



GA8 SERIES

PCB MOUNT SOLID STATE RELAYS



Features

- Ratings of 3.5 and 5 Amps @ 24-280 VAC
- UL Recognized/Horse Power Rated (E46203)
- 4kV Optical Isolation
- Zero Voltage Turn-on
- Industry Standard SIP Package
- Form A Output
- CE compliant

PRODUCT SELECTION

Control Voltage	4 A	5 A
3-28 VDC	GA8-6B02	GA8-6D05

SPECIFICATIONS

Input ⁽¹⁾

Description	4 A	5 A
Minimum Turn-On Voltage [VDC]	3.0	3.0
Maximum Input Voltage [VDC]	28	28
Must Turn-Off Voltage [VDC]	1.0	1.0
Maximum Input Current [mADC] ⁽²⁾	16	16
Nominal Input Resistance ⁽³⁾	Current Regulated	Current Regulated

Output

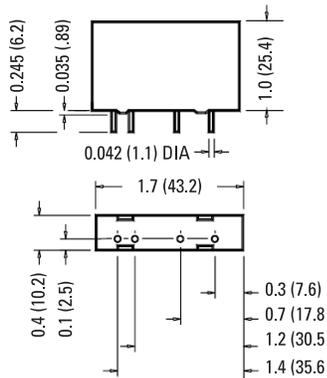
Description	4 A ⁽¹⁰⁾	5 A
Nominal Line Voltage [Vrms]	240	240
Minimum Line Voltage [Vrms]	24	24
Maximum Line Voltage [Vrms]	280	280
Maximum Peak Off-State Voltage [Vpeak] ⁽⁴⁾	600	600
Static (Off-State) dv-dt [V/μSec]	200	200
Maximum On-State Current [Arms] ⁽⁵⁾	4	5.0
Minimum On-State Current [Arms]	.05	.05
Minimum 1-Cycle Surge [Apeak] ⁽⁶⁾	100	100
On-State Voltage Drop [Vpeak] ⁽⁷⁾	1.6	1.6
Maximum Off-State Leakage [mArms] ⁽⁸⁾	.1	.1
HP Rating [HP] ⁽¹¹⁾	1/4	1/4

General ⁽¹⁾

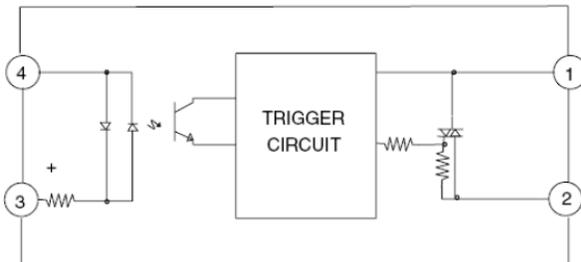
Description	Parameters
Ambient Operating Temperature Range ⁽³⁾	-30 to 80°C
Ambient Storage Temperature Range	-40 to 100 °C
Response Time ⁽¹²⁾	1/2 Cycle
Dielectric Strength, Input Output ⁽⁹⁾	4000 Vrms
Capacitance Input to Output (Typ)	8 pF
Line Frequency Range	47 to 63 Hz

MECHANICAL SPECIFICATIONS

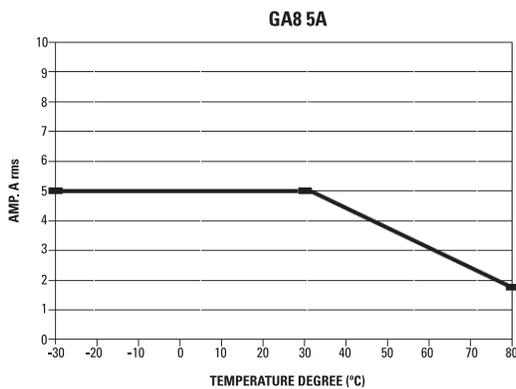
Tolerance: ±0.02 in / 0.5 mm
 All dimensions are in: inches [millimeters]



EQUIVALENT CIRCUIT DIAGRAM



THERMAL DERATE INFORMATION



GENERAL NOTES

- (1) Specifications apply to Ta of -30°C to 80°C unless otherwise noted.
- (2) At maximum input voltage.
- (3) Does not include IRED impedance (drop).
- (4) One minute maximum duration when applied as a DC Voltage.
- (5) Derate 50 mA/°C from 40°C to 80°C UL rating is 3.5 Arms.
- (6) At Ta of 25°C, non-repetitive.
- (7) At Ta of 25°C, and maximum on-state current.
- (8) At Ta of 25°C, and maximum line voltage.
- (9) At Ta of 25°C, for one second.
- (10) Instantaneous turn-on versions available. Specify by adding suffix "R" to appropriate part number. Contact factory for additional details.
- (11) For GA8 only, 1/4 H.P. at 240 VAC, 1/8 HP at 120 VAC
- (12) At 60 Hz 100 µsec for Instantaneous Turn-on (suffix "R") models.

AGENCY APPROVALS & CERTIFICATIONS



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.

Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("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, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets 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 data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. 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 DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, 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 DATA SHEETS 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 (877) 502 5500
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