

## Solid State Relays - PCB Mount: LR



### Features

25-40Amp - 240/480 VAC - DC/AC control voltage - Zero-cross and Random turn-on versions available.

Product	INPUT SPECIFICATIONS		OUTPUT SPECIFICATIONS		
	Control Voltage Range	Load Current	Switching Voltage Type	Turn On	Load Voltage Range
<a href="#">LR600240D25</a>	4-32 VDC	0.15-25 Arms	Vrms	Zero-cross	24-280
<a href="#">LR600240D40</a>	4-32 VDC	0.15-40 Arms	Vrms	Zero-cross	24-280
<a href="#">LR1200480D25</a>	4-32 VDC	0.15-25 Arms	Vrms	Zero-cross	48-530
<a href="#">LR1200480D40</a>	4-32 VDC	0.15-40 Arms	Vrms	Zero-cross	48-530

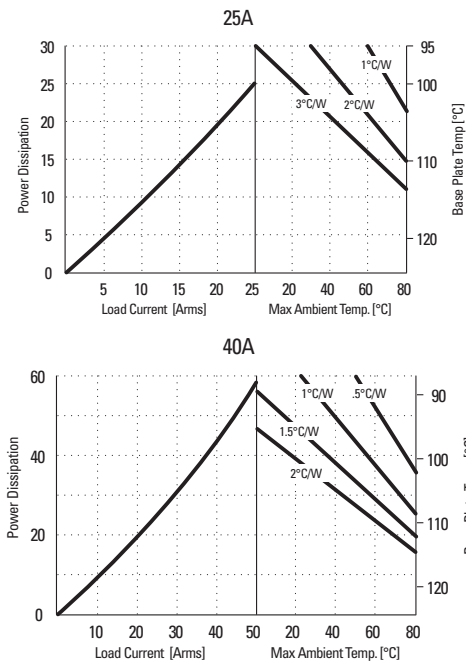
- DC or AC Control
- Zero Cross and Random Switching
- Up to 1200V Transient Capability
- SCR Output
- PCB Mount
- Low Profile

Manufactured in Crydom's ISO 9001 Certified facility for optimum product performance and reliability.

## MODEL NUMBERS

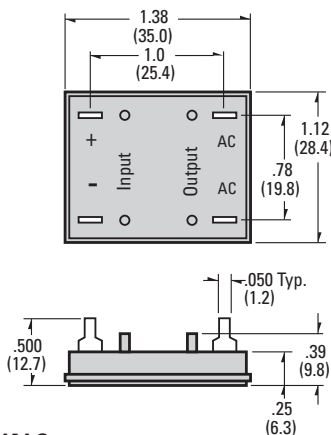
Zero Cross Turn-on	LR600240D25 LR600240A25	LR600240D40 LR600240A40	LR1200480D25 LR1200480A25	LR1200480D40 LR1200480A40
Random Turn-on	LR600240D25R LR600240A25R	LR600240D40R LR600240A40R	LR1200480D25R LR1200480A25R	LR1200480D40R LR1200480A40R

## CURRENT DERATING CURVES



## MECHANICAL DIMENSIONS

All dimensions are in inches (millimeters)



## OUTPUT SPECIFICATIONS ①

Operating Voltage Range (47-63 Hz) [Vrms]	24-280	24-280	48-530	48-530
Load Current Range [Arms]	0.15-25	0.15-40	0.15-25	0.15-40
Transient Over-Voltage [Vpk]	600	600	1200	1200
Max. Surge Current Non-Repetitive, (16.6ms) [Apk]	250	400	250	400
Max. I <sup>2</sup> t For Fusing (8.3 msec.) [A <sup>2</sup> sec]	260	660	260	660
Min. Off-State dv/dt @ Max. Rated Voltage [V/μsec] ③	500	500	500	500
Max. Off-State Leakage @ Rated Voltage [mArms]	0.1	0.1	0.1	0.1
Max. On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6
Max. Turn-On Time ④	1/2 Cycle (DC Input), 10.0 msec (AC Input)			
Max. Turn-Off Time	1/2 Cycle (DC Input), 40.0 msec (AC Input)			
Power Factor (Min.) With Max. Load	0.5	0.5	0.5	0.5

## INPUT SPECIFICATIONS ①

	120 Vac Control ⑥	DC Control	240V AC Control ⑥
Control Voltage Range	90-140 Vac	4-32 Vdc	180-260 Vac
Must Turn On Voltage	90 Vac	4 Vdc	180 Vac
Must Turn Off Voltage	10 Vac	1 Vdc	10 Vac
Typical Input Current ⑤ ⑥	15mA@120 Vac	9 mA@ 5 Vdc	11mA@ 240Vac

## GENERAL SPECIFICATIONS

Dielectric Strength ②	2500 Vrms
Insulation Resistance (Min.) @ 500 Vdc ②	10 <sup>9</sup> Ohm
Max. Capacitance	8.0 pF
Ambient Operating Temperature Range	-30 to 80°C
Ambient Storage Temperature Range	-30 to 125°C

## MECHANICAL SPECIFICATIONS

Weight: (typical) 0.5 oz. (14.4 g)

## GENERAL NOTES

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- ① All parameters at 25°C unless otherwise specified.
- ② Dielectric and insulation resistance are measured between input and output.
- ③ Off-State dv/dt test method per EIA/NARM standard RS-443.
- ④ Turn on time for random switching models is 0.1 ms (use suffix R when ordering random turn on version)
- ⑤ DC Input circuitry incorporates active current limiter.
- ⑥ Use suffix -120 for 120Vac control and -240 for 240Vac control.

## APPROVALS

UL, cUL E116950

