

COMMISSIONING OF STATIC VAR GENERATOR

1.- End user data

End user			
Location		Order No	

2.- Integrator data

Integrator			Area	
Hours worked		km	Commissioning date	
#	Name		ID number	
1				
2				

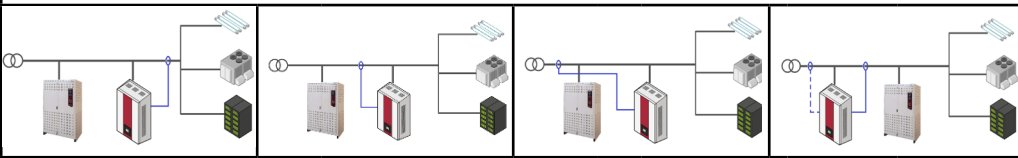
3.- SVGm data

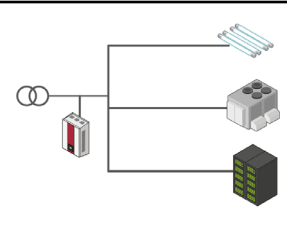
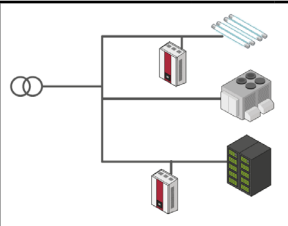
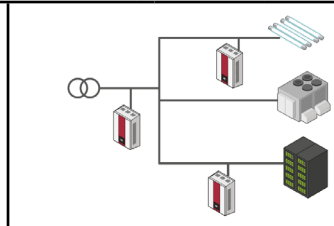
Model			Code	
Serial number			Manufacturing date	
ID number			Internal IP	

4.- Visual inspection of the device

Description	OK	NO OK
Visual inspection of the devices; no scratches or dented are visible...		
Check the absence of voltage and the impossibility to reconnect		
Ambient temperature within the working temperature range (-10 °C ... 45 °C)		
Verification of the cross section of the cables is in accordance with the device's specifications.		mm ²
Verification of the proper power connection (L1, L2, L3, N) and Earth.		
Verification of the communications' connection (if needed)		
Check that the mains voltage is suitable for the SVGm working range.		
Notes:		

5.- Installation inspection

Current transformers (CT)	Location	Mains side	Load side
	Wiring and absence of the jumper bars in the terminal		
	Ratio	/ 5 A	
Capacitor banks location and CT's location	Type of connection		
			
Protections	Verify the correct sizing of the protections		
	Circuit breaker (Caliber / Type / Programming) :		
	RCD (Caliber / Type / Programming) :		

Other SVGm	Type of connection		
			
			<i>Contact After Sales Service</i>
Notes:			

6.- Electrical elements

Verify phase sequences and correspondence with their CT	L1 / L2 / L3	OK	NO OK
	L1 (S1-S2) / L2 (S1-S2) / L3 (S1-S2)		
Check and note the tightening torque in the terminals:			
SVGm-xWF-030M/020M	Power cable connections (Phases)	Normalized 1.5 ... 1.8 Nm	Checked
	Neutral cable connections	1.5 ... 1.8 Nm	
	Earth cables connections	2.2 ... 2.4 Nm	
	Connections of the terminals of the CT	0.5 ... 0.6 Nm	
SVGm-xWF-100C/069C SVGm-xWF-200C/138C SVGm-xWF-300C/207C SVGm-xWF-400C/280C	Power cable connections (Phases)	6 Nm	
	Neutral cable connections	35 Nm	
	Earth cables connections	35 Nm	
	Connections of the terminals of the CT	0.8 Nm	
SVGm-xWF-060M SVGm-xWF-040C	Power cable connections (Phases)	2.2 ... 2.4 Nm	
	Neutral cable connections	2.2 ... 2.4 Nm	
	Earth cables connections	2.2 ... 2.4 Nm	
	Connections of the terminals of the CT	0.5 ... 0.6 Nm	
SVGm-xxx-100M/069M SVGm-xxx-100R/069R	Power cable connections (Phases)	8 ... 10 Nm	
	Neutral cable connections	8 ... 10 Nm	
	Earth cables connections	10 ... 14 Nm	
	Connections of the terminals of the CT	0.5 ... 0.6 Nm	
Notes:			

7.- Verification of on-screen parameters

Close the device and power up

Description		OK	NO OK
Display responds			
No alarms or warnings are shown on-screen.			
Phase sequence	Sign of the active power (positive)		
	Cos ϕ between 0.7 (inductive) ... 0.98 (capacitive)		
	Phasor diagram is correct		
	OK	NO OK	
Verify whether all the slave devices have been detected. <i>Note: Wait 5 minutes after the connection between devices is done</i>		ID of slave devices:	
Notes:			

8.- Screen data with the SVGm stopped

	Mains Active Power: Reactive Power: Cos ϕ :	Load Active Power: Reactive Power: Cos ϕ :
	Voltage L1 L2 L3 Frequency	Current Mains Load L1 L2 L3 N
	Mains power P Q S cos ϕ L1 L2 L3	Load power P Q S cos ϕ L1 L2 L3

	<p style="text-align: center;">Information</p> <p>ID</p> <p>HMI version</p> <p>DSP Version</p>	<p>Notes:</p>
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9.- Configuration Data

	<p style="text-align: center;">Specifications</p> <p>Model:</p> <p>Type:</p>	<p>Notes:</p>
	<p style="text-align: center;">Installed units</p>	<p>Notes:</p>
	<p style="text-align: center;">Limits</p> <p>Min current.</p> <p>Current limit</p>	<p>Notes:</p>
	<p style="text-align: center;">cos φ</p> <p>Mode.</p> <p>cos φ 1</p> <p>cos φ 2</p>	<p>Notes:</p>
	<p style="text-align: center;">Current transformer</p> <p>Num. Transformers</p> <p>Position</p> <p>Ratio</p> <p>Invert L1 L2 L3</p>	<p>Notes:</p>
	<p style="text-align: center;">Medium voltage</p> <p>Medium voltage</p> <p>Type Transf</p> <p>Ratio</p>	<p>Notes:</p>

	<p style="text-align: center;">Communications</p> <p>IP Address</p> <p>Netmask</p> <p>Gateway</p> <p>DHCP</p>	<p>Notes:</p>
	<p style="text-align: center;">RS485</p> <p>Modbus device</p>	<p>Notes:</p>
	<p style="text-align: center;">Date/Time</p> <p>Time</p> <p>Date</p> <p>Time Zone</p> <p>Internet time</p>	<p>Notes:</p>

10.- Screen data with the SVGm running

	<p>Mains</p> <p>Active Power:</p> <p>Reactive Power:</p> <p>cos φ:</p>	<p>Load</p> <p>Active Power:</p> <p>Reactive Power:</p> <p>cos φ:</p>
	<p style="text-align: center;">Voltage</p> <p>L1</p> <p>L2</p> <p>L3</p> <p>Frequency</p>	<p style="text-align: center;">Current</p> <p style="text-align: center;">Mains Load</p> <p>L1 L1</p> <p>L2 L2</p> <p>L3 L3</p> <p>N N</p>
	<p style="text-align: center;">Mains power</p> <p>P Q S cos φ</p> <p>L1</p> <p>L2</p> <p>L3</p>	<p style="text-align: center;">Load power</p> <p>P Q S cos φ</p> <p>L1</p> <p>L2</p> <p>L3</p>

11.- Simplified single line diagram of the installation (with SVGm)

Acceptance and Signatures	
Installer	Client