CONTROLS

SWITCHGEAR

BREMAS

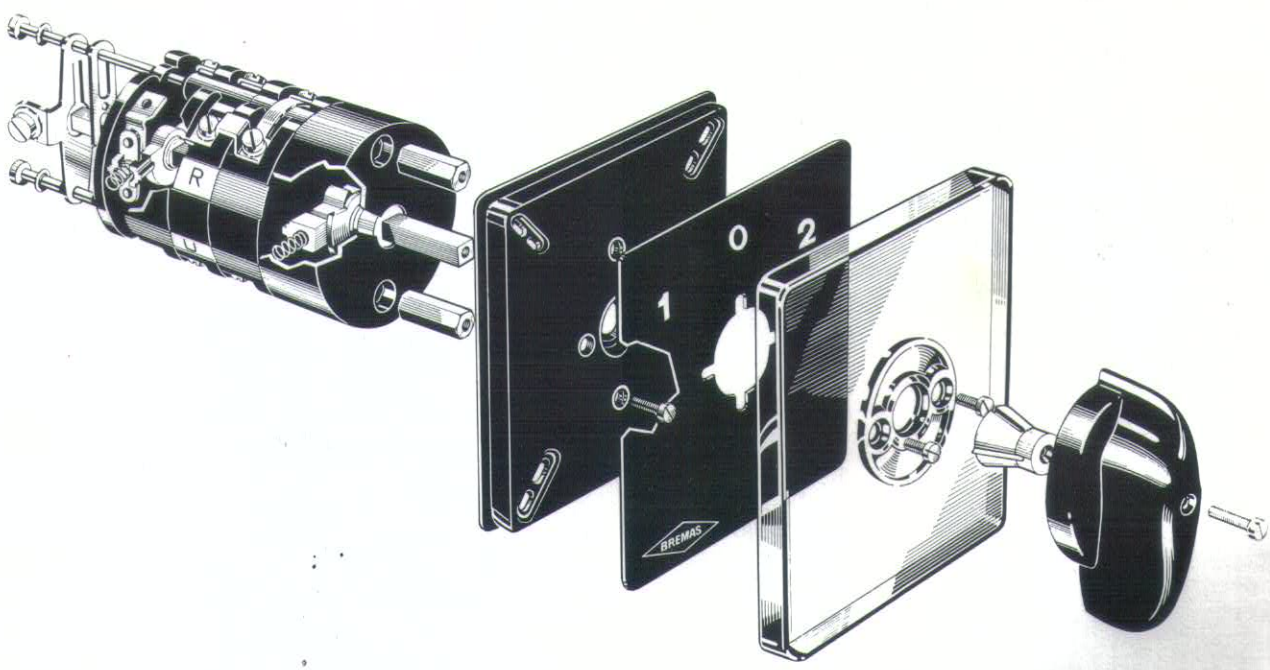
INDUSTRIAL SWITCHES

AND PILOT LAMPS

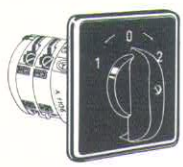
Cam-operated switches

Cam-operated, modular element switches, with double-breaking silver contacts, built according to international standards, with suitable materials, from 10 to 20 A - 380 V a.c. and from 25 to 630 A - 550 V a.c. The great versatility of these equipment permit a large set of versions and standard diagrams, and the possibility to built special switching diagrams, position angles of 30°, 45°, 60°, 90°.

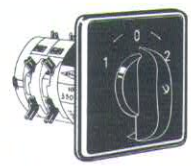
In this catalogue we have condensed the whole production of semirotary switches, accessories and pilot lamps manifactured by BREMAS, with clearness and complete exposure. The subjects are as follows:



Cam-operated switches
Ratings from 10 to 630 A, 380 - 500 V a.c.

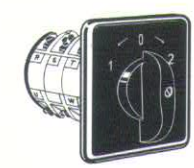


Series A. 1100
10 A - 380 V ~

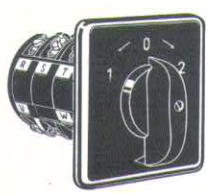


Series A. 1100/f
10 A - 380 V ~

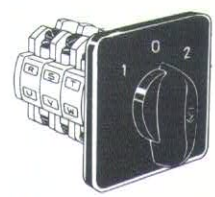
Series A. 1200
16 A - 550 V ~ AC1



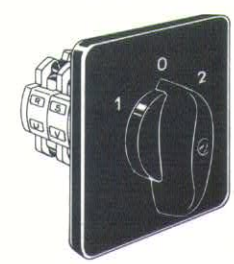
Series A. 1600
20 A - 550 V ~ AC1



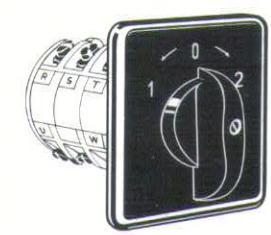
Series A. 2000
25 A - 550 V ~ AC1



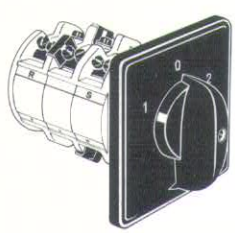
Series A. 2500
32 A - 550 V ~ AC1



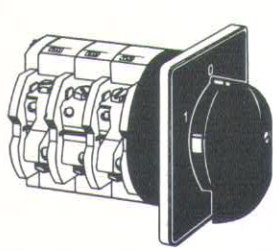
Series A. 3200
40 A - 550 V ~ AC1



Series A. 4000
50 A - 550 V ~ AC1

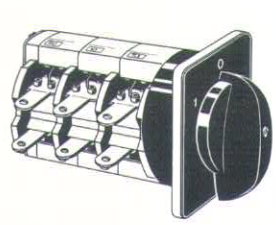


Series A. 6300
75 A - 550 V ~ AC1

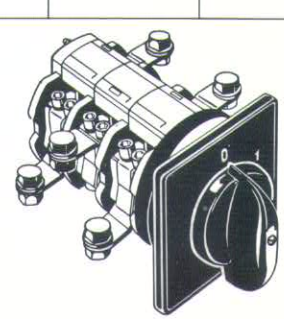


Series A. 100.00
120 A - 550 V ~ AC1

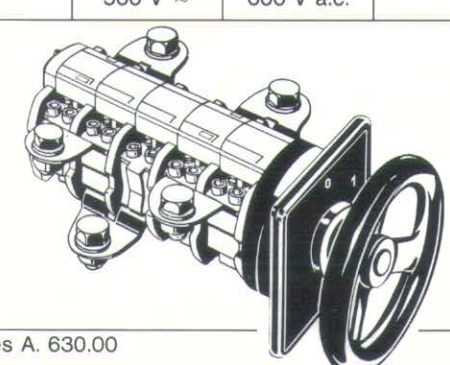
HOMOLOGATIONS APPROVALS / SERIES	ITALY	THE NEDERLANDS	W. GERMANY	SWITZERLAND	CANADA	GREAT BRITAIN
	IMQ	KEMA KEUR	VDE	S	SA	Lloyd's Register
A. 1100	10 (4) A 380 V ~					
A. 1200	12 (4) A 380 V ~	12 (4) A 380 V ~	12 (4) A 380 V ~			
A. 1600	16 (6) A 380 V ~	16 (6) A 380 V ~	16 (6) A 380 V ~			
A. 2000	20 (6) A 380 V ~	20 (6) A 380 V ~				
A. 2500	25 (8) A 500 V ~	25 (8) A 500 V ~	25 (8) A 500 V ~			
A. 3200	32 (10) A 500 V ~	32 (10) A 500 V ~	32 (10) A 500 V ~	32 (10) A 550 V ~	32 A 600 V a.c.	
A. 4000	40 (10) A 500 V ~	40 (10) A 500 V ~	40 (10) A 500 V ~		40 A 600 V a.c.	
A. 6300	63 (10) A 500 V ~	63 (10) A 500 V ~	63 (10) A 500 V ~	63 (10) A 550 V ~	63 A 600 V a.c.	63 A (*) 500 V ~
A. 100.00				100 A 500 V ~	100 A 600 V a.c.	



Series A. 200.00
200 A - 550 V ~



Series A. 400.00
400 A - 550 V ~



Series A. 630.00
630 A - 550 V ~

(*) Max. 8 elem.

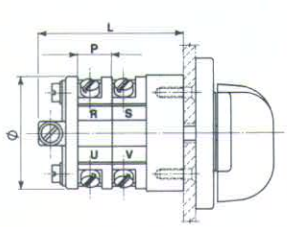
Cam-operated switches
Standard diagrams and overall dimensions of the body

Standard switches, available for prompt delivery in flush and rear mounting, version A.../PL.
The diagram number forms part of the type number of the switch, in the last two positions. For example: a commutator for wattmeter (diagram 27) in 12 amp. series (A.1200) is identified by the type number A.1227/..

Designation	Diagram	Elements no. for series											
		1100	1200	1600	2000	2500	3200	4000	6300	100.00	200.00	400.00	630.00
Single-pole switch	01	1	1	1	1	1	1	1	1	1	1	1	2
Double-pole switch	02	1	1	1	1	1	1	1	1	1	1	2	3
Three-pole switch	03	2	2	2	2	2	2	2	2	2	2	3	5
Four-pole switch	04	2	2	2	2	2	2	2	2	2	2	4	6
Single-pole change-over switch	05	1	1	1	1	1	1	1	1	1	1	2	3
Double-pole change-over switch	06	2	2	2	2	2	2	2	2	2	2	4	6
Three-pole line change-over switch	07	3	3	3	3	3	3	3	3	3	3	6	9
Three-pole reversing switch	08	3	3	3	3	3	3	3	3	3	3		
Pole changing switch	09	4	4	4	4	4	4	4	4	4	4		
Star-delta change-over switch	10	4	4	4	4	4	4	4	4	4	4		
Pole changing and reversing switch	11		6	6	6	6	6	6	7				
Star-delta change-over and reversing switch	12		6	6	6	6	6	6					
Pole changing and star-delta change-over switch	13		6	6	6	6	6	6					
Amperometric change-over switch	14		5	5	5	5	5	5					
PHASE-NEUTRAL voltmetric change-over switch	15		2	2	2	2							
PHASE-PHASE voltmetric change-over switch	16		2	2	2	2							
PHASE-PHASE voltmetric change-over switch for 2 three-phase voltages	17		4	4	4	4							
PHASE-PHASE and PHASE-NEUTRAL voltmetric change-over switch	18		3	3	3	3							
PHASE PHASE and 1 PHASE-NEUTRAL voltmetric change-over switch	19		3	3	3	3							
Single-pole amperometric change-over switch for 1 divider	20		1	1	1	1	1	1					
Single-pole amperometric change-over switch for 2 dividers	21		2	2	2	2	2	2					
Single-pole amperometric change-over switch for 3 dividers	22		3	3	3	3	3	3					
Single-pole amperometric change-over switch for 4 dividers	23		4	4	4	4	4	4					
Two-pole amperometric change-over switch for 2 dividers	24		3	3	3	3	3	3					
Two-pole amperometric change-over switch for 3 dividers	25		5	5	5	5	5	5					
Two-pole amperometric change-over switch for 4 dividers	26		6	6	6	6	6	6					
Commutator for wattmeter	27		5	5	5	5	5	5					
Commutator for power-factor meter	28		5	5	5	5	5	5					
Commutator for remote control switch	29		1	1	1	1							
Commutator for remote control reverser operation	30		2	2	2	2							
Switch for single-phase motor with auxiliary phase	31		2	2	2	2							
Reverser for single-phase motor with auxiliary phase	32		3	3	3	3							
Pole changing switch for single-phase motor with auxiliary phase	33		3	3	3	3							
Reverser for single-phase motor with centrifugal cut-out switch	34		3	3	3	3							
Three-pole switch with break self-return	35		2	2	2	2							
Three-pole reverser with break self-return	36		3	3	3	3							
Star-delta starter with self-return to "0" position from star position	37		4	4	4	4							
Star-delta starter with counter-current braking	38		5	5	5	5							

N.B.: Switches with grey ground are supplied with handwheel.
Switches from 200 to 630 A have to be utilized only for breaking life circuits, but not circuits under load.

Dimensions of the bodies



Series	ø mm.	L = mm.	P = mm.
A. 1100 - 1100/f	37	32	11
A. 1200 - 1600	40	46	12
A. 2000	49	48	13,5
A. 2500 - 3200	58	55	17
A. 4000	74	62	18
A. 6300	84	71	25
A. 100.00	110	91	30
A. 200.00 - 400.00 - 630.00		100	39

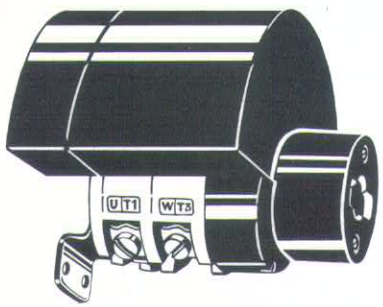
Utilization categories	V	A.1100-1100/f		A.1200		A.1600		A.2000		A.2500		A.3200		A.4000		A.6300		A.100.00	
		KW	hp	KW	hp	KW	hp	KW	hp	KW	hp	KW	hp	KW	hp	KW	hp	KW	hp
AC1 Non-inductive or slightly inductive loads (resistance furnaces, lighting circuits).	110	1,3	–	1,7	–	2,5	–	3	–	3,5	–	4,4	–	5,5	–	8,2	–	13,2	–
	220	2,6	–	3,5	–	4,4	–	5,5	–	7	–	8,8	–	11	–	16,4	–	26,4	–
	380	4,5	–	6	–	7,5	–	9,5	–	12	–	15,2	–	19	–	28,5	–	45,6	–
	500	6	–	8	–	11	–	12,5	–	16	–	20	–	25	–	37,5	–	60	–
AC2 Slip-ring motors: starring and reversing the motor rapidly while the motor is running.	110	1,2	1,5	1,5	2	2,2	3	2,8	3,8	3,2	4,3	5	6,8	6,2	8,5	10	13,5	13	17,5
	220	2,2	3	2,8	3,8	4,5	6	5,5	7,5	6,6	9	10	13,5	12,5	17	20	27	26	35
	380	3,4	4,5	4	5,5	7,4	10	9	12	11,7	16	17	23	20	27	33	45	44	59,5
	500	4	5,5	4,7	6,5	10	13,5	11,7	16	15,4	21	22	30	28	37	44	60	60	81,5
AC3 Squirrel-cage motors: starting, switching off motors during running.	110	0,9	1,2	1,1	1,5	1,8	2,5	2,2	3	2,5	3,5	4	5,5	5,1	7	8	11	11	14,5
	220	1,8	2,5	2,2	3	3,7	5	4,4	6	5,5	7,5	8	11	11	15	16	22	22	29
	380	2,7	3,7	3,4	4,5	6,3	8,5	7,4	10	9,5	13	14	19	14,5	20	28	38	37	50
	500	3,3	4,5	4	5,5	8	11	9,5	13	12,5	17	18,4	25	25,8	35	37	50	50	68
AC4 Squirrel-cage motors: starting, plugging, inching.	110	0,7	0,9	0,8	1,1	1,4	2	1,7	2,3	2	2,7	3	4	3,8	5,2	6,1	8,3	7	10
	220	1,4	1,9	1,6	2,2	2,7	3,7	3,3	4,5	4	5,5	6,1	8,3	7,7	10,5	12	16,5	17,5	24
	380	2,1	2,8	2,5	3,4	4,7	6,5	5,5	7,5	6,9	9,5	10,3	14	13,2	18	21,3	29	30	41
	500	2,5	3,4	2,9	4	6	8,2	7,1	9,7	9,2	12,5	14	19	17,6	24	28	37	40	54
SINGLE PHASE	110	0,5	0,7	0,6	0,8	1	1,4	1,3	1,8	1,6	2,2	2,3	3,2	3	4,2	5,1	7	3,5	5
	220	1	1,3	1,1	1,5	2,1	2,8	2,6	3,5	3,3	4,4	4,6	6,2	6,1	8,4	10,3	14	8,5	12
	380	1,7	2,3	2	2,7	3,6	4,9	4,5	6,2	5,7	7,7	8	10,8	10,7	14,5	17,6	24	15	20,5
	500	2,3	3,1	2,6	3,5	4,8	6,5	6	8	7,5	10	10,4	14	14	19	22,8	31	20	27

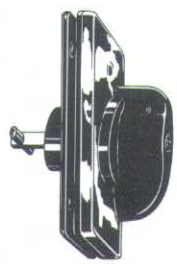
AC2: for utilizations if the heigher value of the making and breaking current is 2,5 I_e.
AC3: when the heigher value of the making current is 6 I_e and the heigher value of the breaking current is I_e.
AC4: for heavier duties, when the higher value of the making and breaking current is 6 I_e.

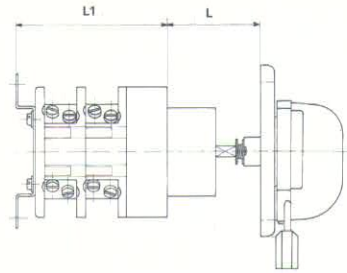
Note: The values in this table are rounded more or less depending to the opportunity and to the cross section of the several components of the switches and based on an operating cycle of about 60 cycle per hour for 8 hours per day for an endurance of 7 years. For the greater series (A.200.00 - 400.000 - 630.00) it shall be considered the rated values beeing these switches designed for breaking life circuits, but not circuits under load.

Ratings in D.C.: until 30 V, cam operated switches can break its rated current; for more than 30 V, there are necessary so many contacts in series connection how many time 30 V are conteined into the requested voltage.

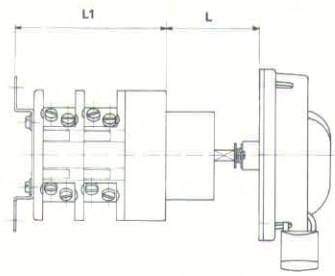
Cam-operated switches with door-interlock



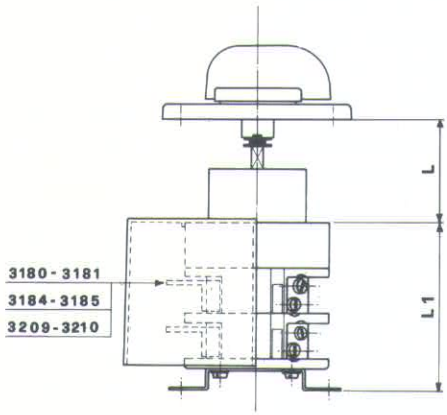




/CME
With 1 padlock locking the knob in "off" position.



/3 LME
With 3 padlocks, locking the knob in "off" and "on " position (60°).

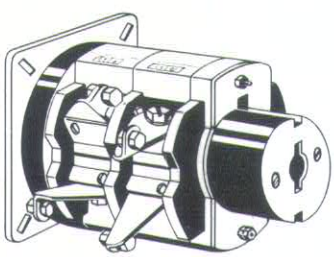


Elem.	L_1				L	L_1		L
	A.1100 A.1100/f	A.1200 A.1600	A.2000	A.2500 A.3200		A.4000	A.6300	
1	41,5	46,5	48	55	47,5	59	68	61
2	52	58,5	51,5	72		77	93	
3	62,5	71	75	89		95	118	
4	73	83	88,5	106		113	143	
5	83,5	95,5	102	123		131	168	
6	94	108	115,5	140		149	193	
7	104,5	120	129	157		167	218	

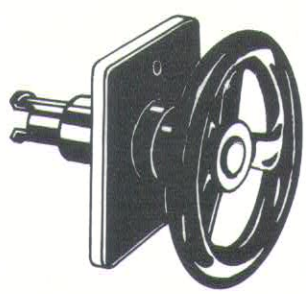
/ME standard version.

All switches with door-interlock are supplied with protective shround against line-terminals and rubber packing for tightness IP54.
On request, switches may be supplied with conductor couplings approachable in axial direction (see page 11).

/ME rated from 10 to 63 Amp.

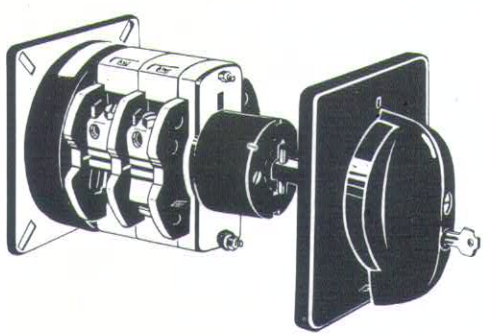


/ME standard version with knob



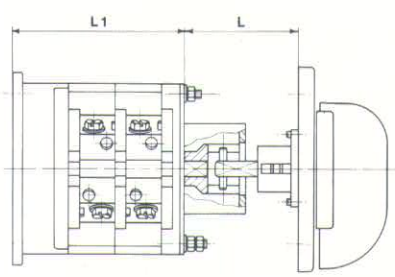
Handwheel control

Rear mounting switches are normally supplied with knob.
On request or when it seems necessary (for example 4 elements from 200 A) the control is made by a handwheel 1600 mm. dia.
In that case all the mechanism is reinforced with rugged elements of turned and milled brass rather than with the normal steel pin.



/CME with incorporated key in the knob for locking in "off" and "on" positions (60°).

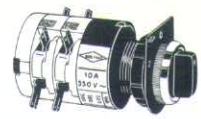
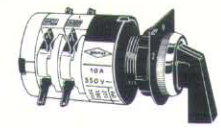
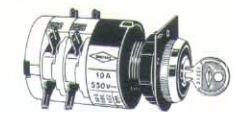
For line-terminal protections and conductor couplings approachable in axial direction, see pages 10 and 11.



Elem.	L_1		L with	
	A.100.00	A.200.00	knob	handwheel
1	80	89	70 ÷ 76	108 ÷ 112
2	110	128		
3	140	167		
4	170	206		

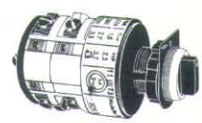
/ME rated from 100 to 200 Amp.

Cam-operated switches
Preselector switches from 10 to 16 A - 380 V a.c.

With "250" Faston

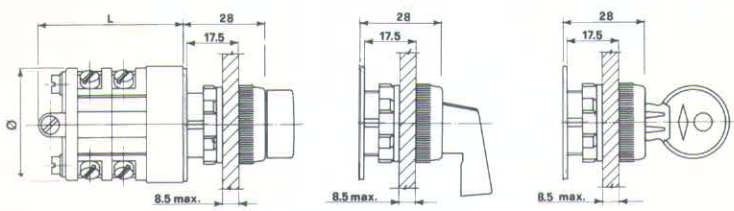
Series	Ratings	ø	Mod.	Mod.	Mod.
M. 1100/f	10 A - 380 V ~	22	M. 1100/fMO1	M. 1100/fMO2	M. 1100/fCO
		30	M. 1100/fM1	M. 1100/fM2	M. 1100/fC



With screw-terminals

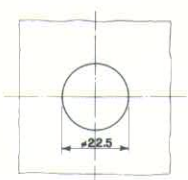
Series	Ratings	ø	Mod.	Mod.	Mod.
M. 1100	10 A - 380 V ~	22	M. 1100/MO1	M. 1100/MO2	M. 1100/CO
		30	M. 1100/M1	M. 1100/M2	M. 1100/O
M. 1200	12 A - 380 V ~	22	M. 1200/MO1	M. 1200/MO2	M. 1200/CO
		30	M. 1200/M1	M. 1200/M2	M. 1200/C
M. 1600	16 A - 380V ~	22	M. 1600/MO1	M. 1600/MO2	M. 1600/CO
		30	M. 1600/M1	M. 1600/M2	M. 1600/C

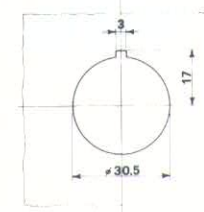
Dimension drawings



Elem.	contacts	Overall dimensions for series			
		A.1100 - A.1100/f		A.1200 - A.1600	
		ø	L	ø	L
1	1	37	32	40	46
	2				
2	3		43		58
	4				
3	5		54		70
	6				
4	7		65		82
	8				
5	9		76		94
	10				
6	11		87		106
	12				
7	13		98		118
	14				
8	15		109		130
	16				

Drilling templates





Prices for key removable in one position only.

On request in 2, 3, 4 positions.

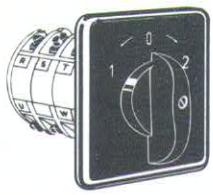
- With or without self-return from right to left position.
- From 1 to 8 elements, corrisponding to 16 contacts.
- Switching angles 30°, 45°, 60°, 90°.
- Front-plates of every type.

The same locking ring coupling is also available for the series 20-25 A.

Series	Ratings	Mod.
M.1100	10 A - 380 V ~	M.1100/CS
M.1100/f		M.1100/CSf
M.1200	12 A - 380 V ~	M.1200/CS
M.1600	16 A - 380 V ~	M.1600/CS

New series of preselector switches with safety key control very sure and durable. Cylinder and casing made in chromium plating brass, and cylindrical pips.
Key normally removable in "off" position; on request, in other positions.
Other characteristics as above.

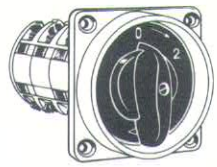
Cam-operated switches
Different versions



Flush or rear mounting

A.../PL

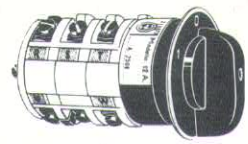
Series A.1100 ÷ A.630.00



Flush mounting with protected knob

A.../IPLA (plate 71x71) Series A.1100 ÷ 2500

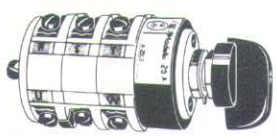
A.../IPLT (plate 62x78) - Series A.1100 ÷ 2000



Rear mounting

A.../R

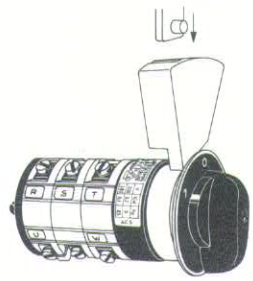
Series A.1100 ÷ 6300



Rear mounting with central fixing

A.../G

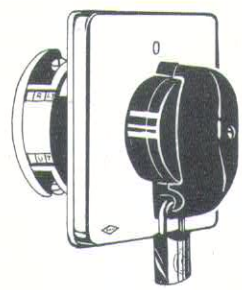
Series A.1100 ÷ 6300



Mechanical clamping

A.../BP

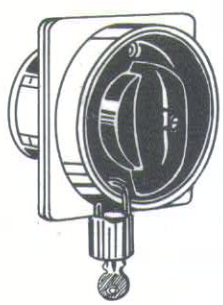
Series A.1200 ÷ 2500



Flush or rear mounting with padlock, locking the knob in "off" position.

A.../CPL

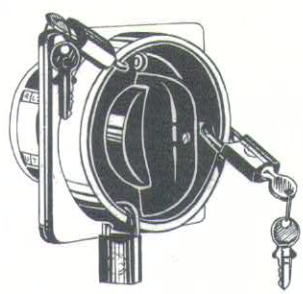
Series A.1200 ÷ 6300



Flush mounting with protected knob, locking with 1 padlock in "off" position

A.../1L

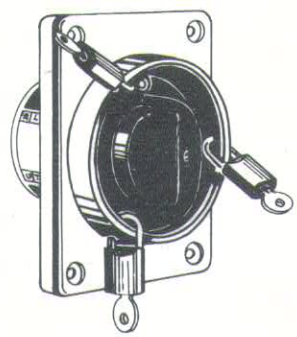
Series A.1200 ÷ 2500



Flush mounting with protected knob, locking with 3 padlocks.

A.../3L

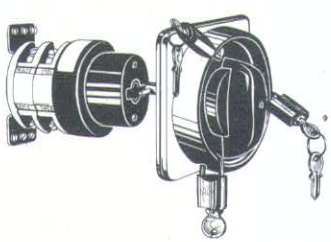
Series A.1200 ÷ 6300



Flush mounting with protected knob, locking with 3 padlocks, on front-plate 76x100 mm.

A.../3LA

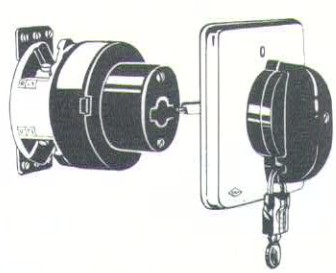
Series A.1200 ÷ 3200



Door-interlock, protected knob, locking with 3 padlocks

A.../3LME

Series A.1200 ÷ 6300



Door-interlock, locking with 1 padlock in "off" position.

A.../CME

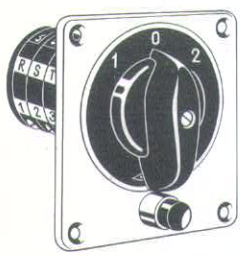
Series A.1200 ÷ 6300

For door-interlocking switches A.../ME see page 4.

For preselector switches with central fixing 22 mm. dia. and 30 mm. dia., see page 5.

Cam-operated switches
Different versions

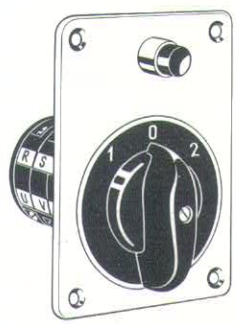
In these pages (6 and 7) are presented the most requested versions, except .../ME versions in standard execution and except preselector switches with central fixing 22 mm. dia. and 30 mm. dia., knob and key controls, to which are reserved specific pages 4 and 5.
Each illustration presents a specific version, with a synthetical description, followed by letters which identify type and series available.
For example, a three-pole switch (diagram 03) of the 40 A series (A.4000), with 3 padlocks (.../3L) is identified by the article A.4003/3L.
On request, owing to the versatility of BREMAS cam-operated switches, several other special executions are possible, as for example coupling of different sizes, tandem drives, etc.
For dimensions of the bodies see page 3. For the other dimensions see pages 8 - 9 - 12.



Push-button lock device
on 1, 2 or 3 positions.

A.../DP

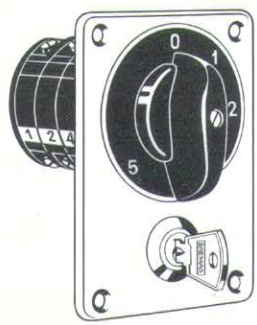
Series A.1200 ÷ 2000



Push button lock device with self return to "off" position from both positions by pressing the button.

A.../DPA

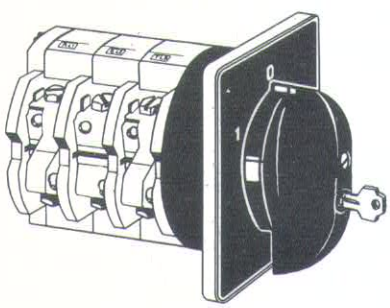
Series A.1200 ÷ 2000



Key lock device on one
or more positions

A.../DC

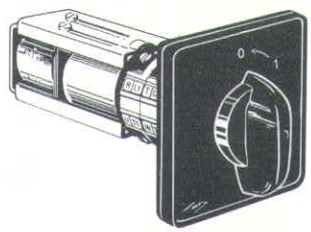
Series A.1200 ÷ 6300



Flush or rear mounting with
locking key in the knob

A.../CPL

Series A.100.00 ÷ 200.00



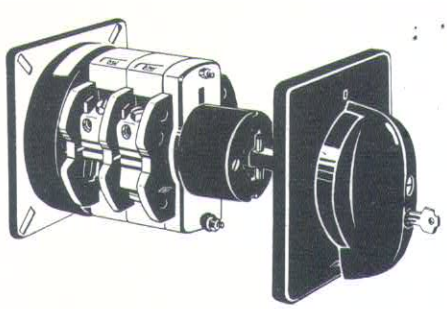
Flush or rear mounting,
with safety electromagnete

A.../EPL

Series A.1200 ÷ 2500

Wall mounting in plastic enclosure

A.../S3 Series A.1100 ÷ 3200
A.../S4 Series A.1200 ÷ 4000
A.../S9 Series A.4000 ÷ 6300

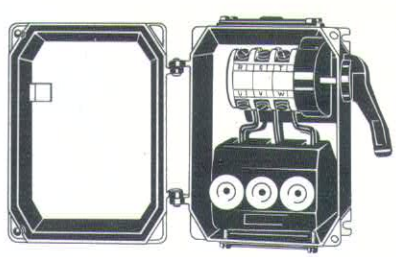


Door-interlock,
with locking key in the knob

A.../CME

Series A.100.00 ÷ 200.00

Max. dimensions
mm. 145 x 185 x 86

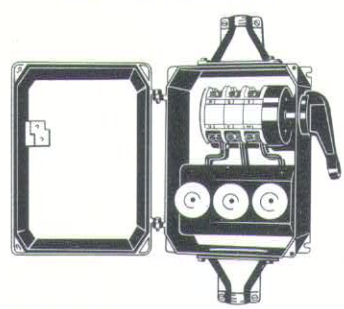


Wall mounting in aluminium enclosure,
with or without fuse-holders

A.../S6F for switches and reversing switches

Series A.1200 ÷ 3200

Max. dimensions
mm. 190 x 260 x 122

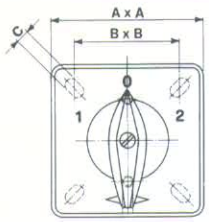


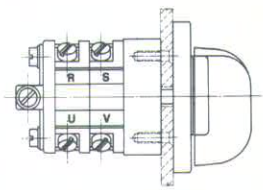
Wall mounting in aluminium enclosure,
with or without fuse-holders

A.../S7F for switches and reversing switches

Series A.4000 ÷ 6300

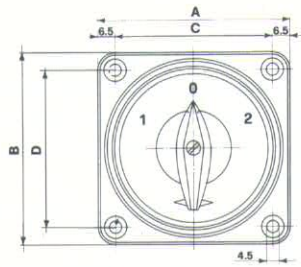
Cam-operated switches
Dimensions drawings

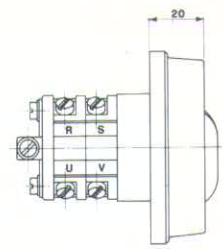




SERIES	A		B		C
	STANDARD	ON REQUEST	STANDARD	ON REQUEST	
A.1100-1200	52	75	34 ÷ 38	46 ÷ 60	4,3
A.1100/f	75	–	46 ÷ 60	–	
A.1600		52		34 ÷ 38	
A.2000-2500		–		–	
A.3200	105	75	65 ÷ 85	46 ÷ 60	5,3
A.4000-6300		–		–	
A.100.00 ÷ 630.00	130	–	94 ÷ 110	–	

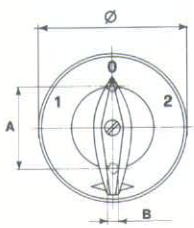
/PL

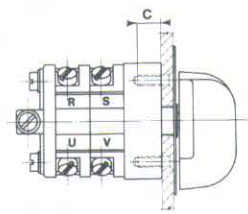




SERIES	/IPLA		/IPLT	
	A x B	C x D	A x B	C x D
A.1100-1100/f	71 x 71	58 x 58	62 x 78	49 x 65
A.1200-1600				
A.2000				
A.2500			–	–

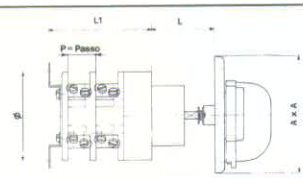
/IPLA - /IPLT





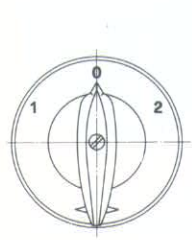
SERIES	ø	A	B	C
A.1100-1100/f	59	28	M 3,5	8
A.1200 ÷ 2500				
A.3200	85			
A.4000-6300		40	M 5	9

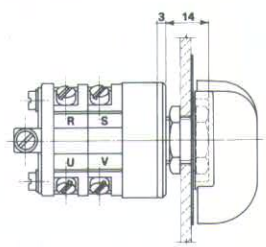
/R



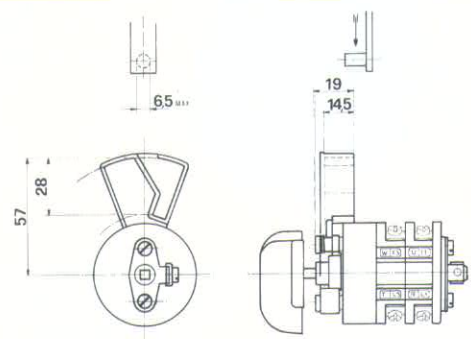
SERIES	A	ø	1 elem. L1 = mm.	P	L
A.1100 - 1100/f	75	40	41,5	12,25	47,5
A.1200 - 1600			46,5		
A.2000		49	48	13,5	
A.2500		58	55	17	
A.3200	105				
A.4000		74	59	18	61
A.6300		84	68	25	

/ME - /CME (Note: for higher ratings see ahead)

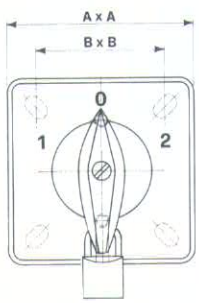




/G

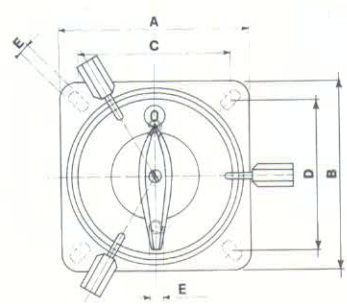


/BP



SERIES	A	B
A.1200 ÷ 2500	75	46 ÷ 60
A.3200 ÷ 6300	105	65 ÷ 85

/CPL (Note: for higher ratings see ahead)

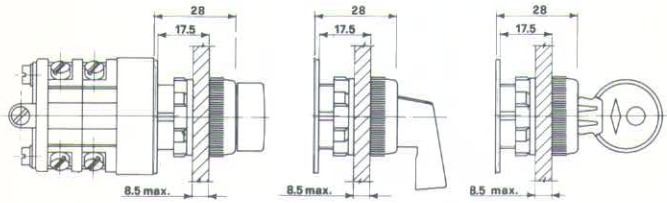


/1L-3L-3LME	A	B	C	D
A.1200 ÷ 2500	75	75	46÷60	46÷60
A.3200 A.4000 ÷ 6300	105	105	65÷85	65÷85

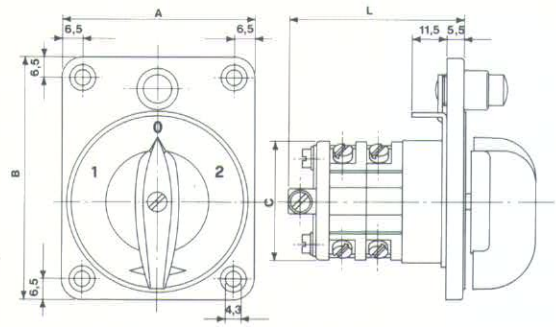
/3LA	A	B	C	D
A.1200 ÷ 2500 A.3200	76	100	63	87

/3L - /3LME - /3LA - /1L

Cam-operated switches
Dimensions drawings

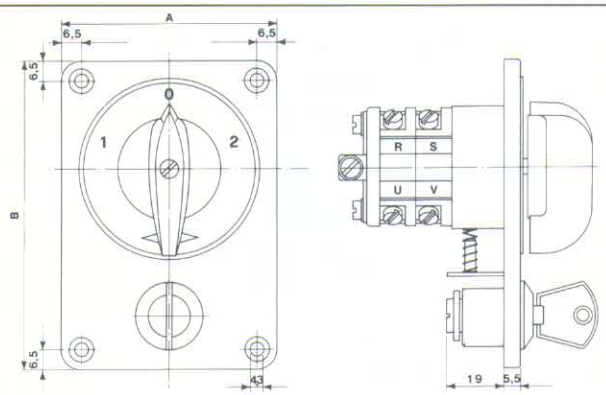


Flange ø 22	M.../01	M.../02	M.../CO
Flange ø 30	M.../1	M.../2	M.../C
Flange ø 30, reinforced type (see page 5)			M.../CS



/DP

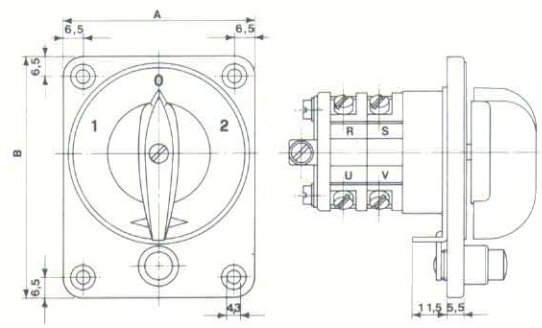
DIMENSIONS	
A	B
63	100
70	100
76	100
63	125
70	135
70	145



/DPA

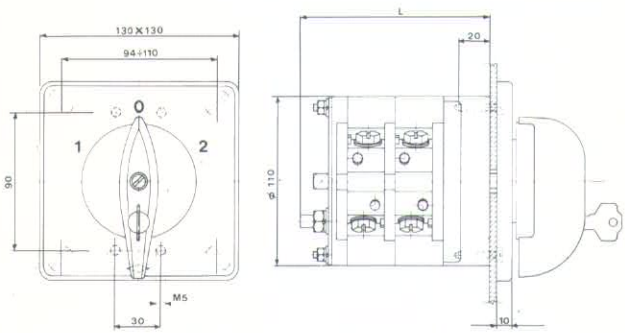
Minimum dimensions for series A.1200 ÷ 2000 - A = 70 - B = 100

Minimum dimensions for series A.3200 ÷ 6300 - A = 100 - B = 130

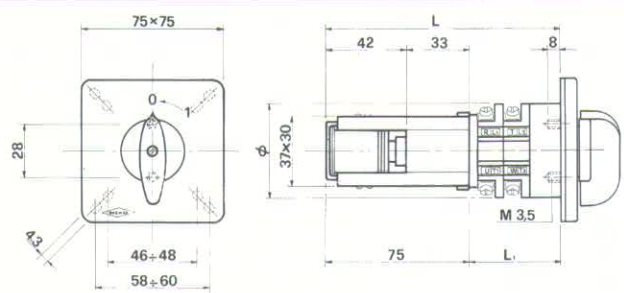


/DC

DIMENSIONS	
A	B
62	78
71	71
80	80
100	100
100	120

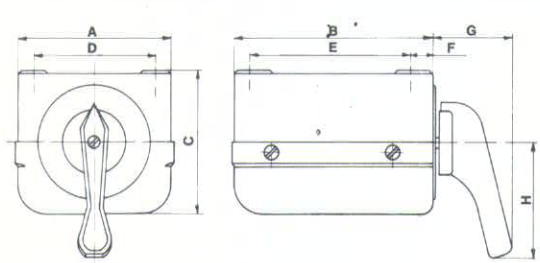


/CPL (version for 100 ÷ 200 Amp.)



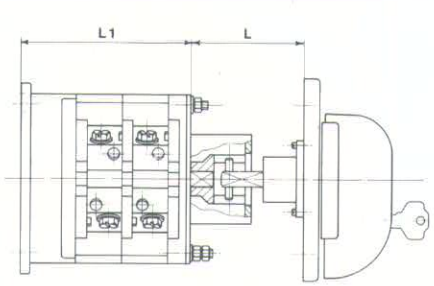
SERIES	ELEM.	ø	L_1	L
A 1200/EPL	2	40	45	120
	3		57	132
A 1600/EPL	2		45	120
	3		57	132
A 2000/EPL	2	49	45	120
	3		58	133
A 2500/EPL	2	58	57	132
	3		74	149

/EPL



TYPE	A x B x C	D x E	F	G	H
S3	80x105x76	62x84	12	42	60
S4	113x152x104	95x129	14	50	80
S9	135x190x115	111x166	12	50	80

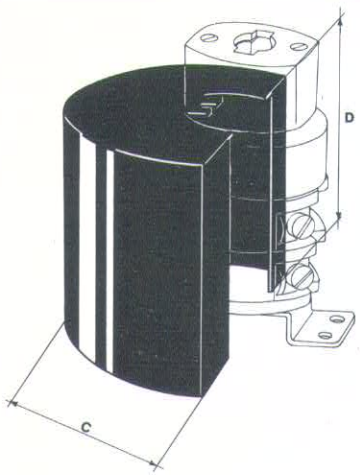
/S3 - S4 - S9



SERIES	L	L1 PER N. ELEM.			
		1	2	3	4
A.100.00/CME	70 ÷ 76	80	110	140	170
A.200.00/CME		89	128	167	206

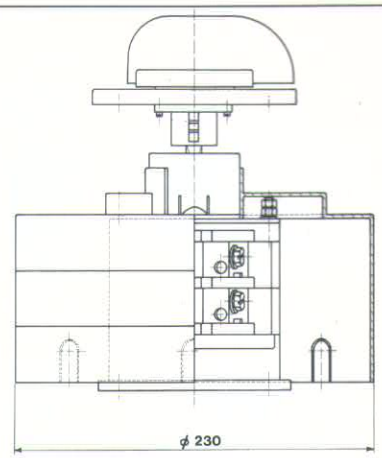
/CME (version for 100 ÷ 200 Amp.)

Cam-operated switches - Accessories
Protective shrouds

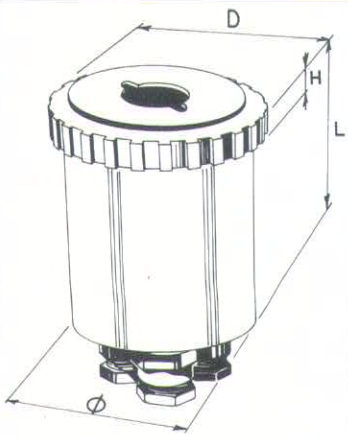


MOD.	Dimensions C	Dimensions D	Use	Elem.
P. 3228/1	33	42	A.1200 ÷ 2000/ME	1
P. 3228		53		2
P. 3880/1	42,5	37	A.2500 ÷ 3200/ME	1
P. 3880/2		54		2
P. 3880/3		70		3
P. 3186/1	57,5	55	A.1200 ÷ 3200/ME	2
P. 3186/2		72		3
P. 3229/1		55	A.4000 ÷ 6300/ME	1
P. 3229/2		72		2
P. 3211/1	72,5	82	A.4000/ME	3
			A.6300/ME	2
P. 3211/2		107	A.4000/ME	4
			A.6300/ME	3
P. 3942	85	98,5	A.100.00 ÷ 200.00/ME	2

Insulating protections against live terminals



P. 3327
Insulating protections against live terminals for series A.100.00 ÷ 200.00/ME



Semi-rigid shrouds with tightness brass according to IP65, supplied with grommets in syntetic rubber or cable threads in polyamide resin. Grommets and cable threads are loose supplied.

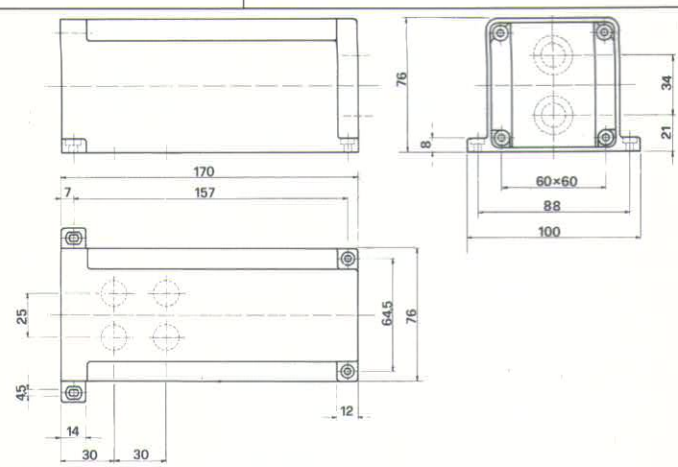
Model WITH GROMMETS	Model WITH CABLE THREADS	ø	L	D	H	Holes for cables N° × ø	Max. elem. per series A.1200	A.1600	A.2000	A.2500	A.3200	A.4000	A.6300
Gr. 092	Gr. 192	63	75	76	12,5	3 × 19,5	2						
Gr. 093	Gr. 193		103				4						
Gr. 094	Gr. 194		128				6						
Gr. 095	Gr. 195	77	106	90	12,5	3 × 23	3		2				
Gr. 096	Gr. 196		130				6		4				
Gr. 097	Gr. 197		163				9		6				
Gr. 098	Gr. 198	100	125	113	13,5	4 × 27						3	2
Gr. 099	Gr. 199		175									6	4
Gr. 100	Gr. 200		225									11	6

Cable threads

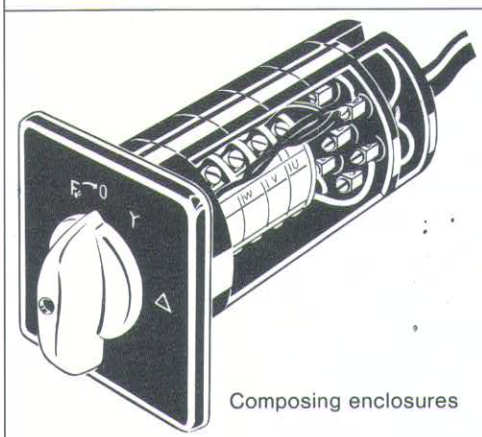
Mod.	Thread	Material	Employ
Gr. 101	Pg 11	NYLON	Gr. 192 ÷ 194
Gr. 102	Pg 16		Gr. 195 ÷ 197
Gr. 103	Pg 21		Gr. 198 ÷ 200
P. 2714/1	3/8" GAS	NYLON	
P. 2714/2	1/2" GAS		
P. 2616/1	3/8" GAS	BRASS	
P. 2616/2	1/2" GAS		

Grommets

Mod.	Employ
P. 4114/1	Gr. 092 ÷ 094
P. 4114/2	Gr. 095 ÷ 097
P. 4114/3	Gr. 098 ÷ 100



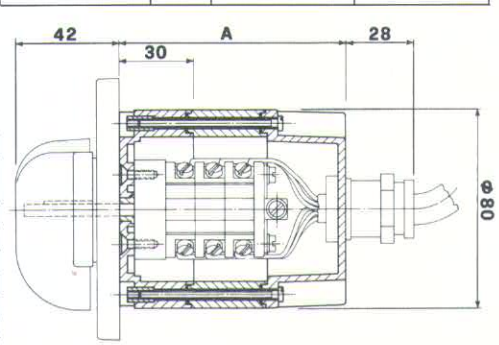
Mod. P. 4111
Insulating enclosure for semirotary switches with safety electromagnete.

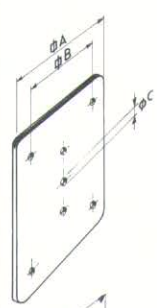


Composing enclosures

Enclosure with binding-clamps Mod.	A	N. max. elem. per series A.1200 ÷ 1600	A.2000
S10 M17	97	1-2-3	1-2
S10 M110			
S10 M27	127	4-5	3-4
S10 M210			
S10 M37	157	6-7-8	5-6-7
S10 M310			
S10 M47	187	9-10	8-9
S10 M410			
S10 M57	217	11-12	10-11
S10 M510			

Enclosure without binding-clamps Mod.	A	N. max. elem. per series A.1200 ÷ 1600	A.2000
S10	64	1	1
S10/1	94	2-3	2-3
S10/2	124	4-5-6	4-5
S10/3	154	7-8	6-7
S10/4	184	9-10	8-9
S10/5	214	11-12-13	10-11-12





Syntetic rubber packing for tightness IP54 for front-plates PL75-105-130

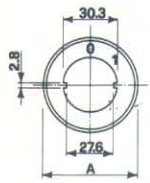
Mod.	A	B	C
P. 3836/1	105	65	4,5
P. 3836/2	105	65	6,5
P. 3837	75	46	4,5
P. 3838	130	102,5	9,5

Syntetic rubber packing for tightness according to IP54 for door-interlocks controls ME ⌀ 75 and ⌀ 105 mm.

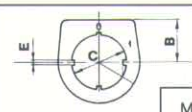
Mod.	A	B
P. 4260	75	60
P. 4261	105	85

Packings

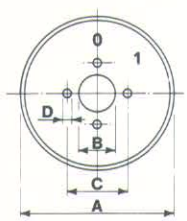
Cam-operated switches - Accessories
Front plates, controls, conductor couplings



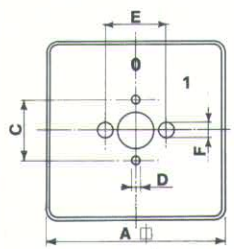
Mod.	Employ	A
T1	M.1100 ÷ 1600	47
T2		52



Mod.	Employ	ø	A	B	C	D	E
T01	M.1100 ÷ 1600	22	37	20	22,2	20,3	2,7
T02		30	44	24	30,5	27,6	3

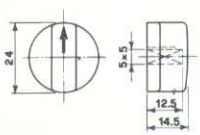


Mod.	Employ	A	B	C	D
T3	A.1100 ÷ 1200	47	16,3	20	3,5
T4		52			
T5	A.1100 ÷ 2500	59			
T6	A.3200 ÷ 6300	85	20	34	

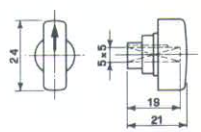


Mod.	Employ	A	C	D	E	F
T7	A.1100 ÷ 1200	48	20	3,5	20	3,5
T8	A.1100 ÷ 2500	71				
T9	A.3200 ÷ 6300	100	34		–	–
T10	A.100.00 ÷ 630.00	124,5	–	–	34	3,5

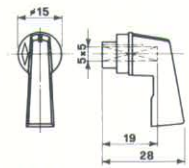
Front plates



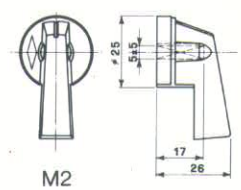
M1



MO1



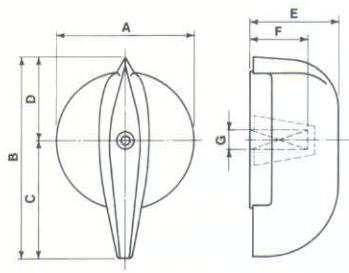
MO2



M2

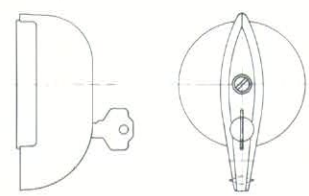
Knobs for preselector switches

Knobs:

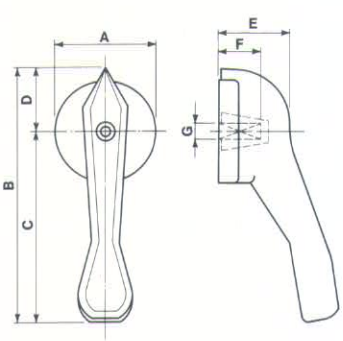


Knob	A	B	C	D	E	F	G		
M3	28	41	24	17	24	14	⌷5	X	
M4					20	10		X	
M04						14			X
M5	34	50	29	21	21	12		X	
M05						14			X
M6	48	70	41	29	31	20	⌷7	X	
M06							⌷5	X	
M9	75	105	63	42	45	25	⌷10	X	
M9C								X	

Thumb grip for series A.1100 ÷ 100.00

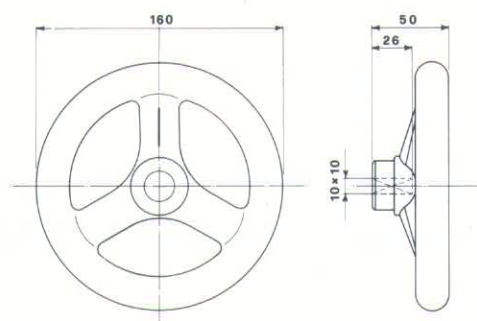


M9C
Knobs for series A.100.00 ÷ 200.000 with incorporated locking key acting in the knob.



Mod.	A	B	C	D	E	F	G
M7	33	80,5	60	20,5	22	11,5	⌷5
M8	48	109	80	29	31	20	⌷7
M10	58	149	115	34	46	25	⌷10

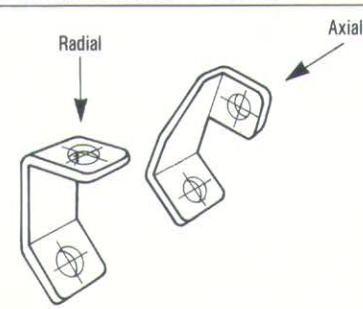
Pistol grip



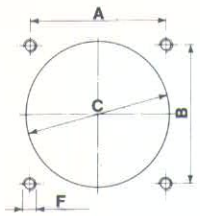
Mod. P.3407

Handwheel for series A.100.00 ÷ 630.00

Approachable:	Mod.					
In axial direction	P. 3180		P. 3184		P. 3209	P. 3370
	P. 3181		P. 3185		P. 3210	P. 3371
						P. 3396
In radial direction	P. 4272	P. 4273	P. 4274	P. 4275	P. 3258	
	P. 4272/1	P. 4273/1	P. 4274/1	P. 4275/1	P. 3258/1	
Employ: from series to series	A.1200 A.1600	A.2000	A.2500 A.3200	A.4000	A.6300	A.100.00

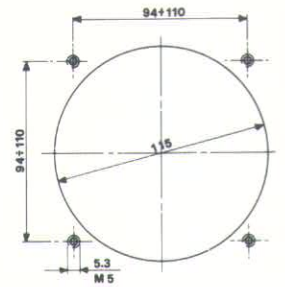


Cam-operated switches
Drilling templates



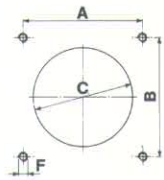
Series	Type	A	B	C	F
A.1100-1200	PL52	36 ÷ 38	36 ÷ 38	43	ø 4,3 o M4
A.1100/f-1600	PL75	46 ÷ 60	46 ÷ 60	53	
A.2000					
A.2500				62	
A.3200	PL105	65 ÷ 85	65 ÷ 85	64	ø 5,3 o M5
A.4000				78	
A.6300				88	
A.100.00	PL130	94 ÷ 110	94 ÷ 110	115	

/PL /EPL



/CPL (100 A)

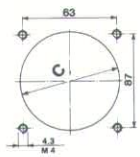
Series	/IPLA A × B	/IPLT A × B	C	F
A.1100	58 × 58	49 × 65	43	4,3 o M4
A.1200				
A.1600				
A.2000			53	
A.2500		—	62	



/IPLA /IPLT

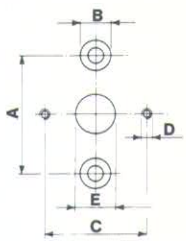
Series	Clamping-plate □	A	B	C	F
A.1200	75	46 ÷ 60	46 ÷ 60	43	4,3 o M4
A.1600					
A.2000				53	
A.2500				62	
A.3200	105	65 ÷ 85	65 ÷ 85	64	5,3 o M5
A.4000				78	
A.6300				88	

/CPL /3L



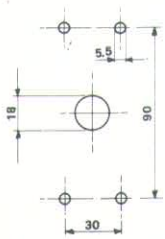
Series	C
A.1200	43
A.1600	
A.2000	53
A.2500	62
A.3200	64

/3LA

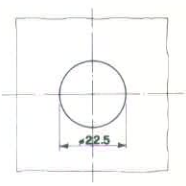


Series	A	B	C	D		E	
				front-plate only	/PL finish	without bush	with bush
A.1100	28	3,8 sv.	20	M3	ø 4,5	7,5	9,7
A.1200-1600							
A.2000							
A.2500							
A.3200			34				
A.4000	40	5,3 sv.				10	14
A.6300							

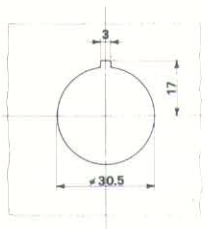
/R



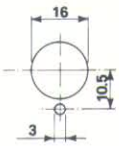
/PL /CPL (Back of board mounting for 100 ÷ 630 A)



M.../01 - /02 - /OC

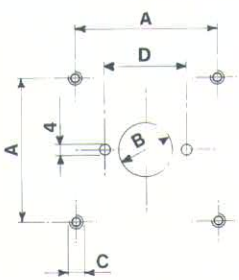


M.../1 - /2 - /3



/G

Drilling template for control clamping-plate



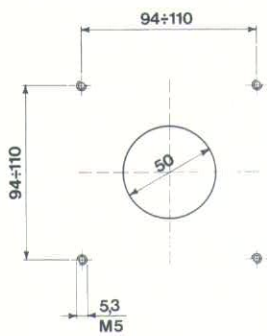
SERIES	A	B	C	D
A.1200 ÷ A.3200	46 ÷ 60	ø 27	ø4,3 (M4)	28
A.4000 ÷ A.6300	65 ÷ 85	ø 40	ø5,3 (M5)	40

Drilling template for the body

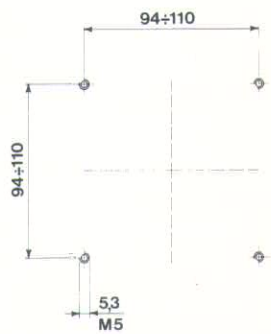
SERIES	A	B	C
A.1200 ÷ A.3200	18	58	ø 4,5 (M4)
A.4000 ÷ A.6300	26	84	ø 5,3 (M5)

/ME /CME /3LME (12 ÷ 63 A)

Drilling template for control clamping-plate

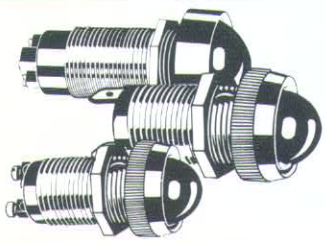
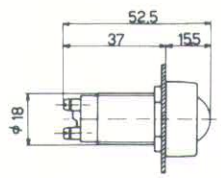
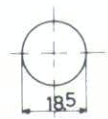
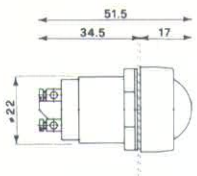
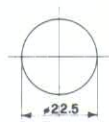
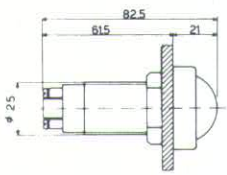
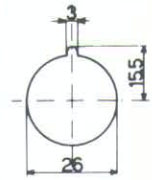


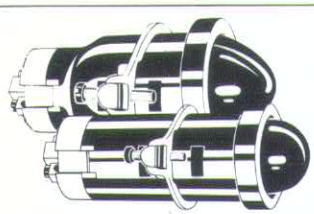
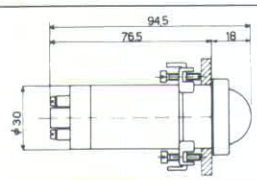
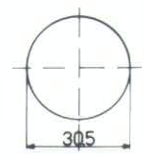
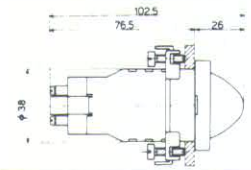
Drilling template for the body

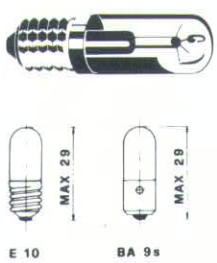


/ME /CME (100-200 A)

Pilot lamps

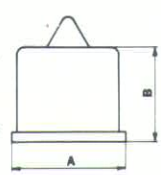
			Round projecting cup	Round cup	Round projecting cup	Square projecting cup	DRILLING TEMPLATE
			Model	Model	Model	Model	
	Screw terminals	E10	SL500	SL506	SL507	SL508	
		BA95	SL510	SL516	SL517	SL518	
	faston Coupling 6,35	E10	SL500/f	SL506/f	SL507/f	SL508/f	
		BA95	SL510/f	SL516/f	SL517/f	SL518/f	
	Screw terminals	E10	SL600	SL606	SL607	SL608	
		BA95	SL610	SL616	SL617	SL618	
	Faston Coupling 6,35	E10	SL600/f	SL606/f	SL607/f	SL608/f	
		BA95	SL610/f	SL616/f	SL617/f	SL618/f	
	Screw terminals	E14	SL520	SL526	SL527	SL528	

			Round projecting cup	Flat square cup	Round cup	Square cup with engraving dial	DRILLING TEMPLATE
			Model	Model	Model	Model	
	Screw terminals	E14	SL530	SL531	SL532	SL535	
		BA15s	SL540	SL541	SL542	SL545	
		BA15d	SL550	SL551	SL552	SL555	
	Screw terminals	E14	SL560	SI561	SL562	SL565	
		BA15s	SL570	SL571	SL572	SL575	
		BA15d	SL580	SL581	SL582	SL585	



For filiment types use lamps with rated voltage at least 30% higher. For neon types, lamps with voltage about 30% lower.

PROTECTING COVER for pilot lamps	A	B
model 590 MICROMIGNON BODY ø 18 packages of 25 pieces	ø 18	17
model 591 MICROMIGNON BODY ø 22 packages of 25 pieces	ø 22	22
model 592 MIGNON BODY ø 25 packages of 25 pieces	ø 26	30
model 593 MIGNON METAL BODY ø 30 - ø 38 packages of 25 pieces	ø 32	30



MOD.	EMPLOY
594	SL. ø 18
595	SL. ø 22
596	SL. ø 25