

Operating instructions

Nolta motor starter for electric-motor driven apparatuses, machines and equipment that can be moved from site to site.



Power plugs with integrated motor protection switch and temperature-compensated thermal trips.

CEE plugs 16A and 32A, optionally with or without phase-sequence indication and phase inverter.



Nolta GmbH
 Industriestrasse 8
 35091 Coelbe
 Germany

Tel. +49(0)6421/98590
 Fax +49(0)6421/985928
 www.nolta.de
 info@nolta.de

Declaration of conformity

We, the manufacturer of the motor protection plug, which is described in detail in the operating instructions, hereby declare that this product complies with the following standards and guidelines.

EC Low Voltage Directive
 2006/95/EG

EC Directive on Electromagnetic Compatibility
 2004/108/EG

Harmonised standards, national standards and technical specifications:

- DIN EN 60999 / VDE 0609-1
- DIN EN 55014-1 / VDE 0875-14-1
- DIN EN 60947-4-1 / VDE 0660-102
- DIN EN 61000-6-1 / VDE 0839-6-1
- DIN EN 61000-6-2 / VDE 0839-6-2
- DIN EN 61000-6-3 / VDE 0839-6-3
- DIN EN 61000-6-4 / VDE 0839-6-4
- DIN EN 60529 / VDE 0470-1
- DIN EN 60695-1-10 / VDE 0471-1-10
- DIN EN 60695-1-11 / VDE 0471-1-11

Technical documentation is held by us and is available for inspection. Old equipment can be returned for disposal to NOLTA in Coelbe, Germany.

28.10.2013

Managing Director
 Dr.-Ing. J. Knake

QA Manager
 W. Seip

Start up

- Electrical connection and fault repairs must be only carried out by a qualified electrician.
- Before working on the equipment, the motor protection plug must always be disconnected from the power supply.
- The maximum fuse rating must be noted and taken heed of by the user (see table below).
- The nominal motor current I_{Nom} must be set within the tripping range.
- The motor must be connected in accordance with the wiring diagram.

Attention: Never use oil, grease or any kind of solvents. These substances have negative effects on the plastics rigidity.

Maximum fuse ratings:

von A	bis A	230 VAC/Agl	400 VAC/Agl	500 VAC/Agl	660 VAC/Agl
0,16	0,25	Kurzschlussfest keine Vorsicherung notwendig bis $I_{cc}=50$ kA			
0,25	0,40				
0,40	0,63				
0,63	1,00				
1,0	1,6			25	25
1,6	2,5			25	25
2,5	4,0			35	35
4,0	6,3			35	35
6,3	9,0		40	40	35
9,0	12,5		50	50	35
12,5	16,0	63	63	50	35
16,0	20,0	80	80	80	40
20,0	25,0	100	100	100	40

Operation

Rotary switch for manual On/Off switching

- OFF= Rotary switch on "O"
- ON = Rotary switch on "I"

For integrated phase-sequence indicator and phase inverter.

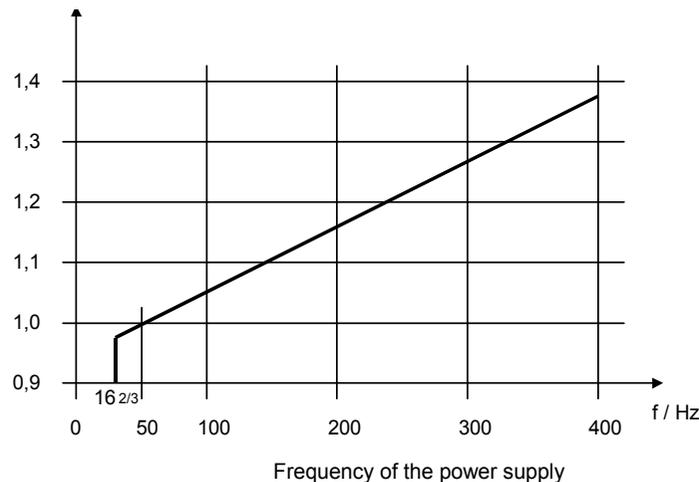
- Red light = phase sequence incorrect
- The direction of rotation is changed by lightly pressing and turning the pole pins in the socket.

After a current overload, the motor safety switch cannot be switched on again until the bimetallic strip has cooled down. This may take a few minutes.

Correction factor diagram for frequencies other than 50 / 60 Hz

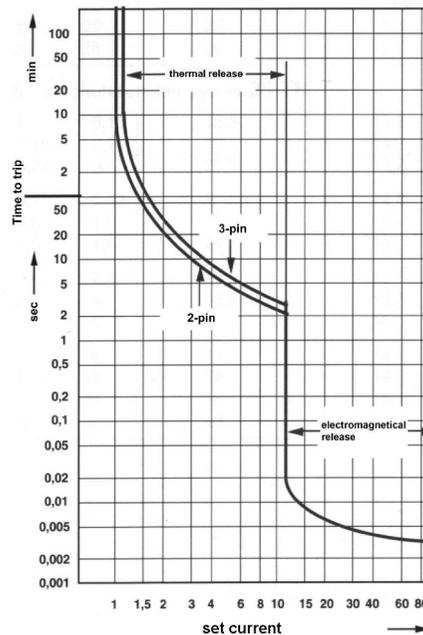
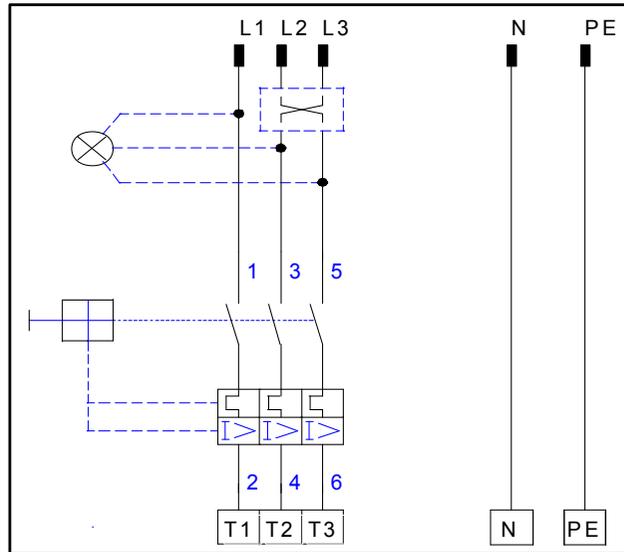
Operating frequencies other than 50/60 Hz affect the electromagnetic short-circuit tripping of the motor protection switch. The higher the frequency the higher the tripping currents. The tripping values at standard frequencies must therefore be calculated using the appropriate correction factors (in accordance with the correction curve). The thermal trip, however, remains unchanged.

Correction factor



Wiring diagram

Wiring diagram and overload characteristics:



Technical data

Mechanical service life:	1x10 ⁵ (switching cycles)
Nominal operating voltage:	230–690 V AC*
Nominal operating current:	25 A max.
Perm. power frequency:	40...60 Hz
Temperature range:	-25...+ 40 °C
Magnetic tripping:	Yes
Temp. compensation:	Yes
Trip time:	see characteristic
Max. back-up fuse rating:	see table
Housing:	Polycarbonate insulation encapsulated
Degree of protection:	IP44 / 45
Cable entry:	M32
Clamping range	8 - 18 mm
Cross-sectional area of main conductor:	
single core	1 x 1...4.0 mm ²
	2 x 1...4.0 mm ²
fine stranded	1 x 1...2.5 mm ²
	2 x 1...2.5 mm ²

*Only applies to the motor protection switch. The nominal voltage is established by the plug attachment and the phase sequence unit.