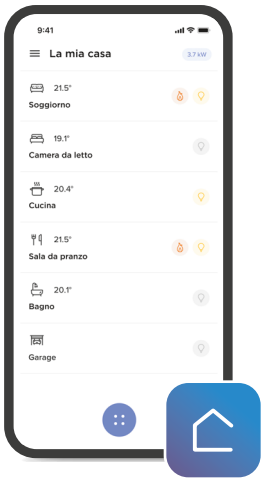
A Group brand | legrand

Smart Electrical Panel

BTDIN WITH Netatmo

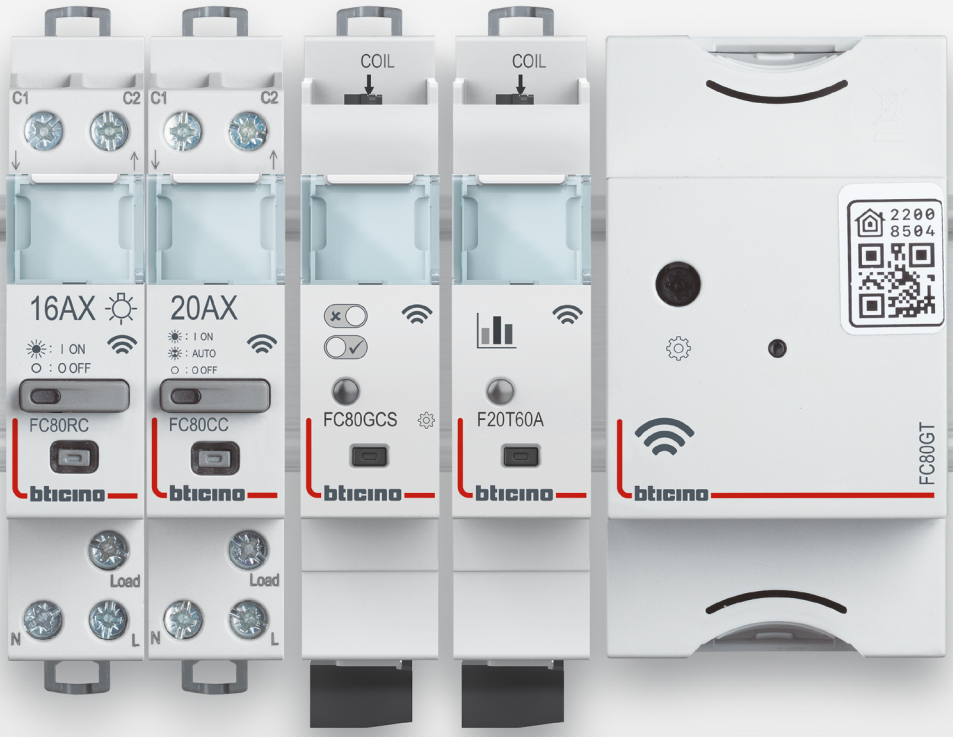


PRODUCTS AND SYSTEMS FOR ELECTRICAL
AND DIGITAL BUILDING INFRASTRUCTURES

bticino

BTDIN with Netatmo forms part of Eliot,
the BTicino program for connected objects.

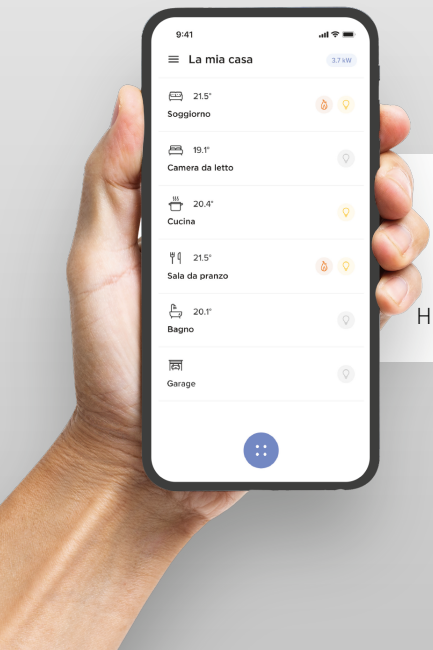
Take full control of your home, from lights to high energy consumption devices.



Works with Apple Home

works with Google Home

works with alexa



Home + Control App

CONTROL WITH SMARTPHONE

VOICE CONTROL

SCHEDULE

SMART ENERGY MANAGEMENT

MONITORING OF ELECTRIC CONSUMPTIONS

Home + Control can be downloaded free from App Store and Google Play

Scarica su App Store

DISPONIBILE SU Google Play

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What your customer can do with the Smart BTDIN with Netatmo solution?	6
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What is BTDIN with NETATMO?

BTDIN with Netatmo is the range of intelligent modular switches for direct installation in the electrical panel, in the heart of the house.

Control of lights and appliances powered from the electrical panel of the home

Intelligent load management and balancing of energy consumption

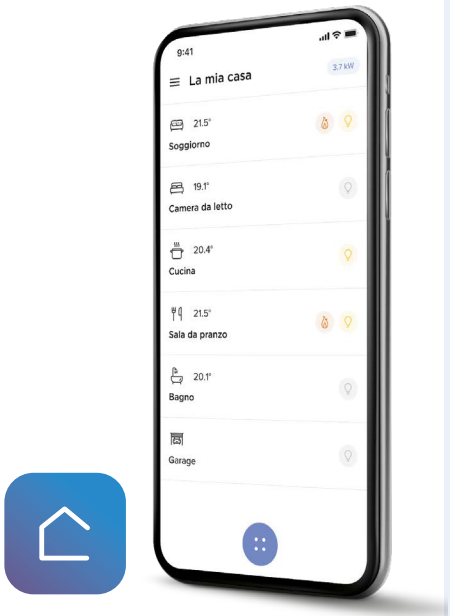
Maximum consumption control and energy waste reduction

Netatmo is a company of the Legrand group, leader in Smart Home solutions

BENEFITS

Take control of your home

From your smartphone, easily control lights, home appliances, high energy consumption devices such as induction plates, wallboxes for recharging electric vehicles and air conditioning fan coils.



Home + Control App

WASTE REDUCED TO A MINIMUM

Receive a notification if a light or appliance is left on for too many hours.
Display abnormal device consumption levels.

MAXIMUM COMFORT

Take advantage of pre-set and customizable scenarios, or easily create your own.
No more going around the house to turn everything off and on, or unplugging all your devices one at a time.

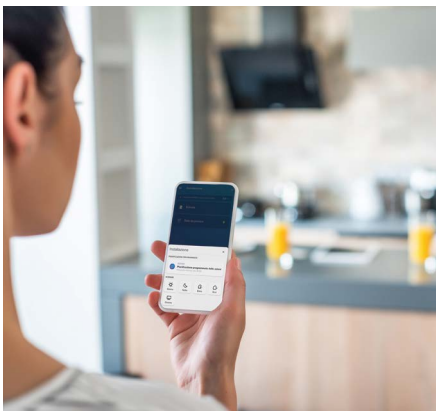
TOTAL CONTROL

View charts of your home energy consumption. If consumption reaches a certain threshold set in advance, you receive a notification on your smartphone and some appliances are switched off to avoid overloading.
Each device is assigned a default priority, which can be changed at any time using the App.

What can your Customer do with the Smart BTDIN with Netatmo solution?

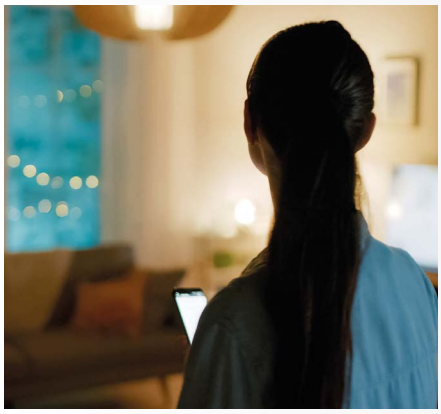
MANAGE THE SCENARIOS

Operate and customize 4 pre-set scenarios using the App: in and out, day and night, and 4 scenarios that can be customised by the user.



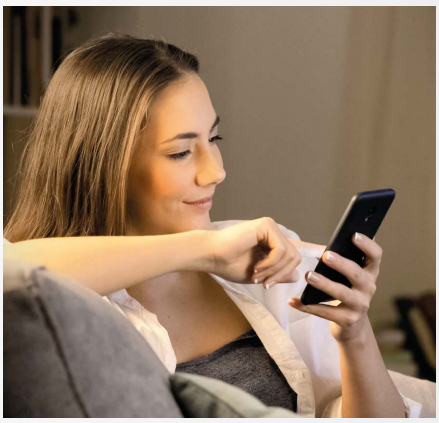
CONTROL LIGHTS AND APPLIANCES

Comfortably control lights, appliances and every load in your home.



CONTROL THE ENERGY CONSUMPTIONS

Use the smartphone to check the energy consumption of the home or appliances and receive an alarm notification to prevent a blackout (when your energy limit is exceeded).



RECEIVE ALARM NOTIFICATIONS

Receive warning notifications on the smartphone in case of faults (blackout, appliance fault).

LOAD CONTROL TO AVOID BLACKOUTS

Set load priorities, so that in case of overload the system automatically disconnects less important appliances, avoiding the tripping of the meter (black-out).

BENEFITS

Also in the small service sector

SELF-SERVICE DISTRIBUTORS | NEWSAGENTS | BAR TOBACCONISTS | SMALL RETAILERS

PROGRAM EVERY SITUATION

With a few simple steps use your smartphone to define and automatically activate daily action profiles to be run on a weekly basis.

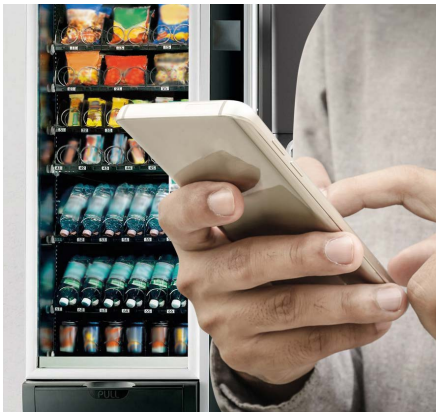
Turn on the air conditioner
between 10:00 p.m. and 7:00 a.m. every day

Raise the living room shutters
every day of the week at dawn

Turn off the charging unit
from 10:00 a.m. to 05:00 p.m. every day of the week

AVOID BLACKOUTS AND ENSURE SERVICE CONTINUITY

Receive warning notifications on your smartphone in case of faults (blackout, automatic vending machine fault).



24/7 SUPERVISION AND CONTROL

Remotely monitor consumption through the smartphone, receive notifications and avoid blackouts in case of fault or if the energy consumption limits are exceeded.

FORGETTING

Remotely turn off lights and the air conditioning, manage and customise scenarios (e.g.: in - out) easily with one simple click, using your smartphone.

BTDIN WITH Netatmo

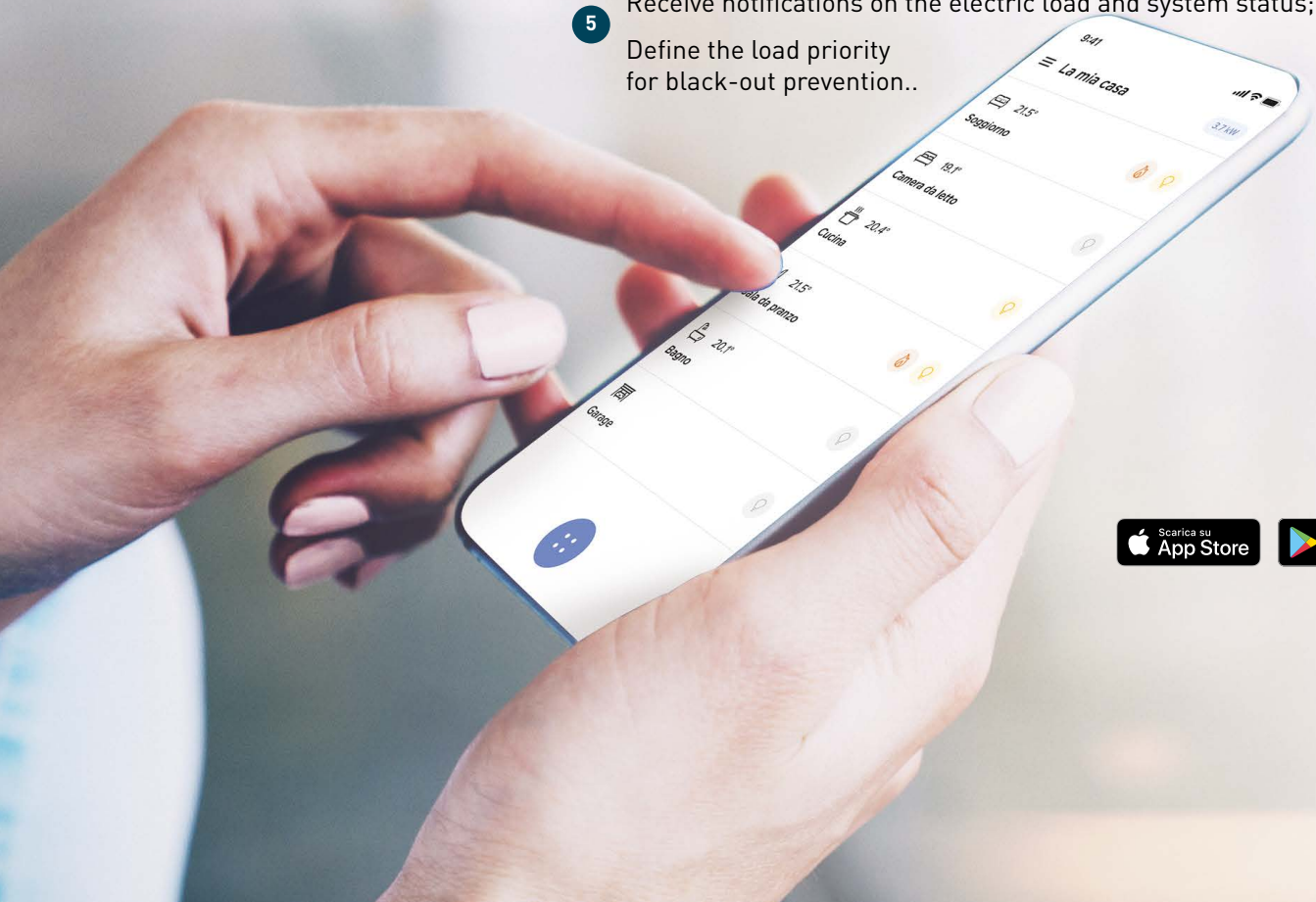
Home + Control

One single App...
many connected advantages

Home+Control is the App that makes it simple to supervise all the BTDIN with Netatmo system functions using iOS and Android mobile devices, inside and outside the home.

Using the App you will be able to:

1. Activate and customise 8 scenarios (4 preconfigured scenarios, coming in, going out, day, night and 4 scenarios customisable by the user);
2. Display and check the status of lights and appliances connected to sockets;
3. Check the total home consumptions;
4. Receive notifications on the electric load and system status;
5. Define the load priority for black-out prevention..



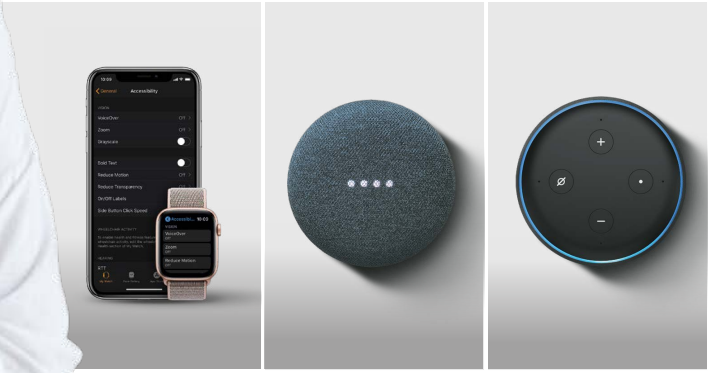
Scarica su App Store

DISPONIBILE SU Google Play

Your customer can also manage the home with the voice

With BTDIN with Netatmo, your customer will be able to control the system using Apple, Google and Amazon voice assistants. An extremely useful function, also for those with mobility problems.

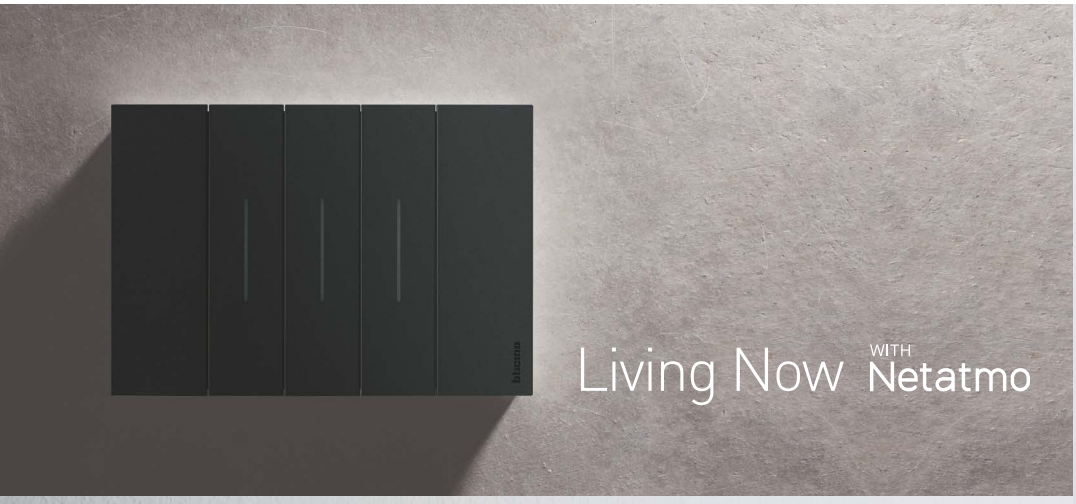
"SIRI, turn on the pool pump."
"Okay Google, turn on the air conditioner."
"ALEXA, turn off the basement lights."

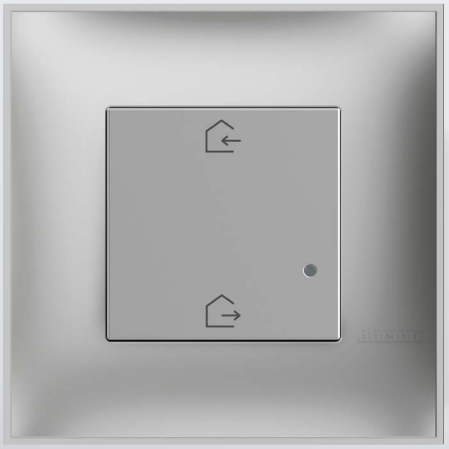


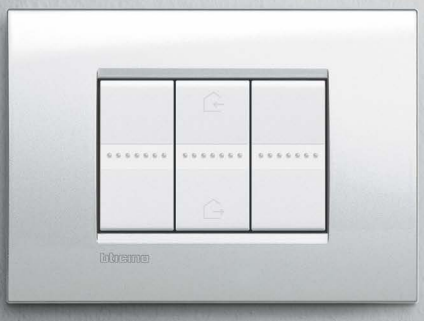
Works with Apple Home | works with Google Home | works with alexa

Note: HomeKit is a registered trade mark which is the property of Apple Inc. Google Home is a registered trade mark which is the property of Google LLC, Amazon Alexa is a registered trade mark which is the property of Amazon.com, Inc.

Integration with Smart ranges







Home + Control App

Home + Control is the same App that manages and controls the BTicino Smart civil series, together with the Gateway, which is fully compatible.

For this reason, if in addition to the smart electrical panel the system also includes the Living Now with Netatmo, Classia with Netamo and Livinglight with Netatmo ranges, it will be possible to control all the smart functions: single sockets, light dimmer function, shutter, curtain and single light control.

For detailed information please refer to the specific documentation available also for download from the **www.bticino.com** website.

Works with Apple Home | works with Google Home | works with alexa

It is also possible to complete the smart electric system by associating it with connected devices of other ranges (e.g. Living Now with Netatmo, Living Light with Netatmo and Classia with Netatmo).

	DIN PANEL DEVICES	DEVICES FROM OTHER RANGES	JUNCTION BOX DEVICES
GATEWAY	FC80GT	RW/RG/K/L4510C K4500C - L4500C	
CONNECTED LOADS	FC80CC	RW/RG/K/L4531C	
CONNECTED LIGHT SWITCH LIGHT RELAY	FC80RC	RW/RG/K/L4003C RW/RG/K/L4411C	3584C 4411C
SHUTTERS		RW/RG/K/L4027C	
LOAD MANAGEMENT AND CONSUMPTION METER	FC80GCS F20T60A F40T125A FC80AC		

RADIO CONTROLS

K/L4003CWI
RW/RG4003CW

K4003DCW - L4003DCW
RW/RG4003DCW

RW/RG/K/L4570CWI

AM/JW/JG/K/L4027CWI
RW/RG4027CW

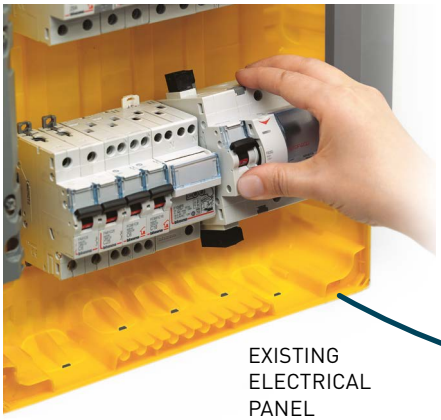
3577C

RW/RG/K/L4074CWI

Note: please refer to the bticino.com website for the complete range of Smart "with Netatmo" control devices

BTDIN WITH Netatmo

From traditional system to SMART system



EXISTING ELECTRICAL PANEL

An ideal evolution for transforming existing traditional systems into Smart systems **without changing working habits**.
Easy to install, BTDIN with Netatmo integrates in the electric system of your home without being noticed.

Smart modules can be installed inside any standard electrical panel to replace or complement existing unconnected modules. BTDIN devices are snap-fitted on DIN35 rails in switchboards, electrical panels and distribution cabinets.

SMART ELECTRICAL PANEL

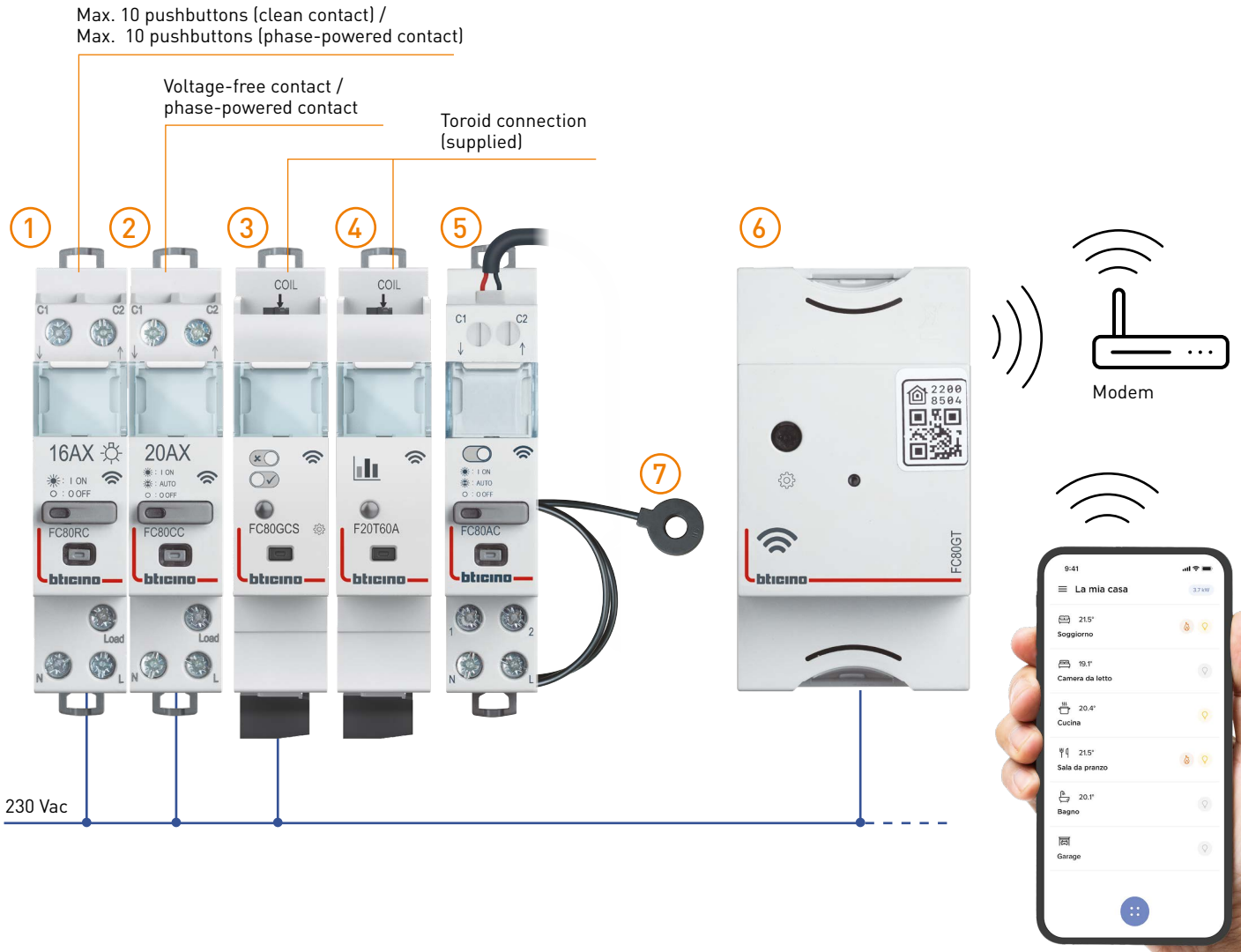
HABITA SERIES

BTDIN with NETATMO also perfectly integrates with the finish of the HABITA and SPACE series electrical panels.
Find out more by visiting the bticino.com website

SPACE SERIES

The SMART components of the electrical panel

1 – **Relay 16 A:** light control for currents up to 16 A;
2 – **Contactor 20 A:** load control for currents up to 20 A;
3 – **Load management module:** load priority management and setting of scenarios for all connected contactors and sockets;
4 - **Meter:** measurement of the consumption of individual power lines.
2 versions: for single-phase and three-phase systems;
5 – **Actuator:** load control with 2A contact and current measurement up to 80A.
6 - **Gateway:** internet connection and control using the Home + Control App;
7 – **Toroid:** for input current reading (supplied with the FC80AC, FC80GCS, F20T60A and F40T125A modules).



THE SMART COMPONENTS OF THE ELECTRICAL PANEL

16A Smart DIN relay item FC80RC

DESCRIPTION

Smart DIN relay for light control with maximum absorption 16 A. Fitted with contacts for remote pushbutton control, maximum 10 pushbuttons. In addition to the use of pushbuttons, the smart relay also allows local and remote control of lights via radio commands, smartphones with the "Home+Control" App or voice assistants.

TECHNICAL FEATURES

Rated voltage: 100 - 240V a.c.
Rated frequency: 50/60Hz
Rated current: 16 A
Noise level: <10 dB
Types of contact: " F " closing contact
Poles: 1 «1F» pole
Width: 1 DIN module

C1: IN terminal for control command (IN). Dry-contact with phase.

C2: OUT terminal self-protected Line for remote (OUT)

Operating status LED indicator

N: IN terminal for Neutral

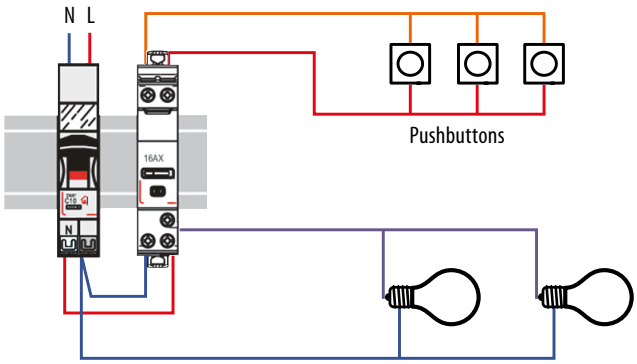
L: IN terminal for the Line

Load: OUT terminal for the line after contact (towards Load)

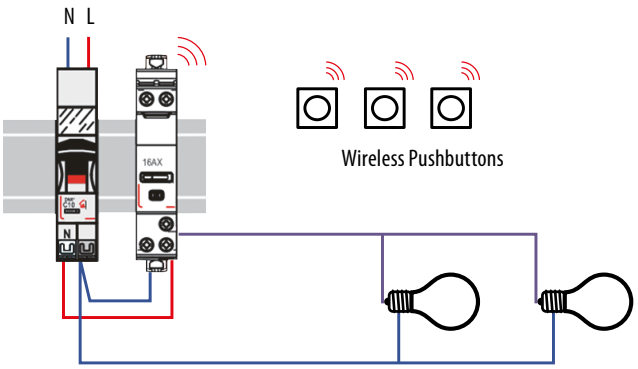
Note: for further information, please refer to the respective technical sheet and installation instructions on the bticino.com website

WIRING DIAGRAMS

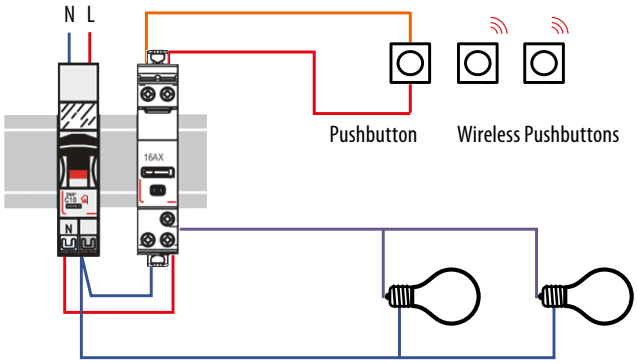
WIRED INSTALLATION



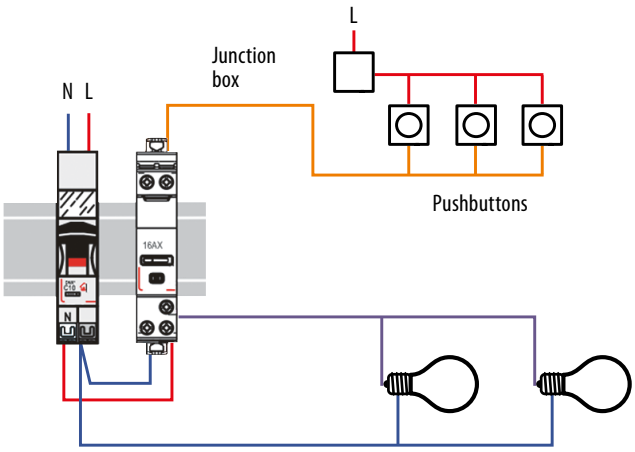
WIRELESS INSTALLATION



WIRED AND WIRELESS MIXED INSTALLATION



WIRED INSTALLATION WITH JUNCTION BOX



THE SMART COMPONENTS OF THE ELECTRICAL PANEL

20A Smart DIN contactor item FC80CC

DESCRIPTION

DIN Smart contactor with load current meter, suitable for ON/OFF control of single-phase loads with <20A consumption, such as water heaters, swimming pool pumps, induction hobs and electric vehicle charging sockets.
The control is possible using remote buttons, a smartphones with the Home+Control App installed or a voice assistant.

TECHNICAL FEATURES

Rated voltage: 100 - 240Va.c.
Rated frequency: 50/60Hz
Rated current: 20 A
Noise level: <10 dB
Types of contact: " F " closing contact
Poles: 1 «1F» pole
Width: 1 DIN module

C1: IN terminal for control command (IN). Dry-contact with phase.

C2: OUT terminal self-protected Line for remote (OUT)

Operating status LED indicator

N: IN terminal for Neutral

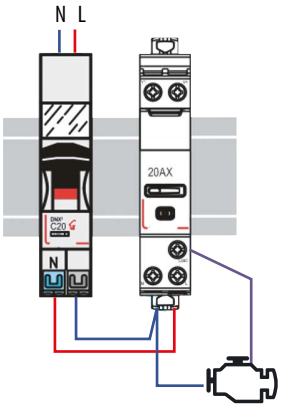
L: IN terminal for the Line

Load: OUT terminal for the line after contact (towards Load)

Note: for further information, please refer to the respective technical sheet and installation instructions on the bticino.com website

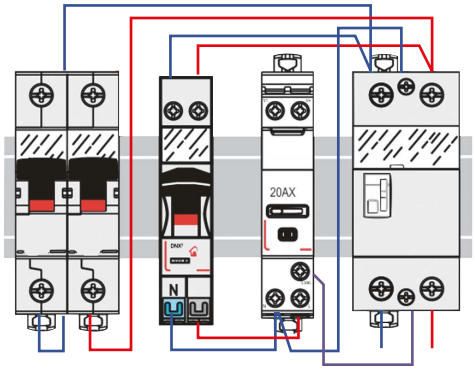
WIRING DIAGRAMS

INSTALLATION FOR ELECTRIC MOTOR

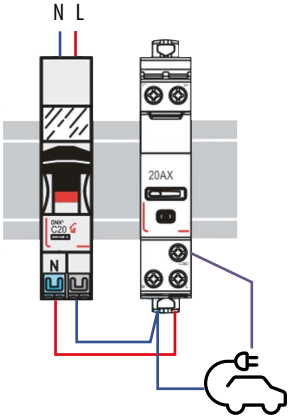


Note: C1 and **C2** terminals are self-protected.

CONTROL OF A STANDARD SINGLE-LINE CONTACTOR (> 20A)



INSTALLATION FOR THE CHARGING OF ELECTRIC VEHICLES



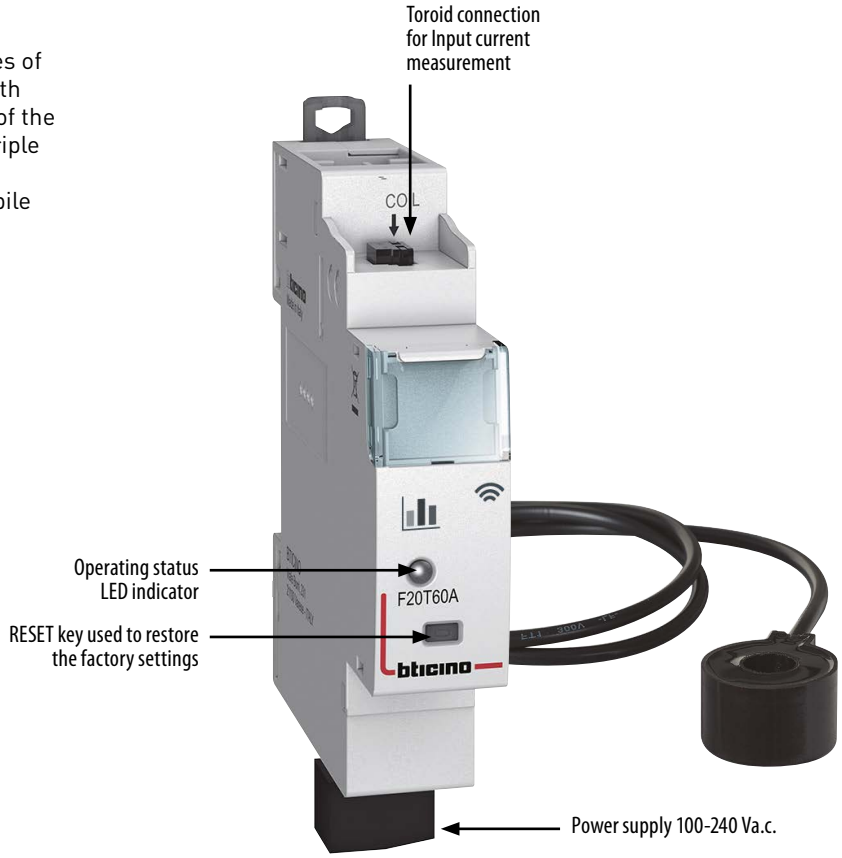
Note: C1 and **C2** terminals are self-protected.

THE SMART COMPONENTS OF THE ELECTRICAL PANEL

Smart DIN meter item F20T60A (single-phase system) and item F40T125A (three-phase system)

DESCRIPTION

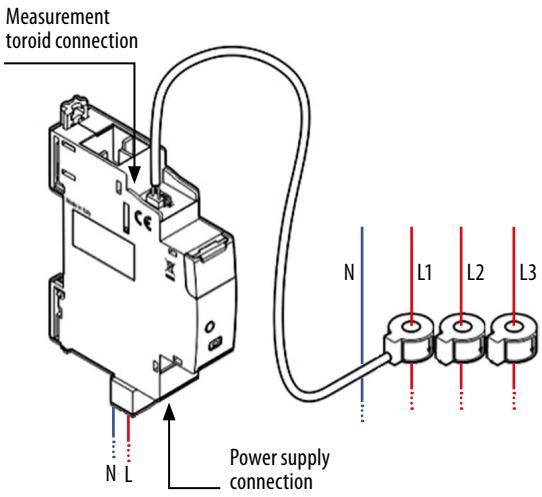
Device for measuring energy consumption (instantaneous, daily, monthly) of the power lines of the entire single-phase system of the house (with item F20T60A and single measuring toroid), or of the three-phase system (with item F40T125A and triple measurement toroid).
Measured data are displayed and stored on mobile devices through the Home+Control app.



TECHNICAL FEATURES

Supply voltage: 100 - 240Va.c.
Frequency: 50/60Hz
Max measured current (toroid): 72 A
Consumption in stand-by: 1 mA
Power consumption: <100mW
Width: 1 DIN module

WIRING DIAGRAMS OF THE THREE-PHASE METER F40T125A

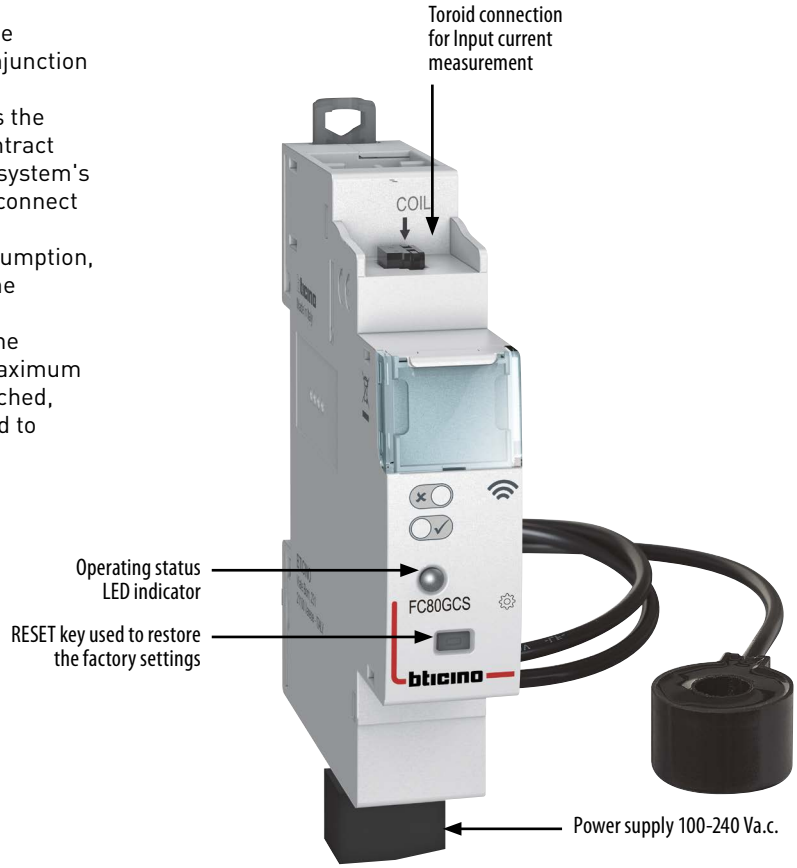


Note: for further information, please refer to the respective technical sheet and installation instructions on the bticino.com website

Smart DIN load management module item FC80GCS

DESCRIPTION

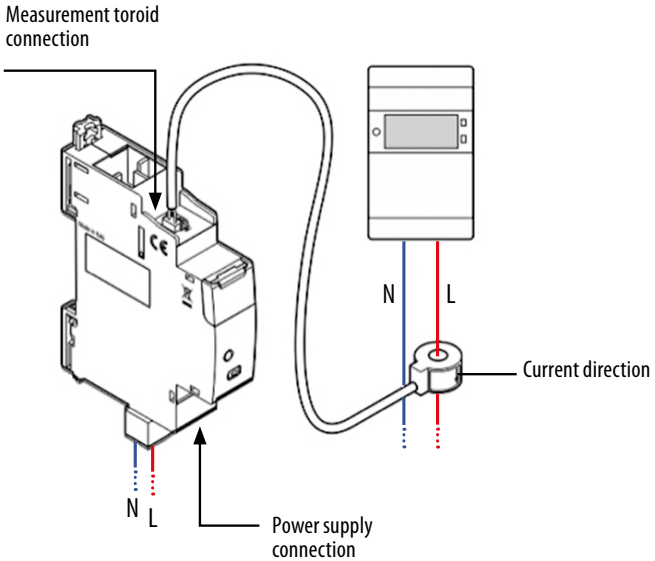
Smart load management module for monitoring the system's electricity consumption, to be used in conjunction with DIN Smart contactors, relays and actuators.
Thanks to the supplied toroid, the device measures the total energy consumption. When the maximum contract consumption level is reached, it intervenes on the system's DIN Smart contactors, relays and actuators, to disconnect non-priority loads and avoid possible blackouts.
The device also measures the total electricity consumption, which can be viewed with a smartphone through the Home + Control App.
Through the same App, it is also possible to view the electricity consumption history and set a power/maximum consumption threshold. When the threshold is reached, loads will be deactivated and individually monitored to ensure precise and accurate management.



TECHNICAL FEATURES

Rated voltage: 100 - 240Va.c.
Rated frequency: 50/60Hz
Rated current: 80Aa.c.
Input power: 0,3W max.
Width: 1 DIN module

WIRING DIAGRAM

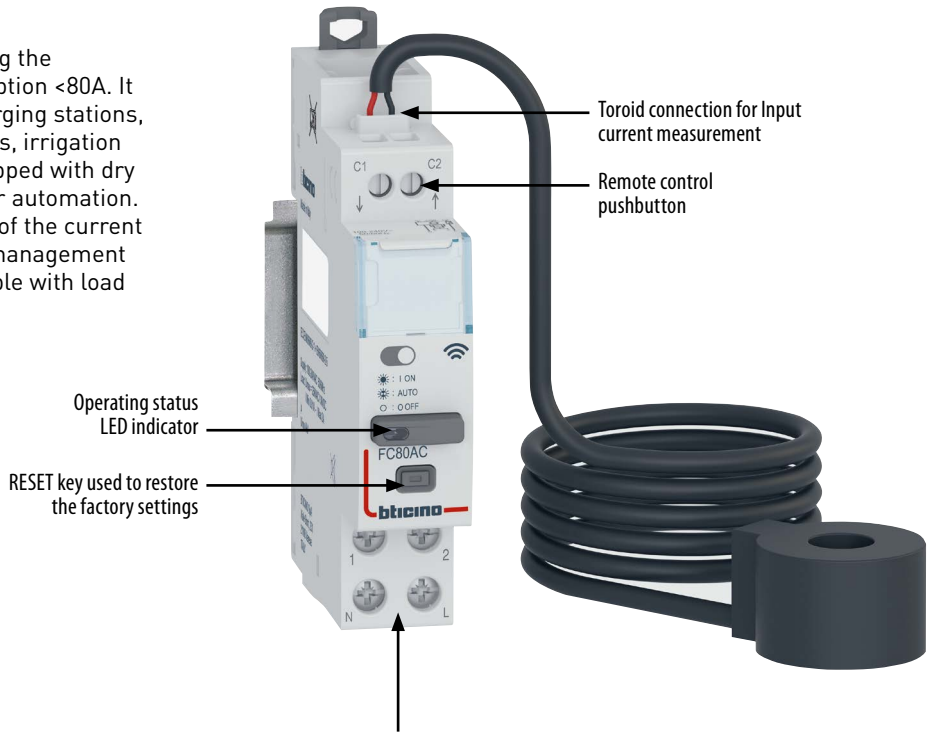


THE SMART COMPONENTS OF THE ELECTRICAL PANEL

Smart DIN actuator item FC80AC with current meter up to 80A

DESCRIPTION

Smart device for controlling and measuring the consumption of appliances with a consumption <80A. It has a dry contact (e.g. electric vehicle charging stations, wallboxes, heat pumps, ventilation systems, irrigation systems ...) or a traditional contactor equipped with dry contact for control. Not suitable for shutter automation. A toroid is supplied, for the measurement of the current absorbed by the load, max 80A. Function management through the Home + Control App, compatible with load management module FC80GCS.



Connection clamps:
N-L: power supply 100-240Vac
1-2: NO contact (Normally Open)

TECHNICAL FEATURES

Operating voltage: 100 – 240Va.c.
Operating frequency: 50/60Hz
Contact output 1-2:
10 – 30Vdc / 10mA – 2A
100 – 240Vac / 10mA - 2A
Power dissipation:
< 0,4 W without load / < 1,7 W with load
Width: 1 DIN module

Note: for further information, please refer to the respective technical sheet and installation instructions on the bticino.com website

WIRING DIAGRAMS

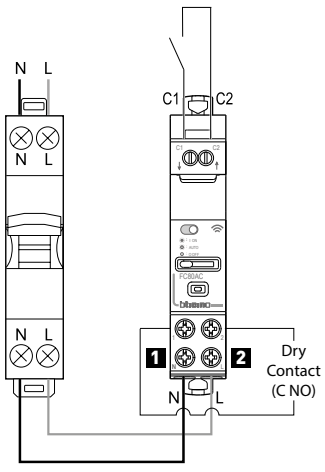


Diagram with remote control switch connected to terminals C1 and C2.

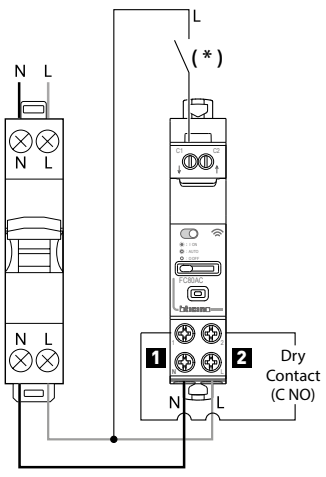


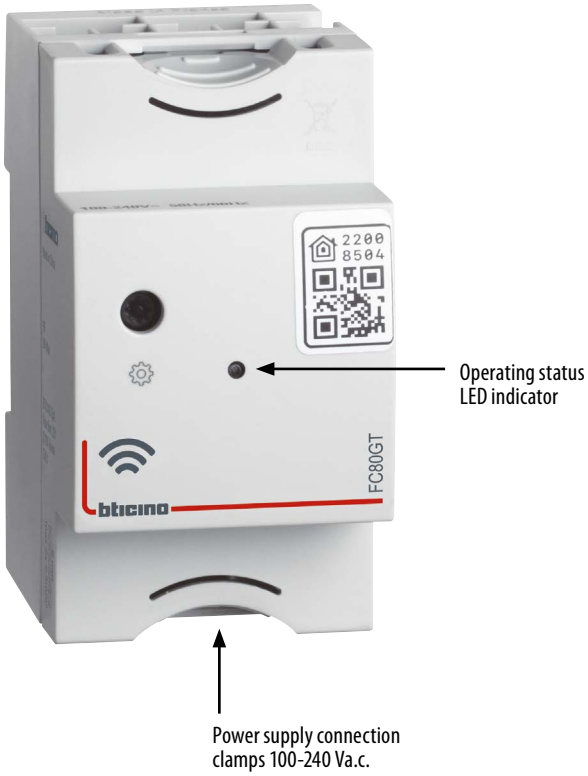
Diagram with remote control switch powered by the phase voltage.

(*) The switch control line must be connected to the power supply phase of the DIN Smart actuator.

Smart DIN gateway item FC80GT

DESCRIPTION

Smart gateway for use with "with Netatmo" Smart DIN devices, for controlling lights and sockets locally and remotely using a smartphone with the Home + Control App installed and/or voice assistants.
The device can be used as an alternative to the flush mounted Gateway, item .....4500C/4510C, of the connected Livinglight, Living Now, MatixGO and Màtix series, for use with the respective Smart devices.

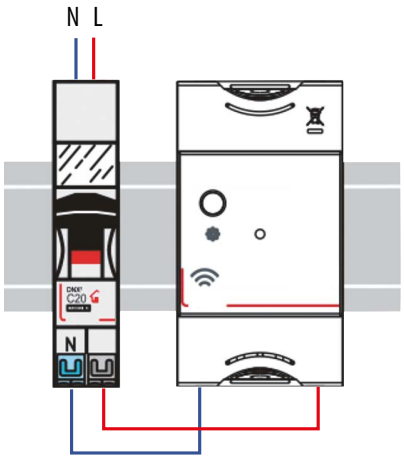


TECHNICAL FEATURES

Rated voltage: 100 - 240V a.c.
Rated frequency: 50/60Hz
Energy consumption: 2 W max
Width: 2.5 DIN modules

Note: for further information, please refer to the respective technical sheet and installation instructions on thebticino.com website

WIRING DIAGRAMS



BTDIN WITH NETATMO

Catalogue

FC80RC

FC80CC

FC80GCS

FC80GT

F40T125A

FC80AC

Item	CONNECTED CONTROL DEVICES
○ **FC80RC**	Smart DIN relay for the control of lights with maximum absorption In=16 A. Equipped with contacts for remote pushbutton control (maximum 10 pushbuttons). It allows local and remote control of the lights through radio commands, wired pushbuttons, smartphones with the "Home+Control" App or using a voice assistant. 1 DIN module. Power supply 100-240 Va.c. 50/60 Hz.
○ **FC80CC**	Smart DIN contactor suitable for controlling single-phase loads < 20 A. The smart contactor allows remote control (ON / OFF) of loads such as water heaters, pool pumps, induction plates and electric vehicle charging sockets from smartphones with the Home+Control App or using a voice assistant. With meter for the measurement of the current absorbed by the load. 1 DIN module. Power supply 100-240 Va.c. 50/60 Hz.
○ **FC80AC**	Smart device for controlling and measuring the consumption of appliances with a power consumption <80. It has a dry contact with a capacity of 10 mA to 2 A (for 10 to 30 Vd.c. or 100 to 240 Va.c. voltage). Ideal for controlling and measuring heating appliances, wallboxes and electric vehicle charging stations, ventilation systems, irrigation systems and any other device with a control dry contact. Not suitable for shutter automation. A toroid is supplied, for the measurement of the current absorbed by the load, max 80A. Function management through the Home + Control App, compatible with load management module FC80GCS. 1 DIN module. 100-240V a.c. power supply 50/60 Hz.

Item	CONNECTED DEVICES FOR ENERGY MANAGEMENT
○ **FC80GCS**	Smart DIN load management module for the monitoring of the consumptions of the whole electric system, the powering or disconnection of the loads, and the setting of scenarios with priority or non-priority loads. When the maximum intended power is reached, the non-priority loads are temporarily disconnected to avoid possible and annoying blackouts. A toroid for the input current measurement is provided. Power supply 100-240 Va.c. - 1 DIN module.
○ **F20T60A**	Smart DIN meter for measuring the energy consumption of the entire single-phase system of the house (instantaneous, daily, monthly), as well as of individual power lines. A toroid for the input current measurement is provided. Power supply 100-240 Va.c. - 1 DIN module. (Single-phase systems only).
○ **F40T125A**	DIN Smart meter like F20T60A but suitable for measurement in three-phase systems.

	GATEWAY FOR REMOTE CONTROL
○ **FC80GT**	Smart DIN gateway for remote control of lights and sockets through the connected FC80RC remote contactor, the connected FC80CC contactor and the FC80GCS load management module, using a smartphone with the HOME + CONTROL App and/or a voice assistant. Zigbee/IP Wi-Fi communication. It can be used as an alternative to the flush mounted Gateway, item ....4500C/4510C, of the Living Now, Livinglight, Matix, MatixGo civil series. Power supply 100-240 Va.c. 2.5 DIN modules.

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BTicino SpA reserves at any time the right to modify the contents of this booklet and to communicate, in any form and modality, the changes brought to the same.

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