



SHARYS ELITE

from 30 to 600 A

a scalable 48 VDC Power System

Rectifiers



SHARYS 007 B 1 CAT

SHARYS ELITE
Example: 600 A power system
with 14 rectifier modules

The solution for

- > Telecommunications
- > Transmission systems
- > Telephone exchanges

Specifically designed for Telecom application, **SHARYS** series combine all telecom features such as modularity, hot-swap module replacements, redundancy N+1 and scalability together with a robust power module design.

Upgradeability

- Expandable according to future requirements by adding additional rectifier modules.

Reliability & Robustness

- Microprocessor control.
- Intelligent rectifier cooling
- Battery safe thanks to the end of discharge protection (option).
- Limited thermal stress and longer life of the components.

Total Costs of Ownership

- High efficiency up to 92%: low energy consumption, low heat dissipation.
- Sinusoidal current absorption with power factor close to one.
- Process continuity with hot-swap capabilities (replacement of modules without any power interruption).

SHARYS ELITE

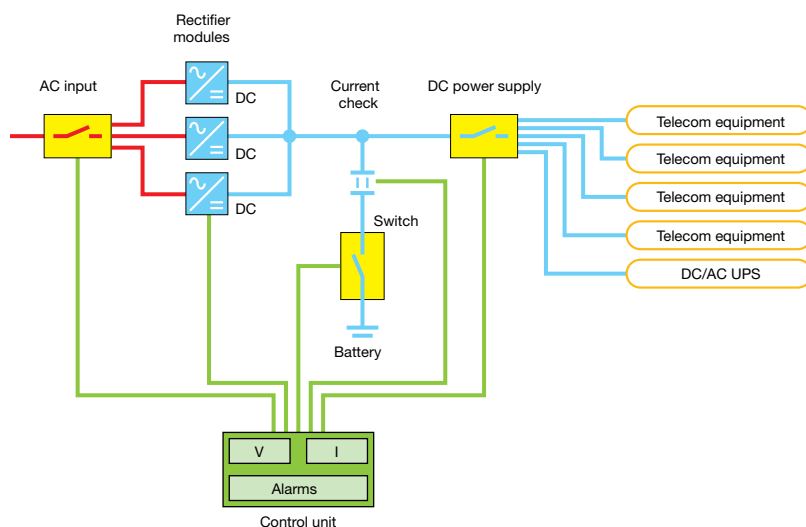
SHARYS ELITE is a complete DC power system consisting of compact rack enclosure including rectifier modules and related power distribution units.

SHARYS ELITE can be fitted with up to 14 **SHARYS** rectifier modules.

Up to 28.8 kW (600A)⁽¹⁾ effective power installed in one cabinet ensuring redundancy N+2.

⁽¹⁾ Contact us for power extension requirements

Block diagram



SHARYS ELITE A GB

SHARYS PLUS control module

The **SHARYS PLUS** advanced control and monitoring module is included as standard on all **SHARYS** DC systems. A 32-digit LCD display provides easy and fast access to all information parameter settings.

- Microprocessor control with CAN-BUS protocol communication and RS232/485 port for external communication.
- Additional easy frontal LEDs indications.
- Plug-in "hot-swap" solution, easy to replaced.

Rectifier modules

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.

- Plug-in "hot-swap".
- Microprocessor control with CAN-BUS protocol communication.
- Parallel connection with active load sharing and selective disconnection of a faulty module.
- Wide temperature and input mains voltage tolerance.

Standard electrical features

- Positive pole grounded.
- Internal battery fuse protection.
- Battery temperature sensor.

Electrical options

- BLVD Battery Low Voltage Disconnect.
- Output distribution.
- Double battery protection.
- Internal batteries.

Standard communication features

- **SHARYS PLUS** advanced digital controller.
- MODBUS/JBUS RTU.
- 2 slots for communication options.

Communication options

- **NET VISION**: professional WEB/ SNMP interface for UPS monitoring and shutdown management of several operating systems.
- Dry-contact interface.

Technical data

SHARYS ELITE - RECTIFIER MODULE		
Reference	SH 1600W	SH 2700W
INPUT		
Rated voltage	230 VAC	
Voltage tolerance ⁽¹⁾	+20% -40%	
Rated frequency	from 47.5 to 63 Hz	
Power factor	≥ 0.99 (nominal conditions)	
Current distortion	compliant with IEC61000-3-2 (EN60555-2)	
OUTPUT		
Rated voltage	48 VDC (45-58 VDC)	
Ripple in all conditions and without batteries	< 50 mVrms, < 100 mVpp, < 1 mVps	
Maximum power	1600 W	2700 W
Rated current	30 A	50 A
EFFICIENCY		
Typical	up to 0.91	up to 0.92
ENVIRONMENT		
Operating ambient temperature	-5 °C to +45 °C (without derating), up to +55 °C with power derating	
Relative humidity	10% to 90%	
Cooling	forced with intelligent fan speed control	
STANDARDS		
Safety	EN 60950	
EMC emission	complies with EN50081-2	
EMC immunity	complies with EN 61000-4-6 (EN 50082-2), EN 61000-4-3, ETSI EN 300-386 v1.3.1	

SHARYS ELITE - POWER SYSTEM								
Rectifier SH1600W	SH-LT60	-	SH-LT120	-	SH-LT270	SH-LT420	-	-
Rectifier SH2700W	-	SH-LT100	-	SH-LT200	-	-	SH-LT450	SH-LT600
INPUT								
Rated voltage	400 VAC 3ph+ N / 230 V AC 1ph +N (up to 200 A)							
Voltage tolerance ⁽¹⁾	+20% -40%							
Rated frequency	from 47.5 to 63 Hz							
OUTPUT								
Rated voltage	48 VDC (45-58 VDC)							
Rated current ⁽²⁾	60 A	100 A	120 A	200 A	270 A	420 A	450 A	600 A
RECTIFIER CABINET								
Dimensions W x D x H	600 x 600 x 1800 mm							
Degree of protection	IP20 (with modules inserted)							
Colours	RAL 7012							

(1) Power derating from -20% to -40%. - (2) With complete rectifier configuration.