







1	2	3	4	5	6	7
	Number of locations			Front ring Matt chromed Type Article no.	Price	Std. pack
Arrangement						

**Complete units for surface mounting IP 65** Totally insulated





**Push-buttons**

Flush	1	
		
	1	
		

 **RD-11/KC/I**  
015136 2

 **RD-10/KC/I**  
017509 2

**Mushroom buttons**


	1	
		
	1	
		

 **RP-GN 11/KC/I**  
024628 1

 **RP-RT 10/KC/I**  
027001 1

**Double push-buttons**



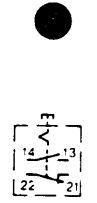
	2	
		


 **QDD-11/10/K 11C/I**  
090508 1

**Emergency-stop buttons**

Tamper-proof to EN 418 1

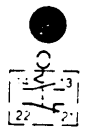
Pull to release.






 **RPV/KC/I**  
029374  
(No front ring) 2

**Key-release mushroom buttons**

With two keys  
<MS 1 lock mechanism 1



 **RPSR/KC/I**  
041239 1

**Selector switches**

With thumb-grip handle.  
Two positions, stay-put 1



 **RWK1R/KC/I**  
034897 1

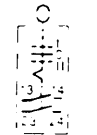
**Key-operated buttons**


With two keys  
Two positions, stay-put  
<MS 1 lock mechanism 1



 **RS/KC/I**  
036493 1

Three positions, stay-put  
<MS 1 lock mechanism 1







 **RS 3/K 20C/I**  
038866 1

The information in this document is subject to change without notice. See Price List for current prices. Prices are in US Dollars.

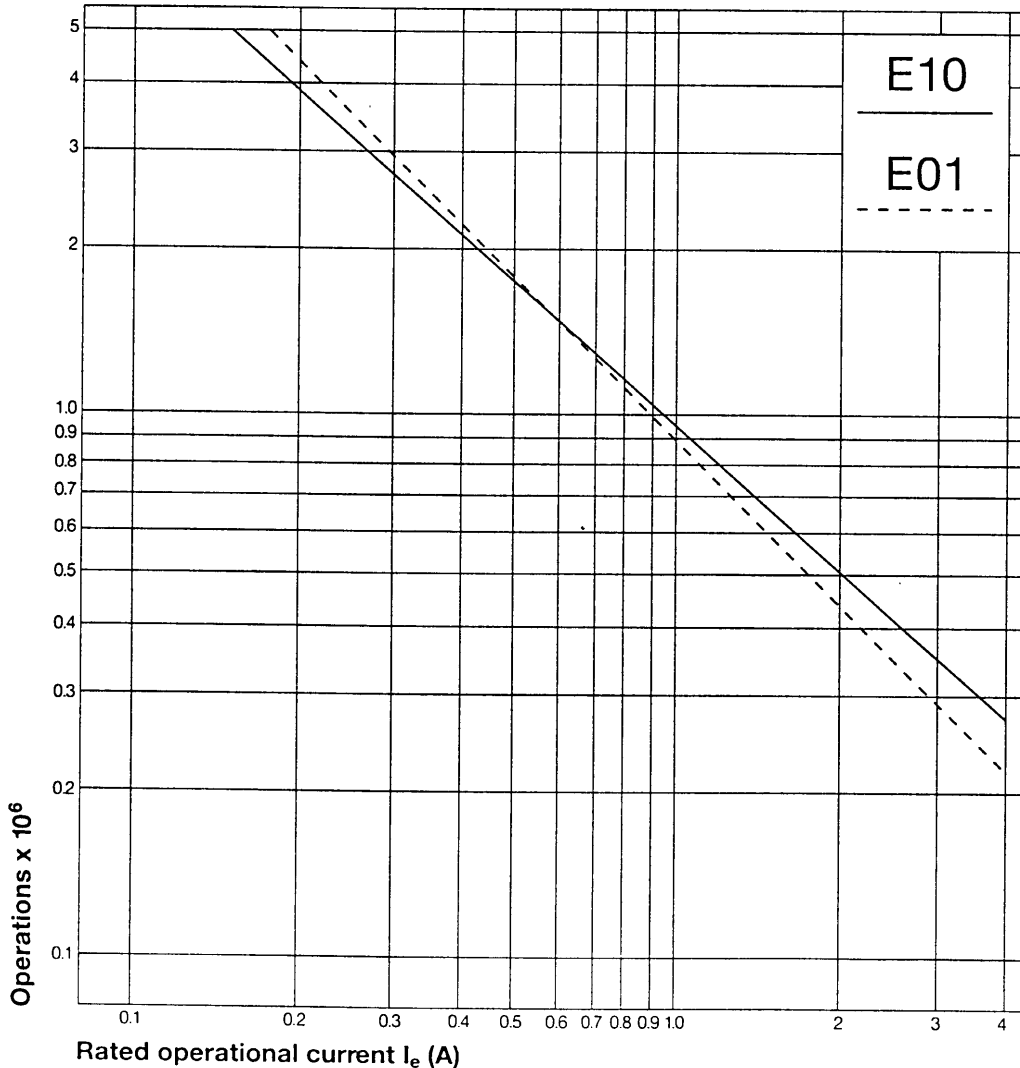
# Control Circuit Devices

			Contact elements	Illuminated push-buttons (Stay-put)	Illuminated selector switches	Indicator lights	Illuminated emergency actuators	
<b>General</b>								
Standards			IEC 947, EN 60 947, DIN VDE 0660					IEC 947
Mechanical lifespan	Operations × 10 <sup>6</sup>		10	3	0.3	-	0.1	
	Operations × 10 <sup>6</sup>		-	(0.3)	-	-	-	
Maximum operating frequency	Ops./h		3600	3600	1800	-	600	
	Ops./h		-	(1800)	-	-	-	
Operating force	N		3	4	-	-	25	
Operating torque	Nm		-	-	≤ 0.2	-	-	
Degree of protection to IEC 529			IP 20 using ISH 2.8 IP 65 IP 65 IP 65					IP 65
Climatic proofing			Damp heat, constant, to IEC 68 Part 2-3 Damp heat, cyclic, to IEC 68 Part 2-30					Damp Damp
Ambient temperature	Open	Min./max. °C	-25/+60	-25/+60	-25/+60	-25/+60	-25/+60	
	Enclosed	Min./max. °C	-25/+40	-25/+40	-25/+40	-25/+40	-25/+40	
Mounting position			As required As required As required As required					As rec
Mechanical shock resistance (shock duration 10 ms) g			40	40	40	40	40	
Terminal capacity Min./max. mm <sup>2</sup>			0.5/1.0	0.5/1.0	0.5/1.0	0.5/1.0	1.0/0.5	
Blade terminal			2.8 × 0.8 mm to DIN 46 244					2.8 ×
Fast-on connector			2.8 × 0.8 mm to IEC 760					2.8 ×
Dimensions Page			03/088	03/088	03/088	03/088	03/088	
<b>Contacts</b>								
Rated impulse withstand voltage U <sub>imp</sub> kV			4	08	0.8	0.8	Elec to E at 2	
Rated insulation voltage U <sub>i</sub> V			250	250	250	250		
Overvoltage category/pollution degree U <sub>e</sub>			III/3	III/3	III/3	III/3		
Rated operational voltage U <sub>e</sub> Max. V			250	24	24	24		
Rated operational voltage I <sub>e</sub> Max. A			4	-	-	-		
Rated operational current I <sub>e</sub> 24 V/ 5 mA			Error frequency < 10 <sup>-7</sup> , < 1 error in 10 <sup>7</sup> operations					
5 V/ 1 mA			Error frequency < 5 × 10 <sup>-6</sup> , < 1 error in 5 × 10 <sup>6</sup> operations					
Voltage, current and tolerances to DIN EN 61 131-2								
Use of insulated ferrule ISH 2.8			From U <sub>e</sub> > 24 V AC/DC recommended From U <sub>e</sub> > 50 V AC and 120 V DC obligatory, even on the unused blade terminals					
Max. short-circuit protective device								
Fuseless Type			FAZN B6	-	-	-		
Fuse A gL			10	-	-	-		
<b>Switching capacity</b>								
Rated operational current I <sub>e</sub> AC-15	230 V A		4					
	110 V		4					
	48 V		4					
	24 V		4					
Rated operational current I <sub>e</sub> DC-13	220 V A		0.2					
	110 V		0.5					
	60 V		1.5					
	24 V		3					

Commutazione v 106

Illuminated emergency-stop actuators	Emergency-stop actuators	Push-button actuators (Stay-put)	Selector switches	Key-operated actuators	
IEC 947, EN 60 947, DIN VDE 0660					 03/004
0.1	0.1	3	0.3	0.3	
-	-	(0.3)	-	-	
600	600	3600	1800	1800	 03/010
-	-	(1800)	-	-	
25	25	4	-	-	
-	-	-	≤ 0.2	≤ 0.4	
IP 65	IP 65	IP 65	IP 65	IP 65	 03/004
Damp heat, constant to IEC 68 Part 2-3					
Damp heat, cyclic, to IEC 68 Part 2-30					
-25/+60	-25/+60	-25/+60	-25/+60	-25/+60	
-25/+40	-25/+40	-25/+40	-25/+40	-25/+40	
As required	As required	As required	As required	As required	
40	40	40	40	40	 03/018
1.0/0.5	-	-	-	-	
2.8 × 0.8 mm	-	-	-	-	
2.8 × 0.8 mm	-	-	-	-	
03/088	03/088	03/088	03/088	03/088	

**Electrical lifespan AC-15  
to EN 60 947-5-1  
at 230 V**



# Control Circuit Devices

			(Stay-put)	Contact elements	Foot and palm switches	Lamp socket elements	Lamp transformers	Push actuator	
						Front fixing		Mush actuator	
<b>General</b>									
Standards									
IEC 947, EN 60 947, DIN VDE 0660									
Mechanical lifespan			Operations × 10 <sup>6</sup>	10	1	0.1	-	IEC 947	
			Operations × 10 <sup>6</sup>	-	-	-	-	5	
Maximum operating frequency			Ops./h	6000	3600	600	-	6000	
Operating force			N	≤ 5	≤ 40	≤ 60	-	≤ 5	
			N	EC 11: ≤ 7.3	-	-	-	-	
			N	EC 20: ≤ 9	-	-	-	-	
			N	EC 02: ≤ 5.5	-	-	-	-	
Operating torque			Nm	-	-	-	-	-	
Degree of protection to IEC 529				IP 20	IP 67/IP 69 K	IP 20	-	IP 67	
Climatic proofing									
Damp heat, constant, to IEC 68 Part 2-3									
Damp heat, cyclic, to IEC 68 Part 2-30									
Ambient temperature	Open		Min./max. °C	-25/+60	-	-	-25/+60	Damp heat	
	Enclosed		Min./max. °C	-25/+40	-25/+40	-25/+40	-25/+60 -25/+40	Damp heat	
Mounting position				As required	As required	As required	As required	As required	
Mechanical shock resistance (shock duration 11 ms) to IEC 68-2-27			g	> 30	> 15	> 15	> 30	> 30	
Terminal capacity	Solid		Min./max. mm <sup>2</sup>	0.75/2.5	0.75/2.5	0.75/2.5	0.75/2.5	-	
	Stranded		Min./max. mm <sup>2</sup>	0.5/1.5	0.5/1.5	0.5/1.5	0.5/1.5	-	
Dimensions			Page	03/090 - 093					03/090
<b>Contacts</b>									
Rated impulse withstand voltage U <sub>imp</sub>			V	6000	6000	6000	4 <sup>1)</sup>	6	
Rated insulation voltage U <sub>i</sub>			V	500	500	500	250	630	
Overvoltage category/pollution degree				III/3	III/3	III/3	III/3	III/3	
Control circuit reliability at 24 V/5 mA 5 V/1 mA			Error frequency HF Error frequency HF	< 10 <sup>-7</sup> , < 1 error in 10 <sup>7</sup> operations < 5 × 10 <sup>-6</sup> , < 1 error in 5 × 10 <sup>6</sup> operations					
Voltage, current and tolerances to DIN EN 61 131-2									
Max. short-circuit protective device	Fuseless		Type	PKZM 0-10/ FAZN B6	PKZM 0-10/ FAZN B6	-	-	Short-circuit-proof	
	Fuse		A gL	10	10	10	-	Short-circuit-proof	
<b>Switching capacity</b>									
Rated operational current I <sub>a</sub> AC-15	115 V	A		6	6	6	-	-	
	230 V	A		6	6	6	-	-	
	400 V	A		4	4	4	-	-	
	500 V	A		2	2	2	-	-	
Rated operational current I <sub>a</sub> DC-13	24 V	A		6	6	6	-	-	
	60 V	A		3	3	3	-	-	
	110 V	A		0.8	0.8	0.8	-	-	
	220 V	A		0.3	0.3	0.3	-	-	
Electrical lifespan AC-15	230 V	1.2 A	Operations × 10 <sup>6</sup>	0.6	0.6	0.6	-	-	
		3.6 A	Operations × 10 <sup>6</sup>	0.3	0.3	0.3	-	-	
DC-13	12 V	2.8 A	Operations × 10 <sup>6</sup>	1.2	1.2	1.2	-	-	

<sup>1)</sup> EF 1 (C) : 2.5 kV, EF 0 (C) : 0.8 kV

# RMQ 22 Technical Data

RMQ 16  
03/002

Push-button actuators Mushroom actuators	Emergency-stop actuators	Double actuators <sup>2)</sup>	Selector switches Illuminated selector switches <sup>3)</sup>	Toggle switches	Key-operated actuators	Key-release mushroom actuators	Illuminated push-button actuators - stay-put <sup>3)</sup>	Indicator lights
---	--------------------------	--------------------------------	--	-----------------	------------------------	--------------------------------	---	------------------



03/004

IEC 947, EN 60 947, DIN VDE 0660

5	0.1	0.2	0.1	0.1	0.1	0.1	3	-
-	-	-	-	-	-	-	R(M)LTR: 0.3	-
6000	10	6000	2000	2500	100	100	6000	-
≧ 5	≧ 30	≧ 5	-	≧ 2	-	≧ 7	≧ 5	-
-	-	-	-	-	-	-	-	-
-	-	-	≧ 0.2	-	≧ 0.4	-	-	-
IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65	IP 65
Damp heat, constant, to IEC 68 Part 2-3								
Damp heat, cyclic, to IEC 68 Part 2-30								
-25/+60	-25/+60	-25/+60	-25/+60	-25/+60	-25/+60	-25/+60	-25/+60	-25/+60
-25/+40	-25/+40	-25/+40	-25/+40	-25/+40	-25/+40	-25/+40	-25/+40	-25/+40
As required	As required	As required	As required	As required	As required	As required	As required	As required
> 30	> 50	> 30	> 30	> 30	> 30	> 30	> 30	-
-	-	-	-	-	-	-	-	-



03/010



03/004

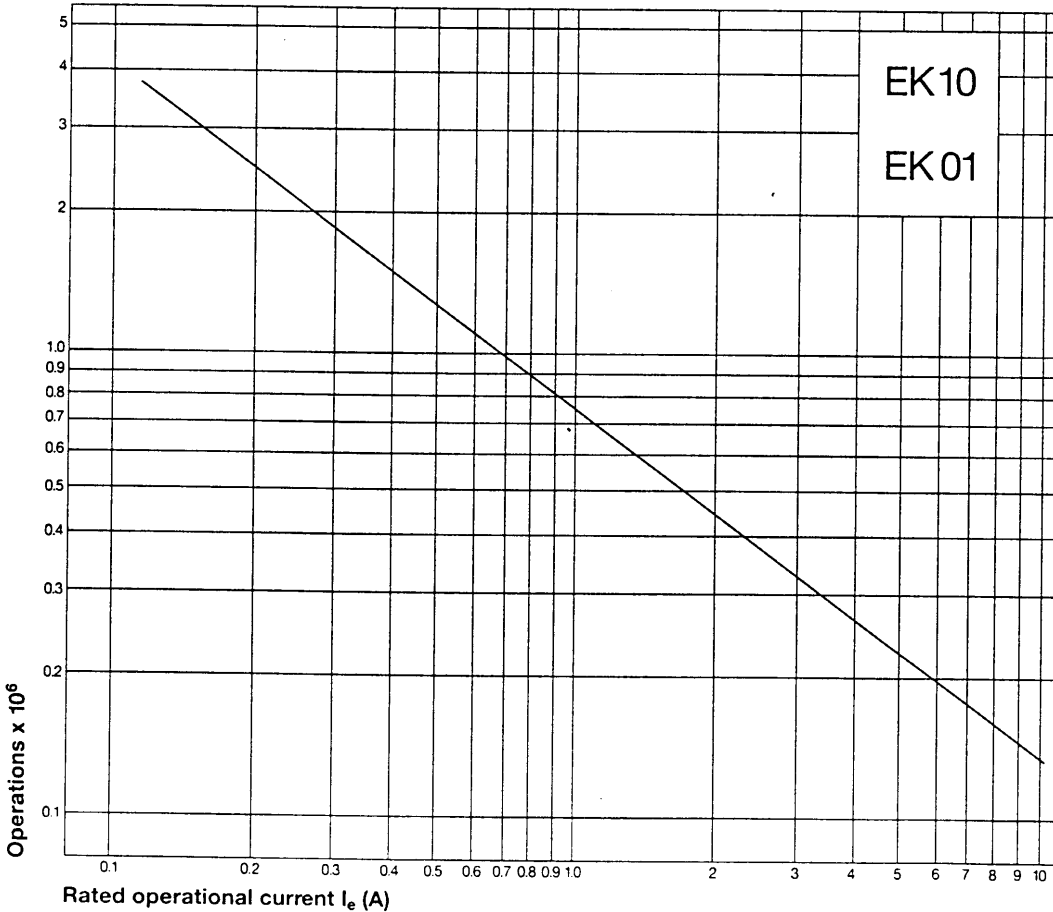


03/018

03/090-093

RMQ 22  
03/028

## Electrical lifespan AC-15 to EN 60 947-5-1 at 230 V



03/030



03/034



03/044



03/058



03/066



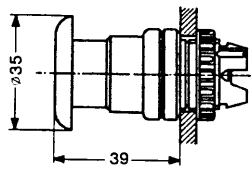
03/082



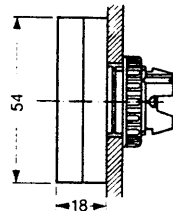
03/088

<sup>2)</sup> Only for  $\otimes$  up to 2 W <sup>3)</sup> Only for  $\otimes$  up to 1.2 W

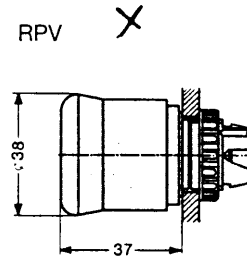
RPSR-... MPSR-...



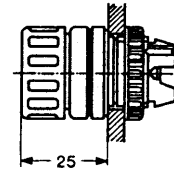
QDD-... QDDL-...



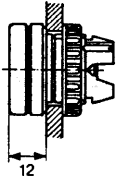
RPV



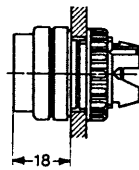
RW-... MW-...



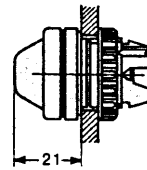
RLT-... MLT-...  
RLTR-... MLTR-...



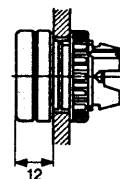
RLTH-... MLTH-...



RL-... ML-...



RLF-... MLF-...  
RZA-... MZA-...



03/004



03/010

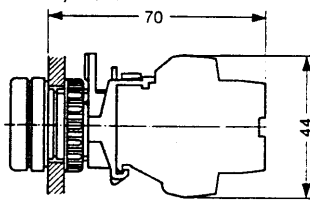
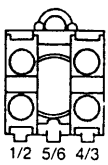


03/004

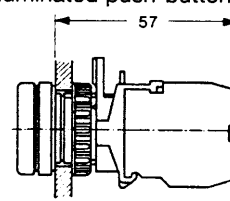
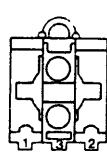


03/018

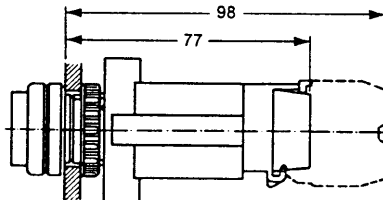
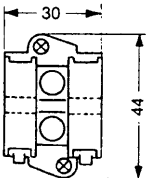
Push-buttons with EC 11, EC 20, EC 02



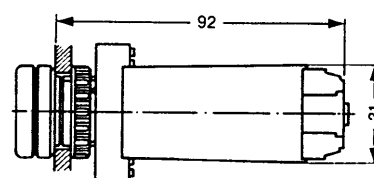
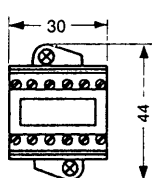
Indicator lights/illuminated push-buttons



Indicator lights/illuminated push-buttons with BFT... lamp transformers



Digital display units



RMQ 22  
03/028



03/030

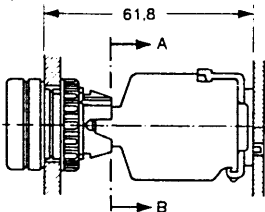


03/034

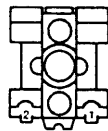


03/044

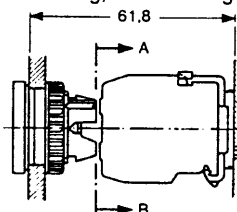
Indicator lights/illuminated push-buttons



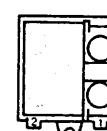
View A-B



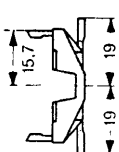
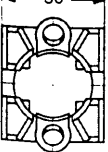
ET... lamp transformers for separate mounting, with blanking plug



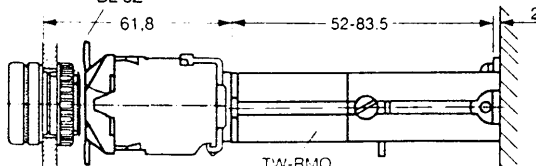
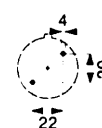
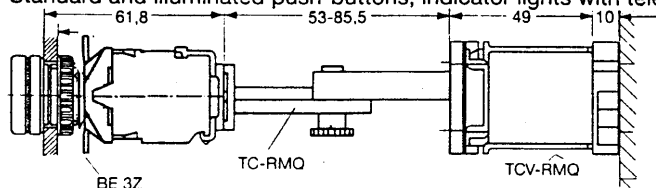
View A-B



BE 3Z centring adapters



Standard and illuminated push-buttons, indicator lights with telescopic clip or bracket



03/058



03/066

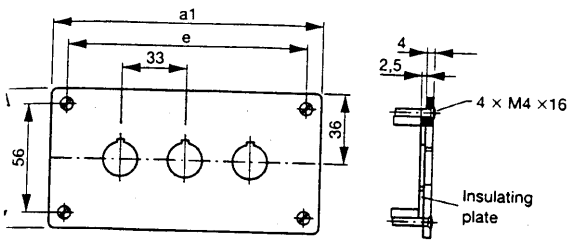


03/082



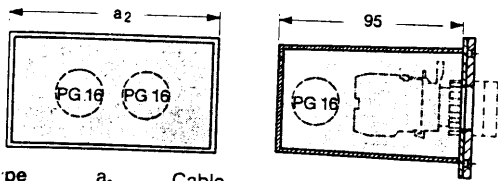
03/088

## Flush mounting plates, one to eight locations



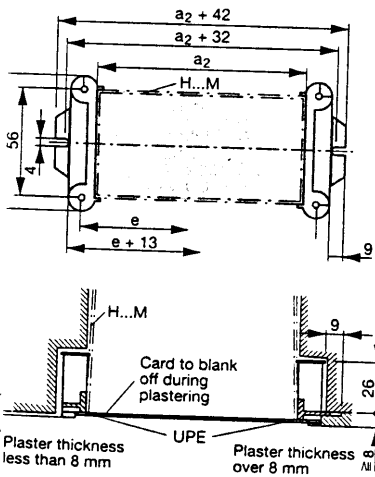
pe	a <sub>1</sub>	e
(GE) 1 M	72	56
2 M	105	89
3 M	138	122
4 M	171	155
5 M	204	188
6 M	237	221
7 M	270	254
3 M	303	287

## With shroud

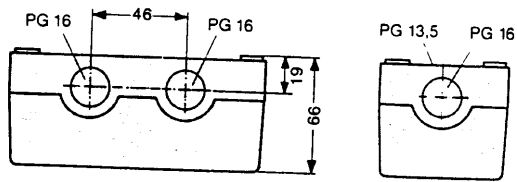
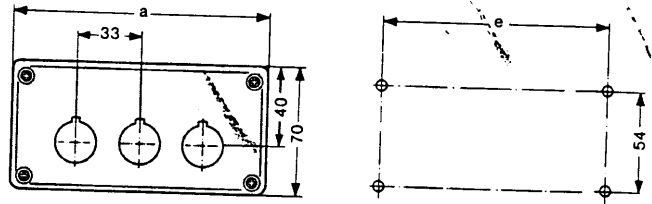


pe	a <sub>2</sub>	Cable entries
1 M	42	3 x Ø PG 16
2 M	75	4 x Ø PG 16
3 M	108	4 x Ø PG 16
4 M	141	4 x Ø PG 16
5 M	174	5 x Ø PG 16
3 M	207	6 x Ø PG 16
7 M	240	6 x Ø PG 16
3 M	273	7 x Ø PG 16

## Shroud with plaster keys (UPE)

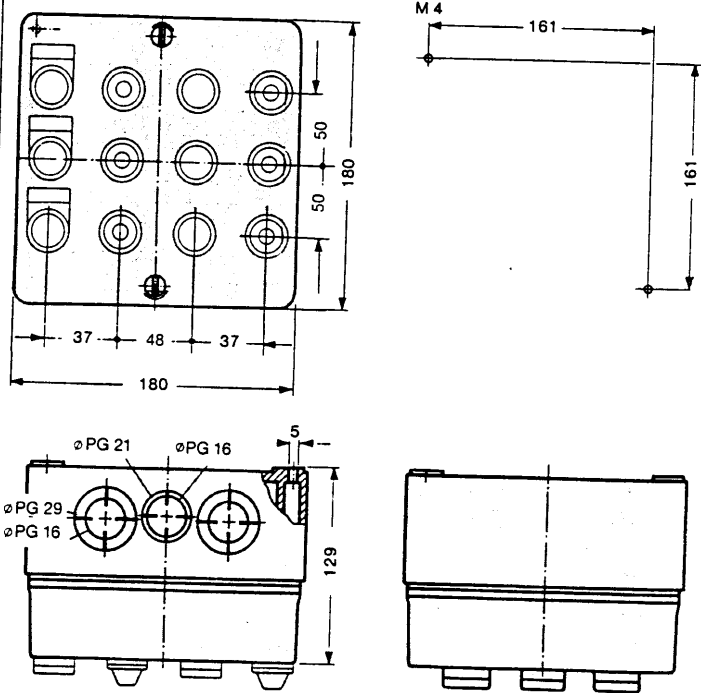


## Surface mounting enclosures, one to five locations

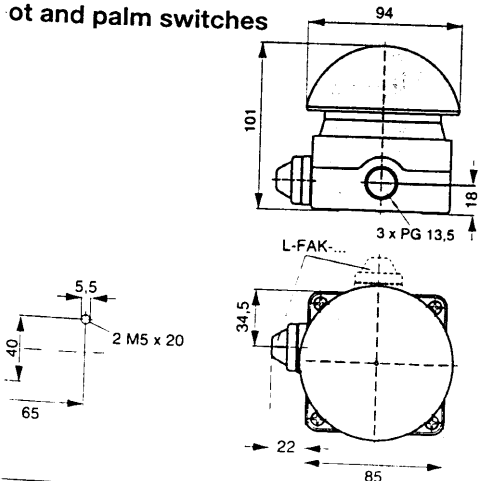


Type	Number of locations	a	e	Cable entries
11 M IGE 1 M	1	72	54	3 x Ø PG 16. 1 PG 13.5
12 M	2	120	100	3 x Ø PG 16. 2 PG 13.5
13 M	3	153	133	4 x Ø PG 16. 2 PG 13.5
14 M	4	186	166	4 x Ø PG 16. 2 PG 13.5
15 M	5	219	200	4 x Ø PG 16. 2 PG 13.5

## Surface mounting enclosures, 12 locations



## Knob and palm switches



Mou  
With

Grid c  
to IEC

QDD.

b 2/ 63

Acc.  
PL-R

48

48

# RMQ 22 Dimensions

RMQ 16  
03/002

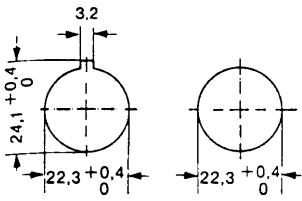
## Mounting holes With/without lug-slot

RA..., RB...

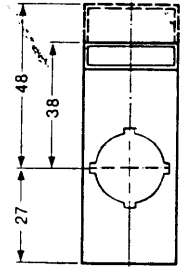
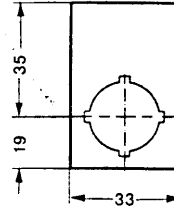
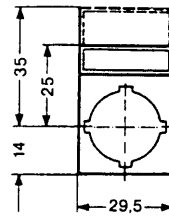
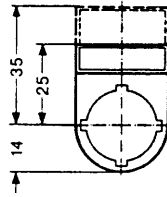
MA..., MB...

ZK-05

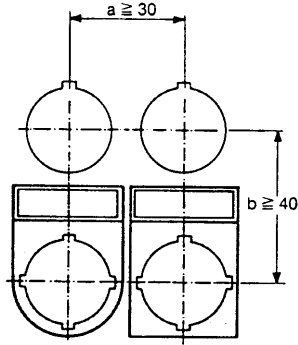
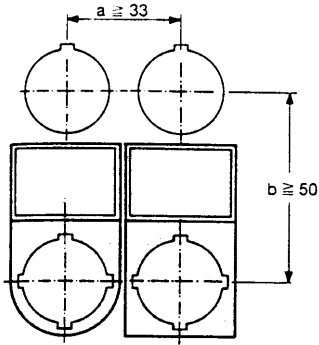
QA..., QB...



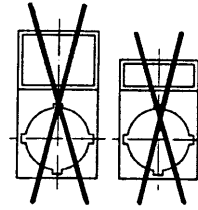
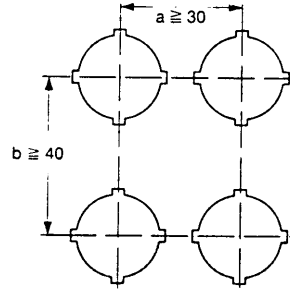
Grid dimension  
to IEC 947



Minimum grid dimension  
(not applicable when EC... is used)

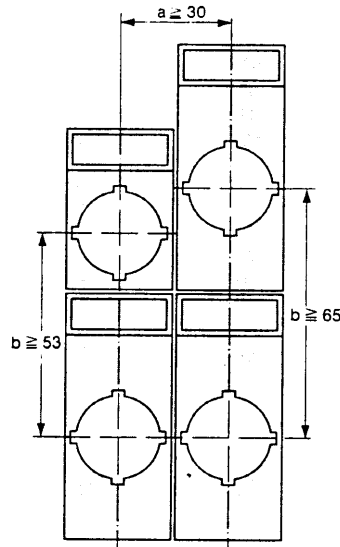
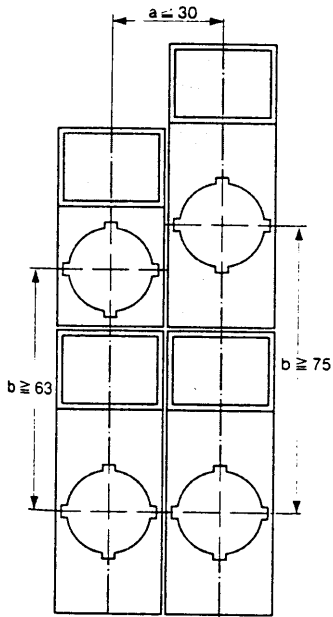


## RD actuators + MT-D diaphragms

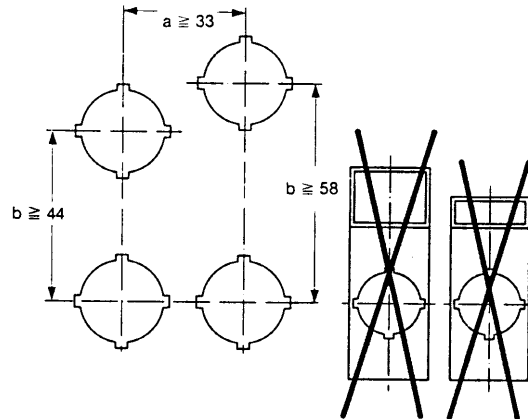


	a ≧	b ≧
IEC 947/EN 50 007	30	50
RMQ 22 min.	30	40
RD + MT-D	33	
RP, MP	35	
RPSR, MPSR	35	
RPV	38	
PL-RPV	48	56
QDD + MT-DD	33	58
QDD, QDDL		54
EC...		50
BCE 24, BCEL 24, BFT...		44

QDD...

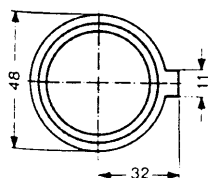
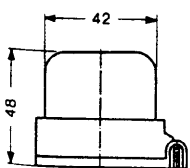


## QDD double actuators + MT-DD diaphragms

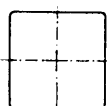
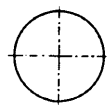
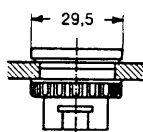


## Accessories

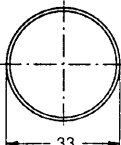
PL-RPV



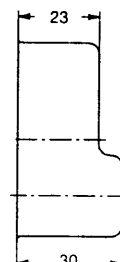
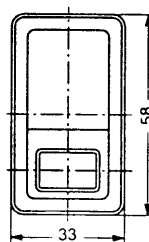
RB22..., MB22...



MT-D



MT-DD



03/004



03/010



03/004



03/018

RMQ 22  
03/028



03/030



03/034



03/044



03/058



03/066



03/082



03/088