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IP room controller

0 484 12

Description

The IP modular controller Cat. No. 0 484 12 has been specially designed for controlling hotel rooms and meeting rooms. It can be powered via a PoE injector on the IP network **or** by an external power supply.

It comprises:

- 16 configurable auxiliary inputs for issuing commands such as ON/OFF, Dim +/-, scenes, up/down/stop for roller blinds via switches, pushbuttons and other volt-free contact devices.

- 16 configurable binary outputs for controlling the lighting (2 blocks of 4 relays: 4.3 A max to be distributed between the blocks), the shutters (2 blocks of 2 relays: 2.1 A max to be distributed between the blocks), and the power sockets (2 blocks of 2 relays: 16 A max to be distributed between the blocks).

- One DALI dimming output:
- In broadcast mode
- In group mode (16 groups max.)

The DALI output can supply up to 20 ballasts (max. bus consumption 40 mA) or up to 64 ballasts with the addition of an external DALI power supply.

Each output can be part of the various scenarios associated with conditional functions such as volt-free contacts, level of light or time programming. Automatic presence management (Virtual Keycard) can determine whether the room is occupied by combining data from the motion sensors and the door contact.

An SCS BUS connection can link the SCS actuators and control units to a customised interface, thus linking dimmers with various loads and controlling temperature regulation.

The parameters are set in the software via the IP network.

The self-configured outputs are supervised using the IP Bacnet protocol.

Front view
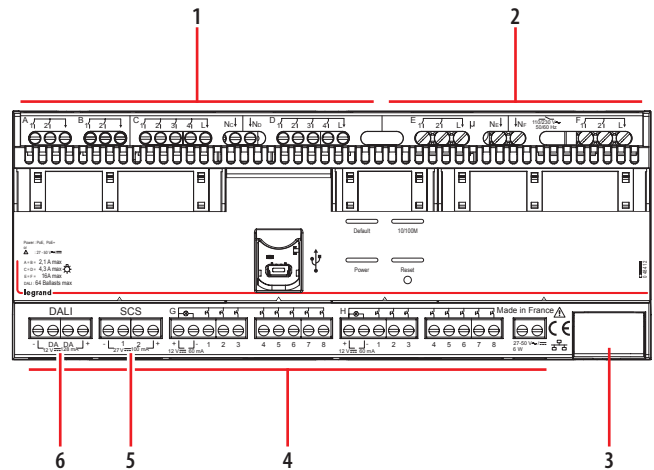
Legend

1. Outputs - Cable section 2 x 1.5 mm^2
2. Outputs - Cable section 2 x 2.5 mm^2
3. RJ 45 socket (PoE/PoE+)
4. Inputs- Cable section 1 x 2.5 mm^2
5. SCS output
6. DALI output

NOTE: Neutral terminals needed for:
- Synchronisation with the mains power supply.

Technical data

Device power supply:	RJ 45 (PoE/PoE+ class 0) **or** Screw terminal block (27-50 V~/V⎓)
Number of load terminals	
16 outputs:	A - B: 2.1 A blocks - C - D: 4.3 A blocks - E - F: 16 A blocks
Number of auxiliary input terminals:	16 inputs (G - H: 2 blocks of 8 inputs)
Capacity of load terminals:	2 x 1.5 mm^2 (A to D) - 2 x 2.5 mm^2 (E to F)
Capacity of SCS terminals:	1 x 2.5 mm^2
Capacity of DALI load terminals:	1 x 2.5 mm^2
Capacity of auxiliary input terminals:	1 x 2.5 mm^2
Contact type:	Bistable and monostable relay
RJ 45:	Auto-MDI/MDI-X - Full duplex
Location category:	Indoors
Degree of protection	
Penetration of solid bodies and liquids:	IP 20 (installation in an enclosure)
Impact resistance:	IK 04
Number of modules:	12
Operating temperature:	(-5) – (+45) °C
Storage temperature:	(-20) – (+70) °C
No-load power consumption:	< 1 W
Weight:	387 g

		LED bulbs		ELV halogen, compact fluorescent and fluorescent bulbs with separate electronic ballast		ELV halogen, compact fluorescent and fluorescent bulbs with separate ferromagnetic ballast		Fluorescent tubes		Compact fluorescent bulbs with built-in electronic ballast	
Outputs C - D	230 V~	160 VA	0.7 A	500 VA	2.1 A	500 VA	2.1 A	4 (2 x 36) W	1.7 A	160 VA	0.7 A
	110 V~	80 VA		250 VA		250 VA		2 (2 x 36) W		80 VA	
Outputs E - F	230 V~	500 VA	2.1 A	1000 VA	4.3 A	1000 VA	4.3 A	10 (2 x 36) W	4.3 A	500 VA	2.1 A
	110 V~	250 VA		500 VA		500 VA		5 (2 x 36) W		250 VA	

		Compact fluorescent bulbs with built-in ferromagnetic ballast		Halogen bulbs		Motors		Contactors	
Outputs A - B	230 V~					250 VA	1.1 A	250 VA	1.1 A
	110 V~					125 VA		125 VA	
	12 - 48 V~/V⎓					13 - 52 VA		13 - 52 VA	
Outputs C - D	230 V~	160 VA	0.7 A	1000 W	4.3 A	500 VA	2.1 A	500 VA	2.1 A
	110 V~	80 VA		500 W		250 VA		250 VA	
Outputs E - F	230 V~	500 VA	2.1 A	3680 W	16 A	500 VA	2.1 A	500 VA	2.1 A
	110 V~	250 VA		1760 W		250 VA		250 VA	

Power supply unit

The device must be powered by an external power supply. Accepted voltage range: 27 – 50 V ~/⎓, 6 W min.

Power outputs

- Block A and B (2 blocks of 2 relays: 2.1 A max to be distributed between the blocks).
Used to perform roller blind control functions, or to switch mutually-exclusive indicators (for example: Do not disturb/Please clean up).
- Block C and D (2 blocks of 4 relays: 4.3 A max to be distributed between the blocks).
Used to control 4 independent loads per block.
- Block E and F (2 blocks of 2 relays: 16 A max to be distributed between the blocks).
Used to control 2 independent loads per block.

DALI output

Used to control 64 DALI ballasts in Broadcast mode. No need to pair the device with the DALI output.
A power supply for the DALI BUS is integrated in the device. Imax 40 mA/12 V⎓ (20 ballasts max). If I is greater than 40 mA, use an external power supply (remove the jumpers from the DALI terminals).

SCS output

This block has a power supply output (+, -) which can be used to power the bus if necessary and the SCS communication BUS (1, 2).
The internal power supply can provide a maximum of 100 mA on the bus.
This self-powered option is achieved by bridging.
If it is necessary to connect more than 100 mA of peripheral equipment, an external SCS power supply can be added to the bus. In this case you must remove the internal power supply.
On the SCS BUS, the control units, actuators, dimmers, thermostats, detectors can be configured and linked to the scenarios using the configuration software.

Control unit inputs

- Block G and H.
The device has 2 blocks, each of which has a power supply output (12 V⎓) and 8 auxiliary inputs. The inputs can take switches or pushbuttons for issuing commands such as ON/OFF, dimming, up/down, scenarios whose parameters are set using the configuration software. The power supply provides low-level lighting for the control units (pilot light).

IP unit

The device has a LAN connection for communication and a Power Over Ethernet connection to supply it with power.
The device can operate at 10 or 100 Mbps. The data rate is 10 kB/s max. per device in Unicast (multiple reading of 50 variables = 2.1 kB/s).

Standards, certifications, marks

CE-compliant
Product standards: IEC 60 669-2-1
Environmental standards:
- European directive 2002/96/EC:
WEEE (Waste Electrical and Electronic Equipment)
- European directive 2002/95/EC:
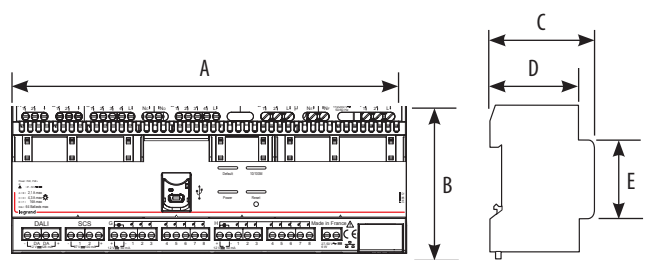RoHS (Restriction of Hazardous Substances)
- Regulations: Public buildings
                 Workplace buildings
                 High-rise buildings
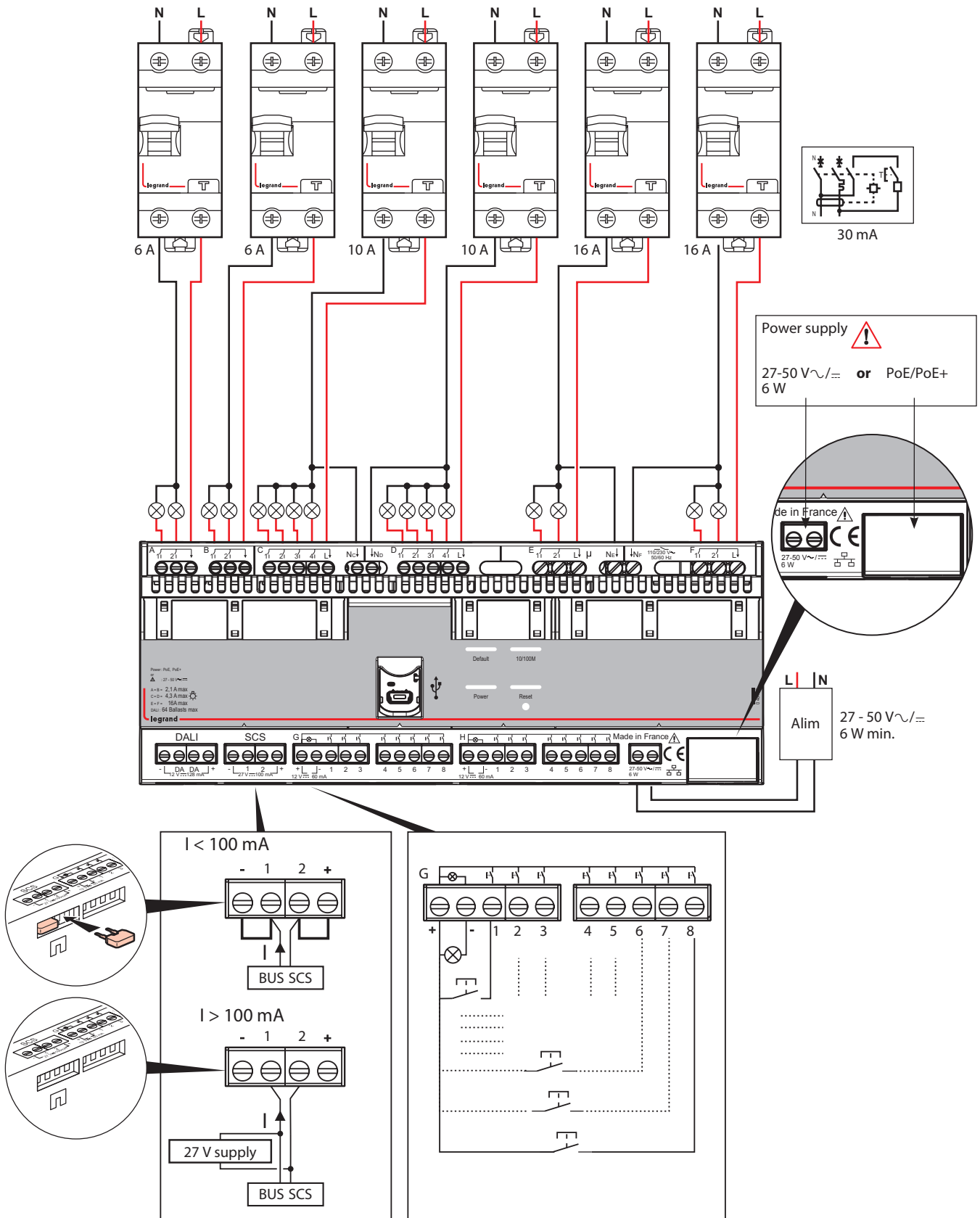- PoE standard: IEEE 802.3 AF/AT

Dimensional data

A	B	C	D	E
213 mm	83 mm	66 mm	50 mm	45 mm

Wiring diagrams

Single phase

Power supply ⚠

27-50 V ∿/⎓ **or** PoE/PoE+
6 W

Power supply:
27-50 V∿/⎓
6 W

Alim   27 - 50 V∿/⎓
6 W min.

I < 100 mA

− 1   2 +

BUS SCS

I > 100 mA

− 1   2 +

27 V supply

BUS SCS

30 mA

Single phase

30 mA	30 mA	30 mA
6 A 6 A	10 A 10 A	16 A 16 A

Power supply ⚠
27-50 V~/⎓ **or** PoE/PoE+
6 W

Made in France
27-50 V~/⎓
6 W

L N
Alim 27 - 50 V~/⎓
6 W min.

Default 10/100M
Power Reset

Power: PoE, PoE+
⚠ : 27 - 50 V~/⎓
A+B= 2,1 A max
C+D= 4,3 A max ☼
E+F= 16A max
DALI: 64 Ballasts max

DALI SCS G H Made in France

I < 128 mA
- DA DA +
BUS DALI

I > 128 mA
- DA DA +
12 V⎓ supply
BUS DALI

I < 100 mA
- 1 2 +
BUS SCS

I > 100 mA
- 1 2 +
27 V supply
BUS SCS

G/H
+ - 1 2 3 4 5 6 7 8

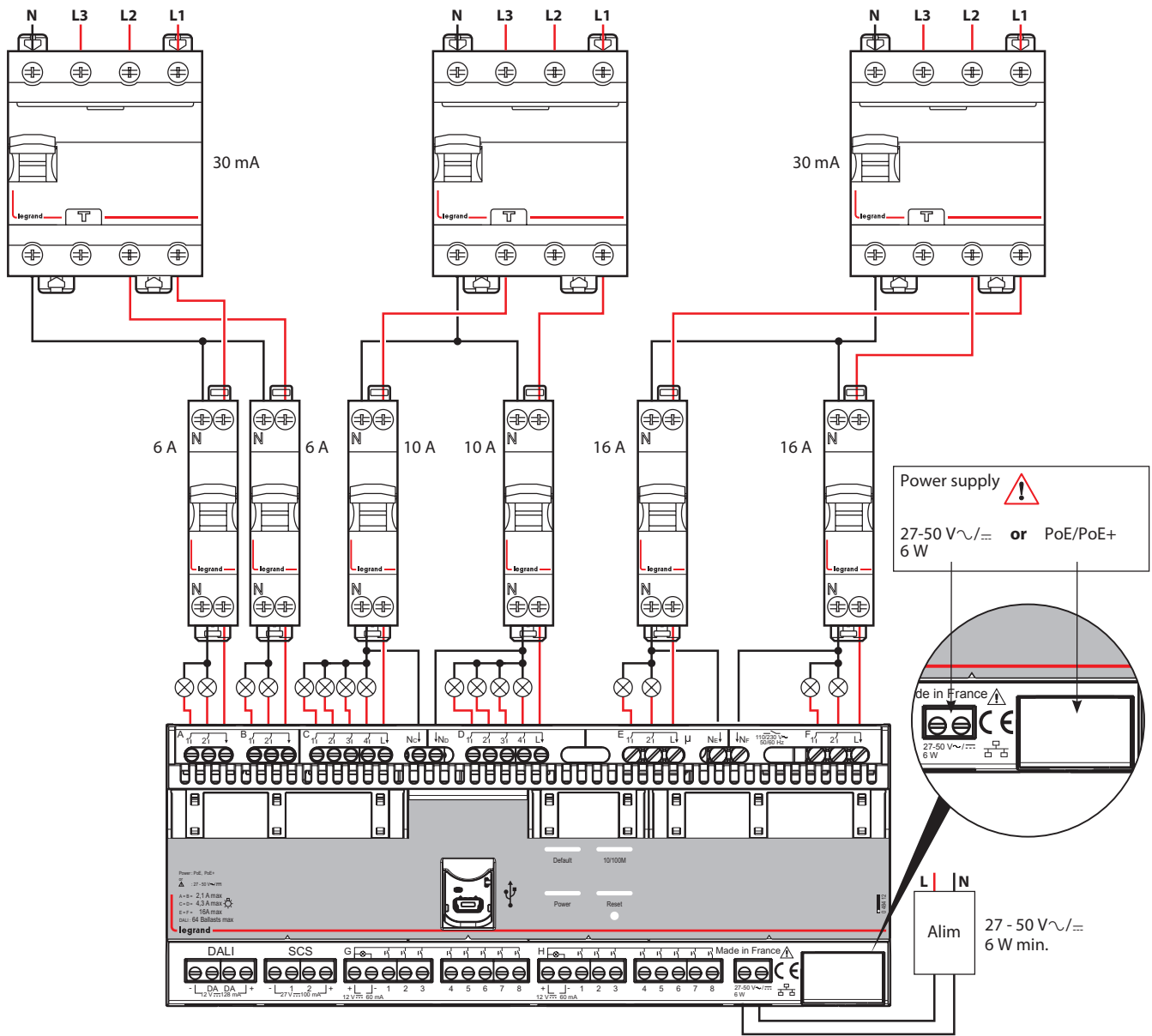**Three-phase**

Parameter setting

The device parameters are set using a special software tool: HRCS (Hotel Room Controller Software).

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Factory configuration:

Input	G1	G2	G3	G4	G5	G6	G7	G8
Output	A1	A2	B1	B2	C1	C2	C3	C4
Action	UP/STOP	DOWN/STOP	UP/STOP	DOWN/STOP	ON/OFF	ON/OFF	ON/OFF	ON/OFF

Input	H1	H2	H3	H4	H5	H6	H7	H8
Output	D1	D2	D3	D4	E1	E2	F1	F2/DALI
Action	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF
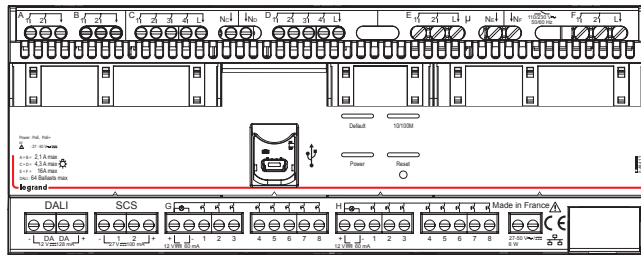
Power LED

- On: The device is powered and has an IP address.
- Flashing slowly: The device is powered but does not have a valid IP address.
- Off: The device is not powered.

10/100 M LED

- Orange LED
    Off: The Ethernet cable is not connected.
    On: The Ethernet cable is connected.
    Flashing: Activity indicator
- Green LED
    Off: 10 Mbps
    On: 100 Mbps.

USB (do not use)
- Reserved for future functions.

"Fault" LED

- On: Indicates a fault
- Off: No faults

Reset LED

- Flashing slowly: Configuration status (following a short press of the Reset button)
- Flashing quickly: Reset in progress (following a 10 s press of the Reset button)
- Off: Normal operation

Reset button

- Short press: The Reset LED flashes slowly and the device sends a BACnet message: "I_AM".
- **Long press: the device resets its IP configuration after a short press followed by a long press lasting 10 s.**

Care

Do not use acetone, tar-removing cleaning agents or trichloroethylene.
Resistant to the following products:
- Hexane
- Methylated spirit
- Soapy water
- Diluted ammonia
- Bleach diluted to 10%
- Window-cleaning products.

Caution: Before the use of other special maintenance products an initial test is required.