



# **GIOVENZANA**

---

## **INTERNATIONAL B.V.**



**PHOENIX CAM SWITCHES**  
**PO • PX • CO • CX • G Series**





**GIOVENZANA**  
INTERNATIONAL B.V.

Automation - Lift - Handling System

# QUALITY AS A LIFE STYLE

[www.giovenzana.com](http://www.giovenzana.com)



PHOENIX CAM SWITCHES: PO • PX • CO • CX • G Series - Rev. 03\_2017

GIOVENZANA INTERNATIONAL B.V. reserves the right to modify, as specifications change, all technical and functional characteristics of the products shown in the catalogue without prior notice as this information is intended for general knowledge and is not legally binding.

# GENERAL INDEX

## PHOENIX CAM SWITCHES

<b>2</b>	AUTOMATION TECHNOLOGIES
<b>4</b>	CAM SWITCHES GENERAL OVERVIEW
<b>6</b>	GENERAL CHARACTERISTICS AND UTILIZATION CATEGORIES
<b>8</b>	BODIES RANGE OVERVIEW
<b>10</b>	BODIES CODIFICATION MAP
<b>11</b>	ELECTRICAL SCHEMES
<b>18</b>	ACTUATORS RANGE OVERVIEW
<b>20</b>	ACTUATORS CODIFICATION MAP

### R REAR PANEL MOUNTING

**23**



<b>26</b>	ON-OFF SWITCHES 0-1
<b>28</b>	CHANGEOVER 1-0-2
<b>30</b>	MOTOR SWITCHES
<b>34</b>	AMMETER AND VOLTMETER SWITCHES
<b>36</b>	STEP SWITCHES 1-2 WITHOUT ZERO
<b>38</b>	STEP SWITCHES 1-2-3 WITHOUT ZERO
<b>40</b>	STEP SWITCHES 1-2-3-4 WITHOUT ZERO
<b>42</b>	STEP SWITCHES 0-1-2 WITH ZERO
<b>44</b>	STEP SWITCHES 0-1-2-3 WITH ZERO
<b>46</b>	STEP SWITCHES 0-1-2-3-4 WITH ZERO
<b>48</b>	DIMENSIONS   SCREW M.
<b>50</b>	DIMENSIONS   Ø22 M.

### B BASE MOUNTING

**53**



<b>56</b>	ON-OFF SWITCHES 0-1
<b>58</b>	CHANGEOVER 1-0-2
<b>60</b>	DIMENSIONS   SCREW M.
<b>62</b>	DIMENSIONS   Ø22 M.

### D DIN MOUNTING

**64**



<b>68</b>	ON-OFF SWITCHES 0-1
<b>70</b>	CHANGEOVER 1-0-2
<b>72</b>	AMMETER AND VOLTMETER SWITCHES

**+**

### ACCESSORIES

<b>75</b>	ACCESSORIES
<b>78</b>	ENCLOSURES
<b>82</b>	TECHNICAL DATA
<b>84</b>	ELECTRICAL CHARACTERISTICS
<b>86</b>	EXECUTION ON DEMAND
<b>87</b>	FRAME FOR SPECIAL SCHEME ON REQUEST



### AUTOMATION

The solutions offered by **Giovenzana** are the results of the detailed analysis of industrial electrical accessories requirements in conformity with all relevant international standards. The range includes:

- Cam Switches Phoenix series from 12A to 200A;
- Switch disconnectors Regolus series from 32A to 160A;
- Auxiliary Controls Pegasus, Orion and NEMA series;
- Limit switches with die cast or molded casing;
- Foot switches and micro switches.

### QUALITY

**Giovenzana**, leader in the elevator and lifting equipment field, has gained a prominent position in the automation sector with the launch of industrial control devices into the market. For many years, all commercial and industrial operations have been integrated within the **UNI EN ISO 9001:2008** quality system.

**CSQ certificate N 9105. GIOV.**

Quality system is the end users guarantee that all production stages are closely followed under strict control and adhere to the requirements set by the company both in terms of customer expectations and compliance to the relevant international standards as proved by the various certificates **Giovenzana** holds for its products.

By the **UNI EN ISO 14001:2004**, **Giovenzana** keeps up with new technologies in order to reduce raw materials consumption, energy and natural resources and to minimize waste and emissions. This reduces the environmental impact.

**The certification CSQ N 9191. GIBV.**

### COMPLIANCE

All **Giovenzana** products are manufactured according to the most relevant Cee directives. **Giovenzana** certifies this compliance with a declaration of conformity.

### CERTIFICATIONS

In order to reach its high quality level **Giovenzana's** products are tested by multiple third parties. In order to obtain the UL mark, **Giovenzana** submits their products to Underwriter Laboratories Inc., one of the most eminent independent certification companies in the World.

### CEE DIRECTIVES

From January 1st, 1997 it is compulsory to CE mark all electromechanical products: this has been outlined by an important regulation: 2006/95/CE Low Voltage Directives.

### CE MARK

European directives, applied to all national regulations, set the minimum requirements in term of safety of all electrical material sold within the EU.

Compliance to these requirements is certified by the manufacturer by the CE mark placed on the products.

### STANDARDS

**Giovenzana's** products comply with both the European EN and the American UL standards. These regulations, such as CEI EN 60204-1 (CEI 44-5) with regards to the safety requirements of the electrical circuits on board industrial machinery, define the characteristics, performance and use of the products.

### EN EUROPEAN STANDARDS

The EN European standards are originated from IEC International standards and are the result of the collaboration between CENELEC (European Committee for Electrotechnical Standardization) member countries.

These standards cover and eliminate existing national standards that may be contradictory and non-compliant.

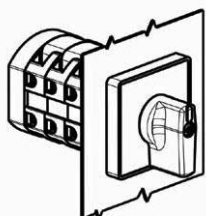




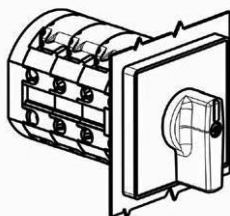
**R**



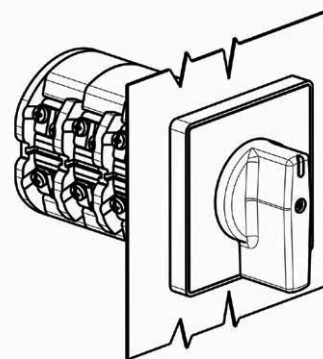
**REAR PANEL MOUNTING**



**12A - 16A - 20A**



**25A - 32A - 40A**

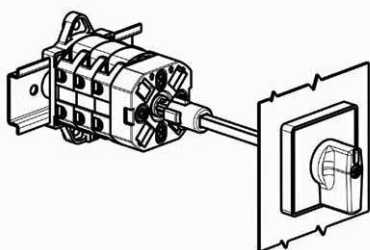


**63A - 80A**

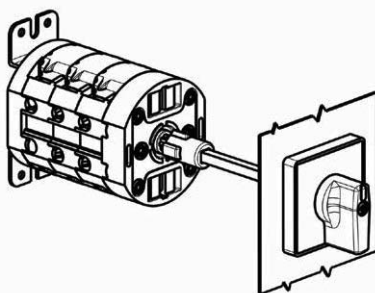
**B**



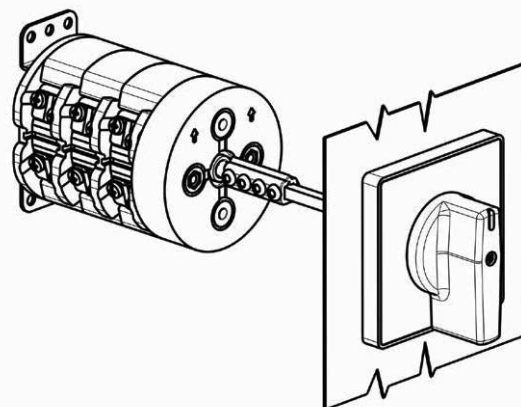
**BASE MOUNTING**



**12A - 16A - 20A**



**25A - 32A - 40A**



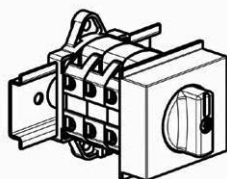
**63A - 80A**

**D**



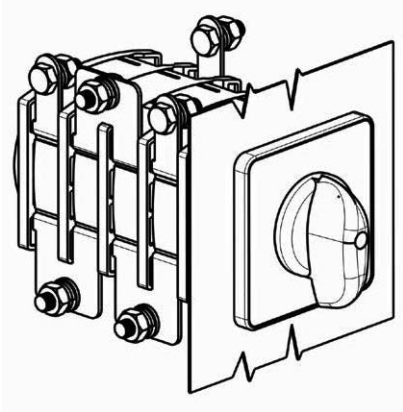
**DIN MOUNTING 46 mm**

Only switches DIN RAIL mounting 46 mm standard boxes

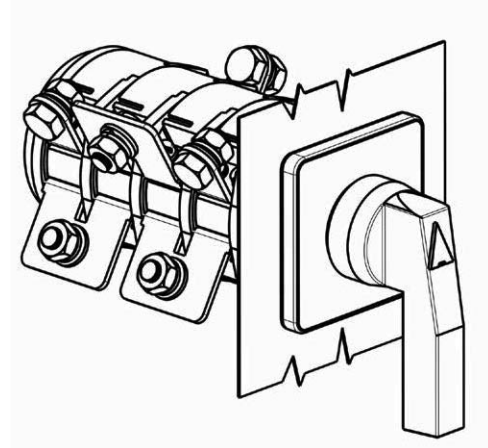


**12A - 16A - 20A**

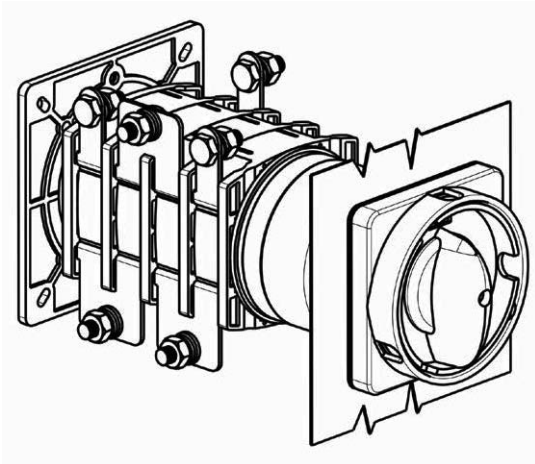
**PHOENIX CAM SWITCHES**



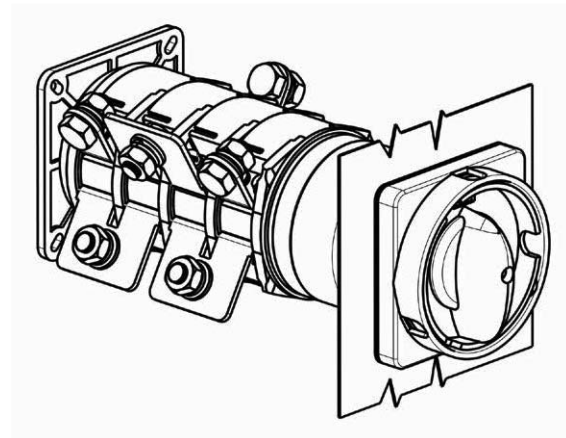
**125A**



**200A**



**125A**



**200A**



**GENERAL CHARACTERISTICS**

**CAM SWITCHES - PHOENIX SERIES**

The cam switches PHOENIX Series are manufactured in compliance with the strictest international and European standards (IEC/EN 60947-3, UL508) and thus satisfy all the strict safety needs.

The long industrial experience, together with the use of the best materials, to knowledge and the most modern machinery and project devices allow us to produce a range of equipment with compact dimensions, and very high quality, by placing **Giovenzana** as a benchmark for warranty, functioning safety and product durability.



**TYPE OF MOUNTINGS**



Rear Panel Mounting



Base Mounting



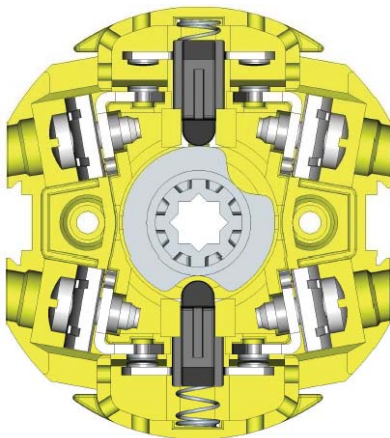
Din Mounting 46 mm  
Only switches DIN RAIL mounting 46 mm standard boxes

**RANGE (AC21A)**

12-16-20-25-32-40-63-80-125-200A

**INSULATION VOLTAGE**

690V



**MORE PERFORMANCES!**

- Self cleaning pads
- Silver alloy plated pads
- Available gold plated pads
- UL94 Vo class self-extinguishing thermoplastic housing
- Metal shaft, metal rods
- Finger-proof terminal version available till to 40A
- Laser engraved body switch markings
- Laser engraved actuator's plate

**APPLICATIONS**

<b>ON-OFF SWITCHES 0-1</b>	<b>CHANGEOVER SWITCHES 1-0-2</b>	<b>STEP SWITCHES</b>
<b>STAR-DELTA MOTOR SWITCHES</b>	<b>REVERSING MOTOR SWITCHES</b>	<b>SPECIAL CUSTOMIZED SCHEME ON DEMAND</b>
<b>AMMETER SWITCHES</b>	<b>VOLTMETER SWITCHES</b>	



## PHOENIX CAM SWITCHES

## UTILIZATION CATEGORIES for alternate and direct current

CATEGORY	APPLICATIONS
AC21A	Switching of resistive loads, including moderate overloads
AC22A	Switching of mixed resistive and inductive loads, including moderate overloads
AC23A	Switching of motor loads or other highly inductive loads
AC3	Squirrel-cage motors: starting, switches off motors during running time
DC21A	Switching of resistive loads, including moderate overloads
DC22A	Switching of mixed resistive and inductive loads, including moderate overloads

## PROTECTION CLASS (IEC/EN 60529)

PARTS		WATER	
0	Non-protected.	0	Non-protected.
1	Protected against solid foreign objects of 50 mm $\varnothing$ and greater. The object probe, sphere of 50 mm $\varnothing$ shall not fully penetrate.	1	Protected against vertically falling water drops. Vertically falling drops shall have no harmful effects.
2	Protected against solid foreign objects of 12,5 mm $\varnothing$ and greater (ex. finger). The object probe, sphere of 12,5 mm $\varnothing$ shall not fully penetrate.	2	Protected against vertically falling water drops when enclosure tilted up to 15°. Vertically falling drops shall have no harmful effects when the enclosure is tilted at any angle up to 15° on either side of the vertical.
3	Protected against solid foreign objects of 2,5 mm $\varnothing$ and greater. The object probe, sphere of 2,5 mm $\varnothing$ shall not fully penetrate.	3	Protected against spraying water. Water sprayed at an angle up to 60° on either side of the vertical shall have no harmful effects.
4	Protected against solid foreign objects of 1,0 mm $\varnothing$ and greater. The object probe, sphere of 1,0 mm $\varnothing$ shall not fully penetrate.	4	Protected against splashing water. Water splashed against the enclosure from any direction shall have no harmful effects.
5	Dust-protected. Ingress of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the apparatus or to impair safety.	5	Protected against water jets. Water projected in jets against the enclosure from any directions shall have no harmful effects.
6	Dust-tights. No ingress of dust.	6	Protected against powerful water jets. Water projected in powerful jets against the enclosure from any direction shall have no harmful effects.
		6K	Protected against powerful water jets with increased pressure. Water projected in powerful jets against the enclosure from any direction, under elevated pressure, shall have no harmful effects (DIN 40050 and not IEC 60529).
		7	Protected against the effects of temporary immersion in water. Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed in water under standardized conditions of pressure and time.
		8	Protected against the effects of continuous immersion in water. Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is continuously immersed in water under conditions which shall be agreed between manufacturer and user but which are more severe than for numeral 7.



**BODIES RANGE OVERVIEW**

| RANGE AC21A | 12A - 16A - 20A |

REAR PANEL MOUNTING	BASE MOUNTING	DIN MOUNTING	TERMINAL PROTECTION	
				<b>PO</b>
				<b>PX</b>
			<b>IP20</b> Finger Proof	
			<b>IP10</b>	

| RANGE AC21A | 25A - 32A - 40A |

REAR PANEL MOUNTING	BASE MOUNTING		TERMINAL PROTECTION	
				<b>CO</b>
				<b>CX</b>
			<b>IP20</b> Finger Proof	
			<b>IP10</b>	

| RANGE AC21A | 63A - 80A |

REAR PANEL MOUNTING	BASE MOUNTING		TERMINAL PROTECTION	
				<b>CO</b>
			<b>IP00</b>	

**PHOENIX CAM SWITCHES**

**| RANGE AC21A | 125A |**

**REAR PANEL MOUNTING**



**BASE MOUNTING**



**TERMINAL PROTECTION**

**IP**



**IPOO**

**CODE**

**G**

**| RANGE AC21A | 200A |**

**REAR PANEL MOUNTING**



**BASE MOUNTING**



**TERMINAL PROTECTION**

**IP**



**IPOO**

**CODE**

**G**

### BODIES CODIFICATION MAP

**PO12 0008 R**

BODY SWITCH TYPE			SCHEME TYPE			MOUNTING TYPE	
CODE	AC21A	TERMINAL PROT.	CODE	FUNCTION	SWITCH WAFER	CODE	MOUNTING
<b>P012</b>	12	IP20		<b>ON-OFF SWITCHES</b>		<b>R</b>	<b>REAR PANEL</b> 
<b>PX12</b>	12	IP10	<b>0001</b>	On-off switch 1 pole	1		
<b>P016</b>	16	IP20	<b>0002</b>	On-off switch 2 poles	1		
<b>PX16</b>	16	IP10	<b>0003</b>	On-off switch 3 poles	2		
<b>P020</b>	20	IP20	<b>0004</b>	On-off switch 4 poles	2		
<b>PX20</b>	20	IP10	<b>0005</b>	On-off switch 5 poles	3		
<b>C025</b>	25	IP20	<b>0006</b>	On-off switch 6 poles	3		
<b>CX25</b>	25	IP10	<b>0007</b>	On-off switch 3 poles with spring return to zero	2	<b>B</b>	<b>BASE</b> 
<b>C032</b>	32	IP20		<b>CHANGEOVER SWITCHES</b>			
<b>CX32</b>	32	IP10	<b>0008</b>	Changeover switch 1 pole	1		
<b>C040</b>	40	IP20	<b>0009</b>	Changeover switch 2 poles	2		
<b>CX40</b>	40	IP10	<b>0010</b>	Changeover switch 3 poles	3	<b>D</b>	<b>DIN</b> Only switches DIN RAIL mounting 46 mm standard boxes. 
<b>C063</b>	63	IP00	<b>0011</b>	Changeover switch 4 poles	4		
<b>C080</b>	80	IP00		<b>MOTOR SWITCHES</b>			
<b>G125</b>	125	IP00	<b>0012</b>	Reversing switch 3 poles	3	<b>S</b>	On request <b>SPECIAL CAM SWITCHES</b> according customers requirements or customizations.
<b>G200</b>	200	IP00	<b>0013</b>	Reversing switch 3 poles with spring return to zero	3		
			<b>0014</b>	Dahlander pole changing two speed switch	4		
			<b>0015</b>	Star-delta starter switch	4		
			<b>0016</b>	Reversing switch single phase with centrifugal cut-out	3		
			<b>0017</b>	Starter switch single phase with auxiliary phase	2		
			<b>0018</b>	Reversing-starter switch single phase with auxiliary phase	3		
			<b>0031</b>	Reversing-dahlander pole changing two speed switch	6		
				<b>AMMETER AND VOLTMETER SWITCHES</b>			
			<b>0019</b>	Ammeter selector switch 1 pole for 3 current transformers	3		
			<b>0020</b>	Voltmeter selector switch phase-neutral	2		
			<b>0021</b>	Voltmeter selector switch phase-phase	2		
			<b>0022</b>	Voltmeter selector switch phase-phase for two circuits	4		
			<b>0023</b>	Voltmeter selector switch phase-phase and phase-neutral	3		
			<b>0024</b>	Voltmeter selector switch phase-phase and 1 phase-neutral	3		
				<b>STEP SWITCHES</b>			
			<b>0025</b>	Step switch 1-2 positions without zero 1 pole	1		
			<b>0026</b>	Step switch 1-2 positions without zero 2 poles	2		
			<b>0027</b>	Step switch 1-2 positions without zero 3 poles	3		
			<b>0028</b>	Step switch 0-1-2 positions with zero 1 pole	1		
			<b>0029</b>	Step switch 0-1-2-3 positions with zero 1 pole	2		
			<b>0030</b>	Step switch 0-1-2-3-4 positions with zero 1 pole	2		
			<b>0032</b>	Step switch 0-1-2 positions with zero 2 poles	2		
			<b>0033</b>	Step switch 0-1-2 positions with zero 3 poles	3		
			<b>0034</b>	Step switch 0-1-2-3 positions with zero 2 poles	3		
			<b>0035</b>	Step switch 0-1-2-3 positions with zero 3 poles	5		
			<b>0036</b>	Step switch 0-1-2-3-4 positions with zero 2 poles	4		
			<b>0037</b>	Step switch 0-1-2-3-4 positions with zero 3 poles	6		
			<b>0038</b>	Step switch 1-2-3 positions without zero 1 pole	2		
			<b>0039</b>	Step switch 1-2-3 positions without zero 2 poles	3		
			<b>0040</b>	Step switch 1-2-3 positions without zero 3 poles	5		
			<b>0041</b>	Step switch 1-2-3-4 positions without zero 1 pole	2		
			<b>0042</b>	Step switch 1-2-3-4 positions without zero 2 poles	4		
			<b>0043</b>	Step switch 1-2-3-4 positions without zero 3 poles	6		

PHOENIX CAM SWITCHES

ELECTRICAL SCHEMES

ON-OFF SWITCHES 0-1

0001	0002	0003	0004	0005	0006	0007																																																																																																																																																																																															
1 POLE	2 POLES	3 POLES	4 POLES	5 POLES	6 POLES	3 POLES WITH SPRING RETURN TO ZERO																																																																																																																																																																																															
<p>90°</p> <table border="1"> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td></td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td></tr> </table>	1					1-2		X	WARF	CONT.	0	1	<p>90°</p> <table border="1"> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td></tr> </table>	1	3-4		X		1-2		X	WARF	CONT.	0	1	<p>90°</p> <table border="1"> <tr><td>2</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td><td></td></tr> </table>	2				X		5-6				1	3-4			X		1-2			X	WARF	CONT.	0	1		<p>90°</p> <table border="1"> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td><td></td></tr> </table>	2	7-8			X		5-6			X	1	3-4			X		1-2			X	WARF	CONT.	0	1		<p>90°</p> <table border="1"> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td></td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td><td></td><td></td><td></td></tr> </table>	3						X		9-10					X	2	7-8					X		5-6					X	1	3-4					X		1-2					X	WARF	CONT.	0	1				<p>90°</p> <table border="1"> <tr><td>3</td><td>11-12</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td><td></td><td></td><td></td></tr> </table>	3	11-12				X		9-10				X	2	7-8				X		5-6				X	1	3-4				X		1-2				X	WARF	CONT.	0	1				<p>45°</p> <table border="1"> <tr><td>2</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td><td></td></tr> </table>	2				X		5-6				1	3-4			X		1-2			X	WARF	CONT.	0	1	
1																																																																																																																																																																																																					
	1-2		X																																																																																																																																																																																																		
WARF	CONT.	0	1																																																																																																																																																																																																		
1	3-4		X																																																																																																																																																																																																		
	1-2		X																																																																																																																																																																																																		
WARF	CONT.	0	1																																																																																																																																																																																																		
2				X																																																																																																																																																																																																	
	5-6																																																																																																																																																																																																				
1	3-4			X																																																																																																																																																																																																	
	1-2			X																																																																																																																																																																																																	
WARF	CONT.	0	1																																																																																																																																																																																																		
2	7-8			X																																																																																																																																																																																																	
	5-6			X																																																																																																																																																																																																	
1	3-4			X																																																																																																																																																																																																	
	1-2			X																																																																																																																																																																																																	
WARF	CONT.	0	1																																																																																																																																																																																																		
3						X																																																																																																																																																																																															
	9-10					X																																																																																																																																																																																															
2	7-8					X																																																																																																																																																																																															
	5-6					X																																																																																																																																																																																															
1	3-4					X																																																																																																																																																																																															
	1-2					X																																																																																																																																																																																															
WARF	CONT.	0	1																																																																																																																																																																																																		
3	11-12				X																																																																																																																																																																																																
	9-10				X																																																																																																																																																																																																
2	7-8				X																																																																																																																																																																																																
	5-6				X																																																																																																																																																																																																
1	3-4				X																																																																																																																																																																																																
	1-2				X																																																																																																																																																																																																
WARF	CONT.	0	1																																																																																																																																																																																																		
2				X																																																																																																																																																																																																	
	5-6																																																																																																																																																																																																				
1	3-4			X																																																																																																																																																																																																	
	1-2			X																																																																																																																																																																																																	
WARF	CONT.	0	1																																																																																																																																																																																																		

CHANGEOVER SWITCHES 1-0-2

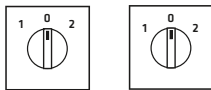
0008	0009	0010	0011																																																																																																																								
1 POLE	2 POLES	3 POLES	4 POLES																																																																																																																								
<p>45°      60° G125 G200</p> <table border="1"> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>WARF</td><td>CONT.</td><td>1</td><td>0</td><td>2</td></tr> </table>	1	3-4			X		1-2	X			WARF	CONT.	1	0	2	<p>45°      60° G125 G200</p> <table border="1"> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>WARF</td><td>CONT.</td><td>1</td><td>0</td><td>2</td></tr> </table>	2	7-8			X		5-6	X			1	3-4			X		1-2	X			WARF	CONT.	1	0	2	<p>45°      60° G125 G200</p> <table border="1"> <tr><td>3</td><td>11-12</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td>X</td><td></td><td></td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>WARF</td><td>CONT.</td><td>1</td><td>0</td><td>2</td></tr> </table>	3	11-12			X		9-10	X			2	7-8			X		5-6	X			1	3-4			X		1-2	X			WARF	CONT.	1	0	2	<p>45°      60° G125 G200</p> <table border="1"> <tr><td>4</td><td>15-16</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>13-14</td><td>X</td><td></td><td></td></tr> <tr><td>3</td><td>11-12</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td>X</td><td></td><td></td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>WARF</td><td>CONT.</td><td>1</td><td>0</td><td>2</td></tr> </table>	4	15-16			X		13-14	X			3	11-12			X		9-10	X			2	7-8			X		5-6	X			1	3-4			X		1-2	X			WARF	CONT.	1	0	2
1	3-4			X																																																																																																																							
	1-2	X																																																																																																																									
WARF	CONT.	1	0	2																																																																																																																							
2	7-8			X																																																																																																																							
	5-6	X																																																																																																																									
1	3-4			X																																																																																																																							
	1-2	X																																																																																																																									
WARF	CONT.	1	0	2																																																																																																																							
3	11-12			X																																																																																																																							
	9-10	X																																																																																																																									
2	7-8			X																																																																																																																							
	5-6	X																																																																																																																									
1	3-4			X																																																																																																																							
	1-2	X																																																																																																																									
WARF	CONT.	1	0	2																																																																																																																							
4	15-16			X																																																																																																																							
	13-14	X																																																																																																																									
3	11-12			X																																																																																																																							
	9-10	X																																																																																																																									
2	7-8			X																																																																																																																							
	5-6	X																																																																																																																									
1	3-4			X																																																																																																																							
	1-2	X																																																																																																																									
WARF	CONT.	1	0	2																																																																																																																							

### ELECTRICAL SCHEMES

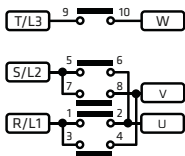
#### MOTOR SWITCHES

**0012**

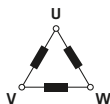
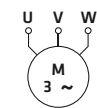
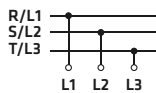
REVERSING SWITCH  
3 POLES



45°  
60°  
G125  
G200



3	9-10	X		X
2	7-8	X		
	5-6			X
1	3-4			X
	1-2	X		
WAF	CONT.	1	0	2

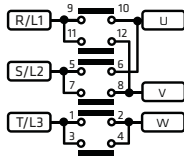


**0013**

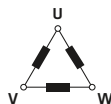
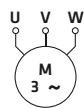
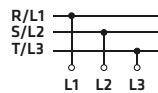
REVERSING SWITCH 3 POLES  
WITH SPRING RETURN  
TO ZERO



45°

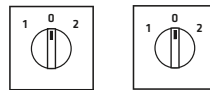


3	11-12			X
	9-10	X		
2	7-8	X		
	5-6			X
1	3-4			X
	1-2	X		
WAF	CONT.	1	0	2

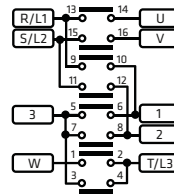


**0014**

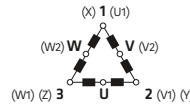
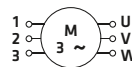
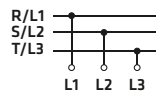
DAHLANDER POLE CHANGING  
TWO SPEED SWITCH



45°  
60°  
G125  
G200

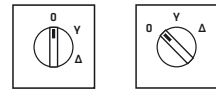


4	15-16			X
	13-14			X
3	11-12	X		
	9-10	X		
2	7-8			X
	5-6			X
1	3-4	X		
	1-2			X
WAF	CONT.	1	0	2

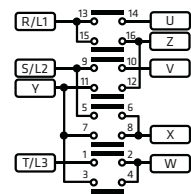


**0015**

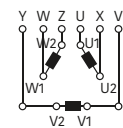
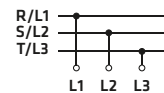
STAR-DELTA  
STARTER SWITCH



60°  
60°  
G125  
G200




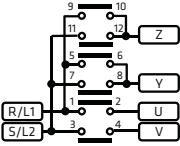
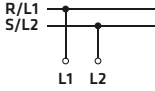
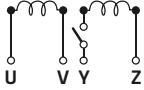

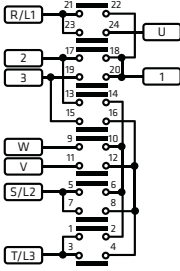
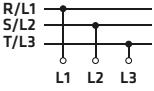
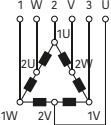

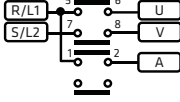
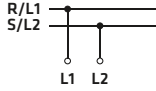
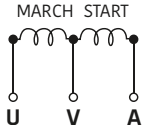

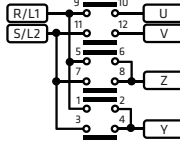
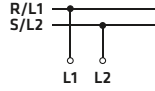
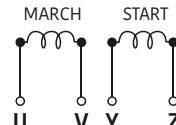
4	15-16				X
	13-14			X	X
3	11-12		X	X	
	9-10		X	X	X
2	7-8		X		
	5-6				X
1	3-4				X
	1-2		X	X	X
WAF	CONT.	0	Y		Δ



PHOENIX CAM SWITCHES

ELECTRICAL SCHEMES

COMANDO MOTORI

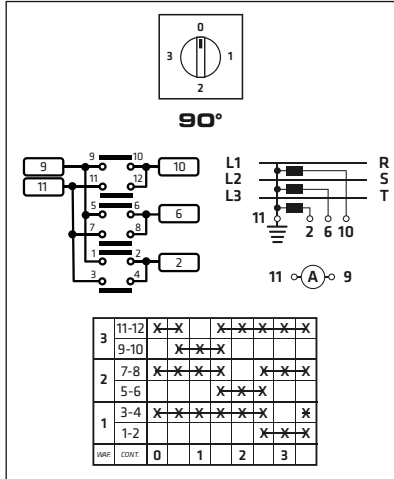
0016	0031	0017	0018																																																																																																																																																																						
REVERSING SWITCH SINGLE PHASE WITH CENTRIFUGAL CUT-OUT	REVERSING-DAHLANDER POLE CHANGING TWO SPEED SWITCH	STARTER SWITCH SINGLE PHASE WITH AUXILIARY PHASE	REVERSING-STARTER SWITCH SINGLE PHASE WITH AUXILIARY PHASE																																																																																																																																																																						
 <p>45°</p>  <table border="1" data-bbox="213 1335 360 1514"> <tr><td>3</td><td>11-12</td><td>X</td><td></td><td></td></tr> <tr><td></td><td>9-10</td><td></td><td></td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>3-4</td><td>X</td><td>X</td><td></td></tr> <tr><td></td><td>1-2</td><td>X</td><td>X</td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>0</td><td>2</td></tr> </table>  	3	11-12	X				9-10			X	2	7-8			X		5-6	X			1	3-4	X	X			1-2	X	X		WAF	CONT.	1	0	2	 <p>45°</p>  <table border="1" data-bbox="464 1167 715 1514"> <tr><td>6</td><td>23-24</td><td>X</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>21-22</td><td></td><td>X</td><td>X</td><td></td><td></td></tr> <tr><td>5</td><td>19-20</td><td>X</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>17-18</td><td>X</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>4</td><td>15-16</td><td></td><td>X</td><td>X</td><td></td><td></td></tr> <tr><td></td><td>13-14</td><td></td><td>X</td><td>X</td><td></td><td></td></tr> <tr><td>3</td><td>11-12</td><td>X</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td>X</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td></td><td>X</td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td>X</td><td></td><td></td><td></td></tr> <tr><td>1</td><td>3-4</td><td>X</td><td>X</td><td></td><td></td><td></td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td>X</td><td>X</td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>2</td><td>0</td><td>1</td><td>0</td><td>2</td></tr> </table>  	6	23-24	X				X		21-22		X	X			5	19-20	X				X		17-18	X				X	4	15-16		X	X				13-14		X	X			3	11-12	X				X		9-10	X				X	2	7-8				X	X		5-6	X	X				1	3-4	X	X					1-2			X	X		WAF	CONT.	2	0	1	0	2	 <p>45°</p>  <table border="1" data-bbox="815 1368 975 1514"> <tr><td>2</td><td>7-8</td><td>X-X</td></tr> <tr><td></td><td>5-6</td><td>X-X</td></tr> <tr><td>1</td><td>1-2</td><td>X</td></tr> <tr><td>WAF</td><td>CONT.</td><td>0 1 AVV.</td></tr> </table>  	2	7-8	X-X		5-6	X-X	1	1-2	X	WAF	CONT.	0 1 AVV.	 <p>45°</p>  <table border="1" data-bbox="1094 1312 1302 1514"> <tr><td>3</td><td>11-12</td><td>X-X</td><td>X-X</td></tr> <tr><td></td><td>9-10</td><td>X-X</td><td>X-X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td></td></tr> <tr><td>1</td><td>3-4</td><td>X-X</td><td></td></tr> <tr><td></td><td>1-2</td><td></td><td>X-X</td></tr> <tr><td>WAF</td><td>CONT.</td><td>AVV.</td><td>1 0 2 AVV.</td></tr> </table>  	3	11-12	X-X	X-X		9-10	X-X	X-X	2	7-8		X		5-6	X		1	3-4	X-X			1-2		X-X	WAF	CONT.	AVV.	1 0 2 AVV.
3	11-12	X																																																																																																																																																																							
	9-10			X																																																																																																																																																																					
2	7-8			X																																																																																																																																																																					
	5-6	X																																																																																																																																																																							
1	3-4	X	X																																																																																																																																																																						
	1-2	X	X																																																																																																																																																																						
WAF	CONT.	1	0	2																																																																																																																																																																					
6	23-24	X				X																																																																																																																																																																			
	21-22		X	X																																																																																																																																																																					
5	19-20	X				X																																																																																																																																																																			
	17-18	X				X																																																																																																																																																																			
4	15-16		X	X																																																																																																																																																																					
	13-14		X	X																																																																																																																																																																					
3	11-12	X				X																																																																																																																																																																			
	9-10	X				X																																																																																																																																																																			
2	7-8				X	X																																																																																																																																																																			
	5-6	X	X																																																																																																																																																																						
1	3-4	X	X																																																																																																																																																																						
	1-2			X	X																																																																																																																																																																				
WAF	CONT.	2	0	1	0	2																																																																																																																																																																			
2	7-8	X-X																																																																																																																																																																							
	5-6	X-X																																																																																																																																																																							
1	1-2	X																																																																																																																																																																							
WAF	CONT.	0 1 AVV.																																																																																																																																																																							
3	11-12	X-X	X-X																																																																																																																																																																						
	9-10	X-X	X-X																																																																																																																																																																						
2	7-8		X																																																																																																																																																																						
	5-6	X																																																																																																																																																																							
1	3-4	X-X																																																																																																																																																																							
	1-2		X-X																																																																																																																																																																						
WAF	CONT.	AVV.	1 0 2 AVV.																																																																																																																																																																						

### ELECTRICAL SCHEMES

#### AMMETER AND VOLTMETER SWITCHES

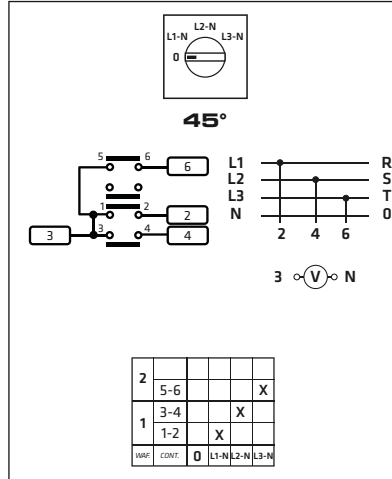
**0019**

AMMETER SELECTOR SWITCH 1 POLE  
FOR 3 CURRENT TRANSFORMERS



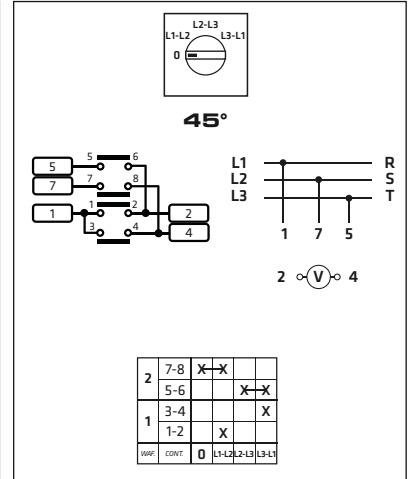
**0020**

VOLTMETER SELECTOR SWITCH  
PHASE-NEUTRAL



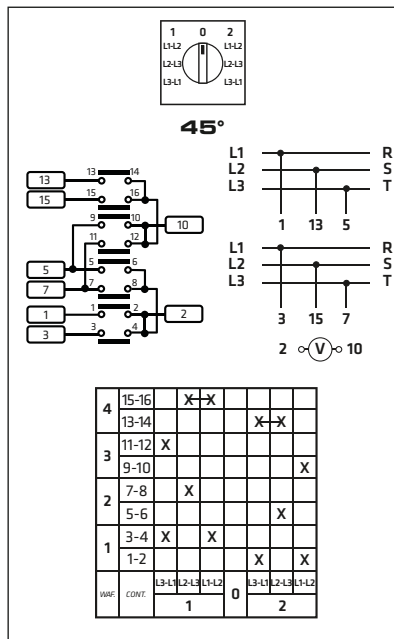
**0021**

VOLTMETER SELECTOR SWITCH  
PHASE-PHASE



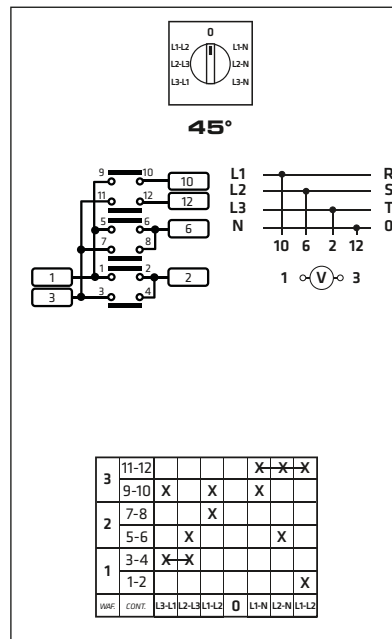
**0022**

VOLTMETER SELECTOR SWITCH  
PHASE-PHASE  
FOR TWO CIRCUITS



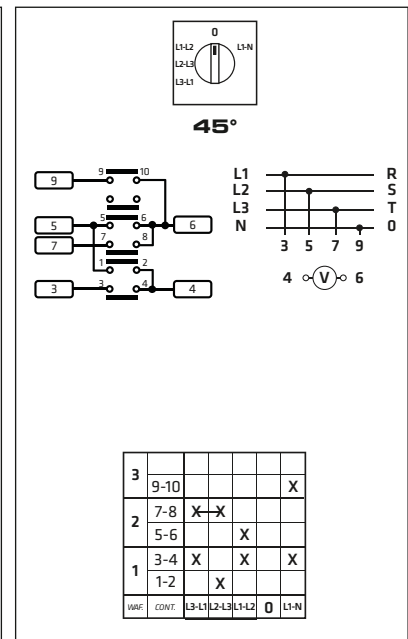
**0023**

VOLTMETER SELECTOR SWITCH  
PHASE-PHASE  
AND PHASE-NEUTRAL



**0024**

VOLTMETER SELECTOR SWITCH  
PHASE-PHASE  
AND 1 PHASE-NEUTRAL

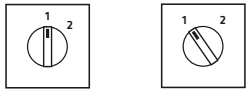
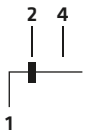
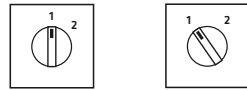
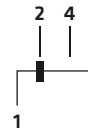
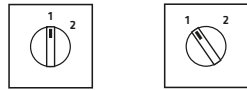
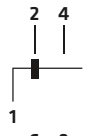


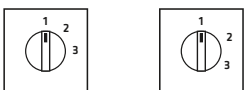
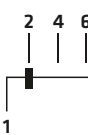

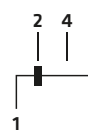




PHOENIX CAM SWITCHES

ELECTRICAL SCHEMES

STEP SWITCHES

0025	0026	0027																																																												
STEP SWITCH 1-2 POSITIONS WITHOUT ZERO 1 POLE	STEP SWITCH 1-2 POSITIONS WITHOUT ZERO 2 POLES	STEP SWITCH 1-2 POSITIONS WITHOUT ZERO 3 POLES																																																												
 <p>45° 60° G125 G200</p>  <table border="1" data-bbox="359 862 462 929"> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>2</td></tr> </table>	1	3-4		X		1-2	X		WAF	CONT.	1	2	 <p>45° 60° G125 G200</p>  <table border="1" data-bbox="774 952 877 1064"> <tr><td>2</td><td>7-8</td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>2</td></tr> </table>	2	7-8		X		5-6	X		1	3-4		X		1-2	X		WAF	CONT.	1	2	 <p>45° 60° G125 G200</p>  <table border="1" data-bbox="1197 1030 1300 1176"> <tr><td>3</td><td>11-12</td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td>X</td><td></td></tr> <tr><td>2</td><td>7-8</td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>2</td></tr> </table>	3	11-12		X		9-10	X		2	7-8		X		5-6	X		1	3-4		X		1-2	X		WAF	CONT.	1	2
1	3-4		X																																																											
	1-2	X																																																												
WAF	CONT.	1	2																																																											
2	7-8		X																																																											
	5-6	X																																																												
1	3-4		X																																																											
	1-2	X																																																												
WAF	CONT.	1	2																																																											
3	11-12		X																																																											
	9-10	X																																																												
2	7-8		X																																																											
	5-6	X																																																												
1	3-4		X																																																											
	1-2	X																																																												
WAF	CONT.	1	2																																																											

0038	0039	0040																																																																																																																			
STEP SWITCH 1-2-3 POSITIONS WITHOUT ZERO 1 POLE	STEP SWITCH 1-2-3 POSITIONS WITHOUT ZERO 2 POLES	STEP SWITCH 1-2-3 POSITIONS WITHOUT ZERO 3 POLES																																																																																																																			
 <p>45° 60° G125 G200</p>  <table border="1" data-bbox="359 1657 494 1769"> <tr><td>2</td><td>5-6</td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td>X</td><td></td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>2</td><td>3</td></tr> </table>	2	5-6			X	1	3-4		X			1-2	X			WAF	CONT.	1	2	3	 <p>45° 60° G125 G200</p>  <table border="1" data-bbox="774 1736 909 1904"> <tr><td>3</td><td>11-12</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td></td><td>X</td><td></td></tr> <tr><td>2</td><td>7-8</td><td>X</td><td></td><td></td></tr> <tr><td></td><td>5-6</td><td></td><td>X</td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td>X</td><td></td></tr> <tr><td></td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>2</td><td>3</td></tr> </table>	3	11-12			X		9-10		X		2	7-8	X				5-6		X		1	3-4		X			1-2	X			WAF	CONT.	1	2	3	 <p>45° 60° G125 G200</p>  <table border="1" data-bbox="1173 1758 1316 2016"> <tr><td>5</td><td>17-18</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>15-16</td><td></td><td></td><td>X</td><td></td></tr> <tr><td>4</td><td>13-14</td><td>X</td><td></td><td></td><td></td></tr> <tr><td></td><td>11-12</td><td></td><td></td><td>X</td><td></td></tr> <tr><td>3</td><td>9-10</td><td></td><td>X</td><td></td><td></td></tr> <tr><td></td><td>7-8</td><td>X</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>5-6</td><td></td><td></td><td>X</td><td></td></tr> <tr><td></td><td>3-4</td><td></td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td><td></td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>2</td><td>3</td><td></td></tr> </table>	5	17-18				X		15-16			X		4	13-14	X					11-12			X		3	9-10		X				7-8	X				2	5-6			X			3-4		X			1	1-2	X				WAF	CONT.	1	2	3	
2	5-6			X																																																																																																																	
1	3-4		X																																																																																																																		
	1-2	X																																																																																																																			
WAF	CONT.	1	2	3																																																																																																																	
3	11-12			X																																																																																																																	
	9-10		X																																																																																																																		
2	7-8	X																																																																																																																			
	5-6		X																																																																																																																		
1	3-4		X																																																																																																																		
	1-2	X																																																																																																																			
WAF	CONT.	1	2	3																																																																																																																	
5	17-18				X																																																																																																																
	15-16			X																																																																																																																	
4	13-14	X																																																																																																																			
	11-12			X																																																																																																																	
3	9-10		X																																																																																																																		
	7-8	X																																																																																																																			
2	5-6			X																																																																																																																	
	3-4		X																																																																																																																		
1	1-2	X																																																																																																																			
WAF	CONT.	1	2	3																																																																																																																	

### ELECTRICAL SCHEMES

#### STEP SWITCHES

**0041**

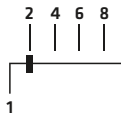
STEP SWITCH 1-2-3-4 POSITIONS  
WITHOUT ZERO  
1 POLE



45°



90°  
G125  
G200



2	7-8			X	
	5-6		X		
1	3-4	X			
	1-2	X			
WAF	CONT.	1	2	3	4

**0042**

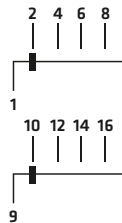
STEP SWITCH 1-2-3-4 POSITIONS  
WITHOUT ZERO  
2 POLES



45°



90°  
G125  
G200



4	15-16			X	
	13-14		X		
3	11-12	X			
	9-10	X			
2	7-8			X	
	5-6		X		
1	3-4	X			
	1-2	X			
WAF	CONT.	1	2	3	4

**0043**

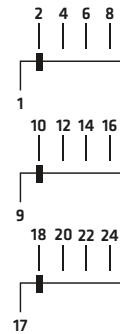
STEP SWITCH 1-2-3-4 POSITIONS  
WITHOUT ZERO  
3 POLES



45°



90°  
G125  
G200



6	23-24			X	
	21-22		X		
5	19-20		X		
	17-18	X			
4	15-16			X	
	13-14		X		
3	11-12	X			
	9-10	X			
2	7-8			X	
	5-6		X		
1	3-4	X			
	1-2	X			
WAF	CONT.	1	2	3	4

**0028**

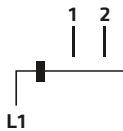
STEP SWITCH 0-1-2 POSITIONS  
WITH ZERO  
1 POLE



45°



60°  
G125  
G200



1	3-4		X	
	1-2	X		
WAF	CONT.	0	1	2

**0032**

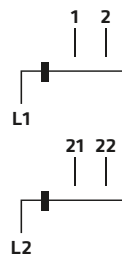
STEP SWITCH 0-1-2 POSITIONS  
WITH ZERO  
2 POLES



45°



60°  
G125  
G200



2	7-8		X	
	5-6		X	
1	3-4	X		
	1-2	X		
WAF	CONT.	0	1	2

**0033**

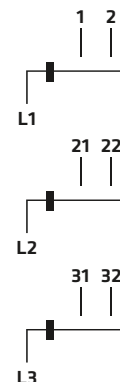
STEP SWITCH 0-1-2 POSITIONS  
WITH ZERO  
3 POLES



45°



60°  
G125  
G200



3	11-12		X	
	9-10	X		
2	7-8		X	
	5-6	X		
1	3-4		X	
	1-2	X		
WAF	CONT.	0	1	2

## PHOENIX CAM SWITCHES

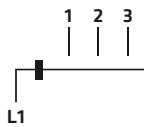
## ELECTRICAL SCHEMES

## STEP SWITCHES

0029

STEP SWITCH 0-1-2-3 POSITIONS  
WITH ZERO  
1 POLE

45°

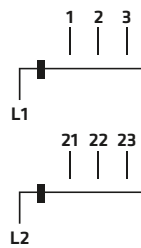
90°  
G125  
G200

2	7-8			X	
	5-6	X			
1	1-2		X		
WAF	COND.	0	1	2	3

0034

STEP SWITCH 0-1-2-3 POSITIONS  
WITH ZERO  
2 POLES

45°

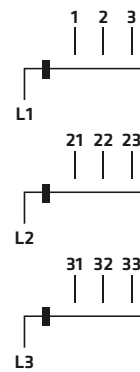
90°  
G125  
G200

3	11-12			X	
	9-10	X			
2	7-8		X		
	5-6		X		
1	3-4			X	
	1-2	X			
WAF	COND.	0	1	2	3

0035

STEP SWITCH 0-1-2-3 POSITIONS  
WITH ZERO  
3 POLES

45°

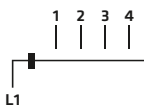
90°  
G125  
G200

5	19-20			X	
	15-16			X	
4	13-14	X			
	11-12			X	
3	9-10		X		
	7-8		X		
2	5-6		X		
	3-4			X	
1	1-2	X			
WAF	COND.	0	1	2	3

0030

STEP SWITCH 0-1-2-3-4 POSITIONS  
WITH ZERO  
1 POLE

45°

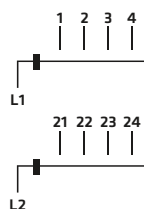
60°  
G125  
G200

2	7-8			X		
	5-6	X				
1	3-4			X		
	1-2		X			
WAF	COND.	0	1	2	3	4

0036

STEP SWITCH 0-1-2-3-4 POSITIONS  
WITH ZERO  
2 POLES

45°

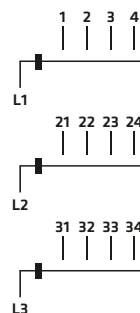
60°  
G125  
G200

4	15-16			X		
	13-14	X				
3	11-12			X		
	9-10		X			
2	7-8		X			
	5-6	X				
1	3-4			X		
	1-2		X			
WAF	COND.	0	1	2	3	4

0037

STEP SWITCH 0-1-2-3-4 POSITIONS  
WITH ZERO  
3 POLES

45°

60°  
G125  
G200

6	23-24			X		
	21-22	X				
5	19-20			X		
	17-18		X			
4	15-16			X		
	13-14	X				
3	11-12			X		
	9-10		X			
2	7-8		X			
	5-6	X				
1	3-4			X		
	1-2		X			
WAF	COND.	0	1	2	3	4

### ACTUATORS RANGE OVERVIEW



AC21A

- ➔ Grey plate
- ➔ Black knob

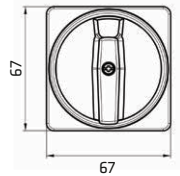
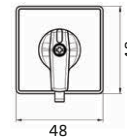
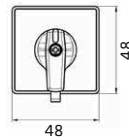
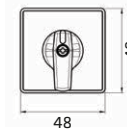
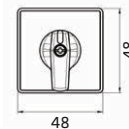
- ➔ Yellow plate
- ➔ Red knob

- ➔ Grey plate
- ➔ Black knob
- ➔ Padlockable (Max 1)
- ➔ Padlockable in 0

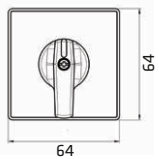
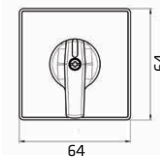
- ➔ Yellow plate
- ➔ Red knob
- ➔ Padlockable (Max 1)
- ➔ Padlockable in 0

- ➔ Grey plate
- ➔ Black knob
- ➔ Padlockable (Max 3)
- ➔ Padlockable in 0

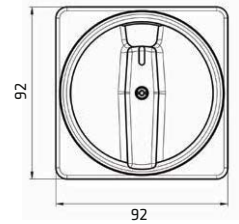
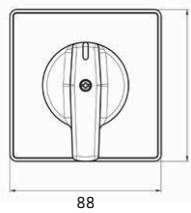
12A  
16A  
20A



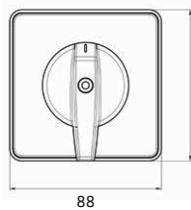
25A  
32A  
40A



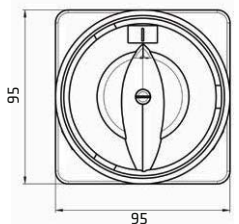
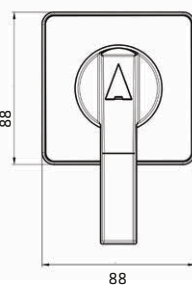
63A  
80A



125A



200A



**PHOENIX CAM SWITCHES**



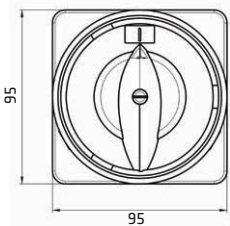
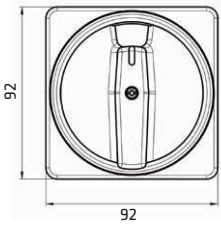
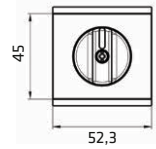
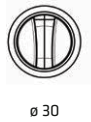
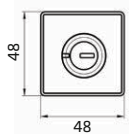
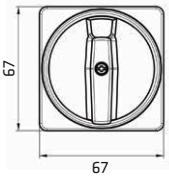
- ➔ Yellow plate
- ➔ Red knob
- ➔ Padlockable (Max 3)
- ➔ Padlockable in 0

- ➔ Grey plate
- ➔ Key operated

- ➔ Without plate
- ➔ Knob operated

- ➔ Without plate
- ➔ Key operated

- ➔ DIN 45x52,3
- ➔ 46 mm standard boxes



### ACTUATORS CODIFICATION MAP

001 / 000 1-1

#### FAMILY TYPE

ACTUATOR	LINE	□	MOUNTING	CODE	PROT. CLASS
	12-16-20	48	R screw	001/...	IP65
	12-16-20	48	R ø22	056X/...	IP65
	25-32-40	64	R screw	007/...	IP65
	63-80	88	R screw	201/...	IP65
	125	88	R screw	441/...	IP65
	200	88	R screw	461/...	IP65
	12-16-20	48	B screw	020/...	IP65
	25-32-40	64	B screw	021/...	IP65
	12...40	48	B ø22	095/...	IP65
	63-80	88	B screw	220/...	IP65

☞ Grey plate ☞ Black knob

ACTUATOR	LINE	□	MOUNTING	CODE	PROT. CLASS
	12...40	67	R screw	009/...	IP65 4-4X
	12-16-20	67	R ø22	061X/...	IP65
	63-80	92	R screw	209/...	IP65
	125-200	95	R screw	449/...	IP65
	12...40	67	B screw	011/...	IP65 4-4X
	12...40	67	B ø22	063/...	IP65 4-4X
	63-80	92	B screw	211/...	IP65
	125-200	95	B screw	451/...	IP65

☞ Grey plate ☞ Black knob ☞ Padlockable (Max 3)  
☞ Padlockable in 0

	12-16-20	48	R screw	002/...	IP65
	12-16-20	48	R ø22	058X/...	IP65
	25-32-40	64	R screw	008/...	IP65
	12-16-20	48	B screw	030/...	IP65
	12...40	48	B ø22	070/...	IP65

☞ Yellow plate ☞ Red knob

	12...40	67	R screw	010/...	IP65 4-4X
	12-16-20	67	R ø22	062X/...	IP65
	63-80	92	R screw	210/...	IP65
	125-200	95	R screw	450/...	IP65
	12...40	67	B screw	012/...	IP65 4-4X
	12...40	67	B ø22	064/...	IP65 4-4X
	63-80	92	B screw	212/...	IP65
	125-200	95	B screw	452/...	IP65

☞ Yellow plate ☞ Red knob ☞ Padlockable (Max 3)  
☞ Padlockable in 0

	12...40	48	R screw	003/...	IP65 4-4X
	12-16-20	48	R ø22	059X/...	IP65
	12...40	48	B screw	005/...	IP65 4-4X
	12...40	48	B ø22	077/...	IP65 4-4X

☞ Grey plate ☞ Black knob ☞ Padlockable (Max 1)  
☞ Padlockable in 0

	12-16-20	48	R ø22	057X/...	IP65
	☞ Grey plate ☞ Key operated ☞ Key removable at "0" position				

	12...40	48	R screw	004/...	IP65 4-4X
	12-16-20	48	R ø22	060X/...	IP65
	12...40	48	B screw	006/...	IP65 4-4X
	12...40	48	B ø22	069/...	IP65 4-4X

☞ Yellow plate ☞ Red knob ☞ Padlockable (Max 1)  
☞ Padlockable in 0

	12-16-20	-	R ø22	028X	IP65
	☞ Without plate ☞ Knob operated				

	12-16-20	-	R ø22	029X	IP65
	☞ Without plate ☞ Key operated ☞ Key removable at 0° and 180° position				

	12-16-20	45x52	D screw	027/...	-
	☞ Grey plate ☞ Black knob ☞ 46 mm standard boxes				





**GIOVENZANA**  
INTERNATIONAL B.V.





# **GIOVENZANA**

---

## **INTERNATIONAL B.V.**



### **PHOENIX CAM SWITCHES**

### **REAR PANEL MOUNTING - R**

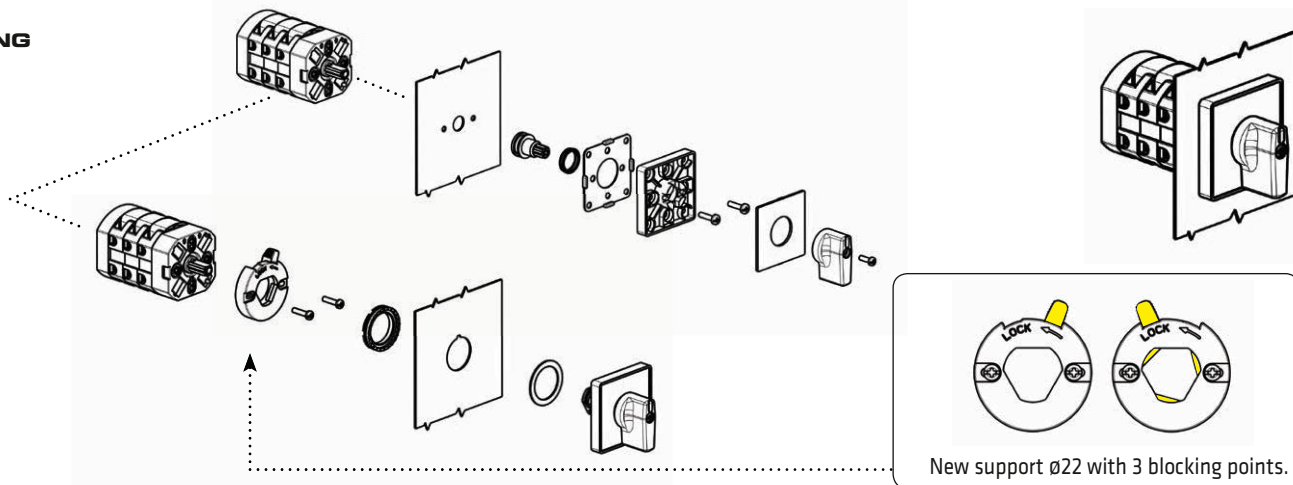


**REAR PANEL MOUNTING**

| RANGE AC21A | 12A - 16A - 20A |

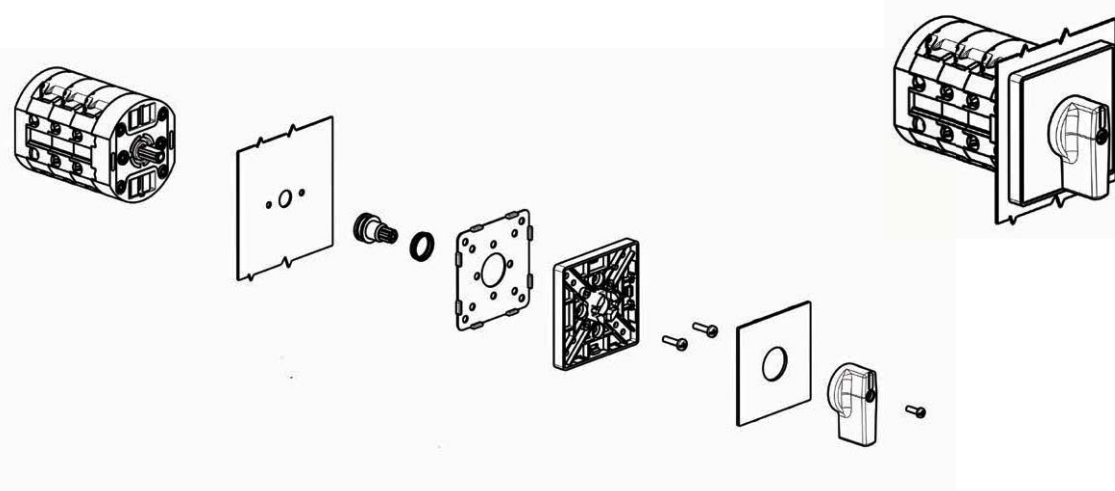
**SCREW FIXING**

**Ø22 FIXING**



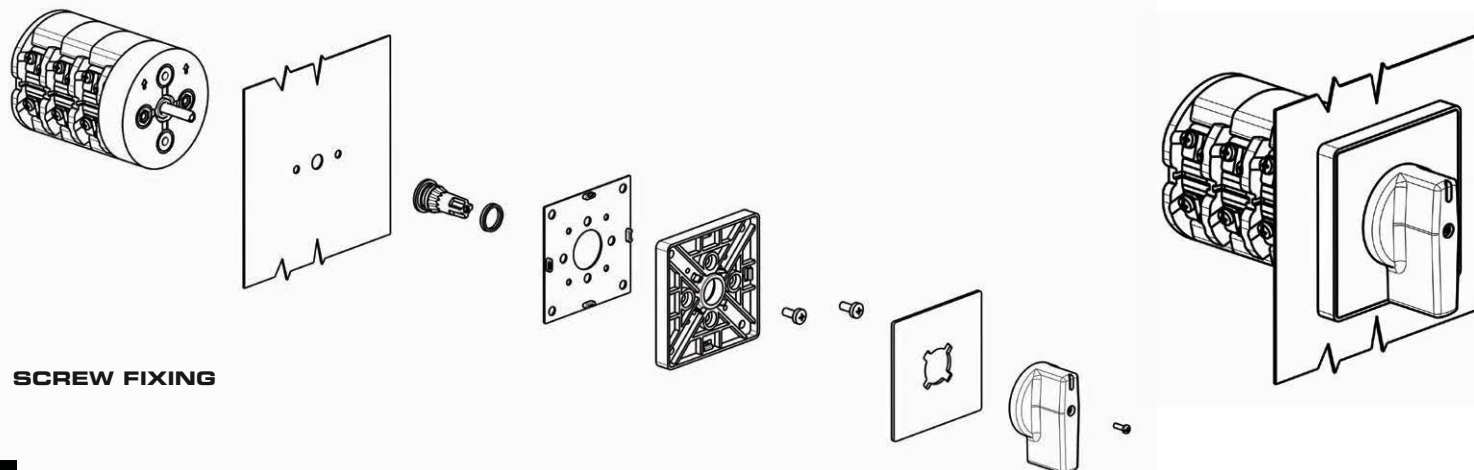
| RANGE AC21A | 25A - 32A - 40A |

**SCREW FIXING**



| RANGE AC21A | 63A - 80A |

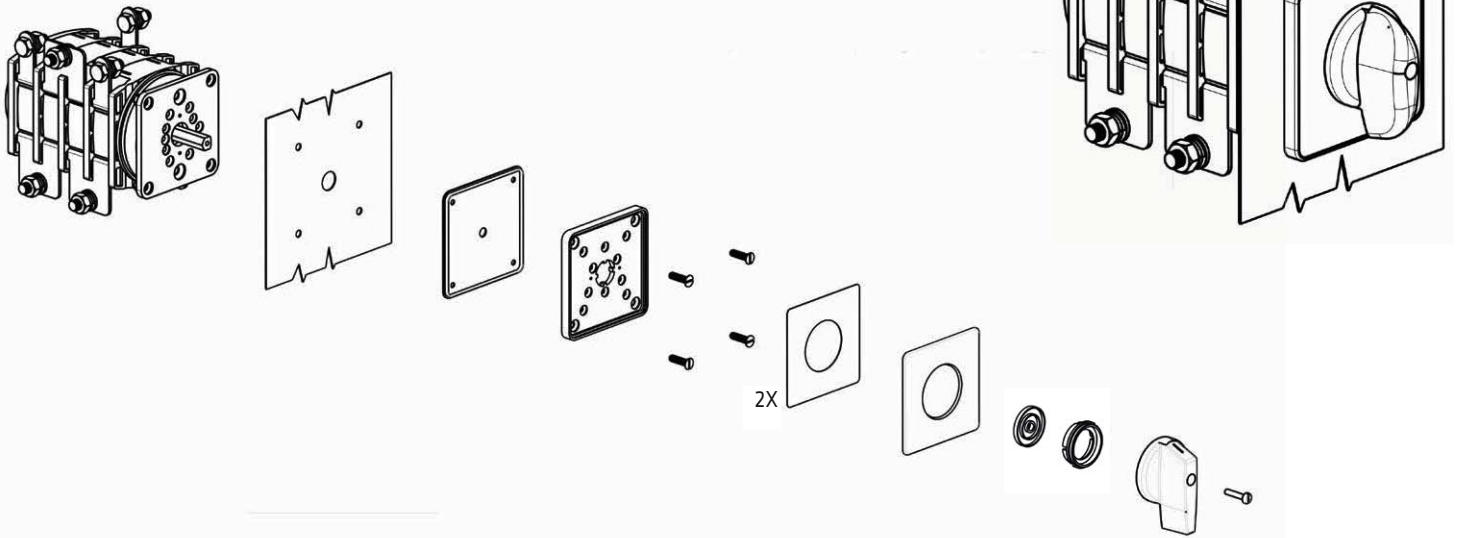
**SCREW FIXING**



PHOENIX CAM SWITCHES | TYPE R

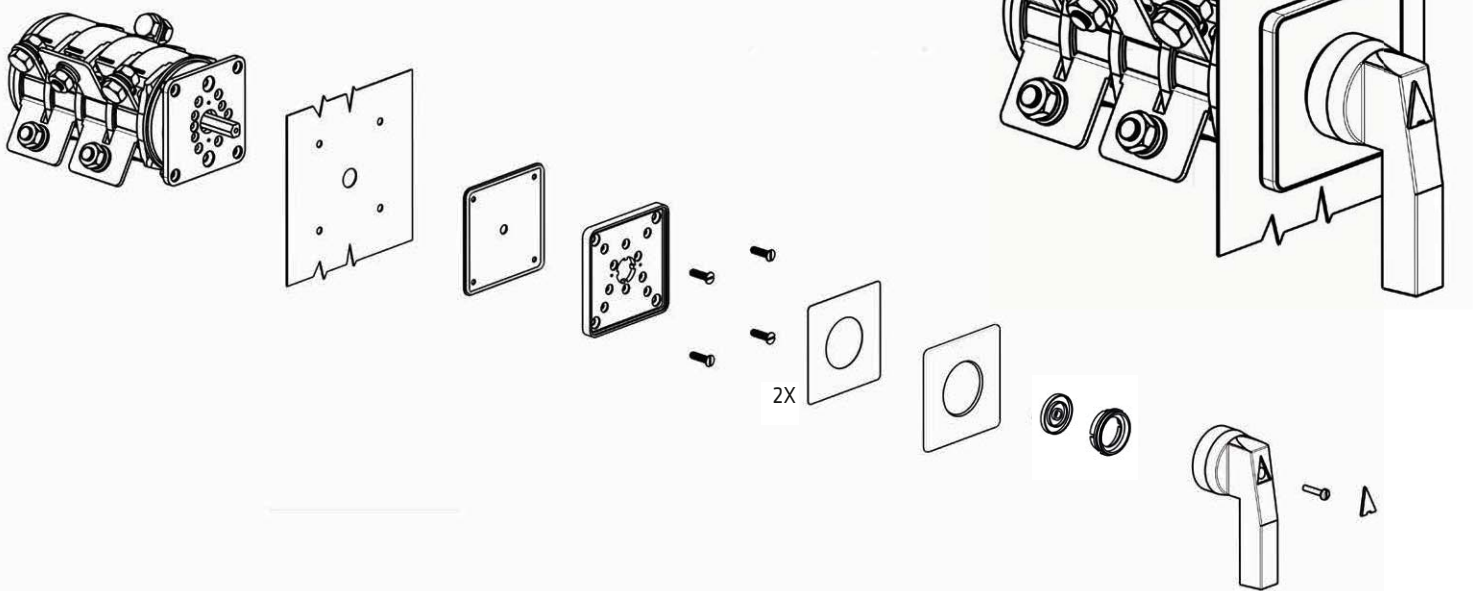
| RANGE AC21A | 125A |

SCREW FIXING



| RANGE AC21A | 200A |

SCREW FIXING





### REAR PANEL MOUNTING

	12-16-20A							
	25-32-40A							
	63-80A							
	125A							
	200A							

SERIES	AC21A	1 POLE	2 POLES	3 POLES	4 POLES	5 POLES	6 POLES	3 POLES WITH SPRING RETURN TO ZERO
P012	12A	P0120001R	P0120002R	P0120003R	P0120004R	P0120005R	P0120006R	P0120007R
P016	16A	P0160001R	P0160002R	P0160003R	P0160004R	P0160005R	P0160006R	P0160007R
P020	20A	P0200001R	P0200002R	P0200003R	P0200004R	P0200005R	P0200006R	P0200007R
C025	25A	C0250001R	C0250002R	C0250003R	C0250004R	C0250005R	C0250006R	C0250007R
C032	32A	C0320001R	C0320002R	C0320003R	C0320004R	C0320005R	C0320006R	C0320007R
C040	40A	C0400001R	C0400002R	C0400003R	C0400004R	C0400005R	C0400006R	C0400007R
C063	63A	C0630001R	C0630002R	C0630003R	C0630004R	C0630005R	C0630006R	-
C080	80A	C0800001R	C0800002R	C0800003R	C0800004R	C0800005R	C0800006R	-
G125	125A	-	G1250002R	G1250003R	G1250004R	-	G1250006R	-
G200	200A	-	G2000002R	G2000003R	G2000004R	-	G2000006R	-

## ACTUATORS ON-OFF SWITCHES 0-1 | TYPE R

PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

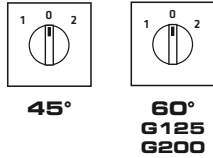
ACTUATOR	FIXING	P012 - P016 - P020				C025 - C032 - C040			C063 - C080		G125	G200
		90°	90°	45°	NO	90°	90°	45°	90°	90°	90°	90°
	screw	001/0001	001/0001-1	001/0007	-	007/0001	007/0001-1	007/0007	201/0001	201/0001-1	441/0001	461/0001
	ø22	056X/0001	056X/0001-1	056X/0007	-	-	-	-	-	-	-	-
	screw	002/0001	002/0001-1	002/0007	-	008/0001	008/0001-1	008/0007	-	-	-	-
	ø22	058X/0001	058X/0001-1	058X/0007	-	-	-	-	-	-	-	-
	screw	003/0001	003/0001-1	003/0007	-	003/0001	003/0001-1	003/0007	-	-	-	-
	ø22	059X/0001	059X/0001-1	-	-	-	-	-	-	-	-	-
	screw	004/0001	004/0001-1	004/0007	-	004/0001	004/0001-1	004/0007	-	-	-	-
	ø22	060X/0001	060X/0001-1	-	-	-	-	-	-	-	-	-
	screw	009/0001	009/0001-1	009/0007	-	009/0001	009/0001-1	009/0007	209/0001	209/0001-1	449/0001	449/0001
	ø22	061X/0001	061X/0001-1	061X/0007	-	-	-	-	-	-	-	-
	screw	010/0001	010/0001-1	010/0007	-	010/0001	010/0001-1	010/0007	210/0001	210/0001	450/0001	450/0001
	ø22	062X/0001	062X/0001-1	062/0007	-	-	-	-	-	-	-	-
	ø22	057X/0001	057X/0001-1	057X/0007	-	-	-	-	-	-	-	-
	ø22	-	-	-	028X	-	-	-	-	-	-	-
	ø22	-	-	-	029X	-	-	-	-	-	-	-



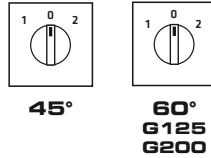
**REAR PANEL MOUNTING**



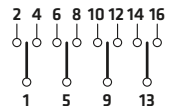
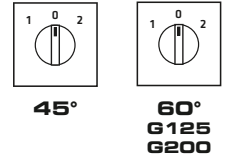
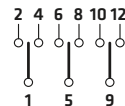
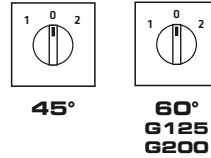
12-16-20A



25-32-40A



63-80A



125A

1	3-4		X
	1-2	X	
WAF.	CONT.	1 0 2	

2	7-8		X
	5-6	X	
1	3-4		X
	1-2	X	
WAF.	CONT.	1 0 2	

3	11-12		X
	9-10	X	
2	7-8		X
	5-6	X	
1	3-4		X
	1-2	X	
WAF.	CONT.	1 0 2	

4	15-16		X
	13-14	X	
3	11-12		X
	9-10	X	
2	7-8		X
	5-6	X	
1	3-4		X
	1-2	X	
WAF.	CONT.	1 0 2	


















200A

SERIEs	AC21A	1 POLE	2 POLES	3 POLES	4 POLES
P012	12A	PO120008R	PO120009R	PO120010R	PO120011R
P016	16A	PO160008R	PO160009R	PO160010R	PO160011R
P020	20A	PO200008R	PO200009R	PO200010R	PO200011R
C025	25A	C0250008R	C0250009R	C0250010R	C0250011R
C032	32A	C0320008R	C0320009R	C0320010R	C0320011R
C040	40A	C0400008R	C0400009R	C0400010R	C0400011R
C063	63A	C0630008R	C0630009R	C0630010R	C0630011R
C080	80A	C0800008R	C0800009R	C0800010R	C0800011R
G125	125A	G1250008R	G1250009R	G1250010R	G1250011R
G200	200A	G2000008R	G2000009R	G2000010R	G2000011R

## ACTUATORS CHANGEOVER SWITCHES 1-0-2 | TYPE R

PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

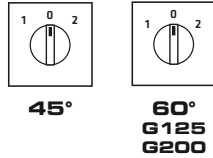
ACTUATOR	FIXING	P012 - P016 - P020		C025 - C032 - C040	C063 - C080	G125	G200
		 45°	 NO	 45°	 45°	 60°	 60°
	screw	001/0008	-	007/0008	201/0008	441/0008	461/0008
	ø22	056X/0008	-	-	-	-	-
	screw	002/0008	-	008/0008	-	-	-
	ø22	058X/0008	-	-	-	-	-
	screw	003/0008	-	003/0008	-	-	-
	ø22	059X/0008	-	-	-	-	-
	screw	004/0008	-	004/0008	-	-	-
	ø22	060X/0008	-	-	-	-	-
	screw	009/0008	-	009/0008	209/0008	-	-
	ø22	061X/0008	-	-	-	-	-
	screw	010/0008	-	010/0008	210/0008	-	-
	ø22	062X/0008	-	-	-	-	-
	ø22	057X/0008-CA	-	-	-	-	-
	ø22	-	028X	-	-	-	-
	ø22	-	029X	-	-	-	-



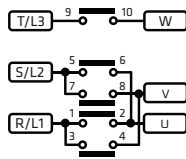
### REAR PANEL MOUNTING



12-16-20A



25-32-40A

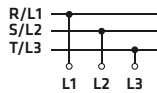


63-80A

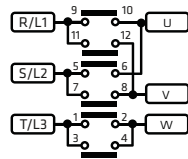
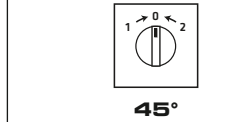
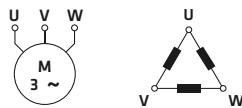
3				
	9-10	X		X
2	7-8	X		
	5-6			X
1	3-4			X
	1-2	X		
WAF	CONT.	1	0	2



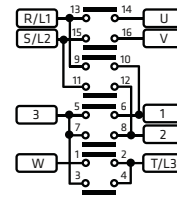
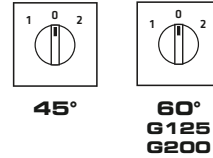
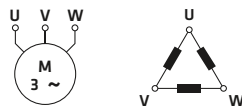
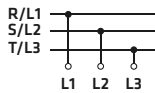
125A



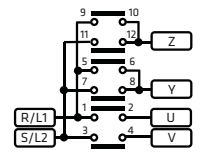
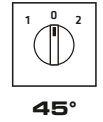
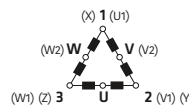
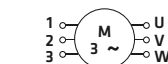
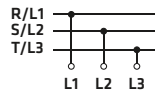
200A



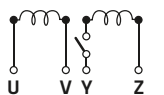
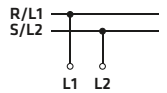
3				
	11-12	X		X
2	9-10	X		
	7-8	X		
1	5-6			X
	3-4			X
	1-2	X		
WAF	CONT.	1	0	2



4	15-16			X
	13-14			X
3	11-12	X		
	9-10	X		
2	7-8			X
	5-6			X
1	3-4	X		
	1-2			X
WAF	CONT.	1	0	2



3				
	11-12	X		
2	9-10			X
	7-8			X
1	5-6	X		
	3-4	X		X
	1-2	X		X
WAF	CONT.	1	0	2




















SERIES	AC21A	REVERSING SWITCH 3 POLES	REVERSING SWITCH 3 POLES WITH SPRING RETURN TO ZERO	DAHLENDER POLE CHANGING TWO SPEED SWITCH	REVERSING SWITCH SINGLE PHASE WITH CENTRIFUGAL CUT-OUT
P012	12A	PO120012R	PO120013R	PO120014R	PO120016R
P016	16A	PO160012R	PO160013R	PO160014R	PO160016R
P020	20A	PO200012R	PO200013R	PO200014R	PO200016R
C025	25A	C0250012R	C0250013R	C0250014R	C0250016R
C032	32A	C0320012R	C0320013R	C0320014R	C0320016R
C040	40A	C0400012R	C0400013R	C0400014R	C0400016R
C063	63A	C0630012R	-	C0630014R	-
C080	80A	C0800012R	-	C0800014R	-
G125	125A	G1250012R	-	G1250014R	-
G200	200A	G2000012R	-	G2000014R	-



## ACTUATORS MOTOR SWITCHES | TYPE R

PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

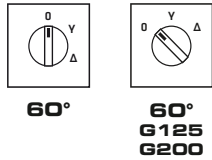
ACTUATOR	FIXING	P012 - P016 - P020			C025 - C032 - C040		C063 - C080	G125	G200
									
		45°	45°	NO	45°	45°	45°	60°	60°
	screw	001/0008	001/0013	-	007/0008	007/00013	201/0008	441/0008	461/0008
	ø22	056X/0008	056X/0013	-	-	-	-	-	-
	screw	002/0008	002/0013	-	008/0008	-	-	-	-
	ø22	058X/0008	058X/0013	-	-	-	-	-	-
	screw	003/0008	003/0013	-	003/0008	003/0013	-	-	-
	ø22	059X/0008	059X/0013	-	-	-	-	-	-
	screw	004/0008	004/0013	-	004/0008	004/0013	-	-	-
	ø22	060X/0008	060X/0013	-	-	-	-	-	-
	screw	009/0008	009/0013	-	009/0008	009/0013	209/0008	-	-
	ø22	061X/0008	061X/0013	-	-	-	-	-	-
	screw	010/0008	010/0013	-	010/0008	010/0013	210/0008	-	-
	ø22	062X/0008	062X/0013	-	-	-	-	-	-
	ø22	057X/0008-CA	057X/0013-CA	-	-	-	-	-	-
	ø22	-	-	028X	-	-	-	-	-
	ø22	-	-	029X	-	-	-	-	-



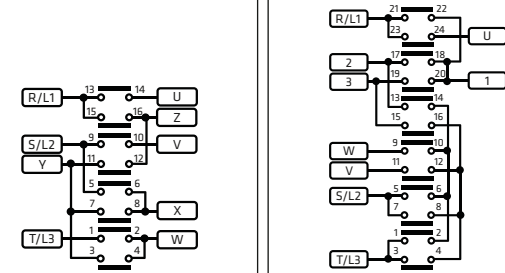
**REAR PANEL MOUNTING**



12-16-20A

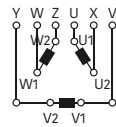
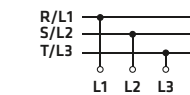


25-32-40A

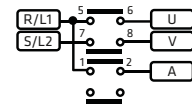
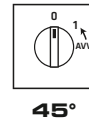
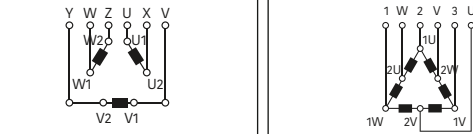


125A

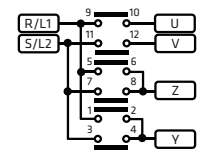
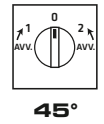
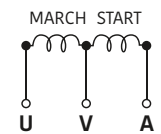
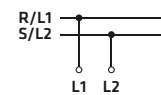
6	23-24	X				X
	21-22		X	X		
5	19-20	X				X
	17-18	X				X
4	15-16		X	X		
	13-14		X	X		
3	11-12	X				X
	9-10	X				X
2	7-8		X			
	5-6	X	X			
1	3-4	X	X			
	1-2			X	X	
WAF	CONT.	0	Y	Δ		



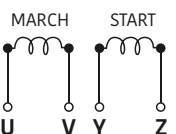
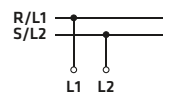
200A



2	7-8	X-X
	5-6	X-X
1	1-2	X
WAF	CONT.	0 1 AVV.



3	11-12	X-X	X-X
	9-10	X-X	X-X
2	7-8		X
	5-6	X	
1	3-4	X-X	
	1-2		X-X
WAF	CONT.	AVV. 1 0 2	AVV.



SERIES	AC21A	STAR-DELTA STARTER SWITCH	REVERSING-DAHLANDER POLE CHANGING TWO SPEED SWITCH	STARTER WITH SINGLE PHASE WITH AUXILIARY PHASE	REVERSING-STARTER SWITCH SINGLE PHASE WITH AUXILIARY PHASE
P012	12A	P0120015R	P0120031R	P0120017R	P0120018R
P016	16A	P0160015R	P0160031R	P0160017R	P0160018R
P020	20A	P0200015R	P0200031R	P0200017R	P0200018R
C025	25A	C0250015R	C0250031R	-	-
C032	32A	C0320015R	C0320031R	-	-
C040	40A	C0400015R	C0400031R	-	-
C063	63A	-	-	-	-
C080	80A	-	-	-	-
G125	125A	G1250015R	-	-	-
G200	200A	G2000015R	-	-	-

## ACTUATORS MOTOR SWITCHES | TYPE R

PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

ACTUATOR	FIXING	P012 - P016 - P020					C025 - C032 C040		C063 - C080	G125	G200
		60°	45°	45°	45°	NO	60°	45°	60°	60°	60°
	screw	001/0015	001/0031	001/0017	001/0018	-	007/0015	007/0031	-	441/0015	461/0015
	ø22	056X/0015	056X/0031	056X/0017	056X/0018	-	-	-	-	-	-
	screw	002/0015	002/0031	002/0017	002/0018	-	008/0015	008/0031	-	-	-
	ø22	-	-	-	-	-	-	-	-	-	-
	screw	003/0015	003/0031	003/0017	003/0018	-	003/0015	003/0031	-	-	-
	ø22	-	-	-	-	-	-	-	-	-	-
	screw	004/0015	004/0031	004/0017	004/0018	-	004/0015	004/0031	-	-	-
	ø22	-	-	-	-	-	-	-	-	-	-
	screw	009/0015	009/0031	009/0017	009/0018	-	009/0015	009/0031	-	-	-
	ø22	-	-	-	-	-	-	-	-	-	-
	screw	010/0015	010/0031	010/0017	010/0018	-	010/0015	010/0031	-	-	-
	ø22	-	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	028X	-	-	-	-	-
	ø22	-	-	-	-	029X	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-	-



### REAR PANEL MOUNTING

12-16-20A



**90°**

3	11-12	X-X	X-X	X-X	X-X
	9-10	X-X	X-X		
2	7-8	X-X	X-X	X-X	X-X
	5-6		X-X	X-X	
1	3-4	X-X	X-X	X-X	X
	1-2			X-X	X-X
WAF	CONT.	0	1	2	3

**45°**

2	5-6			X	
1	3-4		X		
	1-2	X			
WAF	CONT.	0	L1-N	L2-N	L3-N

**45°**

2	7-8	X-X			
	5-6		X-X		
1	3-4			X	
	1-2	X			
WAF	CONT.	0	L1-L2	L2-L3	L3-L1

SERIES	AC21A	AMMETER SELECTOR SWITCH 1 POLE FOR 3 CURRENT TRANSFORMERS	VOLTMETER SELECTOR SWITCH PHASE-NEUTRAL	VOLTMETER SELECTOR SWITCH PHASE-PHASE
P012	12A	P0120019R	P0120020R	P0120021R
P016	16A	P0160019R	P0160020R	P0160021R
P020	20A	P0200019R	P0200020R	P0200021R

12-16-20A



**45°**

4	15-16	X-X			
	13-14		X-X		
3	11-12	X			X
	9-10				
2	7-8	X			X
	5-6				X
1	3-4	X	X		
	1-2			X	X
WAF	CONT.	1	0	2	

**45°**

3	11-12			X-X	X
	9-10	X	X	X	
2	7-8		X		
	5-6	X		X	
1	3-4	X-X			
	1-2				X
WAF	CONT.	1	L3-L1	L2-L3	L1-L2

**45°**

3	9-10				X
2	7-8	X-X			
	5-6		X		
1	3-4	X	X	X	
	1-2	X			
WAF	CONT.	0	L3-L1	L2-L3	L1-L2

SERIES	AC21A	VOLTMETER SELECTOR SWITCH PHASE-PHASE FOR TWO CIRCUITS	VOLTMETER SELECTOR SWITCH PHASE-PHASE AND PHASE-NEUTRAL	VOLTMETER SELECTOR SWITCH PHASE-PHASE AND 1 PHASE-NEUTRAL
P012	12A	P0120022R	P0120023R	P0120024R
P016	16A	P0160022R	P0160023R	P0160024R
P020	20A	P0200022R	P0200023R	P0200024R

## ACTUATORS AMMETER AND VOLTMETER SWITCHES | TYPE R

PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

ACTUATOR	FIXING	P012 - P016 - P020						
		 90°	 45°	 45°	 45°	 45°	 45°	 NO
	screw	001/0019	001/0020	001/0021	001/0022	001/0023	001/0024	-
	ø22	056X/0019	056X/0020	056X/0021	056X/0022	056X/0023	056X/0024	-
	screw	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	028X
	ø22	-	-	-	-	-	-	029X
	ø22	-	-	-	-	-	-	029X



### REAR PANEL MOUNTING



12-16-20A



25-32-40A



63-80A



125A



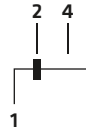
200A



45°



60°  
G125  
G200



1	3-4	X
	1-2	X
MARK	CONT.	1 2



45°



60°  
G125  
G200



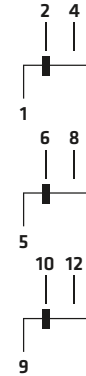
2	7-8	X
	5-6	X
1	3-4	X
	1-2	X
MARK	CONT.	1 2



45°



60°  
G125  
G200



3	11-12	X
	9-10	X
2	7-8	X
	5-6	X
1	3-4	X
	1-2	X
MARK	CONT.	1 2

SERIES	AC21A	1 POLE	2 POLES	3 POLES
P012	12A	P0120025R	P0120026R	P0120027R
P016	16A	P0160025R	P0160026R	P0160027R
P020	20A	P0200025R	P0200026R	P0200027R
C025	25A	C0250025R	C0250026R	C0250027R
C032	32A	C0320025R	C0320026R	C0320027R
C040	40A	C0400025R	C0400026R	C0400027R
C063	63A	C0630025R	C0630026R	C0630027R
C080	80A	C0800025R	C0800026R	C0800027R
G125	125A	G1250025R	G1250026R	G1250027R
G200	200A	G2000025R	G2000026R	G2000027R

**ACTUATORS STEP SWITCHES 1-2 WITHOUT ZERO | TYPE R**
**PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12**

ACTUATOR	FIXING	P012 - P016 - P020		C025 C032 C040	C063 C080	G125	G200
	screw	001/0025	-	007/0025	201/0025	441/0025	461/0025
	ø22	056X/0025	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	ø22	-	028X	-	-	-	-
	ø22	-	029X	-	-	-	-



### REAR PANEL MOUNTING



12-16-20A



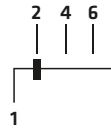
45°



60°  
G125  
G200



25-32-40A



63-80A



45°



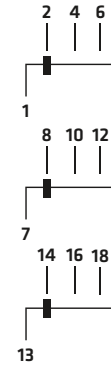
60°  
G125  
G200



45°



60°  
G125  
G200



125A

2	5-6		X
1	3-4	X	
	1-2	X	
WIRE	CONT.	1	2
		2	3

3	11-12		X
	9-10	X	
2	7-8	X	
	5-6		X
1	3-4	X	
	1-2	X	
WIRE	CONT.	1	2
		2	3

5	17-18		X
	15-16	X	
4	13-14	X	
	11-12		X
3	9-10	X	
	7-8	X	
2	5-6		X
	3-4	X	
1	1-2	X	
WIRE	CONT.	1	2
		2	3



200A

SERIES	AC21A	1 POLE	2 POLES	3 POLES
P012	12A	PO120038R	PO120039R	PO120040R
P016	16A	PO160038R	PO160039R	PO160040R
P020	20A	PO200038R	PO200039R	PO200040R
C025	25A	C0250038R	C0250039R	C0250040R
C032	32A	C0320038R	C0320039R	C0320040R
C040	40A	C0400038R	C0400039R	C0400040R
C063	63A	C0630038R	C0630039R	C0630040R
C080	80A	C0800038R	C0800039R	C0800040R
G125	125A	G1250038R	G1250039R	G1250040R
G200	200A	G2000038R	G2000039R	G2000040R



**ACTUATORS STEP SWITCHES 1-2-3 WITHOUT ZERO | TYPE R**
**PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12**

ACTUATOR	FIXING	P012 - P016 - P020		C025 C032 C040	C063 C080	G125	G200
		 45°	 NO	 45°	 45°	 60°	 60°
	screw	001/0038	-	007/0038	201/0038	441/0038	461/0038
	ø22	056X/0038	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	ø22	-	028X	-	-	-	-
	ø22	-	029X	-	-	-	-



**REAR PANEL MOUNTING**



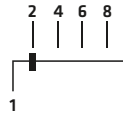
12-16-20A



45°



90°  
G125  
G200



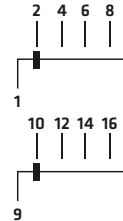
25-32-40A



45°



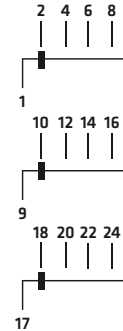
90°  
G125  
G200



45°



90°  
G125  
G200



125A

2	7-8			X	
	5-6		X		
	3-4	X			
1	1-2	X			
MARK	CONT.	1	2	3	4



200A

4	15-16			X	
	13-14		X		
3	11-12	X			
	9-10	X			
2	7-8			X	
	5-6		X		
1	3-4	X			
	1-2	X			
MARK	CONT.	1	2	3	4

6	23-24			X	
	21-22		X		
5	19-20	X			
	17-18	X			
4	15-16			X	
	13-14		X		
3	11-12	X			
	9-10	X			
2	7-8			X	
	5-6		X		
1	3-4	X			
	1-2	X			
MARK	CONT.	1	2	3	4

SERIES	AC21A	1 POLE	2 POLES	3 POLES
P012	12A	P0120041R	P0120042R	P0120043R
P016	16A	P0160041R	P0160042R	P0160043R
P020	20A	P0200041R	P0200042R	P0200043R
C025	25A	C0250041R	C0250042R	C0250043R
C032	32A	C0320041R	C0320042R	C0320043R
C040	40A	C0400041R	C0400042R	C0400043R
C063	63A	-	-	-
C080	80A	-	-	-
G125	125A	G1250041R	G1250042R	G1250043R
G200	200A	G2000041R	G2000042R	G2000043R

## ACTUATORS STEP SWITCHES 1-2-3-4 WITHOUT ZERO | TYPE R

PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

ACTUATOR	FIXING	P012 - P016 - P020		C025 C032 C040		C063 C080		G125		G200
		<b>45°</b>	<b>NO</b>	<b>45°</b>				<b>90°</b>		<b>90°</b>
	screw	001/0041	-	007/0041	-	-	-	441/0041	-	461/0041
	ø22	056X/0041	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	ø22	-	028X	-	-	-	-	-	-	-
	ø22	-	029X	-	-	-	-	-	-	-



### REAR PANEL MOUNTING



12-16-20A



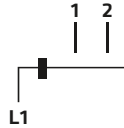
45°



60°  
G125  
G200



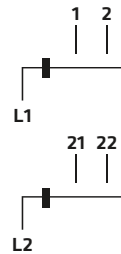
25-32-40A



45°



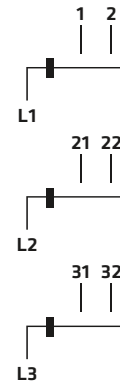
60°  
G125  
G200



45°



60°  
G125  
G200



63-80A

1	3-4		X
	1-2	X	
WARF	CONT.	0	1 2

2	7-8		X
	5-6	X	
1	3-4		X
	1-2	X	
WARF	CONT.	0	1 2

3	11-12		X
	9-10	X	
2	7-8		X
	5-6	X	
1	3-4		X
	1-2	X	
WARF	CONT.	0	1 2



125A



200A

SERIES	AC21A	1 POLE	2 POLES	3 POLES
P012	12A	P0120028R	P0120032R	P0120033R
P016	16A	P0160028R	P0160032R	P0160033R
P020	20A	P0200028R	P0200032R	P0200033R
C025	25A	C0250028R	C0250032R	C0250033R
C032	32A	C0320028R	C0320032R	C0320033R
C040	40A	C0400028R	C0400032R	C0400033R
C063	63A	C0630028R	C0630032R	C0630033R
C080	80A	C0800028R	C0800032R	C0800033R
G125	125A	G1250028R	G1250032R	G1250033R
G200	200A	G2000028R	G2000032R	G2000033R

**ACTUATORS STEP SWITCHES 0-1-2 WITH ZERO | TYPE R**
**PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12**

ACTUATOR	FIXING	P012 - P016 - P020		C025 C032 C040	C063 C080	G125	G200
		 45°	 NO	 45°	 45°	 60°	 60°
	screw	001/0028	-	007/0028	201/0028	441/0028	461/0028
	ø22	056X/0028	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	ø22	-	028X	-	-	-	-
	ø22	-	029X	-	-	-	-



### REAR PANEL MOUNTING



12-16-20A



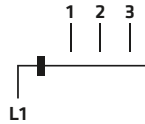
45°



90°  
G125  
G200



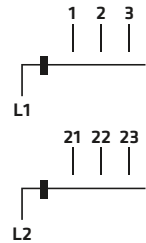
25-32-40A



45°



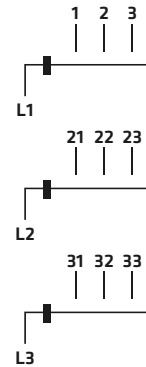
90°  
G125  
G200



45°



90°  
G125  
G200



125A

2	7-8			X	
	5-6	X			
1	1-2		X		
WVF	CONT.	0	1	2	3



200A

3	11-12			X	
	9-10	X			
2	7-8		X		
	5-6		X		
1	3-4			X	
	1-2	X			
WVF	CONT.	0	1	2	3

5	19-20			X	
4	15-16			X	
	13-14	X			
3	11-12			X	
	9-10	X			
2	7-8		X		
	5-6		X		
1	3-4			X	
	1-2	X			
WVF	CONT.	0	1	2	3

SERIES	AC21A	1 POLE	2 POLES	3 POLES
P012	12A	P0120029R	P0120034R	P0120035R
P016	16A	P0160029R	P0160034R	P0160035R
P020	20A	P0200029R	P0200034R	P0200035R
C025	25A	C0250029R	C0250034R	C0250035R
C032	32A	C0320029R	C0320034R	C0320035R
C040	40A	C0400029R	C0400034R	C0400035R
C063	63A	-	-	-
C080	80A	-	-	-
G125	125A	G1250029R	G1250034R	G1250035R
G200	200A	G2000029R	G2000034R	G2000035R

**ACTUATORS STEP SWITCHES 0-1-2-3 WITH ZERO | TYPE R**
**PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12**

ACTUATOR	FIXING	P012 - P016 - P020		C025 C032 C040	C063 C080	G125	G200
		 45°	 NO	 45°	-	 90°	 90°
	screw	001/0029	-	007/0029	-	441/0029	461/0029
	ø22	056X/0029	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	screw	-	-	-	-	-	-
	ø22	-	-	-	-	-	-
	ø22	-	028X	-	-	-	-
	ø22	-	029X	-	-	-	-



### REAR PANEL MOUNTING



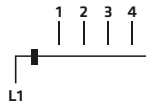
12-16-20A



45°



60°  
G125  
G200



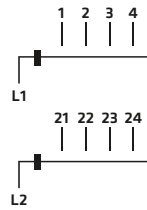
25-32-40A



45°



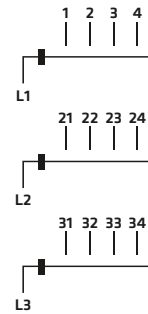
60°  
G125  
G200



45°



60°  
G125  
G200



125A

2	7-8			X		
	5-6	X				
1	3-4			X		
	1-2		X			
WPC	CONT.	0	1	2	3	4



200A

4	15-16			X		
	13-14	X				
3	11-12			X		
	9-10		X			
2	7-8			X		
	5-6	X				
1	3-4			X		
	1-2		X			
WPC	CONT.	0	1	2	3	4

6	23-24			X		
	21-22	X				
5	19-20			X		
	17-18		X			
4	15-16			X		
	13-14	X				
3	11-12			X		
	9-10		X			
2	7-8			X		
	5-6	X				
1	3-4			X		
	1-2		X			
WPC	CONT.	0	1	2	3	4

SERIES	AC21A	1 POLE	2 POLES	3 POLES
P012	12A	P0120030R	P0120036R	P0120037R
P016	16A	P0160030R	P0160036R	P0160037R
P020	20A	P0200030R	P0200036R	P0200037R
C025	25A	C0250030R	C0250036R	C0250037R
C032	32A	C0320030R	C0320036R	C0320037R
C040	40A	C0400030R	C0400036R	C0400037R
C063	63A	-	-	-
C080	80A	-	-	-
G125	125A	G1250030R	G1250036R	G1250037R
G200	200A	G2000030R	G2000036R	G2000037R



## ACTUATORS STEP SWITCHES 0-1-2-3-4 WITH ZERO | TYPE R

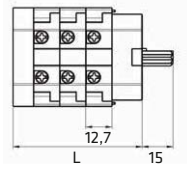
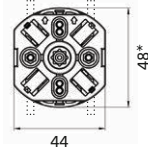
PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

ACTUATOR	FIXING	P012 - P016 - P020		C025 C032 C040		C063 C080		G125		G200
		 45°	 NO	 45°				 60°		 60°
	screw	001/0030	-	007/0030	-	-	-	441/0030	-	461/0030
	ø22	056X/0030	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	screw	-	-	-	-	-	-	-	-	-
	ø22	-	-	-	-	-	-	-	-	-
	ø22	-	028X	-	-	-	-	-	-	-
	ø22	-	029X	-	-	-	-	-	-	-

### R REAR PANEL MOUNTING | ACTUATORS SCREW FIXING



12-16-20A

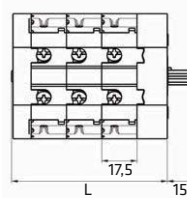
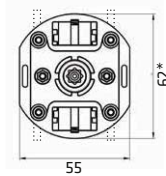


WAFER GAP	L x WAFER N°					
	1	2	3	4	5	6
12,7	37,4	50,1	62,8	75,5	88,2	100,9

\* If cam switch is provided of external bridge (wafer to wafer) the height will be increased of ~ 2 mm for the lower and upper sides.



25-32-40A

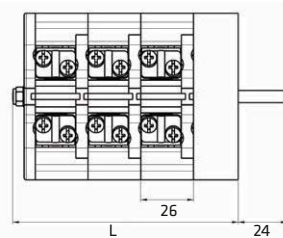
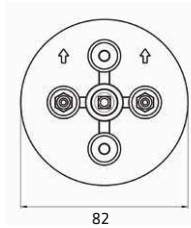


WAFER GAP	L x WAFER N°					
	1	2	3	4	5	6
17,5	42,2	59,7	77,2	94,7	112,2	129,7

\* If cam switch is provided of external bridge (wafer to wafer) the height will be increased of ~ 1 mm for the lower and upper sides.



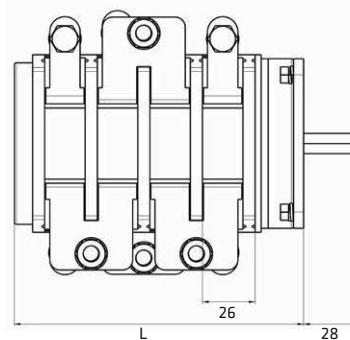
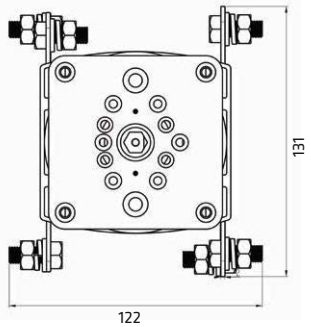
63-80A



WAFER GAP	L x WAFER N°					
	1	2	3	4	5	6
26	59,1	85,1	111,1	137,1	163	189,1



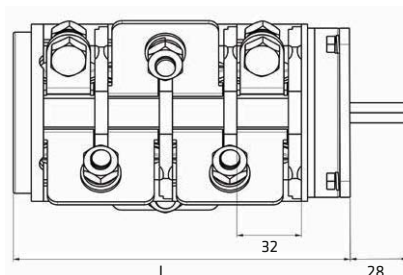
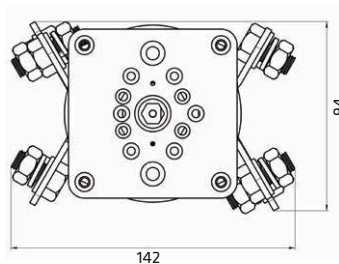
125A



WAFER GAP	L x WAFER N°					
	1	2	3	4	5	6
26	66	92	118	144	170	196

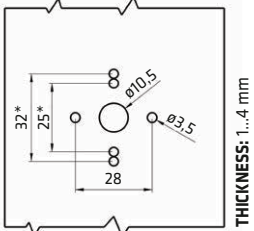


200A



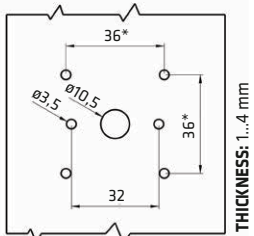
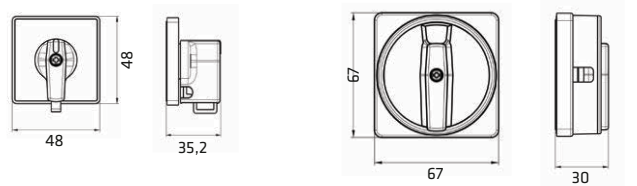
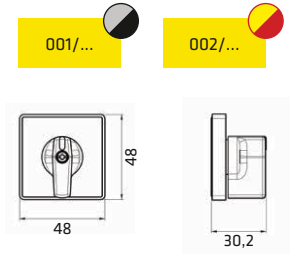
WAFER GAP	L x WAFER N°					
	1	2	3	4	5	6
32	72	104	136	168	200	232

**DIMENSIONS AND DRILLING PLAN | TYPE R**



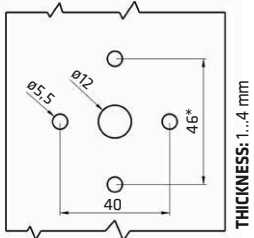
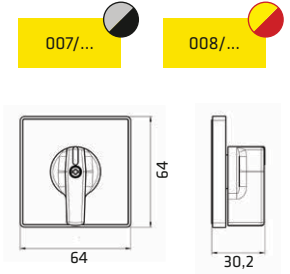
THICKNESS: 1...4 mm

**FIXING:**  
 Captive M3 bolt - 28 mm  
 \* ALTERNATIVE FIXING  
 Screwplast 25 or 32 mm



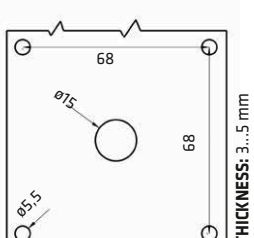
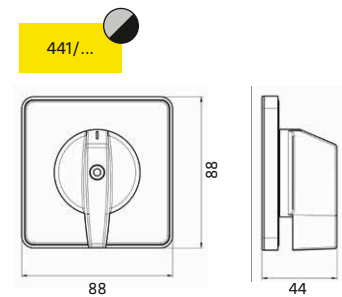
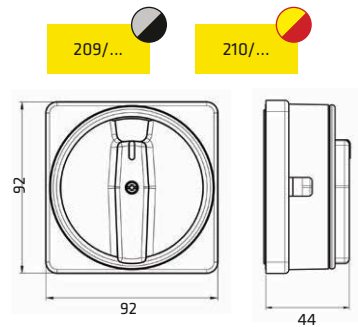
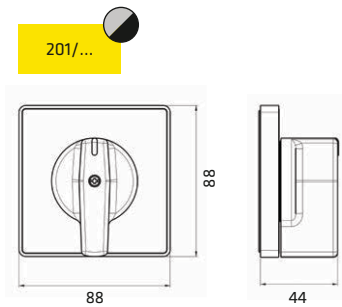
THICKNESS: 1...4 mm

**FIXING:**  
 Captive M3 bolt - 32 mm  
 \* ALTERNATIVE FIXING  
 Screwplast  $\square$ 36 mm



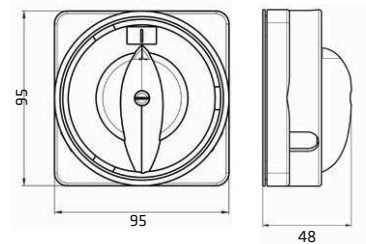
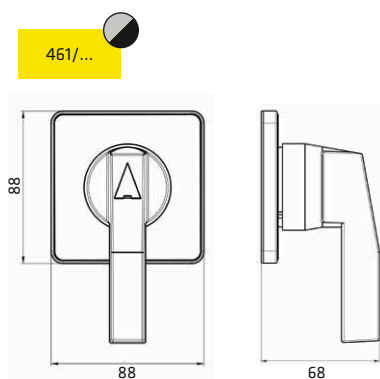
THICKNESS: 1...4 mm

**FIXING:**  
 Captive M5 bolt - 40 mm  
 \* ALTERNATIVE FIXING  
 M5 - 46 mm



THICKNESS: 3...5 mm

**FISSAGGIO:**  
 M5 bolt  $\square$ 68 mm





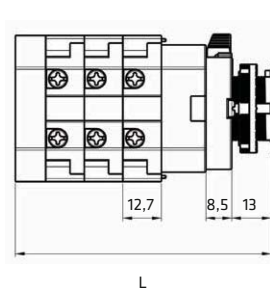
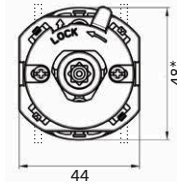
R



**REAR PANEL MOUNTING | ACTUATORS Ø22 FIXING**



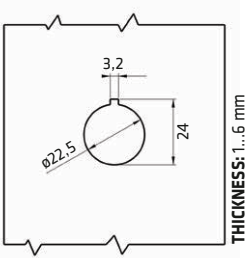
12-16-20A



WAFER GAP	PANEL THICKNESS	L x WAFER N°					
		1	2	3	4	5	6
12,7	1 mm	57,9	70,6	83,3	96	108,7	121,4
	2 mm	56,9	69,6	82,3	95	107,7	120,4
	3 mm	55,9	68,6	81,3	94	106,7	119,4
	4 mm	54,9	67,6	80,3	93	105,7	118,4
	5 mm	53,9	66,6	79,3	92	104,7	117,4
	6 mm	52,9	65,6	78,3	91	103,7	116,4

\* If cam switch is provided of external bridge (wafer to wafer) the height will be increased of ~ 2 mm for the lower and upper sides.

**DIMENSIONS AND DRILLING PLAN | TYPE R**



FIXING:  
ø22,5 mm

<p>056X/...</p> <p>48 48 30,2</p>	<p>058X/...</p> <p>48 48 35,2</p>	<p>059X/...</p> <p>48 48 21,1</p>	<p>060X/...</p> <p>48 48 21,1</p>	<p>057X/...</p> <p>48 48 21,1</p>
<p>009/...</p> <p>67 67 30</p>	<p>010/...</p> <p>67 67 30</p>	<p>028X/...</p> <p>ø30 28,1</p>	<p>029X/...</p> <p>ø30 23,1</p>	



**GIOVENZANA**  
INTERNATIONAL B.V.



# **GIOVENZANA**

---

## INTERNATIONAL B.V.

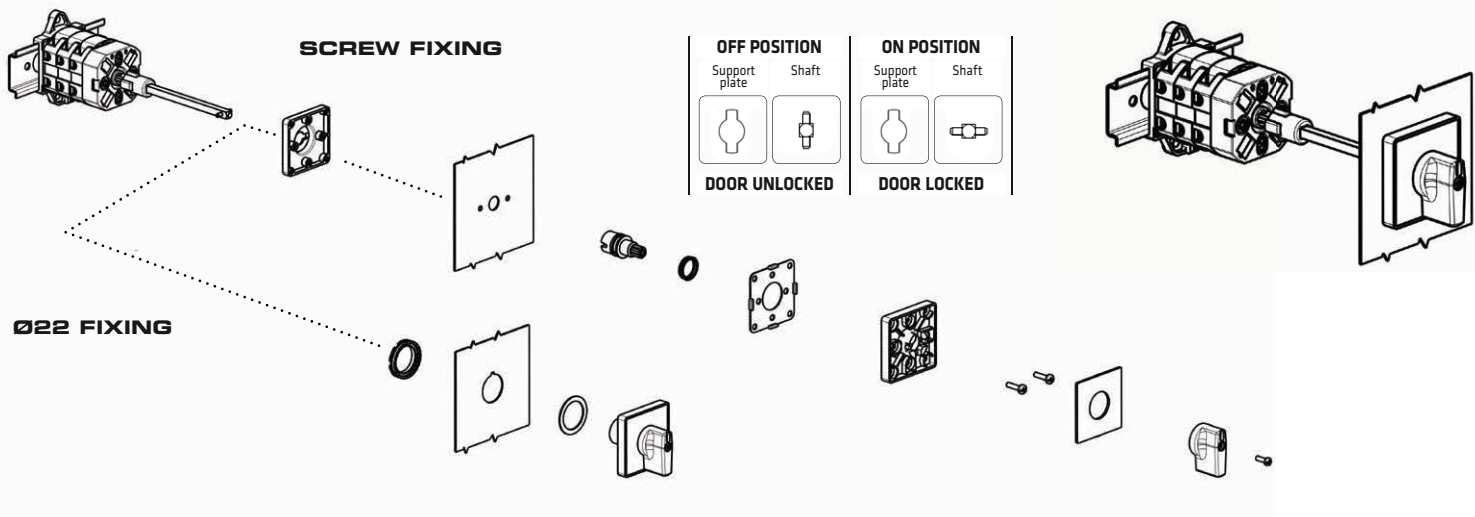


**PHOENIX CAM SWITCHES**  
**BASE MOUNTING - B**

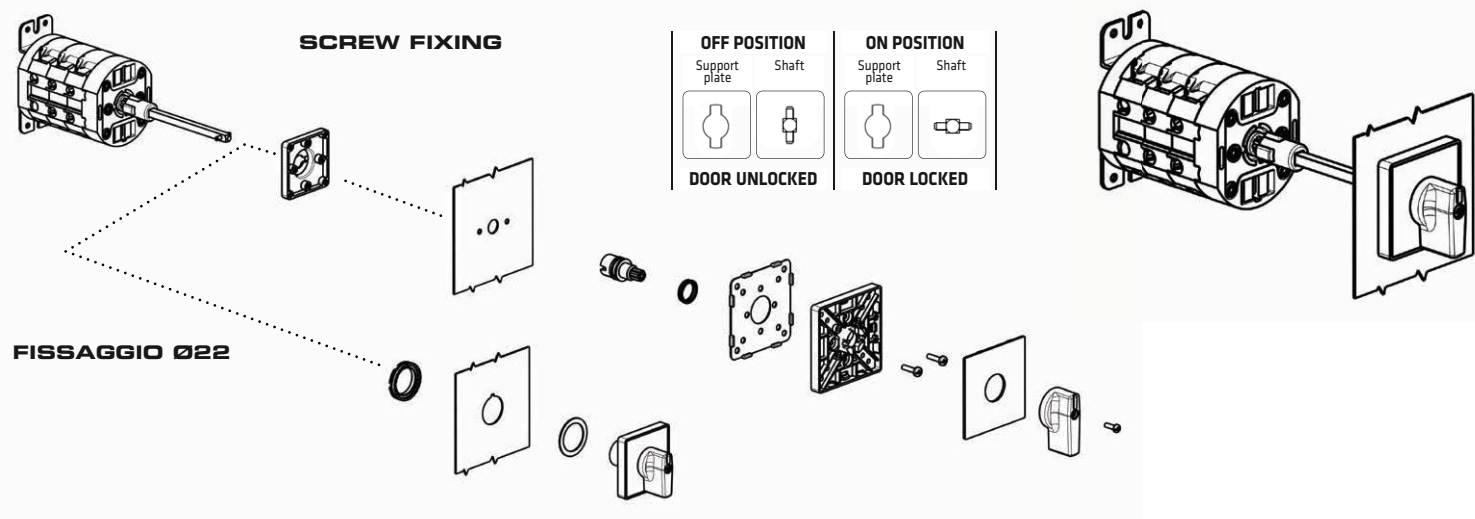
**B**

**BASE MOUNTING**

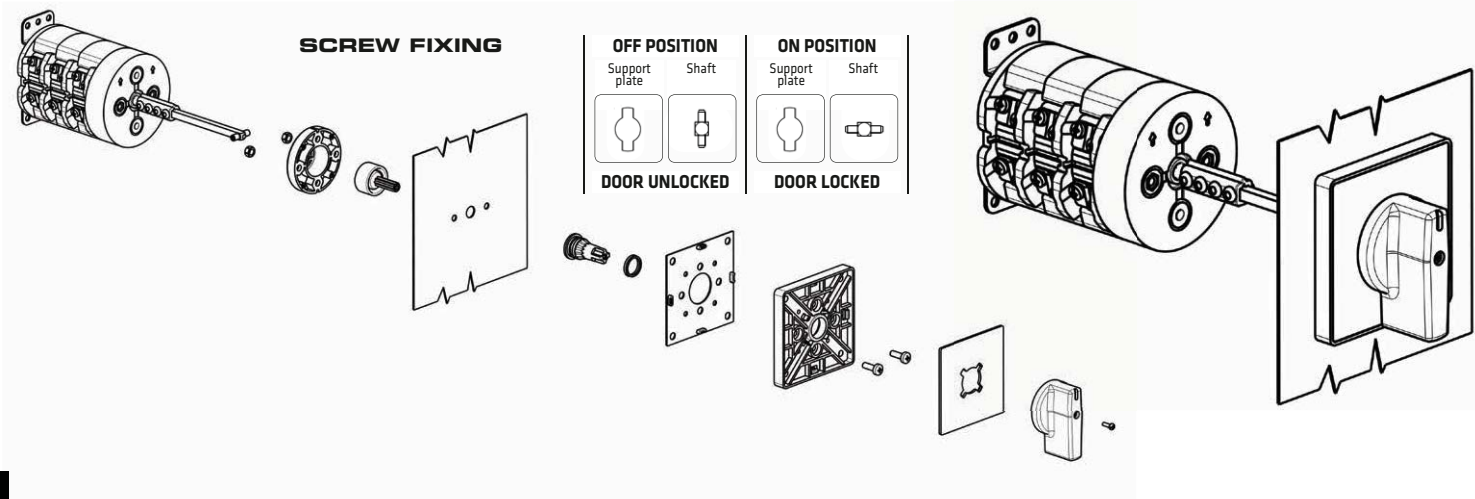
| RANGE AC21A | 12A - 16A - 20A |



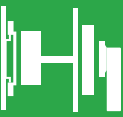
| RANGE AC21A | 25A - 32A - 40A |



| RANGE AC21A | 63A - 80A |

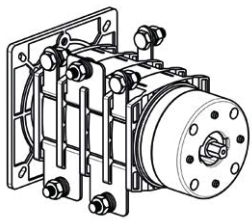




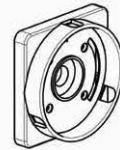
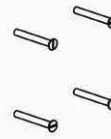
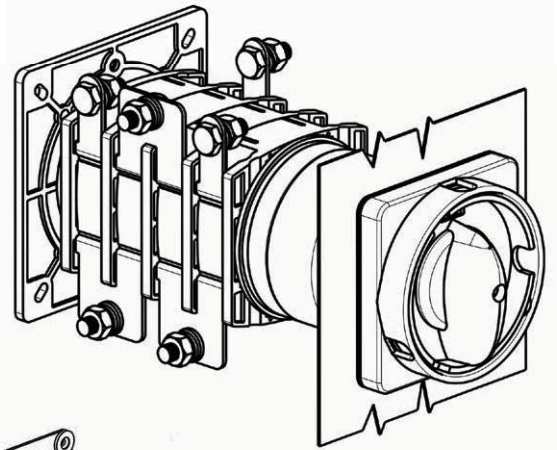
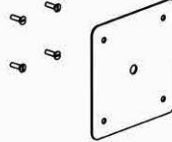
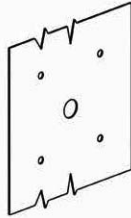


## PHOENIX CAM SWITCHES | TYPE B

## | RANGE AC21A | 125A |



## SCREW FIXING



## OFF POSITION

Support  
Plate Shaft

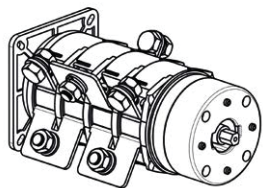
DOOR UNLOCKED

## ON POSITION

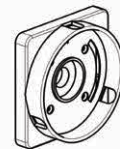
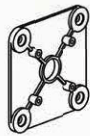
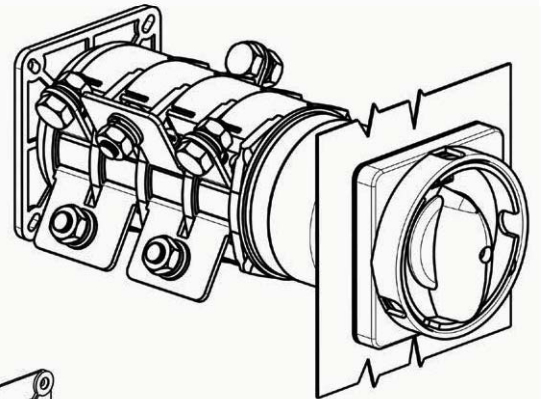
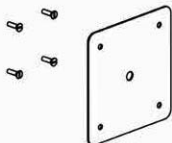
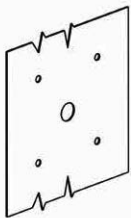
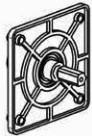
Support  
Plate Shaft

DOOR LOCKED

## | RANGE AC21A | 200A |



## SCREW FIXING

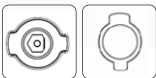


## OFF POSITION

Support  
Plate Shaft

DOOR UNLOCKED

## ON POSITION

Support  
Plate Shaft

DOOR LOCKED

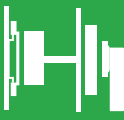
**B**



### BASE MOUNTING

	12-16-20A																																																																																
	25-32-40A																																																																																
	63-80A																																																																																
	125A	<table border="1"> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td></tr> </table>	1	3-4		X		1-2		X	WARF	CONT.	0	1	<table border="1"> <tr><td>2</td><td>5-6</td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td></tr> </table>	2	5-6		X	1	3-4		X		1-2		X	WARF	CONT.	0	1	<table border="1"> <tr><td>2</td><td>7-8</td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td></tr> </table>	2	7-8		X		5-6		X	1	3-4		X		1-2		X	WARF	CONT.	0	1	<table border="1"> <tr><td>3</td><td>11-12</td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td></td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td></tr> </table>	3	11-12		X		9-10		X	2	7-8		X		5-6		X	1	3-4		X		1-2		X	WARF	CONT.	0	1
1	3-4		X																																																																														
	1-2		X																																																																														
WARF	CONT.	0	1																																																																														
2	5-6		X																																																																														
1	3-4		X																																																																														
	1-2		X																																																																														
WARF	CONT.	0	1																																																																														
2	7-8		X																																																																														
	5-6		X																																																																														
1	3-4		X																																																																														
	1-2		X																																																																														
WARF	CONT.	0	1																																																																														
3	11-12		X																																																																														
	9-10		X																																																																														
2	7-8		X																																																																														
	5-6		X																																																																														
1	3-4		X																																																																														
	1-2		X																																																																														
WARF	CONT.	0	1																																																																														
	200A																																																																																

SERIES	AC21A	1 POLE	2 POLES	3 POLES	4 POLES
P012	12A	P0120002B	P0120003B	P0120004B	P0120006B
P016	16A	P0160002B	P0160003B	P0160004B	P0160006B
P020	20A	P0200002B	P0200003B	P0200004B	P0200006B
C025	25A	C0250002B	C0250003B	C0250004B	C0250006B
C032	32A	C0320002B	C0320003B	C0320004B	C0320006B
C040	40A	C0400002B	C0400003B	C0400004B	C0400006B
C063	63A	C0630002B	C0630003B	C0630004B	C0630006B
C080	80A	C0800002B	C0800003B	C0800004B	C0800006B
G125	125A	G1250002B	G1250003B	G1250004B	G1250006B
G200	200A	G2000002B	G2000003B	G2000004B	G2000006B



## ACTUATORS ON-OFF SWITCHES 0-1 | TYPE B

PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

ACTUATOR	FIXING	P012 - P016 - P020	C025 - C032 - C040	C063 - C080	G125	G200			
		 90°	 90°	 90°	 90°	 90°	 90°	 90°	 90°
	screw	020/0001	-	021/0001	-	220/0001	-	-	-
	ø22	095/0001	-	095/0001	-	-	-	-	-
	screw	030/0001	-	-	-	-	-	-	-
	ø22	070/0001	-	070/0001	-	-	-	-	-
	screw	005/0001	-	005/0001	-	-	-	-	-
	ø22	077/0001	-	077/0001	-	-	-	-	-
	screw	006/0001	-	006/0001	-	-	-	-	-
	ø22	069/0001	-	069/0001	-	-	-	-	-
	screw	011/0001	011/0001-A	011/0001	011/0001-A	211/0001	211/0001-1	451/0001	451/0001
	ø22	063/0001	063/0001-1	063/0001	063/0001-1	-	-	-	-
	screw	012/0001	012/0001-2	012/0001	012/0001-2	212/0001	212/0001-1	452/0001	452/0001
	ø22	064/0001	064/0001-1	064/0001	064/0001-1	-	-	-	-
<b>DOORLOCK SHAFT</b>		Metallic □5x85mm			Metallic □6x100mm		Direct doorlock coupling (no metallic shaft)		



All base mounting's actuators are equipped with doorlock function that permits to open the door only in "0" position.



**B**



**BASE MOUNTING**



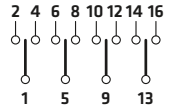
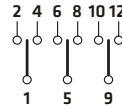
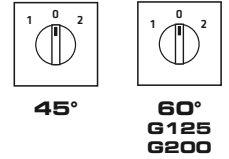
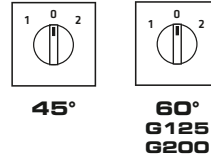
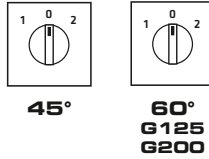
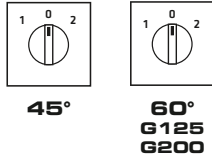
12-16-20A



25-32-40A



63-80A



1	3-4		X
	1-2	X	
WAF	CONT.	1	0 2

2	7-8		X
	5-6	X	
1	3-4		X
	1-2	X	
WAF	CONT.	1	0 2

3	11-12		X
	9-10	X	
2	7-8		X
	5-6	X	
1	3-4		X
	1-2	X	
WAF	CONT.	1	0 2


4	15-16		X
	13-14	X	
3	11-12		X
	9-10	X	
2	7-8		X
	5-6	X	
1	3-4		X
	1-2	X	
WAF	CONT.	1	0 2

SERIES	AC21A	1 POLE	2 POLES	3 POLES	4 POLES
P012	12A	PO120008B	PO120009B	PO120010B	PO120011B
P016	16A	PO160008B	PO160009B	PO160010B	PO160011B
P020	20A	PO200008B	PO200009B	PO200010B	PO200011B
C025	25A	C0250008B	C0250009B	C0250010B	C0250011B
C032	32A	C0320008B	C0320009B	C0320010B	C0320011B
C040	40A	C0400008B	C0400009B	C0400010B	C0400011B
C063	63A	C0630008B	C0630009B	C0630010B	C0630011B
C080	80A	C0800008B	C0800009B	C0800010B	C0800011B
G125	125A	-	-	-	-
G200	200A	-	-	-	-



## ACTUATORS CHANGEOVER SWITCHES 1-0-2 | TYPE B

PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12

ACTUATOR	FIXING	P012 P016 P020	C025 C032 C040	C063 - C080	G125	G200
		 45°	 45°	 45°	 60°	 60°
	screw	020/0008	021/0008	220/0008	-	-
	ø22	095/0008	095/0008	-	-	-
	screw	030/0008	-	-	-	-
	ø22	070/0008	070/0008	-	-	-
	screw	005/0008	005/0008	-	-	-
	ø22	077/0008	077/0008	-	-	-
	screw	006/0008	006/0008	-	-	-
	ø22	069/0008	069/0008	-	-	-
	screw	011/0008	011/0008	211/0008	-	-
	ø22	063/0008	063/0008	-	-	-
	screw	012/0008	012/0008	212/0008	-	-
	ø22	064/0008	064/0008	-	-	-
<b>DOORLOCK SHAFT</b>						
		Metallic □5x85mm		Metallic □6x100mm	Direct doorlock coupling (no metallic shaft)	

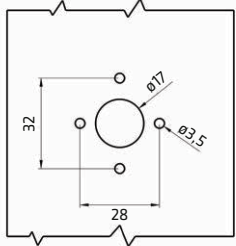


All base mounting's actuators are equipped with Doorlock function that permits to open the door only in "0" position.



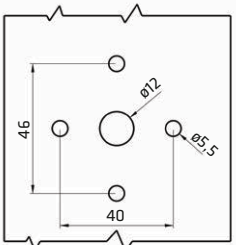
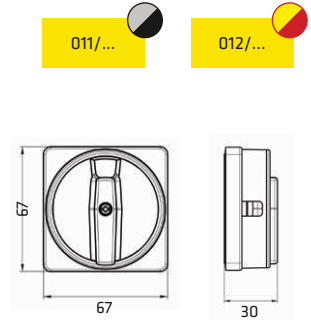
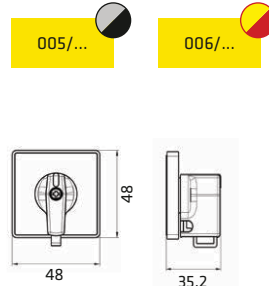
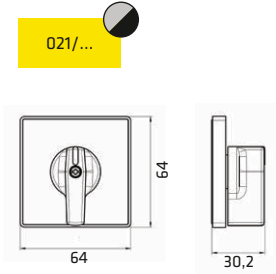
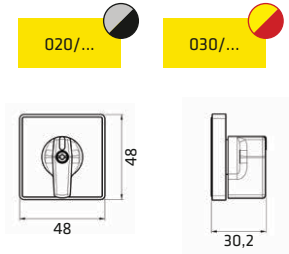


**DIMENSIONS AND DRILLING PLAN | TYPE B**



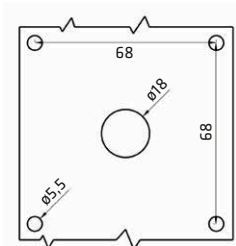
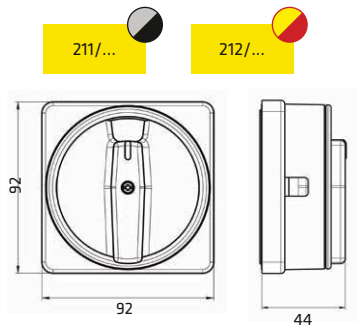
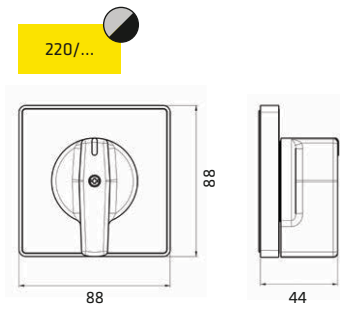
**FIXING:**  
Screwplast 28 or 32 mm

THICKNESS: 1...4 mm



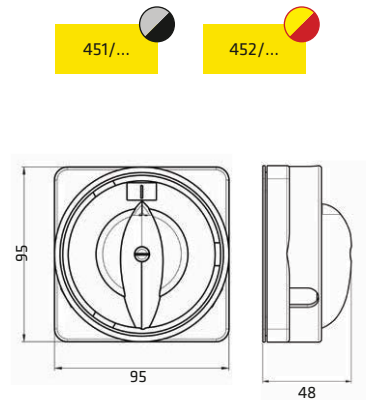
**FIXING:**  
Screwplast 40 or 46 mm

THICKNESS: 1...10 mm



**FIXING:**  
M5 bolt □68 mm

THICKNESS: 3...5 mm



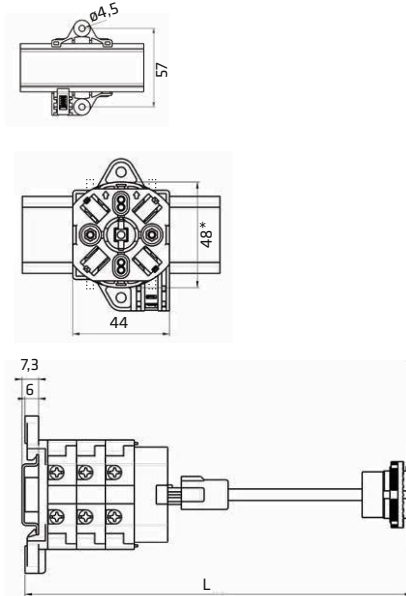
B



### BASE MOUNTING | ACTUATORS Ø22 FIXING



12-16-20A



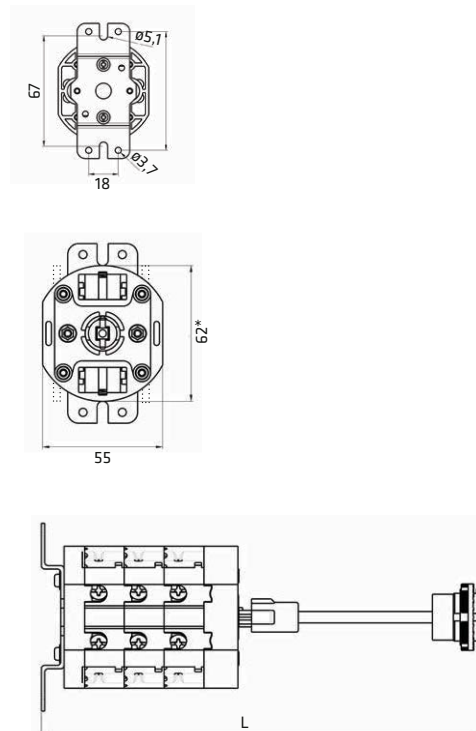
WAFER GAP	PANEL THICKNESS	L x WAFER N°						
		1	2	3	4	5	6	
12,7	1 mm	min*	84,2	96,9	109,6	122,3	135	147,7
		max	143,7	156,4	169,1	181,8	194,5	207,2
	2 mm	min*	83,2	95,9	108,6	121,3	134	146,7
		max	142,7	155,4	168,1	180,8	193,5	206,2
	3 mm	min*	82,2	94,9	107,6	120,3	133	145,7
		max	141,7	154,4	167,1	179,8	192,5	205,2
	4 mm	min*	81,2	93,9	106,6	119,3	132	144,7
		max	140,7	153,4	166,1	178,8	191,5	204,2
	5 mm	min*	80,2	92,9	105,6	118,3	131	143,7
		max	139,7	152,4	165,1	177,8	190,5	203,2
	6 mm	min*	78,2	91,9	104,6	117,3	130	142,7
		max	138,7	151,4	164,1	176,8	189,5	202,2

\* Minimum length with cut shaft.

\* If cam switch is provided of external bridge (wafer to wafer) the height will be increased of ~ 2 mm for the lower and upper sides.



25-32-40A

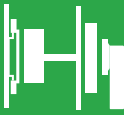


WAFER GAP	PANEL THICKNESS	L x WAFER N°						
		1	2	3	4	5	6	
17,5	1 mm	min*	93,8	115,8	133,3	150,8	168,3	185,8
		max	157,8	175,3	192,8	210,3	227,8	245,3
	2 mm	min*	97,3	114,8	132,3	149,8	167,3	184,8
		max	156,8	174,3	191,8	209,3	226,8	244,3
	3 mm	min*	96,3	113,8	131,3	148,8	166,3	183,8
		max	155,8	173,3	190,8	208,3	225,8	243,3
	4 mm	min*	95,3	112,8	130,3	147,8	165,3	182,8
		max	154,8	172,3	189,8	207,3	224,8	242,3
	5 mm	min*	94,3	111,8	129,3	146,8	164,3	181,8
		max	153,8	171,8	188,8	206,3	223,8	241,3
	6 mm	min*	93,3	110,8	128,3	145,8	163,3	180,8
		max	152,8	170,3	187,8	205,3	222,8	240,3

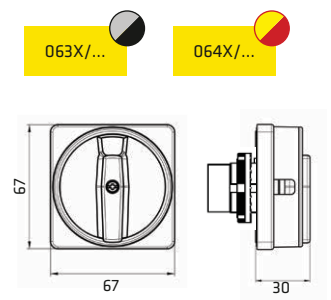
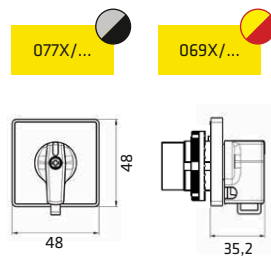
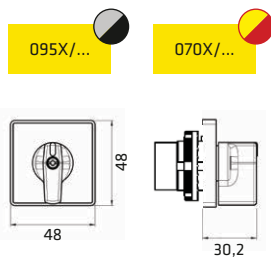
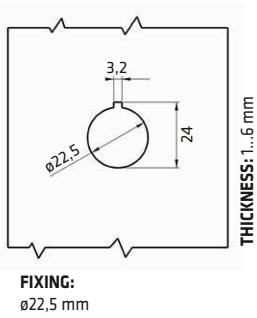
\* Minimum length with cut shaft.

\* If cam switch is provided of external bridge (wafer to wafer) the height will be increased of ~ 1 mm for the lower and upper sides.





## DIMENSIONS AND DRILLING PLAN | TYPE B





**GIOVENZANA**  
INTERNATIONAL B.V.



# **GIOVENZANA**

---

## INTERNATIONAL B.V.



**PHOENIX CAM SWITCHES**  
**DIN MOUNTING - D**



**D**

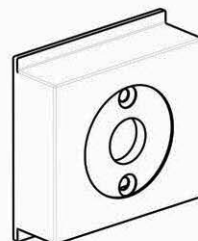
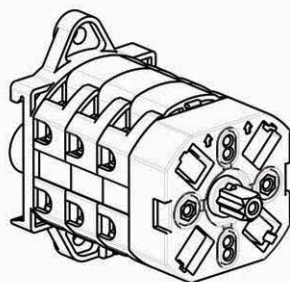
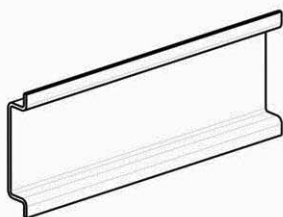
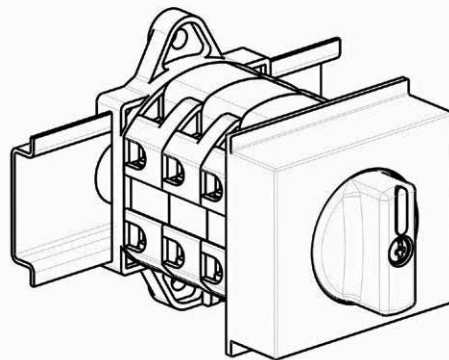


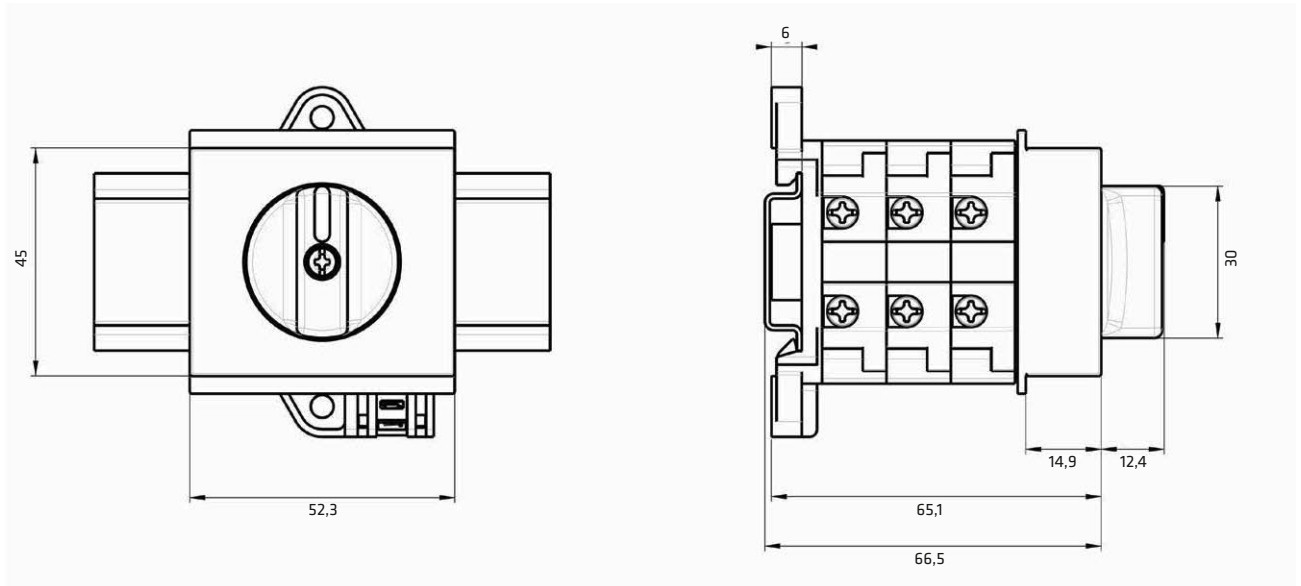
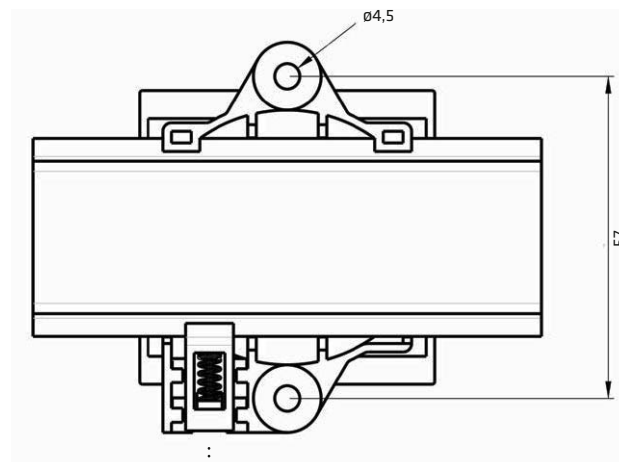
**DIN MOUNTING 46 mm**

Only switches DIN rail mounting 46 mm standard boxes

| RANGE AC21A | 12A - 16A - 20A |

DIN EN46277/3




**DIMENSIONS AND DRILLING PLAN | TYPE D**

**STEADY Length  
3 WAFERS**

**ADDITIONAL FIXING  
HOLES**

**DIN RAIL SNAP-ON MOUNTING  
EN46277/3**



**D**



**DIN MOUNTING 46 mm**

Only switches DIN rail mounting 46 mm standard boxes



12-16-20A

 90°	 90°	 90°	 90°	 90°	 90°																																																																																																																																																														
<table border="1"> <tr><td>1</td><td></td><td></td><td></td></tr> <tr><td></td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WAF.</td><td>CONT.</td><td>0</td><td>1</td></tr> </table>	1					1-2		X	WAF.	CONT.	0	1	<table border="1"> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WAF.</td><td>CONT.</td><td>0</td><td>1</td></tr> </table>	1	3-4		X		1-2		X	WAF.	CONT.	0	1	<table border="1"> <tr><td>2</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td></td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td>X</td></tr> <tr><td>WAF.</td><td>CONT.</td><td>0</td><td></td><td>1</td></tr> </table>	2				X		5-6				1	3-4			X		1-2			X	WAF.	CONT.	0		1	<table border="1"> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td>X</td></tr> <tr><td>WAF.</td><td>CONT.</td><td>0</td><td></td><td>1</td></tr> </table>	2	7-8			X		5-6			X	1	3-4			X		1-2			X	WAF.	CONT.	0		1	<table border="1"> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td>9-10</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>WAF.</td><td>CONT.</td><td>0</td><td></td><td></td><td>1</td></tr> </table>	3							9-10				X	2	7-8				X		5-6				X	1	3-4				X		1-2				X	WAF.	CONT.	0			1	<table border="1"> <tr><td>3</td><td>11-12</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>9-10</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>5-6</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td></td><td></td><td></td><td>X</td></tr> <tr><td></td><td>1-2</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>WAF.</td><td>CONT.</td><td>0</td><td></td><td></td><td>1</td></tr> </table>	3	11-12				X		9-10				X	2	7-8				X		5-6				X	1	3-4				X		1-2				X	WAF.	CONT.	0			1
1																																																																																																																																																																			
	1-2		X																																																																																																																																																																
WAF.	CONT.	0	1																																																																																																																																																																
1	3-4		X																																																																																																																																																																
	1-2		X																																																																																																																																																																
WAF.	CONT.	0	1																																																																																																																																																																
2				X																																																																																																																																																															
	5-6																																																																																																																																																																		
1	3-4			X																																																																																																																																																															
	1-2			X																																																																																																																																																															
WAF.	CONT.	0		1																																																																																																																																																															
2	7-8			X																																																																																																																																																															
	5-6			X																																																																																																																																																															
1	3-4			X																																																																																																																																																															
	1-2			X																																																																																																																																																															
WAF.	CONT.	0		1																																																																																																																																																															
3																																																																																																																																																																			
	9-10				X																																																																																																																																																														
2	7-8				X																																																																																																																																																														
	5-6				X																																																																																																																																																														
1	3-4				X																																																																																																																																																														
	1-2				X																																																																																																																																																														
WAF.	CONT.	0			1																																																																																																																																																														
3	11-12				X																																																																																																																																																														
	9-10				X																																																																																																																																																														
2	7-8				X																																																																																																																																																														
	5-6				X																																																																																																																																																														
1	3-4				X																																																																																																																																																														
	1-2				X																																																																																																																																																														
WAF.	CONT.	0			1																																																																																																																																																														

SERIES	AC21A	1 POLE	2 POLES	3 POLES	4 POLES	5 POLES	6 POLES
P012	12A	P0120001D	P0120002D	P0120003D	P0120004D	P0120005D	P0120006D
P016	16A	P0160001D	P0160002D	P0160003D	P0160004D	P0160005D	P0160006D
P020	20A	P0200001D	P0200002D	P0200003D	P0200004D	P0200005D	P0200006D


**ACTUATORS ON-OFF SWITCHES O-1 | TYPE D**
**ACTUATOR**
**P012 - P016 - P020**

**90°**

**90°**

-

027/0001



**D**



**DIN MOUNTING 46 mm**

Only switches DIN rail mounting 46 mm standard boxes



12-16-20A



45°



1	3-4		X
1	1-2	X	
WAF	CONT.	1	0 2



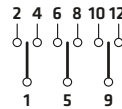
45°



2	7-8		X
2	5-6	X	
1	3-4		X
1	1-2	X	
WAF	CONT.	1	0 2



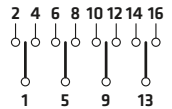
45°



3	11-12		X
3	9-10	X	
2	7-8		X
2	5-6	X	
1	3-4		X
1	1-2	X	
WAF	CONT.	1	0 2



45°



4	15-16		X
4	13-14	X	
3	11-12		X
3	9-10	X	
2	7-8		X
2	5-6	X	
1	3-4		X
1	1-2	X	
WAF	CONT.	1	0 2

SERIES	AC21A	1 POLE	2 POLES	3 POLES	4 POLES
P012	12A	P0120008D	P0120009D	P0120010D	P0120011D
P016	16A	P0160008D	P0160009D	P0160010D	P0160011D
P020	20A	P0200008D	P0200009D	P0200010D	P0200011D





**ACTUATORS CHANGEOVER SWITCHES 1-0-2 | TYPE D**

**ACTUATOR**

**P012 - P016 - P020**



**45°**

027/0008

D

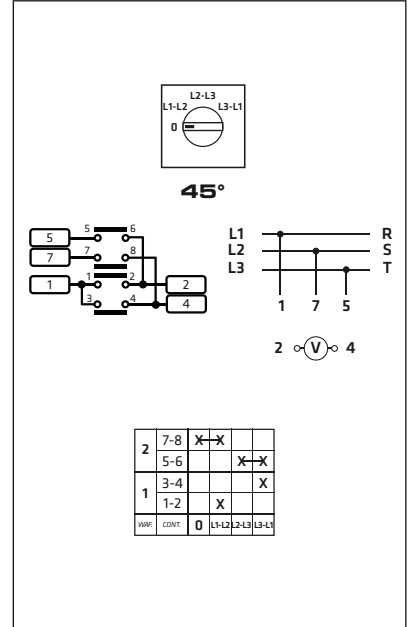
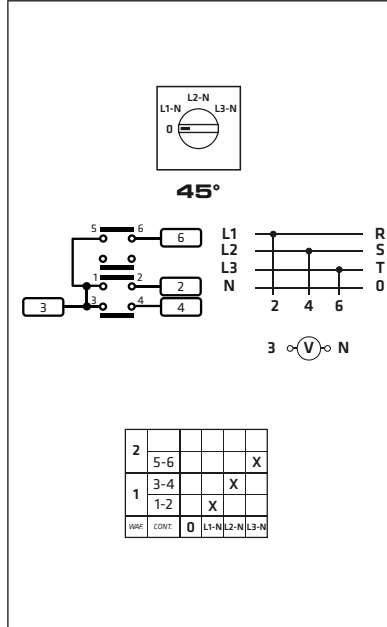
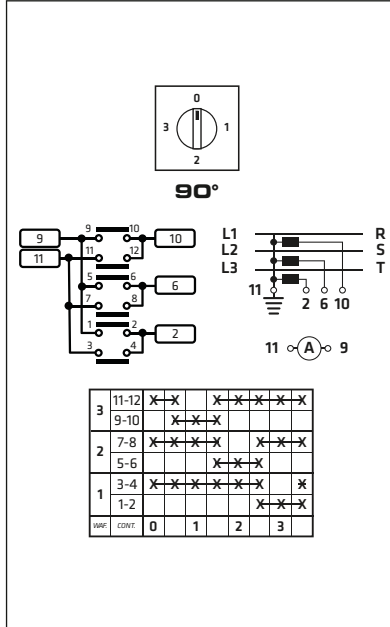


### DIN MOUNTING 46 mm

Only switches DIN rail mounting 46 mm standard boxes



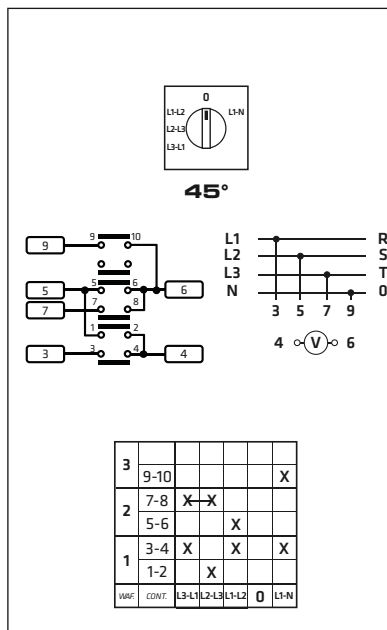
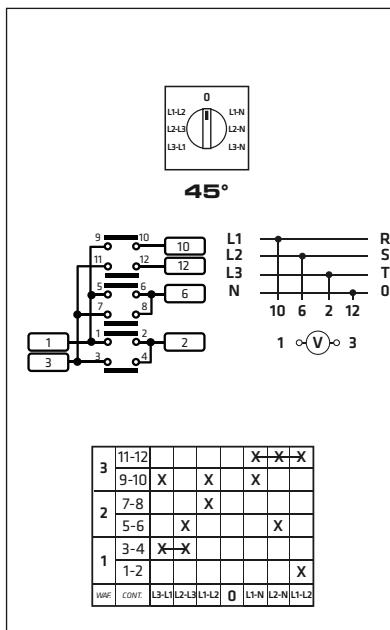
12-16-20A



SERIES	AC21A	AMMETER SELECTOR SWITCH 1 POLE FOR 3 CURRENT TRANSFORMERS	VOLTMETER SELECTOR SWITCH PHASE-NEUTRAL	VOLTMETER SELECTOR SWITCH PHASE-PHASE
P012	12A	P0120019D	P0120020D	P0120021D
P016	16A	P0160019D	P0160020D	P0160021D
P020	20A	P0200019D	P0200020D	P0200021D



12-16-20A



SERIES	AC21A	VOLTMETER SELECTOR SWITCH PHASE-PHASE AND PHASE-NEUTRAL	VOLTMETER SELECTOR SWITCH PHASE-PHASE AND 1 PHASE-NEUTRAL
P012	12A	P0120023D	P0120024D
P016	16A	P0160023D	P0160024D
P020	20A	P0200023D	P0200024D


**ACTUATORS AMMETER AND VOLTMETER SWITCHES | TYPE D**
**ACTUATOR**
**P012 - P016 - P020**

**90°**

027/0019


**45°**

027/0020


**45°**

027/0021


**45°**

027/0023


**45°**

027/0024



# **GIOVENZANA**




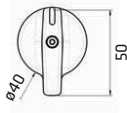





---








INTERNATIONAL B.V.




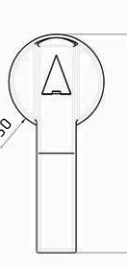
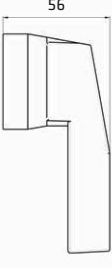
**PHOENIX CAM SWITCHES**  
**ACCESSORIES**

## PHOENIX CAM SWITCHES | ACCESSORIES

## KNOBS

	SERIES	COLOUR	DIMENSIONS	CODE	PROTECTION CLASS	
  	P012 ... 40 C025 ... 40	Black	ø40 x L50	072	IP40 *IP65 with gasket	 
		Red	ø40 x L50	073	IP40 *IP65 with gasket	
		Black	ø44 x L68	081	IP40 *IP65 with gasket	 
		Red	ø44 x L68	110	IP40 *IP65 with gasket	
	C063 ... 80	Black	ø50 x L68	218	IP40 *IP65 with gasket	 
		Red	ø50 x L68	219	IP40 *IP65 with gasket	

	SERIES	COLOUR	DIMENSIONS	CODE	PROTECTION CLASS	
  	P012 ... 40 C025 ... 40	Black	ø34	018	IP40 *IP65 with gasket	 
		Red	ø34	111	IP40 *IP65 with gasket	
		Black	ø40	040	IP40 *IP65 with gasket	 
		Red	ø40	112	IP40 *IP65 with gasket	

	SERIES	COLOUR	DIMENSIONS	CODE	PROTECTION CLASS	
  	G125 G200	Black	ø50 x L115	460	-	 
		Red	ø50 x L115	470	-	

### PROTECTIONS



#### BOOT PROTECTION



SERIES	WAFER	DIAMETER	CODE
P012 P016 P020	Max 3	65	11706031

SERIES	WAFER	DIAMETER	CODE
C025 C032 C040	Max 3	85	20101005

#### EXTENSION UNIT



SERIES	WAFER	DIAMETER	CODE
P012 P016 P020	2	65	11702038

SERIES	WAFER	DIAMETER	CODE
C025 C032 C040	2	85	11706332



#### SOFT BOOT PROTECTION



SERIES	WAFER	DIAMETER	CODE
P012 P016 P020	Max 3	65	20101007

### GASKETS IP65



SERIES	CODE
P012 P016 P020	2800012



SERIES	CODE
C025 C032 C040	15000015



SERIES	CODE
C063 C080	15010016

### FIXING KEY



FIXING KEY Ø 22,5 mm

PCF

## PHOENIX CAM SWITCHES | ACCESSORIES

## SQUARE LONG DOORLOCK SHAFT



□ 5 mm



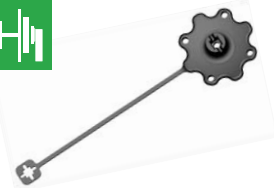
SERIES	L/mm	CODE
P012 P016 P020	185	20401089

SERIES	L/mm	CODE
C025 C032 C040	300	20401164

□ 6 mm

SERIES	L/mm	CODE
C063 C080	300	20900046

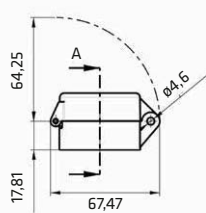
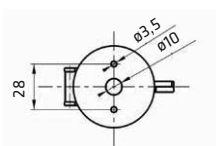
## PROTECTION/KNOB FOR DOORLOCK SHAFT □ 5mm



➔ For maintenance operation, used to control the switch while the door is open and give a protection against injury due to doorlock shaft.

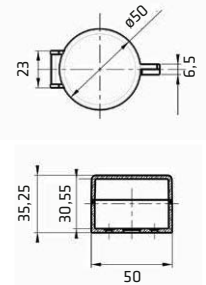
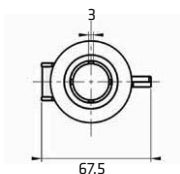
SERIES	CODE
12 ... 40	11706094

## BYPASS PROTECTIONS ø50 WITH LOCKING FACILITY

SCREW  
FIXING

FIXING	CODE
screw*	PPF3-4
ø22	PPF3-5

\* Fixing screws are not supplied.

ø22  
FIXING

FIXING	CODE
screw*	PPF3-6
ø22	PPF3-7

\* Fixing screws are not supplied.

## KT ADAPTOR PLATE IP65 □36 / □48



➔ Complete with gasket IP65 and fixing screw.

SERIES	CODE
12 ... 40	KIT 36/48

### IP65 THERMOPLASTIC ENCLOSURES



#### PQCOGN

IP65

- ☉ Flat cover
- ☉ Front knob
- ☉ **Dimensions:** 75x75x60 mm
- ☉ Black box - grey cover
- ☉ Cable entry: 1xM20 + 1xM16

SERIES	WAFER	CODE
P012	Max 2	PQCOGN
P016		
P020		



#### PQCPGN

IP65

- ☉ Protected cover
- ☉ Front knob
- ☉ **Dimensions:** 75x75x60 mm
- ☉ Black box - grey cover
- ☉ Cable entry: 1xM20 + 1xM16

SERIES	WAFER	CODE
P012	Max 2	PQCPGN
P016		
P020		



#### BF 1/2NGO

IP65

- ☉ Front knob
- ☉ **Dimensions:** 120x100x83 mm
- ☉ Black box - grey cover
- ☉ Cable entry: 8x knock-out Pg16 (2x on the bottom)

SERIES	WAFER	CODE
P012	Max 3	BF1/2NGO
P016		
P020		



#### BF 1/6NGO

IP65

- ☉ Front knob
- ☉ **Dimensions:** 120x100x83 mm
- ☉ Black box - grey cover
- ☉ Cable entry: 8x knock-out Pg16 (2x on the bottom)

SERIES	WAFER	CODE
C025	Max 2	BF1/6NGO
C032		
C040		



#### BL 1/ONGO

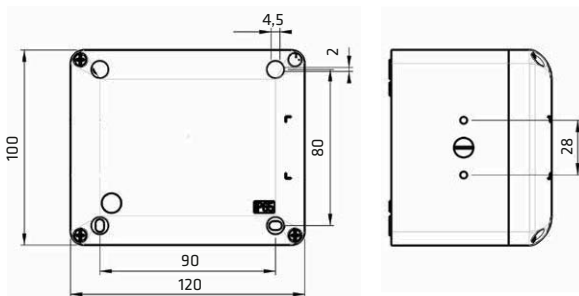
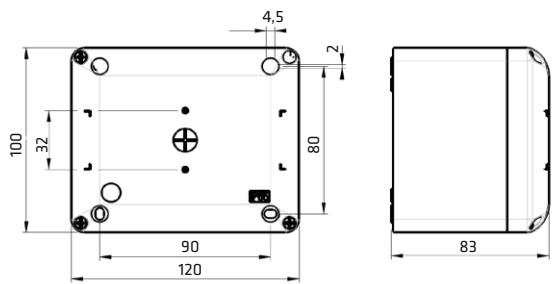
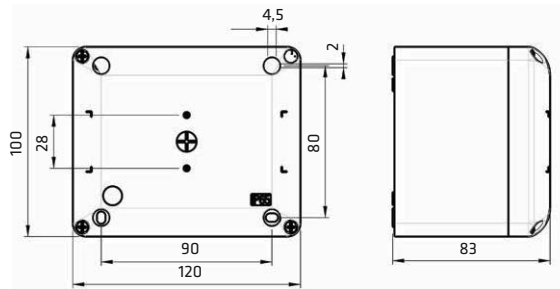
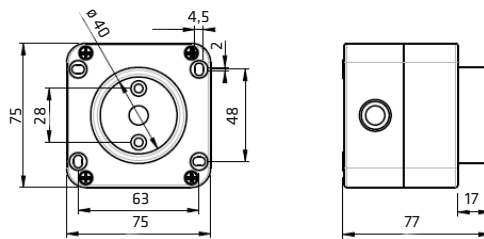
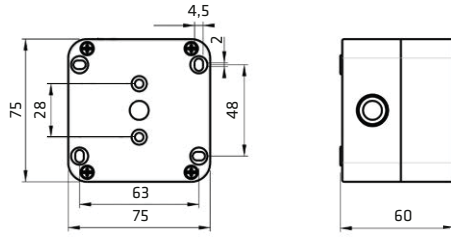
IP65

- ☉ Side knob
- ☉ **Dimensions:** 120x100x83 mm
- ☉ Black box - grey cover
- ☉ Cable entry: 8x knock-out Pg16 (2x on the bottom)

SERIES	WAFER	CODE
P012	Max 6	BL1/ONGO
P016		
P020		



**PHOENIX CAM SWITCHES | ENCLOSURES**





**IP65 THERMOPLASTIC ENCLOSURES**



**BF4/GNGO**

IP65

- ⊕ Front knob
- ⊕ **Dimensions:** 130x180x106 mm
- ⊕ Black box - grey cover
- ⊕ Cable entry: 4x knock-out M25/M32 + 2x  $\varnothing$ 22,5mm closed hole on the bottom.

SERIES	WAFER	CODE
C025	Max 3	BF4/GNGO
C032		
C040		



**BF4/HNGO**

IP65

- ⊕ Front knob
- ⊕ **Dimensions:** 130x180x106 mm
- ⊕ Black box - grey cover
- ⊕ Cable entry: 4x knock-out M25/M32 + 2x  $\varnothing$ 22,5mm closed hole on the bottom.

SERIES	WAFER	CODE
C063	Max 2	BF4/HNGO
C080		

**IP65 ALUMINUM ENCLOSURES**



**BFA/ANGO**

IP65

- ⊕ Front knob
- ⊕ **Dimensions:** 105x140x85 mm
- ⊕ Black box - grey cover
- ⊕ Cable entry: cap 2x M20 +2x M25

SERIES	WAFER	CODE
P012	Max 3	BFA/ANGO
P016		
P020		



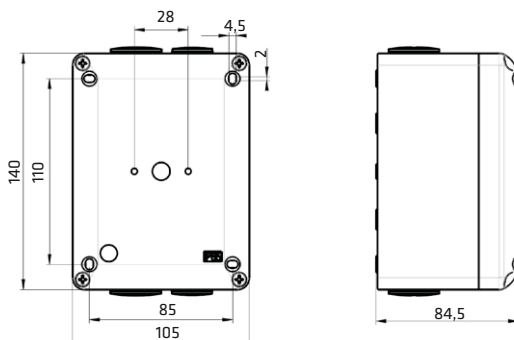
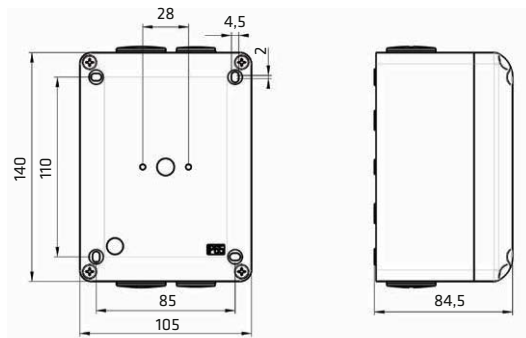
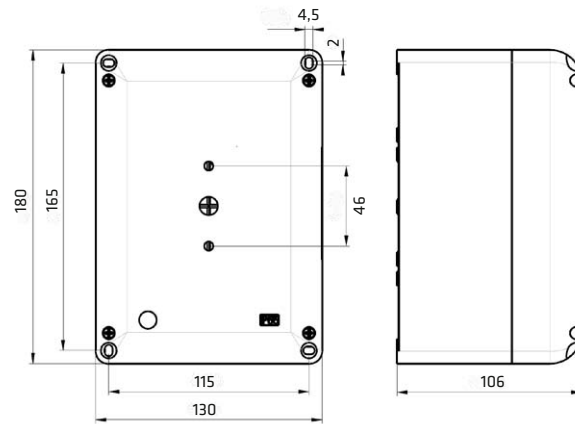
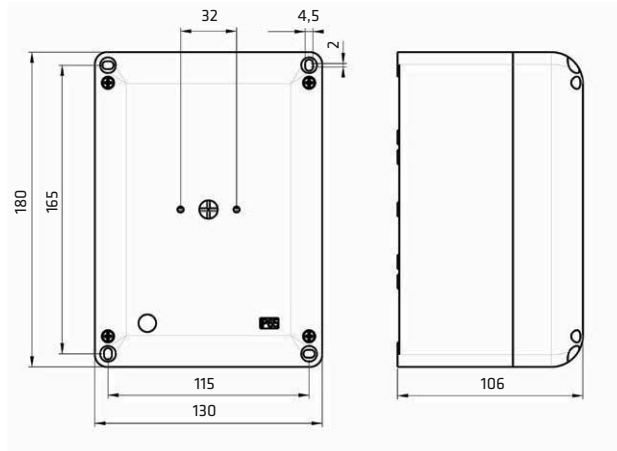
**BFA/BNGO**

IP65

- ⊕ Front knob
- ⊕ **Dimensions:** 105x140x85 mm
- ⊕ Black box - grey cover
- ⊕ Cable entry: cap 2x M20 +2x M25

SERIES	WAFER	CODE
C025	Max 2	BFA/BNGO
C032		
C040		

**PHOENIX CAM SWITCHES | ENCLOSURES**





**RANGE OVERVIEW AND GENERAL CHARACTERISTICS**



**COMPLY WITH RULES**

IEC 947-3, EN 60947-3, UL508



SERIES		PO 12-PO 16-PO 20 PX 12-PX 16-PX 20	CO 25-CO 32-CO 40 CX 25-CX 32-CX 40				
Protection class	control <b>EN 60529 (UL50) NEMA 4X</b> control with knob only terminals	IP65 (Type 1 - 4 -4X) IP40 IP20 (PO) - IP10 (PX)	IP65 (Type 1 - 4 -4X) IP40 IP20 (PO) - IP10 (PX)				
Material group	<b>EN 60947-1</b>	II	II				
Pollution grade	<b>EN 60947-1</b>	3	3				
Flammability	<b>UL94</b>	VO (Live Electrical parts)	VO (Live Electrical parts)				
Ambient temperature	°C	Operating: -40 +85 Storage: -40 +70	Operating: -40 +85 Storage: -40 +70				
Climate Withstand	<b>IEC 68 part 2-3</b> <b>IEC 68 part 2-30</b>	Hot damp Unsettled hot damp	Hot damp Unsettled hot damp				
Terminal screw identification		EN50013	EN50013				
Connections	Terminal block caliber <b>EN60947-1</b> Terminal screw Screwing torque <b>EN60947-1</b>	A3 M3,5 0,8 Nm (7,2 lb. in.) 7,5 lb. in. (0,85 Nm)	A5 M4 1,2 Nm (10,6 lb. in.) 12 lb. in. (1,4 Nm)				
Connectable section	Flexible conductors min/max <b>mm<sup>2</sup></b> <b>AWG</b> Solid conductors min/max <b>mm<sup>2</sup></b> <b>AWG</b>	1x0,75/4 - 2x0,75/2,5 10 - 18 1x0,75/4 - 2x0,75/2,5 10 - 18	2x2,5/10 14 - 6 2x2,5/10 14 - 6				
Contacts		Double breaking	Double breaking				
Opening angles		30° - 45° - 60° - 90°	30° - 45° - 60° - 90°				
Mechanical lifetime at 120 operations for hour	<b>mil./cl</b>	1 1 1	1 1 1				
Electrical lifetime at 120 operations for hour	<b>mil./cl</b>	1 0,75 0,75	1 0,75 0,75				
CERTIFICATIONS		PO 12 PX 12	PO 16 PX 16	PO 20 PX 20	CO 25 CX 25	CO 32 CX 32	CO 40 CX 40
CE	CE mark - Europe	■	■	■	■	■	■
cUL <sub>us</sub>	cUL Listed - USA and Canada	●	●	●	●	●	●
IMQ	IMQ Istituto Marchio Qualità - Italy	●	●	●	●	●	●
CCC	CCC Cina	●	●	●	●	●	●
ERC	EAC Russia	●	●	●	●	●	●

## PHOENIX CAM SWITCHES



C063-C080		G125	G200
IP65		IP65	IP65
IP40		-	-
IP00		IP00	IP00
II		IIIA	IIIA
3		3	3
VO (Live Electrical parts)		VO (Live Electrical parts)	VO (Live Electrical parts)
Operating: -40 +70		Operating: -15 +55	Operating: -15 +55
Storage: -40 +70		Storage: -25 +70	Storage: -25 +70
Hot damp		-	-
Unsettled hot damp		-	-
EN50013		-	-
A7		-	-
2xM4		Hex. screw M8 for bars and cable lugs	Hex. screw M10 for bars and cable lugs
1,2 Nm (10,6 lb. in.)		-	-
10,62 lb. in. (1,2 Nm)		-	-
2,5/35		-	-
14 - 3		-	-
2,5/35		-	-
14 - 3		-	-
Double breaking		Double breaking	Double breaking
45° - 60° - 90°		60° - 90°	60° - 90°
1	1	0,1	0,1
0,5	0,25	0,01	0,01
C063	C080	G125	G200
■	■	■	■
●	●	●	●
●	●		



**ELECTRICAL CHARACTERISTICS**

<b>EN 60947-3 CHARACTERISTICS</b>				<b>P012 - PX12</b>	<b>P016 - PX16</b>	<b>P020 - PX20</b>
Rated operating voltage U <sub>e</sub>	V			690	690	690
Rated insulation voltage U <sub>i</sub>	V			690	690	690
Rated impulse withstand voltage U <sub>imp</sub> (sectionable)	kV			4	4	4
Rated thermal current I <sub>th</sub>	A			16	20	25
Rated thermal current in enclosed I <sub>the</sub>	A			12	16	20
Frequency	Hz			50/60	50/60	50/60
<b>RATED OPERATING CURRENT I<sub>e</sub>: alternate current</b>				<b>P012 - PX12</b>	<b>P016 - PX16</b>	<b>P020 - PX20</b>
AC-21A Switching resistive loads with light overloads	690V	A		12	16	20
AC-22A Switching mixed resistive and inductive loads at light overloads	690V	A		12	16	20
AC-23A Periodic switching of motors	single phase - 1 pole	110V	A/kW	12/1,1	14/1,5	18/2
		230V	A/kW	12/2,2	14/3	18/4
	3 phases - 3 poles	230V	A/kW	10/3	14/4	16/5
		400V	A/kW	10/5,5	14/7,5	16/9
		500V	A/kW	10/7,5	14/10	16/11
AC3 Starting of cage motors (interruption hile running)	single phase - 2 poles	110V	A/kW	10/0,75	12/1,1	16/1,5
		230V	A/kW	10/2	12/2,2	16/3,5
	3 phases - 3 poles	230V	A/kW	8/2,2	10/3	12/4
		400V	A/kW	8/4	10/5	12/6
		500V	A/kW	8/5,5	10/7,5	12/8
Nominal interruption power AC-23A (cosφ 0,45)		230V	A	80	104	128
		400V	A	80	104	128
		500V	A	80	112	128
		690V	A	80	112	128
Power dissipation for each pole	W			0,3*	0,35*	0,4*
<b>RATED OPERATING CURRENT I<sub>e</sub>: direct current</b>				<b>P012 - PX12</b>	<b>P016 - PX16</b>	<b>P020 - PX20</b>
DC-21A Switching resistive loads with light overloads	50V (1 phase)	A		10	12	16
DC-22A Switching mixed resistive and inductive loads at light overloads	30V (1 phase)	A		8	10	12
<b>SHORT CIRCUIT CHARACTERISTICS</b>				<b>P012 - PX12</b>	<b>P016 - PX16</b>	<b>P020 - PX20</b>
Rated short-time short circuit withstand current I <sub>cw</sub> (1 s)	A			300	300	300
Rated short circuit making capacity I <sub>cm</sub>	A			1200	1200	1200
Conditional rated short circuit withstand current	kA			5	5	5
Fuse rating gG	690V	A		20	20	20
<b>UL 508 CHARACTERISTICS</b>				<b>P012 - PX12</b>	<b>P016 - PX16</b>	<b>P020 - PX20</b>
General Use	600V AC	A		12	16	20
Standard motor load	single phase - 2 poles	120V AC	HP (FLA)	0,5 (9,8)	1 (16)	1,5 (20)
		240V AC	HP (FLA)	1 (8)	1,5 (10)	2 (12)
	3 phases - 3 poles	200V AC	HP (FLA)	1,5 (6,9)	3 (11,04)	5 (17,5)
		240V AC	HP (FLA)	3 (9,6)	5 (15,2)	5 (15,2)
		480V AC	HP (FLA)	5 (7,6)	7,5 (11)	10 (14)
		600V AC	HP (FLA)	5 (6,1)	7,5 (9)	10 (11)

## PHOENIX CAM SWITCHES

CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
690	690	690	690	690	690	690
690	690	690	690	690	690	690
6	6	6	8	8	6	6
32	40	50	85	100	150	225
25	32	40	85	100	150	225
50/60	50/60	50/60	50/60	50/60	50/60	50/60
CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
25	32	40	63	80	125	200
25	32	40	63	80	125	200
25/1,5	30/2,2	35/3	45/4	63/5,5	-	-
25/4	30/5,5	35/6,5	45/7,5	63/11	-	-
25/7,5	30/9	35/11	50/15	58/18,5	140/45	169/55
22/11	24/15	32/18,5	40/22	54/30	78/45 (415V)	95/55 (415V)
22/11	27/18,5	32/22	40/30	54/37	65/45	79/55
20/15	22/18,5	25/22	32/30	40/37	47/45	57/55
22/1,1	25/1,5	30/2,5	36/3,7	45/4	-	-
22/3,7	25/4	30/5,5	36/6,5	45/7,5	-	-
18/5,5	23/7,5	27/9	37/11	47/15	115/37	140/45
18/7,5	23/11	27/15	35/18,5	44/22	64/37 (415V)	78/45 (415V)
18/11	23/15	27/18,5	35/22	44/30	53/37	64/45
14/11	18/15	20/18,5	25/22	32/30	39/37	47/45
200	240	280	400	464	-	-
176	216	256	320	432	-	-
176	216	256	320	432	-	-
160	176	200	256	320	-	-
-	-	-	-	-	-	-
CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
20 ▼	25 ▼	32 ▼	-	-	-	-
16 ▼	20 ▼	25 ▼	-	-	-	-
CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
500	500	500	1200	1200	-	-
2840	2840	2840	2000	2000	-	-
10	10	10	10	10	20	20
40 ■	40 ■	40 ■	100	100	125 ▲	200 ▲
CO25 - CX25	CO32 - CX32	CO40 - CX40	CO63	CO80	G125	G200
25	32	40	63	85	125	175
1,5 (20)	2 (24)	3 (34)	5 (56)	5 (56)	-	-
3 (17)	5 (28)	5 (28)	7,5 (40)	10 (50)	-	-
7,5 (25,3)	7,5 (25,3)	10 (32,2)	-	-	10 (56)	15 (84)
7,5 (22)	7,5 (22)	10 (28)	15 (42)	20 (54)	20 (54)	25 (68)
15 (21)	20 (27)	20 (27)	30 (40)	40 (52)	40 (52)	50 (65)
15 (17)	20 (22)	20 (22)	40 (41)	50 (52)	50 (52)	50 (52)

### SPECIAL SHAFTS

- Length and shape on request.



### FAST ON CONNECTIONS

- Flat fast on terminals.
- Single or double terminals.
- P012 ... P020 - C025 ... C040 Series.



### AXIAL INTERLOCK

- "Push and turn" interlock in several positions.
- C025 ... C040 Series.



### UNDIRECTIONAL ROTATION

- Unidirectional turn.
- C025 ... C040 Series.



### PE SERIES - LOWERED CAM SWITCHES

- Only for 12 ... 20A Series.
- Only for few electrical schemes.
- Length 20mm less than an equivalent PO-PX Series.



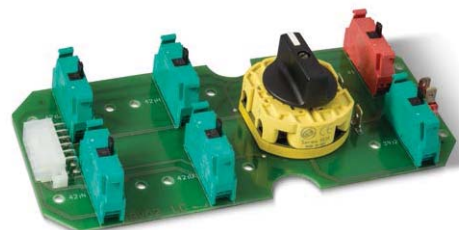
### COAXIAL COUPLING

- Power Unit + Aux Unit.



### CAM SWITCH

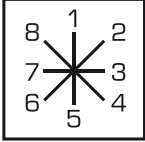
- Suitable for PCB connection.
- **PATENTED** product.



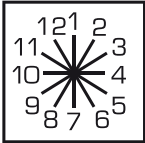




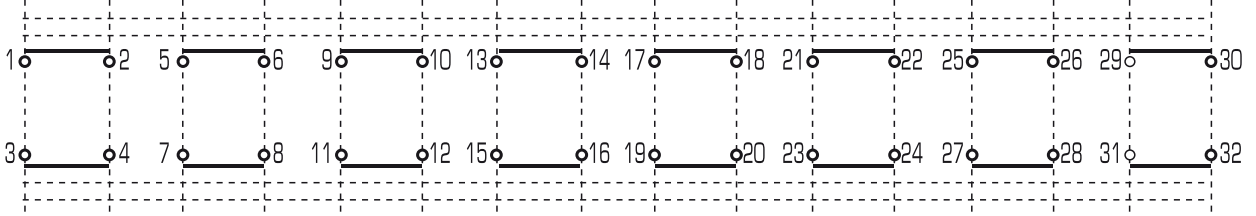
**ORDER FORM FOR SPECIAL SCHEME ON REQUEST**



45 - 90

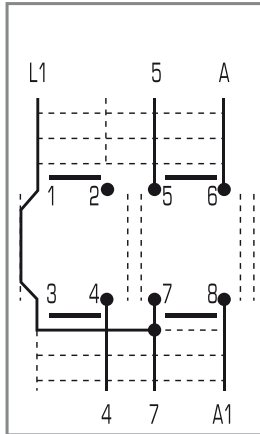


30 - 60



POS.	DESCRIPTION	POS.	DESCRIPTION
1		7	
2		8	
3		9	
4		10	
5		11	
6		12	

10	39-40								
	37-38								
9	35-36								
	33-34								
8	31-32								
	29-30								
7	27-28								
	25-26								
6	23-24								
	21-22								
5	19-20								
	17-18								
4	15-16								
	13-14								
3	11-12								
	9-10								
2	7-8								
	5-6								
1	3-4								
	1-2								
WAFER	CONT.								
		POSITION							



2	7-8			X
	5-6		X	X
1	3-4	X	X	
	1-2		X	
WAFER	CONT.	0	1	M
		POSITION		

- Open Contact
- Closed contact
- Break before make
- Contact closed: no interruption during changeover
- Make before break
- Open contact early make
- Spring return

Rated current Ie Operational rated voltage Ue			
Category	Amp/kw	Volt	
<input type="checkbox"/> AC-21A	A		V
<input type="checkbox"/> AC-22A	A		V
<input type="checkbox"/> AC-23A	1Ph	kW	V
	3Ph	kW	V
<input type="checkbox"/> AC-3	1Ph	kW	V
	3Ph	kW	V

Series \_\_\_\_\_

- Mounting:**
- Rear Panel mounting
  - Base
  - Din

**Operating:** \_\_\_\_\_

**Notes:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Company:** \_\_\_\_\_

**Contact person:** \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

E-mail \_\_\_\_\_

Quantity \_\_\_\_\_

Due date \_\_\_\_\_

Order Nr. \_\_\_\_\_





**GIOVENZANA INTERNATIONAL B.V.**

1077 XX Amsterdam, The Netherlands  
WTC Strawinskylaan 1105  
Phone: +31(0) 20.4413576 - Fax: +31(0) 20.4413456  
E-mail: [giovenzana@giovenzana.com](mailto:giovenzana@giovenzana.com)

**G.T.R. LLC**

127051, Moscow, Russian Federation  
Likhov lane, h.3, b.2, office 101  
Phone: +7.495.6991296 / +7.499.9228548  
E-mail: [gtr@giovenzana.com](mailto:gtr@giovenzana.com)

**GIOVENZANA CONTROLS INDIA Pvt. Ltd.**

Near Mindspace, Malad West - 400064 Mumbai  
A-203, Knox Plaza, Chincholi, Off Link Road  
Phone: +91.22.42640071  
E-mail: [ggindia@giovenzana.com](mailto:ggindia@giovenzana.com)

**GIOVENZANA do Brasil**

São Paulo - Brasile  
Rua Enxovia, 472 cj1904  
Cep. 04711-030; Vila São Francisco  
Phone: +55 11 3360-6840 / 11 3530-5316  
E-mail: [logistic.brasil@giovenzana.com](mailto:logistic.brasil@giovenzana.com)

**Branch**

DUBAI U.A.E. P.O. Box 262146 - J.A.F.Z.A. 15, Jebel Ali Free Zone  
Phone: +971.4.8870788 - Fax: +971.4.8870787  
E-mail: [uae@giovenzana.com](mailto:uae@giovenzana.com)

