

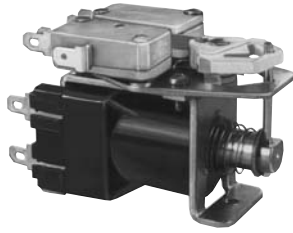
S89R/S90R series

Bistable, Impulse Relay 15 and 20 Amp Industrial Rating Continuous Coil Rating

File E22575

File LR15734

Users should thoroughly review the technical data before selecting a product part number. It is recommended that users 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.



S89R



S90R

Features

- Low cost, bistable impulse relay.
- Operates on 75ms min. pulse.
- Used in garage door controls, motor reversing and lighting controls.
- S89R available with plastic cover and octal plug-in base.

Contact Data @ 25°C

Ratings: S89R: 15 amps, 1/2 HP, 125/250VAC; 5 amps, 125VAC, tungsten filament lamp load; 1/2 amp, 125VDC; 1/4 amp, 250VDC.

Expected Life: 100,000 operations, mechanical; 50,000 operations at rated loads.

Ratings: S90R:

| Load | Minimum Life |
|---|---------------|
| 20A, 120VAC or 7.5A, 277VAC, Tungsten. | 10,000 Cycles |
| 15A, 125VAC or 7A, 277VAC, Fluorescent. | 10,000 Cycles |
| 20A, 277VAC, 75-80% PF. | 50,000 Cycles |
| 1 HP, 125VAC, 50/60 Hz. | 50,000 Cycles |
| 2 HP, 250VAC, 50/60 Hz. | 50,000 Cycles |
| 12 FLA, 60 LRA, 120VAC. | 50,000 Cycles |
| 8 FLA, 48 LRA, 240VAC. | 50,000 Cycles |
| Pilot Duty, 360VA, 125/250VAC. | 50,000 Cycles |

Coil Data @ 25°C

Nominal Power:

DC Coils: 6.33 Watts @ +25°C.

AC Coils: 9VA @ +25°C.

Insulation: Class B (130°C).

Initial Breakdown Voltage: 1,500V rms, 60 Hz.

Must-Operate Voltage:

DC Coils: 75% of nominal voltage @ +25°C.

AC Coils: 85% of nominal voltage @ +25°C.

Coil Data

| Nominal Voltage | Resistance DC Ohms ±15% @ +25°C | Nominal Current mA |
|-----------------|---------------------------------|--------------------|
| 24VAC | 8.7 | 375 |
| 120VAC | 260 | 75 |
| 240VAC | 1084 | 38 |
| 6VDC | 5.8 | 1035 |
| 12VDC | 22.5 | 533 |
| 24VDC | 92 | 260 |

Environmental Data

Temperature Range: -10°C to +60°C.

Mechanical Data

Weight: 7.75 oz. (241g) approximately.

Ordering Information

| Typical Part No. ▶ | S89R | 5 | A | B | D | 1 | -24 |
|--|------|---|---|---|---|---|-----|
| 1. Basic Series: S89R = 15A S90R = 20A | | | | | | | |
| 2. Contact Arrangement: 5 = SPDT 11 = DPDT | | | | | | | |
| 3. Coil Input: A = AC D = DC | | | | | | | |
| 4. Coil Terminal Style: A = .187" (4.75mm) Quick connect/solder. P = Dust cover with octal plug-in base. (S89R only.) B = .250" (6.35mm) Quick connect/solder. | | | | | | | |
| 5. Switch Terminal Style: C = .187" (4.75mm) Quick connect.* P = Dust cover with octal plug-in base.* D = .250" (6.35mm) Quick connect. (S90 only) * S89R only. | | | | | | | |
| 6. Switch Terminal Configuration: 1 = Style 1 (See outline drawings.) | | | | | | | |
| 7. Coil Voltage: 24, 120, 240VAC 6, 12, 24VDC | | | | | | | |

Our authorized distributors are more likely to maintain the following items in stock for immediate delivery.

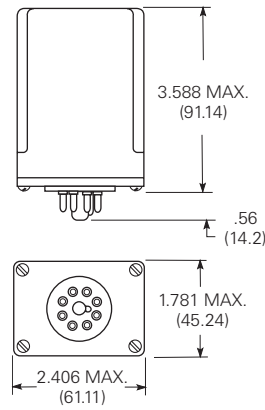
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|---------------|----------------|----------------|---------------|----------------|
| S89R5ABD1-24 | S89R11AAC1-24 | S89R11ABD1-120 | S89R11DAC1-24 | S90R5ABD1-120 |
| S89R5ABD1-120 | S89R11AAC1-120 | S89R11APP1-120 | S89R11DBD1-12 | S90R11ABD1-24 |
| S89R5DBD1-12 | S89R11ABD1-24 | S89R11DAC1-12 | S89R11DBD1-24 | S90R11ABD1-120 |

Outline Dimensions

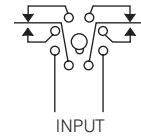
Open Relays



**Enclosed Relays
S89 Series**



Wiring Diagram



Switch Terminal Configuration

Style 1



Switch Terminal Style

C = .187" (4.75mm) Quick-connect
D = .250" (6.35mm) Quick-connect

.187" (4.75mm) Quick Connect S89R **.250" (6.35mm) Quick Connect S90R**

