

## Inverter

INVERTRONIC compact 1500VA

Part-No.: 10019442

**Benning GmbH & Co KG**

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1		Inverter 110V <sub>DC</sub> / PNo.10019442
1.1	Type	Inverter
1.2	Project	INVERTRONIC compact 1500
1.3	Part-No.	10019442
	Drawing-No.	62377.01E001 A3
1.4	Type designation	G110E230/6,52/2...3rfg-PWT
1.5	Rated input voltage	110V <sub>DC</sub>
1.6	Signal threshold	93,5V ; 112,75V ; 132,0V ; 155V
1.7	Acceptable tolerance (U <sub>DC</sub> )	-15 ... +41% from nominal value
1.8	Rated input current	11,87A (at rated output active power and rated input voltage = 100%) 9,53A (at rated output active power and over voltage = 125%) 14,11A (at rated output active power and under voltage = 85%) 270mA at idle at rated voltage
1.9	Acceptable ripple	5% eff.
1.10	Rated output power	1,5kVA (at cos phi = 0.8 ind.)
1.11	Rated active output power	1,2kW (at cos phi 1)
1.12	Rated output voltage	220 / 230 / 240 V <sub>AC</sub>
1.13	Voltage tolerance	±1% statical
1.14	Rated output current	6,8 / 6,52 / 6,25 A
1.15	Rated output frequency	50Hz or 60Hz (switchable on SBS, EUE)
1.16	Efficiency	91,94% at 100% load 91,72% at 75% load 90,70% at 50% load 87,74% at 25% load
1.17	Power dissipation	105,19W at 100% load typ. 29,7W at 0% load
1.18	Acceptable power factor	cos phi = 0,7ind. to cos phi = 0,8cap.
1.19	Response time	<20 milliseconds
1.20	Transformer	Potential seperated transformer in DC/DC-converter
1.21	Frequency tolerance	Mains commutated: max. ±5% (only with external switch device), self commutated: ±0.1% (crystal controlled)
1.22	Distortion factor (EN 62040-1)	<=2% at linear load
1.23	Crest factor	2,8 (at 230V/6,52A) max. surge current 2,8 x I <sub>N</sub> , with higher Crest factor reducing of the acceptable max rated active current
1.24	Overload	200% for 4 seconds; then reducing to 120% for 1 minute, after this shut-down
1.25	Short-circuit behaviour	>16,5A <sub>eff</sub> for 4 seconds shut-down after max. 4 seconds, if bypass voltage is not present. Inverter for itself is short-circuit proof. (EN 62040-1-1)
1.26	Over load ability – constant	110% I <sub>N</sub> (at 25°C)
1.27	Output fuse	T10A/250V (high breaking capacity)
1.28	Load fuse	The short-cut current can blow delayed-action fuses with <sup>1</sup> / <sub>3</sub> of the rated current (e.g. for Neozed)

2		General data
2.1	Protection class	IP 20 (DIN/VDE 0470 Teil 11/92, IEC529), <i>higher on request</i>
2.2	Insulation class	DIN/VDE 0110, overvoltage category 2
2.3	EMV class	DIN EN55022 class A
2.4	Design (module)	Hot Plug in Benning cabinet
2.5	Cable entry (cabinet)	From below; optionally from above (by means of cable cabinet, width 200mm)
2.6	Cooling	Force cooled, fan temperature-controlled and monitored Fans can be replaced from the front of the module Power block is monitored against overtemperature (fault alarm)
2.7	Inlet air temperature	0°C bis 40°C 27°F bis 104°F
2.8	Limitation above 40°C, 104°F	12,5% pro 5° (max. 50°C, 114°F)
2.9	Relative humidity	0 to 95% (non-condensing) class DIN/IEC 721 2-1-09/86
2.10	Storage temperature	-40°C to 85°C -40°F to 185°F
2.11	Installation altitude	up to 2000m ASL
2.12	Connection method	Backplane (Hot – Plug)
2.13	Dimensions (H x W x D)	3 HE; 1/5 19 inch; 300mm 85.6 x 132.6 x 301.5mm
2.14	Weight	ca. 3,1kg per INVERTER-modul, ca. 2,9kg per EUE/MBS-modul
2.15	Finish	RAL 7035 / others on request
2.16	Protection class	I
2.17	Noise Noise level (1Metre)	Dependent on configuration level, load an environment 50dB (A) in normal operation 65dB (A) at full load (5 x Inverter in one carrier)
2.18	Std. single relay contacts only with SBS, EUE (potential free two-way contact)	1 x SBS, EUE – error 1 x Inverter – error

3		Norms
3.1	Norms	EN 60950, 2006-11 / UL 1950 conform  EN 55022 class A  EN 61000-4-4, 2005-07, level 4. Burst, Rectifier Input: (4kV) EN 61000-4-4, 2005-07, level 4. Burst, Bypass Input: (4kV) EN 61000-4-4, 2005-07, level 4. Burst, System Output: (4kV)  EN 61000-4-5, 2007-06, level 4. Surge, Rectifier Input: (2kVsym. / 4kVasym.) EN 61000-4-5, 2007-06, level 4. Surge, Bypass Input: (2kVsym. / 4kVasym.) EN 61000-4-5, 2007-06, level 4. Surge, System Output: (2kVsym. / 4kVasym.)