

1SXF-610007C0201 02-2008





## € ABB Group

ABB ([www.abb.com](http://www.abb.com)) is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impacts. The ABB Group of companies operates in around 100 countries and employs about 111,000 people worldwide.

## € ABB Electrical Wiring Accessories (EWA)

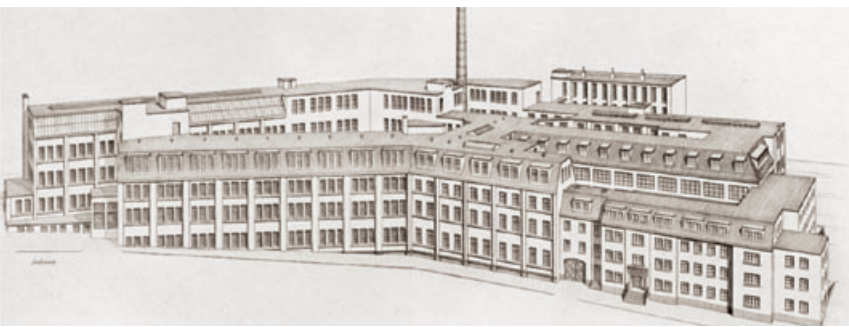
ABB first started EWA production and development in Germany over 125 years ago. In 1879 Hans-Curt Jaeger together with his brother Georg founded a metal ware factory in Luedenscheid, Germany which later became the market leader in Electrical Wiring Accessories in Germany under the brand name of Busch-Jaeger Elektro. In 1969 Busch-Jaeger became part of BBC (today, the ABB Group) selling over 5,700 types of products to countries all over the world.

Based on this history ABB is now producing EWA products in over 10 factories, achieving market leading position in many markets around the globe.



**concept in  
every detail**

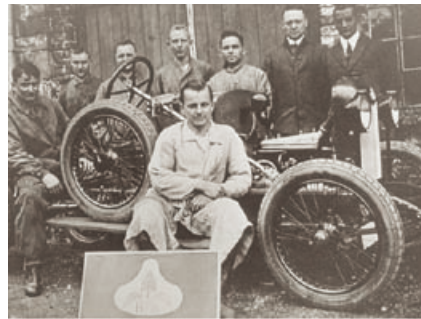




## € Concept in every detail

For over 125 years our products have mirrored the growth and development changes in electrical wiring technologies. Quality and reliability of our products have always been our first priority. Having a concept in every detail was, is and always will be our secret to success.

With its unique design – its square rocker combined with a slight curve on the top and bottom – *concept bs* is the best choice to meet your pursuit of EWA products with high quality and attractive design.



# concept bs series

Based on the profound experience, R&D and production know-how of Busch-Jaeger Germany, this new *concept bs* series is especially developed for British standard markets offering a wide product portfolio with all kinds of products from switches and socket outlets to electronic products such as dimmers, motion detectors and EIB / KNX products.

## Features of *concept bs*



### Excellent materials for durability

High quality PC material with improved flame-retardant characteristics is used, which is flexible and will not deform or change color even after long-term use or prolonged exposure to direct sunlight.

### Big square rocker, unique design

With its unique design - its square rocker combined with a slight curve on the top and bottom - *concept bs* is the perfect fit for any interior design.



### Silver alloy contacts

Silver-nickel alloy contacts have the advantage of low resistance and increased electrical conductivity to ensure excellent performance over a long life-span.

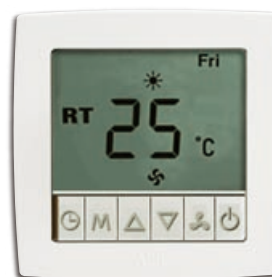
*concept bs* switches are available in 10AX and 20AX versions allowing connection to high fluorescent loads.



### LED indicator light

All switches use LED light indicators combining the attribute of low electricity consumption with the longevity of over 100,000 operating hours.

The decorative line uses combined moulding technology, allowing the perfect shape for the LED light.



### 2/4 pipe fan coil controller

Available in the same style and color as the whole EWA series using an ultra - big LCD with blue background - simple to read & easy to use. Our Temperature controller will automatically reduce the fan speed the closer the temperature comes to the set point to save energy and increase comfort for the user. Via its additional contact, the room temperature controller can be switched on and off e.g. via a card switch in a hotel or via EIB/KNX system.



### Thin design, easy installation

The thickness of the functional part is only 1.2 cm, which allows more space inside the wallbox for wiring connections. In addition our products can also be installed in thinner walls.

**concept in**  
every detail



## € Features of *concept bs*



### Wide variety of socket outlets

For all kinds of requirements. All sockets are equipped with shutters for increased safety. All the sockets are equipped with shutters. Switched and unswitched versions with and without neon. 13A and 15A British standard, international and Euro American socket outlet.



### More safety with *concept bs* surge protection products

Surge protection is available for international, computer and telephone socket outlets. *concept bs* surge protection devices help to safeguard from the risk of personal injury and/or damage to equipment resulting from lightning strikes or voltage surges.



### Hospitality range

*concept bs* also offers a wide range of products such as night light, shaver socket outlet, volume control, key card switch with time delay and doorbell switch. The doorbell switch can be customized with "Do Not Disturb", "Make Up Room" and "Please Wait" markings and indicators.



### Wide variety of data communication outlets

For all kinds of applications in one gang and two gang versions. The labeling field avoids confusion in a structured PC Network. The *concept bs* series provides both cat. 5e and cat. 6 computer socket outlets to meet present customer expectations.

concept bs series: the best solution for your hotel

ABB offers products to fulfill the high expectations of owners and guests in all main areas such as guest rooms, restaurants, meeting rooms, corridors and lobbies.

Small capacity loads in rooms or restaurants, as well as large loads in lobbies can be controlled with ABB's assortment of dimmers. Whether installed on a DIN rail in an enclosure like the 4x2A or 8x1A multi-channel dimmer or just flush-mounted at the bedside, you can be sure we have the right kind of dimmer for your application to ensure a comfortable atmosphere, while simultaneously saving energy. In the corridors, presence detectors can be used to fulfill this requirement.

In conference rooms, a remote control helps the presenter to set the right scene for their speech, presentation or meeting and allows control of light, electric shutters and blinds or presentation screens from all areas of the room.



**AC411 Countdown timer switch**

One contact is attached to a time delay switch with a range from 0 to 120 minutes that stops the fan automatically after the set time. The other contact can be used to control the bathroom lamp, via the switch.



**AC417/AC420 Fan coil controller**

- same style and colour, flush-mounted like the switches
- available in 2-pipe or 4-pipe version
- ultra-big LCD screen with blue background
- automatic temperature and fan speed adjustment to reduce energy
- additional contact to switch on/off e.g. via the card switch or via EIB / KNX system.



**AC401 Shaver socket outlet**



**AC321 Telephone outlet, RJ11, 4-pole UTP**



**AC102 2 gang 1 way switch**



**AC402 Card switch**

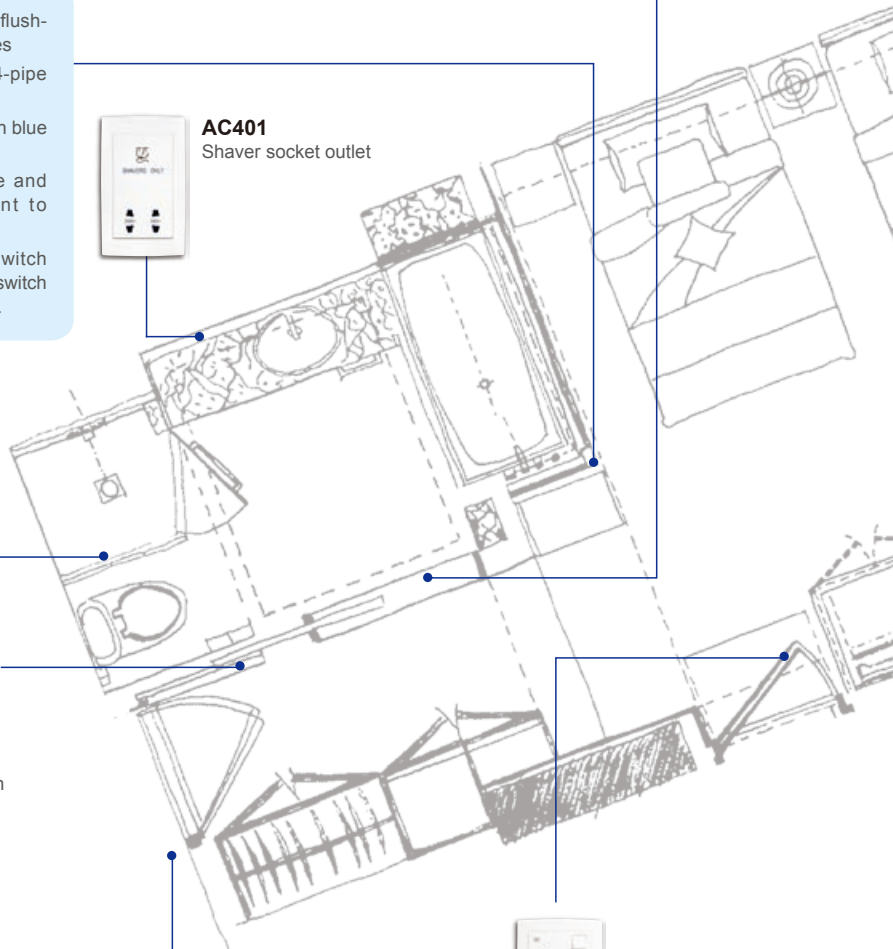


**AC403 Doorbell switch**

The doorbell switch can be customized with "Do Not Disturb", "Please Clean Room", "Please Wait" markings and indicators.



**AC229 BS switched socket outlet with neon**





**AC229 BS switched socket outlet with neon**

Wide variety of socket outlets

- all the sockets are equipped with shutters
- switched and unswitched versions with and without neon
- 13A and 15A British standard, international and Euro American socket outlet.



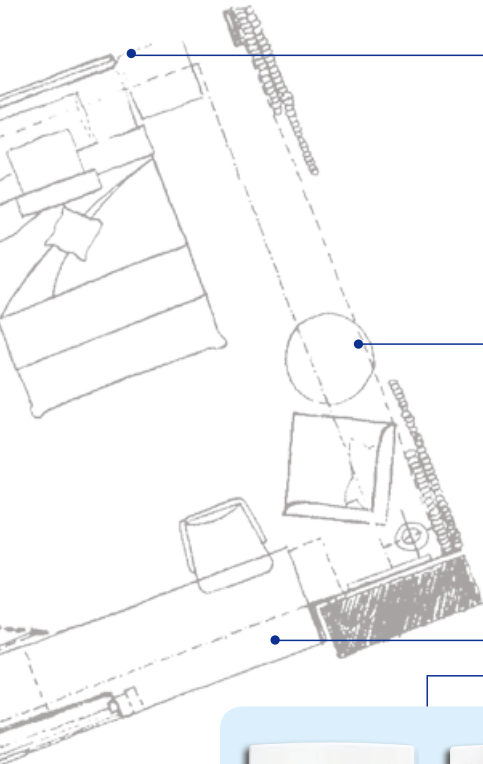
**AC102**  
2 gang 1 way switch



**AC101**  
1 gang 1 way switch



**AC323**  
Telephone outlet RJ11, 4-pole & computer outlet RJ45 cat. 5e, 8-pole UTP



**AC229**  
BS switched socket outlet with neon



**AC301**  
1 gang TV outlet, dead-end feeder



**AC290**  
Universal socket outlet with surge protection



**AC326**  
1 gang telephone outlet with surge protection UTP

A hotel brings many different nationalities together from all over the world. Laptops and electronic devices with various configurations can be plugged into the universal socket outlet with surge protection. To help safeguard from the risk of personal injury and/or damage to equipment resulting from lightning strikes, PC and telephone outlets with surge protection can be used.







**AC5201(AC101+AC229)**  
2 gang frame concept bs



**AC102**  
2 gang 1 way switch



## ABB Switches

	Type	Colour	Description	Rated current		Type	Colour	Description	Rated current
	AC101	white	1 gang 1 way switch	10AX		AC103	white	3 gang 1 way switch	10AX
	AC101-S	silver				AC103-S	silver		
	AC105	white	1 gang 2 way switch	10AX		AC107	white	3 gang 2 way switch	10AX
	AC105-S	silver				AC107-S	silver		
	AC119	white	Intermediate switch	10AX		AC116	white	3 gang 1 way switch	16AX
	AC119-S	silver				AC116-S	silver		
	AC110	white	1 gang 1 way switch	20AX					
	AC110-S	silver							
	AC112	white	1 gang 2 way switch	20AX		AC104	white	4 gang 1 way switch	10AX
	AC112-S	silver				AC104-S	silver		
	AC111	white	1 gang 1 way double pole switch, with marking "On"	20AX		AC108	white	4 gang 2 way switch	10AX
	AC111-S	silver				AC108-S	silver		
	AC430	white	1 gang 1 way push switch	10A		AC117	white	4 gang 1 way switch	16AX
	AC430-S	silver				AC117-S	silver		
	AC102	white	2 gang 1 way switch	10AX					
	AC102-S	silver							
	AC106	white	2 gang 2 way switch	10AX					
	AC106-S	silver							
	AC114	white	2 gang 1 way switch	20AX					
	AC114-S	silver							
	AC115	white	2 gang 2 way switch	20AX					
AC115-S	silver								
	AC113	white	2 gang 1 way double pole switch, with marking "On"	20AX					
	AC113-S	silver							
	AC438	white	2 gang 1 way push switch	10A					
	AC438-S	silver							





Type	Colour	Description	Rated current
AC429	white	Push switch with "bell" symbol	10A
AC429-S	silver		



AC161	white	1 gang 1 way switch with LED/decorative line	10AX
AC161-S	silver		

AC164	white	1 gang 2 way switch with LED/decorative line	10AX
AC164-S	silver		

AC170	white	1 gang 1 way switch with LED/decorative line	20AX
AC170-S	silver		

AC172	white	1 gang 2 way switch with LED/decorative line	20AX
AC172-S	silver		

AC171	white	1 gang 1 way double pole switch with LED/decorative line and marking "On"	20AX
AC171-S	silver		

AC171WH	white	1 gang 1 way double pole switch with LED/decorative line and marking "On" and "water heater"	20AX
AC171WH-S	silver		



Type	Colour	Description	Rated current
AC162	white	2 gang 1 way switch with LED/decorative line	10AX
AC162-S	silver		

AC165	white	2 gang 2 way switch with LED/decorative line	10AX
AC165-S	silver		

AC173	white	2 gang 1 way switch with LED/decorative line	20AX
AC173-S	silver		

AC174	white	2 gang 2 way switch with LED/decorative line	20AX
AC174-S	silver		






























AC163	white	3 gang 1 way switch with LED/decorative line	10AX
AC163-S	silver		

AC166	white	3 gang 2 way switch with LED/decorative line	10AX
AC166-S	silver		

AC175	white	3 gang 2 way switch with LED/decorative line	16AX
AC175-S	silver		

## ABB Socket outlets

Type	Colour	Description	Rated current	Type	Colour	Description	Rated current		
	AC208 AC208-S	white silver	BS socket outlet	13A		AC227 AS227-S	white silver	2 gang BS switched socket outlet	13A
	AC224 AC224-S	white silver	BS switched socket outlet	13A		AC212 AC212-S	white silver	2 gang Euro-American socket outlet	10A
	AC229 AC229-S	white silver	BS switched socket outlet with neon	13A		AC222 AC222-S	white silver	2 gang Euro-American switched socket outlet	10A
	AC209 AC209-S	white silver	BS round pin switched socket outlet	15A		AC234 AC234-S	white silver	2 gang Euro-American switched socket outlet with neon	10A
	AC231 AC231-S	white silver	BS round pin switched socket outlet with neon	15A		AC290 AS290-S	white silver	Universal socket outlet with surge protection	13A
	AC230 AS230-S	white silver	2 gang BS switched socket outlet with neon	13A					








Type	Colour	Description	Type	Colour	Description
	AC321 white AC321-S silver	1 gang telephone outlet, RJ11, 4-pole UTP		AC303 white AC303-S silver	Sat outlet, dead-end-feeder, isolated
	AC322 white AC322-S silver	2 gang telephone outlet, RJ11, 4-pole UTP		AC312 white AC312-S silver	TV & FM outlet, dead-end-feeder, isolated
 	AC326 white AC326-S silver	1 gang telephone outlet with surge protection UTP		AC302 white AC302-S silver	2 gang TV outlet, twin isolated, loop-through , isolated
	AC331 white AC331-S silver	1 gang computer outlet, RJ45 cat. 5e, 8-pole UTP		AC324 white AC324-S silver	TV & telephone outlet, UTP
	AC333 white AC333-S silver	1 gang computer outlet, RJ45 cat. 6, 8-pole UTP			
	AC332 white AC332-S silver	2 gang computer outlet, RJ45, cat. 5e, 8-pole UTP		AC341 white AC341-S silver	Audio outlet, 2 terminals
	AC323 white AC323-S silver	2 gang telephone outlet RJ11, 4-pole & computer outlet RJ45 cat. 5e, 8-pole UTP		AC342 white AC342-S silver	Audio outlet, 4 terminals
	AC301 white AC301-S silver	1 gang TV outlet, dead-end feeder			
	AC304 white AC304-S silver	1 gang TV outlet, loop-through, isolated			






**Surge protection products**

Safeguard from the risk of personal injury and/or damage to equipment resulting from lightning strikes or voltage surges and the loss of important data on your hard disk.

## ABB Hotel series

Type	Colour	Description	Rated current
 AC402 AC402-S	white silver	Card switch * Suitable for several loads, time delay: 30±5s	20A
 AC403-001 AC403-001-S	white silver	Bell push-switch "Do Not Disturb" marking and indicator	10A
 AC403-002 AC403-002-S	white silver	Bell push-switch "Do Not Disturb" & "Please Clean Room" marking and indicator	10A
 AC403 AC403-S	white silver	Bell push-switch "Do Not Disturb", "Please Clean Room" and "Please Wait" marking and indicator	10A
 AC401 AC401-S	white silver	Shaver socket outlet	
 AC406 AC406-S	white silver	Night light 5-10W, 230V~	
 Further hotel products with additional markings and indicators for "Do Not Disturb", "Make Up Room" and "Please Wait" are available upon special request			10AX









## ABB Accessories

Type	Colour	Description
 AC504 AC504-S	white silver	Blank plate
 AC503 AC503-S	white silver	1 gang adapter plate for Busch-Jaeger solo/future/carat/pure series
 AC5201 AC5201-S	white silver	2 gang frame <i>concept bs</i>










## ABB Floor sockets













Type	Material	Description	Type	Material	Description
 AC537 AC537-S	copper aluminium	2 gang telephone floor outlet RJ11, 4-pole	 AC536 AC536-S	copper aluminium	2 gang computer floor outlet, RJ45 cat. 5e, 8-pole & telephone floor outlet RJ11, 6-pole UTP
AC538 AC538-S	copper aluminium	2 gang computer floor outlet, RJ45 cat. 5e, 8-pole			

## ABB Function control switches

	Type	Colour	Description	Technical data	
	AC417	white	Thermostat controller with display, 2 pipe system	Rated power: 220W Sensor: NTC Temperature setting: 5°C-35°C	Temperature adjustment: ±1°C Depth: 25.5mm
	AC417-S	silver			
	AC420	white	Thermostat controller with display, 4 pipe system		
	AC420-S	silver			
	AC411	white	Countdown time switch, 1 gang 1 way	10AX, 250V~ Time setting: 0-120min Two separate switching contacts	
	AC411-S	silver			
	AC414	white	Touch type time delay switch	100W, 230V~ Time delay: 1-3min adjustable Short-circuit protection	
	AC414-S	silver			
	AC415	white	Sound and light control switch	100W, 230V~ Time delay: 1-3min adjustable Sound threshold: 60±5dB	Brightness threshold: 0-150Lux adjustable Short-circuit protection
	AC415-S	silver			
	AC416	white	Volume control switch	5-15W, (0-100)V~ With fire alarm terminal	
	AC416-S	silver			
	AC413	white	4 step fan regulator	300W, 230V~ With high, mid, low fan speed selection	
	AC413-S	silver			
	AC419	white	Emergency switch	6A, 230V~ Sending alarm signal manually, using key to release	
	AC419-S	silver			

## ABB Function control switches

	Description	Colour	Ref. No. Insert	Ref. No. Cover	Frame	Technical data
	Bush watchdog 220 professional line	white	6845/11 AGM-204-500			Rated power: 3680W/VA, 16AX Mounting type: surface-mounted Aperture angle: 220° Protection class (Device): IP55 Mounting height: 2.5m Detection range: frontal: 16m, lateral: 16m Dimensions: (L x W x D): 97mm x 97mm x 159mm
	Watchdog 90 professional	white	6853 AGM-204-500			Rated power: 3680W/VA, 16AX Mounting type: surface-mounted Aperture angle: 90° Protection class (Device): IP55 Mounting height: 2.5m Detection range: frontal: 12m, lateral: 6m Dimensions: (L x W x D): 97mm x 97mm x 159mm
	Presence tech master	white	6401 U-102-500	6813-101-500		Rated power: 2300W/VA, 10AX Suitable for: 230V incandescent lamps, 230V halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformer
	Presence tech slave	white	6805 U-500	6813-101-500		Rated power: 2300W/VA, To be connected with master
	Blind control	white silver	6411 U-500-101	6430-84-102 6430-83-102	AC503 AC503-S	Rated power: 690VA, 3A Outputs: 2 normally open contact Multi-way input terminals (Up/Down) Running time: 3min
	For luminosity sensor	white silver	6411 U/S-500-101	6430-84-102 6430-83-102	AC503 AC503-S	Rated power: 690VA, 3A Outputs: 2 normally open contact Multi-way input terminals(Up/Down) Running time: 3min Connection with brightness sensor 6414-500
	Blind control with IR	white silver	6411 U-500-101	6066-84 6066-83	AC503 AC503-S	Rated power: 690VA, 3A Outputs: 2 normally open contact Multi-way input terminals (Up/Down) Running time: 3min
	Blind control with IR	white silver	6411 U/S-500-101	6066-84 6066-83	AC503 AC503-S	Rated power: 690VA, 3A Outputs: 2 normally open contact Multi-way input terminals (Up/Down) Running time: 3min Connection with brightness sensor 6414-500
	Universal relay	white silver	6401 U-102-500	6067-84 6067-83	AC503 AC503-S	Manual/remote control Outputs: 1 normally open contact Suitable for: 230V incandescent lamps, 230V halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformer
	Universal relay 2 gang	white silver	6402 U-500	6067-84 6067-83	AC503 AC503-S	Manual/remote control Outputs: 2 normally open contact Suitable for: 230V incandescent lamps, 230V halogen lamps and low-voltage halogen lamps with conventional transformers or electronic transformer
	Memory timer	white silver	6457+6418 U	1773 JA-84 1773 JA-83	AC503 AC503-S	Rated power: 690VA, 3A Manual our automatic operation Outputs: 2 normally open contact Commands in a 24-hour rhythm Running time: 3min
	Luminosity sensor	white	6414-500			For combination with 6411 U/S-500-101 shutter control switches, with 2m connecting cable. Measuring range: 15-50, 000Lux
	IR remote	white	6010-25-500			Detection range: frontal: 15m For controlling up to 10 receivers in 2 groups (1-5/6-10)

Description	Colour	Ref. No. Insert	Ref. No. Cover	Frame	Power		Lighting				Remark
					Min	Max					
 Rotary dimmer	white silver		AC412 AC412-S		25W	600W	✓	✓ <sup>(1)</sup>			Short circuit protection Ambience temperature: -5-+40°C Base in box: 31.3mm
 Rotary dimmer	white silver	2247 U-500	6540-84-101 6540-83-101	AC503 AC503-S	20W/VA	500W/VA	✓	✓ <sup>(1)</sup>			Provided with terminal for net disconnection devices
Rotary dimmer	white silver	6513 U-102-500	6540-84-101 6540-83-101	AC503 AC503-S	40W/VA	420W/VA	✓		✓ <sup>(2)</sup>		Provided with terminal for net disconnection devices, short-circuit protected, overload-protected
Rotary dimmer	white silver	6591 U-101-500	6540-84-101 6540-83-101	AC503 AC503-S	60W/VA	420W/VA	✓	✓ <sup>(1)</sup>	✓ <sup>(2)</sup>		Provided with terminal for net disconnection devices
Rotary dimmer slave		6592 U-500	6540-84-101 6540-83-101	AC503 AC503-S							A maximum of 5 multi-way extensions can be connected to a 6591u-101-501
Rotary dimmer	white silver	2112 U-101-500	6540-84-101 6540-83-101	AC503 AC503-S		700W/VA				✓	Control current max. 50mA DC
 Touch-type dimmer	white silver	6593 U-500	6543-84-101 6543-83-101	AC503 AC503-S	60W/VA	420W/VA	✓	✓ <sup>(1)</sup>	✓ <sup>(2)</sup>		Short-circuit protected, overload-protected
Touch-type dimmer	white silver	6550 U-101-500	6543-84-101 6543-83-101	AC503 AC503-S		700W/VA				✓	Control current max. 50mA DC operation also possible via conventional push buttons
 Dimmer 2 gang	white silver	6565 U-500	6545-84 6545-83	AC503 AC503-S	40W/VA	315W/VA	✓		✓ <sup>(2)</sup>		Short-circuit protected, overload-protected
 Touch-type dimmer with IR	white silver	6593 U-500	6066-84 6066-83	AC503 AC503-S	60W/VA	420W/VA	✓	✓ <sup>(1)</sup>	✓ <sup>(2)</sup>		Manual/remote control
Touch-type dimmer with IR	white silver	6550 U-101-500	6066-84 6066-83	AC503 AC503-S		700W/VA				✓	Manual/remote control Control current max. 50mA DC
 Universal master dimmer		6583-500			60W/VA	500W/VA	✓	✓ <sup>(1)</sup>	✓ <sup>(2)</sup>		Can combine with 6584-500 to extend power up to 3000W, short-circuit protected, overload-protected, operation also possible via conventional push buttons
Universal master dimmer capacity booster		6584-500			200W/VA	420W/VA	✓	✓ <sup>(1)</sup>	✓ <sup>(2)</sup>		Combine with 6583-500, short-circuit protected, overload-protected
 Multi channel dimmer 4X2A		6197/50-515			60W/VA	460W/VA	✓	✓ <sup>(1)</sup>	✓ <sup>(2)</sup>		Please check manual to select transformer
Multi channel dimmer 8X1A		6197/51-515			60W/VA	230W/VA	✓	✓ <sup>(1)</sup>	✓ <sup>(2)</sup>		Please check manual to select transformer
 Electronic transformer		6576-70-515			20W/VA	70W/VA					Can be connected with 6197/50-515 and 6197/51-515
Electronic transformer		6576-105-515			35W/VA	105W/VA					Can be connected with 6197/50-515 and 6197/51-515

1) In the case of conventional transformers, take ~20% transformer loss into account.  
2) In case of electronic transformers, 5% transformer losses.



1SXF610007C0201  
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