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, phase inverter, re-start inhibitor or leak monitor.

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

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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

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 $I_{\text{Nom}}$ must be set within the tripping range.
- The motor must be connected in accordance with the wiring diagram.
- Set the desired switch-on mode after current overload (manual/automatic).
- If a thermal contact or level switch has been fitted to the motor starter, then the jumper must be removed from the terminals.

Attention: Never use oil, grease or any kind of solvents. These substances have negative effects on the plastic's rigidity.
Rocker switch On/Off

Rocker switch manual/automatic
- In manual mode, the motor starter operates continuously.
- In automatic mode, the motor starter will operate depending on the setting of the switch connected to Terminals S1 / S2 (e.g. float switch).

RESET switch (red)
- When the over-current relay trips, the motor starter can be switched on again in two ways (adjustment is made at the motor protection relay).
- Automatic
  In automatic mode, the motor protection relay switches on automatically after the bimetallic strip has cooled down.
- Manual
  In manual mode, the motor protection switch must be reset by hand after the bimetallic strip has cooled down.

For the integrated re-start inhibitor
- When the over-current relay or thermo junction in the motor starter has tripped, and after the bimetallic strip has cooled down, the motor starter is prevented from being switched on again. The motor protection switch must be reset with the On-Off switch.

For integrated phase-sequence test and phase inverter
- Red field lights up = phase angle incorrect.
- The direction of rotation is changed by lightly pressing and turning the pole pins in the socket.

For integrated operation display
- Pale field lights up = consumer is operating.

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Mech. service life: 10,000,000 switching cycles
Operating cycles: 30 S/h
Operating Voltage: 400V
Rated current I$_{Nom}$: 50 A
Rated power AC 3/400 V: max 15 kW
for reduced switching frequency: not applicable
Max. back-up fuse rating: see table
Supply frequency: 50/60 Hz
Temperature range: -25...+50°C
Magnet. tripping: No
Temp. compensation: Yes
Trip time: see characteristic
Max. fuse ratings: see table
Housing: Polycarbonate
Degree of protection: IP 44
Housing: Polycarbonate
Degree of protection: IP 44
Cable entry: 1xM32/1xM16
Clamping range: 11-21 mm / 4.5-9 mm
Cross-sectional area of main conductors:
  - single core: 1 x 1.5 mm$^2$ min. / 4 x 4.0 mm$^2$ max.
  - fine stranded: 1 x 0.75 mm$^2$ min. / 2 x 4.0 mm$^2$ max.
  - (without end sleeve): 1 x 0.34 mm$^2$ min. / 1 x 1.5 mm$^2$ max.
  - (with end sleeve): 1 x 2.5 mm$^2$ max.