

Features:

- ☒ two-phase controlled soft starter
- ☒ easy mounting, also for retrofitting into existing plants
- ☒ integrated bypass relay
- ☒ no mains neutral conductor (N) required
- ☒ parameterization by means of three potentiometers
- ☒ economically priced replacement for star/delta switches
- ☒ for mounting on top hat rail
- ☒ current reduction during acceleration
- ☒ very compact design, overall width from 45mm on
- ☒ degree of protection IP20



Soft Starters
DUOSTART 1.5 ... 22
CE

Function:

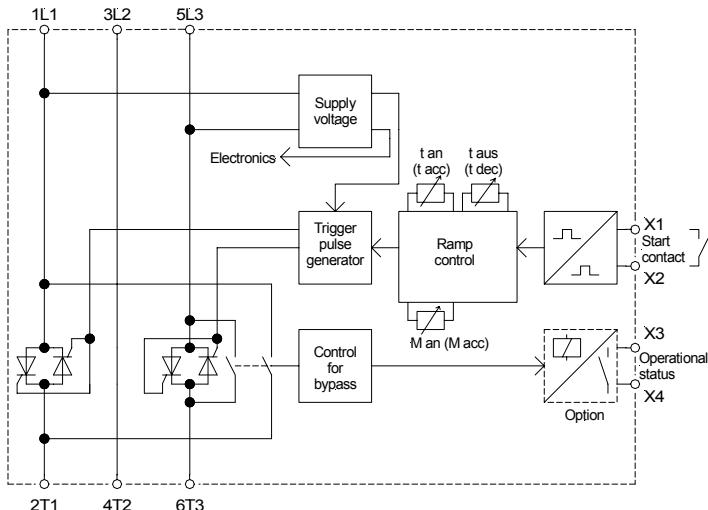
- ☒ soft start and soft stop
- ☒ potential-free control input for soft start and soft stop
- ☒ 3 separately adjustable parameters starting torque, acceleration time, deceleration time
- ☒ control (start/stop) with contact or voltage 10-42VDC

Typical Applications:

door and gate drives
pumps, ventilators
conveyors
packaging machinery
transformer soft start

Options:

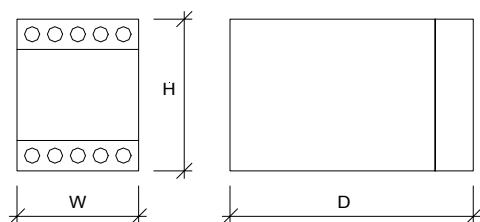
- ☒ DUOSTART ... M
potential-free output for operational status
- ☒ DUOSTART ... S
control (start/stop) with voltage 10-42VDC
- ☒ external 24V supply voltage
(wide voltage range capability)



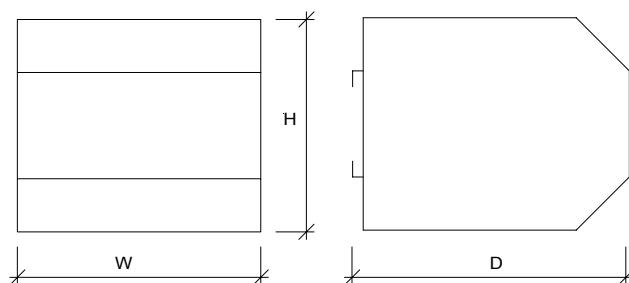
| Technical Data | DUOSTART | | | | | |
|------------------------------------|--|--|--|--------------------------------------|--------------------------------------|--|
| | 1.5 | 3 | 5.5 | 7.5 | 11 | 22 |
| Mains / Motor voltage | 400V ±10% 50/60Hz | | | | | |
| Device nominal current | 3.5A | 6.5A | 12A | 15A | 25A | 45A |
| Motor rating at 400V mains voltage | 1.5kW | 3kW | 5.5kW | 7.5kW | 11kW | 22kW |
| min. Motor load | 40% of the device power rating | | | | | |
| Starting torque | 0 ... 80% | | | | | |
| Acceleration time | 0.5 ... 12s | | | | | |
| Deceleration time | 0.5 ... 12s | | | | | |
| Reset time | 200ms | | | | | |
| Max. Switching cycle | 90/h | 60/h | 30/h | 60/h | 30/h | 20/h |
| Wire range | 2x 2.5mm ² solid stranded | 2x 2.5mm ² 2x 1.5mm ² | 2x 2.5mm ² 2x 1.5mm ² | 6mm ² 4mm ² | 6mm ² 4mm ² | 16mm ² 10mm ² |
| External fuse "high-speed" | 16A | 25A | 35A | 50A | 125A | 160A |
| Ambient / Storage temperature | 0°C ... 45°C / -25°C ... 75°C | | | | | |
| Weight | 0.4kg | 0.4kg | 0.4kg | 0.8kg | 0.8kg | 1.6kg |
| Special voltages | 230V 480V | 230V 480V | 230V 480V | 230V 480V | 230V 480V | 230V 480V |
| Order number | 21500.40001 | 21500.40003 | 21500.40005 | 21500.40007 | 21500.40011 | 21500.40022 |
| Option „M“ | 21501.40001 | 21501.40003 | 21501.40005 | 21501.40007 | 21501.40011 | 21501.40022 |
| Option „S“ | 21502.40001 | 21502.40003 | 21502.40005 | 21502.40007 | 21502.40011 | 21502.40022 |

Abmessungen:

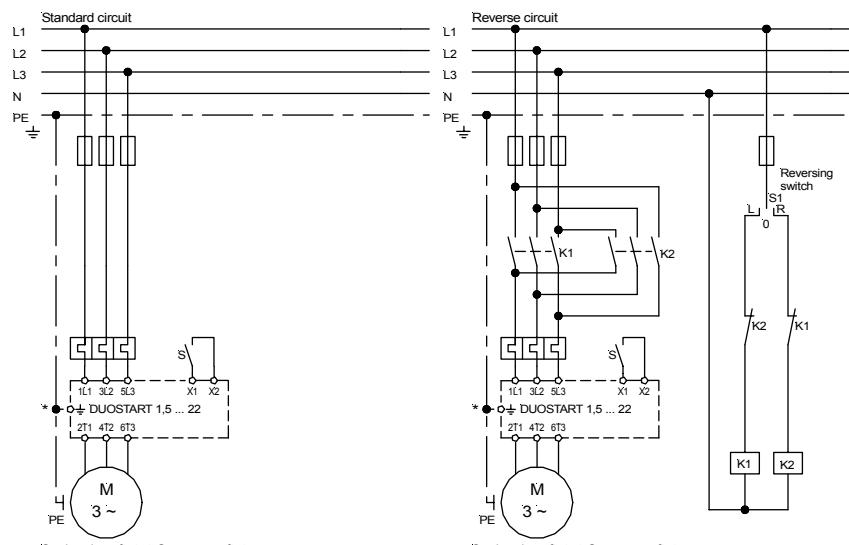
DUOSTART 1.5 ... 5.5



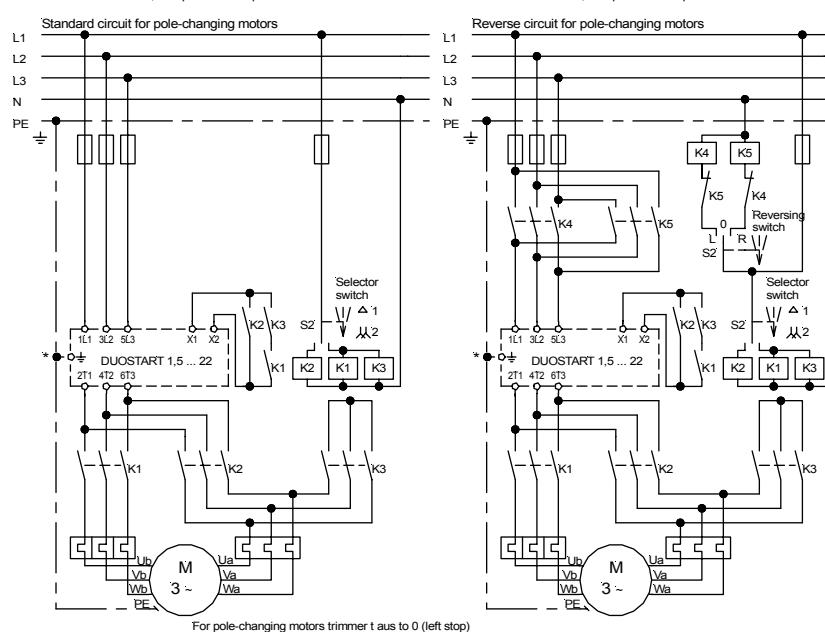
DUOSTART 7.5 / 11 / 22



| Mounting dimensions | W | H | D |
|----------------------|-------|-------|-------|
| DUOSTART 1.5 ... 5.5 | 45mm | 73mm | 122mm |
| DUOSTART 7.5 / 11 | 90mm | 105mm | 105mm |
| DUOSTART 22 | 165mm | 105mm | 105mm |

Connections Diagramms:

EMC
The limit values for emitted interference according to the applicable device standards do not rule out the possibility that receivers and susceptible electronic devices within a radius of 10m are subjected to interference.
If such interference, that is definitely attributable to the operation of the soft starters "DUOSTART", occurs, the emitted interference can be reduced by taking appropriate measures.
Such measures are, e.g.:
to connect reactors (3mH) or a suitable mains filter in series before the soft starter, or to connect X-capacitors (0,15µF) in parallel to the supply voltage terminals.



* PE connection only 7.5 and 22kW