

Installation and use instructions

CPA is a family of power analyzers for ac 1-phase or dc installation monitoring, thanks to Hall effect sensing. Current is measured with no contact with the copper wire. The comprehensive set of measured variables allow this device to be used to monitor photovoltaic installations, industrial processes, battery charging systems.

Istruzioni installazione e uso

CPA sono una famiglia di analizzatori di potenza per il monitoraggio di installazioni ac monofase o cc, grazie al sensore ad effetto di Hall. La corrente è misurata senza il contatto con il cavo di rame. Il set completo di variabili misurate permette l'uso di questo dispositivo per il monitoraggio delle installazioni fotovoltaiche, nei processi industriali e nei sistemi di carica delle batterie.

Installations- und Gebrauchsanweisung

CPA ist eine Serie von Energiezählern für die Überwachung von ac 1-phasig oder dc-Installation durch Hall-Effekt-Abtastung. Strom wird ohne Kontakt zum Kupferdraht gemessen. Das Gesamtset gemessener Variablen ermöglicht den Einsatz dieses Geräts zur Überwachung von Photovoltaik-Anlagen, Industrieprozessen und Batterieladesystemen.

EN: Features

Electrical specification table with columns: Feature, Value. Includes system type, power supply, consumption, current, voltage, frequency, accuracy, and environmental specs.

RS485 specification table with columns: Feature, Value. Includes protocol, addresses, data format, baud-rate, and response delay.

General specification table with columns: Feature, Value. Includes cable cross section area, screw tightening torque, and protection degree.

IT: Caratteristiche

Caratteristiche elettriche table with columns: Feature, Value. Includes system type, power supply, consumption, current, voltage, frequency, accuracy, and environmental specs.

Caratteristiche ambientali table with columns: Feature, Value. Includes operating temperature, storage temperature, relative humidity, and environment.

Caratteristiche RS485 table with columns: Feature, Value. Includes protocol, addresses, data format, baud-rate, and response delay.

Caratteristiche generali table with columns: Feature, Value. Includes cable cross section area, screw tightening torque, and protection degree.

DE: Daten

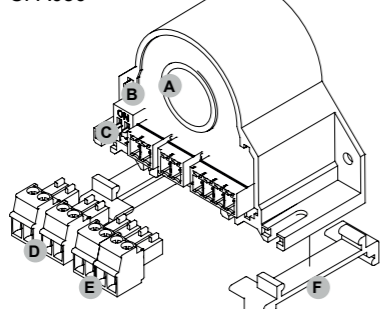
Elektrische Spezifikation table with columns: Feature, Value. Includes system type, power supply, consumption, current, voltage, frequency, accuracy, and environmental specs.

Umweltbedingungen table with columns: Feature, Value. Includes operating temperature, storage temperature, relative humidity, and environment.

RS485 Spezifikation table with columns: Feature, Value. Includes protocol, addresses, data format, baud-rate, and response delay.

Allgemeine technische Daten table with columns: Feature, Value. Includes cable cross section area, screw tightening moment, and protection degree.

CPA050



01

GENERAL WARNINGS

- DANGER: Live parts. Heart attack, burns and other injuries. Disconnect the power supply and load before installing the analyzer.
CAUTION: any changes made by DIP switch require to switch off the power.
CAUTION: make sure that the device is correctly installed before power on.
CAUTION: magnetic fields of high intensity can vary the values measured by the transformer.

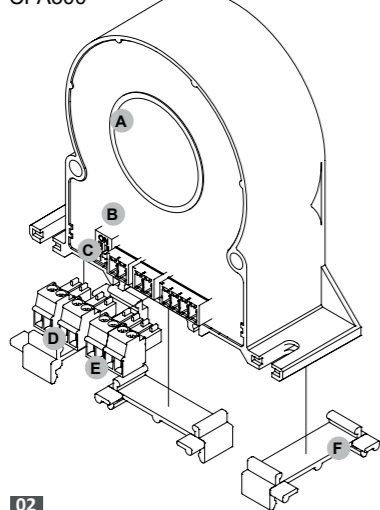


These instructions are an integral part of the product. They should be consulted for all situations tied to installation and use. They should be kept within easy reach of operators, in a clean place and in good conditions.

Product, Fig. 1 and Fig. 2

Table with columns: Element, Component. Maps labels A-F to specific physical components like Hall sensor hole, LED, DIP switch, terminals, and hooks.

CPA300



02

To configure the Baudrate via DIP switch (Fig.1 Fig.2, B)

Set the needed baudrate via DIP switch before connecting and turning on the CPA.

Table with columns: DIP switch, DIP switch 1, DIP switch 2, Address, Baudrate. Shows switch positions for baudrates 9600 and 38400.

PAY ATTENTION: the baudrate 1200, 2400, 4800, 19200, 57600, 115200 can be set only via RS485 (see the section after) by means of UCS software.

To configure the Baudrate and parameters via RS485

PAY ATTENTION: to set the parameter of CPA via RS485 you need the UCS free software tool provided by Carlo Gavazzi. Download the software from the web-site: http://www.productselection.net/

The following table describes you the procedure to program the address, baudrate and other parameters via RS485 and UCS tool.

Table with columns: Step, Action. A 6-step procedure for configuring RS485 parameters via software.

Connection Diagrams

Table with columns: Figure, Description. Lists connection diagrams 03 (ac input), 04 (dc input), 05 (Power Supply), and 06 (RS485 connection).

Legend: pad printed symbols

Table with columns: Symbol, Description. Explains symbols for insulation, high voltage hazard, generic hazard, and cable insertion direction (P1).

MAINTENANCE AND DISPOSAL

Responsibility for disposal

The product must be disposed of at the relative recycling centers specified by the government or local public authorities. Correct disposal and recycling will contribute to the prevention of potentially harmful consequences to the environment and persons.

ITALIANO

AVVERTENZE GENERALI

- PERICOLO: Parti sotto tensione. Arresto cardiaco, bruciature e altre lesioni. Scollegare l'alimentazione e il carico prima di installare l'analizzatore.
ATTENZIONE: ogni modifica apportata mediante DIP switch richiede lo spegnimento preventivo dello strumento.
ATTENZIONE: prima di accendere lo strumento assicurarsi che sia cablato correttamente.
ATTENZIONE: campi magnetici di elevata intensità possono variare i valori misurati dal trasformatore.
USO PREVISTO: misurazione di parametri elettrici in ambienti interni.



Queste istruzioni sono parte integrante del prodotto. Devono essere consultate per tutte le situazioni legate all'installazione e all'uso. Devono essere conservate in modo che siano accessibili agli operatori, in un luogo pulito e mantenuto in buone condizioni.

Prodotto, Fig. 1 e Fig. 2

Table with columns: Elemento, Componente. Maps labels A-F to specific physical components like Hall sensor, LED, DIP switch, terminals, and hooks.

Configurare il Baudrate mediante DIP switch (Fig.1 Fig.2, B)

Impostare il baudrate necessitato, mediante DIP switch, prima di connettere ed accendere il CPA.

Table with columns: DIP switch, DIP switch 1, DIP switch 2, Indirizzo, Baudrate. Shows switch positions for baudrates 9600 and 38400.

ATTENZIONE: i baudrate 1200, 2400, 4800, 19200, 57600, 115200 sono impostabili solo tramite RS485 (vedere la prossima sezione) mediante il software UCS.

Configurare il Baudrate ed i parametri mediante RS485

ATTENZIONE: per impostare i parametri del CPA mediante RS485 si necessita del software gratuito UCS fornito da Carlo Gavazzi. Scaricare il software dal sito web: http://www.productselection.net/

La tabella seguente descrive la procedura per programmare baudrate e altri parametri mediante RS485 e UCS.

Table with columns: Passo, Azione. A 6-step procedure for configuring RS485 parameters via software.

Diagrammi di connessione

Table with columns: Figura, Descrizione. Lists connection diagrams 03 (Collegamento ingresso ca), 04 (Collegamento ingresso cc), 05 (Collegamento di alimentazione), and 06 (Collegamento RS485).

Legenda: simboli tampografati

Table with columns: Simbolo, Descrizione. Explains symbols for insulation, high voltage hazard, generic hazard, and cable insertion direction (P1).

MANUTENZIONE E SMALTIMENTO

Responsabilità di smaltimento

Smaltire con raccolta differenziata tramite le strutture di raccolte indicate dal governo o dagli enti pubblici locali. Il corretto smaltimento e il riciclaggio aiuteranno a prevenire conseguenze potenzialmente negative per l'ambiente e per le persone.

DEUTSCH

ALLGEMEINE SICHERHEITSHINWEISE

- GEFAHR: Spannungsführende Teile. Gefahr von Herzstillstand, Verbrennungen und sonstigen Verletzungen.
VORSICHT: Änderungen durch DIP switch erfordern ein Abschalten der Stromversorgung.
VORSICHT: stellen Sie sicher, dass das Gerät vor der Speisung korrekt installiert wurde.
VERWENDUNG: Messung von elektrischen Parametern, in Innenbereichen.



Diese Anweisungen sind fester Bestandteil des Produkts. Sie müssen vor der Installation und Verwendung sorgfältig gelesen werden. Diese Anweisungen sicher an einem sauberen Ort aufbewahren und für Bedienpersonen jederzeit verfügbar halten.

Produkt, Abb. 1 und Abb. 2

Table with columns: Element, Komponente. Maps labels A-F to specific physical components like Hall-Geber, LED, DIP switch, terminals, and hooks.

Konfiguration der Baudrate per DIP switch (Abb.1 Abb.2, B)

Stellen Sie die erforderliche Baudrate per DIP switch ein, bevor der CPA angeschlossen und eingeschaltet wird.

Table with columns: DIP switch, DIP switch 1, DIP switch 2, Adresse, Baudrate. Shows switch positions for baudrates 9600 and 38400.

ACHTUNG: die Baudrate 1200, 2400, 4800, 19200, 57600, 115200 kann nur per RS485 (siehe folgenden Abschnitt) durch UCS Software eingestellt werden.

Konfiguration der Baudrate und Parameter per RS485

ACHTUNG: zur Einstellung des CPA-Parameters per RS485 benötigen Sie die kostenlose UCS-Software von Carlo Gavazzi. Laden Sie die Software von der Webseite http://www.productselection.net/

Die folgende Tabelle beschreibt die Prozedur zur Programmierung der Adresse, Baudrate und weiterer Parameter per RS485 und UCS-Software.

Table with columns: Schritt, Action. A 6-step procedure for configuring RS485 parameters via software.

Anschlusschaltpläne

Table with columns: Abbildung, Beschreibung. Lists connection diagrams 03 (Anschluss ac-Eingang), 04 (Anschluss dc-Eingang), 05 (Anschluss Spannungsversorgung), and 06 (RS485-Anschluss).

Legende: Aufgedruckte Symbole

Table with columns: Symbol, Beschreibung. Explains symbols for insulation, high voltage hazard, generic hazard, and cable insertion direction (P1).

WARTUNG UND ENTSORGUNG

Verantwortlichkeit für die Entsorgung

Es muss für getrennte Abfallentsorgung anhand der von der Regierung oder den öffentlichen Lokalbehörden benannten Sammelstrukturen gesorgt werden. Die korrekte Entsorgung bzw. das Recycling tragen dazu bei, potentiell negative Auswirkungen auf die Umwelt und die Personen zu vermeiden.

