NATIONAL CONTROLS CORPORATION

AMETEK®

Solid State Power Relays
Model R2025

FEATURES

- *100% functionally and surge tested*
- *48 to 330 VAC load voltage*
- *4000 V isolation*
- *Optically coupled*
- *Epoxy filled*
- *Capable of being switched by a single CMOS gate*
- *Built in snubber*
- *Capable of switching inductive loads of 0.5 power factor*
- *UL recognized component file #E61377*

The AMETEK NCC Series of Solid State Power Relays provide a highly reliable means of switching AC loads up to 25 A. Snubber circuitry is included with each unit for high dV/dt applications and inductive loads.

Use of rugged output devices provides significant increases in turn-on surge capability. Two input control voltage ranges are available in either Form A (SPST-NO) or Form B (SPST-NC) output configurations.

SPECIFICATIONS

ALL MODELS

Max. Load Current*: 25 A
Max. Peak Transient Voltage: 600 Vpk
Output Voltage Range: 48-300 VAC
Max. Off State Leakage Current: 7.2 mA at 300 VAC (RMS)
Operating Temp. Range: -40 to 80 °C
Storage Temp. Range: -40 to 80 °C
Dielectric Strength at 60 Hz
Between Input/Output: 4000 VAC (RMS)
Between Input/Base: 2500 VAC (RMS) Between Output/Base: 2500 VAC (RMS)
Max. Surge Current: 370 A(RMS), 8.3 ms
Min. Off State dV/dt (static): 500 V/µS
Thermal Resistance Junction to Case (Point A): 1.3°C/W Tj max.=110 °C
Turn On Type: Random

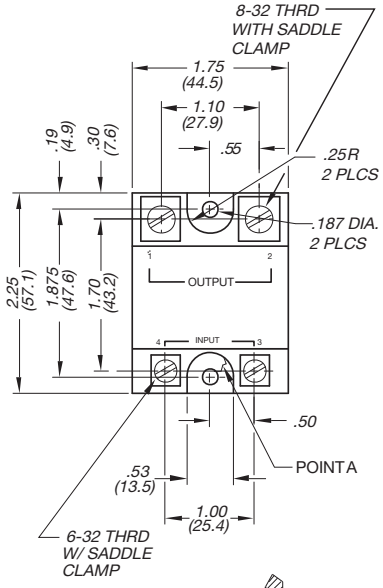
SNC-R2025-507 AND SNC-R2025-517

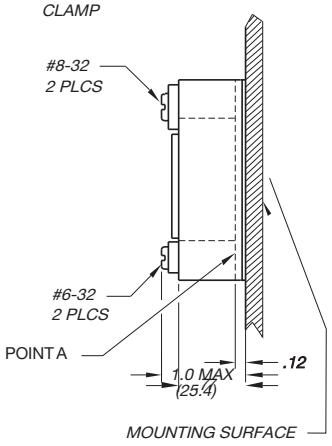
Max. On State Voltage Drop:1.5 VAC (RMS)
Input Impedance: 1700 ohms ±5%
Turn Off Voltage: 2 VAC/DC min.
Turn On Voltage: 3 VAC/DC max.
Output Form:
SNC-R2025-507: SPST-NO
SNC-R2025-517: SPST-NC
Control Voltage Range: 3-30 VAC/DC

SNC-R2025-501 AND SNC-R2025-511

Max. On State Voltage Drop: 1.65 VAC (RMS)
Input Impedance: 56 Kohms ±5%
Turn Off Voltage: 30 VAC min.
Turn On Voltage: 70 VAC max.
Output Form:
SNC-R2025-501: SPST-NO
SNC-R2025-511: SPST-NC
Control Voltage Range: 70-140 VAC

** See derating curves for proper heat sink requirements*





ORDERING INFORMATION

INPUT VOLTAGE	OUTPUT CONFIGURATION	PART NUMBER
3 to 30 VAC/DC	Normally Open, 25 A	SNC-R2025-507
70 to 140 VAC	Normally Open, 25 A	SNC-R2025-501
3 to 30 VAC/DC	Normally Closed, 25 A	SNC-R2025-517
70 to 140 VAC	Normally Closed, 25 A	SNC-R2025-511

ACCESSORY	PART NUMBER
Heatsink, .9 °C/W, supplied with Thermal Compound and Mounting Hardware	ASY-HS25A-011

Heat Sink Data

Heat sinks for derating curves are 1/8" thick aluminum with thermal compound between the mounting surface and solid state relay mounting plate.