

# **FRONIUS GALVO**

The future-proof inverter for small self-consumption systems











Ready



SnaplNverter Technology

HF transformer switchover

Integrated data communication

Zero feed-in

With power categories ranging from 1.5 to 3.1 kW, the Fronius Galvo is perfect for households — and is especially suitable for self-consumption systems. The integrated energy management relay allows the self-consumption component to be maximised.

A host of other smart features make the Fronius Galvo one of the most future-proof inverters in its class: for example, the integrated datalogging, the simple connection to the internet by WLAN, or the plug-in card technology for retrofitting additional functions.

## TECHNICAL DATA FRONIUS GALVO

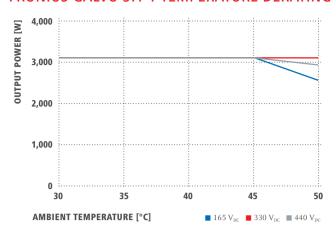
INPUT DATA	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.0-1 <sup>1)</sup>	GALVO 3.1-1	
Number of MPP trackers			1			
Max. input current (I <sub>dc max</sub> )	13.3 A	17.8 A	16.6 A	19.8 A	20.7 A	
Max. array short circuit current	20.0 A	26.8 A	24.8 A	29.6 A	31.0 A	
DC input voltage range (U <sub>dc min</sub> - U <sub>dc max</sub> )	120 -	120 - 420 V		165 - 550 V		
Feed-in start voltage (U <sub>dc start</sub> )	14	140 V 185 V				
Usable MPP voltage range	120 -	120 - 335 V		165 - 440 V		
Number of DC connections		3				
Max. PV generator output (P <sub>dc max</sub> )	3.0 kW <sub>peak</sub>	4.0 kW <sub>peak</sub>	5.0 kW <sub>peak</sub>	6.0 kW <sub>peak</sub>	6.2 kW <sub>peak</sub>	

OUTPUT DATA	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.0-1 <sup>1)</sup>	GALVO 3.1-1		
AC nominal output (Pac,r)	1,500 W	2,000 W	2,500 W	3,000 W	3,100 W		
Max. output power	1,500 VA	2,000 VA	2,500 VA	3,000 VA	3,100 VA		
AC output current (I <sub>ac nom</sub> )	6.5 A	8.7 A	10.9 A	13.0 A	13.5 A		
Grid connection (voltage range)		1~NPE 230 V (+17% / -20%)					
Frequency (frequency range)		50 Hz / 60 Hz (45 - 65 Hz)					
Total harmonic distortion		< 4 %					
Power factor (cos hac r)		0.85 - 1 ind. / cap.					

GENERAL DATA	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.0-1 <sup>1)</sup>	GALVO 3.1-1		
Dimensions (height x width x depth)		645 x 431 x 204 mm					
Weight	16.	16.4 kg		16.8 kg			
Degree of protection		IP 65					
Protection class			1				
Overvoltage category (DC / AC) 2)			2/3				
Night-time consumption			< 1 W				
Inverter concept		HF transformer					
Cooling		Regulated air cooling					
Installation		Indoor and outdoor installation					
Ambient temperature range		-25 - +50 °C					
Permitted humidity		0 to 100 %					
Max. altitude		2,000 m / 3,500 m (unrestricted / restricted voltage range)					
DC connection technology		3x DC+ and 3x DC- screw terminals 2.5 - 16 mm <sup>2</sup>					
AC connection technology		3-pin AC screw terminals 2.5 - 16 mm <sup>2</sup>					
Certificates and compliance with standards	,	ÖVE / ÖNORM E 8001-4-712, AS 4777-2, AS 4777-3, AS3100, DIN V VDE 0126-1-1/A1, VDE AR N 4105, IEC 62109-1-2 IEC 62116 IEC 61727 CFR 06-190 CFI 0-21 FN 50438 G83 G59 NRS 097					

<sup>&</sup>lt;sup>1)</sup> Available for countries where 3 kW restrictions apply.
<sup>2)</sup> Testing to IEC 62109-1.
Further information regarding the availability of the inverters in your country can be found at www.fronius.com.

### FRONIUS GALVO 3.1-1 TEMPERATURE DERATING



### TECHNICAL DATA FRONIUS GALVO

EFFICIENCY	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.0-1 <sup>1)</sup>	GALVO 3.1-1
Max. efficiency	95.9 %	96.0 %		96.1 %	
European efficiency (ηEU)	94.5 %	94.9 %	95.2 %	95.4 %	95.4 %
MPP adaptation efficiency	> 99.9 %				

PROTECTION DEVICES	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.0-1 <sup>1)</sup>	GALVO 3.1-1	
DC insulation measurement	Warning/shutdown (depending on country setup) at RISO < 600 kOhm					
Overload behavior	Operating point shift, power limitation					
DC disconnector	Included					
Reverse polarity protection	Yes					

INTERFACES	GALVO 1.5-1	GALVO 2.0-1	GALVO 2.5-1	GALVO 3.0-1 <sup>1)</sup>	GALVO 3.1-1		
WLAN / Ethernet LAN	Fronius Solar.web, Modbus TCP SunSpec, Fronius Solar API (JSON)						
6 inputs and 4 digital inputs/outputs	Interface to ripple control receiver						
USB (A socket) 2)	Datalogging, inverter update via USB flash drive						
2x RS422 (RJ45 socket) <sup>2)</sup>	Fronius Solar Net						
Signalling output <sup>2)</sup>	Energy management (floating relay output)						
Datalogger and Webserver	Included						
External input 2)	S0-Meter Interface / Input for overvoltage protection						
RS485	Modbus RTU SunSpec or meter connection						

<sup>&</sup>lt;sup>1)</sup> Available for countries where 3 kW restrictions apply. <sup>2)</sup> Also available in the light version. Further information and technical data can be found at **www.fronius.com**.

/ Perfect Welding / Solar Energy / Perfect Charging

#### THREE BUSINESS UNITS, ONE GOAL: TO SET THE STANDARD THROUGH TECHNOLOGICAL ADVANCEMENT.

What began in 1945 as a one-man operation now sets technological standards in the fields of welding technology, photovoltaics and battery charging. Today, the company has around 3,800 employees worldwide and 1,242 patents for product development show the innovative spirit within the company. Sustainable development means for us to implement environmentally relevant and social aspects equally with economic factors. Our goal has remained constant throughout: to be the innovation leader.

Further information about all Fronius products and our global sales partners and representatives can be found at www.fronius.com

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