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

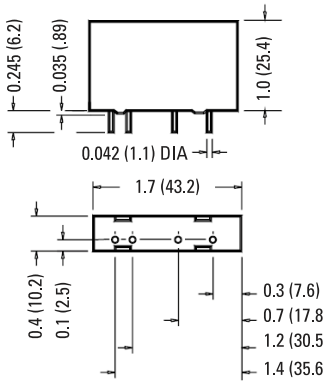
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General [1]

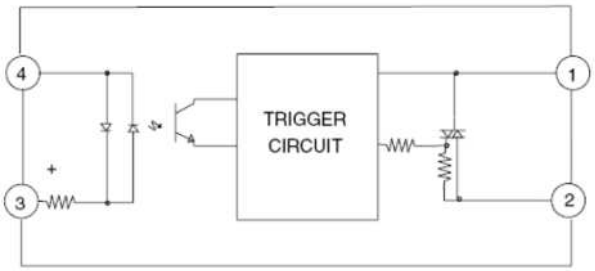
Description	Parameters
Ambient Operating Temperature Range [3]	-30 to 80°C
Ambient Storage Temperature Range	-40 to 100 °C
Response Time [12]	1/2 Cycle
Dielectric Strength, Input Output [9]	4000 Vrms
Capacitance Input to Output (Typ)	8 pF
Line Frequency Range	47 to 63 Hz

MECHANICAL SPECIFICATIONS

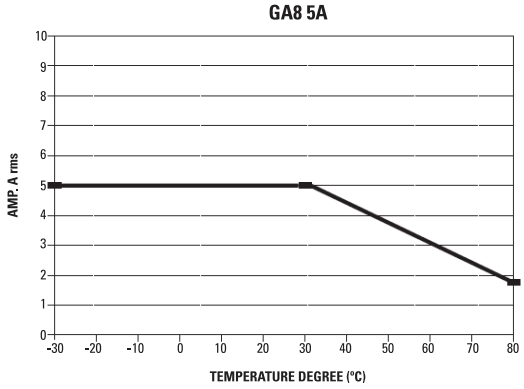
Tolerance: ±0.02 in / 0.5 mm
All dimensions are in: inches [millimeters]



EQUIVALENT CIRCUIT DIAGRAM



THERMAL DERATE INFORMATION



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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

c UL us E46203 CE RoHS

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.

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