

CNS series

Multifunction Time Delay Relay

- 8 programmable timing modes (4 on 8-pin models)
- 0.1 sec. to 100 min. programmable timing range
- Universal (24-240VAC/VDC) and fixed input types
- 10A output relay with DPDT contacts
- DIP switch selection of timing mode and range
- Knob and dial scale for setting actual delay time

File E22575

File LR15734

Users should thoroughly review the technical data before selecting a product part number. It is recommended that user also seek out the pertinent approvals files of the agencies/laboratories and review them to ensure the product meets the requirements for a given application.



Timing Modes

See the following page for a complete description of timing modes.

Timing Specifications

Timing Ranges: 0.1 to 1.0 / 1.0 to 10 / 10 to 100 sec.;
0.1 to 1.0 / 1.0 to 10 / 10 to 100 min.

Timing Adjustment: Knob adjustable within selected range.

Tolerance: -0, +20% of max. specified at high end of timing range; min. specified, or less, at low end.

Delta Time (for AC units add ±1 cycle 60 Hz.): ±10%.

Repeatability (Including first cycle of operation.): ±2% (for AC units add ±1 cycle 60 Hz.).

Reset Time (power interruption): 45 ms, typ.; 60 ms, max.

Minimum Pulse Width, Control: 50 ms.

Recycle Time: 45 ms, typ.; 60 ms, max.

Contact Data @ 25°C

Arrangements: 2 Form C (DPDT).

Material: Silver-cadmium oxide alloy.

Rating: 10 A @ 30VDC or 277VAC, resistive; 1/2 HP @ 250VAC; 1/3 HP @ 120VAC.

Expected Mechanical Life: 10 million operations.

Expected Electrical Life: 100,000 operations, min., at rated load.

Initial Dielectric Strength

Between Open Contacts: 1,000V rms, 60 Hz.

Between All Other Conductors: 1,500V rms, 60 Hz.

Ordering Information – Authorized distributors are more likely to stock boldface items listed below.

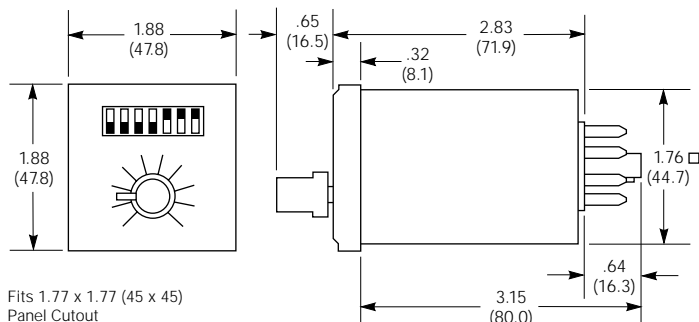
Universal Input Models

Input Voltage	Timing Functions	No. of Pins	Wiring Dia.	Part Number
24-240VAC/VDC	4	8	1	CNS-35-92
24-240VAC/VDC	8	11	2	CNS-35-96

Fixed Input Models

Input Voltage	Timing Functions	No. of Pins	Wiring Dia.	Part Number
120VAC	4	8	1	CNS-35-72
120VAC	8	11	2	CNS-35-76

Outline Dimensions



Input Data @ 25°C

Voltage: Universal Input Type: 24 - 240V ±15%, 50/60 Hz. AC or DC.

Fixed Input Type: 120VAC ±15%, 50/60 Hz.

Power Requirement:

Universal Input Type: 10VA @ 240VAC; 5VA @ 120VAC; 1VA @ 24VAC.
10W @ 240VDC; 5W @ 120VDC; 1W @ 24VDC.

Fixed Input Type: 3VA @ 120VAC.

Transient Protection: Yes.

Reverse Voltage Protection: Yes.

Input Voltages and Limits @ 25°C

Input Type	Nominal Voltage	Minimum Voltage	Maximum Voltage
Universal	24-240VAC/VDC	20.4VAC/VDC	276VAC/VDC
Fixed	120VAC	102VAC	138VAC

Note: DC voltage must be filtered (5% p-p ripple max. at nom. voltage).
AC models will operate on 50 or 60 Hz.

Environmental Data

Temperature Range: Storage: -20°C to +70°C.

Operating: -10°C to +55°C.

Humidity: 85% relative humidity, non-condensing.

Mechanical Data

Termination: 8- or 11-pin octal style plug.

Enclosure: Beige plastic 1/16 DIN case. Dial scale provided for knob adjustment reference.

Sockets: Models with 8-pin base fit either 27E122 or 27E891 (snap-on) screw terminal sockets. 11-pin types fit either 27E123 or 27E892 (snap-on) screw terminal sockets.

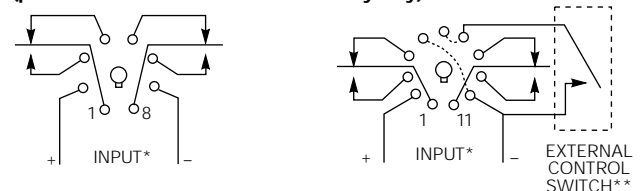
Weight: 4.3 oz. (122g) approximately.

Accessory

Part Number	Name	Description
SSA-24C667	Mounting Clip	Ratchet-fit clip slides onto CNS from behind to secure CNS in panel mount applications.

Wiring Diagrams (Bottom Views)

(pins numbered clockwise from keyway)



*** Note:** Input polarity for DC operation. For most reliable operation on AC, connect high side to "+" and low side to "-".

**** Important:** A dry circuit switch is recommended. A "dry circuit" switch is one rated to reliably switch currents of less than 50mA. Use of a switch rated for other than dry circuit may result in failure of the time delay relay to function properly.

The dotted lines shown between pins on 11-pin diagram indicate internal connections.