



**S.A DE CONSTRUCCIONES
INDUSTRIALES**

**DIRECT CONNECTION THREE
PHASE ELECTRICITY METER
MID CERTIFIED
TCIDL1 - MID**

INSTRUCTION MANUAL



This equipment meets the requirements of the European directive for safety and EMC. It's the responsibility of the installer ensure the continuity of the implementation of these directives in the rest of the installation.

INDEX:

1. INTRODUCTION.....	2
2. DISPLAY	2
3. FRONT PANEL DESCRIPTION.....	2
4. CONNECTION DIAGRAM.....	3
5. INSTALLATION.....	3
5.1. Safety indications.....	3
5.2. Mounting instructions.....	3
5.3. Connection	3
6. DIMENSIONS	4
7. TECHNICAL FEATURES	4

1. INTRODUCTION

TCIDL1 – MID is a three-phase electricity meter with for DIN rail mounting and indoor usage. This meter complies with the standard EN 50470 – 1/3 for accuracy class B active energy. Its size is 76 mm for din rail.

It is intended for Mechanical environment M1 and Electromagnetic environment E2 in accordance with the 2014/32/EU directive.

2. DISPLAY

TCIDL1 – MID meter has an LCD display of 55 x 14 mm, with backlight, for easy reading in dark places.

The measured energy is displayed in six integers and two decimal digits format.

3. FRONT PANEL DESCRIPTION

A Model.

B Reference standards.

C Double insulation, three-phase and class symbols.

D Reference values and firmware version.

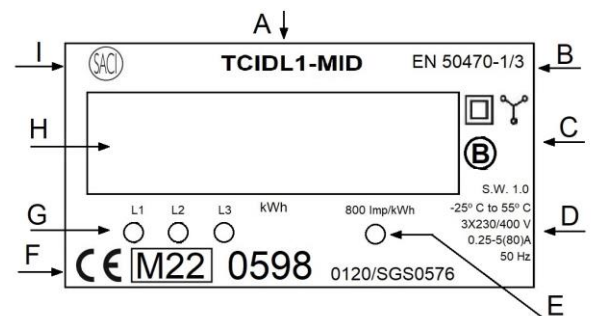
E Led for active energy verification.

F CE and metrological marking.

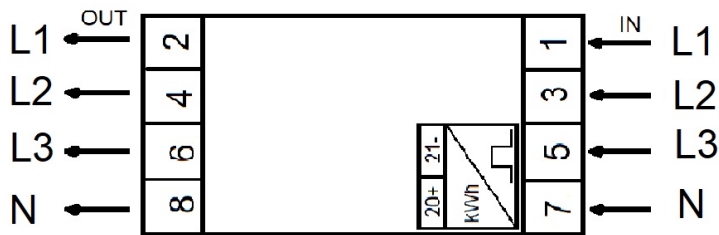
G Current detectors per phase.

H LCD display.

I SACI logo.



4.- CONNECTION DIAGRAM



20 and 21 terminals are an optional, potential free connection for a pulse counter.

5. INSTALLATION

5.1 Safety indications

Before installing the meter read this instruction manual completely.

- Serious injury, or fire hazard could result from improper connection of this instrument. Installation and mounting of this instrument must be performed by qualified personnel only.

- Do not connect the meter without disconnecting mains voltage. Avoid field work unless another person can assist you

- If the equipment is handled in a way not specified by the manufacturer, the equipment protection may be compromised.

- Do not use the meter if its plastic case is damaged and return it to your supplier. The meter must not be opened. No preventive maintenance is required. In case of failure, it must be sent to our facilities for repair and calibration.

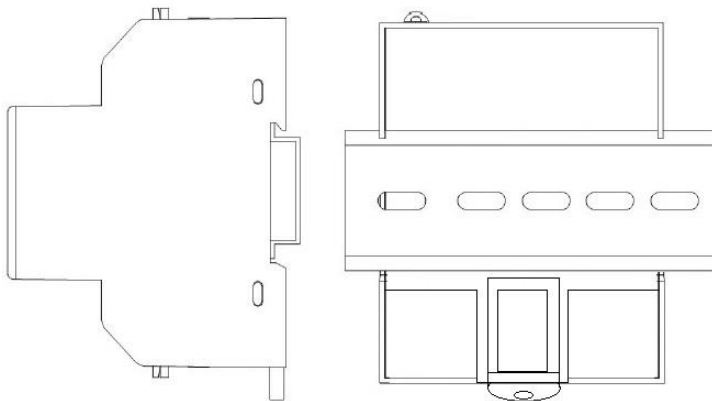
- The device has not a circuit breaker, so this, protection must be provided in the general installation.

- Do not use the meter in explosive atmospheres, or in humid environments with possibility of condensation.

5.2. Mounting instructions.

This unit must be installed inside an electrical cabinet, so that the temperature and humidity do not exceed the working limits.

The plastic case is designed to be mounted in DIN rail of 35 mm x 7.5 mm. To release it from the rail, pull the clip and extract the meter from the rail.



5.3. Connections.

The meter is connected through screw terminals. The connection must be made according to its wiring diagram, indicated on the meter label and in this instruction manual. 20 and 21 terminals are an optional connection free potential for a pulse counter.

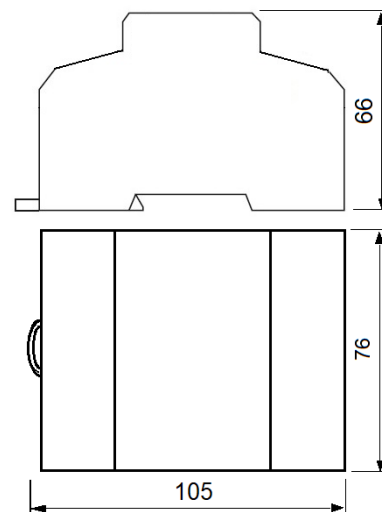
6.- DIMENSIONS

High 105 mm

Wide 76 mm

Deep 66 mm

Weight 0.37 Kg



7.- TECHNICAL FEATURES

Voltage: 3x230 / 400 V
Frequency 50 Hz
Burden <10 VA; 2 W
Current: 0.25 – 5 (80) A
Starting current 20 mA

General:

Class: B EN50470 – 1
Constant 800 Imp / kWh
Temperature range -25° – 55°C

Relative humidity. Annual average $\leq 75 \%$

Maximum humidity without condensation $\leq 95 \%$

Protection degree IP51. Indoor usage

Case Materials PBT, PC

Modular Box. (76 mm)

Terminals Sealable

Screw terminals

Maximum wire section:

Current terminals 25 mm²

More information at “www.saci.es”

EU Regulation 2023/1542 concerning batteries and waste batteries requires that, from 18 February 2027, all products placed on the market incorporating portable batteries shall ensure that those batteries are readily removable and replaceable by the end-user at any time during the lifetime of the product. This requirement does not apply to this equipment (TCIDL1-MID) as it falls within the exceptions set out in Article 11(3) of Regulation (EU) 2023/1542, as clarified in Commission Notice C/2025/214, since it is a product whose main function is to collect and supply data and the purpose of the battery is to maintain the integrity of that data.

S.A. DE CONSTRUCCIONES INDUSTRIALES

C/ Aragoneses, 15. 28108 Alcobendas. Madrid. Spain.

Tel.: 34 - 91 – 519.02.45 Fax. : 34 - 91 - 416.96.46

<http://www.saci.es>

e-mail : saci@saci.es



SACI reserves the right to modify this specification without prior notice

Ver.: 01 28.07.22