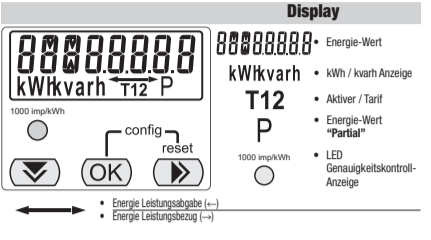


Wechselstromzähler - Direktanschluss 80 A

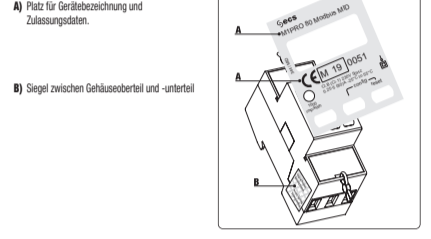
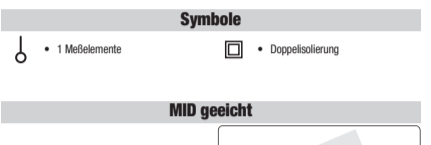
Bedienungsanleitung
Dieses Wechselstromzähler können die wichtigsten Parameter an Ort und Stelle sowie über Kommunikations-Anschlüsse zeigen.



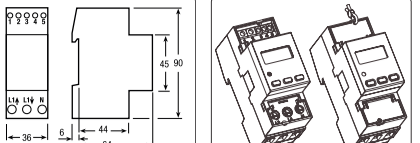
Bestellinformationen
Modell Beschreibung
EC54M36MID M1PRO 80 MID 2 x 50 Impulsausgänge -> Tarif, MID gesamt



Beschreibung der Tasten
Abtauffaste: mit dieser Taste werden die verschiedenen Seiten gezeigt und sind parametrierbar. Der Befehl wird nur durch kurzzeitiges Drücken angenommen (kurzer als 1,5 Sek.).



Maße Plombierbare Klemmenabdeckungen



Kabel-Absollierung und Drehmoment der Klemmschrauben
80 A Direktanschlusss Hauptklemmen
Schraubendreher PZZ

Tarif- und S0 Anschlüsse
Schraubendreher Klinko 0.8x3.5 mm

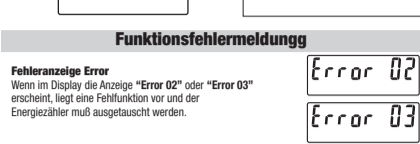
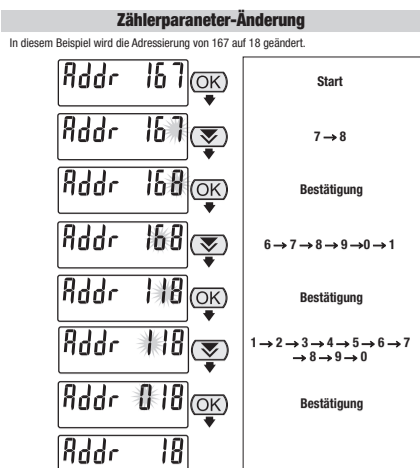
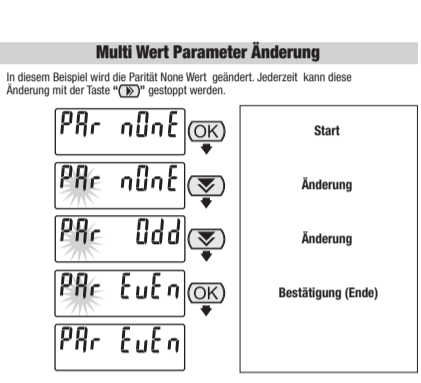
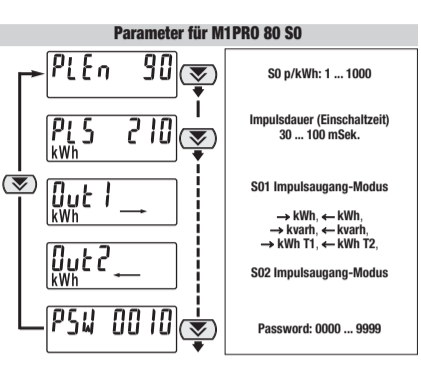
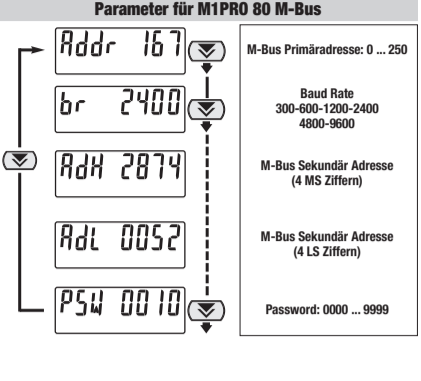
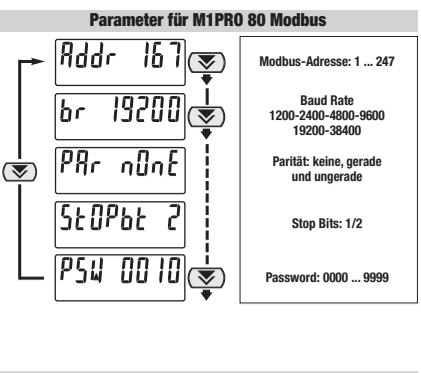
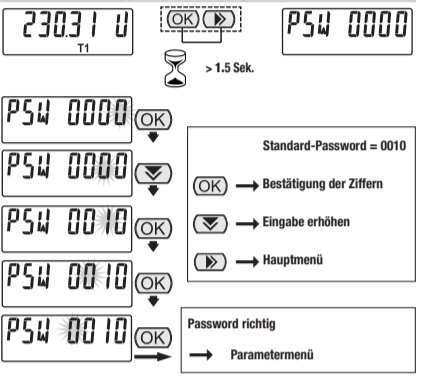
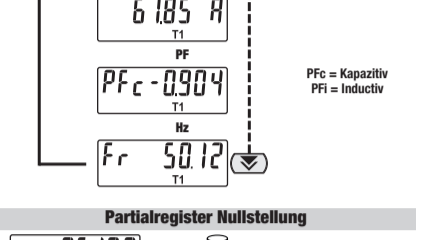
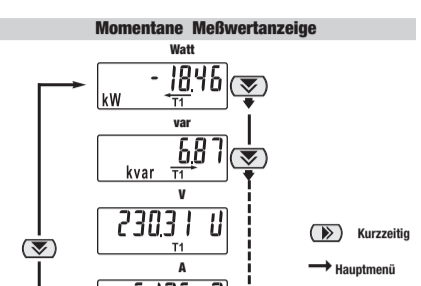
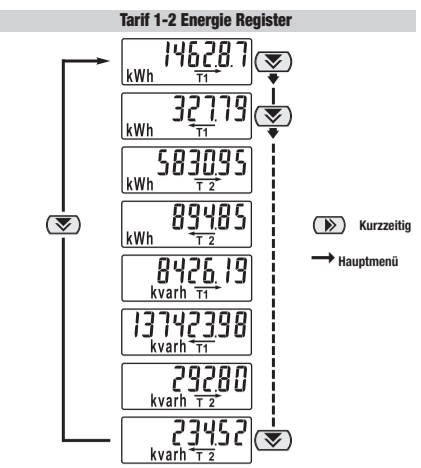
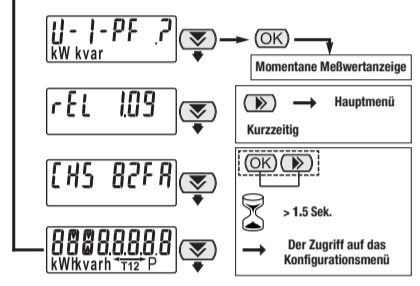
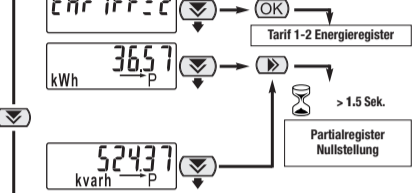
Kommunikationsklemmen
Schraubendreher Klinko 0.8x3.5 mm

Meßgeräte-Anschluß und Hauptseitenanzeige
M1PRO 80 M1PRO 80 M-Bus M1PRO 80 Modbus



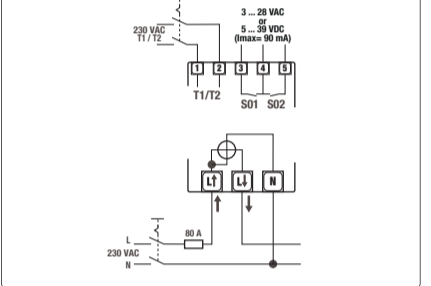
Hauptseiten:
Hier wird nicht nur die Betriebsmöglichkeit gezeigt sondern auch, bei Nichtbeteiligung einer Taste für 30 Sekunden, die Summe des Energierandes bezogener Energie

Beleuchtung des Displays
Wenn länger als 40 Sekunden keine Taste gedrückt wird, kehrt das Display zur Startseite zurück und die Beleuchtung schaltet sich aus.

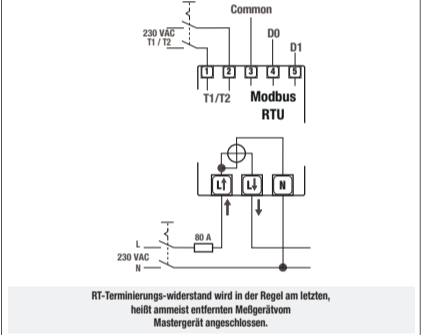


Service und Wartung
Das Gerät benötigt keinerlei Eichung während seiner Lebenszeit. Alle Bauteile haben keinen mechanischen Verschleiß.

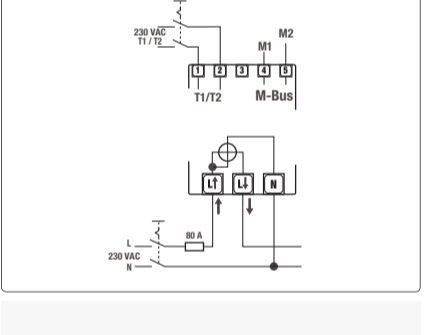
Schaltbild Typ Ausführung S0



Typ Ausführung Modbus



Typ Ausführung M-Bus



Technische Daten

Daten nach EN 50470-1, EN 50470-3, EN 62053-23 und EN 62053-31

Table with columns for general data, functional parameters, and electrical characteristics for the meter.

Table with columns for operating voltage and performance, safety, and meter characteristics.

Table with columns for measurement accuracy, display data, and meter performance.

Table with columns for meter performance, communication, and environmental conditions.

ESCEM36MID Direktanschluss 80 A Schaltstellen S0

Table with columns for electrical characteristics, safety, and meter performance for ESCEM36MID.

ESCEM36MID-ESCEM36M2M Direktanschluss 80 A Integriert, Komm. Modbus/M-Bus

Table with columns for electrical characteristics, safety, and meter performance for ESCEM36MID-ESCEM36M2M.

Notizen

Large grid area for notes and additional information.

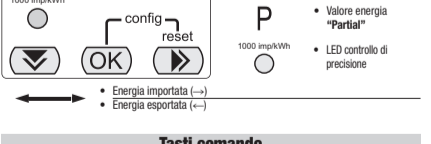
M1PRO 80 ITALIANO

Contatore d'Energia Monofase Digitale Connessione diretta 80 A

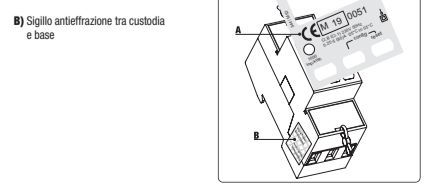
Istruzioni Operative
Questa famiglia di contatori di energia elettrica ha la fondamentale capacità di monitorare un'installazione a singola fase.



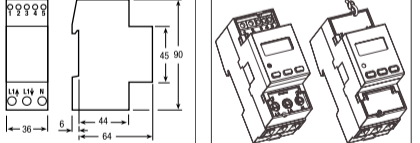
Questo strumento deve essere installato e mantenuto SOLO da personale qualificato e debitamente autorizzato. Durante l'installazione, assicurarsi della mancanza di tensione.



Bastoni comando
Tasto navigazione: è utilizzato solo per navigare nelle pagine e modificare i parametri. L'azione sul tasto è efficace solo se più breve di 1,5 secondi.



Dimensioni Copertura morsetti piombabile

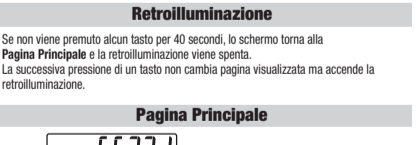


Lunghezza di spelatura dei fili e coppia di serraggio
80 A connessione diretta morsetti principali
Cacciavite PZZ

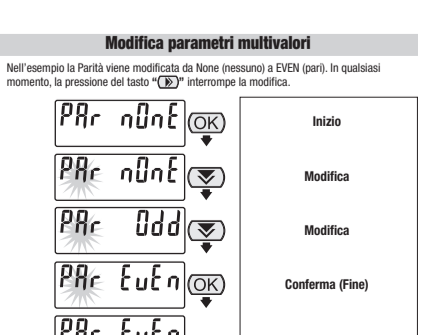
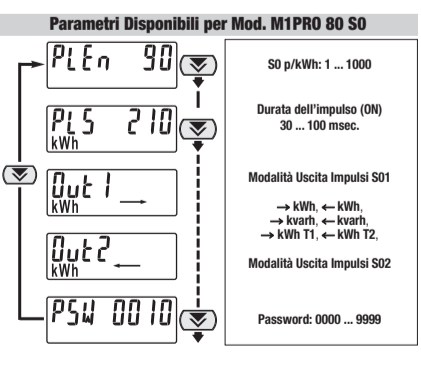
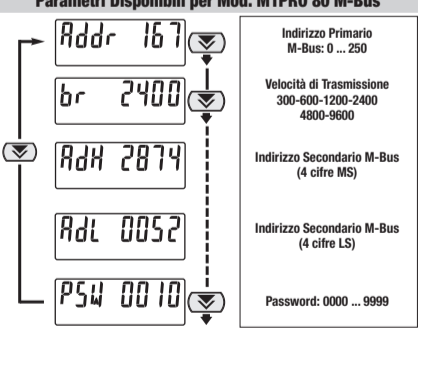
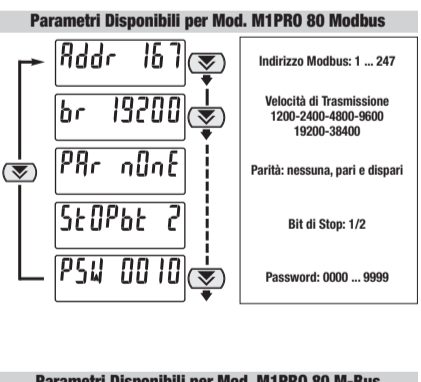
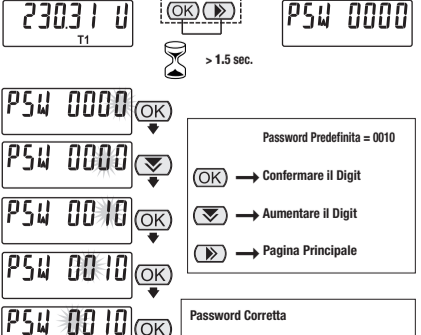
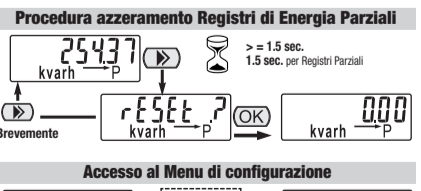
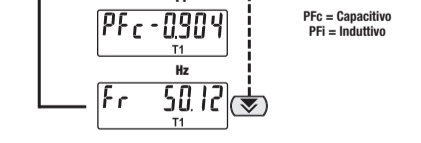
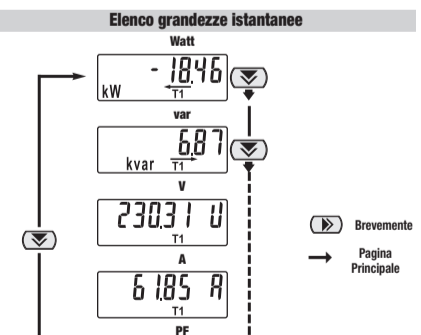
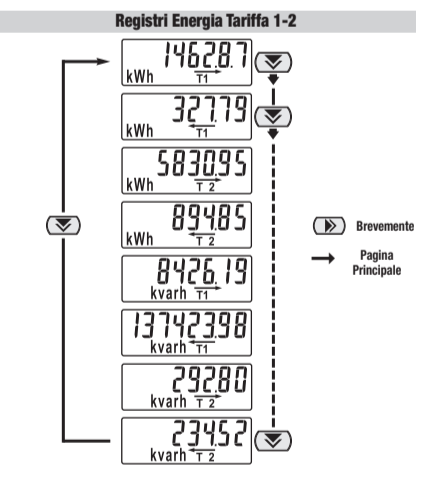
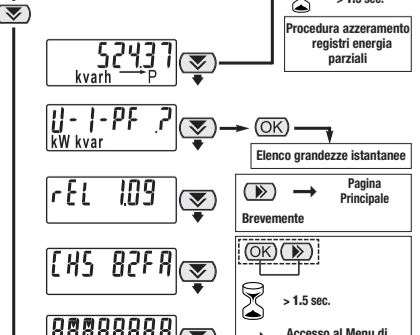
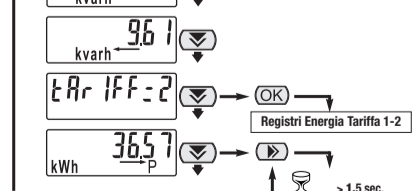
Morsetti tariffe e uscita impulsi
Cacciavite a taglio 0.8x3.5 mm

Morsetti comunicazione
Cacciavite a taglio 0.8x3.5 mm

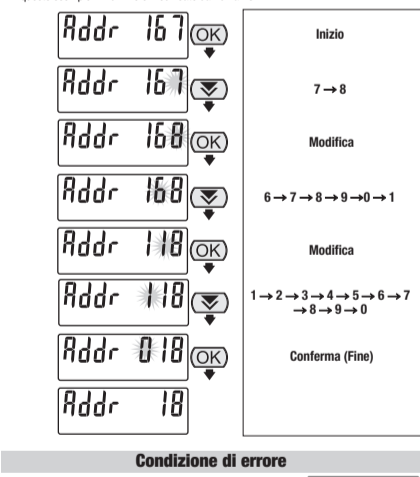
Dispositivo di accensione e Pagina principale
M1PRO 80 M1PRO 80 M-Bus M1PRO 80 Modbus



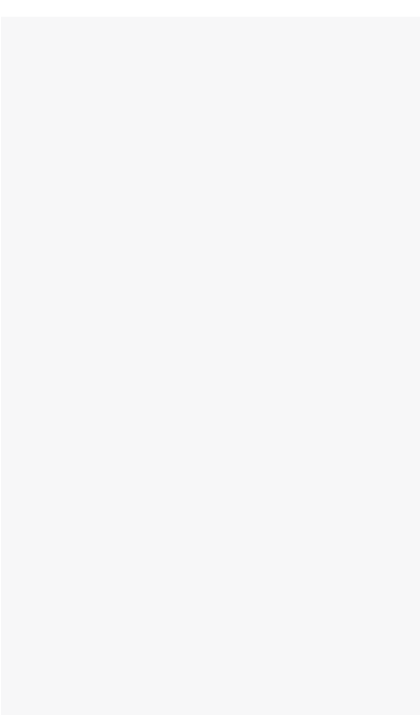
Retroluminazione
Se non viene premuto alcun tasto per 40 secondi, lo schermo torna allo Pagina Principale e la retroilluminazione viene spenta.



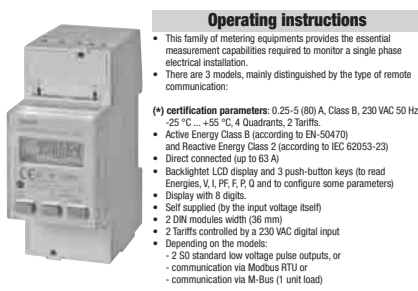
Modifica Numerico dei Parametri



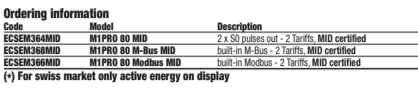
Condizione di errore
Non dovrebbe essere necessario ricalibrare il contatore nel corso del suo esercizio dal momento che si tratta di un apparecchiatura senza parti removibili, la cui elettronica, i sensori di tensione e corrente non degradano per condizioni ambientali speciali.



Single-phase Digital Energy meters - Direct connection 80 A



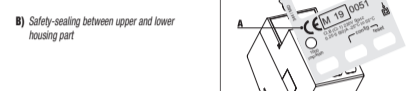
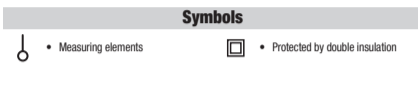
Operating instructions
• This family of metering equipments provides the essential measurement capabilities required to monitor a single phase electrical installation.
• There are 3 models, mainly distinguished by the type of remote communication:



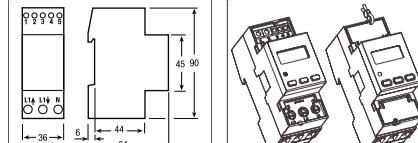
Display
Value energy
kWh/kvarh
• kWh/kvarh display
• Running tariff, called tariff
• Energy value "Partial"

Commands
• Scroll Key: This key is used to scroll pages and to modify parameters value. Its pushing is accepted only if it is shorter than 1.5 seconds.

- List of symbols and their meanings: Measuring elements, Protected by double insulation, Device code and certification data indicators, Safety-sealing between upper and lower housing part.



Dimension Sealeable terminal covers

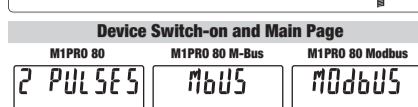


Cable stripping length and terminal screw torque
80 A direct connection main terminals
Screw driver P22

Tariff and PULSE outputs terminals
Screw driver blade 0.8x3.5 mm

Communication terminals
Screw driver blade 0.8x3.5 mm

Device Switch-on and Main Page
M1PRO 80 M1PRO 80 M-BUS M1PRO 80 Modbus



Main Page: This page appears not only at device switch-on, but also in case for 30 seconds no key is pushed. The value is the sum of 2 registers: Imported Act. Energy Tariff T1 + Imported Act. Energy Tariff T2.

Display Back light
• If no button is pushed for 40 seconds, the display goes back to the Main Page and the backlight is switched off.

Main Menu
kWh, kvarh, Tariff 1-2 Energy Registers List, Partial Energy Register Reset Procedure

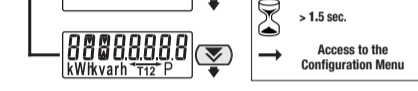
Instantaneous Measures list
kW, kvar, V, A, PF, Hz, Fr

Partial Energy Registers Reset Procedure
kvarh, Tariff

Access to the Configuration Menu
kWh, kvarh, Tariff

Instantaneous Measures list
kW, kvar, V, A, PF, Hz, Fr

Access to the Configuration Menu
kWh, kvarh, Tariff



Technical Data

Data in compliance with EN 50470-1, EN 50470-3, EN 62053-23 and EN 62053-31

Table with 2 columns: General characteristics and Operating features. Rows include Housing, Mounting, Depth, Weight, Connection, Storage of energy values, and Tariff.

Table with 2 columns: Supply Voltage and Power Consumption, and Overload capability. Rows include Operating Supply Voltage range, Maximum Power, Maximum VA burden, Voltage input waveform, Voltage impedance, Current impedance, Voltage, Current, and Frequency.

Table with 2 columns: Display features and Optical metrological LED. Rows include Display type, Energy digits dimension, Active Energy, Reactive Energy, Voltage, Current, Power factor, Frequency, Active Power, Reactive Power, Running Tariff, and Display refresh period.

Table with 2 columns: Safety and Pulse Outputs (ON signals, sec. to IEC 62053-31). Rows include Protective class, AC voltage test, Degree of pollution, Operational voltage, Impulse voltage test, Housing material flame resistance, Safety-sealing, and Pulse Output 1 or 2.

Table with 2 columns: IR Connectable Communication Modules and Connection terminals. Rows include For communication modules connection, Screwdriver for mains terminals, Terminal capacity, and Connection terminals.

Table with 2 columns: Environmental conditions (storage) and Environmental conditions (operating). Rows include Temperature range, Mechanical environment, Electromagnetic environment, Installation, Altitude, Humidity, and IP rating.

Dati tecnici

Secondo Norma EN 50470-1, EN 50470-3, EN 62053-23 e EN 62053-31

Table with 2 columns: Caratteristiche generali and Funzionamento. Rows include Custodia, Fessaggio, Profondità, Peso, Connessione, Memoria, Tariffa, Tensione di riferimento, Corrente massima, Fattore di potenza, Frequenza, Numero di fasi, Misure certificate, Classe di precisione.

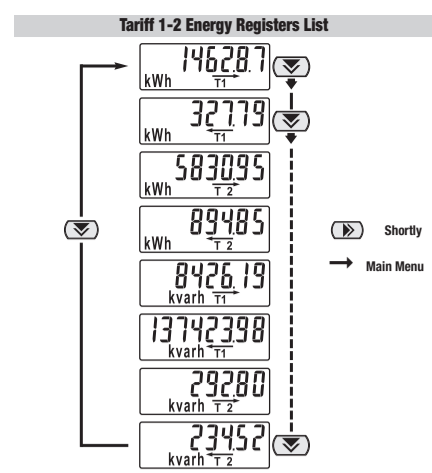
Table with 2 columns: Tensione di alimentazione e potenza consumata and Sicurezza. Rows include Intervallo operativo di alimentazione, Massimo potenza dissipata, Massimo carico in VA, Forma d'onda di tensione, Impedenza di tensione, Impedenza di corrente, Tensione Un, Corrente Imax, Momenti di forza.

Table with 2 columns: Caratteristiche dei circuiti di misura and Visualizzazione dati. Rows include Campo di misura della corrente, Campo operativo di frequenza, Valori misurati, Tipo di display, Energia attiva, Energia reattiva, Tensione, Corrente, Fattore di potenza, Potenza attiva, Potenza reattiva, Tariffa, Ripetizione di aggiornamento dati.

Table with 2 columns: Interfaccia LED (metrologico) and Sicurezza. Rows include LED rosso visibile sul frontale, Classe di isolamento, Temperatura di prova, Classe ingombro, Tensione di funzionamento, Prova tensione di impulso, Resistenza della custodia alla fiamma, Protezione meccanica, Uscite a impulsi, Frequenza di impulsi, Durata impulso, Tensione Operativa Impulsi, Massimo corrente di impulso ON, Corrente di perdita con impulso OFF, Classe di isolamento.

Table with 2 columns: Comunicazione incorporata and Condizioni ambientali (immagazzinamento). Rows include Modbus RTU, M-Bus, Classe di isolamento, Condizioni ambientali (operative), Condizioni ambientali meccaniche, Condizioni ambientali elettromagnetiche, Installazione, Altitudine (max.), Umidità, Grado IP.

(*) Grado di protezione garantito in un quadro con almeno grado di protezione IP51



Instantaneous Measurements List
kW, kvar, V, A, PF, Hz, Fr

Partial Energy Registers Reset Procedure
kvarh, Tariff

Access to the Configuration Menu
kWh, kvarh, Tariff

Instantaneous Measures list
kW, kvar, V, A, PF, Hz, Fr

Access to the Configuration Menu
kWh, kvarh, Tariff

Instantaneous Measures list
kW, kvar, V, A, PF, Hz, Fr

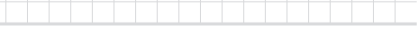
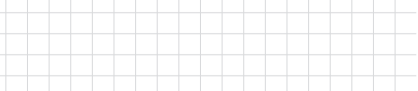
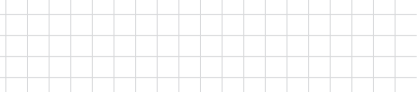
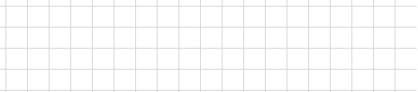
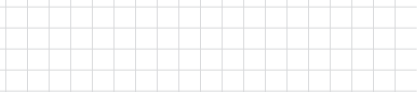
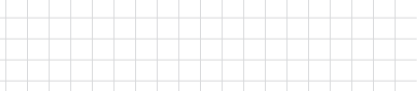
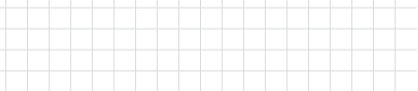
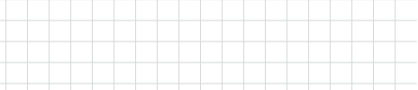
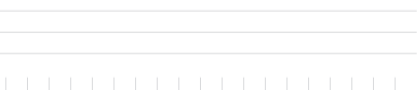
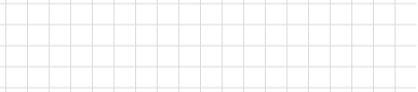
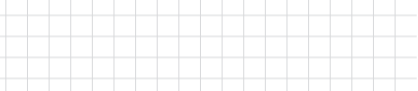
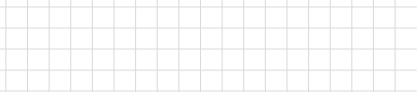
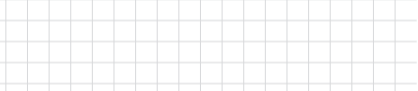
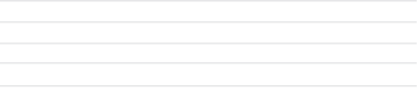
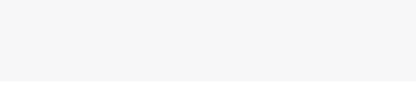
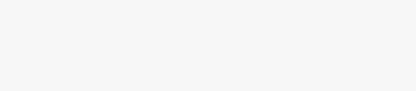
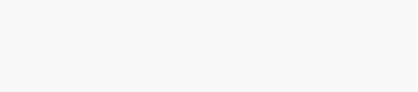
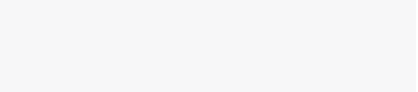
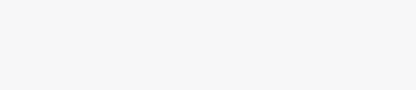
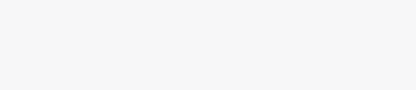
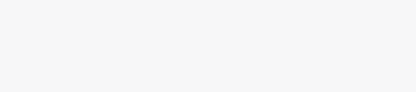
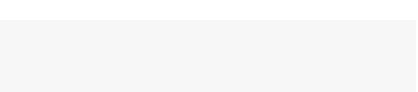
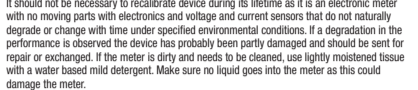
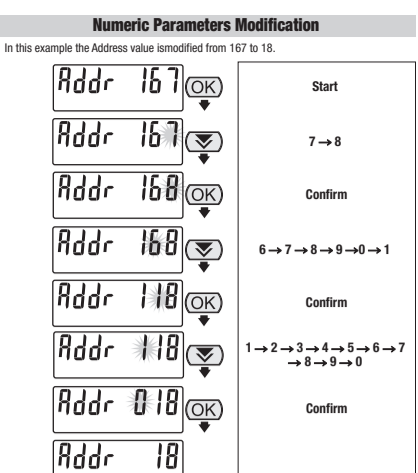
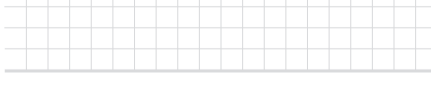
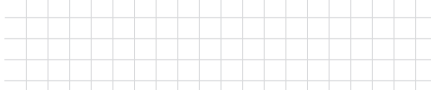
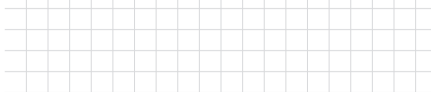
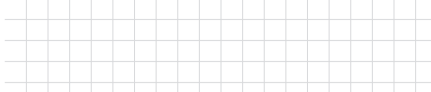
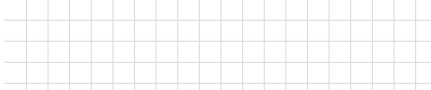
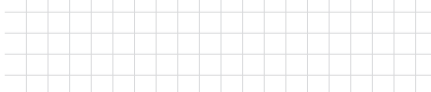
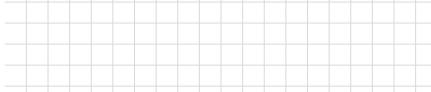
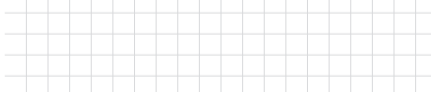
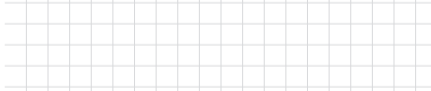
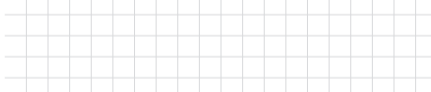
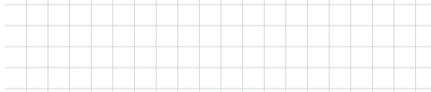
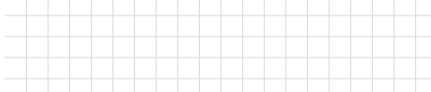
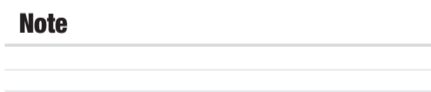
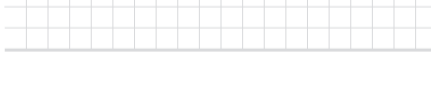
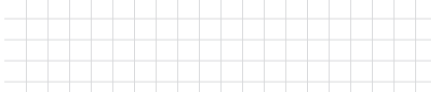
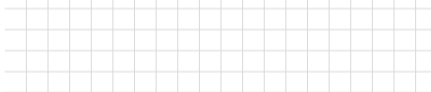
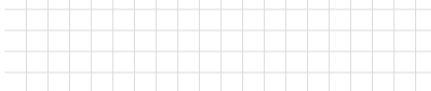
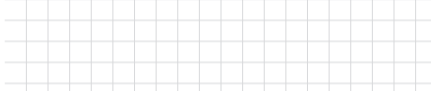
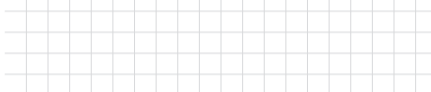
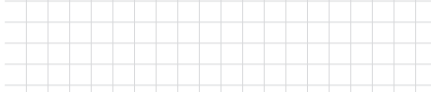
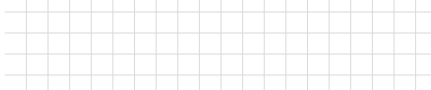
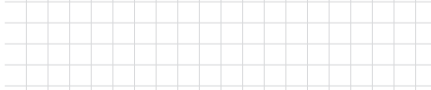
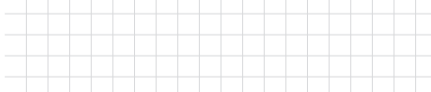
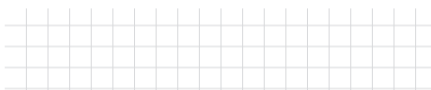
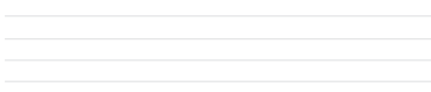
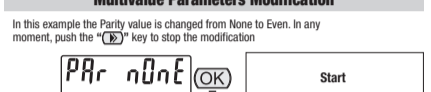
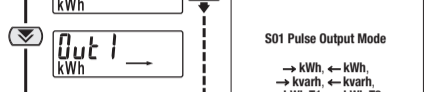
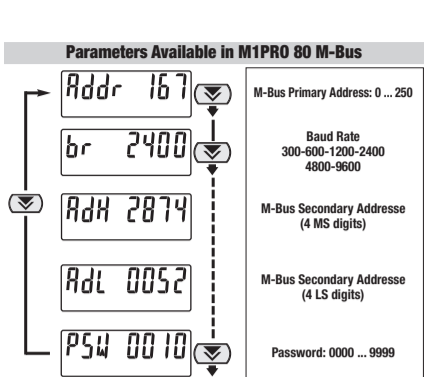
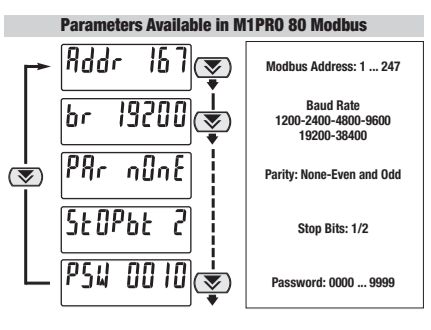
Access to the Configuration Menu
kWh, kvarh, Tariff

Instantaneous Measures list
kW, kvar, V, A, PF, Hz, Fr

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kWh, kvarh, Tariff

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Note

Large empty table for notes.

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