



100U/101U

100 SERIES RELAY

5 AND 10 AMP

GENERAL PURPOSE

FEATURES

- Class F Coil Insulation System for 155°C Total Temperature
- Coil Molded in DuPont Rynite® for Environmental Protection
- Unique Armature Stop Maintains Adjustment

CONTACT DATA

CONFIGURATION:

Thru 3PDT

MATERIALS:

5 AMP:

1/8" Diameter Moveable Fine Silver
3/16" Diameter Stationary Fine Silver

10 AMP:

3/16" Diameter Moveable Silver Cadmium Oxide
3/16" Diameter Stationary Fine Silver

Gold Flash is Standard on All Contacts

Gold Diffused Available on Special Order – Min. Qty. Req'd.

CONTACT RATINGS

| MOVEABLE CONTACT SIZE | POLE CONFIGURATION | UL RATINGS* |
|-----------------------|--------------------|---|
| 1/8" Diameter | thru 3PDT | 1/8 HP or 5 amp at 120VAC 1/4 HP or 5 amp at 277VAC 5 amp at 28VDC |
| 3/16" Diameter | thru 3PDT | 10 amp or 1/3 HP at 120VAC** 1/2 HP or 10 amp at 277VAC 10 amp at 28VDC |

*UL/CSA On 100U/101U Series Only

**3 Pole Devices Rated at 6-2/3 Amp When Switching Greater Than 150VAC, Unless Polarity is the Same on All Poles

UL RECOGNIZED FILE NO.: E37066 (100U/101U Only)

CSA CERTIFIED FILE NO.: LR20690 (100U/101U Only)

EXPECTED LIFE

Electrical At Rated Load (Minimum)

100,000 Operations

Mechanical Life

10,000,000 Operations

DIELECTRIC STRENGTH

800 VRMS, 60 Hz Between Contacts
1500 VRMS (Model 100), 2200 VRMS
(Model 100U/101U), 60 Hz Between Other Elements

MODELS

- 100:** 5 & 10 Amp with Solder Lug Terminals
- 100RF:** With Diallyl Phthalate Panel For Switching RF
- 100U:** 5 Amp Unit with UL and CSA Recognition
- 101U:** 10 Amp Unit with UL and CSA Recognition
- 101UP:** 10 Amp Unit with Printed Circuit Terminals

COIL DATA



| | NOMINAL VOLTAGE | RESISTANCE IN OHMS ± 10% | NOMINAL COIL POWER |
|----------------------------|-----------------|--------------------------|--------------------|
| AC Coils Single Pole Units | 6VAC | 5.0 | 2.0VA |
| | 12VAC | 20 | |
| | 24VAC | 80 | |
| | 48VAC | 315 | |
| | 120VAC | 2025 | |
| AC Coils 2 & 3 Pole Units | 240VAC | 8000 | 2.2VA |
| | 6VAC | 4.5 | |
| | 12VAC | 18 | |
| | 24VAC | 72 | |
| DC Coils 1-3 Pole Units | 48VAC | 285 | 1.2W |
| | 120VAC | 1850 | |
| | 240VAC | 7200 | |
| | 6VDC | 30 | |
| | 12VDC | 120 | |
| DC Coils 1-3 Pole Units | 24VDC | 480 | 1.2W |
| | 48VDC | 1850 | |
| | 110VDC | 10,000 | |

Coil Voltages: AC: Up to 277 Volts/60 Hz
DC: Up to 125 Volts

Coil Treatment: Molded Rynite® Std. Class F

Insulation Resistance: 100 Megohms Minimum

UL Insulation System File No.: E74443

S155D 155°C Total Temperature Std.

(Covers S105 Class A and S130D Class B Requirements)

OPERATE DATA

Pick Up (at 25°C): AC Volts 85% or Less of Nominal
DC Volts 75% or Less of Nominal

Operate Time: Approx. 15 Milliseconds

Release Time: Approx. 15 Milliseconds

ENVIRONMENTAL DATA

Operating Ambient: AC: -45° to 70°C

DC: -45° to 85°C

Coil Temperature Rise: (25°C Ambient – Continuous Duty)

AC: 45°C Approx. @ 60 Hz – Use at 50 Hz

will Cause Slight Increase in Coil Rise

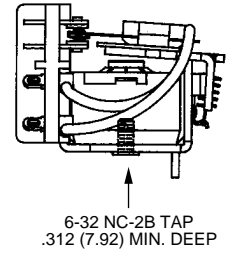
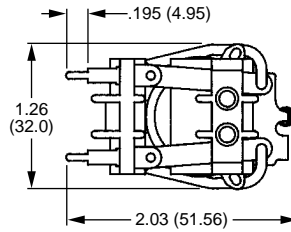
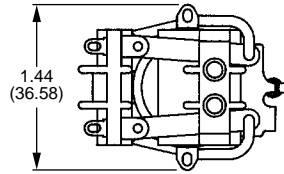
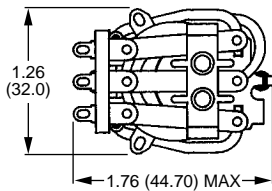
DC: 25°C Approx.

MECHANICAL DATA

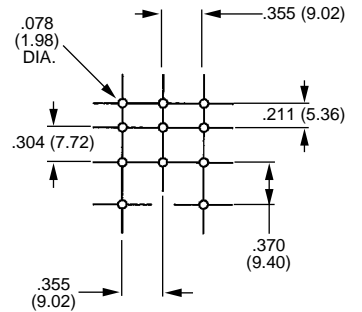
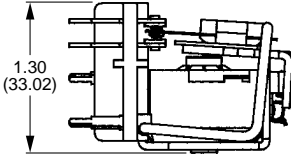
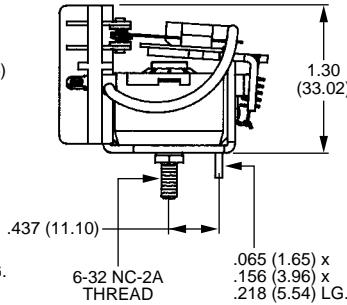
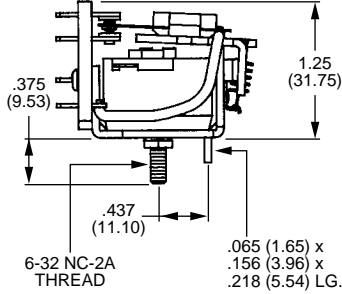
Terminals: 100/100U/101U Pierced Solder Lugs .125" x .032"
100UP/101UP Printed Circuit Pins

Weight: All Versions Approx. 2.0 oz. (57 g)

DIMENSIONS [Unit Inch (mm)]



OPTION WITHOUT STUD



100/100RF

100U/101U

100UP/101UP

MOUNTING DIMENSIONS FOR PRINTED CIRCUIT TERMINALS

ORDERING INFORMATION

5 AMP Part Numbers

| MODEL | POLE CONFIGUR. | AC Coils | | | DC Coils | | |
|-------|----------------|----------|-----------|----------|----------|----------|----------|
| | | 24VAC | 120VAC | 240VAC | 12VDC | 24VDC | 110VDC |
| 100 | SPDT | 20001-82 | 20001-84 | 20001-85 | 20007-81 | 20007-82 | 20007-84 |
| | DPDT | 20003-82 | 20003-84 | 20003-85 | 20009-81 | 20009-82 | 20009-84 |
| | 3PDT | 20005-82 | 20005-84 | 20005-85 | 20011-81 | 20011-82 | 20011-84 |
| 100U | SPDT | 20061-82 | 20061-84 | 20061-85 | 20067-81 | 20067-82 | 20067-84 |
| | DPDT | 20063-82 | 20063-84* | 20063-85 | 20069-81 | 20069-82 | 20069-84 |
| | 3PDT | 20065-82 | 20065-84 | 20065-85 | 20071-81 | 20071-82 | 20071-84 |
| 100UP | SPDT | 20792-82 | 20792-84 | 20792-85 | 20798-81 | 20798-82 | 20798-84 |
| | DPDT | 20794-82 | 20794-84 | 20794-85 | 20800-81 | 20800-82 | 20800-84 |
| | 3PDT | 20796-82 | 20796-84 | 20796-85 | 20802-81 | 20802-82 | 20802-84 |

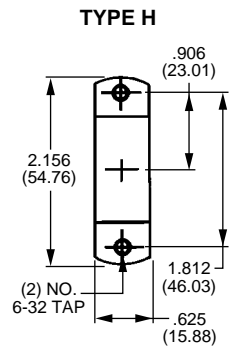
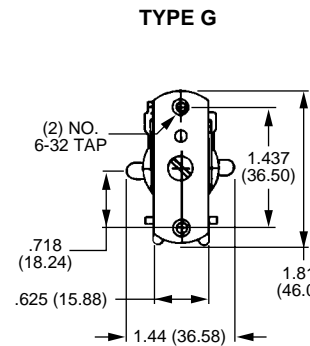
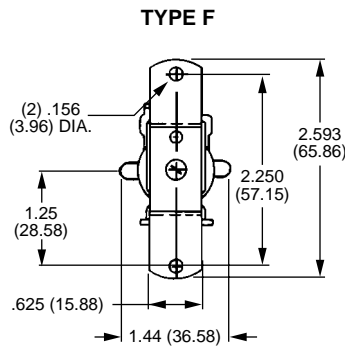
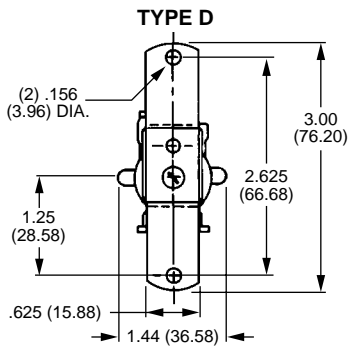
10 AMP Part Numbers

| | | | | | | | |
|-------|------|-----------|-----------|----------|-----------|-----------|-----------|
| 100 | SPDT | 20002-82 | 20002-83 | 20002-84 | 20008-81 | 20008-82 | 20008-84 |
| | DPDT | 20004-82 | 20004-83 | 20004-84 | 20010-81 | 20010-82 | 20010-84 |
| | 3PDT | 20006-82 | 20006-83 | 20006-84 | 20012-81 | 20012-82 | 20012-84 |
| 101U | SPDT | 20062-82 | 20062-84* | 20062-85 | 20068-81* | 20068-82 | 20068-84 |
| | DPDT | 20064-82* | 20064-84* | 20064-85 | 20070-81* | 20070-82* | 20070-84* |
| | 3PDT | 20066-82 | 20066-84 | 20066-85 | 20072-81 | 20072-82 | 20072-84 |
| 101UP | SPDT | 20793-82 | 20793-84 | 20793-85 | 20799-81 | 20799-82 | 20799-84 |
| | DPDT | 20795-82 | 20795-84 | 20795-85 | 20801-81 | 20801-82 | 20801-84 |
| | 3PDT | 20797-82 | 20797-84 | 20797-85 | 20803-81 | 20803-82 | 20803-84 |

* Black Items Are Normally Stocked.

Blue Items Are Non Stock. Minimum Quantity May Be Required.

OPTIONAL MOUNTING BRACKETS



OPTIONAL DUST COVER B-4 DUST COVER FOR SERIES 100

Sealed knock-out holes for standard conduit fittings. Relay mounts on pre-drilled base. Constructed of Aluminum. Snap action cover release. Accommodates relay series 100 and 100RF.

SIZE: 4" W x 2-1/4" H x 2-1/4" D P/N 20256-80*