## Soft Starters VersiStart II ...-3,5...16

#### Features:

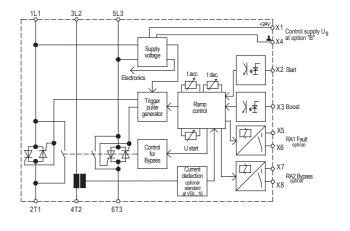
- two-phase controlled soft starter
- controlled by microcontroller
- optimized soft start
- current and torque reduction during acceleration
- easy mounting, for snap-mounting on 35mm standard rail
- integrated bypass relay
- parameterization by means of three potentiometers
- no additional control voltage required
- no mains neutral conductor (N) required
- economically priced substitute for star-delta starters
- compact design, 45mm
- degree of protection IP20

#### 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)

### **Typical Applications:**

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



#### **Options:** (upon request)

- special voltages 230V and 480V
- wide voltage range 200-480V with external control supply voltage U<sub>s</sub> 24VDC (B)
- signalling contact (I) bypass and failure
- motor-PTC (I)
- current control (200...500% xl<sub>N</sub>) (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 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 Ue		400V ±10% 50/60Hz				
control supply voltage Us only with option B		24V ±10% DC				
motor rating at Ue 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 / wid	230V / 480V / wide voltage range 200-480V with external control voltage 24VDC			







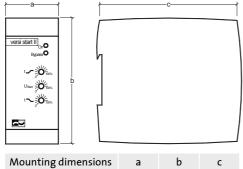
1.03

1.04

# Soft Starters VersiStart II ...-3,5...16

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 $5st_{an}$	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 <sup>2</sup> t –power semiconductors in A <sup>2</sup> s	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	/ 2				
main circuit	III (TT / TN-systems) / 2				
rated impulse strength $\mathbf{U}_{\text{imp}}$ : control and auxiliary circuit	2,5kV				
main circuit	4kV				
rated insulation voltage U <sub>i</sub> : main circuit	500V				
control and auxiliary circuit		25	oV		
cross-sectional arey for connection (max.):					
control terminals	1,5mm² / AWG 12				
power terminals		2,5mm²/			
tightening torque (max.): control terminals	0,6 Nm / 5 lbs in				
main circuit			/ 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:**



0		-	-				
VS II 3,516	45	110	121				
All dimensions indicated in mm.							

# **Connection Diagram:**

