HELIOS
POWER SOLUTIONS

Bravo 25 - 110/277

The most versatile modular inverter is compatible with the Inview controller range.
The industrial version of this solution offers many new features within a unique module!

Telecom | Datacom | Mass transport | Industry | Power Utilities | Renewable

AC In 230 & 277 Vac

DC In 110 Vdc

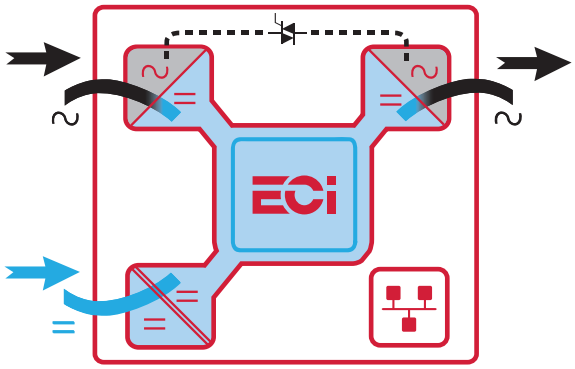
AC Out 230 & 277 Vac

Power 3 kVA 2.5 kW

up to 2.7 MVA

Description

Bravo 25 is a compact and scalable **modular inverter** providing a pure sine wave at AC output. It provides an excellent **AC backup** solution in conjunction with a DC Power system. It uses cutting edge technology to provide the most **energy-efficient** 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 **93.7% in DC/AC conversion**, hence reducing operating costs. We can build the systems up to **2.7 MVA.**

Applications

Designed for **110 Vdc infrastructures**, this solution can be installed in **industrial plants** and **marine environments** for instance. 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.

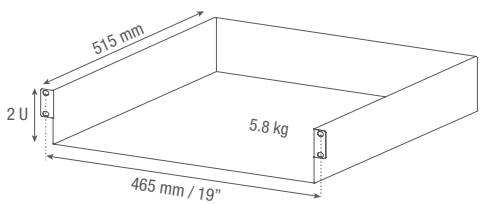
Main Features

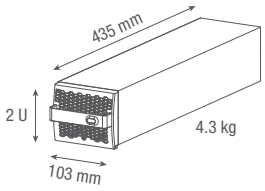
- Extra AC input for increased efficiency on double conversion
- Wide AC input range up to 293 Vac L-N
- Up to 12 kVA in 2RU - 19 inches
- Up to 2.7 MVA by using extra syncrhonization device
- 1P or 3P infrastructure
- Compatible with Inview S, X and GW

Illustrations are non-binding and may include customized fittings.

Bravo 25 - 110/230

General	
Part Number	T621D50201
Cooling / Audible noise	Fan forced cooling / <65db @1meter
MTBF	240 000 hrs (MIL-217-F) at 30°C ambient and 80% load
Dielectric strength DC/AC	2100 Vdc
RoHS / Material (casing)	Compliant / Aluzinc steel
Operating T° / Relative Humidity (RH) non-condensing	Tested according ETS300-019-2-3 Class 3.1 -20°C to 65°C, power de-rating from 40°C to 65°C / Max RH 95% for 96 hours per year
Storage T° / Relative Humidity (RH) non-condensing	Tested according ETS300-019-2-1 Class 1.2 -40°C to 70°C / Max RH 95% for 96 hours per year
Public transport T°/Relative Humidity (RH) non-condensing	Tested according ETS300-019-2-2 Class 3.1 -40°C to 70°C / Max RH 95% for 96 hours per year
Vibration	GR63 office vibration 0 to 100 hz-0.1 g / transport vibration 5-100 Hz 0.5 g 100 to 500 hz-1.5 g / Drop test
Altitude above sea without de-rating of power	< 1500 m / derating > 1500 m – 0.8 % per 100 m / max 4000 m
Power	
AC Input Data	
Nominal voltage / Current	230 Vac; 277 Vac Line to Neutral / 11.7 A; 9.71 A
Voltage range	150 - 293 Vac (De-rating from 195 to 150 Vac)
Brownout	2500 W @ 195 Vac linear decreasing
Power factor / THD	> 0.99 / < 3%
Frequency (Synchronization range)	50 Hz (47 - 53 Hz) or 60 Hz (57 - 63 Hz)
DC Input Data	
Nominal voltage (range)	110 Vdc (90 - 150 Vdc)[1]
Nominal current (at 110 Vdc and 2500 W output)	24.3 A
Maximum input current (for 15 seconds) / voltage ripple	30.3 A / < 10 mV RMS
AC Output Data	
Efficiency AC to AC (EPC) / DC to AC	> 96% / > 93.7%
Nominal voltage[2] (Adjustable)	230 Vac / 277Vac
Frequency / frequency accuracy	50 or 60 Hz / 0.03%
Nominal Output power (VA) / (W)	3 kVA / 2.5 kW
Short time overload capacity	125% (15 seconds)
Admissible load power factor	Full power rating from 0 inductive to 0 capacitive
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 at AC input / On battery	109 A / 34 Arms for 20 ms
Short circuit current after > 20 ms	22.5 A for 15 seconds
AC output voltage stability	±1% from 10% to 100% load
Static / Dynamic voltage regulation	±1% between 10% and 100% load / <5% from 0 to 100% to 0 load impact (100 ms)
In Transfer Performance	
Max. Voltage interruption / total transient voltage duration (max)	0 sec / 0 sec
Signaling & Supervision	
Display	Synoptic LEDs on module and touchscreen with Inview S and Inview X
Supervision / Part number	Inview types: Inview GW DIN - T602004000, Inview S - T602004100 & Inview X - T602004200
Remote ON / OFF	On rear terminal of the shelf through Inview
Safety & EMC	
Electrical Safety	IEC/EN 60950, IEC/EN 62040-1, IEC/EN 62477-1
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





1 Permanent 2500 W / de-rating apply based on internal heatsink T°
2 Operation within lower voltage networks leads to de-rating of power performances.