



Bus meter with 3 inputs for toroids

F520

Description

The SCS device measures currents and voltages of separate lines (up to 3), connecting maximum 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 energy accumulated in Wh.

The device has an internal memory that allows saving the following information:

- cumulative energy on an hourly basis for the last 12 months;
- cumulative energy on a daily basis for the last 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 space requirement for the device is equal to 1 DIN module. The device is provided with socket for 5 configurators: A1, A2, A3-Ta, A3-Tb, A3-Tc.

Technical data

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

Dimensional data

1 DIN module

Configuration

The device can be configured by connecting the physical configurators to the correct sockets (Physical configuration).

The device is provided with socket for five configurators:

- A1 for the hundreds
- A2 for the tens
- A3Ta for the units
- A3 Tb for the units
- A3 Tc for the units

The combination of the configurators defines:

- A1/A2/A3-Ta address of meter A
- A1/A2/A3-Tb address of meter B
- A1/A2/A3-Tc address of meter C

The maximum number of addresses is 255.

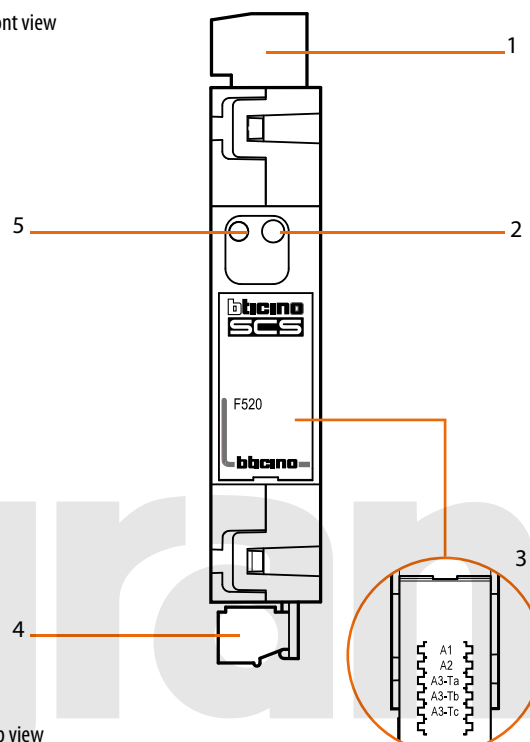
WARNING: The A3-Ta configurator cannot be zero, differently from configurators A3-Tb and A3-Tc, which can have a zero value (if the corresponding input is not managed).

The meter must be installed as close as possible to the power supply, to ensure a high BUS voltage, and enable correct management of memory savings in case of voltage cut. 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 regularly, but will not guarantee correct saving and recovery of data in case of BUS failure.

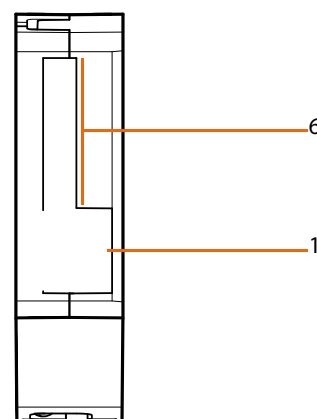
Procedure for the deletion of the cumulative energy data:

- 1 Press the key; after 20 seconds the orange LED flashes quickly; release the key.
- 2 All the cumulative energy data are reset.

Front view



Top view



Legend

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

LED notifications based on the status of the power meter:

Device status	LED
Normal operation	GREEN
BUS problem (BUS voltage insufficient, or voltage drop detected)	GREEN flashing 500 ms/500 ms
Installation error (230 Vac not detected)	RED flashing 100 ms/900 ms
Configuration error	ORANGE flashing irregularly on GREEN
No configuration	ORANGE flashing 128 ms/128 ms on GREEN

Wiring diagrams

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

