# Soft Starters VersiStart III [9 – 45A] 1.15

**Features:**

- three-phase controlled soft starter
- controlled by microcontroller
- optimized soft start and current control
- connection in the motor delta winding (cost saving via smaller rating)
- current and torque reduction during acceleration
- easy mounting, for snap-mounting on 35 mm standard rail
- integrated bypass relay
- parameterization by means of potentiometers
- no mains neutral conductor (N) required
- economically priced substitute for star-delta starters
- spring-loaded terminals
- heat sink temperatur monitoring
- compact design, 45mm up to 25A and 52,5mm at 45A
- degree of protection IP20
- motor protection
- thermal device protection

Soft Starters
**VS III [9 – 45A]**

CE

**Function:**

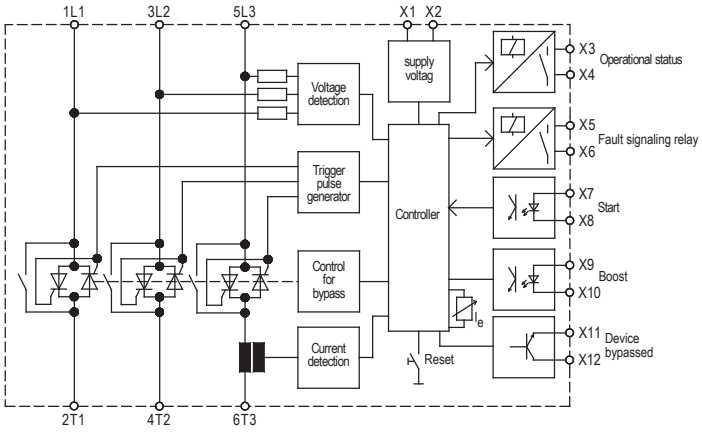
- soft acceleration and deceleration
- potential-free control input for soft acceleration and deceleration
- separately adjustable parameters accel. time, start voltage, decel. time, current limiting, rated device current and tripping class
- boost-start selectable
- potential-free relay output for operating state
- transistor output – unit bypassed

**Typical Applications:**

electric pumps, vacuum pumps
ventilators and fans, extraction systems
stirrers, centrifuges, saws, conveyors
woodworking machines, grinding machines
drives with high load
others

**Options** (upon request)

- special voltages 230V and 480V
- wide voltage range 200-480V with external control supply voltage $U_s$ 230VAC (B)




| Typical designation (standard) | VS III 400- ... | | | | |
|---|---|---|---|---|---|
| | 9 | 16 | 25 | 37 | 45 |
| rated device current | 9A | 16A | 25A | 37A | 45A |
| rated operating voltage $U_e$ | 400V ±10% 50/60Hz | | | | |
| control supply voltage $U_s$ only with option B | 230V ±10% AC 50/60Hz | | | | |
| motor rating at $U_e$ 400V | 4kW | 7,5kW | 11kW | 18,5kW | 22kW |
| order number | 2S500.40009 | 2S500.40016 | 2S500.40025 | 2S500.40037 | 2S500.40045 |
| special voltages (optional) | 230V / 480V / wide voltage range 200-480V with external control voltage 230VAC | | | | |

Please observe supplementary sheet with dimensioning rules!

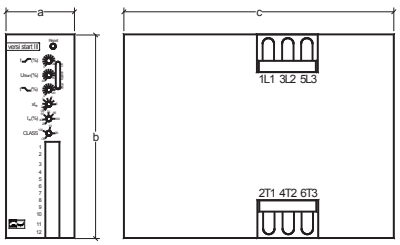
| Technical data VS III 400- ... | 9 | 16 | 25 | 37 | 45 |
|---|---|---|---|---|---|
| rated device current | 9A | 16A | 25A | 37A | 45A |
| switch. frequency/hour at $3xI_N$ und $t_{an}$ = 5s | 50 | 30 | 20 | 15 | 10 |
| utilization category | 9A:AC-53b:6-3:69 | 16A:AC-53b:6-3:117 | 25A:AC-53b:6-3:177 | 37A:AC-53b:6-3:237 | 45A:AC-53b:6-3;360 |
| max. power dissipation | | | | | |
| - in operation related to max. starting frequency | 20W | 20W | 20W | 20W | 20W |
| - standby | 5W | 5W | 5W | 5W | 5W |
| $I^2t$ – power semiconductors in $A^2s$ | 390 | 720 | 4000 | 9100 | 16200 |
| min. motor load | 20% of the device rated current | | | | |
| starting time | 0,5 ... 10s | | | | |
| starting voltage | 40 ... 80% | | | | |
| current limitation | 200 ... 500% | | | | |
| stopping time | 0,25 ... 10s | | | | |
| restart time | 200ms | | | | |
| input resistance contol inputs | 80kOhm | | | | |
| control voltage $U_c$ | 24VDC ... 230VAC | | | | |
| contact rating of relay outputs RA1/RA2 | 2A / 250VAC / 30VDC | | | | |
| contract rating of transistor output | 20mA / 30VDC | | | | |
| installation class | 3 | | | | |
| overvoltage category / pollution degree: | | | | | |
| control and auxiliary circuit | II / 2 | | | | |
| main circuit | III (TT / TN-systems) / 2 | | | | |
| rated impulse strength $U_{imp}$: | | | | | |
| control and auxiliary circuit | 2,5kV | | | | |
| main circuit | 4kV | | | | |
| rated insulation voltage $U_i$: | | | | | |
| main circuit | 500V | | | | |
| control and auxiliary circuit | 250V | | | | |
| cross-sectional area for connection: | | | | | |
| control terminals | 1,5mm² | | | 1,5mm² | |
| power terminals | 6mm² | | | 16mm² | |
| max tightening torque | | | | | |
| control / power terminals | - spring-loaded terminals | | | | |
| ambient / storage temperature | 0°C ... 45°C up to an altitude of 1000m / -25°C ... 75°C | | | | |
| weight / kg | 1,1 | | | | |

**Note:**

Please pay attention and consider for the operation of IE3 motors while dimensioning of softstarters and dc brakes the resulting higher starting and braking currents.

For the use of IE3 motors we highly recommend to dimension and design the needed softstarters and braking devices one size higher.

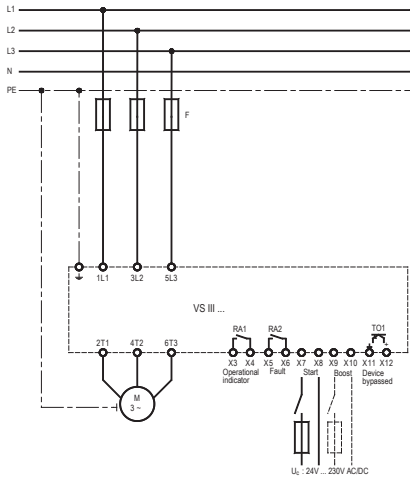
**Dimensions:**




| Mounting dimensions | a | b | c |
|---|---|---|---|
| VS III ...-9...25 | 45 | 147 | 158 |
| VS III ...-37...45 | 52,5 | 147 | 158 |

All dimensions indicated in mm.

**Connection Diagram:**




Subject to change without notice.