

Features:

- ▣ three-phase controlled soft starter
- ▣ easy mounting, also for retrofitting into existing plants
- ▣ terminal arrangement suitable for switchgear connection
- ▣ for snap-mounting on 35mm standard rail
- ▣ integrated bypass relay
- ▣ extensive monitoring functions
- ▣ robust metal housing
- ▣ no mains neutral conductor (N) required
- ▣ special voltages up to 600V
- ▣ functional peak current reduction
- ▣ degree of protection IP 20



Soft Starters
MINISTART 1,5 ... 11
CE

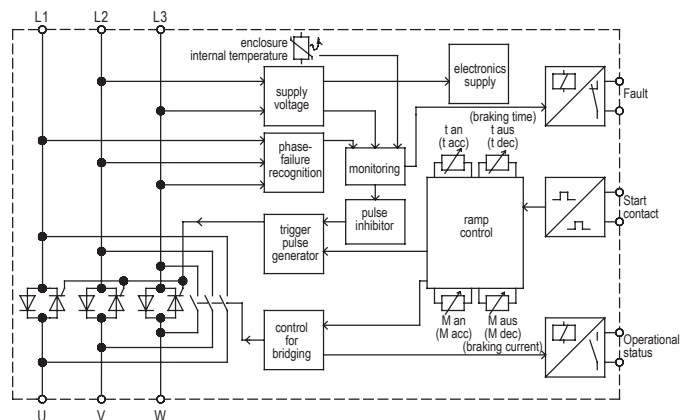
Function:

- ▣ soft acceleration and deceleration
- ▣ 4 separately adjustable parameters starting torque, acceleration time, soft stop torque, deceleration time
- ▣ potential-free input for soft start or soft stop -control voltage 10 ... 30VDC
- ▣ potential-free output for fault indication
- ▣ potential-free output for operational status * -loadable with 250V/8A each
- ▣ temperature monitoring
- ▣ phase-failure monitoring during ramp-up

*
- with standard devices closed, when power semiconductors are bridged
- with option "S" closed from start of acceleration to end of deceleration

Typical Applications:

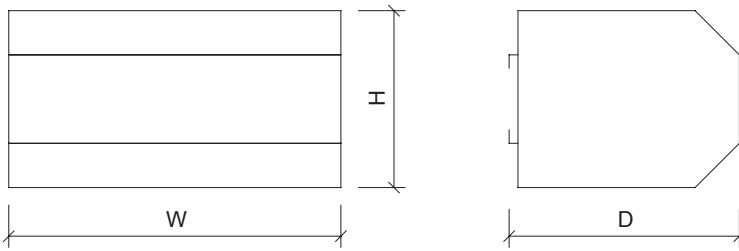
pumps, ventilators
cranes
travelling and rotary operating mechanisms
conveying machinery
washing machines, linen dryers



Technical Data	MINISTART				
	1,5	3	5,5	7,5	11
Mains / Motor voltage according to DIN EN 50160 (IEC 38)	400V ± 15% 50/60Hz				
Device nominal current	4A	6,5A	12A	16A	25A
Motor rating	1,5kW	3kW	5,5kW	7,5kW	11kW
min. motor current	10% of the device rated current				
Starting torque	0 ... 80%				
Acceleration time	1 ... 20s				
Soft stop torque	20 ... 80%				
Deceleration time	0 ... 20s				
Reset time	200ms				
max. Switching cycle at 3x I _e and 10s t _{an}	120/h		60/h		20/h
Control terminals	1,5mm ²				
Power terminals	4,0mm ²				
I ² t-Value Power semiconductor	40A ² s	450A ² s	550A ² s	9100A ² s	9100A ² s
Ambient / Storage temperature	0°C ... 45°C / -25°C ... 75°C				
Weight / kg	1,2	1,2	1,35	1,5	1,5
Order number	21200.38001	21200.38003	21200.38005	21200.38007	21200.38011

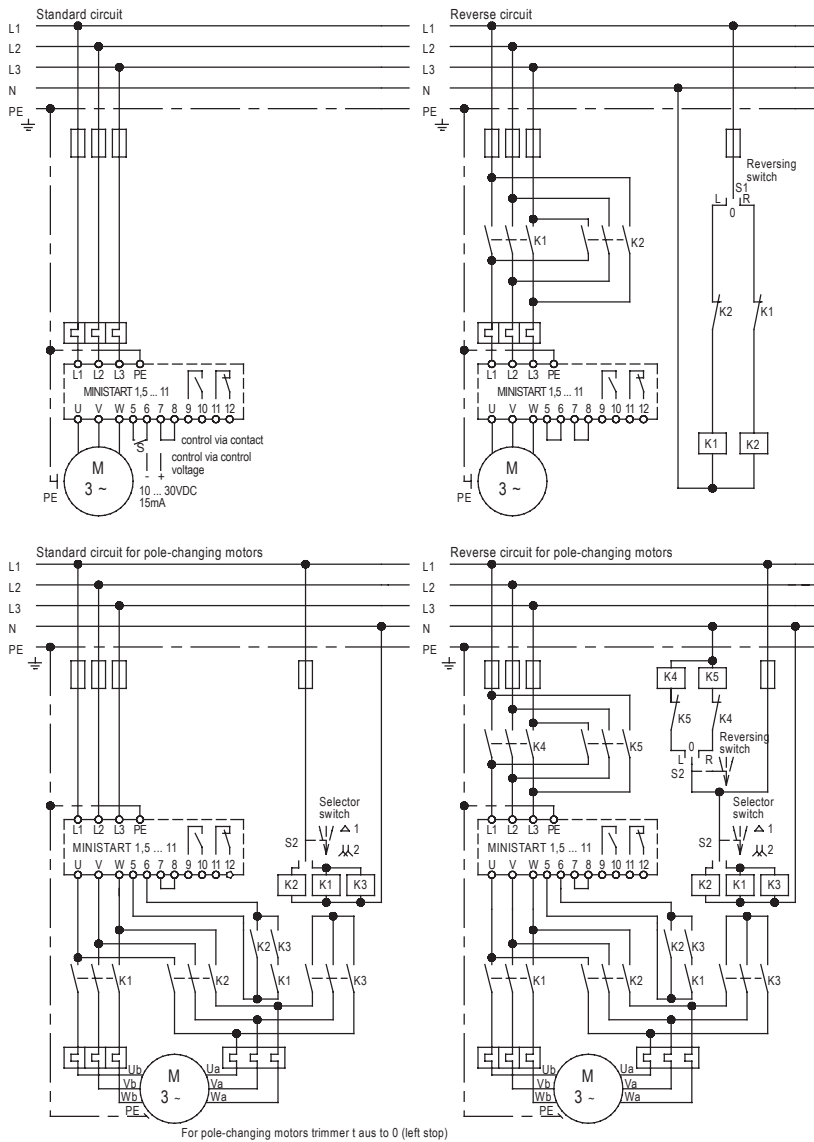
Please observe supplementary sheet with dimensioning rules.

Dimensions:



	W	H	D
Mounting dimensions	166mm	106mm	117mm

Connection Diagram:



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 "MINISTART", 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.

For pole-changing motors trimmer t aus to 0 (left stop)