

OPTIM SVGm-600-440

OPTIM SVGm-600-440, Hybrid var compensators

Code: RG20F9.

> Frequency (Hz): 50 Hz
> Nr steps: 6
> kvar (400 V): 510
> kvar (440 V): 600
> Composition: 5 x 100 kvar + 100 kvar
> Use voltage (V): 400

Description

The Hybrid var compensators **OPTIM SVGm** range consist of a combination of a static reactive power generator, **SVGm**, and a set of steps of rejection filters tuned to 189 Hz (p = 7%), operated by a contact and controlled by a Computer SMART III power factor regulator.
The use of both technologies in a single compensation unit yields accurate reactive power compensation, with a high capacity to react to power changes that require compensation that represent a percentage of the device's total power, while providing a high cost to effectiveness ratio, all in a smaller size than the model consisting solely of regulated capacitor steps.
Similarly, the use of a **SVGm** as a supplement to the contactor-operated steps also provides capacitive power compensation, which is increasingly in demand, and it reduces problems related to the compensation of reactive power in installations containing a self-supply photovoltaic system.

Application

The Hybrid var compensators **OPTIM SVGm** range are suitable for reactive power compensation in any installation where the use of rejection filters is required due to the presence of harmonics in the network, but especially in those where, due to the compensation requirements, using a conventional capacitor bank based on steps operated by contactors does not guarantee proper power factor correction that rules out the possibility of being penalized for excess reactive power consumption.
Installations where part of the total power of the compensation device has to respond quickly.
Installations where the addition of a self-supply system based on photovoltaics varies the demand for active power from the network such that a bank with steps does not cover the compensation needs, or those where at certain times, there is excess capacitive power, which is also subject to penalization.

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Specifications

AC power supply

Installation category	4 kV, CAT III Class 1
Frequency	50 ± 5 %

Electrical characteristics

Reinforcement voltage	440 V
Conditional short-circuit current (Icc)	40 kA
Earthing system	TN, TT
Voltage	400 V ~ Ph-Ph ± 10%

Mechanical characteristics

Size (mm) width x height x depth	1254 x 1959 x 804 (mm)
Noise	< 63 dBA
Weight (kg)	642

Environmental characteristics

Protection class	IP20
Relative humidity (without condensation)	0 ... 95 %
Storage temperature	-20 ... +50 °C
Working temperature	-10 ... +45 °C

Current measurement circuit

Consumption	1,5 VA x transf.
Transformation ratio	5/5A ... 9000/5A

Standards

Electrical safety, Maximum height (m)	2000 m
Electrical safety, Contamination level/class	Category 2
Standards	IEC 61439-2

Protection

Element	Individual protection of each step with fuses with high rupture power (HRP). NH-00 Series.

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CODE	TYPE	kvar (400 V)	kvar (440 V)	Composition	Nr steps	Frequency (Hz)
50 Hz						
RG20F1.	OPTIM SVGm-200-440	182	200	1 x 100 kvar + 100 kvar	2	50 Hz
RG20F3.	OPTIM SVGm-300-440	264	300	2 x 100 kvar + 100 kvar	3	50 Hz
RG20F5.	OPTIM SVGm-400-440	346	400	3 x 100 kvar + 100 kvar	4	50 Hz
RG20F7.	OPTIM SVGm-500-440	428	500	4 x 100 kvar + 100 kvar	5	50 Hz
RG20F9.	OPTIM SVGm-600-440	510	600	5 x 100 kvar + 100 kvar	6	50 Hz
RG20FB.	OPTIM SVGm-700-440	592	700	6 x 100 kvar + 100 kvar	7	50 Hz
RG20FD.	OPTIM SVGm-800-440	674	800	7 x 100 kvar + 100 kvar	8	50 Hz

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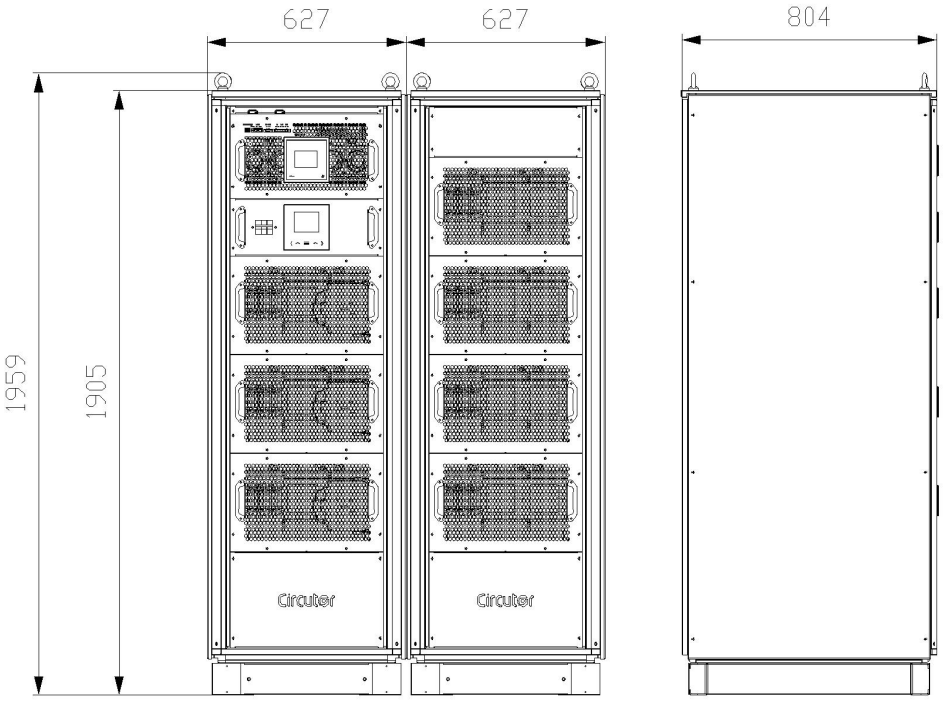


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Dimensions



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