

Electricity meter with three inputs

F520

Description

The SCS device measures currents and voltages of separate lines (up to 3), connecting at most three toroids to the appropriate inputs (one toroid, item 3523, supplied as standard).

The meter processes and saves the following variables:

- instantaneous power in W;
- total accumulated energy in Wh;

The device has an internal memory that can store:

- cumulative energy on an hourly basis for the last 12 months;
- cumulative energy on a daily basis for the past 2 years;
- cumulative energy on a monthly basis for the last 12 years.

In order to allow the device to archive consumption information, the system must be fitted with a device capable of supplying current date and time information (e.g. Touch Screen). If this information is not available, the meter will be unable to archive the data, and will continue calculating the values of the instantaneous variables (power).

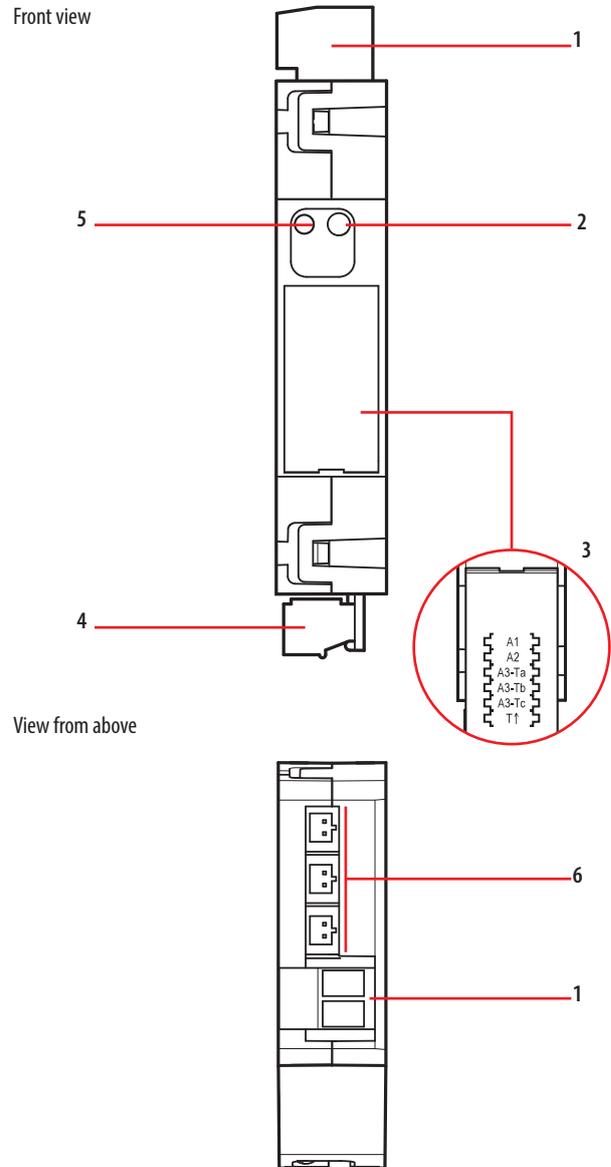
The device has a footprint of 1 DIN module and has a housing for 6 configurators: A1, A2, A3-Ta, A3-Tb, A3-Tc, T↑.

Technical data

Operating power supply with SCS BUS:	18 – 27 Vdc
Current draw:	35 mA max
Rated current:	16 A
Maximum current:	90 A
Operating temperature:	5 – 40°C

Dimensions

1 DIN module



Legend

1. 230 Vac connection
2. Pushbutton for the deletion of cumulative energy data
3. Configurator socket door
4. SCS BUS connection
5. User interface LED, SEE TABLE
6. Ta, Tb, Tc connectors for toroids, item 3523

Configuration

If the device is installed in a MyHOME system it can be configured in two ways:

- PHYSICAL CONFIGURATION, inserting the configurators in position.
- Configuration via MyHOME_Suite software package, downloadable from www.homesystems-legrandgroup.com; this mode has the advantage of offering many more options than the physical configuration.

For a list of the procedures and their meanings, please refer to the instructions in this sheet and to the "Function Descriptions" help section in the MyHOME_Suite software package.

The physical configuration of the device is done by connecting the physical configurators to their sockets.

The meter has a housing for 6 configurators:

- A1: hundreds of the address of the three meters
- A2: tens of the address of the three meters
- A3-Ta: units of the address of the meter A
- A3-Tb: units of the address of the meter B
- A3-Tc: units of the address of the meter C
- T↑: direction of the toroid

The maximum number of addresses is 127.

WARNING: The A3-Ta configurator cannot be zero, unlike configurators A3-Tb and A3-Tc, which can have a zero value (if the corresponding input is not managed).

The meter must be installed as close as possible to the power supply unit, to ensure a high BUS voltage and enable correct management of memory savings in case of power failure.

If the supply voltage is insufficient (below 21 Vdc), the meter will cause the green LED to flash to signal the installation error. The device will work properly, but will not guarantee correct saving and recovery of data in case of BUS failure.

Procedure for the deletion of the cumulative energy data:

- 1 Press and hold down the button; after about 20 seconds, the orange LED will flash quickly; release the button.
- 2 All the cumulative energy data are reset.

1.1 Addressing

	Virtual configuration (MyHOME_Suite)	Physical configuration
Address	0-127	A1, A2, A3Ta = 1-127 A1, A2, A3Tb = 1-127 A1, A2, A3Tc = 1-127

1.2 Direction of the toroid

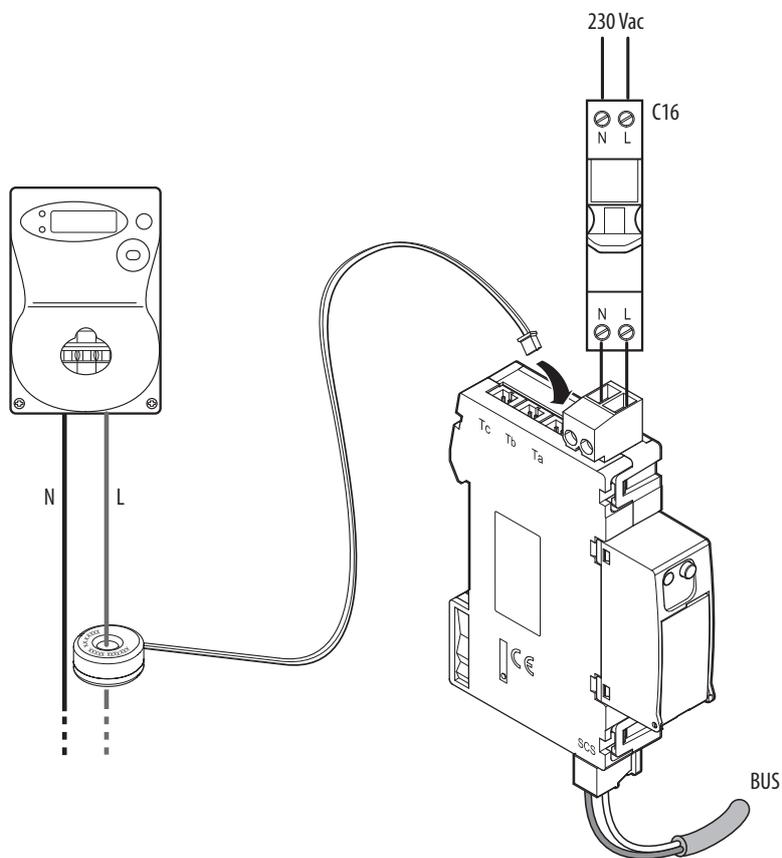
	Virtual configuration (MyHOME_Suite)	Physical configuration
Direction of the toroid	0 – Power and energy measurement independent of the toroid mounting direction	0
	1 – Mono-directional power and energy measurement depending on the toroid mounting direction. Refer to the mounting diagrams for the various applications	1

LED signals according to the status of the electricity meter:

Device status	LED
Normal operation	GREEN
BUS problem (BUS voltage insufficient, or voltage drop detected)	Flashing GREEN 500 ms/500 ms
Installation error (230 Vac not detected)	Flashing RED 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
Not configured	ORANGE flashing 128 ms/128 ms on GREEN

Wiring diagrams

Connection of the meter to the bus, the line, and the toroid



NOTE: The toroid must be installed with the pad-printed part with the product code facing the counter.