

DEFAULT PASSWORD AND DISPLAY VALUES

Default password to enter „Pro-3“ menu: 0000

Display values:

By pressing the keys, the meter changes from the automatic scrolling display to the manual display. Here, by pressing the buttons, all available display values can be displayed via a main menu and a submenu. If no key is pressed for 30 seconds, the meter returns to automatic mode.

A table with all display values can be found on the back of this sheet.

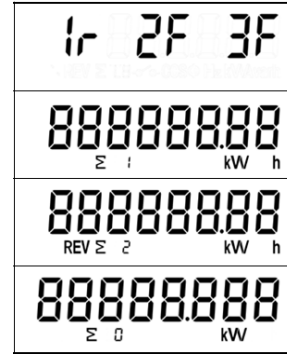
Values which are display in automatic mode:

Current direction
“F” = forward ; “r” = reverse

Total forward active energy

Total reverse active energy

Total active power



WIRING DIAGRAM

CT1 (IN) Terminal k (S1) - CT1 (OUT) Terminal l (S2)

CT2 (IN) Terminal k (S1) - CT2 (OUT) Terminal l (S2)

CT3 (IN) Terminal k (S1) - CT3 (OUT) Terminal l (S2)

Terminal „N“ Neutral conductor

Terminal 10/11 Voltage Phase 1

Terminal 12/13 Voltage Phase 2

Terminal 14/15 Voltage Phase 3

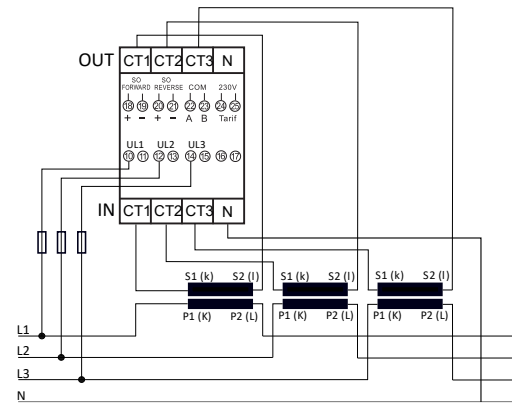
Terminal 16/17 not used

Terminal 18/19 SO output „forward“ (18 +)

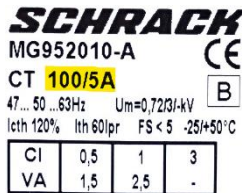
Terminal 20/21 SO output „reverse“ (20 +)

Terminal 22/23 for M-Bus or Modbus interface

Terminal 24/25 external tariff (230V AC)



INFORMATION ABOUT CT SETTINGS



Example:

Primary current = 100A

Secondary current = 5A

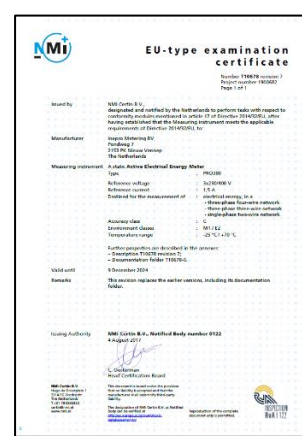
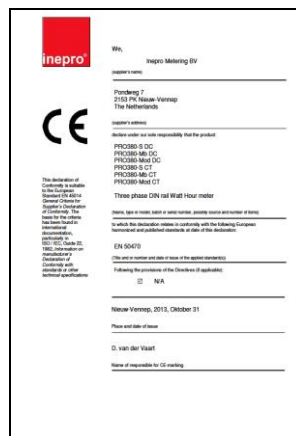
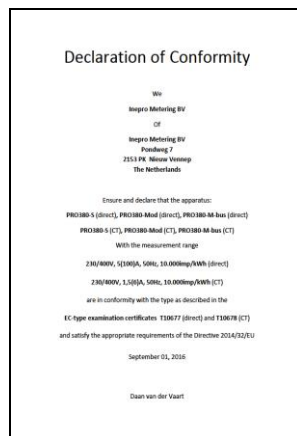
Set the ratio as it is given!



	Secondary cur.	Primary cur.
CT	5	0100

If the counter is connected to power for the first time, the display alternately shows the message "Set CT" and "CT5 0005". If any key is pressed, the display stops on the page "CT5 0005" and the first digit from the left flashes. This number is the value for the secondary current, here you can select between /1A or /5A and then confirm it by pressing both keys at the same time for 3 seconds. Then select the primary current by selecting all 4 digits from left to right. Select each digit and confirm each digit by holding both buttons at the same time. When the last digit is confirmed, the transformer ratio is fixed and cannot be changed, and the meter begins to measure.

CERTIFICATES AND DECLARATION OF CONFORMITY



Documents are available upon request.

Short user manual

Order number: MGX20006
PRO380 S CT

Order number: MGX20406
PRO380 Modbus CT

Order number: MGX20306
PRO380 M-Bus CT

Electronic 3-Phase energy meter for DIN rail with MID conformity

042023V1.00



The ct ratio is settable only once!

SAFETY INFORMATION

This instruction does not contain all the safety instructions applicable to the operation of the meter. It may be necessary to take further measures due to special operating conditions, local regulations or ordinances.

QUALIFIED PERSONNEL

The energy meter may only be installed and connected by qualified personnel. Qualified are those who are authorized to commission, switch on, ground and mark devices, systems and circuits in accordance with safety standards and regulations.

IMPORTANT INFORMATION

The housing of the energy meter is sealed and prohibited to open.

Opening the energy meter or breaking the seals voids the warranty.

INFORMATION REGARDING THE MECHANICAL AND EMV-ENVIRONMENT

The meter can be installed...

- ...indoor or outdoor in a meter housing.
- ...in an environment with low shock and vibration influences according to the 2014/32/EC directive mechanical environment "M1.
- ...in electromagnetic environment "E2" according to 2014/32 / EC directive.

TECHNICAL INFORMATION

Voltage:	230/ 400V AC
Current:	0,015 – 1,5(6) A
Frequency:	50Hz
Measurement:	Active and Reactive energy in forward and reverse direction
Accuracy:	B
Consumption:	<10VA - <2W
Width:	4TE (70mm)
LED output:	10.000 Imp/kWh, 2,5ms
SO output:	10.000 Imp/kWh, 30ms
	Adjustable via touch keys

Work temperature:	-25°C to +70°C
Air humidity:	75% in middle, briefly 95%
Registered harmonic:	0,05 – 0,25kHz
LED:	red blinking: consumption > 4W output rate = consumption
Display:	5+3 Digits (99999,111 kWh)
Wire diameter	
Main terminals:	max. 10mm ² min. 2,5mm ²
Additional terminals:	max. 2,5mm ²

MID-MARKING AND CHECKSUM

Meter with MID declaration of conformity can be used for billing purpose.

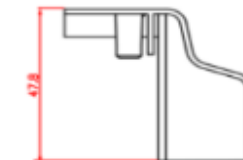
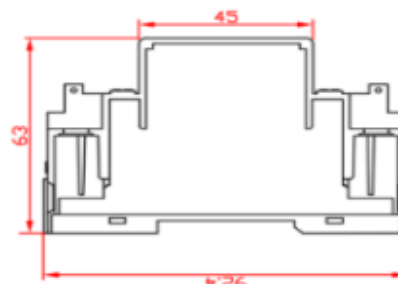
Checksum is as following:

Marking example for MID declaration:

CE M23 0122
0D104797

HOUSING DIMENSIONS

Width: 70 mm	Height without cover: 92,4 mm
Depth: 63 mm	Height with cover: 140 mm



DISPOSAL

The responsibility belongs to the manufacturer:

Inepro Metering BV
Pondweg 7
2153 PK Nieuw Vennep
The Netherlands



CONTACT

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Automatic scrolling display: default 10 seconds

Current direction 1F 2F 3r	Total FW active energy 123456.78 Σ 1 kW h	Total RV active energy 123456.78 REV Σ 2 kW h	Total active power 00045.00 Σ 0 kW	① MGX20300 & MGX20400
				② MGX20400

Button scroll: press the buttons for less than 3 seconds to scroll. After 30 seconds of in no interaction the meter goes back to automatic scroll mode.

MAIN MENU ↓

Current direction 1F 2F 3r
Total active energy 123456.78 Σ 0 kW h
Total reactive energy 123456.78 Σ 0 k varh
Total active power 123456.78 Σ 0 kW
Resettable kWh 123456.70 kW h
Program mode 1 (Read only) Pro - 1
Program mode 2 (Write) Pro - 2
Program mode 3 (Write: Password protected) Pro - 3

enter submenu:

right arrow key

hold 3 sec



submenu

Display shows:



Or

back to main menu:

left arrow key

hold 3 sec



main menu

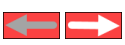
Display shows:



enter submenu:

right arrow key

hold 3 sec



submenu

Hold the right button for 3 seconds and enter the 4 digit password to enter program mode.

back to main menu:

left arrow key

hold 3 sec



main menu

SUBMENU ↓

Current direction		active status word		Serial number		Software version 1		Software version 2			
1F 2F 3r		5 11 111		17100247		Soft		00000000			
Total active energy		T1 active energy		T2 active energy		Total FW active energy		T1 FW active energy		T2 FW active energy	
123456.78		123456.78		123456.78		123456.78		123456.78		123456.78	
Σ 0 kW h		Σ T1 kW h		Σ T2 kW h		Σ 1 kW h		T1 kW h		T2 kW h	
Total RV active energy		T1 RV active energy		T2 RV active energy		L1 total active energy		L1 FW active energy		L1 RV active energy	
123456.78		123456.78		123456.78		123456.78		123456.78		123456.78	
REV Σ 2 kW h		REV T1 kW h		REV T2 kW h		Σ L1 kW h		L1 kW h		REV L1 kW h	
L2 total active energy		L2 FW active energy		L2 RV active energy		L3 total active energy		L3 FW active energy		L3 RV active energy	
123456.78		123456.78		123456.78		123456.78		123456.78		123456.78	
Σ L2 kW h		L2 kW h		REV L2 kW h		Σ L3 kW h		L3 kW h		REV L3 kW h	
Total reactive		T1 reactive energy		T2 reactive energy		Total FW reactive		T1 FW reactive energy		T2 FW reactive energy	
123456.78		123456.78		123456.78		123456.78		123456.78		123456.78	
Σ 0 k varh		Σ T1 k varh		Σ T2 k varh		Σ 1 k varh		T1 k varh		T2 k varh	
Total RV reactive		T1 RV reactive energy		T2 RV reactive energy		L1 total reactive		L1 FW reactive energy		L1 RV reactive energy	
123456.78		123456.78		123456.78		123456.78		123456.78		123456.78	
REV Σ 2 k varh		REV T1 k varh		REV T2 k varh		Σ L1 k varh		L1 k varh		REV L1 k varh	
L2 total reactive		L2 FW reactive energy		L2 RV reactive energy		L3 total reactive		L3 FW reactive energy		L3 RV reactive energy	
123456.78		123456.78		123456.78		123456.78		123456.78		123456.78	
Σ L2 k varh		L2 k varh		REV L2 k varh		Σ L3 k varh		L3 k varh		REV L3 k varh	
Total active power		L1 active power		L2 active power		L3 active power		Total apparent power		L1 apparent power	
123456.78		123456.78		123456.78		123456.78		123456.78		123456.78	
Σ 0 kW		L1 kW		L2 kW		L3 kW		Σ 0 kVA		L1 kVA	
L2 apparent power		L3 apparent power		Total COS		L1 COS		L2 COS		L3 COS	
123456.78		123456.78		1 L 01.00		1 L 01.00		1 L 01.00		1 L 01.00	
L2 kVA		L3 kVA		Σ 0 COSφ		L1 COSφ		L2 COSφ		L3 COSφ	
Grid frequency		Total reactive power		L1 reactive		L2 reactive		L3 reactive		L1 Voltage	
50.00		00001.000		00001.000		00001.000		00001.000		230.0	
Hz		Σ 0 k var		L1 k var		L2 k var		L3 k var		L1 V	
L2 Voltage		L3 Voltage		L1 Current		L2 Current		L3 Current			
230.0		230.0		0100.00		0100.00		0100.00			
L2 V		L3 V		L1 A		L2 A		L3 A			
Resettable kWh											
123456.70		To reset the register, hold the right button for 5 seconds.									
kW h											
CT rate (CT Version only)											
CT5 0005		Forward S0 output		Reverse S0 output		Combinationscode		Modbus/Mbus ID ①		LCD cycle time	
		S0 10000		S0 10000		CODE 10		addr 001		rt 10	
				REV							
Baud rate ①		Resettable kWh		Backlight		Parity ②		Power down counter			
bd 9600		123456.70		bl on		PAr-EvEn		P00-0006			
		kW h									
Modbus/Mbus ID ① Scroll with the buttons to select 3 digits. Confirm each digit by holding both buttons for 3 seconds.											
addr 001				LCD cycle time		Scroll with the buttons to select 1-30. Hold both buttons for 3 seconds to confirm.		Backlight		Scroll with the buttons to select on/off/button. Hold both buttons for 3 seconds to confirm.	
				rt 10				bl on			

add OR remove:

right arrow key

> hold 5 sec



add/ remove

Display shows:

add:

OT in

Or

remove:

OT out

enter program mode:

right arrow key

hold > 5 sec

