



Telecommunications



Data centers



Industries



Renewable

## MODULAR INVERTER BRAVO25 48VCC

INVCETBRAVO25 SERIES



ECI  
technology inside

48VCC - 220VCA/2,5KVA

### DESCRIPTION

The Bravo series is small modular inverter offering many opportunities to design a solution that perfectly fits your needs. The ECI technology offers both AC and DC inputs to provide a perfect AC power while reducing the number of power conversion (the module operates under normal condition with the AC input delivering a 96% efficiency)! In conjunction with the DC input, it provides an excellent AC backup solution.



From 1 to 32 modules, with several options available (manual external by-pass and AC distribution), the modular inverter Bravo series is also hot-swappable meaning a very easy and cheap maintenance. The modules are delivered with our new monitoring solution. Bravo can be used with the Inview S (DIN or panel mounting) and Inview S or GW Slot monitoring. One shelf can accommodate 5 modules or 4 modules with Inview S Slot monitoring included.

### HOW IT WORKS?

An ideal solution for securing critical AC loads, from 2,5KVA to 427MVA. Main application for this inverters are Utility substations, Oil & Gas markets, etc. The module can be integrated into shelves for single-phase (230 Vac) or three-phase (3x400 Vac) installation with different output powers.



### KEY FEATURES

- AC and DC input sources (highest efficiency topology)
- 1 to 32 modules and 1 or 3 phases configuration
- Customization (manual by-pass and AC distribution)
- Transfer time reduced to 0 ms
- Compact design

# MODULAR INVERTER BRAVO25 48VCC



## INVCETBRAVO25 SERIES

### SPECIFICATIONS

INVCETBRAVO25-230

General	
Cooling / Audible noise	Fan forced cooling / < 60 dBA @ 1 meter (100% load at 25°C)
MTBF	240 000 hrs (MIL-217IF) at 30°C ambient and 80% load
Dielectric strength DC/AC	2100 Vdc
RoHS / Material (casing)	Compliant / Nickel-Zinc coated 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
Power	
AC Input Data	
Nominal voltage / Current	230 Vac / 10.9 A
Voltage range	150 - 293 Vac (De-rating from 195 to 150 Vac)
Brownout	1600W @ 150 Vac / 2400W @ 190 Vac linear decreasing
Power factor / THD	> 99% / < 3%
Frequency (Synchronization range)	50 Hz (47 - 53 Hz) or 60 Hz (57 - 63 Hz)
DC Input Data	
Nominal voltage (range)	48 Vdc (32 - 63Vdc)
Nominal current (at 48 Vdc and 2400W output)	53,4 A
Maximum input current (for 15 second) / voltage ripple	66,8 A / <10mV RMS
AC Output Data	
Efficiency AC to AC )EPC_ /DC to AC	> 96% / >93.7%
Nominal voltage** (Adjustable)	230 Vac (200 - 240 Vac)
Frequency / frequency accuracy	50 or 60 Hz / 0.03%
Nominal Output power	3KVA / 2,4KW
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
AC output voltage stability	±1% from 10% to 100% load
In Transfer Performance	
Max. voltage interruption / total transient voltage duration (max)	0 sec / 0 sec
Signaling & Supervision	
Display	Synoptic LEDs on modules and touchscreen with Inview S and Inview X
Supervision / Part Number	Inview types: Inview GW DIN - T602004000, Inview S - T302004100 & Inview X - T602004200
Remote ON/OFF	On rear terminal of the shelf and via Inview Interface
Safety & EMC	
Electrical safety	IEC62040-1 / EN62040-1 Edition 2017
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