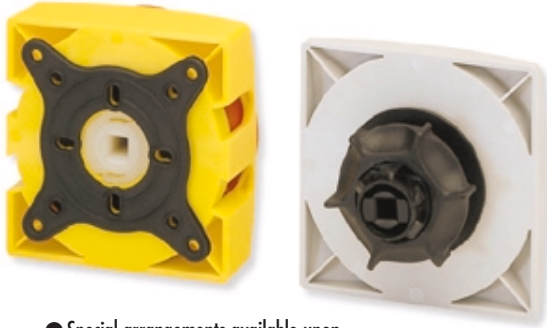


Cam Switches



CN Series Overview

- The CN Series represents the latest generation of manually-operated switching devices
- Available with 12, 16, 20, 25 and 32 Amp rating
- Manufactured from heat resistant and class V2 halogen free and self-extinguishing materials, providing a high mechanical life

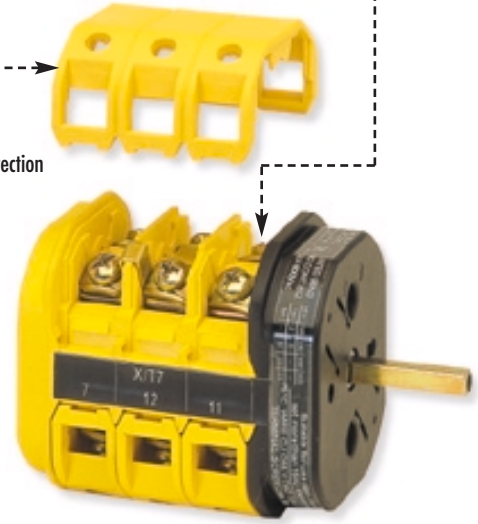


● Special arrangements available upon

Customer		ORDER FORM		CARLO GAVAZZI																															
<input type="checkbox"/> Inquiry <input checked="" type="checkbox"/> Order		Particular requirements: _____ Telephone: _____																																	
<input checked="" type="checkbox"/> 45° <input type="checkbox"/> 90° <input type="checkbox"/> 30° <input type="checkbox"/> 60°	<input type="checkbox"/> Pos. <input checked="" type="checkbox"/> Explanation	<input type="checkbox"/> Pos. <input checked="" type="checkbox"/> Explanation	<input type="checkbox"/> Pos. <input checked="" type="checkbox"/> Explanation	<input type="checkbox"/> Pos. <input checked="" type="checkbox"/> Explanation	<input type="checkbox"/> Pos. <input checked="" type="checkbox"/> Explanation																														
<table border="1"> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> <tr> <td>12</td><td>30</td><td>65</td><td>74</td><td>9-10</td><td>11-12</td><td>23-24</td><td>25-26</td><td>17-18</td><td>19-20</td> </tr> <tr> <td>27-28</td><td>29-30</td><td>31-32</td><td>33-34</td><td>35-36</td><td>37-38</td><td>39-40</td><td>41-42</td><td>43-44</td><td>45-46</td> </tr> </table>						1	2	3	4	5	6	7	8	9	10	12	30	65	74	9-10	11-12	23-24	25-26	17-18	19-20	27-28	29-30	31-32	33-34	35-36	37-38	39-40	41-42	43-44	45-46
1	2	3	4	5	6	7	8	9	10																										
12	30	65	74	9-10	11-12	23-24	25-26	17-18	19-20																										
27-28	29-30	31-32	33-34	35-36	37-38	39-40	41-42	43-44	45-46																										
Series _____ Version _____		Example 		<input type="checkbox"/> Open contact <input checked="" type="checkbox"/> Closed contact <input checked="" type="checkbox"/> Closed contact with break in current between positions <input checked="" type="checkbox"/> Short-circuited contacts <input checked="" type="checkbox"/> Open contact with advanced closing <input checked="" type="checkbox"/> Spring-return <input type="checkbox"/> 1 <input type="checkbox"/> 2																															
Rated operational current I _e (A) _____ Rated operational voltage U _e (V) _____ Utilization category _____ Rear mounting <input type="checkbox"/> Base mounting <input type="checkbox"/> Label carrier YES <input type="checkbox"/> NONE <input type="checkbox"/> Degree of protection IP _____ Quantity to be assembled _____ Delivery time _____																																			
When ordering, this special order form must be used to prevent mistakes during production																																			

- Screws provided with captive self-lifting cable clamp, which are supplied in open position, for quick and easy wiring

- IP20 Finger safe protection of the terminals

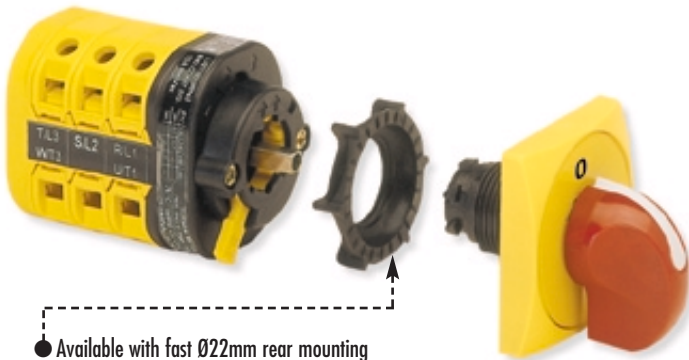


- New modular and shaft extensions



- 30°, 45°, 60° and 90° Switching angles

- IP65 rated operating handle



- Available with fast Ø22mm rear mounting

Cam Switches



Selection Table / Versions

How to order

CN										
-----------	--	--	--	--	--	--	--	--	--	--

Range	Diagram Number	Type
012 = 12 A	See Data Sheet	(mounting plate)
016 = 16 A	0001 = 01	
020 = 20 A	0002 = 02	
025 = 25 A	0003 = 03	
032 = 32 A	etc. etc.	

R Type switch body for rear mounting



G Type switch body for Ø22mm rear center mounting

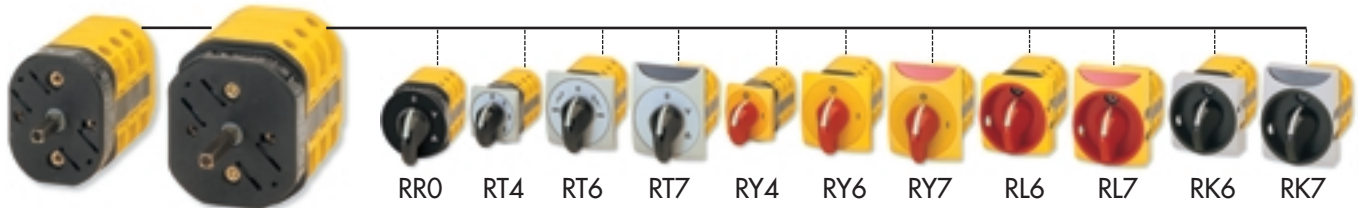


B Type switch body for base mounting

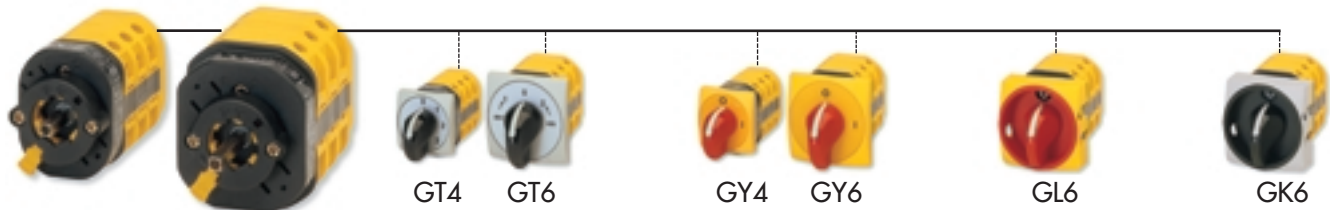


PREFIX	Size	IEC 947-3				UL508		
		I _{th} A	AC21A A	AC23A kW (400V)	AC3 kW (400V)	I _{th} A	3 x 240 V HP	3 x 480 V HP
CN012...	1	12	12	4	3.5	12	2	3
CN016...	1	16	16	7.5	5.5	16	3	7.5
CN020...	1	20	20	9	7.5	20	7.5	10
CN025...	2	25	32	15	10	32	10	15
CN032...	2	40	40	18.5	15	40	15	20

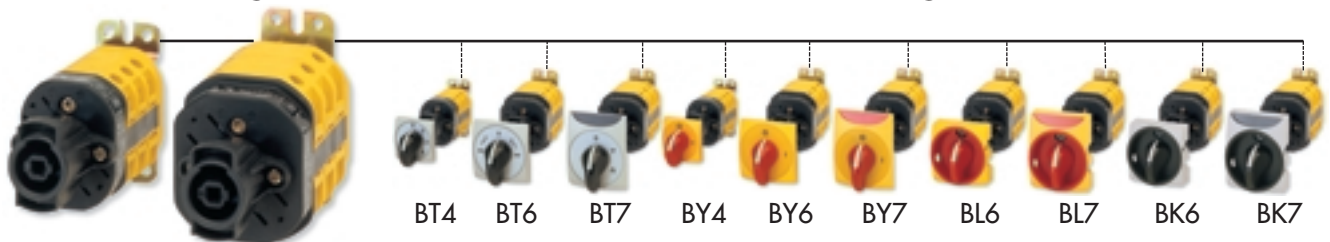
Rear Mounting Cam Switches



Ø22mm Rear Center Mounting Cam Switches



Base Mounting Cam Switches (with door interlocking)



Accessories for Cam Switches and Rotary Disconnects



Shaft extensions

- Adapts the switches with door interlocking device
- Different mounting lengths, up to 8 inches (200mm)



Modular extensions

- Adapts the switches with door interlocking device to different mounting lengths
- Includes four forms that overlap
- Approximately 1/2" (12mm) per extension fitting



Single handle

- Red or black



Reversible black or red label for engraving

- For front trim plates with legend label carrier



Protection shrouds for disconnect terminals

- Increase the degree of protection



Various Mounting Plates

- For DIN rail or base mounting

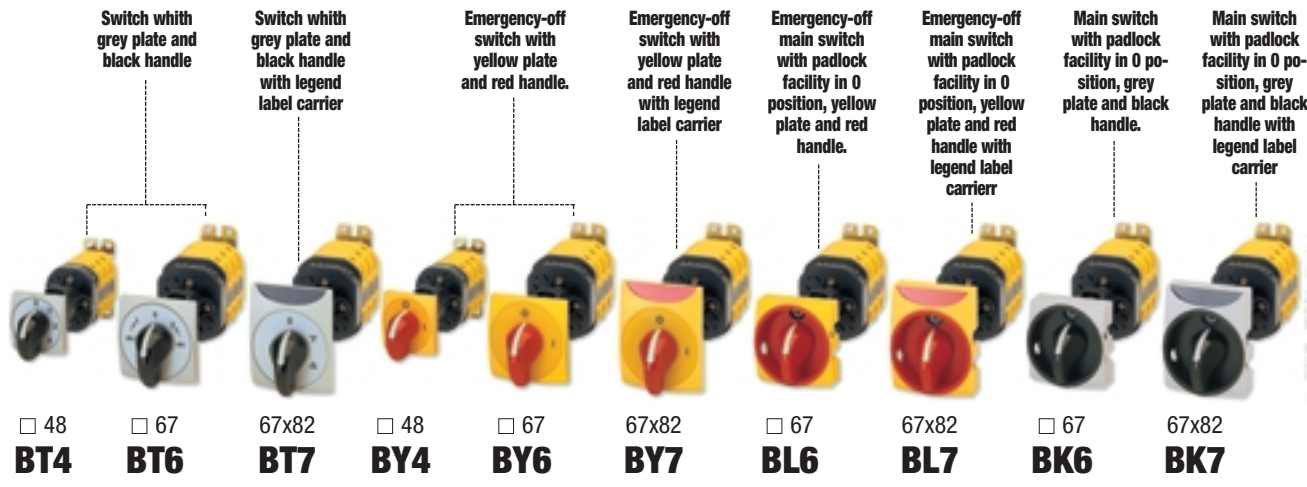


Cam Switches



Selection table / Versions

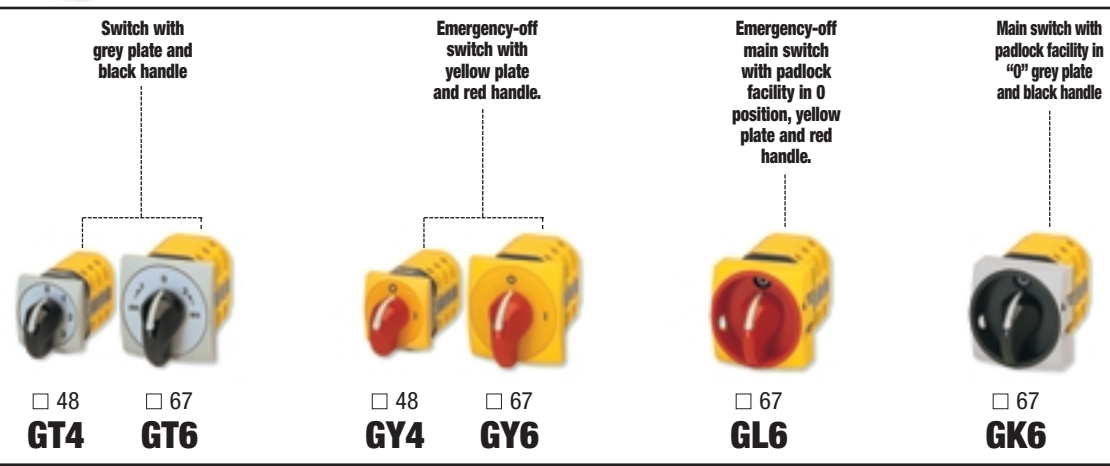
Base mounting (with door interlocking)



	□ 48 BT4	□ 67 BT6	67x82 BT7	□ 48 BY4	□ 67 BY6	67x82 BY7	□ 67 BL6	67x82 BL7	□ 67 BK6	67x82 BK7
12 A	CN012...BT4	CN012...BT6	CN012...BT7	CN012...BY4	CN012...BY6	CN012...BY7	CN012...BL6	CN012...BL7	CN012...BK6	CN012...BK7
16 A	CN016...BT4	CN016...BT6	CN016...BT7	CN016...BY4	CN016...BY6	CN016...BY7	CN016...BL6	CN016...BL7	CN016...BK6	CN016...BK7
20 A	CN020...BT4	CN020...BT6	CN020...BT7	CN020...BY4	CN020...BY6	CN020...BY7	CN020...BL6	CN020...BL7	CN020...BK6	CN020...BK7
25 A		CN025...BT6	CN025...BT7		CN025...BY6	CN025...BY7	CN025...BL6	CN025...BL7	CN025...BK6	CN025...BK7
32 A		CN032...BT6	CN032...BT7		CN032...BY6	CN032...BY7	CN032...BL6	CN032...BL7	CN032...BK6	CN032...BK7



Rear center mounting Ø22



	□ 48 GT4	□ 67 GT6	□ 48 GY4	□ 67 GY6	□ 67 GL6	□ 67 GK6
12 A	CN012...GT4	CN012...GT6	CN012...GY4	CN012...GY6	CN012...GL6	CN012...GK6
16 A	CN016...GT4	CN016...GT6	CN016...GY4	CN016...GY6	CN016...GL6	CN016...GK6
20 A	CN020...GT4	CN020...GT6	CN020...GY4	CN020...GY6	CN020...GL6	CN020...GK6
25 A		CN025...GT6		CN025...GY6	CN025...GL6	CN025...GK6
32 A		CN032...GT6		CN032...GY6	CN032...GL6	CN032...GK6

Cam Switches



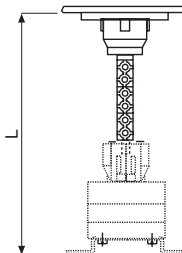
Accessories



Shaft extensions

- Allows adapting the switches with door interlocking device to the different mounting lengths

code	type	length
BR508300	B - GNAP0	100 mm
BR508600	B - GNAP1	150 mm
BR508900	B - GNAP2	200 mm



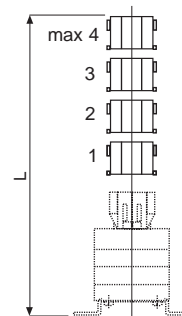
L=(mm)	CN012 - CN016 - CN020				CN025 - CN032				
	1	2	3	+□	1	2	3	+□	
H=100mm	min	181	194	206	+ 12.2	216	232	248	+ 16.2
	max	191	203	215		225	242	258	
H=150mm	min	231	244	256	+ 12.2	266	282	298	+ 16.2
	max	241	253	265		275	292	308	
H=200mm	min	281	294	306	+ 12.2	316	332	348	+ 16.2
	max	291	303	315		325	342	358	



Modular extensions

- Allows adapting the switches with door interlocking device to the different mounting lengths
- Includes 4 forms that overlap

code	type	length
BR508000	B - GNAMO	-



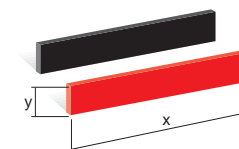
L=(mm)	CN012 - CN016 - CN020				CN025 - CN032				
	1	2	3	+□	1	2	3	+□	
1	min	101	114	126	+ 12.2	111	127	143	+ 16.2
	max	111	123	135		120	137	153	
2	min	126	139	151	+ 12.2	136	152	168	+ 16.2
	max	136	148	160		145	162	178	
3	min	151	164	176	+ 12.2	161	177	193	+ 16.2
	max	161	173	185		170	187	203	
3	min	176	189	201	+ 12.2	186	202	218	+ 16.2
	max	186	198	210		195	212	228	



Reduction disk

- Allow the reduction of the fixing holes from 32 to 28 mm

code	type	length
BR507100	B - G1468	-



Black label - red label for engraving blank

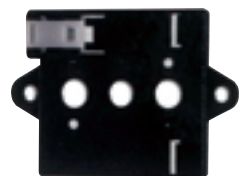
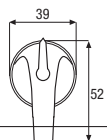
- For front trim plates with legend label carrier

code	type	length
BR506800	B - 6429	-



Single handle

code	type	length
BR507400	B - G1470N (black)	-
BR507700	B - G1470R (red)	-



DIN rail fixing-plate

- instead of metal fixing plate box version

code	type	
VB824200	B - G540	CN012...
		CN016...
		CN025...
		CN032...

Cam Switches



Circuit diagrams

Switches																																					
Text sheet Diagram no.	Circuit diagrams	Description of contacts and sections																																			
01	<p>1-pole switch</p>	<table border="1"> <tr><td>POSIT.</td><td>0</td><td></td><td></td><td></td><td>90°</td></tr> <tr><td></td><td>1</td><td>X</td><td></td><td></td><td>60°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	0				90°		1	X			60°	CONTACT	1	2	3	4	Switch	SECTION	1															
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	1	X			60°																																
CONTACT	1	2	3	4	Switch																																
SECTION	1																																				
02	<p>2-pole switch</p>	<table border="1"> <tr><td>POSIT.</td><td>0</td><td></td><td></td><td></td><td>90°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td></td><td>60°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	0				90°		1	X	X		60°	CONTACT	1	2	3	4	Switch	SECTION	1															
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CONTACT	1	2	3	4	Switch																																
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03	<p>3-pole switch</p>	<table border="1"> <tr><td>POSIT.</td><td>0</td><td></td><td></td><td></td><td>90°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>X</td><td>60°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	0				90°		1	X	X	X	60°	CONTACT	1	2	3	4	5	6	Switch	SECTION	1													
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CONTACT	1	2	3	4	5	6	Switch																														
SECTION	1																																				
04	<p>4-pole switch</p>	<table border="1"> <tr><td>POSIT.</td><td>0</td><td></td><td></td><td></td><td>90°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>X</td><td>60°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	0				90°		1	X	X	X	60°	CONTACT	1	2	3	4	5	6	7	8	Switch	SECTION	1											
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	1	X	X	X	60°																																
CONTACT	1	2	3	4	5	6	7	8	Switch																												
SECTION	1																																				
35	<p>3-pole switch with spring-return to 0 position</p>	<table border="1"> <tr><td>POSIT.</td><td>0</td><td></td><td></td><td></td><td>60°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>X</td><td>45°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	0				60°		1	X	X	X	45°	CONTACT	1	2	3	4	5	6	7	8	Switch	SECTION	1											
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CONTACT	1	2	3	4	5	6	7	8	Switch																												
SECTION	1																																				
G3	<p>3-pole switch</p>	<table border="1"> <tr><td>POSIT.</td><td>0</td><td></td><td></td><td></td><td>90°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>X</td><td>60°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	0				90°		1	X	X	X	60°	CONTACT	1	2	3	4	5	6	7	8	Switch	SECTION	1											
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CONTACT	1	2	3	4	5	6	7	8	Switch																												
SECTION	1																																				
G4	<p>4-pole switch</p>	<table border="1"> <tr><td>POSIT.</td><td>0</td><td></td><td></td><td></td><td>90°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>X</td><td>60°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	0				90°		1	X	X	X	60°	CONTACT	1	2	3	4	5	6	7	8	Switch	SECTION	1											
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05	<p>1-pole change-over switch</p>	<table border="1"> <tr><td>POSITION</td><td>2</td><td>X</td><td>X</td><td>60°</td></tr> <tr><td></td><td>0</td><td></td><td></td><td>45°</td></tr> <tr><td></td><td>1</td><td>X</td><td></td><td>30°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td></tr> </table>	POSITION	2	X	X	60°		0			45°		1	X		30°	CONTACT	1	2	3	4	Switch	SECTION	1												
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	1	X		30°																																	
CONTACT	1	2	3	4	Switch																																
SECTION	1																																				
06	<p>2-pole change-over switch</p>	<table border="1"> <tr><td>POSITION</td><td>2</td><td>X</td><td>X</td><td>60°</td></tr> <tr><td></td><td>0</td><td></td><td></td><td>45°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>30°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSITION	2	X	X	60°		0			45°		1	X	X	30°	CONTACT	1	2	3	4	5	6	7	8	Switch	SECTION	1								
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Text sheet Diagram no.	Circuit diagrams	Description of contacts and sections																																																										
07	<p>3-pole change-over switch</p>	<table border="1"> <tr><td>POSITION</td><td>2</td><td>X</td><td>X</td><td>X</td><td>60°</td></tr> <tr><td></td><td>0</td><td></td><td></td><td></td><td>45°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>X</td><td>30°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSITION	2	X	X	X	60°		0				45°		1	X	X	X	30°	CONTACT	1	2	3	4	5	6	7	8	9	10	11	12	Switch	SECTION	1																								
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CONTACT	1	2	3	4	5	6	7	8	9	10	11	12	Switch																																															
SECTION	1																																																											
39	<p>4-pole change-over switch</p>	<table border="1"> <tr><td>POSITION</td><td>2</td><td>X</td><td>X</td><td>X</td><td>X</td><td>60°</td></tr> <tr><td></td><td>0</td><td></td><td></td><td></td><td></td><td>45°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>X</td><td>X</td><td>30°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSITION	2	X	X	X	X	60°		0					45°		1	X	X	X	X	30°	CONTACT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Switch	SECTION	1																	
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D001	<p>1-pole double-way switch</p>	<table border="1"> <tr><td>POSIT.</td><td>2</td><td>X</td><td>45°</td></tr> <tr><td></td><td>1</td><td>X</td><td>30°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	2	X	45°		1	X	30°	CONTACT	1	2	3	4	Switch	SECTION	1																																										
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D002	<p>2-pole double-way switch</p>	<table border="1"> <tr><td>POSIT.</td><td>2</td><td>X</td><td>X</td><td>45°</td></tr> <tr><td></td><td>1</td><td>X</td><td>X</td><td>30°</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>Switch</td></tr> <tr><td>SECTION</td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	POSIT.	2	X	X	45°		1	X	X	30°	CONTACT	1	2	3	4	5	6	7	8	Switch	SECTION	1																																				
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36	<p>3 pole reversing switch with spring return to "0"</p>	<table border="1"> <tr><td>2</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>0</td><td></td><td></td><td></td><td></td></tr> <tr><td>1</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td>CONTACT</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>Switch</td></tr> <tr><td>ELEM.</td><td>1</td><td>2</td><td>3</td><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>	2	X	X	X	X	0					1	X	X	X	X	CONTACT	1	2	3	4	5	6	7	8	9	10	11	12	Switch	ELEM.	1	2	3	4										
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Cam Switches



Circuit diagrams

Text sheet Diagram no.	Circuit diagrams	Description of contacts and sections	L1 R L2 S L3 T
10	Star-delta starter 		
11	reversing pole changing switch 		
12	reversing star-delta starter switch 		
13	Pole changing switch with star-delta starting 		
29	Change-over switch for reversing with spring return to A - M 		
30	Change-over switch for reversing starters with return to A - M 		
31	Switch for single-phase motor with auxiliary phase 		
32	Change-over switch for single-phase motor with auxiliary phase 		
33	Pole changing switch for single-phase motors with auxiliary phase to start on the first speed 		

Text sheet Diagram no.	Circuit diagrams	Description of contacts and sections	L1 R L2 S L3 T
34	Reversing starter for single-phase motors with centrifugal cut-out 		

Voltmeter switches			
Text sheet Diagram no.	Circuit diagrams	Description of contacts and sections	L1 R L2 S L3 T
15	Voltmeter switch 3 for measurements between each phase and neutral 		
16	Voltmeter switch for measurements between each phase and phase 		
17	Voltmeter switch for measurements between each phase and phase + 1 phase and neutral 		
18	Voltmeter switch for measurements between each phase and phase + 1 phase and neutral 		
19	Voltmeter switch for measurements between each phase and phase + 1 phase and neutral 		

Ammeter switches			
Text sheet Diagram no.	Circuit diagrams	Description of contacts and sections	L1 R L2 S L3 T
14	Ammeter switch for direct measurements 		
20	Ammeter switch for direct measurements between 1-pole 1 current transformer 		

Cam Switches



Circuit diagrams

Text sheet Diagram no.	Circuit Diagrams	Description of contacts and sections	L1 R L2 S L3 T
21	Ammeter switch for direct measurements between 1-pole 2 current transformer 		

Ammeter switches			
22	Ammeter switch for measurements 1-pole 3 current transformers 		
23	Ammeter switch for measurements between 1-pole 4 current transformers 		

Text sheet Diagram no.	Circuit diagrams	Description of contacts and sections
MZ24	2 pole - 4 ways 	
MZ33	3 pole - 3 ways 	
MZ43	4 pole - 3 ways 	

Multi-step change-over with 0 position		
MZ12	1 pole - 2 ways 	
MZ13	1 pole - 3 ways 	
MZ14	1 pole - 4 ways 	
MZ22	2 pole - 2 ways 	
MZ23	2 pole - 3 ways 	

Multi-step change-over switches without 0 position		
M013	1 pole - 4 ways 	
M014	1 pole - 5 ways 	
M015	2 pole - 4 ways 	
M024	2 pole - 5 ways 	
M025		

Cam Switches



Multi-step cumulative change-over switches with "0" position

Tex sheet Diagram no.	Circuit diagrams	Description of contacts and sections
GZ13	<p>1 pole - 3 ways</p>	
GZ23	<p>2 pole - 3 ways</p>	
GZ33	<p>Commutatore tripolare a 3 vie 3 pole - 3 ways</p>	

1-pole	GZ12	GZ13	GZ14	GZ15	GZ16
2-pole	GZ22	GZ23	GZ24	GZ25	GZ26
3-pole	GZ32	GZ33	GZ34	GZ35	GZ36
4-pole	GZ42	GZ43	GZ44	GZ45	GZ46

1-pole	GZ17	GZ18	GZ19	GZ20	GZ01
2-pole	GZ27	GZ28	GZ29	GZ02	GZ03
3-pole	GZ37	GZ38	GZ39	GZ04	GZ05
4-pole	GZ47	GZ48	GZ49	GZ06	GZ07

Date: _____ Inquiry Order

ORDER FORM CARLO GAVAZZI Automatic Components

Customer: _____ For further information contact: _____ Telephone: _____

45°
 90°
 30°
 60°

Pos.	Explanation	Pos.	Explanation	Pos.	Explanation

Position	1	2	3	4	5	6	7	8	9	10
3										
2										
1										
0										

Contacts

Series _____

Version _____

Rated operational current Ie (A) _____

Rated operational voltage Ue (V) _____

Utilization category _____

Rear mounting Base mounting

Label carrier YES NONE

Degree of protection IP _____

Quantity to be assembled _____

Delivery time _____

Example

<input type="checkbox"/> Open contact	<input checked="" type="checkbox"/> Closed contact
<input checked="" type="checkbox"/> Closed contact with break in current between positions	<input checked="" type="checkbox"/> Closed contact without break in current between positions
<input checked="" type="checkbox"/> Short-circuited contacts	<input checked="" type="checkbox"/> Spring-return
<input checked="" type="checkbox"/> Open contact with advanced closing	

Notes

When ordering, this special order form must be used to prevent mistakes during production

Page / TE.01

The circuit diagrams you use probably already exist among the more than 9000 special diagrams memorized in our CAD system

The special versions have to be definite after having contacted our Technical Service directly or sent the special order form shown sideways.

Cam Switches



Overall dimensions (mm)

Version	Front view	Side view	Hole layout	Dimensions (mm)																																																																		
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Cam Switches



Technical data

General specifications					CN012	CN016	CN020	CN025	CN032				
Rated insulation voltage	Ui	IEC947	V		500	500	690	690	690				
	UL		V	-	690	600/300/690	690	690	690				
Rated impulse withstand voltage	Uimp	IEC947	kV		4	4	6	6	6				
Rated thermal current	free air	lth	IEC947	A	16	20	20		40				
		UL		A	12	16	20	32	40				
	enclosed	lthe	IEC/VDE/BS	A	16	20	20	32	40				
		Category AC21A	le	IEC947	690 V A	12 ●	16 ●	20	32	40			
Rated operational current	Category AC22A	le	IEC947	690 V A	12 ●	16 ●	16	25	32				
	Category AC20	le		A									
Max ratings for application on motors													
Category AC3	3-phase / 3-pole	IEC947	230 V	kW (A)	2.2 (7)	3.7 (12)	4 (14)	5.5 (18)	7.5 (23)				
				400 V kW (A)		3.5 (7)	5.5 (10)	7.5 (14)	10 (18)	15 (27)			
				500 V kW (A)		-	-	7.5 (11)	10 (14)	15 (22)			
				690 V kW (A)		-	-	7.5 (8)	15 (19)	18.5 (19)			
Category AC23A	1-phase / 2-pole	IEC947	110 V	kW (A)	0.37 (4)	0.75 (9)	1.1 (13)	1.5 (17)	2.2 (25)				
				230 V kW (A)		1.1 (6)	1.5 (8)	2.2 (12)	3.7	5.5 (30)			
				3-phase / 3-pole	IEC947	230 V	kW (A)	3 (9)	4 (14)	5.5 (17)	8.5 (27)	10 (32)	
				400 V kW (A)		4 (9)	7.5 (14)	9 (16)	15 (27)	18.5 (30)			
Category AC4	3-phase / 3-pole	IEC947	230 V	kW (A)	-	-	1.5	2.2 (7)	3 (10)				
				400 V kW (A)		-	-	2.2	3 (5.5)	5.5 (10)			
				Standard motor load	3-phase / 3-pole	UL/CSA	200 V	HP	1.5	-2	5-	7.5	10
				240 V HP					2	3	7.5	10	15
480 V HP		3	7.5	10				15	20				
600 V HP		5	7.5	10				15	20				
Category AC15	1-phase / 2-pole	UL/CSA	120 V	HP	0.5	1	1.5	2	3				
				240 V HP		1.5	2	3	5	7.5			
				Category AC15	IEC947	230 V	A	4	6	7	8	10	
				400 V		A	3	4	5	6	8		
Rated short-time withstand current (1s)	l _{cw}			A	150	240	240	400	500				
Rated short-circuit making capacity	l _{cm}			A	-	-	1500	2000	2000				
Rated conditional short-circuit current		IEC947-3	500 V	kA eff.	4	4	5	10	10				
With fuses class gG			500 V	A	16	20	20	35	-				
Connecting capacity	Rigid cables	min-max	mm ²		2x1.5-4	2x1.5-4	2x1.5-4	2x2.5-10	2x2.5-10				
	Flexible cables	min-max	mm ² 2x1.5-2.5	AWG	2x1.5-2.5	2x1.5-2.5	2x2.5-6	2x2.5-6					
Rated breaking capacity in category AC23 (cosφ 0.45)	IEC947	230 V	A		72	112	136	216	256				
		400 V	A		72	112	136	216	256				
Average power dissipation for each pole			W	0.27	0.5	0.4	1	1.3					
Mechanical life			cycles 10 ⁶		2	2	2	1.5	1.5				
			cycles per hour	120	120	120	120	120					
Normal service conditions													
Temperatura ambiente/Air ambient temperature		Storage		°C				-30 to 70					
		Operational		°C				-25 to 55					
Resistance to climate	constant hot-damp climate, according to IEC 68 Part:												
	cyclic hot-damp climate, according to IEC 68 Part:					2-8							
						2-30							

● - a 400 V