

Features:

- two-phase controlled soft starter
- controlled by microcontroller
- optimized soft start
- 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
- compact design, 45mm
- degree of protection IP20



Soft Starters
VS II ...-3,5...16



Function:

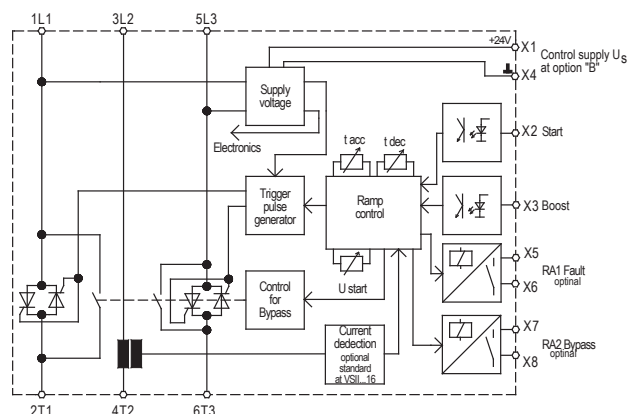
- soft acceleration and deceleration
- potential-free control input for soft acceleration and deceleration
- 3 separately adjustable parameters
accel. time, start voltage, decel. time
- boost-start selectable
- potential-free relay output for operating state
- unit bypassed - and failure (optional)

Options: (upon request)

- special voltages 230V and 480V
- wide voltage range 200-480V with external control supply voltage U_s 24VDC (B)
- signalling contact (I)
bypass and failure
- motor-PTC (I)
- current control ($200...500\% x I_N$) (I)
- heat sink temperature monitoring (I)
- $\sqrt{3}$ - connection (cost saving via smaller rating)
- signalling contact (M)
(beginning of acceleration until end of deceleration)

Typical Applications:

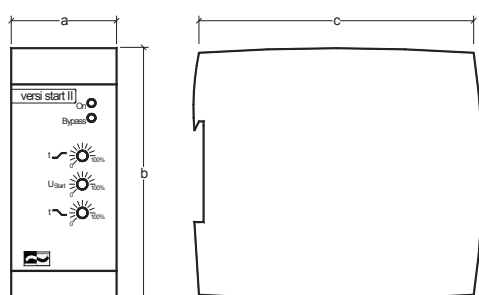
door and gate drives
pumps, ventilators, fans
conveying machines, packaging machines
transport systems, assembly lines
machine applications



Typical designation (standard)		VS II 400-3,5	VS II 400-6,5	VS II 400-12	VS II 400-16
rated device current		3,5A	6,5A	12A	16A
rated operating voltage U_e		400V $\pm 10\%$ 50/60Hz			
control supply voltage U_s only with option B		24V $\pm 10\%$ DC			
motor rating at U_e 400V		1,5kW	3kW	5,5kW	7,5kW
order number	standard	25700.40003	25700.40006	25700.40012	25760.40016
	option I	25703.40003	25703.40006	25703.40012	25703.40016
special voltages (optional)		230V / 480V / wide voltage range 200-480V with external control voltage 24VDC			

Technical data (standard)	VS II 400-3,5	VS II 400-6,5	VS II 400-12	VS II 400-16
rated device current	3,5A	6,5A	12A	16A
max. switching frequency at $3xI_N$ and $5s t_{an}$	150/h	70/h	30/h	15/h
max. power dissipation				
- in operating related to max. starting frequency	11W	10W	9W	7W
- standby	2,5W	2,5W	2,5W	2,5W
I^2t –power semiconductors in A^2s	390	390	720	720
min. motor load	20% of device rating			
acceleration	voltage ramp			
starting time	0,5 ... 10s			
starting voltage	40 ... 80%			
stopping time	0,25 ... 10s			
restart time	300ms			
input resistance control inputs	10kOhm			
contact rating of relay outputs RA1/RA2	2A / 250VAC / 30VDC			
installation class	4			
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 (max.):				
control terminals	1,5mm ² / AWG 12			
power terminals	2,5mm ² / AWG 14			
tightening torque (max.): control terminals	0,6 Nm / 5 lbs in			
main circuit	0,6 Nm / 5 lbs in			
ambient / storage temperature	0°C ... 45°C up to an altitude of 1000m / -25°C ... 70°C			
weight / kg	0,4g			

Dimensions:



Mounting dimensions	a	b	c
VS II ...-3,5...16	45	110	121

All dimensions indicated in mm.

Connection Diagram:

