



270



275F

DELTRON

controls



DIVISION OF DELTROL CORP.

270 & 275 SERIES 35 AMP POWER RELAY

FEATURES

- 35 Amps Switching on all Contacts thru a DPDT Configuration (25 Amps in Europe)
- Coil Molded in DuPont Rynite®, Providing Class F Temperature Insulation
- Low Cost Alternative to Small Contactors

CONTACT DATA

CONFIGURATION:

Thru DPDT, Including SPST-NO-DM, SPST-NC-DB and DMDB

MATERIALS:

All Contacts 1/4" Silver Cadmium Oxide

CONTACT RATINGS

| MODEL | POLE CONFIG. | UL RATINGS |
|----------------------|--|--|
| 270/275 | SPST-NO SPST-NC SPDT DPST-NO DPST-NC DPDT | 35 amp at 277VAC 15 amp at 600VAC 25 amp at 28VDC 1 HP at 120VAC 2 HP at 240/277VAC 3 HP at 480VAC 17 FLA, 60 LRA at 300VAC 25 FLA, 125 LRA at 240/277 VAC 35 FLA, 100 LRA at 240/277 VAC Heavy Pilot Duty, 600VAC 20 amp at 277VAC Ballast 20 amp at 480VAC Ballast |
| | SPST-NO-DM SPST-NC-DB SPDT-DM-DB | 35 amp at 300VAC 15 amp at 600VAC 35 amp at 28VDC 5 amp at 125VDC 1 HP at 120VAC 2 HP at 240/277VAC 3 HP at 480VAC 17 FLA, 60 LRA at 300VAC 25 FLA, 125 LRA at 240/277 VAC 35 FLA, 100 LRA at 240/277 VAC Heavy Pilot Duty, 600VAC 20 amp at 277VAC Ballast 20 amp at 480VAC Ballast |
| SEMKO RATINGS | | |
| 275F 275P 275T | SPST-NO SPST-NC SPDT DPST-NO DPST-NC DPDT | 25 amp at 250VAC, 50 Hz AC-1 25 amp at 28VDC DC-1 12 amp at 240VAC 50 Hz AC-3 |
| | SPST-NO-DM SPST-NC-DB SPDT-DM-DB | 35 amp at 250VAC 50 Hz AC-1 35 amp at 28VDC DC-1 12 amp at 240VAC 50 Hz AC-3 |

UL RECOGNIZED FILE NO.: E37066

US and Canadian Recognition

SEMKO CERTIFICATE NO.: 9648100/01* Model 275 F,P, T

* Double Pole units may require 150°C load wire for some applications.

MODELS

- 270S:** Open Frame w/Stud & Locator Tab
- 275F:** Flange Cover
- 275T:** Top Mount Cover, Other Suffixes Available
B-Bracket Provided, L-Tap & Locator,
P-Printed Circuit Pins



Model 275 F, P, T

COIL DATA

| | NOMINAL VOLTAGE | RESISTANCE IN OHMS ± 10% | NOMINAL COIL POWER |
|----------|-----------------|--------------------------|--------------------|
| AC Coils | 6VAC | 3.5 | 2.4VA |
| | 12VAC | 14 | |
| | 24VAC | 56 | |
| | 48VAC | 230 | |
| | 120VAC | 1500 | |
| DC Coils | 240VAC | 6000 | 1.8W |
| | 6VDC | 20 | |
| | 12VDC | 80 | |
| | 24VDC | 315 | |
| | 48VDC | 1300 | |
| | 110VDC | 6800 | |

Coil Voltages: USA/Canada European

AC: Up to 277 Volts/60 Hz Up to 250 Volts 50/60 Hz

DC: Up to 125 Volts 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: 60°C max. @ full load continuous operation. Consult factory for information on higher operating ambients.

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: 40°C Approx.

EXPECTED LIFE

Electrical At Rated Load (Minimum)

100,000 Operations

Mechanical Life

10,000,000 Operations

DIELECTRIC STRENGTH

1200 VRMS, 60 Hz Between Contacts

2200 VRMS, 60 Hz Between Other Elements

MECHANICAL DATA

Terminals: All Versions (Except P Suffix)

.250" x .032" Quick Connect/Solder

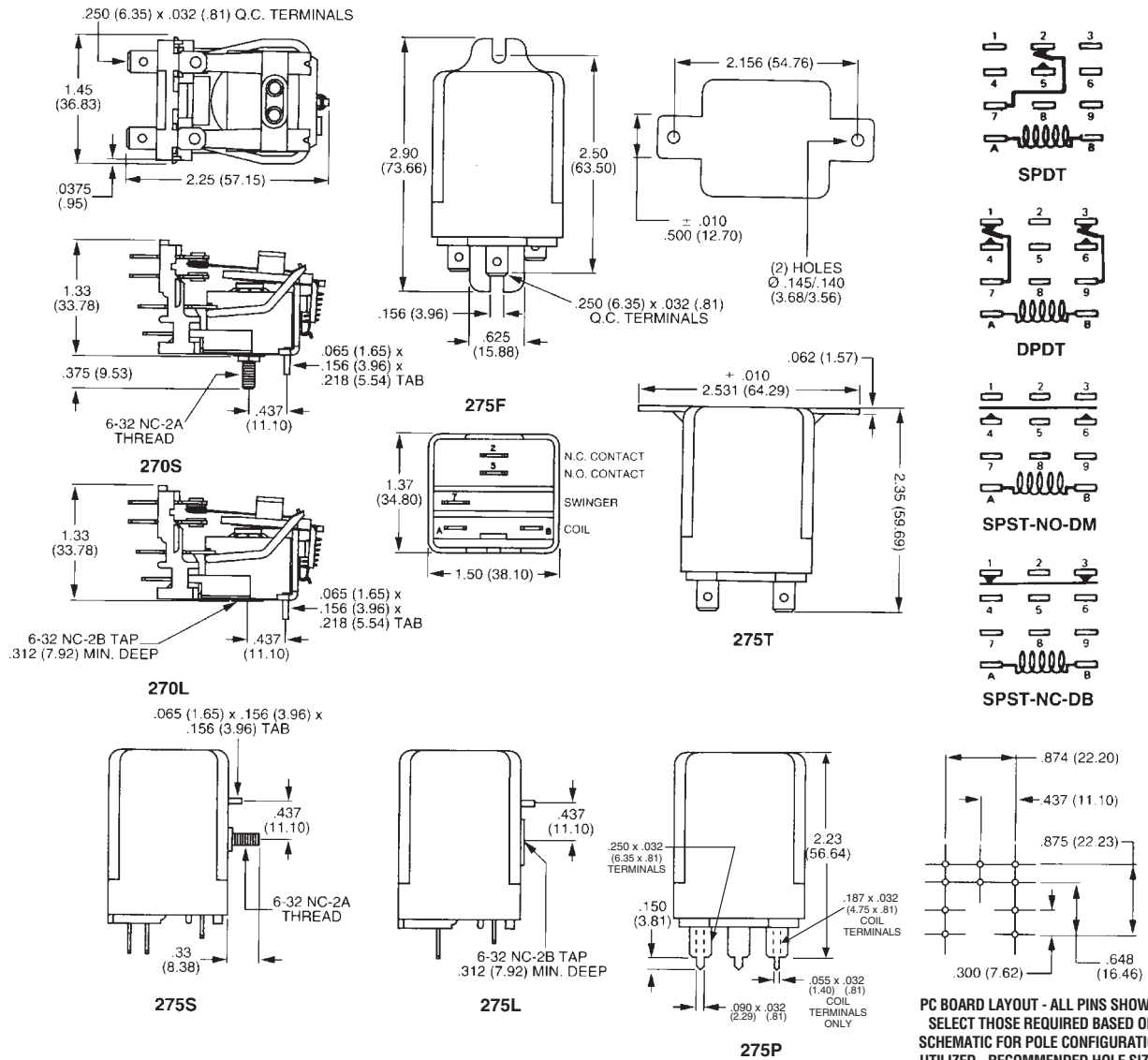
P Suffix Version Printed Circuit Pins

Cover: Clear Polycarbonate - Flammability Rating 94V2

Weight: Approx. 3 oz. (85 g)

DIMENSIONS [Unit Inch (mm)]

SCHEMATICS



ORDERING INFORMATION

35 AMP Part Numbers

| MODEL | POLE CONFIG. | AC Coils | | | DC Coils | | |
|-------|--------------|-----------|-----------|----------|----------|-----------|----------|
| | | 24VAC | 120VAC | 240VAC | 12VDC | 24VDC | 110VDC |
| 275F | SPST-NO | 20837-82 | 20837-84 | 20837-85 | 20845-81 | 20845-82 | 20845-84 |
| | SPST-NC | 20838-82 | 20838-84 | 20838-85 | 20846-81 | 20846-82 | 20846-84 |
| | SPDT | 20839-82 | 20839-84 | 20839-85 | 20847-81 | 20847-82 | 20847-84 |
| | DPST-NO | 20842-82 | 20842-84 | 20842-85 | 20850-81 | 20850-82 | 20850-84 |
| | DPST-NC | 20843-82 | 20843-84 | 20843-85 | 20851-81 | 20851-82 | 20851-84 |
| | DPDT | 20844-82* | 20844-84* | 20844-85 | 20852-81 | 20852-82* | 20852-84 |
| 275P | SPST-NO | 20973-82 | 20973-84 | 20973-85 | 20970-81 | 20970-82 | 20970-84 |
| | SPST-NC | 21058-82 | 21058-84 | 21058-85 | 21059-81 | 21059-82 | 21059-84 |
| | SPDT | 21057-82 | 21057-84 | 21057-85 | 21016-81 | 21016-82 | 21016-84 |
| | DPST-NO | 21044-82 | 21044-84 | 21044-85 | 21023-81 | 21023-82 | 21023-84 |
| | DPST-NC | 20976-82 | 20976-84 | 20976-85 | 20934-81 | 20934-82 | 20934-84 |
| | DPDT | 20931-82 | 20931-84 | 20931-85 | 20930-81 | 20930-82 | 20930-84 |
| 275T | SPST-NO | 20993-82 | 20993-84 | 20993-85 | 21001-81 | 21001-82 | 21001-84 |
| | SPST-NC | 20994-82 | 20994-84 | 20994-85 | 21002-81 | 21002-82 | 21002-84 |
| | SPDT | 20995-82 | 20995-84 | 20995-85 | 21003-81 | 21003-82 | 21003-84 |
| | DPST-NO | 20998-82 | 20998-84 | 20998-85 | 21006-81 | 21006-82 | 21006-84 |
| | DPST-NC | 20999-82 | 20999-84 | 20999-85 | 21007-81 | 21007-82 | 21007-84 |
| | DPDT | 21000-82 | 21000-84 | 21000-85 | 21008-81 | 21008-82 | 21008-84 |

35 AMP Part Numbers

| | | | | | | | |
|------|------------|----------|----------|----------|----------|-----------|----------|
| 275F | SPST-NO-DM | 20840-82 | 20840-84 | 20840-85 | 20848-81 | 20848-82* | 20848-84 |
| | SPST-NC-DB | 20841-82 | 20841-84 | 20841-85 | 20849-81 | 20849-82 | 20849-84 |
| 275T | SPST-NO-DM | 20996-82 | 20996-84 | 20996-85 | 21004-81 | 21004-82 | 21004-84 |
| | SPST-NC-DB | 20997-82 | 20997-84 | 20997-85 | 21005-81 | 21005-82 | 21005-84 |

* Shaded Items Are Normally Stocked.

All Other Items Are Non Stock. Minimum Quantity May Be Required.