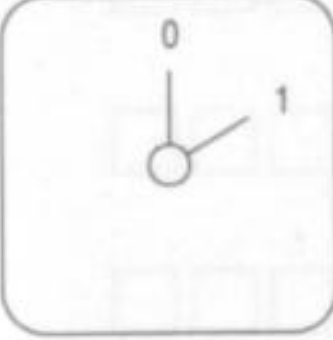
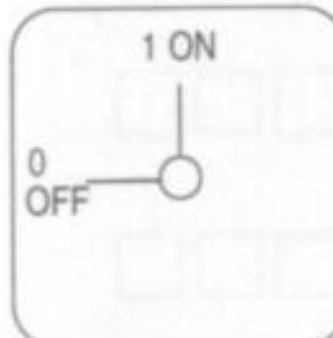
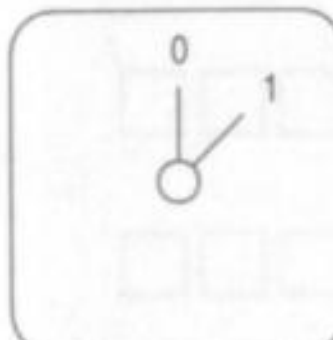
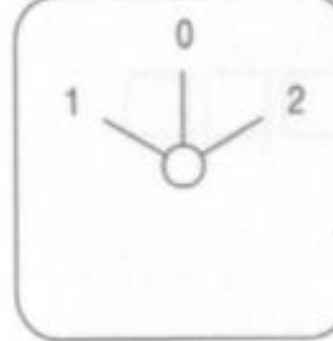
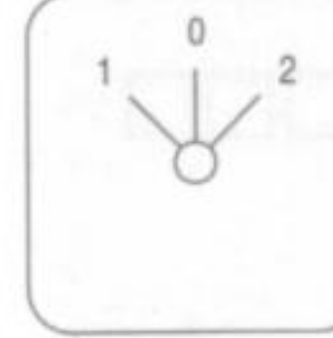
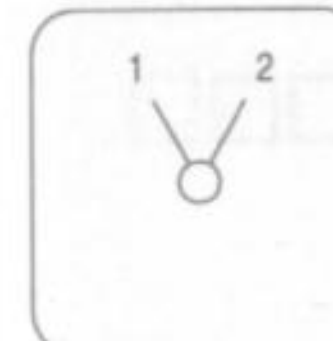
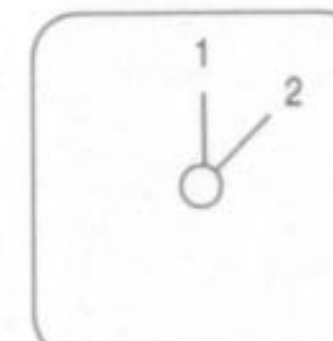


Standaardprogramma

Schakelfunctie	Met standaard frontplaat	Aantal polen
In/uit schakelaar		1
		2
		3
		4
		6
Hoofdschakelaar		1
		2
		3
		4
In-uit schakelaar Met terugkeer naar nulstand		1
		2
		3
		4
Omschakelaar Met nulstand		1
		2
		3
		4
Met terugkeer naar nulstand		1
		2
		3
		4
Zonder nulstand		1
		2
		3
		4
Zonder nulstand met terugkeer naar stand 1		1
		2
		3
		4

Schema's, zie Q.34-Q.41
Technische gegevens, zie Q.31
Maatschetsen, zie Q.45

lth = 10A tot 63A				
lth	Type	Schema	Bevestiging	
10A	107		100	Ø 16/22,5 centraal
			140	Ø 16/22,5 centr. + sleutelbed.
			200	front 4 schroeven
*20A	104		100	Ø 22,5/30,5 centraal
20A	105		200	front 4 schroeven
32A	151		300	bodem
40A	251		700	kast IP65
63A	451			* achter aansluiting

492/◇◇◇000-□□□	
492/◇◇◇001-□□□	
492/◇◇◇002-□□□	
492/◇◇◇003-□□□	
492/◇◇◇138-□□□	
492/◇◇◇004-□□□	
492/◇◇◇005-□□□	
492/◇◇◇006-□□□	
492/◇◇◇007-□□□	
492/◇◇◇008-□□□	
492/◇◇◇009-□□□	
492/◇◇◇010-□□□	
492/◇◇◇011-□□□	
492/◇◇◇012-□□□	
492/◇◇◇013-□□□	
492/◇◇◇014-□□□	
492/◇◇◇015-□□□	
492/◇◇◇016-□□□	
492/◇◇◇017-□□□	
492/◇◇◇018-□□□	
492/◇◇◇019-□□□	
492/◇◇◇020-□□□	
492/◇◇◇021-□□□	
492/◇◇◇022-□□□	
492/◇◇◇023-□□□	
492/◇◇◇024-□□□	
492/◇◇◇025-□□□	
492/◇◇◇026-□□□	
492/◇◇◇027-□□□	

lth = 80A tot 125A				
lth	Type	Schema	Bevestiging	
80A	656		200	front 4 schroeven
160A	756		300	bodem
			700	kast IP65

492/◇◇◇000-□□□	
492/◇◇◇001-□□□	
492/◇◇◇002-□□□	
492/◇◇◇003-□□□	
492/◇◇◇138-□□□	
492/◇◇◇004-□□□	
492/◇◇◇005-□□□	
492/◇◇◇006-□□□	
492/◇◇◇007-□□□	
492/◇◇◇008-□□□	
492/◇◇◇009-□□□	
492/◇◇◇010-□□□	
492/◇◇◇011-□□□	
492/◇◇◇012-□□□	
492/◇◇◇013-□□□	
492/◇◇◇014-□□□	
492/◇◇◇015-□□□	
492/◇◇◇016-□□□	
492/◇◇◇017-□□□	
492/◇◇◇018-□□□	
492/◇◇◇019-□□□	
492/◇◇◇020-□□□	
492/◇◇◇021-□□□	
492/◇◇◇022-□□□	
492/◇◇◇023-□□□	
492/◇◇◇024-□□□	
492/◇◇◇025-□□□	
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492/◇◇◇027-□□□	

Technische gegevens

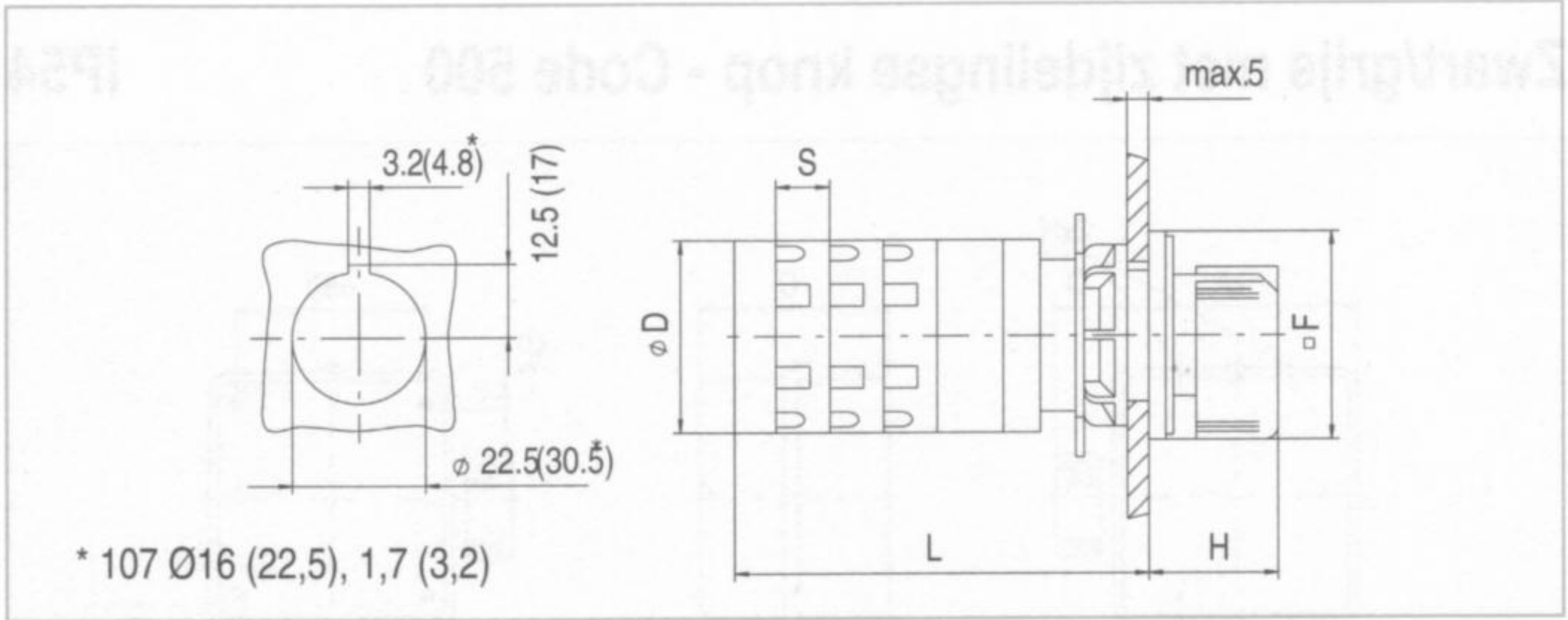
Volgens IEC 947-3, EN 60947-3, DIN VDE 0660 Teil 107, UL en CSA

Types			
Conventionele thermische stroomsterkte (bij max. aansluitbereik)			
I _u open = I _{th}			(A)
I _{the} in behuizing			(A)
Toegekende isolatiespanning U _i (III/3)			(V)
Toegekende stootisolatiespanning U _{imp} (III/3)			(kV)
Toegekende gebruiksstroomsterkte I _e AC 21A			(A)
Toegekende gebruiksspanning U _e			(V)
Frequentie			(Hz)
Schakelvermogen			
Gebruikscategorie AC3:	3 x 230V		(kW)
motorschakelaar voor schakelingen	3 x 400V		(kW)
tijdens bedrijf	3 x 690V		(kW)
Eénfasige motor	1 x 230V		(kW)
	1 x 400V		(kW)
Gebruikscategorie AC23A:	3 x 230V		(kW)
motorschakelaar	3 x 400V		(kW)
(Hoofdschakelaar, onderhoudschakelaar)	3 x 690V		(kW)
Toegekend uitschakelvermogen AC23A	3 x 230V		(A)
	3 x 400V		(A)
	3 x 690V		(A)
Toegekende gebruiksstroomsterkte I _e			
Gebruikscategorie AC15:			
stuurschakelaar - hulpschakelaar	230V		(A)
	400V		(A)
Kortsluitvastheid			
Max. kaliber voorgeschakelde smeltzekering gL-karakteristiek			(A)
Toegekende konditionele kortsluitstroom			(kA _{eff})
Toegekend kortsluitinschakelvermogen I _{cm}			(kA)
Toegekende toegelaten korte-duurstroom I _{cw} (1 s)			(A _{eff})
Scheidereigenschappen tot			(V)
Mechanische levensduur - Aantal schakelcycli			
Aansluitschroeven (Pozidriv)			
Aansluitkoppel voor de aansluitschroeven			(Nm)
Aansluitbereik (Cu)			
Eén- of meerdradig		min. (mm ²)	
		max. (mm ²)	
Soepel met draadhuls (DIN 46228)		min. (mm ²)	
		max. (mm ²)	
	General purpose 3-phase		(A)
			(V)
	Motor 3-phase	240V	
480V			(HP)
600V			(HP)
	Motor 1-phase (2 poles)	120V	(HP)
		240V	(HP)
Cable cross section			AWG-No

107	104	105	151	251	451	656	756
10	20	20	32	40	63	80 ⁽¹⁾	125 ⁽¹⁾
10	16	16	25	40	63	80 ⁽¹⁾	125 ⁽¹⁾
500	690	690	690	690	690	690	690
4	6	6	6	6	6	6	6
10	16	16	25	32	50	80 ⁽¹⁾	125
500	690	690	690	690	690	690	690
50/60	50/60	50/60	50/60	50/60	50/60	50/60	50/60
1,5	3	3	5,5	7,5	11	22	22
2,2	5,5	5,5	7,5	11	18,5	37	45
–	5,5	5,5	11	15	22	45	45
0,55	2,2	2,2	3	4	5,5	11	11
0,75	3	3	4	5,5	7,5	15	18,5
1,5	4	4	7,5	11	15	22	37
2,2	7,5	7,5	11	15	22	37	45
–	7,5	7,5	15	18,5	30	45	45
90	150	150	255	370	520	750	930
70	150	150	230	300	430	700	850
–	90	90	170	210	330	490	490
2,5	6	6	10	12	16	20	20
–	4	4	6	10	12	16	16
10	25	25	35	50	63	125	160
6	10	10	10	10	6	–	–
–	–	–	–	–	–	3,4	3,4
95	192	192	300	400	600	1200	1550
250	500	500	500	690	690	690	690
1 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶	1 x 10 ⁶
M2,5	M3	M3	M3,5	M4	M5	M8	2 x M4
0,7	0,8	0,8	1,0	1,8	2,2	3,5	3,5
0,75	1,0	1,0	1,0	1,0	1,5	1,5	1,5
1,5	4,0	4,0	4,0	6,0	10,0	25,0	35,0
0,75	1,0	1,0	1,0	1,0	1,5	1,5	1,5
1,5	2,5	2,5	2,5	4,0	6,0	16,0	35,0
10	16	16	20	25	40	80	100
300	600	600	600	600	600	600	600
1	3	3	5	7,5	10	525	30
–	5	5	10	15	20	50	60
–	5	5	10	20	30	50	60
0,33	0,5	0,5	11,0	1,5	2,0	7,5	10,0
0,75	1,5	1,5	2,0	3,0	5,0	15,0	20,0
18-15	16-10	16-10	16-10	14-8	14-6	14-4	14-1

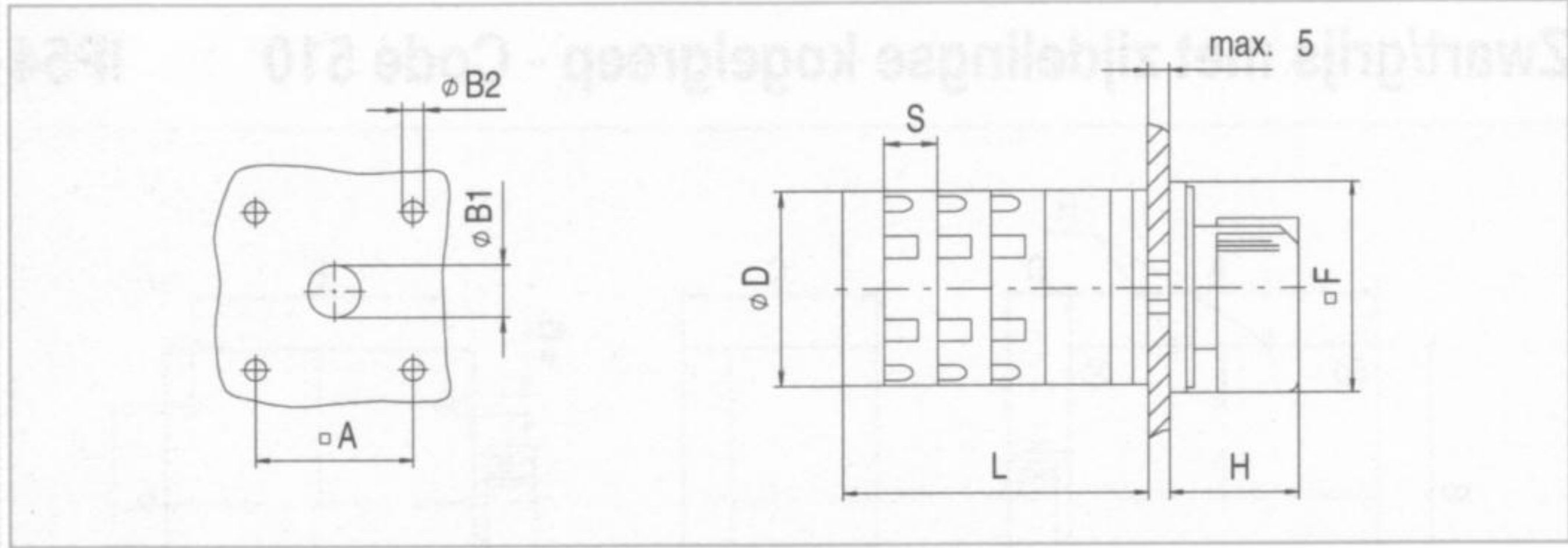
(1) 656 = 100A; 756 = 160A bij gebruik van aansluitstukken type AS

Centrale bevestiging Ø 22,5 / 30,5 mm - Code 100 IP65



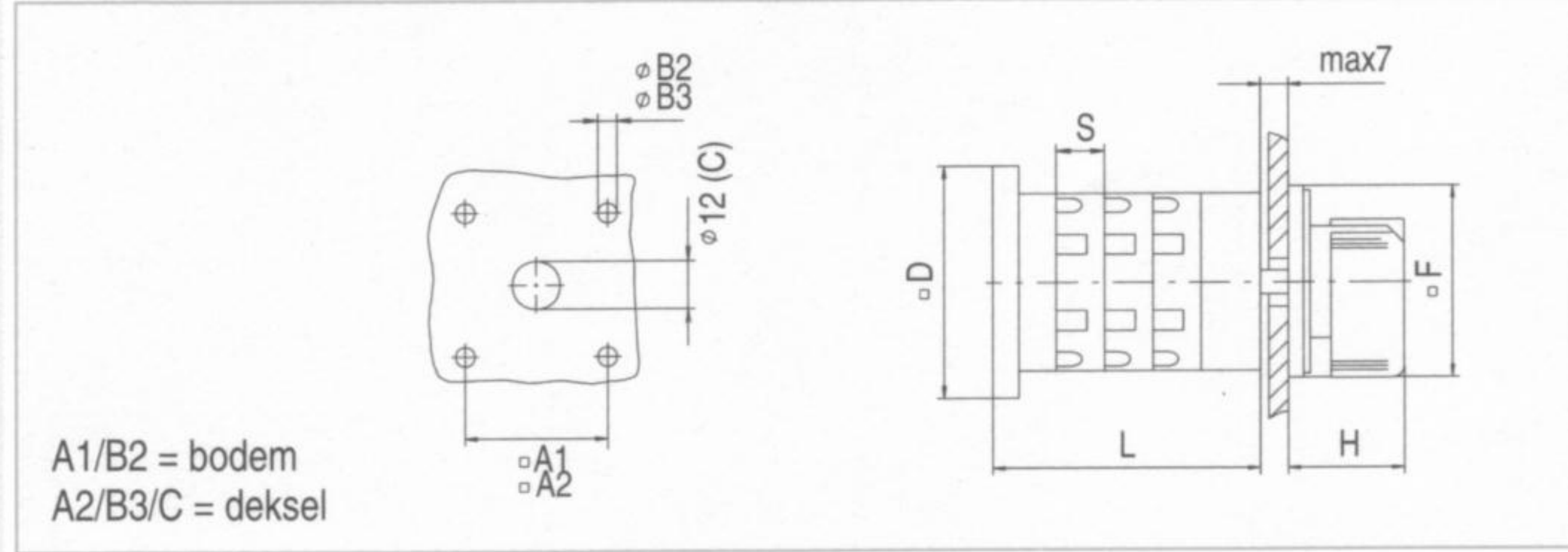
					L bij schakelcontacten			
Types	D	F	H	S	1/2	3/4	5/6	7/8
107	28	30	25	12	46	58	70	82
104	44	48	29	16	55	71	87	103
105	44	48	29	12,5	48	60,5	73	85,5
151	49	48	29	12,5	68,5	81	93,5	106
251	63	64	33	12,5	72	84,5	97	109,5

Frontbevestiging met 4 schroeven - Code 200 IP55



								L bij schakelcontacten			
Types	A	B1	B2	D	F	H	S	1/2	3/4	5/6	7/8
104	36	12	4,5	44	48	29	16	41	57	73	89
105	36	12	4,5	44	48	29	12,5	34	46,5	59	71,5
151	36	12	4,5	49	48	29	12,5	43,5	58	70,5	83
251	48	12	5,5	63	64	33	12,5	49	61,5	74	86,5
451	48	12	5,5	72	64	33	17,5	54	71,5	89	106,5
656	68	15	5,5	80	88	35	16	54	70	86	102
756	68	15	5,5	86	88	35	26,5	64	90,5	117	143,5

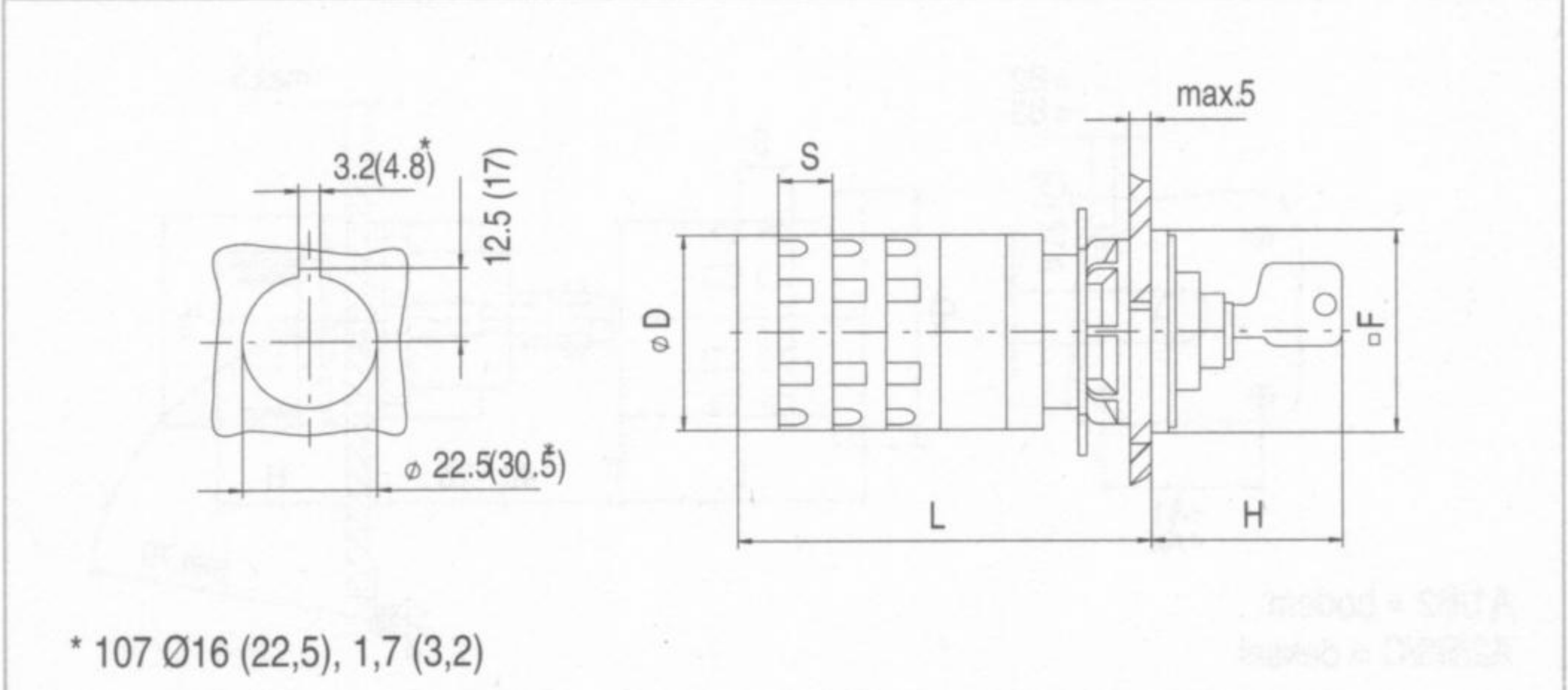
Bodembevestiging - Code 300 IP54



									L bij schakelcontacten			
Type	A1	A2	B2	B3	D	F	H	S	1/2	3/4	5/6	7/8
104	36	36	M3	4,5	44	48	29	16	43	59	75	91
105	36	36	M3	4,5	44	48	29	12,5	34	46,5	59	71,5
151	48	36	M4	4,5	61	48	29	12,5	43,5	56	68,5	81
251	48	48	M4	5	61	64	33	12,5	47	59,5	72	84,5
451	68	48	M5	5	92	64	33	17,5	52	69,5	97	104,5
656	68	68	M5	5,5	92	88	35	16	52	68	84	100
756	68	68	M5	5,5	92	88	35	26,5	62	88,5	115	141,5

L = totale lengte

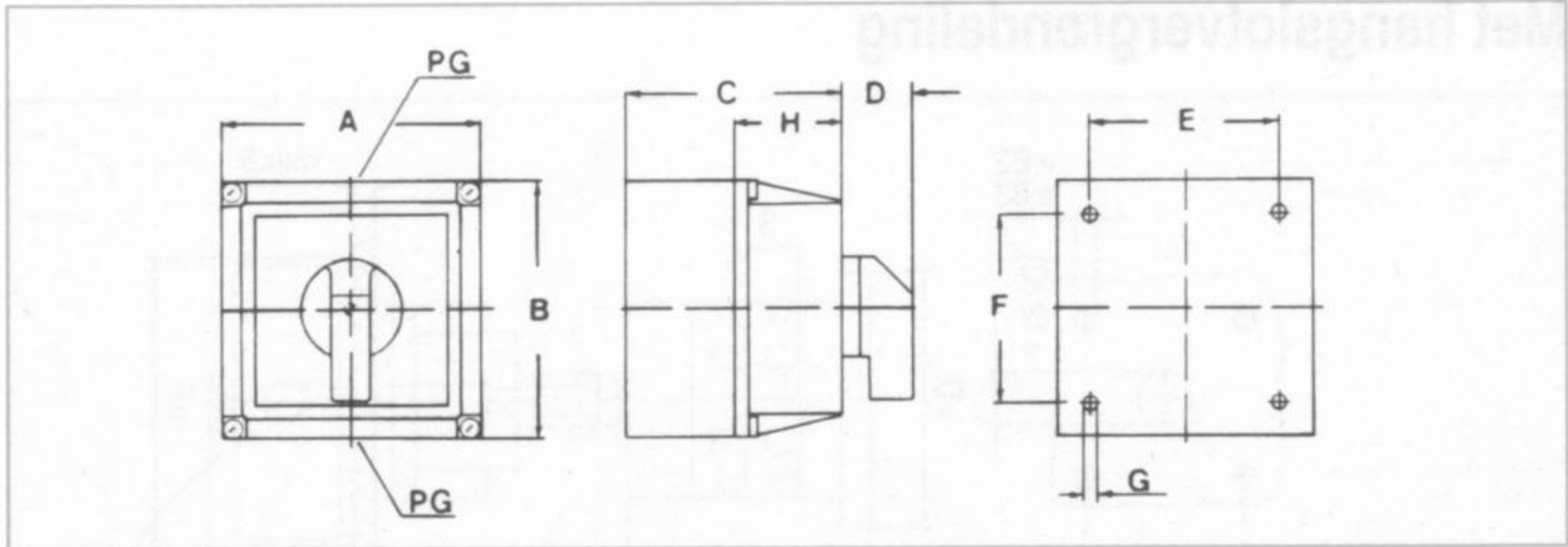
Sleutelbediening Ø 22,5 /30,5 mm - Code 140 IP65



					L bij schakelcontacten			
Types	D	F	H	S	1/2	4/4	5/6	7/8
107 ⁽¹⁾	28	30	33	12	46	58	70	82
104	44	48	45	16	55	71	87	103
105	44	48	45	12,5	48	60,5	73	85,5
151	49	48	45	12,5	68,5	81	93,5	106

(1) Voor serie 107: Ø 16/22,5 mm

In kunststofkast - Code 700 IP65

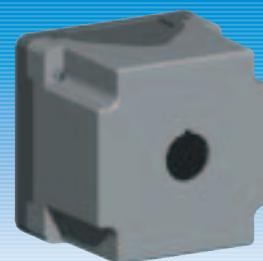


Types	Contact-cellen	A	B	C	D	E	F	G	H	PG
105	3	90	90	76	24,5	66	66	4,5	38	2 x 16
	5	90	90	102	24,5	66	66	4,5	64	2 x 16
	7	90	90	128	24,5	66	66	4,5	90	2 x 16
151	2	90	90	76	24,5	66	66	4,5	38	2 x 16
	4	90	90	102	24,5	66	66	4,5	64	2 x 16
	6	90	90	128	24,5	66	66	4,5	90	2 x 16
251	2	140	180	117	30	124	164	4,5	54	2 x 21/29 1 x 11
	7	140	180	157	30	124	164	4,5	94	2 x 21/29 1 x 11
	10	140	180	197	30	124	164	4,5	134	2 x 21/29 1 x 11
451	2	140	180	117	30	124	164	4,5	54	2 x 21/29 1 x 11
	5	140	180	157	30	124	164	4,5	94	2 x 21/29 1 x 11
	7	140	180	197	30	124	164	4,5	134	2 x 21/29 1 x 11
656	3	140	180	117	30	124	164	4,5	54	2 x 21/29 1 x 11
	5	140	180	157	30	124	164	4,5	94	2 x 21/29 1 x 11
	8	140	180	197	30	124	164	4,5	134	2 x 21/29 1 x 11
756	1	140	180	117	30	124	164	4,5	54	2 x 21/29 1 x 11
	3	140	180	157	30	124	164	4,5	94	2 x 21/29 1 x 11
	4	140	180	197	30	124	164	4,5	134	2 x 21/29 1 x 11

INSULATED ENCLOSURE - EMPTY

With punch-outs for metric cable glands or with plane walls

Dimensions illustration/
Dimensions see page 38-39



Series	Dimensions outside	(l x w x h) inside	Punch-outs for metric cable glands		Insulated enclosure with closed cover		Insulated enclosure with Ø 22,5 mm hole	
	mm	mm	number	number	Type	Order no	Type	Order no
I1	90,5 x 90,5 x 73	80 x 60 x 60	4x M20	2x M12	I1-D-NU	MZ 75005	I1-D-NZ	MZ 75001
I1	90,5 x 90,5 x 110	80 x 60 x 95	4x M20	2x M12	I1-D-HU	MZ 75006	I1-D-HZ	MZ 75002
I1	90,5 x 90,5 x 73	80 x 60 x 60	without	without	I1-U-NU	MZ 75007	I1-U-NZ	MZ 75003
I1	90,5 x 90,5 x 110	80 x 60 x 95	without	without	I1-U-HU	MZ 75008	I1-U-HZ	MZ 75004
I2	115 x 115 x 98	105 x 80 x 80	2x M32, 2x M25	2x M16	I2-D-NU	MZ 75105	I2-D-NZ	MZ 75101
I2	115 x 115 x 125	105 x 80 x 110	2x M32, 2x M25	2x M16	I2-D-HU	MZ 75106	I2-D-HZ	MZ 75102
I2	115 x 115 x 98	105 x 80 x 80	without	without	I2-U-NU	MZ 75107	I2-U-NZ	MZ 75103
I2	115 x 115 x 125	105 x 80 x 110	without	without	I2-U-HU	MZ 75108	I2-U-HZ	MZ 75107
I3	145 x 145 x 120	135 x 100 x 100	4x M40	2x M20	I3-D-NU	MZ 75205	I3-D-NZ	MZ 75201
I3	145 x 145 x 150	135 x 100 x 130	4x M40	2x M20	I3-D-HU	MZ 75206	I3-D-HZ	MZ 75202
I3	145 x 145 x 120	135 x 100 x 100	without	without	I3-U-NU	MZ 75207	I3-U-NZ	MZ 75203
I3	145 x 145 x 150	135 x 100 x 130	without	without	I3-U-HU	MZ 75208	I3-U-HZ	MZ 75204

ACCESSORIES FOR EMPTY ENCLOSURES

N- and PE-Terminals

Series	Cable cross section		Cable cross section		Terminal screws		
	Solid or	multi-stranded	Flexible with ferrule	(DIN 46228)	Torque		
	min. mm ²	max. mm ²	min. mm ²	max. mm ²	Nm.	Type	Order no.
I1	1,5	10	1,0	6	2,5	I1-K	MZ 75050
I2, I3	2,5	16	1,5	10	2,5	I2-K	MZ 75150

Mounting plate-metal

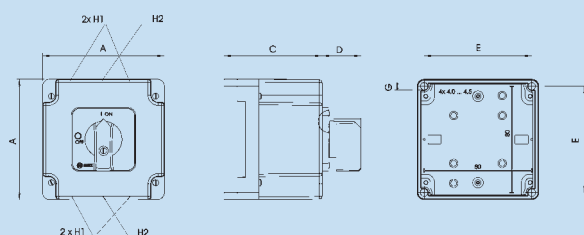
Series	Dimension		
	mm	Type	Order no.
I1	60 x 60	I1-M	MZ 75051
I2	80 x 80	I2-M	MZ 75151
I3	100 x 100	I3-M	MZ 75251

DIN - Rail

Series	Lenght		
	mm	Type	Order no.
I1	60	I1-T	MZ 75052
I2	80	I2-T	MZ 75152
I3	100	I3-T	MZ 75252

WALL MOUNTING PLASTIC ENCLOSURES

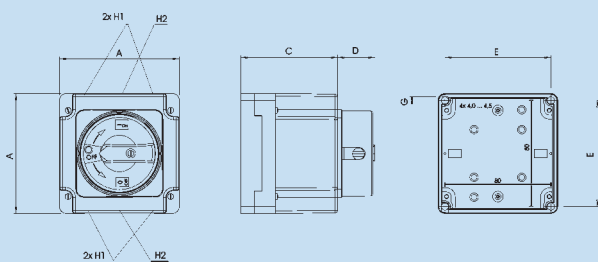
Insulated enclosure for Cam Switch installation Handle black/silver or red/yellow



Series	max. numbers of switching chambers	Dimensions (mm)								Enclosure-type
		A	C	D	E	F ⁽²⁾	G	H1	H2	
105	4	90,5	73	29	80	65	Ø 5,5	M20	M12	I1-D-NL4
105	7	90,5	110	29	80	65	Ø 5,5	M20	M12	I1-D-HL4
111	5	115	98	31	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
111	8	115	125	31	100	60-67	Ø 6,3	M32/M25	M16	I2-D-HL4
151	3	115	98	31	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
151	5	115	125	31	100	60-67	Ø 6,3	M32/M25	M16	I2-D-HL4
251	3	115	98	31	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
251	5	115	125	31	100	60-67	Ø 6,3	M32/M25	M16	I2-D-HL4
451	3	145	120	31	120	75-90	Ø 6,3	M40	M20	I3-D-NL4
451	5	145	150	31	120	75-90	Ø 6,3	M40	M20	I3-D-HL4
ML1		115	98	31	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
ML2		145	120	31	120	75-90	Ø 6,3	M40	M20	I3-D-NL4

²⁾ in base pre-marked drilling dimensions for motor-fixing

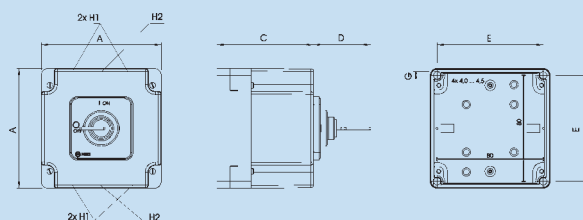
Insulated enclosure for Cam Switch installation Lockable handle for 3 padlocks Handle black/grey or red/yellow and safty switches



Series	max. numbers of switching chambers	Dimensions (mm)								Enclosure-type
		A	C	D	E	F ⁽²⁾	G	H1	H2	
105	4	90,5	73	29	80	65	Ø 5,5	M20	M12	I1-D-NL4
105	7	90,5	110	29	80	65	Ø 5,5	M20	M12	I1-D-HL4
111	5	115	98	38	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
111	8	115	125	38	100	60-67	Ø 6,3	M32/M25	M16	I2-D-HL4
151	3	115	98	38	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
151	5	115	125	38	100	60-67	Ø 6,3	M32/M25	M16	I2-D-HL4
251	3	115	98	38	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
251	5	115	125	38	100	60-67	Ø 6,3	M32/M25	M16	I2-D-HL4
451	3	145	120	38	120	75-90	Ø 6,3	M40	M20	I3-D-NL4
451	5	145	150	38	120	75-90	Ø 6,3	M40	M20	I3-D-HL4
ML1		115	98	38	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
ML2		145	120	38	120	75-90	Ø 6,3	M40	M20	I3-D-NL4

²⁾ in base pre-marked drilling dimensions for motor-fixing

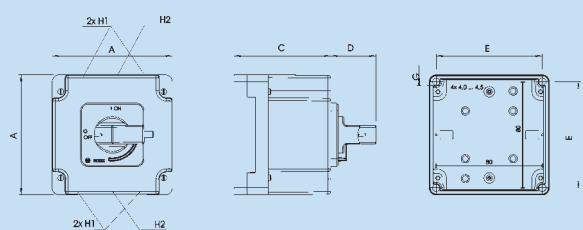
Insulated enclosure for Cam Switch installation With key operation



Series	max. numbers of switching chambers	Dimensions (mm)								Enclosure-type
		A	C	D	E	F ⁽²⁾	G	H1	H2	
105	4	90,5	73	44	80	65	Ø 5,5	M20	M12	I1-D-NL4
111	5	115	98	44	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
111	8	115	125	44	100	60-67	Ø 6,3	M32/M25	M16	I2-D-HL4
151	2	90,5	73	44	80	65	Ø 5,5	M20	M12	I2-D-NL4
151	5	90,5	110	44	80	65	Ø 5,5	M20	M12	I2-D-HL4

²⁾ in base pre-marked drilling dimensions for motor-fixing

Insulated enclosure for Cam Switch installation Lockable handle for 2 padlocks Handle black/silver or red/yellow



Series	max. numbers of switching chambers	Dimensions (mm)								Enclosure-type
		A	C	D	E	F ⁽²⁾	G	H1	H2	
105	4	90,5	73	44	80	65	Ø 5,5	M20	M12	I1-D-NL4
105	7	90,5	110	35	80	65	Ø 5,5	M20	M12	I1-D-HL4
151	3	115	98	44	100	60-67	Ø 6,3	M32/M25	M16	I2-D-NL4
151	5	115	125	44	100	60-67	Ø 6,3	M32/M25	M16	I2-D-HL4

²⁾ in base pre-marked drilling dimensions for motor-fixing