BBK

POWER SYSTEMS

# INDUSTRIAL UPS

# INDBX SERIES

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Integrated and supported by BBK Electromechanics. Power conversion technology platform supplied by a global technology partner.

# INDUSTRIAL UPS
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For ensuring reliable power continuity in industrial facilities, we offer UPS solutions designed with protection suitable for harsh field and facility conditions, which can be mechanically, electrically, or electronically customized to meet your requirements.

The Industrial Series UPS systems are available with mechanical protection classes ranging from IP20 to IP54. Depending on the application and/or operational requirements, an internal isolation transformer can be integrated at the input or output for 10kVA models. For 15kVA, 20kVA, 30kVA, and 40kVA models, the isolation transformer can be implemented within the same footprint without increasing the installation area, requiring only an increase in cabinet height. For products ranging from 60kVA to 120kVA, external isolation transformer solutions are available while maintaining the same protection class.
The unit is designed with front-side filtered air intake (depending on the protection class) and rear-side exhaust airflow. Its structure, which does not require side access for service intervention, provides a compact installation advantage, and it is supplied as standard with floor and ceiling mounting brackets. Please contact us for further technical details and technical drawings.

**Optional Features**

- External Isolation Transformer (selectable for input and/or output)
- 3-Phase Input / 1-Phase Output Option (available only for 10kVA to 30kVA models)
- Filter Clogging Detection
- External DC Output
- External Maintenance Bypass Panel
- External Distribution Panel

**Applications**

- Shipyards, port operations and maritime
- Metro and Tramway Lines
- Railway Applications
- Industrial Facilities
- Factories
- Highway Tunnels
- Power Rooms and Electrical Distribution Areas
- Similar Critical Infrastructure Applications

**High Performance & Low Operating Cost**

- Thanks to IGBT controlled power factor correction technology, the system provides high input power factor (>0.99). By drawing low current from the utility grid with a high power factor, it reduces RMS current values, minimizing cable, fuse, and generator sizing requirements.
- Superior low THDi performance ensures less harmonic distortion drawn from the utility grid, extending the service life of transformers, cables, and fuses.
- Optimized thermal design provides energy savings and reduces operating costs.

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**High Input Power Factor**

- A 0.99 input power factor ensures clean and sinusoidal current draw from the grid. With low current drawn from the utility source, RMS current values decrease significantly. This reduces investment costs for cables, fuses, and generator sizing, especially in large facilities.
- High power factor also minimizes harmonic currents and voltage drops, reducing cable, fuse, and generator oversizing costs.

**Maximum Reliability & Availability**

- Up to 8 units can operate in parallel for capacity increase and redundancy (N+1).
- The system continues operating in parallel even if one of the communication cables is disconnected.

**Standard Electrical Features**

- Backfeed Protection
- Cold Start Capability
- Advanced Battery Management
- Short Circuit and Overload Protection
- Programmable Power Walk-In Function
- (transfers load gradually within approximately 15 seconds)
- Smart Temperature Sensor
- Static and Manual Bypass

**Advanced Communication Options**

- 1500 Real-Time Event Records
- Advanced and User-Friendly 320x240 LCD Display
- RS-485, Dry Contact Standard
- Remote Emergency Power Off – REPO (Standard)
- Remote Monitoring and Control Software
- RS232 or ModBus TCP Communication Ports (Optionals)
- Remote Monitoring Panel (Optional)
- SNMP (Optional)
- Profibus (Optional)

**Flexibility**

The Industrial UPS Series offers a flexible architecture that can be adapted to a wide range of application requirements. Through available options and accessories, the system can be configured to meet different operational and environmental needs.

**Configuration Options**

- Special input configurations
- Optional accessories for high-capacity load applications
- External battery cabinet with intelligent temperature sensor support (in accordance with the selected IP protection class)
- 3-Phase Input / 1-Phase Output option for 10-30kVA models
- Frequency Converter operating mode
- Optional isolation transformer
- External DC output options for 24VDC, 48VDC, 110VDC and 220VDC auxiliary power system applications.
- Configurable as an emergency power supply system in compliance with EN 50171

**BBK Scope of Supply and Services**

- BBK Electromechanics provides comprehensive project support, including:
- System engineering
- Application-specific configuration studies
- Marine power system engineering
- Electrical design and integration
- FAT and SAT support
- Commissioning services
- Local technical service support
- Operator and maintenance training
- Lifecycle support services

**Global Technology, Local Engineering and Service Support**

BBK Electromechanics combines advanced power conversion technologies supplied by global technology partners with its expertise in marine applications, system integration, commissioning, and local technical support services.

This approach enables customers to benefit from proven international technologies while receiving dedicated engineering, project execution, and long-term service support from a experienced partner.

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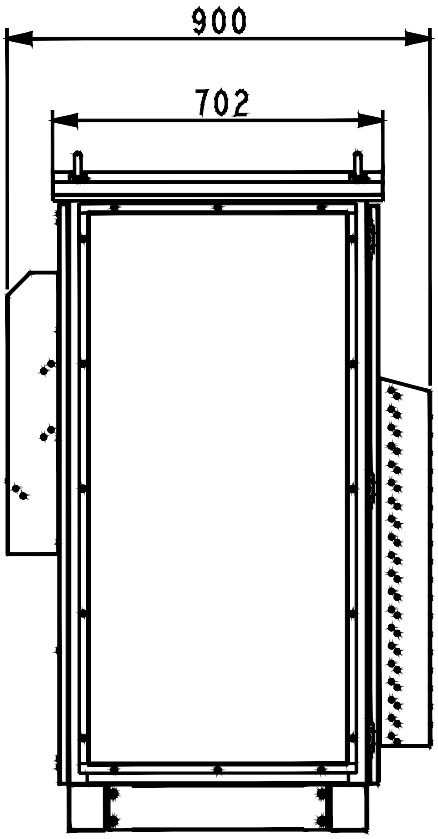
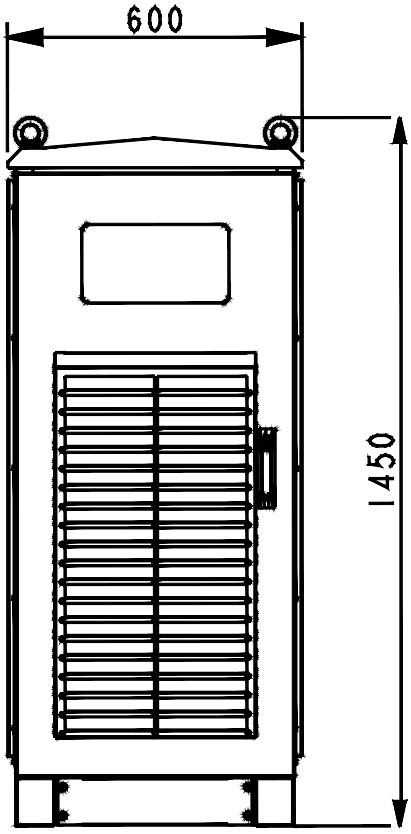
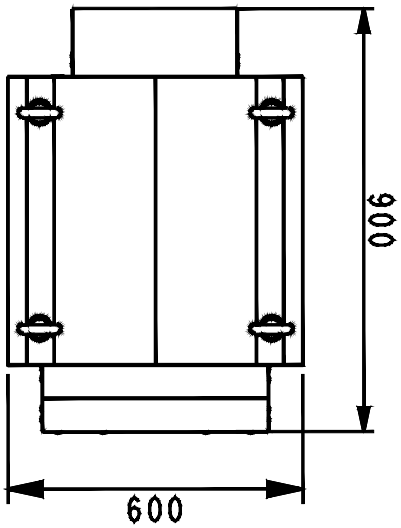
| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Capacity | 10kVA | 15kVA | 20kVA | 30kVA | 40kVA | 60kVA | 80kVA | 100kVA | 120kVA |
| Input | Voltage | 380/400/415/420VAC -%15 +%18 3P+N+Pe/4W+Pe *(Optional 3P+Pe , 3W+Pe)* | | | | | | | | |
| | Frequency | 50-60 Hz (%10 selectable) | | | | | | | | |
| | Input PF and THDi | PF >0,99 / THDi ≤%3 | | | | | | | | |
| Output | Power Factor | 0,9 ( Optional 1,0) | | | | | | | | 0,9 |
| | Voltage | 380/400/415/420VAC 3P+N+Pe/4W+Pe *(Selectable 3P+Pe , 3W+Pe)* | | | | | | | | |
| | Voltage Tolerance | ≤%1 Static, ≤%3 Dynamic | | | | | | | | |
| | Frequency | 50-60 Hz %0,1 | | | | | | | | |
| | THDv | ≤%1 @lineer load, ≤%3 @non-lineer load | | | | | | | | |
| | Crest Factor | 3:1 | | | | | | | | |
| | OverLoad | 600s @%125 Loads, 60s @%150 Loads | | | | | | | | |
| | Efficiency | >%92 @Online Mode, >%98 @ECO Mode | | | | | | | | |
| ByPass | Voltage | 380/400/415/420VAC %15 *(Configurable from %10 to %20)* | | | | | | | | |
| | Frequency | ±5 Hz (Selectable) | | | | | | | | |
| | Maintanence Bypass | Internal MCB or MCCB | | | | | | | | |
| Battery | Batt. Type | OPzS, OPzV (AGM and/or Tubular), NiCd | | | | | | | | |
| | Batt. Voltage | 720 / 744VDC | | | | | | | | |
| | Recahrge Power | at least %25 of its power (It can be increased) | | | | | | | | |
| Isolation Transformer | | Internal | it can be implemented within the same footprintrequiring only an increase in cabinet height. | | | | External | | | |
| Mechanical Dimensions (WxDxH) | | 600x900x1450 | | | | | | 980x1065x1928 | | |

**Storage temp.** -15C / +50C , **Operation temp** 0C / 40 C, **Humidity** %0-%95, **Altitude** 1 ≤ 1000m, 0,92 ≤ 2000m, 0,84 ≤ 3000m, **Noise** ≤53dbA for 10kVA, ≤55dbA for 15kVA, ≤60dbA for 20kVA, ≤65dbA between 30kVA and 120kVA, **Standard Communication** RS232, RS485 , Drycontact Options ( SNMP, ProfilBUS), **Certification** EN62040-1 , EN62040-2 , **Performance** accordig to EN62040-3 (Options VFI-SS-111, Bureau Veritas)

# INDUSTRIAL UPS
# INDBX 10-40KVA



# INDUSTRIAL UPS
# INDBX 60-120KVA