

# TTC Wärtsilä JOVYTEC P

## PRODUCT LEAFLET



UPS systems of the type TTC Wärtsilä JOVYTEC P are available with power ranges of 700 VA up to 3 kVA. Due to their online double converter technology these UPS systems meet the requirements of the highest protection class VFI-SS-111. During start-up a diagnostic test system is activated verifying the status of the UPS system and the battery. The power related fan control system protects the system against overheating and ensures a long battery life.

### ONLINE UPS SYSTEM

UPS systems of the TTC Wärtsilä JOVYTEC P series supply the connected consumer loads constantly with a given frequency. Thus the input frequency can vary between 45 and 65 Hz. The systems of the TTC Wärtsilä JOVYTEC P series are equipped with a five-language LCD with vast display options for voltage, frequency, battery status and capacity utilisation of the UPS system.

### OPERATING MODES

The clear and user-friendly control and display panel enables the choice of four different operating modes: online mode, green mode, free-spin mode, and generator mode. In the online mode according to VFI-SS-111 the consumer load is permanently supplied via an inverter. The inverter provides a first quality sinusoidal voltage. Even in the event of grid failure no disruption of supply occurs for the

consumer loads.

In green mode operation the consumer load is supplied via bypass. The UPS system switches to inverter supply in the case of voltage fluctuations or grid failure during operation and the load is transferred to the inverter almost without any interruption. In green mode operation the efficiency can be increased to more than 98%.

In free-spin mode the input frequency of the UPS systems can vary between 45 and 65 Hz. Thereby Wärtsilä JOVYTEC P keeps the output frequency absolutely stable. The frequency parameters can be set via software.

In generator mode the TTC Wärtsilä JOVYTEC P systems prevent frequent switching in the event of distortions of the output voltage of the generator. Due to this operating mode the exposure of the batteries is considerably reduced. At the same time a better operational safety of the consumer loads is achieved.

Tab.1 Type Overview

### TYPES TTC Wärtsilä JOVYTEC P

	Dimensions W x H x D [mm]	Weight without / with battery [kg]	Autonomy times [min]
TTC Wärtsilä JOVYTEC P 700	152 x 238 x 420	8,4 / 10,4	0 - <b>10*</b> - 15 - 25 - 35 - 50 - 65 - 90 - 130 - 150 - 180
TTC Wärtsilä JOVYTEC P 1000	152 x 238 x 420	9,4 / 11,9	0 - <b>10*</b> - 25 - 45 - 70 - 95 - 120 - 150 - 170
TTC Wärtsilä JOVYTEC P 1500	152 x 238 x 420	10,4 / 12,9	0 - <b>6*</b> - 15 - 30 - 40 - 50 - 60 - 95 - 120 - 170
TTC Wärtsilä JOVYTEC P 2000	225 x 360 x 425	16,2 / 19,2	0 - <b>8*</b> - 15 - 30 - 40 - 60 - 80 - 120 - 170
TTC Wärtsilä JOVYTEC P 3000	225 x 360 x 425	17,0 / 20,0	0 - <b>5*</b> - 20 - 25 - 35 - 50 - 60 - 85 - 120 - 150

\* \* with integrated battery,

the other autonomytimes can be realized with additional batteries and battery cabinets

**TECHNICAL DATA**

Power	700 VA	1000 VA	1500 VA	2000 VA	3000 VA
cos phi 0,7 ind.	490 W	700 W	1050 W	1400 W	2100 W

**INPUT**

Voltage	230 V standard, further voltages on request Input voltage range: 168 - 276 V (0-100 % load) 140 - 159 V (0-70 % load) 120 - 139 V (0-40% load)				
Current	3 A	4 A	5,7 A	7,7 A	12 A
Phases	single phased				
Frequency	50 Hz / 60 Hz ± 3 Hz				
Power factor	0,98				
Battery	maintenance-free, sealed lead - acid batteries, integrated				
Autonomy times	with batteries integrated in UPS System				
at 100 % load	10 min	10 min	6 min	8 min	5 min
at 80 % load	13 min	15 min	10 min	13 min	12 min
at 50 % load	27 min	27min	23 min	28 min	23 min
Direct current link voltage	24 V	36 V	36 V	72 V	72 V

**OUTPUT**

Voltage	230 V standard (208/220/240 V via panel adjustable); further voltages on request				
Frequency	50 Hz / 60 Hz automatic adjustment by UPS System				
Efficiency	cos phi 0,7 ind.				
THD	<3% at linear load				
Overload capacity	100 up to 125 % for 60 s, 125 - 150 % for 10 s				
Crest Factor	3:1				

**SETTING**

Noise level in approx. 1 m distance	<45 dB(A)	<45 dB(A)	<50 dB(A)	<50 dB(A)	<50 dB(A)
Temperature	0°C up to 40°C (15°C up to 25°C recommended, battery: 20°C)				
Humidity	0 % up to 95 %, no condensation				
Communication	RS 232 interface				

**STANDARD FEATURES**

- Electronical emergency stop possibility via potential-free contact
- External battery connection for later enhancements
- Power factor correction for sinusoidal current consumption
- Acknowledgeable alarm!

**OPTIONS**

- Multiplexer, relay card, fixed connection, USB port, software, manual bypass, SNMP adapter

- ONLINE UPS SYSTEM**  
VFI /Double Converter Technology offers maximum safety for connected consumers / loads
- 4 OPERATION MODES**  
selectable via control panel
- ACTIVE POWER FACTOR CONTROL**  
guarantees sinusoidal power consumption
- INTERFACES**  
RS 232 Interface
- POWER RELATED FAN CONTROL**  
protects against overheating
- ALARM SIGNALS**  
via acknowledgeable signal buzzer
- EASY BATTERY EXCHANGE**  
at the front. Only a few steps and the complete battery cassette can be exchanged during running operation.

Fig.1 TTC Wärtsilä JOVYTEC P

