SMART ELECTRICAL PANEL

# Adding comfort is simplicity itself





# Principle of a Legrand connected installation

With our smart electrical panel solutions and the Home + Control app, you have the benefit of a complete system for controlling your electrical installation on any type of site, from private houses to large blocks of flats. The Legrand Cloud hosts data, ... Legrand manages it and Cloud keeps it secure. Router Electricity Rest of the home 8 Fridge The Home + Control app Microwave can be used to control the installation remotely and stay informed.







#### Electrical panel

equipped with connected modular products to control the lighting and high-energy consumption appliances, or track electrical energy consumption.

#### AND/OR







Connected products or packs available in the various Legrand wiring accessory ranges. For installation in different rooms in the house to control the lighting, roller shutters, the heating, etc.

#### **RANGE OF MODULAR PRODUCTS** FOR SMART ELECTRICAL PANELS:



# An interface that is easy to wire up and install which integrates seamlessly into the electrical panel

#### EMDX3 WITH NETATMO CONTROL GATEWAY MODULE

To start a connected installation from the electrical panel, you simply need to install an EMDX<sup>3</sup> with Netatmo Gateway Module.

#### EMDX<sup>3</sup> WITH NETATMO GATEWAY MODULE:

- This is essential for any new installation and acts as an interface between the router and the connected wired products (2.4 GHz radio communication). There are two versions: a modular version in the electrical panel, or a wiring accessory in the various rooms in the house.
- It is the equivalent of the gateway power outlet included in the Céliane<sup>TM</sup> with Netatmo connected starter pack (or available in the other wiring accessory ranges such as Arteor/ Valena/Mosaic/Dooxie with Netatmo for example).
- Compatible with all other Legrand "with Netatmo" connected products.
- A single interface (gateway power outlet or Gateway Module) is enough to control the whole house.





Available separately (Cat.No 4 121 81) or in the connected starter pack (Cat.No 4 121 91) which also includes 1 CX<sup>3</sup> with Netatmo connected contactor.





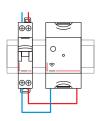
Cat.No 4 121 81

Cat.No 4 121 91



#### POWER SUPPLY: 100-240 V $\sim$

The Gateway Module is installed after a protective circuit breaker.



N (neutral) = blue

L (phase) = everything except blue and green/yellow

#### WIRING

The Gateway Module consists of a fixed base and a removable section, to make wiring as easy as possible.



Unclip the removable section from its base



Wire up the power supply (screw terminals)

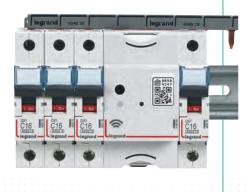


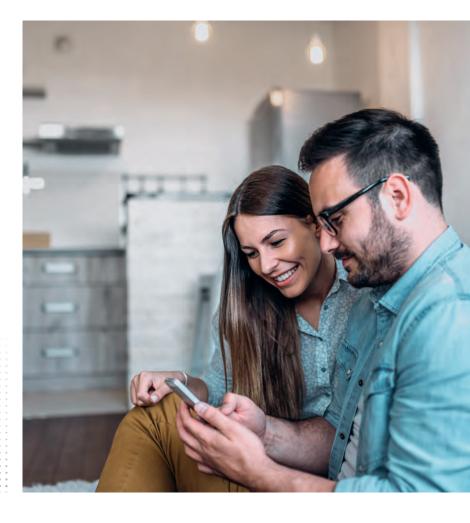
Clip the removable section onto the base

.....



The product profile and positioning of the terminals allow the connection supply busbars to run along the top of the product. This means the position of the Gateway Module in the row can be chosen freely and products on the same rail can be connected via a supply busbar.





## Track easily the energy consumption

#### EMDX3 WITH NETATMO CONNECTED ELECTRICITY METER

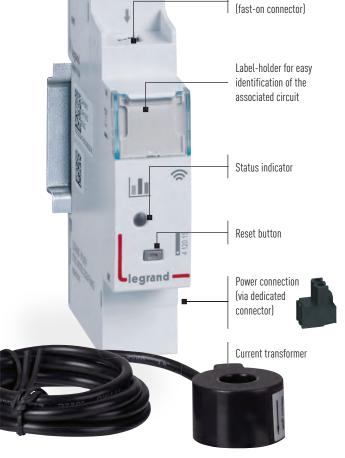
For installation in the electrical panel to measure the total installation consumption or that of a specific line.





### THE EMDX<sup>3</sup> WITH NETATMO CONNECTED ELECTRICITY METER ALLOWS THE USER TO:

- View the total instantaneous power for the house.
- Look up the total electricity consumption history for the building or circuit with which the connected electricity meter is associated (heating, hot water, power outlets, etc) on the daily/weekly/monthly/annual scale.
- Send a notification if an adjustable total instantaneous power threshold is reached (energy meter configured in "total consumption track" mode).
- Install additional connected electricity meters, so as to obtain detailed measurement of the consumption of several circuits.
- Supplied with 1 closed measurement coil 80 A max.



Coil connection



Requires prior installation of a "with Netatmo" connected starter pack, version for \_\_ rail Cat.Nos 4 121 81/91 or Céliane/Arteor/Valena/Dooxie/Mosaic with Netatmo version.



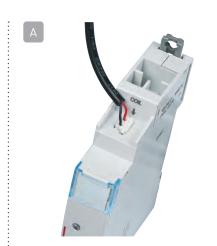
Width: 1 x 17.5 mm module



#### **WIRING**

The connected electricity meter and the current transformer are connected via the quick-lock connector on top of the product (A).

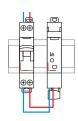
The black removable connector on the underside of the connected electricity meter is used to plug in the power supply (B).





#### POWER SUPPLY: 100-240 V $\sim$

The connected electricity meter is installed after a protective circuit breaker.

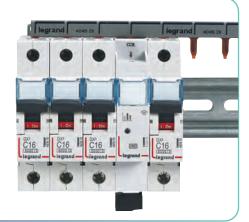


N (neutral) = blueL (phase) = everything except blue and green/yellow





The product profile and positioning of the terminals allow the connection supply busbars to run along the top of the product. This means the position of the connected electricity meter in the row can be chosen freely and products on the same rail can be connected via a supply busbar.

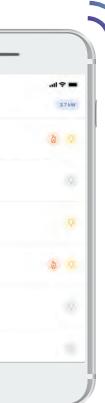


## **Control** lights remotely without altering the installation

CX3 WITH NETATMO CONNECTED LATCHING RELAY

For installation in the electrical panel without the need for associated protection (no protective circuit breaker on the control circuit) when replacing an existing latching relay (refurbishment) or to create/complete a connected installation.





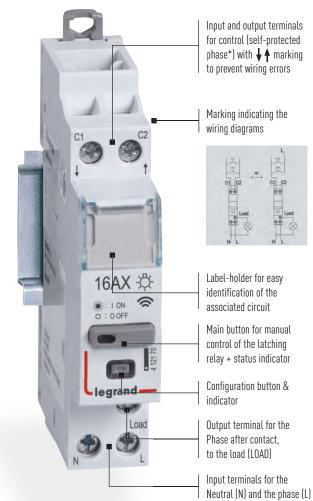
#### THE CX3 WITH NETATMO CONNECTED LATCHING RELAY ALLOWS THE USER TO:

- Control lights controlled by push-buttons locally or remotely (for example, lights in a corridor or stairwell).
- Combine it with wired push-buttons and/or wireless switches in Legrand "with Netatmo" connected ranges.
- Max. loads:
  - 3840 W incandescent and halogen lamps
  - 650 W LED and compact fluorescent lamps:
  - 3000 VA ferromagnetic and electronic transformers for lamps.
- Integrate lights in schedules or in personalised scenarios.
- Track consumption of the lighting circuit controlled in the Home + Control app.
- Control lights with their voice via a voice assistant.











Requires prior installation of a "with Netatmo" connected starter pack, version for \_\_\_ rail Cat.Nos 4 121 81/91 or Céliane/Arteor/Valena/Dooxie/Mosaic with Netatmo version.



Silent latching relay (< 10 dB)



Width: 1 x 17.5 mm module



#### POWER SUPPLY: 100-240 V $\sim$

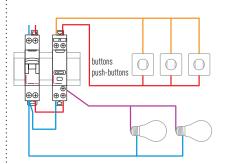
The control circuit has a built-in power supply and protection.

N (neutral) = blue

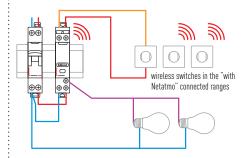
L (phase) = everything except blue and green/yellow Phase after contact = usually purple, orange, etc

#### **WIRING EXAMPLES**

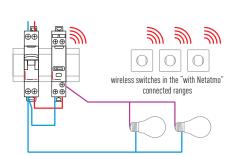
Installation with wired push-buttons (without illuminated indicator).



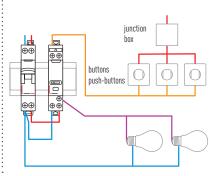
Mixed installation with wired push-buttons (without illuminated indicator) and "with Netatmo" wireless switches.



Wireless installation with several "with Netatmo" wireless switches.



Wired installation with wired push-buttons (without illuminated indicator) and junction box.

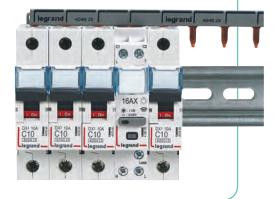






The product profile and positioning of the terminals allow the connection supply busbars to run along the top of the product.

This means the position of the connected latching relay in the row can be chosen freely and products on the same rail can be connected via a supply busbar.





### Control or schedule remotely the operation of high-energy consumption appliances

#### CX3 WITH NETATMO CONNECTED CONTACTOR

For installation in the electrical panel without the need for associated protection (no protective circuit breaker on the control circuit) when replacing an existing contactor or to create/complete a connected installation.





#### THE CX3 WITH NETATMO CONNECTED **CONTACTOR ALLOWS THE USER TO:**

- Control the operation of high-energy consumption appliances locally or remotely (electric water heater, swimming pool pump, electric heating, charging socket for an electric vehicle, etc).
  - For controlling electrical appliances up to 4800 W, or motors up to 2400 VA.
- Integrate controlled appliances in schedules (in place of a time switch) or in personalised
- Track consumption of the circuit controlled in the Home + Control app.
- Choose between operation in peak/off-peak\*\* automatic mode or as a conventional ON/OFF power contactor (via the Home + Control app).
- Control loads with their voice via a voice assistant.



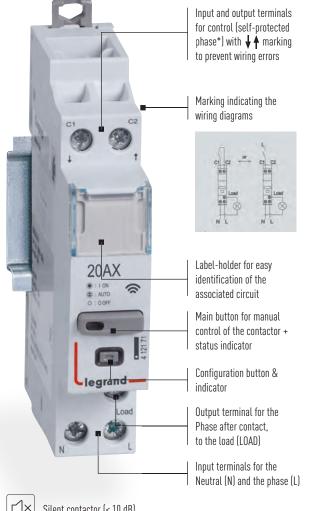






Requires prior installation of a "with Netatmo" Cat.Nos 4 121 81/91 or Céliane/Arteor/Valena/ Dooxie/Mosaic with Netatmo version.

<sup>\*\* &</sup>quot;Peak/Off-Peak" tariff (specific to France). The contactor is controlled by means of the signal sent by the electricity supplier, to supply the load only during time slots with a cheaper tariff.



Silent contactor (< 10 dB)



Width: 1 x 17.5 mm module

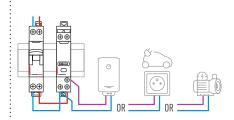


#### POWER SUPPLY: 100-240 V $\sim$

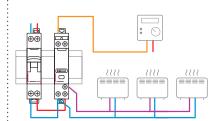
The control circuit has a built-in power supply and protection.

#### **WIRING EXAMPLES**

Control of different high-energy consumption loads.



Control of an electric heating system via a central control unit.

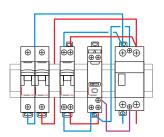


N (neutral) = blue

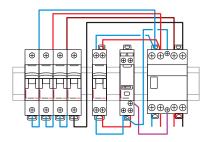
L (phase) = everything except blue and green/yellow

Phase after contact = usually purple, orange, etc

Control of a single-phase or three-phase power contactor (In > 20 A) with a CX<sup>3</sup> with Netatmo connected contactor.



Control of a single-phase power contactor with a CX<sup>3</sup> with Netatmo connected contactor.

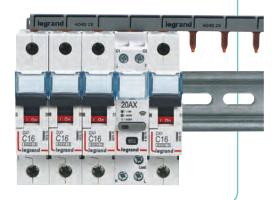


Control of a three-phase power contactor with a CX3 with Netatmo connected contactor.



The product profile and positioning of the terminals allow the connection supply busbars to run along the top of the product.

This means the position of the connected contactor in the row can be chosen freely and products on the same rail can be connected via a supply busbar.

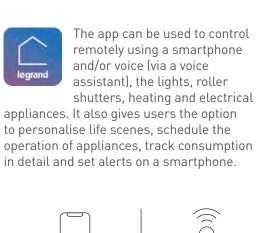


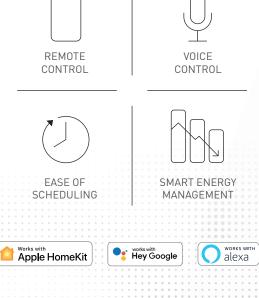


### Home + Control

## just one app to control everything

The installation is controlled and consumption tracked via the unique app: Home + Control.







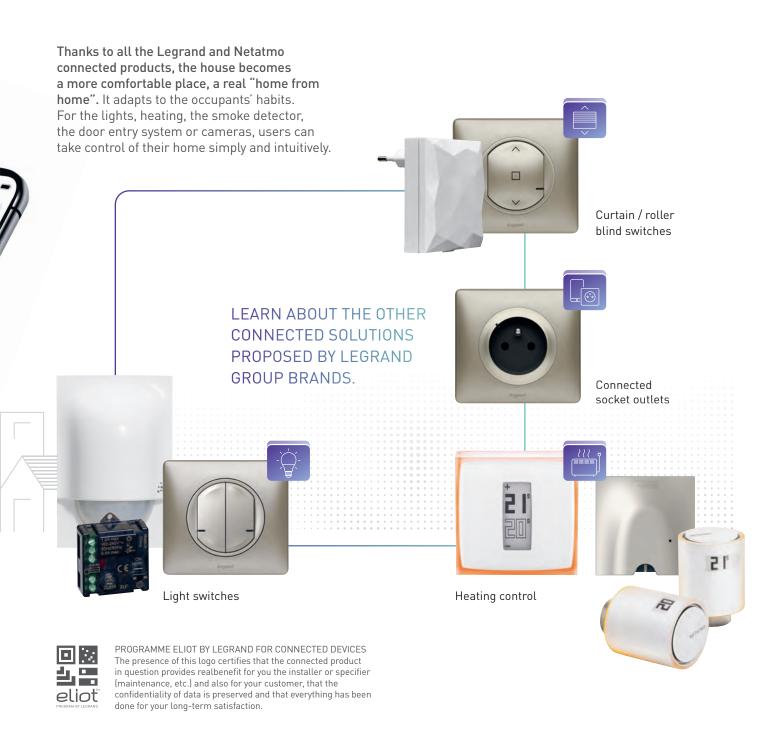


The Home + Control app is completely free and available from the App Store and Google Play.











#### Smart electrical panel

#### connected starter packs

















Smart electrical panel

EMDX<sup>3</sup> with Netatmo connected electricity meter



For technical characteristics, see e-catalogue

For technical characteristics, see e-catalogue

Allows the user to control an installation remotely using a smartphone via the app Home + Control from Legrand and/or voice via a voice assistant For any connected installation, you need to order either an EMDX³ with Netatmo Gateway Module, or a starter pack for connected installations including an interface (CX3 with Netatmo connected starter pack or available in the connected wiring accessory ranges: Arteor/Céliane/Dooxie/Mosaic/Valena with Netatmo)

The installation can be supplemented by other products for smart electrical panel oravailable in the "with Netatmo" connected wiring accessory ranges. Products available from an Authorised Dealer 2.4 GHz Wi-Fi connection required

2.4 GHZ WI-FI Connection required				
Pack	Cat.Nos	EMDX <sup>3</sup> with Netatmo Gateway Module		
1	4 121 81	Can be used to create a connected installation Connects the connected modules (electricity meter, latching relay, contactor) to the house Wi-Fi network For installation in the electrical panel Allows insertion of a supply busbar 100 - 240 V ∼ - 50/60 Hz Consumption: 2 W maximum Connection via screw terminals Width: 2.5 x 17.5 mm modules		
		CX <sup>3</sup> with Netatmo connected starter pack		
1	4 121 91	Can be used to start a connected installation For installation in the electrical panel Connects the connected modules to the house Wi-Fi network Allows insertion of a supply busbar Contents: - 1 Gateway Module Cat.No 4 121 81, 100 - 240 V ∼ - 50/60 Hz Consumption: 2 W maximum Width: 2.5 x 17.5 mm modules - 1 connected contactor Cat.No 4 121 71, multifunction, silent (< 10 dB), 20 A, 100 - 240 V ∼ - 50/60 Hz Width: 1 x 17.5 mm module Connection via screw terminals		

For any installation controlled remotely using a smartphone via the app Home + Control from Legrand and/or voice via a voice assistant Products available from an Authorised Dealer

Pack.	Cat.Nos	EMDX <sup>3</sup> with Netatmo connected electricity meter
1	4 120 15	Requires prior installation of a "with Netatmo" connected starter pack, version for ☐ rail Cat. Nos 4 121 81/91 or Céliane, Dooxie, Mosaic, Valena or Arteor with Netatmo version Allows the user to:  - measure the total instantaneous power consumption of the house  - track the daily/weekly/monthly/annual history of the total consumption of the house or circuit with which it is associated (in kWh and as a value)  - send a notification if an adjustable threshold of total instantaneous power is reached  100 - 240 V ∼ - 50/60 Hz  Supplied with 1 closed current transformer 80 A max. Width: 1 x 17.5 mm module



#### Smart electrical panel

#### CX3 with Netatmo connected contactor

#### Smart electrical panel

#### CX3 with Netatmo connected latching relay





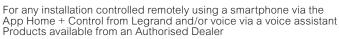






4 121 71







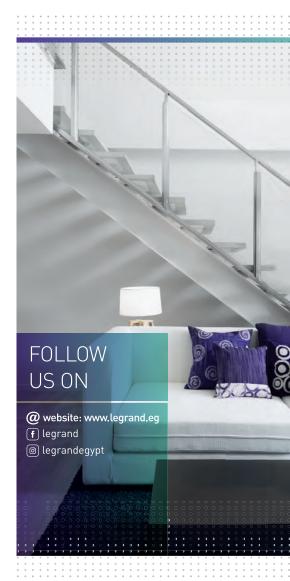
4 121 70

For technical characteristics, see e-cataloguee

For any installation controlled remotely using a smartphone via the App Home + Control from Legrand and/or voice via a voice assistant Products available from an Authorised Dealer

Pack	Cat.Nos	CX <sup>3</sup> with Netatmo connected contactor
1	4 121 71	Requires prior installation of a "with Netatmo" connected starter pack, version for ∟ rail Cat. Nos 4 121 81/91 or Arteor/Céliane/Dooxie/ Mosaic/Valena with Netatmo version.  Multifunction silent contactor (< 10 dB) 20 A, 100 - 240 V  - 50/60 Hz Conforming to standard IEC/EN 60669-2-1 Can be used to control (ON/OFF) any type of load remotely (water heater, heating, swimming pool pump, charging socket for an electric vehicle, etc) Peak/off-peak function Allows the user via the Legrand Home + Control app to: - enter the contactor operating mode (peak/off-peak or ON/OFF) according to the nature of the load (water heater or other load) - measure and track consumption (kWh) of the controlled circuit - control another single or three-phase contactor > 20 A - directly control electrical appliance up to 4800 W, or motors up to 2400 VA, or sockets for electric vehicles up to 16 A VE Self-protected upstream control terminals: no need for protection such as a 2 A circuit breaker or a fuse (remove this circuit breaker if already present when replacing a standard latching relay) Allows insertion of a supply busbar Screw terminals Width: 1 x 17.5 mm module

Pack	Cat.Nos	CX <sup>3</sup> with Netatmo connected latching relay
1	4 121 70	Requires prior installation of a "with Netatmo" connected starter pack, version for prior rail Cat. Nos 4 121 81/91 or Arteor/Céliane/Dooxie/ Mosaic/Valena with Netatmo version Silent latching relay (< 10 dB) Single-pole, 16 A, 100 - 240 V - 50/60 Hz Conforming to standard: IEC/EN 60669-2-1 Allows the user via the Legrand Home + Control app to: - control devices remotely (one-off control or integrated in a scenario with one or more lighting points) - measure and track consumption (kWh) of the controlled circuit - program devices according to a daily and/or weekly schedule Can be controlled by standard wired push-buttons and/or be combined with Arteor/Céliane/Dooxie/ Mosaic/Valena with Netatmo connected wireless switches Self-protected upstream control terminals: no need for protection such as a 2 A circuit breaker or a fuse (remove this circuit breaker if already present when replacing a standard contactor) Allows insertion of a supply busbar Screw terminals Width: 1 x 17.5 mm module





#### EMB Electrical Industries S.A.E.

#### Headquarter office

Pyramids Heights Office Park KM 22 Cairo - Alex. desert road Building 1B, 12556 Tel.: +202 3536 0000

Tel.: +202 3536 0000 Fax: +202 3536 0001 www.legrand.eg