SVGm-4WF-201C-550

SVGm-4WF-201C-550, Static Var Generator with multilevel technology

Code: R4P6FJ.

> EMI filter: 1
> System: 4 wires, 440 ... 550 V
> kvar (440 V): 159
> kvar (480 V): 174
> Phase current: 210
> Use voltage (V): 550
> kvar (550 V): 201

Description

SVGm cabinet-type static var generators are the most accurate power factor correction solution in both unbalanced three-phase systems and installations with inductive and capacitive reactive power. They can be used in three-phase industrial, commercial or service installations, and they are not affected by the installation's harmonics. Much safer device with minimal maintenance. This product range features rack assembly in standard cabinets, designed to simplify installation.

The implemented characteristics and functions are as follows:

- Power factor correction (inductive/capacitive) from 30 to 100 kvar (3W) and 20 to 69 kvar (4W) per cabinet.
- The 100 kvar (3W) and 69 kvar (4W) rack-type module's compact dimensions make it easy to install in standard cabinets.
- Multi-range voltage and frequency (50/60 Hz).
- Harmonic current immunity.
- Cos φ range from 0.7 inductive...to...0.7 capacitive.
- Web-based performance monitoring.
- Internal short-circuit protection.

If higher reactive power compensation capacity is required, up to 100 devices can be connected in parallel.

Application

Ideal solution for individual loads or installations with numerous single-phase and three-phase loads, whether inductive or capacitive. Also, for installations whose load fluctuates over short time frames. Typical loads would be overhead cranes, welding equipment, lifts, drilling/shredding systems, data centres.

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Specifications

AC power supply

Installation category	6 kV, CAT III Class 1
Consumption	6000 W (max.)
Frequency	50 / 60 Hz ± 5 %
Nominal voltage	230 ... 550 V~ F-F (± 10 %)

Mechanical characteristics

Size (mm) width x height x depth	608 x 1890 x 812 (mm)
Noise	< 76 dBA
Weight (kg)	306

Environmental characteristics

Protection class	IP 21 / IK10 (IP 41 on demand)
Relative humidity (without condensation)	0 .... 95 %
Storage temperature	-20 ... +50 °C
Working temperature	-10 ... +45 °C

Electrical characteristics

Conditional short-circuit current (Icc)	40 kA
Rated peak current Ipk	84 kA pico
Maximum phase current	210 A (RMS)
Rated diversity factor (RDF), simultaneity	1
Earthing system	TN, TT

Current measurement circuit

Consumption	1,5 VA por transformador
Transformation ratio	Transformer: 5/5A ... 5000/5A

Communication Network

Protocol	TCP/IP, Modbus TCP
Technology / Type	Ethernet

Standards

Electrical safety, Maximum height (m)	5000
Electrical safety, Contamination level/class	Category 2
Standards	IEC 61000-6-4, UNE-EN 55011, IEC 61000-6-2, IEC 62477-1, IEC 61439-1, IEC 60721-3-3 (Indoor conditioned)

Features / performance

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Reactive power compensation (Kvar)	Selectable: 0.7 inductive ... 1 ... 0.7 capacitive
Filtering / Response time	< 100 µs
Parallel assembly/installation	Up to 100 devices of different caliber. Connection of transformers only in Master unit.

Serial communication

Protocol	Modbus/RTU
Technology / Type	RS-485

SVGm
Static Var Generator with multilevel technology, 50 / 60 Hz.

CODE	TYPE	System	kvar (230 V)	kvar (400 V)	kvar (440 V)	kvar (480 V)	kvar (500 V)	kvar (690 V)	Phase current
3 wires 480 V, Wall-mounted cabinet									
R4P3M0.	SVGm-3WF-30M-480	3 wires, 230...480 V	17,4	30	30	30	-	-	44
R4P3M6.	SVGm-3WF-075M-480	3 wires, 230...480 V	43,1	75	75	75	-	-	110
R4P3M2.	SVGm-3WF-100M-480	3 wires, 230...480 V	57,5	100	100	100	-	-	145
4 wires 400 V, Wall-mounted cabinet									
R4P4MA.	SVGm-4WF-020M-400	4 wires, 230...400 V	12	20,7	-	-	-	-	30
R4P4ML.	SVGm-4WF-050M-400	4 wires, 230...400 V	30	51,7	-	-	-	-	75
R4P4MC.	SVGm-4WF-069M-400	4 wires, 230...400 V	40	69	-	-	-	-	100
3 wires 480 V, Floor-mounted cabinet									
R4P3F2.	SVGm-3WF-100C-480	3 wires, 230...480 V	57,5	100	100	100	-	-	145
R4P3F3.	SVGm-3WF-200C-480	3 wires, 230...480 V	115	200	200	200	-	-	290
R4P3F4.	SVGm-3WF-300C-480	3 wires, 230...480 V	172,5	300	300	300	-	-	435
R4P3F5.	SVGm-3WF-400C-480	3 wires, 230...480 V	230	400	400	400	-	-	580
3 wires 690 V, Floor-mounted cabinet									
R4P5F2.	SVGm-3WF-100C-690	3 wires, 500 ... 690 V	-	-	-	-	72	100	84
R4P5F3.	SVGm-3WF-200C-690	3 wires, 500 ... 690 V	-	-	-	-	144	200	168
R4P5F4.	SVGm-3WF-300C-690	3 wires, 500 ... 690 V	-	-	-	-	216	300	210
R4P5F5.	SVGm-3WF-400C-690	3 wires, 500 ... 690 V	-	-	-	-	288	400	280
4 wires 400 V, Floor-mounted cabinet									
R4P4FC.	SVGm-4WF-069C-400	4 wires, 230...400 V	40	69	-	-	-	-	100
R4P4FD.	SVGm-4WF-138C-400	4 wires, 230...400 V	80	138	-	-	-	-	200
R4P4FE.	SVGm-4WF-207C-400	4 wires, 230...400 V	119,1	207	-	-	-	-	300
R4P4FF.	SVGm-4WF-276C-400	4 wires, 230...400 V	-	276	-	-	-	-	400
4 wires 550 V, Floor-mounted cabinet									
R4P6FG.	SVGm-4WF-067C-550	4 wires, 440 ... 550 V	-	-	53	58	-	-	70
R4P6FH.	SVGm-4WF-134C-550	4 wires, 440 ... 550 V	-	-	106	116	-	-	140

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R4P6FJ.	SVGm-4WF-201C-550	4 wires, 440 ... 550 V	-	-	159	174	-	-	210
R4P6FK.	SVGm-4WF-268C-550	4 wires, 440 ... 550 V	-	-	212	232	-	-	280
Rack module									
R4P3R2.	SVGm-3WF-100R-480	3 wires, 230...480 V	57,5	100	100	100	-	-	145
R4P4RC.	SVGm-4WF-069R-400	4 wires, 230...400 V	40	69	-	-	-	-	100

All equipment has built-in EMI filters

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Dimensions

Connections