

# Lighting control for commercial buildings

For management of different functions in a simultaneous and integrated way, via a BUS line  
 Cost saving thanks to modularity and integration of various devices: selection of applications for today and future use  
 Remote control of all functions via the integrated web server

## Systems

### BASIC CONTROL

This can be used in order to adjust a single function for :

- lighting control (on/off)
- dimming

- PRODUCTS SYSTEM
  - Standard control units
  - Infrared remote control units



### ADVANCED CONTROL

This can be used as a switch, dimmer or timer according to the associated actuator

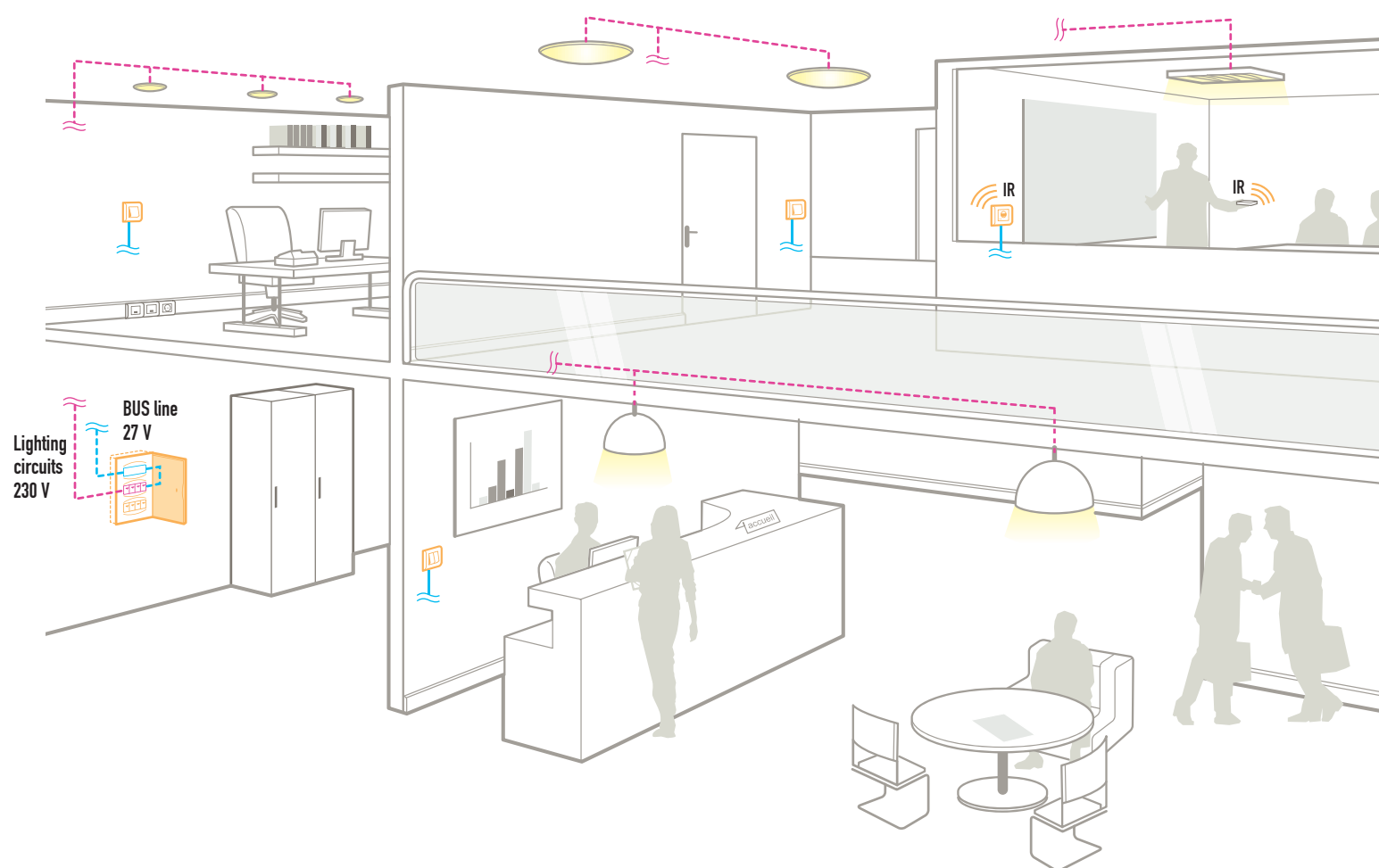
- PRODUCTS SYSTEM
  - Scenario switch
  - Multi-application push-button
  - Multi-purpose switch dimmer



### COLOUR TOUCH SCREEN

Allows the configuration of the key functions of the system

- PRODUCTS SYSTEM
  - Colour touch screen



### DIN RAIL ACTUATORS

Can be used in order to control the connected loads, following an action of the control units

- PRODUCTS SYSTEM
  - 1 to 4 ways actuators with normally open contact
  - 1 to 2 ways actuators with normally closed contact
  - Dimming actuators



### COMPLEMENTARY PRODUCTS

Must be used in order to ensure the functioning of the system or its configuration

- PRODUCTS SYSTEM
  - Power supply
  - Scenario module
  - Memory module
  - Gateways
  - Plug-in configurators
  - Supervision software
  - Virtual configurators



Consult your sales office, addresses on the back of the catalogue



784 65 White finish



784 63 White finish



784 62 White finish



784 69 White finish

*Technical characteristics (p. 455)*  
*Mosaic support frames and cover plates (p. 644 - 649)*

Particularly suitable for new buildings and heavy renovation

Pack	Cat.Nos		Control units
1	White 784 65	Zamak 792 65	To be equipped with Mosaic support frames and cover plates <b>Infrared receivers</b> Allow the control of most products through the use of the infrared remote control Cat.No 882 28
1	784 63	792 63	<b>Double push-buttons</b> Allow the control of one function on 2 different actuators
1	784 62	792 62	<b>Double switches</b> Allow the control of 2 functions on 2 different actuators

Pack	Cat.Nos		Other control units
1	White 784 67	Zamak 792 67	To be equipped with Mosaic support frames and cover plates Can be used whether as a switch, a timer or a dimmer The function depends of the associated actuator and controlled device <b>Multi applications push-buttons</b> Allow the control of one function on one actuator
1	784 69	792 69	<b>Scenario switches</b> Allow the control of 2 different functions on 1 or 2 actuators
1	784 66	792 66	<b>Multiple purpose switch dimmers</b> Allow the control of several functions on 1 actuator

Pack	Cat.Nos		Colour touch screens
1	White 784 77	Zamak 792 77	Allow the configuration of the key functions of the system, as well as the tuning of the technical settings Dry partition flush-mounting box, cover plate and support frame supplied
1	893 79	891 30	<b>Flush-mounting boxes</b> For dry partition walls For concrete walls
1	Grey 882 28		<b>Infrared remote control</b> <b>Mobile remote control</b> Can remotely control most of the products through IR receiver Cat.Nos 784 65 and 792 65 3 way Supplied with wall bracket Dim: 130 x 45 x 22 mm Range: 10 m Take 1 alkaline battery 9 V - 6F22 (not supplied)

# lighting control system for commercial buildings

DIN rail actuators - BUS technology

NEW



038 44



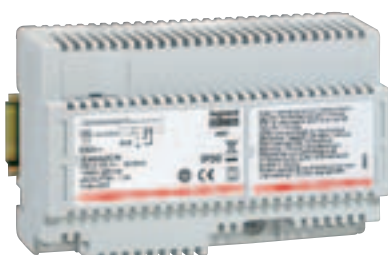
036 52



036 53



036 56



035 60



035 51



035 52



492 31

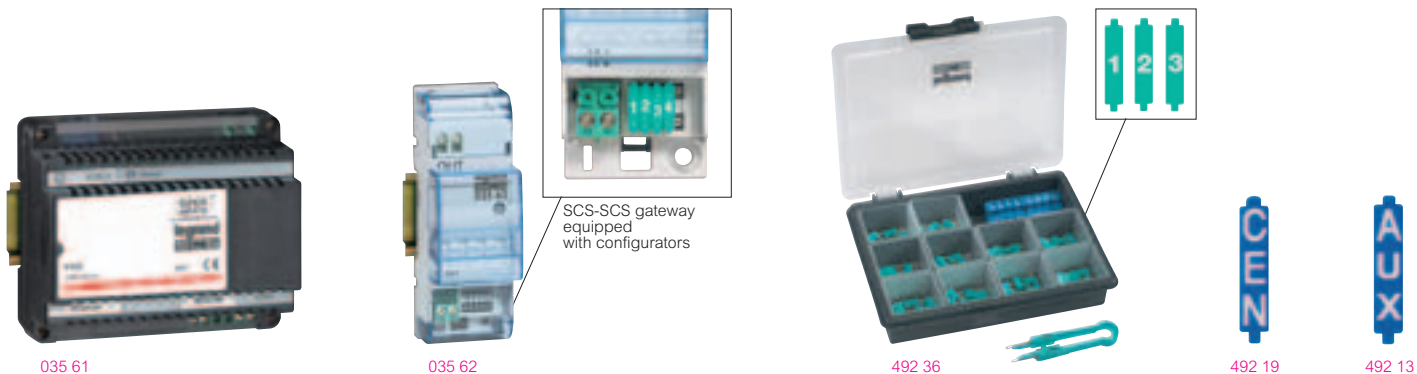


Technical characteristics (p. 455)

Particularly suitable for new buildings and heavy renovation

Pack	Cat.Nos	DIN rail actuators 230 V 50/60 Hz
1	2 modules 038 41	<b>Normally open contact</b> The most common used actuators connect the wiring devices control units with the associated load 1 way actuator for single load Maximum load: 16 A resistive load, 10 A for incandescent lamps, 4 A cos $\Phi$ 0.5 for ferromagnetic transformers 4 A for fluorescent lamps
1	2 modules 038 42	2 way actuator 2 independent relays for single and double loads Maximum load: 6 A resistive load or incandescent lamps 2 A cos $\Phi$ 0.5 for ferromagnetic transformers 150 W for fluorescent lamps
1	2 modules 038 44	4 way actuator 4 independent relays for single, double or mixed loads Maximum load: 6 A resistive load, 2 A for incandescent lamps, 2 A cos $\Phi$ 0.5 for ferromagnetic transformers 70 W for fluorescent lamps
		<b>Normally closed contact</b> It is used in case of emergency in order to turn the light on if there is a BUS failure Compulsory in building where safety light is required Maximum load: 16 A resistive load, 10 A for incandescent lamps, 4 A cos $\Phi$ 0.5 for ferromagnetic transformers 4 A for fluorescent lamps
1	2 modules 038 45	1 way actuator
1	2 modules 038 43	2 way actuator

Pack	Cat.Nos	Dimming actuators - DIN rail fixing
1	4 modules 036 52	<b>For incandescent loads</b> Dimming actuator for incandescent loads Maximum load: 60 - 1 000 W/230 V
1	4 modules 036 53	<b>For ELV halogen lamps with electronic transformer</b> Dimming actuator for ELV halogen lamps with electronic transformer Maximum load: 60 - 400 VA/230V
1	2 modules 036 56	<b>For electronic ballast 1-10V</b> Dimming actuator for fluorescent lamps with electronic ballast, 1-10 V Maximum load: 500 VA
		<b>Complementary products</b>
1	8 modules 035 60	<b>Power supply</b> Power supply for the lighting control system Input voltage: 230V ; output voltage 27 V = Maximum consumption: 300 mA Maximum current supplied: 1.2 A DIN rail fixing
1	2 modules 035 51	<b>Scenario module</b> Allows creation of scenarios by linking different functions piloted by the BUS Maximum memory: 16 scenarios DIN rail fixing
1	2 modules 035 52	<b>Memory module for actuators</b> Memory module for actuators Restore the last state of an actuator in case of a power failure DIN rail fixing
		<b>SCS cables</b> 2 wire cable for the BUS Conforming to the norm: CEI 46-5 and CEI 20-20
1	492 31	100 m
1	492 32	500 m
		<b>USB cable</b>
1	492 34	Can be used in order to connect the system to a PC or Palm
10	492 22	BUS connection terminal To be used in order to connect the system components (control units, dimmers, etc) to the BUS line



*Technical characteristics (p. 455)*

Particularly suitable for new buildings and heavy renovation

Pack	Cat.Nos	Gateways - DIN rail fixing
1	6 modules <b>035 61</b>	<b>Web server gateway TCP-IP</b> Allows the link between a SCS installation and a TCP/IP network
1	2 modules <b>035 62</b>	<b>SCS-SCS gateway (extension)</b> Allows the extension of the installation Suitable for larger buildings
1	2 modules <b>035 63</b>	<b>SCS – EIB intreface (KNX)</b> Allows communication/compatibility with EIB/KNX installation and products
1	6 modules <b>035 64</b>	<b>Web server and scheduler power supply</b> Provide power for web server and scheduling automation products
1	6 modules <b>035 65</b>	<b>Scheduling automation</b> Allows the setting up of the timing conditions for the components of the installation
1	<b>492 49</b>	<b>Supervision software</b> Can be used in order to tune up the system's functions through a computer, and to follow them on real time basis
1	<b>492 80</b>	<b>Virtual configuration kit</b> Comprising: 1wifi access point + power supply 1web server software SD card
1	<b>492 90</b>	<b>Virtual configuration software</b> Comprising: 1 secure digital with palm software 1 CD with PC software

Pack	Cat.Nos	DIN rail contact interface
1	2 modules <b>035 53</b>	Allows the connection of traditional wiring devices such as switches, time delay switches or external sensors 2 independent contacts Can be used in order to control 2 actuators for single function or 1 actuator for double function
10	<b>492 00</b>	<b>Plug-in configurators</b> The plug-in type configurators are used in order to associate an address to the different components of the system
10	<b>492 01</b>	0
10	<b>492 02</b>	1
10	<b>492 03</b>	2
10	<b>492 04</b>	3
10	<b>492 05</b>	4
10	<b>492 06</b>	5
10	<b>492 07</b>	6
10	<b>492 08</b>	7
10	<b>492 09</b>	8
10	<b>492 10</b>	9
10	<b>492 11</b>	GEN
10	<b>492 12</b>	GR
10	<b>492 13</b>	AMB
10	<b>492 14</b>	AUX
10	<b>492 15</b>	ON
10	<b>492 16</b>	OFF
10	<b>492 17</b>	O/I
10	<b>492 18</b>	PUL
10	<b>492 19</b>	SLA
10	<b>492 20</b>	CEN
10	<b>492 21</b>	↑↓
10	<b>492 21</b>	↑↓ M
10	<b>492 36</b>	Kit with "0 to 9" configurators (10 pieces of each figure)
10	<b>492 37</b>	Kit with: AUX, GEN, GR, AMB,ON, OFF, O/I, PUL, SLA, CEN, ↑↓, ↑↓ M

# lighting control system for commercial buildings

## DIN rail interfaces - BUS technology

### ■ System principle

The Lighting Control system allows the management of different functions in a simultaneous and integrated way. All the components of the Lighting Control system are interconnected via an electronic circuit that can be programmed: the BUS. The information is exchanged through the 2 wire BUS cable at low voltage (27 V<sub>DC</sub>).

There are two types of devices in the system:

- the controls units, which are connected only to the BUS cable and
- the actuators, connected both, to the BUS cable and to the 230V power line for managing the connected load

When the Lighting Control system devices are configured properly, it is possible to manage the load as follows:

- control for a single load
- control for one or more load groups;
- simultaneous management of all loads

It is also possible to carry out special functions, which can hardly be achieved with conventional electrical systems

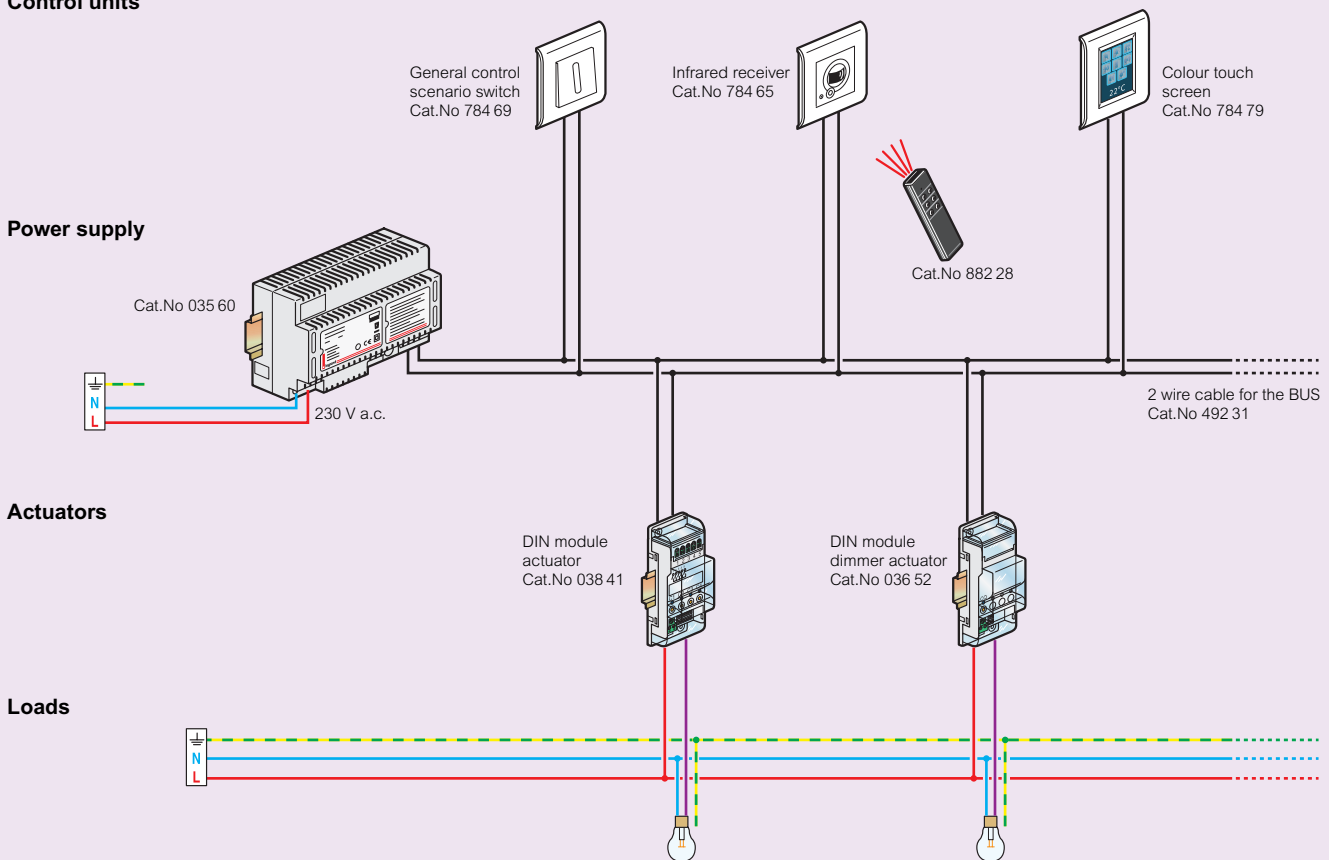
These functions are called scenarios

One scenario is a set of simultaneous control of multiple groups of loads, used in order to modify the environment according to the user's needs

An example of a scenario can be represented by the simultaneous activation of lights, which can be set by the user after getting inside the building by using one single control device or by using the Touch Screen menu

### ■ Installation principle

#### Control units



# lighting control

## DIN rail dimmers and remote control dimmers



036 58



036 71



784 30

**Technical characteristics (p. 457)**

Pack	Cat Nos	Dimmers
1	036 59	DIN rail mounting For incandescent and halogen lamps 230 V and ELV halogen lamps with ferromagnetic transformers Load: 60 to 600 W
1	036 58	For fluorescent lamps with 1-10 V ballast (fluorescent tubes and compact fluorescent lamps with separated ballast) Ballast power: maximum 800 VA Control current: 50 mA

Pack	Cat Nos	Remote control dimmers
1	036 71	DIN rail mounting For incandescent and halogen lamps 230 V, ELV halogen lamps with ferromagnetic or electronic transformers Can be controlled with simple non illuminated double push-buttons or BUS peripheral
1	036 60	For fluorescent lamps with 1-10 V ballast (fluorescent tubes and compact fluorescent lamps with separated ballast) Ballast power: maximum 1 000 VA Control current: 50 mA Can be controlled with simple non illuminated double push-buttons or BUS peripheral
1	036 80	Bus power supply for remote controlled dimmers cat.Nos 036 60/71

Pack	Cat Nos	Peripherals for remote control dimmers
1	784 10	<b>Push-buttons</b> Double push-button with 4 dedicated keys for "ON/OFF" and +/- (dimming) functions To be equipped with Mosaic support frames and cover plates (p. 644-649)

Pack	Cat Nos	Light mood manager 110 - 230 V 50/60 Hz
1	784 30	<b>Main control</b> Especially adapted for the lighting management for conference rooms, meeting rooms, restaurants, show-rooms Possible use: - control of 3 lighting circuits of one room - light mood manager as dimmer of polychrome lamps red/green/blue or warm white/cold white For incandescent and halogen lamps 230 V, ELV halogen lamps with ferromagnetic or electronic transformers and fluorescent lamps with 1-10 V or Dali ballast Maximum load per circuit: 1 000 W / VA Cumulated load on 3 circuits: max. 2 200 W Compatible with IR remote control Cat.No 784 31 Automatic terminals Use with cover plates Cat.No 788 39 or 790 39 and box Cat.No 801 24 below Installation: box min. 50 mm deep
1	784 31	<b>IR remote control</b> Allows the remote control of the different light mood that were previously stored
1	788 39	<b>Cover plate for light mood manager</b> White colour
1	790 39	Aluminium colour
1	801 24	<b>Flush-mounting box for light mood manager</b> Multi-material flush-mounting box 50 mm deep



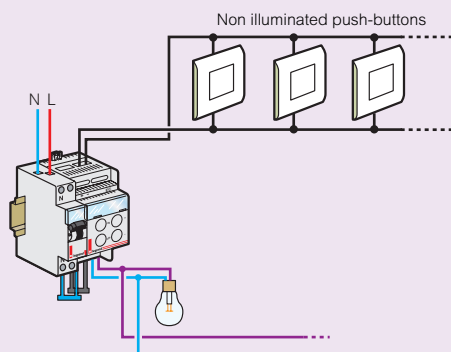
# lighting control

## DIN rail dimmers and remote control dimmers

### ■ Connection

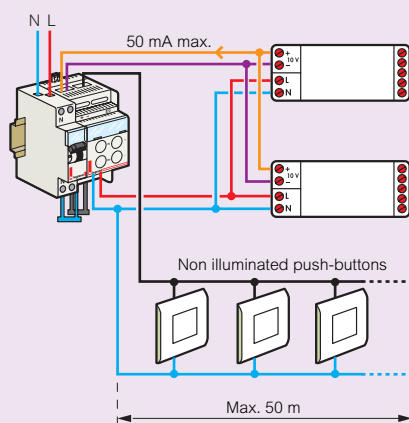
#### Dimmer for incandescent and halogen lamps

Cat.No 036 59



#### Dimmer for fluorescent lamps with electronic ballast 1-10 V

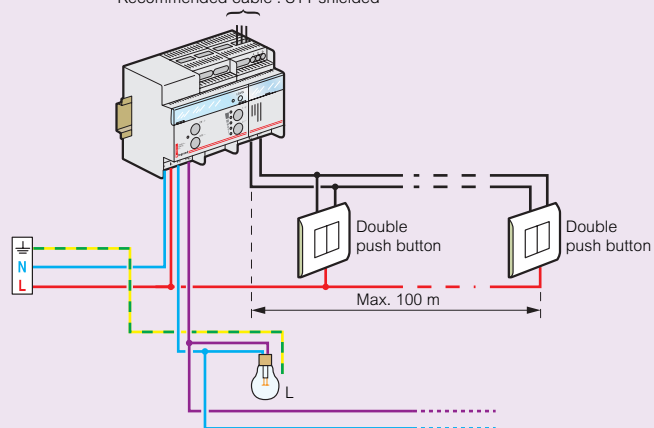
Cat.No 036 58



#### Dimmer for incandescent and halogen lamps

Cat.No 036 71

Bus line for control peripherals  
Maximum length of the bus line : 300 m  
Recommended cable : SYT shielded

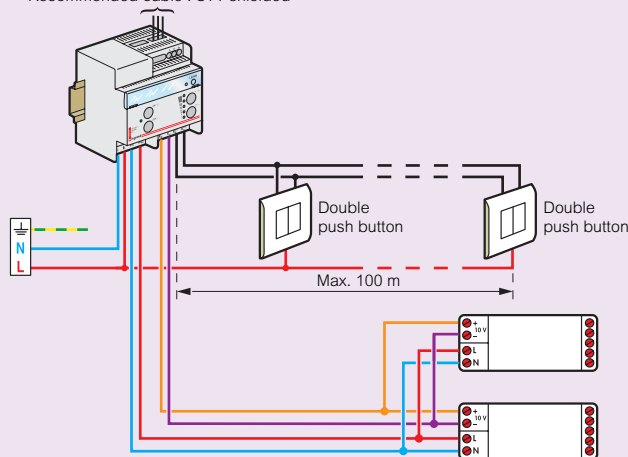


### ■ Connection (suite)

#### Dimmer for fluorescent lamps with 1-10 V dimmable ballast

Cat. No. 036 60

Bus line for control peripherals  
Maximum length of the bus line : 300 m  
Recommended cable : SYT shielded



### ■ Functions

#### Dimmers Cat.Nos 036 58/59

Local control "ON/OFF" functions  
Remote control "ON/OFF" and dimming functions via double non illuminated push-buttons  
Silent functioning  
Storage of the last lighting level following an OFF command

#### Remote controlled dimmers Cat.Nos 036 60/71

Local control "ON/OFF" functions  
Remote control "ON/OFF" and dimming functions via double non illuminated push-buttons or BUS peripherals  
Silent functioning  
Storage of the last lighting level following an OFF command  
Can be interconnected on the same BUS line in order to increase the maximum piloted power

#### Light mood manager Cat.No 784 30

4 different lighting scenes, that can be modified  
Local control via dedicated keys on the front panel  
Remote control via Cat.No 784 31

### ■ Compatible load

Cat.No		1	2	3	4	5	6
036 58	Max.	600 W	no	no	yes with ballast 1-10 V	no	no
	Min.	-	no	no	no	no	yes with ballast 1-10 V
036 59	Max.	600 W	yes	yes	no	yes min. 40 VA max. 600 VA	no
	Min.	60 W	yes	yes	no	yes	no
036 60	Max.	1000 W	no	no	yes with ballast 1-10 V	no	no
	Min.	-	no	no	no	no	yes with ballast 1-10 V
036 71	Max.	1000 W	yes	yes	no	yes	yes
	Min.	40 W	yes	yes	no	yes	yes
784 30	Max.	2200 VA (max. 1000 W per way)	yes	yes	yes with 1-10 V or Dali ballast	yes	yes
	Min.	-	yes	yes	yes with 1-10 V or Dali ballast	yes	yes

- ① Incandescent lamps
- ② Halogen lamps 230 V
- ③ Fluorescent lamps Ø 26 or 36 mm
- ④ Halogen lamps with ferromagnetic transformer
- ⑤ Halogen lamps with electronic transformer
- ⑥ Fluocompact lamps with separated electronic ballast 1-10 V

# lighting control

## power dimmers



400 83



740 30



740 40

Pack	Cat.Nos	Remote control power dimmer
1	400 83	<p>Local control on front face or remote control, light level adjustment via knob on front face</p> <p><b>Three functions:</b></p> <ul style="list-style-type: none"> <li>• Dimmer (V): used to set a light level and control "ON/OFF" switching via a local control, simple non-illuminated push-button, dual-function push-button</li> <li>• Remote control dimmer (T): used to set a light level, control "ON/OFF" switching and dimming via local control, simple non-illuminated push-buttons, dual-function push-buttons and the minimum light level is adjustable</li> <li>• Slave (E): for higher power ratings, the product is used in conjunction with other remote power dimmers (single or-3 phase). Up to 4 slaves can be used per master remote dimmer (same Cat.No as for slave remote control dimmer). Commands are generated by the master remote dimmer</li> </ul> <p>General control: used for "ON/OFF" switching of an unlimited number of remote control dimmers and storing the lighting level of each remote control dimmer before an "OFF" command</p> <p>Storage of last lighting level in the event of a power cut</p> <p>Memorise their lighting level before switching "OFF"</p> <p><b>5000 W remote control power dimmer</b></p> <p>230 V~ - 50/60 Hz</p> <p>Used to vary the light level of an installation:</p> <ul style="list-style-type: none"> <li>• of traditional incandescent lamps, 230 V~: 300 to 5000 W</li> <li>• of halogen incandescent lamps, 230 V~: 300 to 5000 W</li> <li>• of 12 V halogen lamps with ferromagnetic transformer: 300 to 5000 W</li> </ul> <p>Min. power: 300 W</p> <p>Up to 25 000 W can be controlled in master/slave arrangement with 4 slave remote dimmers combined with 1 master remote dimmer</p> <p>Dim.: L 181 x H 232 x D 117 mm - Weight: 2.2 kg</p>

Pack	Cat.Nos	Resistive precharging
1	401 48	<p>Resistive precharging unit for dimming fluorescent tubes, Ø 26 mm</p> <p>Dim.: 250 x 38 x 32 mm</p> <p>Fixing Ø 4 mm, distance between centres 235 mm</p> <p>Connects in parallel on the remote dimmer output</p> <p>Vertical mounting for better dissipation</p>
1	401 39	<p><b>Compensator for dimming ELV halogen lamps with ferromagnetic transformer</b></p> <p>Only used for dimming ELV halogen lamps with ferromagnetic transformer</p> <p>1 compensator per dimmer or remote control dimmer</p> <p>Connects in parallel to the dimmer or remote dimmer output</p>
10	1 module 740 30	<p><b>Lighting control</b></p> <p>Use with power dimmer Cat.No 400 83</p> <p>To be equipped with Mosaic support frames and cover plates (p. 644-649)</p> <p><b>1 way push-buttons 6 A - 250 V</b></p> <p> White</p> <p> Pearl grey</p>
10	6741 73	
10	2 modules 740 40	
10	6741 78	



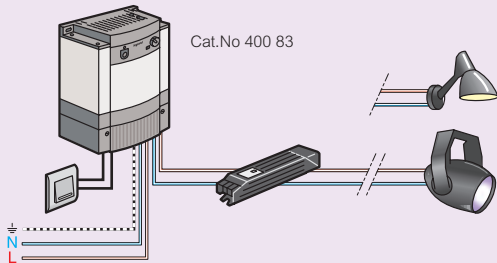
# lighting control

## power dimmers

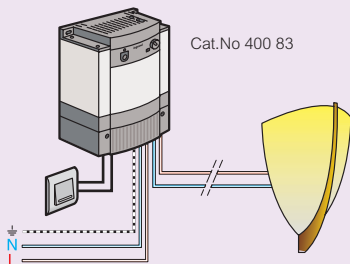
### Examples of use

Place of installation: shopping areas, bar, restaurant, bank, railway station, airport, meeting room, museum...

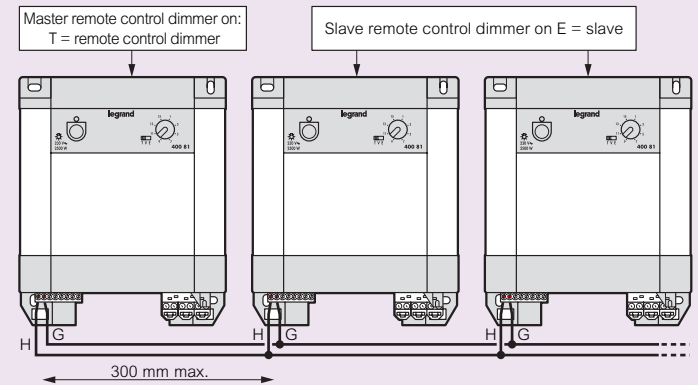
#### Incandescent halogen ELV lamps



#### Incandescent and halogen lamps 230 V

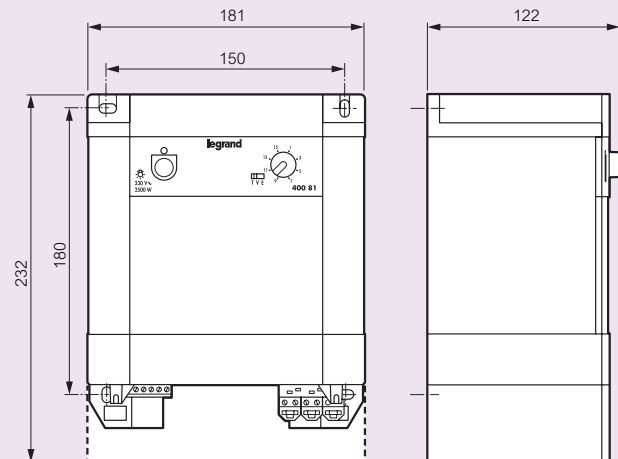


### Master / slave installation



- In a 3-phase mains supply with neutral, the dimmers can be supplied via different phases
- A master dimmer can control up to 4 slave dimmers
- The controls only affect the master dimmer
- The control terminals adjustment buttons on the slave remote control dimmers, are inoperative
- The ballast power terminals of each dimmer are not to be connected in parallel

### Dimensions





**World Headquarters and  
International Department  
87045 LIMOGES CEDEX FRANCE**

☎ : 33 5 55 06 87 87

Fax : 33 5 55 06 74 55