

# Wärtsilä JOVYSTAR PRO

## PRODUCT LEAFLET



UPS systems of the Wärtsilä JOVYSTAR PRO series are available with the performance ranges of 60, 80, 100, 125 and 160 kVA and are applied in industries and production areas all around the world. For redundant operation (half-load parallel operation, n+1 operation) or to increase performance the parallel connection of further systems is easily feasible. Thus an existing UPS system can grow with increasing performance requirements.

### ONLINE UPS SYSTEM

In online operation the systems of the Wärtsilä JOVYSTAR PRO series guarantee the optimal supply of all connected consumer loads as a stable output voltage is ensured permanently free of all standard interference pulses, overlapping currents and fluctuations. Thus critical consumers are provided with secure voltage at all times.

### SHORTER BATTERY CHARGING TIMES

All UPS systems of the JOVYSTAR PRO series are equipped with an intelligent charger for the recharge of various energy storage systems. The DCM charging method (dynamic charging mode) developed by Wärtsilä JOVYATLAS provides for a higher charging current for the charging process in the event of an under-utilised UPS system, which shortens the battery charging times significantly. For short bridging periods battery cabinets are available adapted to the design of the UPS systems. Wärtsilä

JOVYSTAR PRO systems can be operated with different battery systems. The systems of the standard series are equipped with maintenance-free lead batteries with AGM technology. Naturally we also offer solutions with OPzS or OGi batteries for extended autonomy times.

### INNOVATIVE TECHNOLOGY

Using a modern IGBT rectifier reduces disturbances in the mains supply significantly. The innovative IGBT rectifier provides for an almost sinusoidal current consumption. Thanks to the improved performance factor at the input to the rectifier the UPS systems of these types have a reduced input performance of up to 30% in comparison to common UPS systems with a Thyristor rectifier. The reduction of current at the input to the rectifier during grid feed enables a considerable saving when dimensioning the distribution of fuses and cables on-site.

Tab.1 Type overview

### TYPES Wärtsilä JOVYSTAR PRO

	Dimensions W x H x D [mm]	Weight without battery [kg]	Autonomy times [min]
Wärtsilä JOVYSTAR PRO 60	815 x 1705 x 865	570	0 - 8 - 13 - 30 - 40 - 50
Wärtsilä JOVYSTAR PRO 80	815 x 1705 x 865	600	0 - 5 - 8 - 18 - 35 - 50 - 65
Wärtsilä JOVYSTAR PRO 100	815 x 1705 x 865	630	0 - 8 - 15 - 25 - 50 - 60
Wärtsilä JOVYSTAR PRO 125	815 x 1705 x 865	662	0 - 8 - 15 - 35
Wärtsilä JOVYSTAR PRP 160	815 x 1705 x 865	720	0 - 5 - 10 - 25

further autonomy times on request

**TECHNICAL DATA**

Power 60 kVA / 80 kVA / 100 kVA / 125 kVA / 160 kVA

**INPUT**

Voltage 3 x 380/220V 3 x 400/230 V 3 x 415/240 V ±10%  
 Phases 3:3  
 Frequency 50 Hz / 60 Hz ± 5 %  
 Efficiency 0,99 bei 100 % load  
 THD <3 % at 100 % load  
 Battery sealed, lead acid batteries  
 lifetime 10-12 Jahre acc. to EUROBAT  
 number of battery cells: 300  
 Battery charging voltage 680 V (2,27 V per cell)  
 Endpoint voltage 496 V (1,65 V per cell)

**OUTPUT**

Voltage 3 x 380/220V 3 x 400/230 V 3 x 415/240 V  
 ± 1% static load / ± 2% static, asymmetrical load /  
 ± 5% dynamic load (load step 20 % -->100 % --> 20 %)  
 Frequency 50 Hz / 60 Hz (adjustable)  
 Transient time 20 ms onto ±1% of nominal value  
 Efficiency >90 % (normal operation)  
 >93 % (battery operation)  
 98% (ECO mode)  
 THD <1% at linear load,  
 <5% at non-linear load  
 Overload capacity inverter > 100 % up to 125 % for 10 min  
 > 125 % up to 150 % for 1 min  
 > 150 % up to 199 % for 10 s  
 Overload capacity static switch 150 % permanent  
 1000 % for 1 period

**SETTING**

Noise level <60 dB(A)  
 Temperature 0°C up to 40°C (15°C up to 25°C recommended, battery: 20°C)  
 Humidity < 95 %, no condensation  
 Cooling forced ventilation  
 Protection degree IP 20  
 Classification VFI SS 111

**COMMUNICATION**

All data are available on an RS232 / USB interface - optional the system data can be transferred via SNMP, MODBUS, PROFIBUS or via other bus systems.

- **ONLINE UPS SYSTEM**  
VFI /Double Converter Technology offers maximum safety for connected consumer / load
- **PFC-RECTIFIER**  
with IGBT-Technology
- **COMFORTABLE OPERATION**  
via menu-driven display and text
- **RS 232 INTERFACE**  
for monitoring all system data
- **PERFORMANCE INCREASE**  
via parallel connection of several systems feasible
- **LOW OPERATING COSTS**  
via very high efficiency
- **SHORT BATTERY CHARGING TIMES**  
DCM charging method

Fig.1 Wäertsilä JOVYSTAR PRO

