# Soft Starters VersiStart II [17 – 45A]

#### 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 35 mm 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
- heat sink temperature monitoring
- compact design, 45mm up to 32A and 52,5mm at 45A
- 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

# Typical Applications:

electric pumps, vacuum pumps ventilators and fans, travelling cranes extraction systems, stirrers, centrifuges saws, conveyors, woodworking machines grinding machines others

Soft Starters

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

- special voltages 230V and 480V
- wide voltage range 400-600V with external control supply voltage U<sub>S</sub> 24VDC (B)
- signalling contact (M) beginning of acceleration until end of deceleration
- motor PTC



Typical designation	VS II 400-17	VS II 400-25	VS II 400-32	VS II 400-45				
rated device current	17A	25A	32A	45A				
motor rating at 400V mains voltage	7,5kW	11kW	15kW	22kW				
mains / motor voltage	400V ± 10% 50/60Hz							
according to DIN EN 50160 (IEC 38)								
order number	25700.40017	25700.40025	25700.40032	25700.40045				

Please observe supplementary sheet with dimensioning rules!



1.07

# 1.08

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Technical data		VS II 400-17	VS II 400-25	VS II 400-32	VS II 400-45			
mains / motor voltage			400V ± 10% 50/60Hz					
according to DIN EN 5016	o (IEC 38)							
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		0,5 105						
start voltage		40 80%						
deceleration time		0,5 105						
restart time		200ms						
max. switching frequency at 3xle and 5s t <sub>an</sub>		60/h	40/h	30/h	10/h			
cross-sectional area control terminals		1,5mm² / AWG 16 1,5m			m² / AWG 16			
	power terminals	6mm² /	AWG 10	16mm² / AWG 6				
I <sup>2</sup> t – power semiconductor in A <sup>2</sup> s		4000	4000	9100	16200			
tightening torque		1,2-1,5 Nm 1,5-1,7 Nn						
		11-13 lbs in 13-15 lbs in						
input resistance control in	nput	10kΩ						
switching rating of relay	output RA1/RA2	3A/250VAC; 3A/30VDC						
overvoltage category / po	ollution degree	III (TT / TN-systems) / 2						
installation class		3						
surge strength		4kV						
ambient / storage tempe	rature	o°C 45°C up to an altitude of 1000m / -25°C 70°C						
weight / kg		1						
special voltages		230V / 480V / wide voltage range 400-600V						
		with external control supply voltage US 24VDC+10%/150mA						

# 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	а	b	с	d	e				
VS II 1732	125	158	53	45	173				
VS II 45	125	158	53	52,5	178				

All dimensions indicated in mm

# **Connection Diagram:**

