

DUAL GN SERIES

PANEL MOUNT



Features

- Current rating 25 and 40 Amps
- Output voltage 24-280 VAC and 48-660 VAC
- Direct bond copper substrate
- Back to back dual SCR output
- 4000 VAC optical isolation
- Zero Voltage and Instantaneous Turn-On
- UL/cUL Recognized, CE Compliant



SPECIFICATIONS

Product Selection

	1/4" Quick Connect 280 VAC		1/4" Quick Connect 660 VAC		Locking Connector 280 VAC	
Control Voltage	25 A	40 A	25 A	40 A	25 A	40 A
4-15 VDC	84140000	84140200	84140500	84140600	84140800	84140900
17-32 VDC	84140410	84134210	84140510	84140610	84140810	84140910

Output Specifications ⁽¹⁾

Description	280 VAC	660 VAC
Operating Voltage [Vrms]	24-280	48-600
Transient Voltage(t=1 min.) [Vpk]	550	1000
Maximum Off-State Leakage Current @ Rated Voltage (@ max. line voltage) [mArms]	0.1	0.25

Output Specifications ⁽¹⁾

Description	25 A	40 A
Maximum Load Current [Arms]	25	40
Minimum Load Current [mArms]	100	100
Maximum 1 Cycle Surge Current (50/60Hz) [Apk]	275/300	710/750
1 Second surge current (50/60 Hz @ Ta=25°C) [Apk]	85	150
Maximum On-State Voltage Drop @ Rated Current [Vpk]	1.4	1.3
Thermal Resistance Junction to Case (Rjc) [°C/W]	0.6	0.4
Maximum 1/2 Cycle I ² t for Fusing (50/60Hz) [A ² sec]	380/370	2520/2320
Maximum Off-State dv/dt @ Maximum Rated Voltage [V/μsec]	500	500

Input Specifications ⁽¹⁾

Description	84140x0x	84140x1x
Control Voltage Range [Vdc]	4-15	17-32
Minimum Turn-On Voltage [Vdc]	4	17
Must Turn-Off Voltage [Vdc]	1	1
Minimum Input Current (for on-state) [mA]	7.5	13
Maximum Input Current [mA]	34	24
Nominal Input Impedance [Ohms]	500	1500
Maximum Turn-On Time [msec] ⁽²⁾	1/2 Cycle	
Maximum Turn-Off Time [msec]	1/2 Cycle	

General Specifications ⁽¹⁾

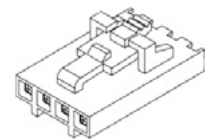
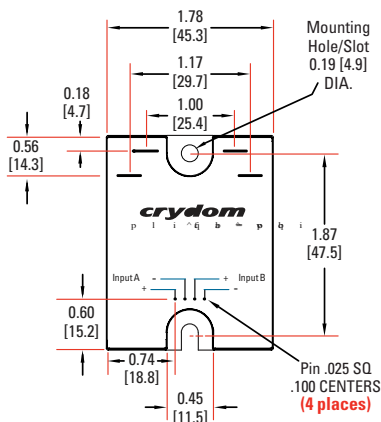
Description	Parameters
Ambient Operating Temperature Range	-40 to 80°C
Ambient Storage Temperature Range	-40 to 100 °C
Input to Output Isolation	4000 Vrms
Input/Output to Ground Isolation	2500 Vrms
Input to Output Capacitance	8 pF
Operation Frequency	47 to 63 Hz
Housing Material	UL94 V-0 (self extinguishing)
Weight (typical)	3.2 oz (91.5g)



MECHANICAL SPECIFICATIONS ⁽¹⁾

Tolerance: ±0.02 in / 0.5 mm

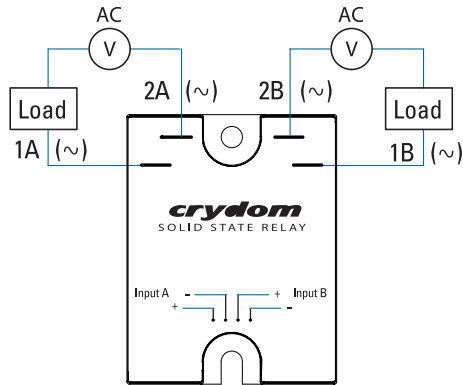
All dimensions are in: inches [millimeters]



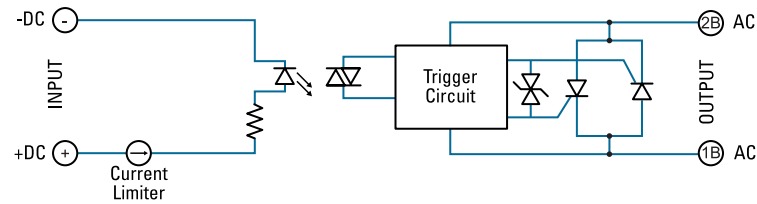
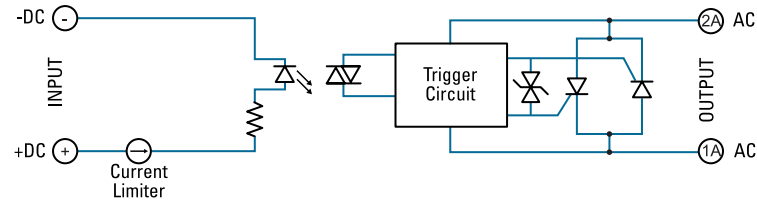
Mating Connector for 841408xxx and 841409xxx
Molex # 50-57-9404 without pins
Crimp Pins Molex # 16-02-0103



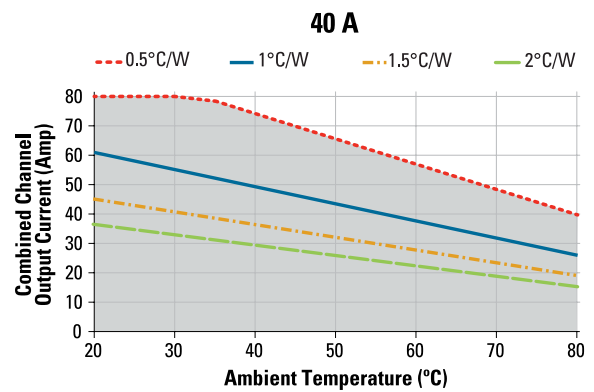
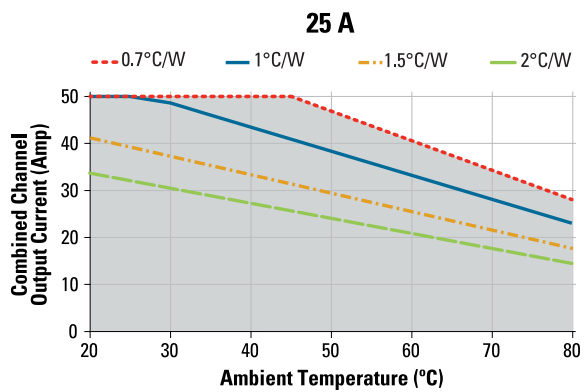
WIRING DIAGRAM



EQUIVALENT CIRCUIT BLOCK DIAGRAMS



THERMAL DERATE INFORMATION





ORDERING OPTIONS

Example : 84140010

	84140	-	0	-	1	-	0
Family							
1/4" Quick Connect 280 VAC							
1/4" Quick Connect 660 VAC							
Locking Connector 280 VAC							
Rated Load Current							
1/4" Quick Connect 280 VAC							
0 : 25 Amp/Zero Voltage Turn-On							
1 : 25 Amp/Instantaneous Turn-On							
2 : 40 Amp/Zero Voltage Turn-On							
3 : 40 Amp/Instantaneous Turn-On							
1/4" Quick Connect 660 VAC							
5 : 25 Amp							
6 : 40 Amp							
Locking Connector 280 VAC							
8 : 25 Amp							
9 : 40 Amp							
Control Voltage							
1/4" Quick Connect 280 VAC							
0 : 4-15 VDC							
1 : 17-32 VDC							
1/4" Quick Connect 660 VAC							
0 : 4-15 VDC							
1 : 17-32 VDC							
Locking Connector 280 VAC							
0 : 4-15 VDC							
1 : 17-32 VDC							
Operating Voltage							
1/4" Quick Connect 280 VAC							
0 : 24-280 VAC							
1/4" Quick Connect 660 VAC							
0 : 48-660 VAC/Zero Voltage Turn-On							
1 : 48-660 VAC/Instantaneous Turn-On							
Locking Connector 280 VAC							
0 : 24-280 VAC/Zero Voltage Turn-On							
1 : 24-280 VAC/Instantaneous Turn-On							



GENERAL NOTES

(1) All parameters at 25°C unless otherwise specified.

(2) Turn-on time for Instantaneous turn-on versions is 0.02 msec.

For additional information or specific questions, contact Crydom Technical Support.



AGENCY APPROVALS & CERTIFICATIONS



EN60950-1: Meets the requirements of sections 1.5: 1.7: 2.9: 2.10.5.3: 4.2: 4.5: 4.7:

Certified according to EN 62314:2006

IEC 61000-4-2 Electrostatic Discharge Level 3

IEC 61000-4-4 Electrically Fast Transients Level 3

IEC 61000-4-5 Electrical Surges Level 3



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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