

FRONIUS GALVO



/ Arc Fault Circuit Interruption



/ Fast PC board replacement



/ SnapInverter mounting system



/ HF transformer switching



/ Wireless monitoring



/ Smart grid ready



The Fronius Galvo is a high frequency transformer, single-phase inverter available in power categories from 1.5 to 3.1 kW. Its light-weight, low-profile design and innovative hinged mounting system allows for single-person installation in under 15 minutes and simple field servicing. It comes equipped with built-in wireless monitoring, arc fault protection and supports third-party interfaces.

The Fronius Galvo is future-proof because the plug-in card technology enables functions to be retrofitted at a later date. The Fronius Galvo also comes with advanced grid features, such as reactive and effective power control, voltage-dependent power manipulation and BUS master functions; smart grid features that go beyond the required standards to ensure optimal operation with tomorrow's grid and information infrastructure.

TECHNICAL DATA FRONIUS GALVO

GENERAL DATA	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Dimensions (height x width x depth)	24.7 x 16.9 x 8.1 in. / 62.7 x 42.9 20.6 cm			
Weight	36.05 lbs. / 16.4 kg		36.93 lbs. / 16.8 kg	
Degree of protection	NEMA 4X			
Night time consumption	< 1 W			
Inverter technology	HF transformer			
Cooling	Variable speed fan			
Installation	Indoor and outdoor installation			
Ambient operating temperature range	-40 F to 122 F (-40 C to 50 C)			
Permitted relative humidity	0 to 100% (non-condensing)			
Admissible conductor size (DC)	AWG 14 to AWG 6 - CU / AWG 6 - AL - solid			
Number of DC input terminals	3 x DC+ and 3 x DC- screw terminals for solid copper or aluminium and stranded / fine stranded copper			
Certificates and compliance with standards	UL 1741-2010, UL1998 (for functions: AFCI, GFDI and isolation monitoring), IEEE 1547-2003, IEEE 1547.1-2003, ANSI/IEEE C62.41, FCC Part 15 A & B, NEC Article 690, C22. 2 No. 107.1-01 (September 2001) , UL1699B Issue 2 -2013, CSA TIL M-07 Issue 1 -2013			
PROTECTIVE DEVICES	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Overload behaviour	Operating point shift, power limitation			
2014 NEC Ready	Included			
DC Arc Fault Circuit Protection	Internal AFCI Type 1 (Arc Fault Circuit Interrupter); in accordance with UL1699B Issue 2 -2013 and CSA TIL M-07 Issue 1 -2013			
DC operation modes	Ungrounded / neg. grounding in accordance with NEC 2014. Positive grounding in accordance with NEC 2011			
DC Ground fault detector / interrupter	Internal GFDI (Ground Fault Detector/Interrupter); in accordance with UL 1741-2010 and NEC 2014 (negative grounding)			
DC disconnect	Included			
INTERFACES	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Wi-Fi* / Ethernet LAN	Wireless standard 802.11 b/g/n / Fronius Solar.web, SunSpec Modbus TCP, JSON			
Digital inputs/outputs	6 digital configurable I/O + 4 digital inputs + 1 relay contact			
USB (A socket)	For USB sticks- updates, logging			
2 x RS422 (RJ45 socket)	Fronius Solar Net			
Datalogger and Webserver	Included			
RS485	SunSpec Modbus RTU, SunSpec Modbus TCP and Fronius Solar API (JSON, for actual values) or meter connection (Available Fall 2014)			

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INPUT DATA		GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
Max. permitted PV power		2.25 kW	3 kW	3.75 kW	4.65 kW
Max. usable input current	240 V	13.4 A	17.9 A	16.1 A	20.0 A
	208 V	13.4 A	17.0 A	16.1 A	18.7 A
Max. admissible input current		16.7 A	22.4 A	20.1 A	25.0 A
Nominal input voltage		260 V		330 V	
Min./Max. input voltage		120 V / 420 V		165 V / 550 V	
DC startup voltage		140 V		185 V	
MPP Voltage Range		120 V - 335 V		165 V - 440 V	

OUTPUT DATA		GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.1-1
AC nominal output power		1,500 VA	2,000 VA	2,500 VA	3,100 VA
Max. output power		1,500 VA	2,000 VA	2,500 VA	3,100 VA
Max. output fault current / Duration		232 A Peak / 3.6 ms	232 A Peak / 3.6 ms	488 A Peak / 1.4 ms	488 A Peak / 1.4 ms
Max. continuous output current	240 V	6.3 A	8.3 A	10.4 A	12.9 A
	208 V	7.2 A	9.1 A	12.0 A	14.1 A
Recommended OCPD/AC breaker size	240 V	10.0 A	15.0 A	15.0 A	20.0 A
	208 V	10.0 A	15.0 A	15.0 A	20.0 A
Max. efficiency		95.8 %	95.8 %	96.0 %	96.0 %
CEC efficiency	208 V	94.0 %	94.5 %	95.0 %	95.0 %
	240 V	94.5 %	94.5 %	95.0 %	95.5 %
Admissible conductor size (AC)		AWG 14 to AWG 6 - CU / AWG 6 - AL - solid			
Max. output overcurrent protection		20 A			
Grid connection		208 / 240 V			
Frequency		60 Hz			
Frequency range		45 - 65 Hz			
Total harmonic distortion		< 4 %			
Power factor range		0.85 - 1 ind./cap			