



EMi

VOLTAGE STABILIZER TO SERVO MOTOR

► EMI: Strength and precision at the service of voltage regulation

Today's industrial processes lie alongside a multitude of loads that we might define as 'difficult' – of marked reactive character, high intensity peaks (e.g.: motors), etc.– and which are also highly sensitive to variations in the power supply voltage.

In these cases, the voltage must be stabilized by using sufficiently strong devices and with suitable overloading capacity to face these loads without hardly needing power over sizing.

If to all of this we add high precision output (up to $\pm 1\%$), the result are the **SALICRU EMI** voltage stabilizers to servo motors, based on continuously adjusting self-transformers and made in a wide range of powers from 2 to 30 kVA in single phase structure and from 6 to 400 kVA in three-phase (higher powers to order).

In the three-phase units it is also possible to choose between common regulation and independent regulation by phase, which gives more precise stabilization on the loads connected to each of the phases. These are all controlled by a powerful microprocessor system and monitored by a complete synoptic.

► PERFORMANCES

- Great robustness, admitting overloads of up to 1000% of the nominal.
- Output voltage stability better than 1% (adjustable) against static or dynamic variations.
- Control and testing of all the parameters without electro mechanical elements.
- In three-phase units, common regulation or independent by phase, immune to imbalances.
- Input regulation margin of $\pm 15\%$, standard (others to order).
- Output voltmeter, standard.
- Voltmeter switch in three-phase units, standard.
- Automatic transformer on unit output. ⁽¹⁾
- Maximum – minimum output voltage protections. ⁽¹⁾
- Fast speed.
- Efficiency > 95%, smaller operating cost.
- High reliability (long MTBF).
- Nil distortion.
- Wide range of powers.
- Three-phase configuration in star or triangle.
- Silent operation.
- Manual bypass. ⁽¹⁾

(1) Option



► EMI models



► Three phase equipment synoptic
(Independent phase regulation)

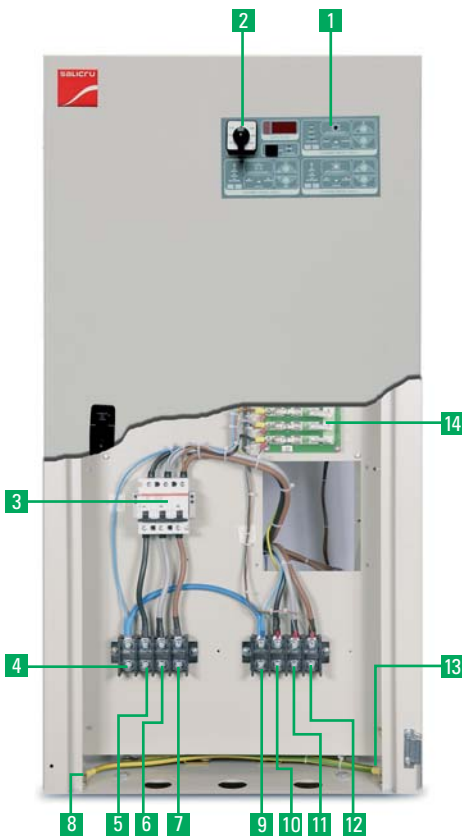
► APPLICATIONS: Effective protection in industrial processes

The present transformation industry profusely uses the so-called machine tools, which most of the time are highly sensitive to variations in their supply voltage: Milling machines, grinding machines, presses, lathes, polishing machines, electro erosion machines and a long etc. deal with shaping solid materials.

The activations and the electrical movements, the numerical control, electric ovens or telecommunications repeaters are other applications inherent to this kind of equipment.

► DESCRIPTION

1. Synoptic.
2. Voltmeter voltage selector.
3. Magnetic thermal start/stop switch.
4. N neutral input terminal.
5. R phase input terminal.
6. S phase input terminal.
7. T phase input terminal.
8. Ground socket input terminal.
9. N phase output terminal.
10. U phase output terminal.
11. V phase output terminal.
12. W phase output terminal.
13. Linking ground output terminal.
14. Protection against voltage transients.



► OPTIONS available

- Separator transformer (T).
- Ultra-isolation transformer.
- Maximum - minimum output voltage protections with manual or automatic reset.
- Magnetic thermal protection on the output.
- Gas discharger.
- Independent regulation by phase.
- Maintenance bypass

► SERVICES

- Pre-sale and after sales advisory service.
- Multiple formulae of maintenance and telemaintenance.



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► TECHNICAL SPECIFICATIONS

MODEL	EMi		
INPUT	Single phase voltage	120 V, 220 V, 230 V or 240 V	
	Three phase voltage	3 x 208 V, 3 x 220 V, 3 x 230 V, 3 x 240 V, 3 x 380 V, 3 x 400 V or 3 x 415 V	
	Regulation range	± 15% ⁽¹⁾	
	Frequency	48 ÷ 63 Hz	
	Power factor	> 0,95	
OUTPUT	Single phase voltage	120 V, 220 V, 230 V or 240 V	
	Three phase voltage	3 x 208 V, 3 x 220 V, 3 x 230 V, 3 x 240 V, 3 x 380 V, 3 x 400 V or 3 x 415 V	
	Accuracy	± 1% selectable	
	Output voltage setting	± 5%	
	Nominal power	2 kVA up to 400 kVA	
	Harmonic distortion	Nil	
	Efficiency	> 95%	
	Permissible overload (depending on the model)	200% for 2 min, 500% for 10 s, 1000% for 50 ms	
	GENERALS	Ambient temperature	- 10° C ÷ + 45° C
		Relative humidity	Up to 95%, non-condensing
Maximum operating altitude		2.400 m.a.s.l.	
Mean Time Between Failures (MTBF)		130.000 hours	
Mean Time To Repair (MTTR)		30 minutes	
Acoustic noise level at 1 metre		< 35 dB	
Cooling		Natural or forced depending on the power rate	
Electrical noise attenuation on common mode		With isolation transformer	> 40 dB
		With ultra-isolation transformer	> 120 dB
STANDARDS		Safety	EN 60950-1
	Electromagnetic compatibility (EMC)	EN 61000-6-3; EN 61000-6-2	
	Marking	CE	
	Quality and environmental management	ISO 9001 and ISO 14001 TÜV	

(1) Other ranges under request

► RANGE⁽²⁾

MODEL	POWER (kVA)	DIMENSIONS (D x W x H mm)	WEIGHT (Kg)
M 2 - 2	2	340 x 240 x 680	26
M 3 - 2	3	340 x 240 x 680	29
M 4 - 2	4.5	340 x 240 x 680	35
M 7 - 2	7	340 x 240 x 680	52
M 9 - 2	9	340 x 240 x 680	54
M 12 - 2	12	390 x 520 x 630	82
M 15 - 2	15	440 x 640 x 635	94
M 20 - 2	20	440 x 640 x 635	117
M 30 - 2	30	440 x 640 x 635	150

Nomenclature, dimensions and weights for models: 230V 50Hz input / 230V 50Hz output and ± 15% input range

MODEL	POWER (kVA)	DIMENSIONS (D x W x H mm)	WEIGHT (Kg)
T 6 - 4	6	340 x 240 x 680	56
T 9 - 4	9	390 x 520 x 630	81
T 15 - 4	15	390 x 520 x 630	99
T 20 - 4	20	390 x 520 x 630	136
T 27 - 4	27	440 x 640 x 635	157
T 35 - 4	35	440 x 640 x 635	198
T 45 - 4	45	600 x 1260 x 750	272
T 60 - 4	60	640 x 1530 x 810	336
T 75 - 4	75	640 x 1530 x 810	369
T 90 - 4	90	640 x 1530 x 810	384
T 120 - 4	120	640 x 1530 x 810	433
T 150 - 4	150	640 x 1760 x 810	531
T 190 - 4	190	640 x 1760 x 810	633
T 225 - 4	225	880 x 1700 x 1060	673
T 300 - 4	300	880 x 1700 x 1060	743
T 400 - 4	400	880 x 1700 x 1060	810

Nomenclature, dimensions and weights for models: 3 x 400V 50Hz input / 3 x 400V 50Hz output, with common regulation and ± 15% input range
 (2) Consult for independent phase regulation, isolation transformer versions and other configurations

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