

AUSPICIUS



CAM SWITCHES

16A. 20A. 25A. 32A. 63A. 100A

2011 / E



STANDARD AND CERTIFICATIONS



TUV Rheinland Group

License No. R50062176
 EN 60947-1:2004
 EN 60947-3:1999+A1
 EN 60947-4-1:2001+A1
 EN 60947-5-1:2004



Rating : 16A. 20A. 25A. 32A. 63A

Series		A2Y1 PS2Y2 R2Y3	CY4	A3Y1	A4Y1	A6Y1
Rated frequency	Hz	50/60				
Thermal current Ith	A	20	25	40	63	80
Utilization category AC-1 (EN 60947-4-1)	-	16A, 660V	20A, 660V	32A, 660V	40A, 660V	63A, 660V
Utilization category AC-21A (EN 60947-3)	-	16A, 600V	20A, 600V	25A, 600V	32A, 600V	40A, 600V
Utilization category AC-22A (EN 60947-3)	-	16A, 600V	20A, 600V	32A, 600V	40A, 600V	63A, 600V
Utilization category AC-12 (EN 60947-5-1)	-	6A, 240V 4A, 440V	6A, 240V 4A, 440V	14A, 240V 6A, 440V	16A, 240V 7A, 440V	--
Rated short-time withstand current Icw	A	250	350	1000	1000	1000
Rated short-time making capacity Icm	KA	None				
Rated conditional short circuit current	KA	1	1	10	10	10
Kind of SCPD	-	Fuse (gL/gG)	Fuse (gL/gG)	Fuse (gL/gG)	Fuse (gL/gG)	Fuse (gL/gG)
Rating of SCPD	A	20A	25A	40A	65A	80A
Insulation Voltage Ui	V	690				
Impulse Withstand Voltage Uimp	V	N				

CSA Certified 186663

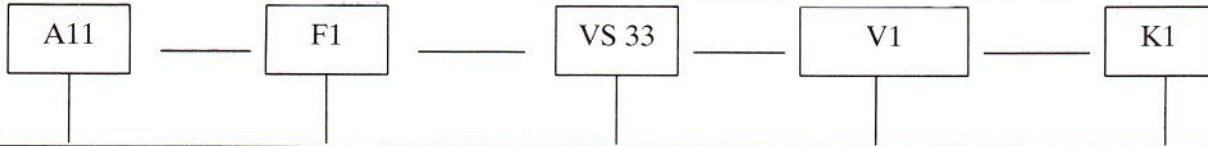
Applicable Requirements



CAN/CSA-C22.2 No. 0-M91-General Requirements-Canadian Electrical Code, PART II
 CAN/CSA-C22.2 No. 14-05-Industrial Control Equipment
 UL Standard No. 508, 17th-Industrial Control Equipment
 CSA Std C22.2 No. 65-93-Wire Connectors

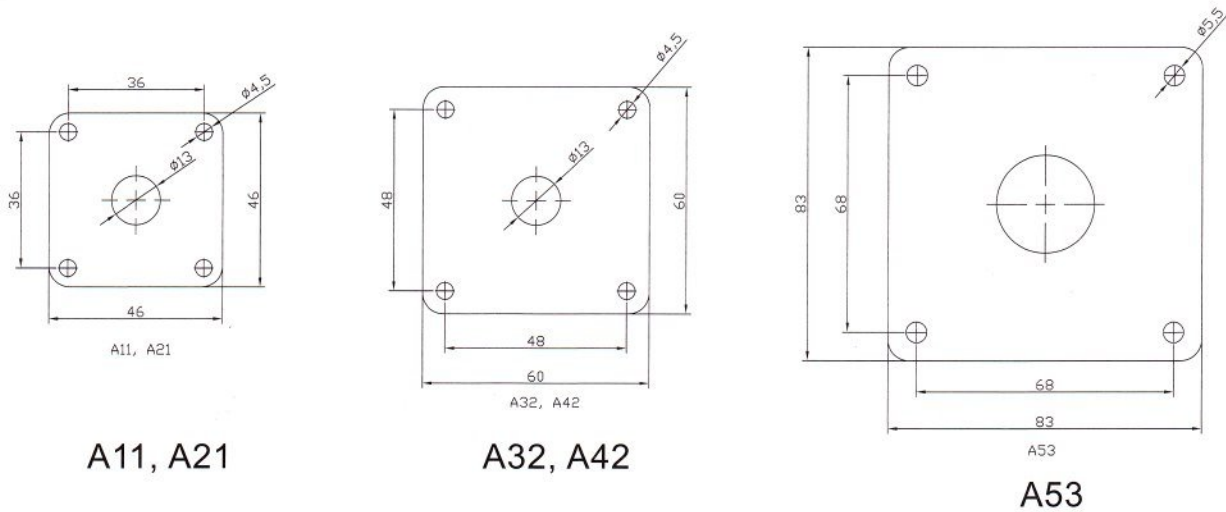
Rating : 20A. 25A. 40A. 80A

Model No.	General Purpose		HP Rating			
			Single Phase / 2 pole		Three phase / 3 pole	
	Voltage (V)	Current (A)	110-120V	220-240V	220-240V	440-480V
PART A: AX1Y1, PSX1Y1, VSX1Y1, ASX1Y1 SERIES	600	20	1.0	2	3	5
PART B: CY4, PSX2Y2 SERIES	600	25	1.0	2	3	5
PART C: A3Y3, PSX3Y3 SERIES	600	40	3	5	7.5	10
PART D: A6Y3 SERIES	600	80	5.0	10	15	30

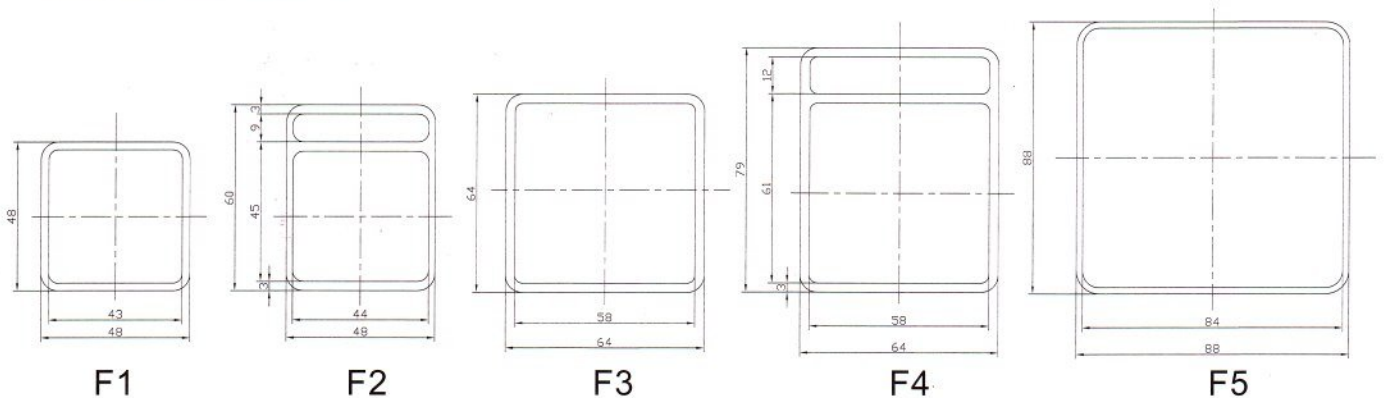


Type of Switch	Type of Frame	Contact arrangement & Code No.	Type of Escutcheon Plate No.	Handle type																																																																																																																																														
A11 (20A)	F1 F2 F3	Please refer to "Code No" on Page 5 to Page 16 for detail	Please refer to "Escutch Plate" on Page 5 to Page 16 for detail	Please refer to Page 4 for detail																																																																																																																																														
A21 (25A)	F1 F2 F3 F4	NOMINAL RATING <table border="1"> <thead> <tr> <th rowspan="2">Type</th> <th rowspan="2">Continuous Current lth A</th> <th rowspan="2">Motor</th> <th rowspan="2">3ph</th> <th rowspan="2">1ph</th> <th colspan="2">AC 23A - KW</th> <th colspan="2">AC 3A - KW</th> </tr> <tr> <th>3ph</th> <th>1ph</th> <th>3ph</th> <th>1ph</th> </tr> </thead> <tbody> <tr> <td rowspan="3">A11</td> <td rowspan="3">20A 25A 600V AC</td> <td>110V-120V</td> <td></td> <td>1HP</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>220V-240V</td> <td>3HP</td> <td>2HP</td> <td>3.7</td> <td>2.5</td> <td>3</td> <td>2.2</td> </tr> <tr> <td>440V-480V</td> <td>5HP</td> <td></td> <td>7.5</td> <td>3.7</td> <td>5.5</td> <td>3</td> </tr> <tr> <td rowspan="3">A21</td> <td rowspan="3">600V AC</td> <td>660V-690V</td> <td></td> <td></td> <td>7.5</td> <td>4.0</td> <td>5.5</td> <td>3</td> </tr> <tr> <td>110V-120V</td> <td></td> <td>3HP</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>220V-240V</td> <td>7.5HP</td> <td>5HP</td> <td>7.5</td> <td>3.5</td> <td>5.5</td> <td>3</td> </tr> <tr> <td rowspan="3">A32</td> <td rowspan="3">40A 600V AC</td> <td>440V-480V</td> <td>10HP</td> <td></td> <td>10</td> <td>3.8</td> <td>7.5</td> <td>3.5</td> </tr> <tr> <td>660V-690V</td> <td></td> <td></td> <td>13</td> <td>5.5</td> <td>10</td> <td>5</td> </tr> <tr> <td>110V-120V</td> <td></td> <td>5HP</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="4">A42</td> <td rowspan="4">80A 600V AC</td> <td>220V-240V</td> <td>15HP</td> <td>10HP</td> <td>15</td> <td>11</td> <td>11</td> <td>3.5</td> </tr> <tr> <td>440V-480V</td> <td>30HP</td> <td></td> <td>25</td> <td>15</td> <td>18.5</td> <td>10</td> </tr> <tr> <td>660V-690V</td> <td></td> <td></td> <td>25</td> <td>15</td> <td>18.5</td> <td>10</td> </tr> <tr> <td>110V-120V</td> <td>10HP</td> <td>5HP</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="4">A53</td> <td rowspan="4">115A 600V AC</td> <td>220V-240V</td> <td>20HP</td> <td>10HP</td> <td>30</td> <td>15</td> <td>15</td> <td>7.5</td> </tr> <tr> <td>440V-480V</td> <td>30HP</td> <td></td> <td>45</td> <td>22</td> <td>30</td> <td>13</td> </tr> <tr> <td>660V-690V</td> <td></td> <td></td> <td>45</td> <td>18.5</td> <td>30</td> <td>11</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			Type	Continuous Current lth A	Motor	3ph	1ph	AC 23A - KW		AC 3A - KW		3ph	1ph	3ph	1ph	A11	20A 25A 600V AC	110V-120V		1HP					220V-240V	3HP	2HP	3.7	2.5	3	2.2	440V-480V	5HP		7.5	3.7	5.5	3	A21	600V AC	660V-690V			7.5	4.0	5.5	3	110V-120V		3HP					220V-240V	7.5HP	5HP	7.5	3.5	5.5	3	A32	40A 600V AC	440V-480V	10HP		10	3.8	7.5	3.5	660V-690V			13	5.5	10	5	110V-120V		5HP					A42	80A 600V AC	220V-240V	15HP	10HP	15	11	11	3.5	440V-480V	30HP		25	15	18.5	10	660V-690V			25	15	18.5	10	110V-120V	10HP	5HP					A53	115A 600V AC	220V-240V	20HP	10HP	30	15	15	7.5	440V-480V	30HP		45	22	30	13	660V-690V			45	18.5	30	11							
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A42	80A 600V AC	220V-240V	15HP	10HP	15	11	11	3.5																																																																																																																																										
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Please refer to "Nominal Rating" for detail	Please refer to "Frame Dimensions" for detail																																																																																																																																																	

DIMENSIONS FOR TYPE A11, A21, A32, A42, A53

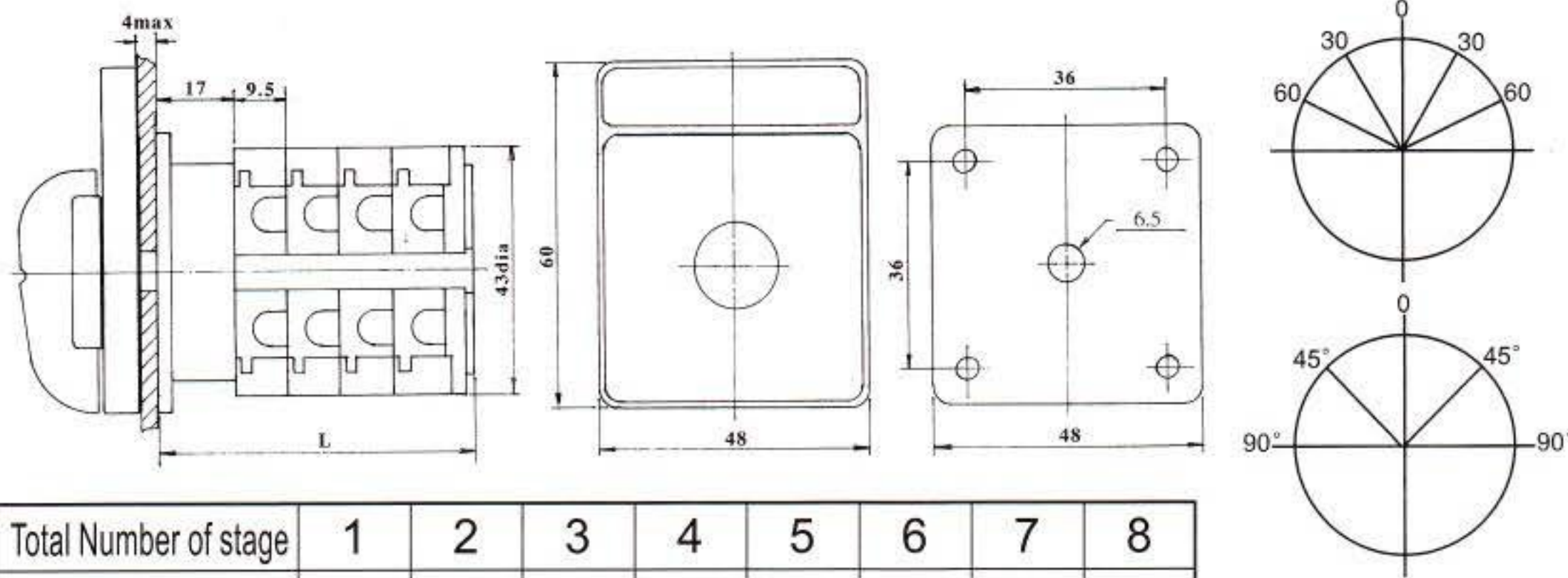


FRAME DIMENSIONS



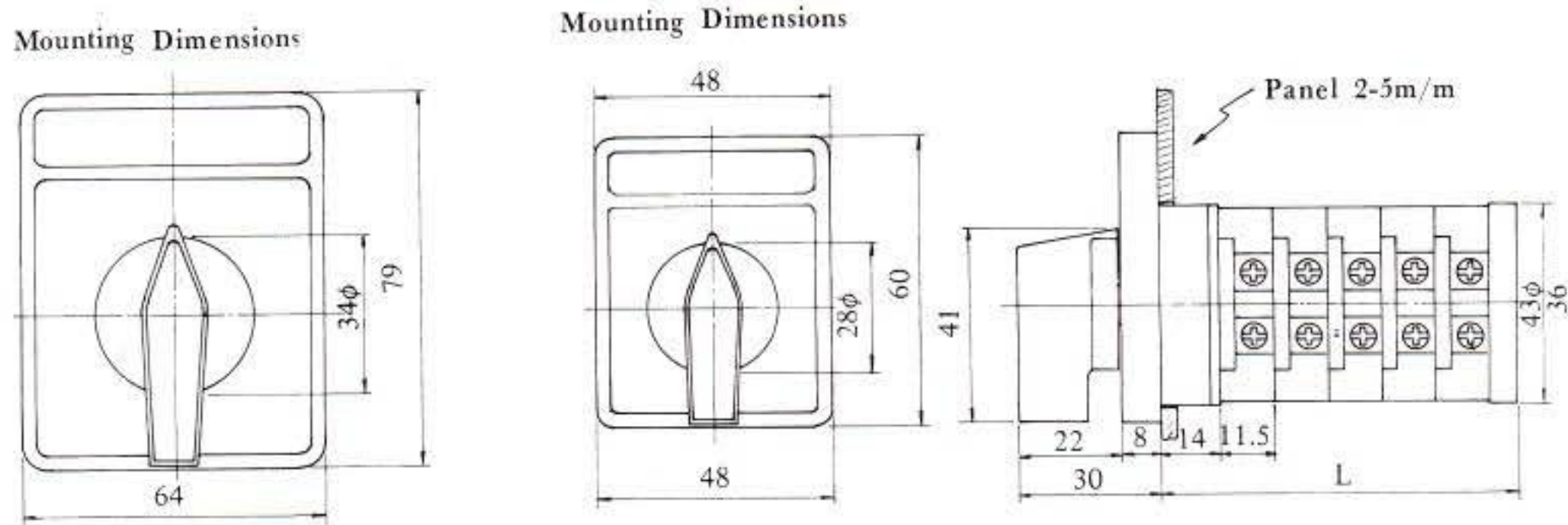
CAM SWITCHES 20A,25A,32A,63A,100A

Dimensions for A2, PS2, R2, switches (20A)



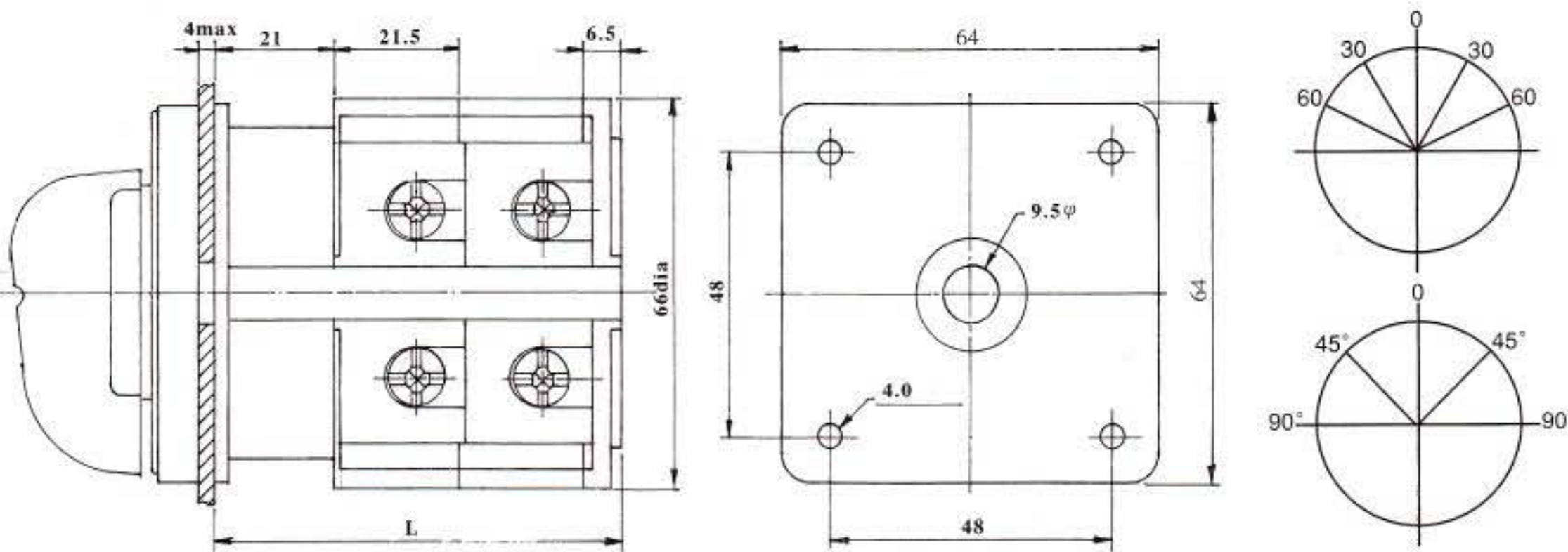
Total Number of stage	1	2	3	4	5	6	7	8
Length L	31.5	41	50.5	60	69.5	79	88.5	98

Dimensions for C2 series switches (20A, 25A)



Total Number of stage	1	2	3	4	5	6	7	8	9	10
Length L	37	48.5	60	71.5	83	94.5	106	117.5	129	140.5

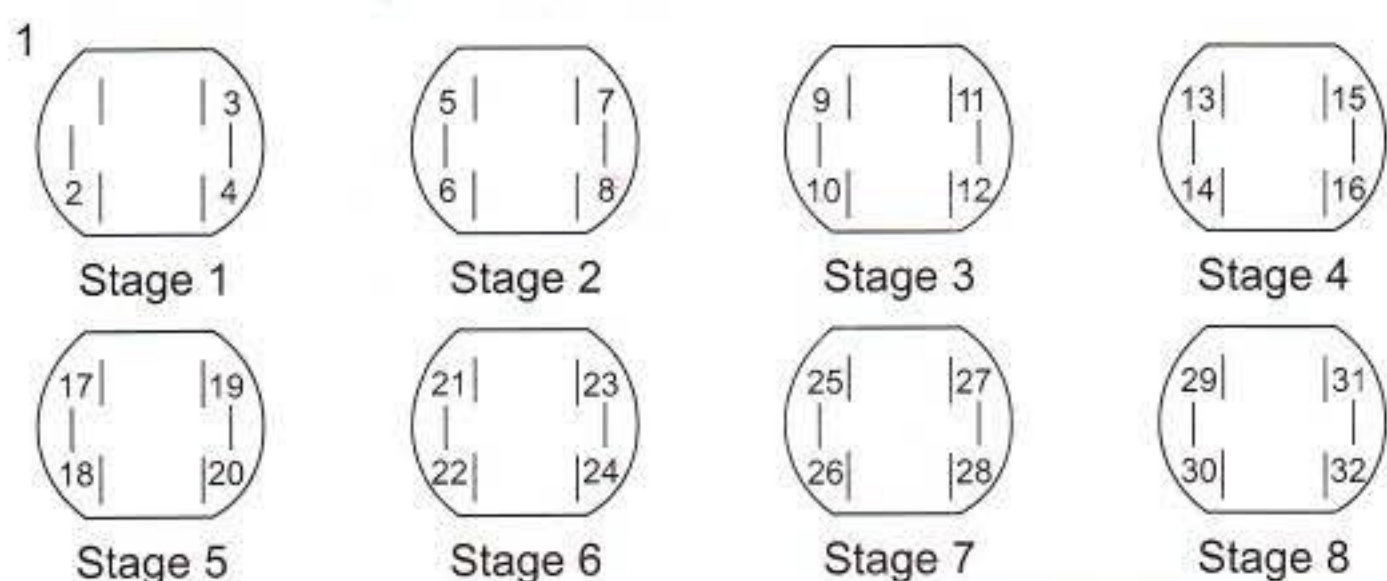
Dimensions mounting for A3, A4, A6 switches (32A, 40A,63A)



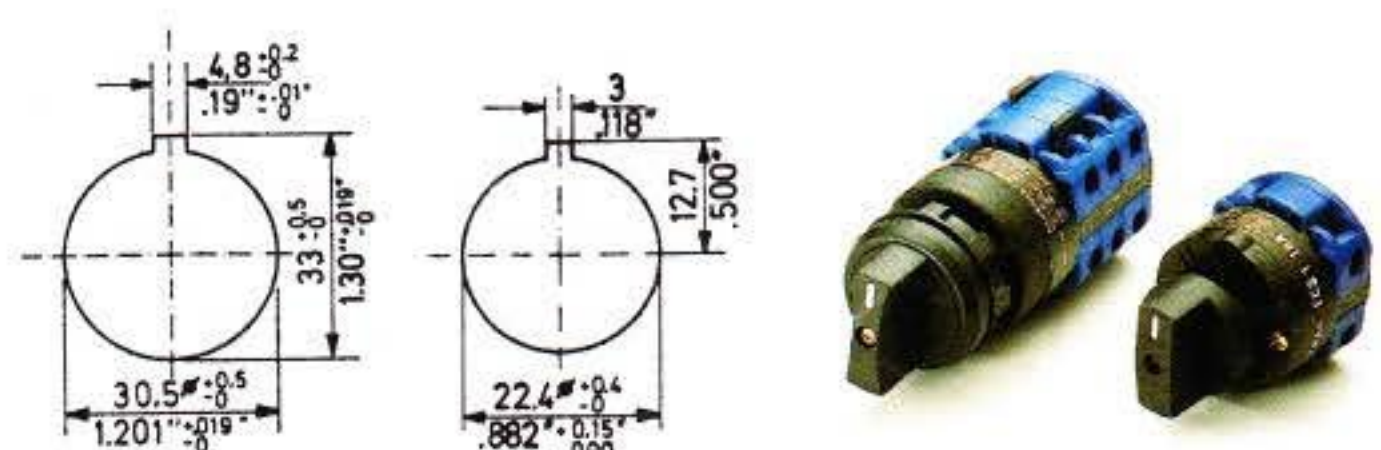
Total Number of stage	1	2	3	4	5	6
Length L	49	70.5	92	113.5	135	156.5

yellow safety cover

connecting diagram



CENTER HOLE MOUNTING



Code	Dimension	Type	Code	Dimension	Type
K1			K8		
K2			K9		
K3			K10		
K4			K11		
K5			K12		
K6			K13		
K7					

CAM SWITCHES

Voltmeter switches with Off

Code No.	Function	Stage	Connecting diagram	In / Out Put	
VS 33	3 Phase 3 wire	2		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">V1</div> </div> <div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">R</div> <div style="border: 1px solid black; padding: 2px;">V2</div> </div> <div style="display: flex; gap: 10px; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">S</div> <div style="border: 1px solid black; padding: 2px;">5</div> </div> <div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">T</div> <div style="border: 1px solid black; padding: 2px;">7</div> </div> </div>	
<p style="text-align: center;">Escutch Plate</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>VOLTMETER</p> <p>V1</p> </div> <div style="text-align: center;"> <p>VOLTMETER</p> <p>OFF</p> <p>V2</p> </div> <div style="text-align: center;"> <p>VOLTMETER</p> <p>OFF</p> <p>V3</p> </div> </div>					
VS 34	3 Phase 4 wire	3		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">V2</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">B</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">V1</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Y</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">N</div> <div style="border: 1px solid black; padding: 2px;">R</div> </div>	
<p style="text-align: center;">Escutch Plate</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>VOLTMETER</p> <p>OFF</p> <p>V4</p> </div> <div style="text-align: center;"> <p>VOLTMETER</p> <p>OFF</p> <p>V5</p> </div> <div style="text-align: center;"> <p>VOLTMETER</p> <p>OFF</p> <p>V6</p> </div> </div>					

Ammeter Switches

Code No.	Function	Stage	Connecting diagram	In / Out Put	
AS 33	3 Phase 3 wire 2 current transformer	2		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">4</div> <div style="border: 1px solid black; padding: 2px;">R</div> </div> <div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">A1</div> <div style="border: 1px solid black; padding: 2px;">T</div> </div> <div style="display: flex; gap: 10px; margin-top: 10px;"> <div style="border: 1px solid black; padding: 2px;">8</div> <div style="border: 1px solid black; padding: 2px;">5</div> </div> <div style="display: flex; gap: 10px;"> <div style="border: 1px solid black; padding: 2px;">A2</div> <div style="border: 1px solid black; padding: 2px;">7</div> </div> </div>	
AS 34	3 Phase 4 wire 3 current transformer	3			<div style="display: flex; flex-direction: column; align-items: center;"> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">A2</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">B</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">R</div> <div style="border: 1px solid black; padding: 2px; margin-bottom: 5px;">Y</div> <div style="border: 1px solid black; padding: 2px;">N</div> </div>
<p style="text-align: center;">Escutch Plate</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>AMMETER</p> <p>A7</p> </div> <div style="text-align: center;"> <p>AMMETER</p> <p>OFF</p> <p>A8</p> </div> <div style="text-align: center;"> <p>AMMETER</p> <p>OFF</p> <p>A11</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <p>AMMETER</p> <p>OFF</p> <p>A9</p> </div> <div style="text-align: center;"> <p>AMMETER</p> <p>O</p> <p>A10</p> </div> </div>					

CAM SWITCHES 20A

ON-OFF switches 45°, 60°, 90°, switching 20A

Code No	Function	Stage	Escutch plate	Connecting Diagram
A201	1 Pole	1		
A201A	2 Pole	1		
A202	3 Pole	2		
A202A	4 Pole	2		
A203	5 Pole	3		
A203A	6 Pole	3		
A204	7 Pole	4		
A204A	8 Pole	4		
A205	9 Pole	5		
A205A	10 Pole	5		
A206	11 Pole	6		
A206A	12 Pole	6		

Change over switches without OFF 90°, 60°, 45°, 30°, switching 20A (Made before Break)

A207	1 Pole	1		
A208	2 Pole	2		
A209	3 Pole	3		
A210	4 Pole	4		
A211	5 Pole	5		
A212	6 Pole	6		

Change over switches without OFF with electrically isolated contacts 20A


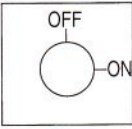
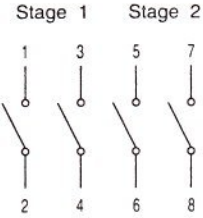
A213	1 Pole	1		
A214	2 Pole	2		
A215	3 Pole	3		
A216	4 Pole	4		

Change over switches with center OFF 60°, 45°, 90° switching 20A

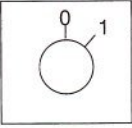
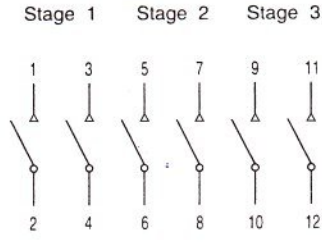

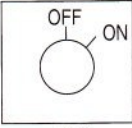
A217	1 Pole	1		<p>A217~A220</p>
A218	2 Pole	2		
A219	3 Pole	3		<p>A221~A224</p>
A220	4 Pole	4		
A221	1 Pole	1		
A222	2 Pole	2		
A223	3 Pole	3		
A224	4 Pole	4		

CAM SWITCHES 20A

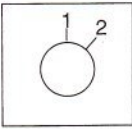
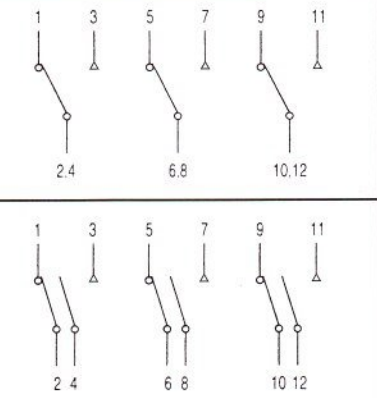

ON-OFF Power switches 90° 20A

Code No	Function	Stage	Escutch Plate	Connecting Diagram	
PS21	1 Pole	1		<p>Stage 1 Stage 2</p> 	
PS22	2 Pole	1			
PS23	3 Pole	2			
PS24	4 Pole	2			
PS25	5 Pole	3			
PS26	6 Pole	3			

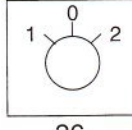
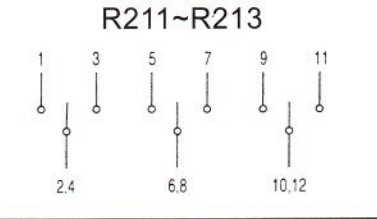


ON-OFF switches spring return to centre 20A

R201	1 Pole	1		<p>Stage 1 Stage 2 Stage 3</p> 		
R201A	2 Pole	1				
R202	3 Pole	2				
R202A	4 Pole	2				
R203	5 Pole	3				
R203A	6 Pole	3				

Change - over switches with spring return 20A

R205	1 Pole	1			
R206	2 Pole	2			
R207	3 Pole	3			
R208	1 Pole	1			
R209	2 Pole	2			
R210	3 Pole	3			

Change - over switches with spring return to centre 20A

R211	1 Pole	1		<p>R211~R213</p> 		
R212	2 Pole	2				
R213	3 Pole	3				
R214	1 Pole	1				
R215	2 Pole	2				
R216	3 Pole	3				


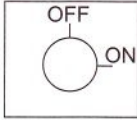
CAM SWITCHES 20A, 25A

Specifications


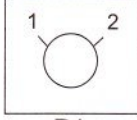
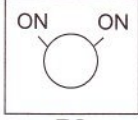
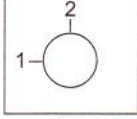
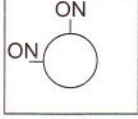
Rated insulation voltage : 600V AC/DC

Rated current : 25A


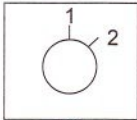
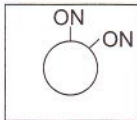
ON/OFF Power Switch 90° 25A

Code No	Poles	Stage	Escutch Plate	Connecting Diagram	
PS251	1	1		<p>OFF ON</p> <p>○ 2 ——— ● 1 ○</p> <p>○ 4 ——— ● 3 ○</p> <p>○ 6 ——— ● 5 ○</p> <p>○ 8 ——— ● 7 ○</p>	
PS252	2	1			
PS253	3	2			
PS254	4	2			
PS255	5	3			
PS256	6	3			



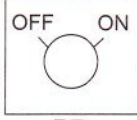
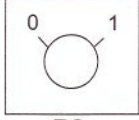
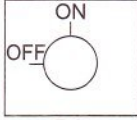
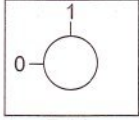
Change-over switches without "OFF" 90° Switching 20A , 25A

Code No	Poles	Stage	Escutch Plate	Connecting Diagram	
C001	1 Pole	1	 	<p>1 2</p> <p>○ 2 —●— 1 ○</p> <p>○ 4 —●— 3 ○</p> <p>○ 6 —●— 5 ○</p> <p>○ 8 —●— 7 ○</p> <p>○ 10 —●— 9 ○</p> <p>○ 12 —●— 11 ○</p> <p>○ 14 —●— 13 ○</p> <p>○ 16 —●— 15 ○</p> <p>○ 18 —●— 17 ○</p> <p>○ 20 —●— 19 ○</p> <p>○ 22 —●— 21 ○</p> <p>○ 24 —●— 23 ○</p> <p>○ 26 —●— 25 ○</p> <p>○ 28 —●— 27 ○</p> <p>○ 30 —●— 29 ○</p> <p>○ 32 —●— 31 ○</p> <p>○ 34 —●— 33 ○</p> <p>○ 36 —●— 35 ○</p> <p>○ 38 —●— 37 ○</p> <p>○ 40 —●— 39 ○</p> <p>○ 42 —●— 41 ○</p> <p>○ 44 —●— 43 ○</p> <p>○ 46 —●— 45 ○</p> <p>○ 48 —●— 47 ○</p>	
C002	2 Pole	2			
C003	3 Pole	3			
C004	4 Pole	4			
C005	5 Pole	5			
C006	6 Pole	6			
C007	7 Pole	7	 		
C008	8 Pole	8			
C009	9 Pole	9			
C010	10 Pole	10			

Changeover switches without "OFF" 60° Switching

Code No	Poles	Stage	Escutch Plate	Connecting Diagram		
C013	1 Pole	1		<p>1 – 12 pole</p>		
C014	2 Pole	2				
C015	3 Pole	3				
C016	4 Pole	4				
C017	5 Pole	5				
C018	6 Pole	6				
C019	7 Pole	7				
C020	8 Pole	8				
C021	9 Pole	9				
C022	10 Pole	10				

ON / OFF Switches with 90° Switching 20A, 25A

Code No	Poles	Stage	Escutch Plate	Connecting Diagram	 	
C025	1 Pole	1	 	<p>OFF ON</p> <p>○ 2 —●— 1 ○</p> <p>○ 4 —●— 3 ○</p> <p>○ 6 —●— 5 ○</p> <p>○ 8 —●— 7 ○</p> <p>○ 10 —●— 9 ○</p> <p>○ 12 —●— 11 ○</p> <p>○ 14 —●— 13 ○</p> <p>○ 16 —●— 15 ○</p> <p>○ 18 —●— 17 ○</p> <p>○ 20 —●— 19 ○</p> <p>○ 22 —●— 21 ○</p> <p>○ 24 —●— 23 ○</p>		
C026	2 Pole	1				
C027	3 Pole	2				
C028	4 Pole	2				
C029	5 Pole	3				
C030	6 Pole	3				
C031	7 Pole	4				 
C032	8 Pole	4				
C033	9 Pole	5				
C034	10 Pole	5				
C035	11 Pole	6				
C036	12 Pole	6				



Change over switches with "OFF" 60° Switching 20A, 25A

Code No.	Function	Stages	Escutch plate	Connection diagram
C037	1 pole	1		
C038	2 pole	2		
C039	3 pole	3		
C040	4 pole	4		
C041	5 pole	5		
C042	6 pole	6		



Change over switches with "OFF" 90° Switching 20A, 25A

Code No.	Function	Stages	Escutch plate	Connection diagram
C045	1 pole	1		
C046	2 pole	2		
C047	3 pole	3		
C048	4 pole	4		



Change over switches with "OFF" 45° Switching

Code No.	Function	Stages	Escutch plate	Connection diagram
C068	1 pole	1		
C069	2 pole	2		
C070	3 pole	3		
C071	4 pole	4		

Change over switches with spring return to center

Code No.	Function	Stages	Escutch plate	Connection diagram
C049	1 pole	1		
C050	2 pole	2		
C051	3 pole	3		



Change over switches with spring return 20A, 25A

Code No.	Function	Stages	Escutch plate	Connection diagram
C052	1 pole	1		
C053	2 pole	1		
C054	3 pole	2		
C055	4 pole	2		

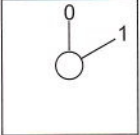
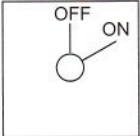


ON/OFF Switches with 45° Switching 20A, 25A

Code No.	Function	Stages	Escutch plate	Connection diagram
C056	1 pole	1		
C057	2 pole	1		
C058	3 pole	2		
C059	4 pole	2		
C060	5 pole	3		
C061	6 pole	3		
C062	7 pole	4		
C063	8 pole	4		

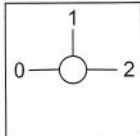
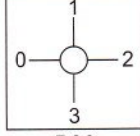
CAM SWITCHES 20A, 25A

ON/OFF SWITCHES WITH 60° SWITCHING

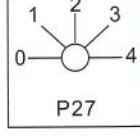
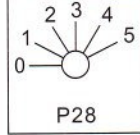
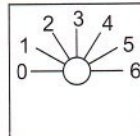
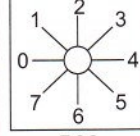
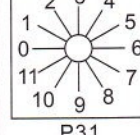
Code No	Poles	Escutch Plate	Stage	Connecting Diagram																																							
C076	1 Pole		1	<p>OFF ON</p> <table border="1"> <tr> <td>0</td> <td>1</td> <td>1</td> </tr> <tr> <td>2</td> <td>3</td> <td>3</td> </tr> <tr> <td>4</td> <td>5</td> <td>5</td> </tr> <tr> <td>6</td> <td>7</td> <td>7</td> </tr> <tr> <td>8</td> <td>9</td> <td>9</td> </tr> <tr> <td>10</td> <td>11</td> <td>11</td> </tr> <tr> <td>12</td> <td>13</td> <td>13</td> </tr> <tr> <td>14</td> <td>15</td> <td>15</td> </tr> <tr> <td>16</td> <td>17</td> <td>17</td> </tr> <tr> <td>18</td> <td>19</td> <td>19</td> </tr> <tr> <td>20</td> <td>21</td> <td>21</td> </tr> <tr> <td>22</td> <td>23</td> <td>23</td> </tr> <tr> <td>24</td> <td></td> <td></td> </tr> </table>	0	1	1	2	3	3	4	5	5	6	7	7	8	9	9	10	11	11	12	13	13	14	15	15	16	17	17	18	19	19	20	21	21	22	23	23	24		
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C077	2 Pole		1																																								
C078	3 Pole		2																																								
C079	4 Pole		2																																								
C080	5 Pole	P23	3																																								
C081	6 Pole		3																																								
C082	7 Pole		4																																								
C083	8 Pole		4																																								
C084	9 Pole		5																																								
C085	10 Pole	P24	5																																								
C086	11 Pole		6																																								

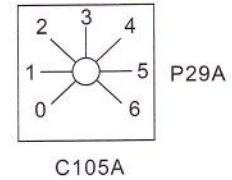
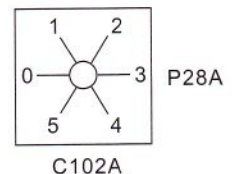


MULTI-STEP SWITCHES WITH "OFF" 20A, 25A

C087	1 Pole 2 step		1	<table border="1"> <tr> <td>0</td> <td>1</td> <td>2</td> <td>13</td> </tr> <tr> <td>2</td> <td>3</td> <td>4</td> <td>14</td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> <td>15</td> </tr> <tr> <td>6</td> <td>7</td> <td>8</td> <td>16</td> </tr> <tr> <td>8</td> <td>9</td> <td>10</td> <td>17</td> </tr> <tr> <td>10</td> <td>11</td> <td>12</td> <td>18</td> </tr> <tr> <td>12</td> <td>13</td> <td>14</td> <td>19</td> </tr> <tr> <td>14</td> <td>15</td> <td>16</td> <td>20</td> </tr> <tr> <td>16</td> <td>17</td> <td>18</td> <td>21</td> </tr> <tr> <td>18</td> <td>19</td> <td>20</td> <td>22</td> </tr> <tr> <td>20</td> <td>21</td> <td>22</td> <td>23</td> </tr> <tr> <td>22</td> <td>23</td> <td></td> <td></td> </tr> </table> <p>1 pole - 3 pole 2 step 4 pole - 6 pole 2 step</p>	0	1	2	13	2	3	4	14	4	5	6	15	6	7	8	16	8	9	10	17	10	11	12	18	12	13	14	19	14	15	16	20	16	17	18	21	18	19	20	22	20	21	22	23	22	23		
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C088	2 Pole 2 step		2																																																	
C089	3 Pole 2 step		3																																																	
C090	4 Pole 2 step		4																																																	
C091	5 Pole 2 step	P25	5																																																	
C092	6 Pole 2 step		6																																																	
C093	1 Pole 3 step		2																																																	
C094	2 Pole 3 step			3																																																
C095	3 Pole 3 step			5																																																
C096	4 Pole 3 step			6																																																
C097	5 Pole 3 step		P26	8																																																
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C098	1 Pole 4 step		2	<table border="1"> <tr> <td>0</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>10</td> </tr> <tr> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>11</td> </tr> <tr> <td>4</td> <td>5</td> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>12</td> </tr> <tr> <td>6</td> <td>7</td> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>13</td> </tr> <tr> <td>8</td> <td>9</td> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> </tr> <tr> <td>10</td> <td>11</td> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>15</td> </tr> <tr> <td>12</td> <td>13</td> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>16</td> </tr> <tr> <td>14</td> <td>15</td> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>17</td> </tr> <tr> <td>16</td> <td>17</td> <td>18</td> <td>19</td> <td>20</td> <td></td> <td>19</td> </tr> </table> <p>1 pole - 2pole 5step</p>	0	1	2	3	4	5	10	2	3	4	5	6	7	11	4	5	6	7	8	9	12	6	7	8	9	10	11	13	8	9	10	11	12	13	14	10	11	12	13	14	15	15	12	13	14	15	16	17	16	14	15	16	17	18	19	17	16	17	18	19	20		19							
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C099	2 Pole 4 step		4																																																																							
C100	3 Pole 4 step		6																																																																							
C101	4 Pole 4 step	P27	8																																																																							
C102	1 Pole 5 step		3																																																																							
C102A	1 Pole 5 step				3																																																																					
C103	2 Pole 5 step				5																																																																					
C104	3 Pole 5 step		P28	8																																																																						
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4	5	6	7	8	9	10	12																																																																			
C105	1 Pole 6 step		4																																																																							
C105A	1 Pole 6 step			4																																																																						
C106	2 Pole 6 step		7																																																																							
C107	3 Pole 6 step		11																																																																							
C108	1 Pole 7 step		4																																																																							
C109	2 Pole 7 step			8																																																																						
C110	1 Pole 8 step		5																																																																							
C111	1 Pole 9 step			5																																																																						
C112	1 Pole 10 step		6																																																																							
C113	1 Pole 11 step	P31	6																																																																							
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MULTI-STEP SWITCHES WITH "OFF" 20A, 25A

Code No	Function	Stage	Escutch Plate	Connecting Diagram	
C114	1 Pole 3 step	2	<p>P32</p>		
C115	2 Pole 3 step	3			
C116	3 Pole 3 step	5			
C117	4 Pole 3 step	6			
C120	1 Pole 4 step	2	<p>P33</p>		
C121	2 Pole 4 step	4			
C122	3 Pole 4 step	6			

C126	1 Pole 5 step	3	<p>P34</p>		
C127	2 Pole 5 step	5			
C128	3 Pole 5 step	8			
C130	1 Pole 6 step	3	<p>P35</p>		
C131	2 Pole 6 step	6			

C134	1 Pole 7 step	4	<p>P36</p>		
C135	2 Pole 7 step	7			
C137	1 Pole 8 step	4	<p>P37</p>		
C138	2 Pole 8 step	8			
C139	3 Pole 8 step	12	<p>P38</p>		
C140	1 Pole 9 step	5			
C141	1 Pole 10 step	5			
C142	1 Pole 11 step	6	<p>P39</p>		

C144	1 Pole 2 step	1	<p>P40</p>		
C145	2 Pole 2 step	2			
C146	3 Pole 2 step	3			
C147	4 Pole 2 step	4			
C148	5 Pole 2 step	5			



MULTI-STEP SWITCHES WITH "OFF" 20A, 25A

Code No	Function	Stage	Escutch Plate	Connecting Diagram	
C149	1 Pole 3 step	2			
C150	2 Pole 3 step	3			
C151	3 Pole 3 step	5			
C152	4 Pole 3 step	6			
C153	5 Pole 3 step	8			
C154	1 Pole 4 step	2			
C155	2 Pole 4 step	4			
C156	3 Pole 4 step	6			
C157	4 Pole 4 step	8			
C158	1 Pole 5 step	3			
C159	2 Pole 5 step	5			
C160	3 Pole 5 step	8			
C161	1 Pole 6 step	4			
C162	2 Pole 6 step	7			
C163	3 Pole 6 step	11			
C164	1 Pole 7 step	4			
C165	2 Pole 7 step	8			
C166	4 Pole 8 step	5			
C167	4 Pole 9 step	5			
C168	4 Pole 10 step	6			

MULTI-STEP SWITCHES WITH "OFF" 20A, 25A

C170	2 pole	3			
C171	3 pole	4			
C172	2 speed	3			
C173	4 pole - 8 pole Speed control and Reversing Control	7	 		

VOLTMETERS WITCHES

Code No.	Stage	Escutch Plate	connction diagram	
C174	3			
C175	4			
C176	4			

AMMETER SWITCHES

Code No.	Stage	Escutch Plate	connction diagram	
C177	3			
C178	4			
C179	4			

STAR-DELTA SWITCH

Code No.	Stage	Escutch Plate	connction diagram	
C180	4			

CAM SWITCHES 32A

ON-OFF switches 90°, 60° witching 32A

Code No	Function	Stage	Escutch Plate	Connecting Diagram	
A301	1 Pole	1		Stage 1 Stage 2 Stage 3 Stage 4 	
A301A	2 Pole	1			
A302	3 Pole	2			
A302A	4 Pole	2			
A303	5 Pole	3			
A303A	6 Pole	3			
A304	7 Pole	4			
A304A	8 Pole	4			

Change over switches without OFF 90°, 60° witching 32A

A307	1 Pole	1			
A308	2 Pole	2			
A309	3 Pole	3			
A310	4 Pole	4			

Change over switches without OFF with electrically isolated contacts 32A

A313	1 Pole	1			
A314	2 Pole	2			
A315	3 Pole	3			
A316	4 Pole	4			

Change over switches with center OFF 90°, 60° witching 32A

A317	1 Pole	1		A317~A320 	
A318	2 Pole	2			
A319	3 Pole	3			
A320	4 Pole	4			
A321	1 Pole	1		A321~A324 	
A322	2 Pole	2			
A323	3 Pole	3			
A324	4 Pole	4			

ON-OFF Power switches 90° 2A

PS31	1 Pole	1		Stage 1 Stage 2 	
PS32	2 Pole	1			
PS33	3 Pole	2			
PS34	4 Pole	2			
PS35	5 Pole	3			
PS36	6 Pole	3			

ON-OFF switches 90°, 60° witching 63A

Code No	Function	Stage	Escutch Plate	Connecting Diagram	
A601	1 Pole	1		<p>Stage 1 Stage 2 Stage 3 Stage 4</p>	
A601A	2 Pole	1			
A602	3 Pole	2			
A602A	4 Pole	2			
A603	5 Pole	3			
A603A	6 Pole	3			
A604	7 Pole	4			
A604A	8 Pole	4			

Change over switches without OFF 60°, 90° witching 63A

A607	1 Pole	1			
A608	2 Pole	2			
A609	3 Pole	3			
A610	4 Pole	4			

Change over switches without OFF with electrically isolated contacts 63A

A613	1 Pole	1			
A614	2 Pole	2			
A615	3 Pole	3			
A616	4 Pole	4			

Change over switches with center OFF 90°, 60° 3A


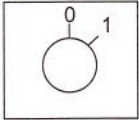
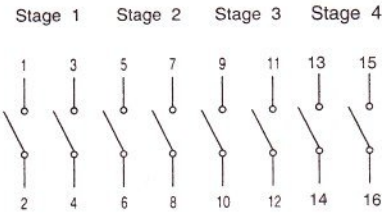
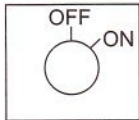
A617	1 Pole	1		<p>A617~A620</p>	
A618	2 Pole	2			
A619	3 Pole	3			
A620	4 Pole	4			
A621	1 Pole	1		<p>A621~A624</p>	
A622	2 Pole	2			
A623	3 Pole	3			
A624	4 Pole	4			

ON - OFF Power switches 90° 3A

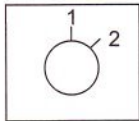
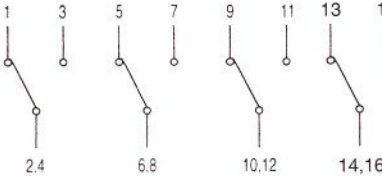

PS61	1 Pole	1		<p>Stage 1 Stage 2</p>	
PS62	2 Pole	1			
PS63	3 Pole	2			
PS64	4 Pole	2			

CAM SWITCHES 100A


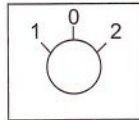
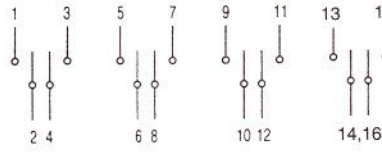
ON-OFF switches with 60° switching

Code No	Function	Stage	Escutch Plate	Connecting Diagram	
A100	1 Pole	1			
A100A	2 Pole	1			
A101	3 Pole	2			
A101A	4 Pole	2			
A102	5 Pole	3			
A102A	6 Pole	3			
A103	7 Pole	4			
A103A	8 Pole	4			

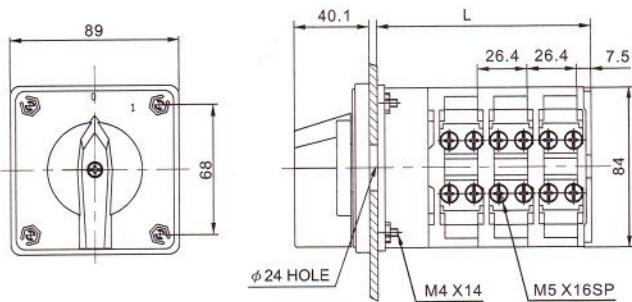
Change over switches without OFF 60° switching

Code No	Function	Stage			
A104	1 Pole	1			
A105	2 Pole	2			
A106	3 Pole	3			
A107	4 Pole	4			

Change over switches with center OFF 60° switching

Code No	Function	Stage	Escutch Plate	Connecting Diagram	
A108	1 Pole	1			
A109	2 Pole	2			
A110	3 Pole	3			
A111	4 Pole	4			

Dimensions for 100A frame F5



Total Number of stage	1	2	3	4
Length L	60.7	87.10	113.5	139.90

Disconnect Switch

DC-Disconnect Switch

Part No: SC-40

2-pole 2-contact

Switching Angle : 90°

Application : Front mounting, central mounting

Handle : Knob type, 0-position 12 o'clock

Front Plate : without

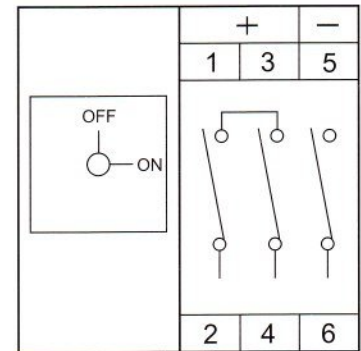
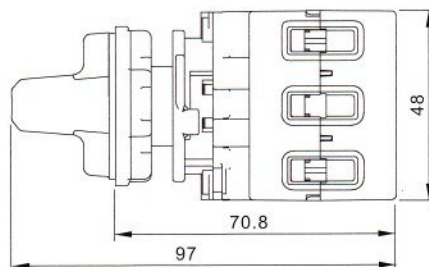
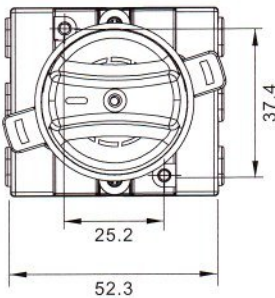
IP Rating : IP65

Electrical Data

Rated Operational Voltage Ue	VDC (V)	400	600	800	1000
Rated Operational Current Ie	VDC (A)	40	25	16	10

Rated Impulse Withstand Voltage Uimp : 6KV

Rated Insulation Voltage Ui : 1000V



AC-Disconnect Switch

3-pole 3-contact

Switching Angle : 90°

Application : Front mounting, central mounting

Handle : Knob type, 0-position 12 o'clock

IP Rating : IP65

Part No.		PS-2	PS-3	PS-4	PS-6	PS-8	PS-10
Rated Voltage	V	660	660	660	660	660	660
Rated Current	A	20A,25A	32A	40A	63A	80A	100A
AC23 3 φ X 240V	KW	4	5.5	7.5	11	18	22
AC23 3 φ X 380V/440V	KW	7.5	11	15	22	30	37
AC3 3 φ X 240V	KW	3	4	7.5	11	15	18
AC3 3 φ X 440V	KW	5.5	7.5	11	18	22	30



Part No.	Amp.	A	B	C	D	E
PS-2	25A	64	48	38	56	48
PS-3	32A	64	48	38	56	48
PS-4	40A	64	48	38	56	48
PS-6	63A					
PS-8	80A					
PS-10	100A					

