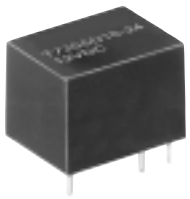
T73 series

Low Profile, 10 Amp Printed Circuit Board Relay



File E29244
File LR48471

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

Features

- 10 amp switching capacity.
- UL Class F (155°C) coil insulation system standard.
- 1 Form A and 1 Form C contact arrangements.
- Ideal for domestic appliances, HVAC and security.
- Resists high temperature and various chemical solutions.
- Immersion cleanable, plastic sealed case available.

Contact Data @ 20°C

Arrangements: 1 Form A (SPST-NO) and 1 Form C (SPDT).
Material: Silver-cadmium oxide.
Max. Switching Rate: 240 ops./min. (no load).
30 ops./min. (rated load).
Expected Mechanical Life: 10 million operations.
Expected Electrical Life: 100,000 operations.
Minimum Load: 10mA @ 5VDC
Initial Contact Resistance: 100 milliohms max. @ 100mA, 6VDC.

Contact Ratings @ 20°C with relay properly vented. Remove vent nib after soldering and cleaning.

Contact Arrang.	Typical Ratings	Type	Operations
1 & 5	1/3HP NO @ 240VAC	Motor	30,000
	10A NO @ 120VAC	Resistive	100,000
	6A NO @ 120VAC	Resistive	100,000
	6A NO @ 24VDC	Resistive	100,000
	10A/5A @ 120VAC	Resistive	100,000
	1/4HP NO @ 120VAC	Motor	

Consult factory for other ratings.

Initial Dielectric Strength

Between Open Contacts: 750VAC 50/60 Hz. (1 minute).
Between Coil and Contacts: 2,000VAC 50/60 Hz. (1 minute).

Initial Insulation Resistance

Between Mutually Insulated Elements: 10^8 ohms min. @ 500VDC.
Ag contact rating.

Coil Data @ 20°C

Voltage: 3 to 48VDC.
Nominal Power: 450 milliwatts.
660 milliwatts for 48VDC coil.
Coil Temperature Rise: 35C° max, at rated coil voltage.
Max. Coil Power: 130% of nominal.
Duty Cycle: Continuous.

Coil Data @ 20°C

Rated Coil Voltage (VDC)	Coil Resistance (Ohms) +10%	Must Operate Voltage (VDC)	Must Release Voltage (VDC)
3	20	1.95	0.15
5	56	3.25	0.25
6	80	3.90	0.30
9	180	5.85	0.45
12	320	7.80	0.60
18	720	11.7	0.90
24	1,150	15.6	1.20
48	3,500	31.2	2.40

Operate Data @ 20°C

Operate Time: 10 ms (excluding bounce).
Release Time: 5 ms (excluding bounce).

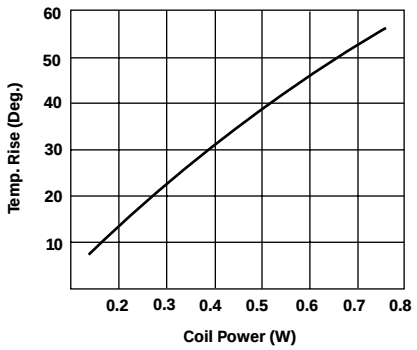
Environmental Data

Temperature Range:
Storage: -40°C to +130°C.
Operating: -30°C to +80°C.
Vibration, Mechanical: 10 to 55 Hz., 1.5mm double amplitude
Operational: 10 to 55 Hz., 1.5mm double amplitude.
Shock, Mechanical: 100g min.
Operational: 10g min.
Operating Humidity: 45 to 85% RH.

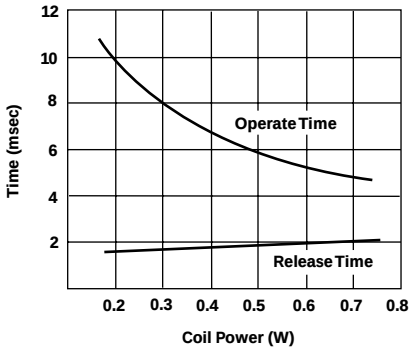
Mechanical Data

Termination: Printed circuit terminals.
Enclosure (94V-0 Flammability Ratings):
Weight: 0.42 oz. (12g).

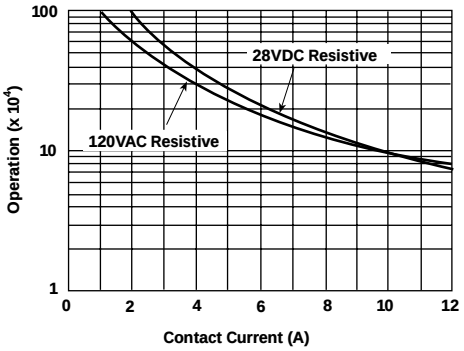
Figure 1 - Coil Temperature Rise



Operate Time



Life Expectancy



Note: Graphical data should not be used as a substitute for specific application verification. To be used for estimates only.

Ordering Information

Typical Part Number ▶	T73	S	5	D	1	5	-24

1. Basic Series:
T73 = Miniature, printed circuit board relay.

2. Enclosure:
V = Vented (Flux-tight)*
S = Immersion cleanable, plastic sealed case.

3. Contact Arrangement:
1 = 1 Form A (SPST-NO).
5 = 1 Form C (SPDT)

4. Coil Input:
D = DC voltage.

5. Relay Type:
1 = Standard coil.

6. Contact Material:
5 = Silver-Cadmium Oxide

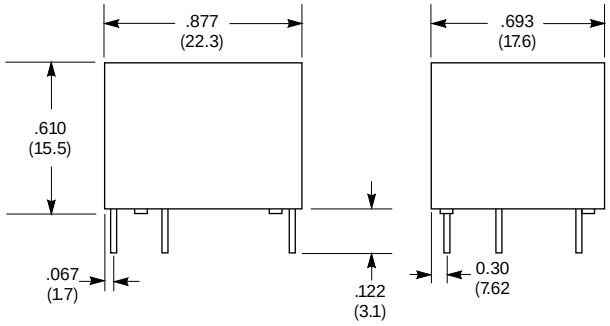
7. Coil Voltage:
03 = 3VDC 06 = 6VDC 12 = 12VDC 24 = 24VDC
05 = 5VDC 09 = 9VDC 18 = 18VDC 48 = 48VDC

* Not suitable for immersion cleaning process.

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

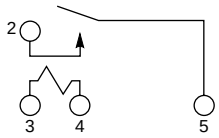
T73S5D15-05
T73S5D15-12
T73S5D15-24

Outline Dimensions

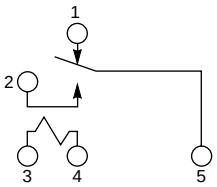


Wiring Diagrams (Bottom Views)

1 Form A

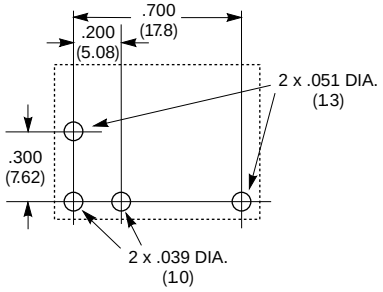


1 Form C



Suggested PC Board Layouts (Bottom Views)

1 Form A



1 Form C