

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...45
CE

Function:

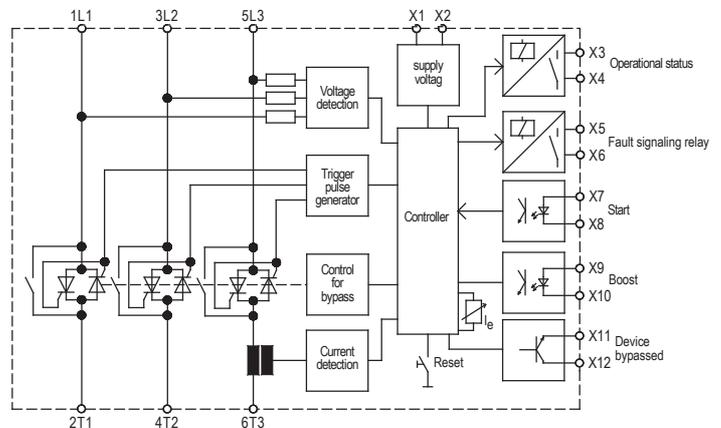
- soft acceleration and deceleration
- potential-free control input for soft acceleration and deceleration
- separately adjustable parameters accel. time, start voltage, decel. time, current limiting, rated device current and tripping class
- boost-start selectable
- potential-free relay output for operating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

Typical Applications:

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

Options (upon request)

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



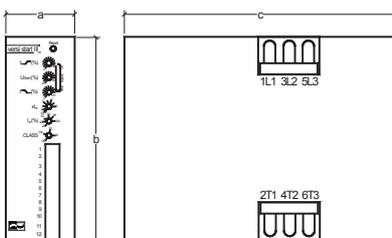
Typical designation (standard)	VS III 400- ...				
	9	16	25	37	45
rated device current	9A	16A	25A	37A	45A
rated operating voltage U_e	400V $\pm 10\%$ 50/60Hz				
control supply voltage U_c only with option B	230V $\pm 10\%$ AC 50/60Hz				
motor rating at U_e 400V	4kW	7,5kW	11kW	18,5kW	22kW
order number	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				

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 ² s		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 control 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		1,5mm ²			1,5mm ²	
power terminals		6mm ²			16mm ²	
max tightening torque		- spring-loaded terminals				
control / power terminals						
ambient / storage temperature		0°C ... 45°C up to an altitude of 1000m / -25°C ... 75°C				
weight / kg		1,1				

Note:

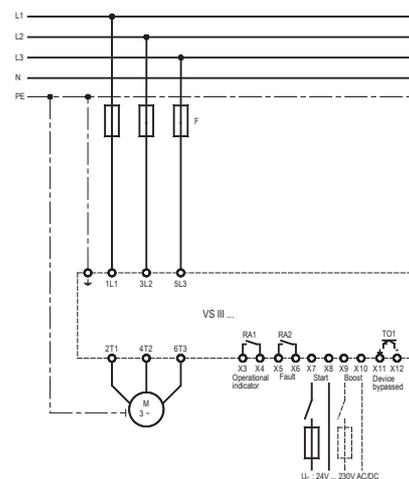
Please pay attention and consider for the operation of IE3 motors while dimensioning of softstarters and dc brakes the resulting higher starting and braking currents.

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.