**Technical catalogue** 

# System pro *M* compact®

On-off switches, pushbuttons, indicator lights

# **Half-size Strong effect** The 9mm solution from ABB

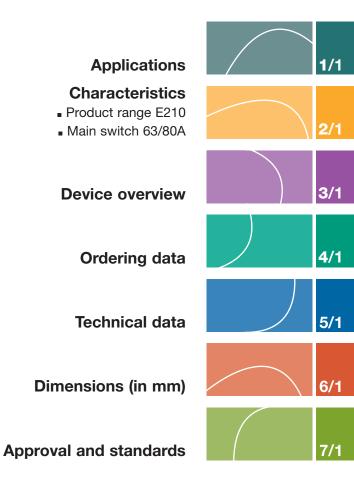


# Half-size. Strong effect.

The new 9 and 18mm modular comand devices for DIN 35mm rail mounting in the System pro *M* compact<sup>®</sup> design.

Can be used in the SMISSLINE socket system







# **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 9mm (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:

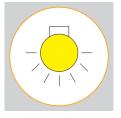
- Phase monitoring
- Manual flap controls (ventilation systems)
- Switching pumps On/Off
- Manual -0-Automatic changeover
- Manual changeover of two-speed machines

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**



### Lighting systems



### **On-off switches**

tions.

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

**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 installa-

# Pushbuttons and pushbuttons with LED (puls contact operation)

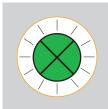
Issuing of commands to latching relay or miniature contactors with visual feedback.

### Air conditioners and fans





### Signalling



### 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)

# **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)

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, 16A, 25A and 32A

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 = 18mm (1 modular width)



### On-Off switches, 16A and 25A 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 = 18mm (1 modular width)



### Change over switches, 16A and 25A

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 16A and 25A

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)

On-off switches, pushbuttons, indicator lights

2CCC441023F0001

2CCC441028F000

### Control switches, 16A and 25A

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 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 9mm (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 to 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 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

System pro M compact®

Special features

# 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.

Special features





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 10kA 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



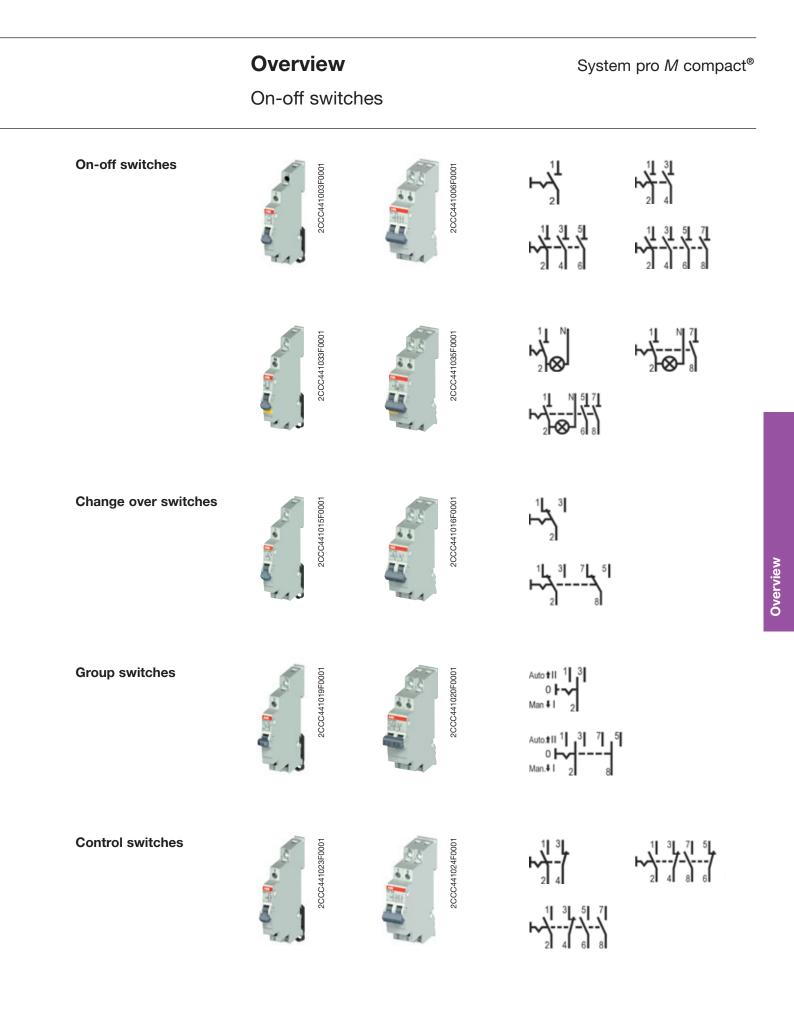
Lockable 63 A main switch (Special version for the German market)

### **Examples:**

As a main switch

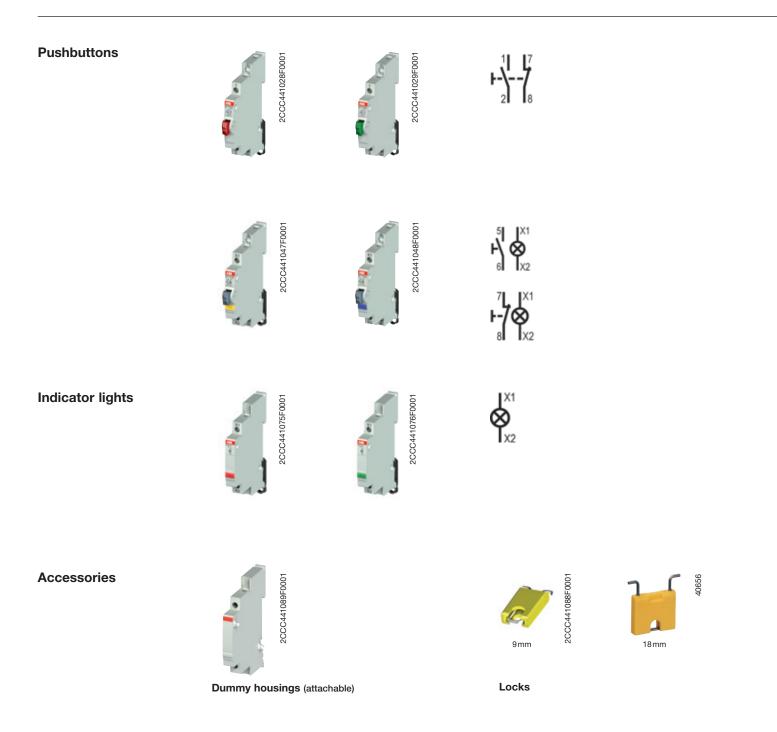
- at market stalls and fairground attraction booths
- in allotment colonies (manual entrance switch)
- for outdoor sockets
- electricity supply feeders on campsites
- in home studios or workshops as main machine switch
- for meter distribution boards

# System pro M compact®



# Overview

Pushbuttons, indicator lights and accessories



# **Overview**

System pro M compact®

Main switches

Master switches



Main switches, 63 and 80 A



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

### On-off switches

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

	config. volt- age	Rated volt-	Power loss		Width Order data		Product No.	Bbn 7612270	Weight per unit	Pack. unit
		VAC	W		mm	Туре		EAN	kg	unit
001	Rated cu	irrent = <sup>-</sup>	16A							
3F0	1 NO	250	0.32	-	9	E211-16-10	2CCA703000R0001	938575	0.035	10
8	2 NO	250,400	0.82	-	9	E211-16-20	2CCA703005R0001	938582	0.045	10
-44	3 NO	250,400	1.14	-	18	E211-16-30	2CCA703010R0001	938599	0.080	10
2CCC441003F0001	4 NO	250,400	1.64	-	18	E211-16-40	2CCA703015R0001	938605	0.090	10

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

2CCC441006F0001

1 NO	250	1.12	-	9	E211-32-10	2CCA703002R0001	938650	0.035	10
2 NO	250,400	2.73	-	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	5.46	-	18	E211-32-40	2CCA703017R0001	938681	0.090	10

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

2CCC441036F0001	Contact config.	Rated volt-	Power loss	LED Colour	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit
3441036		age VAC	W		mm	Туре		EAN	kg	unit
2000	Rated cu	irrent = 1	16A							
	1 NO	250	0.50	amber	9	E211X-16-10	2CCA703100R0001	938872	0.040	10
	2 NO	250,400	1.00	amber	18	E211X-16-20	2CCA703110R0001	938889	0.050	10
	3 NO	250,400	1.50	amber	18	E211X-16-30	2CCA703115R0001	938896	0.060	10



### Rated current = 25 A

1 NO	250	1.15	amber	9	E211X-25-10	2CCA703101R0001	938902	0.040	10
2 NO	250,400	2.30	amber	18	E211X-25-20	2CCA703111R0001	938919	0.050	10
3 NO	250,400	3.45	amber	18	E211X-25-30	2CCA703116R0001	938926	0.060	10

NO = normally-open contact

Change over and group switches

### Change over switches, 16A and 25A



C441015F0001	Contact config.	Rated volt-	Power loss	LED Colour	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit
	age VAC W		W		mm Type			EAN	kg	unit
20002	Rated cu	irrent = <sup>-</sup>	16A							
	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



-0001	Rated current = 25 A
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LG LG										
1016F	1 CO	250	0.40	-	9	E213-25-001	2CCA703041R0001	938711	0.041	10
2CCC441	2 CO	250	0.88	-	18	E213-25-002	2CCA703046R0001	938728	0.082	10

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



	Contact config.	Rated volt-	Power loss	LED Colour	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit
1013		age VAC	W		mm	Туре		EAN	kg	unit
t0007	Rated cu	rrent = 1	6A							
	1 CO	250	0.32	-	9	E214-16-101	2CCA703025R0001	938735	0.041	10
	2 CO	250	0.82	-	18	E214-16-202	2CCA703030R0001	938742	0.082	10



Rated current = 25 A

PF0C	1 CO	250	0.40	-	9	E214-25-101	2CCA703026R0001	938759	0.041	10
102(	2 CO	250	0.88	-	18	E214-25-202	2CCA703031R0001	938766	0.082	10

CO = changeover contact

Control switches and pushbuttons

### Control switches, 16A and 25A



	Contact config.	Rated volt-	Power loss	LED Colour	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit
070		age VAC	W		mm	Туре		EAN	kg	unit
10007	Rated cu	rrent = 1	6A							
	1NO+1NC	250	0.50	-	9	E218-16-11	2CCA703050R0001	938773	0.041	10
	2NO+2NC	250	1.00	-	18	E218-16-22	2CCA703060R0001	938780	0.082	10
	3NO+1NC	250	1.50	-	18	E218-16-31	2CCA703065R0001	938797	0.082	10



1024F0001	Rated cur	rent = 2	25A							
244	1NO+1NC 2	250	0.75	-	9	E218-25-11	2CCA703051R0001	938803	0.041	10
00										

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



Contact config.	Rated volt-	Power loss	Button Colour	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit
	age VAC	W		mm	Туре		EAN	kg	unit
Rated cu	urrent = <sup>-</sup>	16A							
1NO+1NC	250	0.50	grey	9	E215-16-11B	2CCA703150R0001	938810	0.046	10
1NO+1NC	250	0.50	red	9	E215-16-11C	2CCA703151R0001	938827	0.046	10
1NO+1NC	250	0.50	green	9	E215-16-11D	2CCA703152R0001	938834	0.046	10
1NO+1NC	250	0.50	amber	9	E215-16-11E	2CCA703153R0001	938841	0.046	10
1NO+1NC	250	0.50	black	9	E215-16-11F	2CCA703154R0001	938858	0.046	10
1NO+1NC	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)

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.

	Contact config.	Rated volt- age	Power loss	LED Colour	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit
		VAC	W		mm	Туре		EAN	kg	unit
	Rated LE	D voltaç	ge = 1	15-250	VAC					
001	1 NO	250	1.10	white	9	E217-16-10B	2CCA703160R0001	938988	0.050	10
2CCC441048F0001	1 NO	250	1.10	red	9	E217-16-10C	2CCA703161R0001	938995	0.050	10
048	1 NO	250	1.10	green	9	E217-16-10D	2CCA703162R0001	939008	0.050	10
441	1 NO	250	1.10	amber	9	E217-16-10E	2CCA703163R0001	939015	0.050	10
Õ	1 NO	250	1.10	blue	9	E217-16-10G	2CCA703164R0001	939022	0.050	10
20 20										
	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



1 NO	250	0.72	white	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	green	9	E217-16-10D48	2CCA703172R0001	939957	0.050	10
1 NO	250	0.72	amber	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	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	green	9	E217-16-01D48	2CCA703262R0001	939053	0.050	10
1 NC	250	0.72	amber	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 config.	volt-	Power. loss	LED Colour	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit
	age VAC	W		mm	Туре		EAN	kg	unit



Rated LED voltage = 115-2	50 VAC
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- 026	-	0.47	white	9	E219-B	2CCA703400R0001	939282	0.04	10
- 41	-	0.47	red	9	E219-C	2CCA703401R0001	939299	0.04	10
Ö -	-	0.47	green	9	E219-D	2CCA703402R0001	939305	0.04	10
- <sup>S</sup>	-	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	9	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

-	-	1.00	white	9	E219-B220	2CCA703405R0001	939336	0.04	10
-	-	1.00	red	9	E219-C220	2CCA703406R0001	939343	0.04	10
-	-	1.00	green	9	E219-D220	2CCA703407R0001	939350	0.04	10
-	-	1.00	amber	9	E219-E220	2CCA703408R0001	939367	0.04	10
-	-	1.00	blue	9	E219-G220	2CCA703409R0001	939374	0.04	10



### Accessories for the E210 device series

	Width	Order data	Product No.	Bbn 7612271	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 co	mplied	I with to use the d	evices in the SMISSLIN	IE socket system	1. The dummy h	ousing

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



100 to 10	Lo
4	Lo
18 mm	

_ock or 9mm wide units	E210-ASV9	2CCA703648R0001	404215	10
_ock or 18mm wide units	ZQB800	2CCF010016R0001	403492	10

Main switches, 63A und 80A

### 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.



40070

Contact config.	Rated volt-	Power loss	Width	Order data	Product No.	Bbn 7612270	Weight per unit	Pack. unit
	age VAC	W	mm	Туре	EAN		kg	unit
Rated cur	rent = 63 A							
3 NO	400	5.4	44	E463/3-KB	2CCE160300R0131	932528	190	1/50
Rated cur	rent = 80A							
3 NO	400	9.9	44	E480/3-KB	2CCE180300R0141	932542	210	1/50



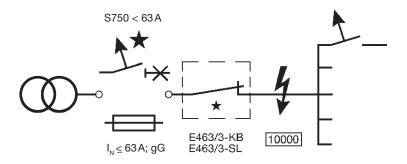
		ent = 63 A	(lockab	le with uti	lity key and also lead-s	ealable and lockable v	ith a padlock)		
400	3 NO	400	5.5	44	E463/3-SL	2CCE160301R0131	932535	195	1/50

NO = normally-open contact

### **Special features**

Tested in compliance with DIN EN 60669-1; VDE 0632 Part 1 Short-circuit resistance:  $10\,kA,\,400\,V{\sim}$ 

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.



# System pro M compact®

# **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°C
Storage temperature	-40°C to +70°C
Connection cross-section (Cu)	from 1 x 1 mm <sup>2</sup> to 1 x 6 mm <sup>2</sup> or 2 x 2.5 mm <sup>2</sup> solid;
	from 1 x 0.75 mm <sup>2</sup> to 2 x 1.5 mm <sup>2</sup> flexible
	with end ferrule or pin cable lug
Tightening torque	1.8Nm
Contacts	Double interrupting

### On-off switches (E211; E211X)

Short-circuit withstand capacity Inc	3 kA; at 400 V cos $\phi$ = 0.8 (with fusing ${\leq}35\text{A}$ / NH00)
Rated current I	16A, 25A, 32A
Rated voltage U <sub>n</sub>	
in accordance with EN	250 V AC, 400 V AC
in accordance UL 508	240 V AC
Lowest operating voltage	24V AC
Rated impulse withstand voltage Uim	<sub>5</sub> 6 kV
Isolating features	to EN60669-2-4
LED voltage ranges	On-off switches E211X 115-250 V AC
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

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

Rated current In	16A, 25A, 32A
Rated voltage U <sub>n</sub>	
in accordance with EN	250 V AC, 400 V AC
in accordance UL 508	240 V AC
Rated impulse withstand voltage ${\rm U}_{\rm im}$	<sub>p</sub> 6 kV
Lowest operating voltage	24 V AC
LED voltage ranges	12-48V AC/DC; 115-250V AC; 110-220V DC
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

### **Indicator lights (E219)**

LED voltage ranges Standards

Approvals

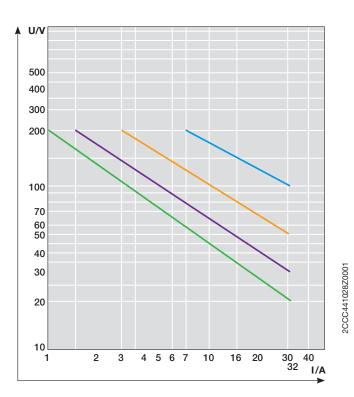
12-48V AC/DC; 115-250V AC; 110-220V DC DIN EN 62094-1 UL 508 VDE; UL

# **Technical data**

### Main switches, 63 A und 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	63 and 80 A
Rated voltage U <sub>n</sub>	250/400 V AC
Lowest operating voltage	24 V AC/DC
Isolating features	to IEC 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°C
Storage temperature	-40°C to +70°C
Connection cross-section (Cu)	1mm <sup>2</sup> flexible with end ferrule or pin cable lug
	0.5 mm <sup>2</sup> to 25 mm <sup>2</sup> solid wire
Tightening torque	max. 3Nm
Contacts	3 normally-open contacts (double interruption)
Standards	DIN EN 60669-1 *VDE 0632-1
Approvals	VDE
Approvals	VDE

### E211 DC switching capacity



Ohmic load Normally-open contact Normally-closed contact Load with time constant

t = 15ms (inductive load) Normally-open contact Normally-closed contact

### **Pushbuttons and indicator lights**

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

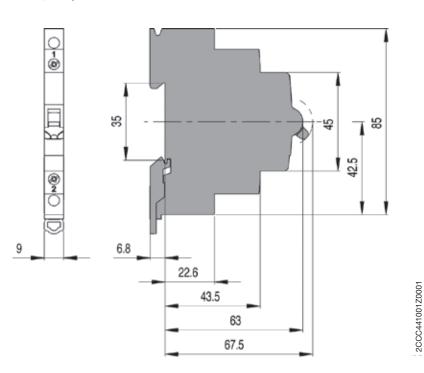
Colour	Meaning	Explanation	Application examples
RED	Emergency	Action in hazardous situations or emergency	EMERGENCY STOP, STOP or OFF with EMERGENCY STOP pushbutton Initiating an emergency function
YELLOW	Abnormal	Action if an abnormal condition is present	Intervention required to suppress the abnormal 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. OFF/ON, STOP/START

# **Dimensions (in mm)**

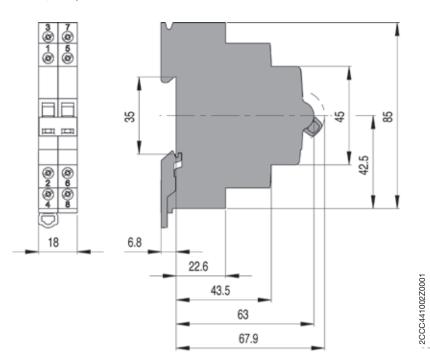
System pro *M* compact<sup>®</sup>

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

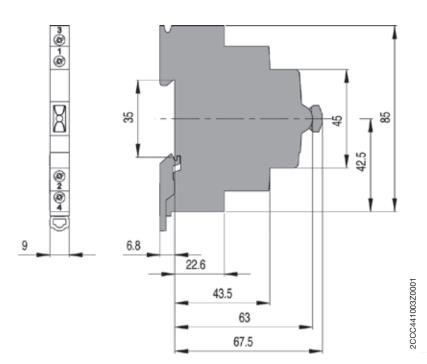
Switch, 1+2-pole



Switch, 3+4-pole

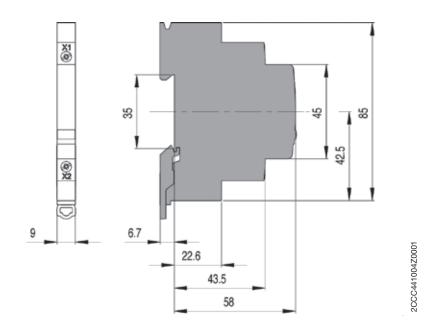


# **Dimensions (in mm)**

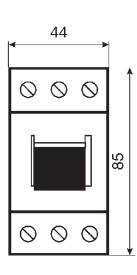


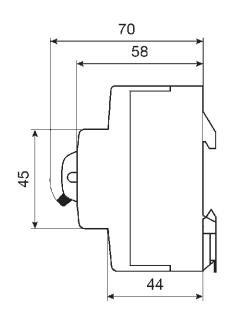
Pushbuttons

Indicator lights



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





On-off switches, pushbuttons, indicator lights

### Modular comand devices

		Germany	Denmark	Norway	Russia	Switzer- land	USA	Poland	China		ing classifi companies	
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		VDE	DEMKO	NEMKO	GOST	ESTI	UR	BBJ	CCC	RINA	GL	LR
Switches	E211											
Two-way switches	E213											
Group switches	E214											
Control switches	E218											
Pushbuttons	E215											
Luminous pushbuttons	E217											
Indicator lights	E219											
Master switches	E463/3 KB											
	E480/3 KB											
	E463/3 SL											

Devices are approved

in preparation



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