

**Features:**

- ▣ two-phase controlled soft starter
- ▣ controlled by microcontroller
- ▣ optimized soft start
- ▣ connection in the motor delta winding (cost saving via smaller rating)
- ▣ current and torque reduction during acceleration
- ▣ easy mounting, for snap-mounting on 35mm standard rail
- ▣ integrated bypass relay
- ▣ parameterization by means of three potentiometers
- ▣ no additional control voltage required
- ▣ no mains neutral conductor (N) required
- ▣ economically priced substitute for star-delta starters
- ▣ plug-in power terminals
- ▣ control outputs with spring-loaded terminals
- ▣ compact design, 45mm up to 32A and 52.5mm at 45A
- ▣ degree of protection IP20



Soft Starters  
**VS II ...-17...45**



**Function:**

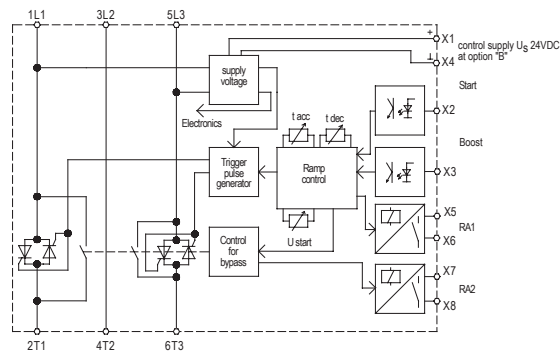
- ▣ soft acceleration and deceleration
- ▣ potential-free control input for soft acceleration and deceleration
- ▣ 3 separately adjustable parameters accel. time, start voltage, decel. time
- ▣ boost-start selectable
- ▣ potential-free relay output for operating state – unit bypassed – and failure

**Typical Applications:**

- door and gate drives
- pumps, ventilators, fans
- conveying systems
- packaging machines
- transport systems, assembly lines
- machine applications

**Options (upon request)**

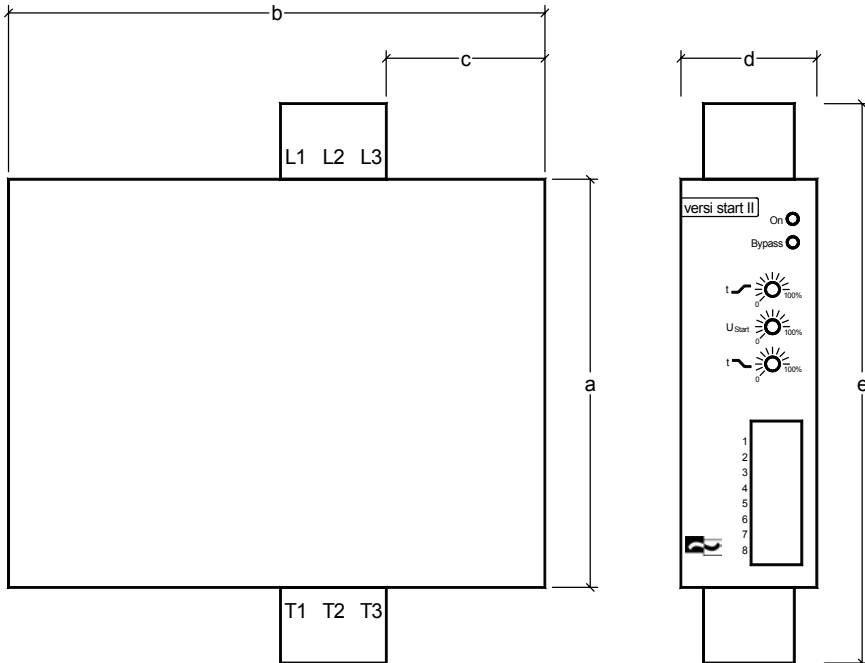
- ▣ special voltages 230V and 480V
- ▣ wide voltage range 400-600V with external control supply voltage  $U_s$  24VDC (B)
- ▣ signaling contact (M) beginning of acceleration until end of deceleration



Technical Data (standard)	VS II 400-17	VS II 400-25	VS II 400-32	VS II 400-45
Mains / Motor voltage according to DIN EN 50160 (IEC 38)	400V ±10% 50/60Hz			
Rated device current	17A	25A	32A	45A
Motor rating at 400V mains voltage	7,5kW	11kW	15kW	22kW
max. Power dissipation - in operation	29,5W	29,5W	28,5W	27W
- in standby	7,5W	7,5W	7,5W	7,5W
min. motor current	20% of the device rated current			
Acceleration time	0,5 ... 10s			
Start voltage	40 ... 80%			
Deceleration time	0,5 ... 10s			
Restart time	200ms			
max. Switching frequency at 3x I <sub>e</sub> , 10s t <sub>an</sub>	60/h	45/h	35/h	10/h
Cross-sectional area: Control terminals	1,5mm <sup>2</sup>		1,5mm <sup>2</sup>	
Power terminals	6mm <sup>2</sup>		16mm <sup>2</sup>	
I <sup>2</sup> t - Power semiconductor	4900A <sup>2</sup> s	4900A <sup>2</sup> s	6050A <sup>2</sup> s	6600A <sup>2</sup> s
Tightening torque	1,2-1,5 Nm 11-13 lbs in			1,5-1,7 Nm 13-15 lbs in
Input resistance Control inputs	10kΩ			
Switching rating of relay output RA1/RA2	3A/250VAC; 3A/30VDC			
Overvoltage category / Pollution degree	III (TT / TN systems) / 2			
Installation class	3			
Surge strength	4kV			
Ambient / Storage temperature	0°C ... 45°C up to an altitude of 1000m / -25°C ... 70°C			
Weight / kg	1			
Special voltages (optional)	230V / 480V / wide voltage range 400-600V with external control supply voltage $U_s$ 24VDC±10%/150mA			
Order number	25700.40017	25700.40025	25700.40032	25700.40045

Please observe supplementary sheet with dimensioning rules.

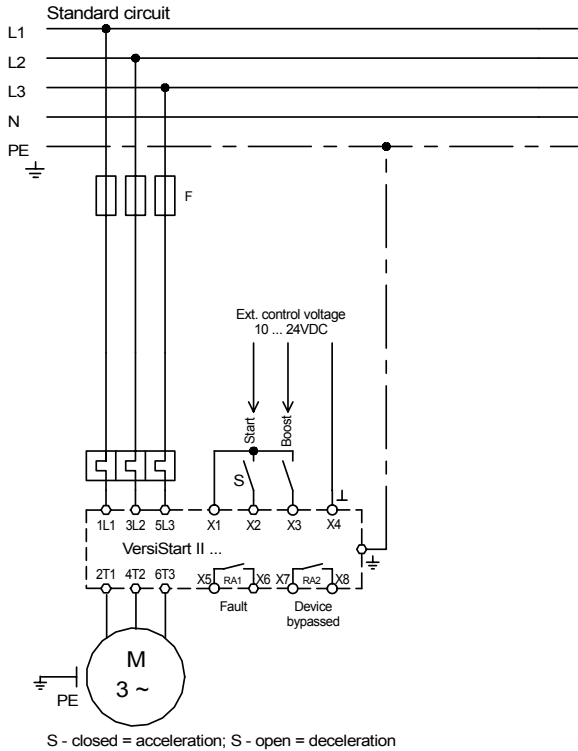
**Dimensions:**



Mounting dimensions	a	b	c	d	e
VS II ...- 17...32	125	158	53	45	173
VS II ...- 45	125	158	53	52.5	178

All dimensions indicated in mm.

**Connection Diagram:**



S - closed = acceleration; S - open = deceleration

**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, which is definitely attributable to the operation of the soft starters "VersiStart II ...", 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.