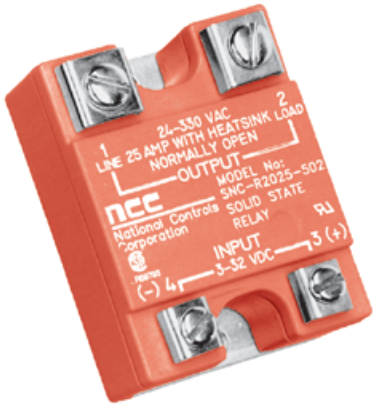
# Solid State Power Relays
## Model R2025




### FEATURES

- *CSA certified file #LR701222*
- *100% functionally and surge tested*
- *24 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 #E164906*

The AMETEK NCC Series of Solid State Power Relays provide a highly reliable means of switching a variety of AC loads up to 20 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 65 °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 arms, 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

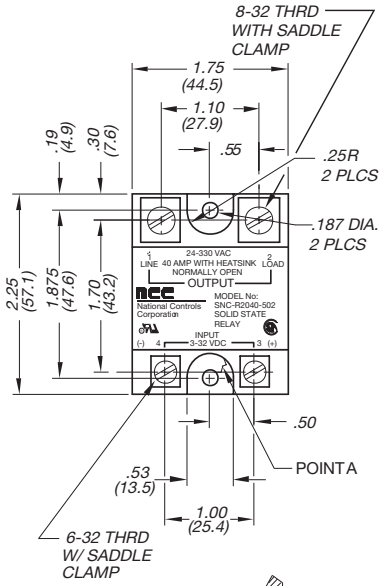
**SNC-R2025-507 AND SNC-R2025-517**

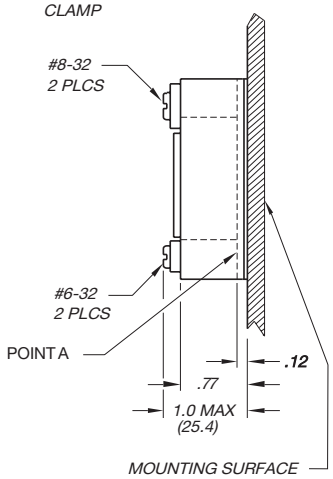
**Max. On State Voltage Drop:**1.5 VAC (RMS)
**Input Impedance:** 1700 ohms ±5%
**Turn Off Voltage:** 2 VAC/DC min.
**Turn On Voltage:** 3 VAC/DC max.
**Output Form:**
SNC-R2025-507: SPST-NO
SNC-R2025-517: SPST-NC
**Control Voltage Range:** 3-30 VAC/DC

**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/DC min.
**Turn On Voltage:** 70 VAC/DC max.
**Output Form:**
SNC-R2025-501: SPST-NO
SNC-R2025-511: SPST-NC
**Control Voltage Range:** 70-140 VAC/DC

** 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 |
| 7 to 140 VAC | Normally Open, 25 A | SNC-R2025-501 |
| 3 to 30 VAC/DC | Normally Closed, 25 A | SNC-R2025-517 |
| 7 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.

