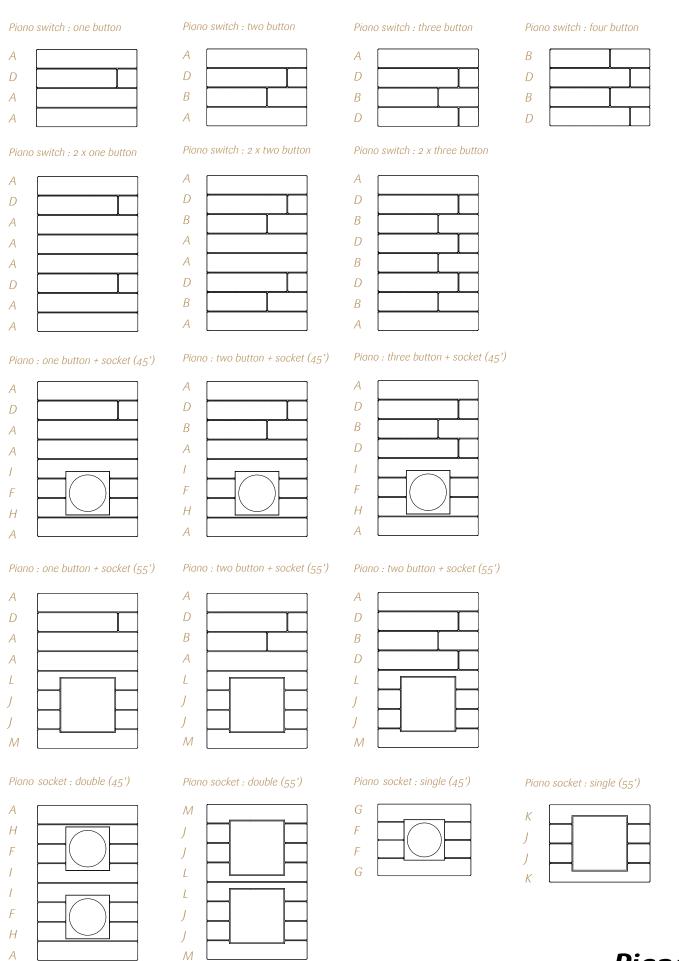
Overview different pieces switches A: Blank plate B: Short keypad button + blank plate D : Long keypod button + blank plate Overview different pieces single sockets G : Single socket (45') upper & down part F: Single socket (45') 4 x side part *K* : Single socket (55') upper & down part J : Single socket (55') 4 x side part Overview different pieces double sockets A : Double socket (45') upper & down part H: Double socket (45') upper & down part F: Double socket (45') 4 x side part I : Double socket (45') middle part *M : Double socket (55')* upper & down part J : Double socket (55') 8 x side part L : Double socket (55')



middle part





### Explanation of the Piano article code:

Example: P-1-ADAA-010102

The first digit "P", characterize the initials of a product created by the brand "Piano by Lithoss".

The next digit, "1", represent the type of mounting frame:

o Not applicable 5 Bticino frame

1 250VAC 6 Legrand/Hager/Peha frame

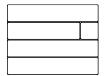
3 55x55 frame 8 KNX

For combinations socket / buttons (1-3), please use following grid:

Frame	Frame	Frame	Frame
Type of buttons	55 × 55	Bticino	L/H/P
250VAC	A	F	K
KNX	C	H	M

In this case the number "1" stands for the push button mounting frame 250VAC.

The next 4 digits, "ADAA", represent the type:



In this case "ADAA" stands for a switch with 1 button.

### For Piano switches and sockets in one colour, use following colourcodes:

The next 2 digits represent the finishing of the complete switch or socket:

o1 : Ralgo10 (white) o2 : RAL7030 (grey) o3 : Ral7022 (anthracite) 99 : Custom RAL

### For Piano switches and sockets with mixed colour plates, use following colourcodes :

The first 2 digits "o1" represent the finishing of the frame:

In this case "o1" stands for the finishing Ral9010.

The next 2 digits "o1" represent the finishing of the blank plates:

In this case "o1" stands for the finishing Ral9010.

The next 2 digits "o2" represent the finishing of the curved Piano keypad buttons (not applicable for sockets):

o1 : Ralgo10 (white) o2 : RAL7030 (grey) o3 : Ral7022 (anthracite) 99 : Custom RAL

In this case "o2" stands for the finishing Ral7030.

The result is a one button Piano switch 250VAC white mixed with a grey curved keypad button.



### Explanation of the Piano article code:

Example: P-H-ADBDIFHA-03

The first digit "P", characterize the initials of a product created by the brand "Piano by Lithoss".

The next digit, "H", represent the type of mounting frame:

o Not applicable 5 Bticino frame

1 250VAC 6 Legrand/Hager/Peha frame

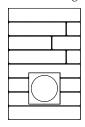
3 55x55 frame 8 KNX

For combinations socket / buttons (1-3), please use following grid :

Frame	Frame	Frame	Frame
Type of buttons	55 × 55	Bticino	L/H/P
250VAC	A	F	K
KNX	C	H	M

In this case the letter "H" stands for the push button mounting frame KNX in combination with a Bticino mounting frame.

The next 8 digits, "ADBDIFHA", represent the type:



In this case "ADBDIFHA" stands for a switch with 3 buttons in combination with a socket.

#### For Piano switches and sockets in one colour, use following colourcodes:

The next 2 digits "o3" represent the finishing of the complete switch or socket :

o1 : Ralgo1o (white) o2 : RALgo3o (grey) o3 : Ralgo22 (anthracite) 99 : Custom RAL

In this case the switch has one colour, so the finishing is anthracite (Ral7022).

### For Piano switches and sockets with mixed colour plates, use following colourcodes:

The first 2 digits represent the finishing of the frame:

o1 : Ralgo10 (white) o2 : RAL7030 (grey) o3 : Ral7022 (anthracite) 99 : Custom RAL

The next 2 digits represent the finishing of the blank plates :

o1: Ralgo10 (white) o2: RAL7030 (grey) o3: Ral7022 (anthracite) 99: Custom RAL

The next 2 digits represent the finishing of the curved Piano keypad buttons (not applicable for sockets):

o1: Ralgo10 (white) o2: RAL7030 (grey) o3: Ral7022 (anthracite) 99: Custom RAL

The result is a three button grey Piano switch with KNX push buttons and socket.



### **Switches**

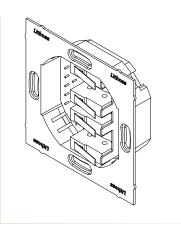
**Push Buttons** 

#### **GENERAL DESCRIPTION**

The Lithoss Piano pushbuttons are very simple to work with, but are in fact extremely versatile. They can be combined with various micro module's that will determine the buttons function. Timer functions, dim units and store controllers are just some of the many possibilities. They are also an ideal solution for domotics installations.

The mounting frame can be turned 90°.

Not suitable for wall boxes without screws.



### **TECHNICAL SPECIFICATIONS**

Switching function SPST (ON) - OFF

All buttons are combined on 1 common contact
Maximum load 10A at 250VAC (resistive load)
Dielectric strength 1000 V RMS
Contact material Silver

Lifecycle 10.000.000 mechanically / 50.000 at full load Protection value IP41 PCB mounted quick connect terminal

Advised wallbox type

Depth 45mm or deeper, with screws Size internal Ø6omm or 50x50mm

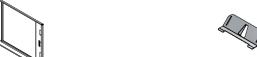
APPROVAL

CE Conform
RoHS RoHS compatible

**INCLUDED PARTS** 

Piano cover Mounting frame with double removable connectors

Piano backcover Piano hook (removal tool), Installation manual





### **Switches**

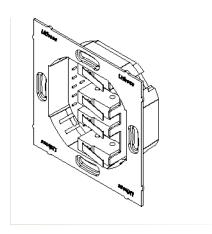
KNX/EIB version

### **GENERAL DESCRIPTION**

The Lithoss Piano pushbuttons are also available in a KNX/EIB version. The pushbutton frames are delivered with a plug & play wired KNX/EIB pushbutton interface reducing the installation time to an absolute minimum. All buttons can be separately programmed to their own specific function using the ETS software.

The mounting frame can be turned 90°.

Not suitable for wall boxes without screws.



### **TECHNICAL SPECIFICATIONS**

Switching functions Multiple functions including : On/Off, Dimming, Up/Down, Scene's, ...

More info can be found in the application software guide.

Status indication, or independant output

Twisted Pair - 30 VDC

max. 15mA

10.000.000 mechanically / 50.000 at full load

IP30

Red / Black KNX connector

Depth 45mm or deeper, with screws Size internal Ø6omm or 50x50mm

**APPROVAL** 

Lifecycle Protection value

LED functions

BUS connection

BUS consumption

Connection method

Advised wallbox type

CE Conform

RoHS RoHS compatible

**INCLUDED PARTS** 

Piano cover Mounting frame with double removable connectors

Plug & Play interface





Li56302 : KNX Interface (2 buttons) Li56304 : KNX Interface (4 buttons)

Piano backcover



Piano hook (removal tool), Installation manual





### Frames

Bticino

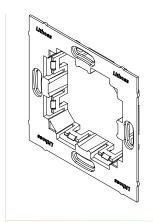
### **GENERAL DESCRIPTION**

The Bticino frame makes it possible to integrate the Bticino sockets and outlets in the Piano design.

The frame is compatible with three ranges of modules in three different colours.

The mounting frame can be turned 90°.

Not suitable for wall boxes without screws.



### **TECHNICAL SPECIFICATIONS**

Compatible modules Bticino Living Black Bticino Light White

Bticino LightTec Grey

Available space 2 modules

#### **APPROVAL**

Approval dependant on module used

### **INCLUDED PARTS**

Piano cover Mounting frame for modules



Piano backcover Piano hook (removal tool), Installation manual





### Frames

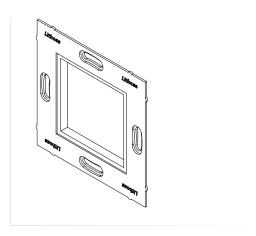
Legrand / Hager / Peha

### **GENERAL DESCRIPTION**

The Legrand/Hager/Peha frame makes it possible to integrate sockets and outlets from three different brands in the Lithoss design. The frame is compatible with modules out of the Mosaic range of Legrand and the Systo range of Hager. Also modules out of the Modul 45 range of Peha can be fitted in this frame.

The mounting frame can be turned 90°.

Not suitable for wall boxes without screws.



### **TECHNICAL SPECIFICATIONS**

Compatible modules Legrand Mosaic White

Hager Systo White

Peha Modul 45 White Black Alu Grey

Available space 2 modules

#### **APPROVAL**

Approval dependant on module used

### **INCLUDED PARTS**

Piano cover



Piano backcover



Mounting frame for modules



Piano hook (removal tool), Installation manual





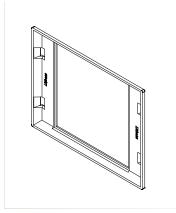
### Frames

Modules 55 x 55mm

### **GENERAL DESCRIPTION**

The  $55^{\circ}$  frame makes it possible to integrate moduls with exterior dimensions 55x55mm from manufacturers like Gira, Berker, Jung, ...

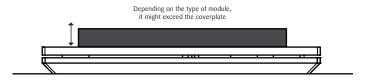
Not suitable for wall boxes without screws.



### **TECHNICAL SPECIFICATIONS**

Compatible modules 55 x 55 module suppliers like Gira, Hager, Berker, Merten

Available space 2 modules



#### **APPROVAL**

Approval dependant on module used

### **INCLUDED PARTS**

Piano cover

Piano hook (removal tool), Installation manual





Piano backcover

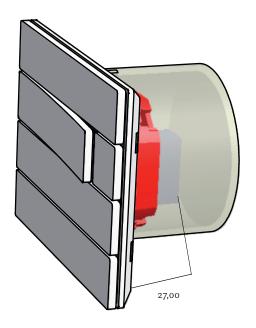




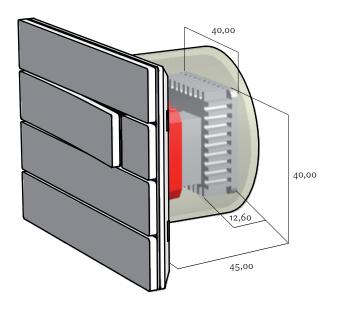
# **Dimensions**

# Depth

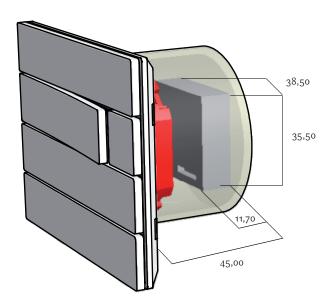
24 Volt Push Buttons



### 250 Volt Push Buttons



### KNX

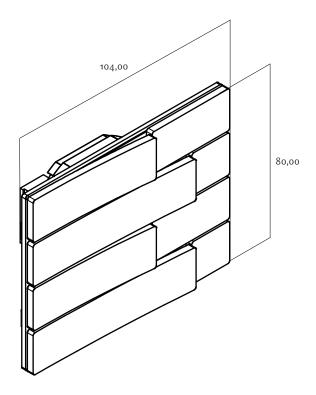




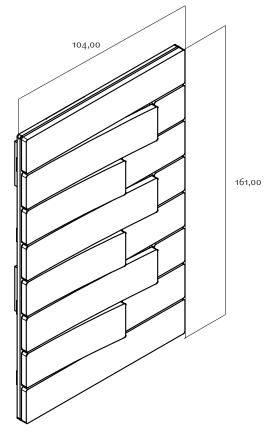
# **Dimensions**

Single frame

One-Four button frame



Two-Six button frame





# Wall Boxes

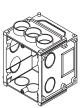
### **Dimensions**

Lithoss switches and sockets should be installed on wall boxes with screws (screw distance: 60mm). Below you find an overview of our wall boxes.

### RE0119



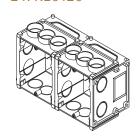
### RE0120



1 button 2 button 3 button 4 button single socket blind plate orientation light

### 2 x RE0120

1 x RE1267



2 x 1 button 2 x 2 button 2 x 3 button 1 button + socket 2 button + socket 3 button + socket double socket

### RE1265







1 button 2 button 3 button 4 button single socket blind plate orientation light



- 2 x 1 button 2 x 2 button 2 x 3 button 1 button + socket 2 button + socket 3 button + socket double socket

### Important distances

### Single frame horizontal

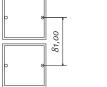




### Single frame vertical



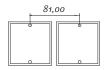




2 x single frame horizontal (max. 2 x 4 buttons) (similar for 3, 4, 5, ... wall boxes)



2 x single frame vertical (max. 2 x 4 buttons) (similar for 3, 4, 5, ... wall boxes)



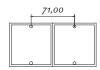


Double frame horizontal (max. 6 buttons !!)



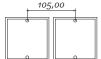


Double frame vertical (max. 6 buttons !!)





2 x single frame horizontal (max. 2 x 4 buttons) (similar for 3, 4, 5, ... wall boxes)

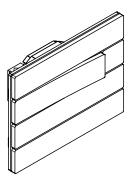






## Overview mouting parts

### Parts included



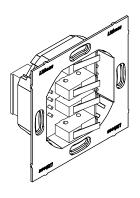
Piano coverplate



Piano frame double



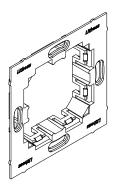
Piano frame single



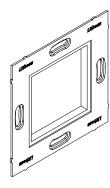
Mounting frame with 2 removable connectors



removal tool



Bticino mounting frame

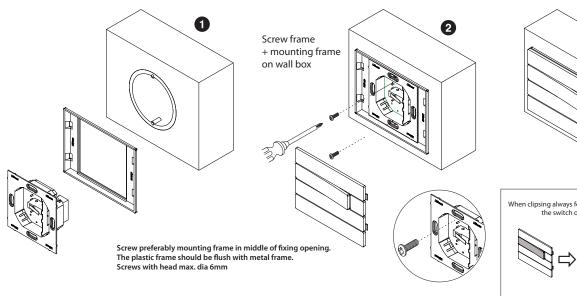


Legrand / Hager / Peha frame

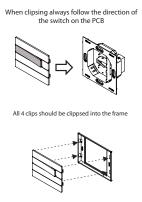


### Manual general

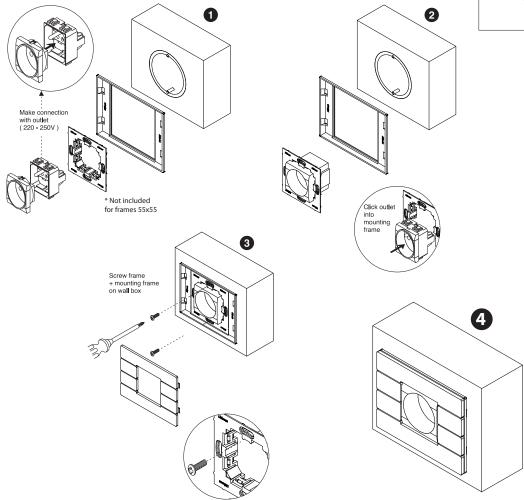
Installation identical for switches with 1 button, 2 buttons, 3 buttons, 4 buttons, 2 x 1 button, 2 x 2 button, 3 x 2 button







Installation identical for single and double sockets and combination of switches and sockets with 1 button, 2 buttons, 3 buttons

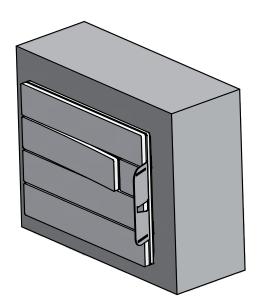




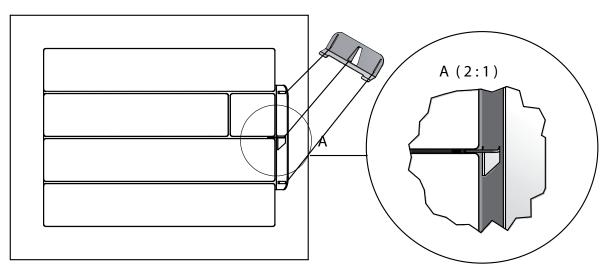
De-mounting

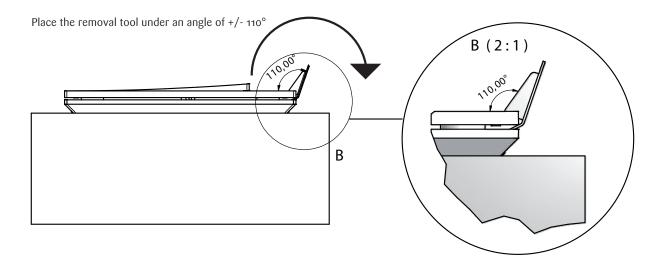
Removal tool





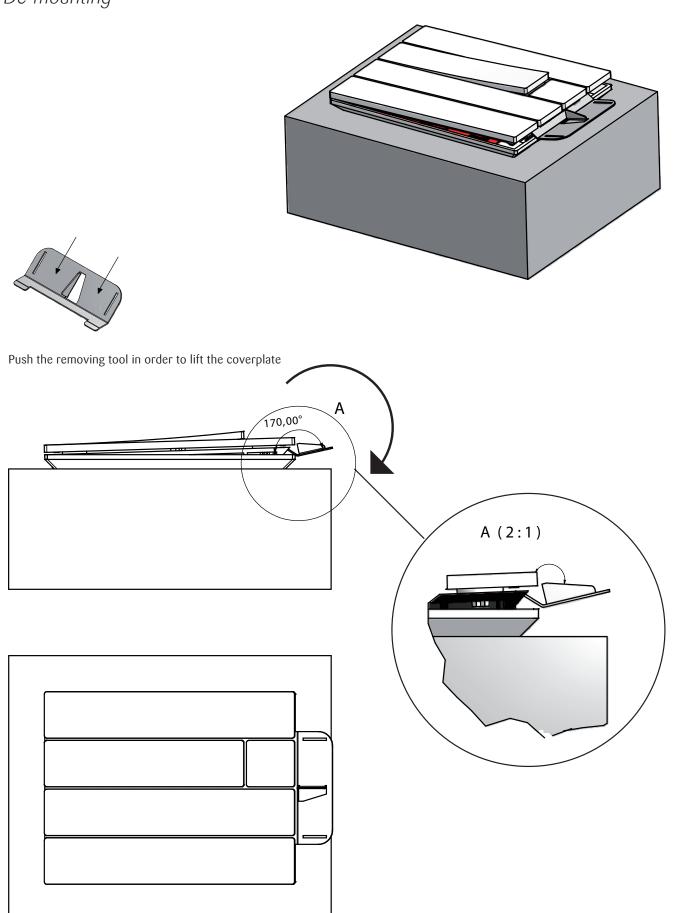
Put the removal tool halfway between the switch







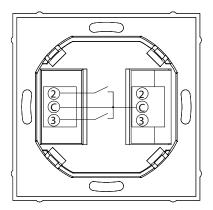
De-mounting



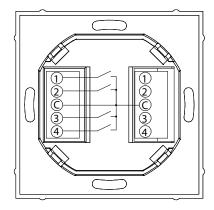


# Wiring diagrams

Two buttons



### Four buttons





# Domotics overview

### STAR KABLING

Lithoss 24V pushbuttons are direct compatible on domotics systems like Duotecno, ...

#### **BUS KABLING**

Lithoss 24V pushbuttons are compatible by using an interface. Here under you find some inferface modules that can be used in combination with Lithoss switches. Lithoss also has a proper KNX switch, which is direct compatible with the different KNX/EIB systems.

Manufacturor	System	Product Code	# channels	LED	Dimensions
Berker	EIB/KNX	7564 20 01	2	Yes	-
Berker	EIB/KNX	7564 40 01	4	Yes	-
Berker	EIB/KNX	7564 80 01	8	Yes	-
Bticino	My Home	3477	2	No	40,5 x 40,5 x 18 mm
Bush Jaeger	EIB/KNX	US/U 2.2	2	Yes	39 X 40 X 12 MM
Bush Jaeger	EIB/KNX	US/U 4.2	4	Yes	39 x 40 x 12 mm
Clipsal	C-Bus	5104BCL	4	No	55 x 49 x 19 mm
Clipsal	C-Bus	5102BCLEDL	2	Yes	55 x 49 x 19 mm
Crestron	Cresnet	CH-UNI8IO	8	Yes	50 x 42 x 24 mm
Domintell	-	DISM04	4	Yes	46 x 28 x 15 mm
Domintell	-	DISMo8	8	Yes	46 x 28 x 15 mm
Jung	EIB/KNX	2076-2 T	2	Yes	43 x 28 x 16 mm
Jung	EIB/KNX	2076-4 T	4	Yes	43 x 28 x 16 mm
GIRA	EIB/KNX	1118 00	2	No	43 × 43 × 18 mm
GIRA	EIB/KNX	1119 00	4	No	43 × 43 × 18 mm
Hager	EIB/KNX	TX 302	2	No	38 x 35 x 12 mm
Hager	EIB/KNX	TX 304	4	No	38 x 35 x 12 mm
Hager	EIB/KNX	TX 344	4	Yes	38 x 35 x 12 mm
Lutron	Grafik Eye	GRX-WCI	2	No	dia. 59 mm x 20 mm
Merten	EIB/KNX	KNX 670802	2	Yes	30 x 40 x 12 mm
Merten	EIB/KNX	KNX 670804	4	Yes	30 x 40 x 12 mm
Niko	Nikobus	05-056	2	No	-
Qbus	-	INP02	2	Yes	41 X 40 X 12 MM
Qbus	-	INP04	4	Yes	41 X 40 X 12 MM
Siemens	EIB/KNX	5WG1 220-2AB02	4	No	38 x 43 x 17,6 mm
Siemens	EIB/KNX	5WG1 220-2AB13	2	No	38 x 43 x 17,6 mm
Theben	EIB/KNX	TA 2 496 9 202	2	Yes	37 × 37 × 10 mm
Theben	EIB/KNX	TA 4 496 9 204	4	Yes	37 x 37 x 10 mm
Theben	EIB/KNX	TA 6 496 9 206	6	Yes	(4x) 37 x 37 x 10 mm

<sup>\*</sup>Note: this list is not complete. For other brands, please contact us.



### Micromodules

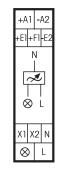
### Eltako

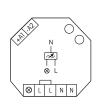
#### **GENERAL DESCRIPTION**

Eltako micromodules are available in many different operation possibilities. They are a perfect solution in combination with the Lithoss 250V pushbuttons. It is advisable to confirm the compatibility with the light supplier before starting the installation.

The first big difference with Yokis modules is that Eltako contains a master on/off module and can switch on 250V by using a 24V (+LED) pushbutton. The second advantage is that Eltako is compatible with fluorescent lighting.

Please find technical sheets in addendum.





#### **TECHNICAL SPECIFICATIONS**

Main power line voltageDepending on modulePowerDepending on moduleCompatible loadsDepending on module

Incompatible loads Depending on module

#### **APPROVAL**

CE Conform

Further approval dependant on micromodule used

#### **INCLUDED PARTS**

Micromodule, Manual

#### **AVAILABILITY**

ES12Z-200 Teleruptor module (on/off) UC-2000W with central control function - modular version

ESR61M Teleruptor module (on/off) UC-2000W - wall box version

EUD12D Dimmer module - dimming up to a max. of 500VA with central control - modular version

EUD61M Dimmer module - dimming up to a max. of 500VA - wall box version LUD12 Slave module for dimmer module EUD12M - modular version MFZ12DDX Digital universal module UC-2000W - modular version

SDS12/1-10V 1-10V dimmer 600VA - modular version

EGS12Z Module for stores and curtains - modular version
EGS61Z Module for stores and curtains - wall box version



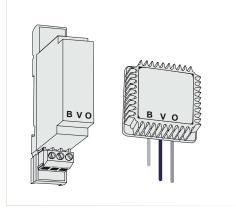
### Micromodules

Yokis

#### **GENERAL DESCRIPTION**

Yokis micromodules are available in many different operation possibilities. They are a perfect solution in combination with the Lithoss 250V pushbuttons. It is advisable to confirm the compatibility with the light supplier before starting the installation.

Please find technical sheets in addendum.



### **TECHNICAL SPECIFICATIONS**

Main power line voltage 230 VAC / 50 Hz

Power Min. 3 VA - Max. 500 VA Unless otherwise specified Compatible loads

1) Conventional lights bulbs and 220V halogen light bulbs

2) Ferromagnetic, ring and electronic transformers

3) Universal or asynchronous motors

4) Relays or switches > 10 VA

5) Economy light bulb ( = add the CHR3W parallel on one of the light bulbs )

1) Modules are not suitable for fluorescent lighting Incompatible loads 2) Point 5 is not applicable for the MTV500-E module

**APPROVAL** 

CE

Further approval dependant on micromodule used

### **INCLUDED PARTS**

Micromodule, Manual

#### **AVAILABILITY**

MTR500-E Teleruptor module (on/off) up to a maximum of 500VA - wall box version MTR500-M Teleruptor module (on/off) up to a maximum of 500VA - modular version Teleruptor module (on/off) up to a maximum of 2000VA - wall box version MTR2000-E Teleruptor module (on/off) up to a maximum of 2000VA - modular version MTR2000-M MTV500-E Dimmer module - dimming up to a maximum of 500VA - wall box version MTV500-M Dimmer module - dimming up to a maximum of 500VA - modular version MTM500-E Timer module - programmable for timed lighting - wall box version MTM500-E Timer module - programmable for timed lighting - modular version MTVT500-E Timed dimmer module - programmable timer with dimmer function

MTK500-E Multifunctional module - variation of switching, dimming, timer, simulation, ...

MVR500-E Module for stores and curtains (R12M & D6ooV not included) R<sub>12</sub>M Add this componant for 2 buttons controle of stores Diode to centralise the modules on one pilot wire D6ooV

CHR<sub>3</sub>W Resistive loads for economic light bulbs

