



DESCRIPTION

Sinusoidal inverter with isolation input / output

Model	Input voltage	Output voltage	Power	Efficiency	No load input current
0696	24 V _{dc}	115 V _{ac}	100 VA	> 85 %	< 0.4 A

INPUT

Input voltage range -20, +25% V_{in} nom
Maximum input ripple 5% V_{in} nom (V_{rms}, 100Hz)

OUTPUT

Output voltage 115 V_{ac} sinusoidal
Maximum continuous current 0.9 A_{rms}
Load regulation < 2 %
Line regulation < 0.2 %
Output frequency 400 Hz ± 2 Hz
Output wave distortion THD < 3% (8 samples h= 0..21th)
Output voltage HF ripple < 1.8 V_{rms}
Maximum output peak current 4.5 A_{pk}

ENVIRONMENTAL

Storage temperature -40 .. 85°C
Operating temperature range : -40 .. 75°C
Derating Power / Temperature: -2.5% / °C from 50 to 75°C

Cooling Natural convection
Maximum relative humidity 95% no condensation
Vibrations EN61373 Cat1 class B body moun.
Shock EN61373 Cat1 class B body moun.
MTBF (MIL-HDBK-217-E; G_b, 25°C) 160.000 h

EMC

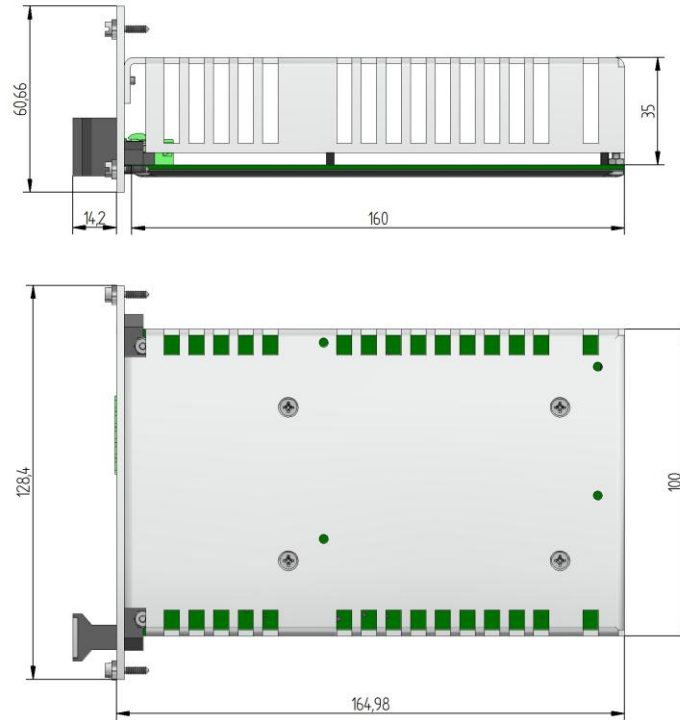
Immunity according EN61000-6-2
Emissions according EN61000-6-4

SAFETY

Dielectric strength: Input / output 3000 V_{rms} / 50Hz / 1min
Dielectric strength: Output / ground 1500 V_{rms} / 50Hz / 1min
Dielectric strength: Input / ground 500 V_{rms} / 50Hz / 1min
Safety according EN60950

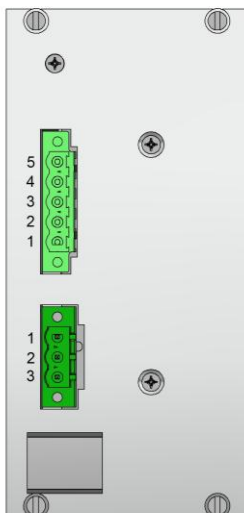
MECHANICAL

Shape	Eurocassette
Weight	<750 g
Dimensions	3 HE x 12 TE x 160 mm



CONNECTION

Input connector	Phoenix Contact MSTB 2,5/ 3-GF-5,08
Output and alarm connector	Phoenix Contact IC 2,5/ 5-GF-5,08



Output: Pin 1 Alarm Common
Pin 2 Alarm
Pin 3 Ground
Pin 4 R2 (115VAC/400Hz)
Pin 5 R1 (115VAC/400Hz)

Input : Pin 1 +24V DC
Pin 2 0V
Pin 3 Ground

PROTECTIONS AND CONTROL

Protection against overloads < 4.5A	linear
Protection against overloads > 4.5A	timed constant current
Protection against short-circuit	1 s
Maximum number of consecutive short-circuits	3 times
Input overcurrent protection	By fuse
Minimum disconnected time	10 s

ALARMS

Output alarm	By optocoupler NO Closed if output OK Maximum rating 36V _{dc} 200mA
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Emission standard

TEST	NORM	PORT	FREQUENCY	LIMITS
Radiated emissions	CISPR11	Case	30MHz-230MHz	Class-A 40dB(μV/m) Qpk at 10m
			230MHz-1GHz	Class-A 47dB(μV/m) Qpk at 10m
Conducted emissions	CISPR11	AC Input	150kHz-500kHz	Class-A 79dB(μV) Qpk
				Class-A 66dB(μV) Av
			500kHz-5MHz	Class-A 73dB(μV) Qpk
				Class-A 60dB(μV) Av
			5MHz-30MHz	Class-A 73dB(μV) Qpk
				Class-A 60dB(μV) Av

Immunity standard

TEST	NORM	PORT	SEVERITY	CONDITIONS	CRIT.
Magnetic field	IEC61000-4-8	X/Y/Z Axis	30A/m	50/60Hz	A
Radiated high-frequency	IEC61000-4-3	X/Y/Z Axis	10V/m	80 - 1000MHz M. 80% 1kHz	A
		X/Y/Z Axis	3V/m	1.4 - 2GHz M. 80% 1kHz	A
		X/Y/Z Axis	1V/m	2 - 2.7GHz M. 80% 1kHz	A
Conducted RF	IEC61000-4-6	Input	10V	0.15...80MHz M. 80% 1kHz	A
		Output	10V	0.15...80MHz M. 80% 1kHz	A
		Signal	10V	0.15...80MHz M. 80% 1kHz	A
Electrostatic discharge	IEC61000-4-2	Case	±8kV	Air (isolated parts)	B
		Case	±4kV	Contact (conductive parts)	B
Fast transients	IEC61000-4-4	Input	±2kV	Tr/Th: 5/50 ns	B
		Output	±2kV	Tr/Th: 5/50 ns	B
		Signal	±1kV	Tr/Th: 5/50 ns	B
Surges	IEC61000-4-5	DC L to L	±500V	Tr/Th: 1.2/50μs	B
		DC L to PE	±500V	Tr/Th: 1.2/50μs	B