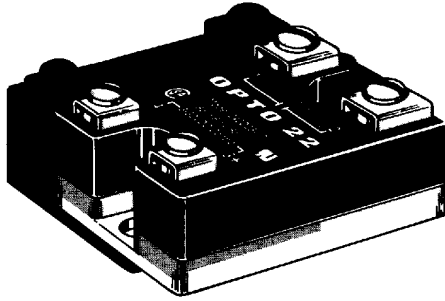


T-25-31



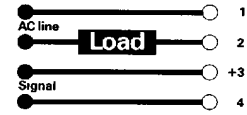
- ▲ Photo isolation
- Zero voltage turn on
- Built-in snubber
- ▲ 4000 volt isolation
- UL recognized
- CSA certified
- ▲ 200% tested at rated current at .5 power factor
- TTL compatible
- High PRV rating



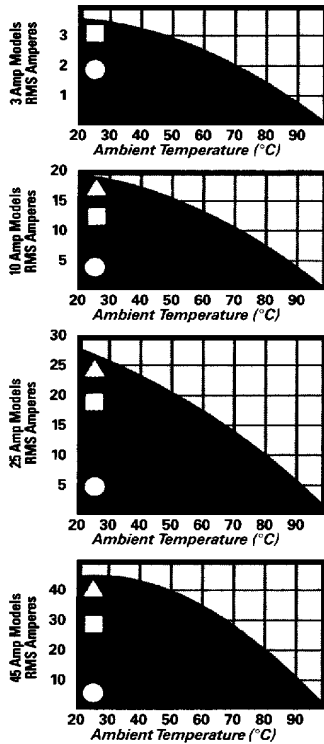
The Opto 22 AC power series offers the industry the ultimate in solid state reliability.

Connection Diagram

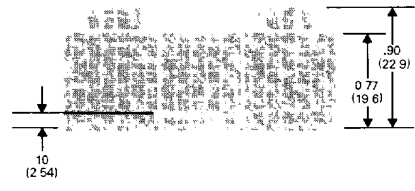
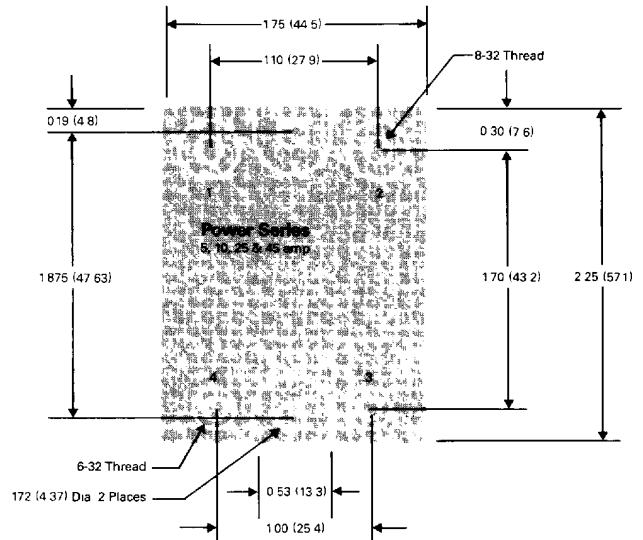
Note: Load may be in series with terminal 1 or 2



THERMAL RATINGS



Free air
 Mounted on 6" x 6" plate (2°c/watt)
 Mounted on 12" x 12" plate (1°c/watt)



120 & 240D3

*Red type is Std. measurement.
 Purple type is metric measurement

Tolerances XX ± .02 (5)
 XXX ± .010 (25)
 Dimensional Units Inches (millimeters)

A C P O W E R S E R I E



Detail 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 Stage Leakage ma Maximum | Operating Voltage Range Volts AC | I _t Rating t = 8.3 Milli-Seconds | Isolation Voltage | *θ _{jc} °C/Watt | Dissipation Watts/Amp |
|--------------|-------------------------|-----------------------------|---------------------------|--------------------------------------|------------------------|-------------------------|---------------------------------|-----------------------------|------------------------------|----------------------------------|---|-------------------|--------------------------|-----------------------|
| 120 D3 | 120 | 3 | 85 | 1000 | 3VDC (32 V allowed) | 1VDC | 600 | 1.6V | 2.5 ma | 12-140 | 30 | 4000 V-RMS | 11 | 1.7 |
| 120 D10 | | 10 | 110 | | | | | | 7 ma | | 50 | | 1.3 | 1.6 |
| 120 D25 | | 25 | 250 | | | | | | 7 ma | | 250 | | 1.2 | 1.3 |
| 120 D45 | | 45 | 650 | | | | | | 7 ma | | 1750 | | .67 | .9 |
| 240 D3 | 240 | 3 | 85 | | | | | | 5 ma | 24-280 | 30 | | 11 | 1.7 |
| 240 D10 | | 10 | 110 | | | | | | 14 ma | | 50 | | 1.3 | 1.6 |
| 240 D25 | | 25 | 250 | | | | | | 14 ma | | 250 | | 1.2 | 1.3 |
| 240 D45 | | 45 | 650 | | | | | | 14 ma | | 1750 | | .67 | .9 |
| 380 D25 | 380 | 25 | 250 | | | | | | 20 ma | 24-420 | 250 | | 1.2 | 1.3 |
| 120 A10 | 120 | 10 | 110 | 33 K | 85 VAC (280 allowed) | 10 VAC | 600 | | 7 ma | 12-140 | 50 | | 1.3 | 1.6 |
| 120 A25 | | 25 | 250 | | | | | | 7 ma | | 250 | | 1.2 | 1.3 |
| 120 A45 | | 45 | 650 | | | | | | 7 ma | | 1750 | | .67 | .9 |
| 240 A10 | 240 | 10 | 110 | | | | | | 14 ma | 24-480 | 50 | | 1.3 | 1.6 |
| 240 A25 | | 25 | 250 | | | | | | 14 ma | | 250 | | 1.2 | 1.3 |
| 240 A45 | | 45 | 650 | | | | | | 14 ma | | 1750 | | .67 | .9 |
| 380 A25 | 380 | 25 | 250 | 33K | 85 VAC (280 allowed) | 10 VAC | 650 | 1.6V | 20 ma | 24-420 | 250 | 4000 V-RMS | 1.2 | 1.3 |

480/575 V See Page 9

Surge Current Data

| TIME SECONDS | TIME (CYCLES)* | 3 AMP PEAK AMPS | 10 AMP PEAK AMPS | 25 AMP PEAK AMPS | 45 AMP PEAK AMPS |
|--------------|----------------|-----------------|------------------|------------------|------------------|
| .017 | 1 | 85 | 110 | 250 | 650 |
| .050 | 3 | 66 | 85 | 175 | 420 |
| .100 | 6 | 53 | 70 | 140 | 320 |
| .200 | 12 | 45 | 60 | 112 | 245 |
| .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 |

*60 HZ

Additional Specifications

- Isolation:**
Coupling capacitance input to output 8 PF max.
- Operating Temp:**
-40° to 100°C
- Operating Freq:**
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 .5 power factor
- *θ_{jc}** = Thermal resistance junction to base. Maximum junction temperature 110°C