

JOVYSTAR COMPACT M/L

PRODUCT LEAFLET



The three-phase UPS systems of the JOVYSTAR COMPACT series cover a power range of 30 up to 500 kVA. The UPS systems of these series convince by its very high efficiency. An integrated control system is able to choose automatically the optimal operation mode to ensure the perfect operating status. The intelligent battery charging mode of the UPS systems can significantly lengthen the battery lifetime.

ONLINE UPS SYSTEMS

As online systems (double converter, continuous transducers technology) JOVYSTAR COMPACT UPS systems protect against interferences and failures of any kind in a secure and economic way.

HIGH EFFICIENCY BY INNOVATIVE TECHNOLOGY

UPS systems of the type JOVYSTAR COMPACT M offer performance ranges of 30, 40 60, 80 100, 125 and 160 kVA whereas the Wärtsilä JOVYSTAR COMPACT L systems offer 200-500 kVA. By mounting vertically all functional units only a small footprint is required. The UPS systems of these series convince by a very high degree of efficiency. They dispose of a PFC rectifier with IGBT technology with a very high input voltage range and a performance factor of $\cos \phi \approx 1$. The performance factor allows high cost savings when dimensioning the supply lines and possible emergency power systems. The operation modes Online Mode, ECO Mode (COMPACT M,L)

and UHE Mode (only compact L) can be chosen manually via an integrated intelligent control system of the UPS. This integrated control system optimises the operating mode autonomously and guarantees the best possible operating status of the UPS system. All systems of the JOVYSTAR COMPACT series are equipped with a self diagnostic system and provide high dynamic in the event of load steps as well as an extreme low noise level. The harmonic component (THDI) of the rectifier is below 3 % in the rated operation. This low THDI allows a smaller dimensioning of emergency generators than with conventional rectifiers in Thyristor technology. For redundant operation (half load parallel operation) or for increased performance a parallel operation of up to 6 UPS systems is feasible without problems. During parallel connection of several systems active current sharing takes place and this takes into account not only the effective power, but also the reactive power during regulating.

TYPES JOVYSTAR COMPACT

JOVYSTAR COMPACT M 30
JOVYSTAR COMPACT M 40
JOVYSTAR COMPACT M 60
JOVYSTAR COMPACT M 80
JOVYSTAR COMPACT M 100
JOVYSTAR COMPACT M 125
JOVYSTAR COMPACT M 160
JOVYSTAR COMPACT L 200
JOVYSTAR COMPACT L 250
JOVYSTAR COMPACT L 300
JOVYSTAR COMPACT L 400
JOVYSTAR COMPACT L 500

Dimensions W x H x D [mm]

465 x 1230 x 650
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560 x 1800 x 940
560 x 1800 x 940
560 x 1800 x 940
560 x 1800 x 940
560 x 1800 x 940
880 x 1978 x 970
880 x 1978 x 970
1430 x 1978 x 970
1430 x 1978 x 970
1430 x 1978 x 970

Weight without batteries [kg]

120
140
250
300
320
360
380
720
850
900
1080
1250

TECHNICAL DATA

Power (cos phi = 1)	COMPACT M 30 kVA-160 kVA	COMPACT L 200 kVA - 500 kVA
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OUTPUT:

Voltage	Inverter: 3x400V/230V +15 % -20 %	
Phases	three phases (3:3)	
Frequency	50 Hz / 60 Hz ± 10 Hz	
Efficiency	>0,99	
THDI	<3 %	
No. of battery cells	360 / 372	
Battery charging voltage	818 V for 360 cells 846 V for 372 cells	
End-point voltage	620 V (360) / 632 V (372) 6	
Max.battery charging current	10A/8A/15A/50A	30A

INPUT:

Voltage	3 x 380/220V / 3 x 400/230V / 3 x 415/240V ±1% static load / ±2% static, asymmetrical load / ±5% dynamic load (load step 20 % -->100 % --> 20 %)	
Frequency	50 Hz (60 Hz) / ± 0.001 Hz	
Efficiency	30kVA/30kW; 40kVA/40kW; 60kVA/60kW; 80kVA/80kW; 100kVA/100kW; 125kVA/125kW; 160kVA/160kW (cos phi =1)	200kVA/200kW; 250kVA/250kW; 300kVA/300kW; 400kVA/400kW; 500kVA/500kW (cos phi =1)
THDI	< 1 % (linear load) bzw. < 5 % (non linear load)	
Overload Capacity Inverter	<125 % for 10 min, 125 %-150 % for 30 s, >150 % for 10 ms	
Overload Capacity Bypass	150 % permanent, 1000 % for 1 period	
Efficiency at Nominal Load		
Online mode	>95 %	>95 %
Battery operation	>97 %	>97 %
ECO mode	>98 %	>98 %
UHE mode	-	>99 %

SETTING:

Protection Degree	IP 20	
Classification	VFI SS 111	
Temperature	USV: 0°C bis +40°C Battery: 0°C up to +25°C; optimal +20 °C	
Humidity	< 95 % (no condensation)	
Noise Level	<57 dB(A)	<60 dB(A)

COMMUNICATION:

All system data can be accessed via RS 232/USB interface - optional they can be transmitted via SNMP adapter, modbus adapter, profibus or via other bus systems.

- **ONLINE UPS SYSTEM**
VFI / Double Converter Technology offers maximum safety for connected consumer/loads
- **HIGHEST PERFORMANCE IN COMPACT DESIGN**
Maximum Output Effective Power (KVA = KW)
- **LOW CURRENT RIPPLE**
and excellent Input Performance Factor
- **MAXIMUM COMPATIBILITY**
for each type of load and power supply
- **PRECISE BATTERY**
for maximum battery life
- **INTELLIGENT CONTROL**
The integrated, intelligent control system of the UPS automatically selects the optimum operating mode and ensures best possible efficiency.

Abb.1 JOVYSTAR COMPACT M

