



TSi POWER (P) LTD,  
PLOT NO. 154-155, SIDDHI  
INDUSTRIAL INFRASTRUCTURE PARK,  
WAGHODIA, VADODARA-391760,  
GUJARAT, INDIA  
e-mail: info@tsipower.in  
Ph: +91 8000455999

## Specifications sheet: VRP Precision PWM Line Conditioners for Machinery, $\pm 20\%$ series

CATEGORY	FEATURE	THREE PHASE MODEL
		VRP-100000-9339-200M
ELECTRICAL	Capacity in KVA (KW)	100 KVA
	Regulator engine	High frequency 20 Khz IGBT driven voltage regulation convertor
INPUT	Nominal voltage	400 volts ac, three phase
	*Normal operating voltage (typical output regulation within +/- 1% of nominal)	320 - 480 volts ac for full regulation
	Relaxed operating voltage (relaxed output regulation within functional range of 200-250V P-N)	277 - 520 volts ac within maximum rated input current capacity
	Maximum rated input current	180A
	Nominal frequency	47 - 63 Hz
	Input circuit breaker rating	200 A X 3 phase MCCB
	Input wire size	2 x 25 mm <sup>2</sup> (AWG 0)
	Ac connection	Terminal block (L1in, L2in, L3in, neutral and ground wires) provided
OUTPUT	Nominal voltage	400 volts ac, three phase
	Power efficiency	typically over 96 % (with 20 - 100% load conditions)
	Voltage regulation (typical, excluding meter error)	+/- 1%
	Maximum rated output current	144A
	System status indicator	Green LED (ON) indicates Normal (regulating mode) operation
	Ac connection	Terminal block (L1op, L2op, L3op, neutral and ground wires) provided
PHYSICAL	Dimensions (IN MM)	888D x 888W x 838H
	Weight (approx.)	310 Kgs
	Display	Digital output voltage display thru selector switch
	Annunciation	LED display for Regulation mode, Bypass mode & Fault conditions
	Mounting	4 High Quality Castor wheels, 2 with brakes
ENVIRONMENTAL	Ambient temperature	0 <sup>o</sup> to + 45 <sup>o</sup> centigrade (32 <sup>o</sup> to +113 <sup>o</sup> fahrenheit). 10 to 90% RH non-condensing
	Cooling method	Fan Cooled
PROTECTIVE FEATURES	Standards & Safety	Designed to meet UL 60950-1 standards. Protection class IP 20.
	OV/UV cut off with SPP	Automatic trip in event of High/Low/Missing Voltage
	Overload & Short Circuit Protection	Through suitably rated input circuit breaker
	Soft Switch-On	This feature ensure that output voltage is never higher than input voltage upon switch-on, before it commences full stabilization.
	Automatic bypass	Automatic bypass will be activated when there is a fault condition
	Surge Test Conditions	Per Class 2 Surge (combination wave)
	Surge let-through voltages	1.2 X 50 $\mu$ s, 6kV, 8 X 20 $\mu$ s, 3 kA waveform. L-N < 300V
WARRANTY	Warranty	Two year limited warranty, covering repair/replacement of defective parts
NOTES	<p>1. The star (*) marked voltage regulation range is based on 400V nominal output voltage. This would proportionately change in case nominal output voltage is required to be preset at any other value between 380-415V.</p> <p>2. All models of VRP are optionally available with 400 Volts to 200 Volts step down transformers.</p> <p>3. Please ask if any non-standard range or customised feature is required.</p> <p>4. Since our designs are constantly evolving, the above specifications are liable to change without prior notice.</p>	