

STANDALONE INVERTER SYSTEM

POWER 1500 VA
INPUT 24 Vdc and 230 Vac
OUTPUT 230 Vac

GRID AC Load DC Load Battery Backup

TSI BRAVO ST

DESCRIPTION

The TSI Bravo ST solution secures **AC loads** at **230 Vac** from a **24 Vdc** infrastructure.

Additional **AC** input is used under normal conditions to achieve an overall **conversion efficiency** of 95.5%. In the event of a grid failure, it **automatically switches** to the DC to secure the loads.

In addition to this, this solution includes a **bypass** that feeds AC loads directly from the grid if there is a problem in the system.

The modules included are hot swappable for **ease** of **maintenance**.

APPLICATIONS

All business critical applications and all types of AC loads. The solution is design for highest AC output availability. Both inverter modules and by-pass are hot-swappable which ensures low Mean Time to Repair (MTTR), reduction in service costs.

MAIN FEATURES

- >>> Extra AC input for increased efficiency
- >>> Integrated bypass
- >>> Compact solution (2U high)
- >> Modularity (from 1.5 to 3 kVA)



POWER

>> TSI BRAVO ST

Synoptic LED

Dry contacts on shelf / Standard USB port and MODBUS on T2S, optional: Candis Display / Candis TCP-IP

on rear terminal of the shelf via T2S

| | TSI Bravo ST 1500 - 24 / 230 |
|---|---|
| GENERAL | |
| Part number | S32P72E0102S |
| EMC (immunity) | EN 61000-4-2 / EN 61000-4-3 / EN61000-4-4 / EN 61000-4-5 / EN 61000-4-6 / EN 61000-4-8 |
| EMC (emission) (class) | EN 55022 (A) |
| Safety | IEC 60950 / EN62040-1 / EN62040-2 |
| Cooling / Isolation | Forced / Doubled |
| MTBF | 240 000 hrs (MIL-217-F) |
| Efficiency (Typical): Enhanced power conversion / on line | > 95.5% / > 89.5% |
| Dielectric strength DC/AC | 4300 Vdc |
| RoHS 6 | Compliant |
| 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 |
| Operating conditions | Designed for installation in an IP20 or IP21 environment. When installed in a dusty or corrosive environment, appropriate measures (air filtering,) must be taken. |
| Altitude above sea without de-rating | < 1500 m / derating > 1500 m – 0.8 % per 100 m |
| Ambient / storage temperature / relative humidity | -20 to 50 ° C / -40 to 70 ° C / 95 %, non-condensing |
| Material (casing) | Coated steel-ALU ZINC |
| AC OUTPUT POWER | |
| Nominal Output power (VA) | 1500 |
| Nominal Output power (W) | 1200 |
| Short time overload capacity | 150 % (15 seconds) 110 % permanent within T° range |
| Admissible load power factor | Full power rating from 0 inductive to 0 capacitive |
| Internal temperature management and switch off | Above 50°C ambiant T° derating up to 65°C. Automatic restart with hyteresis +/- 5°C |
| DC INPUT SPECIFICATIONS | 7 bove of ambiguit 1 derating up to 60 c. Automatio restart with mytolesis 17 c o |
| Nominal voltage (DC) | 24 V |
| Voltage range (DC) | 19 – 35 V |
| Nominal current at nominal DC voltage and max power W | 56 A (at 1200 W/1500 VA), 112 A (at 2400 W/3000 VA) |
| Maximum input current (for 15 second) / voltage ripple | 84 A /< 100 mV ms |
| Input voltage boundaries | User selectable with T2S interface min and max value |
| AC INPUT SPECIFICATIONS | Oser selectable with 125 interface min and max value |
| Nominal voltage (AC) | 220 Vac / 230 Vac / 240 Vac |
| Voltage range (AC) | 150-265 V |
| Brownout | 150 to 185 V linear derating 150 VA/120 W per 10 Vac for 2500 VA model and 300 VA/240 W for 5000 VA model |
| AC input range min and max value | Adjustable between 150 Vac and 265 Vac (fixed hysteresis 10 Vac) |
| | > 99% |
| AC input power factor (EPC operation mode) | |
| Frequency range (selectable) / synchronization range AC OUTPUT SPECIFICATIONS | 50 – 60 Hz / range 47 – 53 Hz / 57 – 63 Hz |
| Nominal voltage (AC) | 230 V / 220V / 240 Vac adjustable (default 230 Vac - 50 Hz) |
| 5 () | |
| Trequency / frequency accuracy | 50 - 60 Hz / 0.03 % |
| Total harmonic distortion (resistive load) | < 1.5 % |
| Load impact recovery time | 0.4 ms |
| Turn on delay | 20 s to 40 s depending on the number of module installed |
| Nominal current. Protected against reverse current | 6.6 A |
| Crest factor at nominal power | 2.8:1 |
| With short circuit management and protection | 10 v L for 20 mood. Available while Mains is available at 40 input part |
| Short circuit clear up capacity | 10 x I _n for 20 msec - Available while Mains is available at AC input port With magnitude control and management |
| Short circuit current after clear up capacity | 2.1 I _n during 15 s and 1.5 I _n after 15 s |
| IN TRANSFER PERFORMANCE | |
| Max. voltage interruption AC to DC module - Module to bypass | 0 ms between DC to AC and AC to DC / <10 ms between BRAVO mode and automatic bypass |
| SIGNALING & SUPERVISION | |

BRAVO ST 1500 - 24/230 - Datasheet v1.0 Specifications can change without notice. New data will be updated on our Web site: www.cet-power.com. The present equipment is protected by several international patents, trademarks and copyrights.



Illustrations are non-binding and may include customized fittings.

Display

Remote on / off

Alarms output / supervision