

MAINS VOLTAGE COMPENSATED VIBRATOR CONTROLLER

230Vac, 50Hz, 3Amps Load Current, 0...10VDC Control Input, DIN Rail

SPARK ECVC20 series of phase angle controllers are specially designed for controlling the electromagnetic vibratory feeders in Linear Feeding Applications. Electromagnetic Vibratory Feeder is a volumetric flow device widely used in packaging machines to control the flow of Granular Materials like Rice, Dhal, etc. The unit produce a highly stable output voltage that is adjustable from 1% to 99%.



Key advantage of ECVC20 is that, it comes with mains voltage compensation algorithm, which keeps the vibration same even when the supply voltage increases or decreases. Hence the material flow remains constant even though supply voltage varies, thereby increasing the system accuracy.

The feed rate set point can be adjusted using an Analog signal of 0 10 VDC from PLC or an external DAC Card. At 1V control input, output of the vibrator will be at 10% whereas at 5V control input, output of the vibrator will be 50% and at 10V control input, output of the vibrator will be 100%. An on-board fuse provides over current protection for the feeder coil as well as for the internal semiconductors. Power LED indication available. Run/Stop Control pins are provided for instant stop of the vibrator.

Ordering Info

S.no	Model No	Control Input type	Control Input Value	Remarks
1	ECVC20	Analog Input	0...10 VDC	

Electrical Characteristics

Supply Voltage	:	230Vac ± 5%
Frequency	:	50Hz
Output Current	:	3A RMS
Ramp time	:	500 msec
Run/Stop control	:	Connect S1 and S2 pins to stop the controller.

Mechanical Characteristics

Operating temperature	:	0...+65 (°C)
Size (l*b*h)	:	100*105*54 mm ³
Housing	:	DIN Rail ABS Plastic Enclosure
Weight	:	200 gms approx

Connector Info

Pin numbers mentioned are from left to right.

PIN#	CONNECTION
SUPPLY CONNECTION	
P	230VAC Phase
N	230VAC Neutral
E	230VAC Earth
VIBRATOR CONNECTION	
L1	Vibrator Terminal 1
L2	Vibrator Terminal 2
E	Vibrator Earth
CONTROL INPUT CONNECTION	
I/P	Control Input (0...10V)
GND	Ground - 0V
RUN/STOP CONTROL**	
S1	Run/Stop Pin-1
S2	Run/Stop Pin-2

**By default, Vibrator is in RUN Mode if Run/Stop Control Pins S1 and S2 are left open. If S1 and S2 pins are connected together, then Vibrator will be in STOP mode.