

- DIN Rail Mount (TS 35)
- MOSFET Output
- Extra Low On State Resistance
- Input Status LED

DC output SPST-NO solid state relays use MOSFET output for high switching capabilities in a DIN Rail (TS-35) mount air-cooled package.

MODEL NO.	MS11-CMX60D10	MS11-CMX100D6
INPUT SPECIFICATIONS ①		
Control Voltage Range	5-10 Vdc	5-10 Vdc
Nominal Input Impedance	300 Ohm	300 Ohm
Typical Input Current @ 5 Vdc	12 mA	12 mA
Must Turn On Voltage	5 Vdc	5 Vdc
Must Turn Off Voltage	1.0 Vdc	1.0 Vdc
OUTPUT SPECIFICATIONS ① ③		
Operating Voltage Range	0-60 Vdc	0-100 Vdc
Load Current Range	0-10 Adc	0-6 Adc
Max. Surge Current, (10 msec)	100 Apk	100 Apk
Max. Off-State Leakage @ Rated Voltage	100 µAdc	100 µAdc
Max. On-State Resistance @ Rated Current (R _{DS-ON})	.018 Ohm	.040 Ohm
Max. On-State Voltage Drop @ Rated Current	0.18V	0.24V
Max. Turn-On Time @ 10Vdc Control	1.0 msec	1.0 msec
Max. Turn-Off Time @ 10Vdc Control	300 µsec	300 µsec

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GENERAL NOTES

- ① All parameters at 25°C unless otherwise specified.
- ② Dielectric and insulation resistance are measured between input and output.
- ③ Inductive loads should be diode suppressed.
- ④ At 55 Vdc.

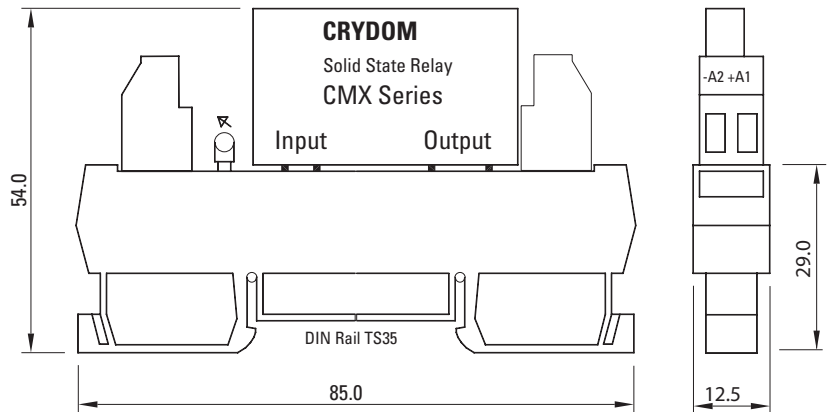
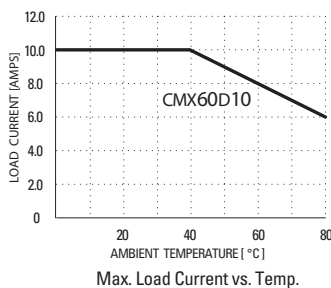
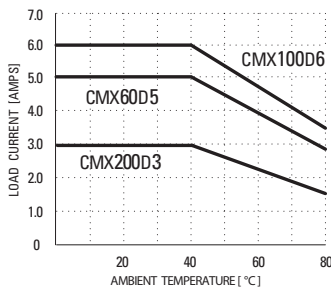
GENERAL SPECIFICATIONS

Dielectric Strength ②	2500 Vrms
Insulation Resistance (Min.) @ 500 Vdc ②	10 ⁹ Ohm
Max. Capacitance (Input/Output)	15 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-30 to 125°C

MECHANICAL SPECIFICATIONS

Weight: (typical)	30 g
Encapsulation(SSR):	Thermally Conductive Epoxy

CURRENT DERATING CURVES



All dimensions are in millimeters (not to scale)
Colour of carrier including terminations - orange

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APPROVALS (SSR ONLY)

UL E116950 (6A & 10A Models)

- DIN Rail Mount (TS-35)
- SCR Output Rating
- Ultra High Surge
- Crydom's Patented Design
- Input Status LED

Crydom's family of SPST-NO relays achieves the highest power switching capability in a DIN mounted air-cooled package. Advanced features include exceptional steady state current, plus ultra-high surge ratings. Models are available to switch up to 280 Vrms with AC or DC control, and either zero-cross or random turn-on ("R") switching versions.

MODEL NUMBERS	AC CONTROL (120Vac) (24Vac)	MS11-CX2405A MS11-CXE240A5
	DC CONTROL (5Vdc) (24Vdc)	MS11-CX240D5 MS11-CXE240D5
OUTPUT SPECIFICATIONS ①		
Operating Voltage (47-63 Hz) [Vrms]		12-280
Load Current Range [Arms]		.06-5
Transient Overvoltage [Vpk]		600
Max. Surge Current, (16.6ms) [Apk]		250
Max. On-State Voltage Drop @ Rated Current [Vpk]		1.4
Maximum I ² t for Fusing, (8.3 msec.) [A ² sec]		260
Max. Off-State Leakage Current @ Rated Voltage [mArms]		0.1
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ②		500
Max. Turn-On Time ③		1/2 Cycle (DC Control), 10.0 msec (AC Control)
Max. Turn-Off Time		1/2 Cycle (DC Control), 40.0 msec (AC Control)
Power Factor (Min.) with Max. Load		0.5

MODEL NUMBERS	DC CONTROL		AC CONTROL ④	
	5Vdc	24Vdc	120Vac	24Vac
Nominal Voltage				
Control Voltage Range	5-15 Vdc	15-32 Vdc	90-140 Vrms	18-36 Vrms
Max. Turn-On Voltage	5.0 Vdc	15.0 Vdc	90.0 Vrms	18.0 Vrms
Min. Turn-Off Voltage	1.0 Vdc	1.0 Vdc	10.0 Vrms	2.0 Vrms
Nominal Input Impedance	300 Ohm	1.0k Ohm	14.1k Ohm	4.2k Ohm
Typical Input Current @ Nominal Voltage	12 mA	8 mA	10 mArms	5 mArms

GENERAL NOTES

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- ① All parameters at 25°C unless otherwise specified.
 ② Off-State dv/dt test method per EIA/NARM standard RS-443, paragraph 13.11.1
 ③ Turn-On Time for Random Turn-On versions 0.1msec (DC Control Models).
 ④ No input status LED on AC control modules.

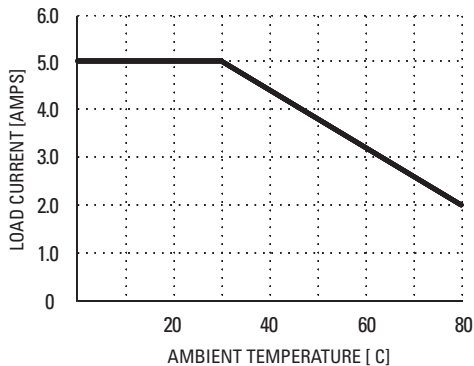
GENERAL SPECIFICATIONS

Dielectric Strength 50/60Hz Input/Output	2500 Vrms
Insulation Resistance (Min.) @ 500 Vdc	10 ⁹ Ohm
Max. Capacitance Input/Output	10 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-30 to 80°C

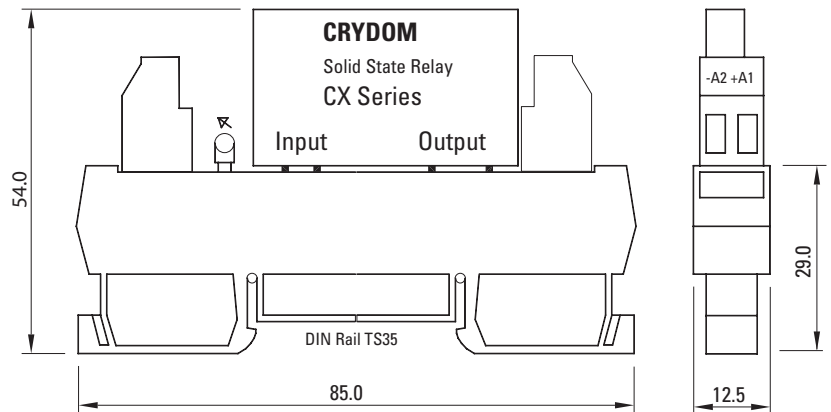
MECHANICAL SPECIFICATION

Weight: (typical)	30 grms
Encapsulation (SSR):	Thermally Conductive Epoxy

CURRENT DERATING CURVE



Max. Load Current vs. Temp.



- All dimensions are in millimeters (not to scale)
- Colour of carrier and termination housing - orange
- Input status LED is on DC control module only

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AVAILABLE OPTIONS

- R Random Turn-On Switching
Example: MS11-CX240D5R, MS11-CX240A5R

APPROVALS (SSR ONLY)

UL E 116949
CSA LR 81689
VDE 70938
UG (240V, DC Control Only)

