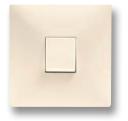


## Milestones of Hager wiring accessories











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, 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 of switch is as colorful 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

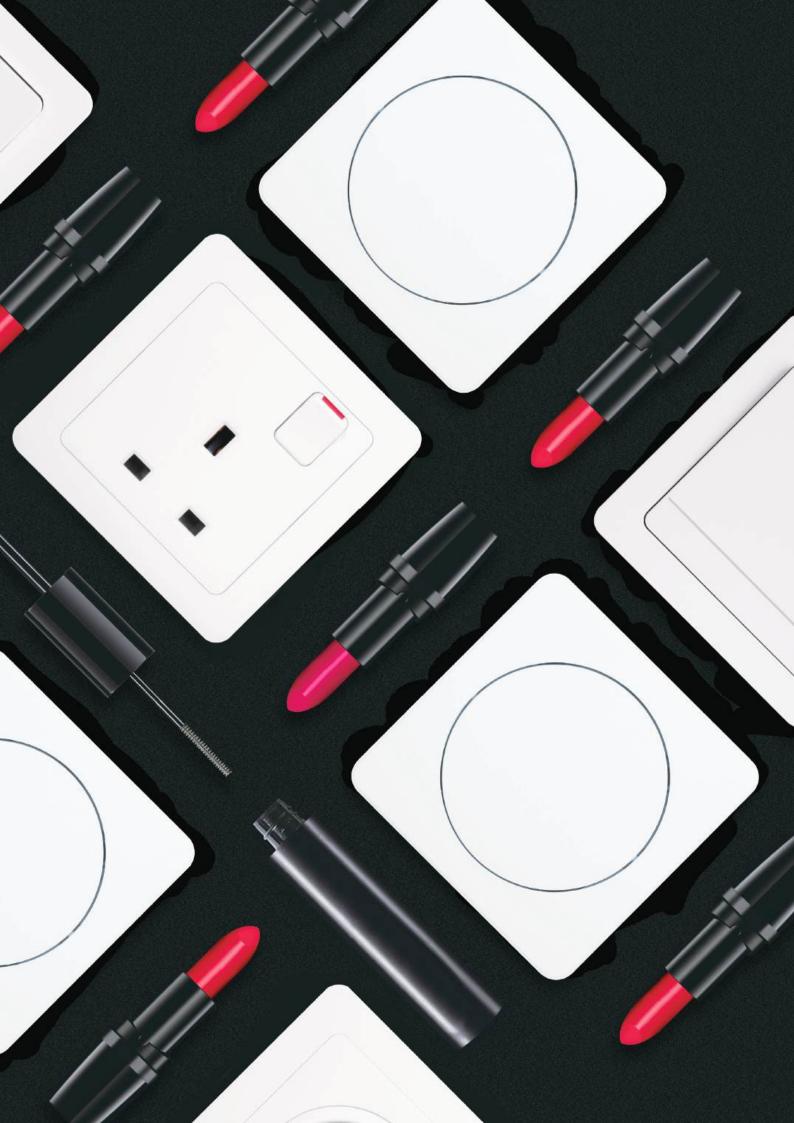
stylea with slim and nice profile large rocker provided affordable option.

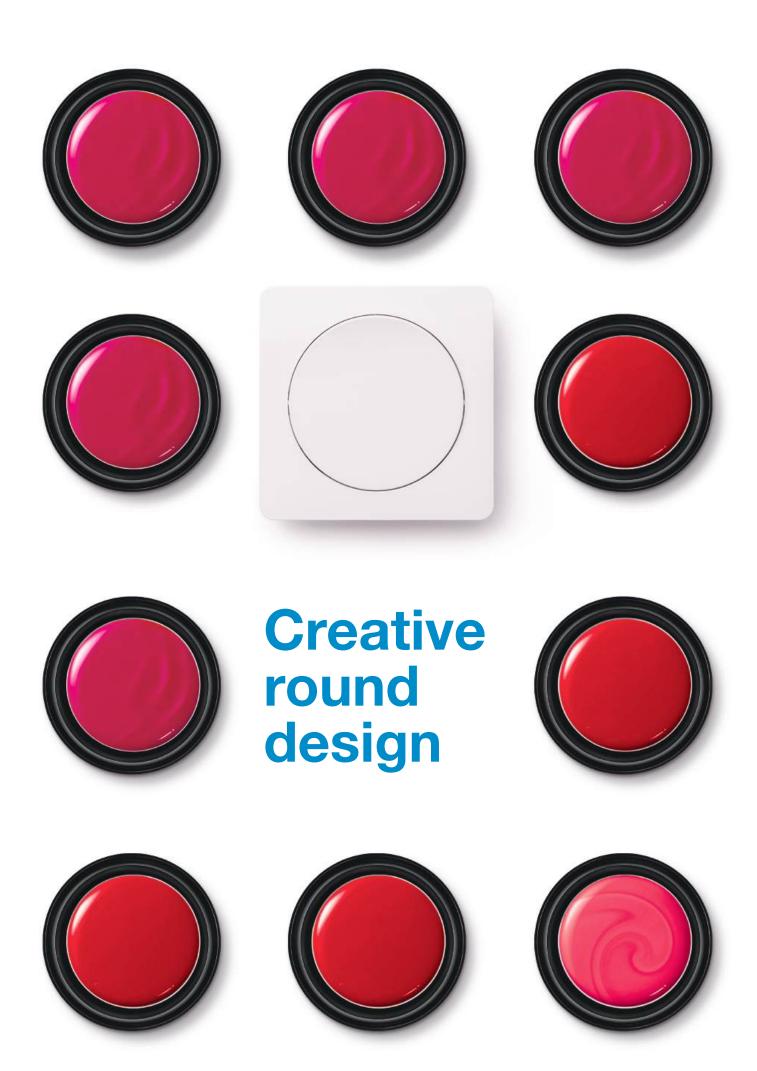


#### 2018

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















#### **Exquisite design**

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





## Delicate chamfering

Good design lies in every detail.
Creative and delicate idea brings
excellence to our living and working
spaces.

#### **Multicolor options**

Many choices to fit your ideas: white, aurora silver, noble bronze, knight black, and elegant gold.





#### The unique brand

Individuality need not to be displayed but it is an expression of your character. The hager brand is exquisitely and uniquely located on the side, offering the product boundless space for expression and letting the essence of beauty blend with the quality of life.



#### **Consistent in size**

In accordance with the highest standard, the switch and socket are consistent in size, offering flexible interchange-ability.



#### 13A 3 pin socket with USB charger

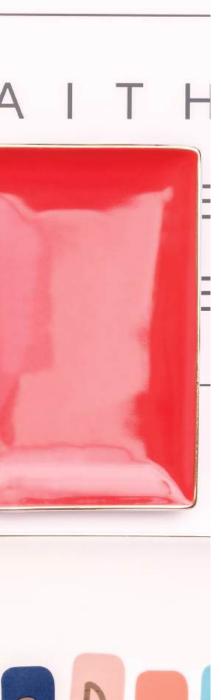
The socket is equipped with two 2.4A USB chargers, which intelligently adapt to mobile devices with different power consumptions, ensuring safety and fast charging.

# Multi gang frame

Conjoined switch, socket and data combination, a delight on the wall, convenient and beautiful.









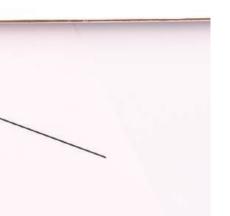
## Switch equipped with fluorescent indicator

The switch is dotted with rays of light like twinkling stars, waiting quietly for its guests to enter.
Responding to your fingertip, it makes the home bright.



#### IP55 waterproof cover

Ensuring safety against water and dust ingress when operating in wet and dusty areas.





#### **Quick installation**

The mounting bracket has superior strength and rigidity. It is suitable for all kinds of installation conditions.

#### U type screwed terminals

Capacity of terminal can fit 2 x 4mm<sup>2</sup> or 3 x 2.5mm<sup>2</sup> flexible/ rigid cable. However, it is easy for wiring and faster for installation.









#### **USB** charger

4.2A, 5V charger with 1 Type C and 2 Type A port suits most portable electronic devices.

No need for extra charger, with only USB cables.

Up to 3 devices can be charged simultaneously. Easy and convenient to use.





## 16AX reliable and high performance

#### **Mechanical switch**

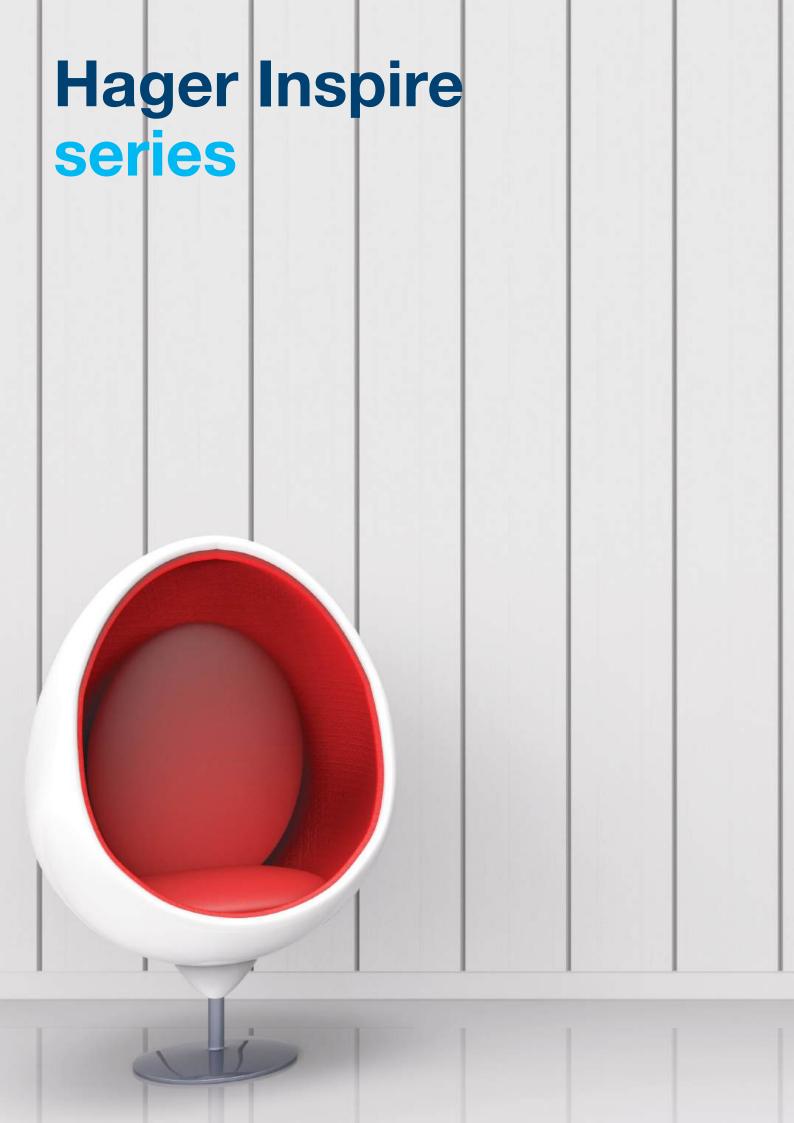
Rated current: 16AX Rated Power: 4000W

The load capacity of switch is stronger, for better performance in increasing demanding installation.

## Identification for power

Delayed power off is built-in, which save power in a smart way. The insert tag switch has LED indicator, which makes it easy for you to find the slot in the dark. After power on, the indicator will turn off automatically.





Index	Page
Switches	18-19
Dimmer and fan controller switches	19
Double pole control switches	20
13A socket outlets	21
15A and 16A socket outlets	22
Communication and data	23
Hotel range	24
Others	25
Product standard	26
Ingress protection	29
Circuit diagram	30
Success cases	34
Notes	38

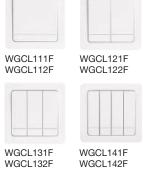


- Complies with IEC 60669-1 CB certificate
- 'AX' rated No need to derate for fluorescent loads
- 10 AX (100W Self Ballasted Lamp (SBL))
- (200W Self Ballasted Lamp (SBL))
- Supplied with M3.5 x 37  $_{\mbox{\scriptsize mm}}$ long fixing screws
- Capacity of each terminal:  $3 \times 1.5 \text{ mm}^2$
- 2 X 2.5 mm<sup>2</sup>
- Two way switches can be wired either 1 way or 2 way
- Terminal markings denote:

L1 = one way L2 = two way С = common

- Material: Polycarbonate

		0 0						
		Description	Pack qty.	Cat. Ref. White	Cat. Ref. Aurora Silver	Cat. Ref. Noble Bronze	Cat. Ref Knight Black	Cat. Ref Elegant Gold
		Large dolly switch 16AX, 1 gang 1 way	10	WGCL111	WGCXL111AS	WGCXL111NB	WGCXL111KB	WGCXL111EG
		16AX, 1 gang 2 way	10	WGCL112	WGCXL112AS	WGCXL112NB	WGCXL112KB	WGCXL112EG
WGCL111 WGCL112	WGCL121 WGCL122	16AX, 2 gang 1 way	10	WGCL121	WGCXL121AS	WGCXL121NB	WGCXL121KB	WGCXL121EG
		16AX, 2 gang 2 way	10	WGCL122	WGCXL122AS	WGCXL122NB	WGCXL122KB	WGCXL122EG
		16AX, 3 gang 1 way	10	WGCL131	WGCXL131AS	WGCXL131NB	WGCXL131KB	WGCXL131EG
WOOLAN	Woolda	16AX, 3 gang 2 way	10	WGCL132	WGCXL132AS	WGCXL132NB	WGCXL132KB	WGCXL132EG
WGCL131 WGCL132	WGCL141 WGCL142	16AX, 4 gang 1 way	10	WGCL141	WGCXL141AS	WGCXL141NB	WGCXL141KB	WGCXL141EG
		16AX, 4 gang 2 way	10	WGCL142	WGCXL142AS	WGCXL142NB	WGCXL142KB	WGCXL142EG
		Large dolly switch			W00VI 444E40	W00VI 444END	W00VI 444EVD	W00VI 444EE0
		16AX, 1 gang 1 way	10	WGCL111F	WGCXL111FAS	WGCXL111FNB	WGCXL111FKB	WGCXL111FEG
		16AX, 1 gang 2 way	10	WGCL112F	WGCXL112FAS	WGCXL112FNB	WGCXL112FKB	WGCXL112FEG



Large dolly switch w	vith flu					
16AX, 1 gang 1 way	10	WGCL111F	WGCXL111FAS	WGCXL111FNB	WGCXL111FKB	WGCXL111FEG
16AX, 1 gang 2 way	10	WGCL112F	WGCXL112FAS	WGCXL112FNB	WGCXL112FKB	WGCXL112FEG
16AX, 2 gang 1 way	10	WGCL121F	WGCXL121FAS	WGCXL121FNB	WGCXL121FKB	WGCXL121FEG
16AX, 2 gang 2 way	10	WGCL122F	WGCXL122FAS	WGCXL122FNB	WGCXL122FKB	WGCXL122FEG
16AX, 3 gang 1 way	10	WGCL131F	WGCXL131FAS	WGCXL131FNB	WGCXL131FKB	WGCXL131FEG
16AX, 3 gang 2 way	10	WGCL132F	WGCXL132FAS	WGCXL132FNB	WGCXL132FKB	WGCXL132FEG
16AX, 4 gang 1 way	10	WGCL141F	WGCXL141FAS	WGCXL141FNB	WGCXL141FKB	WGCXL141FEG
16AX, 4 gang 2 way	10	WGCL142F	WGCXL142FAS	WGCXL142FNB	WGCXL142FKB	WGCXL142FEG



WGCR111 WGCR112

WGCR121 WGCR122

WGCR131 WGCR132

Round switch 16AX, 1 gang 1 way	10	WGCR111	WGCXR111AS	WGCXR111NB	WGCXR111KB	WGCXR111EG
16AX, 1 gang 2 way	10	WGCR112	WGCXR112AS	WGCXR112NB	WGCXR112KB	WGCXR112EG
16AX, 2 gang 1 way	10	WGCR121	WGCXR121AS	WGCXR121NB	WGCXR121KB	WGCXR121EG
16AX, 2 gang 2 way	10	WGCR122	WGCXR122AS	WGCXR122NB	WGCXR122KB	WGCXR122EG
16AX, 3 gang 1 way	10	WGCR131	WGCXR131AS	WGCXR131NB	WGCXR131KB	WGCXR131EG
16AX, 3 gang 2 way	10	WGCR132	WGCXR132AS	WGCXR132NB	WGCXR132KB	WGCXR132EG



- Complies with IEC 60669-1 CB certificate
- 10 AX (100W Self Ballasted Lamp (SBL) )
- Supplied with M3.5 x 37  $_{\mbox{\scriptsize mm}}$  long fixing screws
- Capacity of each terminal:  $3 \times 1.5 \text{ mm}^2$   $2 \times 2.5 \text{ mm}^2$
- Material: polycarbonate

		Description	Pack qty.	Cat. Ref. White	Cat. Ref. Aurora	Cat. Ref.	Cat. Ref Knight	Cat. Ref Elegant
			qıy.	VVIIILE	Sliver	Bronze	Black	Gold
		Large dolly s 10AX, 1 gang intermediate	switch 10	WGCL113	WGCXL113AS	WGCXL113NB	WGCXL113KB	WGCXL113EG
WGCL113	WGCL111B	10A, 1 gang bell switch mark bell sym	10 nbol	WGCL111B	WGCXL111BAS	WGCXL111BNB	WGCXL111BKB	WGCXL111BEG
WGCL111E		10A, 1 gang press switch mark "EXIT"	10	WGCL111E	WGCXL111EAS	WGCXL111ENB	WGCXL111EKB	WGCXL111EEG
		Press switch 10A, 1 gang	10	WGCL111P	WGCXL111PAS	WGCXL111PNB	WGCXL111PKB	WGCXL111PEG
		10A, 2 gang	10	WGCL121P	WGCXL121PAS	WGCXL121PNB	WGCXL121PKB	WGCXL121PEG
WGCL111P	WGCL121P	10A, 3 gang	10	WGCL131P	WGCXL131PAS	WGCXL131PNB	WGCXL131PKB	WGCXL131PEG
		10A, 4 gang	10	WGCL141P	WGCXL141PAS	WGCXL141PNB	WGCXL141PKB	WGCXL141PEG
WGCL131P	WGCL141P							
		Press round 10A, 1 gang	switch	WGCR111P	WGCXR111PAS	WGCXR111PNB	WGCXR111PKB	WGCXR111PEG
		10A, 2 gang	10	WGCR121P	WGCXR121PAS	WGCXR121PNB	WGCXR121PKB	WGCXR121PEG
WGCR111P	WGCR121P	10A, 3 gang	10	WGCR131P	WGCXR131PAS	WGCXR131PNB	WGCXR131PKB	WGCXR131PEG

#### **Hager Inspire**

WGCR131P

#### Dimmer and fan controller switches

- Supplied with M3.5 x 37  $_{\mbox{\scriptsize mm}}$ - Complies with - Capacity of each terminal: - Material: Polycarbonate IEC 60669-2-1 long fixing screws  $3 \times 1.5 \text{ mm}^2$ Description Pack Cat. Ref. Cat. Ref. Cat. Ref. Cat. Ref Cat. Ref qty. White Knight Aurora Noble Elegant Sliver Black Gold Bronze Fan control 250VA, single 6 WGCEFR250 WGCXEFR250AS WGCXEFR250NB WGCXEFR250KB WGCXEFR250EG Dimmer 40-500W WGCEDR500 WGCXEDR500AS WGCXEDR500NB WGCXEDR500KB WGCXEDR500EG WGCEFR250 WGCEDR500 single, 2 way

Remark: Blue reference product - only available under special request

#### **Hager Inspire**

#### Double pole control switches



Abbreviation ws

WM WH

- Material: Polycarbonate

- Complies with IEC 60669-1 CB certificate

- 20 AX (250W Self Ballasted Lamp (SBL))

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

Pack Cat. Ref.

Description

- Capacity of each terminal: **20AX** 

L, N, E: 2 x 4 mm<sup>2</sup>

32A, 45A

 $L, N : 2.5 \text{ mm}^2 \sim 16 \text{ mm}^2$ E x 2: 2.5 mm<sup>2</sup> ~ 16 mm<sup>2</sup>

Cat. Ref. Cat. Ref Cat. Ref. Cat. Ref



White Aurora Noble Knight Elegant Silver Black Gold Bronze

DP switch with LED WGCL2D1N WGCXL2D1NAS WGCXL2D1NNB WGCXL2D1NKB WGCXL2D1NEG 20AX, 1 gang 10 WGCL2D2N WGCXL2D2NAS WGCXL2D2NNB WGCXL2D2NKB WGCXL2D2NEG 20AX, 2 gang 10 20AX, 1 gang 10 WGCL2D12N WGCXL2D12NAS WGCXL2D12NNB WGCXL2D12NKB WGCXL2D12NEG 2 way

Special marks	Abbreviation	Special marks	Abbreviation	Special marks A
"AIR CONDITONER"	AC	"HOB"	HB	"WASHER"
"DISH WASHER"	DW	"HOOD"	HD	"WASHING MACHINE"
"DRYER"	DR	"MICROWAVE"	MW	"WATER HEATER"
"FRIDGE"	FR	"OVEN"	OV	

Example: "WATER HEATER" WH

20AX 1 gang WGCL2D1WH WGCXL2D1ASWH WGCXL2D1NBWH WGCXL2D1KBWH WGCXL2D1EGWH



Control switch with LED WGCXR32D1AS WGCXR32D1NB WGCXR32D1KB WGCXR32D1EG 32A DP WGCR32D1 45A DP 8 WGCR45D1 WGCXR45D1AS WGCXR45D1NB WGCXR45D1KB WGCXR45D1EG

Remark: Blue reference product - only available under special request



-	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 mm<sup>2</sup> or
- USB output current 2.4A (Max)

- Integral rocker design of

clear red 'on' indication

switched sockets provides

- Material: Polycarbonate

2 X 4.0 mm<sup>2</sup>

Description Pack Cat. Ref. White

Cat. Ref. Aurora Silver

Cat. Ref. Noble Bronze

Cat. Ref Knight Black

Cat. Ref Elegant Gold





13A single 10

**WGCS113S** 

WGCXS113SAS WGCXS113SNB WGCXS113SKB WGCXS113SEG







switched

10 WGCS113SN

WGCXS113SNAS WGCXS113SNNB WGCXS113SNKB WGCXS113SNEG



WGCS113SUSB

13A single

13A single

switched

w/ LED

WGCS113SUSB WGCXS113SUSBAS WGCXS113SUSBNB WGCXS113SUSBKB WGCXS113SUSBEG

switched

+ 2 x USB chargers

14

**WGCS213S** 

WGCXS213SAS WGCXS213SNB WGCXS213SKB WGCXS213SEG





switched 13A twin switched

w/ LED

13A twin

WGCS213SN

WGCXS213SNAS WGCXS213SNNB WGCXS213SNKB WGCXS213SNEG

**WGCS213S** WGCS213SN

13A twin switched

WGCS213SUSB WGCXS213SUSBAS WGCXS213SUSBNB WGCXS213SUSBKB WGCXS213SUSBEG

+ 2 x USB chargers



WGCS213SUSB

Remark: Grey reference product - coming soon

## Hager Inspire 15A and 16A socket outlets



- Complies with BS 546 (15A sockets) SS 472 (15A sockets) IEC 60884-1 (16A German socket) (Euro-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

		Description		Cat. Ref. White	Cat. Ref. Aurora Silver	Cat. Ref. Noble Bronze	Cat. Ref Knight Black	Cat. Ref Elegant Gold
		15A round pin switched	10	WGCS115S	WGCXS115SAS	WGCXS115SNB	WGCXS115SKB	WGCXS115SEG
WGCS115S	WGCS116S	16A German socket w/ shutter	8	WGCS116S	WGCXS116SAS	WGCXS116SNB	WGCXS116SKB	WGCXS116SEG
4,	•••	16A single Euro-American	10	WGCS116EA	WGCXS116EAAS	WGCXS116EANB	WGCXS116EAKB	WGCXS116EAEG
WGCS116EA	WGCS216EA	16A twin Euro-American	10	WGCS216EA	WGCXS216EAAS	WGCXS216EANB	WGCXS216EAKB	WGCXS216EAEG



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

- Material: Polycarbonate

		Description		Cat. Ref. White	Cat. Ref. Aurora Silver	Cat. Ref. Noble Bronze	Cat. Ref Knight Black	Cat. Ref Elegant Gold
2		RJ11 outlet 1 mod	10	WGCT1RJ	WGCXT1RJAS	WGCXT1RJNB	WGCXT1RJKB	WGCXT1RJEG
WGCT1RJ	WGCT2BJ	2 mod	10	WGCT2RJ	WGCXT2RJAS	WGCXT2RJNB	WGCXT2RJKB	WGCXT2RJEG
Waarina	Wasterio	RJ45 outlet	loos	o plato				
-		1 mod	20	•	WGCXT1RJ6LPAS	WGCXT1RJ6LPNB	WGCXT1RJ6LPKB	WGCXT1RJ6LPEG
WGCT1RJ6LP	WGCT1RJ6LPNM	1 mod without symbo	20 I	WGCT1RJ6LPNM	WGCXT1RJ6LPNMAS	WGCXT1RJ6LPNMNB	WGCXT1RJ6LPNMKB	WGCXT1RJ6LPNMEG
		2 mod	20	WGCT2RJ6LP	WGCXT2RJ6LPAS	WGCXT2RJ6LPNB	WGCXT2RJ6LPKB	WGCXT2RJ6LPEG
8 8		2 mod without symbo	20 I	WGCT2RJ6LPNM	WGCXT2RJ6LPNMAS	WGCXT2RJ6LPNMNB	WGCXT2RJ6LPNMKB	WGCXT2RJ6LPNMEG
WGCT2RJ6LP	WGCT2RJ6LPNM							
		RJ45 cat6 o 1 mod	utlet 10	WGCT1RJ6	WGCXT1RJ6AS	WGCXT1RJ6NB	WGCXT1RJ6KB	WGCXT1RJ6EG
		1 mod without symbo	10 I	WGCT1RJ6NM	WGCXT1RJ6NMAS	WGCXT1RJ6NMNB	WGCXT1RJ6NMKB	WGCXT1RJ6NMEG
WGCT1RJ6	WGCT1RJ6NM	2 mod	10	WGCT2RJ6	WGCXT2RJ6AS	WGCXT2RJ6NB	WGCXT2RJ6KB	WGCXT2RJ6EG
	==	2 mod without symbo	10 I	WGCT2RJ6NM	WGCXT2RJ6NMAS	WGCXT2RJ6NMNB	WGCXT2RJ6NMKB	WGCXT2RJ6NMEG
WGCT2RJ6	WGCT2RJ6NM							
		RJ45 cat5e	outle	<u></u>				
NH H		1 mod	10	WGCT1RJ5	WGCXT1RJ5AS	WGCXT1RJ5NB	WGCXT1RJ5KB	WGCXT1RJ5EG
WGCT1RJ5	WGCT2RJ5	2 mod	10	WGCT2RJ5	WGCXT2RJ5AS	WGCXT2RJ5NB	WGCXT2RJ5KB	WGCXT2RJ5EG
2 9		<b>RJ11 + RJ4</b> 2 mod			WGCXT2RJRJ5AS	WGCXT2RJRJ5NB	WGCXT2RJRJ5KB	WGCXT2RJRJ5EG
WGCT2RJRJ5 WGCT2RJRJ6		<b>RJ11 + RJ4</b> 5 2 mod			WGCXT2RJRJ6AS	WGCXT2RJRJ6NB	WGCXT2RJRJ6KB	WGCXT2RJRJ6EG
v 9	120	TV inlet/out			WGCXT2TVRJ5AS	WGCXT2TVRJ5NB	WGCXT2TVRJ5KB	WGCXT2TVRJ5EG
WGCT2TVRJ5	WGCT1TV	TV inlet/out		WGCT1TV	WGCXT1TVAS	WGCXT1TVNB	WGCXT1TVKB	WGCXT1TVEG
• 1	481	TV inlet/out 2 mod		R45 cat6 (DAT WGCT2TVRJ6	•	WGCXT2TVRJ6NB	WGCXT2TVRJ6KB	WGCXT2TVRJ6EG
WGCT2TVRJ6	WGCT1TVF	<b>TV outlet, F</b> 1 mod		WGCT1TVF	WGCXT1TVFAS	WGCXT1TVFNB	WGCXT1TVFKB	WGCXT1TVFEG
• III		TV outlet, F 1 mod		+ R45 Cat6 (D. WGCT2TVFRJ6		WGCXT2TVFRJ6NB	WGCXT2TVFRJ6KB	WGCXT2TVFRJ6EG



<ul> <li>Complies with</li> </ul>
IEC 60669-1
IEC 60669-2-1
IEC 62368-1 (USB

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

- Material: Polycarbonate

		Description		Cat. Ref. White	Cat. Ref. Aurora Silver	Cat. Ref. Noble Bronze	Cat. Ref Knight Black	Cat. Ref Elegant Gold
WGCHDC		16AX DND & MUR with LED (Indoor)	10	WGCHDC	WGCXHDCAS	WGCXHDCNB	WGCXHDCKB	WGCXHDCEG
	- •	USB charger USB charger 4.2A (1 x type 0 + (2 x type A)	8	WGCS3USB	WGCXS3USBAS	WGCXS3USBNB	WGCXS3USBKB	WGCXS3USBEG
WGCS3USB	WGCHUSB35	USB + 3.5mr	<b>n aud</b> 10	io WGCHUSB35	WGCXHUSB35AS	WGCXHUSB35NB	WGCXHUSB35KB	WGCXHUSB35E0
-		Emergency	switch 8	WGCEE1	WGCXEE1AS	WGCXEE1NB	WGCXEE1KB	WGCXEE1EG
WGCEE1	WGCEA6	<b>Audio switch</b> 6W	<b>1</b> 6	WGCEA6	WGCXEA6AS	WGCXEA6NB	WGCXEA6KB	WGCXEA6EG
ELECTRIC OUT		Shaver sock 115/230V	<b>et</b> (wit 1	h frame for co	olor products) WGCXHSRAS	WGCXHSRNB	WGCXHSRKB	WGCXHSREG
WGCHSR		16A key tag - mechanical	6	WGCHKTM	WGCXHKTMAS	WGCXHKTMNB	WGCXHKTMKB	WGCXHKTMEG
		16A key tag - RFID	6	WGCHKTRFID	WGCXHKTRFIDAS	WGCXHKTRFIDNB	WGCXHKTRFIDKB	WGCXHKTRFIDEG
WGCHKTM	WGCHKTRFID							



		Description		Cat. Ref. White	Cat. Ref. Aurora Silver	Cat. Ref. Noble Bronze	Cat. Ref Knight Black	Cat. Ref Elegant Gold
WGCCH2KB		Multi-gang f 2 gang horizontal	f <b>rame</b> 18	WGCCH2	WGCCH2AS	WGCCH2NB	WGCCH2KB	WGCCH2EG
	/GCCV2NB	2 gang vertical	18	WGCCV2	WGCCV2AS	WGCCV2NB	WGCCV2KB	WGCCV2EG
	WGCCV3	3 gang horizontal	12	WGCCH3	WGCCH3AS	WGCCH3NB	WGCCH3KB	WGCCH3EG
WGCCH3NB	_	3 gang vertical	12	WGCCV3	WGCCV3AS	WGCCV3NB	WGCCV3KB	WGCCV3EG
WGCCH4		4 gang horizontal	12	WGCCH4	WGCCH4AS	WGCCH4NB	WGCCH4KB	WGCCH4EG
		5 gang horizontal	9	WGCCH5	WGCCH5AS	WGCCH5NB	WGCCH5KB	WGCCH5EG
WGCCH5KB								
		Blank plate 1 gang	20	WGCBP1	WGCXBP1AS	WGCXBP1NB	WGCXBP1KB	WGCXBP1EG
WGCBP1	WGCVE2	Accomodation 2 modules	ion pla 14	te WGCVE2	WGCVE2AS	WGCVE2NB	WGCVE2KB	WGCVE2EG
		Remark: Gr	ey refe	rence produ	ct - coming soon	1		
		Single frame	<b>e</b> 25	WGCC2	WGCC2AS	WGCC2NB	WGCC2KB	WGCC2EG
WGCC2		1 gang square	40	WGCC1S	WGCC1SAS	WGCC1SNB	WGCC1SKB	WGCC1SEG
		1 gang round	40	WGCC1R	WGCC1RAS	WGCC1RNB	WGCC1RKB	WGCC1REG
WGCC1S	WGCC1R							
		WA covers ( IP55 single size		parent) XC9003				

Remark: Blue reference product - only available under special request

XC9004

IP55 twin size

XC9004

XC9003



#### 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 installations with particular requirements for timedelay switches (TDS)		
Frames and plates	BS 5733	Switches for household and similar fixed electrical installations 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 MS1577	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 installations		
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 V a.c. and 1500 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	[ <del>/</del> ]	Protected against solid objects greater than 50mm
2	[ ]	Protected against solid objects greater than 12.5mm
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	3	Protected against dripping water when tilted up to 15°
3	7	Protected against spraying water
4	3	Protected against splashing water
5	• 7	Protected against water jets
6	<b>* * *</b>	Protected against heavy seas
7	15 cm	Protected against the effect of immersion
8	<b>I</b>	Protected against submersion

#### Additional letter (in option)

Protection of people against access to dangerous parts

	Description
A	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

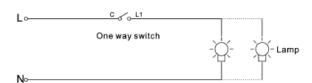
#### Additional letter (in option)

Specific information on the product

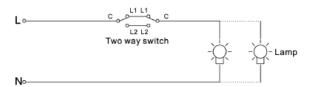
	Description
Н	High voltage material
M	Movements during water test
S	Stationary during water test
W	Bad weather

## Hager Inspire Circuit diagram

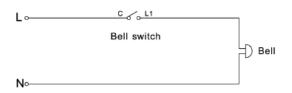
#### One way switch



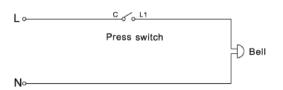
#### Two way switch



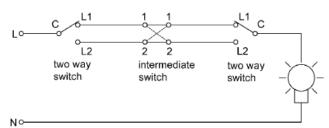
#### Marked BELL switch



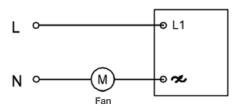
#### Marked PRESS switch



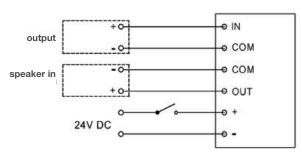
#### Intermediate switch



#### Fan control

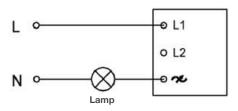


#### Audio switch

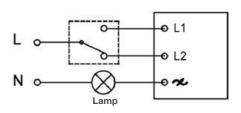


#### Dimmer switch

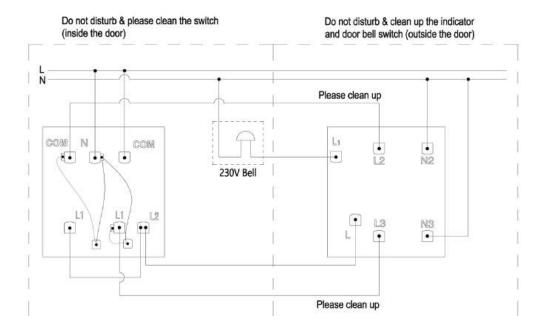
#### 1. One way connection



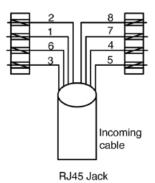
#### 2. Two way connection



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)



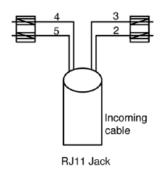
RJ45 Computer module cable diagram EIA/TIA 568B (Compliance to EIA/TIA 568-C-2)



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 White/Brown 7 White/Brown 8 Brown Brown

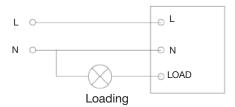
RJ11 Telephone plug-in module cable diagram



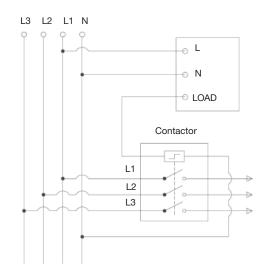
RJ11 Jack pin.

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

#### Key card Direct load



### **Key card**Connected 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







Hager Electro Systems Pte Ltd 12, Tai Seng Street, #06-01B, Luxasia Building, Singapore 534118

Tel: +(65) 6383 1030 Fax: +(65) 6383 0230 Email: sales@hager.sg

hager.sg