Technical Data Sheet

RIDA3000-TW Inverter

2400W-3000W / Wide Range

RECOM
DC/AC INVERTER

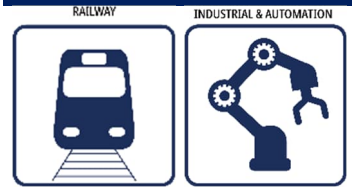
FEATURES

- Sine wave output voltage
- Suitable for motors control
- Selectable output frequency: 50/60 Hz
- Adjustable output voltage
- High input-output isolation 3000 Vrms
- Remote inhibit
- Configurable input: Reverse or Mid power
- Remote control via RS232
- Alarms by isolated relay contacts
- Remote off opto-coupled
- Optional railway version EN50155
- Fire and smoke: EN45545-2 approved



Dimensions: 400.7 x 220.0 x 80.5mm (15.48" x 8.66" x 3.17")

APPLICATION



SAFETY & EMC

- The charger follows LVD Directive 2014/35/EU and EMC Directive 2014/30/EU.
- The converter is CE compliant. EMC radiation must be evaluated and tested in the complete system since mounting and wiring have a large influence on radiation behaviour.
- Cybersecurity: the product features a serial communication interface. CRA-relevant security aspects have been considered in the product design and documentation, including risk assessment. The product complies with the Cyber Resilience Act (CRA, EU Regulation 2024/2847) when installed in accordance with the instruction sheet

DESCRIPTION

The RIDA3000-TW Series is a three-phase DC-AC sine-wave inverter designed to deliver 230VAC or 400VAC output from a wide range DC input supply. The series provides galvanic isolation between input and output up to 3000 Vrms and is suitable for motor control applications requiring adjustable output voltage and selectable output frequency. Output frequency can be set to 50 Hz or 60 Hz via DIP-switch, or adjusted over a wider range through RS-232 communication. The inverter supports configurable operating modes, including reverse rotation and mid-power control, as well as soft-start functionality with programmable V/F ramps for controlled motor start-up. Remote ON/OFF, remote inhibit, and system monitoring are available through opto-coupled inputs, isolated relay alarm outputs, and RS-232 interface. The RIDA3000-TW Series is available in industrial and railway versions, including options compliant with EN50155 and EN45545-2 for fire and smoke requirements. The units feature controlled internal fan cooling, comprehensive protection functions against overload, short-circuit, over-temperature, and input under-voltage, and are designed for reliable operation in demanding industrial and railway environments.

RIDA3000- - -TW- -

- Nominal power
- Nominal input
- Nominal output

PRI Remote OFF reversed (ON: applying 15÷154V)

Options

PRB Industrial version

PRT Railway version according to EN50155

PRL Extended railway version

PRL includes the following:

- Lower temperature operation (-40°C)
- Higher isolation input & output to earth (2500Vac)
- Output terminals type Cage clamp
- Signal connectors with locking lever
- New enclosure

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RIDA3000-TW Inverter
2400W-3000W / Wide Range

RECOM
DC/AC INVERTER

Options B and T



Options L



Accessories must be ordered in a separate order line

MODELS

Part Number	Input Voltage nom. [VDC]	No Load Input Current [A]	Output Voltage nom. [VAC]	Output Current Max [A]	Output Power Max [W]
RIDA3000-24-230-TW-2.4kW	24	1.58A	230	6.00A	2400
RIDA3000-36-230-TW* (coming soon)	36	TBD	230	TBD	TBD
RIDA3000-48-230-TW* (coming soon)	48	TBD	230	TBD	TBD
RIDA3000-72-230-TW* (coming soon)	72	TBD	230	TBD	TBD
RIDA3000-110-230-TW	110	0.34A	230	7.55A	3000
RIDA3000-24-400-TW-2.4Kw	24	1.58A	400	3.46A	2400
RIDA3000-36-400-TW	36	1.05A	400	4.33A	3000
RIDA3000-48-400-TW	48	0.79A	400	4.33A	3000
RIDA3000-72-400-TW	72	0.52A	400	4.33A	3000
RIDA3000-110-400-TW	110	0.34A	400	4.33A	3000

* Available under request. References subject to special MOQs and lead times.

BASIC CHARACTERISTICS

Parameter	Conditions	Min.	Typ.	Max.
INPUT				
Rated Input Voltage	RIDA3000-24-230-TW-2.4kW		24VDC	
	RIDA3000-110-230-TW		110VDC	
	RIDA3000-24-400-TW-2.4kW		24VDC	
	RIDA3000-36-400-TW		36VDC	
	RIDA3000-48-400-TW		48VDC	
	RIDA3000-72-400-TW		72VDC	
	RIDA3000-110-400-TW		110VDC	
Input Voltage Range	RIDA3000-24-230-TW-2.4kW	16.8VDC		30.0VDC
	RIDA3000-110-230-TW	77.0VDC		138.0VDC
	RIDA3000-24-400-TW-2.4kW	16.8VDC		30.0VDC
	RIDA3000-36-400-TW	25.2VDC		45.0VDC
	RIDA3000-48-400-TW	33.6VDC		60.0VDC
	RIDA3000-72-400-TW	50.4VDC		90.0VDC
	RIDA3000-110-400-TW	77.0VDC		138.0VDC
No Load Input Current	RIDA3000-24-230-TW-2.4kW			1.58A
	RIDA3000-110-230-TW			0.34A
	RIDA3000-24-400-TW-2.4kW			1.58A
	RIDA3000-36-400-TW			1.05A
	RIDA3000-48-400-TW			0.79A
	RIDA3000-72-400-TW			0.52A
	RIDA3000-110-400-TW			0.34A
Efficiency	RIDA3000-24-230-TW-2.4kW		89%	
	RIDA3000-110-230-TW		91%	
	RIDA3000-24-400-TW-2.4kW		89%	
	RIDA3000-36-400-TW		90%	

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	RIDA3000-48-400-TW		91%	
	RIDA3000-72-400-TW		91%	
	RIDA3000-110-400-TW		92%	
Input Ripple	Vrms, 100Hz		5%	
Parameter	**Conditions**	**Min.**	**Typ.**	**Max.**
Input Voltage Shutdown Instantaneous	RIDA3000-24-230-TW-2.4kW - RIDA3000-24-400-TW-2.4kW	14.4VDC		33.6VDC
	RIDA3000-36-400-TW	21.6VDC		50.4VDC
	RIDA3000-48-400-TW	28.8VDC		67.2VDC
	RIDA3000-72-400-TW	43.2VDC		100.8VDC
	RIDA3000-110-230-TW - RIDA3000-110-400-TW	66.0VDC		154.0VDC
Input Voltage Timed Shutdown (t) (Input Alarm)	RIDA3000-24-230-TW-2.4kW - RIDA3000-24-400-TW-2.4kW	16.8VDC		31.2VDC
	RIDA3000-36-400-TW	25.2VDC		46.8VDC
	RIDA3000-48-400-TW	33.6VDC		62.4VDC
	RIDA3000-72-400-TW	50.4VDC		93.6VDC
	RIDA3000-110-230-TW - RIDA3000-110-400-TW	77.0VDC		143VDC
Start-Up Voltage	RIDA3000-24-230-TW-2.4kW - RIDA3000-24-400-TW-2.4kW	16.8VDC		
	RIDA3000-36-400-TW	25.2VDC		
	RIDA3000-48-400-TW	33.6VDC		
	RIDA3000-72-400-TW	50.4VDC		
	RIDA3000-110-230-TW - RIDA3000-110-400-TW	77.0VDC		
Time to Shutdown (t)			500ms	
OUTPUT				
Rated Output Voltage	RIDA3000-24-230-TW-2.4kW - RIDA3000-110-230-TW		230VAC	
	RIDA3000-24-400-TW-2.4kW - RIDA3000-36-400-TW – RIDA3000-48-400-TW - RIDA3000-72-400-TW - RIDA3000-110-400-TW		400VAC	
Output Voltage Range	Models of 230VAC output via RS232	50VAC		230VAC
	Models of 400VAC output via RS232	50VAC		400VAC
Output Current Range	RIDA3000-24-400-TW-2.4kW			3.46A
	RIDA3000-36-400-TW - RIDA3000-48-400-TW - RIDA3000-72-400-TW - RIDA3000-110-400-TW			4.33A
	RIDA3000-24-230-TW-2.4kW			6.30A
	RIDA3000-110-230-TW			7.55A
Output Peak Current (Iopk 10ms)	RIDA3000-24-400-TW-2.4kW - RIDA3000-36-400-TW - RIDA3000-48-400-TW - RIDA3000-72-400-TW - RIDA3000-110-400-TW			11A
	RIDA3000-24-230-TW-2.4kW - RIDA3000-110-230-TW			19A
Warning Current (Output Alarm)	RIDA3000-24-400-TW-2.4kW		3.46A	
	RIDA3000-36-400-TW - RIDA3000-48-400-TW - RIDA3000-72-400-TW - RIDA3000-110-400-TW		4.33A	
	RIDA3000-24-230-TW-2.4kW		6.30A	
	RIDA3000-110-230-TW		7.55A	
Rated Output Frequency			50/60Hz	
Range Output Frequency	Via DIP-SWITCH	50Hz		60Hz
	Via RS-232	5Hz		75Hz
Initial Start-up Frequency			16Hz	
Soft Start Duration			10cycles	
Ramp-up V/F			1Hz/cycles	
Max Output Power	RIDA3000-24-230-TW-2.4kW			2400W 2400VA
	RIDA3000-110-230-TW			3000W 3000VA
	RIDA3000-24-400-TW-2.4kW			2400W 2400VA
	RIDA3000-36-400-TW			3000W 3000VA
	RIDA3000-48-400-TW			3000W 3000VA
	RIDA3000-72-400-TW			3000W 3000VA
	RIDA3000-110-400-TW			3000W 3000VA

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Load regulation				4%
Line regulation	Vin -25% ÷ +25%			2%
	Vin -30% ÷ +25%			10%
	Vin -40% ÷ +40% (100ms)			20%
Parameter	**Conditions**	**Min.**	**Typ.**	**Max.**
Output Wave Distortion THD	Average of 16 samples			2%
Output HF Ripple				2.5%
Time Between Restart Attempts			4000ms	
Number of attempts of consecutive overload			5	

CONTROL

Parameter	Conditions
Output OK LED	Green
Input OK LED	Green
Input Alarm	Open When Alarm. Max. Rating: 0.16A at 160VDC
Output Alarm	Open When Alarm. Max Rating: 0.16A at 160VDC
Remote OFF	Off applying 15 ÷ 154VDC (acc. To EN50155), Impedance > 35kΩ
Configurable Input (Reverse Rotation or Mid-power	ON: applying 15÷154VDC (acc. To EN50155), Impedance > 35kΩ

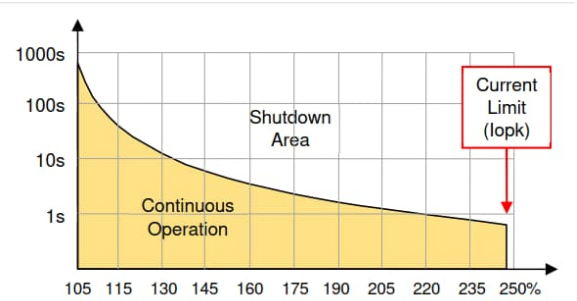
ENVIROMENTAL CONDITIONS

Parameter	Conditions		Min.	Typ.	Max.
Operating Temperature Range	Option PRB and PRT	At Full Load (EN50155 OT1)	-25°C		+55°C
	Option PRL	At Full Load (EN50155 OT2)	-40°C		+55°C
	Option PRB and PRT	At 62.5% Load (EN50155 OT3)	-25°C		+70°C
	Option PRL	At 62.5% Load (EN50155 OT4)	-40°C		+70°C
Storage Temperature Range	Option PRB and PRT		-25°C		+80°C
	Option PRL (Note1)		-40°C		+80°C
Operating Humidity Range	Non-Condensing		5%		95%
Storage and Transportation Humidity Range	Non-Condensing		5%		95%
Operating Altitude	At Full Load				2000m
	At 95% of Load				2500m
Cooling	Controlled internal fan				
MTBF	MIL-HDBK-217-E; G_B, 25°C			100000h	

SAFETY AND PROTECTIVE FUNCTIONS

Parameter	Conditions		Min.	Typ.	Max.
Dielectrics withstand voltage (@50Hz /1m)	Option PRB and PRT	Input – Output (50Hz / 1min)		3000VRMS	
	Option PRL			3000VRMS	
	Option PRB and PRT	Input – P.E. (50Hz / 1min)		1000VRMS	
	Option PRL			2500VRMS	
	Option PRB and PRT	Output – P.E. (50Hz / 1min)		1500VRMS	
	Option PRL			2500VRMS	
	Option PRB and PRT	Signals (Note2) – P.E. + Input		1500VRMS	
	Option PRL			1500VRMS	
	Option PRB and PRT	Signals (Note2) – Output		1500VRMS	
	Option PRL			2500VRMS	
Output Under-voltage Shutdown	Setting 1000ms				85%
Warning voltage (output alarm)	Setting 200ms				90%
Look for continuous overload or internal failure				Unlimited Time	
Reset Time by Input Disconnection			2min		
Internal warning temperature				82°C	
Internal shutdown temperature				98°C	
Internal restart temperature				87°C	
Internal Temperature of Fan Start-up				45°C	
Against over-temperature	Shutdown with auto-recovery				
Against overload	Current and I2T limited				
Maximum overload I^2t	See figure below				

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OVERLOAD PROTECTION		
Protection Against Overloads and Short-Circuit	By Current Limiting at Iopk By I^2t. The Unit Shutdown when the Current-Time is over the Continuous Operation Curve	
Overload Protection Recovery	Every 4 Seconds After Shutdown, the Unit tries to Restart Up to 5 Times. If the Overload Persists, the Unit Reminds Shutdown Until an Input Reconnection.	

CERTIFICATIONS	
Environmental (Railway Standards)	
Compliance	**Standard / Criterion**
RoHS Restriction of the use of certain hazardous substances in electrical and electronic equipment	2015/863/EU
RoHS2	RoHS 2011/65/EU + AM2015/863
CE	CE 2013
UKCA	UKCA
Fire Protection on Railway Vehicles	EN 45545-2 approved
Shock and Vibration	EN61373:2010+Corr 1:2011 Cat.1 Class B

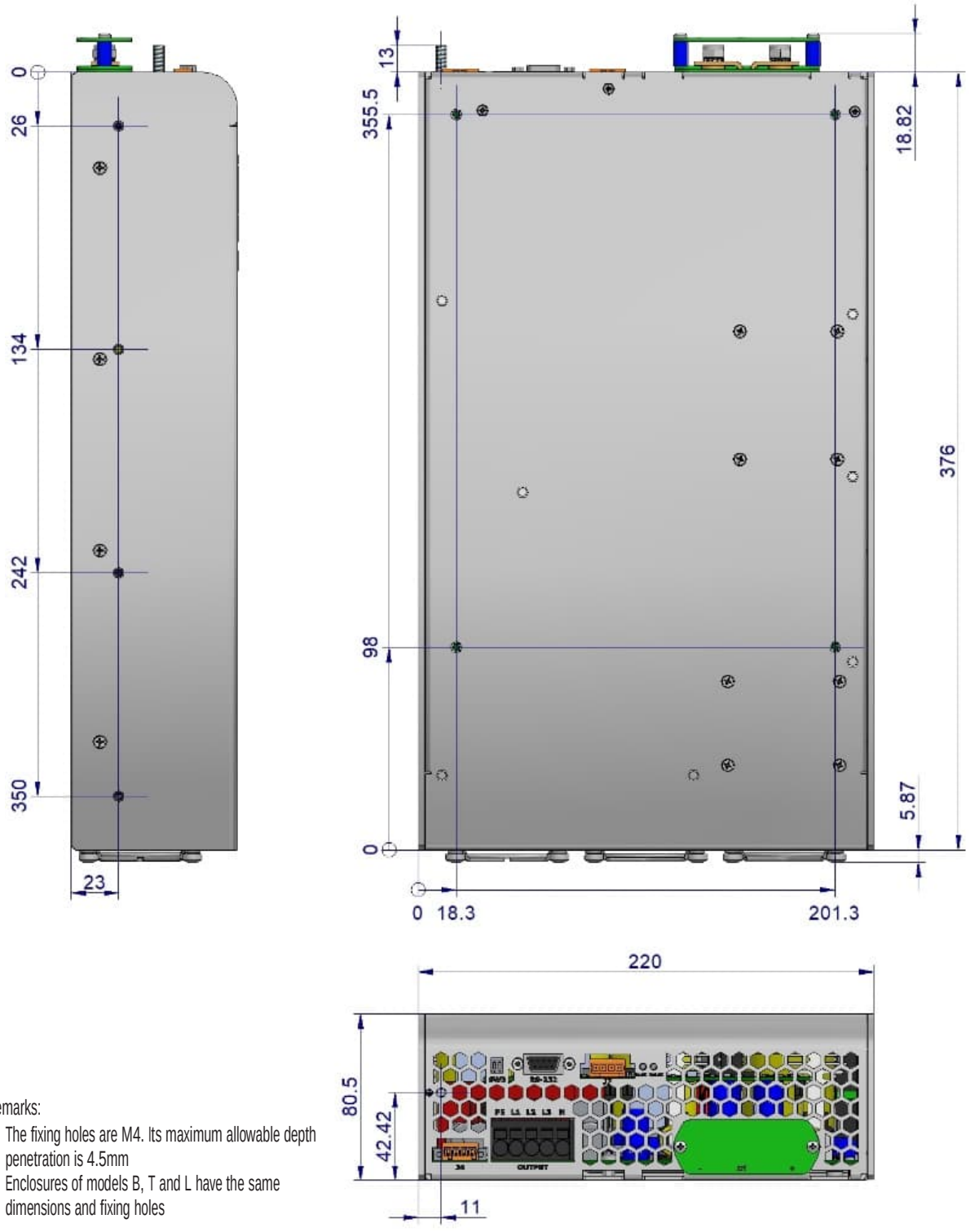
CERTIFICATIONS	
Safety	
Compliance	**Standard / Criterion**
Low voltage the electrical equipment (safety) regulations	2014/35/EU
Audio/video, information and communication technology equipment Safety requirements	EN IEC62368-1:2024 + A11:2024
Railway Applications - Electrical Equipment used on rolling stock (Option PRT)	EN50155: 2021

CERTIFICATIONS	
EMC Compliance	
Compliance	**Standard / Criterion**
EMC Electromagnetic compatibility regulations	2014/30/EU
Immunity according	EN61000-6-2 (EN50121-3-2)
Emission according	EN61000-6-4 (EN50121-3-2)
Railway applications. EMC Rolling stock equipment	EN50121-3-2: 2016

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MECHANICAL DATA				
Parameter	Conditions	Min.	Typ.	Max.
Weight				7150g 15.76lb
Width			400.7mm – 15.48”	
Length			220.0mm – 8.66”	
Height			80.5mm – 3.17”	

DIMENSIONS



Remarks:

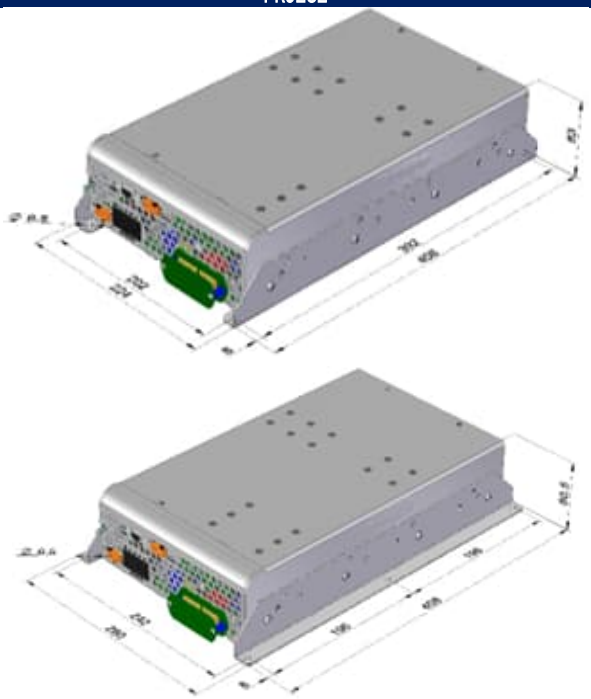
- The fixing holes are M4. Its maximum allowable depth penetration is 4.5mm
- Enclosures of models B, T and L have the same dimensions and fixing holes

ACCESSORIES

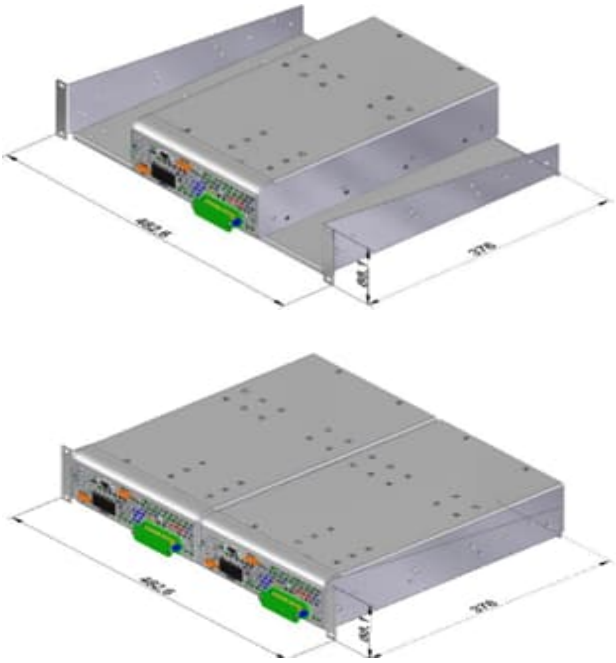
Description	Notes	Code
Mounting Brackets Kit	Contains Two Brackets and Screws	PR9282
2U 19" Rackmount Tray Kit	It Allows to Install One or Two Units	PR9353

Accessories must be ordered in a separate order line

PR9282

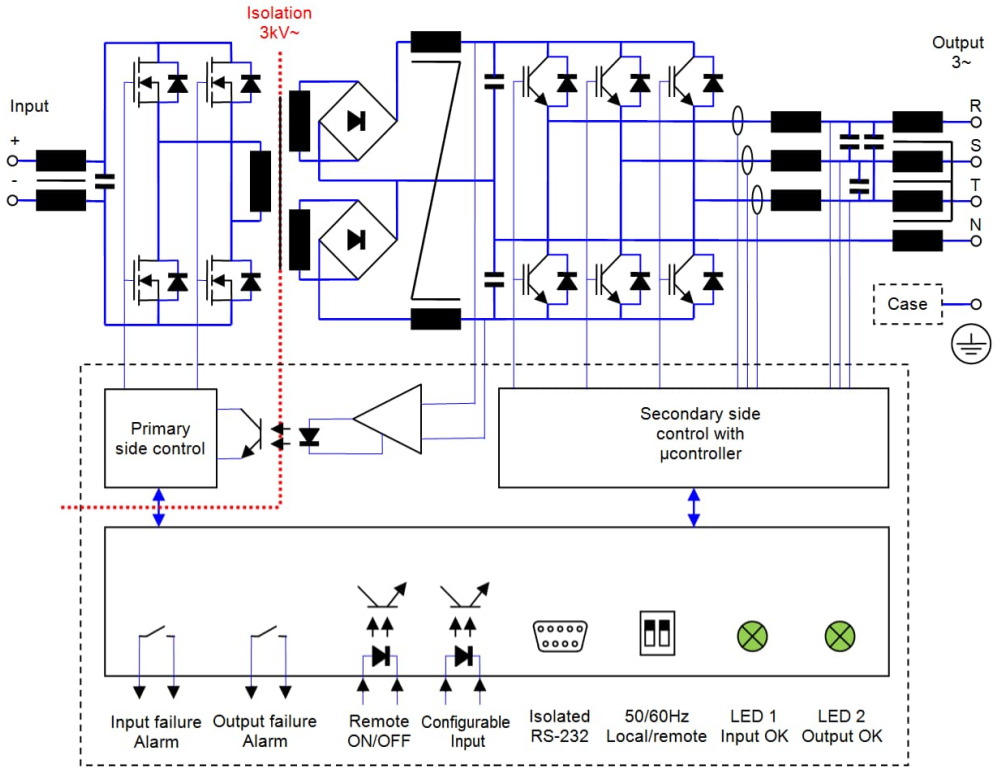


PR9353



BLOCK DIAGRAM

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DESCRIPTION

The RIDA3000 Series consists of three phase sine-wave DC-AC inverters with galvanic isolation between input and output.

The unit allows:

- Three working modes configurable via switch SW3:

SW3-1	SW3-2	WORKING MODE
OFF (UP)	OFF (UP)	Output frequency: 50Hz or the one programmed by default via RS232, if different from 50Hz. Output enabled by default.
OFF (UP	ON (DOWN)	Output frequency: 50Hz or the one programmed by default via RS232, if different from 50Hz. Output disabled by default. It is enabled by the PRG3999.9 command (RS232).
ON (DOWN)	OFF/ON (UP/DOWN)	Output frequency: 60Hz.

When SW3-2 is ON (down position), the AC output must be enabled by means of the command PRG3999.9. You will find more information about this and other commands in the table "RS232 communication port" in the section below (see page 6/10).

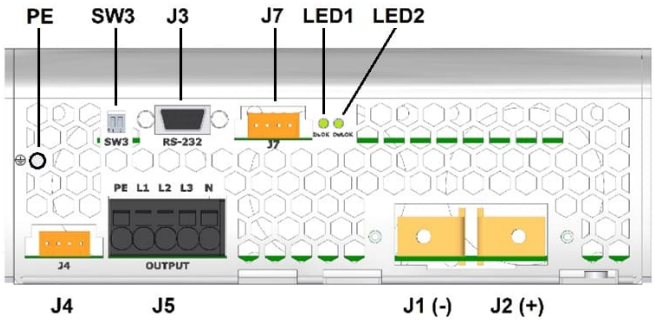
- Shutdown applying voltage output 15 to 154 V on pins 3 and 4 of J4
- Start-up motors by means of a soft start. In the start-up, the output voltage rises linearly from 0 V to set voltage and the frequency from the initial to the set one. The start-up ramp slope may be changed via RS-232
- Set the rotation speed of a motor according to the appropriate Voltage/Frequency ratio.
- Configurable input (pin 1 and 2 of J4):

Reverse mode: Changing the rotation direction for the next start-up of a motor by applying voltage between 15 and 154 V

- Mid power mode: Changing the output frequency in V/F mode from nominal to a mid-power frequency by applying voltage between 15 and 154 V.
- Monitoring the status of the input and output voltage through the contacts of two separate solid-state relays.
- Set and monitor parameters via RS-232.
- The RIDA3000 Series is equipped with maximum average power protection as well as maximum output peak current protection. This protects the semiconductors even when an output short-circuit occurs. It also features a disabled function for input under-voltage, which allows protecting the batteries from harmful discharges.

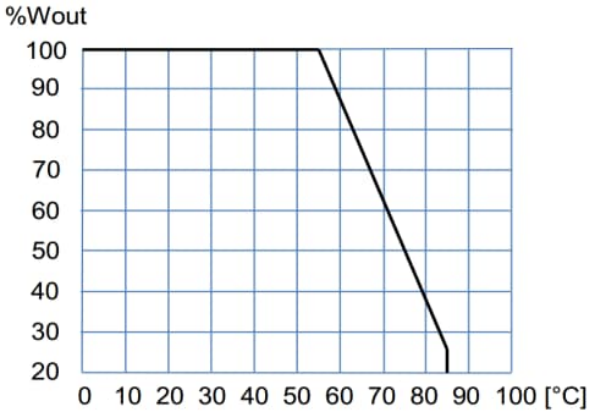
CONNECTIONS

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PIN	SIGNAL	TERMINAL
J1	-Vin	Terminals M6 (Rec. torque 6 Nm)
J2	+Vin	
PE	Protective Earth	Stud M5 (Rec. torque 3.8 Nm)
J5 – 1	Protective Earth	Cables 1.5 ÷ 2.5 mm²
J5 - 2	Output R	
J5 – 3	Output S	
J5 – 4	Output T	
J5 – 5	Output Neutral	
J4 – 1	+ Configurable input	Cables 0.25 ÷ 1.5 mm² **Option PRB and PRTT** Phoenix Contact MC1.5/4-G-3.81 Includes female: MC1.5/4-ST-3.81 **Option PRL** Wago 734-264 Includes female: 734-204/037-000
J4 – 2	- Configurable input	
J4 – 3	+ Remote ON/OFF	
J4 - 4	- Remote ON/OFF	
J7 - 1	Output alarm	
J7 – 2	Output alarm	
J7 - 3	Input alarm	
J7 - 4	Input alarm	
J3 - 2	RS-232 Rx	Sub-DB9 female
J3 - 3	RS-232 Tx	
J3 - 5	RS-232 GND	
J3 REST	Not connected	
SW3	Options switch	ON is position down

POWER DERATING vs AMBIENT TEMPERATURE



INSTALLATION

- The unit has 4 threaded holes for the fixation on a mounting surface.
- The unit has internal fans. For an appropriate cooling, the air input and output should be free of elements that cause an air flow reduction (minimum recommended distance to other objects 50 mm).
- Make connections as shown in the figure.
- The ground connection can be made through the terminal strip (J5-1) or the ground stud on the front side indistinctly.
- The default output frequency is 50 Hz. For 60 Hz simply actuate the DIP-switch as indicated in the figure.

For safety reasons, the following requirements must be met:

- Provide the equipment with some kind of protective enclosure that complies with the electrical safety directives in effect within the country where the equipment is installed.
- Include an input fuse with a rating immediately higher than the maximum input current.
- Use cables of adequate cross-section to connect inputs and outputs. The following table lists the maximum currents and the minimum cross-sections for the cables used for each power connection.

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REC	INPUT 24V	INPUT 36V	INPUT 48V	INPUT 72V	INPUT 110V	OUTPUT 230V	OUTPUT 400V
MAX CURRENT (A)	161	132	98	66	43	7.55	4.4
CABLE CROSS-SECTION (mm^2)	$50mm^2$	$50mm^2$	$25mm^2$	$16mm^2$	$10mm^2$	$2.5mm^2$	$1.5mm^2$

For the installation of converter, the following must be adhered to:

- The converter must be installed at a secure location out of reach of the user. This is to prevent dangers such as accidental touching of HV components or skin burns on the hot housing.
- The converter should be installed at a dry location, safe from splashing water, dirt and stone chipping.
- The tightness of the converter can only be guaranteed if all signal wires to the signal connectors are assembled and connected to a tight unit on both sides. If this is not the case for a cable or wire, it must be sealed separately.
- The mechanical fixture is to be designed in such a way that the device is installed in a fixed position and with as little vibrations as possible.
- All cable connections must be secured with strain relief elements near the device (not included in the scope of delivery).
- Cable connections must have sufficient play and must not meet sharp-edged components.
- The enclosure should be sufficiently ventilated (no heat accumulation).

RS232 COMMUNICATION PORT

It is possible to control and monitor the unit via RS232 by means a terminal emulator like “Tera Term” or “Putty”. Also, it is possible to control and monitor the unit directly using the protocol showed in table: Protocol Configuration: ASCII Code, 19200Bauds, Parity None, 8Bits, 1Bit Stop



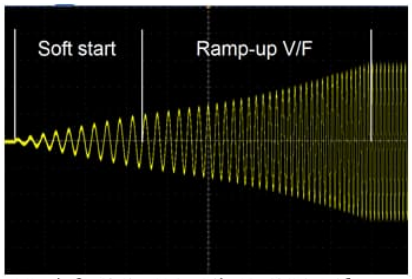
Protocol configuration: ASCII code, 9600 bauds, parity none, 8 bits, 1 bit stop

Header		Function	Parameter		Returns	Description
P	R	L	V		PTV■■■.■	Input Voltage in Volts
			v		PTv■■■.■	Input Voltage Ripple in Volts
			U		PTURS=■■■■[13]UST=■■■■[13] URT=■■■■	Output voltage in Volts RMS ([13]=Char 13 of ASCII Code)
			I		PTIR=■■.■■[13]IS=■■.■■[13] IT=■■.■■	Output Current in Amps RMS ([13]=Char 13 of ASCII Code)
			T		PTT■■■.■	Internal Temperature in K
			F		PTF■■■.■	Nominal Output Frequency in Hz
			f		PTf■■■.■	Actual Output Frequency in Hz
			u		PTu■■■.■	Actual Output Voltage Set-Point in V
			S		PTS■■■.■	Inverter Status 999.9 -> Enabled 000.0 -> Disabled 222.2 -> Blocked by Overload 111.1 -> Blocked by Overload or Short-Circuit
			M		PTM■■■■	Model Number
			R		PTR■■■■	Firmware Version
			Other		PTE	Command Not Supported
		G	1	■■■.■	OK/ERR	Set the Low Input Voltage Timed Shutdown in V
			2	■■■.■	OK/ERR	Set the Minimum Alarm Input Voltage in V
			3	■■■.■	OK/ERR	Change the Status Bit (After Start-Up Enabled with SW3=LOCAL and Disabled with SW3=REMOTE) 999.9 -> Inverter Enabled 000.0 -> Inverter Disabled
			4	■■■.■	OK/ERR	Set the Output Voltage in Vrms (Vo) (Output Must be Stopped) 050.0 ≤ ■■■.■ ≤ 232.0 (Models of 230V Output) 050.0 ≤ ■■■.■ ≤ 405.0 (Models of 400V Output)
			5	■■■.■	OK/ERR	Set the Maximum Output Current in Arms 20% Inom ≤ ■■■.■ ≤ 100% Inom
			6	■■■.■	OK/ERR	Set the Nominal output Frequency in Hz (Fo) (Output Must be Stopped) 005.0 ≤ ■■■.■ ≤ 075.0

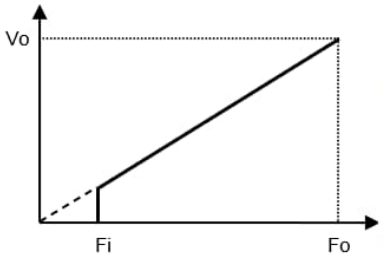
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Header		Function	Parameter		Returns	Description
			7	■■■.■	OK/ERR	Set the Alarm Maximum Output Current in Arms 0 ≤ ■■■.■ ≤ 100% Imax_warning
			8	■■■.■	OK/ERR	111.1 -> Reset the Inverter
			L	■■■.■	OK/ERR	Set the Minimum Input Starting Voltage in Volts
			O	■■■.■	OK/ERR	Set the Initial Frequency in the Start-Up (Fi) 005.0 ≤ ■■■.■ ≤ 075.0
			P	■■■.■	OK/ERR	Set the Ramp-Up in Increment of "N" Cycles per Hz in mode V/F, Frequency Charges or Start-Up 001.0 ≤ ■■■.■ ≤ 100.0
			Q	■■■.■	OK/ERR	Set the Ramp-Down in Decrement of "N" Cycles per Hz in mode V/F (Note-1) 002.0 ≤ ■■■.■ ≤ 100.0
			Y	■■■.■	OK/ERR	*Charge the Working mode of the Input J4-1, J4-2 111.1 -> Input as Reverse Phase Control (Default) 222.2 -> Input as Mid-Power Control
			X	■■■.■	OK/ERR	*Set the Mid-Power Frequency for V/F mode by the Use of Input J4-1, J4-2 005.0 ≤ ■■■.■ ≤ 75.0
		M	1	■■■.■	OK/ERR	Set a New Output Frequency in Hz (Output must be Run and Not Stored in Memory) 005.0 ≤ ■■■.■ ≤ 075.0
			2	■■■.■	OK/ERR	Set a New Output Voltage in Volts (Output must be Run and Not Stored in Memory) 050.0 ≤ ■■■.■ ≤ 232.0 (Models of 230V Output) 050.0 ≤ ■■■.■ ≤ 405.0 (Models of 400V Output)
			3	■■■.■	OK/ERR	Set a New Output Frequency in Hz in mode V/F (Output must be Run and Not Stored in Memory) 005.0 ≤ ■■■.■ ≤ 075.0
			4	■■■.■	OK/ERR	Changes the Output Phase Order (Output must be Run and nor Stored in Memory) 111.1 -> Phase RST (Direct Phase) 222.2 -> Phase SRT (Reverse Phase)

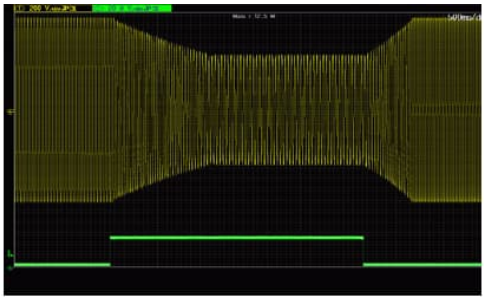
* Parameters are only useful from version 6.0 of firmware.



Example for N=1: start-up time = N x 1.7 s for changes from 16 Hz to 50 Hz



Mode V/F curve


Example for change from 50Hz / 400 V to 30 Hz and 240 V with ramp-down of 2 cycles / Hz and ramp-up de 1 Cycle/Hz. Yellow: output voltage and Green: Mid-Power input signal

WARRANTY AND GUARANTEE

The warranty corresponds to the regulations in our currently valid general terms and conditions.

INSTRUCTIONS REGARDING DISPOSAL

A basic requirement for the re-use and recycling of used electronic devices is the correct disposal. With the implementation of the electric and electronic device regulation, electronic devices may no longer be disposed of along with ordinary household waste but must be separately collected and recorded by a specialist service.
Disposal through a specialist service significantly helps to avoid dangers to people and nature. Therefore, in the case of disposal, we recommend contacting a recognized specialist disposal service.

REQUIREMENTS ON THE OPERATION PERSONNEL

All courses of action described in this manual may only be carried out by a qualified electrician! Specialist staff are defined as electricians who have had

- specific professional training
- have knowledge and experience in the field of electronics
- as well as knowledge of relevant provisions and dangers for which they can provide proof. Furthermore, they must be able to assess the work assigned to them independently, identify possible dangers, and establish necessary protection measures.

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