

**Features:**

- ▣ three-phase controlled digital-soft starter (11-800kW)
- ▣ integrated bypass
- ▣ current and torque reduction during acceleration
- ▣ USB port
- ▣ comprehensive and customizable motor protection
- ▣ display graphical LCD – real time graphs of motor operating performance
- ▣ inside delta (6-wire) connection
- ▣ degree of protection IP20 up to 135A
- ▣ motor PTC connection



Soft Starters  
VS p III ...-24 ... 229



**Function:**

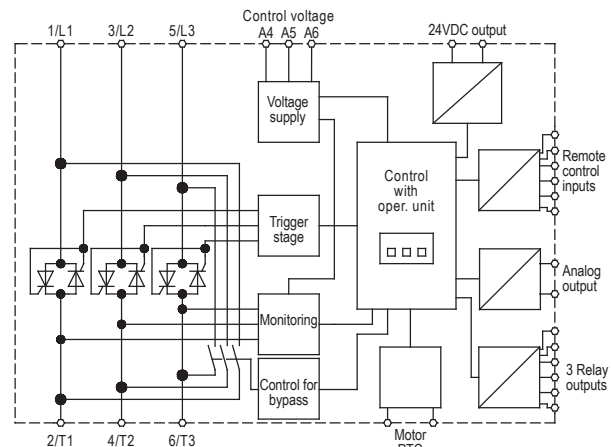
- ▣ emergency run
- ▣ 2 motor sets: forward or reverse jog direction
- ▣ remote control inputs (2x fixed, 2x programmable)
- ▣ relay outputs (3x programmable)
- ▣ 24VDC output
- ▣ analog output
- ▣ divers soft start/stop control types
- ▣ units with 690V upon request

**Typical Applications:**

- pumps, ventilators
- compressors
- mills, crushers, presses
- conveying systems
- drives with high-inertia starting
- machines with gear units, belt or chain drives

**Accessories:**

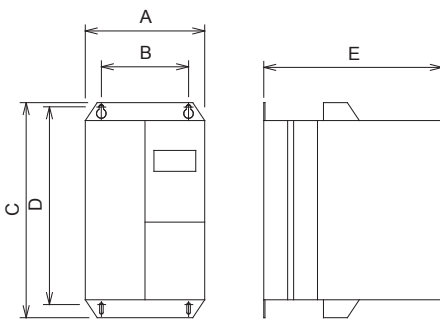
- ▣ Remote Keypad & Cable (29000.2S801)
- ▣ DeviceNet Interface (29000.2S802)
- ▣ Ethernet IP Interface (29000.2S803)
- ▣ ModBus RTU Interface (29000.2S804)
- ▣ ModBus TCP Interface (29000.2S805)
- ▣ Profibus Interface (29000.2S806)
- ▣ Profinet Interface (29000.2S807)
- ▣ Remote Keypad Card (29000.2S808)
- ▣ Remote Keypad, Card & Cable (29000.2S809)
- ▣ SmartCard Pump Application (29000.2S810)
- ▣ Finger protection (from 184A up to 580A, 29000.2S811)



Typical designation	VSp III 525 -							
	24 C1 / C2	42 C1 / C2	52 C1 / C2	69 C1 / C2	105 C1 / C2	135 C1 / C2	184 C1 / C2	229 C1 / C2
rated device current	24A	42A	52A	69A	105A	135A	184A	229A
mains voltage	200-525V 45-66Hz							
control voltage	C1: 110VAC; 220VAC -15%/+10% 600mA; C2: 24VDC/24 VAC ±20% 2.8A							
motor rating at Ue 400V	11kW	18,5kW	22kW	30kW	55kW	60kW	75kW	110kW
order number:								
C1 2S900.50...	024	042	052	069	105	135	184	229
C2 2S901.50...	024	042	052	069	105	135	184	229

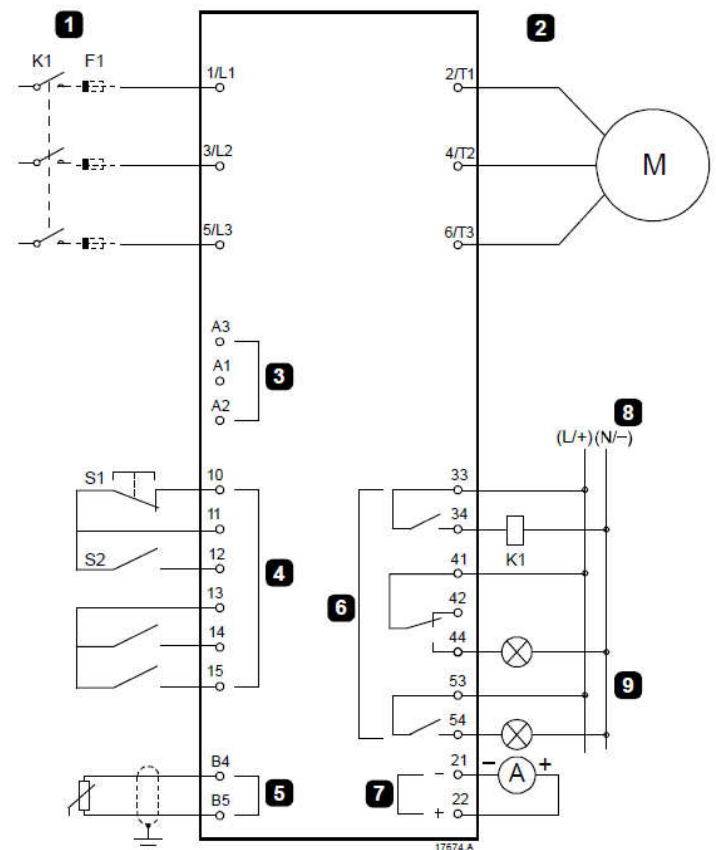
Technical data	VS p III 525 -							
	24 C1 / C2	42 C1 / C2	52 C1 / C2	69 C1 / C2	105 C1 / C2	135 C1 / C2	184 C1 / C2	229 C1 / C2
max. power dissipation - during start - in operation	4,5W per A about 35W			4,5W per A about 50W			4,5W per A about 120W	
I <sup>2</sup> T – value power semiconductors in A <sup>2</sup> s	1150	8000	8000	15000	80000	125000	320000	320000
min. motor load	5A	9A	11A	15A	21A	29A	34A	44A
utilization category	AC53b							
EMC	meets EU-standard 89/336/EEC; IEC 60947-4-2 class B; IEC 60947-4-2							
ambient / storage temperature	-25°C up to +60°C (derating) / - 25° up to +60°C							
inputs	active 24VDC about 8mA, motor PTC (trip >3,6kOhm, reset <1,6kOhm)							
relay outputs	10A at 250VAC resistive, 5A at 250VAC AC15 Lf 0,3							
analog output	0 up to 20mA or 4 up to 20mA							
24VDC output	max. 200mA							
kinds of start	constant current, current ramp, adaptive control, kick start							
kinds of stop	soft stop via voltage drop in an allowed time, DC brake, free deceleration							
adaptable protection functions	motor overload, min. current, max. starting time, short time over-current, current unbalance, mains frequency, phase sequence							
certification	CE, RoHS conform, RCM, Lloyds Register, UL / cUL							
weight / kg	4,8		4,9		5,5		12,7	

## Dimensions:



	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)
VS p III...-24	152	92	336	307	231
VS p III...-42	152	92	336	307	231
VS p III...-52	152	92	336	307	231
VS p III...-69	152	92	336	307	231
VS p III...-105	152	92	336	307	231
VS p III...-135	152	92	336	307	231
VS p III...-184	216	180	495	450	243
VS p III...-229	216	180	495	450	243

## Connection Diagram:



1	Three-phase supply	K1	Main contactor
2	Motor	F1	Semiconductor fuses (optional)
3	Control voltage (soft starter)	10, 11 (S1)	Reset
4	Digital inputs	11, 12 (S2)	Start/Stop
5	Motor thermistor input	13, 14	Programmable input A (default = Input Trip (N/O))
6	Relay outputs	13, 15	Programmable input B (default = Input Trip (N/O))
7	Analog output	B4, B5	Motor thermistor input
8	Control voltage (external equipment)	33, 34	Main contactor output
9	Pilot lamps	41, 42, 44	Relay output A (default = Run)
		53, 54	Relay output B (default = Trip)
		21, 22	Analog output