



SOLID STATE RELAY

220 Vac (45-440Hz)/25A

CSS-10-1/CSS-10-2

C.OT.S.

M28750/10-001Y

M28750/10-002Y

FEATURES:

- 1500 Vac Optical Isolation
- Zero voltage turn-on
- Hermetically sealed
- Logic compatible input

ELECTRICAL SPECIFICATIONS:

Input Data:

Input voltage range: 4.0 to 32.0 V dc.

Rated turn-on voltage: 4.0 V dc minimum.

Rated turn-off voltage: 1.0 V dc maximum.

Input current: 16 mA maximum at 32 V dc.

Turn-on time: $\frac{1}{2 \text{ (line frequency)}}$ maximum.

Turn-off time: $\frac{1}{\text{(line frequency)}}$ maximum.

Transient voltage: MIL-STD-704A, curve 1, 80 V, 50 ms maximum.

Output Data:

Output voltage range: 25 to 250 V ac, 45-440 Hz.

Rated output current: 25 amperes, ac maximum (see figures 1 and 2).

Rated output voltage: 220 volts maximum, 45-440 Hz.

Output voltage drop: 1.5 volts rms maximum.

Output leakage current: 10 mA, ac maximum at 208 V ac, 400 Hz.

Transient voltage: MIL-STD-704A, curve 1.

Overload: 80 amperes. Relays shall be cycled 10 times, turned on and turned off for a 1 ± 0.1 second interval each cycle. A 30 second cool down period is permitted between each cycle. The input current shall be as specified. The turn-on and turn-off times shall be monitored.

DC offset voltage: ± 150 millivolts maximum.

Waveform distortion: 4 volts rms maximum from 10% to 100% rated output current.

Initial turn-on:

- 001 ± 15 volts peak maximum.
- 002 ± 40 volts peak maximum. $\pm 1/$

Electrical Data:

Dielectric withstanding voltage: 1,500 V ac maximum at 60 Hz, all terminal to case.

Insulation resistance: 100 megohms minimum at 500 V dc.

Isolation: 20 picofarads maximum.

Power dissipation: 38 watts maximum.

ENVIRONMENTAL DATA:

Temperature:

Operation: -55°C to $+110^{\circ}\text{C}$.

Storage: -55°C to $+125^{\circ}\text{C}$.

Shock (specified pulse): MIL-STD-202, method 213, test condition I (100 G's).

Vibration: 30 G's, 10 to 3,000 Hz.

Salt spray (corrosion): In accordance with method 1041 of MIL-STD-750.

PHYSICAL DATA:

Weight: 6 ounces maximum.

Seal: Hermetic, 10^{-5} ATM C^3/S .

Terminals:

Terminal strength: 5 pounds pull.

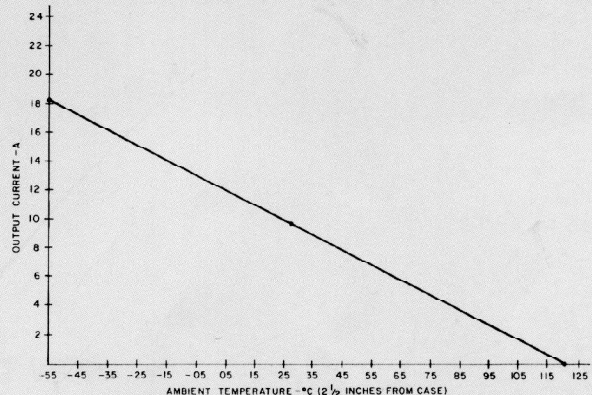
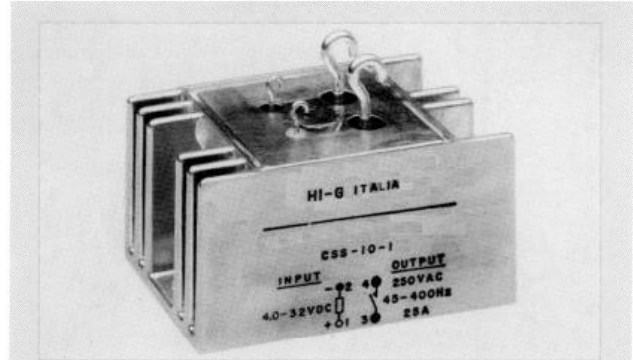


FIGURE 1 - Output current versus ambient temperature.

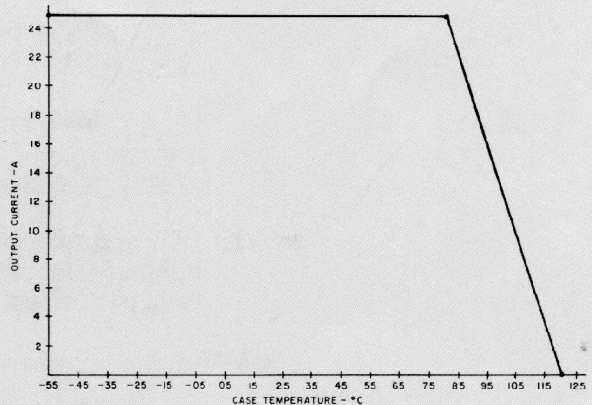
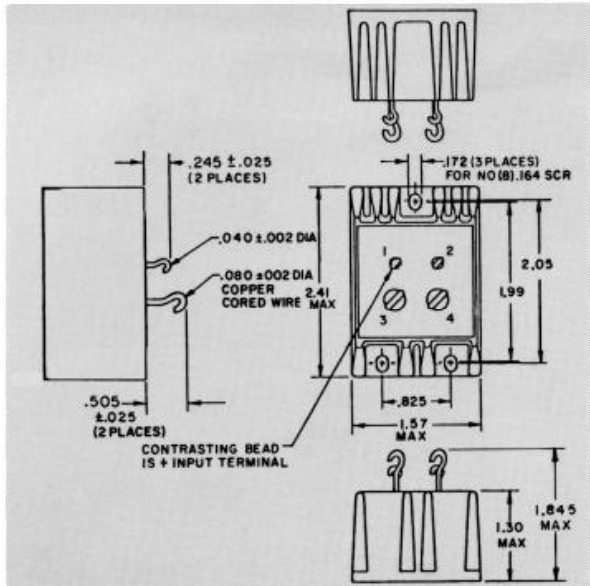
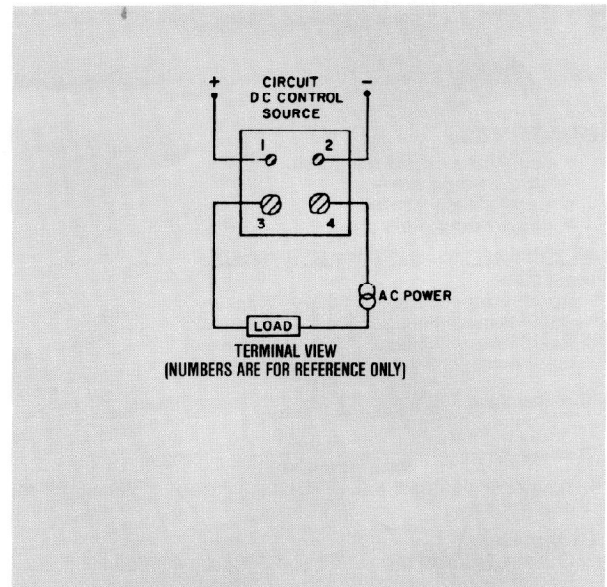


FIGURE 2 - Output current versus case temperature.

MECHANICAL SPECIFICATIONS



WIRING DIAGRAM



Part Number	C.O.T.S.	Zero Crossing Window
CSS-10-1	M28750/10-001Y	15 V pk max.
CSS-10-2	M28750/10-002Y	40 V pk max.