

**Seri SCM X-X - I -X-X- SINGLE -THREE- PHASE RECTIFIER****DC SYSTEMS WITH COMMUNICATION**

The rectifier is thyristor based power electronics, associated with a micro - controller used to pilot the system, provide alarm signalling and obtain the appropriate charge for the battery used.

**Key Features**

- SCM X-X-I -X-X :three phase power supply.
- Rectified by a 6 pulse- thyristor bridge (reduction of current harmonic on the mains)
- Communication system used to monitor and control the defined parameters locally or remotely.
- Choice of several types of batteries: nickel-cadmium or lead, vented or gas recombination.
- Simplified maintenance.
- High MTBF and low MTTR.

**SPECIFICATION****Complete power supply system****Input**

<b>Three phase</b>	400V $\pm 10\%$ other voltage as non option standard.
<b>Exceptional variations</b>	+15 - 20 %(functional)
<b>Frequency</b>	50 Hz or 60Hz +/- 6%

**Output**

Nominal voltage (Udc) 24V,48V, 110V, 220V (on request : 12, 32, 60 ,125 and 250V

**Range of operating voltage**

<b>Floating charge</b>	75% to 125% of UDC Nominal
<b>High rate charge</b>	75 to 135%UDC nominal
<b>Commissioning charge</b>	75 to 135%UDC nominal
<b>Static voltage regulation</b>	+ / - 1% in the following in the condition: .at float charger .input voltage +/-10% .input frequency +/-10% .temparature from 0°C to 40 O°C

## Seri SCM X-X-I-X-X- SINGLE -THREE- PHASE RECTIFIER

### Dynamic voltage regulation

With using standard filter and the battery connected ( capacity highter than 5 time In)

Load step	Deviation	Recovery time
10 - 100%	-5%	205 ms
100 - 10%	5%	70 ms

### Current regulation

#### Long term stability of UDC

+ / - 1% to I max

#### Temperature coeff of UDC

0.15% for 1000 hours

#### Charging characteristic

0.02% per °C

#### Input / Output isolation

Constant current / constant voltage (I/U as per IEC 478- 1) during float charge

#### Insulation resistance

2000 VAC between Input / Output and electrical earth.

#### Ripple

> 10 MΩ, 500 VDC

- max 1% rms of nom. DC voltage, with a battery Ah capacity of 5 times the charger nom rating (battery connected)

- 2.5% rms typical (max 5%) on rectifier output, battery not connected.

### Protection

- Polarity reversal of battery ( blows battery fuse) ( optional) ;
- AC and DC surge limitation;
- Soft-start function 0 to 100%;
- Short-circuits.
- Limited to 100% of rated current;
- Internal DC fuse
- Non-volatile storage of system parameters and user setting;
- Mains failure shutdown ;
- Rectifier failure shutdown;
- High-voltage DC shutdown;
- Thermal protection;
- Phase rotation and phase loss.

### EMC emissions

### Safety

Generic emission standards EN 5008 1 - 2 and generic immunity standards EN 5008 2 - 2 available as standard option.

According to EN 50178 standards

### Environmental

#### Ambient temperature

Operating : 0°C to +40°C derate from 40°C to 55°C by lowering the output current with 1.25% per °C

Storage: -25°C to +70°C.

Operation : from 20% to 80% no-condensation.

Storage: from 15% to 90% ( in original packaging).

typical 45-65 dB (A)

#### Relative humidity

Up to 1000m, derate form 1000 to 4000m by lowering the output current with

7% per 1000m

#### Acoustic noise

#### Altitude

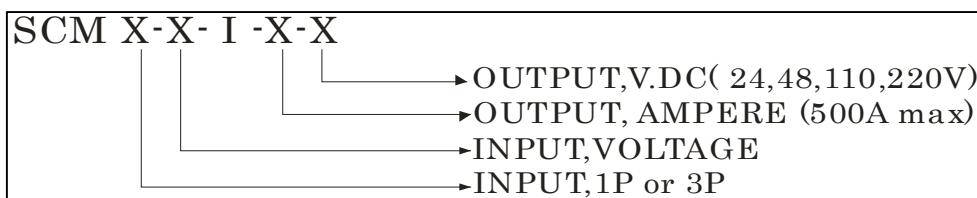
**TECHNICAL DATA and DIMENTIONS**  
**Phase charger , seri SCM X-X-I-X-X**



OUT	24V		48V		110V		220V	
	CABINET Type *	WT KG*						
10	SC8	40	SC8	50	SC8**	55	SC8 **	50
15	SC8	50	SC8	60	SC8**	65	SC8 **	60
20	SC8	60	SC8	70	SC8**	75	SC12 **	60
25A	SC8	70	SC8	80	SC8**	85	SC12 **	60
30A	SC8	85	SC8	125	SC8**	150	SC12**	190
50A	SC8	100	SC8	150	SC12**	270	SC16**	390
75A	SC8	125	SC12	220	SC12**	400	SC16**	490
100A	SC8	150	SC12	245	SC12**	425	SC16**	530
150A	SC12	220	SC12	400	SC12-1**	490	SC19**	750
175A	SC16	230	SC16	410	SC19**	520	SC19**	810
200A	SC19	250	SC19	420	SC19-1**	630	SC19-2**	860
250A	SC19	385	SC19	515	SC19-2**	720	SC19-3**	1000
300A	SC19	410	SC19	555	SC19-3**	920	SC19-3**	1275

\*\* Cabinet Control

**MODEL DESIGNATION**



TYPE	DIMENTION IN MM		
	HEIGHT	WIDTH	DEPTH
SC8	800	600	300
SC12	1230	600	400
SC12-1	1230	670	490
SC16	1630	670	490
SC19	1900	840	800
SC19-1	1900	840	625
SC19-2	1900	840	800
SC19-3	1900	900	800

