

Modular UPS

**Modular,
reliable** and
scalable energy



Industrial Motors

Commercial &
Appliance Motors

Automation

Digital &
Systems

Energy

Transmission &
Distribution

Coatings

Driving efficiency and sustainability





Modular, reliable and scalable energy



The WEG UMDW Modular UPS is the ultimate solution for critical applications that demand safety, flexibility and efficiency. Equipped with scalable 25 kVA/kW power modules, it seamlessly adapts to the growth of your operation, ensuring both redundancy and uninterrupted power supply. With industry-leading energy efficiency — reaching up to 99% in *Eco* mode — it significantly reduces operating costs.

Ideal for data centers, hospitals, industrial facilities, and IT infrastructure, the UMDW stands out for its reliability and double-conversion online technology, delivering high-quality power to sensitive loads. Discover how WEG's modular UPS can protect and optimize your business.



Benefits



Hot swap:
module replacement without
interrupting operation.



Parallelism:
expansion to up to 8 cabinets,
totaling 1.6 MW.



High efficiency:
up to 95.5% in *Online* mode and
99% in the *ECO* mode.



Double conversion online:
highly precise output voltage, protecting
against transients and harmonics.



Battery compatibility:
VRLA, NiCd and Lithium.

Main characteristics



1 7" touchscreen HMI

2 Panel latch

3 Slots for power modules

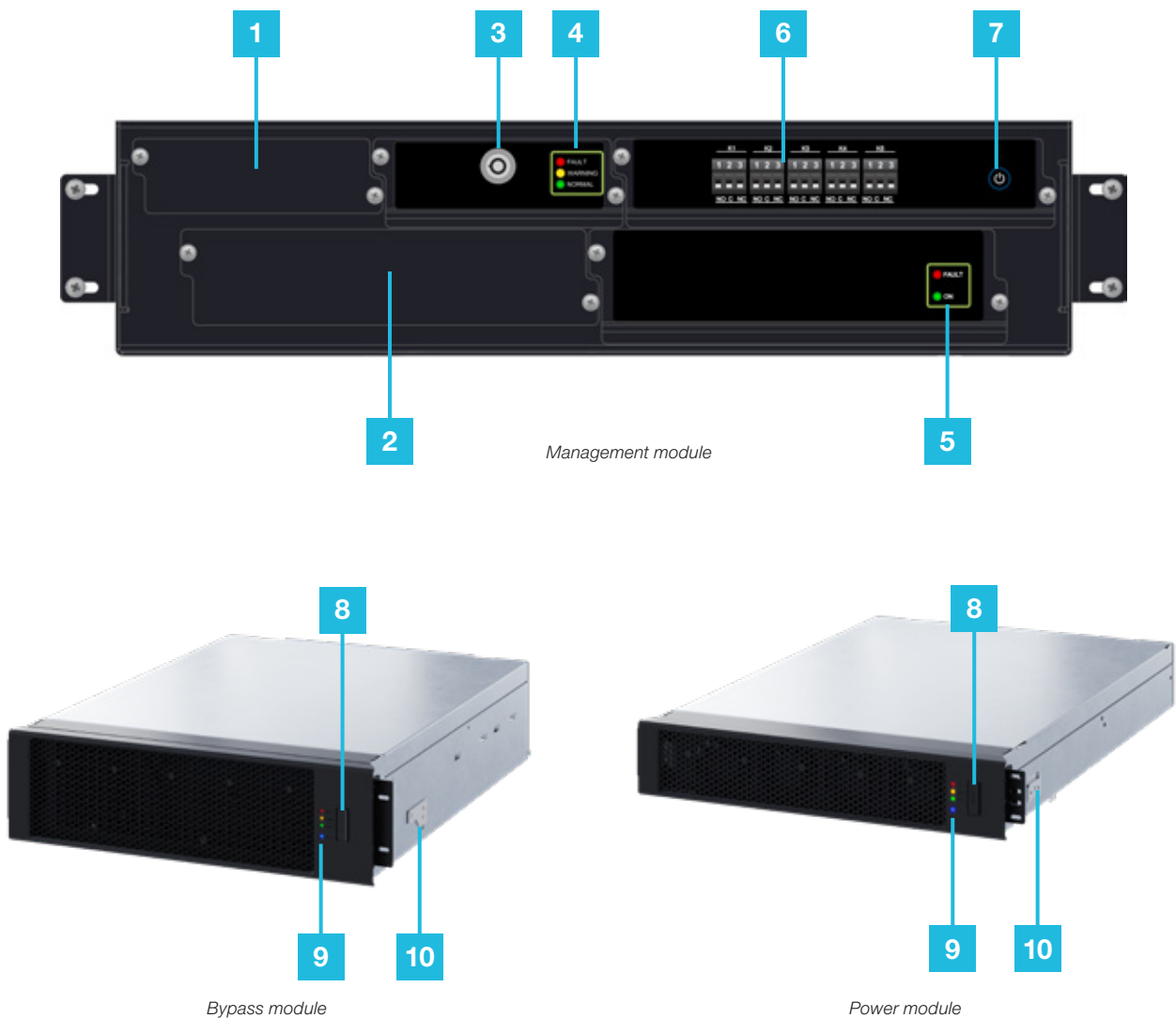
4 Bypass module

5 Management module

6 Maintenance bypass

7 Access to cable connections

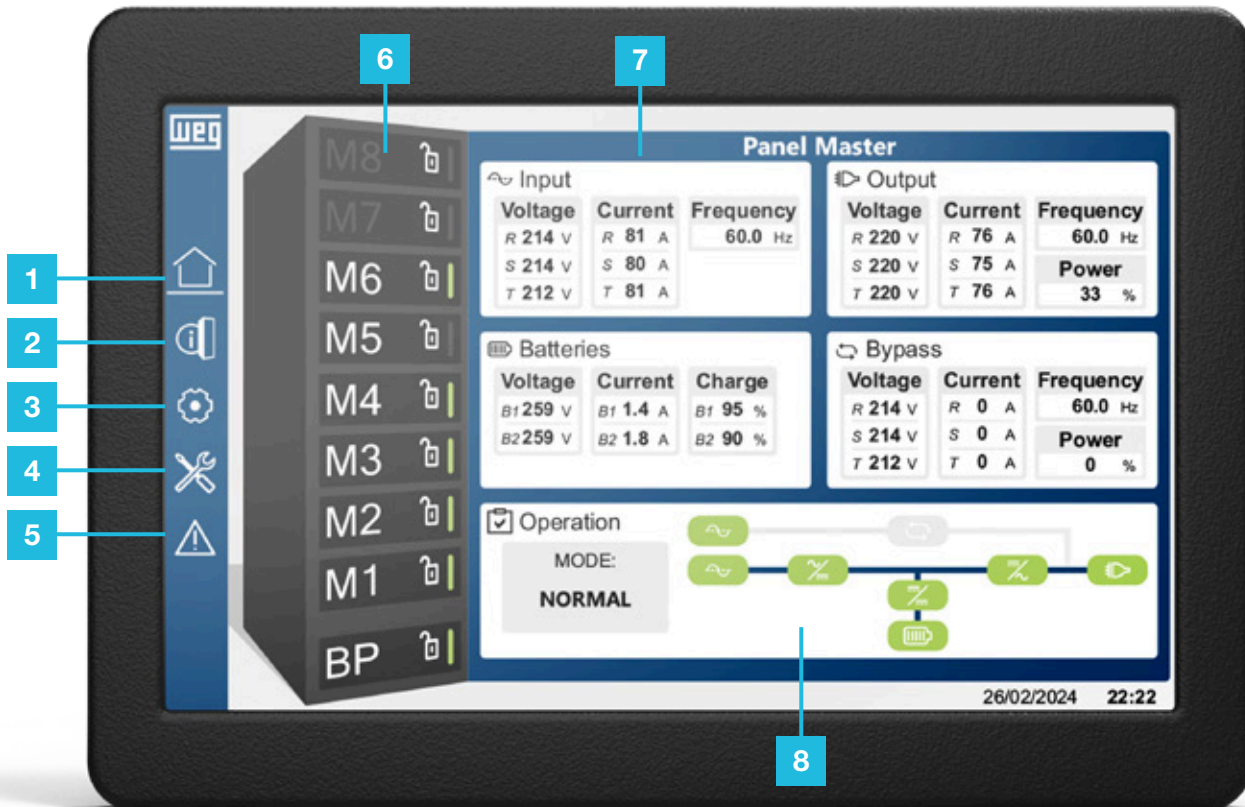
Main characteristics



- | | | |
|---|---|--|
| 1 Slot of the redundant control module | 2 Slot of the protection module and redundant power supply | 3 Hot-swap safety lock for the control module |
| 4 Control mode status LED indicators | 5 Status LED indicators for the protection module and power supply | 6 Dry contact outputs |
| 7 DC start and ON/OFF button | 8 Hot-swap lock | 9 LED indicators |
| | | 10 Safety lock |

HMI

The UMDW Human-Machine Interface (HMI) is designed to make user interaction with the system simple and efficient. Featuring a 7-inch touchscreen display, the HMI provides an intuitive panel that offers real-time access to system functions and information.



- | | | |
|------------------------|------------------------|--------------------------------|
| 1 Main menu | 2 Measurements | 3 Settings |
| 4 Maintenance | 5 Notifications | 6 Status of the modules |
| 7 General panel | 8 Mimic diagram | |

Applications



Data centers



Hospitals and laboratories



IT Infrastructure



Network operation center

Main features

Operating modes

UMDW features multiple operating modes, configurable via HMI.

- **Normal mode:** operates in double energy conversion, ensuring high-quality output voltage and protecting against fluctuations in the power grid.
- **Battery mode:** powers the system in the event of failures or anomalies in the power input, using the battery bank.
- **Automatic bypass mode:** protects loads against overloads and internal faults by supplying power directly through the bypass input.
- **Eco mode:** energy-saving configuration that reduces power consumption by activating the inverter only when necessary.
- **Emergency mode:** completely shuts down the system in critical situations via external triggering.

Advanced monitoring

Ideal for ensuring operation and preventing interruptions.

- **Human-Machine Interface (HMI):** a 7-inch touchscreen display providing access to measurements, settings, and system status.
- **Intelligent sensors (CMSW):** monitor variables such as temperature, vibration, humidity, and pressure, generating alarms when values exceed configured limits.
- **Real-time diagnostics:** information on voltages, currents, power, and environmental conditions.
- **Notifications and logs:** event, alarm, and fault records for analysis and preventive maintenance.

Parallel operation

Allows power expansion and increased redundancy by configuring up to 8 units in parallel.

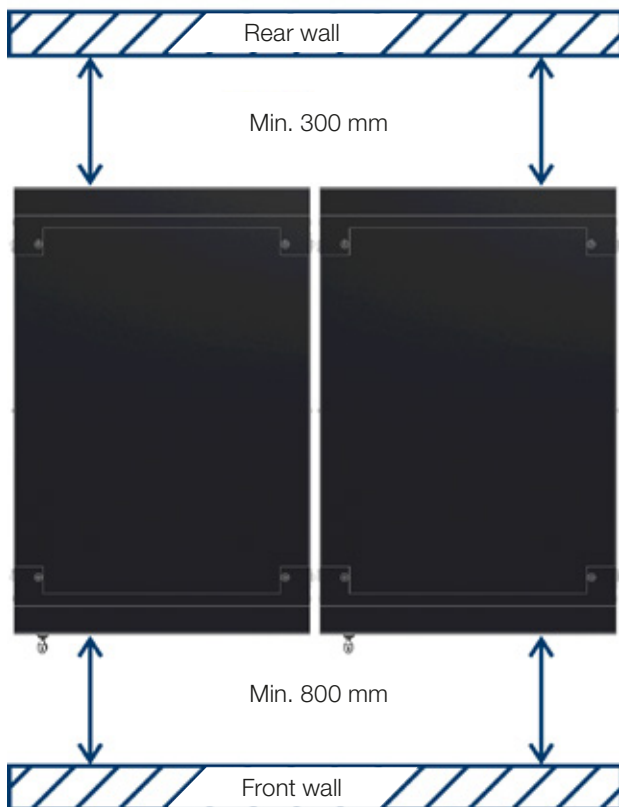
- **Scalability:** adapts to growing demand without the need to replace equipment.
- **Redundancy (N+1):** if a module fails, the others automatically take over the load.
- **Shared battery bank:** simplifies installation and ensures uniform power supply.
- **Synchronization and communication:** utilizes a CAN network to operate as a single unit, guaranteeing stability.



Dimensions



Installation



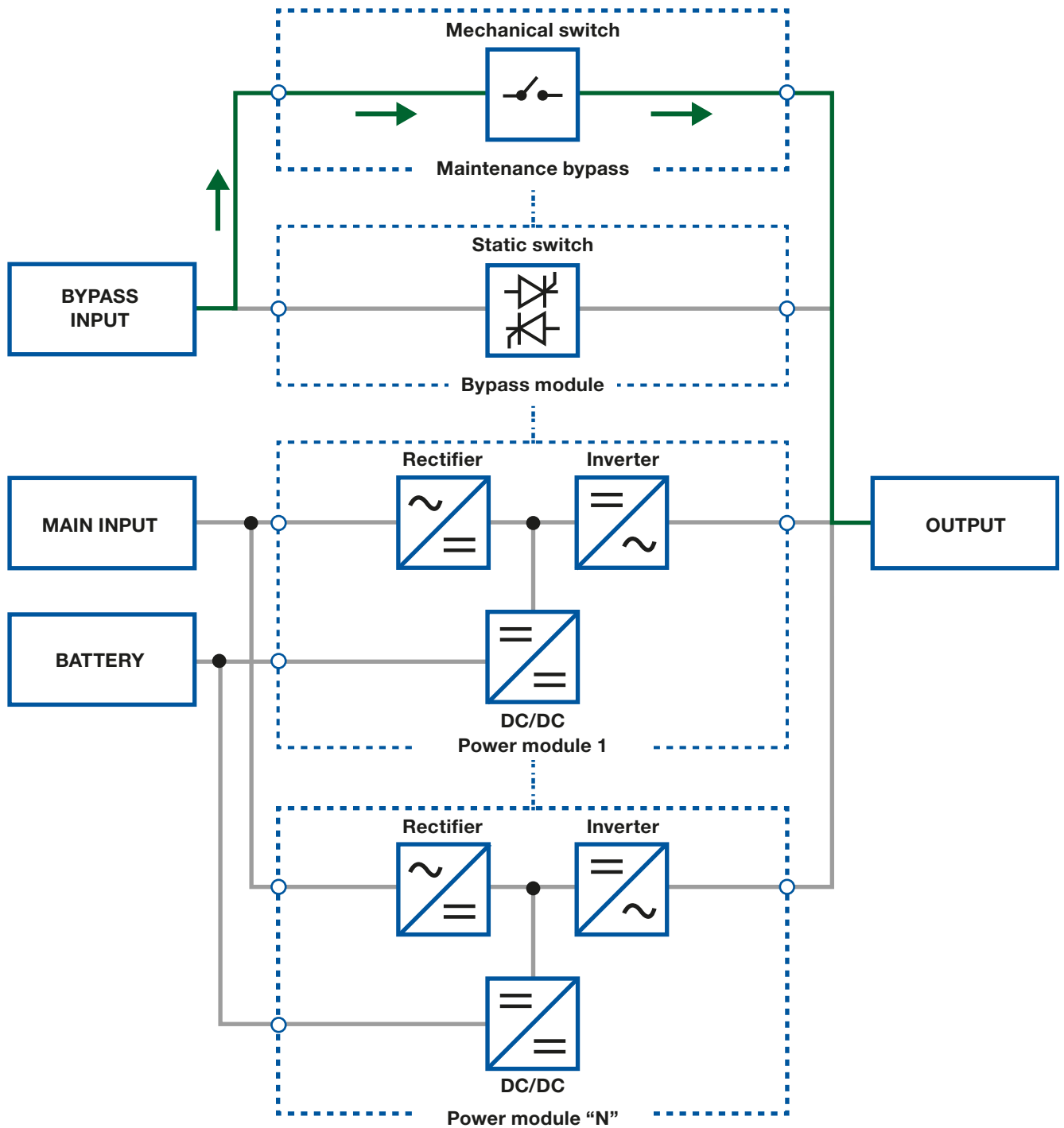
Technical data

Basic information			
Frame	UMDW Frame I	UMDW Frame II	UMDW Frame III
Output power (kVA)	75	125	200
Dimensions (Height x Width x Depth)	2,000 x 600 x 800 mm		
Parallel operation	Up to 8 products		
Protection rating	IP21 (includes accessories)		
Ambient temperature	0 to +40 °C		
Air relative humidity	5 to 95% non-condensing		
Noise level at 1 meter	65 to 70 dB		
Altitude (m)	Up to 1,000 (above this, with derating)		
Storage temperature	0 to 70 °C		
Operating environment	Internal, sheltered, free of inflammable and/or corrosive gases		
Grounding system	TN, TT or IT		
Cable outlet	Cable exit through the bottom of the panel		
Human-machine interface	7-inch touchscreen display		
Efficiency (%)	Up to 95.5% online and 99% in ECOMODE		
Ef100 (%)	95	95.1	95.3
Ef75 (%)	95.3	95.4	95.5
Ef50 (%)	95	95.1	95.3
Ef25 (%)	94	94.1	94.3
Rectifier			
Number of wires	3 phases + Neutral		
Input voltage range (V) (F-N)	185-275 (without derating)		
Rated current (A) (220 V FN)	119.6	199.4	319
Maximum current (A) (185 A FN)	142.2	237.1	379.3
Power factor	≥0.99		
THDi (%)	<3%		
Input frequency	Nominal 50/60 Hz, range 40 to 70 Hz		
Compatible with generating unit	Yes		
Short-circuit capacity (kA)	35 kA @415 V		
Inverter			
Number of wires	3 phases + Neutral		
Rated phase voltage (V) (FN)	220/230/240		
Static voltage regulation	±1%		
Operating frequency	50 or 60 Hz		
Total voltage harmonic distortion (THDv)	<3% for linear load and <5% for non-linear load		
Rated current (A) (220 V FN)	113.6	189.4	303
Rated current (A) (230 V FN)	108.7	181.2	289.9
Rated current (A) (240 V FN)	104.2	173.6	277.8
Crest factor	03:01		
Load step regulation	Class 1 – according to IEC 62040-3		
Overload capacity <110%	All the time		
Overload capacity: ≥125% <150%	10 minutes		
Overload capacity: ≥150%	1 minute		

Technical data

Battery bank	
Number of wires	3 wires (positive, neutral and negative)
Equipped with internal batteries	No
Quantity of VRLA batteries	36 to 44 batteries
Rated voltage (V) – VRLA	432 (36 batteries)
Maximum equalization voltage (V) – VRLA	633 (44 batteries) 14.4 V per battery
Maximum float voltage (V) – VRLA	598 (44 batteries) 13.6 V per battery
Minimum voltage (V) – VRLA	378 (36 batteries) 10.5 V per battery
Cold start	Yes
Compatible battery types	VRLA / NiCd / Lithium-ion
Maximum charging current per module	10 A
Bypass	
Number of wires	3 phases + Neutral
Type of automatic bypass	Static switch
Maintenance bypass switch	Internal manual switch
Bypass input	It can be independent from the main input or share the same power source
Bypass transfer time	0ms
Short-circuit capacity (kA)	35 kA @ 415 V
Overload capacity <125%	All the time
Overload capacity: ≥125% <150%	30 minutes
Overload capacity: ≥150% <200%	5 minutes
Overload capacity: ≥200% <400%	30 seconds
Overload capacity: ≥400%	20 milliseconds
International standards	
Safety, EMC and performance standards	Safety: IEC 62040-1 – Uninterruptible Power Systems (UPS) – Part 1: General and safety requirements for UPS
	EMC: IEC 62040-2 – Uninterruptible Power Systems (UPS) – Part 2: Electromagnetic compatibility (EMC) requirements
	Performance: IEC 62040-3 – Uninterruptible Power Systems (UPS) – Part 3: Method of specifying the performance and test requirements

Block diagram



Global presence

is essential, as much
as understanding
your needs.

Global Presence

With more than 47,000 employees worldwide, WEG is one of the largest electric motors, electronic equipments and systems manufacturers. We are constantly expanding our portfolio of products and services with expertise and market knowledge. We create integrated and customized solutions ranging from innovative products to complete after-sales service.

WEG's know-how guarantees our **Modular UPS** is the right choice for your application and business, assuring safety, efficiency and reliability.



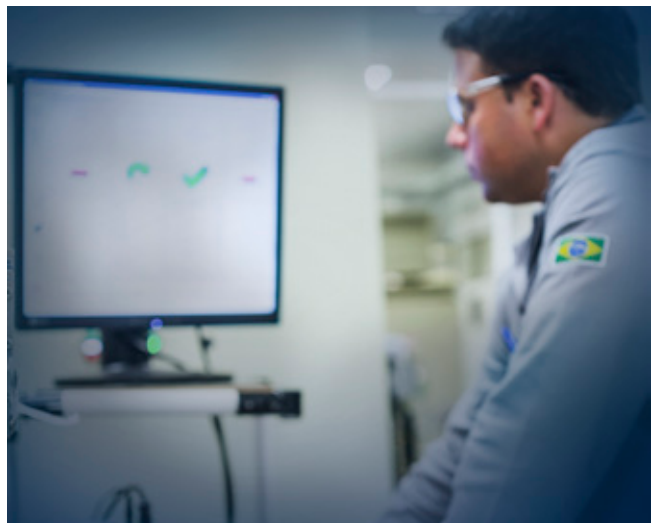
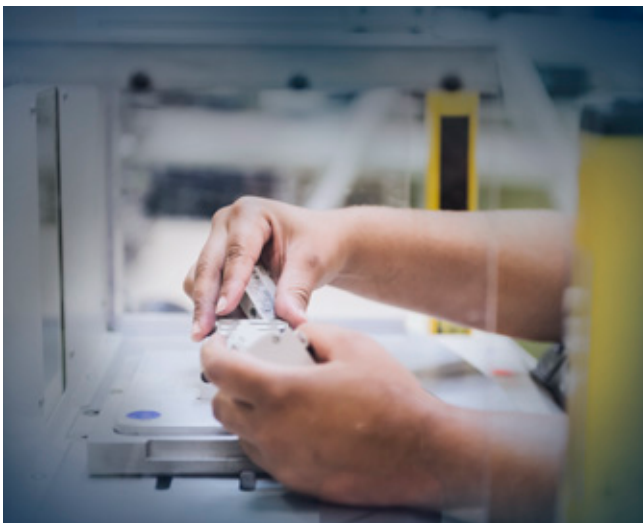
Availability is to have a global support network



Partnership is to create solutions that suits your needs

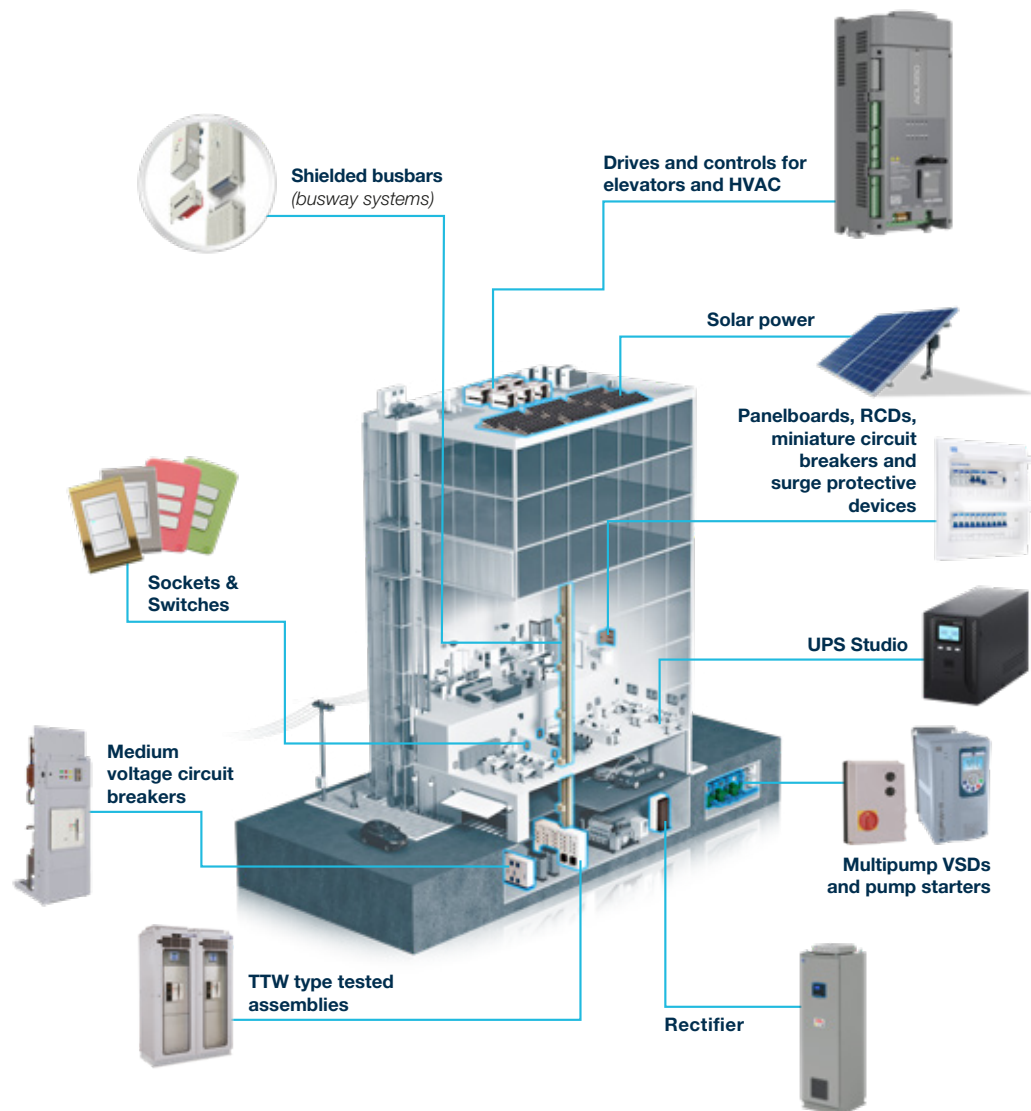


Competitive edge is to unite technology and innovation



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The values shown are subject to change without prior notice.
The information contained is reference values.