

Milestones of Hager wiring accessories











1919

Berker Brothers began to manufacture the first batch of rotary switches in Schalksmühle. Every detail was as simple, elegant, and functional as all Berker's other subsequent models.

1948

Traditionally, water-proof switches are made of cast resin or ceramics. Therefore, Berker's molded plastics rotary switch is a real innovation. The threads of the rotary switch are pressed into the top of the gland cover and grease cavity seals are installed on the axle. This type of switches features optimal waterproof performance. Its basic design features remained unchanged for decades of years.

1966

Although it seems quite natural today, dating back to 1966, the launch of a switch equipped with a dismountable switch cover that can be backfilled after the completion of the painting engineering indicated a significant innovation and great progress in terms of convenience. Moreover, since the switch cover is easy to change, many of the 1966 rocker switches are still in good keep today and can still work normally.

1980

The combination of circle and square was one of our most successful products in the grim technical environment in the 1980s.

1996

'Twinpoint' design has interchangeable decorative rings, which provides all kinds of design possibilities









1928

Form + Function: When Bauhaus began to carry this concept forward. of switch is as colorful Berker Brothers have turned to the famous architect Louis Henri Sullivan's design concept. Functional and perfect design combined with reliable technology-Berker's switches already had all the elements that a product needs to become classic. These products later became classic indeed.

1957

The cover of this type as any of the modern works of art-That is why this colorful sample is called 'Chagall'.

1972

A big success, where modularization is used, the first type of stainless all-metal switch- Another real innovation.

1983

An expert to deal with difficult tasks: 'ISO-Panzer' has excellent waterproof and shockproof performances excellent waterproof and shockproof performances

1999

TS series can not only assist in creating special lighting effect, but can also combine KNX system for operating the complete smart home system.



2003

Full ranges included system 8000, 9000, 9088 metal ranges for Asia launched.



2008

The greatest feature of TS Crystal Ball is its glittering Swarovski crystal and sensitive optical reflection sensor, very charming.



2009

Touch of style as system 10088 equipped with large rocker and blue LED indication.



2016

Berker Q.7 not only highlights its form, functions, and craftsmanship, but also lifts architectural individuality and material application to a higher level.



2020

Hager Dream,
Hager Inspire,
Hager Muse with
best-in-class
aesthetics design,
quality and full
functions to answer
all needs.



2004

Intelligence is a kind of beauty. Undoubtedly, B.IQ looks very beautiful: The first type of smart and fashionable home control unit in the world indicates the arrival of the new era of comfort.



2007

Only by touching...
That is the artistic state to start to control a room. Technical progress makes it possible for us to combine minimalism with modern technology and create a new exchange mode.



2011

R.1 series explains its design of round angle of the excircle in its unique way. It has a soft framework outline and all kinds of functional versions. It is a good choice for all residential and decoration projects.



2013

stylea with slim and nice profile large rocker provided affordable option.



2018

Dream series, designed by the European designer, Erwin van Handenhoven, a winner of many international awards, bring elegant life experience to customers.



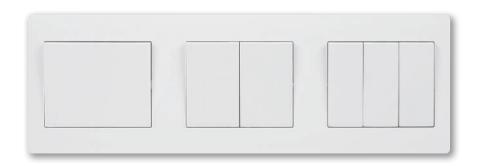


Socket with USB charger

The socket equipped with two 2.4A USB chargers, which intelligently adapt to mobile devices with different power consumptions, ensure the charging safety and efficiency.

Multi-gang frame

Conjoined switch combination, convenient and beautiful.





Color options

Pursuing vibrancy and elegance with optional colors, white, aurora silver, knight black, shine the style and good taste.

Beehive-like plate

Beehive structure, praised highly in aviation technology, has the advantages of super-strong intensity and light weight. It is used for support of the switch panel, which makes it firmer and more durable.





Extra-large wiring capacity

The U-shaped screw terminal can hold three 4mm² electrical cables, making wiring work easier and faster.

Extra-thin back mechanism

With fine craft, designed precisely, only for the purpose of providing abundant wiring space and convenient installation means.





Terminal screws are prevented from dropping

We do everything no matter how small it is for pursuit of quality. The screw terminals are designed to provide installers with more practical use, preventing screws from dropping off during installation. We regard it as our ultimate mission to increase efficiency.



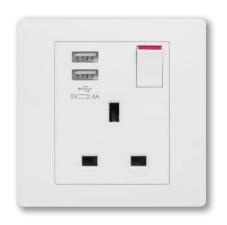


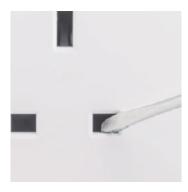
High 16AX rating

The rated current of switch is 16AX, which meets the requirements of using electricity safely in all aspects.

USB protected against surge voltages

Protection against transient surge voltage for the USB circuits is provided at 2500Vac, 2.5 times higher than IEC requirement. USB output maintains at 5Vdc to ensure optimum safety for users and equipment being charged.





Shutter

Having safety awareness all the time comes from the care for family members. The socket panel is designed with child lock, preventing unintended access by young children.



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Hager MuseWall switches



- Complies with IEC 60669-1 CB certificate
- 'AX' rated No need to derate for fluorescent loads
- 10 AX (100W Self Ballasted Lamp (SBL))
- 16 AX (200W Self Ballasted Lamp (SBL))
- Supplied with M3.5 x 37 mm long fixing screws
- Capacity of each terminal: 3 x 1.5 mm²
- 2 X 2.5 mm²
- Two way switches can be wired either 1 way or 2 way
- Terminal markings denote:

L1 = one way

L2 = two way
C = common

- Material: Polycarbonate

| | | long fixing screws | | | | |
|--------------------|--------------------|---|----------------|---------------------------|---------------------------------|---------------------------------|
| | | Description | Pack qty. | Cat. Ref. White | Cat. Ref. Aurora Silver | Cat. Ref. Knight Black |
| | | Large dolly switch 16AX, 1 gang 1 way | 10 | WGML111 | WGML111AS | WGML111KB |
| | | 16AX, 1 gang 2 way | 10 | WGML112 | WGML112AS | WGML112KB |
| WGML111 WGML112 | WGML121 WGML122 | 16AX, 2 gang 1 way | 10 | WGML121 | WGML121AS | WGML121KB |
| | | 16AX, 2 gang 2 way | 10 | WGML122 | WGML122AS | WGML122KB |
| | | 16AX, 3 gang 1 way | 10 | WGML131 | WGML131AS | WGML131KB |
| | | 16AX, 3 gang 2 way | 10 | WGML132 | WGML132AS | WGML132KB |
| WGML131 | WGML142 | 16AX, 4 gang 1 way | 10 | WGML141 | WGML141AS | WGML141KB |
| WGML132 | WGML142 | 16AX, 4 gang 2 way | 10 | WGML142 | WGML142AS | WGML142KB |
| WGML113 | WGML111B | 10AX, 1 gang intermediate 10A, 1 gang bell switch mark "bell symbol" 10A, 1 gang press switch mark "EXIT" | 10 10 10 | WGML113 WGML111B WGML111E | WGML113AS WGML111BAS WGML111EAS | WGML113KB WGML111BKB WGML111EKB |
| WGML111E | | | | | | |
| | | Press switch 10A, 1 gang | 10 | WGML111P | WGML111PAS | WGML111PKB |
| | | 10A, 2 gang | 10 | WGML121P | WGML121PAS | WGML121PKB |
| WGML111P | WGML121P | 10A, 3 gang | 10 | WGML131P | WGML131PAS | WGML131PKB |
| | | 10A, 4 gang | 10 | WGML141P | WGML141PAS | WGML141PKB |

WGML131P

WGML141P



- Complies with IEC 60669-2-1
- Supplied with M3.5 x 37 mm long fixing screws

3 x 1.5 mm²

- Capacity of each terminal:
- Material: Polycarbonate

| | Description | Pack qty. | Cat. Ref. White | Cat. Ref. Aurora Silver | Cat. Ref. Knight Black |
|-----|------------------------------|--------------|--------------------|-------------------------------|------------------------------|
| | 250VA single fan control | 6 | WGMEFR250 | WGMEFR250AS | WGMEFR250KB |
| (0) | 40-500W single dimmer, 2 way | 6 | WGMEDR500 | WGMEDR500AS | WGMEDR500KB |





WGMEDR500 WGMEFR250

Hager Muse

Double pole control switches

- Complies with IEC 60669-1 CB certificate
- (250W Self Ballasted Lamp (SBL))
- Supplied with M3.5 x 37 mm long fixing screws
- Capacity of each terminal: **20AX**
- L, N, E: 2 x 4 mm²

32A, 45A

 $L,~N~:2.5~\text{mm}^2\sim~16~\text{mm}^2$ E x 2: 2.5 mm² ~ 16 mm²

Pack Cat. Ref. Cat. Ref. Cat. Ref. qty. White Aurora Knight Silver Black





DP switch

Description

20AX, 1 gang with LED 10 WGML2D1N WGML2D1NAS WGML2D1NKB WGML2D2NAS WGML2D2NKB 20AX, 2 gang with LED WGML2D2N 10 20AX, 1 gang 2 way with LED 10 WGML2D12N WGML2D12NAS WGML2D12NKB

| Special marks | Abbreviation | Special marks | Abbreviation | Special marks | Abbreviation |
|----------------------|--------------|---------------|--------------|---------------|--------------|
| "AIR CONDITONER" | AC | "HOB" | HB | "WASHER" | WS |
| "DISH WASHER" | DW | "HOOD" | HD | "WASHING MACH | INE" WIV |
| "DRYER" | DR | "MICROWAVE" | MW | "WATER HEATER | " WH |
| "FRIDGE" | FR | "OVEN" | OV | | |
| Example: "WATER HEAT | ER" WH | | | | |
| 20AX 1 gang with LED | | WGML2D | 1NWH WGML | .2D1NASWH WGI | ML2D1NKBWH |





Control switch with LED 32A with LED

45A with LED

WGMR32D1 8 8 WGMR45D1

WGMR32D1AS WGMR32D1KB WGMR45D1AS WGMR45D1KB

- Material: Polycarbonate

WGMR32D1 WGMR45D1

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- Complies with BS 5733 IEC 60998-1 IEC 60998-2-1 BS 1363-4 (Fused connection units) - Supplied with M3.5 x 37 mm long fixing screws

Capacity of each terminal:
 25A
 L, N, E: 4 x 2.5mm² or 2 x 4mm² or 1 x 6mm²

13A FCUL, N : 3 x 4.0 mm²
E : 2 x 4.0 mm²

45A

L, N, E: $7 \times 2.5 \text{mm}^2$ or $4 \times 4 \text{mm}^2$ or $2 \times 6 \text{mm}^2$

- Material: polycarbonate

| | | Description | Pack qty. | Cat. Ref. White | Cat. Ref. Aurora Silver | Cat. Ref. Knight Black |
|---------|----------|---|--------------|--------------------|-------------------------------|------------------------------|
| | | 25A with flex outlet | 14 | WGMR25 | WGMR25AS | WGMR25KB |
| MONAPOS | WOMP45 | 45A with flex outlet | 10 | WGMR45 | WGMR45AS | WGMR45KB |
| WGMR25 | WGMR45 | 13A fused with flex outlet | 10 | WGMR13 | WGMR13AS | WGMR13KB |
| | 0 | 13A fused with LED + flex outlet | 10 | WGMR13N | WGMR13NAS | WGMR13NKB |
| | | 13A switched fused with flex outlet | 10 | WGMR13S | WGMR13SAS | WGMR13SKB |
| WGMR13 | WGMR13N | 13A switched fused with flex outlet, with LED | 10 | WGMR13SN | WGMR13SNAS | WGMR13SNKB |
| WGMR13S | WGMR13SN | | | | | |

Hager Muse 15A and 16A socket outlets

- Complies with BS 546 (15A socket) SS 472 (15A socket) IEC 60884-1 (German socket) (Furo-American socket)
- Supplied with M3.5 x 37 mm long fixing screws
- Capacity of each terminal: L, N, E: 3 X 2.5 mm² or 2 X 4.0 mm²
- Integral rocker design of switched sockets provides clear red 'on' indication (for 15A socket)
- Material: Polycarbonate

| (Euro-Amei | rican socket) | 2 X 4.0 mm | 2 | | • | |
|------------|---------------|--------------------------|--------------|--------------------|-------------------------------|------------------------------|
| | | Description | Pack qty. | Cat. Ref. White | Cat. Ref. Aurora Silver | Cat. Ref. Knight Black |
| | | 15A round pin switched | 10 | WGMS115S | WGMS115SAS | WGMS115SKB |
| • | | 16A German with shutter | 8 | WGMS116S | WGMS116SAS | WGMS116SKB |
| WGMS115S | WGMS116S | 16A single Euro-American | 10 | WGMS116EA | WGMS116EAAS | WGMS116EAKB |
| 4.6 | ** | 16A twin Euro-American | 10 | WGMS216EA | WGMS216EAAS | WGMS216EAKB |
| WGMS116EA | WGMS216EA | | | | | |



- Complies with IEC 60884-1 (10A socket)
- Supplied with M3.5 x 37 mm long fixing screws
- Capacity of each terminal: L, N, E: 3 X 2.5 mm² or 2 X 4.0 mm²
- Integral rocker design of switched sockets provides clear red 'on' indication

Cat. Ref.

Knight

Black

- Material: Polycarbonate



WGMS110US



WGMS210U

Cat. Ref. Cat. Ref. Description Pack White Aurora qty. Silver

Socket outlet

| 10A, 2 pin switched | 10 | WGMS110US | WGMS110USAS | WGMS110USKB |
|---------------------|----|-----------|-------------|-------------|
| 10A. 2 pin + 2 pin | 10 | WGMS210U | WGMS210UAS | WGMS210UKB |

Hager Muse 13A socket outlets

- Complies with BS 1363-2 SS 145-2
- Supplied with M3.5 x 37 mm long fixing screws
- Capacity of each terminal: L, N, E: 3 X 2.5 mm² or 2 X 4.0 mm²
- Integral rocker design of
- Material: Polycarbonate



WGMS113SUSB WGMS113SN



WGMS113S1USB WGMS113SUSBAC



WGMS213



WGMS213S



WGMS213SN



Description

| 13A single | 10 |
|---------------------|----|
| 13A single switched | 10 |
| | |

13A single switched with LED 13A single switched + 2 x USB charger 13A single switched + 1 x USB charger 8 13A single switched + 2 x USB A + C

13A twin 14 13A twin switched 14 13A twin switched with LED 14 13A twin switched + 2 x USB charger 10

- USB output current 2.4A (Max)

switched sockets provides clear red 'on' indication

> Cat. Ref. Cat. Ref. White Aurora

Silver

Cat. Ref. Knight Black



8

Pack

qty.



WGMS113S1USB

WGMS213

WGMS213S

WGMS213SN

WGMS213SUSB

WGMS113SAS WGMS113SNAS

WGMS113AS

WGMS113SNKB

WGMS113SKB

WGMS113KB

WGMS113SUSBAS WGMS113SUSBKB

WGMS113S1USBAS WGMS113S1USBKB

WGMS113SUSBAC WGMS113SUSBACAS WGMS113SUSBACKB

> **WGMS213AS** WGMS213KB WGMS213SAS

WGMS213SKB

WGMS213SNAS WGMS213SNKB WGMS213SUSBAS WGMS213SUSBKB

Remark: Grey reference product - coming soon

Subject to change without prior notice

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Hager Muse Communication and data



| - Supplied with M3.5 x 37 | 7 mm |
|---------------------------|------|
| long fixing screws | |

- Material: Polycarbonate

| long lixing sore | | | | | | |
|--------------------------|--|--|--------------|--------------------|-------------------------------|------------------------------|
| | | Description | Pack qty. | Cat. Ref. White | Cat. Ref. Aurora Silver | Cat. Ref. Knight Black |
| | | | | | | |
| | | RJ11 outlet | | | | |
| | 2 2 | 1 mod | 10 | WGMT1RJ | WGMT1RJAS | WGMT1RJKB |
| | | 2 mod | 10 | WGMT2RJ | WGMT2RJAS | WGMT2RJKB |
| WGMT1RJ | WGMT2RJ | | | | | |
| | | RJ45 cat6 outlet 1 mod | 10 | WGMT1RJ6 | WGMT1RJ6AS | WGMT1RJ6KB |
| | | 1 mod without symbol | 10 | WGMT1RJ6NM | WGMT1RJ6NMAS | WGMT1RJ6NMKB |
| WGMT1RJ6 | WGMT1RJ6NM | 2 mod | 10 | WGMT2RJ6 | WGMT2RJ6AS | WGMT2RJ6KB |
| | | 2 mod without symbol | 10 | WGMT2RJ6NM | WGMT2RJ6NMAS | WGMT2RJ6NMKB |
| WGMT2RJ6 | WGMT2RJ6NM | | | | | |
| 9 | D D | RJ45 cat5e outlet 1 mod | 10 | WGMT1RJ5 | WGMT1RJ5AS | WGMT1RJ5KB |
| | | 2 mod | 10 | WGMT2RJ5 | WGMT2RJ5AS | WGMT2RJ5KB |
| WGMT1RJ5 | WGMT2RJ5 | | | | | |
| | G B | RJ11 + RJ45 cat5e 2 mod | 10 | WGMT2RJRJ5 | WGMT2RJRJ5AS | WGMT2RJRJ5KB |
| | • | RJ11 + RJ45 cat6 2 mod | 10 | WGMT2RJRJ6 | WGMT2RJRJ6AS | WGMT2RJRJ6KB |
| WGMT2RJRJ5 WGMT2RJRJ6 | WGMT2TVRJ5 | TV inlet/outlet + RJ45 cat5e 2 mod | 10 | WGMT2TVRJ5 | WGMT2TVRJ5AS | WGMT2TVRJ5KB |
| 19 | to come for the company of the compa | TV inlet/outlet 1 mod | 10 | WGMT1TV | WGMT1TVAS | WGMT1TVKB |
| WGMT1TV | WGMT2TVRJ6-SG | TV inlet/outlet + RJ45 cat6 (DATA marking) 2 mod | 10 | WGMT2TVRJ6-SG | WGMT2TVRJ6AS-SG | WGMT2TVRJ6KB-SG |
| 100 | The same of the sa | TV outlet, F type 1 mod | 10 | WGMT1TVF | WGMT1TVFAS | WGMT1TVFKB |
| WGMT1TVF | WGMT2TVFRJ6-SG | TV outlet, F type 3 + RJ45 Cat6 (DATA marking 2 mod | 10 | WGMT2TVFRJ6-SG | WGMT2TVFRJ6AS-SG | WGMT2TVFRJ6KB-SG |



| Complies with |
|-----------------------------------|
| IEC 60669-1 |
| IEC 60669-2-1 |
| IEC 62368-1 (USB) |

- 10 AX (100W Self Ballasted Lamp (SBL))
- Supplied with M3.5 x 37 mm long fixing screws
- Material: Polycarbonate

| | | Description | Pack qty. | Cat. Ref. White | Cat. Ref. Aurora Silver | Cat. Ref. Knight Black |
|-----------------------|----------|---|--------------|--------------------|-------------------------------|------------------------------|
| WGMHDC | | 16AX, DND & MUR with LED (Indoor) | 10 | WGMHDC | WGMHDCAS | WGMHDCKB |
| | | 6W Audio switch | 6 | WGMEA6 | WGMEA6AS | WGMEA6KB |
| | 40 | USB charger 4.2A (1 type C) + (2 x type A) | 8 | WGMS3USB | WGMS3USBAS | WGMS3USBKB |
| WGMEA6 | WGMS3USB | 16A key tag - mechanical | 6 | WGMHKTM | WGMHKTMAS | WGMHKTMKB |
| | | 16A key tag - RFID | 6 | WGMHKTRFID | WGMHKTRFIDAS | WGMHKTRFIDKI |
| WGMHKTM WGMHKTRFID | | | | | | |
| | | Door chime - electronic | 6 | WXEDC01 | WXEDC01AS | WXEDC01KB |

WXEDC01

Subject to change without prior notice



| | | Description | Pack qty. | Cat. Ref. White | Cat. Ref. Aurora Silver | Cat. Ref. Knight Black |
|--------|--------|--|-------------------|--------------------|-------------------------------|------------------------------|
| | | 2 gang, multi-gang, horizontal | 18 | WGMCH2 | WGMCH2AS | WGMCH2KB |
| WGMCH2 | | 3 gang, multi-gang, horizontal | 12 | WGMCH3 | WGMCH3AS | WGMCH3KB |
| WGMCH3 | | 4 gang, multi-gang, horizontal | 12 | WGMCH4 | WGMCH4AS | WGMCH4KB |
| | | 5 gang, multi-gang, horizontal | 12 | WGMCH4 | WGMCH4AS | WGMCH4KB |
| WGMCH4 | | | | | | |
| WGMCH5 | | | | | | |
| | | Blank plate 1 gang | 20 | WGMBP1 | WGMBP1AS | WGMBP1KB |
| | | Blank plate (size 2) | 10 | WGMBP2 | WGMBP2AS | WGMBP2KB |
| WGMBP1 | WGMVE2 | Accomodation plate 2 modules Remark: Grey reference product - o | 14 coming soon | WGMVE2 | WGMVE2AS | WGMVE2KB |
| | | | | | | |
| | | Single frame 1 gang frame (vertical) 52 x 65 mm | 40 | WGMCV1 | WGMCV1AS | WGMCV1KB |
| WGMCV1 | WGMC2 | 2 gang frame | 40 | WGMC2 | WGMC2AS | WGMC2KB |
| | | 1 gang frame (horizontal) 65 x 52 mm | 40 | WGMC1 | WGMC1AS | WGMC1KB |
| WGMC1 | WGMC1S | 1 gang frame (square) 52 x 52 mm | 40 | WGMC1S | WGMC1SAS | WGMC1SKB |
| | | | | | | |
| mark | D < | WA covers (Transparent) IP55 single size | 40 | XC9003 | | |
| XC9003 | XC9004 | IP55 twin size | 40 | XC9004 | | |



Compliance with standards

Regulation 511-01-01 of BS 7671: Requirements for Electrical Installations, IEE Wiring Regulations Sixteenth Edition is of particular importance to specifiers and installers with respect to product standards.

Regulation 511-01-01 requires every item of equipment to comply with the relevant requirements of the applicable British Standard, or Harmonised Standard appropriate to the intended use of the equipment.

British Standards (BS)

The BSI (British Standards Institution) was the first national standards body in the world. There are now more than 100 similar organisations which belong to the International Organisation for Standardisation (ISO) and the International Electrotechnical Commission (IEC).

British Standards are drawn up by all those who have a particular interest in the subject i.e. manufacturers, users, research organisations, government departments and consumers. This work is co-ordinated by BSI staff, acting as secretaries to the committees where the work is done. All standards are made available for public comment before they are published.

Harmonised standards

A Harmonised standard is a European standard formally presented by CENELEC, to the European Commission and published in the commission's official journal. CENELEC is the Comite European de Normalisation Electrotechnique i.e. European Committee for Electrotechnical Standardisation.

BS 7671 part 2 defines a harmonised standard as a standard which has been drawn up by common agreement between national standards bodies notified to the European Commission by all member states and published under national procedures. The UK national standards body is the British Standards Institution. In the UK a harmonised standard will normally be published as a British Standard European Norm i.e. BS EN.

British Standard European Norm (BS EN)

CENELEC European standards are pre-fixed EN (European Norm). Adoption of the European Standard within the EC is mandatory and member countries of CENELEC are obliged to publish them unchanged. In the UK such standards are further endorsed with the additional prefix 'BS', for example BS EN 60669-1: 1996 is the British Standard European Norm for Switches for household and similar fixed electrical installations.

Whilst a European Standard can be a direct replica of an IEC standard, discussions within CENELEC may result in the formulation of a standard which includes commonly agreed variations and Special National Conditions.

International Electrotechnical Commission (IEC)

Founded in 1906 the International Electrotechnical Commission (IEC) is the world organisation that prepares and publishes international standards for all electrical, electronic and related technologies. The membership consists of 60 participating countries, including all the worlds major trading nations and a growing number of industrialising countries.

Foreign national standards based on IEC standards are permitted to be used by BS 7671. However the specifier must verify that any differences between the foreign standard and the corresponding British Standard or Harmonised Standard does not result in any lesser degree of safety than that afforded by compliance with the British Standard. This assessment would probably need to be made by specialists.

Conclusion

BS 7671 (IEE Wiring Regulations) recognises equipment which complies with a British Standard or Harmonised Standard appropriate to the intended use of the equipment without the need for further qualification.

Hager products have always been designed and manufactured to a high standard to ensure compliance with the current British or Harmonised Standard. See the table below for further information.



| Product description | BS / IEC number | Description | | |
|-------------------------------------|--|---|--|--|
| Switches | BS EN 60669-1 IEC 60669-1 CB certificate | Switches for household and similar fixed electrical installations | | |
| Indicators | BS 5733 | General requirements for Electrical Accessories | | |
| Fused connection unit, cord outlets | BS 5733 | Switches for household and similar fixed electrical installations with particular requirements for timedelay switches (TDS) | | |
| Dimmers | BS EN 60669-2-3 | Switches for household and similar fixed electrical installation with particular requirements for timedelay switches (TDS) | | |
| Frames and plates | BS 5733 | Switches for household and similar fixed electrical installation with particular requirements for timedelay switches (TDS) | | |
| 10 /16 Amp Wall switch | BS EN 60669-1 IEC 60669-1 CB certificate | Switches for household and similar fixed electrical installations | | |
| Dimmer switches | BS EN 60669-2-1 IEC 60669-2-1 | Electronic variable control switches (dimmer switches) for tungsten filament lighting | | |
| 13 Amp Socket Outlets | BS 1363- 2 SS145-2 | 13A plugs, socket-outlets, adaptors and connection units | | |
| 15 Amp Switched Socket | BS 546 SS472 MS 1577 | Specification. Two-pole and earthing-pin plugs, socket-outlets and socket-outlet adaptors | | |
| 20 Amp D.P. Switches | BS EN 60669-1 IEC 60669-1 CB certificate | Switches for household and similar fixed electrical installation | | |
| 13 Amp Fused Connection Unit | BS 1363-4 | Specification for 13A fused connection units switched and unswitched | | |
| 45 Amp D.P. Switches | BS EN 60669-1 IEC 60669-1 CB certificate | Switches for household and similar fixed electrical installations | | |
| 45 Amp Cooker Control Unit | BS 4177 | Cooker control units | | |
| Shaver Socket Outlet | BS EN 61558-2-5 | General Requirements Isolating transformers and safety isolating transformers | | |
| | IEC 61558-2-5 | Electromagnetic compatibility, immunity requirements for household CB certificate appliances tools and similar apparatus. | | |
| 25 Amp/ Amp Flex Outlet Plate | BS 5733 | General Requirements for Electrical Accessories | | |
| BS Batten | BS EN 61184 IEC 61184 BS EN 60238 IEC 60238 | Home office shield are T2 rated | | |
| Ceiling rose | BS 67 | | | |



Objective of CE marking.

CE marking is a "technical passport" which indicates that a product conforms to all relevant directives which require CE marking, thus enabling the product to travel within the E.U.

A directive is a piece of mandatory European Legislation implemented by regulations in all member countries. Its purpose is to allow free movement of goods that are safe and fit for use into and within the European Union.

CE marking is not a quality mark and it does not indicate that any testing or certification has been carried out.

The marking.

CE marking is a statement by the manufacturer that the product complies with the essential requirements of all relevant Directives, notably in the area of technical safety and conformity assessment.

CE marking can appear on the product or packaging or documentation or combination thereof dependant upon which directive it has to comply with.

CE marking is a very specific graphical symbol and must be clearly separated from other marks.



Directives.

It is the responsibility of the manufacturer or his authorised representative who places the product onto the EC market to decide which Directive(s) apply and to ensure the CE marking is affixed by the dates stated in the relevant directive(s)

For the majority of Hager products only one directive is applicable this is referred to as the Low Voltage Directive. Where some products incorporate electronic devices the Low voltage Directive and the Electromagnetic Compatibility Directive are applicable.

The low voltage directive.

EC directives are requirements adopted by the European Council and published in the official journal of the European Communities and are addressed to the member states.

European Council Directive 73/23/EEC with an amendment 93/68/ EEC is known as the Low Voltage Directive.

The low voltage directive has been implemented into UK law by the "Electrical Equipment (Safety) Regulations 1994" and apply to all electrical / electronic equipment operating at a voltage of 50-1000 V a.c. or 75-1500 V d.c.. They do not apply to plugs, socket outlets and adapters which are covered by the Plugs and Sockets (Safety) Regulations 1994.

Relationship between the Electrical Equipment (Safety)
Regulations, Harmonised standards and the IEE Wiring
Regulations Sixteenth Edition.

The Electrical Equipment (Safety) Regulations requires electrical equipment to be safe. Electrical equipment which satisfies the safety provisions of Harmonised standards shall be taken to comply with this requirement, unless there are reasonable grounds for suspecting that the equipment does not so comply.

Regulation 511-01-01 of BS 7671 Requirements for Electrical Installations, IEE Wiring Regulations Sixteenth Edition requires every item of equipment to comply with the relevant requirements of the applicable British Standard, or Harmonised Standard appropriate to the intended use of the equipment.



The Ingress Protection (IP) for all low voltage enclosures up to $1000\,\mathrm{V}$ a.c. and $1500\,\mathrm{V}$ d.c. is defined in identical fashion by the standards EN 605 29 - IEC 529 it comprises the letters IP followed by two character numerals:

The first character numeral indicated the degree of protection provided by the enclosure with respect to persons, also to the equipment inside the enclosure.

The second character numeral indicated the degree of protection provided by the enclosure with respect to harmful ingress of water; a third character may be used to indicate mechanical strength.

An x signifies that no test has been carried out.

The first character numeral:

protection against solid substances

| IP | Description | |
|----|--------------|---|
| 0 | | Non-protected |
| 1 | [<u>/</u>] | Protected against solid objects greater than 50mm |
| 2 | [] | Protected against solid objects greater than 12.5mm |
| 3 | [3] | Protected against solid objects greater than 2.5mm |
| 4 | [] | Protected against solid objects greater than 1.0mm |
| 5 | F | Dust-protected |
| 6 | F | Dust-tight |

The second character numeral:

protection against liquid substances

| IP | Description | |
|----|----------------|--|
| 0 | | Non-protected |
| 1 | 3 | Protected against dripping water |
| 2 | 7 | Protected against dripping water when tilted up to 15° |
| 3 | F | Protected against spraying water |
| 4 | 3 | Protected against splashing water |
| 5 | * ! | Protected against water jets |
| 6 | * * * * | Protected against heavy seas |
| 7 | 15 cm | Protected against the effect of immersion |
| 8 | F | Protected against submersion |

Additional letter (in option)

Protection of people against access to dangerous parts

| | Description |
|---|--|
| Α | Protected against access of the back of the hand |
| В | Protected against access of a finger |
| С | Protected against access of a tool - ø 2.5mm |
| D | Protected against access of a tool - ø 1mm |

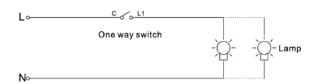
Additional letter (in option)

Specific information on the product

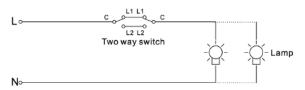
| | Description |
|---|------------------------------|
| Н | High voltage material |
| M | Movements during water test |
| S | Stationary during water test |
| W | Bad weather |



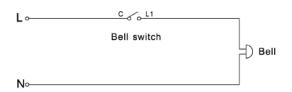
One way switch



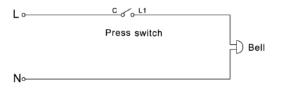
Two way switch



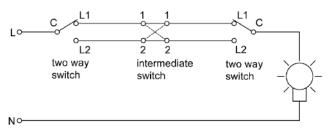
Marked BELL switch



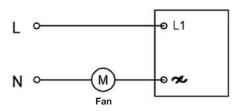
Marked PRESS switch



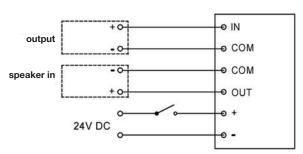
Intermediate switch



Fan control

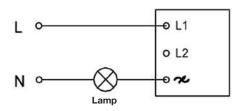


Audio switch

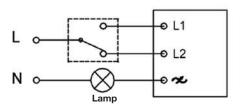


Dimmer switch

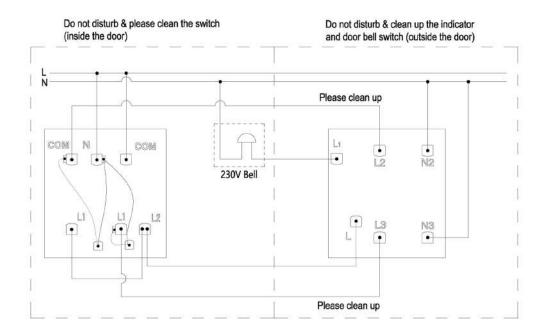
1. One way connection



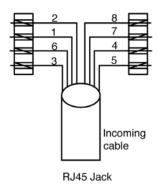
2. Two way connection



Do not disturb and please clean the switch (inside the door) / Do not disturb and please clear the instructions and the doorbell switch (outside the door)

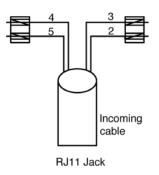


RJ45 Computer module cable diagram EIA/TIA 568B



RJ45 Jack pin. EIA/TIA 568B EIA/TIA 568A 1 White/Orange White/Green 2 Orange Green 3 White/Green White/Orange 4 Blue Blue 5 White/Blue White/Blue 6 Green Orange 7 White/Brown White/Brown 8 Brown Brown

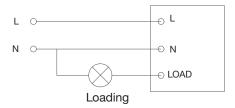
RJ11 Telephone plug-in module cable diagram



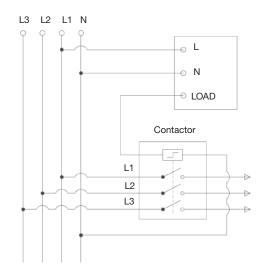
RJ11 Jack pin.

- 2 Blue/White
- 3 White/Blue
- 4 White/Red
- 5 Red/White

Key card Direct load



Key cardConnected load through contactor



Success cases

The courage to try to innovate in architectural design; the design of excellence always brings together a lot of ideas; the pursuit of the ultimate detail and the admiration of superior quality. Today, whether in Munich, Berlin and Hamburg, or in Bolzano, Madrid and Seoul, these ideas can be traced in any building in the world. It is no coincidence that Hager switches and systems can be found in all of these places.

China

Sofitel Shenyang Lido, Shenyang New World Beijing Hotel, Beijing Fairmont Beijing, Beijing

Marriott Nanjing South Hotel, Nanjing

Grand Hyatt, Hangzhou

Park Hyatt Ningbo Resort & Spa, Ningbo

The Peninsula, Shanghai

Le Royal Meridien Hotel, Shanghai Swissôtel Grand Shanghai, Shanghai Mandarin Oriental Pudong, Shanghai

Sofitel Shanghai Sheshan Oriental, Shanghai

JW Marriott, Hangzhou

Four Points by Sheraton Bijie, Guizhou

Kempinski Hotel, Yinchuan

New World Wuhan Hotel, Wuhan

Mandarin Oriental Hotel Guangzhou

Hyatt Place Shenzhen Airport, Shenzhen

The Ritz-Carlton, Shenzhen InterContinental, Shenzhen

Swissôtel, Foshan

Shangri-La's Sanya Resort & Spa, Hainan

Hong Kong & Macau

Sheraton Hotel Tung Chung Island Shangri-La, Hong Kong

Penta Hotel Hotel ICON

Royal Plaza Hotel

Ritz Cariton Hotel

Best Western Hotel (Causeway bay & Tsim Sha Tsui)

Harbour Grand Hong Kong

Hyatt Regency Hotel

Harbourview Horizon Hotel

Royal View Hotel

Grand Lisboa Macau

Studio City Macau

Galaxy Macau

Singapore

Grand Hyatt Hotel Goodwood Park Park Regis

Ramada & Days Hotel Singapore at Zhongshan Park

Hotel Fort Canning

Malaysia

Genting Hotel, Genting Highlands JW Marriott Hotel, Kuala Lumpur

WEIL Hotel Ipoh, Perak

Alila Bangsar Kuala Lumpur, Kuala Lumpur Hilton Garden Inn Puchong, Selangor

Alwaqf Hotel, Kelantan Kimberley Hotel, Penang Iconic Hotel, Penang

VE Hotel & Residence, Bangsar South, Kuala Lumpur

Indonesia

Westin Hotel, Jakarta Courtyard by Marriott, Bali Fairfield by Marriott Sunset Road, Bali The Ritz-Carlton, Bali Resort & Spa, Bali

Vietnam

Novotel Nha Trang Sealink Phan Thiet Sheraton Da Nang Radison Blu Cam Ranh Movenpick Cam Ranh Melia Cam Ranh Hanoi Hotel

India

Taj Palace, Mumbai Hyatt Place, Hyderabad Ritz Carlton Pune, Pune

Lemon Tree, 3 hotels (Udaipur, Dehradun, Kolkata)

Fairfield Marriott Kolkata, Kolkata

Europe

Hotel Sacher, Vienna

Hotel Lux Alpinae, St. Anton am Arlberg

Hotel Schloss Elmau, Elmau

Vigilius Mountain Resort, Lana Hotel Puerta l'America, Madrid

Lloyd Hotel, Amsterdam

Zentrum für Virtuelles

Engineering ZVE, Stuttgart

Herzogin Anna Amalia Bibliothek, Weimar

minimum bulthaup, Berlin

Privathaus, Berlin

Hyatt Regency, Istanbul

Şişli Marriott, Istanbul

Sheraton Ateşehir, Istanbul

Swissôtel, Istanbul

Le Meridien, Istanbul

Hilton, Izmir

Crowne Plaza, Istanbul

Other Countries

Sedona Hotel, Mandalay, Myanmyar Four Seasons Hotel, Seychelles Makati Shangri-La Hotel, Manila





Hager Dream









Hager Silhouette





Berker R.1











Berker R. Classic













hagerblu visage









Berker B.IQ











Hager golf



reddot design award winner 2013



Hager witty





Hager Design turns technical products into familiar friends.



International designer Erwin van Handenhoven has been working with Hager since 2000 and his designs have repeatedly won international design awards. Erwin became the product design director of Hager Group in 2013, focusing on shaping the future of Hagrer products and brands, making Hager design an international vane.

Before we start designing a new product, we think about the people it is going to serve. Will it assist or entertain, observe or protect, save time or save energy? Ideally, whatever it does, users will feel it is a reliable "friend". We need to know how to connect with people on an emotional level, to ensure that in return they feel connected to our products.

Design links exquisite emotions to great usability and quality. How to illustrate this better then through this new HAGER range? I designed it with special care to become a real trendsetter for good taste. We know that the Asian continent is constantly raising his design sensibility and quality expectations. It is exciting to create in this particular context where tradition and change operate together.

This new design range will upgrade the standard of living in a clearly visible way. Hope you enjoy it as much as I do.



Erwin van Handenhoven

Corporate Design Director of Hager Group Hager Group Design Director



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