



270



275F

DELTRON

controls /  DIVISION OF DELTROL CORP.

270 & 275

SERIES 30 AND 35 AMP POWER RELAY

FEATURES

- 30 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 DMDB	30 amp at 300VAC 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 Heavy Pilot Duty, 600VAC 20 amp at 277VAC Ballast 20 amp at 480VAC Ballast
	SPST-NO-DM SPST-NC-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 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 DMDB	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	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

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: AC: -45° to 75°C

DC: -45° to 80°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: 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

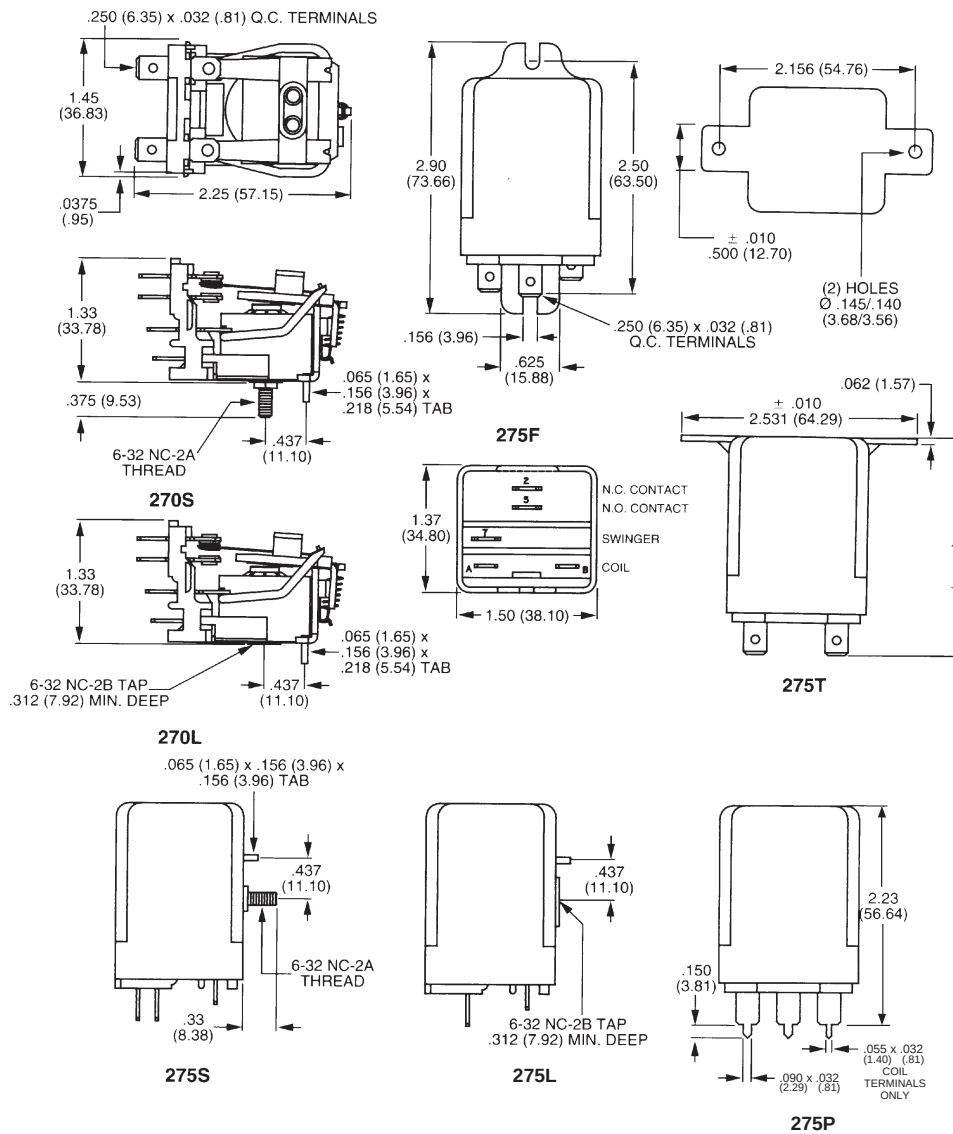
P Suffix Version Printed Circuit Pins

Cover: Clear Polycarbonate - Flammability Rating 94V2

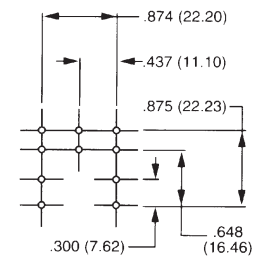
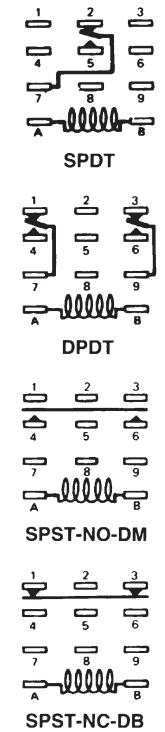
Weight: Approx. 3 oz. (85 g)

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

DIMENSIONS [Unit Inch (mm)]



SCHEMATICS



PC BOARD LAYOUT - ALL PINS SHOWN.
 SELECT THOSE REQUIRED BASED ON
 SCHEMATIC FOR POLE CONFIGURATION
 UTILIZED. RECOMMENDED HOLE SIZES
 .078 (1.98) FOR COIL (A&B)
 .109 (2.77) FOR OTHERS (1-9)

ORDERING INFORMATION

30 AMP Part Numbers

AC Coils					DC Coils		
MODEL	POLE CONFIG.	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.