Smart solutions.
Strong relationships.

Small yet powerful

Emotron VSS series

Easy to use & suitable for machinery applications

Power range

0.4 kW to 2.2 kW

220 V single phase

We put all our energy into saving yours!

SC Industrial Syndicate

5/105, MUMBAI SAMACHAR MARG, FORT, MUMBAI- 400023.
PHONE: 022 2266 1079 / 1840 / 3444 / 5439 / 5615. FAX: 022 2266 0628.
Mob: +91 98333 55333 / +91 98333 11444 / +91 98333 11888.
E-mail: sales@scindustrial.com Website: www.scindustrial.com

emotron
DEDICATED DRIVE
A CG Product

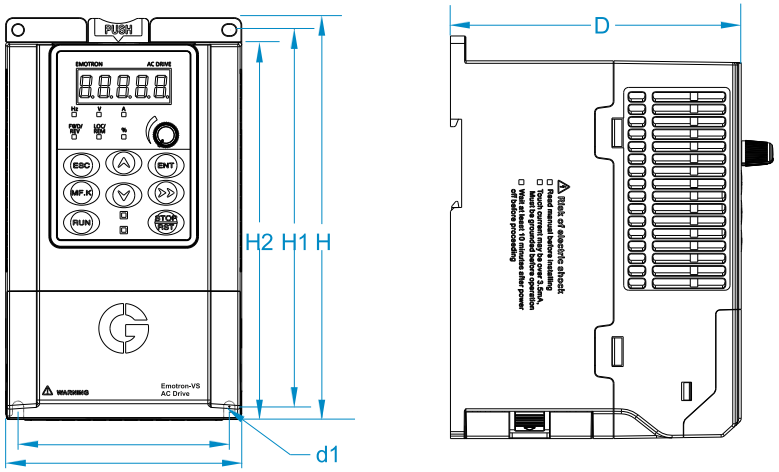
SC Industrial Syndicate

Emotron VSS
Small yet powerful

Emotron VSS is a multipurpose ac drive which is packed with features to meet application requirements. VSS is cost effective, easy to install, easy to use drive for the single phase supply system in challenging industrial environment.

VSS series meets user's needs and runs variety of applications like packaging, wood working, pumps, blowers, mixers and other machineries.

Dimensional details



Frame size	External and installation dimensions mm											Weight (kg)
	W	H	D	W1	W2	H1	H2	H3	H4	d1	d2	
VSS1	95	162	120	85	11	151.5	152	110.8	130	4.5	4.5	1.1
VSS2	110	173	135	100	11	163	163	121.8	140.5	4.5	5	1.5

Emotron Series VSS ordering codes

Main Power Voltage	Model No.	Motor Power		Power Capacity (kVA)	Input Current (A)	Output Current (A)	Frame Size
		(kW)	(hp)				
Single phase 220 V ac (-15% ~ +30%)	VSS23 2p5 CEB	0.4	0.5	1.0	6.5	2.5	VSS1
	VSS23 4p2 CEB	0.75	1	1.5	9.3	4.2	
	VSS23 5p5 CEB	1.1	1.5	2.0	11	5.5	VSS2
	VSS23 7p5 CEB	1.5	2	3.0	15.7	7.5	
	VSS23 9p5 CEB	2.2	3	4.0	24	9.5	

Technical Data

Parameter		Specification
Input Power	Rated Input Voltage (V)	Single phase 220 V_{ac} (-15% ~ +30%)
	Rated Input Frequency (Hz)	50Hz/60Hz, ±5%
Output Power	Maximum Output Voltage (V)	0 ~ Rated input voltage, Error<±3%
	Maximum Output Frequency(Hz)	0.00 ~ 600.00 Hz, Units: 0.01Hz
Control Characteristic	Control mode	V/f control, Sensor-less vector control 1, Sensor-less vector control 2
	Speed range	1:50 (V/f control), 1:100 (Sensor-less vector control 1), 1:200 (Sensor-less vector control 2)
	Speed accuracy	±0.5% (V/f control), ±0.2% (Sensor-less vector control 1, 2)
	Speed fluctuation	±0.3% (Sensor-less vector control 1, 2)
	Torque response	< 10ms (sensor-less vector control 1, 2)
	Starting torque	0.5Hz: 180% (V/f control, sensor-less vector control 1), 0.25Hz: 180% (Sensor-less vector control 2)
Basic functions	Carrier frequency	0.7kHz ~ 16kHz
	Overload capability	150% x Rated Current for 60s, 180% x Rated Current for 10s, 200% x Rated Current for 1s
	Torque boost	Automatic torque boost; Manual torque boost 0.1%~30.0%
	V/F Curve	Three ways: Straight; multi-point type; N^{th}-type V / F curve
	Acceleration and deceleration Curve	Line or curve acceleration and deceleration mode. Four kinds of acceleration and deceleration time, Ramp Time Range :0.0~6000.0s
	DC brake	DC brake start frequency: 0.00 ~ 600.00Hz DC brake time: 0.0s~10.0s DC brake current: 0.0%~150.0%
Run	Command source	Control panel, control terminal, serial communication port.
	Frequency source	9 kinds of frequency sources
	Input terminal	5 Digital Inputs (9-30V), including one high speed pulse input 2 Analog inputs (AI1: 0-10V, AI2: 0-10V/0-20mA)
	Output terminal	1 Digital output (0-24V), 1 Relay output (250VAC/3A, 30VDC, 1A), 1 Analog output (0-10V)
Featured functions	Parameter copy, Parameter backup, Flexible parameter displayed & hidden, Various master & auxiliary command and switchover, Reliable speed search, A variety of programmable Accel / Decel curves , Timing control, Fixed length control, Count function, Fault recorded (last theree), Over excitation brake, Restart upon power loss, Four kinds of Accel / Decel time, Flexible fan control, Process PID control, Simple PLC, 16-step programmable speed control, Wobble frequency control, Programmable multi-functional key, Field-weakening control, High-precision torque control, V/f separated control, Torque control in sensor-less vector mode.	
Protection function	Over current, Over voltage, Under voltage, Over temperature, Overload protection, Motor thermal protection	
Communication	Modbus 485	
Environment	Place of operation	Indoors, no direct sunlight. Free from dust, corrosive gases, flammable gases, oil mist, water vapor, water drop and salt, etc.
	Altitude	0 ~ 2000m De-rate 1% for every 100m when the altitude is above 1000 meters
	Ambient temperature	-10°C ~ 40°C (De-rate from 40°C ~ 50°C)
Others	Efficiency	Rated power; ≥93%
	Installation	Wall-mounted or DIN-rail mounting
	IP grade	IP20
	Cooling method	Fan cooled