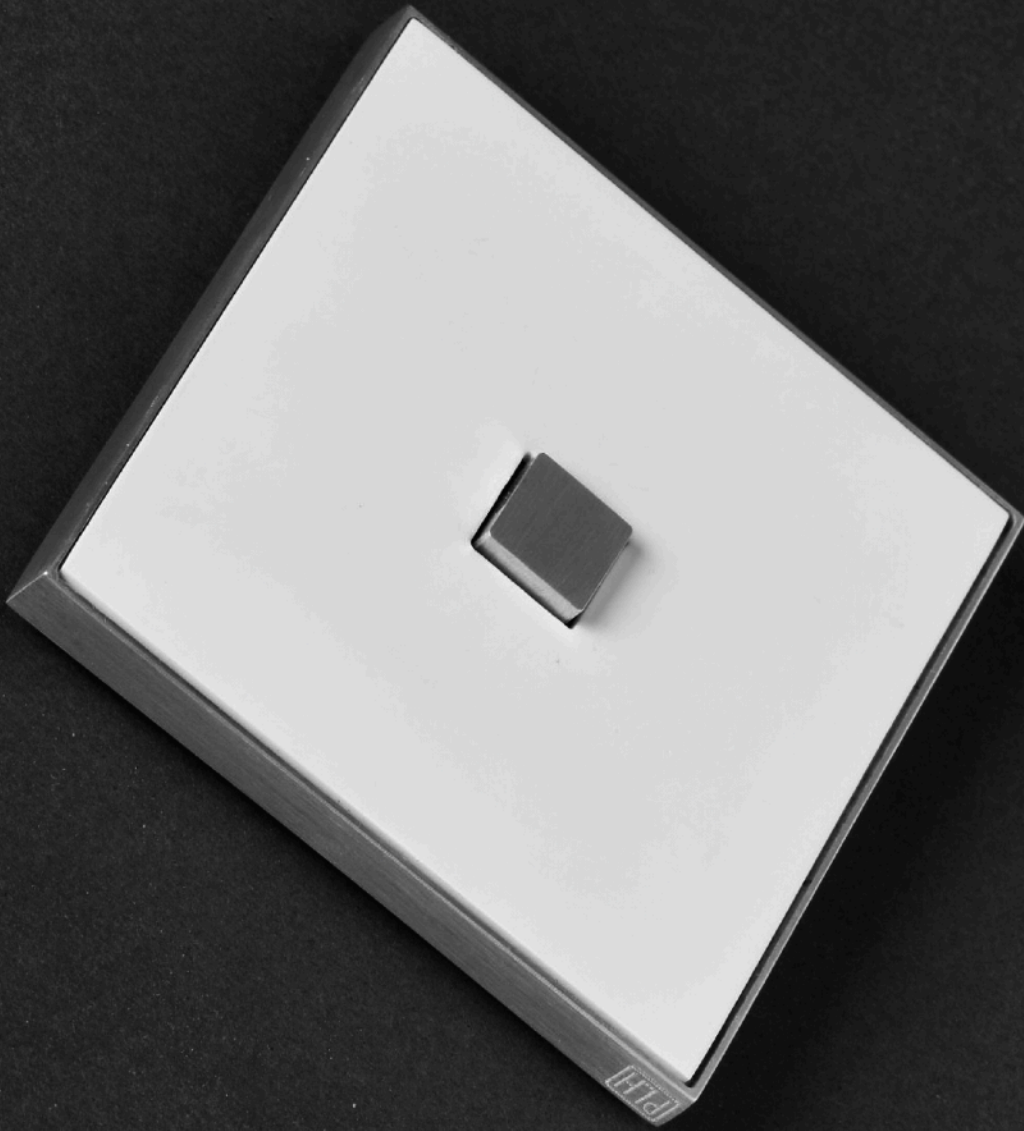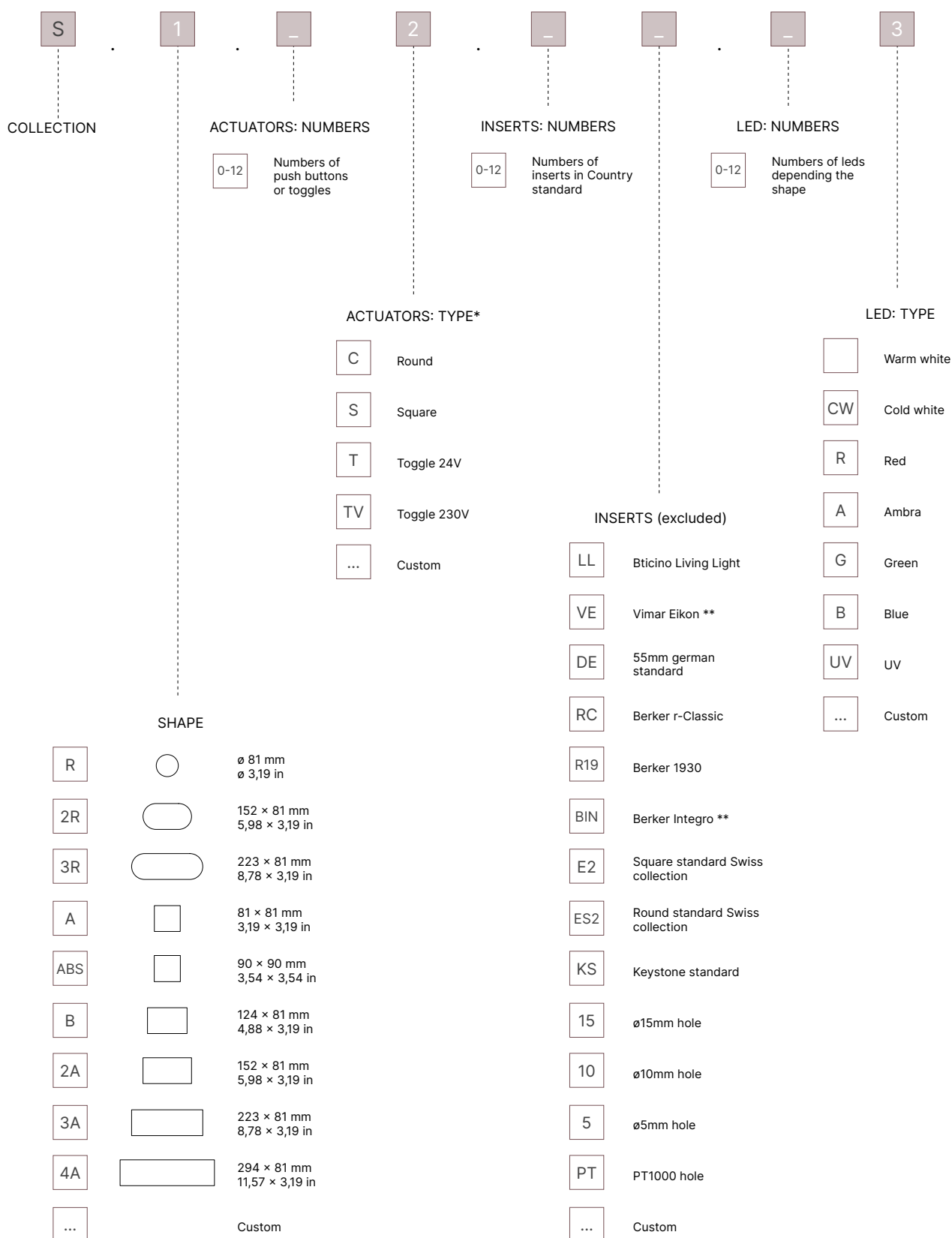PLH

datasheet
PLH SKIN
rev. 1.0_01/05/2022

Skin has a design with a changeable and customizable "skin" with different materials and textures: the plates can be revealed or camouflaged according to the style and taste needs of designers and users.

S . 1 . _ 2 . _ _ . _ 3

COLLECTION

ACTUATORS: NUMBERS

| 0-12 | Numbers of push buttons or toggles |

INSERTS: NUMBERS

| 0-12 | Numbers of inserts in Country standard |

LED: NUMBERS

| 0-12 | Numbers of leds depending the shape |

ACTUATORS: TYPE*

C	Round
S	Square
T	Toggle 24V
TV	Toggle 230V
...	Custom

LED: TYPE

	Warm white
CW	Cold white
R	Red
A	Ambra
G	Green
B	Blue
UV	UV
...	Custom

INSERTS (excluded)

LL	Bticino Living Light
VE	Vimar Eikon **
DE	55mm german standard
RC	Berker r-Classic
R19	Berker 1930
BIN	Berker Integro **
E2	Square standard Swiss collection
ES2	Round standard Swiss collection
KS	Keystone standard
15	ø15mm hole
10	ø10mm hole
5	ø5mm hole
PT	PT1000 hole
...	Custom

SHAPE

R		ø 81 mm / ø 3,19 in
2R		152 × 81 mm / 5,98 × 3,19 in
3R		223 × 81 mm / 8,78 × 3,19 in
A		81 × 81 mm / 3,19 × 3,19 in
ABS		90 × 90 mm / 3,54 × 3,54 in
B		124 × 81 mm / 4,88 × 3,19 in
2A		152 × 81 mm / 5,98 × 3,19 in
3A		223 × 81 mm / 8,78 × 3,19 in
4A		294 × 81 mm / 11,57 × 3,19 in
...		Custom

(*) When using toggles indicate the way of orientation and for main tension the kind (switch, 2 way switch or intermediate switch).
Contact PLH® for different types of toggles.
(**) on request

DESCRIPTION
Keypad in solid metal material (6082 aluminum alloy, brass) machined by CNC machine, from a single sheet, 10mm thickness (8mm + 2mm of shadow gap), in round, square or rectangular format for main voltage and low voltage control devices and standard inserts, for **indoor use only**

ENVIRONMENT
Environment specification
→ Ambient Operating Temperature: 0-40 °C (32-104 °F)
→ Relative Humidity: less than 90%, non-condensing

SHAPES OF THE KEYPADS AND WALLBOXES
The keypads are designed to be used for commercial and standard wallboxes following the bottom specifications

Code	Shape	Dim.	Single box	Eu standard	Notes
R	⬭	ø 81 mm ø 3,19 in			Round wallboxes with screws 60mm installation opening
2R	⬭	152 × 81 mm 5,98 × 3,19 in			2 round wallboxes joined (71 mm installation opening)
3R	⬭	223 × 81 mm 8,78 × 3,19 in			3 round wallboxes joined (2×71 mm installation opening)
A	☐	81 × 81 mm 3,19 × 3,19 in			Round or square wallboxes with screws 60mm installation opening
ABS	☐	90 × 90 mm 3,54 × 3,54 in			British standard or Swiss standard wallboxes with screws
B	▭	124 × 81 mm 4,88 × 3,19 in			503E Italian standard or USA 1-GANG JBox
2A	▭	152 × 81 mm 5,98 × 3,19 in			504E Italian standard or 2 round/square wallboxes joined (71 mm installation
3A	▭	223 × 81 mm 8,78 × 3,19 in			506L Italian standard or 3 round/square wallboxes joined (2×71 mm installation
4A	▭	294 × 81 mm 11,57 × 3,19 in			4 round/square wallboxes joined (3×71 mm installation opening)

MATERIALS, TREATMENTS, NUANCE

Aluminium (6082 alloy)

G0021 Ⓐ	F0019 Ⓐ	F0007 Ⓐ	F0001 Ⓐ	F0090 Ⓐ	F0130 Ⓐ	F0022 Ⓓ	F0024 Ⓓ
Tumbled not protected	Anodized brushed silver	Anodized brushed black	Anodized brushed inox	Anodized brushed bronze	Anodized brushed dark grey	Sputtering Metal Bronze not prot.	Sputtering Metal Zinc not protected

F0003 Ⓐ	F0491 Ⓑ	F0501 Ⓑ	F0511 Ⓑ	F0509 Ⓑ	F0503 Ⓑ	F0510 Ⓑ
Painted Matte RAL 9003	Painted Cerakote® Black	Painted Cerakote® Gun Metal	Painted Cerakote® Silver	Painted Cerakote® Rose gold	Painted Cerakote® Light Gold	Painted Cerakote® Dark Grey

Brass

G0063 Ⓒ	F0013 Ⓒ	F0005 Ⓒ	F0002 Ⓓ	F0014 Ⓓ
Tumbled not protected	Brushed protected	Polished Chrome	DeCastelli Delabre' F2	DeCastelli Delabre' Striato G7

PLH

2 ACTUATORS
Electrical and mechanical specification

| C | S |

→	Push-Button type:	SMD Tactile switch MOM - OFF
→	Rated current / Rated voltage:	20mA - 24V DC (*)
→	Withstanding voltage (1 min):	250V (AC)
→	Actuator and frame flammability rating:	UL94 V-0
→	Operation force:	260 g
→	Electrical life:	500.000 cycles
→	Stroke:	0,25 mm
→	Terminals:	SMD terminal block 24÷18AWG

| T |

→	Push-Button type:	Miniature toggle switch MOM - OFF - MOM
→	Rated current / Rated voltage:	4A - 30V DC
→	Insulation resistance:	1.000 MΩ min. at 500V (DC)
→	Case flammability rating:	UL94 V-0
→	Paddle flammability rating:	UL94 HB
→	Electrical life (full load):	50.000 cycles
→	Mechanical life:	100.000 cycles
→	Terminals:	150 mm precutted wires 18÷19 AWG

| Tv |

→	Type:	S → Switch DPDT - Pattern 1
		2 → 2 way Switch DPDT - Pattern 6
		I → Intermediate Switch DPDT - Pattern 7
		P → Push Button (MOM - OFF - MOM) SPDT - Pattern 4
→	Rated current / Rated voltage:	10A - 240V AC
→	Withstanding voltage (1 min):	1.500V (AC)
→	Insulation resistance:	200 MΩ min. at 500V (DC)
→	Contact resistance:	1 A 20 mΩ max 2-4V (DC)
→	Electrical life (full load):	10.000 cycles make-and-break cycles
→	Mechanical life:	10.000 cycles
→	Terminals:	50 mm precutted wires 15 AWG with splicing connectors

Regulatory Compliance

| C | S |
| T |

The PCB included in the MakeUp keypads has been tested for Electromagnetic compatibility (EMC) in conformity with the essential requirements of the EN61000-6-2 (2016) - EN61000-6-3 (2007) +A1 (2011).
PLH Products must be installed according to the specifications, and in extra low tension systems. For this reason all PLH products are not UL LISTED and do not fall under 2006/95/EC Directive.
The normally open push buttons are designed to be installed only by DC safety transformers with maximum 24V and DO NOT directly control the load. Do not connect high-voltage power to low-voltage terminals. Improper wiring can result in personal injury or damage to the control or to other equipment.

Regulatory Compliance

| Tv |

The keypad using the components with the pattern number 1, 6, 7 o 4 and all the combinations for the Model and Variants indicated in the declaration of conformity attachment, are in conformity with the essential requirements of the IEC 60669-1:1998 (Third Edition) + A1:1999 + A2:2006.
The Notified Body IMQ S.p.A. performed all the test and produced the Test Report Reference No MI20-0048284-01.

Moreover all PLH components must be installed as described in the technical specification on equipment manufactured in compliance with the regulations, according to the latest safety rules, using certified materials and suitable to the characteristics of the environment and pose.
Installation and verification of compliance are not PLH responsibility.

3 LED
Electrical and mechanical specification

| C | S |

→	Feedback led (**):	0,5 ≤ I ≤ 5 mA (***)
→	Positional Led (**) :	10 mA ≤ 30 V (DC)
→	Terminals:	SMD terminal block 24÷18AWG

(*) Inductive load ARE NOT ALLOWED
(**) Multiples led are with the common connected to - (minus polarity)
(***) without any limitation of the current. Limitation need to be a part of the interface connect to our led

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