

FEATURES

- 30A DPST-NO and DPDT switching capabilities.
- Designed to control compressor loads to 3.5 tons, 25.3 FLA, 110 LRA.
- Extended life - >300,000 operations at 30A, 240VAC (DC coil).
>100,000 operations at 30A, 240VAC (AC coil).
- Meets requirements of UL873 and UL508 spacings.
- .315" (8 mm) through air, .375" (9.5 mm) over surface.
- Meets requirements of VDE 8 mm spacing, 4kV dielectric coil-to-contacts.
- Meets requirements of UL Class F construction.
- UL approved for 600VAC Switching (1.5HP).
- Conforms to VDE 0435, 0631, and 0700.

CONTACT DATA @ 25°C

Arrangements: 2 Form A (DPST-NO) and 2 Form C (DPDT).

Materials: Silver cadmium oxide.

Max. Load Rating:

Normally Open Contacts:

- 30A @ 120/277VAC, resistive;
- 10A @ 600VAC, resistive;
- 1 HP @ 120VAC, 2.5 HP @ 240VAC; 1.5 HP @ 480VAC, 1.5 HP @ 600VAC
- 22FLA, 96LRA @ 240VAC with AC coil;
- 25.3 FLA, 110 LRA @ 240VAC with DC coil⁽¹⁾;
- 3A @ 240VAC pilot duty;
- 20A @ 28VDC;
- TV10 @ 120VAC.

VDE Rating (Flange Mount) 25A @ 400VAC, 100K Ops. (30K Ops. for Form C Models).

VDE Rating (PC Mount) 30A @ 400VAC, 100K Ops. (30K Ops. for Form C Models).

Normally Closed Contacts:

- 3A @ 28VDC or 277VAC, 2A @ 480VAC, 1A @ 600VAC.

VDE Rating (Flange or PC Mount) 3A @ 400VAC, 30K Ops.

Min. Load Rating:

- Normally Open Contacts:** 500mA @ 12VAC/VDC.
- Normally Closed Contacts:** 100mA @ 6VAC/VDC.

Expected Mechanical Life: 5 million operations.

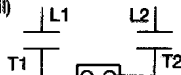
Expected Electrical Life: 100,000 operations at rated load.

ARI 780-86 Endurance Test (section 6.6):

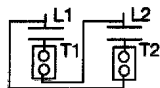
HVAC Definite Purpose Contactor Standard

Normally Open Contacts

- Single Phase/Two Pole (Both poles together switching a single load)
- 110 LRA, 25.3 FLA, 200K Operations (DC Coil)
- 96 LRA, 22 FLA, 200K Operations (AC Coil).



- Single Phase Per Pole (Single Load per Pole)
- 110 LRA, 18 FLA, 200K Operations (DC Coil)
- 60 LRA, 20 FLA, 200K Operations (AC Coil).



NOTE: Vent hole tape must be removed to achieve all listed ratings.

INITIAL DIELECTRIC STRENGTH

- Between Contacts and Coil:** 4,000V rms, 50/60 Hz.
- Between Open Contacts:** 1,500V rms, 50/60 Hz.
- Between Poles:** 2,000V rms, 50/60 Hz.

INITIAL INSULATION RESISTANCE

Between Mutually Insulated Elements: 10⁹ ohms, min. @ 500VDC.

COIL DATA

- Voltage:** 6 through 110VDC and 24 through 277VAC.
- Resistance:** See Coil Data table.
- Nom. Power:** AC Coil: 4.0VA; DC Coil: 1.7W.
- Coil Temp. Rise:** 35°C/W.
- Max. Coil Temp.:** 140°C
- Duty Cycle:** Continuous

T92 series

**TWO-POLE, 30 AMP
PC BOARD OR PANEL MOUNT RELAY**

File E22575

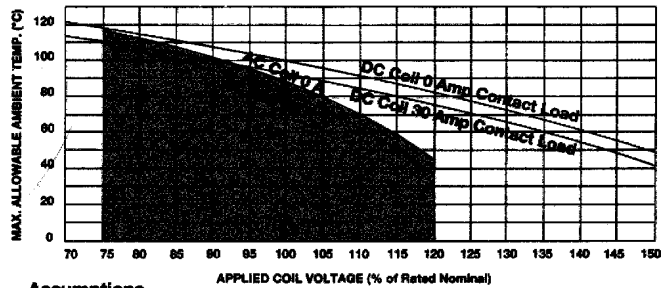
File LR15734

VDE - Reg. No. 5386

COIL DATA (@ 25°C Coil Temperature)

DC COILS (1.7W)					
Nom. Voltage (VDC)	DC Resist. ±10% (Ohms)	Nom. Voltage (VDC)	DC Resist. ±10% (Ohms)		
6	22	48	1,390		
12	86	110	7,255		
24	350				
AC COILS (4.0VA)					
Nom. Voltage (VAC)	Freq.	DC Resist. ±10% (Ohms)	Nom. Voltage (VAC)	Freq.	DC Resist. ±10% (Ohms)
12	60	9.1	110/120	50/60	950
12	50	11.2	120	50	1119
24	60	36.6	208	60	2841
24	50	44.4	220/240	50/60	3800
48	50	179.2	230/240	50	4355
100/110	50/60	793	250/277	50/60	5485

AMBIENT TEMPERATURE VS. COIL VOLTAGE



Assumptions

1. Thermal resistance = 35°C per Watt (DC only.)
2. Still air
3. Nominal coil resistance
4. Maximum mean coil temperature = 140°C using change of resistance method, Class F
5. Coil temperature rise due to load = 6.3°C @ 30 Amps
6. Curves are based on 1.7 W at 25°C (DC only.)

OPERATE DATA

- Must Operate Voltage:** AC Coil: 80% of nominal voltage or less.
DC Coil: 75% of nominal voltage or less.
- Must Release Voltage:** 10% of nominal voltage or more.
- Initial Operate Time⁽²⁾:** 15 ms typical, (25 ms max. w/bounce).
- Initial Release Time⁽²⁾:** 10 ms typical, (25 ms max. w/bounce).
- Max Operating Frequency:** 14 operations per minute.

ENVIRONMENTAL DATA

- Temperature Range:** Storage: -55°C to +155°C.
Operating: AC Coil: -40°C to +65°C.
DC Coil: -40°C to +85°C.
- Vibration:** 0.065" (1.65 mm) double amplitude for 10-55 Hz., functional.
- Shock, Operational:** 10g for 11 ms, 1/2 sine wave pulse with no contact opening > 100µs.
- Shock, Mechanical:** 100g for 11 ms, 1/2 sine wave pulse.
- Flammability:** UL 94-V0.

MECHANICAL DATA

- Termination:** Printed circuit terminals; .250" (6.35 mm) quick connects for coil and contacts; or .187" (4.75 mm) quick connects for coil and .250" (6.35 mm) quick connects for contacts.
- Enclosure:** Unsealed, plastic dust cover or immersion cleanable, tape sealed plastic cover.
- Weight:** 3 oz. (86 g) approximately.

CONDITIONS

All parametric, environmental and life tests are performed according to EIA Standard RS-407-A at standard test conditions (25°C ambient, 20-50% RH, 29.5 ± 1" Hg.) unless otherwise noted.

NOTES:

- (1) FLA, LRA ratings are compatible with 3.5 ton compressor applications.
- (2) Nominal voltage, no coil suppression, excluding bounce.