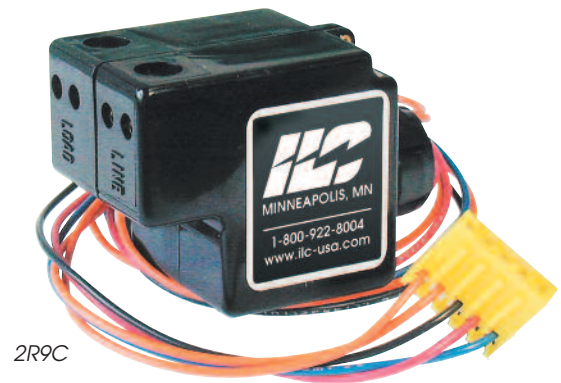




# 2R9 Relays (with pilot contacts)

Magnetically Latched Relays

- Magnetically latching contacts
- 1 amp 30 volts AC/DC isolated contacts for status feedback or pilot lights
- Single moving part design
- Operates in any position
- Unmatched endurance (Ind. Test Lab)
  - 200,000 (ON/OFF) cycles, at FULL LOAD
  - 1,000,000 (ON/OFF) cycles, at no load
- 20 amp 120, 277 or 347 VAC operation
- UL listed, FCC approval for commercial and residential use



Relays and Contactors

## Overview

The 2R9 Series of relays are designed and manufactured to be the longest-lasting, most reliable relays available. By incorporating a unique single moving part (the contacts) design, both endurance and reliability are significantly enhanced. Compare our 200,000 ON/OFF cycle FULL LOAD and 1,000,000 no load ratings with any other relay in the industry. We're confident you will agree that for reliability and endurance, ILC's 2R9 Relay Series simply can't be beat. ILC 2R9 relays are magnetically latched, requiring only a momentary rectified AC or DC pulse to open or close the contacts.

## Features

### General Information

- UL Listed
- Mounts in standard 1/2" K.O. .825" - .875" diameter, 14 or 16 gauge material
- Operates in any position

### Line Voltage Characteristics

- Contacts: SPST Maintained (permanent magnet latching)
- Terminals: 2 terminals, 2 back wiring holes per terminal for feed through wiring
- Screw-actuated clamps for use with #14-10AWG solid or stranded copper wire only

### Low Voltage Characteristics

- Split coil: 1/2 for "ON", 1/2 for "OFF"
- Compatible with standard interface drivers
- Operating voltage:
  - 18 - 30 VAC rectified
  - 12 - 24 VDC filtered
- Duty rating: Momentary
- Minimum activating pulse time: 17 milliseconds
- Coil Impedance: 68 - 73 ohms at 60Hz, 50 - 60 ohms DC resistance
- Switching power required for each 2R relay is:
  - 2.2 VA per relay at 24 VAC rectified
  - 175 mA per relay at 12 VDC
  - 350 mA per relay at 24 VDC
- Status contacts: 1 amp AC/DC

### Application Considerations

- **Relays Connected in Parallel** - Two or more relays connected in parallel, by grouping red leads and black leads, will operate together. The maximum number of relays connected in parallel is determined by the capacity of the power supply and the switch contact rating.

FOR USE IN  
**SA SN EN**  
LIGHTMASTER NETWORKS

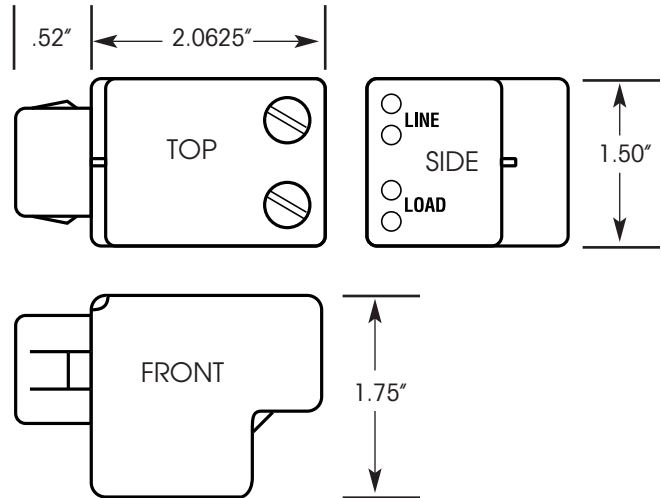
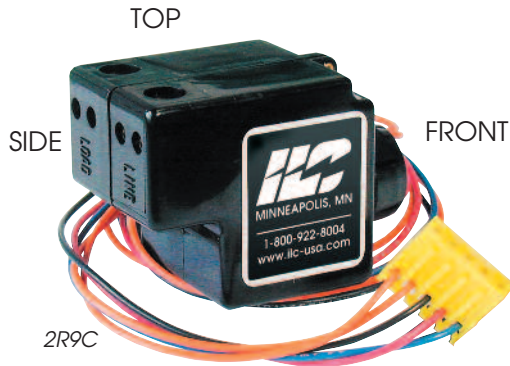
INTELLIGENT LIGHTING  
CONTROLS, INC.

5229 Edina Industrial Boulevard  
Minneapolis, Minnesota 55439  
Phone 952 829 1900  
FAX 952 829 1901  
1-800-922-8004  
www.ilc-usa.com



# 2R9 Relays (with pilot contacts)

Magnetically Latched Relays



## Specifications

### Physical:

- Mounts in standard 1/2" K.O. .825" – .875"
- Operates in any position

### Electrical:

- 120, 277 or 347 VAC
- Motor Loads
  - 1 Hp @120VAC
- 20 amp Ballast 120, 277 or 347 VAC
- Resistive loads: 20 amps 120, 277 or 347 VAC
- SCCR Rating: 18,000 Symmetrical Amperes (see PDF PD0202 for details)

### Connectors:

- Leads available in plain wire (no connector), C connector (5-pin female connector), EZ connector (quick disconnect terminals for standard .187" x .020" male tabs)

### Operating Environment:

- Location Interior Space
- Operating Temperature 0° to 60° C (32° to 140° F)
- Relative Humidity 10% to 95% Non-condensing
- Atmosphere Non-explosive, Non-corrosive
- Vibration Stationary application NEMA Level A

### Certifications:

- UL
- FCC Approval for commercial and residential use

INTELLIGENT LIGHTING CONTROLS, INC.

5229 Edina Industrial Boulevard  
Minneapolis, Minnesota 55439  
Phone 952 829 1900  
FAX 952 829 1901  
1-800-922-8004  
www.ilc-usa.com

### How to Order

Ordering a **2R9** Relay  
Order No. 2R9C (sample)

**2R9** \_\_\_\_

P= Plain wire  
C= 5-pin female connector  
EZ= Quick disconnect terminals