

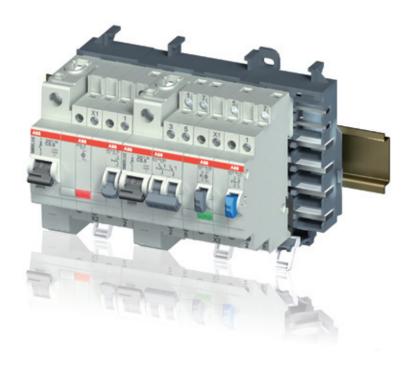
Product range E 210
On-off switches, pushbuttons, indicator lights
System pro *M* compact ®



Half-size Strong effect



The new 9 and 18 mm modular comand devices for DIN 35 mm rail mounting in the System pro M compact® design



Can be used in the SMISSLINE socket system

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Applications

On-off switches, pushbuttons, indicator lights

Using modular DIN-rail mounted devices (MDRC) such as On-Off switches, pushbuttons and indicator lights makes it possible to switch and control electric loads from a central location. Thanks to signalling of the switch position, operating states can be recognized easily and users haven an overview of the situation. Space is saved in the distribution board thanks to the new narrow width of only 9 mm (0.5 modular width). The On-Off switches are easy to operate and the switched position is always clearly recognisable. Depending on requirements, the switch position can also be indicated by a built-in yellow LED. The pushbuttons are excellently suitable for forwarding pulse control commands, e.g. in lighting controls. The operating state of the luminous pushbutton variants can be signalled. The indicator lights are optimally used to signal or report back an operating state.



Private electrical installations

MDRCs can be used in subdistribution boards of multiple or single-family dwellings and other private buildings. Optimum operability and/or signalling of operating states is made easily possible.

Examples:

- Phase monitoring
- Signalling the operating state of a pond pump
- Switching machines in a DIY workshop
- Switching additional garden lighting On/Off
- Visualising the garden/garage door position



Commercial installations

In guesthouses, hotels, storage halls, small workshops, construction sites and other commercial operations, the MDRCs enable easy switching, control and signalling, thus providing a clear general picture of current operating states.

Examples:

- Outdoor lighting systems
- Additional electric heaters
- Visual status indication of machines and devices (e.g. a fan)
- Outdoor sockets
- Hotel reception (switching and/or monitoring functions)



Industrial installations

The MDRC product range is also used in all industrial establishments.

Examples:

- Phase monitoring
- Manual flap controls (ventilation systems)
- Switching pumps On/Off
- Manual 0 Automatic changeover
- Manual changeover of two-speed machines

Integration of modular installation devices (on-off switches, pushbuttons and indicator lights) in the subdistribution board affords the additional advantage of intelligible signalling of electric loads' operating states. Easy operation or interpretation of devices is ensured by the clearly recognizable switching position (toggle lever) and/or a status display by means of an LED light. Depending on the system requirements, further signalling or control functionality for reliable operation can be used in the subdistribution board in the form of pushbuttons or indicator lights.

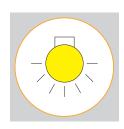
Electric heating devices



On-off switches, pushbuttons and pushbuttons with LED

Manual direct or pulse-controlled On/Off switching of additional heating elements, e.g. in DIY workshops or other purpose-built installations.

Lighting systems



On-off switches

As master switches for multiple-phase lighting sections, e.g. in halls, large basement rooms or provisional constructions.

Pushbuttons and pushbuttons with LED (puls contact operation)

Issuing of commands to latching relay or miniature contactors with visual feedback.

Air conditioners and fans



On-off switches or pushbuttons

Connecting air conditioners or ventilation fans as required.

Change over switches or group switches I-0-II

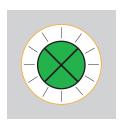
Switching over fans with two operating levels

Group switches I-0-II

Manual - 0 - Automatic changeover (from normal to emergency mains)



Signalling



On-off switches or pushbuttons with LED

Clear signalling and indication of the operating states of electric loads.

Indicator lights

Phase monitoring display

Signalling On, Off or Danger (colours, e.g. green, red, yellow)

Half-size Strong effect



The new 9 and 18 mm modular comand devices for DIN 35 mm rail mounting in the System pro M compact® design



Can be used in the SMISSLINE socket system

Characteristics

On-off switches, pushbuttons, indicator lights

The On-Off switches, pushbuttons and indicator light units open up new space-saving and modern installation possibilities.

The units are for switching, controlling or signalling part of electrical systems or specific items of equipment. The new Series E210 units are available in widths of 9 mm (0.5 modular width) or 18 mm (1.0 modular width).



On-Off switches, 16 A, 25 A and 32 A

These switches are installed directly in the subdistribution board and are used as manual master switches for direct On/Off switching of courtyard or basement lighting systems, ventilation and air conditioning systems, fans or special lighting systems with gas discharge lamps.

Module width depends on the contact configuration.

1 + 2 switching contacts = 9 mm (0,5 modular width)

3 + 4 switching contacts = 18 mm (1 modular width)



On-Off switches, 16 A and 25 A with switch position indication

The unit's switched position is signalled clearly by the integrated LED. Thanks to the easily visible lit amber LED, which operating states the various items of equipment are in is clearly recognisable on the distribution board.

Module width depends on the contact configuration.

1 switching contact + LED = 9 mm (0.5 modular width)

2+3 switching contacts + LED = 18 mm (1 modular width)



Change over switches, 16 A and 25 A

With its two switched positions, the change over switch is used in industry and building management systems. Clear recognisability of the switch's settings I and II enables reliable and easy use. Applications consist of switching over from normal to emergency lighting, changing over an outdoor lighting system with light sensor to normal operation and many other possibilities.

Module width depends on the contact configuration.

1 changeover contact = 9 mm (0.5 modular width)

2 changeover contacts = 18 mm (1 modular width)



Group switches I-0-II 16 A and 25 A

The group switches offer universal application possibilities in industry, building management systems and house installations. They are used in lighting and machine control systems, for example. Using these units, a Manual - 0 - Automatic control can be realised with ease.

Module width depends on the contact configuration.

1 changeover contact = 9 mm (0.5 modular width)

2 changeover contacts = 18 mm (1 modular width)

Characteristics

On-off switches, pushbuttons, indicator lights



Control switches, 16 A and 25 A

The control switches are used in electric control cabinets or house distribution boards. They offer universal possibilities of use with their diverse variants. They perform the task of forwarding control commands.

Module width depends on the contact configuration.

- 1+2 switching contacts = 9 mm (0.5 modular width)
- 3+4 switching contacts = $18 \, \text{mm}$ (1 modular width)



Pushbutton, 16 A - 6 different pushbutton colours (Pulse contact operation)

Normal pushbuttons are always equipped with a normally-open and a normally-closed contact. The pushbuttons' various colours (six colours) are based on DIN60204-1 (Colour marking of operator control parts and their significance). These pushbutton devices are suitable for forwarding pulse control command in almost every electrical system. They can also be used to operate lighting groups by means of a pulse command, e.g. to a latching relay or directly on the spot from the subdistribution board or the distribution cabinet. Module width is always 9 mm (0.5 modular width)



Pushbutton, 16 A with LED - 5 different colours (Pulse contact operation)

The pushbuttons with an LED are equipped with only one contact (normally open or closed). Here, you have to choose between a normally-open or normally-closed version. The LED lights, various colours, are based on DIN60204-1 (Colour marking of operator control parts and their significance).

The pushbuttons with LEDs are excellently suitable for signalling or reporting back the operating state of loads controlled.

e.g. pump On = green LED lit; pump Off = LED not lit

The pushbuttons with LEDs are available in 12-48 V versions for DC or AC voltage, 115-250 V AC voltage and 110-220 V DC voltage.



E219 indicator lights - 5 different LED colours

The indicator lights warrant a clear overview of the operating states of electrical equipment from one central location. The long useful life of LED technology promises maintenance-free operation for up to 100,000 hours.

For comparison: the incandescent bulbs previously used had a maximum operating operating time of 10,000 hours.

The indicator lights are available in 12-48 V versions for DC or AC voltage, 115-250 V AC voltage and in a version for 110-220 V DC voltage.

All code colours white, red, green, amber and blue are available for the well-known functions:

Neutral = white
Emergency = red
Abnormal operation = amber
Normal operation = green
Compelling action = blue

Set new standards in your electrical distribution board

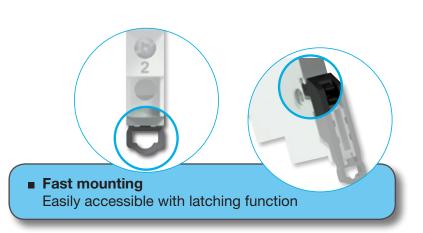
The reduced device width saves space while providing the same functionality and improved performance



More space plus improved performance

Characteristics

Special features

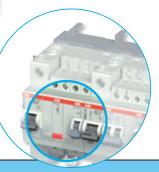


■ Switch position clearly recognisable



5 different colours (red, green, amber, blue, white)

■ Cross-head recessed screws
Pozidrive 1 (captive)



■ Indicator lights

■ Can be used in the SMISSLINE socket system



■ Reliable connection terminals with integrated shutter



Pushbutton6 different colours (grey, red, green, amber, black, blue)

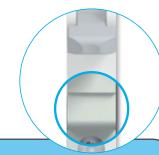
Impressive solutions at a glance

On-off switches, pushbuttons, indicator lights

- Touch protection to DIN EN 50274 (DIN VDE0660 Part 514)
- Reliable and convenient operation
- Colour-fast LEDs: 5 colours for luminous pushbuttons and indicator lights
- LED voltage ranges: 12-48V AC/DC; 115-250V AC; 110-220V DC
- Maintenance-free LED light source (up to 100,000 h)
- Consistent innovative design
- Dissipated power optimised
- Compliance with international standards



■ Type designation and schematic with lasting laser marking



■ Labelling field
System pro *M* compact



■ Visual switch position indication by On/Off switches (with LED light)



■ Uniform design
ABB pro *M* compact device family



On/Off switch, lockable in the On or Off setting

Characteristics

Main switches E463 and E480

We set new standards in your electrical distribution board:

- Space-saving use 3 poles over 44 mm
- Switch position clearly defined and recognisable by toggle lever
- Short-circuit resistance of up to 10 kA including the appropriate fusing
- Master switch for 63 A or 80 A
- double interrupting switch contacts
- Compliance with international standards

Application:

Switching devices between the consumer's overcurrent interrupter and the circuit distribution board. The Main switches can also be used for diverse other applications.



Main switches, 63 A and 80 A



Lockable 63 A main switch (Special version for the German market)

Examples:

- at market stalls and fairground attraction booths
- in allotment colonies (manual entrance switch)
- for outdoor sockets
- electricity supply feeders on campsites
- in home studios or workshops as main machine switch
- for meter distribution boards

Overview

On-off switches

On-off switches

















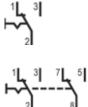
Change over switches







2CCC441016F0001



Group switches





Control switches





Overview

Pushbuttons, indicator lights and accessories and main switches

Pushbuttons















Indicator lights







Accessories



Dummy housings (attachable)



Padlock

Main switches



Main switches, 63 and 80 A



2CCC4410

Lockable 63 A main switch (Special version for the German market)

On-off switches

On-Off switches, 16A, 25A and 32A





Rated current = 25 A

1 NO	250	0.75	-	9	E211-25-10	2CCA703001R0001	938612	0.035	10	
2 NO	250,400	1.95	-	9	E211-25-20	2CCA703006R0001	938629	0.045	10	
3 NO	250,400	2.70	-	18	E211-25-30	2CCA703011R0001	938636	0.080	10	
4 NO	250,400	3.90	-	18	E211-25-40	2CCA703016R0001	938643	0.090	10	



Rated current = 32 A

nate	u current =	: 32 A								
1 NO	250	1.12	-	9	E211-32-10	2CCA703002R0001	938650	0.035	10	
2 NO	250,400			9	E211-32-20	2CCA703007R0001	938667	0.045	10	
3 NO	250,400	3.85	-	18	E211-32-30	2CCA703012R0001	938674	0.080	10	
4 NO	250,400			18	E211-32-40	2CCA703017R0001	938681	0.090	10	



On-Off switches, 16 A and 25 A with switch position indication

Contact	Rated	Powe	r LED	Width	Order data	Product No.	Bbn	Weight	Pack.	
config.	volt-	loss	Colour			7612270		per unit	unit	
	age									
	VAC	W		mm	Туре		EAN	kg	unit	
Rated	current :	= 16 A								
Rated of	current :	= 16 A	amber	9	E211X-16-10	2CCA703100R0001	938872	0.040	10	
		0.50	-	9 18		2CCA703100R0001 2CCA703110R0001	938872 938889	0.040	10	



2CCC441035F0001

Rated current = 25 A

Hateu	Current -	207							
1 NO	250	1.15	amber	9	E211X-25-10	2CCA703101R0001	938902	0.040	10
2 NO	250,400 2			18	E211X-25-20	2CCA703111R0001	938919	0.050	10
3 NO	250,400			18	E211X-25-30	2CCA703116R0001	938926	0.060	10

NO = normally-open contact

Change over and group switches



Change over switches, 16 A and 25 A

Contact	Rated	Power LED	Width	Order data	Product No.	Bbn	Weight	Pack.
config.	volt-	loss Colour			7612270		per unit	unit
	age							
	VAC	W	mm	Туре		EAN	kg	unit
Rated	current	= 16 A						
1 CO	250	0.32 -	9	E213-16-001	2CCA703040R0001	938698	0.041	10
2 CO	250	0.82 -	18	E213-16-002	2CCA703045R0001	938704	0.082	10



Rated current = 25 A

1 CO	250	0.40	-	9	E213-25-001	2CCA703041R0001	938711	0.041	10
2 CO	250	0.88	-	18	E213-25-002	2CCA703046R0001	000.20	0.082	10



Group switches I-0-II 16 A and 25 A

WILCIIC	310	II IOA	and Lo	• •				
Rated	Powe	r LED	Width	Order data	Product No.	Bbn	Weight	Pack.
volt-	loss	Colour			7612270		per unit	unit
age								
VAC	W		mm	Туре		EAN	kg	unit
urrent :	= 16 A							
250	0.32	-	9	E214-16-101	2CCA703025R0001	938735	0.041	10
250	0.82	-	18	E214-16-202	2CCA703030R0001	938742	0.082	10
	Rated volt- age VAC current :	Rated Power volt- loss age VAC W current = 16 A 250 0.32	Rated Power LED volt- loss Colour age VAC W current = 16 A 250 0.32 -	Rated volt- loss Colour down age VAC W mm current = 16 A 250 0.32 - 9	Rated volt- loss Colour age VAC W mm Type Current = 16 A 250 0.32 - 9 E214-16-101	Rated volt- loss Colour age Width Order data Product No. 7612270 VAC W mm Type current = 16 A 250 0.32 - 9 E214-16-101 2CCA703025R0001	Rated volt- loss Colour age Width Order data Product No. Bbn VAC W mm Type EAN Eurrent = 16 A 250 0.32 - 9 E214-16-101 2CCA703025R0001 938735	volt- age loss Colour per unit VAC W mm Type EAN kg current = 16 A 250 0.32 - 9 E214-16-101 2CCA703025R0001 938735 0.041



Rated current = 25 A

1 CO	250	0.40 -	- 9)	E214-25-101	2CCA703026R0001	938759	0.041	10
2 CO	250	0.00	- 1	8	E214-25-202	2CCA703031R0001	938766	0.082	10

CO = changeover contact

Control switches and pushbuttons



Control switches, 16 A and 25 A

Contact	Rated	Powe	r LED	Width	Order data	Product No.	Bbn	Weight	Pack.
config.	volt-	loss	Colour			7612270		per unit	unit
	age								
	VAC	W		mm	Type		EAN	kg	unit
Rated o	urrent	= 16A	<u> </u>						
1NO+1N0	250	0.50	-	9	E218-16-11	2CCA703050R0001	938773	0.041	10
2NO+2N0	250	1.00	-	18	E218-16-22	2CCA703060R0001	938780	0.082	10
3NO+1N0	250	1.50	-	18	E218-16-31	2CCA703065R0001	938797	0.082	10



Rated current	= 25 A							
1NO+1NC 250	0.75 -	9	E218-25-11	2CCA703051R0001	938803	0.041	10	



Pushbutton, 16 A - 6 different pushbutton colours (Pulse contact operation)

Contact	Rated	Powe	r LED	Width	Order data	Product No.	Bbn	Weight	Pack.
config.	volt-	loss	Colour			7612270		per unit	unit
	age								
	VAC	W		mm	Туре		EAN	kg	unit
Rated o	urrent	= 16 A							
1NO+1N0	250	0.50	grey	9	E215-16-11B	2CCA703150R0001	938810	0.046	10
1NO+1N0	250	0.50	red	9	E215-16-11C	2CCA703151R0001	938827	0.046	10
1NO+1N0	250	0.50	green	9	E215-16-11D	2CCA703152R0001	938834	0.046	10
1NO+1N0	C 250	0.50	amber	9	E215-16-11E	2CCA703153R0001	938841	0.046	10
1NO+1N0	C 250	0.50	black	9	E215-16-11F	2CCA703154R0001	938858	0.046	10
1NO+1N0	250	0.50	blue	9	E215-16-11G	2CCA703155R0001	938865	0.046	10

NO = normally-open contact

NC = normally-closed contact

Pushbutton, lit

Pushbutton, 16 A, lit - 5 different LED colours (Pulse contact operation)

Power LED

loss Colour

The pushbuttons with LEDs are available in 12 to 48 V versions for DC or AC voltage, 115-250 V AC voltage and 110-220 V DC voltage.

Product No.

Bbn

7612270

Weight

per unit

Pack.

Width Order data



Contact

config.

Rated

volt-

	age								
	VAC	W		mm	Туре		EAN	kg	unit
Rated	LED vo	ltage =	: 115-2	50 VA	C				
1 NO	250	1.10	white	9	E217-16-10B	2CCA703160R0001	938988	0.050	10
1 NO	250	1.10	red	9	E217-16-10C	2CCA703161R0001	938995	0.050	10
1 NO	250	1.10	green	9	E217-16-10D	2CCA703162R0001	939008	0.050	10
1 NO	250	1.10	amber	9	E217-16-10E	2CCA703163R0001	939015	0.050	10
1 NO	250	1.10	blue	9	E217-16-10G	2CCA703164R0001	939022	0.050	10
1 NC	250	1.10	white	9	E217-16-01B	2CCA703250R0001	939084	0.050	10
1 NC	250	1.10	red	9	E217-16-01C	2CCA703251R0001	939091	0.050	10
1 NC	250	1.10	green	9	E217-16-01D	2CCA703252R0001	939107	0.050	10
1 NC	250	1.10	amber	9	E217-16-01E	2CCA703253R0001	939114	0.050	10
1 NC	250	1.10	blue	9	E217-16-01G	2CCA703254R0001	939121	0.050	10

Rated LED voltage = 12-48 VAC/DC

1 NO	250	0.72 white	e 9	E217-16-10B48	2CCA703170R0001	938933	0.050	10	
1 NO	250	0.72 red	9	E217-16-10C48	2CCA703171R0001	938940	0.050	10	
1 NO	250	0.72 gree	n 9	E217-16-10D48	2CCA703172R0001	939957	0.050	10	
1 NO	250	0.72 amb	er 9	E217-16-10E48	2CCA703173R0001	939964	0.050	10	
1 NO	250	0.72 blue	9	E217-16-10G48	2CCA703174R0001	939971	0.050	10	
1 NC	250	0.72 white	e 9	E217-16-01B48	2CCA703260R0001	939039	0.050	10	
1 NC	250	0.72 red	9	E217-16-01C48	2CCA703261R0001	939046	0.050	10	
1 NC	250	0.72 gree	n 9	E217-16-01D48	2CCA703262R0001	939053	0.050	10	
1 NC	250	0.72 amb	er 9	E217-16-01E48	2CCA703263R0001	939060	0.050	10	
1 NC	250	0.72 blue	9	E217-16-01G48	2CCA703264R0001	939077	0.050	10	

Rated LED voltage = 110-220 VDC

1 NO	250	1.50	white	9	E217-16-10B220	2CCA703165R0001	938138	0.050	10
1 NO	250	1.50	red	9	E217-16-10C220	2CCA703166R0001	938145	0.050	10
1 NO	250	1.50	green	9	E217-16-10D220	2CCA703167R0001	939152	0.050	10
1 NO	250	1.50	amber	9	E217-16-10E220	2CCA703168R0001	939169	0.050	10
1 NO	250	1.50	blue	9	E217-16-10G220	2CCA703169R0001	939176	0.050	10
1 NC	250	1.50	white	9	E217-16-01B220	2CCA703255R0001	939183	0.050	10
1 NC	250	1.50	red	9	E217-16-01C220	2CCA703256R0001	939190	0.050	10
1 NC	250	1.50	green	9	E217-16-01D220	2CCA703257R0001	939206	0.050	10
1 NC	250	1.50	amber	9	E217-16-01E220	2CCA703258R0001	939213	0.050	10
1 NC	250	1.50	blue	9	E217-16-01G220	2CCA703259R0001	939220	0.050	10

NO = normally-open contact

NC = normally-closed contact

Indicator lights and accessories

E219 indicator lights - 5 different LED colours

The indicator lights are available in 12 to 48 V versions for DC or AC voltage, 115-250 V AC voltage and in a version for 110-220 V DC voltage. All code colours white, red, green, amber and blue are available for the well-known functions:

Neutral = white
Emergency = red
Abnormal operation = amber
Normal operation = green
Compelling action = blue

Contact	Rated	Powe		Width	Order data	Product No.	Bbn	Weight	Pack.
config.	volt-	loss	Colour			7612270		per unit	unit
	age								
	VAC	W		mm	Туре		EAN	kg	unit
Rated L	ED vol	tage =	115-2	50 VAC					
-	-	0.47	white	9	E219-B	2CCA703400R0001	939282	0.04	10
-	-	0.47	red	9	E219-C	2CCA703401R0001	939299	0.04	10
-	-	0.47	green	9	E219-D	2CCA703402R0001	939305	0.04	10
-	-	0.47	amber	9	E219-E	2CCA703403R0001	939312	0.04	10
=	-	0.47	blue	9	E219-G	2CCA703404R0001	939329	0.04	10



Rated LED voltage = 12-48 VAC/DC

-	-	0.40	white	9	E219-B48	2CCA703420R0001	939237	0.04	10
-	-	0.40	red	9	E219-C48	2CCA703421R0001	939244	0.04	10
=	-	0.40	green	_	E219-D48	2CCA703422R0001	939251	0.04	10
-	-	0.40	amber	9	E219-E48	2CCA703423R0001	939268	0.04	10
-	-	0.40	blue	9	E219-G48	2CCA703424R0001	939275	0.04	10

Rated LED voltage = 110-220 VDC

-	-		vhite	9	E219-B220	2CCA703405R0001	939336	0.04	10
-	-		ed	9	E219-C220	2CCA703406R0001	939343	0.04	10
-	-	1.00 g	reen	9	E219-D220	2CCA703407R0001	939350	0.04	10
-	-	1.00 a	mber	9	E219-E220	2CCA703408R0001	939367	0.04	10
-	-		lue	9	E219-G220	2CCA703409R0001	939374	0.04	10



Accessories for the E210 device series

	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit	
	mm	Туре		EAN	kg	unit	
Dummy housings	9	E210-DH	2CCA703480R0001	404208	0.18	10	

The modular width of 18 mm must be complied with to use the devices in the SMISSLINE socket system. The dummy housing is ready-made with two expanding connectors. Always snap on dummy housings on the left.



Padlock	E210-ASV9	2CCA703648R0001	404215	10
for 9 and 18 mm wide units				

Main switches, 63 A und 80 A

E463/3-KB, E480/3-KB and E463/3-SL

These compact main switches can be used as entrance switches or as main switches in subdistribution boards. They are equipped with a fast mount for DIN rail mounting and offer optimum connection convenience.



Contact	Rated	Power	Width	Orderdata	Product No.	Bbn	Weight	Pack.
config.	volt-	loss				7612270	per unit	unit
	age							
	VAC	W	mm	Туре	EAN		kg	unit
Rated cu	rrent = 63	3 A						
3 NO	400	5.4	44	E463/3-KB	2CCE160300R0131	932528	190	1/50
Rated cu								
3 NO	400	9.9	44	E480/3-KB	2CCE180300R0141	932542	210	1/50



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Contact	Rated	Power	Width	Orderdata	Product No.	Bbn	Weight	Pack.
config.	volt-	loss				7612270	per unit	unit
	age							
	VAC	W	mm	Type	EAN		kg	unit

(lockable with utility key and also lead-sealable and lockable with a padlock)

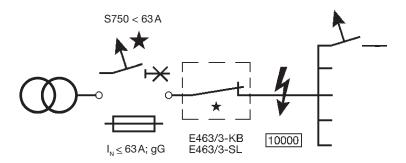
NO = normally-open contact

Special features

Tested in compliance with DIN EN 60669-1; VDE 0632 Part 1

Short-circuit resistance: 10 kA, 400 V~

The switches E463/3-KB and E463-SL marked by * comply with the "Technical Conditions for Connection" and also comply with the short-circuit resistance detailed therein of 10 kA for equipment between the last overcurrent protector before the measuring unit and the circuit distribution board.



Technical data

On-off switches, pushbuttons, indicator lights

Generall On-off switches, pushbuttons, indicator lights

Overall depth 68 mm

Width 0.5 or 1 module (9 or 18 mm)

Colour grey, RAL 7035

Climatic resistance to IEC 60068-2-2 (dry heat)

IEC 60068-2-30 (humid heat)

IEC 60068-2-1 (low temperatures)

Ambient temperature -25°C to $+55^{\circ}\text{C}$ Storage temperature -40°C to $+70^{\circ}\text{C}$

Connection cross-section (Cu) from 1 x 1 mm² to 1 x 6 mm² or 2 x 2.5 mm² solid;

from 1 x 0.75 mm² to 2 x 1.5 mm² flexible

with end ferrule or pin cable lug

Tightening torque 1,2 - 1,5 Nm
Contacts Double interrupting

On-off switches (E211; E211X)

Short-circuit withstand capacity I_{nc} 3 kA; at 400 V cos ϕ = 0.8 (with fusing \leq 35 A / NH00)

Rated current In 16 A, 25 A, 32 A

Rated voltage U

in accordance with EN 250 V AC, 400 V AC

% in accordance UL 508 240 V AC Rated impulse with stand voltage $\rm U_{imp}$ 6 kV

Lowest operating voltage 24 V AC; 25 mA

Isolating features to EN60669-2-4; IEC/EN 60947-3
Utilization category AC-22A, DC-22A acc. IEC/EN 60947-3

LED voltage ranges On-off switches E211X 115-250 V AC (Tolerance +/- 10%)

Frequency 50/60 Hz

Sealable in the On and Off positions
Standards DIN EN 60669-1 *VDE 0632-1
DIN EN 60669-2-4 *VDE 0632-2-4

UL 508

Approvals VDE; UL; GOST; CCC

Change over, Group- and Control- switches (E213; E214; E218) Pushbuttons without and with LED (E215; E217)

Rated current I₂ 16 A, 25 A

Rated voltage U

in accordance with EN 250 V AC, 400 V AC

in accordance UL 508 240 V AC Lowest operating voltage 24 V AC; 25 mA

LED voltage ranges 12-48 V AC / DC; 115-250 V AC; 110-220 V DC (Tolerance +/- 10%)

Frequency 50/60 Hz

Switches sealable in the On and Off positions
Standards DIN EN 60669-1 *VDE 0632-1

UL 508

Approvals VDE; UL; GOST; CCC

Indicator lights (E219)

LED voltage ranges 12-48 V AC/DC; 115-250 V AC; 110-220 V DC (Tolerance +/- 10%)

Standards DIN EN 62094-1

UL 508

Approvals VDE; UL; GOST

Technical data

Main switches, 63 A and 80 A

Overall depth 68 mm

Width 2.5 modules (44 mm)
Colour grey, RAL 7035

Switching capacity $1.25 \times I_n$; $1.1 \times U_n$; $\cos \varphi = 0.6$ to DIN VDE 0632

Rated current I_n 63 and 80 A
Rated voltage U_n 250/400 V AC
Lowest operating voltage 24 V AC/DC
Isolating features to IEC/EN 60947-3

Frequency 50/60 Hz

Sealable in the On and Off positions

Touch protection to DIN VDE 0106 Part 100 (VBG4)

Ambient temperature -25°C to $+55^{\circ}\text{C}$ Storage temperature -40°C to $+70^{\circ}\text{C}$

Connection cross-section (Cu) 1mm² flexible with end ferrule or pin cable lug

0.5 mm² to 25 mm² solid wire

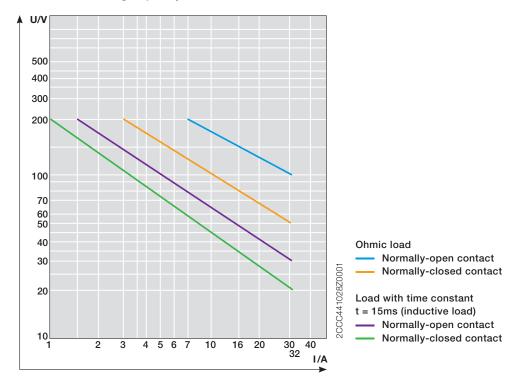
Tightening torque max. 3 Nm

Contacts 3 normally-open contacts (double interruption)

Standards DIN EN 60669-1 *VDE 0632-1

Approvals VDE

E211 DC switching capacity



Pushbuttons and indicator lights

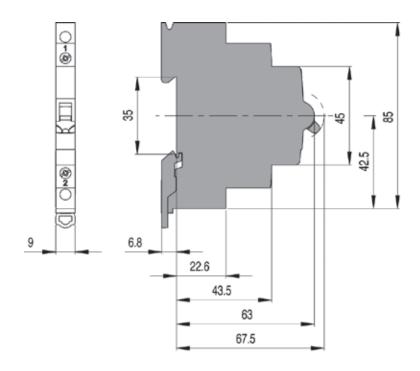
Overview of general meanings of the colours of operator control parts (excerpt from VDE 0199 or DIN EN 60073).

Colour	Meaning	Explanation	Application examples
RED	Emergency	Action in hazardous situations or emergency	EMERGENCY STOP, STOP or OFF with EMERGENCY STOP pushbutton Initiating an emergency function
YELLOW	Abnormal	Action if an abnormal condition is present	Intervention required to suppress the abnormal condition, manual intervention to restart an interrupted automatic cycle
GREEN	Safety	Action in safe conditions or to prepare a normal condition	Activation
BLUE	Regulation	Status requiring action	Reset function
WHITE GREY BLACK	Non-specific	Functions start	Available for any functions except, except for emergency stop, e.g. ON/OFF; Stop/Start

Dimensions (in mm)

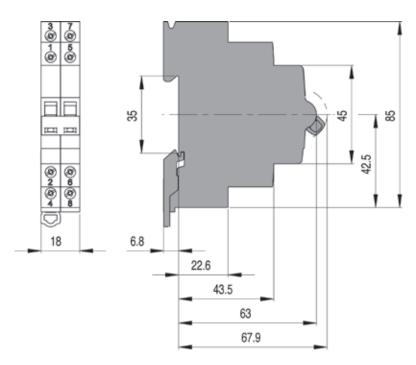
Switches, pushbuttons and indicator lights 16 A, 25 A and 32 A

Switch, 1+2-pole



2CCC441001Z0001

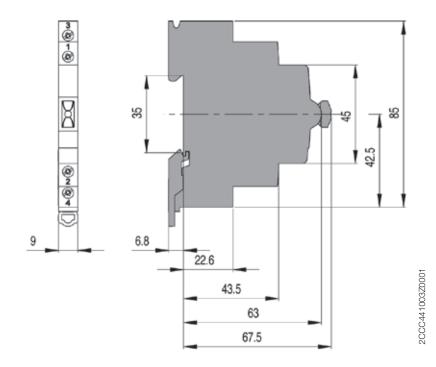
Switch, 3+4-pole



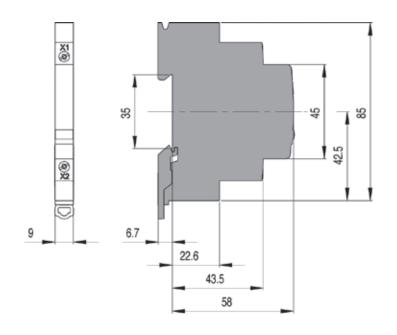
2CCC441002Z0001

Dimensions (in mm)

Pushbuttons

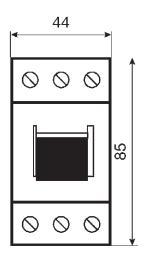


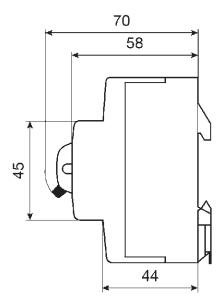
Indicator lights



2CCC441004Z0001

Main switches E463/3-KB, E463/3-SL, E480/3-KB





Approval and standards

On-off switches, pushbuttons, indicator lights Modular comand devices

		Germany	Denmark	Norway	Russia	Switzer- land	USA	Poland	China	1.7	ing classification companies	
		△A VDE	① DEMKO	NEMKO	© GOST	(<u>\$</u>) ESTI	c Allus cURus	® BBJ	©	∰ RINA	€ L	<u>⊪</u> LR
Switches	E211											
Two-way switches	E213											
Group switches	E214							· · · · · · · · · · · · · · · · · · ·				
Control switches	E218											
Pushbuttons	E215											
Luminous pushbut	tons E217											
Indicator lights	E219											
Master switches	E463/3 KB											
	E480/3 KB							÷				
	E463/3 SL							:				
		:	:			:		:		:	:	:

Devices are approvedin preparation

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