

<b>Product Certificate Number</b>	<b>11212-1-CER-E1</b>
<b>Applicant</b>	CIRCUTOR, S.A. Vial Sant Jordi, s/n 08232 Villadecavalls. Barcelona, Spain
<b>Series/</b>	Fronius Galvo / CDP / MC3 / GE CTX
<b>Model/</b>	Fronius Galvo 2.5-1/ CDP-0 / MC3-63 / GE CTX 634052
<b>Type of generating unit</b>	Single Phase Inverter / Dynamic Power Controller
<b>Technical Data</b>	See page 2 and 3
<b>Standard</b>	<b>UNE 217001 IN: 2015:</b> Requisitos y ensayos para sistemas que eviten el vertido de energía a la red de distribución.

Having assessed the test report number: 11212-1-TR performed by CERE Testing Laboratory based on the requirements of the EN ISO/IEC 17025:2005

The above-mentioned generating unit complies with the requirements of the: UNE 217001 IN: 2015: Requisitos y ensayos para sistemas que eviten el vertido de energía a la red de distribución.

This certification is according the CERE internal process PET-CERE-09 Rev 9 based on the requirements of the EN ISO/IEC 17065:2012. For this certification process the conformity assessment activities were based on:

- Testing of production samples selected by CERE.
- Audit of quality system according ISO 9001 with certificate number: QMS 140506-01/B issued by a certification body accredited according EN ISO/IEC 17021.
- Inspection of the manufacturing process.

This certificate cancels and supersedes the certificate number: 11212-1-CER.

Madrid, March 07, 2017. This certificate is valid until February 27, 2020

Miguel Martínez Lavin  
Certification Manager

### Inverters characteristics

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
Max. input current ( $I_{dc\ max}$ )	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
Min. input voltage ( $U_{dc\ min}$ )	120 V			165 V	
Feed-in start voltage ( $U_{dc\ start}$ )	140 V			185 V	
Nominal input voltage ( $U_{dc\ n}$ )	260 V			330 V	
Max. input voltage ( $U_{dc\ max}$ )	420 V			550 V	
MPP voltage range ( $U_{mpp\ min} - U_{mpp\ max}$ )	120 - 335 V			165 - 440 V	
Number of MPP trackers			1		
Number of DC connections			3		
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 ( $P_{ac,n}$ )	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 ( $I_{ac\ nom}$ )	6.5 A	8.7 A	10.9 A	13.0 A	13.5 A
Grid connection (voltage range)			1-NPE, 230 V (+17.7% / -20%)		
Frequency (frequency range)			50 Hz / 60 Hz (45 - 65 Hz)		
Total harmonic distortion			< 4%		
Power factor ( $\cos \phi_{ac,n}$ )			0.85 - 1 ind. / cap.		

### Power analyzer characteristics:

<b>Model:</b>	<b>CDP-0, CDP-G, CDP-DUO</b>
<b>Circuito de alimentación</b>	
Tension nominal	230 Vca (80...115%)
Frecuencia	50...60 Hz
Consumo	6 VA / 6 W
Tension nominal	12 VCC
<b>Circuito de medida de tension</b>	
Margen de medida	10...300 Vca
Frecuencia	50...60 Hz
<b>Circuito de medida de corriente</b>	
Corriente nominal	.../250 mA
Corriente máxima	.../300 mA
<b>Clase de precision</b>	
Potencia	0,5%
Energía	1%
<b>Salidas de relé</b>	
Número	4
Tipo	Libre de potencial
Corriente máxima de maniobra	6 A
<b>Comunicaciones</b>	
Interfaz de usuario	Ethernet
Comunicacion con inversor	RS-232, RS-485, RS-422
Comunicacion otros equipos	RS-485

<b>Características constructivas</b>	
Dimensiones	6 módulos DIN
Envolvente	Plástico UL94-V0 Autoextinguible
Peso	250 gr
<b>Condiciones ambientales</b>	
Temperatura de trabajo	-25°C...+70°C
Humedad relativa	95% sin condensación

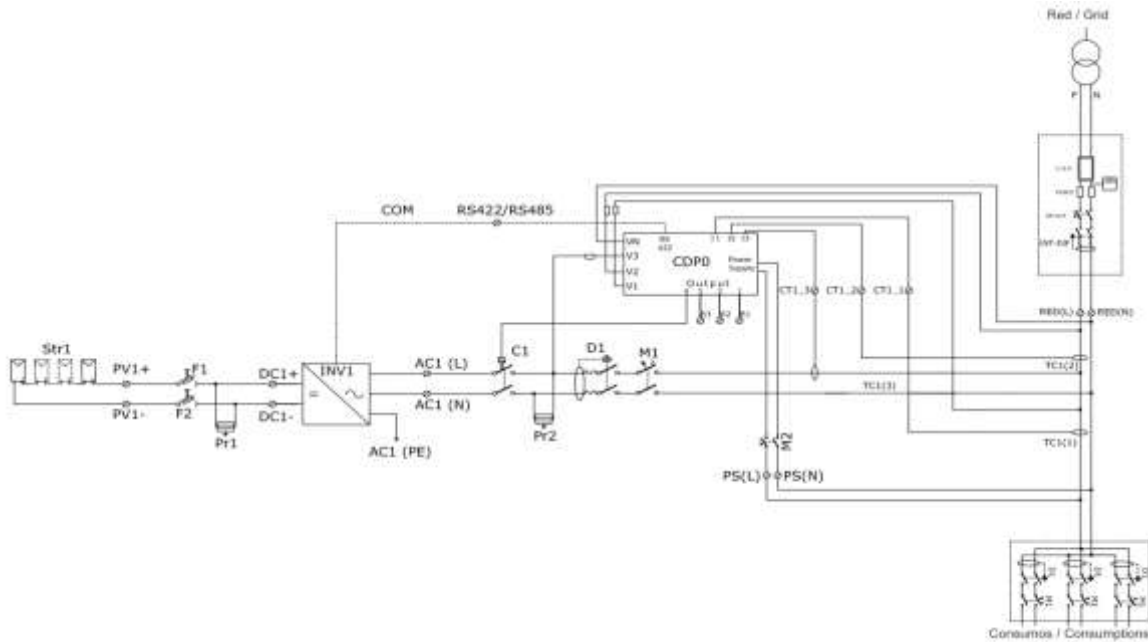
Switch of grid characteristics:

<b>Model:</b>	<b>CTX 634052</b>
Intensidad nominal	63 A
Combinación de contactos	4NA
Tensión de la bobina	230 V
CA/CC	CA/CC
Nº Modulos	3
Tipo	CTX63 40 230 U
Código	666156
Sum. (uds)	3

Current sensors:

<b>Model:</b>	<b>MC3-63</b>	<b>MC3-125</b>	<b>MC3-250</b>
Corriente máxima	63 A	125 A	250 A
Frecuencia	50/60 Hz		
Tensión de aislamiento	3 kVca		
Corriente térmica de cortocircuito ( $I_{th}$ )	60 $I_n$		
Corriente dinámica ( $I_{dyn}$ )	2,5 $I_{th}$		
Tensión mas elevada para el material	0.72 kVca		
Clase	0.5		
Clase térmica	B (130 °C)		
Tipo de encapsulado	Plástico V0 autoextinguible		
Factor de seguridad	Fs 5		
Bornes secundarios precintables	Si		
Terminales secundarios	IP20		

Electrical Diagram



Manufacturer:

CIRCUTOR, S.A. (DEZAC)  
Vial Sant Jordi, s/n  
08232 Villadecavalls. Barcelona. SPAIN

The sample selected to test was representative of the production.  
The sample was selected in manufacture facilities.

On January 16, 2017

Sample Report Number:

11212-1-TM  
11212-6-TM  
11212-7-TM  
11212-9-TM

The inspection of manufacturing process was performed in  
manufacture facilities:

On February 10, 2017

Inspection Report Number:

11212-2-IF