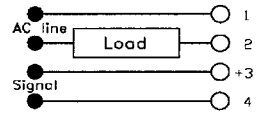
- ▲ *4000 volt photo isolation*
- ■ *Zero voltage turn-on*
- ● *Built-in snubber*
- ▲ *TTL compatible*
- ■ *High PRV rating*
- ● *CSA certified*
- ▲ *200% load tested at rated current at 0.5 power factor*
- ■ *UL recognized*
- ● *VDE approved*

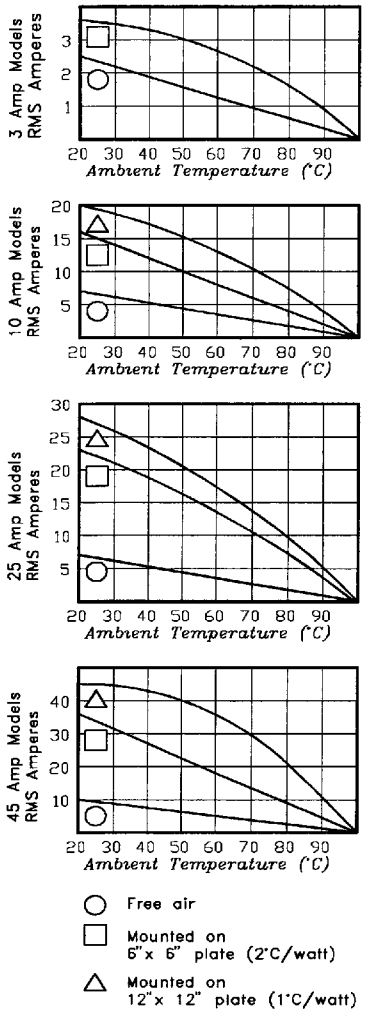
The Opto 22 AC Power Series offers the industry the ultimate in solid state reliability.

Connection Diagram



Note: Load may be in series with terminal 1 or 2.

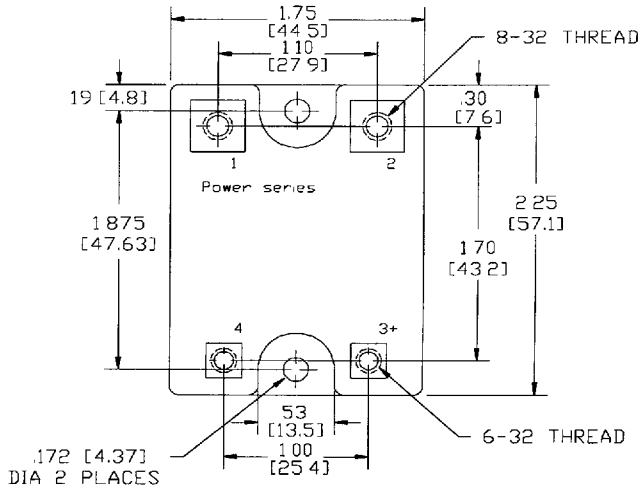
THERMAL RATINGS

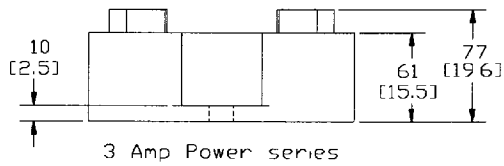


○ Free air

□ Mounted on 6"x 6" plate (2°C/watt)

△ Mounted on 12"x 12" plate (1°C/watt)





3 Amp Power series

TOLERANCES: .XX ± 0.03 [0.8]
.XXX ± 0.010 [0.25]

AC POWER SERIES

Detailed Electrical Specifications

Model Number	Nominal AC Line Voltage	Nominal Current Rating Amps	1 Cycle Surge (Amps) Peak	Nominal Signal Input Resistance Ohms	Signal Pick-up Voltage	Signal Drop-out Voltage	Peak Repetitive Voltage Minimum	Maximum Output Voltage Drop	Off State Leakage mA Maximum	Operating Voltage Range Volts AC	I^2t Rating t = 8.3 Milli-Seconds	Isolation Voltage	θ_{jc}* °C/Watt	Dissipation Watts/Amp
120D3	120	3	85	1000	3 VDC (32V allowed)	1 VDC	600	1.6 volts	2.5 mA	12 - 140	30	4000 V_{rms}	11	1.7
120D10	120	10	110	1000		1 VDC	600	1.6 volts	7 mA	12 - 140	50	4000 V_{rms}	1.3	1.6
120D25	120	25	250	1000		1 VDC	600	1.6 volts	7 mA	12 - 140	260	4000 V_{rms}	1.2	1.3
120D45	120	45	650	1000		1 VDC	600	1.6 volts	7 mA	12 - 140	1750	4000 V_{rms}	0.67	0.9
240D3	240	3	85	1000		1 VDC	600	1.6 volts	5 mA	24 - 280	30	4000 V_{rms}	11	1.7
240D10**	240	10	110	1000		1 VDC	600	1.6 volts	14 mA	24 - 280	50	4000 V_{rms}	1.3	1.6
240D25**	240	25	250	1000		1 VDC	600	1.6 volts	14 mA	24 - 280	250	4000 V_{rms}	1.2	1.3
240D45**	240	45	650	1000		1 VDC	600	1.6 volts	14 mA	24 - 280	1750	4000 V_{rms}	0.67	0.9
380D25	380	25	250	1000		1 VDC	800	1.6 volts	12 mA	24 - 420	250	4000 V_{rms}	1.2	1.3
380D45	380	45	650	1000		1 VDC	800	1.6 volts	12 mA	24 - 420	1750	4000 V_{rms}	0.67	0.9
120A10	120	10	110	33K	85 VAC (280 allowed)	10 VAC	600	1.6 volts	7 mA	12 - 140	50	4000 V_{rms}	1.3	1.6
120A25	120	25	250	33K		10 VAC	600	1.6 volts	7 mA	12 - 140	250	4000 V_{rms}	1.2	1.3
240A10	240	10	110	33K		10 VAC	600	1.6 volts	14 mA	24 - 280	50	4000 V_{rms}	1.3	1.6
240A25	240	25	250	33K		10 VAC	600	1.6 volts	14 mA	24 - 280	250	4000 V_{rms}	1.2	1.3
240A45	240	45	650	33K		10 VAC	600	1.6 volts	14 mA	24 - 280	1750	4000 V_{rms}	0.67	0.9

Note: VDE Approved on models with **, add - 17 to model number. 480/575 volt, see page 6 and 8.

Surge Current Data

Time Seconds	Time*** (Cycles)	3 AMP Peak Amps	10 AMP Peak Amps	25 AMP Peak Amps	45 AMP Peak Amps
0.017	1	85	110	250	650
0.050	3	66	85	175	420
0.100	6	53	70	140	320
0.200	12	45	60	112	245
0.500	30	37	50	80	175
1	60	31	40	67	134
2	120	28	33	53	119
3	180	27	32	49	98
4	240	26	31	47	95
5	300	25	30	45	91
10	600	24	28	42	84

Note: ***60 Hz

Additional Specifications

ALL MODELS

Isolation:
Coupling capacitance input to output 8 PF maximum.

Operating Temperature:
- 40° C to 100° C

Operating Frequency:
25 - 65 Hz (400 Hz with 6 times higher off-state leakage)

Turn-on Time:
1/2 cycle maximum zero voltage

Turn-off Time:
1/2 cycle maximum zero current

DV/DT Off State:
200 V/microsecond

DV/DT Commutating:
Snubbed for rated current at 0.5 power factor

*θjc = Thermal resistance junction to base
Maximum junction temperature 110° C