



## CONTROL & SIGNALLING UNITS Ø 22

### ▶ QUICK REFERENCE GUIDE

OUR COMMITMENT MAKES THE DIFFERENCE ▶

**BACO**<sup>®</sup>

# GUARANTEE, CONFORMITY OF LONG-LASTING PRODUCTS

BACO facilitates the daily work offering ingenious and easy to implement solutions

## ► A KEY PLAYER IN THE MARKET

As a key player on the market for control and signalling devices, cam switches and switch disconnectors, BACO is recognized for its professional expertise and compliance with safety standards. BACO is committed not only to provide technical solutions that offer a perfect match for customers' requirements, but also to offer dedicated sales support and assistance. Users of electrical switches and control devices have come to trust BACO for reliable and durable components.

## ► A 10-YEAR GUARANTEE

We are committed to a demanding quality charter so you know you're getting the very best deal. Our products have a 10-year guarantee and are exceptionally reliable, that is why they are ideal for integration into systems that do not tolerate any failure.



## ► WIDELY USED AROUND THE WORLD

Conform to the best international standards:

- IEC 60947-5-1
- IEC 60947-5-5
- IEC 60947-5-4
- ISO 13850
- UL 508-CSA 22.2
- CCC
- BV MARINE RULES

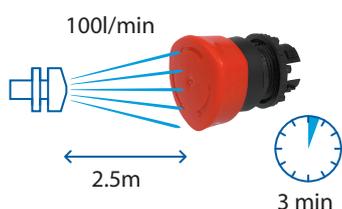


ISO 9001 & 14001 certified

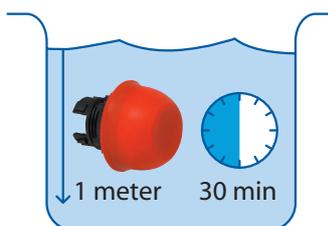


## ► HIGH DEGREE OF PROTECTION

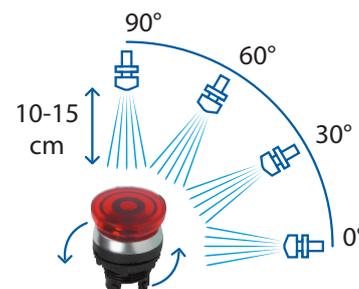
Waterproof according to Ingress Protection (IP) Ratings:



**IP 66:** against strong water jets



**IP 67:** against temporary water immersion



**IP 69K:** against water jets with high temperature and pressure

► **DESIGNED TO LAST**

**HEAD**

**LOCKING RING**

**CLIP**

**BLOCK**

*"Cleverly designed to be both ergonomic and clearly visible"*

- Insulating material ensures electrical safety
- Integrated anti-rotation tab
- Legend holder frame keeps IP 66 + IP 69K protection
- Auto-grip ring on all heads allows single hand mounting
- Choice of bezels: black or chrome plastic
- Innovative and varied functions
- Optimised dimensions

*"Flexibility of configuration: 1, 3 or 5 position clips. Contact blocks can be assembled in any order..."*

- Secured assembly
- Metal latch on clip secures every assembly*
- Contact blocks are simply snapped onto the clip
- Four different types of terminal connections

*"Imaginatively designed to be safe, robust and durable"*

- Securely fixed by clipping into place
- Stackable
- Grade protection: IP 20 as "finger safe" on screw and plug-in terminals
- Electrical insulation
- LED blocks combining long life and economy (100,000 hours)
- Corrosion resistant to some

**SCREW TERMINALS**

**PLUG-IN TERMINALS**

**FASTON TERMINALS**

**PIN STYLE TERMINALS (FOR PCB)**

► **QUICK AND EASY TO ASSEMBLE**

**Anti rotation Tab**

E=1 to 6 mm  
E

**Auto-grip ring**  
head held firmly in the drilling hole during assembly

**Locking ring**  
to fix the head

**Fixing**  
Locate block onto head and lock in place with rotating metallic latch

**Quick connection**  
No tool required for wires with ferrules. New plug-in terminals



## ► PUSH-BUTTONS - NON ILLUMINATED

### SPRING RETURN - FLUSH



L21AA01/2/3/4/5/6/8

With engraving

- Red L21AA81
- Green L21AA82
- Black L21AA83

On demand engraving\*  
L21AA31/2/3/4/5/6 \_\_\_



Supplied with shroud  
L22AF01/2/3  
L22AG04/5/6

### SPRING RETURN - SUPER FLUSH



L23AA01/2/3/4/5/6

On demand engraving\*  
L23AA31/2/3/4/5/6 \_\_\_

### STAY-PUT - FLUSH



L21CA01/2/3/4/5/6

On demand engraving\*  
L21CA31/2/3/4/5/6 \_\_\_

### SPRING RETURN - PROJECTING



L21AB01/2/3/4/5/6

On demand engraving\*  
L21AB31/2/3/4/5/6 \_\_\_

### STAY-PUT - PROJECTING



L21CB01/2/3/4/5/6

## ► PUSH-BUTTONS - ILLUMINATED

### FLUSH



#### SPRING RETURN

L21AH10/20/40/50/60

On demand engraving\*  
L21AH31/2/4/5/6 \_\_\_

#### STAY PUT

L21CH10/20/40/50/60

On demand engraving\*  
L21CH31/2/4/5/6 \_\_\_

### PROJECTING



#### SPRING RETURN

L21AK10/20/40/50/60

#### STAY PUT

L21CK10/20/40/50/60

### SUPER FLUSH



#### SPRING RETURN

L23AH10/20/40/50/60

On demand engraving\*  
L23AH31/2/4/5/6 \_\_\_

#### STAY PUT

L23CH10/20/40/50/60

On demand engraving\*  
L23CH31/2/4/5/6 \_\_\_

## ► ADJUSTABLE MECHANICAL PUSH-BUTTONS

### FLUSH



L21HA01/2/3/4/5/6

On demand engraving\*  
L21HA31/2/3/4/5/6/ \_\_\_

### PROJECTING



L21HB01/2/3/4/5/6

## ► PUSH-BUTTONS WITHOUT BUTTON PLATE

### SPRING RETURN - FLUSH



Non illuminated  
L21AA00

Illuminated  
L21AH00

### BUTTON PLATES

#### FOR NON-ILLUMINATED PUSH-BUTTONS



Without engraving  
LT01/2/3/4/5/6

On demand engraving\*  
LT21/2/3/4/5/6 \_\_\_

#### FOR ILLUMINATED PUSH-BUTTONS



Without engraving  
LT10/20/40/50/60

On demand engraving\*  
LT31/2/4/5/6 \_\_\_

## ► PILOT LIGHTS

### MODULAR, SEPARATE UNITS



Without engraving  
L20SE10/20/40/50/60

On demand engraving\*  
L20SE31/2/4/5/6 \_\_\_



#### SUPER FLUSH

Without engraving  
L23SE10/20/40/50/60

### ONE PIECE, INTEGRATED LED



Replace "x" for voltage:

L: 24V AC/DC  
M: 130V AC/DC  
H: 230V AC/DC



Without engraving  
L20SC10x/20x/40x/50x/60x

On demand engraving\*  
L20SC31x/2x/4x/5x/6x \_\_\_

## ► CLIPS



1 position  
331E



3 positions  
333E



5 positions  
335E

\* For "on demand engraving" products, please replace the \_\_\_ with the 3 digits code:

303 for ON, 304 for OFF, 301 for START, 302 for STOP, for more digit codes, please see BACO general catalogue: [www.baco-international.com](http://www.baco-international.com)



## ► MUSHROOM HEAD BUTTONS, ISO 13850 COMPLIANT

### STAY PUT, PULL TO RELEASE



NON ILLUMINATED  
Ø 32mm  
L22DQ01

Ø 40mm  
L22DR01



Ø 54mm  
with flag indicator  
L22DU01A 0 - I  
L22DU01 STOP - I



ILLUMINATED  
Ø 40mm  
L22DN10

### STAY PUT, TURN TO RELEASE



Ø 40mm  
L22ER01

Ø 40mm  
with ISO 13850 symbol

### STAY PUT, TURN KEY TO RELEASE



Ø 32mm  
L22GQ01

Ø 40mm  
L22GR01

## ► MUSHROOM HEAD BUTTONS

### STAY PUT, NON ILLUMINATED



TURN TO RELEASE  
Ø 32mm  
L22EC01/2/3/4  
Ø 40mm  
L22ED01/2/3/4



PULL TO RELEASE  
Ø 32mm  
L22DC01  
Ø 40mm  
L22DD01/2/3/4



TURN KEY TO  
RELEASE  
Ø 40mm  
L22GM01/2/3/4

### STAY PUT, ILLUMINATED



TURN TO RELEASE  
Ø 32mm  
L22EL10/20/40  
Ø 40mm  
L22EM10/20/40



PULL TO RELEASE  
Ø 32mm  
L22DL10  
Ø 40mm  
L22DM10/20/40/50

### SPRING RETURN



NON ILLUMINATED  
Ø 32mm  
L21AC01/2/3/4  
Ø 40mm  
L21AD01/2/3/4/6  
Ø 70mm  
L21AE01/3/6



ILLUMINATED  
Ø 32mm  
L21AL10/20/40/50

## ► CONTACT BLOCKS

### SCREW TERMINALS



NO 3 4 33E10  
NC 1 2 33E01  
NO/NC 2 1 1 4 3 33E11

### PLUG-IN TERMINALS



NO 3 4 33R10  
NC 1 2 33R01

### FASTON TERMINALS



NO 3 4 33D10  
NC 1 2 33D01

### PIN-STYLE TERMINALS



NO 3 4 33P10  
NC 1 2 33P01

## ► LED BLOCKS Replace \_ by the corresponding letter: L, L4, M or H

### SCREW TERMINALS



Voltage:  
L = 24 V AC/DC  
L4 = 48 V AC/DC  
M = 130 V AC  
H = 230 V AC

33EAW/R/G/B/Y\_  
33EAWDM = 110 V DC

### PLUG-IN TERMINALS



Voltage:  
L = 24 V AC/DC  
M = 130 V AC  
H = 230 V AC

33RAW/R/G/B/Y\_

### FASTON TERMINALS



Voltage:  
L = 24 V AC/DC  
M = 130 V AC  
H = 230 V AC

33DAW/R/G/B/Y\_

### PIN STYLE TERMINALS



(low voltage  
24V AC/DC max)  
33PAWL  
33PARL  
33PAGL  
33PABL  
33PAYL



## ▶ SELECTOR SWITCHES Replace \_ by the corresponding letter: A, B, C...Y

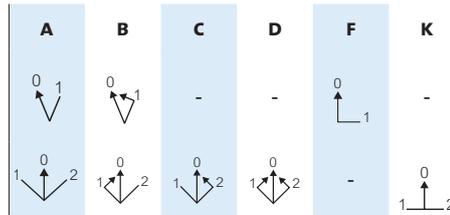
### NON ILLUMINATED



2 positions  
L21T\_03

3 positions  
L21U\_03

### WITH KNOB



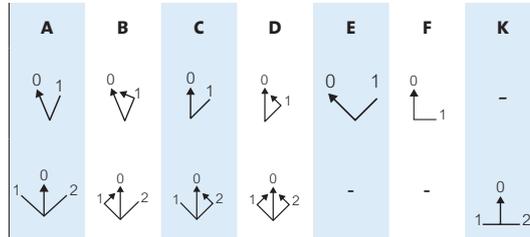
### NON ILLUMINATED



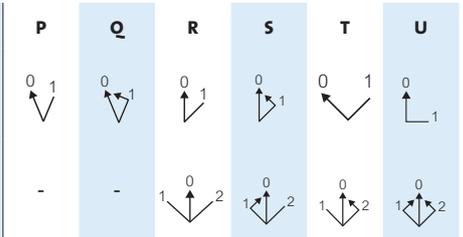
2 positions  
L21K\_01/2/3/8

3 positions  
L21M\_01/2/3/8

### WITH HANDLE



### WITH LONG HANDLE



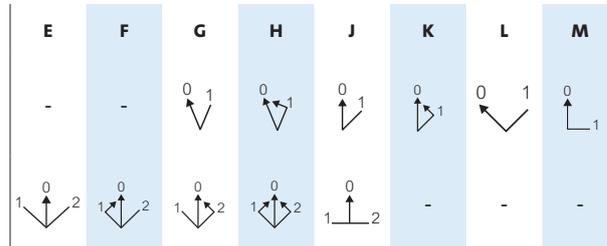
### ILLUMINATED



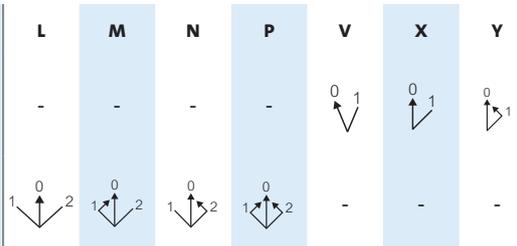
2 positions  
L21K\_10/20/30

3 positions  
L21M\_10/20/30

### WITH HANDLE



### WITH LONG HANDLE



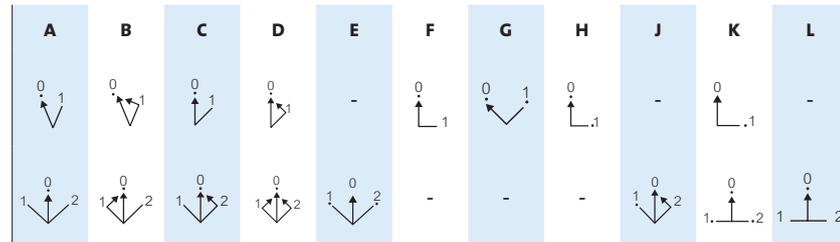
### NON ILLUMINATED



2 positions  
L21L\_00

3 positions  
L21N\_00

### WITH KEY



. Key extraction position

## ▶ DOUBLE TOUCH AND TRIPLE TOUCH SPRING RETURN BUTTONS

### DOUBLE TOUCH

#### FLUSH-FLUSH



Non-illuminated

L61QA21

L61QA21B

L61QA53

L61QA22

L61QA22K

L61QA33C

Illuminated

L61QH21

L61QH21A

L61QH53B

L61QH22V

L61QH22A

L61QH33C

#### FLUSH-PROJECTING



Non-illuminated

L61QB21

L61QB21B

L61QB53

Illuminated

L61QK21

L61QK21A

L61QK53

### TRIPLE TOUCH

#### FLUSH-PROJECTING-FLUSH



- STOP L61BA22
- STOP L61BA22B
- UP L61BA22G
- STOP L61BA22G
- DOWN L61BA22G
- OPEN L61BA22F
- STOP L61BA22F
- CLOSE L61BA22F

## ▶ AUDIBLE WARNING BUZZERS



80 dB sound intensity at 10 cm  
Supply voltage:  
18 to 30V AC/DC  
**L22VA03L**  
85 to 140V AC/DC  
**L22VA03M**  
185 to 265V AC/DC  
**L22VA03H**

## ▶ USB COMMUNICATION INTERFACE



USB interface 3.0 type A/A

**L21VB03**

## ▶ JOYSTICKS



**LM2F** A - 0 - B

**LM2A** A → 0 ← B

**LM4F** A  
C - 0 - D  
B

**LM4A** A  
C - 0 - D  
B

Contact block for Joystick **LM11**

## ▶ CONTROL STATIONS



Ø 40mm

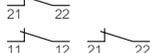
Engraved: Emergency Stop  
Stay put, push-turn to reset  
**LBX10510**



Ø 40mm ISO 13850

Engraved: Emergency Stop +   
Stay put, push-turn to reset  
**LBX17301**

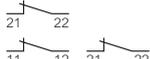
**LBX17302**



Stay put, push-pull to reset

**LBX15301**

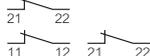
**LBX15302**



Stay put, key to reset

**LBX11301**

**LBX11302**



## ▶ EMPTY CONTROL STATIONS



1 HOLE, BLACK BASE

Grey cover **LBX0100**

Yellow cover **LBX0100J**

Black cover **LBX0100NR**

Red cover **LBX0100RN**

1 HOLE, RED BASE

Red cover **LBX0100RG**



2 HOLES, BLACK BASE

Grey cover **LBX0200**

Yellow cover **LBX0200J**

3 HOLES, BLACK BASE

Grey cover **LBX0300**

4 HOLES, BLACK BASE

Grey cover **LBX0400**

5 HOLES, BLACK BASE

Grey cover **LBX0500**



CONTACT BLOCKS FOR CONTROL STATIONS

Screw terminals

NO 3 4 **33510**

NC 1 2 **33501**



LED BLOCKS FOR CONTROL STATIONS

Screw terminals

**33SAW/R/G/B/Y\_**

Replace \_ by the corresponding letter:  
L, M or H

L = 24V AC/DC

M = 130V AC

H = 230V AC

## ▶ ACCESSORIES



ACCESSORIES Ø22

**LWA0219**

Reduction ring Ø 30/22

**LWA0225**

Grey guard

**LWA0226**

Padlockable shroud

**LWA0229**

Blanking plug

**LWA0230**

Square frame

**LWA0234**

Fixing tool

**LWA0238**

DIN rail adaptor

**LWA0240**

Yellow padlockable guard

**LWA0242**

Yellow guard ring

**L21RP03**

Button for potentiometer



FRAMES

**LWP3**

**LWG3**

**LWP4**

**LWP2**

Standard black frame for LIA plates

Large black frame for LIB plates

Square black frame for LIA plates

Black frame for twin and triple touch for LIA plates



LEGEND PLATES

**LIA1/3/5/9**

Standard plates

**LIB1/3/5/9**

Large plates

ENGRAVED LEGEND PLATES

**LIA9081**

O-I

**LIA9082**

I-II

**LIA9091**

I-O-II

**LIA9191**

Manu-O-Auto

**LIA9291**

Hand-O-Auto

**LIA9301**

Start

**LIA9303**

On

**LIA9304**

Off

**LIA9315**

Reset

**LIA9327**

Run

**LIA9383**

Hand-Auto

METAL ROUND LEGEND PLATES

According to ISO 13850

**LWE16232**

Ø60: Not-Halt + 

**LWE16300**

Ø60: Emergency stop + 

**LWE00232**

Ø80: Not-Halt + 

**LWE00300**

Ø80: Emergency stop + 

**LWE16200**

Ø60: Not aus

**LWE16352**

Ø60: Emergency stop

**LWE00200**

Ø80: Not aus

**LWE00352**

Ø80: Emergency stop



SHROUDS

**LWA0203/4/5**

For non illuminated projecting buttons

**LWA0228**

For illuminated projecting buttons

**LWA0251/2/3**

For non illuminated flush buttons

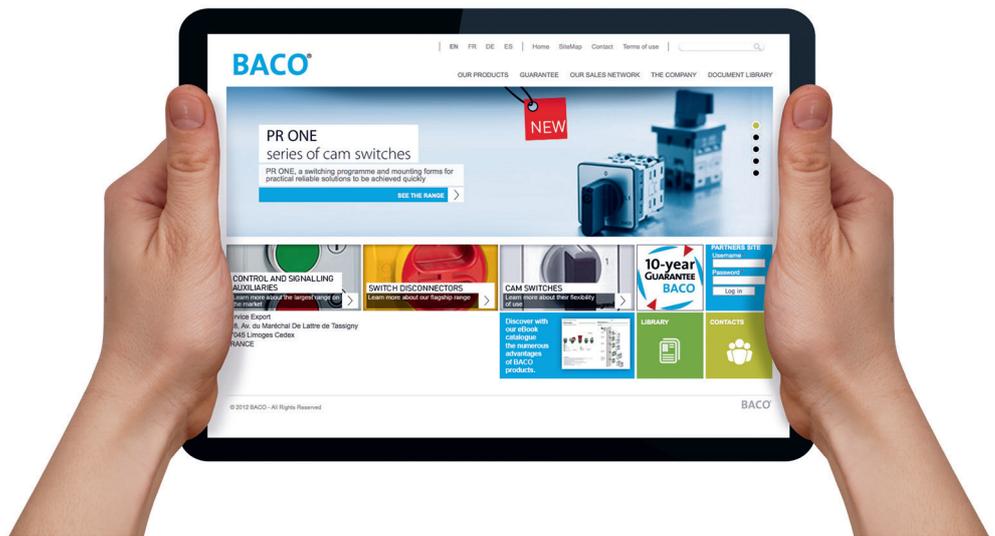
**LWA0255**

For illuminated flush buttons

**LWA0223**

For double and triple touch buttons





Please refer to  
[www.baco-international.com](http://www.baco-international.com)  
to find your local distributor



BA218001