

PART NUMBERS

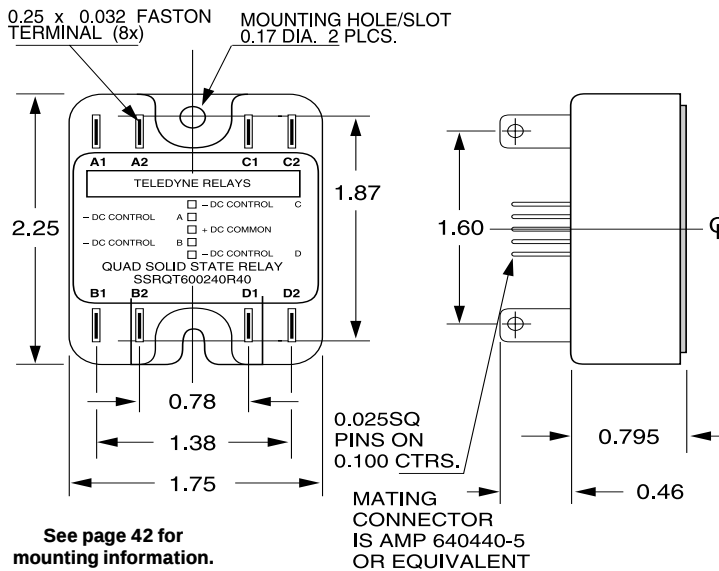
Package & Chip Type	Max Blocking Voltage (piv)/ Line Rating	Input Type	Output Current Amps	Options
SSRQT-Triac	600240	D-DC Input Zero Cross Switching R-DC Input Random Turn-On	25	See Table Below and Page 40

Options (Add Suffix to Part Number) - See Page 40 for full description

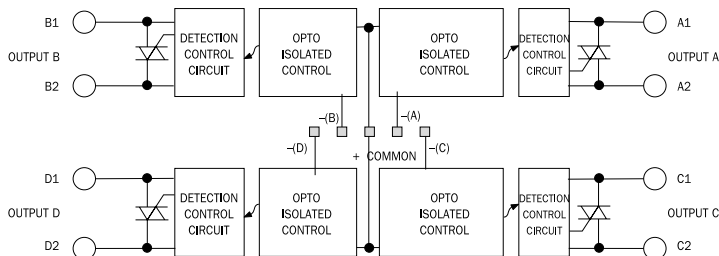
-012 EZ Mount™

Part Number Example: SSRQT600240D25

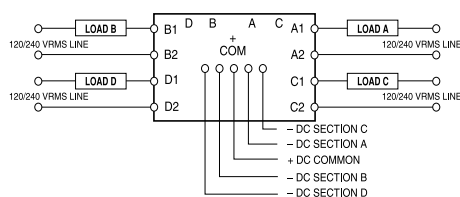
MECHANICAL SPECIFICATION



BLOCK DIAGRAM



WIRING DIAGRAM



FEATURES/BENEFITS

- Four independently controlled solid state relays in a single package.
- Industry standard SSR package mounting.
- Quick connect type power terminals in a high temperature plastic housing for mechanical ruggedness.
- Triac outputs for economy.
- Choice of Zero Cross or Random Turn-On versions.
- Constant Current Input minimizes source current requirement (standard on D input only)
- Exposed ceramic baseplate for reduced thermal resistance and best thermal performance.
- Constructed using Teledyne's unique Powertherm™ process. This process yields superior thermal impedance and power cycling capabilities through reduced thermal interconnections, allowing for cooler, more reliable operation.
- The logic drive circuitry sections use the latest in reliable surface mount technology.
- Certifications:
 - UL and ULC Recognized File #E128555
 - CE # EN60947-1

TYPICAL APPLICATIONS

- On/Off controls of high power AC equipment.
- Interfacing of microprocessor controls to AC loads - lights, motors, heaters, valves, solenoids etc.
- Electromechanical line relay replacement.
- Mercury displacement relay replacement.
- Industrial and Process Controls.
- Programmable Controller interface.
- Robotics motor position and speed controls.
- Light dimmer; Transformer tap switch.

GENERAL DESCRIPTION

The SSRQT series 4-pole AC Solid State Relays are designed to save space while providing independent control of large amounts of power in four separate circuits. Optical isolation ensures complete protection of each relay circuit's control elements from load transients in each load circuit. Teledyne's advanced design featuring the Powertherm™ process offers users superior thermal management resulting in superior performance, quality and reliability.

ELECTRICAL SPECIFICATIONS
INPUT (CONTROL) SPECIFICATIONS

Parameter	Input Type	Min	Max	Units
Control Voltage Range	D	3	32	Vdc
	R	4	26	
Input Current	(@5Vdc)		15	mA
Must Turn-Off Voltage		1		Vdc
Reverse Voltage Protection			-32	Vdc
Turn-Off Current		0.25		mA(DC)

OUTPUT (LOAD) SPECIFICATION

Parameter	Min	Max	Units
Load Voltage Rating	24	280	Vac
Frequency Range (Note 2)	47	70	Hz
Over Voltage Range		600	VPeak
On-State Voltage Drop @ Max Rated Current	1.5		V
Turn-On Time	D	8.3	ms
	R	0.02	ms
Turn-Off Time		8.3	ms
Leakage Current (Off-State) @ Rated Voltage, 60 hz		0.5	mA
dV/dt (Typical)		500	V/μs
Dielectric Strength (60 hz)	2500		V
Insulation Resistance (500Vdc)	10 ⁹		Ohms
Operating Ambient Temperature	-40	100	°C
Storage Ambient Temperature	-55	125	°C
Power Factor Range	0.5	1.0	
Weight (Typical)	3.0 oz	(85g)	

OUTPUT (LOAD) SPECIFICATIONS (Contd)

Parameter	Min	Max	Units
Output Current Rating Per Output (Base Temp @85 °C)	0.05	25	A
Surge Current Rating (Non-Repetitive 16.7 mS)		250	A
Thermal Resistance Junction to Case (J _c)	All Switches On	.06	°C/W

NOTES:

- 1.) Where overvoltage transient spikes are present, suppression may be required. A suppressor and/or a snubber circuit across the AC terminals of the module will provide additional transient immunity.
- 2.) For 400 Hz loads, contact factory.
- 3.) All parameters at 25°C unless otherwise specified