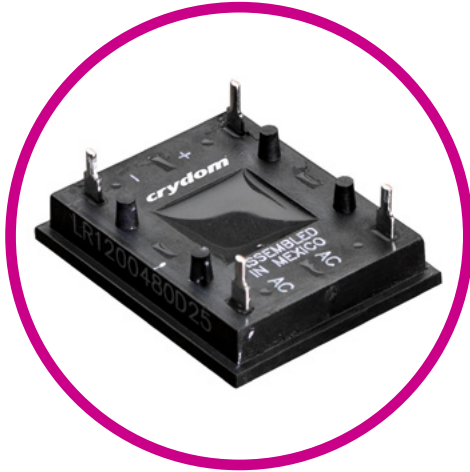


| LR SERIES

PCB MOUNT SOLID STATE RELAYS



Features

- Ratings up to 40 A @ 600 VAC with external heat sink
- SCR output for heavy industrial loads
- AC or DC control
- Zero voltage (resistive loads) or instantaneous turn-on (inductive loads) output
- Optional mounting clip available (LMC-1)

PRODUCT SELECTION

Control Voltage	25 A	40 A	25 A	40 A	25 A	40 A
90-140 VAC	LR600240A25-120	LR600240A40-120	LR1200480A25-120	LR1200480A40-120	LR1200600A25-120	R1200600A40-120
180-260 VAC	LR600240A25-240	LR600240A40-240	LR1200480A25-240	LR1200480A40-240	LR1200600A25-240	LR1200600A40-240
4-32 VDC	LR600240D25	LR600240D40	LR1200480D25	LR1200480D40	LR1200600D25	LR1200600D40

SPECIFICATIONS

Output ⁽¹⁾

Description	25A	40A	25A	40A	25A	40A
Operating Voltage Range (47-63 Hz) [Vrms]	24-280	24-280	48-530	48-530	48-600	48-600
Transient Overvoltage [Vpk]	600	600	1200	1200	1200	1200
Maximum Off-State Leakage Current @ Rated Voltage [mA_{ms}]	0.1	0.1	0.1	0.1	0.1	0.1
Minimum Off-State dv/dt @ Maximum Rated Voltage [V/μsec] ⁽³⁾	500	500	500	500	500	500
Maximum Load Current [Arms]	25	40	25	40	25	40
Minimum Load Current [Arms]	0.15	0.15	0.15	0.15	0.15	0.15
Maximum Surge Non-Repetitive (16.6 msec)[Apk]	250	400	250	400	250	40
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.6	1.6	1.6	1.6	1.6	1.6
Maximum I² t for Fusing (8.33 msec) [A² sec]	260	660	260	660	260	660
Maximum Thermal Resistance Junction to Ceramic Base	0.9°C/W	0.7°C/W	0.9°C/W	0.7°C/W	0.9°C/W	0.7°C/W
Minimum Power Factor (with Maximum Load)	0.5	0.5	0.5	0.5	0.5	0.5

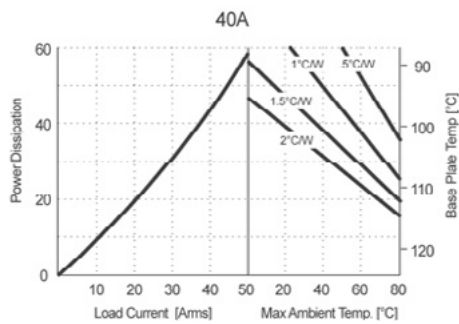
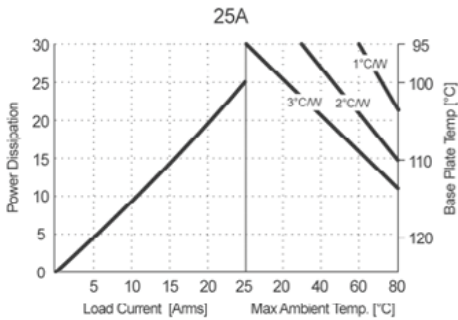
Input ⁽¹⁾

Description	No Suffix	-120	-240
Control Voltage Range	4-32 VDC	90-140 VAC	180-260 VAC
Must Turn-On Voltage	4.0 VDC	90 VAC	180 VAC
Must Turn-Off Voltage	1.0 VDC	10 VAC	10 VAC
Typical Input Current [mA] ⁽⁵⁾⁽⁶⁾	9	15	11
Maximum Turn-on Time ⁽⁴⁾	1/2 Cycle	10	10
Maximum Turn-off Time	1/2 Cycle	40	40

General ⁽¹⁾

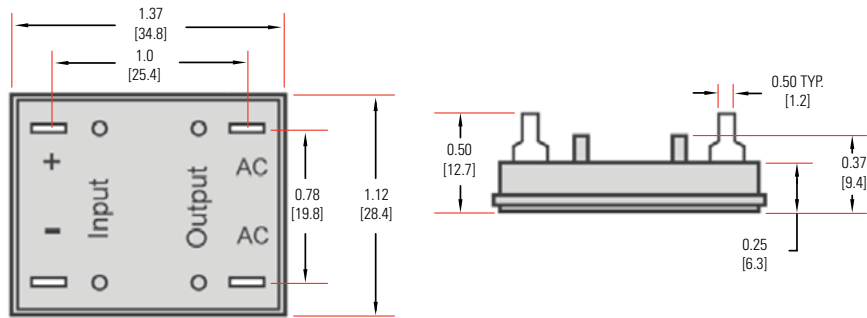
Description	Parameters
Dielectric Strength, Input/Output/Base (50/60 Hz)	2500 Vrms
Minimum Insulation Resistance (@ 500 VDC)	10 ⁹ Ohms
Maximum Capacitance, Input/Output	8 pF
Ambient Operating Temperature Range	-30 to 80 °C
Ambient Storage Temperature Range	-30 to 125 °C
Weight (typical)	0.5 oz. (14.4 g)
Encapsulation	Thermally Conductive Epoxy

THERMAL DERATE INFORMATION

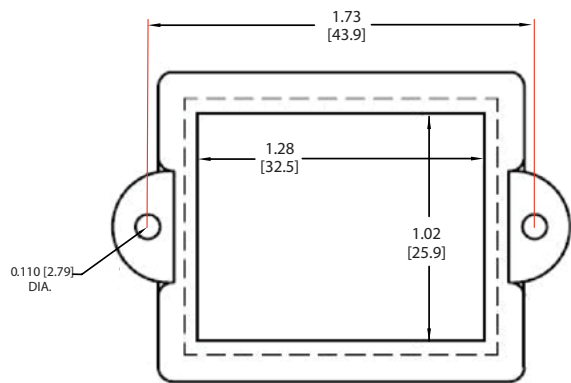


MECHANICAL DIMENSIONS

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

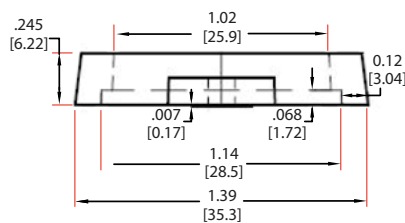
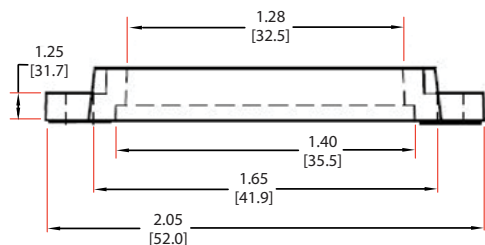


Mounting Clip (Optional)



LMC-1 Mounting Clip

NOTE: This plastic shell is designed to secure LR Series Solid State Relay to the surface of external heat sink.



ORDERING OPTIONS

Example : LR600240A25R-120

Series	LR	600	240	A	25	R	-120
LR							
Blocking Voltage							
600: 600 Vpk							
1200: 1200 Vpk							
Operating Voltage							
240: 24-280 VAC							
480: 48-530 VAC							
600: 48-600 VAC							
Control Voltage							
D: DC Input							
A: AC Input							
Rated Load Current							
25: 25 Amps							
40: 40 Amps							
Switching Type							
Blank: Zero voltage Turn-on							
R: Instantaneous Turn-on							
AC Control Range							
Blank: 4-32 VDC (DC Only)							
-120: 90-140 VAC (AC Only)							
-240: 180-260 VAC (AC Only)							

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

GENERAL NOTES

- ⁽¹⁾ All parameters at 25 °C and per section 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, paragraph 13.11.1
- ⁽⁴⁾ Turn-on time for instantaneous turn-on models is 0.1 ms
- ⁽⁵⁾ DC input circuitry incorporates active current limiter.
- ⁽⁶⁾ Use suffix -120 for 120 VAC control and -240 for 240 VAC control.

AGENCY APPROVALS & CERTIFICATIONS

Designed in accordance with the requirements of IEC 62314



WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- 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

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment
- Verify all connections and replace all covers before turning on power

Failure to follow these instructions will result in death or serious injury.

Datasheets provided by Sensata Technologies, Inc., its subsidiaries and/or affiliates ("Sensata") are solely intended to assist third parties ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, valuation, and judgment in designing Buyer's systems and products. Sensata datasheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular datasheet. Sensata may make corrections, enhancements, improvements, and other changes to its datasheets or components without notice.

Buyers are authorized to use Sensata datasheets with the Sensata component(s) identified in each particular datasheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATASHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATASHEETS OR USE OF THE DATASHEETS, EXPRESS, IMPLIED, OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATASHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com. SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY, AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA

CONTACT US

Americas

+1(800) 350 2727
sales.crydom@sensata.com
Europe, Middle East & Africa
+44 (1202) 416170
ssr-info.eu@sensata.com

Asia Pacific

sales.isasia@list.sensata.com
China +86 (21) 2306 1500
Japan +81 (45) 277 7117
Korea +82 (31) 601 2004
India +91 (80) 67920890
Rest of Asia +886 (2) 27602006
ext 2808