

Crydom, sensata, Минск т.80447584780

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Реле, твердотельное, Crydom, модуль, каталог, описание, технические,
характеристики, datasheet, параметры,
маркировка, габариты, фото, даташит, *solid, state, relay, cosmo, sensata*



Реле, твёрдотельное купить,
продажа, в наличии,
Минск, Беларусь

реле

электро
механическое
электронные
компоненты

[где и как купить в Минске?](#)

Реле	10pcv2415	Производитель: sensata, crydom
Реле	10pcv2425	Производитель: sensata, crydom
Реле	1f25	Производитель: sensata, crydom
Реле	1nt01f-6957	Производитель: sensata, crydom
Реле	1nt01l-0204	Производитель: sensata, crydom
Реле	1nt01l-0205	Производитель: sensata, crydom
Реле	1nt01l-0206	Производитель: sensata, crydom
Реле	1nt01l-0210	Производитель: sensata, crydom
Реле	1nt01l-7938	Производитель: sensata, crydom
Реле	1nt08l-6956	Производитель: sensata, crydom
Реле	1nt20l6577	Производитель: sensata, crydom
Реле	20400d5-443	Производитель: sensata, crydom
Реле	20400d5-519	Производитель: sensata, crydom
Реле	20601l8-40	Производитель: sensata, crydom
Реле	2mmt145-01	Производитель: sensata, crydom

Реле	2mmt90-01	Производитель: sensata, crydom
Реле	3am7avk0100-1052..30102	Производитель: sensata, crydom
Реле	3f20	Производитель: sensata, crydom
Реле	4344-184-410	Производитель: sensata, crydom
Реле	4344-184-410	Производитель: sensata, crydom
Реле	4cr-1-753	Производитель: sensata, crydom
Реле	66f050	Производитель: sensata, crydom
Реле	66f070	Производитель: sensata, crydom
Реле	67f045	Производитель: sensata, crydom
Реле	67f045	Производитель: sensata, crydom
Реле	67f050	Производитель: sensata, crydom
Реле	67f065	Производитель: sensata, crydom
Реле	67f070	Производитель: sensata, crydom
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Реле	67f090	Производитель: sensata, crydom
Реле	67f095	Производитель: sensata, crydom
Реле	67f110	Производитель: sensata, crydom
Реле	67f110	Производитель: sensata, crydom
Реле	67f120	Производитель: sensata, crydom
Реле	67l040	Производитель: sensata, crydom
Реле	67l060	Производитель: sensata, crydom
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Реле	6ps551f074f054n	Производитель: sensata, crydom
Реле	7am020a5-1198	Производитель: sensata, crydom
Реле	7am023a5-1199	Производитель: sensata, crydom
Реле	7am024a5-219-5	Производитель: sensata, crydom
Реле	84130104	Производитель: sensata, crydom
Реле	84130105	Производитель: sensata, crydom
Реле	84134010	Производитель: sensata, crydom
Реле	84134020	Производитель: sensata, crydom
Реле	84134020k	Производитель: sensata, crydom
Реле	84134040	Производитель: sensata, crydom
Реле	84134110	Производитель: sensata, crydom
Реле	84134110.	Производитель: sensata, crydom

Реле	84134120	Производитель: sensata, crydom
Реле	84134180	Производитель: sensata, crydom
Реле	84134210k	Производитель: sensata, crydom
Реле	84134221	Производитель: sensata, crydom
Реле	84134310	Производитель: sensata, crydom
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Реле	84134380	Производитель: sensata, crydom
Реле	84134901	Производитель: sensata, crydom
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Реле	84137000	Производитель: sensata, crydom
Реле	84137001	Производитель: sensata, crydom
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Реле	84137011	Производитель: sensata, crydom
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Реле	84137021	Производитель: sensata, crydom
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Реле	84137111	Производитель: sensata, crydom
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Реле	84137130	Производитель: sensata, crydom
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Реле	84137330	Производитель: sensata, crydom
Реле	84137860	Производитель: sensata, crydom
Реле	84137870	Производитель: sensata, crydom
Реле	84140010	Производитель: sensata, crydom
Реле	9700h006-0692..ae	Производитель: sensata, crydom
Реле	9700h021-0777-qe	Производитель: sensata, crydom
Реле	9700h021-0777..qe	Производитель: sensata, crydom
Реле	9700h046-0725ne	Производитель: sensata, crydom
Реле	9904-111-31104	Производитель: sensata, crydom
Реле	9904-111-31104-2108	Производитель: sensata, crydom
Реле	9904-120-52602	Производитель: sensata, crydom
Реле	9904-120-52605	Производитель: sensata, crydom
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Реле	a2440	Производитель: sensata, crydom
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Реле	a53tp50d	Производитель: sensata, crydom
Реле	aso241	Производитель: sensata, crydom
Реле	aso242	Производитель: sensata, crydom
Реле	b485f-2	Производитель: sensata, crydom
Реле	c4oaca	Производитель: sensata, crydom
Реле	ckm0610	Производитель: sensata, crydom
Реле	ckm0630	Производитель: sensata, crydom
Реле	ckra2420	Производитель: sensata, crydom
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Реле	ckrd2410	Производитель: sensata, crydom
Реле	ckrd2420	Производитель: sensata, crydom
Реле	ckrd2430	Производитель: sensata, crydom

Реле	ckrd2430p	Производитель: sensata, crydom
Реле	ckrd4820	Производитель: sensata, crydom
Реле	ckrd4830	Производитель: sensata, crydom
Реле	ckrd6030	Производитель: sensata, crydom
Реле	cl240d05c	Производитель: sensata, crydom
Реле	cl240d10c	Производитель: sensata, crydom
Реле	cl240d10r	Производитель: sensata, crydom
Реле	cmrd2435	Производитель: sensata, crydom
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Реле	cmx200d3	Производитель: sensata, crydom
Реле	cmx60d10	Производитель: sensata, crydom
Реле	cmx60d5	Производитель: sensata, crydom
Реле	cmxe60d10	Производитель: sensata, crydom
Реле	cn024d05	Производитель: sensata, crydom
Реле	cn024d24	Производитель: sensata, crydom
Реле	cnr60a30u	Производитель: sensata, crydom
Реле	cpp11-52-7.00a-oc-v	Производитель: sensata, crydom
Реле	csw2410	Производитель: sensata, crydom
Реле	csw2425k	Производитель: sensata, crydom
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Реле	cwd2425p	Производитель: sensata, crydom
Реле	cwd48125p	Производитель: sensata, crydom
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Реле	cwu24125p	Производитель: sensata, crydom
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Реле	cx240d5r	Производитель: sensata, crydom
Реле	cx241	Производитель: sensata, crydom
Реле	cx380d5	Производитель: sensata, crydom
Реле	cx480d5	Производитель: sensata, crydom
Реле	cxe240d5	Производитель: sensata, crydom
Реле	cxe240d5r	Производитель: sensata, crydom
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Реле	d06d60	Производитель: sensata, crydom
Реле	d1210k	Производитель: sensata, crydom
Реле	d1225k	Производитель: sensata, crydom
Реле	d1240-b	Производитель: sensata, crydom
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Реле	d1d07l	Производитель: sensata, crydom
Реле	d1d12	Производитель: sensata, crydom
Реле	d1d12k	Производитель: sensata, crydom
Реле	d1d20	Производитель: sensata, crydom
Реле	d1d40	Производитель: sensata, crydom

Реле	d1d40k	Производитель: sensata, crydom
Реле	d1d40l	Производитель: sensata, crydom
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Реле	d1d60.	Производитель: sensata, crydom
Реле	d2410	Производитель: sensata, crydom
Реле	d2410k	Производитель: sensata, crydom
Реле	d2410pg	Производитель: sensata, crydom
Реле	d2425	Производитель: sensata, crydom
Реле	d2425-10	Производитель: sensata, crydom
Реле	d2425d	Производитель: sensata, crydom
Реле	d2425k.	Производитель: sensata, crydom
Реле	d2425pg	Производитель: sensata, crydom
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Реле	d2440-10	Производитель: sensata, crydom
Реле	d2440d	Производитель: sensata, crydom
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Реле	d2450-10	Производитель: sensata, crydom
Реле	d2450-b	Производитель: sensata, crydom
Реле	d2450k	Производитель: sensata, crydom
Реле	d2450pg	Производитель: sensata, crydom
Реле	d2475	Производитель: sensata, crydom
Реле	d2490	Производитель: sensata, crydom
Реле	d2d07	Производитель: sensata, crydom
Реле	d2d12	Производитель: sensata, crydom
Реле	d2d40	Производитель: sensata, crydom
Реле	d2w202f	Производитель: sensata, crydom
Реле	d2w203f	Производитель: sensata, crydom
Реле	d2w203f11	Производитель: sensata, crydom
Реле	d4825	Производитель: sensata, crydom
Реле	d4825k	Производитель: sensata, crydom
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Реле	d4840-10	Производитель: sensata, crydom
Реле	d4850	Производитель: sensata, crydom
Реле	d4875	Производитель: sensata, crydom
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Реле	d4d07	Производитель: sensata, crydom
Реле	d4d12	Производитель: sensata, crydom
Реле	d4d12k	Производитель: sensata, crydom
Реле	d53rv50ch	Производитель: sensata, crydom
Реле	d53tp25d	Производитель: sensata, crydom
Реле	d53tp50d	Производитель: sensata, crydom
Реле	d5d07	Производитель: sensata, crydom
Реле	d5d10	Производитель: sensata, crydom
Реле	dc60s3	Производитель: sensata, crydom
Реле	dc60s5	Производитель: sensata, crydom
Реле	dc60s5b	Производитель: sensata, crydom
Реле	dmo063	Производитель: sensata, crydom
Реле	do061a	Производитель: sensata, crydom
Реле	do061a..	Производитель: sensata, crydom
Реле	dpa6111	Производитель: sensata, crydom

Реле	dr-iac24	Производитель: sensata, crydom
Реле	dr06d06	Производитель: sensata, crydom
Реле	dr06d12	Производитель: sensata, crydom
Реле	dr10d03	Производитель: sensata, crydom
Реле	dr2220d30u	Производитель: sensata, crydom
Реле	dr2260a20u	Производитель: sensata, crydom
Реле	dr2260a20v	Производитель: sensata, crydom
Реле	dr2260a30u.	Производитель: sensata, crydom
Реле	dr2260a30ur	Производитель: sensata, crydom
Реле	dr2260d20u	Производитель: sensata, crydom
Реле	dr2260d30v.	Производитель: sensata, crydom
Реле	dr24d03	Производитель: sensata, crydom
Реле	dr24d03.	Производитель: sensata, crydom
Реле	dr24d06	Производитель: sensata, crydom
Реле	dr24d12	Производитель: sensata, crydom
Реле	dra1-cmx60d10	Производитель: sensata, crydom
Реле	dra1-cmx60d5	Производитель: sensata, crydom
Реле	dra1-cmxe100d10	Производитель: sensata, crydom
Реле	dra1-cmxe100d6	Производитель: sensata, crydom
Реле	dra1-cmxe60d10	Производитель: sensata, crydom
Реле	dra1-cx240d5	Производитель: sensata, crydom
Реле	dra1-cx240d5-b	Производитель: sensata, crydom
Реле	dra1-cxe240d5	Производитель: sensata, crydom
Реле	dra1-mp240d3	Производитель: sensata, crydom
Реле	dra1-mp240d4	Производитель: sensata, crydom
Реле	dra1-mpdcd3	Производитель: sensata, crydom
Реле	dra1cmx60d10	Производитель: sensata, crydom
Реле	dra1cmxe100d6	Производитель: sensata, crydom
Реле	dra1cmxe200d3	Производитель: sensata, crydom
Реле	dra1mpdcd3b	Производитель: sensata, crydom
Реле	dracn240a24	Производитель: sensata, crydom
Реле	drc3p48a411	Производитель: sensata, crydom
Реле	drc3p48b400r	Производитель: sensata, crydom
Реле	drc3p48c411r2	Производитель: sensata, crydom
Реле	drc3p48d411r	Производитель: sensata, crydom
Реле	drc3p48d433r	Производитель: sensata, crydom
Реле	drc3r48e440	Производитель: sensata, crydom
Реле	drh3p60d18	Производитель: sensata, crydom
Реле	drh3p60d20	Производитель: sensata, crydom
Реле	drml1	Производитель: sensata, crydom
Реле	drs1	Производитель: sensata, crydom
Реле	drscn30	Производитель: sensata, crydom
Реле	drsed	Производитель: sensata, crydom
Реле	drta06d06	Производитель: sensata, crydom
Реле	drtl24b06	Производитель: sensata, crydom
Реле	ed06c5	Производитель: sensata, crydom
Реле	ed24c3	Производитель: sensata, crydom
Реле	ed24c3r	Производитель: sensata, crydom
Реле	ed24c5	Производитель: sensata, crydom
Реле	ed24d3	Производитель: sensata, crydom

Реле	ed24d3r	Производитель: sensata, crydom
Реле	el100d10-05	Производитель: sensata, crydom
Реле	el100d1005	Производитель: sensata, crydom
Реле	el100d1024	Производитель: sensata, crydom
Реле	el100d524	Производитель: sensata, crydom
Реле	el240a10-05	Производитель: sensata, crydom
Реле	el240a2005	Производитель: sensata, crydom
Реле	el240a2024	Производитель: sensata, crydom
Реле	el240a30-05	Производитель: sensata, crydom
Реле	el240a30-12	Производитель: sensata, crydom
Реле	el240a30-24	Производитель: sensata, crydom
Реле	el240a30r-05	Производитель: sensata, crydom
Реле	ez240d12s	Производитель: sensata, crydom
Реле	ez240d5	Производитель: sensata, crydom
Реле	ga8-6b02	Производитель: sensata, crydom
Реле	gn050dsr	Производитель: sensata, crydom
Реле	gn325asz	Производитель: sensata, crydom
Реле	gn325bsz	Производитель: sensata, crydom
Реле	gn325dsz	Производитель: sensata, crydom
Реле	gn325dsz.	Производитель: sensata, crydom
Реле	gn325esz	Производитель: sensata, crydom
Реле	gn350dsz	Производитель: sensata, crydom
Реле	gnr10acz	Производитель: sensata, crydom
Реле	gnr20acz	Производитель: sensata, crydom
Реле	gnr20dcz	Производитель: sensata, crydom
Реле	gnr20dhz	Производитель: sensata, crydom
Реле	gnr25dcr	Производитель: sensata, crydom
Реле	gnr25dcz	Производитель: sensata, crydom
Реле	gnr30acz	Производитель: sensata, crydom
Реле	gnr30dcz	Производитель: sensata, crydom
Реле	gnr35acz	Производитель: sensata, crydom
Реле	gnr35dhz	Производитель: sensata, crydom
Реле	gnr45acz	Производитель: sensata, crydom
Реле	gnr45dhz	Производитель: sensata, crydom
Реле	h12d4850	Производитель: sensata, crydom
Реле	h12d4890k	Производитель: sensata, crydom
Реле	h12wd4850	Производитель: sensata, crydom
Реле	h12wd4850pg	Производитель: sensata, crydom
Реле	h12wd4890	Производитель: sensata, crydom
Реле	ha4825	Производитель: sensata, crydom
Реле	ha4850	Производитель: sensata, crydom
Реле	hd48125	Производитель: sensata, crydom
Реле	hd48125g	Производитель: sensata, crydom
Реле	hd48125k	Производитель: sensata, crydom
Реле	hd4812k	Производитель: sensata, crydom
Реле	hd4825	Производитель: sensata, crydom
Реле	hd4825k	Производитель: sensata, crydom
Реле	hd4850	Производитель: sensata, crydom
Реле	hd4850-10	Производитель: sensata, crydom
Реле	hd4850k	Производитель: sensata, crydom

Реле	hd4875k	Производитель: sensata, crydom
Реле	hd4890	Производитель: sensata, crydom
Реле	hd4890-10	Производитель: sensata, crydom
Реле	hd4890k	Производитель: sensata, crydom
Реле	hdc100a160	Производитель: sensata, crydom
Реле	hk4	Производитель: sensata, crydom
Реле	hs053	Производитель: sensata, crydom
Реле	hs053d53tp50d	Производитель: sensata, crydom
Реле	hs072	Производитель: sensata, crydom
Реле	hs151dr	Производитель: sensata, crydom
Реле	hs201dr	Производитель: sensata, crydom
Реле	hs301dr	Производитель: sensata, crydom
Реле	hs501dr	Производитель: sensata, crydom
Реле	hsp-3	Производитель: sensata, crydom
Реле	hsp-5	Производитель: sensata, crydom
Реле	hsp-7	Производитель: sensata, crydom
Реле	ieg6-1-72-10.0-01-v	Производитель: sensata, crydom
Реле	ieg6-1-72-30.0-01-v	Производитель: sensata, crydom
Реле	ielhk11-1-72-15.0-01-v	Производитель: sensata, crydom
Реле	ks101	Производитель: sensata, crydom
Реле	ks300	Производитель: sensata, crydom
Реле	l512f	Производитель: sensata, crydom
Реле	ma10-aa-051-3	Производитель: sensata, crydom
Реле	mcpc2450a	Производитель: sensata, crydom
Реле	mcpc2450c	Производитель: sensata, crydom
Реле	mcpc2450d	Производитель: sensata, crydom
Реле	mcpc4850d	Производитель: sensata, crydom
Реле	mcx240d5	Производитель: sensata, crydom
Реле	mp240d3	Производитель: sensata, crydom
Реле	mp240d4	Производитель: sensata, crydom
Реле	mpdcd3	Производитель: sensata, crydom
Реле	mpdcd3-b	Производитель: sensata, crydom
Реле	oac5a	Производитель: sensata, crydom
Реле	odc5	Производитель: sensata, crydom
Реле	pb-4	Производитель: sensata, crydom
Реле	pf240d25	Производитель: sensata, crydom
Реле	pf240d25r	Производитель: sensata, crydom
Реле	pf480d25	Производитель: sensata, crydom
Реле	pm2260d25v.	Производитель: sensata, crydom
Реле	pm2260d50v.	Производитель: sensata, crydom
Реле	pm2260d95v	Производитель: sensata, crydom
Реле	pm2260d95v.	Производитель: sensata, crydom
Реле	pmp2450w	Производитель: sensata, crydom
Реле	pmp4850w	Производитель: sensata, crydom
Реле	pp11-2-2.00a-xx-v	Производитель: sensata, crydom
Реле	r11-1-15.0a-9641-1	Производитель: sensata, crydom
Реле	r11-2-5.00a-b06cv-v	Производитель: sensata, crydom
Реле	r11-61-5.00a-w06ch-v	Производитель: sensata, crydom
Реле	r21-2-10.0a-b06cv-v	Производитель: sensata, crydom
Реле	rp-1b	Производитель: sensata, crydom

Реле	rp-4a	Производитель: sensata, crydom
Реле	sdi2415	Производитель: sensata, crydom
Реле	sdv2415	Производитель: sensata, crydom
Реле	sdv2415r	Производитель: sensata, crydom
Реле	smr2425-6	Производитель: sensata, crydom
Реле	spf240d25	Производитель: sensata, crydom
Реле	ssc1000-25-24	Производитель: sensata, crydom
Реле	t11-2-1.00a-01-11a1-v	Производитель: sensata, crydom
Реле	t11-2-1.25a-01-11a-v	Производитель: sensata, crydom
Реле	t11-2-10.0a-01-11a1-v	Производитель: sensata, crydom
Реле	t11-2-2.00a-01-11a1-v	Производитель: sensata, crydom
Реле	t11-2-20.0a-01-11a1-v	Производитель: sensata, crydom
Реле	t11-4-2.50a-26478-1	Производитель: sensata, crydom
Реле	t485c	Производитель: sensata, crydom
Реле	td2420q	Производитель: sensata, crydom
Реле	td2425	Производитель: sensata, crydom
Реле	upg6-1-72-253-01	Производитель: sensata, crydom
Реле	ys11a45a-d10	Производитель: sensata, crydom
Реле	ys11a60a-d10	Производитель: sensata, crydom
Реле	ys11a80a-c7	Производитель: sensata, crydom
Реле	ys11a80a-d2	Производитель: sensata, crydom
Реле	ys11a80a-d7	Производитель: sensata, crydom
Реле	4344-145nc+10f	Производитель: sensata, crydom
Реле	4344-145nc+50f	Производитель: sensata, crydom

ckr , dr22 ,b48-2 , b48-2t , m50 diode , pm22 , i/o модуль , dra3p ,dra1 , el ,h1 , dr45 , gn-dual , pmp ,cl , 1-dc , m серия реле , output модуль , cmx , 1-dcl , cs , dc60 , 53tp , dr серия реле , input модуль , , hs серия реле , heat sinks ,m серия реле , input модуль , , hs серия реле , assemblies , c4 серия реле , input модуль , , c4 серия реле , output модуль , , gms , thermal pads , 53rv , aso , do , dpa ,hardware kits , lug terminals , ac filters , ckm , d06d , d2w , dr серия реле , output модуль , , aspf , drs , 2se , 3at , 4at , 10at , add on модуль , at , din rail brackets , dmo

[где и как купить в Минске?](#)



CW24 Series

- Ratings from 10 A to 125 A @ 24-280 VAC
- SCR Output for heavy industrial loads
- LED Status Indicator
- UL/CSA/TUV Approved, CE Compliant to EN60950-1
- Improved SEMS screw and washer
- Redesigned housing with anti-rotation barriers
- AC or DC control and Universal AC/DC control
- EMC Compliant to Level 3
- Epoxy Free Design
- Removable IP20 touch-safe cover
- DBC substrate for superior thermal performance

For **Generation 3** datasheet [click here](#)

PRODUCT SELECTION

Control Voltage	10 A	25 A	50 A	90 A	125 A
3-32 VDC	CWD2410	CWD2425	CWD2450	CWD2490	CWD24125
90-280 VAC	CWA2410	CWA2425	CWA2450	CWA2490	CWA24125
18-36 VAC	CWA2410E	CWA2425E	CWA2450E	CWA2490E	CWA24125E
20-48 VDC/20-280 VAC	CWU2410	CWU2425	CWU2450	CWU2490	CWU24125

AVAILABLE OPTIONS

Series

Control Voltage
D: 3-32 VDC
U: 20-48 VDC or 20-280 VAC
A: 90-280 VAC
AxxxxE: 18-36 VAC

Thermal Pad
Blank: Not Included
H: Included

Operating Voltage
24: 24-280 VAC

Rated Load Current
10: 10 Amps
25: 25 Amps
50: 50 Amps
90: 90 Amps
125: 125 Amps

Overvoltage Protection
Blank: Not Included
P: Included (1)

Switching Type
Blank: Zero Voltage Turn-On
-10: Instantaneous Turn-On

● Required for valid part number
 ● For options only and not required for valid part number
 * Not all part number combinations are available.
 Contact Crydom Technical Support for information on the availability of a specific part number.

OUTPUT SPECIFICATIONS (2)

Description	10 A	25 A	50 A	90 A	125 A
Operating Voltage (47-440Hz) [Vrms]	24-280	24-280	24-280	24-280	24-280
Transient Overvoltage [Vpk] (1)	600	600	600	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	1	1	1	1	1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec]	500	500	500	500	500
Maximum Load Current [Arms] (3)	10	25	50	90	125
Minimum Load Current [mArms]	150	150	150	250	250
Maximum 1 Cycle Surge Current (50/60Hz) [Apk]	380/400	570/600	810/850	1290/1350	1900/2000
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.3	1.3	1.3	1.3	1.25
Thermal Resistance Junction to Case (Rjc) [°C/W]	0.35	0.3	0.2	0.16	0.11
Maximum 1/2 Cycle I ² t for Fusing (50/60Hz) [A ² sec]	720/660	1620/1500	3280/3000	8320/7560	18000/16600
Minimum Power Factor (at Maximum load) (1)	0.5	0.5	0.5	0.5	0.5
HP Rating UL 508/IEC60947 [-10 Option][HP (KW)]: 120 VAC	0.5 (0.37)	1 (0.74)	2 (1.5)	3 (2.24)	5 (3.37)
HP Rating UL 508/IEC60947 [-10 Option][HP (KW)]: 240 VAC	1.5 (1.1)	3 (2.2)	5 (3.73)	7.5 (5.6)	10 (7.5)
HP Rating UL 508/IEC60947 [HP (KW)]: 120 VAC	0.5 (0.37)	0.75 (0.56)	1 (0.74)	2 (1.5)	3 (2.24)
HP Rating UL 508/IEC60947 [HP (KW)]: 240 VAC	1.5 (1.1)	2 (1.5)	3 (2.2)	5 (3.73)	7.5 (5.6)

INPUT SPECIFICATIONS (2)

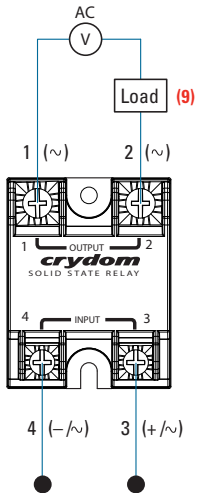
Description	CWD	CWA	CWAxxxxE	CWU
Control Voltage Range	3-32 VDC	90-280 VAC (4)	18-36 VAC	20-48 VDC/ 20-280 VAC
Maximum Reverse Voltage	-32 VDC	-	-	-
Minimum Turn-On Voltage	3 VDC (5)	90 VAC	18 VAC	19 VDC/VAC
Must Turn-Off Voltage	1 VDC	10 VAC	4 VAC	5 VDC/VAC
Minimum Input Current (for on-state)	10 mA	6 mA	13 mA	7/13 mA
Maximum Input Current	15 mA	10 mA	15 mA	11/9 mA
Nominal Input Impedance	Current Regulated	Current Regulated	Current Regulated	Current Regulated
Maximum Turn-On Time [msec]	1/2 Cycle (6)	20	20	20
Maximum Turn-Off Time [msec]	1/2 Cycle	30	30	30

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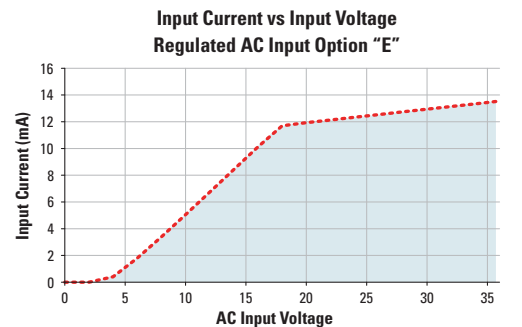
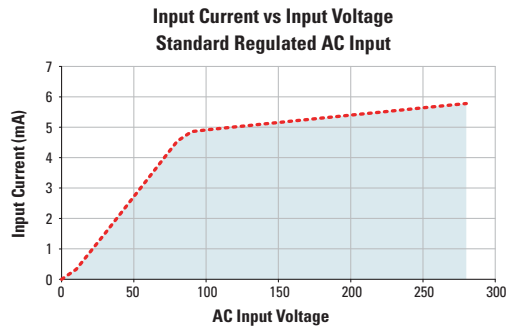
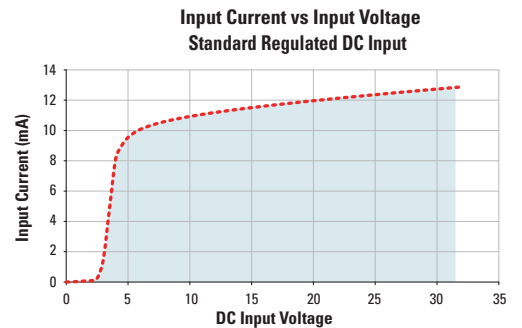
GENERAL SPECIFICATIONS (1)

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range (7)	-40 to 80 °C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	2.88 oz (81.53 g)
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Input Terminal Screw Torque Range (in-lb/Nm)	13-15 / 1.5-1.7
Load Terminal Screw Torque Range (in-lb/Nm)	18-20 / 2-2.2
SSR Mounting Screw Torque Range (in-lb/Nm)	18-20 / 2-2.2
Input/Output Terminal Screw Thread Size	#6-32 UNC / #8-32 UNC
Humidity per IEC60068-2-78	93% non-condensing
LED Input Status Indicator	Green
MTBF (Mean Time Between Failures) at 40°C ambient temperature (8)	11,641,553 hours (1,328 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (8)	7,210,376 hours (823 years)

WIRING DIAGRAM

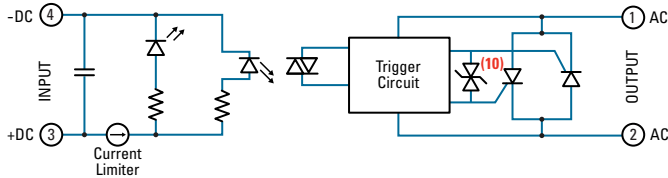


Recommended Wire Sizes		
Terminals	Wire Size (Solid / Stranded)	Wire Pull-Out Strength (lb)[N]
Input	24 AWG (0.2 mm ²) / 0.2 [minimum]	10 [44.5]
	2 x 12 AWG (3.3 mm ²) / 3.3 [maximum]	90 [400]
Output	20 AWG (0.5 mm ²) / 0.518 [minimum]	30 [133]
	2 x 10 AWG (5.3 mm ²) / 5.3 [maximum]	110 [490]
	2 x 8 AWG (8.4 mm ²) / 8.4 [maximum]	90 [400]

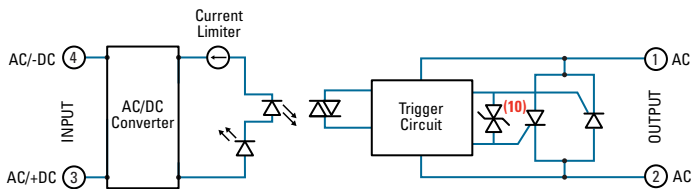


EQUIVALENT CIRCUIT BLOCK DIAGRAMS

CWD Series DC Control



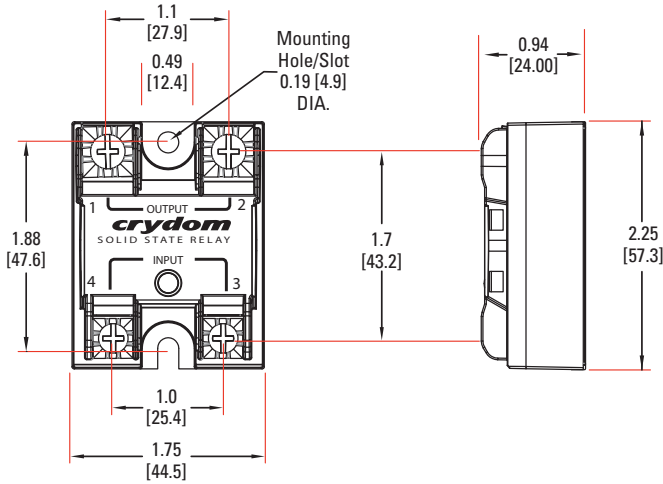
CWA/CWU Series AC Control



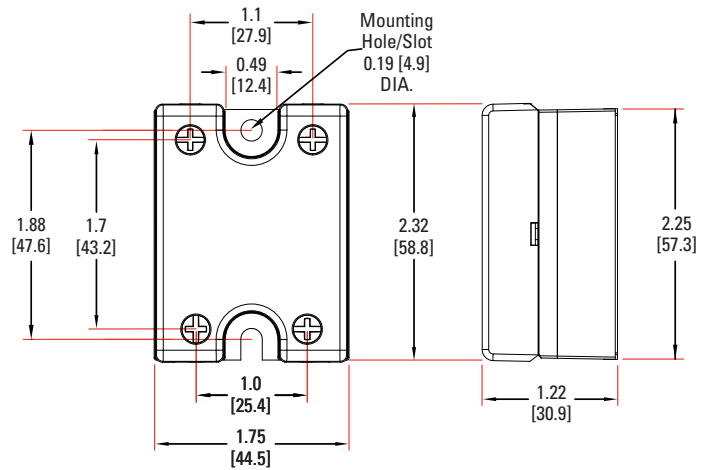
MECHANICAL SPECIFICATIONS ⁽¹⁾

Tolerances: ±0.02 in / 0.5 mm
 All dimensions are in: inches [millimeters]

Screw Termination



Screw Termination, IP20



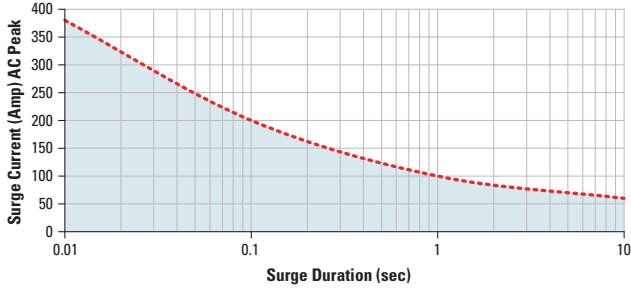
GENERAL NOTES

- (1) "P" option output will self trigger between 450-600 Vpk. Power factor 0.7 or higher, not suitable for capacitive loads.
- (2) All parameters at 25°C unless otherwise specified.
- (3) Heat sinking required, see derating curves
- (4) For ambient temperature above 40°C the maximum control voltage must not exceed 250 VAC.
- (5) Increase minimum voltage by 1V for operations from -20 to -40°C.
- (6) Turn-on time for Instantaneous turn-on versions is 0.1 msec and 7msec for CWU models.
- (7) AC input models operating range is -20 to 80 °C.
- (8) All parameters at 50% power rating and 100% duty cycle (contact Crydom tech support for detailed report).
- (9) Load can be wired to either SSR output terminal 1 or 2.
- (10) Select P option for overvoltage protection.
- (11) For single surge pulse Tc=25°C; Tj=125°C. For AC Output SSRs, AC Rms value of surge current equals the peak value divided by $\sqrt{2}$ (1.414).

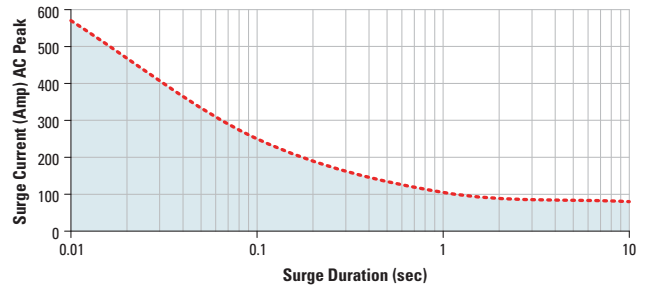
For additional information or specific questions, contact Crydom Technical Support.

SURGE CURRENT INFORMATION --- Single Pulse (11)

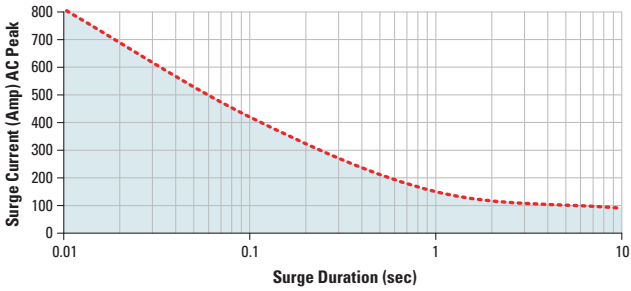
CWxxx10



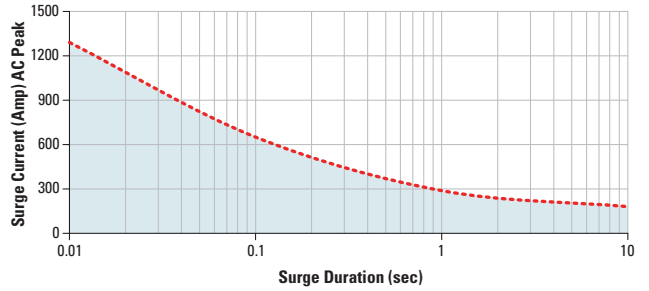
CWxxx25



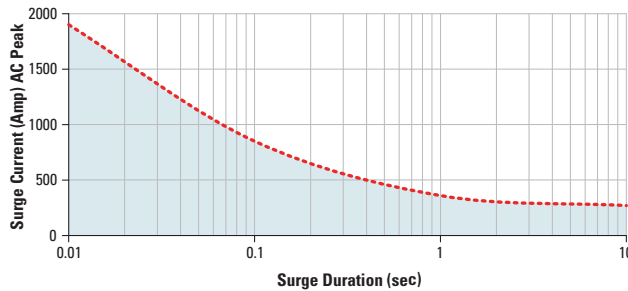
CWxxx50



CWxxx90

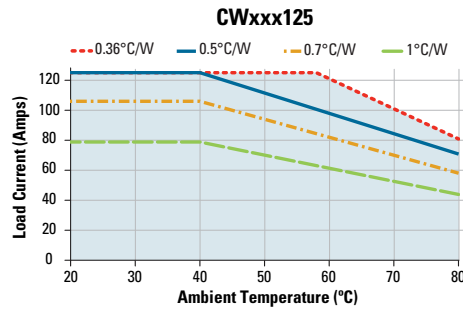
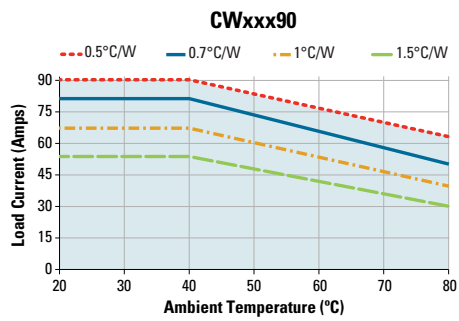
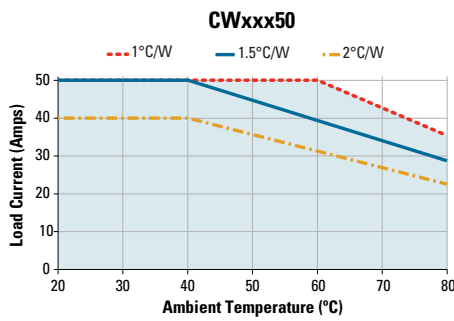
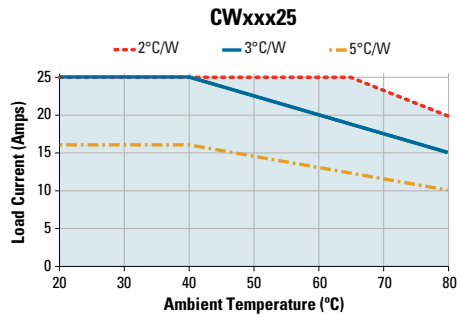
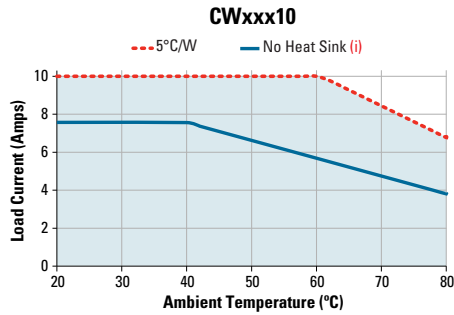


CWxxx125



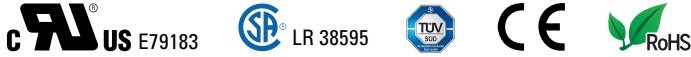
THERMAL DERATE INFORMATION

(i) SSR metal base plate acting as heat sink, it must be exposed to free ambient air.



AGENCY APPROVALS

EN60950-1: Meets the requirements of sections 1.5: 1.7; 2.9: 2.10.5.3: 4.2: 4.5: 4.7:
 Certified according to EN 62314:2006
 IEC 61000-4-2 Electrostatic Discharge Level 3
 IEC 61000-4-4 Electrically Fast Transients Level 3
 IEC 61000-4-5 Electrical Surges Level 3



ACCESSORIES






New Accessory!
Hardware Kits

Hardware Kit
 Part number: HK4



Bag with 2 square brass accessories and 2 screw 8-32 x 5/8 for output. Used to mount TMR1 lug terminals.

Recommended Accessories

 Cover	 Hardware Kit	 Heat Sink Part No.	Thermal Resistance [°C/W]	 Lug Terminal	 Thermal Pad
KS101	HK1	HS501DR	5.0	TRM1	HSP-1
	HK4	HS301 / HS301DR	3.0	TRM6	HSP-2
		HS251	2.5		
		HS201 / HS201DR	2.0		
		HS202 / HS202DR	2.0		
		HS172	1.7		
		HS151 / HS151DR	1.5		
		HS122 / HS122DR	1.2		
		HS103 / HS103DR	1.0		
		HS101	1.0		
		HS073	0.7		
		HS072	0.7		
		HS053	0.5		
		HS033	0.36		
	HS023	0.25			

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⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / 危險

<p>HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH.</p> <ul style="list-style-type: none"> • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. <p>Failure to follow these instructions will result in death or serious injury.</p>	<p>RIESGO DE DESCARGA ELECTRICA O EXPLOSION.</p> <ul style="list-style-type: none"> • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. <p>El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.</p>	<p>RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION</p> <ul style="list-style-type: none"> • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en olace avant de mettre sous <p>De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.</p>	<p>GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION.</p> <ul style="list-style-type: none"> • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. <p>Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.</p>	<p>RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE.</p> <ul style="list-style-type: none"> • Spenga tutta l'alimentazione che fornisce questa apparecchiatura prima di lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima dell'accensione <p>L'omissione di queste istruzioni provocherà la morte o lesioni serie</p>	<p>存在电击、爆炸或电弧闪烁危险</p> <ul style="list-style-type: none"> • 在操作此设备之前请先关闭电源。 <p>若不遵守这些说明,可能会导致严重的人身伤害甚至死亡。</p>
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⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / 警告

<p>RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE</p> <ul style="list-style-type: none"> • The product's side panels may be hot, allow the product to cool before touching. • Follow proper mounting instructions including torque values. • Do not allow liquids or foreign objects to enter this product. <p>Failure to follow these instructions can result in serious injury, or equipment damage.</p>	<p>RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER</p> <ul style="list-style-type: none"> • Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. • Respecter les consignes de montage, et notamment les couples de serrage. • Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. <p>Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.</p>	<p>GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG</p> <ul style="list-style-type: none"> • Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. • Beachten Sie die Montageanweisungen, • Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. <p>Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.</p>
<p>RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD</p> <ul style="list-style-type: none"> • Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. • Respetar las instrucciones de montaje, y en particular los pares de apretado. • No dejar que penetren líquidos o cuerpos extraños en el producto. <p>Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.</p>	<p>RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO</p> <ul style="list-style-type: none"> • I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. • Seguire le istruzioni di montaggio corrette. • Non far entrare liquidi o oggetti estranei in questo apparecchio. <p>La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.</p>	<p>材料损坏和高温外壳的危险性</p> <ul style="list-style-type: none"> • 产品的一侧面板可能很热, 在其冷却前请不要触碰。 • 遵照正确的安装说明, 包括扭矩值。 • 请勿让液体及其他异物进入本产品。 <p>如不能正确执行这些操作说明, 极有可能造成严重人体伤害或者设备的损坏。</p>

ANNEX - ENVIRONMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People’s Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

附件 – 环保信息

此附件所标示的包括电子信息产品污染图标的环保信息符合中华人民共和国电子行业标准 SJ/T11364 - 2006, 电子信息产品污染控制标识要求。

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O





Series 1 480 VAC

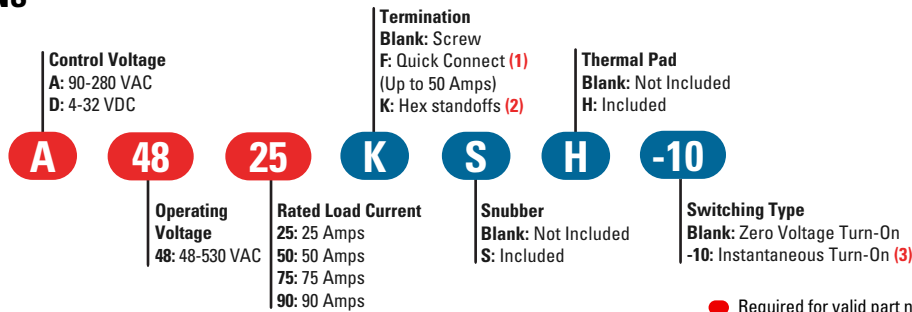
- Ratings from 25 A to 90 A @ 48-530 VAC
- SCR output for heavy industrial loads
- Zero voltage or instantaneous turn-on outputs
- UL/CSA/VDE Approved, CE Compliant to EN60950-1
- Improved SEMS screw and washer
- Redesigned housing with anti-rotation barriers
- AC or DC control
- Direct bond copper substrate
- EMC compliant to Level 3
- Direct power lead frame
- Epoxy free design

For **Generation 3** datasheet [click here](#)

PRODUCT SELECTION

Control Voltage	25 A	50 A	75 A	90 A
4-32 VDC	D4825	D4850	D4875	D4890
90-280 VAC	A4825	A4850	A4875	A4890

AVAILABLE OPTIONS



- Required for valid part number
- For options only and not required for valid part number
- * Not all part number combinations are available. Contact Crydom Technical support for information on the availability of a specific part number.

OUTPUT SPECIFICATIONS ⁽⁴⁾

Description	25 A	50 A	75 A	90 A
Operating Voltage (47-440Hz) [Vrms] (5)	48-530	48-530	48-530	48-530
Transient Overvoltage [Vpk]	800	800	800	800
Maximum Off-State Leakage Current @ Rated Voltage [mArms] (6)	1	1	1	1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec]	500	500	500	500
Maximum Load Current [Arms] (2)(7)	25	50	75	90
Minimum Load Current [mArms]	150	150	150	150
Maximum 1 Cycle Surge Current (50/60Hz) [Apk]	239/250	597/625	954/1000	1145/1200
Maximum On-State Voltage Drop @ Rated Current [Vrms]	1.15	1.15	1.15	1.15
Thermal Resistance Junction to Case (Rjc) [°C/W]	0.8	0.45	0.3	0.27
Maximum 1/2 Cycle I ² t for Fusing (50/60Hz) [A ² sec]	285/259	1770/1621	4555/4150	6560/5976
Minimum Power Factor (at Maximum Load)	0.5	0.5	0.5	0.5

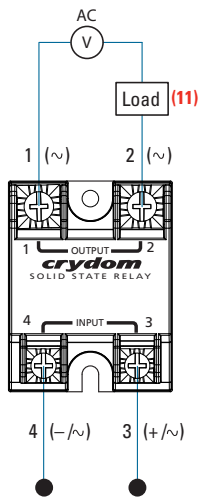
INPUT SPECIFICATIONS ⁽⁴⁾

Description	D48xx	A48xx
Control Voltage Range	4-32 VDC	90-280 Vrms (60Hz)
Maximum Reverse Voltage	-32 VDC	-
Minimum Turn-On Voltage	4.0 VDC (8)	90 Vrms
Must Turn-Off Voltage	1.0 VDC	10 Vrms
Minimum Input Current	7.0 mA	5.0 mA
Maximum Input Current	12 mA	10 mA
Nominal Input Impedance	Current Regulated	Current Regulated
Maximum Turn-On Time [msec]	1/2 Cycle (9)	20
Maximum Turn-Off Time [msec]	1/2 Cycle	30

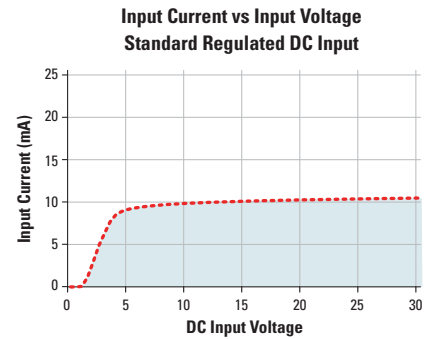
GENERAL SPECIFICATIONS (4)

Description	Parameters
Dielectric Strength, Input/Output/Base (50/60Hz)	4000 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohm
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-40 to 80 °C
Ambient Storage Temperature Range	-40 to 125 °C
Weight (typical)	2.6 oz (74.9 g)
Housing Material	94 V-0
Baseplate Material	Aluminum
Input Terminal Screw Torque Range (in-lb/Nm)	13-15 / 1.5-1.7
Load Terminal Screw Torque Range (in-lb/Nm)	18-20 / 2.0-2.2
SSR Mounting Screw Torque Range (in-lb/Nm)	18-20 / 2.0-2.2
Input/Load Terminal Screw Torque Range (in-lb/Nm) (2)	w/"K" option 8-10 / 0.9-1.13
Input/Output Terminal Screw Thread Size	#6-32 UNC / #8-32 UNC
Humidity per IEC60068-2-78	93% non-condensing
MTBF (Mean Time Between Failures) at 40°C ambient temperature (10)	11,641,553 hours (1,328 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (10)	7,210,376 hours (823 years)

WIRING DIAGRAM



Recommended Wire Sizes		
Terminals	Wire Size (Solid / Stranded)	Wire Pull-Out Strength (lb)[N]
Input	24 AWG (0.2 mm ²) / 0.2 [minimum]	10 [44.5]
	2 x 12 AWG (3.3 mm ²) / 3.3 [maximum]	90 [400]
Output	20 AWG (0.5 mm ²) / 0.518 [minimum]	30 [133]
	2 x 10 AWG (5.3 mm ²) / 5.3 [maximum]	110 [490]
	2 x 8 AWG (8.4 mm ²) / 8.4 [maximum]	90 [400]



EQUIVALENT CIRCUIT BLOCK DIAGRAMS

Diagram: Series 1 DC

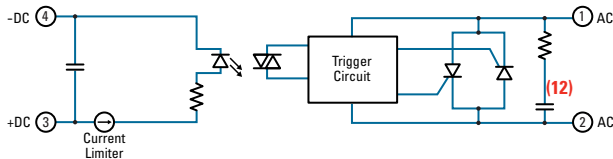
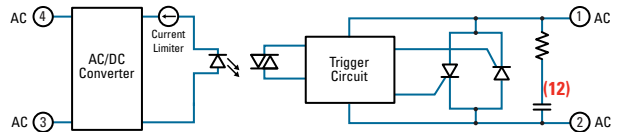


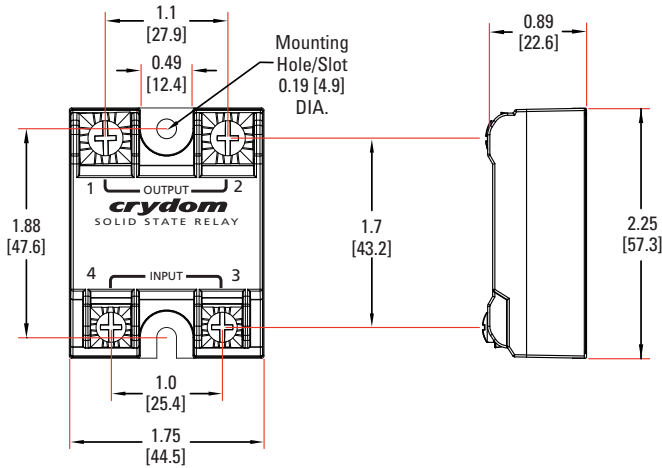
Diagram: Series 1 AC



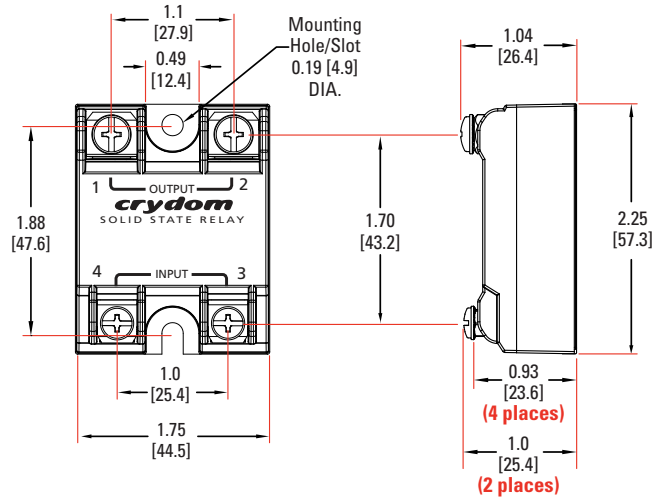
MECHANICAL SPECIFICATIONS (4)

Tolerances: ±0.02 in / 0.5 mm
All dimensions are in: inches [millimeters]

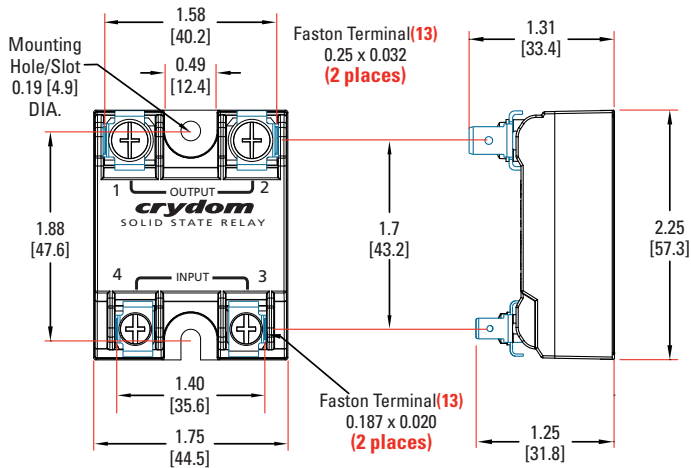
Screw Termination



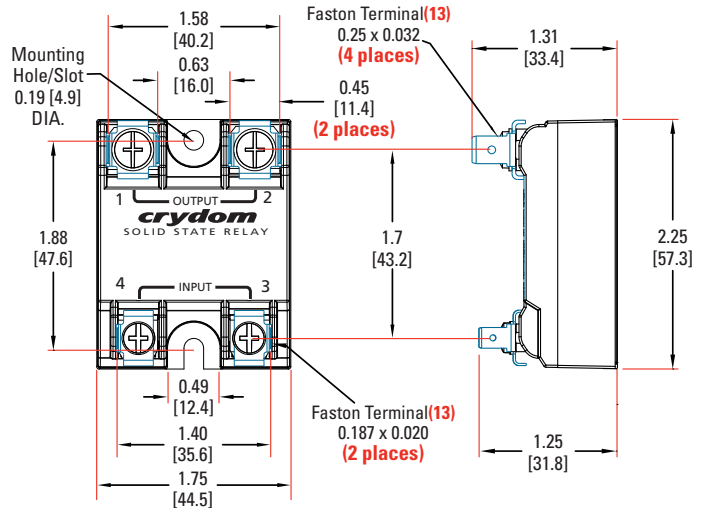
Hex Standoff Termination ("K" Option) (2)



Quick Connect Termination ("F" Option) - Up to 25 Amp (1)



Quick Connect Termination ("F" Option) - Up to 50 Amp (1)

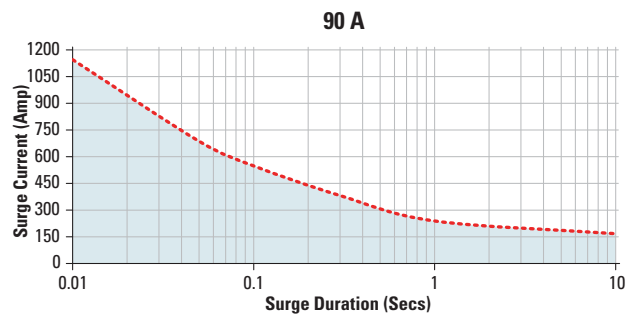
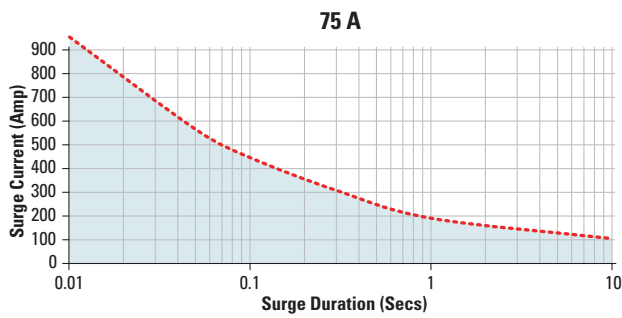
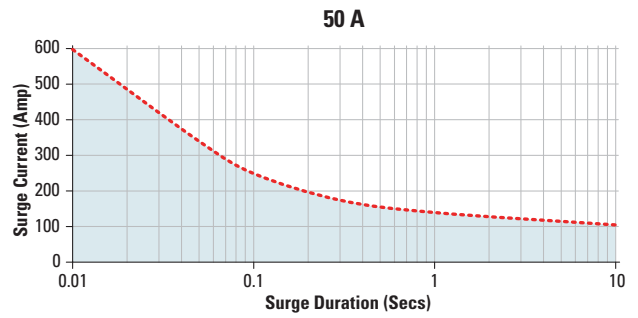
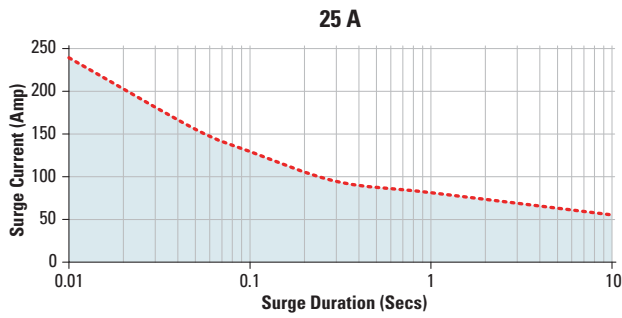


GENERAL NOTES

- (1) Single pair (up to 25 A) Double pair* (50 A model only). *Caution: User must connect to both pairs.
- (2) Option "K" is designed and tested for use with printed circuit boards or ring/fork terminals having a thickness between 0.031 and 0.093 inches (0.79 to 2.36 mm), and loads rated up to 50 Amps. For higher load currents, the "K" standoff temperature must not exceed 105°C. For additional application assistance please contact Crydom Technical Support.
- (3) Instantaneous turn-on not recommended for capacitive loads. Use zero turn-on only.
- (4) All parameters at 25°C unless otherwise specified.
- (5) For "S" option, operating voltage frequency is 47-63Hz.
- (6) For parts with option "S" maximum leakage current is 10mA.
- (7) Heat sinking required, see derating curves.
- (8) Increase minimum voltage by 1V for operations from -20 to -40°C.
- (9) Turn-on time for Instantaneous turn-on versions is 0.02 msec (DC Control Models).
- (10) All parameters at 50% power rating and 100% duty cycle (contact Crydom tech support for detailed report).
- (11) Load can be wired to either SSR output terminal 1 or 2.
- (12) Elective Internal Snubber, "S" option.
- (13) Mechanical dimensions vary from G3 models.

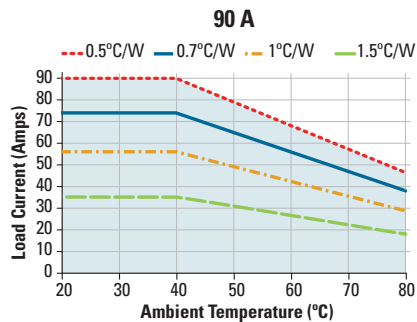
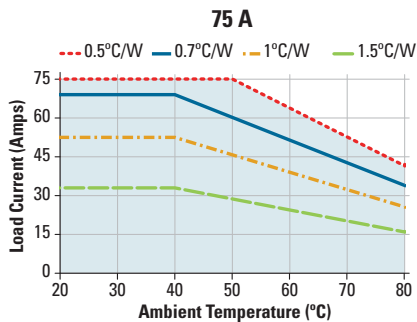
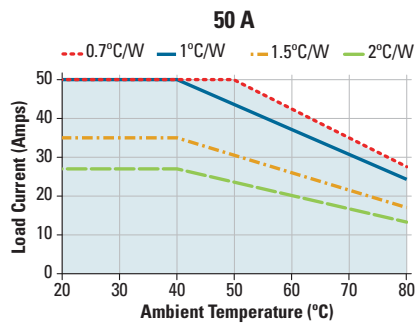
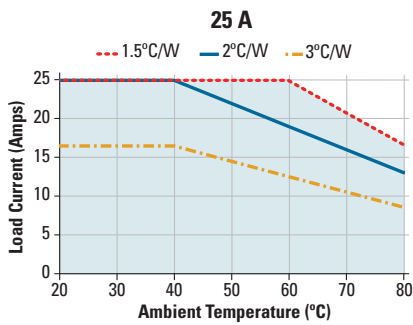
For additional information or specific questions, contact Crydom Technical Support.

SURGE CURRENT INFORMATION



Non repetitive peak surge current at Tj initial 40°C.

THERMAL DERATE INFORMATION



AGENCY APPROVALS

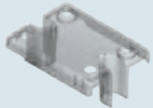
EN60950 : Meets the requirements of sections 1.5: 1.7: 2.9: 2.10.5.3: 4.2: 4.5: 4.7:
 Designed in accordance with the requirements of IEC 62314
 IEC 61000-4-2 : Electrostatic Discharge – Level 3
 IEC 61000-4-4 : Electrically Fast Transients – Level 3
 IEC 61000-4-5 : Electrical Surges – Level 3
 IEC 60068-2-6 : Vibration 0.33mm and 0.75 mm Amplitude over 10-55 Hz
 IEC 60068-2-27 : Shock Resistance 15g/11ms



ACCESSORIES

New Accessories!
Protective Cover & Hardware Kits

Protective Cover
 Part number: KS101








Clear plastic cover compatible with all new S1 designs. Safety covers provide added protection from electric shock when installing or checking equipment.

Hardware Kit
 Part number: HK4



Bag with 2 square brass accessories and 2 screw 8-32 x 5/8 for output. Used to mount TMR1 lug terminals.

Recommended Accessories

 Cover	 Hardware Kit			 Lug Terminal	 Thermal Pad
		Heat Sink Part No.	Thermal Resistance [°C/W]		
KS101	HK1	HS501DR	5.0	TRM1	HSP-1
	HK4	HS301 / HS301DR	3.0	TRM6	HSP-2
		HS251	2.5		
		HS202 / HS202DR	2.0		
		HS201 / HS201DR	2.0		
		HS172	1.7		
		HS151 / HS151DR	1.5		
		HS122 / HS122DR	1.2		
		HS103 / HS103DR	1.0		
		HS101	1.0		
		HS073	0.7		
		HS072	0.7		
		HS053	0.5		
		HS033	0.36		
		HS023	0.25		

⚠ DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / 危險

<p>HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH.</p> <ul style="list-style-type: none"> • Disconnect all power before installing or working with this equipment. • Verify all connections and replace all covers before turning on power. <p>Failure to follow these instructions will result in death or serious injury.</p>	<p>RIESGO DE DESCARGA ELECTRICA O EXPLOSION.</p> <ul style="list-style-type: none"> • Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo. • Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo. <p>El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.</p>	<p>RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION</p> <ul style="list-style-type: none"> • Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil • Vérifier tous connections, et remettre tous couverts en olace avant de mettre sous <p>De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses sérieuses.</p>	<p>GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION.</p> <ul style="list-style-type: none"> • Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen • Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen. <p>Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.</p>	<p>RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE.</p> <ul style="list-style-type: none"> • Spenga tutta l'alimentazione che fornisce questa apparecchiatura prima di lavorare a questa apparecchiatura • Verificare tutti i collegamenti e sostituire tutte le coperture prima dell'accensione <p>L'omissione di queste istruzioni provocherà la morte o lesioni serie</p>	<p>存在电击、爆炸或电弧闪烁危险</p> <ul style="list-style-type: none"> • 在操作此设备之前请先关闭电源。 <p>若不遵守这些说明,可能会导致严重的人身伤害甚至死亡。</p>
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⚠ WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / 警告

<p>RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE</p> <ul style="list-style-type: none"> • The product's side panels may be hot, allow the product to cool before touching. • Follow proper mounting instructions including torque values. • Do not allow liquids or foreign objects to enter this product. <p>Failure to follow these instructions can result in serious injury, or equipment damage.</p>	<p>RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER</p> <ul style="list-style-type: none"> • Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher. • Respecter les consignes de montage, et notamment les couples de serrage. • Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit. <p>Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.</p>	<p>GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG</p> <ul style="list-style-type: none"> • Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren. • Beachten Sie die Montageanweisungen, • Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein. <p>Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.</p>
<p>RIESGO DE DAÑOS MATERIALES Y DE SOBRECALENTAMIENTO DE LA UNIDAD</p> <ul style="list-style-type: none"> • Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo. • Respetar las instrucciones de montaje, y en particular los pares de apretado. • No dejar que penetren líquidos o cuerpos extraños en el producto. <p>Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.</p>	<p>RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO</p> <ul style="list-style-type: none"> • I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo. • Seguire le istruzioni di montaggio corrette. • Non far entrare liquidi o oggetti estranei in questo apparecchio. <p>La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.</p>	<p>材料损坏和高温外壳的危险性</p> <ul style="list-style-type: none"> • 产品的一侧面板可能很热，在其冷却前请不要触碰。 • 遵照正确的安装说明，包括扭矩值。 • 请勿让液体及其他异物进入本产品。 <p>如不能正确执行这些操作说明,极有可能造成严重人体伤害或者设备的损坏。</p>

ANNEX - ENVIROMENTAL INFORMATION

The environmental information disclosed in this annex including the EIP Pollution logo are in compliance with People’s Republic of China Electronic Industry Standard SJ/T11364 – 2006, Marking for Control of Pollution Caused by Electronic Information Products.

Part Name	Toxic or hazardous Substance and Elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybrominated biphenyls (PBB)	Polybrominated diphenyl ethers (PBDE)
Semiconductor die	X	O	O	O	O	O
Solder	X	O	O	O	O	O

附件 - 环保信息

此附件所标示的包括电子信息产品污染图标的环保信息符合中华人民共和国电子行业标准 SJ/T11364 - 2006, 电子信息产品污染控制标识要求。

部件名称	有毒有害物质或元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr (VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
半导体芯片	X	O	O	O	O	O
焊接点	X	O	O	O	O	O

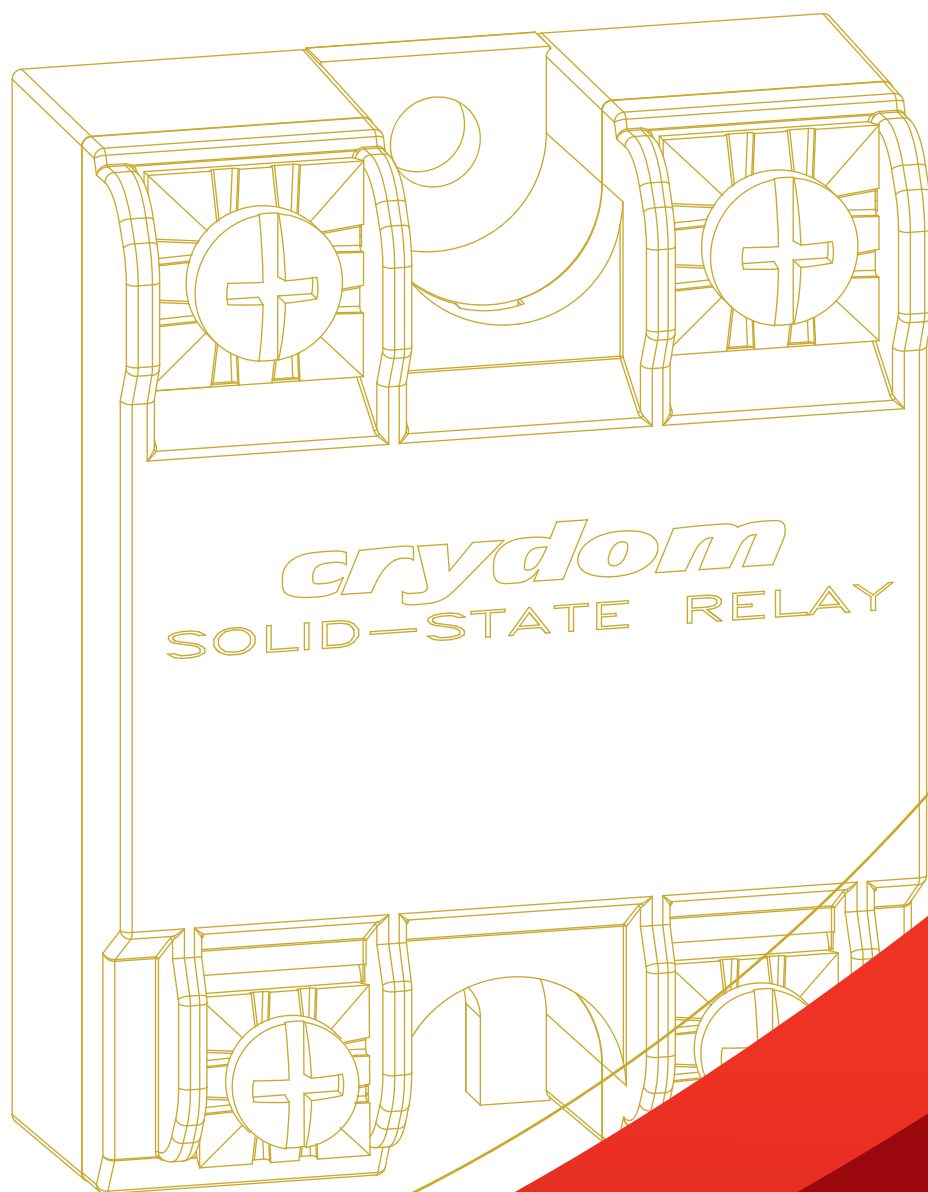


crydom[®]

The Global Expert in **Solid State Switching** Technology



Panel Mount Solid State Relays Vol. II





Crydom, a brand of Sensata Technologies and **global expert in Solid State Relay Technology**, has a distinguished record of providing high quality, world class Solid State Relay and Control Products for a variety of heating, lighting and motion control applications. Crydom products, coupled with **unparalleled technical support, timely delivery and competitive pricing**, provide Crydom's clients with the innovative products and support necessary to succeed in today's competitive and fast paced global markets.

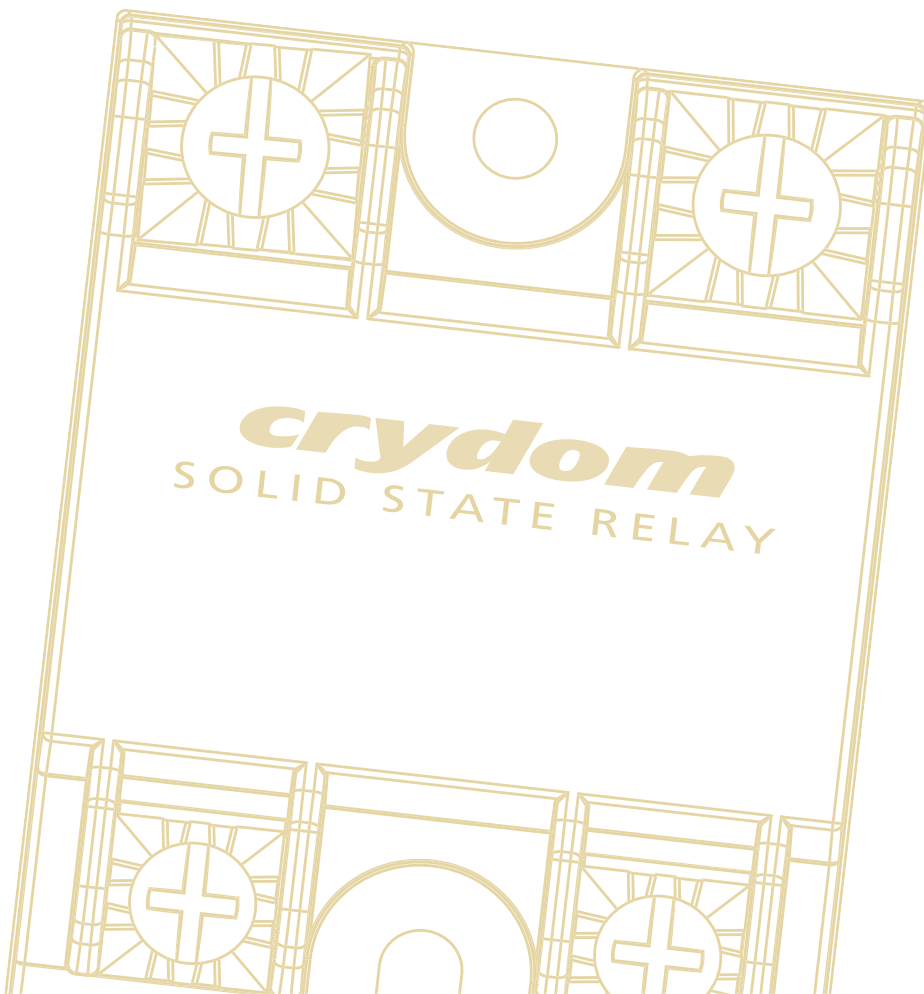
Crydom's extensive selection of standard off-the-shelf products is constantly being updated and expanded through its continuous improvement and aggressive new product development programs. Utilizing state of the art designs, materials and technology, Crydom offers a wide range of AC and DC output SSRs and solid state contactors in industry standard Panel Mount, PCB Mount, DIN Rail and Plug-In packages, all **meeting global safety and standards agency requirements** such as CE, RoHS, UL, IEC, etc.

Bolstered by four decades of Solid State Relay operations experience, Crydom also specializes and encourages **adapted and fully custom-designed SSR products** for nearly any application where unique specifications and optimized performance are critical for success.

Crydom's modern purpose-built **100,000 square foot manufacturing facility** houses all aspects of its ISO certified operation including Design and Development Engineering, Manufacturing Operations and Quality Assurance, Customer Service, Finance, Marketing and General Management, permitting close coordination of all aspects of Crydom's activities. Applications Engineering and Sales support are both performed in the field to provide Crydom's Customers with the unparalleled technical and commercial support.

Following rigid design guidelines and standards, Crydom products have set the bench mark for SSR performance and reliability world wide. In addition to **award winning designs**, Crydom has acquired an impressive list of **patents** related to SSRs and Solid State Controls, while continuing to develop new circuit and technology-related inventions as part of **extensive R&D programs**.

To learn more about Crydom SSR technology and products, or how an alliance with Crydom can contribute to the success of your project, visit **www.crydom.com** or contact your authorized Crydom Distributor or Crydom Customer Service Representative today.



www.crydom.com



The New EXPANDED range of S1 Generation 4 PANEL MOUNT SOLID STATE RELAYS

Now including DC Outputs & IP20 covers

New housing with anti-rotation barriers



Improved IP00 touch safe cover



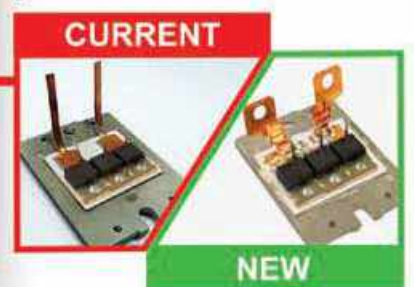
Improved IP20 safety cover



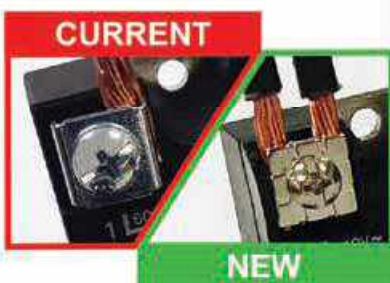
Direct output "lead frame" termination



Improved thermal performance with DBC



Improved "SEMS" screw & washer hardware



Stress & epoxy free construction



Improved performance





CW Series 280/660 VAC 10-125 Amps

- Heavy duty Solid State Relays
- Ratings from 10 to 125 Amps @ 24-280 VAC or 48-660 VAC
- AC or DC control and Universal AC/DC control
- SCR Output for heavy industrial loads
- UL/CSA/TUV Approved, CE Compliant to EN60950-1
- Certified according to EN 62314:2006



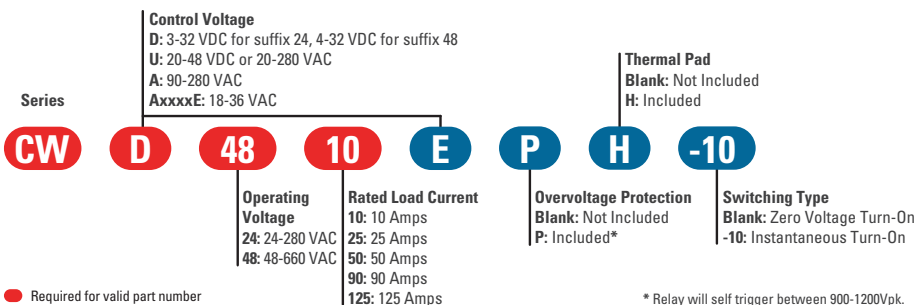
Output Specifications (A)	CWx2410	CWx2425	CWx2450	CWx2490	CWx24125	CWx4810	CWx4825	CWx4850	CWx4890	CWx48125
Operating Voltage (47-440Hz) [Vrms]	24-280	24-280	24-280	24-280	24-280	48-660	48-660	48-660	48-660	48-660
Transient Voltage [Vpk]	600	600	600	600	600	1200	1200	1200	1200	1200
Maximum 1 Cycle Surge Current (50/60Hz) [Apk]	380/400	570/600	810/850	1290/1350	1900/2000	380/400	570/600	810/850	1290/1350	1900/2000
Thermal Resistance Junction to Case [Rjc] [°C/W]	0.35	0.3	0.2	0.16	0.11	0.35	0.3	0.2	0.16	0.11
HP Rating UL 508/IEC60947 [HP] (KW): 120 VAC zero voltage t/o	0.5 (0.37)	0.75 (0.56)	1 (0.74)	2 (1.5)	3 (2.24)	0.5 (0.37)	0.75 (0.56)	1 (0.74)	2 (1.5)	3 (2.24)
HP Rating UL 508/IEC60947 [HP] (KW): 240 VAC zero voltage t/o	1.5 (1.1)	2 (1.5)	3 (2.2)	5 (3.73)	7.5 (5.6)	1.5 (1.1)	2 (1.5)	3 (2.2)	5 (3.73)	7.5 (5.6)
HP Rating UL 508/IEC60947 [HP] (KW): 480 VAC zero voltage t/o	-	-	-	-	-	3 (2.24)	5 (3.7)	7.5 (5.6)	10 (7.4)	15 (11.2)
HP Rating UL 508/IEC60947 [HP] (KW): 120 VAC instantaneous t/o	0.5 (0.4)	1 (0.7)	2 (1.0)	3 (2.2)	5 (3.7)	0.5 (0.4)	1 (0.7)	2 (1.0)	3 (2.2)	5 (3.7)
HP Rating UL 508/IEC60947 [HP] (KW): 240 VAC instantaneous t/o	1.5 (1.1)	3 (2.2)	5 (3.5)	7.5 (5.6)	10 (7.5)	1.5 (1.1)	3 (2.2)	5 (3.5)	7.5 (5.6)	10 (7.5)
HP Rating UL 508/IEC60947 [HP] (KW): 480 VAC instantaneous t/o	-	-	-	-	-	3 (2.24)	5 (3.7)	7.5 (5.6)	10 (7.4)	15 (11.2)

Output Specifications (A)	10 A	25 A	50 A	90 A	125 A
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	1	1	1	1	1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec]	500	500	500	500	500
Maximum Load Current [Arms] (B)	10	25	50	90	125
Minimum Load Current [mArms]	150	150	150	250	250
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.3	1.3	1.3	1.3	1.25
Maximum 1/2 Cycle I ² t for Fusing (50/60Hz) [A ² sec]	720/660	1620/1500	3280/3000	8320/7560	18000/16600
Minimum Power Factor (at Maximum load)	0.5	0.5	0.5	0.5	0.5

Input Specifications (A)	CWD	CWA	CWAxxxxE	CWU
Control Voltage Range	3-32 VDC [suffix 24] / 4-32 VDC [suffix 48]	90-280 VAC (D)	18-36 VAC	20-48 VDC / 20-280 VAC
Maximum Reverse Voltage	-32 VDC	-	-	-
Minimum Turn-On Voltage	3 VDC [suffix 24] / 4 VDC [suffix 48] (C)	90 VAC	18 VAC	19 VDC / VAC
Minimum Turn-Off Voltage	1 VDC	10 VAC	4 VAC	5 VDC / VAC
Minimum Input Current (for on-state) [mA]	10	6	13	7/13
Maximum Input Current [mA]	15	10	15	11/9
Nominal Input Impedance [Ohms]	Current Regulated			
Maximum Turn-On Time [msec]	1/2 Cycle (E)	20	20	20
Maximum Turn-Off Time [msec]	1/2 Cycle	30	30	30

General Specifications (A)	CW Series
Dielectric Strength, Input/Output/Base (50/60Hz) [Vrms]	4000
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	10 ⁹
Maximum Capacitance, Input/Output [pF]	8
Ambient Operating Temperature Range [°C] (F)	-40 to 80
Ambient Storage Temperature Range [°C]	-40 to 125
LED Input Status Indicator	Yes, Green
Weight (Typical) [oz] (gr)	2.88 (81.53)
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Humidity	85% non-condensing
MTBF (Mean Time Between Failures) at 40°C ambient temperature (G)	11,641,553 hours (1,328 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (G)	7,210,376 hours (823 years)

Part Number Nomenclature



IEC 61000-4-2 Electrostatic Discharge Level 3
 IEC 61000-4-4 Electrically Fast Transients Level 3
 IEC 61000-4-5 Electrical Surges Level 3



CL Series 280 VAC 5-10 Amps

- Economical Solid State Relays with triac output
- Ratings of 5 and 10 Amps @ 280 VAC
- Flexible 3 to 32 VDC or 90 to 250 VAC Control Voltage
- New "K" Option for PCB mounting for IP00 versions
- UL Approved, CE Compliant to EN60950-1
- Optional IP20 safety cover



Output Specifications (A)

	5 A	10 A
Operating Voltage (47-63Hz) [Vrms]	24-280	24-280
Transient Overvoltage [Vpk] (H)	600	600
Maximum Off-State Leakage Current @ Rated Voltage [mArms]	7	7
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec]	500	500
Maximum Load Current [Arms] (B)	5	10
Minimum Load Current [mArms]	150	150
Maximum 1 Cycle Surge Current (50/60Hz) [Apk]	84/100	120/126
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.5
Thermal Resistance Junction to Case [Rjc] [°C/W]	2.3	2.3
Maximum 1/2 Cycle I² t for Fusing (50/60Hz) [A² sec]	35/42	72/66
Minimum Heat Sink for Rated Current @ 40°C [°C/W]	3	1.5
Minimum Power Factor (at Maximum load)	0.5	0.5

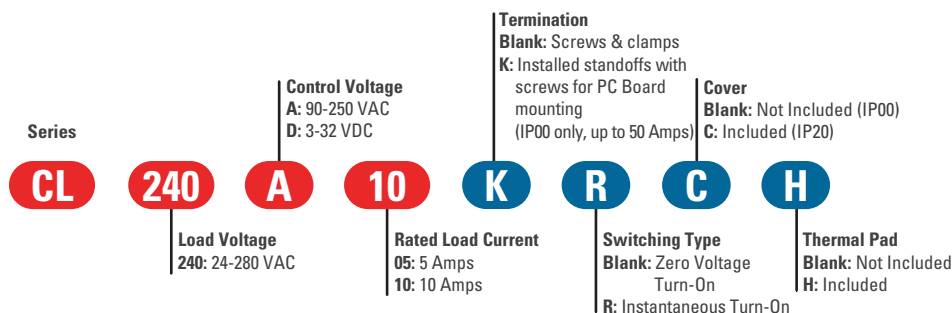
Input Specifications (A)

	AC Input	DC Input
Control Voltage Range	90-250 VAC	3-32 VDC (C)
Maximum Reverse Voltage	N/A	-32 VDC
Minimum Turn-On Voltage	90 VAC	3 VDC
Must Turn-Off Voltage	10 VAC	1 VDC
Minimum Input Current (for on-state) [mA]	6	10
Maximum Input Current [mA]	10	14
Nominal Input Impedance [Ohms]	Current Limited	Current Limited
Maximum Turn-On Time [msec]	20	1/2 Cycle (E)
Maximum Turn-Off Time [msec]	30	1/2 Cycle

General Specifications (A)

	CL Series
Dielectric Strength, Input to Output (50/60Hz) [Vrms]	4000
Dielectric Strength, Input/Output to Ground (50/60Hz)	2500
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	10 ⁹
Maximum Capacitance, Input/Output [pF]	8
Ambient Operating Temperature Range [°C] (F)	-40 to 80
Ambient Storage Temperature Range [°C]	-40 to 125
LED Input Status Indicator	Yes, Green
Weight (Typical) [oz] (gr)	2.88 (81.53)
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Humidity	85% non-condensing
MTBF (Mean Time Between Failures) at 40°C ambient temperature (G)	11,641,553 hours (1,328 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (G)	7,210,376 hours (823 years)

Part Number Nomenclature



- Required for valid part number
- For options only and not required for valid part number

IEC 61000-4-2 Electrostatic Discharge Level 3
IEC 61000-4-4 Electrically Fast Transients Level 3
IEC 61000-4-5 Electrical Surges Level 3

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DC60 Series

60 VDC

3-7 Amps

- Economical Bipolar transistor output Solid State Relays
- Ratings from 3 to 7 Amps @ 60 VDC
- Flexible 3.5 to 32 VDC Control Voltage
- New "K" Option for PCB mounting for IP00 versions
- UL Approved, CE Compliant to EN60950-1

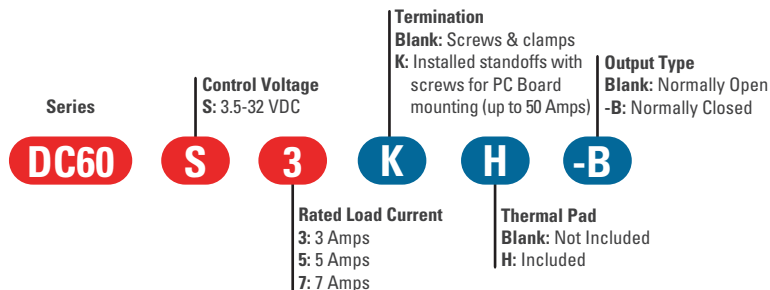


Output Specifications (A)	3 A	5 A	7 A
Recommended Operating Voltage [VDC]	3-48	3-48	3-48
Absolute Maximum Rating [VDC]	60	60	60
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.1	0.1
Maximum Load Current [Adc] (B)	3	5	7
Minimum Load Current [mA]	20	20	20
Maximum Surge Current [Adc] (10 ms)	6	10	14
Maximum On-State Voltage Drop @ Rated Current [VDC]	1.0	1.2	1.3
Thermal Resistance Junction to Case [Rjc] [°C/W]	2	2	2
Minimum Heat Sink @ Ambient [for max current = °C/W & Ta]	5 @ 60°C	5 @ 60°C	5 @ 40°C

Input Specifications (A)	DC60 Series
Control Voltage Range	3.5-32 VDC
Maximum Reverse Voltage	-32 VDC
Minimum Turn-On Voltage (J)	3.5 VDC
Minimum Turn-Off Voltage (K)	1 VDC
Minimum Input Current (for on-state) [mA]	2.2
Maximum Input Current [mA]	25
Nominal Input Impedance [Ohms]	1500
Maximum Turn-On Time [msec] (L)	0.1
Maximum Turn-Off Time [msec] (M)	0.3

General Specifications (A)	DC60 Series
Dielectric Strength, Input/Output/Base (50/60Hz) [Vrms]	4000
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	10 ⁹
Maximum Capacitance, Input/Output [pF]	8
Ambient Operating Temperature Range [°C]	-30 to 80
Ambient Storage Temperature Range [°C]	-40 to 125
Weight (Typical) [oz] (gr)	2.46 (70)
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Humidity	85% non-condensing
MTBF (Mean Time Between Failures) at 40°C ambient temperature (G)	21,395,130 hours (2,441 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (G)	11,545,504 hours (1,317 years)

Part Number Nomenclature



- Required for valid part number
- For options only and not required for valid part number



D06D Series

60 VDC
60-100 Amps

- Solid State Relays with low impedance MOSFET output
- Ratings from 60 to 100 Amps @ 60 VDC
- Flexible 3.5 to 32 VDC Control Voltage
- New "K" Option for PCB mounting for IP00 versions
- UL Approved, CE Compliant to EN60950-1

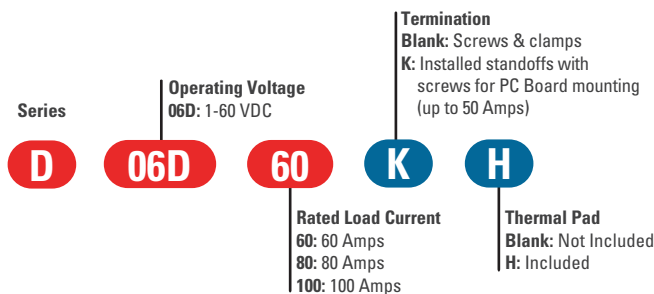


Output Specifications (A)	60 A	80 A	100 A
Recommended Operating Voltage [VDC]	1-48	1-48	1-48
Absolute Maximum Rating [VDC]	60	60	60
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.1	0.3
Maximum Load Current [Adc] (B)	60	80	100
Minimum Load Current [mA] (N)	5	5	5
Maximum Surge Current [Adc] (10 ms)	180	220	270
Maximum On-State Voltage Drop @ Rated Current [VDC]	0.6	0.7	0.5
Maximum On-State Resistance [R _{DS-ON}] [Ohms]	0.010	0.008	0.005
Thermal Resistance Junction to Case [Rjc] [°C/W]	0.73	0.73	0.51
Minimum Heat Sink for Rated Current @ 40°C [°C/W]	1.0	0.5	0.5
Maximum Pulse Wide Modulation Frequency [Hz] (P)	1000	900	700

Input Specifications (A)	D06D Series
Control Voltage Range [VDC]	3.5-32
Maximum Reverse Voltage [VDC]	-32
Minimum Turn-On Voltage [VDC] (C)	3.5
Must Turn-Off Voltage [VDC]	1
Minimum Input Current (for on-state) [mA]	10
Maximum Input Current [mA]	15
Nominal Input Impedance	Current Regulated
Maximum Turn-On Time [µsec]	100
Maximum Turn-Off Time [µsec]	150

General Specifications (A)	D06D Series
Dielectric Strength, Input/Output/Base (50/60Hz) [Vrms]	3750
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	10 ⁹
Maximum Capacitance, Input/Output [pF]	8
Ambient Operating Temperature Range [°C] (O)	-40 to 100
Ambient Storage Temperature Range [°C]	-40 to 125
Weight (Typical) [oz] (gr)	2.66 (75.5)
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Humidity	85% non-condensing
MTBF (Mean Time Between Failures) at 40°C ambient temperature (G)	21,395,130 hours (2,441 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (G)	11,545,504 hours (1,317 years)

Part Number Nomenclature



- Required for valid part number
- For options only and not required for valid part number

IEC 61000-4-2 Electrostatic Discharge Level 3
IEC 61000-4-4 Electrically Fast Transients Level 3
IEC 61000-4-5 Electrical Surges Level 3

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Series 1-DC & 1-DCL

100/200/400/500 VDC

7-100 Amps

- Solid State Relays with low impedance MOSFET output
- Ratings from 7 to 100 Amps @ 100 VDC, from 7 to 40 Amps @ 200 VDC, from 7 to 12 Amps @ 400 VDC, and from 7 to 10 Amps @ 500 VDC
- Flexible 3.5 to 32 VDC Control Voltage
- New "K" Option for PCB mounting for IP00 versions
- UL Approved, CE Compliant to EN60950-1



Output Specifications (A)	D1D07x	D1D12x	D1D20x	D1D40x	D1D60x	D1D80x	D1D100x	D2D07x	D2D12x	D2D40x	D4D07x	D4D12x	D5D07x	D5D10x
Recommended Operating Voltage [VDC]	1-72	1-72	1-72	1-72	1-72	1-72	1-72	1-150	1-150	1-150	1-300	1-300	1-385	1-385
Absolute Maximum Rating [VDC]	100	100	100	100	100	100	100	200	200	200	400	400	500	500
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.2	0.3	0.3	0.1	0.2	0.3	0.1	0.3	0.3	0.3	0.3	0.2	0.3
Maximum Load Current [A] (B)	7	12	20	40	60	80	100	7	12	40	7	12	7	10
Minimum Load Current [mA] (N)	1	1	1	1	5	5	5	1	1	1	1	1	1	1
Maximum Surge Current [A] (10 ms)	23	28	42	106	180	220	330	22	31	106	18	36	19	29
Maximum On-State Voltage Drop @ Rated Current [VDC]	0.5	0.9	0.8	1.0	0.6	0.7	0.5	1.5	0.7	0.8	2.3	2.6	3.5	3.3
Maximum On-State Resistance [R _{DS-ON}] [Ohms]	0.07	0.072	0.039	0.025	0.010	0.008	0.005	0.21	0.062	0.021	0.33	0.22	0.5	0.33
Thermal Resistance Junction to Case [R _{jc}] [°C/W]	2.00	2.00	1.71	0.68	0.34	0.34	0.27	1.24	0.71	0.22	0.56	0.39	0.60	0.43
Minimum Heat Sink for Rated Current @ 40°C [°C/W]	5.0	3.0	2.0	1.0	1.0	0.5	0.5	3.0	3.0	0.7	2.0	1.0	1.0	0.7
Maximum Pulse Wide Modulation Frequency [Hz] (P)	5000	4000	3500	2500	1000	900	800	3500	2000	950	1200	900	1100	900

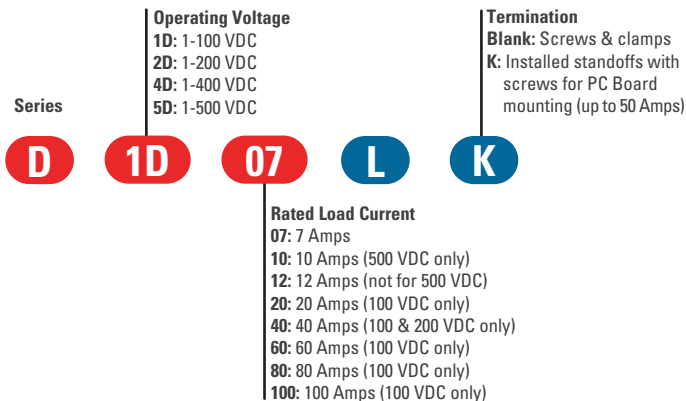
Input Specifications (A)

	Series 1-DC & 1-DCL
Control Voltage Range [VDC]	3.5-32
Maximum Reverse Voltage [VDC]	-32
Minimum Turn-On Voltage [VDC] (C)	3.5
Must Turn-Off Voltage [VDC]	1
Minimum Input Current (for on-state) [mA]	10
Maximum Input Current [mA]	15
Nominal Input Impedance	Current Regulated
Maximum Turn-On Time [µsec]	100
Maximum Turn-Off Time [µsec]	100

General Specifications (A)

	Series 1-DC & 1-DCL
Dielectric Strength, Input/Output/Base (50/60Hz) [Vrms]	3750
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	10 ⁹
Maximum Capacitance, Input/Output [pF]	8
Ambient Operating Temperature Range [°C] (Q)	-40 to 100
Ambient Storage Temperature Range [°C]	-40 to 125
Weight (Typical) [oz] (gr)	2.66 (75.5)
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Humidity	85% non-condensing
MTBF (Mean Time Between Failures) at 40°C ambient temperature (G)	21,395,130 hours (2,441 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (G)	11,545,504 hours (1,317 years)

Part Number Nomenclature



- Required for valid part number
- For options only and not required for valid part number

IEC 61000-4-2 Electrostatic Discharge Level 3
 IEC 61000-4-4 Electrically Fast Transients Level 3
 IEC 61000-4-5 Electrical Surges Level 3



SSC Series 1000 VDC 25 Amps

- Solid State Relays with high voltage IGBT output
- Rated at 25 Amps @ 1000 VDC
- Flexible 8 to 16 VDC or 20 to 28 VDC Control Voltage
- New "K" Option for PCB mounting for IP00 versions
- CE Compliant to EN60950-1



Output Specifications (A)

	SSC Series
Recommended Operating Voltage [VDC]	1-1000
Absolute Maximum Rating [VDC]	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.3
Maximum Load Current [A] (B)	25
Minimum Load Current [mA] (N)	20
Maximum Surge Current [A] (10 ms)	75
Maximum On-State Voltage Drop @ Rated Current [VDC]	1.55
Thermal Resistance Junction to Case [Rjc] [°C/W]	0.45
Minimum Heat Sink for Rated Current @ 40°C [°C/W]	1
Maximum Pulse Wide Modulation Frequency [Hz] (P)	500

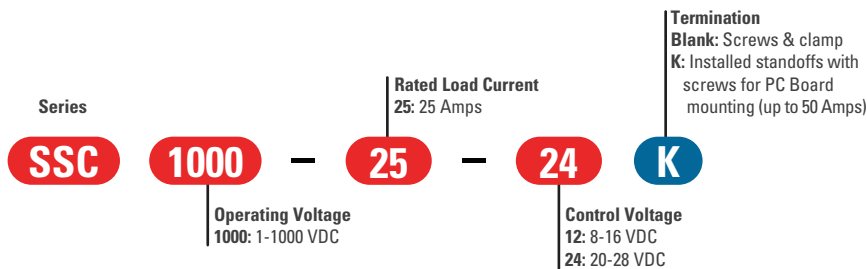
Input Specifications (A)

	Option -12	Option -24
Nominal Control Voltage [VDC]	12	24
Control Voltage Range [VDC]	8-16	20-28
Maximum Reverse Voltage [VDC]	-16	-28
Minimum Turn-On Voltage [VDC]	8	20
Must Turn-Off Voltage [VDC]	1	
Minimum Input Current (for on-state) [mA]	12.5	
Maximum Input Current [mA]	15	
Nominal Input Impedance [Ohms]	Current Regulated	
Maximum Turn-On Time [µsec]	200	
Maximum Turn-Off Time [µsec]	150	

General Specifications (A)

	SSC Series
Dielectric Strength, Input/Output/Base (50/60Hz) [Vrms]	3750
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	10 ⁹
Maximum Capacitance, Input/Output [pF]	8
Ambient Operating Temperature Range [°C] (D)	-40 to 100
Ambient Storage Temperature Range [°C]	-40 to 125
Weight (Typical) [oz] (gr)	2.88 (81.53)
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Humidity	85% non-condensing
MTBF (Mean Time Between Failures) at 40°C ambient temperature (G)	21,395,130 hours (2,441 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (G)	11,545,504 hours (1,317 years)

Part Number Nomenclature



- Required for valid part number
- For options only and not required for valid part number



PowerPlus DC Series 60/100/200/400/500 VDC 10-100 Amps

- Solid State Relays with low impedance MOSFET output
- Solid State Relays with ratings up to 100 Amps @ 60 VDC, 100 Amps @ 100 VDC, 40 Amps @ 200 VDC, 20 Amps @ 400 VDC and 60 Amps @ 500 VDC
- Flexible 4 to 32 VDC or 30 to 60 VDC Control Voltage
- New "K" Option for PCB mounting for IP00 versions
- UL Approved, CE Compliant to EN60950-1
- Optional IP20 safety cover



Output Specifications (A)	DC60x10	DC60x20	DC60x40	DC60x60	DC60x80	DC60x100
Recommended Operating Voltage [VDC]	1-48	1-48	1-48	1-48	1-48	1-48
Absolute Maximum Rating [VDC]	60	60	60	60	60	60
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.1	0.1	0.1	0.1	0.1
Maximum Load Current [Adc] (B)	10	20	40	60	80	100
Minimum Load Current [mA] (N)	2.5	2.5	2.5	2.5	2.5	2.5
Maximum Surge Current [Adc] (10 ms)	78	108	163	200	258	326
Maximum On-State Voltage Drop @ Rated Current [VDC]	0.17	0.30	0.36	0.51	0.46	0.56
Maximum On-State Resistance [R _{DS-ON}] [Ohms]	0.0170	0.0150	0.0090	0.0085	0.0058	0.0056
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.60	1.60	0.74	0.74	0.51	0.51
Minimum Heat Sink for Rated Current @ 40°C [°C/W]	5	5	2	1	0.5	0.5
Maximum Pulse Wide Modulation Frequency [Hz] (P)	1000	1000	900	900	700	700

Output Specifications (A)	DC100x10	DC100x20	DC100x40	DC100x60	DC100x80	DC100x100
Recommended Operating Voltage [VDC]	1-72	1-72	1-72	1-72	1-72	1-72
Absolute Maximum Rating [VDC]	100	100	100	100	100	100
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.1	0.1	0.1	0.1	0.1	0.1
Maximum Load Current [Adc] (B)	10	20	40	60	80	100
Minimum Load Current [mA] (N)	2.5	2.5	2.5	2.5	2.5	2.5
Maximum Surge Current [Adc] (10 ms)	66	91	136	180	220	330
Maximum On-State Voltage Drop @ Rated Current [VDC]	0.13	0.24	0.28	0.36	0.40	0.40
Maximum On-State Resistance [R _{DS-ON}] [Ohms]	0.013	0.012	0.007	0.006	0.005	0.004
Thermal Resistance Junction to Case (Rjc) [°C/W]	1.27	0.73	0.58	0.45	0.34	0.27
Minimum Heat Sink for Rated Current @ 40°C [°C/W]	N/R	5	2	1	0.5	0.5
Maximum Pulse Wide Modulation Frequency [Hz] (P)	1000	1000	900	900	700	700

Output Specifications (A)	DC200x10	DC200x20	DC200x40	DC200x60	DC400x10	DC400x20	DC500x60
Recommended Operating Voltage [VDC]	1-150	1-150	1-150	1-150	1-300	1-300	1-500
Absolute Maximum Rating [VDC]	200	200	200	200	400	400	500
Maximum Off-State Leakage Current @ Rated Voltage [mA]	0.2	0.2	0.2	0.2	0.4	0.4	0.1
Maximum Load Current [Adc] (B)	10	20	40	60	10	20	60
Minimum Load Current [mA] (N)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Maximum Surge Current [Adc] (10 ms)	71	71	142	224	32	48	95
Maximum On-State Voltage Drop @ Rated Current [VDC]	0.40	0.78	0.64	0.66	1.55	2.2	0.8
Maximum On-State Resistance [R _{DS-ON}] [Ohms]	0.040	0.039	0.016	0.011	0.155	0.11	0.013
Thermal Resistance Junction to Case (Rjc) [°C/W]	0.9	0.85	0.41	0.28	0.5	0.37	0.25
Minimum Heat Sink for Rated Current @ 40°C [°C/W]	5	2.5	1	0.5	1.5	0.5	0.7
Maximum Pulse Wide Modulation Frequency [Hz] (P)	1000	1000	900	700	900	700	500

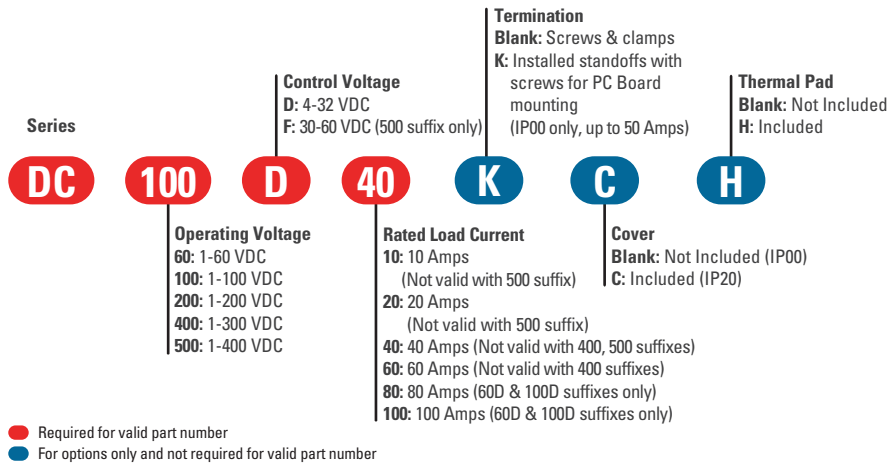
Input Specifications (A)	DC60xx	DC100xx	DC200xx	DC400xx	DC500Dx	DC500Fx
Control Voltage Range [VDC]	4-32	4-32	4-32	4-32	4-32	30-60
Maximum Reverse Voltage [VDC]	-32	-32	-32	-32	-32	-60
Minimum Turn-On Voltage [VDC] (C)	4	4	4	4	4	30
Must Turn-Off Voltage [VDC]	1	1	1	1	1	20
Minimum Input Current (for on-state) [mA]	11	11	11	11	11	12
Maximum Input Current [mA]	14	14	14	14	14	17
Nominal Input Impedance	Current Regulated					
Maximum Turn-On Time [µsec]	75	75	75	75	100	100
Maximum Turn-Off Time [µsec]	150	150	100	100	100	100

General Specifications (A)

PowerPlus DC Series

Dielectric Strength, Input/Output/Base (50/60Hz) [Vrms]	3750
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	10 ⁹
Maximum Capacitance, Input/Output [pF]	8
Ambient Operating Temperature Range [°C] (Q)	-40 to 100
Ambient Storage Temperature Range [°C]	-40 to 125
LED Input Status Indicator	Yes, Green
Weight (Typical) [oz] (gr)	2.53 (72) except DC500xx, 2.88 (81.53) for DC500xxx
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Humidity	85% non-condensing
MTBF (Mean Time Between Failures) at 40°C ambient temperature (G)	21,395,130 hours (2,441 years)
MTBF (Mean Time Between Failures) at 60°C ambient temperature (G)	11,545,504 hours (1,317 years)

Part Number Nomenclature



IEC 61000-4-2 Electrostatic Discharge Level 3
IEC 61000-4-4 Electrically Fast Transients Level 3
IEC 61000-4-5 Electrical Surges Level 3

General Notes

- (A) All parameters at 25°C unless otherwise specified.
- (B) Heat sinking required, see derating curves. For "K" option maximum current up to 50 Amp.
- (C) Increase minimum voltage by 1 V for operations from -20 to -40°C.
- (D) For ambient temperatures above 40°C the maximum control voltage must not exceed 250 VAC.
- (E) Turn-on time for Instantaneous turn-on versions is 0.1 msec for CWA, CWD & CL240D, and 7 ms for CWU models.
- (F) AC input models operating range is -20 to 80 °C
- (G) All parameters at 50% power rating and 100% duty cycle (contact Crydom tech support for detailed report).
- (H) Output will self trigger between 450-600 Vpk, not suitable for capacitive loads.
- (J) Minimum turn-on voltage for -B, DC control is 1 VDC and AC control is 10 Vrms/VDC.
- (K) Minimum turn-off voltage for -B, DC control is 3.5 VDC and AC control is 90 Vrms/VDC.

- (L) Turn-on time for -B version is 300 µs
- (M) Turn-off time for -B version is 100 µs.
- (N) Low current loads and high ambient temperature can affect turn-on time.
- (P) 8 VDC Minimum control voltage. Resistive loads only. Consider switching losses; at maximum frequency reduce to 75% output current.
- (Q) Decrease maximum control voltage 1.35V/°C above 80°C ambient temperature.
- (R) Select "P" option for overvoltage protection.
- (S) Option "K" is intended only for use in attaching a printed circuit board to the SSR or mounting the SSR to a printed circuit board (PCB thicknesses from .031 to .093 inches [0.79 to 2.36 mm]).

Block Diagrams

Diagram 1: CW Series, AC Control

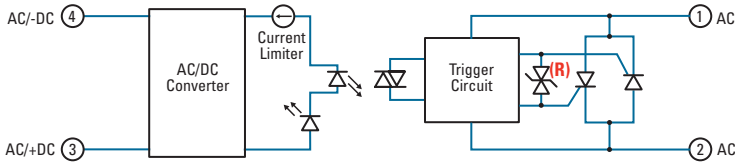


Diagram 2: CW Series, DC Control

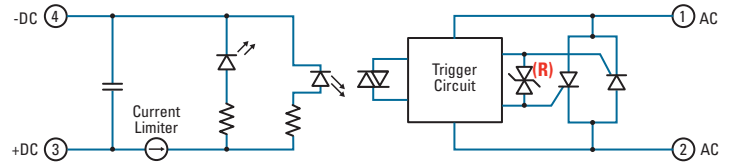


Diagram 3: CL Series, AC Control

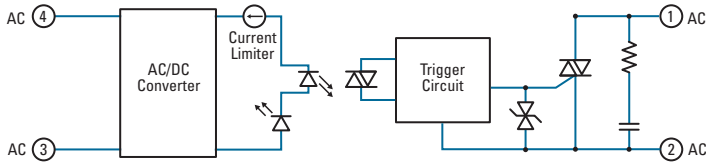


Diagram 4: CL Series, DC Control

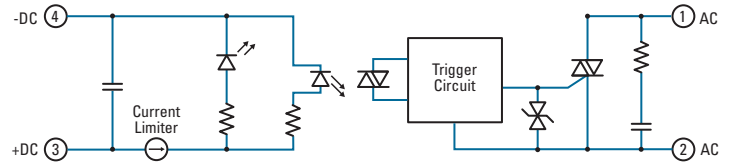


Diagram 5: DC60 Series

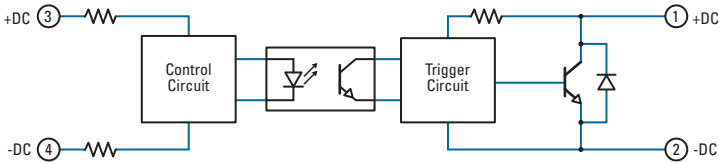


Diagram 6: 1-DC, 1-DCL, D1D, D06D Series

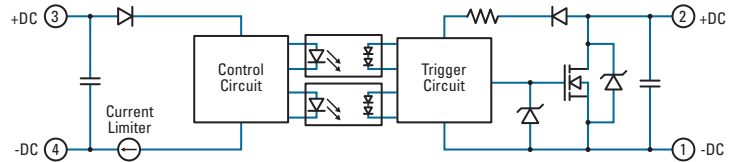


Diagram 7: SSC Series

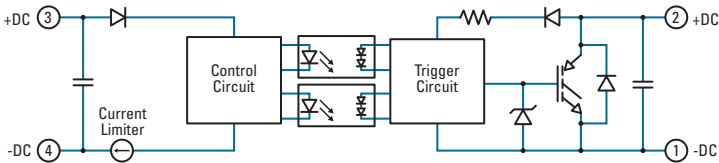


Diagram 8: PowerPlus DC Series

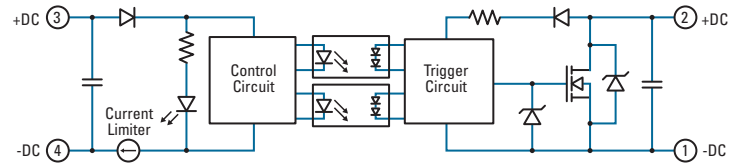


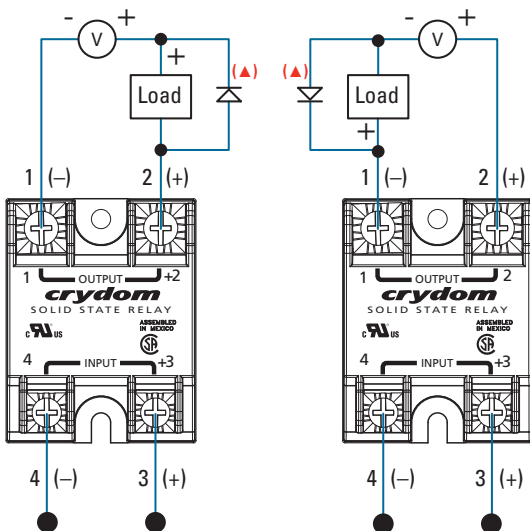
TABLE 1. Block Diagrams

Diagram 1	CW Series, AC Control
Diagram 2	CW Series, DC Control
Diagram 3	CL Series, AC Control
Diagram 4	CL Series, DC Control
Diagram 5	DC60 Series
Diagram 6	1-DC, 1-DCL, D1D, D06D Series
Diagram 7	SSC Series
Diagram 8	PowerPlus DC Series

Wiring Diagrams

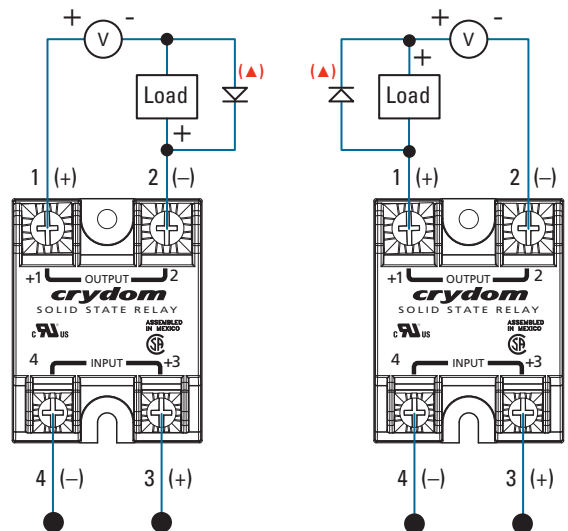
All DC Output Relays, Except DC60Sx

(▲) Inductive loads must be diode suppressed



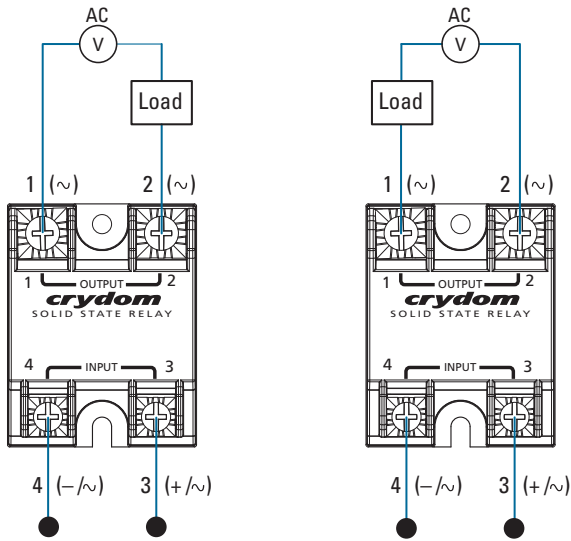
DC60Sx

(▲) Inductive loads must be diode suppressed



Wiring Diagrams

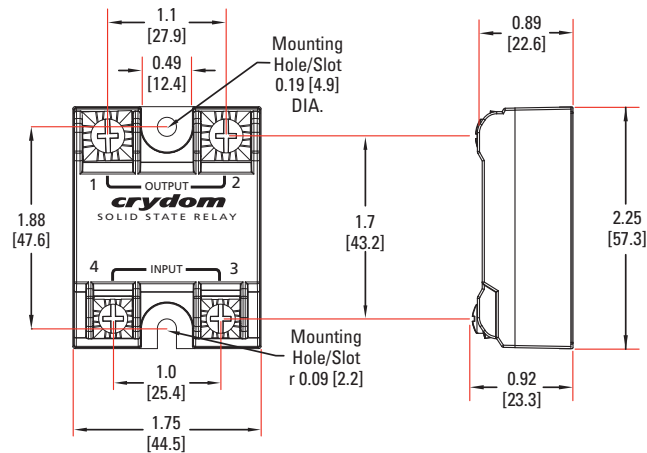
All AC Output Relays



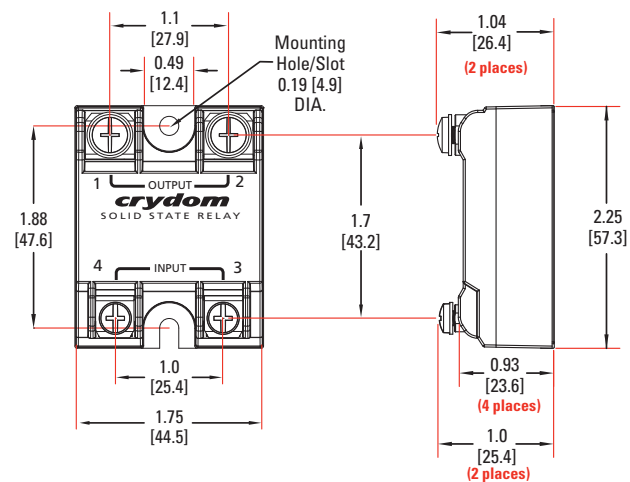
Mechanical Dimensions

Tolerances: 0.02 in / 0.5 mm
All dimensions are in: inches [millimeters]

Screw Termination



Standoff Termination (Option "K") (S)



New Accessories!

Protective Cover & Hardware Kit

Protective Cover

Part number: KS101



Clear plastic cover compatible with all new S1 designs. Safety covers provide added protection from electric shock when installing or checking equipment. Not applicable for IP20 models (CW, CL & PowerPlus DC Series).

Hardware Kit

Part number: HK4



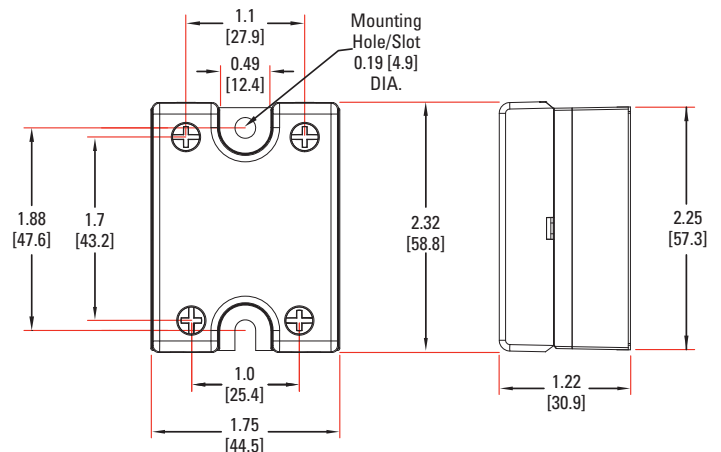
Bag with 2 square brass accessories and 2 screw 8-32 x 5/8 for output. Used to mount TMR1 lug terminals.

TABLE 2. Recommended Accessories

Cover	Hardware Kit	Heat Sink Part No.	Thermal Resistance [°C/W]	Lug Terminal	Thermal Pad
KS101	HK1	HS501DR	5.0	TRM1	HSP-1
		HS301 / HS301DR	3.0	TRM6	HSP-2
	HK4 (■)	HS251	2.5		
		HS201 / HS201DR	2.0		
		HS202 / HS202DR	2.0		
		HS172	1.7		
		HS151 / HS151DR	1.5		
		HS122 / HS122DR	1.2		
		HS103 / HS103DR	1.0		
		HS101	1.0		
		HS073	0.7		
		HS072	0.7		
		HS053	0.5		
		HS033	0.36		
HS023	0.25				

(■) Not suitable for use with IP20 versions

Screw Termination, IP20 (Option "C" & CW Series)



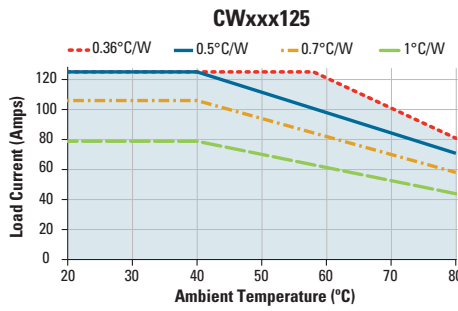
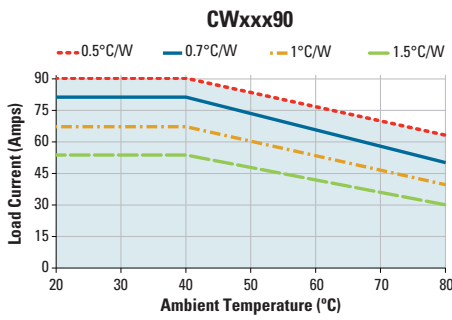
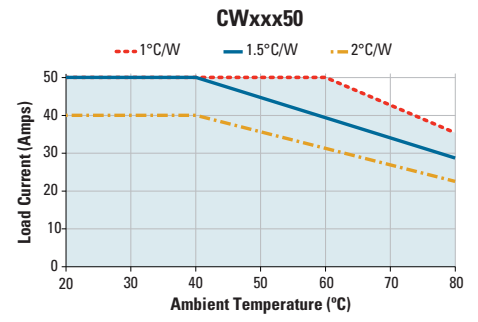
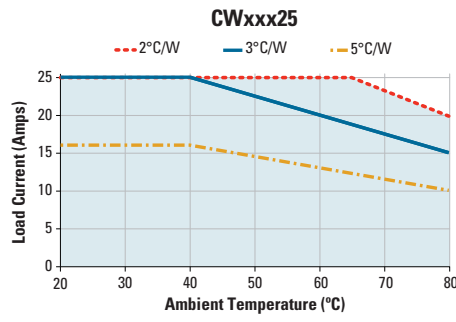
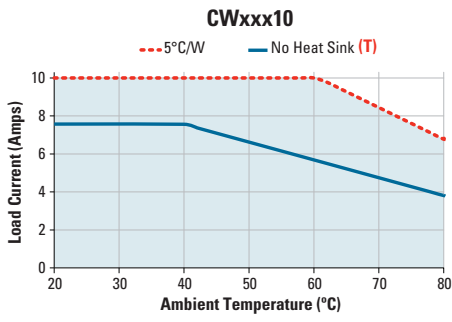
Questions?
Call or e-mail:

America Tel.: +1 (877) 502 5500
e-mail: sales@crydom.com

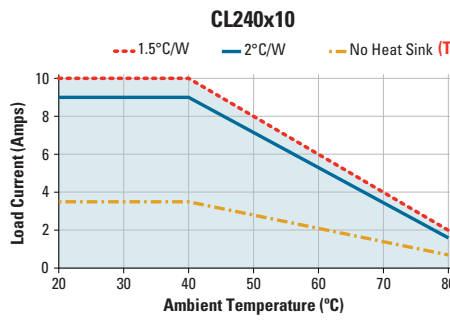
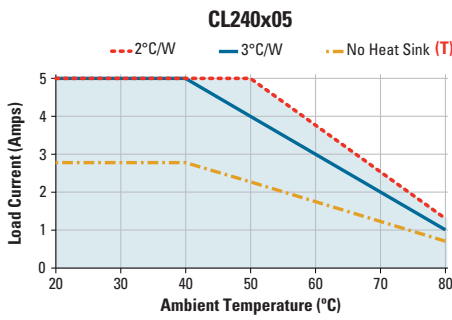
EMEA Tel.: +44 (0) 1202 416170
e-mail: sales-europe@crydom.com

Asia Tel.: +86 (21) 2306 1648
e-mail: sales-cn@crydom.com

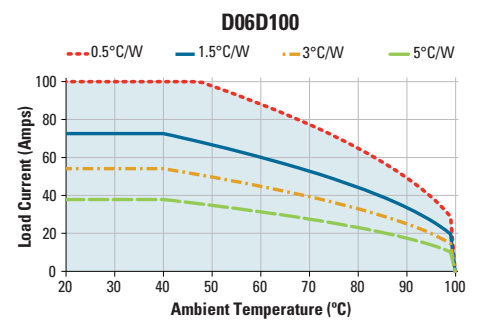
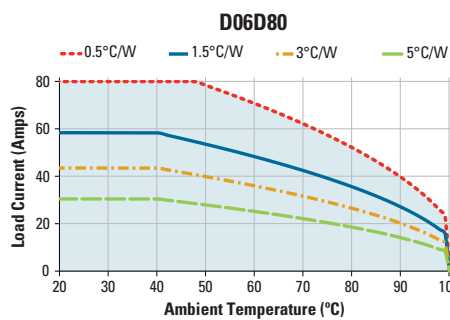
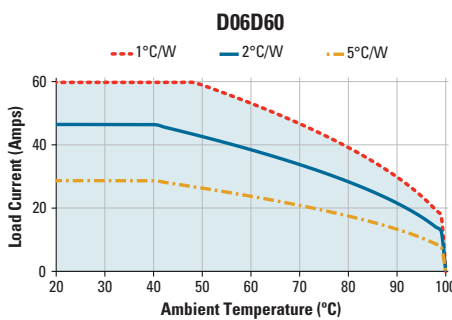
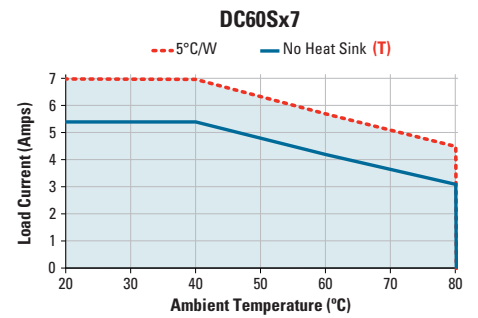
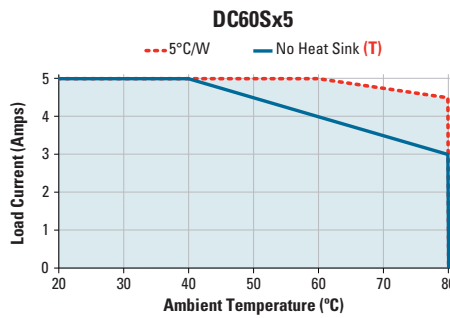
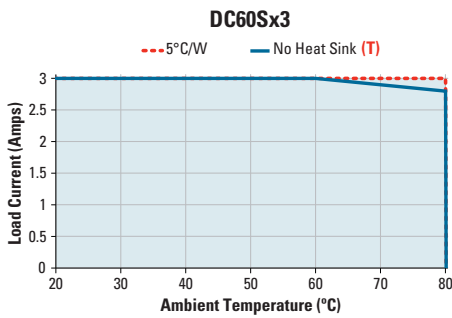
Derating Curves: CW Series



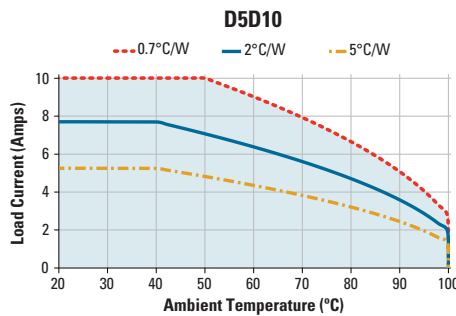
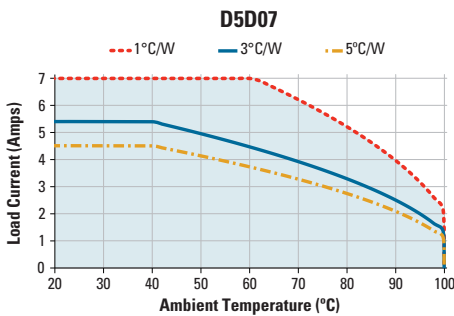
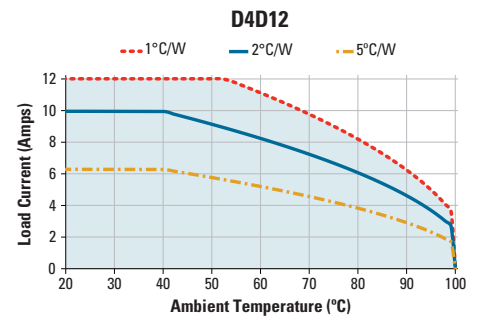
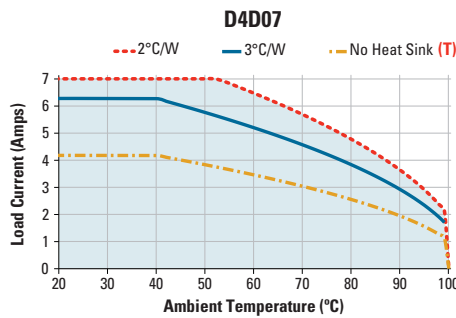
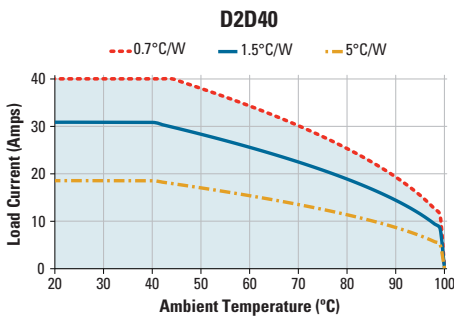
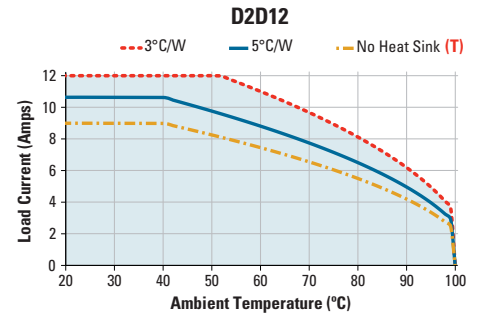
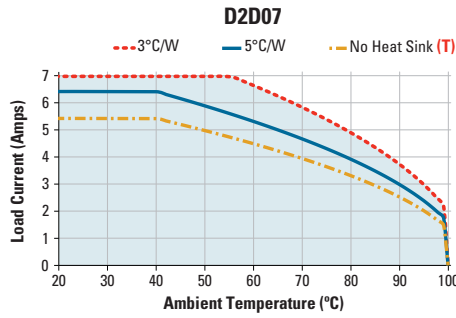
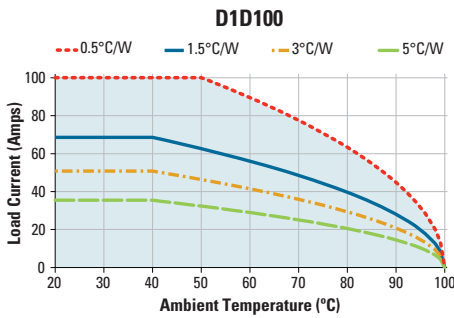
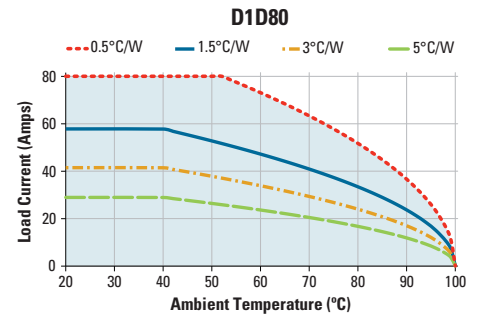
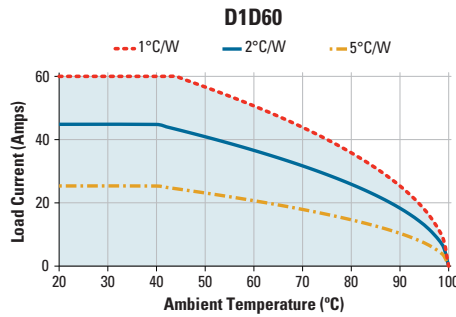
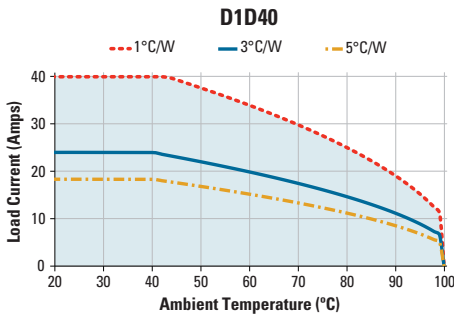
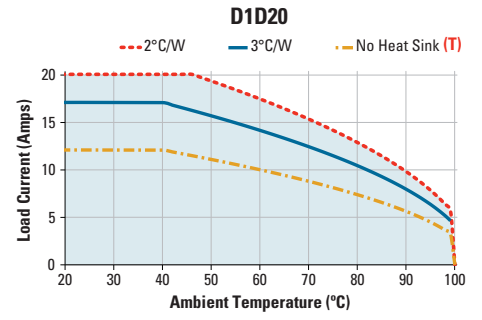
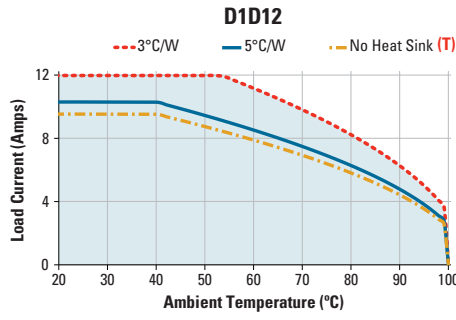
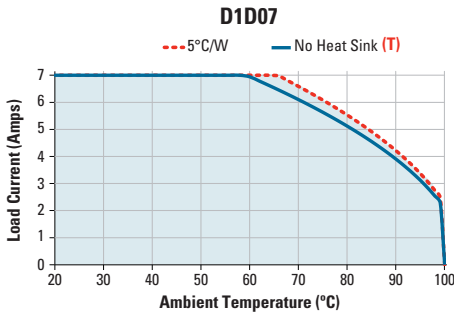
Derating Curves: CL Series



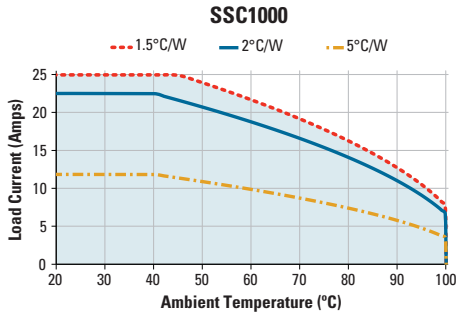
Derating Curves: DC60 Series



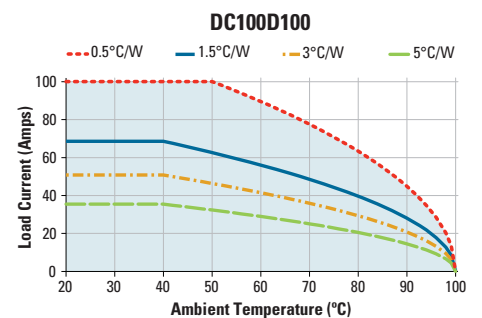
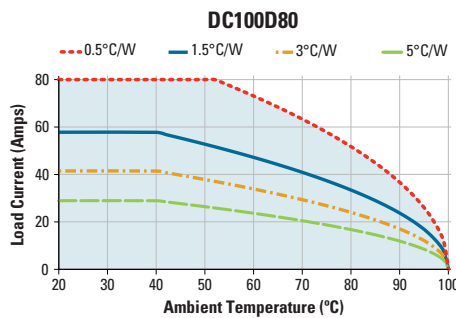
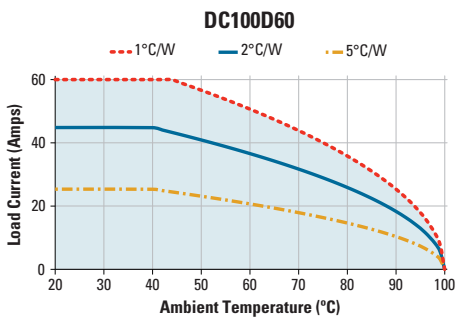
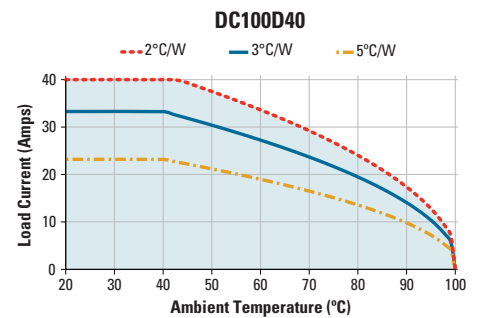
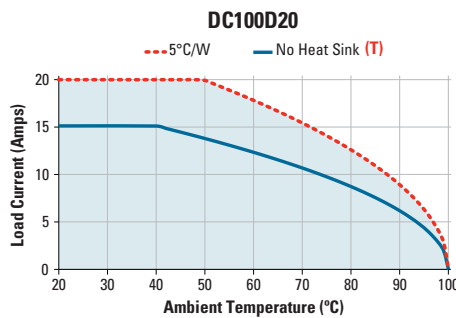
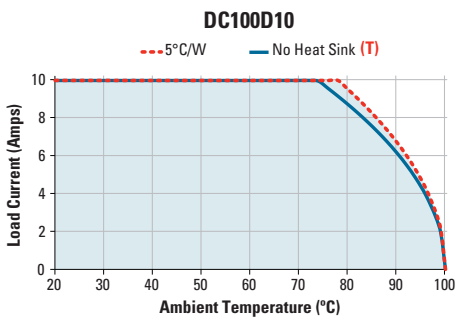
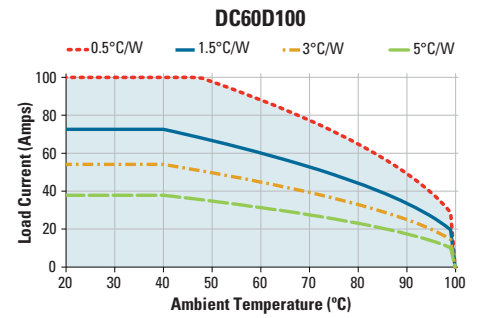
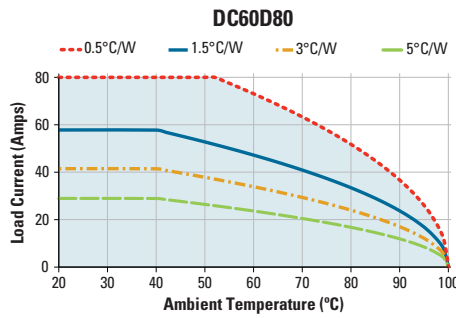
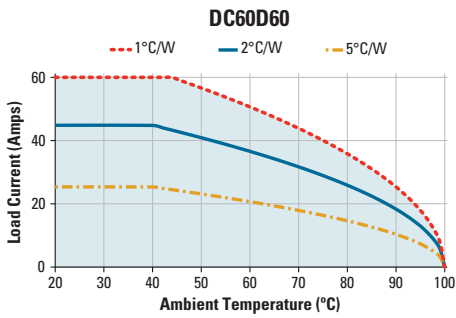
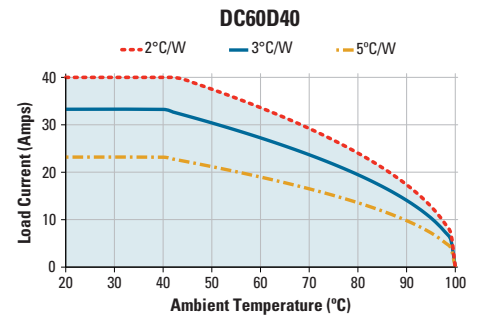
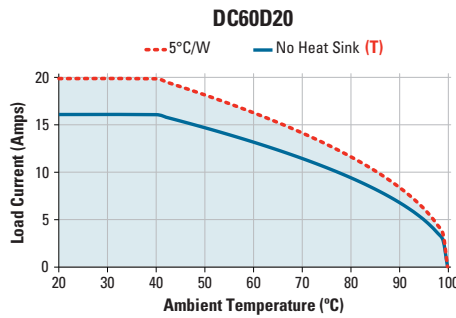
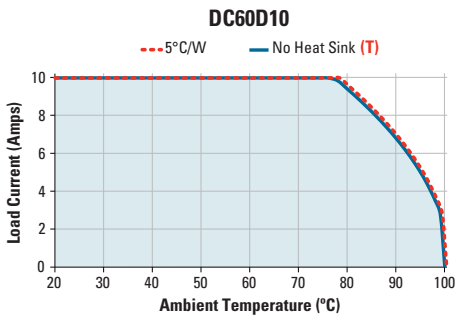
Derating Curves: Series 1-DC & 1-DCL



Derating Curves: SSC Series



Derating Curves: PowerPlus DC Series



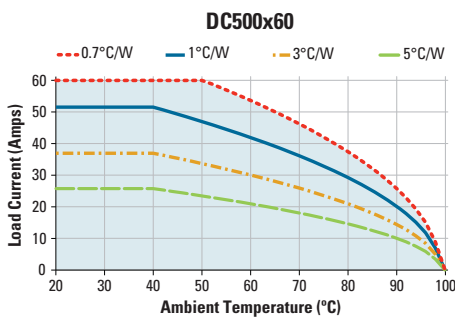
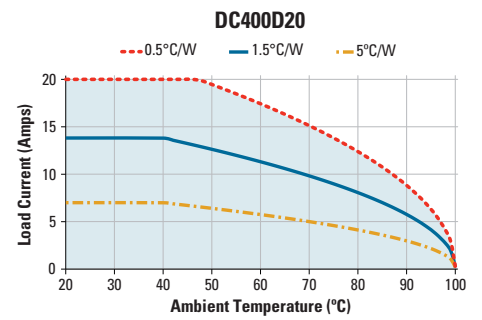
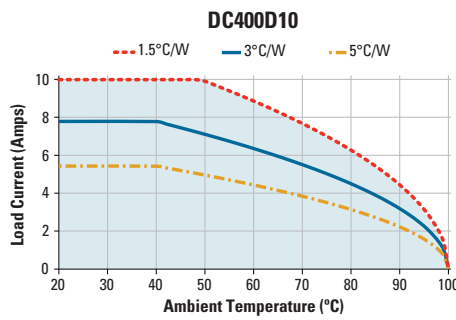
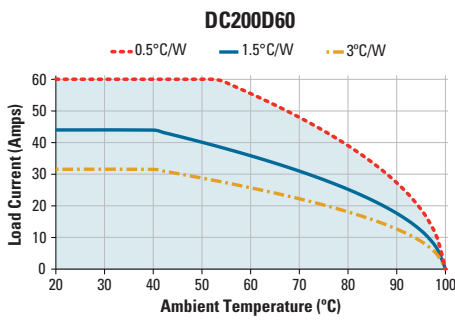
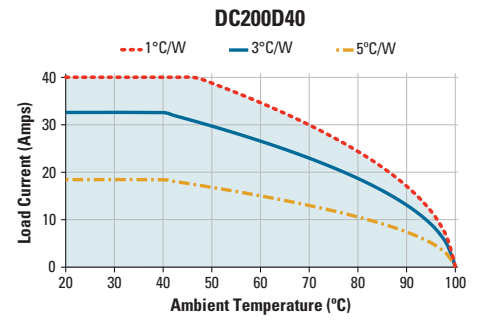
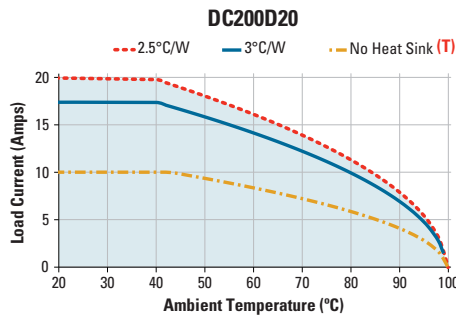
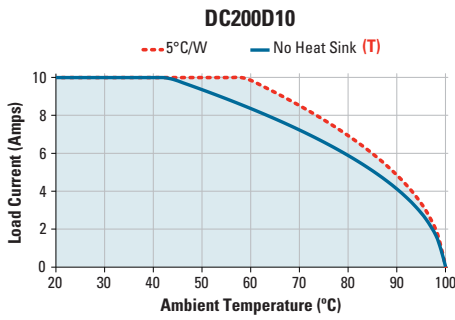


TABLE 3: Heat Sinks

Crydom Part No.	Thermal Resistance [°C/W]
HS501DR	5
HS301 / HS301DR	3
HS251	2.5
HS202 / HS202DR	2
HS201 / HS201DR	2
HS172	1.7
HS151 / HS151DR	1.5
HS122 / HS122DR	1.2
HS103 / HS103DR	1
HS101	1
HS073	0.7
HS072	0.7
HS053	0.5
HS033	0.36
HS023	0.25

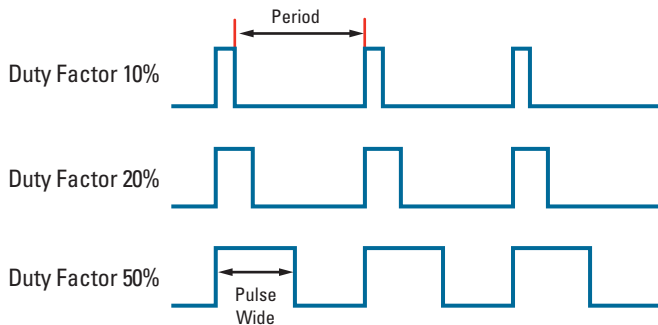
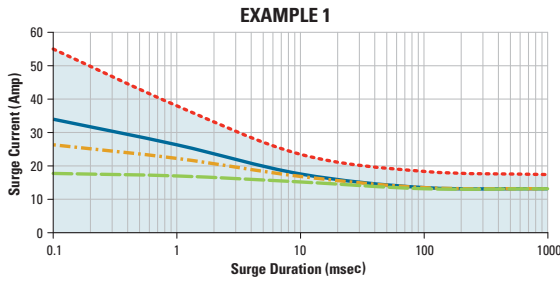
General Notes

(T) SSR metal base plate acting as heat sink, it must be exposed to free ambient air.

Surge Current Graphics

Surge Current Duty Factor

--- Single Pulse (*) — Duty Factor (10%) (**)
 - - - Duty Factor (20%) (**)
 — Duty Factor (50%) (**)



For Pulse Wide Modulation applications select the curve according to duty factor and pulse duration as following.

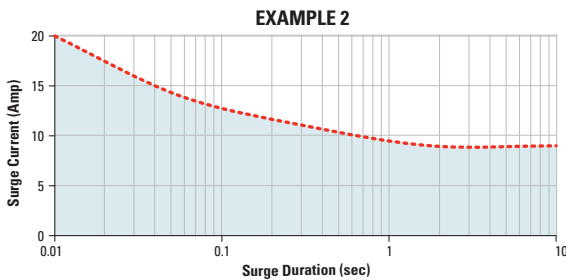
$$\text{Duty Factor} = \frac{\text{Pulse Wide}}{\text{Period}} \times 100 (\%)$$

(*) for Single Surge Pulse $T_c=40^\circ\text{C}$; $T_j 175^\circ\text{C}$

(**) for Repetitive Surge Pulse $T_c=40^\circ\text{C}$; $T_j 130^\circ\text{C}$

Surge Current Single Pulse

--- Single Pulse (*)



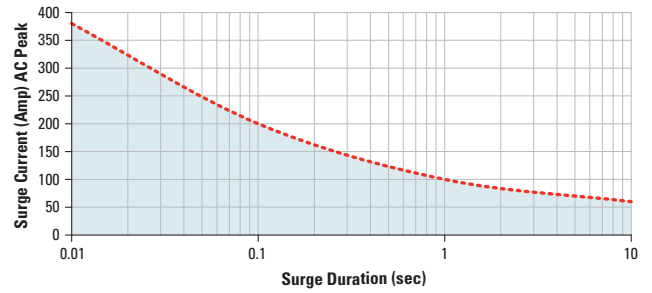
(*) for Single Surge Pulse $T_c=25^\circ\text{C}$; $T_j 150^\circ\text{C}$.

For Single Surge Pulse, AC Output [CW & CL series]: $T_c=25^\circ\text{C}$; $T_j=125^\circ\text{C}$

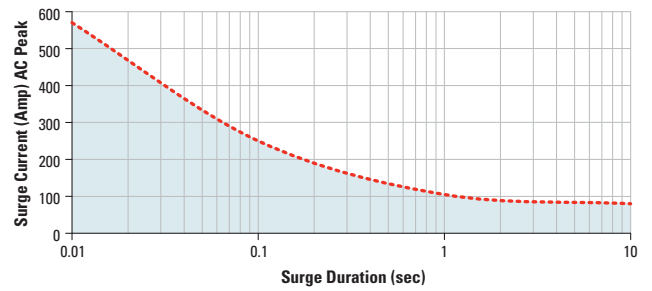
For AC Output SSRs, AC Rms value of surge current equals the peak value divided by $\sqrt{2}$ (1.414).

Surge Current Graphics: CW Series

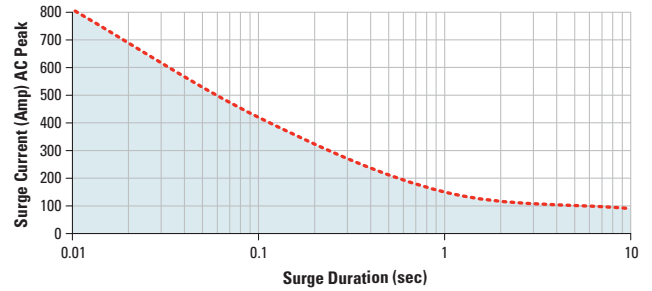
CWxx10



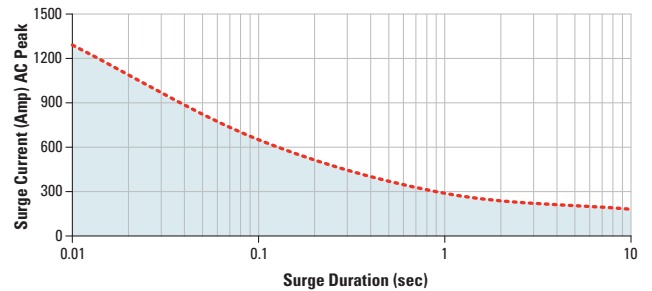
CWxx25



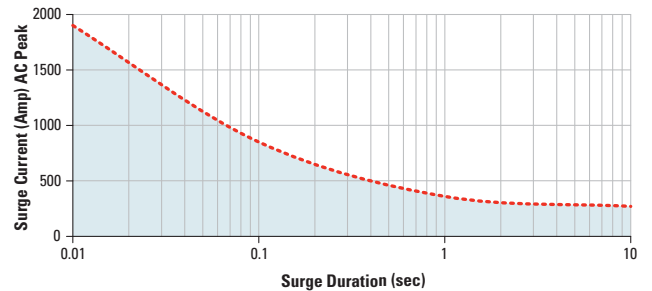
CWxx50



CWxx90

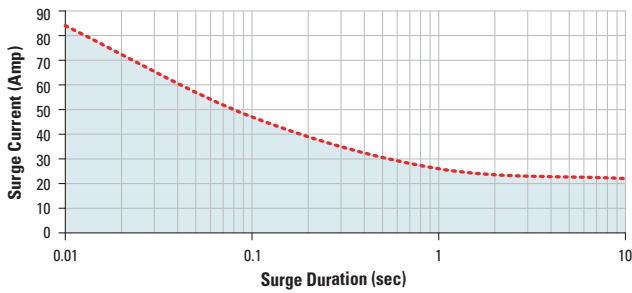


CWxx125

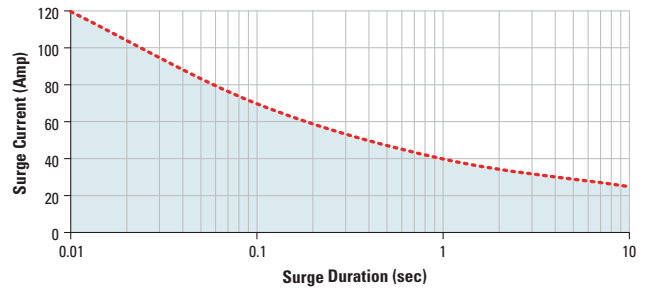


Surge Current Graphics: CL Series

CL240x05

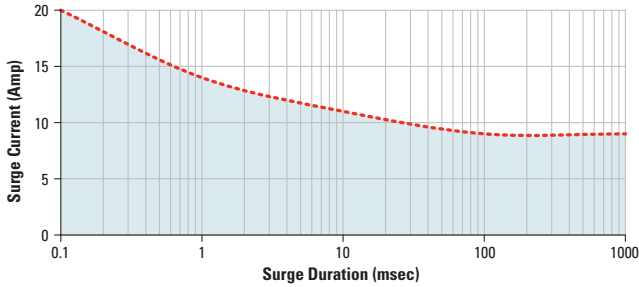


CL240x10

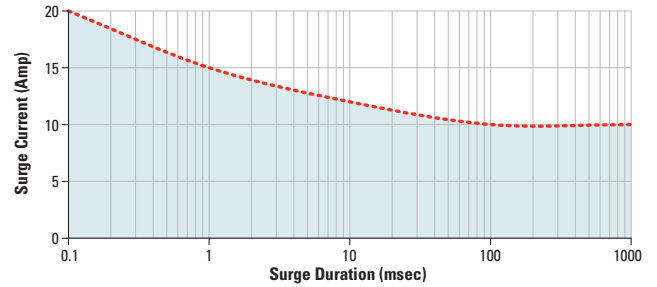


Surge Current Graphics: DC60 Series

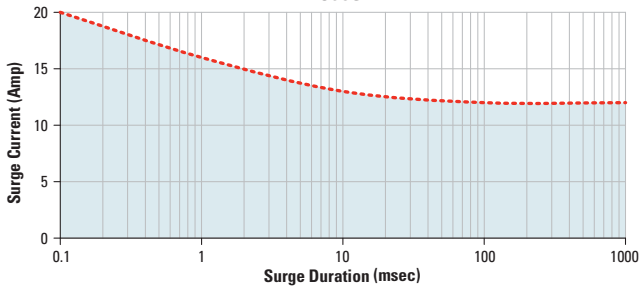
DC60Sx3



DC60Sx5

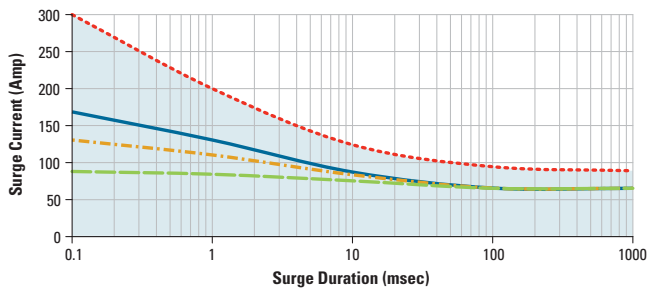


DC60Sx7

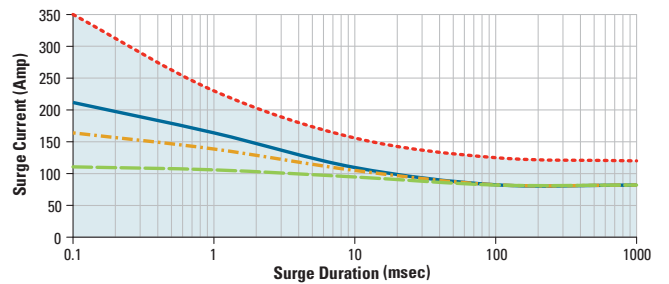


Surge Current Graphics: DC06D Series

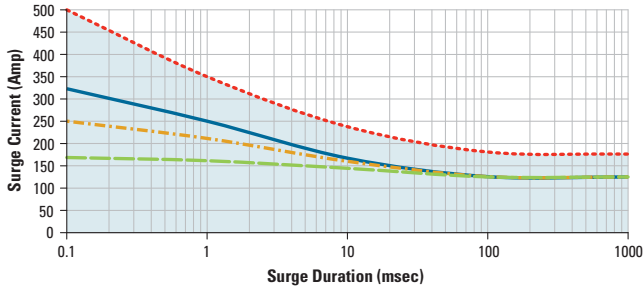
DC06D60



DC06D80

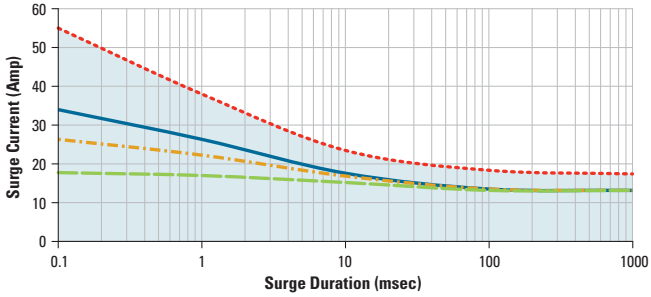


DC06D100

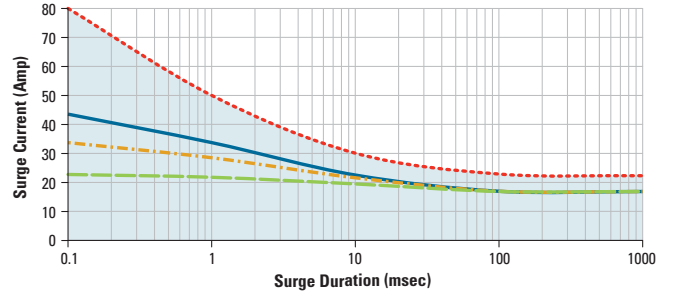


Derating Curves: Series 1-DC & 1-DCL

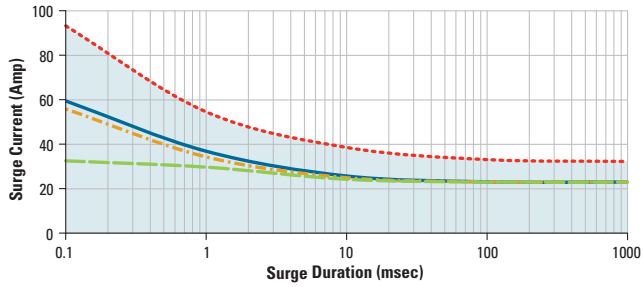
D1D07



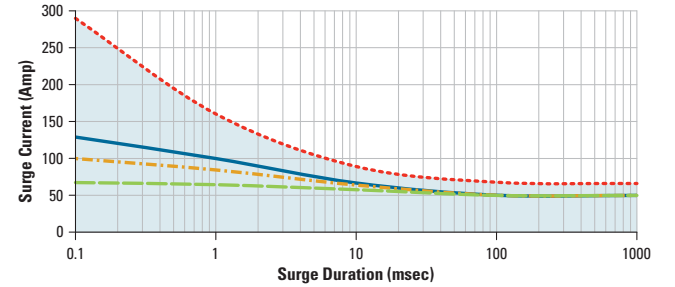
D1D12



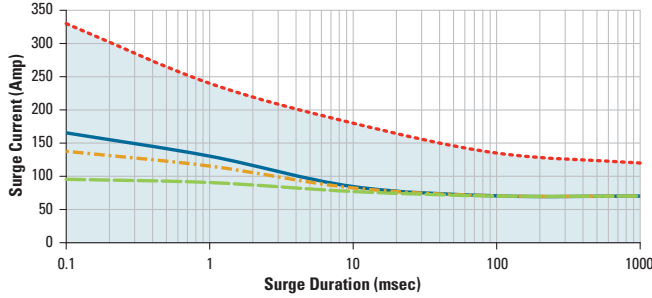
D1D20



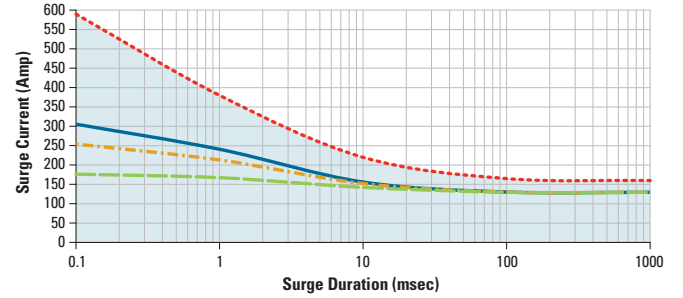
D1D40



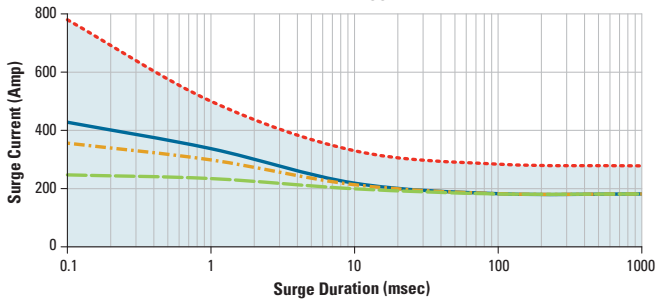
D1D60



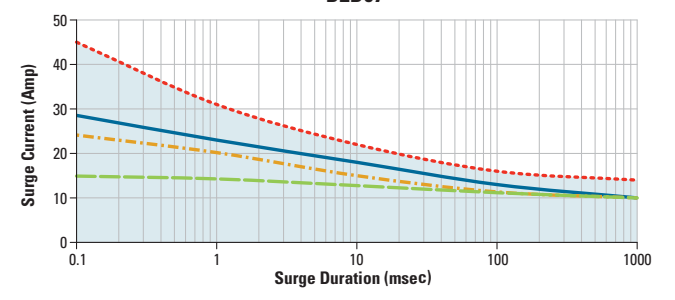
D1D80



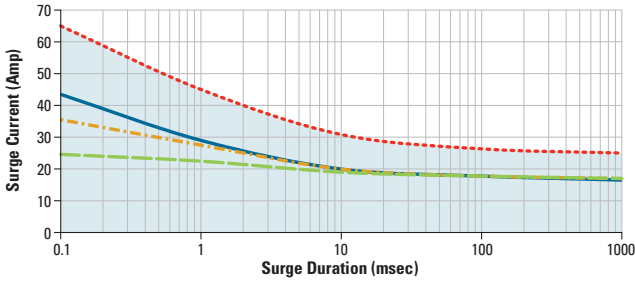
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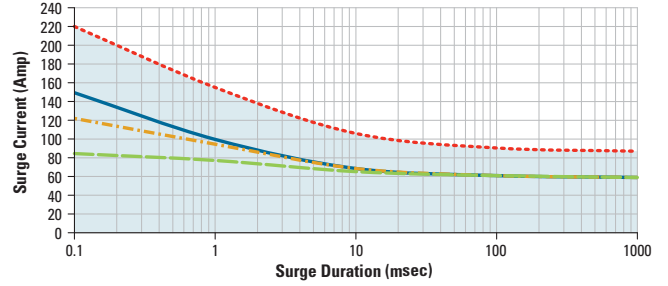
D2D07



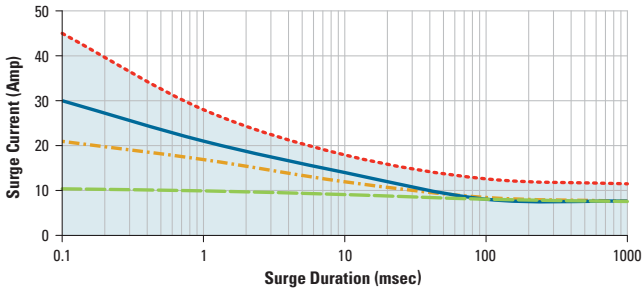
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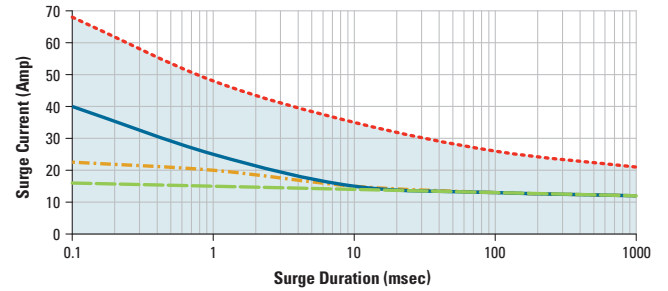
D2D40



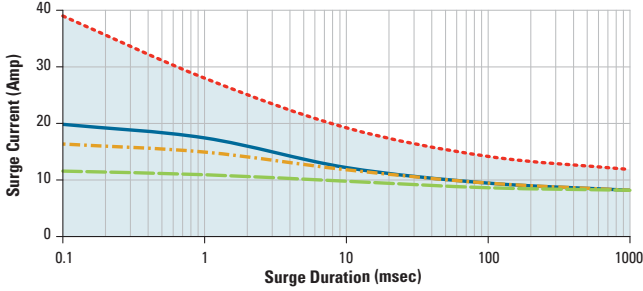
D4D07



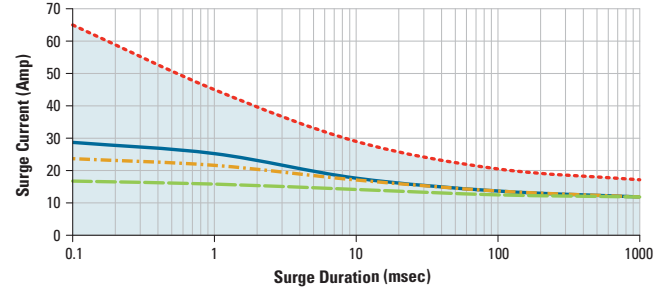
D4D12



D5D07

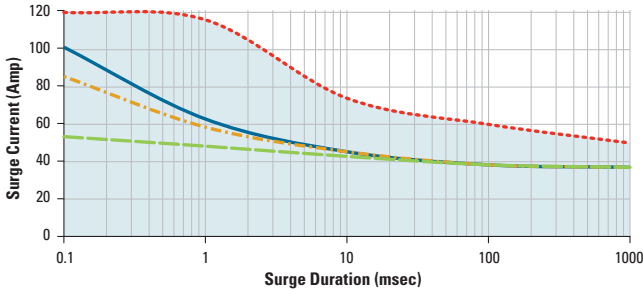


D5D10



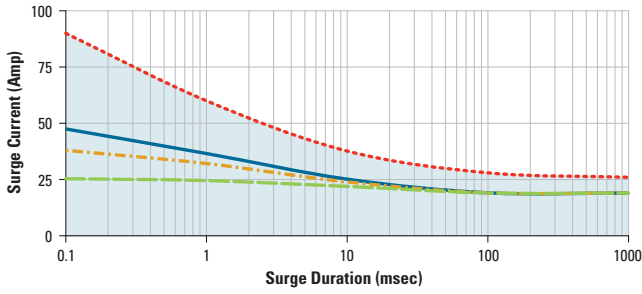
Derating Curves: SSC Series

SSC1000

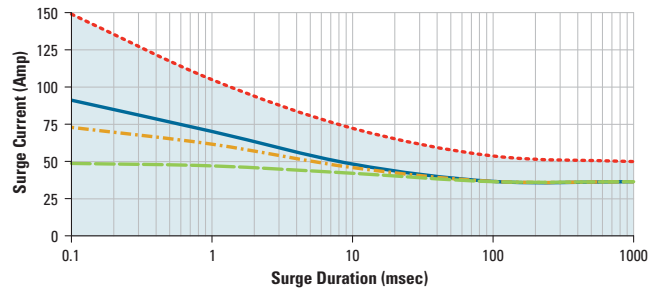


Derating Curves: PowerPlus DC Series

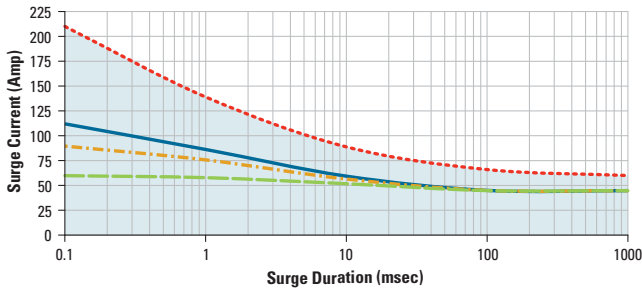
DC60D10



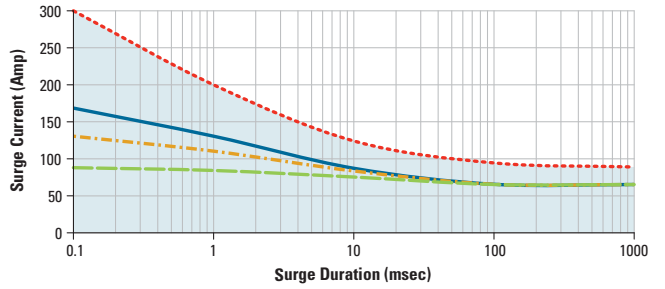
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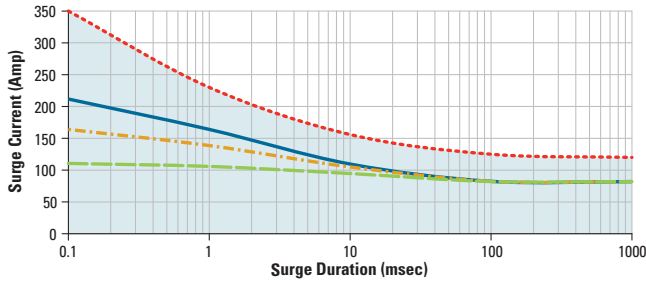
DC60D40



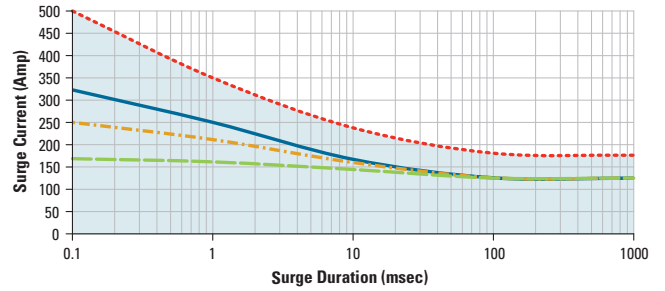
DC60D60



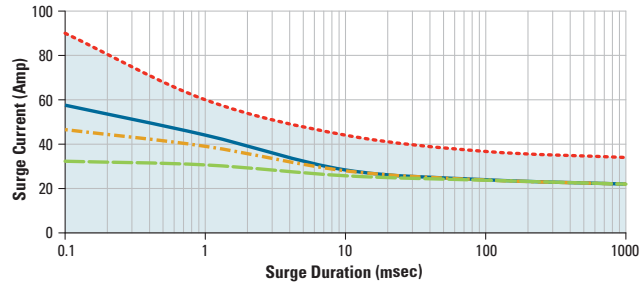
DC60D80



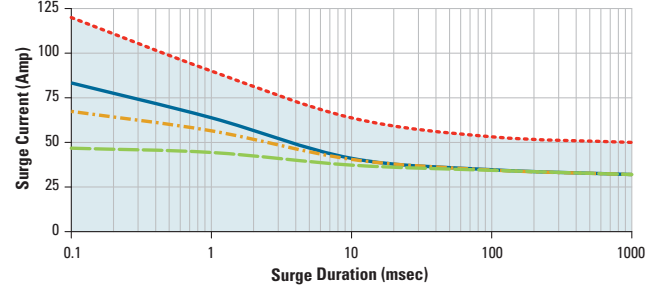
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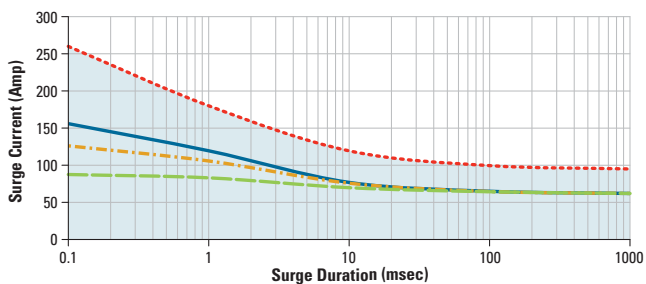
DC100D10



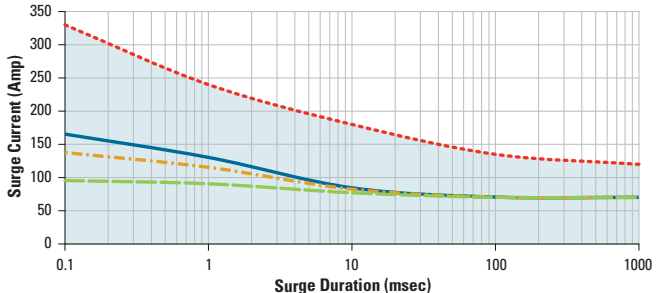
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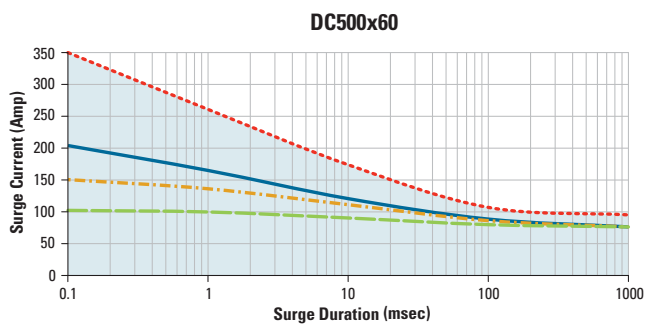
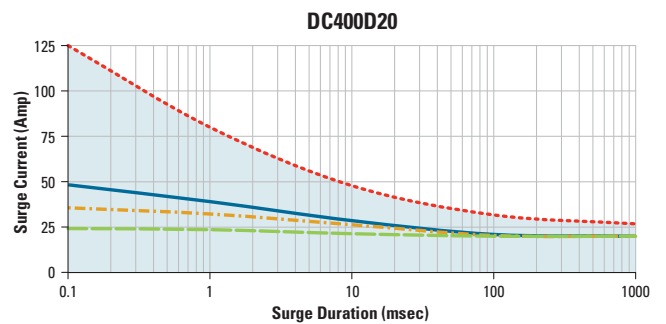
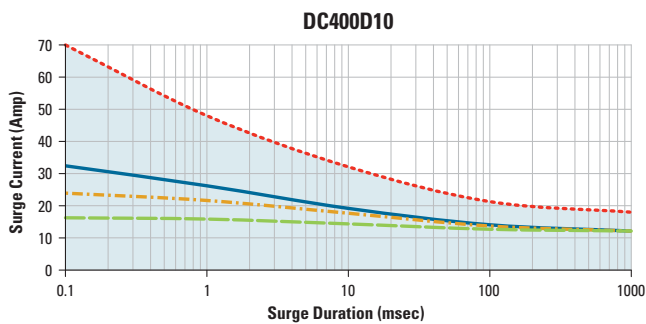
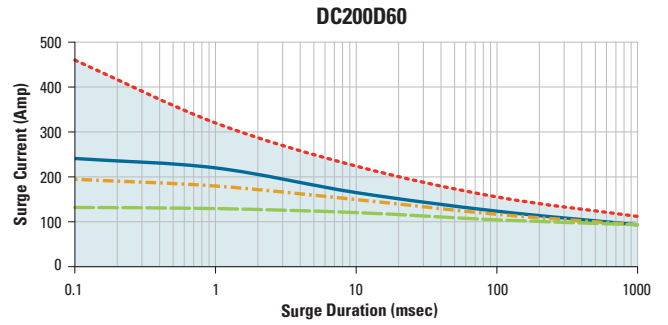
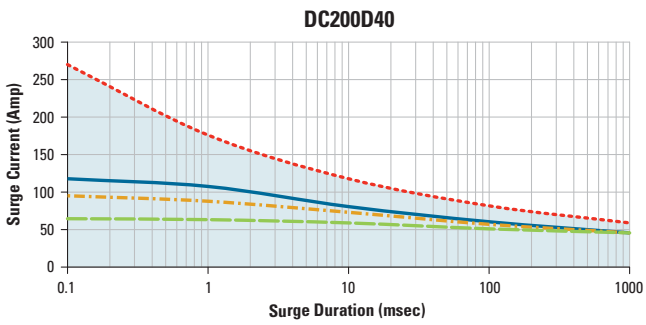
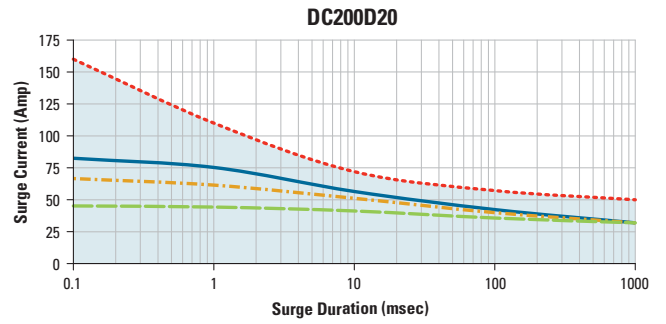
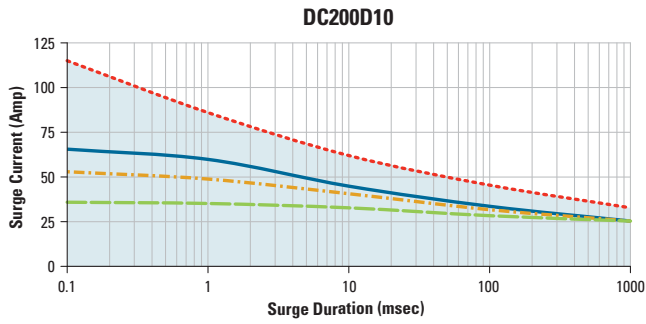
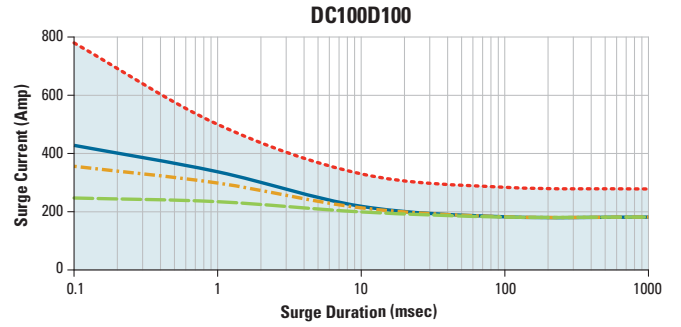
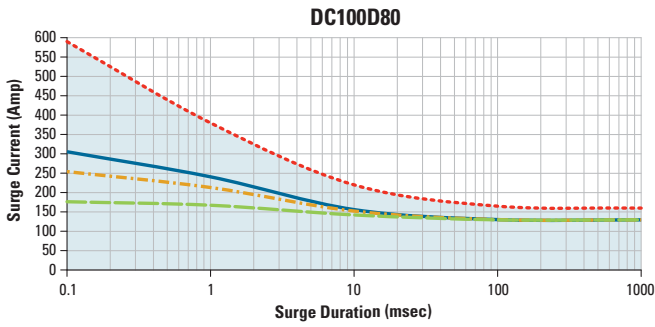


DC100D40



DC100D60





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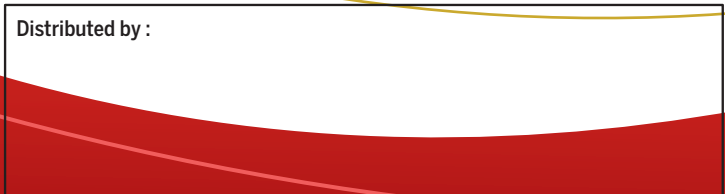
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NOVA22

DIN Rail & Panel Mount Solid State Relays



crydom[®]

The Global Expert in **Solid State Switching** Technology


Sensata
Technologies

NOVA22



NOVA22 Solid State Relays were developed combining technology and innovation to offer high performing solid state relays in a 22.5mm industrial package.

Highest power available in a 22.5mm wide package

The advanced design and technology used in NOVA22 products provide greater power density than any other 22.5 mm wide SSR in the market: 35 Amps in DIN Rail mount and 95 Amps in Panel Mount package.

Wide and innovative range of connections

The unique range of terminal options and configurations makes NOVA22 the most versatile solution. Relay or Contactor terminal configurations, screw or spring cage plug-in input terminals, standard or elevator screws, allowing the use of ring terminals, are all options offered within the NOVA22 family.



NOVA22 Solid state relays are built with high quality components and Crydom's technology and innovation making them the most powerful and versatile solid state relays in a 22.5mm package on the market today!

Diverse Range of Applications

NOVA22 Solid State Relays can be used in a wide range of AC and DC applications. Ideal for heating applications, NOVA22s are also suitable for motion, power and lighting applications; especially for demanding applications that require higher levels of reliability including:

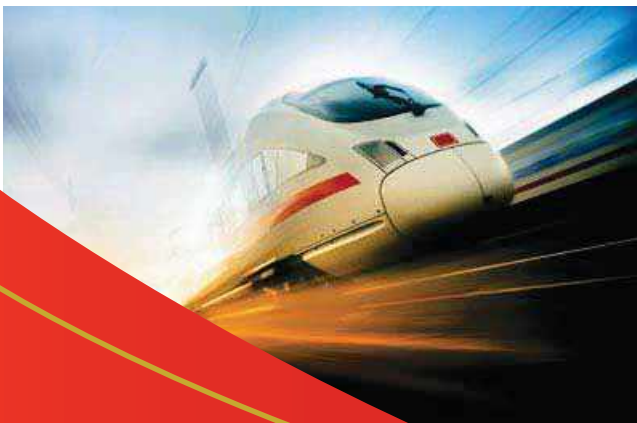
Industrial OEMs: Plastic Machinery, Packaging and Material Handling Equipment, Industrial Ovens, Pumps

Food & Beverage: Baking Ovens, Refrigeration, Food Processing Equipment

Building Equipment: HVAC&R, Lighting, Access Control

Energy & Infrastructure: Renewable Energy, Water and Waste Water Treatments

Transportation: Agricultural Machinery, Railway Vehicles (Tested for Shock and Vibration Resistance up to 50g and 500 Hz, per IEC 60068-2)



Power & Versatility in a 22.5mm Package!

Rated up to 35 Amps (DIN Rail Mount) and 95 Amps (Panel Mount)

High I^2t for use with circuit breakers (8320 A^2sec)

Zero Voltage or Instantaneous Turn-On

600 VAC or 200 VDC models

Built-in overvoltage transient protection

High resistance to Shock and Vibration

ID marker for easy identification

C-UL-US Listed, CE, and TUV certified

LED input status indicator

100 kA SCCR

Input control available in DC and AC voltage options

Industry standard Panel Mount package available

Relay or Contactor configuration

Standard or elevator innovative output screw

Screws or spring cage input terminals



DR22 Series AC & DC Output DIN Rail Mount Solid State Relays

- Ratings up to 35 Amps at 600 VAC and 30 Amps at 200 VDC
- Built-in overvoltage transient protection on AC models
- Relay or Contactor configuration
- Integral heat sink eliminates the need for complex thermal calculations
- DBC substrate for superior thermal performance
- Optional "Elevator" screw suffix "W" allows the use of ring or lug type terminals
- 1kHz Maximum PWM frequency
- C-UL-US Listed and TUV approved

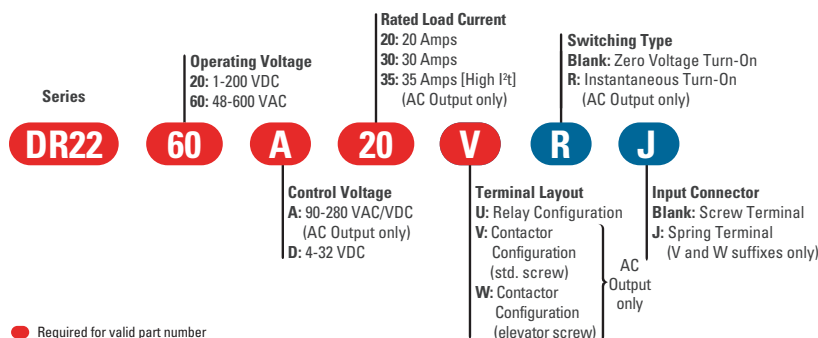


Output Specifications (A)	DR2260x20x	DR2260x30x	DR2260x35x	DR2220D20U	DR2220D30U
Operating Voltage (47-440 Hz)	48-600 V _{RMS}	48-600 V _{RMS}	48-600 V _{RMS}	1-150 VDC	1-150 VDC
Absolute Maximum Rating [VDC]	-	-	-	200	200
Transient Overvoltage [Vpk] (B)	1200	1200	1200	-	-
Maximum Off-State Leakage Current @ Rated Voltage [mA]	1	1	1	0.1	0.2
Minimum Off-State dV/dt @ Maximum Rated Voltage [V/μsec]	500	500	500	-	-
Load Current, General Use UL508/LC A IEC62314 @ 40°C [A _{RMS}]	20	30	35	-	-
Load Current, Motor Starting UL508 FLA / LC B IEC62314 @ 40°C [A _{RMS}]	8.5/4.8	14/7.6	26/14	-	-
Load Current, DC General Use UL508 @ 40°C [ADC]	-	-	-	20	30
Load Current, DC Motor Starting UL508 FLA @ 40°C [ADC]	-	-	-	4.1	5.4
Maximum Load Current	20 A _{RMS}	30 A _{RMS}	35 A _{RMS}	20 ADC	30 ADC
Minimum Load Current (C)	100 mA _{RMS}	100 mA _{RMS}	150 mA _{RMS}	5 mA	5 mA
Maximum 1 Cycle Surge Current (50/60 Hz) [A _{pk}]	286/300	716/750	1290/1350	-	-
Maximum On-State Voltage Drop @ Rated Current	1.35 V _{pk}	1.35 V _{pk}	1.30 V _{pk}	0.68 VDC	0.48 VDC
Maximum 1/2 Cycle I ² t for Fusing (50/60 Hz) [A ² sec]	409/375	2563/2343	8320/7593	-	-
Minimum Power Factor (at Maximum load)	0.5	0.5	0.5	-	-
Maximum Surge Current [ADC] (10 msec)	-	-	-	58	86
Maximum On-State Resistance [R _{DS-ON}] [Ohms]	-	-	-	0.034	0.016
Maximum Pulse Width Modulation Frequency [Hz] (D)	-	-	-	1000	900
Motor Rating UL 508/IEC62314 [HP (kW)]: 120 VAC	0.5 (0.37)	1 (0.74)	2 (1.5)	-	-
Motor Rating UL 508/IEC62314 [HP (kW)]: 240 VAC	1.5 (1.1)	3 (2.2)	5 (3.73)	-	-
Motor Rating UL 508/IEC62314 [HP (kW)]: 480 VAC	3 (2.24)	5 (3.7)	10 (7.4)	-	-
Motor Rating UL 508 [HP (kW)]: 120 VDC	-	-	-	1/3 (0.25)	1/2 (0.37)

Input Specifications (A)	DR2260Axxx	DR2260Dxxx	DR2220DxxU
Control Voltage Range	90-280 VAC/VDC (E)	4-32 VDC (F)	4-32 VDC
Maximum Reverse Voltage	-	-32 VDC	-32 VDC
Minimum Turn-On Voltage	90 VAC/VDC	4 VDC	4 VDC
Must Turn-Off Voltage	5 VAC/VDC	1 VDC	1 VDC
Minimum Input Current (for on-state) [mA]	6	10	11
Maximum Input Current [mA]	10	15	15
Nominal Input Impedance [Ohms]	Current Limited	Current Limited	Current Regulated
Maximum Turn-On time	20 msec	1/2 Cycle (G)	75 μsec
Maximum Turn-Off time	30 msec	1/2 Cycle	100 μsec

General Specifications	DR2260xxxx	DR2220DxxU
Dielectric Strength, Input to Output (50/60 Hz) [V _{RMS}]	4000	3750
Dielectric Strength, Input/Output/Case (50/60 Hz) [V _{RMS}]	4000	2500
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	-	10 ⁹
Maximum Capacitance, Input/Output [pF]	-	8
Ambient Operating Temperature Range [°C] (H)	-	-40 to 80
Ambient Storage Temperature Range [°C]	-	-40 to 100
Short Circuit Current Rating [kA] (J)	100	-
LED Input Status Indicator	-	Green
Weight (Typical) [oz] (g)	Suffix "U" 10.5 (298), "V" & "W" suffixes 10.6 (301)	10.5 (298)
Housing Material	-	UL94 V-0
Baseplate Material	-	Aluminum
Hardware Finish	-	Nickel Plating
Humidity	-	85% non-condensing

Part Number Nomenclature



- Required for valid part number
- For options only and not required for valid part number

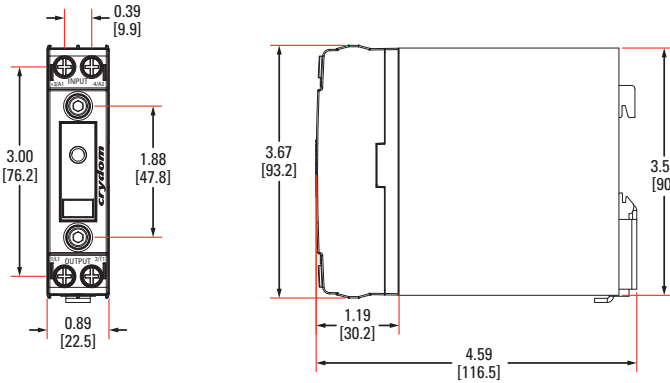
Recommended Accessories for DR22 Series

Connectors	ID Marker	Lug Terminal	Module
CP201 CP202	CNLB CNLN CNL2	TRM0 TRM6	DRML1

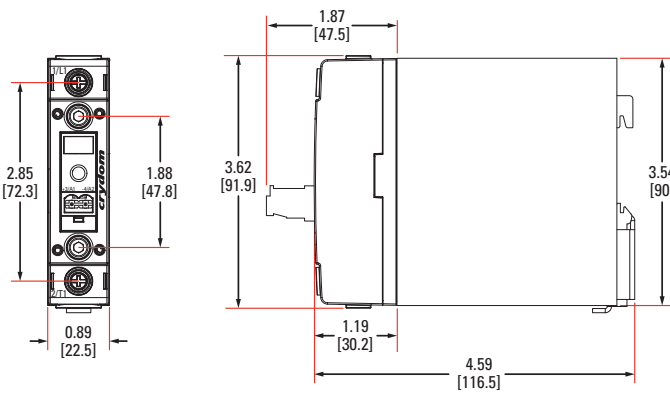
Mechanical Dimensions

Tolerances: ±0.02 in / 0.5 mm
All dimensions are in: inches [millimeters]

Relay Configuration

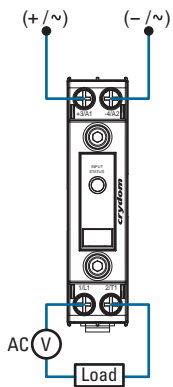


Contact Configuration

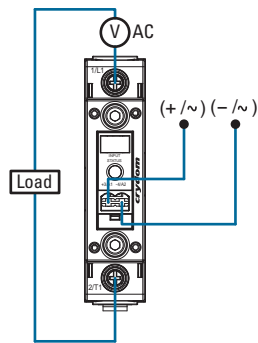


Wiring Diagrams

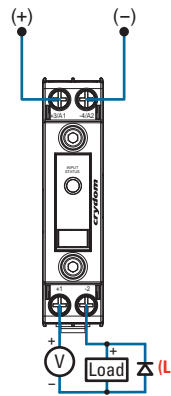
Relay Configuration AC Output



Contact Configuration AC Output

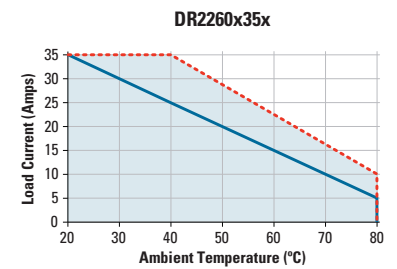
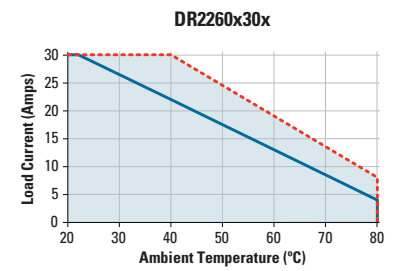
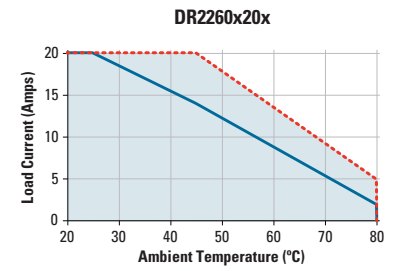


Relay Configuration DC Output (K)

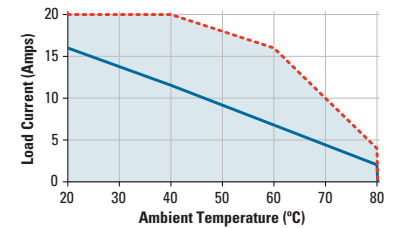


Derating Curves (H)

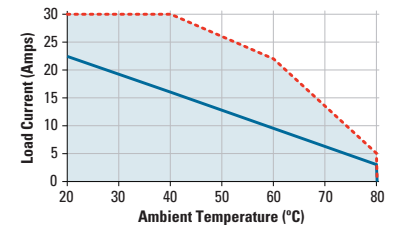
--- Single unit
— Multiple units, no minimum spacing between components



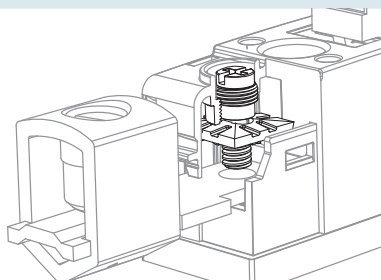
DR2220D20U



DR2220D30U



Elevator Screw (Suffix "W")



The Elevator Screw option allows the screw and clamp to be raised out of the mating threads completely. This provides for the insertion and use of a ring or lug type wire terminal. See datasheet for Compatible Terminals.

General Notes

- (A) All parameters at 25°C unless otherwise specified.
- (B) Output will self trigger between 900-1200 Vpk. Not suitable for capacitive loads.
- (C) Low current loads and high ambient temperature can affect turn-on time.
- (D) 8 VDC Minimum control voltage. Resistive loads only. Consider switching losses; at maximum frequency reduce to 75% output current. Recommended suppressor diode connected at load side, see wiring diagram.
- (E) Above 40°C ambient temperature the maximum control voltage must not exceed 250 VAC/VDC.
- (F) Increase minimum voltage by 1 V for operations from -20 to -40°C.
- (G) Turn-On Time for Instantaneous Turn-On versions is 0.1 msec.
- (H) Operating range -20 to 60°C for AC control models only.
- (J) With appropriate class and rated fuse, see product datasheet for detailed info
- (K) Load can be wired to either terminal 1 or terminal 2. Proper polarity must be observed for the DC control power supply, with terminal 3 being positive with respect to terminal 4.
- (L) DC inductive loads must be diode suppressed.



PM22 Series AC Output Panel Mount Solid State Relays

- Ratings up to 95 Amps at 600 VAC
- Built-in overvoltage transient protection
- DBC substrate for superior thermal performance
- LED input status indicator
- IP20 touch safe housing
- AC or DC control voltage options
- 4000 VAC optical isolation
- C-UL-US Recognized and TUV approved

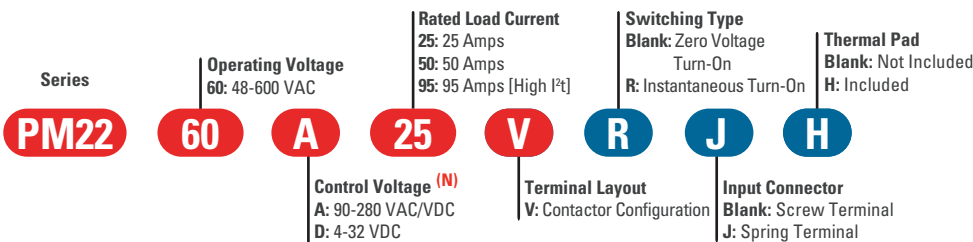


Output Specifications (A)	PM2260x25x	PM2260x50x	PM2260x95x
Operating Voltage (47-440 Hz) [V _{RMS}]	48-600	48-600	48-600
Transient Overvoltage [Vpk] (B)	1200	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA _{RMS}]	1	1	1
Minimum Off-State dV/dt @ Maximum Rated Voltage [V/μsec]	500	500	500
Load Current, General Use UL508/LC A IEC 62314 @ 40°C [A _{RMS}] (M)	25	50	95
Load Current, Motor Starting UL508 FLA /LC B IEC 62314 @ 40°C [A _{RMS}] (M)	8.5/4.8	14/7.6	26/14
Minimum Load Current [mA _{RMS}]	100	100	150
Maximum 1 Cycle Surge Current (50/60 Hz) [A _{pk}]	286/300	716/750	1290/1350
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.35	1.35	1.30
Thermal Resistance Junction to Case (Rjc) [°C/W]	0.49	0.27	0.2
Maximum 1/2 Cycle I ² t for Fusing (50/60 Hz) [A ² sec]	409/375	2563/2343	8320/7593
Minimum Power Factor (at Maximum load)	0.5	0.5	0.5
Minimum Heat sink for Rated Current @ 40°C	2	0.7	0.23
Motor Rating UL 508/IEC62314 [HP (kW)]: 120 VAC	0.5 (0.37)	1 (0.74)	2 (1.5)
Motor Rating UL 508/IEC62314 [HP (kW)]: 240 VAC	1.5 (1.1)	3 (2.2)	5 (3.73)
Motor Rating UL 508/IEC62314 [HP (kW)]: 480 VAC	3 (2.24)	5 (3.7)	10 (7.4)

Input Specifications (A)	PM2260Axx	PM2260Dxx
Control Voltage Range	90-280 VAC/VDC (E)	4-32 VDC (F)
Maximum Reverse Voltage	-	-32 VDC
Minimum Turn-On Voltage	90 VAC/VDC	4 VDC
Must Turn-Off Voltage	5 VAC/VDC	1 VDC
Minimum Input Current (for on-state) [mA]	6	10
Maximum Input Current [mA]	10	15
Nominal Input Impedance [Ohms]	Current Limited	Current Limited
Maximum Turn-On time	20 msec	1/2 Cycle (G)
Maximum Turn-Off time	30 msec	1/2 cycle

General Specifications	PM2260xxx
Dielectric Strength, Input to Output (50/60 Hz) [V _{RMS}]	4000
Dielectric Strength, Input/Output/Case (50/60 Hz) [V _{RMS}]	4000
Minimum Insulation Resistance (@ 500 VDC) [Ohms]	10 ⁹
Maximum Capacitance, Input/Output [pF]	8
Ambient Operating Temperature Range [°C] (H)	-40 to 80
Ambient Storage Temperature Range [°C]	-40 to 100
Short Circuit Current Rating [kA] (J)	100
LED Input Status Indicator	Green
Weight (Typical) [oz] (g)	2.3 (64)
Housing Material	UL94 V-0
Baseplate Material	Aluminum
Hardware Finish	Nickel Plating
Humidity	85% non-condensing

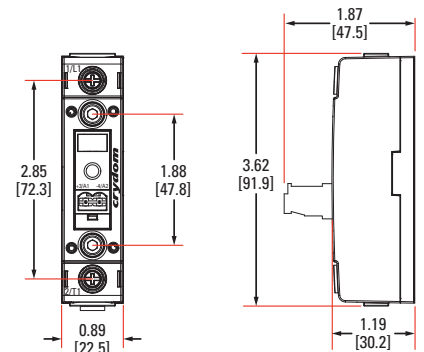
Part Number Nomenclature



- Required for valid part number
- For options only and not required for valid part number

Mechanical Dimensions

Tolerances: ±0.02 in / 0.5 mm
All dimensions are in: inches [millimeters]



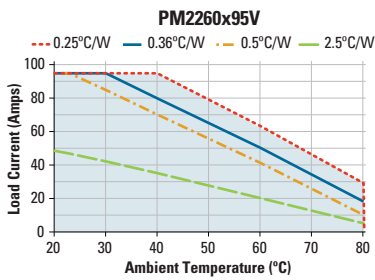
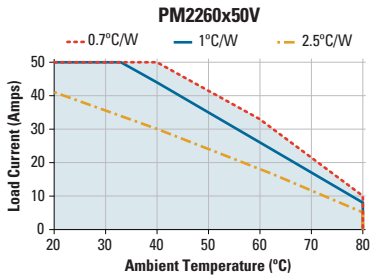
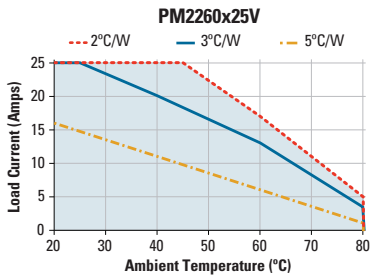
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Derating Curves (H)



General Notes

- (A) All parameters at 25°C unless otherwise specified.
- (B) Output will self trigger between 900-1200 Vpk. Not suitable for capacitive loads.
- (E) Above 40°C ambient temperature the maximum control voltage must not exceed 250 VAC/VDC.
- (F) Increase minimum voltage by 1 V for operations from -20 to -40°C.
- (G) Turn-On Time for Instantaneous Turn-On versions is 0.1 msec.
- (H) Operating range -20 to 60°C for AC control models only.
- (M) Heat sink required, see derating curves.
- (N) Control voltage 18-52 VAC/VDC is available upon request.

Recommended Accessories for PM22 Series

Connectors	ID Marker	Hardware Kit	Heat Sink	Thermal Resistance	Module	Thermal Pad
			Part No.	[°C/W]		
CP201	CNLB	HK8	HS259DR	2.5	DRML1	HSP-7
CP202	CNLN		HS073	0.7		
	CNL2		HS072	0.7		
			HS053	0.5		
			HS033	0.36		
			HS023	0.25		

New Accessories!

Connectors

Part number: CP201, CP202



Pluggable input connectors, 2 position, with screw terminals (CP201) or spring type terminals (CP202). Compatible with Contactor configuration NOVA22 SSRs.

Hardware Kit

Part number: HK8



Bag with 2 SSR mounting screws 8-32 x 3/8, Hex Socket Cap, compatible with PM22 Series Panel Mount SSRs. Used to mount the SSR onto any of our compatible heat sinks.

Heat Sink

Part number: HS259DR



DIN Rail mountable heat sink with 2.5°C/W thermal resistance. Heat sink material is aluminum with black anodized finish. Suitable for mounting a single PM22 Series Panel Mount SSR.

Load Monitoring Module

Part number: DRML1



Load monitoring module with a total current range from 1.2 to 50 Amps at 600 VAC. Compatible with DIN Rail and Panel Mount NOVA SSRs (DR2260DxxV/W & PM2260DxxV).

Lug Terminal

Part number: TRMO



Copper wire lug for AWG 6 (13.3 mm²) to AWG 0 (53.5 mm²) wire size. For use with "Elevator" screw option ("W" suffix) NOVA22 SSRs.

Thermal Pad

Part number: HSP-7



Non-adhesive thermal pad for half-puck package SSRs. Compatible with PM22 Series Panel Mount SSRs.

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EL Series



The global expert in solid state switching technology


Sensata
Technologies

ABOUT US

Crydom, a brand of **Sensata Technologies** and global expert in Solid State Relay Technology, has a distinguished record of providing high quality, world class Solid State Relay and Control Products for a variety of heating, lighting, motion and power control applications. Crydom products, coupled with **unparalleled technical support, timely delivery and competitive pricing**, provide Crydom's clients with the innovative products and support necessary to succeed in today's competitive and fast paced global markets.

Crydom's extensive selection of standard off-the-shelf products is constantly being updated and expanded through its continuous improvement and aggressive new product development programs. Utilizing state of the art designs, materials and technology, Crydom offers a wide range of AC and DC output SSRs in industry standard Panel Mount, PCB Mount and DIN Rail packages, all **meeting global safety and standards agency requirements** such as CE, RoHS, UL, IEC, etc.

Bolstered by four decades of Solid State Relay operations experience, Crydom also specializes and encourages **adapted and fully custom-designed SSR products** for nearly any application where unique specifications and optimized performance are critical for success.

Crydom's modern purpose-built **100,000 square foot manufacturing facility** houses all aspects of its ISO certified operation including Design and Development Engineering, Manufacturing Operations and Quality Assurance, Customer Service, Finance, Marketing and General Management, permitting close coordination of all aspects of Crydom's activities. Applications Engineering and Sales support are both performed in the field to provide Crydom's Customers with the unparalleled technical and commercial support.

Following rigid design guidelines and standards, Crydom products have set the bench mark for SSR performance and reliability world wide. In addition to **award winning designs**, Crydom has acquired an impressive list of **patents** related to SSRs and Solid State Controls, while continuing to develop new circuit and technology-related inventions as part of **extensive R&D programs**.

To learn more about Crydom SSR technology and products, or how an alliance with Crydom can contribute to the success of your project, visit **www.crydom.com** or contact your authorized Crydom Distributor or Crydom Customer Service Representative today.

EL SERIES COMPACT PANEL MOUNTED SSRS

EL Series AC Output SSRs

Crydom's **EL Series** of Compact Panel Mounted SSRs includes AC output models featuring SCRs rated at 10 or 30 Arms (with heat sinking) in a 40 °C ambient, from 24 to 280 VAC in either instantaneous or zero voltage turn on versions. Designed with high surge current ratings and low off state leakage current, the **EL Series** is housed in a compact 21 wide x 35 mm long mini-puck package with polarized quick connect terminals. The **EL Series** AC output models offer 3750 VAC optically isolated logic compatible 5, 12 or 24 VDC input control ratings.

Flexible Control of DC Load

The **EL Series** DC output models feature low dissipation FETs rated at 10 Amps (with heat sinking) at 40°C, from 3 to 100 VDC. The FET outputs offer low minimum load requirements for high impedance loads, high surge current ratings and low off state leakage. Housed in the same compact 21 x 35 mm package with polarized quick connect terminals, the DC Output **EL Series** SSRs offer 2500 VAC optically isolated logic compatible 5, 12 or 24 VDC input control ratings.

EL Series SSRs are RoHS, China RoHS & CE compliant, UL & cUL recognized and TUV certified, making them ideal for heating, lighting and motion control applications where compact high power Solid State Switching is desirable for Reliability and Long Life.

For more information, technical support or questions about the Crydom **EL Series** Solid State Relays or other Crydom products, contact your nearest Crydom Distributor, Representative or Local Crydom Sales Office, or visit our website at www.crydom.com.



EL Series AC Output Panel Mount SSRs

- Compact 21 mm wide mini-puck panel mount package
- Ratings of 10A & 30A @ 24 to 280 VAC
- 5, 12 & 24 VDC control options available
- LED input status indicator
- Thermal pad included
- Zero-Voltage Turn-On or Instantaneous Turn-On output
- UL & cUL Recognized, CE & RoHS Compliant, TUV Certified



Output Specifications (A)

	10 A	30 A
Operating Voltage Range (47-63 Hz) [Vrms]	24-280	
Transient Overvoltage [Vpk] (B)	600	
Maximum Off-State Leakage Current @ Maximum Operating Voltage [mAms]	0.1	
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec]	500	
Minimum Load Current [mAms]	150	250
1 Cycle Surge Current (50/60 Hz) [Apk]	145 / 150	260 / 280
Maximum I _t for Fusing (50/60 Hz, 1/2 cycle) [A ² sec]	100 / 95	338 / 326
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.3	
Minimum Power Factor (with Maximum Load) (C)	0.7	
Thermal Resistance Junction to Case (R _{jc}) [°C/W]	3	0.9
UL 508 Resistive Load @ Rated Voltage [A] (D)	10	30

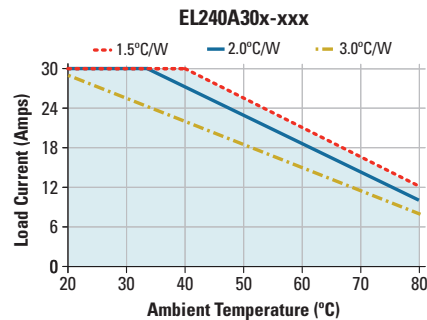
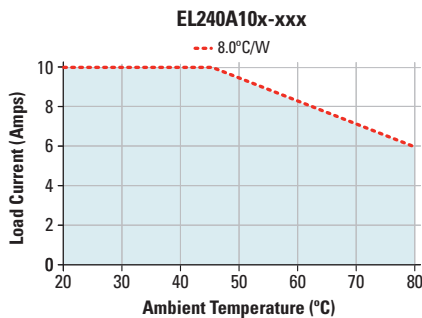
Input Specifications (A)

	EL240Axx-05	EL240Axx-12	EL240Axx-24
Nominal Control Voltage [VDC]	5	12	24
Control Voltage Range [VDC]	4-8	10-14	21-27
Minimum Turn-On Voltage [VDC]	4	10	21
Must Turn-Off Voltage [VDC]	1		
Typical Input Current @ Nominal Control Voltage [mA]	8.5	9.2	5.9
Nominal Input Impedance [Ohm]	470	1.2k	3.9k
Maximum Turn-On Time [msec] (E)	1/2 Cycle		
Maximum Turn-Off Time [msec]	1/2 Cycle		

General Specifications (A)

	Parameters
Dielectric Strength, Input to Output (50/60 Hz) [Vrms]	3750
Dielectric Strength, Output to Baseplate (50/60 Hz) [Vrms]	2500
Maximum Capacitance, Input to Output [pF]	8
Ambient Operating Temperature Range [°C]	-30 to 80
Ambient Storage Temperature Range [°C]	-30 to 125
Weight (typical) [oz] (g)	0.5 (14.4)
Terminal type / size [in] (mm)	Quick Connect / 0.187 (4.75) input, 0.25 (6.35) output

Derating Curves (F)



General Notes

(A) All parameters at 25°C unless otherwise specified.

(B) In models with built-in overvoltage protection ("P" option), the output will self-trigger between 450-600 Vpk, not suitable for capacitive loads.

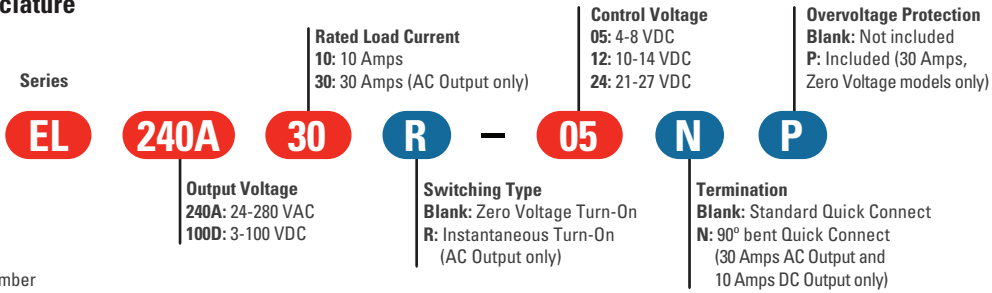
(C) For option P minimum power factor (at maximum load) is 0.9.

(D) Heat sink required, see derating curves.

(E) Turn-On time for Instantaneous Turn-On versions is 0.02 msec.

(F) 100% Duty Cycle.

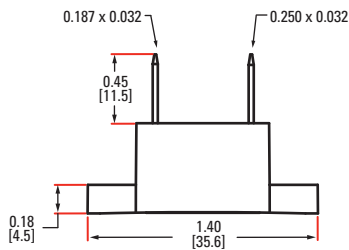
Part Number Nomenclature



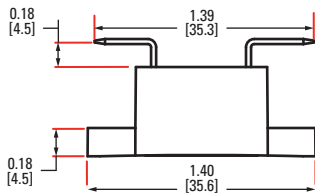
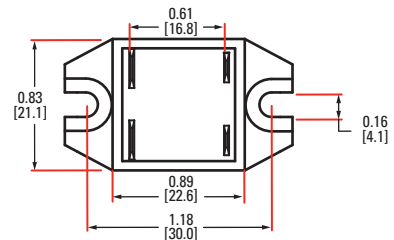
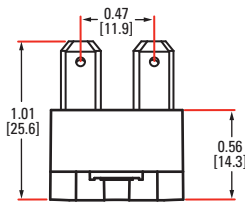
- Required for valid part number
- For options only and not required for valid part number

Mechanical Dimensions

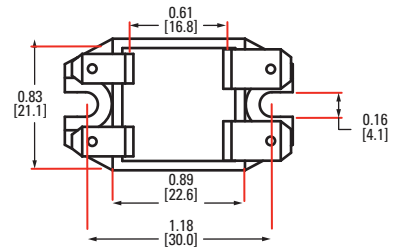
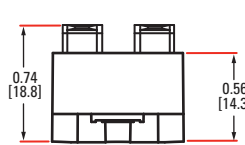
Tolerances: ±0.02 in / 0.5 mm
 All dimensions are in: inches [millimeters]



Standard Quick Connect terminals

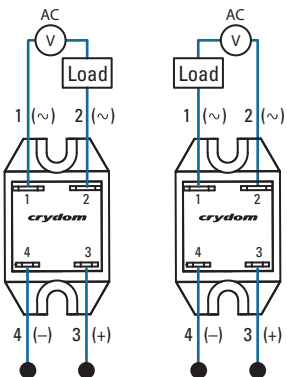


90° bent Quick Connect terminals

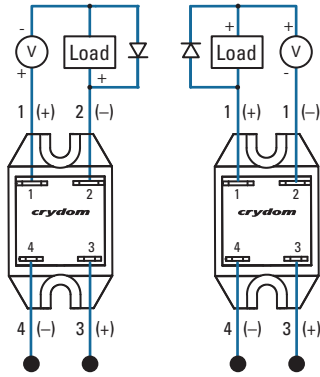


Wiring Diagram (G,H)

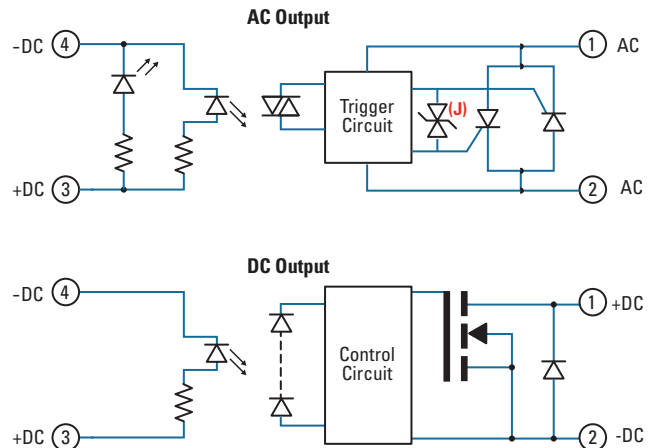
AC Output



DC Output



Block Diagram



AC Pinout
Terminal 1: AC Load
Terminal 2: AC Load
Terminal 3: DC Control (+)
Terminal 4: DC Control (-)

DC Pinout
Terminal 1: DC Load (+)
Terminal 2: DC Load (-)
Terminal 3: DC Control (+)
Terminal 4: DC Control (-)

General Notes

- (G) For AC loads, the AC line can be wired to either terminal 1 or terminal 2. For DC loads, the proper polarity must be observed for the power supply and load with terminal 1 being positive with respect to terminal 2.
- (H) DC inductive loads must be diode suppressed.
- (J) Elective Overvoltage Protection, "P" option.

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EL Series DC Output Panel Mount SSRs

- Compact 21 mm wide mini-puck panel mount package
- Ratings of 10A @ 3 to 100 VDC
- 5, 12 & 24 VDC control options available
- Thermal pad included
- MOSFET Output
- UL & cUL Recognized, CE & RoHS Compliant, TUV Certified



Output Specifications (A,H)

10 A

Operating Voltage Range [VDC]	3-100
Minimum Load Current [mADC]	20
Maximum Surge Current Non-Repetitive (10ms) [A]	100
Maximum Off-State Leakage Current @ Rated Voltage [μ ADC]	100
Maximum On-State Resistance @ Rated Current (Rds-on) [Ohm]	0.02
Maximum On-State Voltage Drop @ Rated Current [V]	0.25
UL 508 Resistive Load @ Rated Voltage [A] (D)	10

Input Specifications (A)

EL100Dxx-05

EL100Dxx-12

EL100Dxx-24

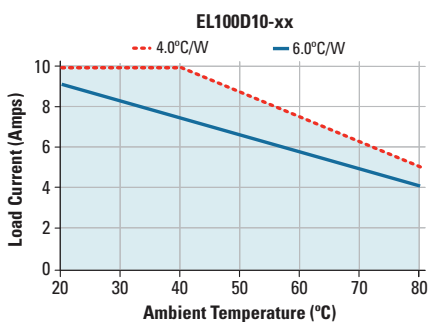
Nominal Control Voltage [VDC]	5	12	24
Control Voltage Range [VDC]	4-8	10-14	21-27
Minimum Turn-On Voltage	4	10	21
Must Turn-Off Voltage	0.5	1	2
Typical Input Current @ Nominal Control Voltage [mA]	13.3	11.7	11.5
Nominal Input Impedance [Ohm]	300	940	2k
Maximum Turn-On Time [msec]		1	
Maximum Turn-Off Time [μ sec]		300	

General Specifications (A)

Parameters

Dielectric Strength, Input/Output/Base (50/60 Hz) [Vrms]	2500
Ambient Operating Temperature Range [°C]	-30 to 80
Ambient Storage Temperature Range [°C]	-30 to 125
Weight (typical) [oz] (g)	0.5 (14.4)
Terminal type / size [in] (mm)	Quick Connect / 0.187 (4.75) input, 0.25 (6.35) output

Derating Curves (F)



General Notes

- (A) All parameters at 25°C unless otherwise specified.
- (D) Heat sink required, see derating curves.
- (F) 100% Duty Cycle.
- (H) DC inductive loads must be diode suppressed.

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DRA & DRS Series

Crydom, a company of Sensata Technologies and global expert in Solid State Relay Technology, has a distinguished record of providing high quality, world class Solid State Relay and Control Products for a variety of heating, lighting and motion control applications. Crydom products, coupled with unparalleled technical support, timely delivery and competitive pricing, provide Crydom's clients with the innovative products and support necessary to succeed in today's competitive and fast paced global markets.

Crydom's extensive selection of standard off-the-shelf products is constantly being updated and expanded through its continuous improvement and aggressive new products development programs. Utilizing state of the art designs, materials and technology, Crydom offers a wide range of AC and DC output SSRs in industry standard Panel Mount, PCB Mount and DIN Rail packages, all meeting global safety and standards agency requirements such as CE, RoHS, UL, IEC, etc.

Bolstered by 4 decades of Solid State Relay operations experience, Crydom also specializes and encourages adapted and fully custom-designed SSR products for nearly any application where unique specifications and optimized performance are critical for success.

Crydom's modern air conditioned purpose-built 100,000 square foot manufacturing facility houses all aspects of its ISO certified operation including Design and Development Engineering, Manufacturing Operations and Quality Assurance, Customer Service, Finance, Marketing and General Management, permitting close coordination of all aspects of Crydom's activities. Applications Engineering and Sales support are both performed in the field to provide Crydom's Customers with the best level of local support possible.

Following rigid design guidelines and standards, Crydom products have set the bench mark for SSR performance and reliability world wide. In addition to award winning designs, Crydom has acquired an impressive list of patents related to SSRs and Solid State Controls, while continuing to create new circuit and technology-related inventions as part of extensive R&D programs.

To learn more about Crydom SSR technology and products, or how an alliance with Crydom can contribute to the success of your project, visit www.crydom.com or contact your authorized Crydom distributor or Crydom Customer Service today.

DIN MOUNTED SOLID STATE RELAYS AND SOCKETS

Crydom DRA Series DIN mounted SSR Assemblies

The 35 mm DIN Rail has become a world standard for mounting various components in control cabinets, and now joining Crydom's already extensive line of high power DIN Rail mounted Solid State Relays is the new DRA Series of low and medium power SSRs.

The **DRA Series** combines Crydom's world class AC and DC output PCB mounted Single-in-Line Solid State Relays with 10 and 54 mm wide DIN rail mounted sockets to create the **DRA Series** of SSR Assemblies. The **DRA series** offers a wide variety of ratings which are ideal for low to medium power control for heating, lighting or motion control applications. In addition to the models listed in the catalog, any standard Crydom SIP type SSR with similar pin centers can be offered as an assembly.

Crydom DRS Series DIN Rail Sockets

DRS Series DIN rail mounted socket kits are designed to accept either one or up to four individual Crydom SIP type PCB mounted SSRs with industry standard 1.1 inch/27.9 mm end to end pin spacing. Single channel sockets are 10 mm wide and 4 channel sockets are 54 mm wide.

Each DRS Series socket comes from the factory in kit form which allows the user to select and install the best SSR and input configuration for any particular application. Input status LED indicators and resistors for low range or high range DC inputs are also included in the kit along with instructions for assembly.

For more information, technical support or questions about adapted assemblies, contact your local Crydom Distributor or Regional Sales office.





**DRA Series
AC/DC Output SSR Assemblies**

- Ready-to-use SSR assemblies for either AC or DC output
- 10 mm Single channel and 54 mm Four channel DIN Rail mount assemblies available
- 3 to 15 or 15 to 32 VDC input versions include LED indicator
- 3 to 32 VDC, 18 to 36 and 90 to 140 AC input control versions do not include LED indicator
- AC output ratings up to 300 VAC @ 8 Amps (UL) and 380 VAC 8 amps (IEC)
- DC output ratings up to 200 VDC and 8 Amps
- Cage style screw terminals for easy and reliable wire connection
- Socket clip fits all standard 35 mm DIN rail profiles

Standard Assemblies (A)

**1 channel
DC output**

	Output Voltage Range VDC	Output Current Range (B) ADC	Control Voltage Range VDC	Input Current @ 5/24 Vdc mA	Input Status Indicator	SSR Function	Isolation Voltage Vrms	Operating Temp. Range °C
DRA1-CMX100D10	1-100	0-8	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMX100D6	1-100	0-6	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMX200D3	1-200	0-3	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMX60D10	1-60	0-8	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMX60D5	1-60	0-5	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE100D10	1-100	0-8	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE100D6	1-100	0-6	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE200D3	1-200	0-3	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE60D10	1-60	0-8	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-CMXE60D5	1-60	0-5	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA1-MPDCD3	3-60	.02-3	3-32	3	No	SPST-NO	4000	-40 to 80
DRA1-MPDCD3-B	3-60	.02-3	3-32	3	No	SPST-NC	4000	-40 to 80

**1 channel
AC output**

	Output Voltage Range VAC	Output Current Range (B) Arms	Control Voltage Range VDC	Input Current @ 5/24 Vdc mA	Input Status Indicator	SSR Function	Isolation Voltage Vrms	Operating Temp. Range °C
DRA1-CX240D5	12-280	.06-5	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-CX240D5-B	12-280	.06-5	4-28	15	No	SPST-NC, Zero Voltage Turn-On	4000	-30 to 80
DRA1-CX240D5R	12-280	.06-5	3-15	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-CX380D5	48-530	.06-5	4-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-CX380D5R	48-530	.06-5	4-15	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-CXE240D5	12-280	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-CXE240D5R	12-280	.06-5	15-32	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-CXE380D5	48-530	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-MCX240D5	12-280	.06-5	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MCX380D5	48-530	.06-5	4-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MCXE240D5	12-280	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MCXE380D5	48-530	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MP120D3	12-140	.02-3	3-32	3	No	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MP240D3	24-280	.02-3	3-32	3	No	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-MP240D4	24-280	.02-4	3-32	3	No	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA1-SPF240A25	12-280	.06-8	90-140 VAC	10	No	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPF240D25	12-280	.06-8	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPF240D25R	12-280	.06-8	3-15	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-SPF380D25	48-530	.06-8	4-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPF380D25R	48-530	.06-8	4-15	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80
DRA1-SPFE240A25	12-280	.06-8	18-36 VAC	10	No	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPFE240D25	12-280	.06-8	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA1-SPFE240D25R	12-280	.06-8	15-32	15	Yes	SPST-NO, Random Turn-On	4000	-30 to 80

**4 channel
DC output**

	Output Voltage Range VDC	Output Current Range (B) ADC	Control Voltage Range VDC	Input Current @ 5/24 Vdc mA	Input Status Indicator	SSR Function	Isolation Voltage Vrms	Operating Temp. Range °C
DRA4-CMX100D10	1-100	0-8	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA4-CMX200D3	1-200	0-3	3-10	15	Yes	SPST-NO	2500	-30 to 80
DRA4-CMXE100D10	1-100	0-8	20-28	15	Yes	SPST-NO	2500	-30 to 80
DRA4-CMXE200D3	1-200	0-3	20-28	15	Yes	SPST-NO	2500	-30 to 80

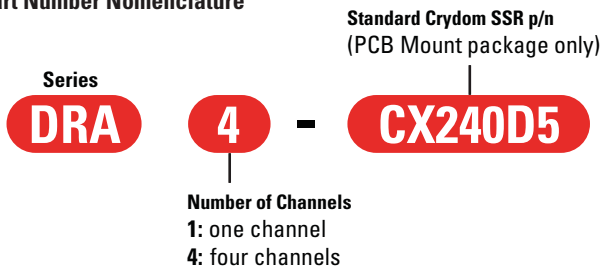
**4 channel
AC output**

	Output Voltage Range VAC	Output Current Range (B) Arms	Control Voltage Range VDC	Input Current @ 5/24 Vdc mA	Input Status Indicator	SSR Function	Isolation Voltage Vrms	Operating Temp. Range °C
DRA4-CX240D5	12-280	.06-5	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA4-CXE240D5	12-280	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-30 to 80
DRA4-MCX240D5	12-280	.06-5	3-15	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80
DRA4-MCXE240D5	12-280	.06-5	15-32	15	Yes	SPST-NO, Zero Voltage Turn-On	4000	-40 to 80

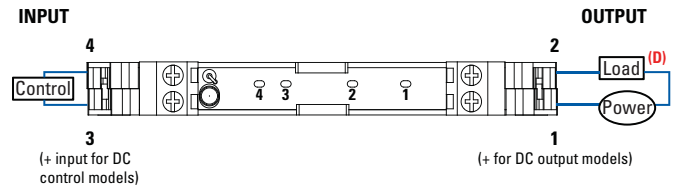
(A) For full SSR specifications see product datasheet at www.crydom.com

(B) Maximum output current rating of any assembly is 8 amps per channel @ 40°C ambient, derating from full output to 0 amps @ 80°C ambient.

Part Number Nomenclature



Wiring Diagram (C)



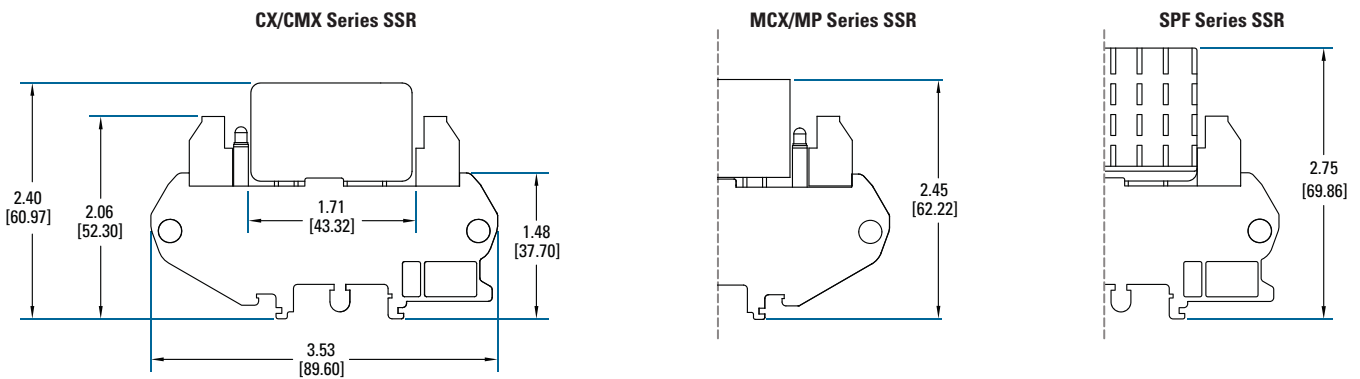
(C) Wiring diagram is identical for each individual section whether it is a single or four channel assembly.

(D) For AC loads, the AC line can be wired to either SSR/socket terminal 1 or terminal 2. The AC load may also be wired on either the line or neutral side of the SSR. For DC loads, the proper polarity must be observed for the power supply, load and SSR/socket with terminal 1 being positive with respect to terminal 2.

Mechanical Dimensions

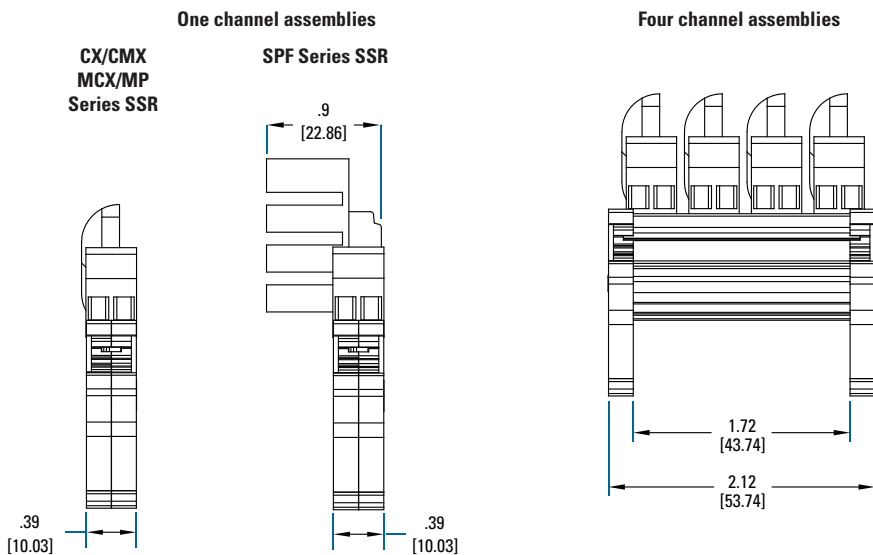
Tolerances: ± 0.02 in / 0.5 mm
 All dimensions are in: inches [millimeters]

FRONT VIEW

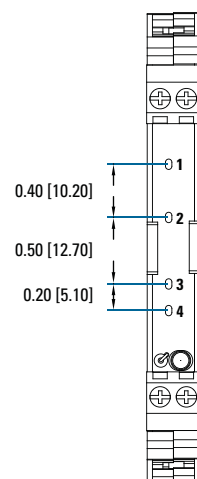


Note: Front view drawings apply to single and four channel assemblies.

SIDE VIEW



TOP VIEW



To view available Installation Sheet scan the QR code with your smartphone or visit www.crydom.com

Questions? Call or e-mail

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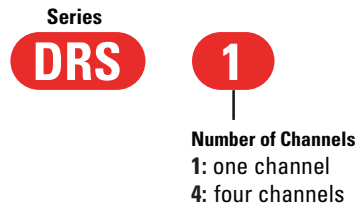
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DRS Series Sockets

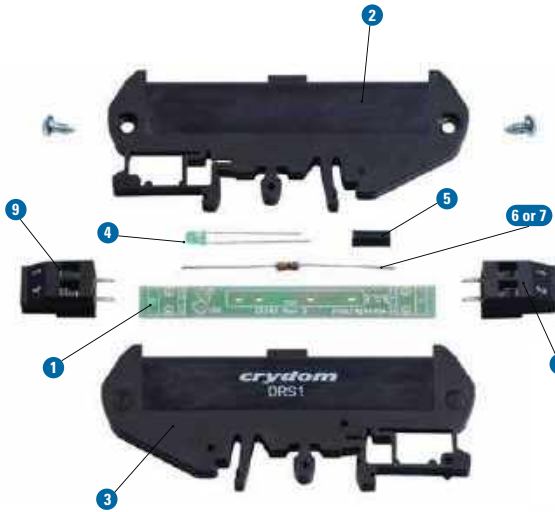
- 10 mm Single channel and 54 mm Four channel DIN Rail mount sockets available.
- Input status LED for either 3 to 15 or 15 to 32 VDC control applications.
- Cage style screw terminals for easy and reliable wire connection.
- Socket clip fits all standard 35 mm DIN rail profiles.

Part Number Nomenclature



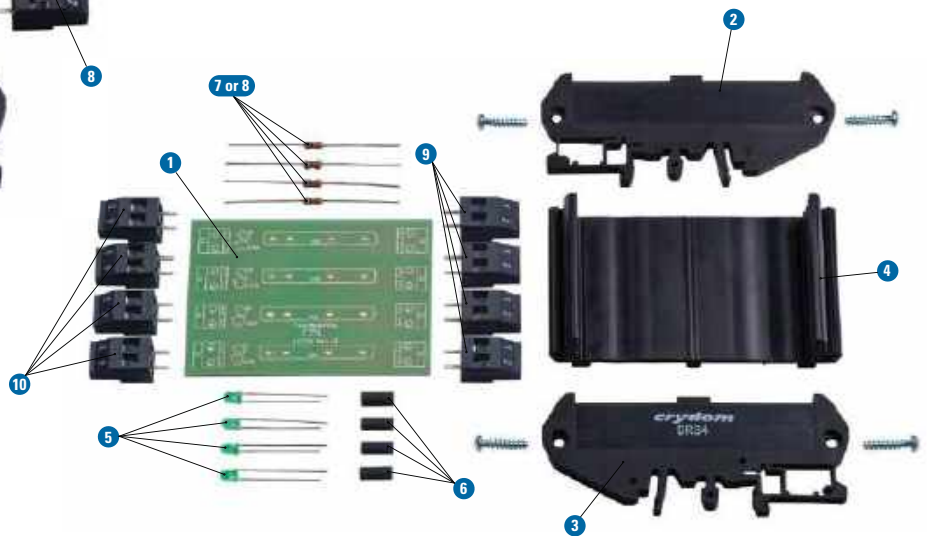
SINGLE CHANNEL SOCKET

List of parts included in the kit (E)	Quantity
1 Printed circuit board	1
2 Housing - right side (includes 2 screws)	1
3 Housing - left side	1
4 Green LED (F)	1
5 LED standoff	1
6 Resistor 1K Ω , 0.25W (brown-black-red) (G)	1
7 Resistor 4.7K Ω , 0.25W (yellow-violet-red) (G)	1
8 Output terminal block	1
9 Input terminal block	1



FOUR CHANNEL SOCKET

List of parts included in the kit (E)	Quantity
1 Printed circuit board	1
2 Housing - right side (includes 2 screws)	1
3 Housing - left side (includes 2 screws)	1
4 Profile extrusion	1
5 Green LED (F)	4
6 LED standoff	4
7 Resistor 1K Ω , 0.25W (brown-black-red) (G)	4
8 Resistor 4.7K Ω , 0.25W (yellow-violet-red) (G)	4
9 Output terminal block	4
10 Input terminal block	4



(E) SSR(s) purchased separately.

(F) LED status indicator is not required for proper function of the SSR and may be omitted. No resistors are needed when LED is not installed. For AC input SSR control applications LED status indicator and resistor must not be used.

(G) Each kit includes two different value resistors (1K Ω & 4.7K Ω) to choose from. Use 1K Ω (brown-black-red) resistor for applications with control voltage range between 3-15 VDC and 4.7K Ω (yellow-violet-red) resistor for applications with control voltage range between 15-32 VDC.

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