Conductor combination with PTC-Thermistor relay

The NOLTA contactor combination with PTC-Thermistor relay has been specially designed for use in connection with portable, electric motor-driven apparatus, machines and devices and bundles the necessary protection and control technology for motors in a compact, mobile housing. The contactor combination is available with a 16A or 32A CEE plug, PTC thermistor evaluation, phase inverter and phase sequence indicator. In addition, operating indicator, restart interlock and leakage electronics can be integrated.
A selector switch can be used to choose between manual and automatic mode so that the connected motor can be controlled, for example, via a float switch.
The integrated PTC thermistor relay enables the evaluation of PTC thermistors (PTC sensors according to DIN 44081 and DIN 44082) and reliably and effectively prevents dangerous overheating of the motor. As soon as the connected PTC thermistor even slightly exceeds a critical temperature value, the thermistor trips and causes the connected consumer to be switched off.

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NOLTA

Conductor combination with PTC-Thermistor relay

Available versions

Voltage Frequency	Plug Pins	Features	CEE 16 A	CEE 32 A
400 V, 6h, 50-60 Hz	3L+N+PE	Phase inverter + Phase sequence indicator + PTC thermistor relay	80 4301..	80 8301..
400 V, 6h, 50-60 Hz	3L+N+PE	Phase inverter + Phase sequence indicator + Operating indicator + PTC thermistor relay	80 4302..	80 8302..
400 V, 6h, 50-60 Hz	3L+N+PE	Phase inverter + Phase sequence indicator + Operating indicator + PTC thermistor relay + restart inhibit	80 4303..	80 8303..
400 V, 6h, 50-60 Hz	3L+N+PE	Phase inverter + Phase sequence indicator + Operating indicator + PTC thermistor relay + restart inhibit + leak monitoring	80 4304..	80 8304..

Adjustment range

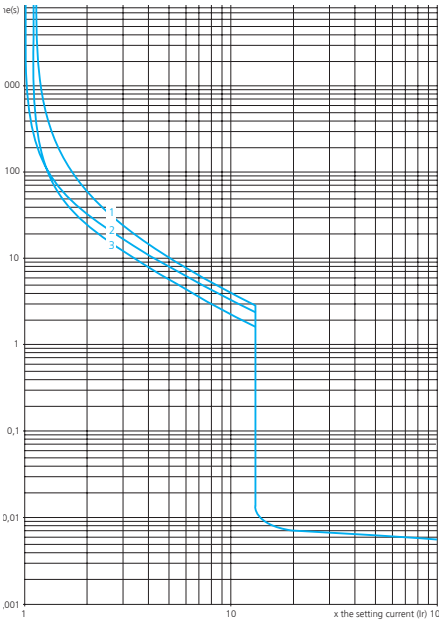
Adjustment range	max. Back up fuse	Order-No. addition
1.00 - 1.60 A	4,0 A	..06
1.60 - 2.50 A	6,0 A	..07
2.50 - 4.00 A	10,0 A	..08
4.00 - 6.00 A	16,0 A	..09
5.50 - 8.00 A	20,0 A	..10
7.00 - 10.00 A	20,0 A	..11
9.00 - 13.00 A	25,0 A	..12
12.00 - 18.00 A	35,0 A	..13*
16.00 - 24.00 A	50,0 A	..14*
23.00 - 32.00 A	63,0 A	..15*

* only available with CEE 32 A plug

Technical data switching device

Switch cycles	Max. 30 starts/h
Mech. Life span	10^7 switching cycles
Operating voltage	400 V AC
Nominal operating current	1A - 32A
Rated power AC3/400V	Max. 15 kW
Supply frequency	50 - 60 Hz
Temperature range	-20 - +50°C
Magn. Tripping	No
Therm. Tripping	Yes
Motor protection tripping	See tripping chart
Protection class	IP44
Supply	CEE-plug 16A / 32A
Cable entry	Motor: M 32 (11-21 mm) Control: M 16 (4,5 - 10 mm)
Cross sections of the main conductors	1 - 10 mm² rigid/ 1 - 6 mm² flexible / 16 - 10 AWG
Housing	Polycarbonate (PC)
Dimensions	325 x 145 x 140 mm (L x W x H)
Weight	2.5 kg

Tripping characteristics



3 poles tfrom cold state
2 poles from cold state
3 poles from hot state

Technical data PTC-Thermistor relay

Approved sensor types	PTC sensors according to DIN 44081 and DIN 44082
Terminals	P1 and P2
Number of PTC sensors	1 ... 6 PTC thermistors in series
Rated response temperature TFS	60 °C ... 180 °C
Tolerance of the system TFS	±6 °C
Collective resistance of the sensor loop	≤ 1,5 kΩ
Voltage in the sensor circuit	≤ 0,8 V at R ≤ 1,5 kΩ, ≥ 1 V at R = ∞
Sensor current	≤ 0,3 mA
Performance / burden	≤ 1 mW
Reset	automatically after cooling

With integrated restart inhibit

In the event of an error (triggering of the motor protection, the PTC thermistor relay or the leakage electronics), the restart inhibit prevents automatic restart after the error has been rectified.
After an error has occurred and has been rectified, the electronics must first be reset using the on / off switch. It can then be switched on again.

With integrated leak monitoring

The leak monitoring detect leaks in the connected motor via a motor leak electrode and switch it off accordingly in the event of a fault.