JOVYATLAS

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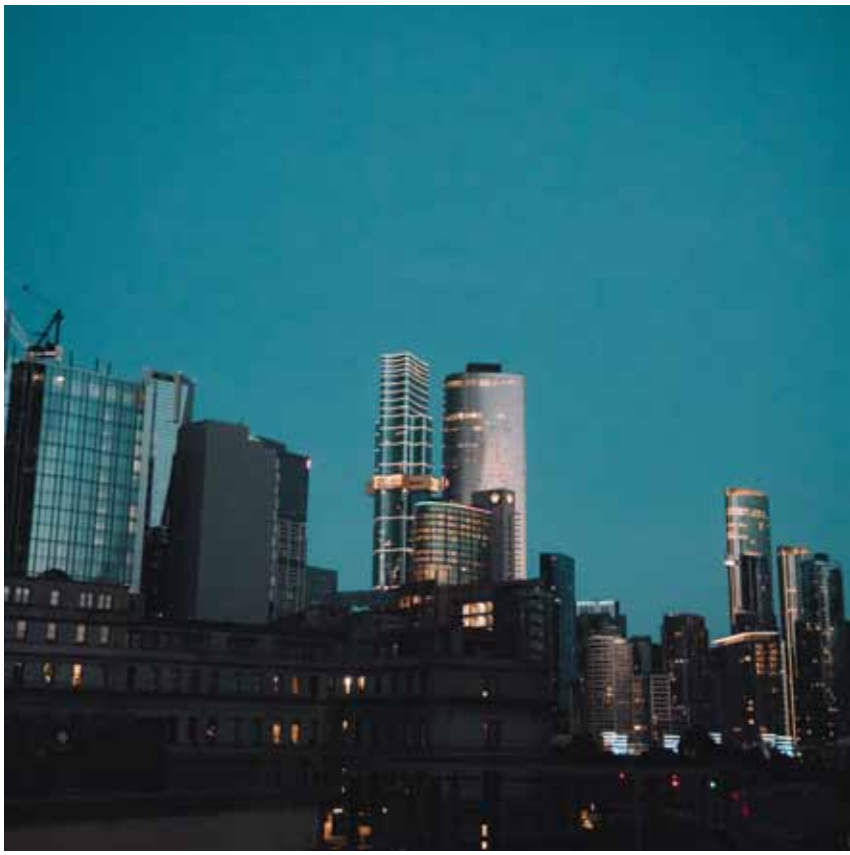

Our UPS systems

Handmade Made in Germany

www.jovyatlas.de

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From the cinema hall into the world

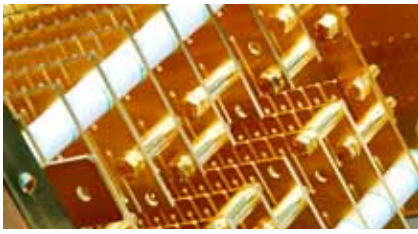
The story from a small start-up to a modern industrial company

Do you remember this? In old black-and-white films, you often see unwanted light-dark changing effects that disturb the viewing experience. The founder of JOVYATLAS, Dr.-Ing. Richard Jovy, had the brilliant idea at the end of 1945: A special rectifier for the lamps in the film projectors eliminated this effect. With this, he conquered the hearts of cinema operators and, of course, also those of the cinema-goers.

Another development was the "electronically controlled hall darkener"; this was the name of the patent from 1953 that we call dimmer today.

In the 1970s, JOVYATLAS rectifier technology was even used in television shows.

Together with a business partner from Italy, the company developed and produced systems for uninterruptible power supply (UPS systems) in the 1980s.



Since the mid-1990s, the range of products for customers has been expanded to include the "big hitters" in electrical engineering, the high-power resistors.

Today, the product range includes UPS systems, rectifiers up to 1,000 volts and 1,000 amps, as well as load banks for testing aggregates up to the megawatt range.

UPS systems from JOVYATLAS are real winners worldwide, for example, on cruise ships. But also in rescue control centres, supermarkets, office buildings, acute hospitals or universities as well as at airports, people know: With JOVYATLAS, the lights are always on.

Today, JOVYATLAS GmbH belongs to Jakob-Waitz-Industrie GmbH, a medium-sized family business based in Kassel, Germany.

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RCB
SBCB
MBCB
OCB
BCB

About UPS systems

What are UPS systems?

UPS stands for "Uninterruptible Power Supply". These systems ensure the continuous maintenance of critical electrical loads in the power grid. They are, therefore, different from emergency power systems, where the switchover results in a short interruption of the power supply.

Why UPS systems?

UPS systems from JOVYATLAS provide reliable protection worldwide against damage or impairment caused by power failure, undervoltage or overvoltage, frequency changes or harmonics. Our product range in the area of UPS systems is extremely wide, due to their diverse areas of application and possible uses.

Where are UPS systems used?

We offer you the right solution for every area of application and for every problem: whether for securing PCs or home offices to securing large networks and server systems, whether on land or at sea, in the field of medical care or industrial processes.

UPS possibilities

Monobloc

Monobloc UPSs are self-contained systems and therefore suitable for areas of application with a precisely defined infrastructure. They are available in discrete versions from less than 10 kVA to just over 1 000 kVA.

A monoblock system can be used individually or in parallel to increase power or redundancy in order to ensure failsafety for several MVA.

The monobloc UPSs are usually used with transformers for industrial applications. Here, the advantages of galvanic isolation and the clean output voltage outweigh the disadvantages.

In the event of a fault, as well as mains voltage disturbances, the solid and fault-tolerant construction ensures a stable supply. The proven technology offers high robustness and superior power supply for critical applications, even in harsh environments.

Modular

Modular UPSs are usually transformerless and, therefore, even more efficient. A system consists of several UPS modules working internally in parallel, as well as a central bypass module and battery connection.

All modules have the same nominal power and can be switched on and off without any problems. Thus, the modular concept allows the UPS power to be flexibly adapted to the individual power requirements. This means that the system operates with optimum efficiency.

The individual modules are hot-swappable - i.e. they can be replaced during operation. The UPS system automatically recognises the connected modules and system expansions can be carried out within minutes.

In the event of a failure, the system also automatically distributes the load to the remaining modules. This saves space and considerable costs because no additional, redundant UPS system is required as with monoblocks.

Industry

The different requirements in industry always call for special designs of UPS systems. Whether increased requirements relating to the given environment, shock and vibration loads or installation of additional equipment such as DC power supplies.

JOVYATLAS has established a leading position in this market segment in recent years. Our engineers develop professional and economical solutions, specially tailored to your requirements.

You are free to choose both the cabinet type and the colour, as well as the space for additional fittings. Of course, these systems can also be connected to your EDP system or central control centre in a wide range of ways.

UPS systems of this type series are designed to be service-friendly. All important assemblies can be replaced without great effort.

Our service

To ensure fast response times, JOVYATLAS GmbH has set up service points throughout the Federal Republic of Germany. In the event of a malfunction, the specialist staff at the JOVYATLAS headquarters in Jemgum provide support and coordinate the necessary service calls.

With an extensive, selected stock of spare parts , we ensure that we can respond to almost any conceivable problem at any time.

Our 24-hour service guarantees that you can reach our specialist staff at any time - around the clock, 365 days a year.

So please feel free to contact us at any time!

+49 (0) 49 58 93 94 0

service@jovyatlas.de

Whether it's a 24-hour service hotline, the provision of rental equipment, the offer of various spare parts, the performance of maintenance, network analyses, load tests or the commissioning of new plants – JOVYATLAS is your reliable and competent service partner.

UPS maintenance

Based on our many years of experience, wehave developed an effective and cost-optimised service programmefor our customers. When concluding a maintenance contract, our specialists check the function of the UPS system, including the battery. Together with you, we will then work out the necessary measures to ensure the continued operational safety and availability of your UPS system.

UPS Service

Our trained service technicians know the JOVYATLAS plants and systems down to the smallest component, and are competent contacts at your site. Our service staff will also advise you on all peripheral issues and inform you about the appropriate dimensioning of the connecting cables and fuses, as well as about compliance with the standards during installation. Furthermore, your staff will be instructed in the operation of the new system.

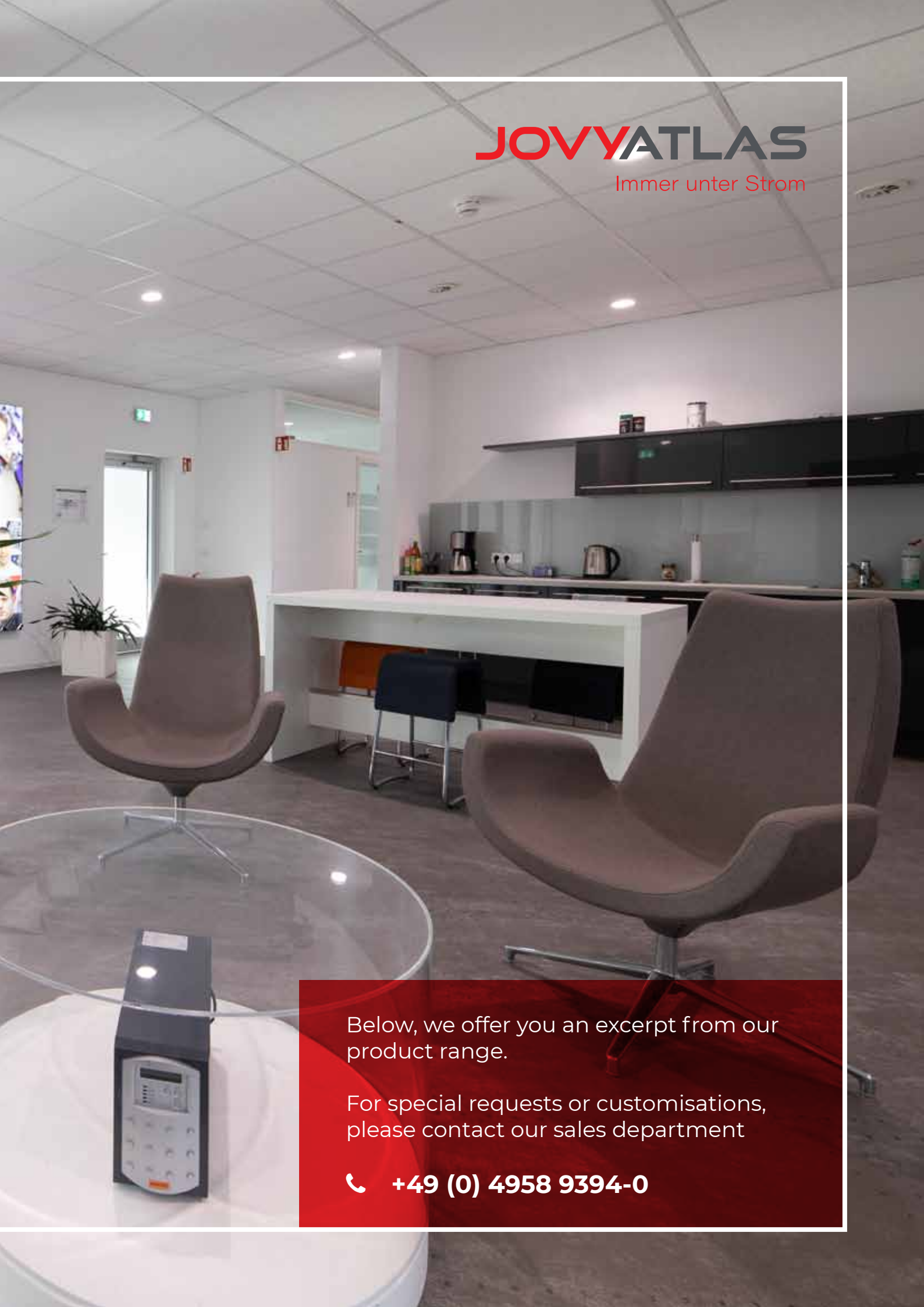
UPS leasing and rental

JOVYATLAS supplies you with a complete UPS system tailored to your specific needs as a rental system and thus offers you the opportunity to rent a UPS system for a short period of time at a fair price. We hold a limited contingent for our rental service and can deliver in the shortest possible time. Our service contacts will be happy to inform you about prices and modalities.

Network analysis

Is the quality of the energy supply indispensable and of utmost importance for your business ?Then you should not hesitate to have a network analysis carried out. It does not matter whether you are looking at a data centre, an industrial plant or office workplaces. We analyse your network on the UPS side and on the general supply side. We measure your 3-phase low-voltage power supply with our own equipment and detect events and anomalies.

Our UPS systems



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Below, we offer you an excerpt from our product range.

For special requests or customisations, please contact our sales department

+49 (0) 4958 9394-0

JOVYSKY M 3/3, 3/1

Technology and flexibility with the smallest footprint.

10 - 40 kVA

Thanks to its compact size, the JOVYSKY M UPS system is ideal for installation environments with small room dimensions, e.g. in small data centres. JOVYSKY M 3/3 provides comprehensive protection for business-critical applications thanks to extensive standard features.

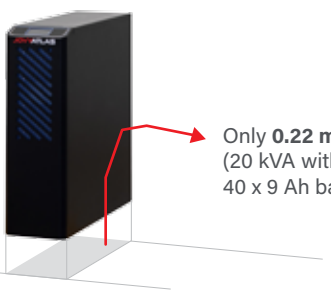
Data centre | Telecommunications | Medicine | Industry

Performance data

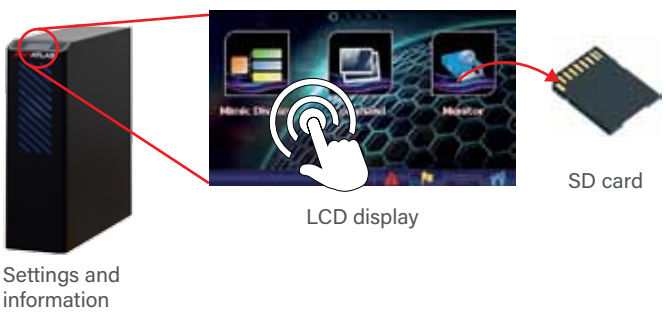
- Smallest footprint in this performance category: 0.22m² at 20 kVA with internal 40 x 9 Ah batteries
- Maximum flexibility through simple reconfiguration to 3/3, 3/1 version
- Powerful battery charger (10 kVA with up to 10 A charger as standard)
- 4-pole manual bypass and isolator switch
- Double grid feed-in
- Easy maintenance thanks to vertically mounted boards
- Energy and time-delayed start-up in generator mode adjustable. High input frequency range
- Protection against phase anomalies and wrong direction of rotation
- THDi <3 % for minimum mains load
- High overload capacity (up to 1 minute at 150 % overload)
- 26 to 40 batteries (for 10 kVA) or 32 to 40 batteries per string selectable and configurable via LCD
- Parallel configuration of up to 6 units for power extension or redundancy, adjustable via LCD
- Separate or battery supply for parallel systems
- Fast, intuitive and user-friendly operation via touch screen LCD
- Extensive standard communication interfaces: two communication slots, RS232, USB, programmable floating contact
- Simplified service procedures: UPS information, settings and log files easily downloaded to SD card via LCD
- Cold start function integrated as standard
- Up to 40 x 9 Ah internal batteries

Smart functions

Small footprint:



Load settings onto SD card:



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Specifications

Model		10 kVA (3/3)	15 kVA (3/3)	20 kVA (3/3)	40 kVA (3/3)
Input	Voltage	400 V 3-phase + N			
	Tolerance	± 20 % at 100 % load			
	Frequency range	45-70Hz			
	Power factor	≥ 0.99			
	THDi	<3 %			
Output	Voltage	380/400/415 V 3-phase + N			
	Tolerance	± 1 % (at static load)			
	Power factor	0.9			
	Frequency	50/60 Hz			
	Tolerance	± 0.01 %			
	Crest factor	3:1			
	THD	<2 % linear load; <5 % distorting load			
	Overload	110 % for 60 min, 125 % for 10 min, 150 % for 1 min, >150 % and <300 for 3 sec			
Battery	Number per string	26-40 configurable	32-40 configurable		
	Maximum charging current	10 A	21 A	30 A	39 A
	Common battery system	Yes			
	Internal batteries	Up to 40 x 12 V/9 Ah batteries		No	
Efficiency	VFI mode	Up to 95			
	ECO mode	Up to 98			
	Backup mode	Up to 94			
General	Parallel operation	Up to 6 units can be connected in parallel			
	Dimensions W x D x H (mm)	260 x 890 x 850 (incl. castors)			
	Weight without batteries (kg)	74	76	85	88
	Protection class	IP20			
	Display and MMI	4.3" colour LCD, touch screen, swipe technology			
	Communication	RS232, USB, EPO, floating contacts (programmable), 3IN + 1OUT, additional communication slots for optional cards			

Options

- Isolating transformer
- Transformers/ autotransformers for potential separation or voltage adjustment
- Temperature-dependent equalisation of the charging voltage
- Manual bypass in external wall switch box
- Battery switch with fuses in the wall switch box
- Battery cabinets for long autonomy times
- Parallel connection of up to 8 units to increase system redundancy.
- Optional load-sync function
- Common battery management (60 to 160 kW)
- Tripping device as regeneration protection
- 7-inch colour touch screen display for UPS from 60 to 160 kW

For further details, please call us:
+49 (0) 49 58 93 94 0

JOVYSKY L 3/3

3-Phase High Performance UPS solution with the latest technology standards.

40 - 80 kVA

JOVYSKY L provides you with clean, stable and reliable power for all mission-critical 3-phase loads. JOVYSKY L is the best choice Small to medium-sized data centres and server environments. Ease of maintenance and intelligent error analysis minimise operating costs and reduce TCO.

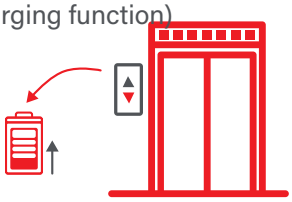
Data centre | Network | Medicine | Industry | Lift

Performance data

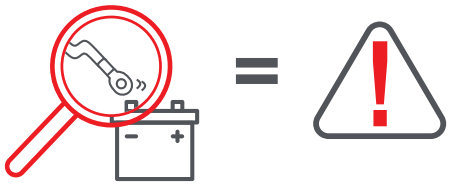
- Safe troubleshooting, diagnosis, rectification and testing under low voltage
- Supply of capacitive and inductive loads without power loss
- Energy and time-delayed start-up in generator mode adjustable. High input frequency range
- Compatible for use with lifts due to efficient use of regenerated energy with generative loads
- THDi <3 % for minimum mains load
- Cold start function (standard up to 20 kVA, optional up to 80 kVA)
- Simplified service procedures: UPS information, settings and log files easily downloaded to SD card via LCD
- Up to 40 kVA internal batteries (max. 2 strings per 40)
- 32 to 40 batteries per string selectable (26 to 40 for 10kVA) and configurable via LCD
- Ready for Li-Ion batteries and other battery technologies
- Smart battery detection. Immediate alarm when battery system disconnected
- Smart battery discharge – battery discharge tests without additional loads and connections
- Double mains supply and internal manual bypass
- Parallel configuration of up to 6 units for power extension or redundancy, adjustable via LCD
- Separate or common battery supply for parallel systems
- Fast and user-friendly operation via touch screen LCD
- Standard communication interfaces: two communication slots, RS232, USB, programmable floating contacts
- Protection against phase anomalies and wrong direction of rotation
- Powerful battery charger
- Thanks to 440 mm width suitable for cabinets with higher IP class
- High overload capacity (up to 200 ms at over 300 % overload)

Smart functions

Optimised lift compatibility
(with charging function)



Smart battery detection



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Specifications

Model		40 kVA	60 kVA	80 kVA
Input	Voltage	400 V 3-phase + N		
	Tolerance	± 20 % at 100 %, - 40 % at 50 % load		
	Frequency range	40 - 70 Hz (depending on the selected output frequency)		
	Power factor	>0.99		
	THDi	<3 %		
Output	Voltage	380/400/415 V 3-phase + N		
	Tolerance	± 1 %		
	Power factor	1		
	Frequency	50/60 Hz		
	Tolerance	± 0.01 %		
	Crest factor	3:1		
	THD	<1 % linear load; <3 % distorting load		
	Overload	110 % for 60 min, 125 % for 10 min, 150 % for 1 min, >150 % and <300 for 3 sec.		
Battery	Number per string	32-40		
	Maximum charging current	26 A	40 A	52 A
	Internal batteries	Yes	No	
Efficiency	Online mode	Up to 96		
	ECO mode	>98 %		
General	Parallel operation	up to 6 systems can be connected in parallel		
	Dimensions W x D x H (mm)	440 x 840 x 1390	600 x 827 x 1300	
	Weight without batteries (kg)	132	200	210
	Protection class	IP20		
	Display and MMI	4.3" colour LCD, touch screen, swipe technology		
	Communication	Standard: USB, EPO, 2 SNMP slots, floating contacts (1 IN/3 OUT)		
	Optional communication	RS232, RS-485 ModBus card, extra floating contacts		

Options

- SNMP adapter for remote monitoring, data exchange takes place via a LAN connection
- Relay card with alarm messages for industrial remote monitoring
- MODBUS card (RS-485)
- Connection box
- Temperature sensor
- Parallel kit

JOVYCUBE 3/3, 3/1

Modules can be exchanged during operation (hot swap).

Modular application 20 - 200 kVA

The modular UPS systems of the JOVYCUBE series are based on a 20 kVA UPS module and offer the flexible solution for power supplies from 20 kVA up to 640 kVA. The UPS modules deliver a winning performance with efficient power control, dynamic transitions without switching times, as well as the high efficiency of 96 %. They have extensive battery management with dynamic charge control. The JOVYCUBE UPS systems can operate both single-phase and three-phase.

Maritime applications

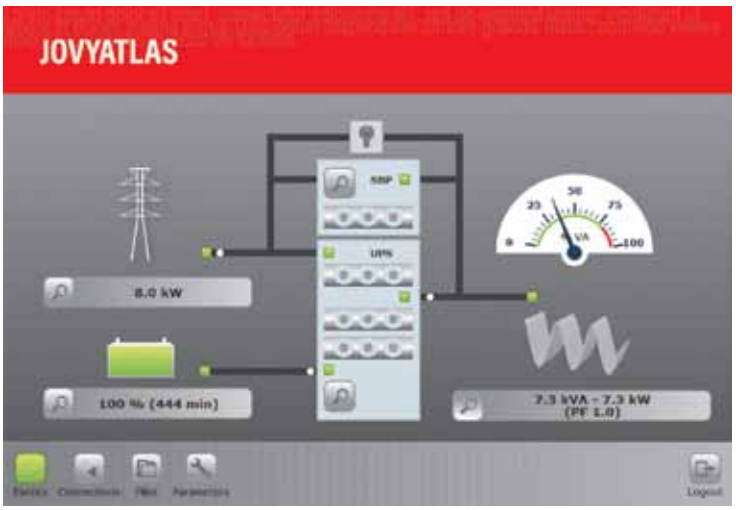
Offshore

Research

Performance data

- Modular online UPS system
  VFI/double conversion, highest safety for the connected loads
- Hot-swappable – exchange of modules during operation
- High efficiency saves energy costs
- Highest output power (KVA = KW)
- Efficient power control through intelligent, integrated control system
- Highest flexibility due to 20 kVA module
- Battery capacity and reserve time prediction

Smart functions



Touchscreen display

The7-inchtouchscreen display provides easy access to system monitoring through a powerful web-based graphical display.

In addition to the display, it is possible to access the same graphical user interface (GUI) via the Ethernet port on a PC. By default, this interface is located on the front panel.

The system is programmable via the web browser, no specific software is required.

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Specifications

Model		JOVYCUBE 60	JOVYCUBE 160	JOVYCUBE 200
Technical data	Power	20 - 60 kVA	20 - 160 kVA	20 - 200 kVA
	Output power per module	20 kVA / 20 kW	20 kVA / 20 kW	20 kVA / 20 kW
	Number of possible modules	1 - 3	1 - 8	1 - 10
	Cabinet dimensions W x H x D [mm]	600 x 1900 x 800	600 x 1900 x 800	600 x 1900 x 800
	Dimensions module W x H x D [mm]	483 x 133 x 600	483 x 133 x 600	483 x 133 x 600
	Weight module [kg]	24 kg	24 kg	24 kg
Input	Rated voltage	198 VAC to 264 VAC at >70 % load 150 VAC to 264 VAC at <70 % load 3 x 343 VAC/198 V+N to 3 x 457 VAC+N at >70 % load 3 x 260 VAC/150 V+N up to 3 x 457 VAC+N at <70 % load		
	Tolerances of the input voltage	47 Hz to 63 Hz		
	Frequency	47 Hz to 63 Hz		
	Power factor	≥0.99 from 25 % to 100 % load		
Output	Rated voltage	220 VAC or 230 VAC or 240 VAC (adjustable) 3 x 380 VAC+N or 3 x 400 VAC+N or 3 x 415 VAC+N		
	Output voltage stability	static: ≤ ±2% dynamic (load step 0 % to 100 % and 100 % to 0 %): ±3 %		
	THDI	with linear load <±2 %, with non-linear load <±4 % (EN62040-3-2001)		
	Frequency	50 or 60 Hz		
	Output frequency tolerances	Standby (AC input is not present): ± 0.1 % synchronised with AC input from 47 to 63 Hz Free running outside this area		
	Sliding load capacity	100 % per phase		
	Overload capacity	130 % over 15 sec, 110 % permanently (at nominal voltage, depending on ambient temperature)		
	Short-circuit capacity	4 x In with existing AC input within 20 ms		
	Crest factor	2.7:1		
	Efficiency 100 % / 75 % / 50 % / 25 %	AC-AC: 96 % / 96 % / 95 % / 93 % DC-AC: 97 % / 97 % / 95 % / 93 %		
Battery	VRLA battery, battery voltage: ±192 VDC (total 384 VDC) Number of battery cells: 192, with reduced power 180 cells can be used			

Options

- Potential free messages
- Touchscreen
- Temperature compensation
- Mains switching
- No internal battery
- Battery 18 Ah internal
- Battery 26 Ah internal
- BASYM 384 V internal
- BASYM 384 V external
- WLAN
- Generex SNMP budget
- Generex SNMP
- Generex PROFIBUS
- ModBus RTU
- Battery system BC, temperature compensation option
- Generex BACS
- IP23 Roof fan
- IP54 Roof ventilator
- Auxiliary fan
- Smart Bypass Module Insertion
- Decoupling the inputs
- Surge arrester SPD TNS ACI 275 FM

JOVYFLEX 3/3

Extremely flexible modular application.

20 - 250 kVA

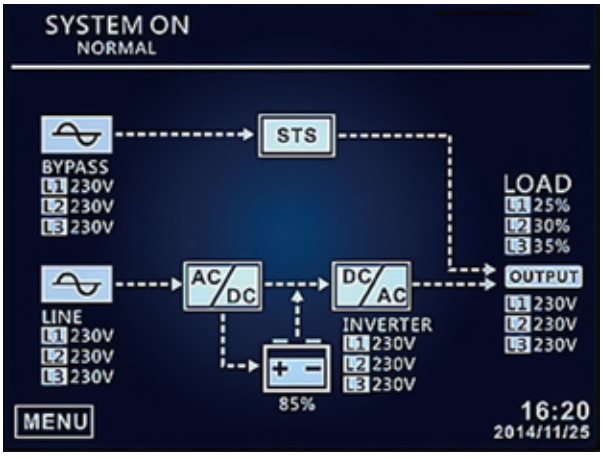
The new JOVYFLEX modular UPS range offers an extremely flexible solution for power supplies from 20 kVA up to 210 kVA. The UPS systems are based on 20 or 30 kVA power modules, as well as a static switch 120/180 or 210 kVA/kW. The UPS modules deliver a winning performance with efficient power control, dynamic transitions without switching times and a high efficiency of 95 %. JOVYFLEX modular UPS systems are the first choice, especially for use in data centres.

Data centre | Industry | Medicine | Telecommunications

Performance data

- Modular online UPS system
  VFI/double conversion, maximum safety
- Hot-swappable – exchange of modules during operation
- High efficiency saves energy costs
  Highest output power (KVA = KW)
- Efficient power control through intelligent, integrated control system
- Highest flexibility through 20 kVA or 30 kVA modules
- Battery capacity and reserve time prediction
- Can also be started without an available mains supply
  Cold start possible without problems
- Parallel switchable

Smart functions



ECO Energy saving

- Intelligent heat generation control, as well as noise reduction to extend service life and save energy

5.7-inch TFT LCD colour display and touch panel

- Fast, intuitive and user-friendly operation via touch panel under 5.7" TFT LCD display

Remote control

- Standard built-in remote control for monitoring, managing and operating the system remotely

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Specifications

Model		JOVYFLEX 120 (80)	JOVYFLEX 180 (120)	JOVYFLEX 210 (140)
Technical data	Power	20 - 120 kVA	20 - 180 kVA	20 - 210 kVA
	Power per module	20 kVA / 20 kW 30 kVA / 30 kW	20 kVA / 20 kW 30 kVA / 30 kW	20 kVA / 20 kW 20 kVA / 20 kW
	Power static switch	120 kVA	180 kVA	210 kVA
	Number of possible modules	1 - 4	1 - 6	1 - 7
	Cabinet dimensions W x H x D [mm]	600 x 1475x1100	600 x 1475 x 1100	600 x 2010 x 1100
	Dimensions module W x H x D [mm]	483 x 170 x 692	483 x 170 x 692	483 x 170 x 692
	Weight UPS cabinet without modules with 20 kVA modules with 30 kVA modules	100 kg 188 kg 335 kg	208 kg 237 kg 415 kg	307 kg 457 kg 549 kg
	Weight module [kg]	21.5 kg (20 kVA) 34.5 kg (30 kVA)	21.5 kg (20 kVA) 34.5 kg (30 kVA)	21.5 kg (20 kVA) 34.5 kg (30 kVA)
Input	Rated voltage	3x380 V/220 V, 3x400 V/230 V, 3x415 V/240 V (TN-C mains presettable)		
	Tolerances of the input voltage	3x305/176 VAC - 3 x 478/276 VAC at >70 % load 3x208/120 VAC - 3 x 478/276 VAC at <70 % load		
	Frequency	40 Hz to 70 Hz		
	Power factor	≥ 0.99 from 50 % to 100 % load		
Output	Rated voltage	3x380 V/220 V, 3x400 V/230 V, 3x415 V/240 V (TN-C mains presettable)		
	Tolerance range	<2 % at static load, <4 % at dynamic load (10 % - 100 % - 10 %)		
	Overload behaviour	105 % - 110 % for 60 minutes 111 % - 125 % for 10 minutes 126 % - 150 % for 1 minute >150 % for 200 ms		
	Frequency	50 or 60 Hz (automatic or adjustable)		
Battery	Number of battery cells	192 (minimal) 216 (nominal) 40 (maximum		
	Temperature compensation	5 mV per °C per cell (option)		
	Battery charging current	6A per module		

Options

- Relay card JOVYFLEX
- JOVYFLEX communication card
- Mini SNMP adapter 35CS141 MINI
- SNMP JOVYFLEX
- Temperature sensor JOVYFLEX
- Modbus adapter JOVYFLEX
- BASYM JOVYFLEX (2 per string)

JOVYSTAR COMPACT M 3/3

Efficient and compact UPS

30 - 160 kVA

The optimal solution for the absolutely uninterruptible power supply of critical applications for industrial processes, the health, finance, housing and tertiary sectors, transport, telecommunications, as well as network and data protection systems in small and medium-sized data centres.

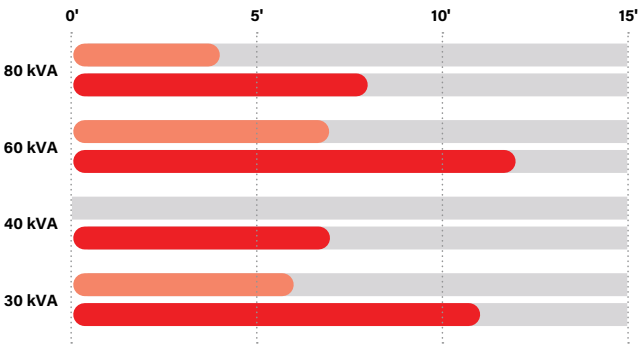
Data centre | Network | Industry | Medicine

Performance data

- Online UPS system
  VFI/double conversion, maximum safety for the connected loads
- High power in a compact form
  Highest output power (KVA = KW)
- Low current ripple and excellent input power factor
- Maximum compatibility for any type of load and power supply
- Precise battery management for best possible battery life
- Intelligent control:
  The integrated, intelligent control of the UPS system automatically selects the optimal operating mode and ensures the best possible efficiency.
- Highly efficient green conversion technology already at low load percentages, with lowest TCO (Total Cost of Ownership) in this category.
- Internal batteries up to 80 kVA for solutions with a small footprint and maximum flexibility of use

Smart functions

Autonomy times with different internal batteries



7" touch screen colour display

JOVYATLAS
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Specifications

Model			COMPACT M
Technical data	Power		30 kVA - 160 kVA
Input	Voltage		3x400 V/230 V Rectifier: +15 % -20 %
	Phases		three-phase (3:3)
	Frequency		50 Hz / 60 Hz ± 10 Hz
	Power factor		>0.99
	Current distortion factor		<3 %
	No. of battery cells		360 / 372
	Battery charging voltage		818 V with 360 cells / 846 V with 372 cells
	Discharge voltage		620 V (360) / 632 V (372)
	Battery charging current max.		10 A / 8 A / 15 A / 50 A / 30 A
Output	Voltage		3 x 380/220 V / 3 x 400/230 V / 3 x 415/240 V ± 1 % static load / ± 2 % static, unbalanced load / ± 5 % dynamic load (load step 20 % ▷ 100 % ▷ 20 %)
	Frequency		50 Hz (60 Hz) / ± 0.001 Hz (with self-guidance)
	Power		30 kVA/30 kW; 40 kVA/40 kW; 60 kVA/60 kW 80 kVA/80 kW; 100 kVA/100 kW; 125 kVA /125 kW; 160 kVA/160 kW (cos phi =1)
	Distortion factor		<1 % (linear load) or <5 % (non-linear load)
	Inverter overload capacity		<125 % for 10 min, 125 % - 150 % for 30 s, >150 % for 10 ms
	Bypass overload capacity		150 % continuous, 1000 % for 1 period
	Efficiency at nominal load	Online mode	>95 %
		Battery operation	>97 %
		ECO mode	>98 %
General	Communication		All system data can be retrieved via an RS 232/USB interface - optionally they can be transmitted via SNMP adapters, Modbus adapters, Profibus or also via other bus systems.

Options

- Relay card
- SNMP BSC
- SNMP SC
- Temperature Sensor Kit CS121
- Temperature-Humidity Sensor Kit CS121
- MODBUS
- PROFIBUS
- JUMP
- Remote display
- Parallel switching unit
- Temperature compensation

For further details, please call us:
+49 (0) 49 58 93 94 0

JOVYSTAR COMPACT L 3/3

High efficiency - low space requirement

200 - 500 kVA

Efficient, compact solution with low operating costs for absolutely uninterruptible power supply of critical applications for network and data protection systems in medium and large data centres, the health, financial and tertiary sectors, industrial processes, construction, transport and telecommunications.

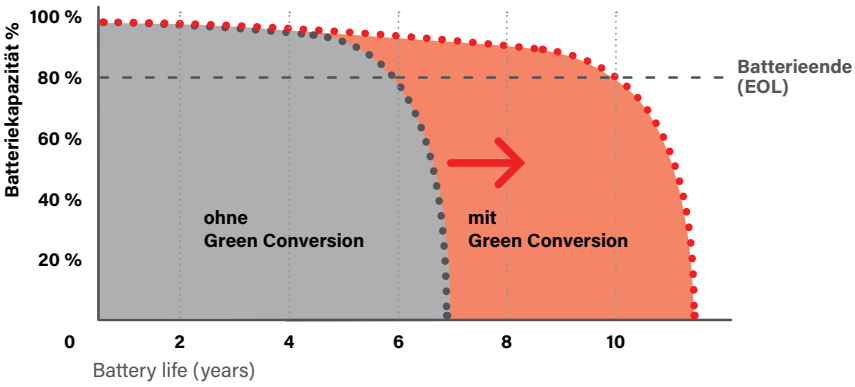
Data centre | Network | Industry | Medicine

Performance data

- Online UPS system
  VFI/double conversion, maximum safety for the connected loads
- High power in a compact form
  Highest output power (KVA = KW)
- Low current ripple and excellent input power factor
- Maximum compatibility for any type of load and power supply
- Precise battery management for best possible battery life
- Intelligent control:
  The integrated, intelligent control of the UPS system automatically selects the optimal operating mode and ensures the best possible efficiency.
- Three-stage green conversion technology, high system efficiency, low operating noise and lowest total cost of ownership in this category

Smart functions

Extending the battery's operating life with Green Conversion Battery Care



10" touch screen colour display

JOVYATLAS
Immer unter Strom

Specifications

Model			COMPACT L
Technical data	Power		200 kVA - 500 kVA
Input	Voltage		3x400 V/230 V Rectifier: +15 % -20 %
	Phases		three-phase (3:3)
	Frequency		50 Hz / 60 Hz ± 10 Hz
	Power factor		>0.99
	Current distortion factor		<3 %
	No. of battery cells		360 / 372
	Battery charging voltage		818 V with 360 cells / 846 V with 372 cells
	Discharge voltage		620 V (360) / 632 V (372)
	Battery charging current max.		10 A / 8 A / 15 A / 50 A / 30 A
Output	Voltage		3 x 380/220 V / 3 x 400/230 V / 3 x 415/240 V ± 1 % static load / ± 2 % static, unbalanced load / ± 5 % dynamic load (load step 20 % ▷ 100 % ▷ 20 %)
	Frequency		50 Hz (60 Hz) / ± 0.001 Hz (with self-guidance)
	Power		200 kVA/200 kW; 250 kVA/250 kW; 300 kVA/300 kW; 400 kVA/400 kW; 500 kVA/500 kW (cos phi =1)
	Distortion factor		<1 % (linear load) or <5 % (non-linear load)
	Inverter overload capacity		<125 % for 10 min, 125 % - 150 % for 30 s, >150 % for 10 ms
	Bypass overload capacity		150 % continuous, 1000 % for 1 period
	Efficiency at nominal load	Online mode	>95 %
		Battery operation	>97 %
		ECO mode	>98 %
		UHE mode	>99 %

Options

- SRC-2: Relay card, used for remote signalling of states and alarms.
- Parallel Load Sync: is used for communication between UPS systems connected in parallel.
- MODBUS RS485: used for external transmission of data via the MODBUS RTU protocol (RS485).
- Temperature sensor: used to detect the temperature in the battery cabinet/room and automatically adjust the charging voltage.
- SNMP: used for external transmission of data via LAN.
- Common battery: Control interface for a dual parallel system with common battery

JOVYSTAR PLUS 3/3, 3/1

Robust and compact – low operating costs.

10 - 20 kVA

JOVYSTAR PLUS UPS systems are available as single-phase or three-phase systems with output powers of 10 kVA, 15 kVA or 20 kVA. The UPS systems of this series can be operated in continuous converter mode/online mode (according to VFI-SS-111) or in standby mode to achieve the highest possible efficiency. For redundant operation (half-load parallel operation, n+1 operation) or to increase power, a parallel connection of up to six systems is possible.

Network Industry Medicine

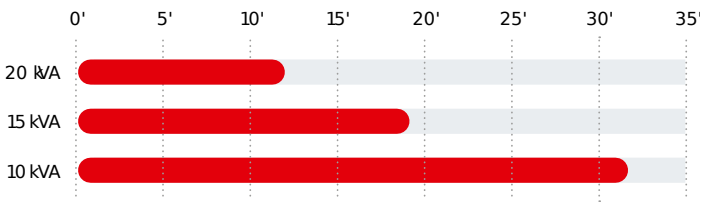
Performance data

- Online UPS system, VFI/double conversion, highest safety for the connected loads
- PFC rectifier with IGBT technology
- Integrated diagnostic system detects errors and informs the user via LCD
- Power increase through parallel connection
- RS 232 interface for monitoring all system data and for computer shutdown
- Internal manual bypass ensures supply to the load during maintenance or malfunctions
- Overload-proof and short-circuit-proof
- Low weight

Smart functions

- Programmable performance data can be called up via LCD display
- High autonomy times despite small overall size

Autonomy times with different internal batteries



JOVYATLAS
Immer unter Strom

Specifications

Model			JOVYSTAR PLUS		
Technical data	Power		10 kVA	15 kVA	20 kVA
Input	Voltage	single-phase (3:1)	Rectifier 3 x 400/230 V +15 % -20 %; bypass: 230 V		
		three-phase (3:3)	Rectifier 3 x 400/230 V +15 % -20 %		
	Frequency		50 Hz / 60 Hz ± 5 %		
	Power factor		0.99		
	Current distortion factor		<4 %		
	Battery		maintenance-free, sealed lead batteries Service life 10 - 12 years according to EUROBAT Number of battery cells: 2 x 180		
	Battery charging voltage		2 x 409.5 V (2.275 V per cell)		
	Battery discharge voltage		2 x 310 V (1.72 V per cell)		
	Battery charging current max.		15 A		
Output	Voltage	single-phase (3:1)	1 x 220 V / 1 x 230 V / 1 x 240 V ± 1 % static / ± 2 % static, asymmetric / ± 5 % dynamic (load step 20 % ▷100 % ▷ 20 %)		
		three-phase (3:3)	3 x 380/220 V / 3 x 400/230 V / 3 x 415/240 V ± 1 % static load / ± 2 % static, unbalanced load / ± 5 % dynamic load (load step 20 % ▷ 100 % ▷ 20 %)		
	Frequency		50 Hz (60 Hz) ± 0.001 Hz (with self-guidance)		
	Efficiency		at nominal load: >92 %, at battery operation >95 %, at ECO mode >98 %		
	Distortion factor		<2 % with linear load, <5 % with non-linear load		
	Inverter overload capacity		<125 % for 10 min, 125 - 150 % for 30 s, >150 % for 10 s		
	Bypass overload capacity		150 % continuous, 1000 % for 1 period		
General	Communication		All system data can be retrieved via an RS 232/USB interface - optionally they can be transmitted via SNMP adapters, Modbus adapters, Profibus or also via other bus systems.		

Options

- Isolating transformer
- Transformers / autotransformers for adaptation
- Temperature-dependent equalisation of the charging voltage
- Manual bypass in external wall switch box
- Battery switch with fuses in the wall switch box
- Battery cabinets for long autonomy times
- Parallel connection of up to 6 units to increase system redundancy
- Optional load-sync function
- Input terminals for the following auxiliary contacts: remote emergency stop, external bypass, diesel mode
- Separate bypass input on B8033FXS

JOVYTEC PE 1/1

High power density in a small space.

1 - 10 kVA

The JOVYTEC PE – the E stands for Evolution – is a further development of the JOVYTEC P series, which has sold well over 100,000 units. The systems are used worldwide on ships, in the industrial sector, in EDP and communication. The 5-language menu allows the user to make extensive settings. Versions with voltages of 115 volts for the input/ output, as well as special versions on request.

Computing centre

Tele-communication

maritime applications

renewable energies

Performance data

- Online UPS system
  VFI/double conversion
  Maximum safety for the connected loads
- 4 operating modes
  selectable via control panel
- Active power factor control
  guarantees sinusoidal current consumption
- Interfaces
  RS 232 interface, USB
- Alarm messages
  via acknowledgeable buzzer
- Easy battery replacement
  via the front. Only a few hand movements are needed and the complete battery cassette can be changed

Smart functions

UPSMON PRO interface in 5 languages

- Full programmability of the small UPS through UPSMON software

JOVYATLAS
Immer unter Strom

Specifications

Model		PE 1000	PE 1500	PE 2000	PE 3000
Technical data	Power	1000 VA	1500 VA	2000 VA	3000 VA
	cos phi 0.9 ind.	900 W	1350 W	1800 W	2700 W
Input	Voltage	230 V standard, other voltages on request Input voltage ranges: 168-276 V (0-100 % load) 140-159 V (0-70 % load) 120-139 V (0-40 % load)			
	Power	4 A	5.7 A	7.7 A	12 A
	Phases	single-phase			
	Frequency	50 Hz / 60 Hz ± 3 Hz			
	Power factor	0.98			
	Battery	maintenance-free, sealed lead-acid battery			
	DC link voltage	36 V	48 V	72 V	96 V
	Ext. protection	D01/10 A		16 A	
	Bypass	Input voltage range (configurable): 184 - 265 VAC			
Output	Voltage	230 V standard (208/220/240 V selectable via panel); other voltages on request			
	Frequency	50 Hz/60 Hz automatic adjustment by the UPS systems			
	Power factor	cos phi 0.9 ind.			
	Distortion factor	<3 % with linear load			
	Overload behaviour	106-120 % for 30 sec. - 121-150 % for 10 sec.			
	Crest factor	3:1			
Battery	Type	12 V 7 Ah	12 V 7 Ah	12 V 7 Ah	12 V 7 Ah
	Quantity	3	4	6	8
	closed, maintenance-free	Yes			
	typical recharge time	4 h / 90 %			
Surround-ings	Noise level at approx. 1 m distance	<45 dB(A)	<45 dB(A)	<50 dB(A)	<50 dB(A)
	Temperature	0 °C to 40 °C (15 °C to 25 °C recommended, battery: 20 °C)			
	Humidity	0 % to 95 %, non-condensing			
General	Communication	RS 232 interface and USB			

Options

- Relay card
- Fixed connection
- Software
- SNMP adapter
- External manual bypass
- External battery module
- External battery connection

JOVYTEC PME 1/1

High power density in a small space.

1 - 10 kVA

JOVYTEC PM E UPS systems are available with power ratings from 1000 VA to 10000 VA. Many applications in the maritime, industrial and data processing sectors use the JOVYTEC PME series of continuous transformer systems. This is due to the high quality, the extensive equipment and the versatile application possibilities. The 2000 and 3000 VA systems are also available as a short version with a depth of 425 mm for installation in industrial cabinets.

Computing centre

Tele-communication

maritime applications

renewable energies

Performance data

- Online UPS system
  VFI/double conversion
  Maximum safety for the connected loads
- 4 operating modes
  selectable via control panel
- Active power factor control
  guarantees sinusoidal current consumption
- Interfaces
  RS 232 interface, USB
- Alarm messages
  via acknowledgeable buzzer
- Easy battery replacement
  via the front. Only a few hand movements are needed and the complete battery cassette can be changed

Smart functions

UPSMON PRO interface in 5 languages

- Full programmability of the small UPS through UPSMON software

JOVYATLAS
Immer unter Strom

Specifications

Model		PM E 1000	PM E 1500	PM E 2000	PM E 3000
Technical data	Power	1000 VA	1500 VA	2000 VA	3000 VA
	cos phi 0.9 ind.	900 W	1350 W	1800 W	2700 W
Input	Voltage	230 V standard, other voltages on request Input voltage ranges: 168-276 V (0-100 % load) 140-159 V (0-70 % load) 120-139 V (0-40 % load)			
	Power	3 A	4 A	5.7 A	7.7 A
	Phases	single-phase			
	Frequency	50 Hz / 60 Hz ± 3 Hz			
	Power factor	0.98			
	Battery	maintenance-free, sealed lead-acid battery			
	DC link voltage	36 V	48 V	72 V	72 V
	Ext. protection	D01/10 A			
Output	Voltage	230 V standard (208/220/240 V selectable via panel); other voltages on request			
	Frequency	50 Hz/60 Hz automatic adjustment by the UPS systems			
	Power factor	cos phi 0.9 ind.			
	Distortion factor	<3 % with linear load			
	Overload behaviour	106-120 % for 30 sec. - 121-150 % for 10 sec.			
	Crest factor	3:1			
Battery	Type	12 V 7 Ah	12 V 7 Ah	12 V 7 Ah	12 V 7 Ah
	Quantity	3	4	6	8
	closed, maintenance-free	Yes			
	typical recharge time	4 h / 90 %			
Surround-ings	Noise level at approx. 1 m distance	<45 dB(A)	<45 dB(A)	<50 dB(A)	<50 dB(A)
	Temperature	0 °C to 40 °C (15 °C to 25 °C recommended, battery: 20 °C)			
	Humidity	0 % to 95 %, non-condensing			
General	Communication	RS 232 interface and USB			

Options

- Relay card
- Fixed connection
- Software
- External manual bypass
- 19 inch mounting rails
- External battery module
- External battery connection
- SNMP adapter

JOVYSECURE

High recharge current – high overload capacity.

10 - 160 kVA

The ECS (Emergency Central Systems) series complies with EN 50171 and provides absolutely uninterruptible power supply for emergency and safety equipment such as emergency and safety systems, emergency lighting, fire alarm and extinguishing systems, as well as security systems.

Emergency and security systems

Emergency lighting

Fire alarm and Extinguishing systems

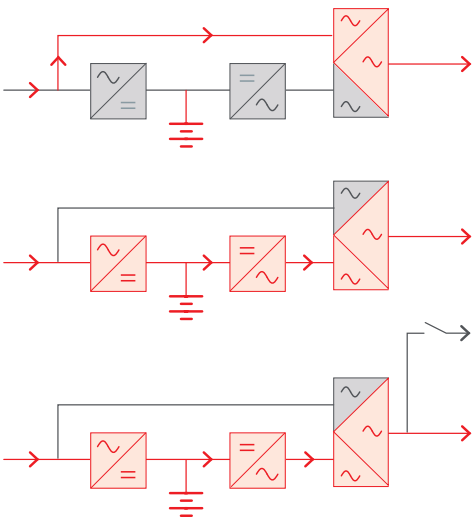
Security systems

Performance data

- Permanent overload capacity of 120 % referred to the rated power
- Batteries with an expected life of 10 years
- Reverse battery protection
- Deep discharge protection
- Short-circuit protection
- High-current charger for recharging to 80% of autonomy in 12 hours
- Equalisation of the charging voltage according to the temperature
- Metal housing IP 20 according to EN 60598-1
- Guarantees continuous operating cost savings through patented Green Conversion technology with high efficiency that protects the durability of critical components and batteries
- Transformerless for small footprint and reduced environmental impact
- Easy access for fast maintenance and low MTTR
- Battery cabinets and racks with acid protection treatment

Smart functions

- Compliance with EN 50171
- Enables the reduction of installation costs as well as easier regular inspections.



JOVYATLAS
Immer unter Strom

Specifications

Model		80 kVA	100 kVA	125 kVA	160 kVA
Technical data	Rated power according to EN 50171	67 kVA	83 kVA	104 kVA	133 kVA
Input	Connection type	Terminals, 4 cores (rectifier), 4 cores (bypass)			
	Rated voltage	400 Vac three-phase current with neutral conductor (rectifier); 380/400/415 Vac three-phase current with neutral conductor (bypass)			
	Voltage tolerance	-20 %, +15 % (rectifier); ± 10 % (bypass)			
	Frequency	50/60 Hz, 45 ÷ 65 Hz			
	Power factor	>0.99			
	Current distortion factor	<3 %			
Output	Connection type	Terminals, 4 cores			
	Rated voltage	380/400/415 Vac three-phase current, three phases with neutral conductor			
	Frequency	50/60 Hz			
	Voltage stability	Static: ± 1 %; dynamic: IEC/EN 62040-3 Class 1			
	Power factor	Up to 1, without reduction in performance			
	Permissible overload according to EN 50171	120 % at continuous load, 150 % for 10 min.			
	Efficiency (AC/AC) according to IEC/EN 62040-3	Up to 99			
	Classification according to IEC/EN 62040-3	VFI-SS-11			
Surroundings	Noise level at approx. 1 m distance	<60 dBA			
	Operating temperature	0 °C ÷ +40 °C			
	Storage temperature	-10 °C ÷ +70 °C			
General	Communication	Serial connection RS-232 and USB; signalling contact for activation of regenerative protection; input terminals for auxiliary contact, external battery switch, remote emergency stop, auxiliary contact manual, external bypass, contact for diesel generator mode			

Options

- Kit for SA+SE mode
- Isolating transformer
- Separate bypass inputs for E8033 ECS
- Kit for parallel operation
- Backfeed protection (standard in sizes 10, 15 and 20 kVA)
- Relay card
- SNMP adapter
- PROFIBUS
- MODBUS
- Battery symmetry monitoring
- Parallel redundancy systems

JOVYSTAR BSV systems

Safety power supply systems for medical rooms and areas.

5 - 100 kVA, special requests on request

Particularly high demands are placed on the power supply in rooms used for medical purposes in hospitals, because a power failure can endanger the health or life of patients. JOVYATLAS has been developing, producing and supplying safe power supply systems for hospitals, also known as battery-based central power supply systems, for more than 40 years.

Medicine Hospitals

Performance data

- Very good generator properties
- Easy handling
- Convenient operation
- Capacity check with mains regeneration
- Very good quality output voltage
- Extremely high overload capacity
- Extensive monitoring options Relay cards, SNMPA adapter, MODBUS, PROFIBUS
- Very low distortion factor
- Uncomplicated initiation of the capacity test (programmable)
- Clear display for programming and reading (LCD)

Smart functions

- Battery symmetry monitoring BASYM
- Simple operation
- Galvanic isolation in the input
- Capacity test through grid feedback via the inverter
- Good generator properties
- High overload capacity
- Fan control
- Optimum quality of the output voltage
- Signalling during trial operation
- Heavy-duty charging level
- Clear display (LCD)

JOVYATLAS
Immer unter Strom

Specifications

Model			5 kVA - 30 kVA	40 kVA - 100 kVA
Technical data	Input voltage	Rectifier	3 x 400/230 V AC ± 10 %, 50 Hz	3 x 400/230 V AC ± 10 %, 50 Hz
		Bypass	1 x 230 V AC ± 10 %	3 x 400/230 V AC ± 10 %, 50 Hz
	Output voltage		1 x 230 V AC ± 10 %, 50 Hz	3 x 400/230 V AC ± 10 %, 50 Hz
	Dynamics		±5 % at load step 91 % -10 % -90%	
	Overload capacity		150 % permanent, 200 % for 1 min, 900 % for 20 msec	
	DC voltages		5-10 kVA: 240 V DC 15-30 kVA: 384 V DC	40-100 kVA: 384 V DC
	Temperature		0 °C up to 40 °C	
	Battery		sealed, maintenance-free (service life 10-12 years according to EUROBAT)	
	Classification		VFD-Y-311 according to IEC/DIN/EN 62040-3	

TYPES	Battery	Power [kVA]	Dimensions W x H x D [mm]	Weight [kg]
JOVYMED 5-240-1ph-3h-Ik 350A	Lead 3 h	5	800 x 1900 x 800	390
JOVYMED 10-240-1ph-3h-Ik 350A	Lead 3 h	10	800 x 1900 x 800	497
JOVYMED 15-384-1ph-3h-Ik 450A	Lead 3 h	15	800 x 1900 x 800	548
JOVYMED 20-384-1ph-3h-Ik 450A	Lead 3 h	20	800 x 1900 x 800	616
JOVYMED 30-384-1ph-3h-Ik 450A	Lead 3 h	30	800 x 1900 x 800	760
JOVYMED 40-384-3ph-1h-Ik 450A	Lead 1 h	40	1200 x 1900 x 800	1061
JOVYMED 60-384-3ph-1h-Ik 450A	Lead 1 h	60	2x800 x 1900 x 800	1160
JOVYMED 80-384-3ph-1h-Ik 450A	Lead 1 h	80	2x800 x 1900 x 800	1290
JOVYMED 100-384-3ph-1h-Ik 450A	Lead 1 h	100	2x1200 x 1900 x 800	1325

Options

- Battery connection unit BAE
- Analogue active power meter
- Analogue meter battery current
- Multiplication of messages
- Protocol printer for the capacity sample
- MODBUS connection
- Increase of Ik > 1kVA possible
- Design for 3-hour battery
- NiCd battery
- higher capacities
- external manual bypass

Immer unter Strom.

Legal notice

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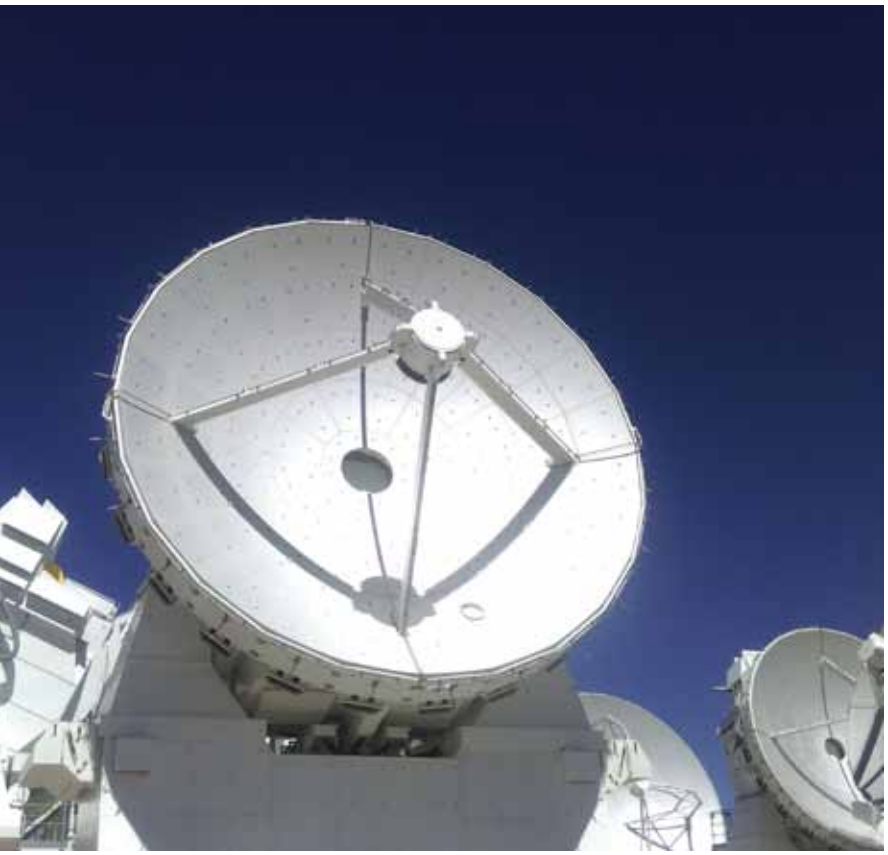

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