

Sharys IP

Multi-purpose Rectifiers from Socomec UPS

DC power systems with rectifier modules can be used for a broad spectrum of applications that range from process control on the data network, tomography and fire prevention (for end user applications), from industrial to military and medical application segments, and from centralised to distributed system architectures. Socomec UPS is backed by years of technical experience in this sector and today presents Sharys, a series of rectifiers ranging from 1 to 20 kW and which are ideal for transformation stations (48/110V), fire prevention and emergency stations (24/48/110 V), process control (24/48 V) and process power supply (24/48/120 V), and guarantee customers standard synergic solutions with the company's complementary UPS offer.

The rectifier range

Socomec UPS presents Sharys IP, a range of standard rectifiers with which to simplify the product choice and configurability for the customer and enhance the overall product offer by raising the percentage of standardised products. However, the company also prides itself on its ability to offer high quality personalised products to meet the customers' particular requirements.

A modular solution

Product flexibility comes from modular product design concepts, meaning that a configuration can be tailored to the application and giving the client a wide choice of optimum solutions based on two product families, System (20 to 400 A range) and Enclosure (15 to 100 A range).

Enclosure

The Enclosure series is available in the following voltages: 24 V, 48 V, 108 and 120 V with current in the range 15 to 100 A in a module that can be upgraded to double the rating by adding a second module. The products have a compact footprint (600x505 mm), a modular height (from 700 to 1200 mm) and light weight (from 60 to 75 kg).

System

The System series comes in the following voltages 24 V, 48 V, 108 and 120 V with current in the range 20 to 200 A. The range is further subdivided into a solution with up to 4 rectifier modules (IS) or a solution with up to three modules equipped with an input transformer (IX). System has a compact footprint (600x600 mm), a height of 1900 mm and light weight (approx. 170 kg)

The Sharys IP features

Some of the standard features of Sharys IP are listed below:

- disconnection of the batteries in the event of low voltage supply;
- disconnection of non priority loads;
- tropicalisation of printed circuits;
- battery cabinets;
- IP 31 protection level;
- dry contacts board.

The general specifications include:

- IGBT double conversion;
- galvanic insulation between input and output;
- microprocessor control and regulation;

- Can-Bus communication between the modules;
- hot-swappable wireless modules;
- surface mount board technology.

The input specifications are:

- power factor of 1;
- the input voltage is 230 V (with a range between +20% and –50%) and the frequency is 50 Hz (in range between 47.5 and 63 Hz);

The output power is constant.

Performance, use and service

Socomec UPS technicians have also designed an intelligent cooling system. In fact, the fan speed is controlled by the environment temperature and the load level. This prolongs component life and improves the overall system performance to a maximum of around 93%, which is very high with respect to other rectifiers currently on the market. Installation has also been simplified by reducing the operations to a minimum.

A communication interface, which is easy to interpret and manage, shows the alarms, the battery status and the current voltage values of the batteries and output, and the output current value.

There is also an indication of the power flow.

Two other important features taken into consideration by the Socomec designers are ease of installation, for example the pre-installation of batteries in the factory to simplify set up, and maintenance which is facilitated thanks to the fact that pallets are not needed to move the modules around. Lastly, not to be overlooked is the affordable price which is low when compared to the impeccable performance and services offered by Socomec UPS based on a consolidated tradition. These services – provided by the ease of product choice and configuration – guarantee the user complete peace of mind.