TTC WÄRTSILÄ

TTC Wärtsilä JOVYSTAR PRO

PRODUCT LEAFLET

UPS systems of the TTC 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 TTC 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 availa
ble 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 TTC Wärtsilä JOVYSTAR PRO

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

ERFORMANCE INCREASE
via parallel connection of several systems feasible

LOW OPERATING COSTS
via very high efficiency

SHORT BATTERY CHARGING TIMES
DCM charging method

Fig.1 TTC Wärtsilä JOVYSTAR PRO

www.tamintalo.com **www.wartsila.com**

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