CDP-0

Dynamic power controller

Description

CDP-0 is a dynamic power controller which modifies the MPPT (Maximum Power Point Tracker) of the inverters in order to regulate the PV generation according the energy consumption of the user.

CDP-0 has the goal to regulate the PV production of one or many solar inverters in order to avoid or to adjust the percentage of the energy injected to the grid. **CDP-0** has communication drivers for the main brands of solar inverters in the market (*), being an indispensable product for any PV installation. As the **CDP-0** can communicate with all these solar inverters, its main advantage is that it can regulate very accurately the PV production of any inverter, unlike other systems which uses relays to fix steps, and obviously only can fix a small group of regulation values.

In single-phase systems, **CDP-0** allows to monitor and to register the energy consumption, the PV energy production and also of the grid consumption (or injection). In three-phase systems, **CDP-0** allows to monitor and to register the energy consumption and by using an additional power analyzer, to monitor and to register the grid consumption (or injection) and the PV production.

Some of the main features of the **CDP-0** are:

- Possibility to manage the main solar inverters in the market and many solar inverters by installation
- Web monitoring (smart-phone, tablet or PC)
- Data logger and file downloading (.csv) through any web browser.
- Web configuration of many parameters
- Display with on-line data of PV production, user consumption and grid consumption.
- Capability to use external power analyzers to add features.
- Double protection against grid injection
- MODBUS/TCP communications to allow SCADA integrations

* Check webpage to verify list of solar inverters.

Applications

- Self-consumption PV installations without grid injection
- PV installations with a monitoring system
- PV installations with a grid injection control regulation
- Remote monitoring systems and energy balance trending (with or without grid injection)

Technical features

Power supply circuit	Rated voltage	230 Vac
	Tolerance	80%...115%
	Frequency	50...60 Hz
	Consumption	6 VA
	Rated voltage	12 Vdc
	Consumption	6 W
Voltage measurement circuit	Measurement margin	10...300 Vac
	Frequency	50...60 Hz
Current measurement circuit	Nominal current	.../250 mA
	Maximum current	.../300 mA
Accuracy class	Power	0.5%
	Energy	1.0%
Relay outputs	Number	4
	Type	Potential-free
	Maximum operating current	6 A
Communications	User interface	Ethernet
	Communication with the inverter	RS-232, RS-485, RS-422
	Communication with other units	RS-485
Mechanical features	Dimensions	6 DIN modules
	Material	UL94 – V0 self-extinguishing plastic
	Weight	250 gr
Environmental conditions	Operating temperature	-25 °C...+70 °C
	Relative humidity	95% without condensation
Standards	Safety of electrical measurement and control units **IEC 61010-1:2010**, electromagnetic compatibility **IEC 61000-6-2:2005,** and **IEC 61000-6-4:2011**	

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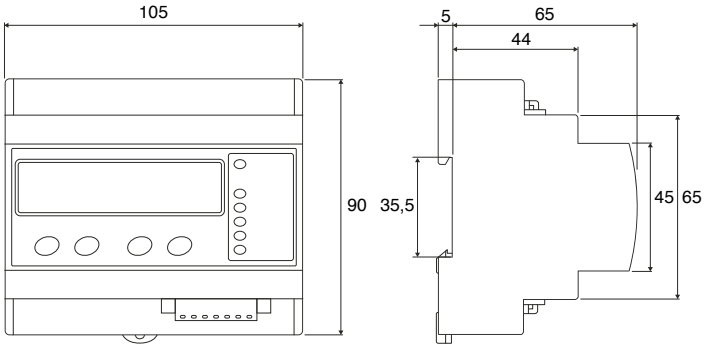
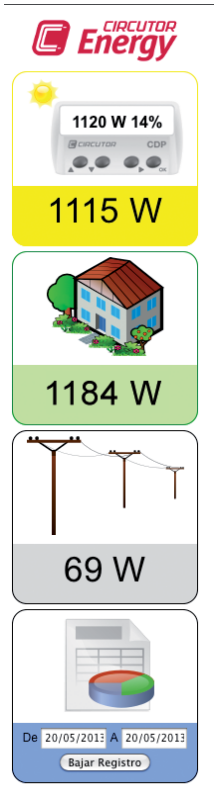
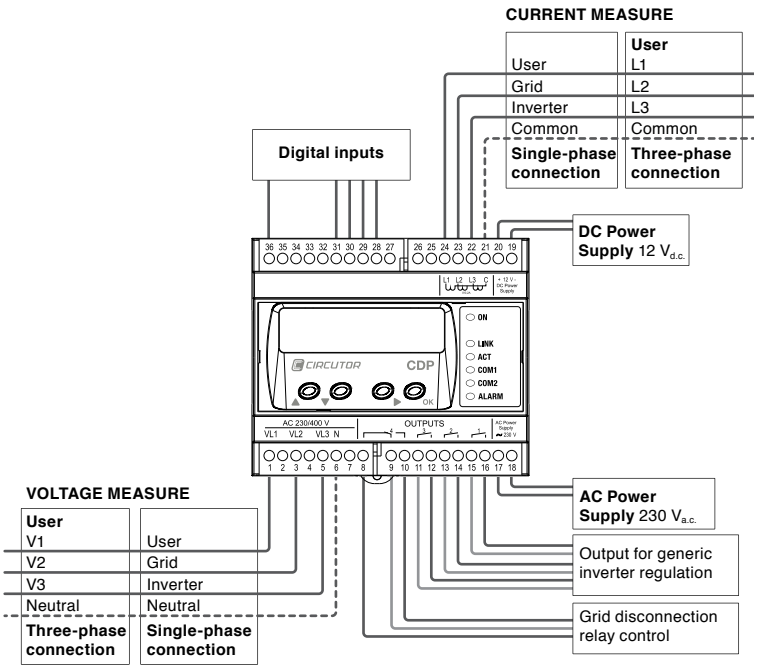
References

Type	Code	Description
CDP-0	E51001	Dynamic power controller, zero injection

Dimensions



Web display



Connections