



The most efficient modular inverter with an extra AC input to prevent unnecessary watt loss!

☎ Telecom

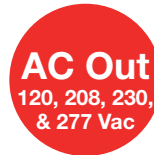
📄 Datacom

🚆 Mass transport

🏭 Industry

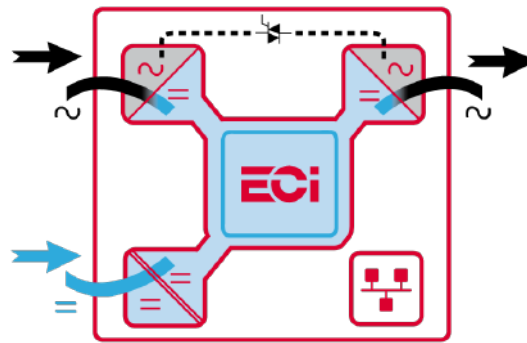
⚡ Power Utilities

🌿 Renewable



Description

BRAVO is a compact and scalable **modular inverter** providing a pure sine wave AC supply. In conjunction with a DC Power system, it provides an excellent **AC backup solution**. It uses the latest inverter technology, providing superior **energy efficiency** in a **compact size**.



The ECI technology **eliminates all single points of failure** with full scalability; up to 32 modules in parallel and high efficiency of up to **96% in AC to AC conversion**, and above **94.5% in DC/AC conversion**, hence reducing operating costs.

Applications

All business critical applications and all types of AC loads. The design is modular and scalable with hot-swappable inverter modules which ensures **low Mean Time to Repair (MTTR)**, reduction in service costs and meets the changing needs for future expansion.

Main Features

- High efficiency (DC to AC >94.5%)
- Compact design
- Dual input sources (AC & DC)
- Transfer time reduced to 0
- Up to 12 kVA in 2 U

Illustrations are non-binding and may include customized fittings.

Bravo ECI 380 VDC

| General | |
|---|--|
| EMC | EN 61000-4-2 / EN 61000-4-3 / EN 61000-4-4 / EN 61000-4-5 / EN 61000-4-6 / EN 61000-4-8 ETSI EN 300386 v1.9.1 |
| Safety | EN62040-1 |
| Cooling | Forced |
| MTBF | 240 000 hrs (MIL-217IF) |
| Efficiency (Typical): Enhanced power conversion / on line | 96% / >94.5% |
| Dielectric strength DC/AC | 2100 Vdc |
| RoHS | Compliant |
| Environment | ETSI EN 300019 / ETSI EN 300132.2 |
| Altitude above sea without de-rating of power | < 1500 m / derating > 1500 m – 0.8 % per 100 m / max 4000 m |
| Ambient temperature | -20 to 40° C de-rating from 40°C to 65°C |
| Storage temperature / relative humidity | -40 to 70°C / 95%, non-condensing |
| Material (casing) | Zinc coated steel |

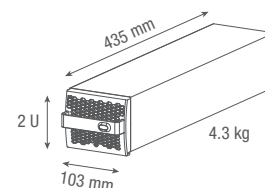
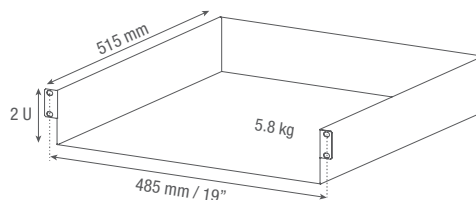
| Power | |
|---|--|
| AC Output Power | |
| Nominal Output power (VA) / (W) | 3000 VA / 2500 W |
| Short time overload capacity | 125% (15 seconds) |
| Admissible load power factor | Full power rating from 0 inductive to 0 capacitive |
| DC Input Specifications | |
| DC voltage: Nominal / range | 336 V / 200 V - 400 V* |
| Nominal input current (at 336 Vdc nominal and 2500 W power) | 7.9 A |
| Maximum input current (for 15 seconds) / voltage ripple | 9.9 A / < 250 mV RMS |
| AC Input Specifications | |
| Nominal voltage (AC) | 120 Vac / 208 Vac / 230 Vac / 277 Vac Line to Neutral |
| Voltage range (AC) | 108 - 290 Vac permanent (295 Vac 60 ms) |
| Brownout | 1500 VA / 1500 W @120 VAC, 2500 VA / 2500 W @190 VAC, 3000 VA / 2500 W from 230 VAC to 277 Vac |
| Power factor @ Nominal Power | > 99% |
| Frequency range (selectable) / synchronization range | 50 Hz (range 47 – 53 Hz) / 60 Hz (range 57 – 63 Hz) |
| AC Output Specifications | |
| Nominal voltage (AC**) | 120 Vac / 208 Vac / 230 Vac / 277 Vac |
| Frequency / frequency accuracy | 50 or 60 Hz / 0.03% |
| Total harmonic distortion (resistive load) | < 3% |
| Load impact recovery time (10% - 90%) | <= 0.4 ms |
| Nominal current | 13 A @ 230 Vac |
| Crest factor at nominal power | 3 : 1 for load P.F. <= 0.7 |
| Short circuit clear up capacity 0-20 ms | 100 A for 20 ms - Available while Mains is available at AC input port / 34 A RMS in DC/AC |
| Short circuit current after >20 ms -15 s | 18 A RMS |
| AC output voltage stability | ±1% from 10% to 100% load |

| In Transfer Performance | |
|--|-----------|
| Max. voltage interruption / total transient voltage duration (max) | 0 s / 0 s |

| Signaling & Supervision | |
|-----------------------------|--|
| Display | Synoptic LED |
| Alarms output / Supervision | Dry contacts on shelf / Use optional devices |
| Remote on / off | On rear terminal of the shelf via T2S ETH |

* De-rating between 200 to 260 VDC.

** Operation within lower voltage networks leads to de-rating of power performances.



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