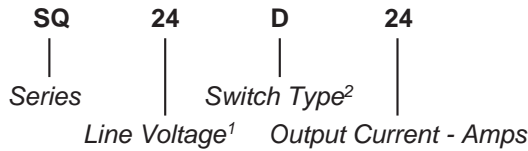


Part Number	Description
SQ24D25	25A, 230 Vac

Part Number Explanation



NOTES
 1) Line Voltage (nominal): 24 = 240 Vac
 2) Switch Type: D = Zero-cross turn-on
 3) Control LED and Random model available. Contact factory.

MECHANICAL SPECIFICATION

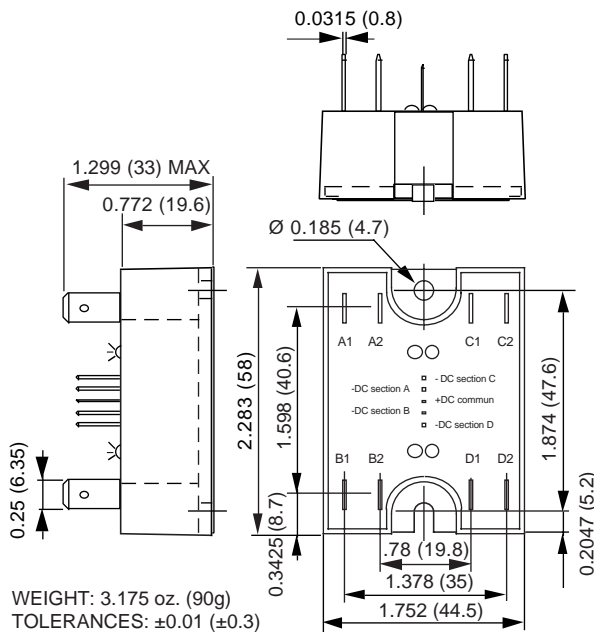
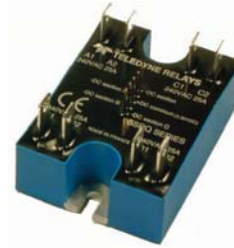


Figure 1 — SQ relay; dimensions in inches (mm)

INPUT (CONTROL) SPECIFICATION

	Min	Max	Units
Control Range	3	32	Vdc
Input Current Range	See Figure 2		
Must Turn-off Voltage		1	Vdc
Reverse Voltage		32	V



FEATURES/BENEFITS

- Four independently controlled solid-state relays in an industry standard package.
- Tight zero-cross window for low EMI
- Constant current input for low current draw
- Faston terminals

DESCRIPTION

The Series SQ relay provides four independent 25A relays in a standard hockey-puck package. The SQ package conserves space while providing high-power switching. The tight zero-cross window reduces the EMI level. Optical isolation ensures complete protection of the control circuit from load transients.

APPLICATIONS

- Heating control
- Motor control
- Industrial and process controls
- On/Off controls of AC equipment

APPROVALS

Series SQ relays are UL recognized.
 UL File Number: E128555.

CONTROL CHARACTERISTIC

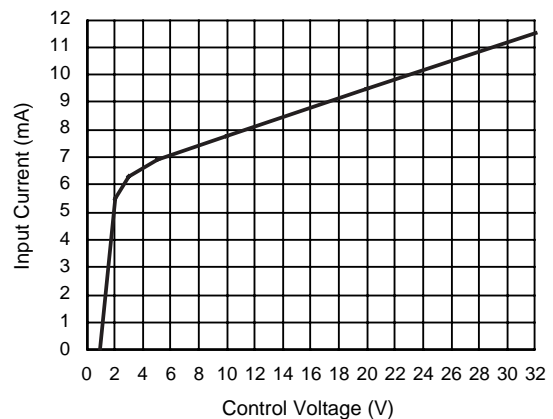


Figure 2 — Control Characteristic

THERMAL CHARACTERISTICS

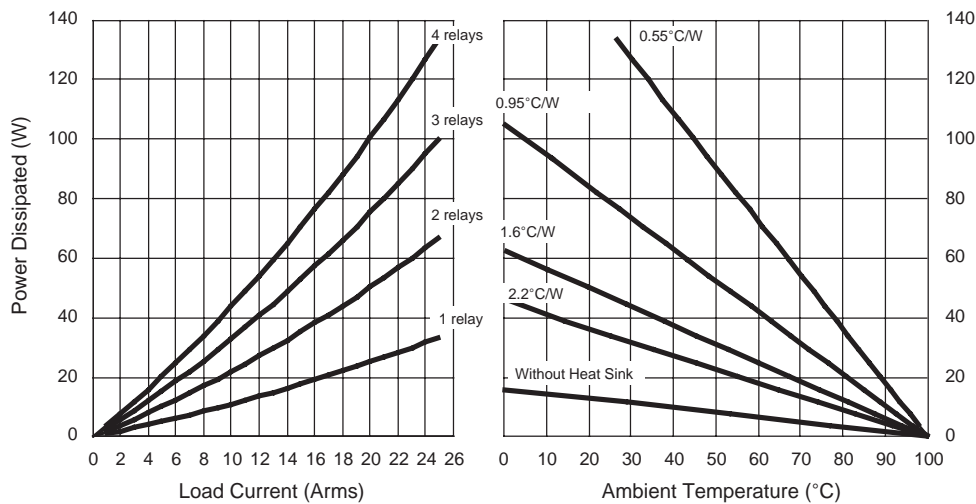


Figure 3 — Current Derating Curves

OUTPUT (LOAD) SPECIFICATION

	Min	Max	Unit
Operating Range	12	280	Vrms
Peak Voltage		600	V
Load Current Range	.005	25	Arms
(See Figure 3)			
Maximum Surge Current Rating (Non-repetitive, see Figure 5)		240	A
On-State Voltage Drop		1.2	V
Zero-Cross Window		±25	V
Off-State Leakage Current (60Hz)		0.5	mA
Turn-On Time		8.3	ms
Turn-Off Time		8.3	ms
Off-State dv/dt		500	V/μs
Operating Frequency Range	47	440	Hz
I ² t for match fusing (<8.3ms)		288	A ² S

ENVIRONMENTAL SPECIFICATION

	Min	Max	Unit
Operating Temperature	-40	100	°C
Storage Temperature	-40	100	°C
Input-Output Isolation	4000		Vrms
Output-Case Isolation	2500		Vrms
Rated Impulse Voltage	4000		V

TYPICAL APPLICATION

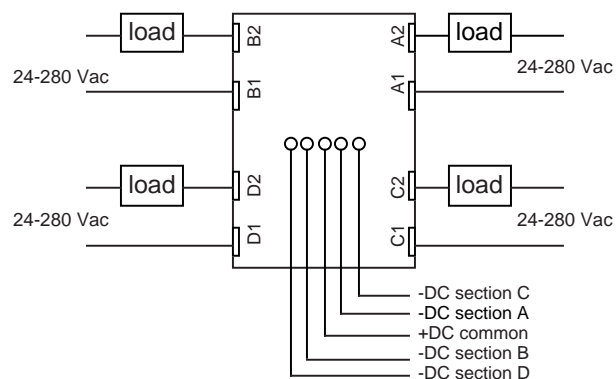


Figure 4 — Typical Application

SURGE CURRENT

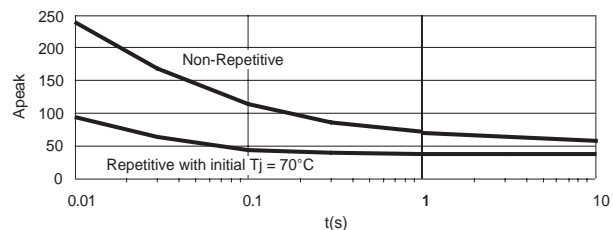


Figure 5 — Surge Current Curves

- NOTES:
1. Electrical specifications at 25°C unless otherwise noted.
 2. Control LED and Random models available. Contact factory.
 3. For 800Hz applications, contact factory.
 4. For additional/custom options, contact factory.

OPTIONAL ADD-ONS

- Please order add-ons separately:
- -12 — Thermal pad installed.