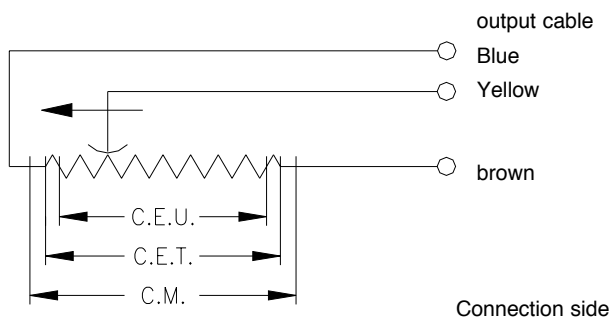
Fastening to self-aligning ball joints

PZ-34

LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE

50 to 300mm stroke. Mechanical fixing with brackets, self-aligning joints or flange. Independent linearity up to $\pm 0.05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 10 m/s. Working temperature: -30...+100°C. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP60 protection rating.

- IP60 protection rating
- Electrical connection: 3-pin cable, 1 metre



Version	Useful electrical stroke (mm)	Order code	SAP/METEL code	
Transducer case diameter 19mm	025	PZ-34-A-025 0000X000X00	F004373	A
	050	PZ-34-A-050 0000X000X00	F004377	A
	075	PZ-34-A-075 0000X000X00	F004384	A
	100	PZ-34-A-100 0000X000X00	F004391	A
	125	PZ-34-A-125 0000X000X00	F004400	A
	150	PZ-34-A-150 0000X000X00	F004406	A
	175	PZ-34-A-175 0000X000X00	F006448	
	200	PZ-34-A-200 0000X000X00	F004411	A
	225	PZ-34-A-225 0000X000X00	F038864	
	250	PZ-34-A-250 0000X000X00	F004420	A
300	PZ-34-A-300 0000X000X00	F006458	A	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PZ-34	Description	Order code	SAP/METEL code	
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148	
	12-pin male connector (for version PCIR-A)	MOR031	MOR031	

POSITION TRANSDUCERS

Fastening to self-aligning ball joints

PZ-67A

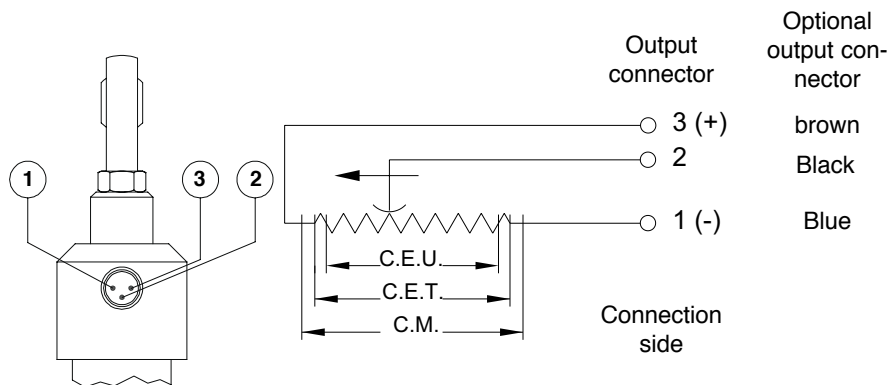


LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE, IP67 PROTECTION RATING

25 to 300mm stroke. Mechanical fixing with brackets or self-aligning joints. Independent linearity up to $\pm 0.05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 5 m/s.

Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP67 protection rating.

- **IP67 protection rating**
- **Version: Transducer case diameter 19mm**
- **Electrical connection: 4-pin M12 female connector**



Useful electrical stroke (mm)	Order code	SAP/METEL code
010	PZ-67-A-010 0000X000X00	F042180
025	PZ-67-A-025 0000X000X00	F034174
050	PZ-67-A-050 0000X000X00	F035259
075	PZ-67-A-075 0000X000X00	F041696
100	PZ-67-A-100 0000X000X00	F034175
125	PZ-67-A-125 0000X000X00	F037891
150	PZ-67-A-150 0000X000X00	F040780
175	PZ-67-A-175 0000X000X00	F043526
200	PZ-67-A-200 0000X000X00	F034176
250	PZ-67-A-250 0000X000X00	F039830
300	PZ-67-A-300 0000X000X00	F033820

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PZ-67	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031
Connectors	Female connector + 2m of wired PVC cable (for version PME)	CAV010	CAV010

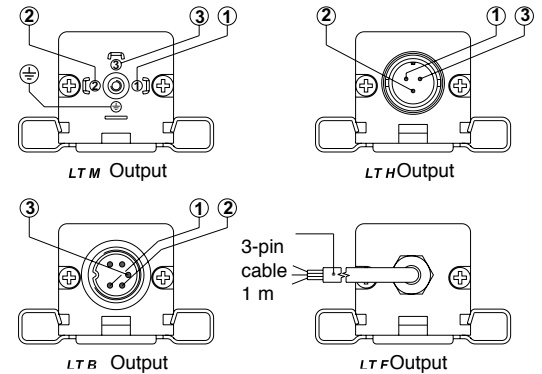
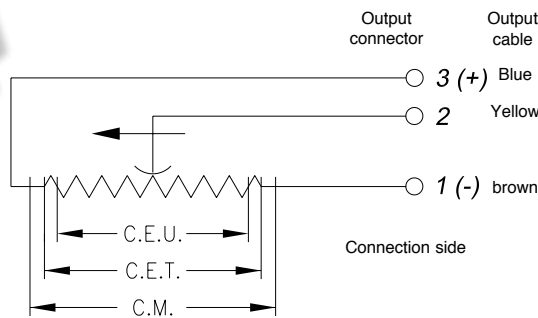
Fixing with brackets

LT

LINEAR POSITION TRANSDUCER

50 to 900mm stroke. Mechanical drag with threaded M6 rod. Independent linearity up to $\pm 0.05\%$. Repeatability 0.01mm; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 5m/s (10m/s on request). Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP60 or IP65 protection rating.

- Version: anodized aluminium case, 33x33mm
- Electrical connection: EV DIN43650 electrovalve connector



IP	Useful electrical stroke (mm)	Order code	SAP/METEL code	
IP 60	0050	LT-M-0050-S 0000X000X00	F003485	A
	0075	LT-M-0075-S 0000X000X00	F005909	
	0100	LT-M-0100-S 0000X000X00	F003494	A
	0130	LT-M-0130-S 0000X000X00	F003508	A
	0150	LT-M-0150-S 0000X000X00	F003518	A
	0175	LT-M-0175-S 0000X000X00	F003529	A
	0200	LT-M-0200-S 0000X000X00	F003538	A
	0225	LT-M-0225-S 0000X000X00	F003549	A
	0250	LT-M-0250-S 0000X000X00	F005987	A
	0275	LT-M-0275-S 0000X000X00	F003559	A
	0300	LT-M-0300-S 0000X000X00	F003572	A
	0350	LT-M-0350-S 0000X000X00	F006002	A
	0360	LT-M-0360-S 0000X000X00	F006005	
	0375	LT-M-0375-S 0000X000X00	F003583	A
	0400	LT-M-0400-S 0000X000X00	F003592	A
	0450	LT-M-0450-S 0000X000X00	F003602	A
	0500	LT-M-0500-S 0000X000X00	F003613	A
	0600	LT-M-0600-S 0000X000X00	F003629	A
	0650	LT-M-0650-S 0000X000X00	F003633	A
0700	LT-M-0700-S 0000X000X00	F006036		
0750	LT-M-0750-S 0000X000X00	F003639	A	
0800	LT-M-0800-S 0000X000X00	F006041		
0900	LT-M-0900-S 0000X000X00	F003650	A	



POSITION TRANSDUCERS

IP	Useful electrical stroke (mm)	Order code	SAP/METEL code	
IP 65	0050	LT-M-0050-P 0000X000X00	F003483	A
	0075	LT-M-0075-P 0000X000X00	F028267	
	0100	LT-M-0100-P 0000X000X00	F003491	A
	0130	LT-M-0130-P 0000X000X00	F003503	
	0150	LT-M-0150-P 0000X000X00	F003512	A
	0175	LT-M-0175-P 0000X000X00	F003524	A
	0200	LT-M-0200-P 0000X000X00	F003533	A
	0225	LT-M-0225-P 0000X000X00	F003544	A
	0250	LT-M-0250-P 0000X000X00	F005985	
	0275	LT-M-0275-P 0000X000X00	F003554	A
	0300	LT-M-0300-P 0000X000X00	F003563	A
	0350	LT-M-0350-P 0000X000X00	F006001	
	0360	LT-M-0360-P 0000X000X00	F006004	
	0375	LT-M-0375-P 0000X000X00	F003578	A
	0400	LT-M-0400-P 0000X000X00	F003586	A
	0450	LT-M-0450-P 0000X000X00	F003596	A
	0500	LT-M-0500-P 0000X000X00	F003606	A
	0600	LT-M-0600-P 0000X000X00	F003620	A
	0650	LT-M-0650-P 0000X000X00	F003632	
	0750	LT-M-0750-P 0000X000X00	F003634	A
0850	LT-M-0850-P 0000X000X00	F035052		
0900	LT-M-0900-P 0000X000X00	F003644	A	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for LT		Description	Order code	SAP/METEL code	
Signal conditioners		DIN rail mounting; output 0..10VDC	PCIR-A	F003148	
		12-pin male connector (for version PCIR-A)	MOR031	MOR031	
		Mounting on DIN43650A connector; output 0..10VDC	PCIR-101	F003150	
		Mounting on DIN43650A connector; output 4..20mA	PCIR-102	F003152	
Connectors		4-pin female connector (DIN43650A)	CON006	CON006	
Accessories		LT fixing kit, 2 brackets, screws, washers	PKIT009	PKIT009	
		Ball joint (for version LT)	PKIT015	PKIT015	

Fixing with brackets

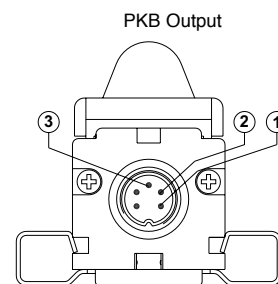
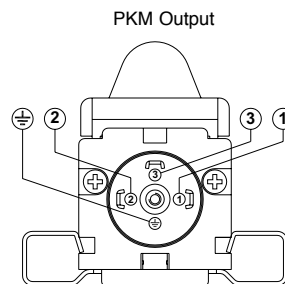
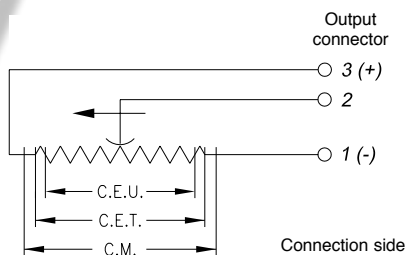
PK

LINEAR POSITION TRANSDUCER WITHOUT ROD

100 to 2000mm stroke. Mechanical drag with threaded M5 rod. Independent linearity up to ±0.05%. Repeatability 0.01mm; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke.

Max. displacement speed 10m/s. Working temperature: -30...+100°C. Life: > 25x10⁶ m strokes, or > 100x10⁶ operations. IP40 protection rating.

- IP40 protection rating
- Version: anodized aluminium case, 38x39.2mm, sliding cursor
- Electrical connection: EV DIN43650 electrovalve connector



Useful electrical stroke (mm)	Order code	SAP/METEL code
0100	PK-M-0100 0000X000X00	F003971
0130	PK-M-0130 0000X000X00	F003978
0150	PK-M-0150 0000X000X00	F003985
0175	PK-M-0175 0000X000X00	F006162
0200	PK-M-0200 0000X000X00	F003991
0225	PK-M-0225 0000X000X00	F003999
0250	PK-M-0250 0000X000X00	F006175
0275	PK-M-0275 0000X000X00	F006177
0300	PK-M-0300 0000X000X00	F004008
0350	PK-M-0350 0000X000X00	F006189
0360	PK-M-0360 0000X000X00	F006199
0375	PK-M-0375 0000X000X00	F035395
0400	PK-M-0400 0000X000X00	F004018
0450	PK-M-0450 0000X000X00	F004027
0500	PK-M-0500 0000X000X00	F004038
0600	PK-M-0600 0000X000X00	F004047
0650	PK-M-0650 0000X000X00	F039354
0700	PK-M-0700 0000X000X00	F006231
0750	PK-M-0750 0000X000X00	F004058
0800	PK-M-0800 0000X000X00	F006241
0850	PK-M-0850 0000X000X00	F004064
0900	PK-M-0900 0000X000X00	F004070
1000	PK-M-1000 0000X000X00	F004079
1100	PK-M-1100 0000X000X00	F006259
1250	PK-M-1250 0000X000X00	F004088



POSITION TRANSDUCERS

Useful electrical stroke (mm)	Order code	SAP/METEL code	
1350	PK-M1350 0000X000X00	F006267	
1500	PK-M-1500 0000X000X00	F004097	A
1750	PK-M-1750 0000X000X00	F004105	
2000	PK-M-2000 0000X000X00	F004110	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PK	Description	Order code	SAP/METEL code	
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148	
	12-pin male connector (for version PCIR-A)	MOR031	MOR031	
	Mounting on DIN43650A connector; output 0..10VDC	PCIR-101	F003150	
	Mounting on DIN43650A connector; output 4..20mA	PCIR-102	F003152	
Connectors	4-pin female connector (DIN43650A)	CON006	CON006	
Accessories	Fixing kit for PK 100 - 900mm, 2 brackets, screws, washers	PKIT059	PKIT059	
	Fixing kit for PK 1000 - 2000mm, 3 brackets, screws, washers	PKIT061	PKIT061	

Fixing with brackets

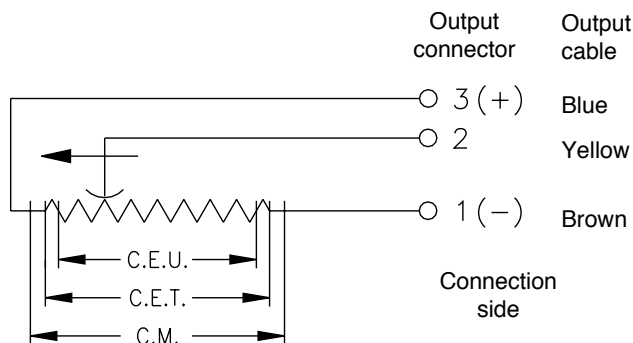
PA1



LINEAR POSITION TRANSDUCER

25 to 150mm stroke. Mechanical drag with joint and take-up of play, M4 thread. Independent linearity up to ±0.05%. Infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 5m/s. Working temperature: -30...+100°C. Life: > 100x10⁶ operations (within the EU). IP40 protection rating.

- IP40 protection rating
- Version: tip with self-aligning joint



Electrical connection	Useful electrical stroke (mm)	Order code	SAP/METEL code	
3-pin cable 1 m	025	PA1-F-025-S01M 0000X000X00	F003673	
	050	PA1-F-050-S01M 0000X000X00	F003677	
	075	PA1-F-075-S01M 0000X000X00	F003684	A
	100	PA1-F-100-S01M 0000X000X00	F003695	A
	125	PA1-F-125-S01M 0000X000X00	F003705	
	150	PA1-F-150-S01M 0000X000X00	F003710	A
5-pin female connector DIN43322	025	PA1-C-025 0000X000X00	F003656	A
	050	PA1-C-050 0000X000X00	F003659	A
	075	PA1-C-075 0000X000X00	F003662	A
	100	PA1-C-100 0000X000X00	F003665	A
	125	PA1-C-125 0000X000X00	F003668	
	150	PA1-C-150 0000X000X00	F003669	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaingin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PA1	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031
Connectors	5-pin female connector; IP40 protection	CON011	CON011
	5-pin female connector; IP67 protection	CON012	CON012
	5-pin angular female connector; IP40 protection	CON013	CON013
Accessories	PA1 fixing kit, 4 brackets, M4x10 screws, washers	PKIT005	PKIT005
	Coupling joint (for version PA1 and PY1)	PKIT020	PKIT020

POSITION TRANSDUCERS

Fixing with brackets

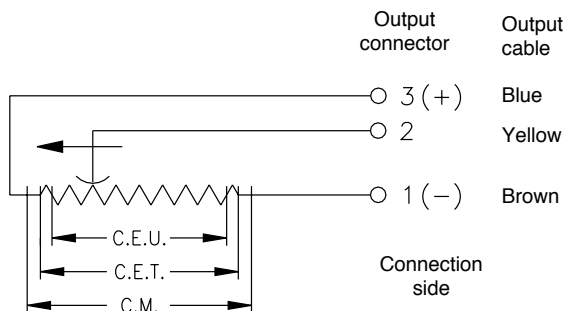
PY1



LINEAR POSITION TRANSDUCER

25 to 150mm stroke. Control rod with joint and take-up of play, M4 thread. Independent linearity up to $\pm 0.05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 10m/s. Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 100 \times 10^6$ operations (within the EU). Double support of rod. IP40 protection rating.

- Version: tip with self-aligning joint



Electrical connection	Useful electrical stroke (mm)	Order code	SAP/METEL code	
3-pin cable 1 m	025	PY-1-F-025-S01M 0000X000X00	F004159	
	050	PY-1-F-050-S01M 0000X000X00	F004166	
	075	PY-1-F-075-S01M 0000X000X00	F004172	
	100	PY-1-F-100-S01M 0000X000X00	F004178	
	150	PY-1-F-150-S01M 0000X000X00	F004184	
5-pin female connector DIN43322	025	PY-1-C-025 0000X000X00	F004131	A
	050	PY-1-C-050 0000X000X00	F004136	A
	075	PY-1-C-075 0000X000X00	F004142	A
	100	PY-1-C-100 0000X000X00	F004146	A
	150	PY-1-C-150 0000X000X00	F004152	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PY-1	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031
Connectors	5-pin female connector; IP40 protection	CON011	CON011
	5-pin female connector; IP67 protection	CON012	CON012
	5-pin angular female connector; IP40 protection	CON013	CON013
Accessories	Coupling joint (for version PA1 and PY1)	PKIT020	PKIT020
	Ball tip (for version PY2)	PTAS000	PTAS000
	Bearing tip (for version PY3)	PTAS001	PTAS001

Fixing with brackets

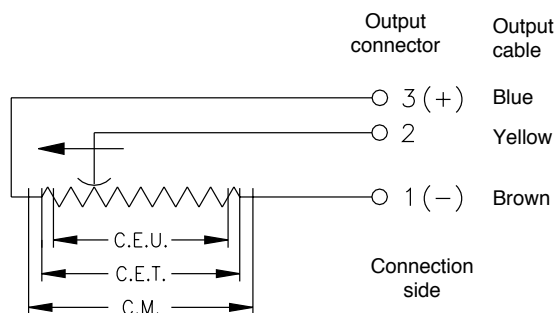
PY2



LINEAR POSITION TRANSDUCER WITH CONTROL ROD AND BALL

10 to 100mm stroke. Control rod with double support and return spring. Tip with M2.5 threaded shank and stainless steel ball. Independent linearity up to $\pm 0.1\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 10m/s. Working temperature: -30...+100°C. Life: $> 100 \times 10^6$ operations (within the EU). IP40 protection rating.

• **Version: tip with stainless steel ball and return spring**



Electrical connection	Useful electrical stroke (mm)	Order code	SAP/METEL code	
3-pin cable 1 m	010	PY-2-F-010-S01M 0000X000X00	F004215	A
	025	PY-2-F-025-S01M 0000X000X00	F004228	A
	050	PY-2-F-050-S01M 0000X000X00	F004242	A
	075	PY-2-F-075-S01M 0000X000X00	F006378	
	100	PY-2-F-100-S01M 0000X000X00	F006379	
5-pin female connector DIN43322	010	PY-2-C-010 0000X000X00	F004190	A
	025	PY-2-C-025 0000X000X00	F004199	A
	050	PY-2-C-050 0000X000X00	F004207	A
	075	PY-2-C-075 0000X000X00	F006350	A
	100	PY-2-C-100 0000X000X00	F006351	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainig codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PY-2	Description	Order code	SAP/METEL code	
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148	
	12-pin male connector (for version PCIR-A)	MOR031	MOR031	
Connectors	5-pin female connector; IP40 protection	CON011	CON011	
	5-pin female connector; IP67 protection	CON012	CON012	
	5-pin angular female connector; IP40 protection	CON013	CON013	
Accessories	Coupling joint (for version PA1 and PY1)	PKIT020	PKIT020	
	Ball tip (for version PY2)	PTAS000	PTAS000	
	Bearing tip (for version PY3)	PTAS001	PTAS001	

POSITION TRANSDUCERS

Fixing with brackets

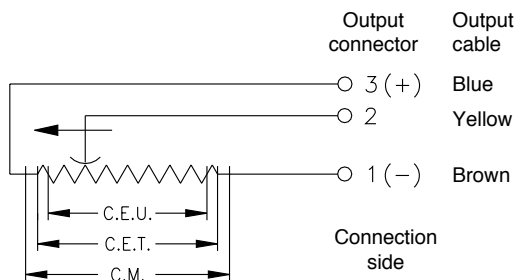
PY3



LINEAR POSITION TRANSDUCER WITH CONTROL ROD AND BEARING

10 to 50mm stroke. Control rod with double support and return spring. Tip with M2.5 threaded shank and ball bearing. Independent linearity up to $\pm 0.1\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Non-rotating shaft. Max. displacement speed 10m/s. Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 100 \times 10^6$ operations (within the EU). IP40 protection rating.

• **Version: tip with stainless steel bearing and return spring**



Electrical connection	Useful electrical stroke (mm)	Order code	SAP/METEL code
3-pin cable 1 m	010	PY-3-F-010-S01M 0000X000X00	F004267
	025	PY-3-F-025-S01M 0000X000X00	F004269
	050	PY-3-F-050-S01M 0000X000X00	F004275
5-pin female connector DIN43322	010	PY-3-C-010 0000X000X00	F004255
	025	PY-3-C-025 0000X000X00	F004256
	050	PY-3-C-050 0000X000X00	F004261

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PY-3	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031
Connectors	5-pin female connector; IP40 protection	CON011	CON011
	5-pin female connector; IP67 protection	CON012	CON012
	5-pin angular female connector; IP40 protection	CON013	CON013
Accessories	Coupling joint (for version PA1 and PY1)	PKIT020	PKIT020
	Ball tip (for version PY2)	PTAS000	PTAS000
	Bearing tip (for version PY3)	PTAS001	PTAS001

Fixing with brackets

MK4-A



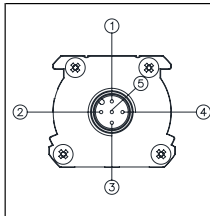
CONTACTLESS LINEAR POSITION TRANSDUCER WITH ANALOG OUTPUT

Contactless linear position transducer with ONDA magnetostrictive technology. The absence of electrical contact on the cursor eliminates wear and guarantees almost unlimited life. Compact size for simple installation. Full protection against outside agents for use in harsh environments with high contamination and presence of dust. Excellent linearity, repeatability, resistance to mechanical vibrations and shocks.

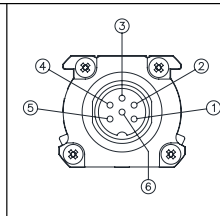
- **IP67 protection rating**
- **Version: Profile in anodized aluminium, 32x28.3mm**



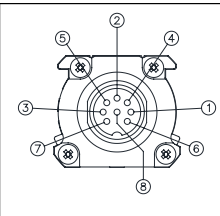
MK4A A OUTPUT



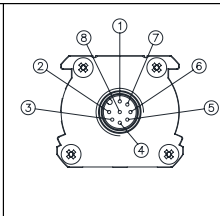
MK4A B OUTPUT



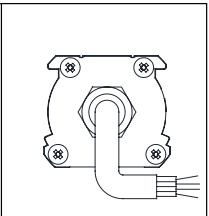
MK4A C OUTPUT



MK4A H OUTPUT



MK4A F OUTPUT



Electrical connection	Electrical Output	Useful electrical stroke (mm)	Order code	SAP/METEL code
4-pin cable ,1 metre	0-10Vdc	0050	MK4-A-F-0050-N 0000X000X00X0XX	F036173
		0100	MK4-A-F-0100-N 0000X000X00X0XX	F032031
		0130	MK4-A-F-0130-N 0000X000X00X0XX	F029027
		0150	MK4-A-F-0150-N 0000X000X00X0XX	F037454
		0175	MK4-A-F-0175-N 0000X000X00X0XX	F033674
		0200	MK4-A-F-0200-N 0000X000X00X0XX	F031254
		0250	MK4-A-F-0250-N 0000X000X00X0XX	F027550
		0450	MK4-A-F-0450-N 0000X000X00X0XX	F037091
		0500	MK4-A-F-0500-N 0000X000X00X0XX	F036336
		0600	MK4-A-F-0600-N 0000X000X00X0XX	F031255
	0750	MK4-A-F-0750-N 0000X000X00X0XX	F050487	
	1200	MK4-A-F-1200-N 0000X000X00X0XX	F035930	
	4...20mA	0050	MK4-A-F-0050-E 0000X000X00X0XX	F028197
		0100	MK4-A-F-0100-E 0000X000X00X0XX	F030943
		0130	MK4-A-F-0130-E 0000X000X00X0XX	F032485
		0150	MK4-A-F-0150-E 0000X000X00X0XX	F030634
		0200	MK4-A-F-0200-E 0000X000X00X0XX	F032099
		0250	MK4-A-F-0250-E 0000X000X00X0XX	F038866
		0300	MK4-A-F-0300-E 0000X000X00X0XX	F050623
		0350	MK4-A-F-0350-E 0000X000X00X0XX	F043729
0700		MK4-A-F-0700-E 0000X000X00X0XX	F043378	
0800		MK4-A-F-0800-E 0000X000X00X0XX	F032685	
1400	MK4-A-F-1400-E 0000X000X00X0XX	F032686		
1500	MK4-A-F-1500-E 0000X000X00X0XX	F036293		



POSITION TRANSDUCERS

Electrical connection	Electrical Output	Useful electrical stroke (mm)	Order code	SAP/METEL code	
M12 5-pin female connector	0-10Vdc	0050	MK4-A-A-0050-N 0000X000X00X0XX	F025041	
		0075	MK4-A-A-0075-N 0000X000X00X0XX	F024803	
		0100	MK4-A-A-0100-N 0000X000X00X0XX	F026867	A
		0130	MK4-A-A-0130-N 0000X000X00X0XX	F026266	
		0150	MK4-A-A-0150-N 0000X000X00X0XX	F026450	
		0175	MK4-A-A-0175-N 0000X000X00X0XX	F033006	
		0200	MK4-A-A-0200-N 0000X000X00X0XX	F025933	A
		0225	MK4-A-A-0225-N 0000X000X00X0XX	F025645	
		0250	MK4-A-A-0250-N 0000X000X00X0XX	F026321	
		0300	MK4-A-A-0300-N 0000X000X00X0XX	F024756	A
		0310	MK4-A-A-0310-N 0000X000X00X0XX	F031142	
		0350	MK4-A-A-0350-N 0000X000X00X0XX	F025646	
		0360	MK4-A-A-0360-N 0000X000X00X0XX	F031741	
		0400	MK4-A-A-0400-N 0000X000X00X0XX	F023812	
		0450	MK4-A-A-0450-N 0000X000X00X0XX	F025651	
		0500	MK4-A-A-0500-N 0000X000X00X0XX	F024088	
		0550	MK4-A-A-0550-N 0000X000X00X0XX	F034349	
		0600	MK4-A-A-0600-N 0000X000X00X0XX	F025653	A
		0650	MK4-A-A-0650-N 0000X000X00X0XX	F030024	
		0700	MK4-A-A-0700-N 0000X000X00X0XX	F024444	
		0750	MK4-A-A-0750-N 0000X000X00X0XX	F027694	
		0800	MK4-A-A-0800-N 0000X000X00X0XX	F027399	
		0850	MK4-A-A-0850-N 0000X000X00X0XX	F032076	
		0900	MK4-A-A-0900-N 0000X000X00X0XX	F024089	
		0950	MK4-A-A-0950-N 0000X000X00X0XX	F027086	
		1000	MK4-A-A-1000-N 0000X000X00X0XX	F026651	
		1100	MK4-A-A-1100-N 0000X000X00X0XX	F027085	
		1200	MK4-A-A-1200-N 0000X000X00X0XX	F029821	
1250	MK4-A-A-1250-N 0000X000X00X0XX	F024445			
1300	MK4-A-A-1300-N 0000X000X00X0XX	F027070			
1350	MK4-A-A-1350-N 0000X000X00X0XX	F039210			
1400	MK4-A-A-1400-N 0000X000X00X0XX	F027095			
1500	MK4-A-A-1500-N 0000X000X00X0XX	F027083			
1750	MK4-A-A-1750-N 0000X000X00X0XX	F027081			

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for MK4-A	Description	Order code	SAP/METEL code	
Cursor	Floating cursor	PCUR039	PCUR039	
	Sliding magnetic cursor (straight joint - low position)	PCUR035	PCUR035	
	Sliding magnetic cursor (straight joint - high position)	PCUR036	PCUR036	
	Sliding magnetic cursor (90° joint)	PCUR037	PCUR037	
	Sliding magnetic cursor (interchangeable with MK1 and MK2)	PCUR997	PCUR997	
Brackets	Steel brackets (hole center distance 42.5mm) (2 brackets)	PKIT090	PKIT090	
	Steel brackets (hole center distance 50mm) (2 brackets)	PKIT091	PKIT091	
	Stainless steel brackets (hole center distance 50mm) (2 brackets)	PKIT092	PKIT092	
	Stainless steel brackets (hole center distance 42.5mm) (2 brackets)	PKIT093	PKIT093	
Connectors	M12 5-pin female connector; IP67	CON031	CON031	
	M12 5-pin angular female connector; IP67	CON041	CON041	
Prewired connectors 5-pin M12	IP67 female connector with 2 meters of cable	CAV011	CAV011	
	IP67 female connector with 5 meters of cable	CAV012	CAV012	
	IP67 female connector with 10 meters of cable	CAV013	CAV013	
	IP67 female connector with 15 meters of cable	CAV015	CAV015	
	90° female connector, IP67 with 2 meters of cable	CAV021	CAV021	
	90° female connector, IP67 with 5 meters of cable	CAV022	CAV022	
	90° female connector, IP67 with 10 meters of cable	CAV023	CAV023	
	90° female connector, IP67 with 15 meters of cable	CAV024	CAV024	

Fixing with brackets

ONP1-A



CONTACTLESS MAGNETOSTRICTIVE LINEAR POSITION TRANSDUCER

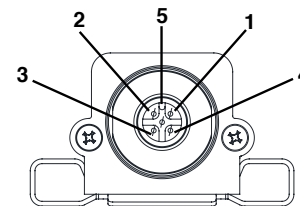
(ONDA TECHNOLOGY) Analog output

Linear position transducer with GEFTRAN'S innovative ONDA magnetostriuctive technology for long life- The absence of electrical contact on the cursor eliminates wear and guarantees almost unlimited life.

Gefran's patented ONDA technology achieves a compact, modular structure for simple installation.

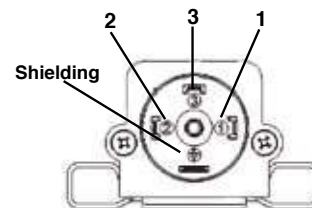
- **Protection IP65**
- **Version: ProWire in aluminium housing 33x16,3mm**
- **Electrical connection: EV DIN43650 Electrovalve connector**

PIN	FUNCTION
1	Output
2	GND Output
3	n.d.
4	Power supply -
5	Power supply +

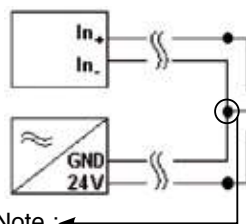


ONP1-A-A

PIN	FUNCTION
1	Power supply -
2	Output
3	Power supply +
⊕	Shielding (also connected to panel side)



ONP1-A-M



Note : Make the connection as close as possible to the transducer.



Electrical Output	Useful electrical stroke (mm)	Order code	SAP/METEL code	
0-10Vdc	0050	ONP1-A-M-0050-W 0000X000X00X0XX	F049359	
	0075	ONP1-A-M-0075-W 0000X000X00X0XX	F050100	
	0100	ONP1-A-M-0100-W 0000X000X00X0XX	F049360	A
	0130	ONP1-A-M-0130-W 0000X000X00X0XX	F051337	
	0150	ONP1-A-M-0150-W 0000X000X00X0XX	F050177	
	0175	ONP1-A-M-0175-W 0000X000X00X0XX	F050800	
	0200	ONP1-A-M-0200-W 0000X000X00X0XX	F049535	A
	0225	ONP1-A-M-0225-W 0000X000X00X0XX	F049361	
	0250	ONP1-A-M-0250-W 0000X000X00X0XX	F049532	
	0300	ONP1-A-M-0300-W 0000X000X00X0XX	F049362	A
	0350	ONP1-A-M-0350-W 0000X000X00X0XX	F049536	

POSITION TRANSDUCERS

Electrical Output	Useful electrical stroke (mm)	Order code	SAP/METEL code	
0-10Vdc	0360	ONP1-A-M-0360-W 0000X000X00X0XX	F050178	
	0375	ONP1-A-M-0375-W 0000X000X00X0XX	F050179	
	0400	ONP1-A-M-0400-W 0000X000X00X0XX	F049533	
	0450	ONP1-A-M-0450-W 0000X000X00X0XX	F049581	
	0500	ONP1-A-M-0500-W 0000X000X00X0XX	F049363	A
	0600	ONP1-A-M-0600-W 0000X000X00X0XX	F049601	
	0650	ONP1-A-M-0650-W 0000X000X00X0XX	F054618	
	0700	ONP1-A-M-0700-W 0000X000X00X0XX	F051971	
	0750	ONP1-A-M-0750-W 0000X000X00X0XX	F049364	
	0800	ONP1-A-M-0800-W 0000X000X00X0XX	F050424	
	0850	ONP1-A-M-0850-W 0000X000X00X0XX	F050529	
	0900	ONP1-A-M-0900-W 0000X000X00X0XX	F049579	
	0950	ONP1-A-M-0950-W 0000X000X00X0XX	F051837	
	1000	ONP1-A-M-1000-W 0000X000X00X0XX	F049365	A
	1100	ONP1-A-M-1100-W 0000X000X00X0XX	F050476	
	1200	ONP1-A-M-1200-W 0000X000X00X0XX	F051195	
	4...20mA	0050	ONP1-A-M-0050-E 0000X000X00X0XX	F049368
0075		ONP1-A-M-0075-E 0000X000X00X0XX	F049580	
0100		ONP1-A-M-0100-E 0000X000X00X0XX	F049370	A
0130		ONP1-A-M-0130-E 0000X000X00X0XX	F051254	
0150		ONP1-A-M-0150-E 0000X000X00X0XX	F049578	A
0175		ONP1-A-M-0175-E 0000X000X00X0XX	F052147	
0200		ONP1-A-M-0200-E 0000X000X00X0XX	F050416	
0225		ONP1-A-M-0225-E 0000X000X00X0XX	F049371	A
0250		ONP1-A-M-0250-E 0000X000X00X0XX	F050485	
0300		ONP1-A-M-0300-E 0000X000X00X0XX	F049372	A
0350		ONP1-A-M-0350-E 0000X000X00X0XX	F050679	
0360		ONP1-A-M-0360-E 0000X000X00X0XX	F050921	
0400		ONP1-A-M-0400-E 0000X000X00X0XX	F050354	
0450		ONP1-A-M-0450-E 0000X000X00X0XX	F050680	
0500		ONP1-A-M-0500-E 0000X000X00X0XX	F049373	
0550		ONP1-A-M-0550-E 0000X000X00X0XX	F050681	
0600		ONP1-A-M-0600-E 0000X000X00X0XX	F049802	A
0650		ONP1-A-M-0650-E 0000X000X00X0XX	F050682	
0700		ONP1-A-M-0700-E 0000X000X00X0XX	F051419	
0750		ONP1-A-M-0750-E 0000X000X00X0XX	F049374	
0800		ONP1-A-M-0800-E 0000X000X00X0XX	F050997	
0850		ONP1-A-M-0850-E 0000X000X00X0XX	F050683	
0900		ONP1-A-M-0900-E 0000X000X00X0XX	F053893	
1000		ONP1-A-M-1000-E 0000X000X00X0XX	F051606	
1100		ONP1-A-M-1100-E 0000X000X00X0XX	F052602	
1200		ONP1-A-M-1200-E 0000X000X00X0XX	F050922	
1500		ONP1-A-M-1500-E 0000X000X00X0XX	F049375	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainig codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for ONP1-A	Description	Order code	SAP/METEL code	
Cursor	Floating cursor	PCUR034	PCUR034	
	Sliding magnetic cursor (straight joint - low position)	PCUR135	PCUR135	
	Sliding magnetic cursor (straight joint - high position)	PCUR136	PCUR136	
	Sliding magnetic cursor (90° joint)	PCUR137	PCUR137	
Brackets	Steel brackets (hole center distance 42.5mm) (2 brackets)	PKIT590	PKIT590	
	Steel brackets (hole center distance 50mm) (2 brackets)	PKIT591	PKIT591	
Mobile connectors	4-pin female connector (DIN43650A)	CON006	CON006	

Fixing with brackets

PZ-67S

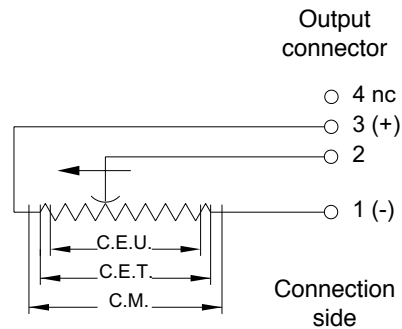
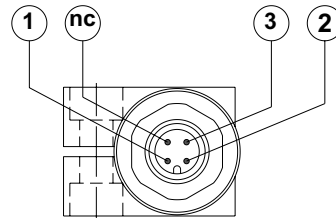


LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE, IP67 PROTECTION RATING

25 to 300mm stroke. Mechanical fixing with brackets or self-aligning joints. Independent linearity up to $\pm 0.05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 5 m/s.

Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP67 protection rating.

- **IP67 protection rating**
- **Version: Transducer case diameter 19mm**
- **Electrical connection: 4-pin M12 female connector**



Useful electrical stroke (mm)	Order code	SAP/METEL code
025	PZ-67-S-025 0000X000X00	F034136
050	PZ-67-S-050 0000X000X00	F036641
075	PZ-67-S-075 0000X000X00	F040554
100	PZ-67-S-100 0000X000X00	F034172
150	PZ-67-S-150 0000X000X00	F039635
175	PZ-67-S-175 0000X000X00	F039657
200	PZ-67-S-200 0000X000X00	F033421
250	PZ-67-S-250 0000X000X00	F037485

All configurations can be seen on www.gefran.com

Accessories for PZ-67	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031
Connectors	Female connector + 2m of wired PVC cable (for version PME)	CAV010	CAV010

POSITION TRANSDUCERS

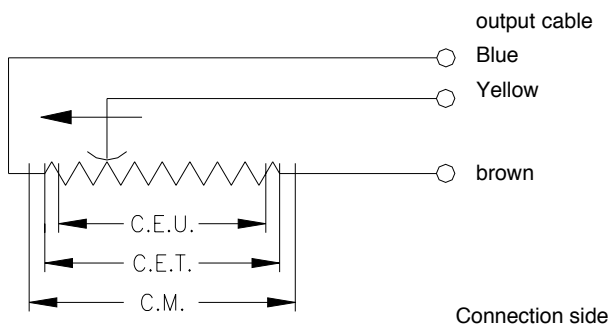
Fixing with brackets

PZ-12

LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE

25 to 250mm stroke. Mechanical fixing with brackets, self-aligning joints or flange. Independent linearity up to $\pm 0.05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 10 m/s. Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP60 protection rating.

- **Protection 60**
- **Version: Transducer case diameter 12.7mm**
- **Electrical connection: 3-pin cable, 1 metre**



Useful electrical stroke (mm)	Order code	SAP/METEL code	
025	PZ-12-S-025 0000X000X00	F004335	A
050	PZ-12-S-050 0000X000X00	F004341	A
075	PZ-12-S-075 0000X000X00	F004352	
100	PZ-12-S-100 0000X000X00	F004358	A
125	PZ-12-S-125 0000X000X00	F004365	
150	PZ-12-S-150 0000X000X00	F004368	
200	PZ-12-S-200 0000X000X00	F006442	
250	PZ-12-S-250 0000X000X00	F023611	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PZ-12	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031

Fixing with brackets

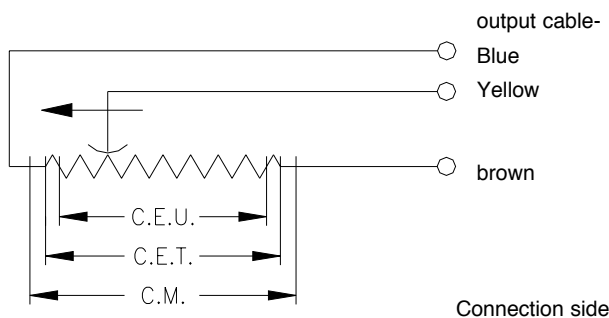
PZ-34



LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE

25 to 300mm stroke. Mechanical fixing with brackets, self-aligning joints or flange. Independent linearity up to $\pm 0.05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 10 m/s. Working temperature: $-30\dots+100^{\circ}\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP60 protection rating.

- **Protection 60**
- **Version: Transducer case diameter 19mm**
- **Electrical connection: 3-pin cable 1 m**



Useful electrical stroke (mm)	Order code	SAP/METEL code	
025	PZ-34-S-025 0000X000X00	F004443	
050	PZ-34-S-050 0000X000X00	F004444	
075	PZ-34-S-075 0000X000X00	F004447	
100	PZ-34-S-100 0000X000X00	F004449	A
125	PZ-34-S-125 0000X000X00	F004451	
150	PZ-34-S-150 0000X000X00	F004453	A
175	PZ-34-S-175 0000X000X00	F006482	
200	PZ-34-S-200 0000X000X00	F004457	
250	PZ-34-S-250 0000X000X00	F004460	
300	PZ-34-S-300 0000X000X00	F033927	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PZ-34	Description	Order code	SAP/METEL code	
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148	
	12-pin male connector (for version PCIR-A)	MOR031	MOR031	
Accessories	N° 2 Brackets (per Version PZ34-S)	STA075	STA075	

POSITION TRANSDUCERS

Fixing with flange

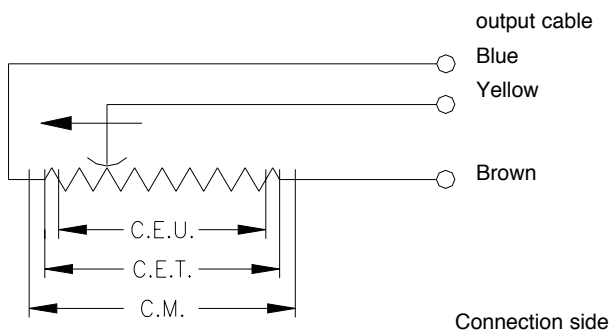
PZ-12



LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE

25 to 250mm stroke. Mechanical fixing with brackets, self-aligning joints or flange. Independent linearity up to $\pm 0.05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 10 m/s. Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP60 protection rating.

- **IP60 protection rating**
- **Version: Transducer case diameter 12.7mm**
- **Electrical connection: 3-pin cable, 1 metre**



Useful electrical stroke (mm)	Order code	SAP/METEL code	
025	PZ-12-F-025 0000X000X00	F004319	A
050	PZ-12-F-050 0000X000X00	F004322	A
075	PZ-12-F-075 0000X000X00	F004327	
100	PZ-12-F-100 0000X000X00	F004330	
125	PZ-12-F-125 0000X000X00	F004332	
150	PZ-12-F-150 0000X000X00	F004333	
200	PZ-12-F-200 0000X000X00	F040572	
250	PZ-12-F-250 0000X000X00	F035983	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for PZ-12	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031
Accessories	2 brackets (for version PZ12-S)	STA074	STA074

Fixing with flange

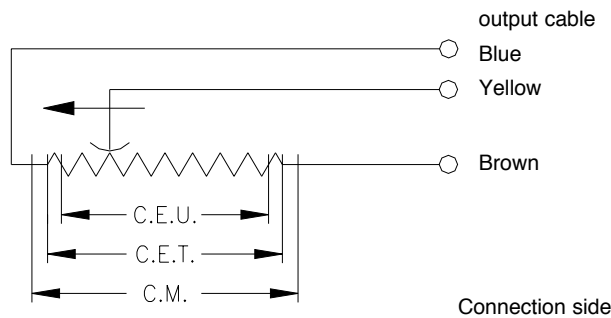
PZ-34



LINEAR POSITION TRANSDUCER WITH CYLINDRICAL CASE

25 to 300mm stroke. Mechanical fixing with brackets, self-aligning joints or flange. Independent linearity up to $\pm 0,05\%$; infinite resolution. No variation of electrical output signal outside theoretical electrical stroke. Max. displacement speed 10 m/s. Working temperature: $-30...+100^{\circ}\text{C}$. Life: $> 25 \times 10^6$ m strokes, or $> 100 \times 10^6$ operations, whichever is smaller (within the EU). IP60 protection rating.

- **IP60 protection rating**
- **Version: Transducer case diameter 19mm**
- **Electrical connection: 3-pin cable, 1 metre**







Useful electrical stroke (mm)	Order code	SAP/METEL code
025	PZ-34-F-025 0000X000X00	F004427
050	PZ-34-F-050 0000X000X00	F004429
075	PZ-34-F-075 0000X000X00	F004431
100	PZ-34-F-100 0000X000X00	F004432
125	PZ-34-F-125 0000X000X00	F004435
150	PZ-34-F-150 0000X000X00	F004436
200	PZ-34-F-200 0000X000X00	F004439
250	PZ-34-F-250 0000X000X00	F004440
300	PZ-34-F-300 0000X000X00	F040689

All configurations can be seen on www.gefran.com

Accessories for PZ-34	Description	Order code	SAP/METEL code
Signal conditioners	DIN rail mounting; output 0..10VDC	PCIR-A	F003148
	12-pin male connector (for version PCIR-A)	MOR031	MOR031

PRESSURE SENSORS



Pressure type	Accuracy	Full scale	Process temperature	Diaphragm	Area	Output type	Model
Relative	$\leq 0.15\% \text{ FS}$	$\geq \pm 1 \text{ bar}$ $\leq 1000 \text{ bar}$	$-40 \dots 80^\circ\text{C}$	Standard	Atex	Current	KX 
	$\leq 0.1\% \text{ FS}$	$\geq 50 \text{ bar}$ $\leq 1000 \text{ bar}$	$-40 \dots 105^\circ\text{C}$	Standard	Safe	Voltage	TPSA/TPSADA
						Current	TPSA/TPSADA
						Voltage	TPHADA
	$\geq 1000 \text{ bar}$ $\leq 5000 \text{ bar}$	$-30 \dots 120^\circ\text{C}$	Standard	Safe	Current	TPHADA	
					mV/V	TPH	
					Voltage	TPFAS	
	$\geq 0.15\% \text{ FS}$ $+ < 0.25\% \text{ FS}$	$\geq 25 \text{ bar}$ $\leq 600 \text{ bar}$	$-40 \dots 120^\circ\text{C}$	Flush miniaturized	Safe	Current	TPFAS
						mV/V	TPS
		$\geq 10 \text{ bar}$ $\leq 1000 \text{ bar}$		Flush		Voltage	TPFADA
						Current	TPFADA
						mV/V	TPF
		$\geq 0.05 \text{ bar}$ $\leq 50 \text{ bar}$		Standard		Voltage	TSA
						Current	TSA
	$\geq 0.25\% \text{ FS} +$ $\leq 0.5\% \text{ FS}$	$\geq \pm 1 \text{ bar}$ $\leq 500 \text{ bar}$	$-40 \dots 125^\circ\text{C}$	Standard	Safe	Voltage	TK/TKDA
Current						TK/TKDA	
Voltage		KS 					
Current		KS 					
Absolute	$\leq 0.15\% \text{ FS}$	$\geq 1 \text{ bar}$ $\leq 40 \text{ bar}$	$-20 \dots 80^\circ\text{C}$			Voltage	TSA
						Current	TSA

Model	Min. Range	Max. Range
PRESSURE	BAR PSI	BAR PSI
KS	0...1 0...15	0...1000 0...15000
TK TKDA	± 1 ± 15	0...500 0...7500
TSA	0...0.05 0...5	0...60 0...1000
TPS	0...10 0...150	0...1000 0...15000
TPSA TPSDA	0...50 0...750	0...1000 0...15000
TPF	0...10 0...150	0...1000 0...15000
TPFADA	0...10 0...150	0...1000 0...15000
TPFAS	0...25 0...350	0...600 0...9000
TPH	0...1000 0...15000	0...5000 0...70000
TPHADA	0...1000 0...15000	0...5000 0...70000
KX	± 1 ± 15	0...1000 0...15000



PRESSURE SENSORS

Industrial applications (0.25%)

KS



PRESSURE TRANSMITTER

Ranges: from 0...1 to 0...1000bar
Output signal: 4...20mA two wires / 0...10VDC three wires

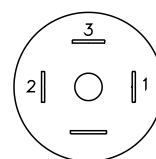
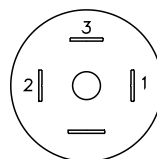
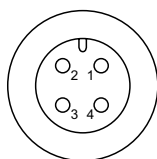
Protection rating: IP65/IP67.
Contact material: Stainless steel

- **SIL 2 certification**
- **Process connection: 1/4 gas male**
- **Accuracy: 0.5% FS**

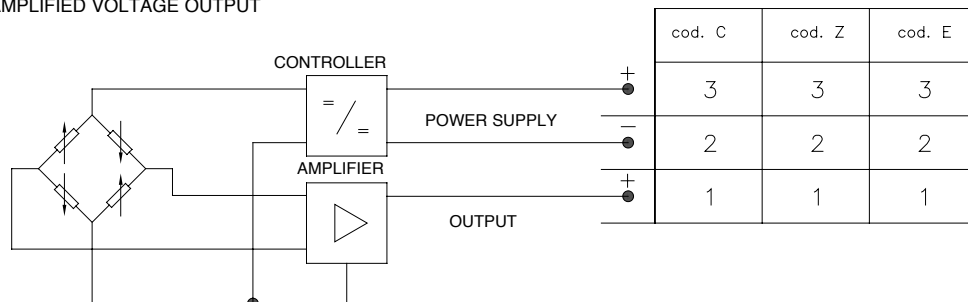
Z – Connector
4 pin M12 x 1

E - EN 175301-803

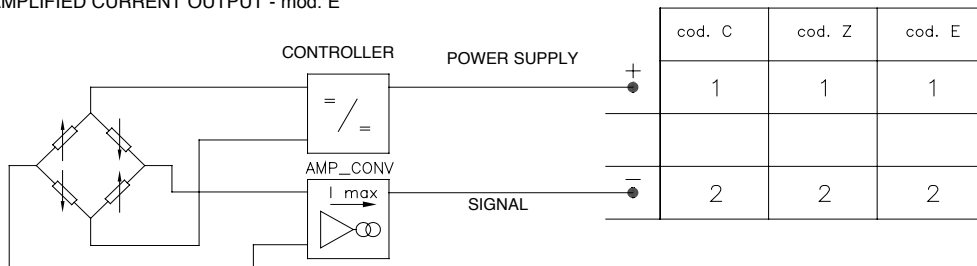
C – EN 175301-803



AMPLIFIED VOLTAGE OUTPUT



AMPLIFIED CURRENT OUTPUT - mod. E



Pressure range	Process connection	Connector	Electrical Output	Boxes of 10 pieces	Order code	SAP/METEL code
0..1 Bar	1/2 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-3-E-B01U-M-V-539 2130X000U00	F055310
0..1 Bar	1/4 gas male	Z (M12x1)	4-20 mA	X	KS-E-E-Z-B01U-M-V-539 2130X000X00	F054544
0..1,6 Bar	1/4 gas male	C (4 pin microDIN)	4-20 mA	X	KS-E-E-C-B1V6-M-V-539 2130X000T00	F055867
0..6 Bar	1/4 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-E-E-B06U-M-V-539 2130X000U00	F057692
0..6 Bar	1/4 gas male	Z (M12x1)	4-20 mA	X	KS-E-E-Z-B06U-M-V-539 2130X000X00	F053973
0..10 Bar	1/2 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-3-E-B01D-M-V-539 2130X000U00	F055311
0..10 Bar	1/4 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-E-E-B01D-M-V-539 2130X000U00	F052533
0..10 Bar	1/4 gas male	Z (M12x1)	4-20 mA	X	KS-E-E-Z-B01D-M-V-539 2130X000X00	F052532
0..10 Bar	1/4 gas male	C (4 pin microDIN)	0-10 V	X	KS-N-E-C-B01D-M-V-539 2130X000T00	F052535
0..10 Bar	1/4 gas male	E (4 pin DIN)	0-10 V	X	KS-N-E-E-B01D-M-V-539 2130X000U00	F052534
0..10 Bar	1/4 gas male	Z (M12x1)	0-10 V	X	KS-N-E-Z-B01D-M-V-539 2130X000X00	F054943
0..16 Bar	1/2 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-3-E-B16U-M-V-539 2130X000U00	F055312

Pressure range	Process connection	Connector	Electrical Output	Boxes of 10 pieces	Order code	SAP/METEL code
0..16 Bar	1/4 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-E-E-B16U-M-V-539 2130X000U00	F052536
0..16 Bar	1/4 gas male	E (4 pin DIN)	0-10 V	X	KS-N-E-E-B16U-M-V-539 2130X000U00	F052537
0..20 Bar	1/4 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-E-E-B02D-M-V-539 2130X000X00	F055851
0..20 Bar	1/4 gas male	Z (M12x1)	4-20 mA	X	KS-E-E-Z-B02D-M-V-539 2130X000X00	F053974
0..25 Bar	1/2 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-3-E-B25U-M-V-539 2130X000U00	F055313
0..25 Bar	1/4 gas male	Z (M12x1)	4-20 mA	X	KS-E-E-Z-B25U-M-V-539 2130X000X00	F057594
0..40 Bar	1/2 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-3-E-B04D-M-V-539 2130X000U00	F055314
0..40 Bar	1/4 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-E-E-B04D-M-V-539 2130X000U00	F052538
0..40 Bar	1/4 gas male	E (4 pin DIN)	0-10 V	X	KS-N-E-E-B04D-M-V-539 2130X000U00	F052539
0..60 Bar	1/4 gas male	Z (M12x1)	4-20 mA	X	KS-E-E-Z-B06D-M-V-539 2130X000X00	F053976
0..100 Bar	1/4 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-E-E-B01C-M-V-539 2130X000U00	F052540
0..100 Bar	1/4 gas male	E (4 pin DIN)	0-10 V	X	KS-N-E-E-B01C-M-V-539 2130X000U00	F052541
0..250 Bar	1/4 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-E-E-B25D-M-V-539 2130X000U00	F053654
0..250 Bar	1/4 gas male	Z (M12x1)	4-20 mA	X	KS-E-E-Z-B25D-M-V-539 2130X000X00	F054152
0..250 Bar	1/4 gas male	E (4 pin DIN)	0-10 V	X	KS-N-E-E-B25D-M-V-539 2130X000U00	F056610
0..250 Bar	1/4 gas male	Z (M12x1)	0-10 V	X	KS-N-E-Z-B25D-M-V-539 2130X000X00	F054253
0..400 Bar	1/4 gas male	C (4 pin microDIN)	4-20 mA	X	KS-E-E-C-B04C-M-V-539 2130X000T00	F052545
0..400 Bar	1/4 gas male	E (4 pin DIN)	4-20 mA	X	KS-E-E-E-B04C-M-V-539 2130X000U00	F052542
0..400 Bar	1/4 gas male	Z (M12x1)	4-20 mA	X	KS-E-E-Z-B04C-M-V-539 2130X000X00	F054546
0..400 Bar	1/4 gas male	E (4 pin DIN)	0-10 V	X	KS-N-E-E-B04C-M-V-539 2130X000U00	F052544
0..400 Bar	1/4 gas male	Z (M12x1)	0-10 V	X	KS-N-E-Z-B04C-M-V-539 2130X000X00	F052543
0..1000 Bar	1/4 gas male	C (4 pin microDIN)	4-20 mA	X	KS-E-E-C-B01M-M-V-539 2130X000T00	F052546
0..1000 Bar	1/4 gas male	E (4 pin DIN)	0-10 V	X	KS-N-E-E-B01M-M-V-539 2130X000U00	F054438

All configurations can be seen on www.gefran.com

Accessories for KS	Description	Order code	SAP/METEL code
Connectors	Connection E EN 175301-803 4-pin DIN Type A (P 18) - IP65	CON 064	CON 064
	Connection Z 4-pin M12 x 1 connector - IP67	CON 293	CON 293
	Connection C EN 175301-803 4-pin MicroDIN Type C (P 8) - IP65	CON 047	CON 047
Extension cables	Female connector IP67 M12 x 1 + 2 m of cable	CAV011	CAV011
	Female connector IP67 M12 x 1 + 5 m of cable	CAV012	CAV012
	Female connector IP67 M12 x 1 + 10 m of cable	CAV013	CAV013
	Female connector IP67 M12 x 1 + 15 m of cable	CAV015	CAV015

PRESSURE SENSORS

Industrial applications (0.5% to 0.25%)

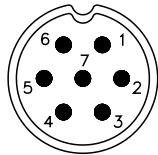
TK



PRESSURE TRANSMITTER

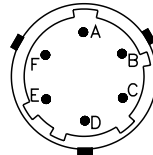
Ranges: from : 0...3 to 0...500bar and -1...+1 to -1...+10bar.
 Output signal 4...20mA two wires / 0.1...5.1VDC / 0.1...10.1VDC / 0...5VDC / 0...10VDC / 1...5VDC / 1...10VDC
 Protection rating: IP65/IP67.
 Contact material: AISI 430 and 17-4PH.
 Single pack

P – 7-pin connector



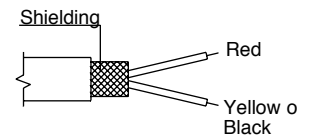
Male connector 09-127-09-07
IP67 protection rating

V – 6-pin connector



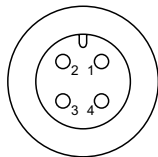
Male connector VPT02A10-6PT2
IP66 protection rating

F – 2-pin cable



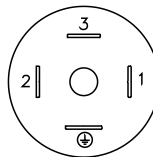
Shielded cable 2x0.25 - 2m. (output E)
IP65 protection rating

**Z – Male connector
4-pin M12 x 1**



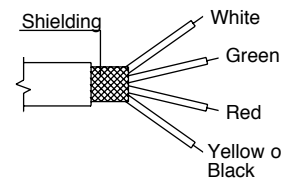
Male connector 4-pin series 713
IP67 protection rating

**E - 4-pin conn. Electrovalve
M - 4-pin conn. Microelectrovalve**



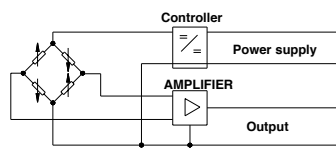
Electrovalve DIN 43650A - ISO4400
IP65 protection rating
Micro Electrovalve DIN 43650C - ISO4400
IP65 protection rating

F – 4-pin cable



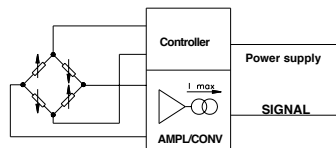
Shielded cable 4x0.25 - 2m
IP65 protection rating

AMPLIFIED VOLTAGE OUTPUT - mod. B/C/M/N/P/Q/R



	cod. V	cod. P	cod. F	cod. E/M	cod. Z
+	C	1	White	3	3
-	D	2	Green	2	2
+	A	3	Red	1	1
-	B	4	Yellow or Black	2	2
⊥	Housing	Housing	Shielding	⊥	Housing

AMPLIFIED CURRENT OUTPUT - mod. E



	cod. V	cod. P	cod. F	cod. E/M	cod. Z
+	A	3	Red	1	1
-	B	4	Yellow or Black	2	2
⊥	Housing	Housing	Shielding	⊥	Housing



Pressure range	Process connection	Accuracy	Connector	Electrical Output	Order code	SAP/METEL code
-1..+2 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-N02U-M-V 2130X000X00	F029854
-1..+3 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-N03U-M-V 2130X000X00	F028446
-1..+5 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-N05U-H-V 2130X000X00	F029547
0-1..+1 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-N01U-M-V 2130X000X00	F028507

Pressure range	Process connection	Accuracy	Connector	Electrical Output	Order code	SAP/METEL code
-1..+10 bar	1/4 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-N01D-M-V 2130X000X00	F028528
0..5 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B05U-H-V 2130X000X00	F032943
0..6 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B06U-M-V 2130X000X00	F029200
0..10 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B01D-M-V 2130X000X00	F028315 A
0..10 bar	1/4 gas male	0,25% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-B01D-H-V 2130X000X00	F028624
0..10 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B01D-H-V 2130X000X00	F028314
0..10 bar	1/2 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-3-E-B01D-M-V 2130X000X00	F028548
0..10 bar	1/4 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-B01D-M-V 2130X000X00	F028365
0..10 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	0-10V	TK-N-1-E-B01D-H-V 2130X000X00	F029990
0..10 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	0-10V	TK-N-1-E-B01D-M-V 2130X000X00	F028422
0..16 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B16U-M-V 2130X000X00	F028544
0..16 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B16U-H-V 2130X000X00	F028437
0..16 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	0-10V	TK-N-1-E-B16U-H-V 2130X000X00	F033476
0..20 bar	1/4 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-B02D-M-V 2130X000X00	F029956
0..20 bar	1/2 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-3-E-B02D-M-V 2130X000X00	F029703
0..30 bar	1/4 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-B03D-M-V 2130X000X00	F028572 A
0..30 bar	1/2 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-3-E-B03D-M-V 2130X000A00	F035458
0..40 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B04D-M-V 2130X000X00	F034489
0..40 bar	1/2 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-3-E-B04D-M-V 2130X000X00	F030662
0..50 bar	1/4 gas male	0,5% FS	Z (M12x1)	0-10V	TK-N-1-Z-B05D-M-V 2130X000X00	F032433
0..50 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	0-10V	TK-N-1-E-B05D-M-V 2130X000X00	F028482
0..50 bar	1/4 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-B05D-M-V 2130X000X00	F028804
0..60 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B06D-H-V 2130X000X00	F032761
0..60 bar	1/2 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-3-E-B06D-M-V 2130X000X00	F044141
0..100 bar	1/4 gas male	0,25% FS	V (6 pin)	0-10V	TK-N-1-V-B01C-H-V 2130X000X00	F054920
0..160 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B16D-H-V 2130X000X00	F028438
0..160 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	0-10V	TK-N-1-E-B16D-M-V 2130X000X00	F029699
0..200 bar	1/4 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-B02C-M-V 2130X000X00	F028633
0..250 bar	1/4 gas male	0,25% FS	M (4 pin microDIN)	1-10V	TK-Q-1-M-B25D-H-V 2130X000X00	F035299
0..250 bar	1/4 gas male	0,25% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B25D-H-V 2130X000X00	F028651
0..250 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	0-10V	TK-N-1-E-B25D-M-V 2130X000X00	F028323
0..350 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	0-10V	TK-N-1-E-B35D-M-V 2130X000X00	F028321 A
0..350 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B35D-M-V 2130X000X00	F028606 A
0..350 bar	1/4 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-B35D-M-V 2130X000X00	F028542
0..350 bar	1/4 gas female	0,5% FS	E(4 pin DIN)	0,1-10,1V	TK-C-4-E-B35D-M-V 2130X000X00	F048905
0..400 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-1-E-B04C-M-V 2130X000X00	F028335
0..400 bar	1/4 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TK-E-1-M-B04C-M-V 2130X000X00	F031005
0..400 bar	1/4-18 NPT male	0,5% FS	E(4 pin DIN)	4-20mA	TK-E-7-E-B04C-M-V 2130X000X00	F050924
0..500 bar	1/4 gas male	0,5% FS	Z (M12x1)	4-20mA	TK-E-1-Z-B05C-M-V 2130X000X00	F033293
0..500 bar	1/4 gas male	0,5% FS	E(4 pin DIN)	0-10V	TK-N-1-E-B05C-M-V 2130X000X00	F028279

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for TK		Description	Order code	SAP/METEL code																	
Connectors		Connection E connector 3 pins + ground DIN43650A ISO4400 - IP65	CON 006	CON 006																	
		Connection Z 4-pin connector - IP67	CON 293	CON 293																	
		Connection M connector 3 pins + ground DIN43650C ISO4400 Prot. IP65	CON 008	CON 008																	
		Connection P female cable connector - IP67	CON 321	CON 321																	
		Connection V female cable connector - IP66	CON 300	CON 300																	
Extension cables	<table border="1"> <thead> <tr> <th colspan="2">Cable color code</th> </tr> <tr> <th>Conn.</th> <th>Wire</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>Red</td> </tr> <tr> <td>B</td> <td>Yellow/Black</td> </tr> <tr> <td>C</td> <td>White</td> </tr> <tr> <td>D</td> <td>Green</td> </tr> <tr> <td>E</td> <td>Blue</td> </tr> <tr> <td>F</td> <td>Orange</td> </tr> </tbody> </table>		Cable color code		Conn.	Wire	A	Red	B	Yellow/Black	C	White	D	Green	E	Blue	F	Orange	6-pin connector with 8 m (25 ft) cable	C08WLS	C08WLS
	Cable color code																				
	Conn.	Wire																			
	A	Red																			
	B	Yellow/Black																			
C	White																				
D	Green																				
E	Blue																				
F	Orange																				
		6-pin connector with 15 m (50 ft) cable	C15WLS	C15WLS																	
		6-pin connector with 30 m (100 ft) cable	C30WLS	C30WLS																	
		Other lengths	on request	on request																	

PRESSURE SENSORS

Special applications (0.2%)

TPFADA

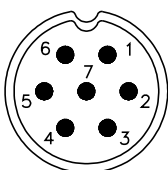


PRESSURE TRANSMITTER WITH FLUSH DIAPHRAGM AND DIGITAL AUTOZERO

Range: from 0...10 to 0...1000bar (0...150 to 0...15000psi).
 Accuracy: 0.2% over 50 bar.
 Entirely in stainless steel.
 Compact version, \varnothing 26.5 mm.
 Hex connection.
 Calibration signal generated internally (V, P, F only).
 Autozero and Digital Span with magnetic pen (span for V, P, F only).

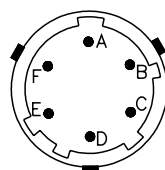
- Flush diaphragm

P – 7-pin connector



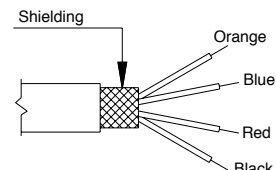
Male connector 09-127-09-07
 IP67 protection rating

V – 6-pin connector



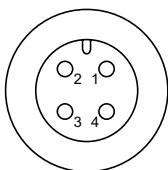
Male connector VPT02A10-6PT2
 IP66 protection rating

F – 4-pin cable



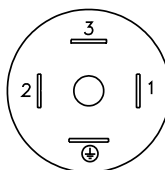
Cable schermato 4x0,25 - 1m. (Output E)
 Grado di protezione IP65

**Z – Male connector
 4-pin M12 x 1**



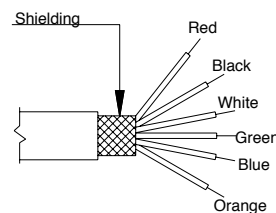
Male connector 4-pin series 713
 IP67 protection rating

**E - 4-pin conn. Electrovalve
 M - 4-pin conn. Microelectrovalve**



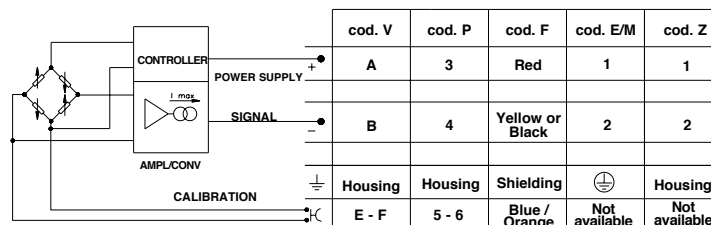
Electrovalve DIN 43650A - ISO4400
 IP65 protection rating
 Micro Electrovalve DIN 43650C - ISO4400
 IP65 protection rating

F - Cable 6 poli

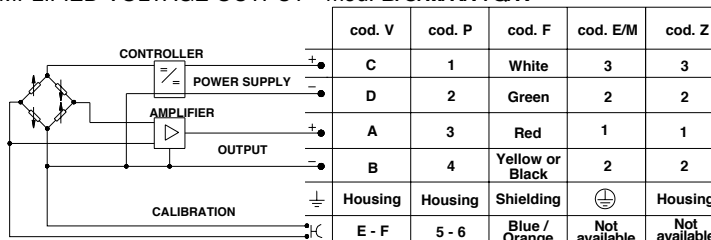


Shielded cable 6x0.25 - 1m
 IP65 protection rating

AMPLIFIED CURRENT OUTPUT - mod. E



AMPLIFIED VOLTAGE OUTPUT - mod. B/C/M/N/P/Q/R



Pressure range	Process connection	Accuracy	Connector	Electrical Output	Order code	SAP/METEL code	
0..10 bar	1/2 gas male	0,5% FS	E (4 pin DIN)	4-20mA	TPFADA-E-M-E-B01D-M-V 2130X000X00	F042222	
0..20 bar	1/2 gas male	0,5% FS	M (4 pin microDIN)	4-20mA	TPFADA-E-M-M-B02D-M-V 2130X000X00	F046530	
0..30 bar	1/2 gas male	0,5% FS	E (4 pin DIN)	4-20mA	TPFADA-E-M-E-B03D-M-V 2130X000X00	F044984	
0..50 bar	M18x1,5	0,5% FS	V (6 PIN)	4-20mA	TPFADA-E-G-V-B05D-M-V 2130X000X00	F042196	A
0..50 bar	1/2 gas male	0,5% FS	E (4 pin DIN)	0-10V	TPFADA-N-M-E-B05D-M-V 2130X000X00	F042278	
0..100 bar	1/2 gas male	0,25% FS	E (4 pin DIN)	4-20mA	TPFADA-E-M-E-B01C-H-V 2130X000X00	F042116	A
0..200 bar	1/2 gas male	0,25% FS	E (4 pin DIN)	0-10V	TPFADA-N-M-E-B02C-H-V 2130X000X00	F054690	
0..250 bar	M18x1,5	0,25% FS	Z (M12x1)	4-20mA	TPFADA-E-G-Z-B25D-H-V 2130X000X00	F052652	
0..350 bar	1/2 gas male	0,25% FS	E (4 pin DIN)	4-20mA	TPFADA-E-M-E-B35D-H-V 2130X000X00	F044634	A
0..400 bar	1/2 gas male	0,25% FS	E (4 pin DIN)	4-20mA	TPFADA-E-M-E-B04C-H-V 2130X000X00	F042245	

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for TPFADA	Description	Order code	SAP/METEL code
Connectors	Connection E connector 3 pins + ground DIN43650A ISO4400 - IP65	CON 006	CON 006
	Connection M connector 3 pins + ground DIN43650C ISO4400 - IP6	CON 008	CON 008
	Connection Z female cable connector, 4-pin M12x1 - IP67	CON 293	CON 293
	Connection Z female cable connector, 4-pin 90° M12x1 - IP67	CON 050	CON 050
	Connection V female cable connector, 6-pin - IP66	CON 300	CON 300
Extension cables	6-pin female connector (CON 300) + 2 m cable (6x0.25)	C02WLS	C02WLS
	6-pin female connector (CON 300) + 6 m cable (6x0.25)	C06WLS	C06WLS
	6-pin female connector (CON 300) + 10 m cable (6x0.25)	C10WLS	C10WLS
	6-pin female connector (CON 300) + 15 m cable (6x0.25)	C15WLS	C15WLS

NOTE: Available in version with miniaturized flush diaphragm, with G1/4 connection or M10x1 (TPFAS series).
For more information, see www.gefran.com

PRESSURE SENSORS

High accuracy (0.15%)

TPS



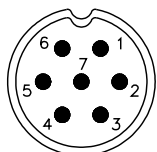
PRESSURE TRANSDUCER

Range: from 0...10 to 0...1000bar

Output signal in mV/V

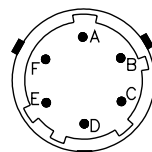
- **Process connection: 1/4 gas female or male**
- **Accuracy: 0.15% FS**
- **Connector: 6-pin - V**
- **Electrical Output: mV/V**

P – 7-pin connector



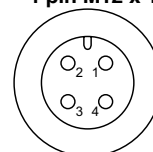
Male connector 09-127-09-07
IP67 protection rating

V – 6-pin connector



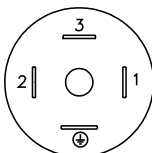
Male connector VPT02A10-6PT2
IP66 protection rating

**Z – Male connector
4-pin M12 x 1**



Male connector 4-pin series 713
IP67 protection rating

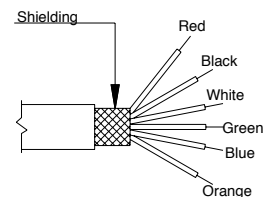
**E - 4-pin conn. Electrovalve
M - 4-pin conn. Microelectrovalve**



Electrovalve DIN 43650A - ISO4400
Micro Electrovalve DIN 43650C - ISO4400

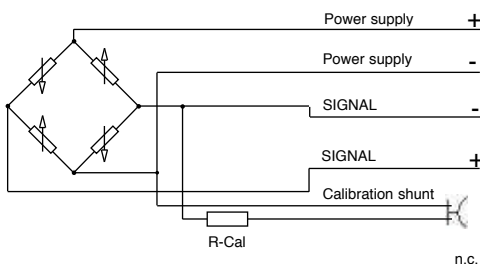
IP65 protection rating

F - Cable 6 poli



F – Shielded cable 6 x 0.25 - 1m

Output mV/V



Code V	Code P	Code F	Code E/M	Code Z
C	1	White	3	1
D	2	Green		2
B	4	Black or Yellow	2	4
A	3	Red	1	3
E - F	5 - 6	Blue/ Orange or Purple	Not available	Not available
	7			

The cable braiding is connected to the transducer case



Pressure range	Order code	SAP/METEL code
0..200 bar	TPS-4-V-B02C-T 2130X000X00	F031992
0..350 bar	TPS-1-V-B35D-T 2130X000X00	F031284
0..350 bar	TPS-4-V-B35D-T 2130X000X00	F032089
0..500 bar	TPS-4-V-B05C-T 2130X000X00	F031553

All configurations can be seen on www.gefran.com

Accessories for TPS	Description	Order code	SAP/METEL code
Connectors	Connection V Female cable connector, 6-pin - IP66	CON 300	CON 300
Extension cables	6-pin female connector (CON 300) + 2 m cable (6x0.25)	C02W	C02W
	6-pin female connector (CON 300) + 6 m cable (6x0.25)	C06W	C06W
	6-pin female connector (CON 300) + 10 m cable (6x0.25)	C10W	C10W
	6-pin female connector (CON 300) + 15 m cable (6x0.25)	C15W	C15W



PRESSURE SENSORS

High accuracy (0.1%)

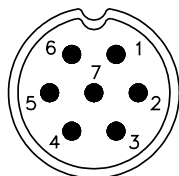
TPSA



PRESSURE TRANSMITTER

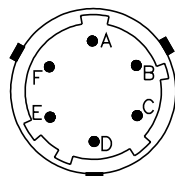
Range: from 0...50 to 0...1000bar
 Output signal in voltage or current
 Protection rating: IP65/IP67
 Material in contact with fluid: 17-4PH
 Working temperature: -40...+105°C
 • Accuracy: 0.1% FS

P – 7-pin connector



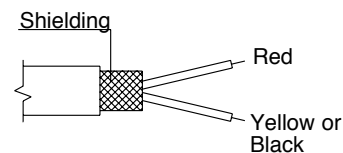
Male connector 09-127-09-07
 IP67 protection rating

V – 6-pin connector



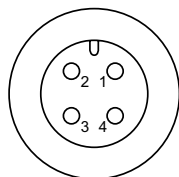
Male connector VPT02A10-6PT2
 IP66 protection rating

F – 2-pin cable



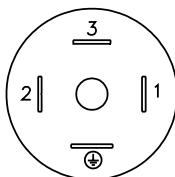
Cable schermato 2x0,25 - 2m. (Output E)
 Grado di protezione IP65

Z – Male connector
 4-pin M12 x 1



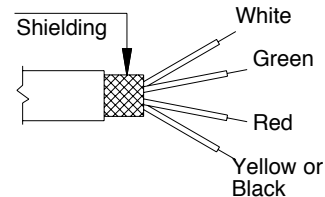
Male connector 4-pin series 713
 IP67 protection rating

E - 4-pin conn. Electrovalve
 M - 4-pin conn. Microelectrovalve



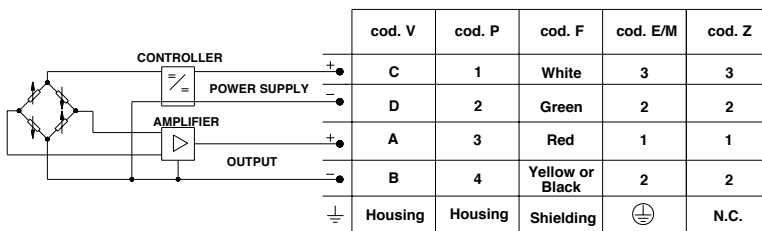
Electrovalve DIN 43650A - ISO4400
 IP65 protection rating
 Micro Electrovalve DIN 43650C - ISO4400
 IP65 protection rating

F – 4-pin cable

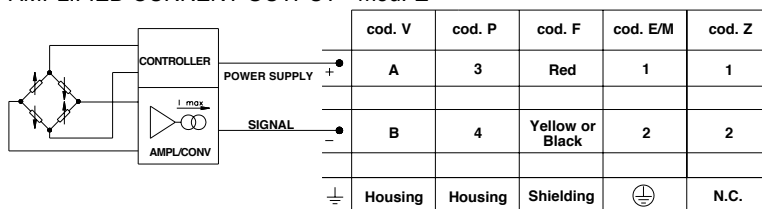


Shielded cable 4x0.25 - 2m
 IP65 protection rating

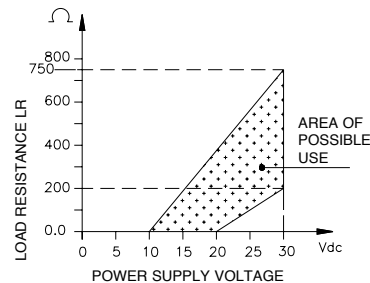
AMPLIFIED VOLTAGE OUTPUT - mod. B/C/M/N/P/Q/R



AMPLIFIED CURRENT OUTPUT - mod. E



LOAD DIAGRAM
 (Output current)



Pressure range	Process connection	Connector	Electrical Output	Order code	SAP/METEL code
0..50 bar	1/4 gas male	F (Output cable)	4-20mA	TPSA-E-1-F-B05D-T-V 2130X000X00	F028093
0..100 bar	1/4 gas female	V (6 pin)	4-20mA	TPSA-E-4-V-B01C-T-V 2130X000X00	F026840
0..200 bar	1/4 gas male	E (4 pin DIN)	4-20mA	TPSA-E-1-E-B02C-T-V 2130X000X00	F030038
0..200 bar	1/4 gas female	M (4 pin microDIN)	4-20mA	TPSA-E-4-M-B02C-T-V 2130X000X00	F025941
0..250 bar	1/4 gas male	V (6 pin)	4-20mA	TPSA-E-1-V-B25D-T-V 2130X000X00	F028083
0..350 bar	1/4 gas female	V (6 pin)	0,1-5,1V	TPSA-B-4-V-B35D-T-V 2130X000X00	F026684
0..350 bar	1/4 gas male	E (4 pin DIN)	0,1-10,1V	TPSA-C-1-E-B35D-T-V 2130X000X00	F027150
0..350 bar	1/4 gas female	E (4 pin DIN)	0,1-10,1V	TPSA-C-4-E-B35D-T-V 2130X000X00	F027277
0..350 bar	1/4 gas female	V (6 pin)	0,1-10,1V	TPSA-C-4-V-B35D-T-V 2130X000X00	F025971
0..350 bar	1/4 gas male	E (4 pin DIN)	4-20mA	TPSA-E-1-E-B35D-T-V 2130X000X00	F026869
0..350 bar	1/4 gas female	E (4 pin DIN)	4-20mA	TPSA-E-4-E-B35D-T-V 2130X000X00	F028701
0..350 bar	1/4 gas female	V (6 pin)	4-20mA	TPSA-E-4-V-B35D-T-V 2130X000X00	F027367
0..350 bar	1/4 gas male	E (4 pin DIN)	0-10V	TPSA-N-1-E-B35D-T-V 2130X000X00	F024792
0..350 bar	1/4 gas male	M (4 pin microDIN)	0-10V	TPSA-N-1-M-B35D-T-V 2130X000X00	F024688
0..400 bar	1/4-18 NPT male	V (6 pin)	0,1-5,1V	TPSA-B-7-V-B04C-T-V 2130X000X00	F026278
0..400 bar	1/4 gas male	E (4 pin DIN)	4-20mA	TPSA-E-1-E-B04C-T-V 2130X000X00	F028277
0..500 bar	1/4 gas male	E (4 pin DIN)	4-20mA	TPSA-E-1-E-B05C-T-V 2130X000X00	F035704
0..600 bar	1/4 gas female	V (6 pin)	4-20mA	TPSA-E-4-V-B06C-T-V 2130X000X00	F026182
0..600 bar	1/4 gas male	E (4 pin DIN)	4-20mA	TPSA-E-1-E-B07C-T-V 2130X000X00	F028649
0..700 bar	1/4 gas female	E (4 pin DIN)	4-20mA	TPSA-E-4-E-B07C-T-V 2130X000X00	F026505
0..1000 bar	1/4 gas female	V (6 pin)	0,1-10,1V	TPSA-C-4-V-B01M-T-V 2130X000X00	F027288
0..1000 bar	1/4 gas male	E (4 pin DIN)	4-20mA	TPSA-E-1-E-B01M-T-V 2130X000X00	F027942

All configurations can be seen on www.gefran.com

Accessories for TPSA	Description	Order code	SAP/METEL code
Connectors	Connection E connector 3 pins + ground DIN43650A ISO4400 - IP65	CON 006	CON 006
	Connection M connector 3 pins + ground DIN43650C ISO4400 Prot. IP65	CON 008	CON 008
	Connexion Z Female cable connector, 4-pin M12x1 - IP67	CON 293	CON 293
	Connection V Female cable connector, 6-pin - IP66	CON 300	CON 300
Extension cables	6-pin connector with 8 m (25 ft) cable	C08WLS	C08WLS
	6-pin connector with 15 m (50 ft) cable	C15WLS	C15WLS
	6-pin connector with 30 m (100 ft) cable	C30WLS	C30WLS

PRESSURE SENSORS

High accuracy (0.1%)

TPSADA

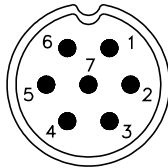


PRESSURE TRANSMITTER WITH DIGITAL AUTOZERO

Range: from 0...50 to 0...1000bar
 Output signal in voltage or current
 Protection rating: IP65/IP67
 Material in contact with fluid: 17-4PH
 Working temperature: -40...+105°C

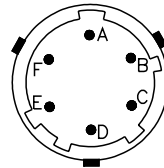
- Accuracy: 0.1% FS
- Autozero function with magnetic pen

P – 7-pin connector



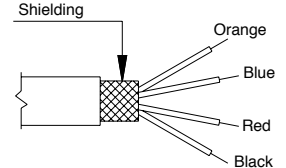
Male connector 09-127-09-07
 IP67 protection rating

V – 6-pin connector



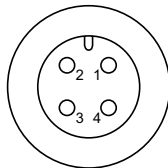
Male connector VPT02A10-6PT2
 IP66 protection rating

F – 4-pin cable



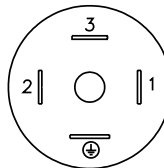
Cable schermato 4x0,25 - 1m. (Output E)
 Grado di protezione IP65

Z – Male connector
 4-pin M12 x 1



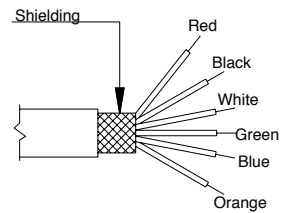
Male connector 4-pin series 713
 IP67 protection rating

E – 4-pin conn. Electrovalve
 M – 4-pin conn. Microelectrovalve



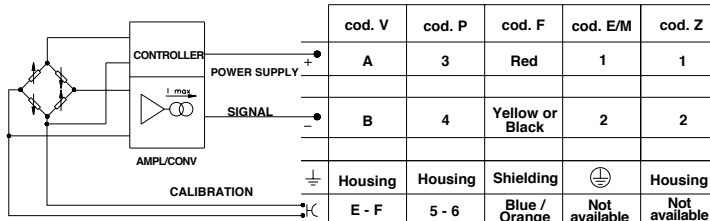
Electrovalve DIN 43650A - ISO4400
 IP65 protection rating
 Micro Electrovalve DIN 43650C - ISO4400
 IP65 protection rating

F - Cable 6 poli

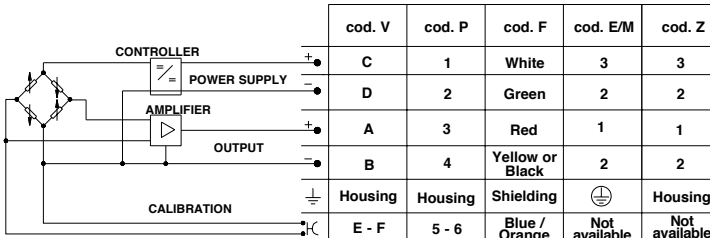


Shielded cable 6x0.25 - 1m
 IP65 protection rating

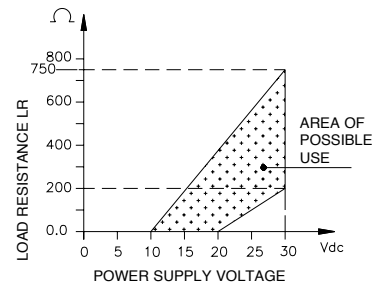
AMPLIFIED CURRENT OUTPUT - mod. E



AMPLIFIED VOLTAGE OUTPUT - mod. B/C/M/NP/Q/R



LOAD DIAGRAM
 (Output current)



Pressure range	Process connection	Connector	Electrical Output	Order code	SAP/METEL code
0..350 bar	1/4 gas male	E (4 pin DIN)	4-20mA	TPSADA-E-1-E-B35D-T-V 2130X000X00	F044394
0..500 bar	1/4 gas female	V (6 pin)	0,1-10,1V	TPSADA-C-4-V-B05C-T-V 2130X000X00	F042183

All configurations can be seen on www.gefran.com

Accessories for TPSADA	Description	Order code	SAP/METEL code
Connectors	Connection E connector 3 pins + ground DIN43650A ISO4400 - IP65	CON 006	CON 006
	Connection V Female cable connector, 6-pin - IP66	CON 300	CON 300
Extension cables	6-pin female connector (CON 300) + 8 m cable (6x0.25)	C08WLS	C08WLS
	6-pin female connector (CON 300) + 15 m cable (6x0.25)	C15WLS	C15WLS
	6-pin female connector (CON 300) + 30 m cable (6x0.25)	C30WLS	C30WLS

PRESSURE SENSORS

High accuracy (0.1%)

TPH

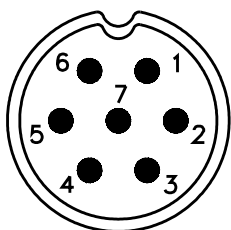


HIGH-PRESSURE TRANSDUCER

Range: from 0...1000 to 0...5000bar (0...15000 to 0...70000psi).
 Entirely in stainless steel.
 Calibration signal generated internally.
 Autoclave type pressure port.
 Protection rating: IP65/IP66/IP67.

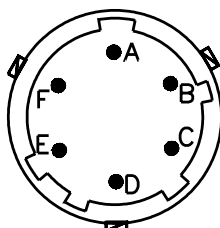
- **Process connection: F250-C (9/16-18 UNF)**
- **Accuracy: 0.1% FSO**
- **Connector: 6-pin**
- **Electrical Output: mV/V**

P – 7-pin connector



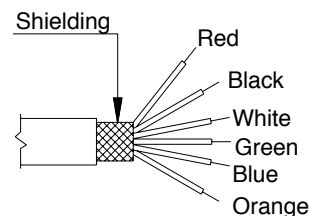
Male Conn.
 09-0127-09-07
 IP67 protection rating

V – 6-pin connector



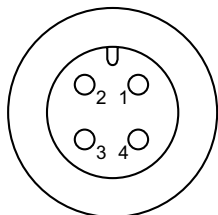
Male Conn.
 VPT02A10-6PT2
 IP66 protection rating

F - Cable 6 poli



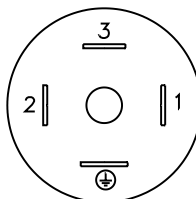
Shielded cable 6x0.25 - 1m
 IP65 protection rating

Z – Male connector
 4 pins M12 x 1



Male connector 4-pin
 series 713
 IP67 protection rating

E- EN 175301-803 Type A
 M – EN 175301-803 Type C-ind



4-Pin DIN Type A
 IP65 protection rating
 4-Pin MicroDIN Type C-industrial
 IP65 protection rating



Pressure range	Order code	SAP/METEL code
0..2000 bar	TPH-D-V-B02M-T 2130X000X00	F051444
0..3500 bar	TPH-D-V-B35C-T 2130X000X00	F051453

All configurations can be seen on www.gefran.com

Accessories for TPH	Description	Order code	SAP/METEL code	
Connectors	Connection V Female cable connector, 6-pin - IP66	CON 300	CON 300	
Extension cables	6-pin female connector (CON 300) + 2 m cable (6x0.25)	C02WLS	C02WLS	
	6-pin female connector (CON 300) + 6 m cable (6x0.25)	C06WLS	C06WLS	
	6-pin female connector (CON 300) + 8 m cable (6x0.25)	C08WLS	C08WLS	
	6-pin female connector (CON 300) + 10 m cable (6x0.25)	C10WLS	C10WLS	



PRESSURE SENSORS

High accuracy (0.1%)

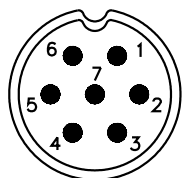
TPHADA



HIGH PRESSURE TRANSMITTER

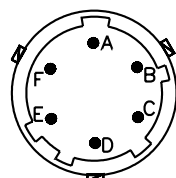
Ranges from 0...1000 to 0...5000 Bar (0...15000 to 0...70000 psi).
 Pressure transmitters for special applications
 Measurement diaphragm with monolithic structure.
 Output Signal: 0.1...5.1Vdc/0.1...10.1Vdc/0...5Vdc/0...10Vdc/4...20mA 2-wires.
 Digital Autozero and span function.
 Protection class: IP65/IP66/IP67.
 • Accuracy: 0.1% FSO

P – 7-pin connector



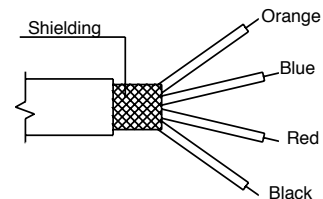
Conn. male
09-0127-09-07
Protection rating IP67

V – 6-pin connector



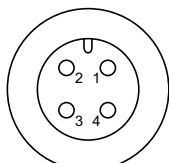
Conn. male
VPT02A10-6PT2
Protection rating IP66

F – 4-pin cable



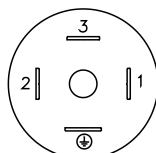
Shielded cable. 4x0,25 - 1m. (Output E)
Protection rating IP65

Z – Connector maschio
4 pin M12 x 1



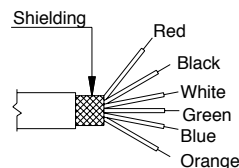
Connector male 4 pin
serie 713
Protection rating IP67

E – EN 175301-803 Tipo A
M – EN 175301-803 Tipo C-ind



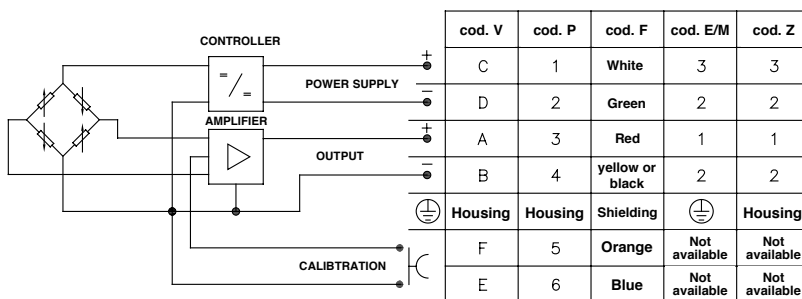
4 Pin DIN Tipo A
4 Pin DIN Type A
Protection rating IP65
4 Pin MicroDIN Type C-Industrial
Protection rating IP65

F – Cable 6 poli

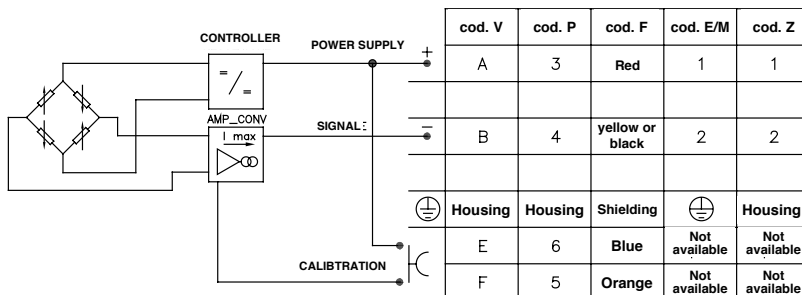


Shielded cable 6x0,25 - 1m
IP65 protection rating

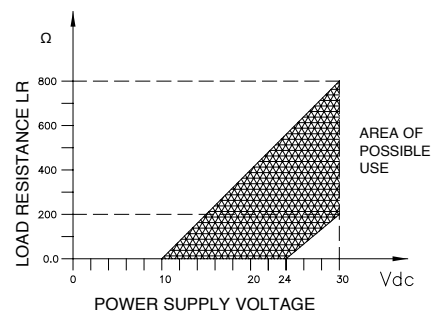
AMPLIFIED VOLTAGE OUTPUT - mod. B/C/M/N/P/Q/R



Output AMPLIFICATA IN Current - mod. E



LOAD DIAGRAM (Output current)



Pressure range	Process connection	Accuracy	Connector	Electrical Output	Order code	SAP/METEL code
0..1500 bar	9/16-18UNF female	0,2% FS	E (4 pin DIN)	4-20mA	TPHADA-E-D-E-B15C-T 2130X000X00	F052089
0..2000 bar	M16x1,5 female	0,2% FS	E (4 pin DIN)	4-20mA	TPHADA-E-E-E-B02M-T 2130X000X00	F051807
0..2000 bar	18UNF female	0,2% FS	V (6 pin)	4-20mA	TPHADA-E-D-V-B02M-T 2130X000X00	F051434
0..2000 bar	9/16-18UNF female	0,2% FS	E (4 pin DIN)	4-20mA	TPHADA-E-D-E-B02M-T 2130X000X00	F051437
0..3500 bar	M16x1,5 female	0,2% FS	E (4 pin DIN)	4-20mA	TPHADA-E-E-E-B35C-T 2130X000X00	F051425
0..5000 bar	9/16-18UNF female	0,2% FS	V (6 pin)	0-10V	TPHADA-N-D-V-B05M-T 2130X000X00	F051442
0..5000 bar	9/16-18UNF female	0,2% FS	E (4 pin DIN)	4-20mA	TPHADA-E-D-E-B05M-T 2130X000X00	F051439

All configurations can be seen on www.gefran.com

Accessories for TPHADA	Description	Order code	SAP/METEL code
Connectors	Connection E 3-pin connection + ground DIN43650A ISO4400 - IP65	CON 006	CON 006
	Connection V Female cable connector, 6-pin - IP66	CON 300	CON 300
Extension cables	6-pin female connector (CON 300) + 2 m cable (6x0.25)	C02WLS	C02WLS
	6-pin female connector (CON 300) + 6 m cable (6x0.25)	C06WLS	C06WLS
	6-pin female connector (CON 300) + 8 m cable (6x0.25)	C08WLS	C08WLS
	6-pin female connector (CON 300) + 10 m cable (6x0.25)	C10WLS	C10WLS

MELT SENSORS

T_{max}	Filling fluid	Environment	Output	Gefran series	
315°C	Diathermic oil	Safe area	mV/V	W3	
			Current	WE	
			Voltage	WN	
			CANopen	WD	
			HART (Current)	HWE	
			Local display	W6	
		Atex area (EU)	Current	WX	
			HART (Current)	HWX	
			Hazardous area (USA)	Current	WF
	Mercury	Safe area	mV/V	M3	
			Current	ME	
			Voltage	MN	
			CANopen	MD	
			HART (Current)	HME	
			Local display	M5	
		Atex area (EU)	Current	MX	
			HART (Current)	HMX	
			Hazardous area (USA)	Current	HMX4
		Sodium-Potassium	Safe area	mV/V	K3
				Current	KE
				Voltage	KN
CANopen	KD				
HART (Current)	HKE				
Fluid free	Safe area	mV/V	I3		
		Current	IE		
		Voltage	IN		
	Atex area (EU)	Current	I7		
		Current	IX		
350°C	Mercury	Safe area	mV/V	M3	
			Current	ME	
			Voltage	MN	
			CANopen	MD	
			HART (Current)	HME	
			Local display	M5	
		Atex area (EU)	Current	M6	
			HART (Current)	MX	
			Hazardous area (USA)	Current	MX4
	Mercury	Safe area	Current	HMX	
			HART (Current)	HMX4	
			Hazardous area (USA)	Current	MF

T _{max}	Filling fluid	Environment	Output	Gefran series
350°C	Sodium-Potassium	Safe area	mV/V	K3
			Current	KE
			Voltage	KN
			CANopen	KD
			HART (Current)	HKE
	Fluid free	Safe area	mV/V	I3
			Current	IE
			Voltage	IN
I7				
	Atex area (EU)	Current	IX	
400°C	Mercury	Safe area	mV/V	M3
			Current	ME
			Voltage	MN
			CANopen	MD
			HART (Current)	HME
			Local display	M5
		M6		
		Atex area (EU)	Current	MX
				MX4
			HART (Current)	HMX
	HMX4			
		Hazardous area (USA)	Current	MF
	Sodium-Potassium	Safe area	mV/V	K3
			Current	KE
Voltage			KN	
CANopen			KD	
HART (Current)			HKE	
538°C	Sodium-Potassium	Safe area	mV/V	K3
			Current	KE
			Voltage	KN
			CANopen	KD
			HART (Current)	HKE



g

MELT SENSORS

Pressure measurement up to 400°C

M3

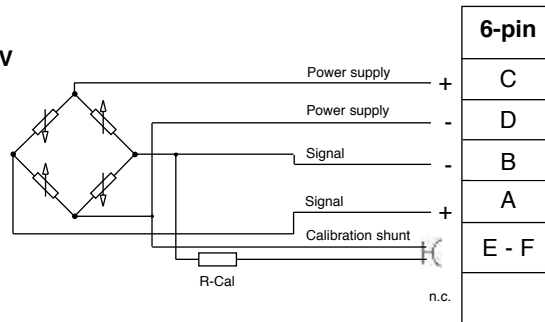
MELT PRESSURE TRANSDUCER WITH 3.33mV/V OUTPUT

Gefran M3 Series Melt sensors are pressure transducers designed for use in high-temperature environments. They can read medium pressure up to **400°C**. The constructive principle is based on hydraulic transmission of the pressure; mechanical stress is transferred by means of a non-compressible transmission fluid. Extensimetric technology converts the physical quantity into an electrical signal.

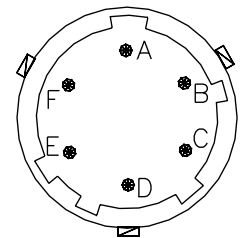
- **Filling: Mercury**
- **Connector: 6-pin Veam**
- **Accuracy: 0.25%FS - 0.5%FS**
- **Process connection: 1/2-20UNF**



Output mV/V



6-pin connector VPT07RA10-6PT2 (PT02A-10-6P)



The cable braiding must be connected to instrument side.



Pressure range	Rigid rod length	Electrical Output	Flexible rod length	Order code	SAP/METEL code
0..100 bar	153	3,33mV/V	-	M30-6-M-B01C-1-4-0 2130X000X00	F008455 A
0..200 bar	153	3,33mV/V	457	M31-6-H-B02C-1-4-D 2130X000X00	F008547
0..350 bar	153	3,33mV/V	457	M31-6-M-B35D-1-4-D 2130X000X00	F008627 A
0..350 bar	153	3,33mV/V	457	M32-6-M-B35D-1-4-D 2130X000X00	F008729 A
0..350 bar	153	3,33mV/V	-	M30-6-M-B35D-1-4-0 2130X000X00	F008511 A
0..350 bar	318	3,33mV/V	457	M31-6-M-B35D-1-5-D 2130X000X00	F008642
0..500 bar	153	3,33mV/V	457	M32-6-M-B05C-1-4-D 2130X000X00	F008706 A
0..500 bar	153	3,33mV/V	457	M31-6-M-B05C-1-4-D 2130X000X00	F008595 A
0..700 bar	153	3,33mV/V	-	M30-6-M-B07C-1-4-0 2130X000X00	F008495 A
0..700 bar	153	3,33mV/V	457	M32-6-M-B07C-1-4-D 2130X000X00	F008715 A
0..700 bar	153	3,33mV/V	457	M31-6-M-B07C-1-4-D 2130X000X00	F008611 A
0..1000 bar	153	3,33mV/V	457	M31-6-M-B01M-1-4-D 2130X000X00	F008575 A
0..1000 bar	153	3,33mV/V	-	M30-6-M-B01M-1-4-0 2130X000X00	F008463 A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for M3	Description	Order code	SAP/METEL code
Connectors	6-pin female connector (IP65)	CON 300	CON 300
Extension cables	6-pin connector with 8 m (25 ft) cable	C08W	C08W
	6-pin connector with 15 m (50 ft) cable	C15W	C15W
	6-pin connector with 25 m (75 ft) cable	C25W	C25W
Mounting bracket	Mounting bracket	SF18	SF18

Pressure measurement up to 400°C

M2

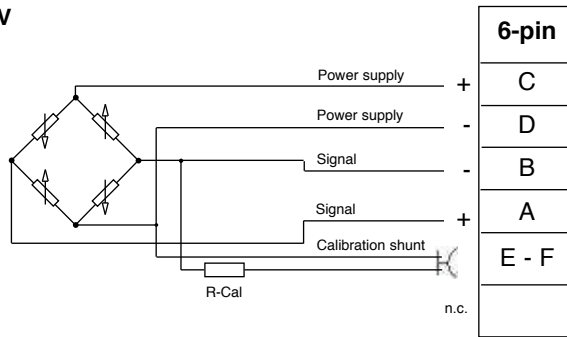
MELT PRESSURE TRANSDUCER WITH 2.5mV/V OUTPUT

Gefran M2 Series Melt sensors are pressure transducers designed for use in high-temperature environments. They can read medium pressure up to **400°C**. The constructive principle is based on hydraulic transmission of the pressure; mechanical stress is transferred by means of a non-compressible transmission fluid. Extensimetric technology converts the physical quantity into an electrical signal.

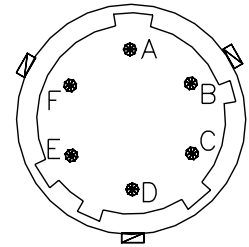
- **Filling: Mercury**
- **Connector: 6-pin Veam**
- **Accuracy: 0.5% FS**
- **Process connection 1/2-20UNF**



Output mV/V



6-pin connector VPT07RA10-6PT2 (PT02A-10-6P)



The cable braiding must be connected to instrument side.



Pressure range	Rigid rod length	Electrical Output	Flexible rod length	Order code	SAP/METEL code
0..350 bar	153	2,5mV/V	457	M21-6-M-B35D-1-4-D 2130X000X00	F008398
0..350 bar	153	2,5mV/V	457	M22-6-M-B35D-1-4-D 2130X000X00	F008435
0..500 bar	153	2,5mV/V	457	M22-6-M-B05C-1-4-D 2130X000X00	F008418
0..700 bar	153	2,5mV/V	457	M22-6-M-B07C-1-4-D 2130X000X00	F008425
0..1000 bar	153	2,5mV/V	457	M22-6-M-B01M-1-4-D 2130X000X00	F008410
0..1000 bar	153	2,5mV/V	457	M21-6-M-B01M-1-4-D 2130X000X00	F008374

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for M2	Description	Order code	SAP/METEL code
Connectors	6-pin female connector (IP65)	CON 300	CON 300
	6-pin connector with 8 m (25 ft) cable	C08W	C08W
Extension cables	6-pin connector with 15 m (50 ft) cable	C15W	C15W
	6-pin connector with 25 m (75 ft) cable	C25W	C25W
Mounting bracket	Mounting bracket	SF18	SF18

MELT SENSORS

Pressure measurement up to 400°C

ME

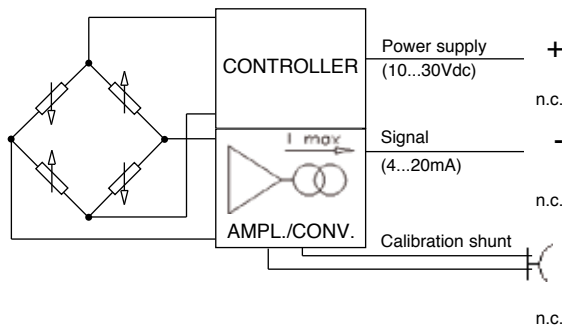


MELT PRESSURE TRANSDUCER WITH 4...20mA OUTPUT

Gefran ME Series Melt sensors are pressure transducers designed for use in high-temperature environments. They can read medium pressure up to **400°C**. The constructive principle is based on hydraulic transmission of the pressure; mechanical stress is transferred by means of a non-compressible transmission fluid. Extensimetric technology converts the physical quantity into an electrical signal

- **Filling: Mercury**
- **Electrical Output: 4-20mA**
- **Connector: 6-pin Veam**
- **Accuracy: 0.25% FS - 0.5% FS**
- **Process connection 1/2-20UNF**

CURRENT OUTPUT (4...20mA, 2 wires)



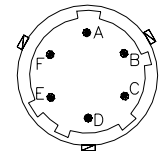
MAGNETIC AUTOZERO

6-pin	
A	Power supply + (10...30Vdc)
C	n.c.
B	Signal - (4...20mA)
D	n.c.
E - F	Calibration shunt
	n.c.

EXTERNAL AUTOZERO

6-pin	
A	Power supply + (10...30Vdc)
C	n.c.
B	Signal - (4...20mA)
D	n.c.
E - F	Autozero
	n.c.

6-pin connector VPT07RA10-6PT2 (PT02A-10-6P)



The cable braiding must be connected to instrument side.



Pressure range	Rigid rod length	Flexible rod length	Order code	SAP/METEL code
0..200 bar	153	457	ME1-6-H-B02C-1-4-D 2130X000X00	F007662
0..350 bar	153	457	ME1-6-M-B35D-1-4-D 2130X000X00	F007725
0..350 bar	153	457	ME2-6-M-B35D-1-4-D 2130X000X00	F007783
0..500 bar	153	457	ME2-6-M-B05C-1-4-D 2130X000X00	F007769
0..500 bar	153	457	MSPE2-6-M-B05C-1-4-D 2130X000X00	F055494
0..500 psi	153	457	ME1-6-M-P05C-1-4-D 2130X000X00	F026442
0..700 bar	153	457	ME1-6-M-B07C-1-4-D 2130X000X00	F007714
0..1000 bar	153	-	ME0-6-M-B01M-1-4-0 2130X000X00	F007637
0..1000 bar	153	457	ME2-6-M-B01M-1-4-D 2130X000X00	F007766
0..1000 bar	76	-	ME0-6-M-B01M-1-3-0 2130X000X00	F033683
0..1000 bar	153	457	ME1-6-M-B01M-1-4-D 2130X000X00	F007690
0..5000 psi	153	457	ME1-6-H-P05M-1-4-D 2130X000X00	F007678

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for ME	Description	Order code	SAP/METEL code
Connectors	6-pin female connector (IP65)	CON 300	CON 300
	6-pin connector with 8 m (25 ft) cable	C08WLS	C08WLS
Extension cables	6-pin connector with 15 m (50 ft) cable	C15WLS	C15WLS
	6-pin connector with 25 m (75 ft) cable	C25WLS	C25WLS
Mounting bracket	Mounting bracket	SF18	SF18

Pressure measurement up to 400°C

MN

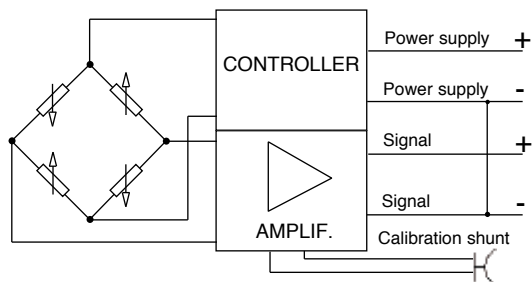


MELT PRESSURE TRANSMITTER WITH 0...10V OUTPUT

Gefran MN Series Melt sensors are pressure transmitters designed for use in high-temperature environments. They can read medium pressure up to **400°C**. The constructive principle is based on hydraulic transmission of the pressure; mechanical stress is transferred by means of a non-compressible transmission fluid.

- Filling: Mercury
- Electrical Output: 0-10V
- Connector: 6-pin Veam
- Accuracy: 0,25%FS - 0,5%FS
- Process connection 1/2-20UNF
- Rigid rod length 153 mm
- Flexible rod length 457 mm

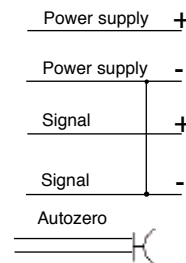
VOLTAGE OUTPUT
Power supply 15..30Vdc



MAGNETIC AUTOZERO

6-pin
C
D
A
B
E - F

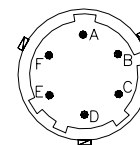
The cable braiding is connected to the transducer case



EXTERNAL AUTOZERO

6-pin
C
D
A
B
E - F

6-pin connector VPT07RA10-6PT2 (PT02A-10-6P)



Pressure range	Order code	SAP/METEL code
0..350 bar	MN1-6-H-B35D-1-4-D 2130X000X00	F008280
0..700 bar	MN2-6-M-B07C-1-4-D 2130X000X00	F008334
0..1000 bar	MN2-6-M-B01M-1-4-D 2130X000X00	F008327

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for MN	Description	Order code	SAP/METEL code
Connectors	6-pin female connector (IP65)	CON 300	CON 300
Extension cables	6-pin connector with 8 m (25 ft) cable	C08WLS	C08WLS
	6-pin connector with 15 m (50 ft) cable	C15WLS	C15WLS
	6-pin connector with 25 m (75 ft) cable	C25WLS	C25WLS
Mounting bracket	Mounting bracket	SF18	SF18

MELT SENSORS

Pressure measurement to 315°C with FDA oil

WE

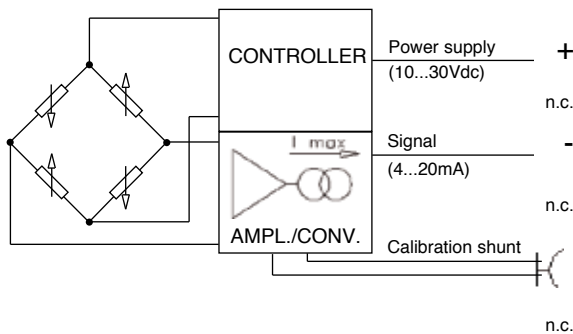


OIL-FILLED MELT PRESSURE TRANSMITTERS WITH 4...20mA OUTPUT

Gefran WE Series Melt sensors are pressure transmitters designed for use in high-temperature environments. They can read medium pressure up to **315°C**. The constructive principle is based on hydraulic transmission of the pressure; mechanical stress is transferred by means of a non-compressible transmission fluid. Extensimetric technology converts the physical quantity into an electrical signal

- **Filling: FDA oil**
- **Electrical Output : 4-20mA**
- **Connector: 6-pin Veam**
- **Accuracy: 0.5% FS**
- **Process connection 1/2-20UNF,**
- **Rigid rod length 153 mm**
- **Flexible rod length 457 mm**

CURRENT OUTPUT (4...20mA, 2 wires)



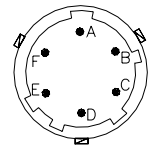
MAGNETIC AUTOZERO

6-pin	
A	Power supply + (10...30Vdc)
C	n.c.
B	Signal - (4...20mA)
D	n.c.
E - F	Autozero
	n.c.

EXTERNAL AUTOZERO

6-pin	
A	Power supply + (10...30Vdc)
C	n.c.
B	Signal - (4...20mA)
D	n.c.
E - F	Autozero
	n.c.

6-pin connector VPT07RA10-6PT2 (PT02A-10-6P)



The cable braiding must be connected to instrument side.



Pressure range	Order code	SAP/METEL code
0..1500 psi	WE1-6-M-PI5C-1-4-D 2130X000X00	F034804

All configurations can be seen on www.gefran.com

Accessories for WE	Description	Order code	SAP/METEL code
Connectors	6-pin female connector (IP65)	CON 300	CON 300
	6-pin connector with 8 m (25 ft) cable	C08WLS	C08WLS
Extension cables	6-pin connector with 15 m (50 ft) cable	C15WLS	C15WLS
	6-pin connector with 25 m (75 ft) cable	C25WLS	C25WLS
Mounting bracket	Mounting bracket	SF18	SF18

Pressure measurement to 315°C with FDA oil

WN



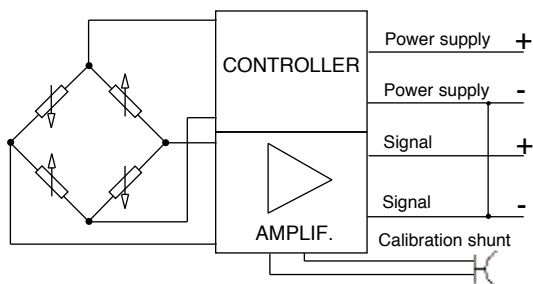
OIL-FILLED MELT PRESSURE TRANSMITTERS WITH 0...10V OUTPUT

Gefran WE Series Melt sensors are pressure transmitters designed for use in high-temperature environments. They can read medium pressure up to **315°C**. The constructive principle is based on hydraulic transmission of the pressure; mechanical stress is transferred by means of a non-compressible transmission fluid. Extensimetric technology converts the physical quantity into an electrical signal

- **Filling: FDA oil**
- **Electrical Output: 0-10V**
- **Connector: 6-pin Veam**
- **Accuracy: 0.25% FS**
- **Process connection 1/2-20UNF**



VOLTAGE OUTPUT
Power supply 15..30Vdc



MAGNETIC AUTOZERO

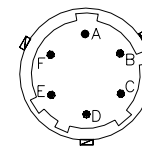
6-pin	
Power supply +	C
Power supply -	D
Signal +	A
Signal -	B
Autozero	E - F

The cable braiding is connected to the transducer case

EXTERNAL AUTOZERO

6-pin	
Power supply +	C
Power supply -	D
Signal +	A
Signal -	B
Autozero	E - F

6-pin connector VPT07RA10-6PT2 (PT02A-10-6P)



Pressure range	Rigid rod length	Flexible rod length	Order code	SAP/METEL code
0..700 bar	153	457	WN1-6-H-B07C-1-4-D 2130X000X00	F021468

All configurations can be seen on www.gefran.com

Accessories for WN	Description	Order code	SAP/METEL code
Connectors	6-pin female connector (IP65)	CON 300	CON 300
Extension cables	6-pin connector with 8 m (25 ft) cable	C08WLS	C08WLS
	6-pin connector with 15 m (50 ft) cable	C15WLS	C15WLS
	6-pin connector with 25 m (75 ft) cable	C25WLS	C25WLS
Mounting bracket	Mounting bracket	SF18	SF18

MELT SENSORS

Pressure measurement to 538°C

KE

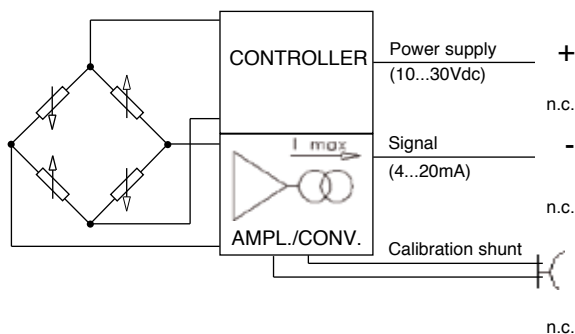


MELT PRESSURE TRANSMITTERS WITH 4...20mA OUTPUT

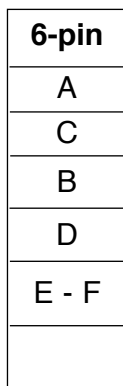
Gefran KE Series Melt sensors are pressure transmitters designed for use in high-temperature environments. They can read medium pressure up to **538°C (1000°F)**. The constructive principle is based on hydraulic transmission of the pressure; mechanical stress is transferred by means of a non-compressible transmission fluid (NaK) (Sodium-Potassium). Extensimetric technology converts the physical quantity into an electrical signal

- **Filling: NaK**
- **Electrical Output : 4-20mA**
- **Connector: 6-pin Veam**
- **Accuracy: 0.5% FS**
- **Process connection 1/2-20UNF,**

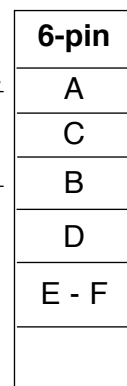
CURRENT OUTPUT (4...20mA, 2 wires)



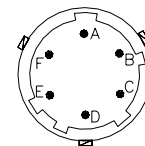
MAGNETIC AUTOZERO



EXTERNAL AUTOZERO



6-pin connector
VPT07RA10-6PT2
(PT02A-10-6P)



The cable braiding must be connected to instrument side.



Pressure range	Rigid rod length	Flexible rod length	Order code	SAP/METEL code
0..200 bar	-	711	KE3-6-M-B02C-1-0-L-S 2130X000X00	F040325
0..7500 psi	153	-	KE0-6-M-P75C-1-4-0-S-E 2130X000X00	F048347

All configurations can be seen on www.gefran.com

Accessories for KE	Description	Order code	SAP/METEL code
Connectors	6-pin female connector (IP65)	CON 300	CON 300
	6-pin connector with 8 m (25 ft) cable	C08WLS	C08WLS
Extension cables	6-pin connector with 15 m (50 ft) cable	C15WLS	C15WLS
	6-pin connector with 25 m (75 ft) cable	C25WLS	C25WLS
	Mounting bracket	SF18	SF18

Pressure measurement to 538°C

KN

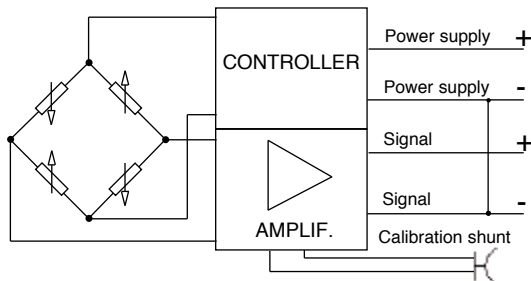


MELT PRESSURE TRANSMITTERS WITH 0...10mA OUTPUT

Gefran KN Series Melt sensors are pressure transmitters designed for use in high-temperature environments. They can read medium pressure up to **538°C (1000°F)**. The constructive principle is based on hydraulic transmission of the pressure; mechanical stress is transferred by means of a non-compressible transmission fluid (NaK) (Sodium-Potassium). Extensimetric technology converts the physical quantity into an electrical signal

- **Filling: NaK**
- **Electrical Output: 0-10V**
- **Connector: 6-pin Veam**
- **Accuracy: 0.5% FS**
- **Process connection 1/2-20UNF**

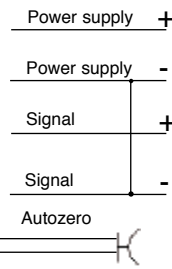
VOLTAGE OUTPUT
Power supply 15..30Vdc



MAGNETIC AUTOZERO

6-pin
C
D
A
B
E - F

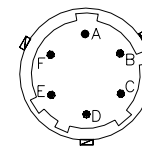
The cable braiding is connected to the transducer case



EXTERNAL AUTOZERO

6-pin
C
D
A
B
E - F

6-pin connector VPT07RA10-6PT2 (PT02A-10-6P)



Pressure range	Rigid rod length	Flexible rod length	Order code	SAP/METEL code
0..1000 bar	76	-	KN0-6-M-B01M-1-3-0-1 2130X000X00	F043325
0..1000 bar	38	457	KN1-6-M-B01M-1-1-D-1 2130X000X00	F043423

All configurations can be seen on www.gefran.com

Accessories for KN	Description	Order code	SAP/METEL code
Connectors	6-pin female connector (IP65)	CON 300	CON 300
	6-pin connector with 8 m (25 ft) cable	C08WLS	C08WLS
Extension cables	6-pin connector with 15 m (50 ft) cable	C15WLS	C15WLS
	6-pin connector with 25 m (75 ft) cable	C25WLS	C25WLS
	Mounting bracket	SF18	SF18

LOAD CELLS AND FORCE TRANSDUCERS



LOAD CELLS

Load type	Dimensions	Range	Output signal	Accuracy	Protection Rating	Version		
Compression	Compact	Up to 1000kg	mV/V	0,2%	IP67	CU		
	Standard	Up to 50000kg				CM		
Tension or Compression	Compact	Up to 1000kg				TU		
	Standard	Up to 20000kg				TC		
Cutting	Standard	Up to 5000kg				D1 (OIMLR60)	IP66	SB
		Up to 10000kg						SH
Bending	Standard	Up to 200kg				C1,C2,C3 (OIMLR60)	IP68	CB

h



**FORCE
TRANSDUCERS**

Load type	Dimensions	Range	Output signal	Accuracy	Protection Rating	Version
Compression	Compact	Up to 20kN	mV/V	1%	IP65	AM
	Standard	Up to 1500kN		1%		CC
		Up to 3000kN		0,5%		CT
Tension or Compression	Standard	Up to 100kN		0,2%		TH
Bending	Standard	Up to 2kN		0,5%		TR

LOAD CELLS AND FORCE TRANSDUCERS

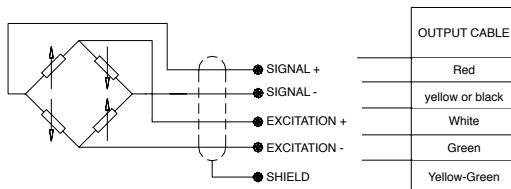
Compression load

CU

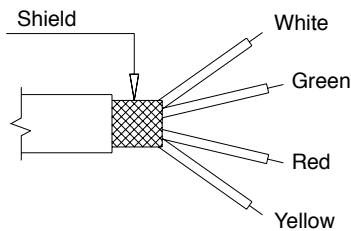
COMPACT LOAD CELL FOR COMPRESSION APPLICATIONS



Measurement range: 50 to 1000 kg
 Accuracy: 0.2%
 Entirely in stainless steel
 Protection rating: IP67 (DIN 40050)
 Compact size: 50 mm external diameter

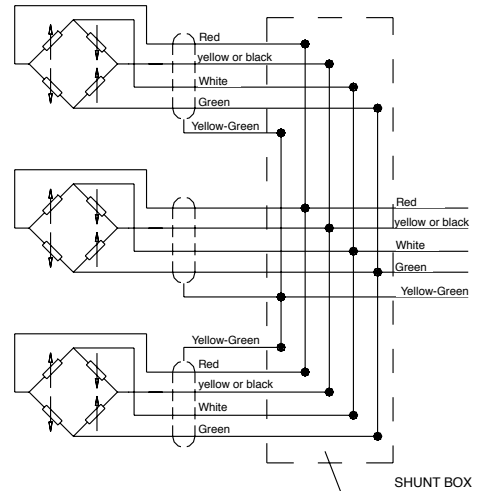


Shielded cable
4x0.25



* The shielding is isolated from the transducer case. It is advisable to ground it on the instrument side.

Cell connection in parallel



In multi-cell systems, connection in parallel automatically sums the loads on the individual cells. This measurement system has the sum of loads on individual cells as the maximum load and the average sensitivity value of the cells as sensitivity.

The user must ensure that no cell is stressed beyond the maximum load in each load condition.



Connections	Range	Order code	SAP/METEL code	
Cable 4x0,25 - 5m	50 Kg	CU-K5D 2130X000X00	F005155	
Cable 4x0,25 - 5m	100 Kg	CU-K1C 2130X000X00	F005156	A
Cable 4x0,25 - 5m	200 Kg	CU-K2C 2130X000X00	F005160	
Cable 4x0,25 - 5m	500 Kg	CU-K5C 2130X000X00	F005161	
Cable 4x0,25 - 5m	1000 Kg	CU-K1M 2130X000X00	F005165	A

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

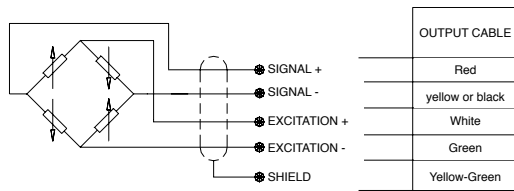
Compression load

AM

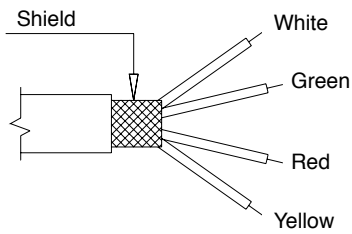
COMPACT LOAD CELL FOR COMPRESSION APPLICATIONS



Measurement range: 5 to 20 kN
 Accuracy: 1%
 Entirely in stainless steel
 Protection rating: IP65 (DIN 40050)
 Compact size: 31.75 mm external diameter

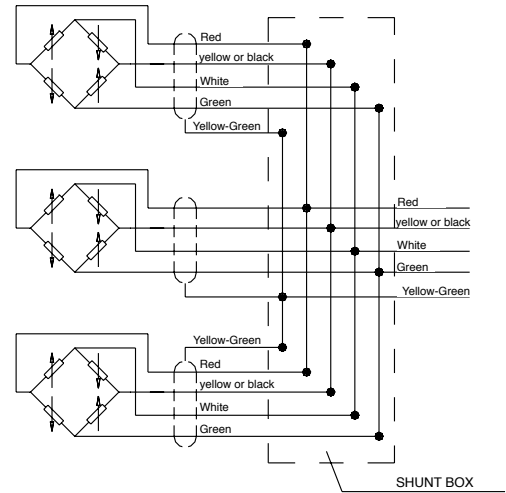


Shielded cable 4x0.25



*The shielding is isolated from the transducer case. It is advisable to ground it on the instrument side.

Cell connection in parallel



In multi-cell systems, connection in parallel automatically sums the loads on the individual cells. This measurement system has the sum of loads on individual cells as the maximum load and the average sensitivity value of the cells as sensitivity.

The user must ensure that no cell is stressed beyond the maximum load in each load condition.



Connections	Range	Order code	SAP/METEL code
Cable 4x0,25 - 2m	5 kN	AM-KN5U 2130X000X00	F005030
Cable 4x0,25 - 2m	10 kN	AM-KN1D 2130X000X00	F005032
Cable 4x0,25 - 2m	20 kN	AM-KN2D 2130X000X00	F005035
Cable 4x0,25 - 10m	5 kN	AM-KN5U 2130X000XX0	F058126
Cable 4x0,25 - 10m	10 kN	AM-KN1D 2130X000XX0	F058128
Cable 4x0,25 - 10m	20 kN	AM-KN2D 2130X000XX0	F053419

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaining codes into the catalogue, we kindly suggest you to contact Gefran sales team

LOAD CELLS AND FORCE TRANSDUCERS

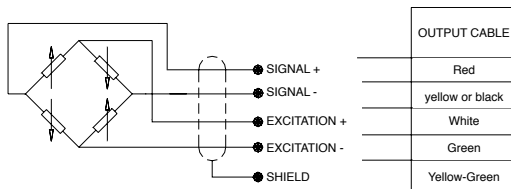
Tension or compression load

TU

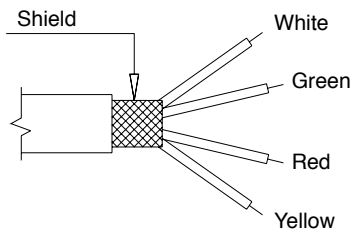


MINIATURE FORCE TRANSDUCER FOR COMPRESSION APPLICATIONS

Measurement range: 50 to 1000 kg
 Accuracy: 0.2%
 Entirely in stainless steel
 Protection rating: IP67 (DIN 40050)
 Compact size: 50 mm external diameter

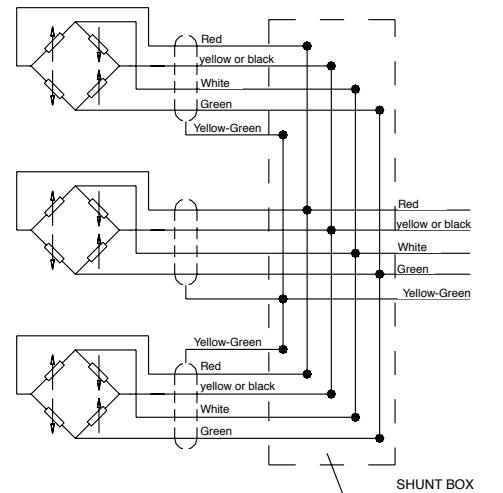


Shielded cable
4x0.25



* The shielding is isolated from the transducer case. It is advisable to ground it on the instrument side.

Cell connection in parallel



In multi-cell systems, connection in parallel automatically sums the loads on the individual cells. This measurement system has the sum of loads on individual cells as the maximum load and the average sensitivity value of the cells as sensitivity.

The user must ensure that no cell is stressed beyond the maximum load in each load condition.



Connections	Range	Order code	SAP/METEL code
Cable 4x0,25 - 5m	50 Kg	TU-K5D 2130X000X00	F005610 A
Cable 4x0,25 - 5m	100 Kg	TU-K1C 2130X000X00	F005613 A
Cable 4x0,25 - 5m	200 Kg	TU-K2C 2130X000X00	F005615 A
Cable 4x0,25 - 5m	500 Kg	TU-K5C 2130X000X00	F005619 A
Cable 4x0,25 - 5m	1000 Kg	TU-K1M 2130X000X00	F005622 A

All configurations can be seen on www.gefran.com

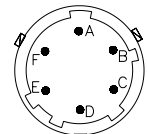
Tension or compression load

TR



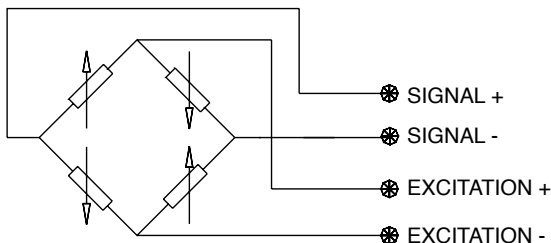
FORCE TRANSDUCER FOR MEASURING TENSION ON FIXED OR ROTATING SPINDLES

Measurement range: from 100 to 2kN
 Accuracy: 0.5%
 Protection rating: IP65 (40050)
 Integrated overload protection
 VPT02A10-6PT2-V 6-pin connector



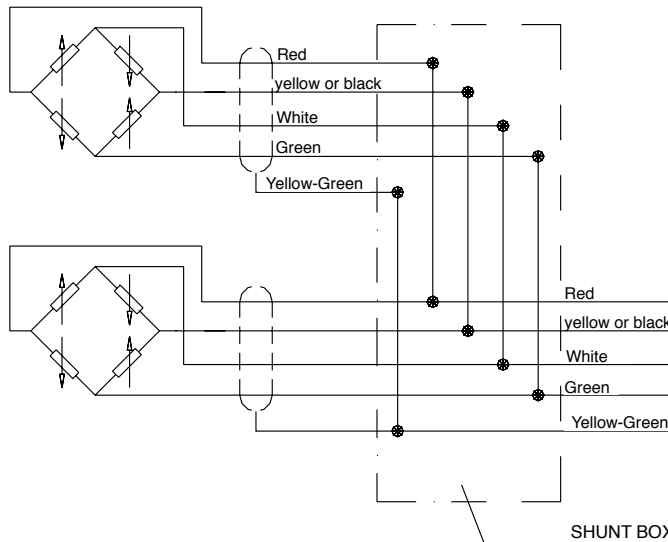
VPT02A10-6PT2 CONNECTOR

If the transducer is supplied with a prewired connection cable, the color code is the one shown in the table



	OUTPUT CABLE	CABLE CONNECTION
	A	Red
	B	yellow or black
	C	White
	D	Green

Cell connection in parallel



In connections with cells in parallel, you can connect cells with the same nominal load by following the diagram shown in the figure. In this way, the device will have the nominal sensitivity of a single cell when the sum of the maximum applicable loads of the individual cells is applied to it. In this type of use, the load acting on the single cell cannot be determined; the user must therefore ensure that no transducer is stressed beyond its full-scale value in each load condition.



Range	Diametro esterno	Order code	SAP/METEL code
100 N	Bearing 40 mm	TR-N1C-C40-1 2130X000X00	F005493 A
200 N	Bearing 40 mm	TR-N2C-C40-1 2130X000X00	F005530 A
350 N	Bearing 40 mm	TR-N3.5C-C40-1 2130X000X00	F005554 A
500 N	Bearing 40 mm	TR-N5C-C40-1 2130X000X00	F005573
750 N	Bearing 40 mm	TR-N7,5C-C40-1 2130X000X00	F005594
1000 N	Bearing 40 mm	TR-N1M-C40-1 2130X000X00	F005508 A
1500 N	Bearing 40 mm	TR-N15C-C40-1 2130X000X00	F025587
2000 N	Bearing 40 mm	TR-N20C-C40-1 2130X000X00	F040395
100 N	Shaft pin 30mm	TR-N1C-P30-1 2130X000X00	F005499
200 N	Shaft pin 30mm	TR-N2C-P30-1 2130X000X00	F005537
350 N	Shaft pin 30mm	TR-N3.5C-P30-1 2130X000X00	F005562
500 N	Shaft pin 30mm	TR-N5C-P30-1 2130X000X00	F005582

LOAD CELLS AND FORCE TRANSDUCERS

Range	Diametro esterno	Order code	SAP/METEL code
750 N	Shaft pin 30mm	TR-N7,5C-P30-1 2130X000X00	F005600
1000 N	Shaft pin 30mm	TR-NIM-P30-1 2130X000X00	F005517
1500 N	Shaft pin 30mm	TR-N15C-P30-1 2130X000X00	F053740
2000 N	Shaft pin 30mm	TR-N20C-P30-1 2130X000X00	F044036

All configurations can be seen on www.gefran.com

Accessories for TR	Description	Order code	SAP/METEL code
Connectors	6-pin female connector	CON 300	
	6-pin angular female connector	CON 324	
Connection cables with connector	6-pin female connector + 8 m cable	C08W	
	6-pin female connector + 15 m cable	C15W	
	6-pin female connector + 25 m cable	C25W	
	6-pin female connector + 30 m cable	C30W	
Flange	M10 main fastening flange	FLA 711	
	M12 main fastening flange	FLA 715	
	35 mm radial bearing with ring and spacer	PKIT 602	
	40mm radial bearing with ring and spacer	PKIT 600	

Amplifier

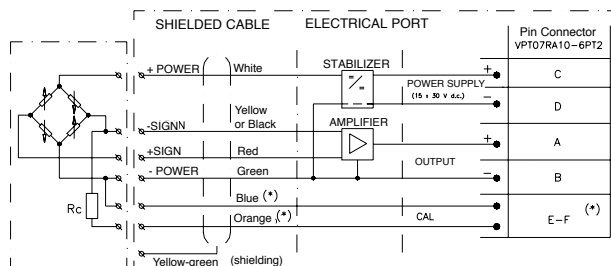
CIR



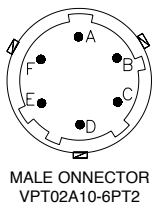
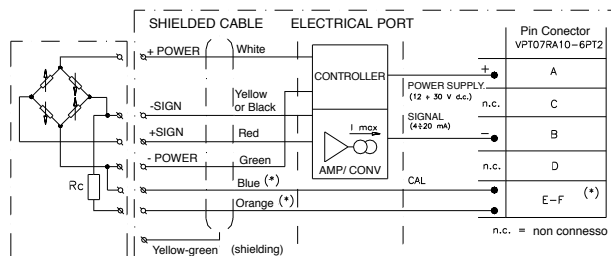
AMPLIFIER FOR EXTENSIMETRIC TRANSDUCERS

Galvanic isolation between Supply Voltage and Amplifier >500VDC
 Linearity error <0.05% FSO
 Current output 3 wires
 Low thermal drift 0.01% FSO/°C
 10VDC transducer power supply
 2 mV/V input

Mod. B/C/M/N



Mod. E



FEMALE PIN CONNECTOR CON300	CABLE CONN. COLOR CODE
A	Red
B	Yellow / Black
C	White
D	Green
E	Blue
F	Orange

Connector and cable color code with prewired female connector.

The amplifiers are supplied with VPT07RA10-6PT2 male connector as standard. The function of individual pins varies according to output type, as shown in the boxes for versions B, C, E, M, and N.

* In version Z only (maximum length of wires for calibration signal: 2 metres) it can be useful to connect the cable shielding to the negative pin of the transducer power supply).



Output	Version	Order code	SAP/METEL code
4..20 mA	4 wires	CIR-E-2-M	F005788
4..20 mA	6 wires	CIR-E-2-M-Z	F005786
0..10Vdc	4 wires	CIR-N-2-M	F005811
0..10Vdc	6 wires	CIR-N-2-M-Z	F005808

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remainin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Accessories for CIR	Description	Order code	SAP/METEL code
Connectors	6-pin female connector	CON 300	
	6-pin angular female connector	CON 324	
Connection cables with connector	6-pin female connector + 8 m cable	C08W	
	6-pin female connector + 15 m cable	C15W	
	6-pin female connector + 25 m cable	C25W	
	6-pin female connector + 30 m cable	C30W	

THERMOCOUPLES / RESISTANCE THERMOMETERS

TEMPERATURE LIMITS

Temperature limits of MgO thermocouple element or ceramic isolation based on sheathing diameter

WITH CERAMIC ISOLATION						WITH MGO MINERAL OXIDE						
∅	TC6/AC6		∅	TC8/AC8		TC9	∅	TC1M/TC5M TC6M/AC6M TC7M		∅	TC2/AC2	
Element	J	K	Element	J	K	K	Element	J	K	Element	J	K
5mm	480°C	980°C	16mm	690°C	1090°C	1060°C	1mm	320°C	750°C	10mm	550°C	1050°C
6mm	500°C	1000°C	3/8"	690°C	1090°C	1060°C	1,5mm	340°C	870°C	12mm	550°C	1050°C
8mm	500°C	1000°C	1/2"	760°C	1250°C	1060°C	2mm	370°C	960°C	14mm	550°C	1050°C
10mm	500°C	1000°C	3/4"	760°C	1250°C	1060°C	3mm	390°C	970°C	16mm	550°C	1050°C
12mm	600°C	1060°C					4,5mm	480°C	980°C	3/8"	550°C	1050°C
CABLE CONSTRUCTION			PVC	GSC	TES	TTS	6mm	550°C	1050°C	1/2"	550°C	1050°C
SERIES	TC1/TC3/T4F/T4A/TC5		-30°C 95°C	-60°C 200°C	-60°C 250°C	-60°C 350°C	8mm	640°C	1090°C	3/4"	550°C	1050°C

THERMOCOUPLE ACCURACY CLASSES (RIF. IEC 584-2)

TYPE	T	E	J	K/N	R/S	B
TOLERANCE CLASS 1 <i>Temperature interval</i> <i>Tolerance</i>	-40...+125 °C ±0,5 °C	-40...+375 °C ±1,5 °C	-40...+375 °C ±1,5 °C	-40...+375 °C ±1,5 °C	0...+1100 °C ±1 °C	- -
<i>Temperature interval</i> <i>Tolerance</i>	125...+350 °C ±0,004 • [t]	375...+800 °C ±0,004 • [t]	+375...+750 °C ±0,004 • [t]	+375...+1000 °C ±0,004 • [t]	+1100...+1600 °C ±[+0,003 (t-1100)] °C	- -
TOLERANCE CLASS 2 <i>Temperature interval</i> <i>Tolerance</i>	-40...+133 °C ±1 °C	-40...+333 °C ±2,5 °C	-40...+333 °C ±2,5 °C	-40...+333 °C ±2,5 °C	0...+600 °C ±1,5 °C	- -
<i>Temperature interval</i> <i>Tolerance</i>	+133...+350 °C ±0,0075 • [t]	+333...+900 °C ±0,0075 • [t]	+333...+750 °C ±0,0075 • [t]	+333...+1200 °C ±0,0075 • [t]	+600...+1600 °C ±0,0025 • [t]	+600...+1700 °C ±0,0025 • [t]
TOLERANCE CLASS 3 <i>Temperature interval</i> <i>Tolerance</i>	-67...+40 °C ±1 °C	-167...+40 °C ±2,5 °C	-	-167...+40 °C ±2,5 °C	-	+600...+800 °C +4 °C
<i>Temperature interval</i> <i>Tolerance</i>	-200...-67 °C ±0,015 • [t]	-200...-167 °C ±0,015 • [t]	-	-200...-167 °C ±0,015 • [t]	-	800...1700 °C ±0,005 • [t]

PT 100 RESISTANCE THERMOMETER ACCURACY CLASSES

DIN 43760 IEC 751	B	A	-	-	-
	1 DIN	1/2 DIN	1/3 DIN	1/5 DIN	1/10 DIN
ACCURACY AT 0°C	± 0,3°C	± 0,15°C	± 0,1°C	± 0,06°C	± 0,03°C

THERMOCOUPLES / RESISTANCE THERMOMETERS

Element	Construction	Electrical connection	Output	Type / use	Series	
RESISTANCE THERMOMETER	CABLE	CABLE	PT100	GENERIC	TR1	
				THRUST SPRING	TR5/TR5N	
				GENERIC	TRD	
	MgO	TERMINAL BOARD	PT100	PT100	ELEMENT	TR1
					CONNECTOR	PT100
		CABLE	PT100	PT100	GENERIC	TR1M
					THRUST SPRING	TR5M
					PENETRATION MEASUREMENT	TRPM
					GENERIC VIBRATIONS	TR6M
		HEAD	PT100	PT100	GENERIC VIBRATIONS	TR2
					4-20mA	GENERIC VIBRATIONS
	4-20mA				GENERIC VIBRATIONS	AR2
	4-20mA				GENERIC VIBRATIONS	AR2
	CERAMIC ISOLATION	HEAD	PT100	PT100	GENERIC	TR6
				4-20mA	AMBIENT	TRA
				4-20mA	GENERIC	AR6
	MELT			PT100	AMBIENT	TRA
				PT100	PLASTIC MELT	TRM
THERMOCOUPLE	CABLE	CABLE	J/K	GENERIC	TC1	
				TIP	TC3	
				RING	T4A	
				PLATE	T4P	
				BAND	T4F	
				THRUST SPRING	TC5/TC5N	
	MgO	CONNECTOR	J/K	J/K	GENERIC	TC7M
					TERMINAL BOARD	J/K
		CABLE	J/K	J/K	GENERIC	TC1M
					THRUST SPRING	TC5M
					PENETRATION MEASUREMENT	TCPM
					GENERIC VIBRATIONS	TC6M
		HEAD	J/K	J/K	GENERIC VIBRATIONS	TC2
					4-20mA	GENERIC VIBRATIONS
	4-20mA				GENERIC VIBRATIONS	AC2
	4-20mA				GENERIC VIBRATIONS	AC2
	CERAMIC ISOLATION	HEAD	J/K	J/K	GENERIC	TC6
					GENERIC	TC8
					HIGH TEMPERATURE	TC9
					METAL MELT	TC10
					4-20mA	GENERIC
4-20mA					GENERIC	AC8
MELT			J/K	HIGH TEMPERATURE	AC9	
				PLASTIC MELT	TCM	

TC = Thermocouple TR = Resistance thermometer A = Amplified thermocouple or resistance thermometer M = Metal oxide (MgO) Thermocouple or resistance thermometer (MgO)

THERMOCOUPLES / RESISTANCE THERMOMETERS

Thermocouples with cable connection

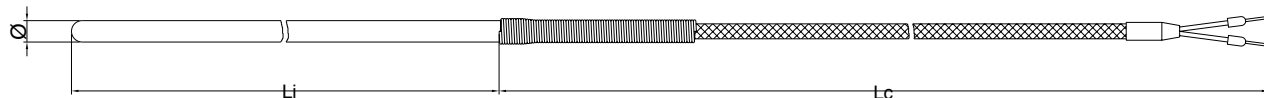
TC1



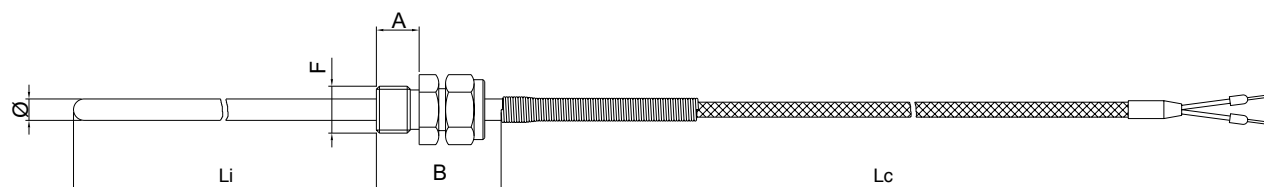
THERMOCOUPLE FOR USE IN THE PLASTICS INDUSTRY

Temperature limits: - 40 ... + 250°C (see table for thermocouple cable used)
 Reference tolerances: IEC584.2 class 2 for type J, K: $\pm 2.5^{\circ}\text{C}$ (- 40 ... + 333°C)
 Cable to DIN standard
 Highly versatile
 Low cost

TC1 A: without mount



TC1 B: with sliding pressure mount



- Isolated single element
- Element : Fe - Cu/Ni (Type J)
- Connector type: Without nipple

$\varnothing \times L_i$	Cable	Order code	SAP/METEL code
4x50	TTS 2x0,25 1m	TC1-A-1-J-5-A-F 010X000X00050XX	F058119
4x100	TTS 2x0,25 1m	TC1-A-1-J-5-A-F 010X000X00100XX	F040610
4x50	TTS 2x0,25 5m	TC1-A-1-J-5-A-F 050X000X00050XX	F058121
4x100	TTS 2x0,25 5m	TC1-A-1-J-5-A-F 050X000X00100XX	F021865
6x50	TTS 2x0,25 1m	TC1-A-1-J-5-A-I 010X000X00050XX	F051088
6x100	TTS 2x0,25 1m	TC1-A-1-J-5-A-I 010X000X00100XX	F010802
6x100	TTS 2x0,25 5m	TC1-A-1-J-5-A-I 050X000X00100XX	F010817
6x50	TTS 2x0,25 5m	TC1-A-1-J-5-A-I 050X000X00050XX	F040663

- Isolated single element
- Element : Fe - Cu/Ni (Type J)
- Connector type: with threaded nipple

Ø x Li	Cable	Nipple thread	Order code	SAP/METEL code
4x50	TTS 2x0,25 1m	G 1/4"	TCI-B-1-J-5-A-F-B-2 010X000X00050XX	F058122
4x100	TTS 2x0,25 1m	G 1/4"	TCI-B-1-J-5-A-F-B-2 010X000X00100XX	F058127
4x50	TTS 2x0,25 5m	G 1/4"	TCI-B-1-J-5-A-F-B-2 050X000X00050XX	F058129
4x100	TTS 2x0,25 5m	G 1/4"	TCI-B-1-J-5-A-F-B-2 050X000X00100XX	F058130
6x50	TTS 2x0,25 1m	G 1/4"	TCI-B-1-J-5-A-I-B-2 010X000X00050XX	F058131
6x100	TTS 2x0,25 1m	G 1/4"	TCI-B-1-J-5-A-I-B-2 010X000X00100XX	F058132
6x50	TTS 2x0,25 5m	G 1/4"	TCI-B-1-J-5-A-I-B-2 050X000X00050XX	F051523
6x100	TTS 2x0,25 5m	G 1/4"	TCI-B-1-J-5-A-I-B-2 050X000X00100XX	F058133
4x50	TTS 2x0,25 1m	G 1/8"	TCI-B-1-J-5-A-F-A-2 010X000X00050XX	F058134
4x100	TTS 2x0,25 1m	G 1/8"	TCI-B-1-J-5-A-F-A-2 010X000X00100XX	F058135
4x50	TTS 2x0,25 5m	G 1/8"	TCI-B-1-J-5-A-F-A-2 050X000X00050XX	F058136
4x100	TTS 2x0,25 5m	G 1/8"	TCI-B-1-J-5-A-F-A-2 050X000X00100XX	F058137
6x50	TTS 2x0,25 1m	G 1/8"	TCI-B-1-J-5-A-I-A-2 010X000X00050XX	F058140
6x100	TTS 2x0,25 1m	G 1/8"	TCI-B-1-J-5-A-I-A-2 010X000X00100XX	F058248
6x50	TTS 2x0,25 5m	G 1/8"	TCI-B-1-J-5-A-I-A-2 050X000X00050XX	F058141
6x100	TTS 2x0,25 5m	G 1/8"	TCI-B-1-J-5-A-I-A-2 050X000X00100XX	F058142

- Isolated single element
- Element: Ni/Cr - Ni/Al (Type K)
- Connector type: Without nipple

Ø x Li	Cable	Order code	SAP/METEL code
4x50	TTS 2x0,25 1m	TCI-A-1-K-5-A-F 010X000X00050XX	F058143
4x100	TTS 2x0,25 1m	TCI-A-1-K-5-A-F 010X000X00100XX	F058144
4x50	TTS 2x0,25 5m	TCI-A-1-K-5-A-F 050X000X00050XX	F058145
4x100	TTS 2x0,25 5m	TCI-A-1-K-5-A-F 050X000X00100XX	F058146
6x50	TTS 2x0,25 1m	TCI-A-1-K-5-A-I 010X000X00050XX	F058148
6x100	TTS 2x0,25 1m	TCI-A-1-K-5-A-I 010X000X00100XX	F058149
6x50	TTS 2x0,25 5m	TCI-A-1-K-5-A-I 050X000X00050XX	F058150
6x100	TTS 2x0,25 5m	TCI-A-1-K-5-A-I 050X000X00100XX	F058151

- Isolated single element
- Element: Ni/Cr - Ni/Al (Type K)
- Connector type: with threaded nipple

Ø x Li	Cable	Thread	Order code	SAP/METEL code
4x50	TTS 2x0,25 1m	G 1/4"	TCI-B-1-K-5-A-F-B-2 010X000X00050XX	F058152
4x100	TTS 2x0,25 1m	G 1/4"	TCI-B-1-K-5-A-F-B-2 010X000X00100XX	F058153
4x50	TTS 2x0,25 5m	G 1/4"	TCI-B-1-K-5-A-F-B-2 050X000X00050XX	F058154
4x100	TTS 2x0,25 5m	G 1/4"	TCI-B-1-K-5-A-F-B-2 050X000X00100XX	F058155
6x50	TTS 2x0,25 1m	G 1/4"	TCI-B-1-K-5-A-I-B-2 010X000X00050XX	F058164
6x100	TTS 2x0,25 1m	G 1/4"	TCI-B-1-K-5-A-I-B-2 010X000X00100XX	F058166
6x50	TTS 2x0,25 5m	G 1/4"	TCI-B-1-K-5-A-I-B-2 050X000X00050XX	F058167
6x100	TTS 2x0,25 5m	G 1/4"	TCI-B-1-K-5-A-I-B-2 050X000X00100XX	F058168
4x50	TTS 2x0,25 1m	G 1/8"	TCI-B-1-K-5-A-F-A-2 010X000X00050XX	F058169
4x100	TTS 2x0,25 1m	G 1/8"	TCI-B-1-K-5-A-F-A-2 010X000X00100XX	F058170
4x50	TTS 2x0,25 5m	G 1/8"	TCI-B-1-K-5-A-F-A-2 050X000X00050XX	F058172
4x100	TTS 2x0,25 5m	G 1/8"	TCI-B-1-K-5-A-F-A-2 050X000X00100XX	F058173
6x50	TTS 2x0,25 1m	G 1/8"	TCI-B-1-K-5-A-I-A-2 010X000X00050XX	F058174
6x100	TTS 2x0,25 1m	G 1/8"	TCI-B-1-K-5-A-I-A-2 010X000X00100XX	F058175
6x50	TTS 2x0,25 5m	G 1/8"	TCI-B-1-K-5-A-I-A-2 050X000X00050XX	F058176
6x100	TTS 2x0,25 5m	G 1/8"	TCI-B-1-K-5-A-I-A-2 050X000X00100XX	F058177

All configurations can be seen on www.gefran.com

THERMOCOUPLES / RESISTANCE THERMOMETERS

Thermocouples for extruders

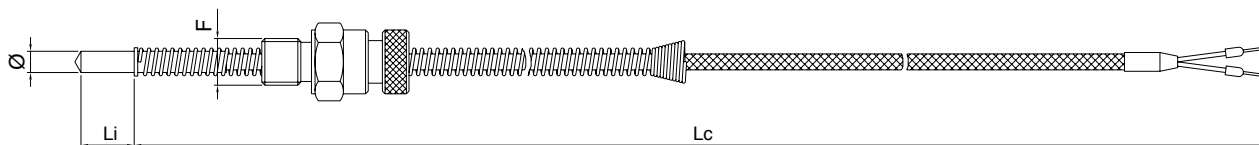
TC5



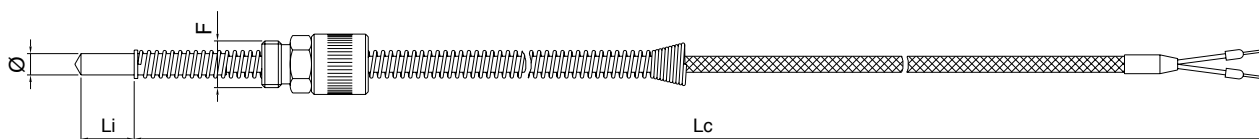
THERMOCOUPLE FOR USE IN THE PLASTICS INDUSTRY

Temperature limits: - 40 ... + 250°C (see table for thermocouple cable used)
 Reference tolerances: IEC584.2 class 2 for type J, K : ±2.5°C (-40...+333°C)
 AISI 303 stainless steel tip
 Threaded spring fitting: diam. 8mm, length 300mm.

TC5 B: with bayonet mount



TC5 V: with screw mount



- Isolated single element
- Element : Fe - Cu/Ni (Type J)
- Connection: Bayonet mount

Ø x Li	Cable	Threaded bayonet mount	Order code	SAP/METEL code
6x15	TTS 2x0,25 1m	G 1/4"	TC5-B-1-J-5-Q-I-B-3 010X000X00015XX	F033350
6x15	TTS 2x0,25 5m	G 1/4"	TC5-B-1-J-5-Q-I-B-3 050X000X00015XX	F012785
8x10	TTS 2x0,25 1m	G 1/4"	TC5-B-1-J-5-Q-J-B-3 010X000X00010XX	F012830
8x10	TTS 2x0,25 5m	G 1/4"	TC5-B-1-J-5-Q-J-B-3 050X000X00010XX	F012845
6x15	TTS 2x0,25 1m	M12 x 1,5	TC5-B-1-J-5-Q-I-P-3 010X000X00015XX	F058203
6x15	TTS 2x0,25 5m	M12 x 1,5	TC5-B-1-J-5-Q-I-P-3 050X000X00015XX	F012809
8x10	TTS 2x0,25 1m	M12 x 1,5	TC5-B-1-J-5-Q-J-P-3 010X000X00010XX	F012856
8x10	TTS 2x0,25 5m	M12 x 1,5	TC5-B-1-J-5-Q-J-P-3 050X000X00010XX	F012862

- Isolated single element
- Element : Fe - Cu/Ni (Type J)
- Connection: Fixing screws

Ø x Li	Cable	Threaded bayonet mount	Order code	SAP/METEL code
6x15	TTS 2x0,25 1m	G 1/4"	TC5-V-1-J-5-Q-I-B-3 010X000X00015XX	F033059
6x15	TTS 2x0,25 5m	G 1/4"	TC5-V-1-J-5-Q-I-B-3 050X000X00015XX	F029251
8x10	TTS 2x0,25 1m	G 1/4"	TC5-V-1-J-5-Q-J-B-3 010X000X00010XX	F058204
8x10	TTS 2x0,25 5m	G 1/4"	TC5-V-1-J-5-Q-J-B-3 050X000X00010XX	F021948
6x15	TTS 2x0,25 1m	M12 x 1,5	TC5-V-1-J-5-Q-I-P-3 010X000X00015XX	F013625
6x15	TTS 2x0,25 5m	M12 x 1,5	TC5-V-1-J-5-Q-I-P-3 050X000X00015XX	F040958
8x10	TTS 2x0,25 1m	M12 x 1,5	TC5-V-1-J-5-Q-J-P-3 010X000X00010XX	F058205
8x10	TTS 2x0,25 5m	M12 x 1,5	TC5-V-1-J-5-Q-J-P-3 050X000X00010XX	F023838

- Isolated single element
- Element : Fe - Cu/Ni (Type K)
- Connection: Bayonet mount

Ø x Li	Cable	Threaded bayonet mount	Order code	SAP/METEL code
6x15	TTS 2x0,25 1m	G 1/4"	TC5-B-1-K-5-Q-I-B-3 010X000X00015XX	F058207
6x15	TTS 2x0,25 5m	G 1/4"	TC5-B-1-K-5-Q-I-B-3 050X000X00015XX	F058208
8x10	TTS 2x0,25 1m	G 1/4"	TC5-B-1-K-5-Q-J-B-3 010X000X00010XX	F058209
8x10	TTS 2x0,25 5m	G 1/4"	TC5-B-1-K-5-Q-J-B-3 050X000X00010XX	F058210
6x15	TTS 2x0,25 1m	M12 x 1,5	TC5-B-1-K-5-Q-I-P-3 010X000X00015XX	F058211
6x15	TTS 2x0,25 5m	M12 x 1,5	TC5-B-1-K-5-Q-I-P-3 050X000X00015XX	F058212
8x10	TTS 2x0,25 1m	M12 x 1,5	TC5-B-1-K-5-Q-J-P-3 010X000X00010XX	F058213
8x10	TTS 2x0,25 5m	M12 x 1,5	TC5-B-1-K-5-Q-J-P-3 050X000X00010XX	F058214

- Isolated single element
- Element : Fe - Cu/Ni (Type K)
- Connection: Fixing screws

Ø x Li	Cable	Threaded bayonet mount	Order code	SAP/METEL code
6x15	TTS 2x0,25 1m	G 1/4"	TC5-V-1-K-5-Q-I-B-3 010X000X00015XX	F058215
6x15	TTS 2x0,25 5m	G 1/4"	TC5-V-1-K-5-Q-I-B-3 050X000X00015XX	F058216
8x10	TTS 2x0,25 1m	G 1/4"	TC5-V-1-K-5-Q-J-B-3 010X000X00010XX	F058217
8x10	TTS 2x0,25 5m	G 1/4"	TC5-V-1-K-5-Q-J-B-3 050X000X00010XX	F058218
6x15	TTS 2x0,25 1m	M12 x 1,5	TC5-V-1-K-5-Q-I-P-3 010X000X00015XX	F058224
6x15	TTS 2x0,25 5m	M12 x 1,5	TC5-V-1-K-5-Q-I-P-3 050X000X00015XX	F058225
8x10	TTS 2x0,25 1m	M12 x 1,5	TC5-V-1-K-5-Q-J-P-3 010X000X00010XX	F058228
8x10	TTS 2x0,25 5m	M12 x 1,5	TC5-V-1-K-5-Q-J-P-3 050X000X00010XX	F058229

All configurations can be seen on www.gefran.com

TCMCP

TCMCC

TCMCE

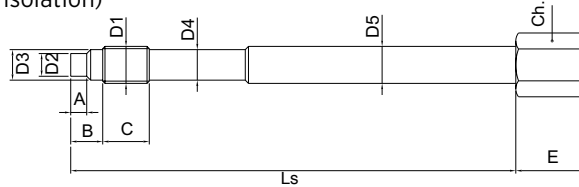


MINERAL OXIDE THERMOCOUPLE FOR USE IN THE PLASTICS INDUSTRY

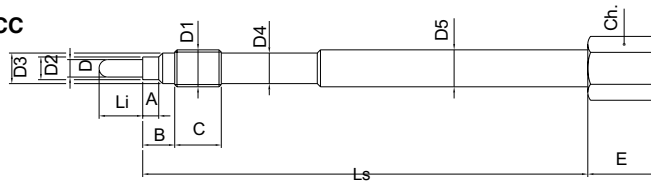
Temperature limits: - 40 ... + 400°C

Reference tolerances: IEC584.2 class 2 for type J, K : ±2.5°C (-40...+333°C) ±0.0075 [t] (t > + 333°C) Heat-sensitive element with compact isolation and continuous metal sheathing (MgO isolation)

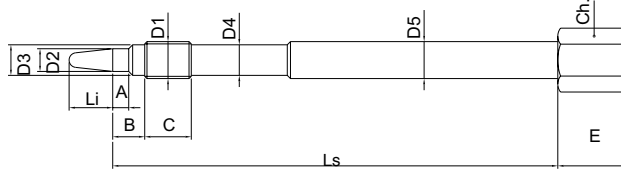
TCMCP



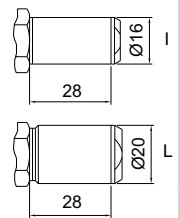
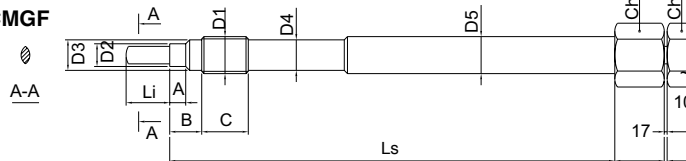
TCMCC



TCMCE



TCMGF



D1	D2	D3	D	D4	D5	A	B	C	Ls	Ch	E	Li
1/2-20UNF	ø 7,8	ø 10,5	ø 6	ø 10,5	ø 12,7	5,5	11	16	90-153	17-19	17-25	Immersion Length Immersion Length
M18x1,5	ø 10	ø 16	ø 7	ø 16	ø 17,8	6	14	20	90-153	19	17-25	

- Isolated single element
- Element : Fe - Cu/Ni (Type J)
- Connection: Male thread: 1/2 -20 UNF 1/2 -20 UNF
- Extension cable : 1 meter steel sheathing compensated connectors

Version	Immersion	Order code	SAP/METEL code
Conical Tip	10	TCM-CE-1-J-0-A-0-T-F 010X000X00010XX	F009848
Conical Tip	15	TCM-CE-1-J-0-A-0-T-F 010X000X00015XX	F028710
Conical Tip	20	TCM-CE-1-J-0-A-0-T-F 010X000X00020XX	F058236
Rounded Tip	10	TCM-CC-1-J-0-A-0-T-F 010X000X00010XX	F009708
Rounded Tip	15	TCM-CC-1-J-0-A-0-T-F 010X000X00015XX	F058237
Rounded Tip	20	TCM-CC-1-J-0-A-0-T-F 010X000X00020XX	F009709
Flat Tip		TCM-CP-1-J-0-A-0-T-F 010X000X00000XX	F010040

All configurations can be seen on www.gefran.com

A= high rotating codes available on stock. For the remaingin codes into the catalogue, we kindly suggest you to contact Gefran sales team

Resistance thermometer with cable connection

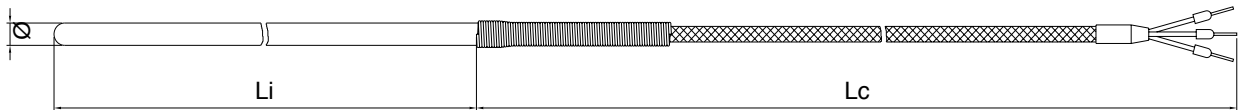
TR1

RESISTANCE THERMOMETERS FOR USE IN THE PLASTICS INDUSTRY

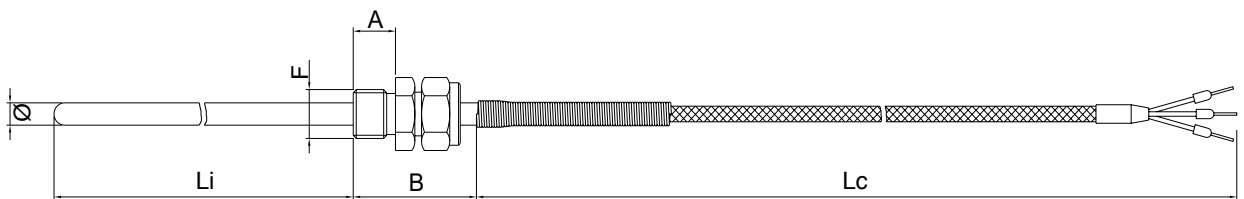


Temperature limits: - 40 ... + 250°C (see table for thermocouple cable used)
 Reference tolerances: UNI 7937, IEC 751: ± 0.15°C at 0°C for class A (1/2 DIN); ± 0.30°C at 0°C for class B (1 DIN)
 Sensitive element PT100 at 0°C
 Highly versatile

TR1 A: without mount



TR1 B: with sliding pressure mount



- Isolated single element
- Sensitive element: PT100; 3 wires; Class B
- Connector type: Without nipple

$\varnothing \times Li$	Cable	Order code	SAP/METEL code
4x100	TTS 3x0,35 1m	TR1-A-2-B-5-A-F 010X000X00100XX	F058243
4x100	TTS 3x0,35 5m	TR1-A-2-B-5-A-F 050X000X00100XX	F058244
4x50	TTS 3x0,35 1m	TR1-A-2-B-5-A-F 010X000X00050XX	F017883
4x50	TTS 3x0,35 5m	TR1-A-2-B-5-A-F 050X000X00050XX	F058245
6x100	TTS 3x0,35 1m	TR1-A-2-B-5-A-I 010X000X00100XX	F017921
6x100	TTS 3x0,35 5m	TR1-A-2-B-5-A-I 050X000X00100XX	F017948
6x50	TTS 3x0,35 1m	TR1-A-2-B-5-A-I 010X000X00050XX	F017920
6x50	TTS 3x0,35 5m	TR1-A-2-B-5-A-I 050X000X00050XX	F017947

THERMOCOUPLES / RESISTANCE THERMOMETERS

- Isolated single element
- Sensitive element: PT100; 3 wires; Class B
- Connector type: with threaded nipple

∅ x Li	Cable	Nipple thread	Order code	SAP/METEL code
4x100	TTS 3x0,35 1m	G 1/8"	TR1-B-2-B-5-A-F-A-2 010X000X00100XX	F058251
4x100	TTS 3x0,35 5m	G 1/8"	TR1-B-2-B-5-A-F-A-2 050X000X00100XX	F058252
4x50	TTS 3x0,35 1m	G 1/8"	TR1-B-2-B-5-A-F-A-2 010X000X00050XX	F058255
4x50	TTS 3x0,35 5m	G 1/8"	TR1-B-2-B-5-A-F-A-2 050X000X00050XX	F058256
6x100	TTS 3x0,35 1m	G 1/8"	TR1-B-2-B-5-A-I-A-2 010X000X00100XX	F058268
6x100	TTS 3x0,35 5m	G 1/8"	TR1-B-2-B-5-A-I-A-2 050X000X00100XX	F058269
6x50	TTS 3x0,35 1m	G 1/8"	TR1-B-2-B-5-A-I-A-2 010X000X00050XX	F058270
6x50	TTS 3x0,35 5m	G 1/8"	TR1-B-2-B-5-A-I-A-2 050X000X00050XX	F058271
4x100	TTS 3x0,35 1m	G 1/4"	TR1-B-2-B-5-A-F-B-2 010X000X00100XX	F058272
4x100	TTS 3x0,35 5m	G 1/4"	TR1-B-2-B-5-A-F-B-2 050X000X00100XX	F058286
4x50	TTS 3x0,35 1m	G 1/4"	TR1-B-2-B-5-A-F-B-2 010X000X00050XX	F058287
4x50	TTS 3x0,35 5m	G 1/4"	TR1-B-2-B-5-A-F-B-2 050X000X00050XX	F058274
6x100	TTS 3x0,35 1m	G 1/4"	TR1-B-2-B-5-A-I-B-2 010X000X00100XX	F026508

All configurations can be seen on www.gefran.com

Resistance thermometer with connection head**TR6****RESISTANCE THERMOMETERS FOR USE IN VARIOUS INDUSTRIES**

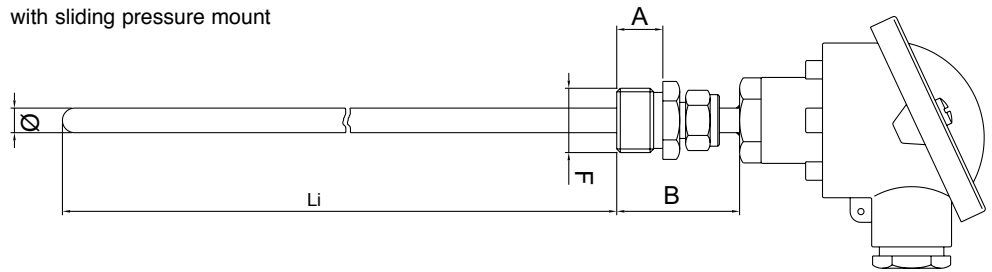
Temperature limits: - 40 ... + 300°C

Reference tolerances: UNI 7937, IEC 751: ± 0.15°C at 0°C for class A (1/2 DIN); ± 0.30°C at 0°C for class B (1 DIN); ± 0.10°C at 0°C for class 1/3 DIN

Sensitive element with ceramic isolators PT100 at 0°C

Highly versatile

TR6 B
with sliding pressure mount



- Isolated single element
- Sensitive element with ceramic isolators PT100; 3 wires; Class B
- Electrical connection: Head DIN B
- Connection: sliding pressure mount

Ø x Li	Nipple thread	Order code	SAP/METEL code
6x100	G 1/2"	TR6-B-2-B-C-C-I-D-2 000X000X00100XX	F020144
6x200	G 1/2"	TR6-B-2-B-C-C-I-D-2 000X000X00200XX	F020146
6x300	G 1/2"	TR6-B-2-B-C-C-I-D-2 000X000X00300XX	F020148
6x400	G 1/2"	TR6-B-2-B-C-C-I-D-2 000X000X00400XX	F020149
6x500	G 1/2"	TR6-B-2-B-C-C-I-D-2 000X000X00500XX	F020150
8x100	G 1/2"	TR6-B-2-B-C-C-J-D-2 000X000X00100XX	F031873
8x200	G 1/2"	TR6-B-2-B-C-C-J-D-2 000X000X00200XX	F020176
8x300	G 1/2"	TR6-B-2-B-C-C-J-D-2 000X000X00300XX	F020177
8x400	G 1/2"	TR6-B-2-B-C-C-J-D-2 000X000X00400XX	F020180
8x500	G 1/2"	TR6-B-2-B-C-C-J-D-2 000X000X00500XX	F020181
6x100	G 1/4"	TR6-B-2-B-C-C-I-B-2 000X000X00100XX	F034191
6x200	G 1/4"	TR6-B-2-B-C-C-I-B-2 000X000X00200XX	F020119
6x300	G 1/4"	TR6-B-2-B-C-C-I-B-2 000X000X00300XX	F022426
6x400	G 1/4"	TR6-B-2-B-C-C-I-B-2 000X000X00400XX	F040454
6x500	G 1/4"	TR6-B-2-B-C-C-I-B-2 000X000X00500XX	f058288
8x100	G 1/4"	TR6-B-2-B-C-C-J-B-2 000X000X00100XX	F056869
8x200	G 1/4"	TR6-B-2-B-C-C-J-B-2 000X000X00200XX	F020159
8x300	G 1/4"	TR6-B-2-B-C-C-J-B-2 000X000X00300XX	F058289
8x400	G 1/4"	TR6-B-2-B-C-C-J-B-2 000X000X00400XX	F058290
8x500	G 1/4"	TR6-B-2-B-C-C-J-B-2 000X000X00500XX	F043811
6x100	G 3/8"	TR6-B-2-B-C-C-I-C-2 000X000X00100XX	F023924
6x200	G 3/8"	TR6-B-2-B-C-C-I-C-2 000X000X00200XX	F020130
6x300	G 3/8"	TR6-B-2-B-C-C-I-C-2 000X000X00300XX	F058291
6x400	G 3/8"	TR6-B-2-B-C-C-I-C-2 000X000X00400XX	F020131
6x500	G 3/8"	TR6-B-2-B-C-C-I-C-2 000X000X00500XX	F058292
8x100	G 3/8"	TR6-B-2-B-C-C-J-C-2 000X000X00100XX	F058293
8x200	G 3/8"	TR6-B-2-B-C-C-J-C-2 000X000X00200XX	F020161
8x300	G 3/8"	TR6-B-2-B-C-C-J-C-2 000X000X00300XX	F023490
8x400	G 3/8"	TR6-B-2-B-C-C-J-C-2 000X000X00400XX	F046005
8x500	G 3/8"	TR6-B-2-B-C-C-J-C-2 000X000X00500XX	F020162

INDUSTRIAL INVERTERS

	INVERTERS FOR INDUSTRIAL APPLICATIONS	INVERTERS FOR THE LIFT SECTOR	
BASIC LINES	<p>BDI50</p>  <p>The BDI50 is a compact, vertical industrial inverter with a black and grey casing. It features a small LCD screen at the top, several control buttons, and a terminal block at the bottom. The model name 'BDI50' is printed on the front panel.</p>	<p>AGL50</p>  <p>The AGL50 is a vertical industrial inverter with a grey and black casing. It has a large terminal block on the front and a control panel with buttons and a small display. The model name 'AGL50' is printed on the top right.</p>	
STANDARD LINES	<p>VDI100</p>  <p>The VDI100 is a vertical industrial inverter with a black casing. It features a large LCD screen and a control panel with several buttons. The model name 'VDI100' is printed at the bottom of the device.</p>		
SYSTEM LINES	<p>ADV200</p>  <p>The ADV200 is a vertical industrial inverter with a black casing. It has a large LCD screen and a control panel with a rotary knob and several buttons. The model name 'ADV200' is printed at the bottom.</p>	<p>ADL300</p>  <p>The ADL300 is a vertical industrial inverter with a grey and black casing. It features a large LCD screen and a control panel with several buttons. The model name 'ADL300' is printed on the front panel.</p>	<p>AVRy</p>  <p>The AVRy is a large, vertical industrial inverter with a grey metal casing. It has a large LCD screen and a control panel with several buttons. The model name 'AVRy' is printed at the top right.</p>

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ARMATURE CONVERTERS

INVERTERS FOR WATER TREATMENT AND HVAC

TPD32 EV



ADV200 WA



INDUSTRIAL INVERTERS

Basic Line Inverter

BDI50



COMPACT V/f & SENSORLESS INVERTER, FROM 0.4 UP 11.0 KW

- * Power supply: Single-Phase 230V, Three-Phase 230V, Three-Phase 380~480V (+10% ~ -15%), 50/60Hz ±5%
- * Motor rating: from 0.4kW (0.5Hp) to 11kW (15Hp)
- * Certifications: CE, cULus

- **3-phase AC output**
- **With filter and keypad**
- **IP20**



Compact Sensorless Inverter
Asynchronous Motor Control
Power supply: 1 x 230Vac
Programming Keypad: Integrated

Power (kW)	Power supply	Dimensions	Order code	SAP/METEL code
0.4	1 x 230V	72 x 141 x 141	BDI50-1004-KXX-2M-P-F	S6N05
0.75	1 x 230V	72 x 141 x 141	BDI50-1007-KXX-2M-P-F	S6N06
1.5	1 x 230V	118 x 144 x 150	BDI50-2015-KXX-2M-P-F	S6N07
2.2	1 x 230V	118 x 144 x 150	BDI50-2022-KXX-2M-P-F	S6N08

Compact Sensorless Inverter
Asynchronous Motor Control
Power supply: 3 x 230Vac
Programming Keypad: Integrated

Power (kW)	Power supply	Dimensions	Order code	SAP/METEL code
0.75	3 x 230V	72 x 141 x 141	BDI50-1007-KXX-2T-N	S6N09
1.5	3 x 230V	118 x 144 x 150	BDI50-2015-KXX-2T-N	S6N10
2.2	3 x 230V	118 x 144 x 150	BDI50-2022-KXX-2T-N	S6N11
3.7	3 x 230V	129 x 197,5 x 148	BDI50-3037-KBX-2T-NP	S6N12
5.5	3 x 230V	187 x 273 x 190	BDI50-4055-KBX-2T-NP	S6N13
7.5	3 x 230V	187 x 273 x 190	BDI50-4075-KBX-2T-NP	S6N14

Compact Sensorless Inverter
Asynchronous Motor Control
Power supply: 3 x 380...480Vac
Tastiera di Programmazione: Integrata

Power (kW)	Power supply	Dimensions	Order code	SAP/METEL code
0.75	3 x 400V	118 x 144 x 150	BDI50-2007-KBX-4-P-F	S6N22
1.5	3 x 400V	118 x 144 x 150	BDI50-2015-KBX-4-P-F	S6N23
2.2	3 x 400V	118 x 144 x 150	BDI50-2022-KBX-4-P-F	S6N24
3.7	3 x 400V	129 x 197,5 x 148	BDI50-3037-KBX-4-NP-F	S6N25
5.5	3 x 400V	129 x 197,5 x 148	BDI50-3055-KBX-4-NP-F	S6N26
7.5	3 x 400V	187 x 273 x 190	BDI50-4075-KBX-4-NP-F	S6N27
11	3 x 400V	187 x 273 x 190	BDI50-4110-KBX-4-NP-F	S6N28

For models 1 x 230V and 3 x 400V, versions without integrated filter are available.

General purpose full vector inverter**VDI100****ASYNCHRONOUS & SYNCHRONOUS MOTOR CONTROL, FROM 0.75 UP 160 KW**

- * Power supply: Three-Phase 230V, Three-Phase 380~480V (+10% ~ -15%), 50/60Hz ±5%
- * Motor rating: from 0.75kW (1Hp) to 160kW (215Hp)
- * Certifications: CE, cULus
- **3-phase AC output**
- **With filter (up to 45 kW) and keypad**
- **IP20/NEMA1 up to size 5, IP00 size 6 and 7 (optional NEMA 1 kit available)**

**Flux Vectort Inverter**

Asynchronous & Synchronous Motor Control

Power supply: 3 x 230Vac

Heavy Duty 150%/1 min, 200%/2sec - Normal Duty 120%/1 min

Programing Keypad: Integrated

Power (kW)		Power supply	Dimensions	Order code	SAP/METEL code	
Heavy Duty	Normal Duty					
0.75	1.5	3 x 230V	130 x 215 x 150	VDI100-1007-KBX-2T	S6N100	
1.5	2.2	3 x 230V	130 x 215 x 150	VDI100-1015-KBX-2T	S6N101	
2.2	3.7	3 x 230V	140 x 279 x 177	VDI100-2022-KBX-2T	S6N102	
3.7	5.5	3 x 230V	140 x 279 x 177	VDI100-2037-KBX-2T	S6N103	
5.5	7.5	3 x 230V	140 x 279 x 177	VDI100-2055-KBX-2T	S6N104	
7.5	11	3 x 230V	210 x 300 x 215	VDI100-3075-KBX-2T	S6N105	
11	15	3 x 230V	265 x 360 x 225	VDI100-4110-KBX-2T	S6N106	
15	18.5	3 x 230V	265 x 360 x 225	VDI100-4150-KBX-2T	S6N107	
18.5	22	3 x 230V	265 x 360 x 225	VDI100-4185-KBX-2T	S6N108	
22	30	3 x 230V	286.5 x 525 x 252	VDI100-5220-KBX-2T	S6N109	

Flux Vectort Inverter

Asynchronous & Synchronous Motor Control

Power supply: 3 x 380Vac...480Vac

Heavy Duty 150%/1 min, 200%/2sec - Normal Duty 120%/1 min

Programing Keypad: Integrated

Power (kW)		Power supply	Dimensions	Order code	SAP/METEL code	
Heavy Duty	Normal Duty					
0.75	1.5	3 x 400V	130 x 306 x 150	VDI100-1007-KBX-4-F	S6N110	
1.5	2.2	3 x 400V	130 x 306 x 150	VDI100-1015-KBX-4-F	S6N111	
2.2	3.7	3 x 400V	130 x 306 x 150	VDI100-1022-KBX-4-F	S6N112	
3.7	5.5	3 x 400V	140 x 400 x 177	VDI100-2037-KBX-4-F	S6N113	
5.5	7.5	3 x 400V	140 x 400 x 177	VDI100-2055-KBX-4-F	S6N114	
7.5	11	3 x 400V	210 x 416.5 x 215	VDI100-3075-KBX-4-F	S6N115	
11	15	3 x 400V	210 x 416.5 x 215	VDI100-3110-KBX-4-F	S6N116	
15	18.5	3 x 400V	265 x 500 x 225	VDI100-4150-KBX-4-F	S6N117	
18.5	22	3 x 400V	265 x 500 x 225	VDI100-4185-KBX-4-F	S6N118	
22	30	3 x 400V	265 x 500 x 225	VDI100-4220-KBX-4-F	S6N119	

INDUSTRIAL INVERTERS

Flux Vectort Inverter
 Asynchronous & Synchronous Motor Control
 Power supply: 3 x 380Vac...480Vac
 Heavy Duty 150%/1 min, 200%/2sec - Normal Duty 120%/1 min
 Programming Keypad: Integrated

Power (kW)		Power supply	Dimensions	Order code	SAP/METEL code	
Heavy Duty	Normal Duty					
30	37	3 x 400V	286.5 x 679 x 252	VDI100-5300-KBX-4-F	S6N120	
37	45	3 x 400V	286.5 x 679 x 252	VDI100-5370-KXX-4-F	S6N121	
45	55	3 x 400V	286.5 x 679 x 252	VDI100-5450-KXX-4-F	S6N122	
55	75	3 x 400V	286.5 x 525 x 252	VDI100-5550-KXX-4	S6N136	
75	90	3 x 400V	344 x 580 x 300	VDI100-6750-KXX-4	S6N137	
90	110	3 x 400V	344 x 580 x 300	VDI100-6900-KXX-4	S6N138	
110	132	3 x 400V	459 x 790 x 324.5	VDI100-71100-KXX-4	S6N139	
132	160	3 x 400V	459 x 790 x 324.5	VDI100-71320-KXX-4	S6N140	
160	185	3 x 400V	459 x 790 x 324.5	VDI100-71600-KXX-4	S6N141	

For models 3 x 400V (up to 45kW), versions without integrated filter are available.

Digital converters

TPD32 EV



DIGITAL CONVERTERS FROM 20A TO 3300A

- * 3phase 230VAC...500VAC, 50/60Hz; 3-phase 575VAC 50/60Hz; 3-phase 690VAC, 50/60Hz
- * Rated current: from 20 to 3300 A (biquadrant and tetraquadrant)
- * IP20 (IP00 for currents over 2700A)
- * Certifications: CE, UL, cUL

• DC Output

Digital armature converters

2 Quadrants

Power supply 3 x 400Vac...500Vac - 575Vac - 690Vac

Version	Power supply	Dimensions	Current range (A)	Order code	SAP/METEL code	
20	3 x 500V	267x 349 x 280	10	TPD32-EV-500/600-20-2B-A	S4TP01	
40	3 x 500V	267x 349 x 280	10	TPD32-EV-500/600-40-2B-A	S4TP02	
70	3 x 500V	267x 349 x 280	10	TPD32-EV-500/600-70-2B-A	S4TP03	A
110	3 x 500V	267x 349 x 280	14	TPD32-EV-500/600-110-2B-A	S4TP04	
140	3 x 500V	267x 349 x 280	14	TPD32-EV-500/600-140-2B-A	S4TP05	
185	3 x 500V	267x 349 x 280	14	TPD32-EV-500/600-185-2B-A	S4TP06	A
280	3 x 500V	311x 388x 343,6	20	TPD32-EV-500/600-280-2B-B	S4TP07	
350	3 x 500V	311x 388x 343,6	20	TPD32-EV-500/600-350-2B-B	S4TP08	
420	3 x 500V	311x 388x 343,6	20	TPD32-EV-500/600-420-2B-B	S4TP09	A
500	3 x 500V	311x 388x 343,6	20	TPD32-EV-500/600-500-2B-B	S4TP10	
650	3 x 500V	311x 388x 373,6	20	TPD32-EV-500/600-650-2B-B	S4TP11	A
770	3 x 500V	521x 512 x 410	25	TPD32-EV-500/600-770-2B-C	S4TP12	A
1000	3 x 500V	521x 512 x 410	25	TPD32-EV-500/600-1000-2B-C	S4TP13	A

Digital armature converters

4 Quadrants

Power supply 3 x 400Vac...500Vac - 575Vac - 690Vac

Version	Power supply	Dimensions	Current range (A)	Order code	SAP/METEL code	
20	3 x 500V	267x 349 x 280	10	TPD32-EV-500/520-20-4B-A	S4TP61	
40	3 x 500V	267x 349 x 280	10	TPD32-EV-500/520-40-4B-A	S4TP62	A
70	3 x 500V	267x 349 x 280	10	TPD32-EV-500/520-70-4B-A	S4TP63	
110	3 x 500V	267x 349 x 280	14	TPD32-EV-500/520-110-4B-A	S4TP64	A
140	3 x 500V	267x 349 x 280	14	TPD32-EV-500/520-140-4B-A	S4TP65	
185	3 x 500V	267x 349 x 280	14	TPD32-EV-500/520-185-4B-A	S4TP66	A
280	3 x 500V	311x 388x 343,6	20	TPD32-EV-500/520-280-4B-B	S4TP67	
350	3 x 500V	311x 388x 343,6	20	TPD32-EV-500/520-350-4B-B	S4TP68	A
420	3 x 500V	311x 388x 343,6	20	TPD32-EV-500/520-420-4B-B	S4TP69	
500	3 x 500V	311x 388x 343,6	20	TPD32-EV-500/520-500-4B-B	S4TP70	
650	3 x 500V	311x 388x 373,6	20	TPD32-EV-500/520-650-4B-B	S4TP71	A
770	3 x 500V	521x 512 x 410	25	TPD32-EV-500/520-770-4B-C	S4TP72	A
1050	3 x 500V	521x 512 x 410	25	TPD32-EV-500/520-1050-4B-C	S4TP73	A

Accessories for TPD32 EV

	Description	Order code	SAP/METEL code
Keypad	Programming keypad for TPD32 EV	KB-TPD32-EV	S5TP02 A

ENG

PRODUCT RANGE



GEFRAN

APPLICATIONS



INJECTION



EXTRUSION



BLOW



METAL



ELECTRICAL FURNACES



MOBILE HYDRAULICS



LIFTS



WATER & HVAC



CRANES & OVERHEAD CRANES

In addition to foreseeing the market's application needs, Gefran forms partnerships with its customers to find **the best way to optimise and boost the performance of various applications.**

Gefran products communicate with one another to provide integrated solutions and can interact with devices from other companies, thanks to their compatibility with numerous field buses.





Thanks to forty years of experience, Gefran is the world leader in the design and production of solutions for **measuring, controlling, and driving industrial production processes**. We have branches in 14 countries and a network of over 80 worldwide distributors.

QUALITY AND TECHNOLOGY

Gefran components are a **concentration of technology**, the result of constant research and of **cooperation with major research centres**.

For this reason, Gefran is synonymous with **quality and expertise in the design and production of:**

sensors for measuring main variables such as **temperature, pressure, position and force**

state-of-the-art components and solutions for indication and control, satisfying demands for optimisation of

processes and intelligent management of energy consumption

automation platforms of various complexities

electric drives to control AC, DC, and brushless motors used in modern plants for industrial automation and civil lift engineering

Gefran's know-how and experience guarantee continuity and tangible solutions.



SERVICES

A team of Gefran experts works with the customer to select the ideal product for its application and to help install and configure devices (customercare@gefran.com).

Gefran offers a wide range of courses at different levels for the technical-commercial study of the Gefran product range as well as specific courses on demand.

Certifications



RoHS✓

PLC²



SENSORS

PRESSURE SENSORS

Instruments to measure fluids, liquids or gases: ideal for all industrial applications.

Also available in ATEX Intrinsic Safety versions for use in potentially explosive atmospheres.



MELT PRESSURE SENSORS

Melt pressure sensors and high-temperature pressure transducers and transmitters are available with mercury* filling, with FDA-approved fluid, and in fluid-free versions. Ideal for extrusion and injection applications.



* Mercury filled versions are available only where permitted by the European Directive 2011/65/EU (RoHS II)

POSITION TRANSDUCERS: POTENTIOMETERS

Sensors for measuring linear or angular displacement, suitable for all industrial applications.

These are "Simple devices" according to EN 60079-11:2007 (Explosive atmospheres.

Equipment protected by intrinsic safety "i").

Robust and versatile even in heavy-duty applications.



POSITION TRANSDUCERS: MAGNETOSTRICTIVE

Gefran magnetostrictive position sensors are an advance over potentiometric position transducers and offer solutions for more complex applications.

Now available with ONDA technology for simple installation, versatility, and excellent quality/price ratio.



TEMPERATURE SENSORS: THERMOCOUPLES AND RESISTANCE THERMOMETERS

Gefran offers a wide range of contact temperature sensors, plus custom versions based on type of application, environmental conditions, work, temperature range, and precision required.



LOAD CELLS, FORCE TRANSDUCERS AND STRAIN SENSORS

Sensors to measure the tension of plastic films and tapes, plus a range of products that measure force, load and compression/traction.



INSTRUMENTATION AND POWER CONTROLLERS

CONTROLLERS AND PROGRAMMERS

A wide range of panel-mounted instruments for precise measurement of temperature, pressure, force, position, humidity, etc.

Available in Basic, Value, Performance and Multifunction versions, with control and recording functions.



INDICATORS AND ALARM UNITS

Panel-mounted microprocessor instruments, configurable to display temperature, pressure, capacity, force, position, voltage, current, humidity, etc.

With programmable alarms and diagnostics.



STATIC CONTACTORS AND SOLID STATE RELAYS

Solid-state relays and power units with built-in heatsink, load diagnostics to control resistive loads.

Complete range from 15 A to 120 A



POWER CONTROLLERS

Actuators and solid-state relays to control resistive/inductive/infrared loads in modern temperature control systems. Complete range up to 250 A and exclusive, patented solutions (such as the Xtra series) to protect against short circuits.



MOTION CONTROL

INVERTERS FOR INDUSTRIAL APPLICATION

A wide range of field-oriented inverters for the control of asynchronous and synchronous motors either in closed and open loop, applied in the most advanced architectures of automation systems, with standard or customized applicative solutions and installation both air cooled or liquid cooled.



REGEN AND AC/DC POWER SUPPLIES

Gefran's continuous research provides a wide range of regenerative power supplies, such as Active Front End (AFE200) and Fundamental Front End (FFE200), that implement the most advanced energy-recovery technologies.

The SMB200 power supply is ideal for high power applications.

The DC bus power supply is used when recovery of any kinetic energy is moderate.



SERVODRIVES & BRUSHLESS MOTORS

Dedicated to the most advanced motion control systems, the Gefran servo drives are providing a very wide currents range and mechanical solutions for both modular or stand alone technologies in a single drive.



DC ARMATURE CONVERTERS

The series of digital armature converters with 2 and 4 quadrants configurations, provides the highest technology for the use of DC motors applied in modern automation solutions.



INVERTERS FOR ELEVATORS

A range of inverters designed for the civil lifting market.

Technology and performance aimed at modern elevator systems and projects for lift refurbishments.





AUTOMATION PLATFORMS

Gefran Soluzioni (Company subject to management and coordination by Gefran S.p.A.) supplies industrial products, solutions, and services, with special emphasis on the plastic transformation sector.

Gefran Soluzioni designs and manufactures automation devices, electrical panels and control software for industrial processes.

GCube Fit CUSTOM CONTROLLER

A compact, custom solution to control and display small/medium-size systems and machines. Process control, data logging, and PLC all in one unit.



GCube Modula INTEGRATED CONTROLLER

An integrated solution especially suitable for medium-size systems and machines, where scalability, management of multiprotocol communication and remote access service are essential.

GCube Performa EMBEDDED CONTROLLER

An extremely flexible and economical industrial solution for medium-high complexity applications. A complete and integrated solution for machine control, monitoring, communication and automation management.



Integrated development environment

GF_Project VX and GF_Project LX development environments for all Gcube platforms. A series of integrated and standard configuration modules (IEC61131-3) for easy and intuitive development of different types of automation.

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Реле, твердотельное каталог, описание, технические, характеристики, datasheet, параметры, маркировка, габариты, фото, даташит, gefran



Реле, твердотельное, Минск, Беларусь

Электронные компоненты, радиодетали

где и как купить в Минске?

Категория: Реле твердотельное, однофазные, трехфазные