



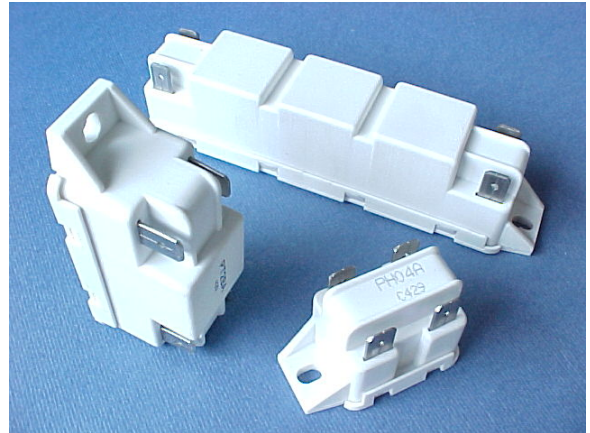
New P series bracket mount PTC Start Relay

ADVANTAGES OF PTC STARTING

The primary advantage of the PTC relay is that it allows a strong current flow through the start winding of the motor during the initial start.

Appropriate motor design can benefit from savings in the start winding and from the energy efficiency improvements obtained with a run capacitor.

One PTC start relay usually fits a complete range of compressors, thereby reducing inventory, part numbering, and planning requirements.



ELECTRICA P SERIES PTC STARTING RELAY

P Series PTC Start Relays are compact components, ideally suited for the starting of hermetic compressors used in air conditioning and some commercial applications.

P relay incorporates a PTC (Positive Temperature Coefficient) ceramic pellet with a low, controlled resistance value at ambient temperature, which allows the motor to start.

After a short delay the PTC pellet increases its resistance considerably, and reduces motor starting current to a very low value, which is anyway sufficient to keep the PTC relay in a non-operating condition as long as the motor is running. When the motor is switched off, after a cooling down period, the PTC pellet resistance decreases to its original low value. The relay is ready for another start.

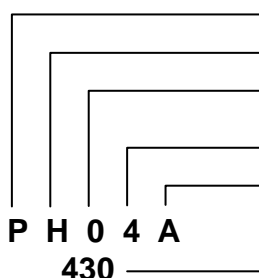
GENERAL DATA

- Fixing by means of one screw.
- Rated voltage 115 or 230 Va.c.
- Load controlled Resistive and Inductive
- For Normal pollution condition (according to EN60730)
- Case material: thermoplastic compound
PTI 250V – UL94 V0 – Rated 140°C
- Max switch head temperature 80°C
- Max mounting face temperature 80°C
- Endurance (typical) 100,000 cycles
- Terminals: 6.3 mm quick-connect.

APPROVALS

- ENEC IMQ – EF959
- UL E51436

CODING & MARKING



Product family
Pellet Characteristics
Pellet Reference Temperature (0=120°C, 1=135°C, 2=130°C)
Bracket mount configuration
Terminal code
Manufacturing date Year of manufacture (4) and week of manufacture (30)

PELLET CHARACTERISTICS

Configuration	Type	Ref. Temp.	High voltage a.c. Resistance	Low voltage D.C. Resistance	V _{max}	I _{max}	Average power consumption	Compressor range	
		°C	Ohm	Ohm	V	A	W	BTUx100	HP
4	H	120	25 ± 20%	38 ± 30%	400	9	2	10-28	0.75-2
	J	130	35 ± 20%	50 ± 30%	410	8	2	8-18	0.5-1.5
	K	130	50 ± 20%	75 ± 30%	410	6	2	5-12	0.25-1
B	S	130	20 ± 20%	30 ± 30%	500	18	4	20-50	1.5-4
	T	130	25 ± 20%	37.5 ± 30%	500	15	4	18-42	1.5-3.5
C	S	130	10 ± 20%	15 ± 30%	500	36	8	28-68	3-7
	T	130	12.5 ± 20%	18.75 ± 30%	500	30	8	28-62	3-6

CONFIGURATION (See drawings)

4	Bracket mount, single 20x5 mm pellet
B	Bracket mount, two 20x5 mm pellets
C	Bracket mount, four 20x5 mm pellets

TERMINAL CODE

Code	Terminal position				Terminal type
	1	2	3	4	
A	♣	♣	♣	♣	♣ = 6.3x0.8 male quick-connect terminal

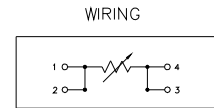
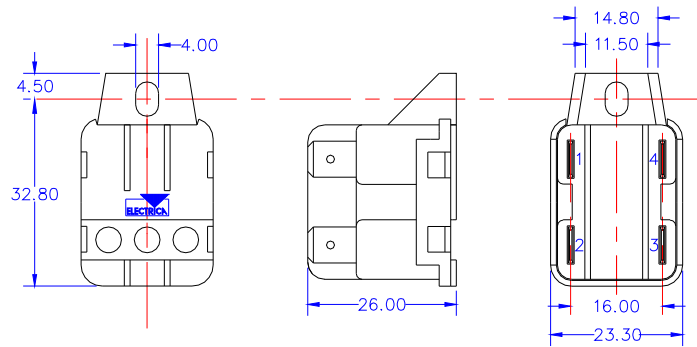
Notice

PTC elements may be degraded by excessive humidity, especially saline, and by pollution, especially Cl and Ph. Carefully evaluate the use of PVC parts near PTC elements.

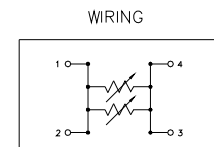
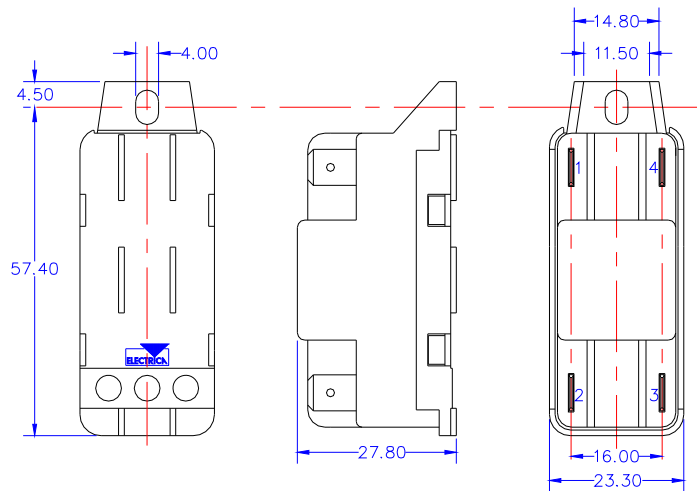
OUTLINE DRAWINGS

Dimensions in millimetre - Tolerances ± 0.25 mm

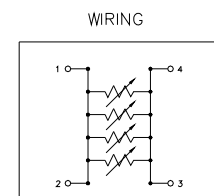
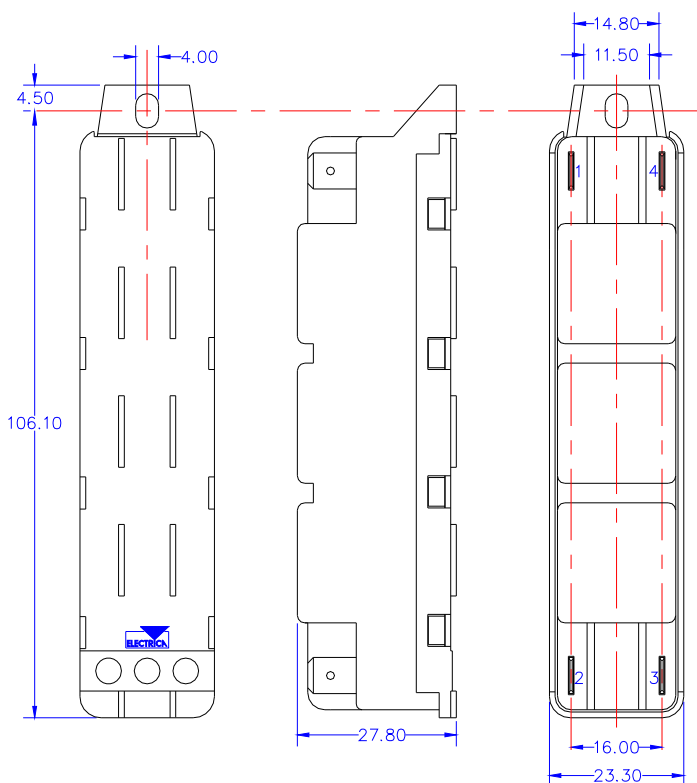
CONFIGURATION 4



CONFIGURATION B



CONFIGURATION C



For any different configuration, contact the Factory

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