

# **TTC Wärtsilä JOVYREC SRM**

## **PRODUCT LEAFLET**



Switched-mode rectifiers of the type series TTC Wärtsilä JOVYREC SRM are available with output voltages of 12 V, 24 V, 48 V or 60 V. The rectifiers have a modular design and can be deployed both as power supply unit and charging unit. In combination with batteries the systems offer the optimal solution as uninterruptible DC supply for critical loads.

### **TTC WÄRTSILÄ JOVYREC SRM320 UP TO 320 A (24V) OR 168 A (48V)**

Switched-mode rectifiers of the type TTC Wärtsilä JOVYREC SRM 320 are available with nominal voltage of 24V and 48 V and expandable by means of their modular design up to 320 A (24V) and 168 A (48V). The individual compact rectifier modules with a capacity of 1 kW per module are equipped with active PFC (power factor control). This modern technology achieves a performance factor of 0.98 and reduces hereby the circuit feedback to a minimum. A superordinate monitoring unit, via which the input voltage as well as the output voltage can be adjusted, is available to control the individual rectifier modules. Via this control unit all parameter of the modules can be monitored during operation. In case of critical temperatures automatic shutdown of the concerned module takes place. The housings of the TTC Wärtsilä JOVYREC SRM320 rectifiers are used

as floor standing or wall mounted enclosures. For easy connecting, for expanding the system or in the event of a service intervention the rear panel of the housing can be opened, in this way all connections are accessible from the rear.

### **TTC WÄRTSILÄ JOVYREC SRM500 UP TO 40 A (24 V) OR 21 A (48 V)**

Switch-mode rectifiers of the type TTC Wärtsilä JOVYREC SRM500 are primary switched power supplies with performance ranges of 40 A/24 V up to 21 A/48 V. All power supply modules of these type series are convection-

modules of 30 to 40 A three-phase inputs are necessary.

The rectifiers of the type TTC Wärtsilä JOVYREC SRM500 are suitable for panel as well as for top-hat rail mounting. Up to 200 A can be achieved via parallel connection of up to five modules.

### **TTC WÄRTSILÄ JOVYREC SRM1000 FOR OUTPUT VOLTAGES OF 12, 24, 48 OR 60V**

The outstanding technical features of TTC Wärtsilä JOVYREC SRM1000 offer multiple applications. Due to their low residual ripple the systems of the type TTC Wärtsilä JOVYREC SRM1000 are ideally suited for charging starter batteries, valve-regulated and vented lead acid batteries as well as NiCad batteries. The switch-mode rectifiers are available in modular design and in a 19-inch version. In the modular version the device is ideally suited as power supply or charger unit for mounting into control cabinets. By the means of simple 4-hole fixing the modular version can be fixed easily on any mounting panel. The base module disposes of a performance factor control, is convection-cooled, short-circuit proof and has interfaces for remote signalling. In the 19-inch version we deliver the TTC Wärtsilä JOVYREC SRM1000-Modul in a solid, coated steel sheet frame. The TTC Wärtsilä JOVYREC SRM1000 guarantees the galvanic separation from the grid and has high efficiency. Further advantages of these systems are the robustness (almost maintenance-free) as well as the low noise-level. On the clearly arranged operating panel load voltages can be set and operating states of the device can easily be read via LED.

#### TECHNICAL DATA TTC WÄRTSILÄ JOVYREC SRM320

Input voltage	3 x 400 / 230 V -50% +10%
Output voltage	24 V or 48 V
Input frequency	47 - 63 Hz
Output current	21 - 320 A
Efficiency	24 V = 86 %    48 V = 88 %
Protection class	IP 20
Temperature	0 °C up to 50 °C
Mode of operation	permanent operation

#### TECHNICAL DATA TTC WÄRTSILÄ JOVYREC SRM500

Input voltage	3 x 320 - 575 VAC (three-phase) 186 V 264 V or 320 VDC ± 20 % (single-phase)
Output voltage	24V at battery operation; 26,4 V - 27,2 V at mains operation
Input frequency	45 - 65 Hz
Output power	max. 500 W
Charging characteristic	I/U acc. to DIN 41773/1
Mode of operation	permanent operation
Protection class	IP 20

#### TECHNICAL DATA TTC WÄRTSILÄ JOVYREC SRM1000

Input voltage	230V ± 10%
Input frequency	50Hz ± 5%
Efficiency	0,97 cap. at full load
Output voltage	12 V, 24 V, 48 V or 60 V
Output power	max. 1000 W
Float charge	max. 2,4 V / cell
Boost charge max.	2,7 V / cell
Characteristic	IU acc. to DIN 41773
Mode of operation	permanent operation
Protection class	IP 20

Fig.1-3 Wärtsilä JOVYREC SRM320

Wärtsilä JOVYREC SRM500

Wärtsilä JOVYREC SRM1000



**SWITCH-MODE RECTIFIERS**  
applicable also as power supply and charger units

**UPS SYSTEMS**  
in combination with a battery also ideally suited as uninterruptible DC supply

**MODULAR DESIGN**  
offers high flexibility

**DC POWER SUPPLY**  
for critical consumers, automation systems, battery chargers and more

**VERY ROBUST SYSTEMS**  
suitable for extreme ambient conditions

**PERFORMANCE INCREASE**  
via parallel connection of multiple systems feasible.