STATIC VOLTAGE **REGULATOR**



Instantaneous Voltage Correction for Protection of **Precision Equipment**



- Mitigates voltage sags & swells
- Voltage spike & noise control
- Real-time voltage compensation
- Voltage correction within 20msec











KEY FEATURES AND BENEFITS TO THE CONSUMERS:

- Ideal voltage conditioner as voltage sags & swells are mitigated within 20msec
- Eliminates the voltage spikes & filters noise
- Highly compatible with regenerative loads
- Increases life of precision equipment
- · Automatic bypass for failsafe operation
- Efficiency >97% ensuring energy saving through efficient operation
- Light weight, compact in size, Easy Installations & Fan-cooled
- Inbuilt Input MCB's to prevent costly equipment damage due to load side faults
- · Higher productivity due to control over electronic card failures and machine breakdowns

1 PHASE



Selectable O/P 220V / 230V / 240V



Nominal Operating Voltage Range



Relaxed Operating Voltage Range



Modbus RS485 Communication

3 PHASE



Selectable O/P 380V / 400V / 415V

320 - 480V AC for full regulation

Nominal Operating Voltage Range

277 - 520V AC for ±10% compensation

Relaxed Operating Voltage Range



Modbus RS485 Communication

SYSTEM		SINGLI	E PHASE			
RATINGS	2.5kVA 5kVA 7.5kVA 10kVA					
TECHNOLOGY	Digital Signal Processing Technology (DSP) Controlled Pulse Width Modulation (PWM) type. Insulated Gate Bipolar Transistor (IGBT) Technology					
INPUT SPECIFICATIONS						
Nominal Input Voltage	230V AC					
Normal Operating Voltage		180 - 280V AC	for full Regulation			
Operating Frequency		47-	65 Hz			
Maximum Rated Input Current	14A	27A	42A	55A		
Input MCB Rating	20A	32A	50A	63A		
Input Connection		Terminal blo	ck (R, N and E)	I		
Input Wire Size	4 sq.mm (AWG 12)	6 sq.mm	(AWG 10)	10 sq.mm (AWG 8)		
PERFORMANCE		I		I		
Eliminates Voltage Sags		Up to 50V (22 % Con	sidering 230V Nominal)			
Swell Compensation		Up to 50V (20% Con	sidering 230V Nominal)			
Compensation Irrespective of Phase		,	⁄es			
Cooling Method		Fan	Cooling			
Compensation of Depth & long Disturbances		Continuous Corre	ction Possible (24x7)			
OUTPUT SPECIFICATIONS						
Nominal Output Voltage		230	OV AC			
Output Voltage Range	220-230-240V AC (Selectable)					
Power Efficiency	High Power Efficiency greater than 97 %					
Voltage Correction time	20 Milliseconds or le	ss Voltage Correction time.	Instant and real time Voltage	Correction 5000 V/sec		
Response time	10ms					
Voltage Compensation		Up t	to 50V			
Maximum Rated Output Current	11A	22A	33A	44A		
Voltage Regulation		±	1%	I		
Relaxed Operating Voltage for ±10% Compensation	160 - 300V AC					
Duty Cycle	Continuous, 100% loading should be Possible at lowest input Voltage for Indefinite time.					
Output Connection	Terminal block (L, N and E)					
Load Bypass	Auto (activated within 5 secs of fault detection) / Manually Selectable					
Communication Interface & Protocol	RS485 and MODBUS RTU					
Readable Parameter on Communication	Input Voltage, Output Voltage, Fault Code					
DISPLAY OPTIONS						
7 Segment LED Display	Regular Input and Output Voltage range (Data logged of last 2 faults)					
Bar Graph LED	Load indication with Resolution of 10%					
LED Indication	Overload, Over-voltage, Under-voltage, Over-current					

SYSTEM		SINGLE	PHASE			
Buzzer Indication	Power on, Overload, Over-voltage, Under-voltage, Over-current, Over temp.					
POWER SPECIFICATIONS						
Power Consumption		100	VA			
MECHANICAL PROPERTIES						
Dimensions (In mm)	282(W) x 353(H) x	282(D) mm	367(W) x 617.25(I	H) x 552(D) mm		
Weight (In kg)	18 kg	28 kg	35 kg	50 kg		
Mounting	Mounte	ed on 4 Heavy duty PVC/	PU wheel, 2 Wheels with bra	ke		
PROTECTION FUNCTIONS						
Protection		Overload, Undercurrent & Short Circuit Protection through Suitably rated input circuit breaker. Zero Impact of Voltage Sags, Swells, Surges, Spikes, Transients & Electrical Noise				
Input Protection		Line Over-current, Over	-voltage, Under-voltage			
Output Protection		Overload, Overload,	er Current trip			
Overload & Short-circuit	Through Suitable Input Circuit Breaker					
Surge test Conditions	As per class 2 Surge (Combination wave)					
Surge let-through Voltage	1.2 X 50µs, 6kV, 8 X 20µs, 3 kA waveform. L-N < 300V					
EMI/RFI Filter	Equipped with EMI/FRI Filter for Proper Operation					
Noise Filter card	In-built Through fire-retardant Capacitor					
Surge Protection	MOV based					
Transient Protection	Spike Suppressor					
Trip And Restart	Auto / manual					
ENVIRONMENT CONDITIONS						
Ambient Temp.	0 - 50°C, 10 to 90% RH Non-condensing					
Protection Class	IP 20					
WARRANTY						
Service Life	1 year					
Warranty	1 year					

SYSTEM		THREE	PHASE		
RATINGS	7.5kVA	15kVA	22.5kVA	30kVA	
TECHNOLOGY	Digital Signal Processing Technology (DSP) Controlled Pulse Width Modulation (PWM) type. Insulated Gate Bipolar Transistor (IGBT) Technology				
INPUT SPECIFICATIONS					
Nominal Input Voltage	400V AC				
Normal Operating Voltage		340 – 480V AC	for full Regulation		
Operating Frequency		47-6	5 Hz		
Maximum Rated Input Current	14A/Phase	27A/Phase	42A/Phase	56A/Phase	
Input MCB Rating	20A/Phase	32A/Phase	50A/Phase	63A/Phase	
Input Connection		Terminal block (l	R, Y, B, N and E)	1	
Input Wire Size	4 sq.mm (AWG 12)	6 sq.mm	(AWG 10)	10 sq.mm (AWG 8)	
PERFORMANCE				1	
Eliminates Voltage Sags		Up to 8	0V (L - L)		
Swell Compensation		Up to 8	0V (L - L)		
Compensation Irrespective of Phase		Corrects all t	hree Phases		
Cooling Method		Fan C	cooling		
Compensation of Depth & long Disturbances		Continuous Correc	tion Possible (24x7)		
OUTPUT SPECIFICATIONS					
Nominal Output Voltage		400	V AC		
Output Voltage Range		400V AC t	o 415V AC		
Power Efficiency		High Power Efficiend	cy greater than 97 %		
Voltage Correction time	20 Milliseconds or le	ss voltage correction time. In	stant and real time voltage o	correction 5000 V/sec	
Response time		10	ms		
Voltage Compensation		Up to 8	0V (L - L)		
Maximum Rated Output Current	11A/Phase	22A/Phase	33A/Phase	44A/Phase	
Voltage Regulation		±′	1%	'	
Relaxed Operating Voltage for ±10% Compensation	277 - 520V AC				
Duty Cycle	Continuous, 100% loading should be possible at lowest input Voltage for Indefinite time.				
Output Connection	Terminal block (L1, L2, L3, N and E)				
Buck-Boost Transformer	Class H Insulation Works upto 175°C				
Operating technique	IGBT Based PWM type Voltage				
Load Bypass	Auto (Immediate after fault detection) / Manual Bypass				
Communication Interface & Protocol	RS485 and MODBUS RTU				
Readable Parameter on Communication	Input Voltage, Output Voltage, Fault Code				

SYSTEM		THREE	PHASE		
DISPLAY OPTIONS					
7 Segment LED Display	Regular Input and Output Voltage range (Data logged of last 2 faults)				
Bar Graph LED		Load indication with	Resolution of 10%		
LED Indication		Overload, Over-voltage, U	nder-voltage, Over-current		
Buzzer Indication	Power	on, Overload, Over-voltage, U	ndervoltage, Over-current, Ov	er temp.	
Readable Facility	Input Voltage, Output Voltage, Earth Voltage, kVA rating				
POWER SPECIFICATIONS					
Power Consumption		100VA	/Phase		
MECHANICAL PROPERTIES					
Dimensions (In mm)	367 (W) x 617.	3(H) x 552 (D)mm	482.50 (W) x 67	5(H) x 800(D)mm	
Unit Weight (Excluded packaging)	60 kg	85 kg	100 kg	120 kg	
Mounting	M	ounted on 4 Heavy duty PVC/	PU wheel, 2 Wheels with bra	ke	
PROTECTION FUNCTIONS					
Protection		current & Short Circuit Protect t of Voltage Sags, Swells, Sur			
Input Protection		Line Over-current, Over	-voltage, Under-voltage		
Output Protection		Overload, Ov	er Current trip		
Overload & Short-circuit	Through Suitable Input Circuit Breaker				
Compensation irrespective of Phase	Yes				
Surge test Conditions	As per class 2 Surge (Combination wave)				
Surge let-through Voltage	1.2 X 50µs, 6kV, 8 X 20µs, 3 kA waveform. L-N < 300V				
EMI/RFI Filter	Equipped with EMI/FRI Filter for proper operation				
Noise Filter card	In-built Through fire-retardant Capacitor				
Surge Protection	MOV based				
Transient protection	Spike Suppressor				
Trip And restart	Auto / manual				
ENVIRONMENT CONDITIONS					
Ambient Temp.	0 - 50°C, 10 to 90% RH Non-condensing				
Protection Class		IP	20		
WARRANTY					
Service Life	1 year				
Warranty	1 year				

SYSTEM	THREE PHASE (HEAVY DUTY)				
RATINGS	50kVA	75kVA	100kVA		
TECHNOLOGY	Digital Signal Processing Technology (DSP) Controlled Pulse Width Modulation (PWM) type. Insulated Gate Bipolar Transistor (IGBT) Technology				
INPUT SPECIFICATIONS					
Nominal Input Voltage		400V AC			
Normal Operating Voltage	320 – 480V	AC for full Regulation	340 – 480V AC for full Regulati		
Operating Frequency		47-65 Hz			
Maximum Rated Input Current	93A/Phase	139A/Phase	171A/Phase		
Input MCCB Rating	100A/Phase	160A/Phase	200A/Phase		
Input Connection		Terminal block (R, Y, B, N and E)	1		
Input Wire Size	25 sq.mm (AWG 4)	33 sq.mm (AWG 2)	2X25 sq.mm (AWG 0)		
PERFORMANCE		1	1		
Eliminates Voltage Sags		Up to 80V (L-L)			
Swell Compensation		Up to 80V (L-L)			
Compensation Irrespective of Phase		Corrects all three Phases			
Cooling Method		Fan Cooling			
Compensation of Depth & long Disturbances		Continuous Correction Possible (24x7	7)		
OUTPUT SPECIFICATIONS					
Nominal Output Voltage	400V AC				
Output Voltage Range		380V AC to 415V AC			
Power Efficiency		High Power Efficiency greater than 97	%		
Voltage Correction time	20 Milliseconds or less voltage correction time. Instant and real time voltage correction 5000 V/sec				
Response time		10ms			
Voltage Compensation		Up to 80V (L-L)			
Maximum Rated Output Current	73A/Phase	109A/Phase	145A/Phase		
Voltage Regulation		±1%	1		
Relaxed Operating Voltage for ±10% Compensation	277 - 520V AC				
Duty Cycle	Continuous, 100% loading should be possible at lowest input Voltage for Indefinite time.				
Output Connection	Terminal block (L1, L2, L3, N and E)				
Switching Technology	PWM based IGBT switching				
Buck-Boost Transformer	Class H Insulation Works upto 175°C				
Operating Technique	IGBT Based PWM type Voltage				
Load Bypass	Auto (Immediate after fault detection) / Manual Bypass				
Communication Interface & Protocol	Wi-Fi module with mobile application compatibility				
Readable Parameters on Communication	Input Voltage, Output Voltage, Earth Voltage, kVA rating, Voltage Unbalance Percentage				

SYSTEM	THREE PHASE (HEAVY DUTY)			
DISPLAY OPTIONS				
Display	LCD Screen (16 x 2)			
Buzzer Indication	Power on, Overload, Over-voltage, Undervoltage, Over-current, Over temp.			
Readable Facility	Input Voltage, Output Voltage, Earth Voltage, kVA rating, Voltage unbalance percentage			
POWER SPECIFICATIONS				
Power Consumption	200VA/Phase			
MECHANICAL PROPERTIES				
Dimensions (In mm)	540 (W) x 776 (H) x 928 (D)mm			
Unit Weight (Excluded packaging)	160 kg 180 kg 200 kg			
Mounting	Mounted on 4 Heavy duty PVC/ PU wheel, 2 Wheels with brake			
PROTECTION FUNCTIONS				
Protection	Overload, Undercurrent & Short Circuit Protection through Suitably rated input circuit breaker. Zero Impact of Voltage Sags, Swells, Surges, Spikes, Transients & Electrical Noise, Earth voltage			
Input Protection	Line Over-current, Over-voltage, Under-voltage, Earth-voltage			
Output Protection	Overload, Over Current trip, Short circuit, Over temperature			
Overload & Short-circuit	Through Suitable Input Circuit Breaker			
Surge test Conditions	As per class 2 Surge (Combination wave)			
Surge let-through Voltage	1.2 X 50µs, 6kV, 8 X 20µs, 3 kA waveform. L-N < 300V			
EMI/RFI Filter	Equipped with EMI/FRI Filter for proper operation			
Noise Filter card	In-built Through fire-retardant Capacitor			
Surge Protection	MOV based			
Transient protection	Spike Suppressor			
Trip And restart	Auto / manual			
ENVIRONMENT CONDITIONS				
Ambient Temp.	0 - 50°C, 10 to 90% RH Non-condensing			
Protection Class	IP 20			
WARRANTY				
Service Life	1 year			
Warranty	1 year			

ORDERING INFORMATION

Product Code	Description	HSN Code				
STATIC VOLTAGE REGULATOR						
SINE-1P-2.5-180/280V	Static voltage regulator, 1 phase 2.5kVA, 180/280V					
SINE-1P-5-180/280V	Static voltage regulator, 1 phase 5kVA, 180/280V					
SINE-1P-7.5-180/280V	Static voltage regulator, 1 phase 7.5kVA, 180/280V					
SINE-1P-10-180/280V	Static voltage regulator, 1 phase 10kVA, 180/280V					
SINE-3P-7.5-340/480V	Static voltage regulator, 3 phase 7.5kVA, 340/480V					
SINE-3P-15-340/480V	Static voltage regulator, 3 phase 15kVA, 340/480V	90328910				
SVR-3P-22.5-320/480V	Static voltage regulator, 3 phase 22.5kVA, 340/480V					
SVR-3P-30-320/480V	Static voltage regulator, 3 phase 30kVA, 340/480V					
SVR-3P-50-320/480V	Static voltage regulator, 3 phase, 50kVA, 320/480V					
SVR-3P-75-320/480V	Static voltage regulator, 3 phase, 75kVA, 320/480V					
SVR-3P-100-340/480V	Static voltage regulator, 3 phase, 100kVA, 340/480V					

* PRICES ON DEMAND

COMPARISON AT A GLANCE

OMITARIOON AT A GEARGE					
FEATURES	STATIC VOLTAGE REGULATOR	SERVO VOLTAGE STABILIZER	ONLINE UPS	AUTO VOLTAGE REGULATOR	FERRO RESONANT CVT
Real-time voltage correction	Yes	Poor	Yes	No	Depend on load & line
Sag Elimination	Yes	No	Yes	No	Yes
Stepless correction	Yes	Yes	Yes	No	Yes
Surge Suppression	Yes	No	Yes	No	Yes
Ability to handle regenerative loading	Excellent, Undisturbed	Unstable	Poor	Satisfactory	Poor
Load regulation	Excellent	Excellent	Good	Good	Very Poor
Load compatibility	Excellent	Good	Poor	Poor	Poor
Moving parts	None	Yes	Yes	Yes	Yes
Reliability	Excellent	Satisfactory	Good	Poor	Good
Servicing	Simple (Plug & Play)	Support required	Simple (Battery maintenance)	Simple	Simple
Built-in Auto Bypass	Yes	No	Yes	No	No
Energy saving	Yes	Yes	No	Limited	No
Voltage overshoot	Never	Yes	Never	Yes	Can be very high
Soft-switching	Yes	No	Yes	No	No
Cost of Ownership	Extremely cost effective	High due to maintenance	Extremely high	High	High due to poor efficience

APPLICATIONS



- AND MANY MORE... Induction moulding machines Laser cutting machines CNC machines Laboratory equipment Food processing machines Robotics machines Auto & Auto-ancillary Oil & Gas Textile Wood cutting
 - Plastic manufacturing
 Building management
 Radar & telecommunication

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