

SOLID STATE RELAYS GZ SSR'S & DUAL SSR'S

Heatsinks & Accessories

The GZ Series offers a low profile SSR with 1/4 inch Quick-connect terminals and outputs of 12 and 20 amp with DC (4-15V) control. They come with or without snubbers and handle load voltages from 24-280VAC and 4000 Vms opto-isolation. It is UL and cUL Recognized and bears the CE mark.

ZERO VOLTAGE TURN-ON

TYPE	CONTROL VOLTAGE	MAX-OUTPUT	OUTPUT CURRENT
84132200	4-15VDC	24-280VAC	12A
84132210	4-15VDC	24-280VAC	20A
84132600	4-15VDC	36-530VAC	12A
84132610	4-15VDC	36-530VAC	20A

RANDOM TURN-ON

TYPE	CONTROL VOLTAGE	MAX-OUTPUT	OUTPUT CURRENT
84132300	4-15VDC	24-280VAC	12A
84132310	4-15VDC	24-280VAC	20A
84132700	4-15VDC	36-530VAC	12A
84132710	4-15VDC	36-530VAC	20A

ZERO VOLTAGE TURN-ON NO SNUBBER

TYPE	CONTROL VOLTAGE	MAX-OUTPUT	OUTPUT CURRENT
84132000	4-15VDC	24-280VAC	12A
84132010	4-15VDC	24-280VAC	20A
84132400	4-15VDC	36-530VAC	12A
84132410	4-15VDC	36-530VAC	20A

RANDOM TURN-ON NOSNUBBER

TYPE	CONTROL VOLTAGE	MAX-OUTPUT	OUTPUT CURRENT
84132100	4-15VDC	24-280VAC	12A
84132110	4-15VDC	24-280VAC	20A
84132500	4-15VDC	36-530VAC	12A
84132510	4-15VDC	36-530VAC	20A

The "Smart Module" supplies electrical and visual feedback if an error occurs in the circuit or with the host SSR. Will mount on any standard puck style SSR. For use with any DC input AC output SSR.

TYPE	CONTROL VOLTAGE	ERROR OUTPUT CURRENT	LINE VOLTAGE
84060001	4-32VDC	100mA	24-660VAC

SMART MODULE FUNCTIONS (Module Energized 4-32 VDC)

CONDITION	GREEN LED	RED LED	ERROR OUTPUT
No circuit fault & SSR operating normally (Relay Off)	Off	Off	High
No circuit fault & SSR operating normally (Relay On)	On	Off	High
Input signal applied & voltage across output (Open Circuit)	On	Blink	Low
Input signal applied & external short occurs	On	Blink	Low
No input & external short occurs	Off	Blink	Low
Input signal applied & output circuit opened	On	Blink	Low
No input & output circuit opened	Off	Blink	Low
No input & relay output internally shorted	Off	On	Low

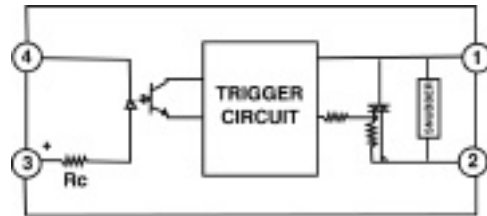
ssr covers and THERMAL PADS

TYPE	FOR SERIES
SSRC	1 Phase
SSRC/GA3	3 Phase
SSRC/GA0	3 Phase
HSP-1	1 Phase
HSP-3	3 Phase

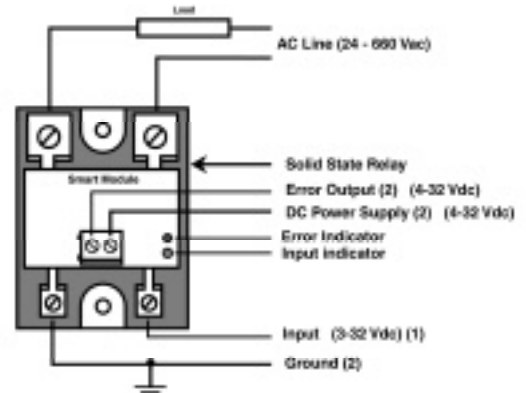
HEAT SINKS

TYPE	DEGREES C/W	FOR SERIES
HS-1	1.5	3 Phase
HS-2	2	1 Phase
HS-3	1.5	1 Phase
HS-4	1	1 Phase
HS-5	0.7	1 Phase
HS-6	0.5	1 Phase
HS-7	0.9	3 Phase
HS-8*	1.8	1 Phase
HS-9*	1.3	1 Phase

*DIN-RAIL OR PANEL MOUNT



GZ SERIES DC INPUT EQUIVALENT CIRCUIT



Note:
1. G4800 and G575D Series DC Input Range is 4-32 Vdc
2. Input, Outputs and DC Power Supply voltages are referred to the same common Ground

DIN Rail Panel Mount SSRs

SERIES CMRD/CMRA

35-65 Amp • 240, 480, 600 Vac • AC Output

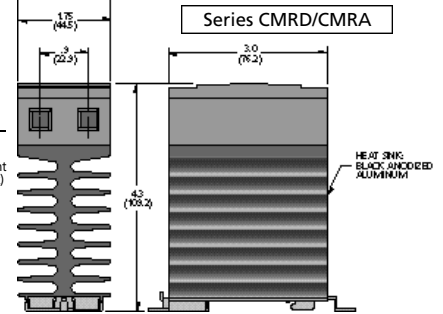
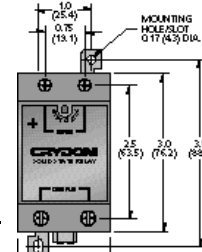
Featuring state-of-the-art Surface Mount Technology, this SPST-NO relay delivers proven reliability in the most demanding applications. Output consists of an SCR AC switch and is available in zero-cross and random turn-on versions.

- AC or DC Control with Status Indicating Display
- Zero Voltage & Random Turn-On Switching

DC/AC CONTROL Type	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc/Vrms)	Surge Current 16.6ms (Apk)
CMRD/CMRA4825	48-530	0.15-35	3-32/90-140	250
CMRD/CMRA4850	48-530	0.15-45	3-32/90-140	625
CMRD/CMRA4875	48-530	0.25-55	3-32/90-140	1000
CMRD/CMRA4890	48-530	0.25-65	3-32/90-140	1200
CMRD/CMRA6025	48-660	0.15-35	3-32/90-140	250
CMRD/CMRA6050	48-660	0.15-45	3-32/90-140	625
CMRD/CMRA6075	48-660	0.25-55	3-32/90-140	1000
CMRD/CMRA6090	48-660	0.25-65	3-32/90-140	1200

DC/AC CONTROL Type	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc/Vrms)	Surge Current 16.6ms (Apk)
CMRD/CMRA4825	48-530	0.15-35	3-32/90-140	250
CMRD/CMRA4850	48-530	0.15-45	3-32/90-140	625
CMRD/CMRA4875	48-530	0.25-55	3-32/90-140	1000
CMRD/CMRA4890	48-530	0.25-65	3-32/90-140	1200
CMRD/CMRA6025	48-660	0.15-35	3-32/90-140	250
CMRD/CMRA6050	48-660	0.15-45	3-32/90-140	625
CMRD/CMRA6075	48-660	0.25-55	3-32/90-140	1000
CMRD/CMRA6090	48-660	0.25-65	3-32/90-140	1200

AVAILABLE OPTIONS:
-10 Random Turn-On, Phase Controllable
Operating Temp Range: -30°C to 80°C Isolation Voltage (Vac): 4000



SERIES HPF

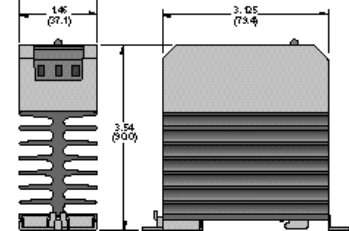
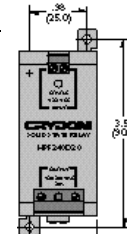
20, 30 Amp • 120/240, 480Vac • AC Output

The Series HPF Solid State Relays utilize Crydom's proprietary thermal management technology providing a compact and efficient design. Built-in DIN Rail attachment, easy-to-use cage type terminals and integral heat sinking complete the package. This compact new design offers up to 30Arms in ambient temperatures of 25°C.

- DIN Rail Mount, Integral Heat Sink
- Zero Voltage & Random Turn-On Switching

DC CONTROL Type	Line Voltage Range (Vac)	Load Current Range (Arms)	Control Voltage Range (Vdc)	Surge Current 1-Cycle (Apk)
HPF240D20	12-280	.15-20	4-32	250
HPF240D30	12-280	.15-30	4-32	625
HPF240D20R*	12-280	.15-20	4-32	250
HPF240D30R*	12-280	.15-30	4-32	625
HPF480D20	12-480	.15-20	5-32	250
HPF480D30	12-480	.15-30	5-32	625
HPF480D20R*	12-480	.15-20	5-32	250
HPF480D30R*	12-480	.15-30	5-32	625

AVAILABLE OPTIONS:
* R Random Turn-On Version S Internal Snubber
Operating Temp Range: -30°C to 80°C Isolation Voltage (Vrms): 4000



Panel Mount SSR Accessories

Heat Sinks

For Panel Mount SSRs

Type	Usage Rating (Max.)	Deg°C/W @ Max. Curr.	HxWxD (inches)
HS-1	10A	2.7	1.6 x 3.36 x 2.06
HS-2	25A	1.7	1.6 x 3.36 x 4.12
HE-54	50A	0.67	2.62 x 4.75 x 5.5
HE-90*	90A	0.43	3.5 x 6.0 x 6.0

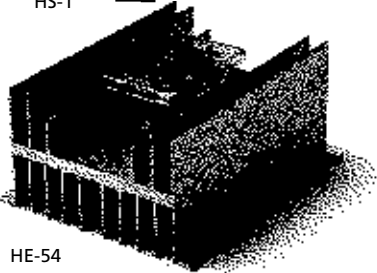
*HE-90 is suitable for up to three Series 1 type SSRs, or one Series 53TP, 3-Phase SSR.



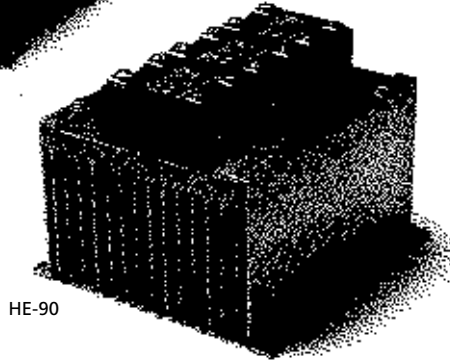
HS-1



HS-2



HE-54



HE-90

SSR Protective Covers

For Panel Mount SSRs

- Type
KS100 - Cover for Series 1 Type SSR package
KS300 - Cover for Series 53TP, Three-Phase SSR package

301T OPTO-ISOLATOR

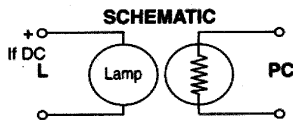
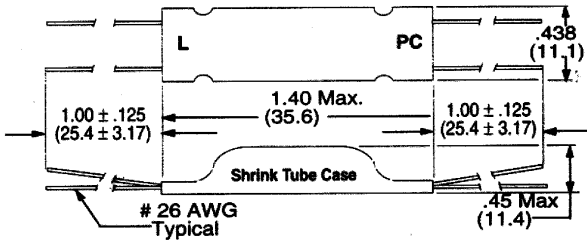
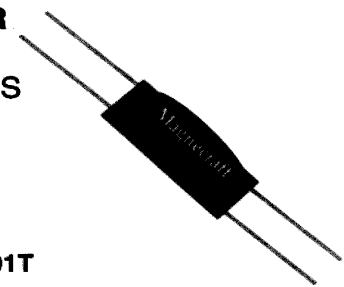
OPTICAL COUPLING PROVIDES HIGH INPUT TO OUTPUT ISOLATION. CAN BE USED AS AN ON/OFF SWITCH OR AS AN LOW VOLTAGE CONTROLLED RESISTOR. IDEAL FOR TRIGGERING SCR'S AND TRIACS.

301T OPTO-ISOLATOR
0.2 WATT OUTPUT
VAC OR VDC OUTPUTS
SHRINK TUBE COVER



CLASS
SSR

7
RELAYS



SPECIFICATIONS 301T

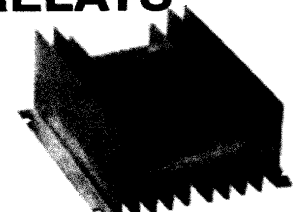
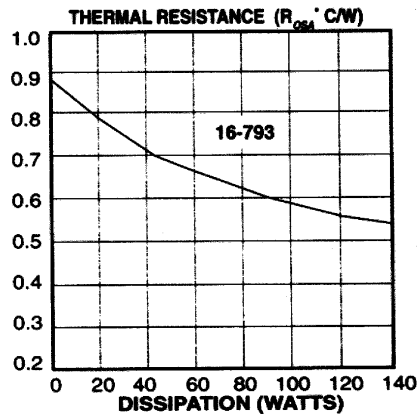
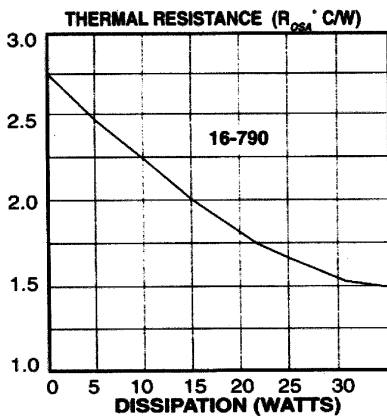
- CONTACTS**
Output Voltage Max.: ± 250 VDC or VAC Peak
- INSULATION RESISTANCE**
Dielectric Strength
Across Open Contacts: 1000 V rms Between all insulated Points
Insulation Resistance: 100ohms
- ENVIRONMENTAL CAPABILITIES**
Ambient Temperature
Operating: -40°C to + 60°C
- Miscellaneous**
Weight: 301T: 0.04 oz (1.1 g)

NOT RECOMMENDED FOR WAVE OR DIP SOLDERING. ALSO MAY BE AFFECTED BY CLEANING SOLVENTS

Magnecraft PART NUMBER	INPUT			OUTPUT		RESPONSE TIME	
	LAMP TYPE	VOLTAGE	CURRENT (mA)	ON RESISTANCE (Ohms max.)	POWER DISSIPATION Per pole (mW)	TURN-ON TO 10KΩ (mS max.)	TURN-OFF TO 100KΩ (mS max.)
W301T1-2A1	LED	1.7 VDC	40	2000Ω	200	10	50
W301T1-2B1	LED	2.0 VDC	25	1000Ω	200	5	100
W301T1-12B1	INCAND.	12 VDC/AC	24	400Ω	200	150	300
W301T1-120A1	NEON	120 VDC/AC†	1.3	1200Ω	200	35	100

† Add 47KΩ Ohm external series resistor to limit current.

HEAT SINKS FOR CLASS 6 SOLID STATE RELAYS



Magnecraft PART NUMBER	(2) LOAD CURRENT	THERMAL RESISTANCE
16-790	5 to 20 Amps	3° C/W
16-793	Above 20 Amps	1° C/W

(1) Heat Sinks are Aluminum alloy
(2) Current ratings are based on the use of a suitable thermally conductive compound (e.g. Silicon grease) between the SSR base and mounting surface of Heat Sink.

