

DESCRIPTION

Sinusoidal inverter for railway rolling stock application according to EN50155 and EN50160

INPUT

DC input voltage	36Vdc
DC input voltage range	-30%...+25%, transients according to EN50155 class S1
No load input current (standby state)	< 20mA
Maximum input current	18A
Efficiency (typical)	90% at load 100%, 87% at load 50%, 81% at load 25%, 76% at load 10%

OUTPUT

Output voltage	230	V
Frequency	50	Hz
Harmonic distortion	< 2	%
Maximum continuous current (I _o)	1.74	A
Overload protection	> 2	A
Line regulation	0,2	%
Load regulation	3	%
Total Harmonic Distortion (typ/max)	2 / 5	%
Total Output power (P _o):	400	W

ENVIRONMENTAL

Storage temperature	25...70°C
Operating temperature range	-25...70°C (EN50155 T3)
Cooling	Natural convection
Relative humidity	5...95%
Vibration	EN61373 Category 1 class B body mounted
Shock	EN61373 Category 1 class B body mounted
Service life	10 years at 40°C
Environmental regulations	RoHS according to directive 2002/95/EC

EMC

Emission according to norm/s EN50121-3-2

TEST	NORM	PORT	FREQUENCY	LIMITS
Radiated emissions	EN55011	Case	30MHz-230MHz	40dB(μV/m) Qpk at 10m
			230MHz-1GHz	47dB(μV/m) Qpk at 10m
Conducted emissions	EN55011	Input	150kHz-500kHz	99dB(μV) Qpk
			500kHz-30MHz	93dB(μV) Qpk

Immunity according to norm/s EN50121-3-2

TEST	NORM	PORT	SEVERITY	CONDITIONS	CRIT.
Radiated high-frequency	IEC61000-4-3	X/Y/Z Axis	20V/m	80...1000MHz M. 80% 1kHz	A
		X/Y/Z Axis	10V/m	1G...2GHz M. 80% 1kHz	A
		X/Y/Z Axis	5V/m	2G...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	±6kV	Contact (conductive parts)	B
Fast transients	IEC61000-4-4	Input	±2kV	Tr/Th: 5/50 ns	A
		Output	±2kV	Tr/Th: 5/50 ns	A
		Signal	±2kV	Tr/Th: 5/50 ns	A
Surges	IEC61000-4-5	L to L	±1kV	Tr/Th: 1.2/50μs	B
		L to PE	±2kV	Tr/Th: 1.2/50μs	B

SPECIFICATIONS

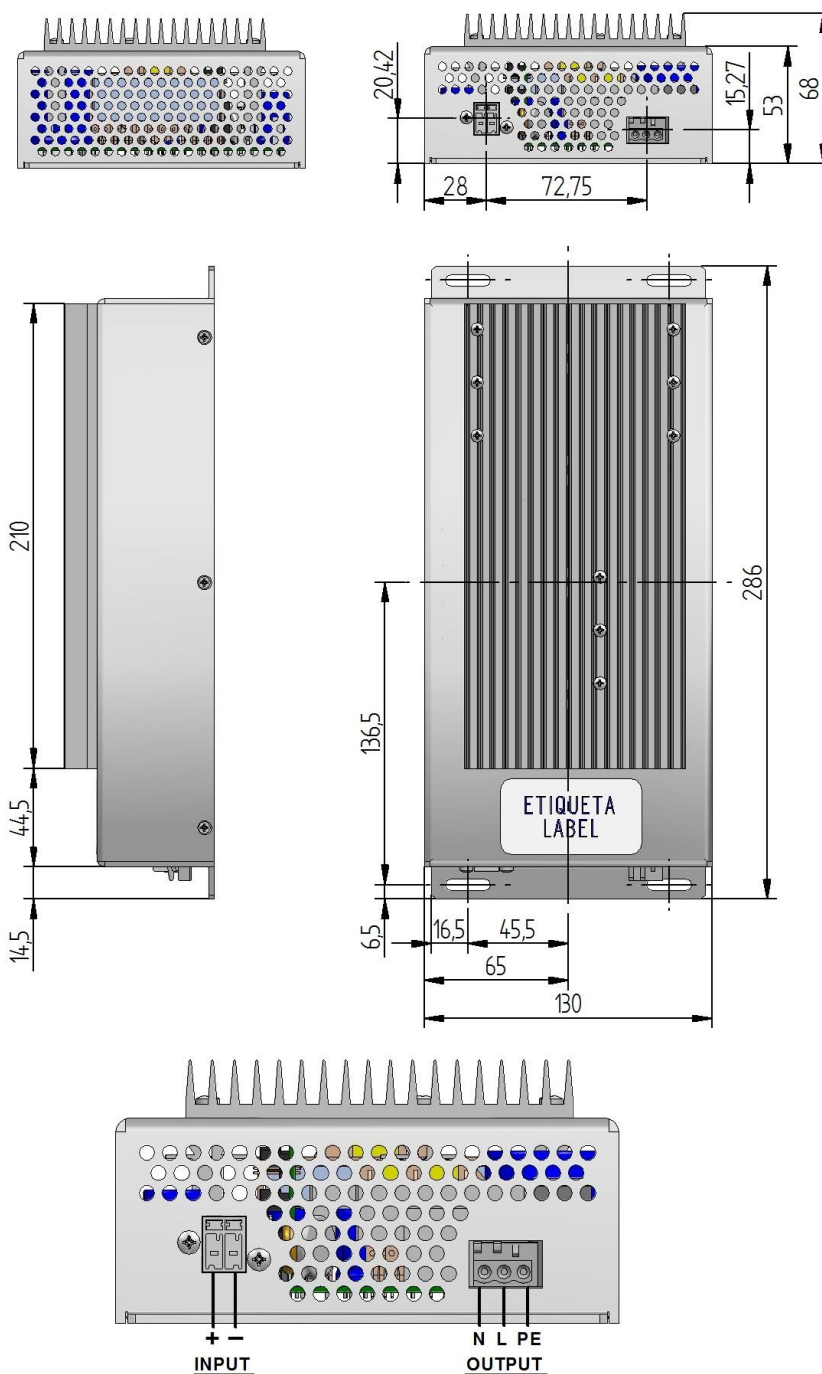
400VA Railway Inverter RSW400

SAFETY

Safety according to norm/s	EN60950 -1
Dielectric strength Input/Output	3000Vac
Dielectric strength Input/Earth	1500Vac
Dielectric strength Output/Earth	500Vac

MECHANICAL

Weight	2400g
Connection type	Input: Wago X-COM SYTEM item no. 769-662/004-000
	Output: Wago MIDI SYSTEM item no. 232-233



PROTECTIONS AND CONTROL

Output protected against overloads and shortcircuits
Input protected against overcurrents by internal fuse.
Over-temperature shutdown
Input under-voltage lockout
PCB conformal coated

Saving function:

If the load is < 10W the inverter goes to standby state for half a minute. After this period it checks the output power again.
In standby state the inverter consumes an average current < 20mA.

Available from:



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