

SHARYS IP Enclosure

from 15 to 100 A

supplying your industrial applications with DC power

High Availability

- Modularity for better availability.
- Process continuity with hot swap capabilities (replacement of modules without any power interruption).

A modular and flexible range

- Expandable according to future requirements.

High efficiency

- Low energy consumption, low heat dissipation.
- Sinusoidal current absorption, low conductor heat dissipation and no plant oversize.

High reliability

- Intelligent cooling of the components.
- Limited thermal stress and longer life of the components.
- Microprocessor control.

Easy, user-friendly operation

- Intuitive LCD display.

Low Total Costs of Ownership

- Evolves as your company (upgradeability with step of 15 A).
- Power factor close to one.
- Reduced installation costs.
- Reduced maintenance costs and MTTR.

Communication

- Embedded 4 dry contact interface.

Robustness

- Degree of Protection (IP) 30.
- Steel frame.
- PCB tropicalisation.



Your protection for

- > Process industry
- > Heavy industry
- > Contactors



Rectifiers module

SHARYS rectifier modules use double conversion switching technology. The combination of SMD technology, of digital microprocessor control and of IGBT components results in a highly reliable and efficient rectifier.

- Microprocessor control with CAN-BUS protocol communication.
- Wide temperature and mains voltage tolerances.
- Power factor ≥ 0.99 .
- High efficiency.
- Parallel connection with active load sharing.
- Selective disconnection of a faulty module.
- Plug-in "hot-swap".

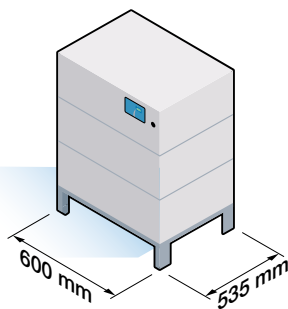


All **SHARYS IP** (SH-IP) series rectifiers are certified by TÜV SÜD with regard to product safety (EN 61204-7 and EN 60950-1).



SHARYS 030 A

Dimensions



SHARYS_26_B

Communication

- LCD display on front panel.
- Embedded 4 dry contact device.

Standard equipment

- PCB tropicalisation.
- Temperature compensated battery charge.
- User friendly mimic panel.
- IP 30 steel cabinet.
- Pallet truck friendly base.

Accessories

- Emergency Power Off (EPO).
- Low voltage disconnecter.
- Selective load disconnection POWER SHARE.
- Coupling kit.
- Earth leakage control.
- Surge suppressor.
- Output distribution devices.
- Battery cabinet.
- Enhanced protection degree.

Technical data

ENCLOSURE ED - DOUBLE MODULE					
Input voltage	230 V 1ph + N				
Input voltage tolerances	$\pm 20\%$ @ 100% Pn up to a -50% @ 40% In				
Input frequency	from 47.5 to 63 Hz				
Input power factor	≥ 0.99				
Output voltage (V)	24 V	48 V		108 V	120 V
Output voltage variation (V)	21-29 V	42-58 V		95-131 V	105-145 V
Max. output power (kW)	2.4 kW	1.4 kW	2.9 kW	4.8 kW	4.8 kW
Nominal output current (A)	100 A	30 A	60 A	100 A	40 A
Efficiency (typical)	$> 93\%$				
Output voltage ripple	50mVrms 100mVpp				
Cooling	force ventilated				
Colour	RAL 7012				
Min-max height ⁽¹⁾ (mm)	894-1254				
Min-max weight ⁽²⁾ (kg)	60-75				
Working temperature	-5 °C up to 45 °C (up to 55 °C with derated output)				
Relative humidity	from 10% to 90%				
EMC	EN 61000-6-4, EN 61204-3, EN 61000-6-2, EN 61000-3-3				

(1) Depending on accessories and back-up time.

(2) Without batteries.

The ENCLOSURE EX version includes a transformer for 400 V single phase AC supply.

SHARYS IP System

from 60 to 200 A

supplying your industrial applications
with customisable DC power

The **SHARYS IP** series have been designed with the objective of making reliable DC products:

A modular and flexible range

- Expandable according to future requirements.

High efficiency

- Low energy consumption, low heat dissipation.
- Sinusoidal current absorption, low conductor heat dissipation and no plant oversize.

High reliability

- Reduced maintenance costs.
- Intelligent cooling of the components.
- Limited thermal stress and longer life of the components.
- Microprocessor control.

Easy, user-friendly operation

- Remote management of the equipment.
- Easy control and monitoring.

Low Total Costs of Ownership

- Evolves as your company (upgradeability with step of 20 or 50 A).
- Power factor close to one.
- Reduced installation costs.
- Reduced maintenance costs.
- Process continuity with hot swap capabilities (replacement of modules without any power interruption).
- User friendly.
- Digital control and monitoring of the rectifier modules.
- End of discharge protection.
- Internal batteries.
- Power share for extended back-up time.
- JBUS/MODBUS protocol.
- Communication via SNMP, Internet (with **NET VISION** option).
- Advanced dry contacts interface (option).

Robustness

- Degree of Protection (IP) 30.
- Steel frame.
- Tropicalisation.



Your protection for

- > Process industry
- > Heavy industry
- > Drives



Rectifiers module

SHARYS rectifier modules use double conversion switching technology. The combination of SMD technology, of digital microprocessor control and of IGBT components result in a highly reliable and efficient rectifier.

- Microprocessor control with CAN-BUS protocol communication.
- Wide temperature and input mains voltage tolerances.
- Power factor ≥ 0.99 .
- High efficiency.
- Parallel connection with active load sharing.
- Selective disconnection of a faulty module.
- Plug-in "hot-swap".

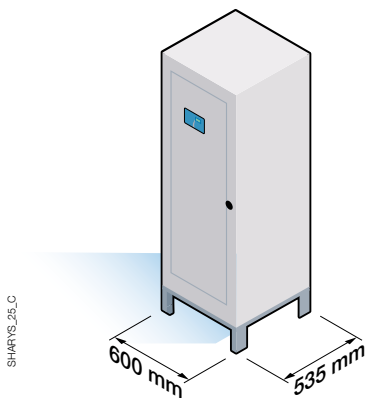


All **SHARYS IP** (SH-IP) series rectifiers are certified by TÜV SÜD with regard to product safety (EN 61204-7 and EN 60950-1).



SHARYS 030 A

Dimensions



SHARYS 235 C

Control module

The **SHARYS PLUS** control and monitoring module provides comprehensive information on the **SHARYS IP System**.

Once opened the frame door the 32-digit LCD display and the three LEDs provide easy and fast access to all information.

- Microprocessor technology with CAN-BUS communication system.
- RS232/485 port for external communication.
- Battery management.
- Plug-in "hot-swap".
- Selective disconnection of a faulty module.

Communication

- LCD display on front panel.
- Communication via SNMP, Internet with **NET VISION**.
- JBUS/MODBUS protocol.
- Advanced dry contacts interface (option).

Standard equipment

- PCB tropicalisation.
- Embedded 4 dry contact device.
- Temperature compensated battery charge.
- User friendly mimic panel.
- Controller module.
- IP 30 steel cabinet.
- Pallet truck friendly base.
- JBUS communication capability.

Accessories

- Emergency Power Off (EPO).
- Low voltage disconnecter.
- Selective load disconnection POWER SHARE.
- Coupling kit.
- Earth leakage control.
- Surge suppressor.
- Output distribution devices.
- Battery cabinet.
- Enhanced protection degree.

Technical data

	SYSTEM IS - 4 MODULES				SYSTEM IX - 3 MODULES WITH TX			
	230 V 1ph + N - 400 V 3ph + N				400 V 3ph + N			
Input voltage								
Input voltage tolerances	±20% @ 100% Pn up to -50% @ 40% In							
Input frequency	from 47.5 to 63 Hz							
Input power factor	≥ 0.99							
Output voltage (V)	24	48	108	120	24	48	108	120
Output voltage variation (V)	21-29	42-58	95-131	105-145	21-29	42-58	95-131	105-145
Max. output power (kW)	4.8	9.6	8.6	9.6	3.6	7.2	6.5	14.4
Nominal output current (A)	200	200	80	80	150	150	60	60
Efficiency (typical)	> 90%							
Output voltage ripple	50mVrms 100mVpp							
Input transformer	no				yes			
Cooling	force ventilated							
Colour	RAL 7012							
Height (mm)	1900							
Min-max weight ⁽¹⁾ (kg)	245				305			
Working temperature	-5 °C up to 45 °C (up to 55 °C with derated output)							
Relative humidity	from 10% to 90%							
EMC	EN 61000-6-4, EN 61204-3, EN 61000-6-2, EN 61000-3-3							

(1) Without batteries.