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PHOENIX CAM SWITCHES
PO · PX · CO · CX · G Series



QUALITY AS A LIFE STYLE

www.giovenzana.com



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PHOENIX CAM SWITCHES

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AUTOMATION TECHNOLOGIES

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.

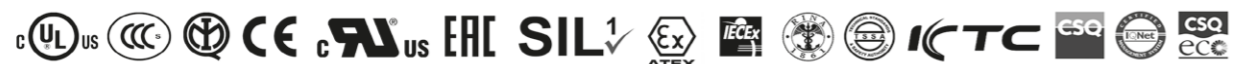
STANDARDS

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.

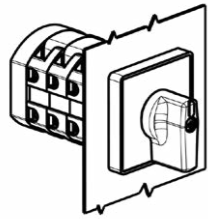


PHOENIX CAM SWITCHES

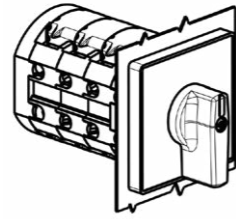
PHOENIX CAM SWITCHES

R

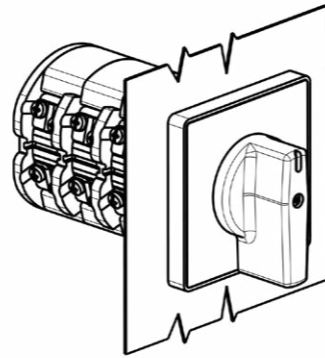
REAR PANEL MOUNTING



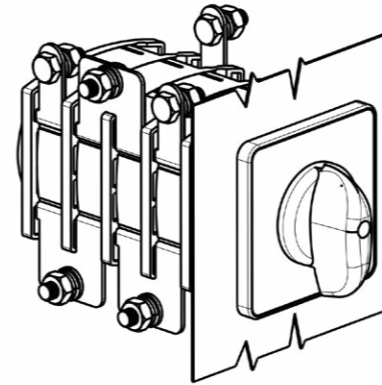
12A - 16A - 20A



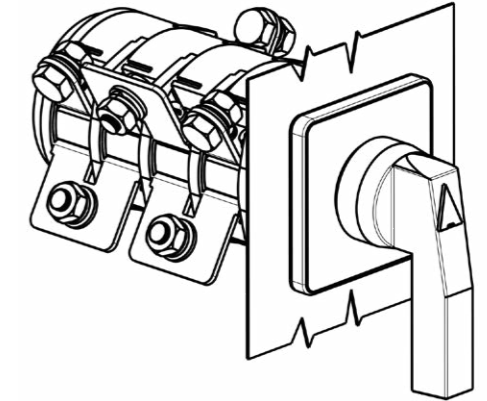
25A - 32A - 40A



63A - 80A



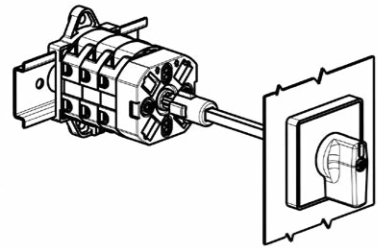
125A



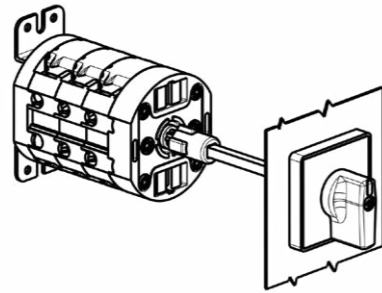
200A

B

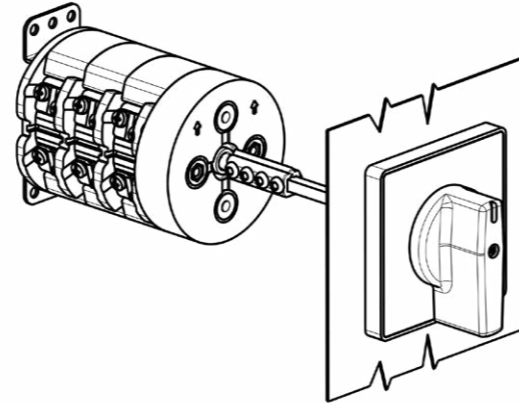
BASE MOUNTING



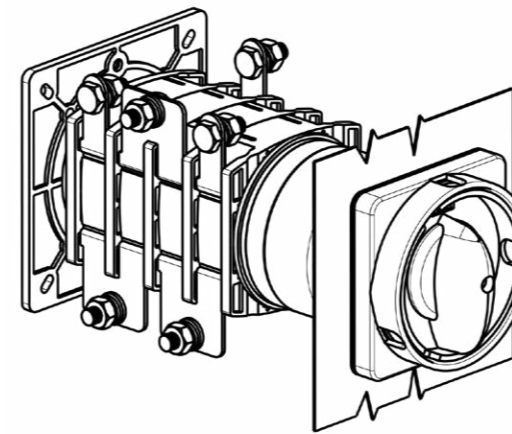
12A - 16A - 20A



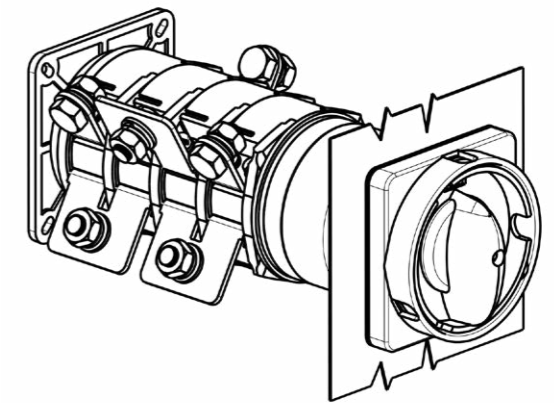
25A - 32A - 40A



63A - 80A



125A

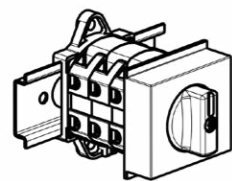


200A

D

DIN MOUNTING 46 mm

Only switches DIN RAIL mounting 46 mm standard boxes



12A - 16A - 20A

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



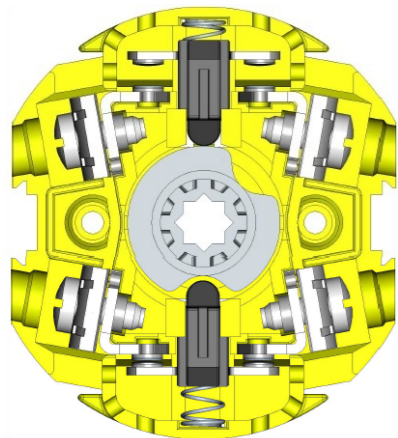
Din Mounting 46 mm
Only switches DIN RAIL mounting 46 mm standard boxes

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

| | | |
|----------------------------------|----------------------------------|--|
| ON-OFF SWITCHES 0-1 | CHANGEOVER SWITCHES 1-0-2 | STEP SWITCHES |
| STAR-DELTA MOTOR SWITCHES | REVERSING MOTOR SWITCHES | SPECIAL CUSTOMIZED SCHEME ON DEMAND |
| AMMETER SWITCHES | VOLTMETER 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 ø and greater. The object probe, sphere of 50 mm ø 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 ø and greater (ex. finger). The object probe, sphere of 12,5 mm ø 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 ø and greater. The object probe, sphere of 2,5 mm ø 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 ø and greater. The object probe, sphere of 1,0 mm ø 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



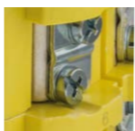


| RANGE AC21A | 12A - 16A - 20A |

| REAR PANEL MOUNTING | BASE MOUNTING | DIN MOUNTING | TERMINAL PROTECTION | |
|---|---|--|---|-----------|
| | | | IP | CODE |
|  |  |  |  | PO |
|  |  |  |  | PX |
| | | | IP10 | |






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

| REAR PANEL MOUNTING | BASE MOUNTING | TERMINAL PROTECTION | |
|---|---|---|-----------|
| | | IP | CODE |
|  |  |  | CO |
|  |  |  | CX |
| | | IP10 | |






| RANGE AC21A | 63A - 80A |

| REAR PANEL MOUNTING | BASE MOUNTING | TERMINAL PROTECTION | |
|---|---|---|-----------|
| | | IP | CODE |
|  |  |  | CO |
|  |  | IP00 | |

| RANGE AC21A | 125A |

| REAR PANEL MOUNTING | BASE MOUNTING | TERMINAL PROTECTION | |
|--|--|---|----------|
| | | IP | CODE |
|  |  |  | G |
|  |  | IP00 | |

| RANGE AC21A | 200A |

| REAR PANEL MOUNTING | BASE MOUNTING | TERMINAL PROTECTION | |
|---|---|---|----------|
| | | IP | CODE |
|  |  |  | G |
|  |  | IP00 | |

PHOENIX CAM SWITCHES

PHOENIX CAM SWITCHES

BODIES CODIFICATION MAP

| BODY SWITCH TYPE | | | SCHEME TYPE | | | MOUNTING TYPE | |
|--------------------|-------|----------------|-------------|--|--------------|---------------|---|
| CODE | AC21A | TERMINAL PROT. | CODE | FUNCTION | SWITCH WAFER | CODE | MOUNTING |
| PO12 0008 R | | | | | | | |
| P012 | 12 | IP20 | | ON-OFF SWITCHES | | | |
| PX12 | 12 | IP10 | 0001 | On-off switch 1 pole | 1 | R | REAR PANEL |
| P016 | 16 | IP20 | 0002 | On-off switch 2 poles | 1 | | |
| PX16 | 16 | IP10 | 0003 | On-off switch 3 poles | 2 | | |
| P020 | 20 | IP20 | 0004 | On-off switch 4 poles | 2 | | |
| PX20 | 20 | IP10 | 0005 | On-off switch 5 poles | 3 | | |
| C025 | 25 | IP20 | 0006 | On-off switch 6 poles | 3 | | |
| CX25 | 25 | IP10 | 0007 | On-off switch 3 poles with spring return to zero | 2 | B | BASE |
| C032 | 32 | IP20 | | CHANGEOVER SWITCHES | | | |
| CX32 | 32 | IP10 | 0008 | Changeover switch 1 pole | 1 | | |
| C040 | 40 | IP20 | 0009 | Changeover switch 2 poles | 2 | | |
| CX40 | 40 | IP10 | 0010 | Changeover switch 3 poles | 3 | | |
| C063 | 63 | IP00 | 0011 | Changeover switch 4 poles | 4 | D | DIN Only switches DIN RAIL mounting 46 mm standard boxes. |
| C080 | 80 | IP00 | | MOTOR SWITCHES | | | |
| G125 | 125 | IP00 | 0012 | Reversing switch 3 poles | 3 | | |
| G200 | 200 | IP00 | 0013 | Reversing switch 3 poles with spring return to zero | 3 | | |
| | | | 0014 | Dahlander pole changing two speed switch | 4 | | |
| | | | 0015 | Star-delta starter switch | 4 | | |
| | | | 0016 | Reversing switch single phase with centrifugal cut-out | 3 | | |
| | | | 0017 | Starter switch single phase with auxiliary phase | 2 | | |
| | | | 0018 | Reversing-starter switch single phase with auxiliary phase | 3 | | |
| | | | 0031 | Reversing-dahlander pole changing two speed switch | 6 | | |
| | | | | AMMETER AND VOLTMETER SWITCHES | | | |
| | | | 0019 | Ammeter selector switch 1 pole for 3 current transformers | 3 | | |
| | | | 0020 | Voltmeter selector switch phase-neutral | 2 | | |
| | | | 0021 | Voltmeter selector switch phase-phase | 2 | | |
| | | | 0022 | Voltmeter selector switch phase-phase for two circuits | 4 | | |
| | | | 0023 | Voltmeter selector switch phase-phase and phase-neutral | 3 | | |
| | | | 0024 | Voltmeter selector switch phase-phase and 1 phase-neutral | 3 | | |
| | | | | STEP SWITCHES | | | |
| | | | 0025 | Step switch 1-2 positions without zero 1 pole | 1 | | |
| | | | 0026 | Step switch 1-2 positions without zero 2 poles | 2 | | |
| | | | 0027 | Step switch 1-2 positions without zero 3 poles | 3 | | |
| | | | 0028 | Step switch 0-1-2 positions with zero 1 pole | 1 | | |
| | | | 0029 | Step switch 0-1-2-3 positions with zero 1 pole | 2 | | |
| | | | 0030 | Step switch 0-1-2-3-4 positions with zero 1 pole | 2 | | |
| | | | 0032 | Step switch 0-1-2 positions with zero 2 poles | 2 | | |
| | | | 0033 | Step switch 0-1-2 positions with zero 3 poles | 3 | | |
| | | | 0034 | Step switch 0-1-2-3 positions with zero 2 poles | 3 | | |
| | | | 0035 | Step switch 0-1-2-3 positions with zero 3 poles | 5 | | |
| | | | 0036 | Step switch 0-1-2-3-4 positions with zero 2 poles | 4 | | |
| | | | 0037 | Step switch 0-1-2-3-4 positions with zero 3 poles | 6 | | |
| | | | 0038 | Step switch 1-2-3 positions without zero 1 pole | 2 | | |
| | | | 0039 | Step switch 1-2-3 positions without zero 2 poles | 3 | | |
| | | | 0040 | Step switch 1-2-3 positions without zero 3 poles | 5 | | |
| | | | 0041 | Step switch 1-2-3-4 positions without zero 1 pole | 2 | | |
| | | | 0042 | Step switch 1-2-3-4 positions without zero 2 poles | 4 | | |
| | | | 0043 | Step switch 1-2-3-4 positions without zero 3 poles | 6 | | |

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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 2 | 1 3 2 4 | 1 3 5 2 4 6 | 1 3 5 7 2 4 6 8 | 1 3 5 7 9 2 4 6 8 10 | 1 3 5 7 9 11 2 4 6 8 10 12 | 1 3 5 2 4 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"><tr><td>1</td><td></td><td></td><td>X</td></tr><tr><td>WAF.</td><td>CONT.</td><td>0</td><td>1</td></tr></table> | 1 | | | X | WAF. | CONT. | 0 | 1 | <table border="1"><tr><td>1</td><td>3-4</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 | WAF. | 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>WAF.</td><td>CONT.</td><td>0</td><td>1</td></tr></table> | 2 | 5-6 | | X | 1 | 3-4 | | X | WAF. | CONT. | 0 | 1 | <table border="1"><tr><td>2</td><td>7-8</td><td></td><td>X</td></tr><tr><td>1</td><td>3-4</td><td></td><td>X</td></tr><tr><td>WAF.</td><td>CONT.</td><td>0</td><td>1</td></tr></table> | 2 | 7-8 | | X | 1 | 3-4 | | X | WAF. | CONT. | 0 | 1 | <table border="1"><tr><td>3</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>1</td><td>3-4</td><td></td><td>X</td></tr><tr><td>WAF.</td><td>CONT.</td><td>0</td><td>1</td></tr></table> | 3 | 9-10 | | X | 2 | 7-8 | | X | 1 | 3-4 | | X | WAF. | CONT. | 0 | 1 | <table border="1"><tr><td>3</td><td>11-12</td><td></td><td>X</td></tr><tr><td>2</td><td>7-8</td><td></td><td>X</td></tr><tr><td>1</td><td>3-4</td><td></td><td>X</td></tr><tr><td>WAF.</td><td>CONT.</td><td>0</td><td>1</td></tr></table> | 3 | 11-12 | | X | 2 | 7-8 | | X | 1 | 3-4 | | X | WAF. | 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>WAF.</td><td>CONT.</td><td>0</td><td>1</td></tr></table> | 2 | 5-6 | | X | 1 | 3-4 | | X | WAF. | CONT. | 0 | 1 |
| 1 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WAF. | CONT. | 0 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WAF. | CONT. | 0 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 5-6 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 3 | 9-10 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 3 | 11-12 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| CHANGEOVER SWITCHES 1-0-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 4 | 15-16 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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ELECTRICAL SCHEMES

ELECTRICAL SCHEMES

MOTOR SWITCHES

COMANDO MOTORI

| 0012 | 0013 | 0014 | 0015 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| REVERSING SWITCH 3 POLES | REVERSING SWITCH 3 POLES WITH SPRING RETURN TO ZERO | DAHLANDER POLE CHANGING TWO SPEED SWITCH | STAR-DELTA STARTER SWITCH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <table border="1"> <tr><td>3</td><td>9-10</td><td>X</td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td>X</td><td></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>X</td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>0 2</td></tr> </table> | 3 | 9-10 | X | X | 2 | 7-8 | X | | | 5-6 | | X | 1 | 3-4 | | X | | 1-2 | X | | WAF | CONT. | 1 | 0 2 | <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>X</td><td></td></tr> <tr><td>2</td><td>7-8</td><td>X</td><td></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>X</td><td></td></tr> <tr><td>WAF</td><td>CONT.</td><td>1</td><td>0 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 | 0 2 | <table border="1"> <tr><td>4</td><td>15-16</td><td></td><td>X</td></tr> <tr><td></td><td>13-14</td><td></td><td>X</td></tr> <tr><td>3</td><td>11-12</td><td>X</td><td></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></td><td>X</td></tr> <tr><td>1</td><td>3-4</td><td>X</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>1</td><td>0 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 | WAF | CONT. | 1 | 0 2 | <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></td><td>X</td><td>X</td></tr> <tr><td>3</td><td>11-12</td><td></td><td>X</td><td>X</td></tr> <tr><td></td><td>9-10</td><td></td><td>X</td><td>X</td></tr> <tr><td>2</td><td>7-8</td><td></td><td>X</td><td></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>X</td><td>X</td></tr> <tr><td>WAF</td><td>CONT.</td><td>0</td><td>Y</td><td>Δ</td></tr> </table> | 4 | 15-16 | | | X | | 13-14 | | X | X | 3 | 11-12 | | X | X | | 9-10 | | X | X | 2 | 7-8 | | X | | | 5-6 | | | X | 1 | 3-4 | | | X | | 1-2 | | X | X | WAF | CONT. | 0 | Y | Δ |
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| 3 | 11-12 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2 | 7-8 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 15-16 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 13-14 | | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 11-12 | | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 9-10 | | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5-6 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1-2 | | X | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WAF | CONT. | 0 | Y | Δ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 0016 | 0031 | 0017 | 0018 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45° | 45° | 45° | 45° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <table border="1"> <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 2</td><td></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 | | <table border="1"> <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>X</td><td>X</td><td></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 1 0</td><td>1 0 2</td><td></td><td></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 | 1 0 2 | | | <table border="1"> <tr><td>2</td><td>7-8</td><td>X</td><td>X</td></tr> <tr><td></td><td>5-6</td><td>X</td><td>X</td></tr> <tr><td>1</td><td>1-2</td><td></td><td>X</td></tr> <tr><td>WAF</td><td>CONT.</td><td>0</td><td>1 AVV.</td></tr> </table> | 2 | 7-8 | X | X | | 5-6 | X | X | 1 | 1-2 | | X | WAF | CONT. | 0 | 1 AVV. | <table border="1"> <tr><td>3</td><td>11-12</td><td>X</td><td>X</td><td>X</td><td>X</td></tr> <tr><td></td><td>9-10</td><td>X</td><td>X</td><td>X</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>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></tr> <tr><td></td><td>1-2</td><td></td><td></td><td>X</td><td>X</td></tr> <tr><td>WAF</td><td>CONT.</td><td>AVV.</td><td>1</td><td>0 2</td><td>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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 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. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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ELECTRICAL SCHEMES

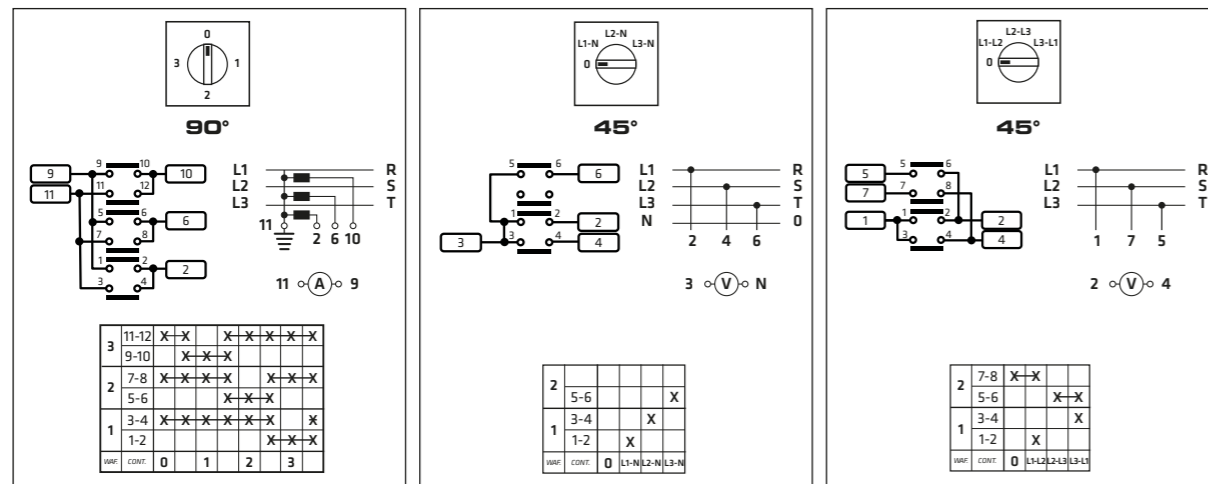
ELECTRICAL SCHEMES

AMMETER AND VOLTMETER SWITCHES

STEP SWITCHES

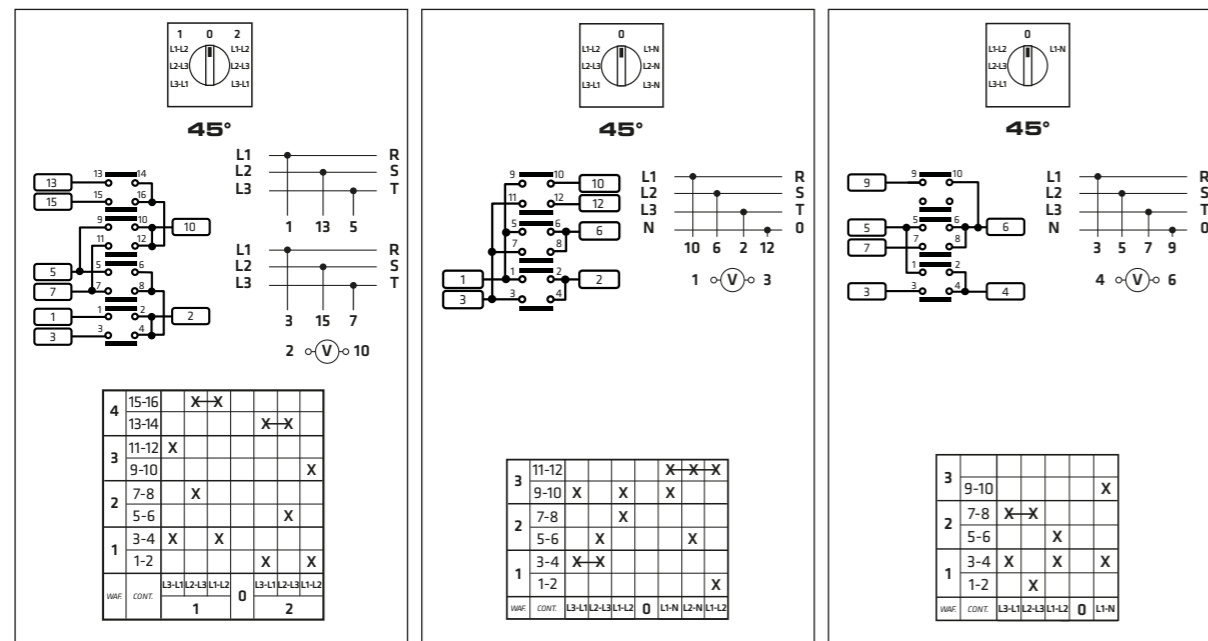
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| | | |
|---|---|---------------------------------------|
| AMMETER SELECTOR SWITCH 1 POLE FOR 3 CURRENT TRANSFORMERS | VOLTMETER SELECTOR SWITCH PHASE-NEUTRAL | VOLTMETER SELECTOR SWITCH PHASE-PHASE |
|---|---|---------------------------------------|



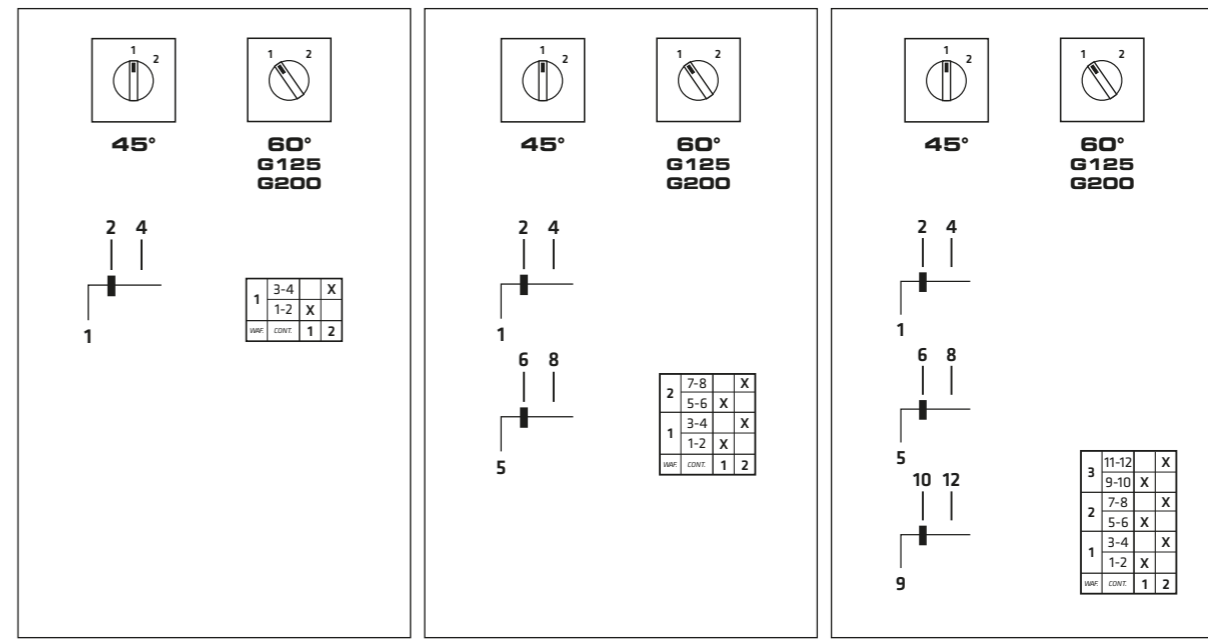
| 0022 | 0023 | 0024 |
|------|------|------|
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| | | |
|--|---|---|
| VOLTMETER SELECTOR SWITCH PHASE-PHASE FOR TWO CIRCUITS | VOLTMETER SELECTOR SWITCH PHASE-PHASE AND PHASE-NEUTRAL | VOLTMETER SELECTOR SWITCH PHASE-PHASE AND 1 PHASE-NEUTRAL |
|--|---|---|



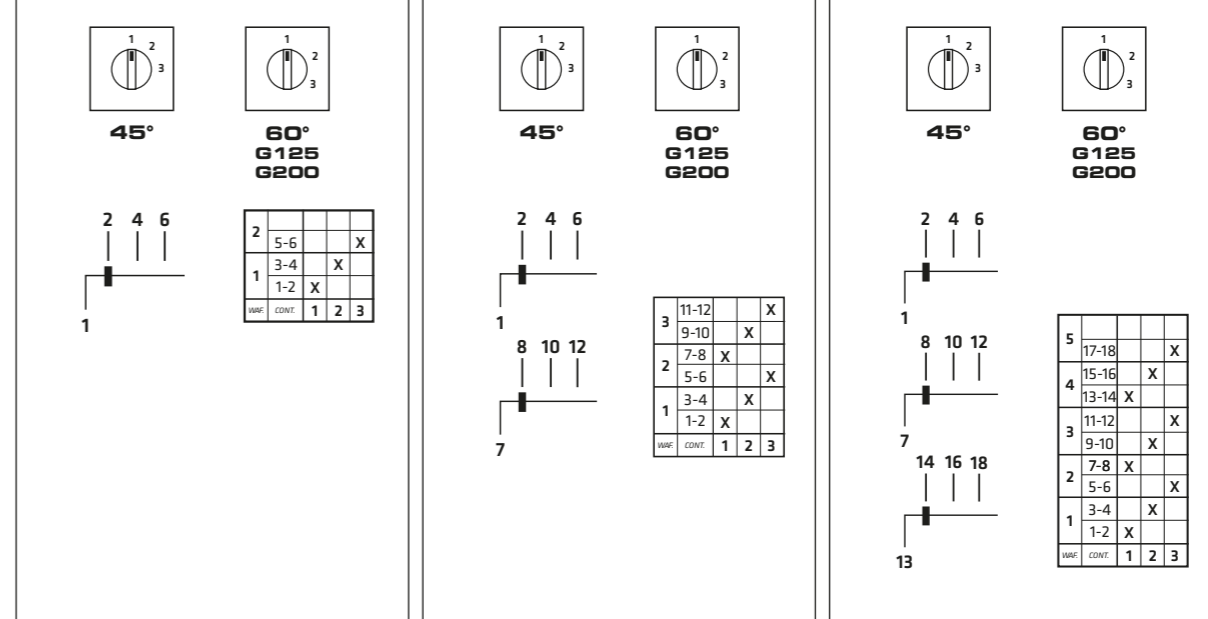
| 0025 | 0026 | 0027 |
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|---|--|--|
| STEP SWITCH 1-2 POSITIONS WITHOUT ZERO 1 POLE | STEP SWITCH 1-2 POSITIONS WITHOUT ZERO 2 POLES | STEP SWITCH 1-2 POSITIONS WITHOUT ZERO 3 POLES |
|---|--|--|



| 0038 | 0039 | 0040 |
|------|------|------|
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| | | |
|---|--|--|
| 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 |
|---|--|--|



ELECTRICAL SCHEMES

ELECTRICAL SCHEMES

STEP SWITCHES

STEP SWITCHES

| 0041 | 0042 | 0043 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|---|---|---|---|-----|--|--|--|---|-----|---|--|--|---|-----|---|--|--|------|-------|---|---|---|---|--|---|-------|--|--|---|---|-------|--|--|--|---|-------|---|--|--|---|------|--|--|--|---|-----|--|--|---|---|-----|--|--|--|---|-----|---|--|--|---|-----|---|--|--|------|-------|---|---|---|---|--|---|-------|--|--|---|---|-------|--|--|--|---|-------|---|--|--|---|-------|--|--|--|---|-------|--|--|---|---|-------|--|--|--|---|-------|---|--|--|---|------|--|--|--|---|-----|--|--|---|---|-----|--|--|--|---|-----|---|--|--|---|-----|---|--|--|------|-------|---|---|---|---|
| STEP SWITCH 1-2-3-4 POSITIONS WITHOUT ZERO 1 POLE | STEP SWITCH 1-2-3-4 POSITIONS WITHOUT ZERO 2 POLES | STEP SWITCH 1-2-3-4 POSITIONS WITHOUT ZERO 3 POLES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45° 90° G125 G125 G200 G200 | 45° 90° G125 G125 G200 G200 | 45° 90° G125 G125 G200 G200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td>3</td><td>5-6</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>3-4</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> </table> | 2 | 7-8 | | | X | 3 | 5-6 | | | | 4 | 3-4 | X | | | 1 | 1-2 | X | | | VARF | CONF. | 1 | 2 | 3 | 4 | <table border="1"> <tr><td>4</td><td>15-16</td><td></td><td></td><td>X</td></tr> <tr><td>3</td><td>13-14</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>11-12</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>9-10</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td>3</td><td>5-6</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>3-4</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> </table> | 4 | 15-16 | | | X | 3 | 13-14 | | | | 2 | 11-12 | X | | | 1 | 9-10 | | | | 2 | 7-8 | | | X | 3 | 5-6 | | | | 4 | 3-4 | X | | | 1 | 1-2 | X | | | VARF | CONF. | 1 | 2 | 3 | 4 | <table border="1"> <tr><td>6</td><td>23-24</td><td></td><td></td><td>X</td></tr> <tr><td>5</td><td>21-22</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>19-20</td><td>X</td><td></td><td></td></tr> <tr><td>3</td><td>17-18</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>15-16</td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>13-14</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>11-12</td><td>X</td><td></td><td></td></tr> <tr><td>3</td><td>9-10</td><td></td><td></td><td></td></tr> <tr><td>4</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td>5</td><td>5-6</td><td></td><td></td><td></td></tr> <tr><td>6</td><td>3-4</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> </table> | 6 | 23-24 | | | X | 5 | 21-22 | | | | 4 | 19-20 | X | | | 3 | 17-18 | | | | 2 | 15-16 | | | X | 1 | 13-14 | | | | 2 | 11-12 | X | | | 3 | 9-10 | | | | 4 | 7-8 | | | X | 5 | 5-6 | | | | 6 | 3-4 | X | | | 1 | 1-2 | X | | | VARF | CONF. | 1 | 2 | 3 | 4 |
| 2 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 5-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 3-4 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 15-16 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 13-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 11-12 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 9-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 5-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 3-4 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 23-24 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 21-22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 19-20 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 17-18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 15-16 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 13-14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 11-12 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 9-10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 5-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 3-4 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 0029 | 0034 | 0035 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| STEP SWITCH 0-1-2-3 POSITIONS WITH ZERO 1 POLE | STEP SWITCH 0-1-2-3 POSITIONS WITH ZERO 2 POLES | STEP SWITCH 0-1-2-3 POSITIONS WITH ZERO 3 POLES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45° 90° G125 G125 G200 G200 | 45° 90° G125 G125 G200 G200 | 45° 90° G125 G125 G200 G200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td>3</td><td>5-6</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>1-2</td><td></td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td><td>3</td></tr> </table> | 2 | 7-8 | | | X | 3 | 5-6 | X | | | 1 | 1-2 | | | | VARF | CONF. | 0 | 1 | 2 | 3 | <table border="1"> <tr><td>3</td><td>11-12</td><td></td><td></td><td>X</td></tr> <tr><td>2</td><td>9-10</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>7-8</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>5-6</td><td>X</td><td></td><td></td></tr> <tr><td>3</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td><td>3</td></tr> </table> | 3 | 11-12 | | | X | 2 | 9-10 | X | | | 1 | 7-8 | | | | 2 | 5-6 | X | | | 3 | 3-4 | | | X | 1 | 1-2 | X | | | VARF | CONF. | 0 | 1 | 2 | 3 | <table border="1"> <tr><td>5</td><td>19-20</td><td></td><td></td><td>X</td></tr> <tr><td>4</td><td>17-18</td><td></td><td></td><td></td></tr> <tr><td>3</td><td>15-16</td><td>X</td><td></td><td></td></tr> <tr><td>2</td><td>13-14</td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>11-12</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>9-10</td><td>X</td><td></td><td></td></tr> <tr><td>3</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td>4</td><td>5-6</td><td></td><td></td><td></td></tr> <tr><td>5</td><td>3-4</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td><td>3</td></tr> </table> | 5 | 19-20 | | | X | 4 | 17-18 | | | | 3 | 15-16 | X | | | 2 | 13-14 | | | X | 1 | 11-12 | | | | 2 | 9-10 | X | | | 3 | 7-8 | | | X | 4 | 5-6 | | | | 5 | 3-4 | X | | | 1 | 1-2 | X | | | VARF | CONF. | 0 | 1 | 2 | 3 |
| 2 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 11-12 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 9-10 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 7-8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 3-4 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 19-20 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 17-18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 15-16 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 13-14 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 11-12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 9-10 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 5-6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 3-4 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 0028 | 0032 | 0033 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| STEP SWITCH 0-1-2 POSITIONS WITH ZERO 1 POLE | STEP SWITCH 0-1-2 POSITIONS WITH ZERO 2 POLES | STEP SWITCH 0-1-2 POSITIONS WITH ZERO 3 POLES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45° 60° G125 G125 G200 G200 | 45° 60° G125 G125 G200 G200 | 45° 60° G125 G125 G200 G200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><td>2</td><td>1-2</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td></tr> </table> | 1 | 3-4 | | X | 2 | 1-2 | | | VARF | CONF. | 0 | 1 | 2 | <table border="1"> <tr><td>2</td><td>7-8</td><td></td><td>X</td></tr> <tr><td>3</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>2</td><td>1-2</td><td>X</td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td></tr> </table> | 2 | 7-8 | | X | 3 | 5-6 | X | | 1 | 3-4 | | X | 2 | 1-2 | X | | VARF | CONF. | 0 | 1 | 2 | <table border="1"> <tr><td>3</td><td>11-12</td><td></td><td>X</td></tr> <tr><td>2</td><td>9-10</td><td>X</td><td></td></tr> <tr><td>1</td><td>7-8</td><td></td><td>X</td></tr> <tr><td>2</td><td>5-6</td><td>X</td><td></td></tr> <tr><td>3</td><td>3-4</td><td></td><td>X</td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td></tr> </table> | 3 | 11-12 | | X | 2 | 9-10 | X | | 1 | 7-8 | | X | 2 | 5-6 | X | | 3 | 3-4 | | X | 1 | 1-2 | X | | VARF | CONF. | 0 | 1 | 2 |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 1-2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 11-12 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 9-10 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| 0030 | 0036 | 0037 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| STEP SWITCH 0-1-2-3-4 POSITIONS WITH ZERO 1 POLE | STEP SWITCH 0-1-2-3-4 POSITIONS WITH ZERO 2 POLES | STEP SWITCH 0-1-2-3-4 POSITIONS WITH ZERO 3 POLES | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 45° 60° G125 G125 G200 G200 | 45° 60° G125 G125 G200 G200 | 45° 60° G125 G125 G200 G200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>2</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td>3</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>2</td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> </table> | 2 | 7-8 | | | X | 3 | 5-6 | X | | | 1 | 3-4 | | | X | 2 | 1-2 | X | | | VARF | CONF. | 0 | 1 | 2 | 3 | 4 | <table border="1"> <tr><td>4</td><td>15-16</td><td></td><td></td><td>X</td></tr> <tr><td>3</td><td>13-14</td><td>X</td><td></td><td></td></tr> <tr><td>2</td><td>11-12</td><td></td><td></td><td>X</td></tr> <tr><td>1</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>3</td><td>5-6</td><td>X</td><td></td><td></td></tr> <tr><td>4</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> </table> | 4 | 15-16 | | | X | 3 | 13-14 | X | | | 2 | 11-12 | | | X | 1 | 9-10 | X | | | 2 | 7-8 | | | X | 3 | 5-6 | X | | | 4 | 3-4 | | | X | 1 | 1-2 | X | | | VARF | CONF. | 0 | 1 | 2 | 3 | 4 | <table border="1"> <tr><td>6</td><td>23-24</td><td></td><td></td><td>X</td></tr> <tr><td>5</td><td>21-22</td><td>X</td><td></td><td></td></tr> <tr><td>4</td><td>19-20</td><td></td><td></td><td>X</td></tr> <tr><td>3</td><td>17-18</td><td></td><td></td><td></td></tr> <tr><td>2</td><td>15-16</td><td>X</td><td></td><td></td></tr> <tr><td>1</td><td>13-14</td><td></td><td></td><td>X</td></tr> <tr><td>2</td><td>11-12</td><td></td><td></td><td>X</td></tr> <tr><td>3</td><td>9-10</td><td>X</td><td></td><td></td></tr> <tr><td>4</td><td>7-8</td><td></td><td></td><td>X</td></tr> <tr><td>5</td><td>5-6</td><td>X</td><td></td><td></td></tr> <tr><td>6</td><td>3-4</td><td></td><td></td><td>X</td></tr> <tr><td>1</td><td>1-2</td><td>X</td><td></td><td></td></tr> <tr><td>VARF</td><td>CONF.</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr> </table> | 6 | 23-24 | | | X | 5 | 21-22 | X | | | 4 | 19-20 | | | X | 3 | 17-18 | | | | 2 | 15-16 | X | | | 1 | 13-14 | | | X | 2 | 11-12 | | | X | 3 | 9-10 | X | | | 4 | 7-8 | | | X | 5 | 5-6 | X | | | 6 | 3-4 | | | X | 1 | 1-2 | X | | | VARF | CONF. | 0 | 1 | 2 | 3 | 4 |
| 2 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 15-16 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 13-14 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 11-12 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 9-10 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 3-4 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 23-24 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 21-22 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 19-20 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 17-18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 15-16 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 13-14 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 11-12 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 9-10 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 3-4 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONF. | 0 | 1 | 2 | 3 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |












ACTUATORS RANGE OVERVIEW

| AC21A | <ul style="list-style-type: none"> Grey plate Black knob | <ul style="list-style-type: none"> Yellow plate Red knob | <ul style="list-style-type: none"> Grey plate Black knob Padlockable (Max 1) Padlockable in 0 | <ul style="list-style-type: none"> Yellow plate Red knob Padlockable (Max 1) Padlockable in 0 | <ul style="list-style-type: none"> Grey plate Black knob Padlockable (Max 3) Padlockable in 0 | <ul style="list-style-type: none"> Yellow plate Red knob Padlockable (Max 3) Padlockable in 0 | <ul style="list-style-type: none"> Grey plate Key operated | <ul style="list-style-type: none"> Without plate Knob operated | <ul style="list-style-type: none"> Without plate Key operated | <ul style="list-style-type: none"> DIN 45x52,3 46 mm standard boxes | | | | | |
|----------------------------|--|--|---|---|---|---|--|--|---|---|--|--|--|--|--|
| 12A 16A 20A | | | | | | | | | | | | | | | |
| 25A 32A 40A | | | | | | | | | | | | | | | |
| 63A 80A | | | | | | | | | | | | | | | |
| 125A | | | | | | | | | | | | | | | |
| 200A | | | | | | | | | | | | | | | |







ACTUATORS CODIFICATION MAP

001 / 0001-1





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

| | | | | | |
|--|----------|----|---|----------|------|
|  | 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 | 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...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

| 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...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

| | | | | | |
|---|----------|----|---|----------|------|
|  | 12-16-20 | 48 |  R ø22 | 057X/... | IP65 |
|---|----------|----|---|----------|------|

Grey plate Key operated
Key removable at "0" position

| | | | | | |
|---|----------|---|---|------|------|
|  | 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

SCHEME/INSCRIPTION TYPE - version or key extraction position

| ON-OFF SWITCHES 0-1 | CHANGEOVER SWITCHES 1-0-2 MOTOR SWITCHES | STEP SWITCHES | AMMETER SWITCHES | VOLTMETER SWITCHES |
|---|---|--|--|--|
|  90°  90°  45° |  45°  45°  45°  60° G125 G200 |  45°  45°  60° G125 G200  60° G125 G200 |  90° 001/0019 027/0019 056X/0019 |  45° 001/0020 027/0020 056X/0020  45° 001/0021 027/0021 056X/0021  45° 001/0022 056X/0022  45° 001/0023 027/0023 056X/0023  45° 001/0024 027/0024 056X/0024 |
| 001/0001 002/0001 003/0001 004/0001 005/0001 006/0001 007/0001 008/0001 009/0001 010/0001 011/0001 012/0001 020/0001 021/0001 030/0001 056X/0001 057X/0001 058X/0001 059X/0001 060X/0001 061X/0001 062X/0001 063/0001 064/0001 069/0001 070/0001 077/0001 095/0001 201/0001 209/0001 210/0001 211/0001 212/0001 220/0001 441/0001 449/0001 450/0001 451/0001 452/0001 461/0001 | 001/0001-1 002/0001-1 003/0001-1 004/0001-1 007/0007 008/0007 010/0007 009/0001-1 010/0001-1 011/0001-A 012/0001-2 027/0001 056X/0001-1 057X/0001-1 058X/0001-1 059X/0001-1 060X/0001-1 061X/0001-1 062X/0001-1 063/0001-1 064/0001-1 201/0001-1 209/0001-1 210/0001-1 211/0001-1 212/0001-1 057X/0008-CA 058X/0008 059X/0008 060X/0008 062X/0008 063/0008 064/0008 068/0008 069/0008 070/0008 077/0008 095/0008 201/0008 209/0008 210/0008 211/0008 212/0008 220/0008 441/0008 449/0008 450/0008 461/0008 | 001/0017 002/0017 003/0017 004/0017 009/0017 010/0017 056X/0017 057X/0013-CA 058X/0013 059X/0013 060X/0013 061X/0013 062X/0013 001/0015 002/0015 003/0015 004/0015 007/0015 008/0015 009/0015 010/0015 056X/0015 441/0015 461/0015 001/0018 002/0018 003/0018 004/0018 009/0018 010/0018 056X/0018 001/0038 007/0038 056X/0038 201/0038 441/0038 461/0038 001/0031 002/0031 003/0031 004/0031 007/0031 008/0031 009/0031 010/0031 056X/0031 001/0041 007/0041 056X/0041 441/0041 461/0041 001/0013 002/0013 003/0013 004/0013 007/0013 010/0013 056X/0013 007/0025 056X/0025 201/0025 441/0025 461/0025 001/0028 007/0028 056X/0028 057X/0028-CA 201/0028 441/0028 461/0028 001/0029 007/0029 056X/0029 057X/0029-CA 441/0029 461/0029 007/0030 056X/0030 441/0030 461/0030 | 001/0019 027/0019 056X/0019 | 001/0020 027/0020 056X/0020 001/0021 027/0021 056X/0021 001/0022 056X/0022 001/0023 027/0023 056X/0023 001/0024 027/0024 056X/0024 |

Some combinations of actuator family/inscription couldn't be available as standard. Other combinations with special inscription are available on request.



GIOVENZANA
INTERNATIONAL B.V.



GIOVENZANA

INTERNATIONAL B.V.



PHOENIX CAM SWITCHES
REAR PANEL MOUNTING - R

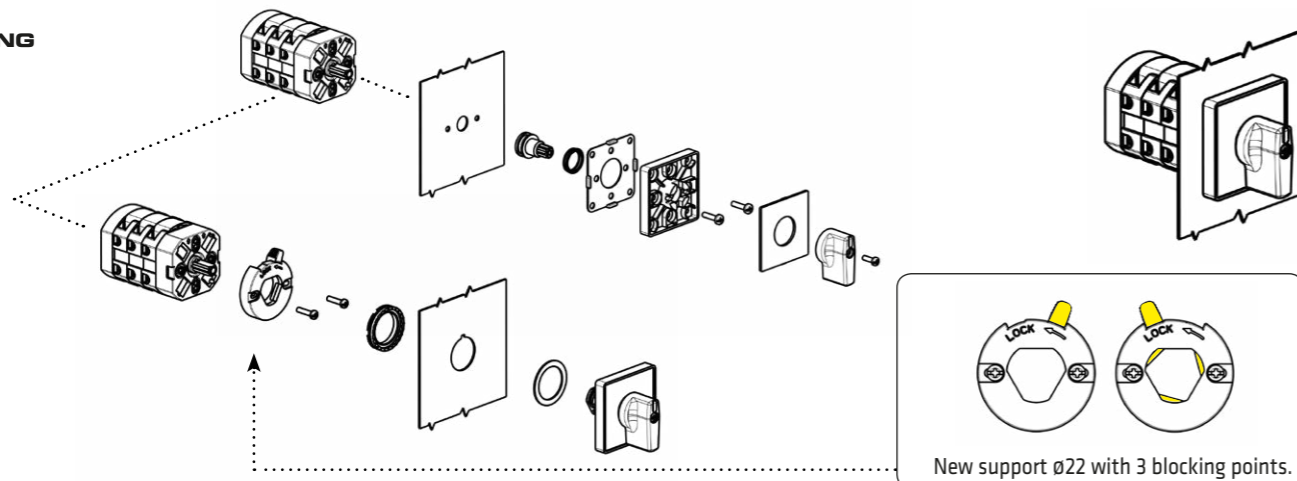


REAR PANEL MOUNTING

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

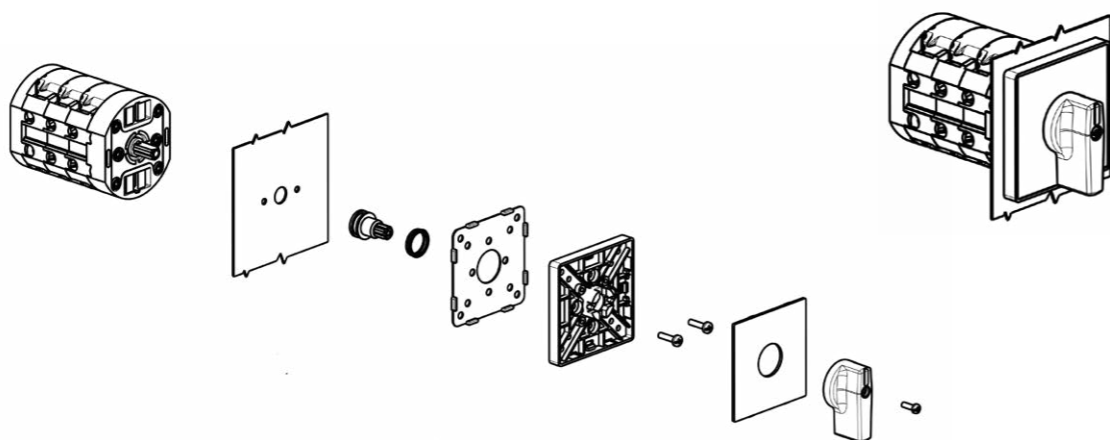
SCREW FIXING

Ø22 FIXING



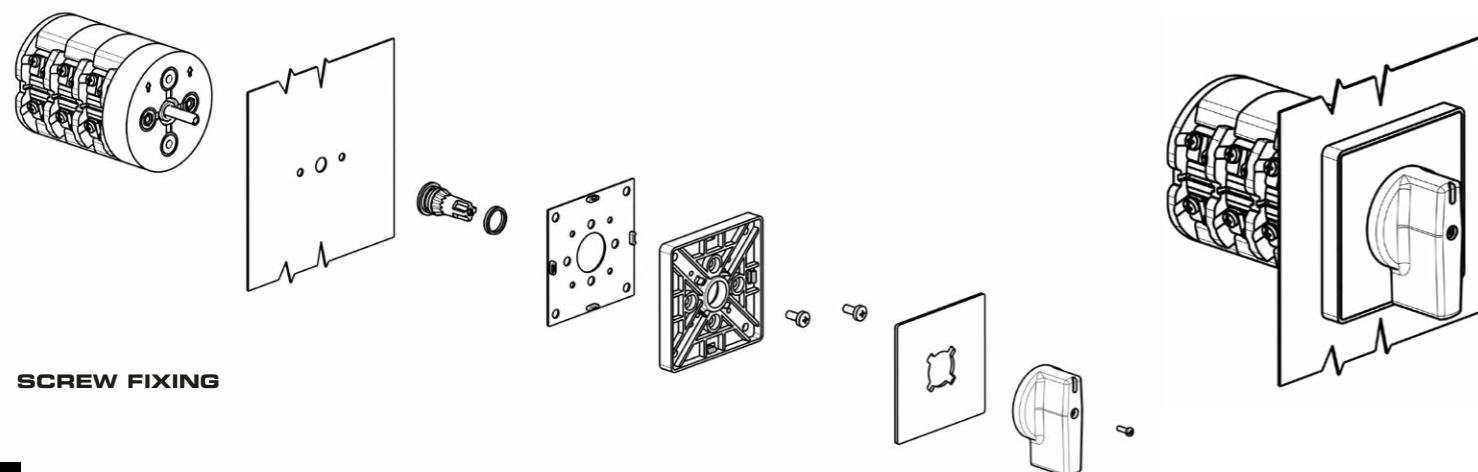
| RANGE AC21A | 25A - 32A - 40A |

SCREW FIXING



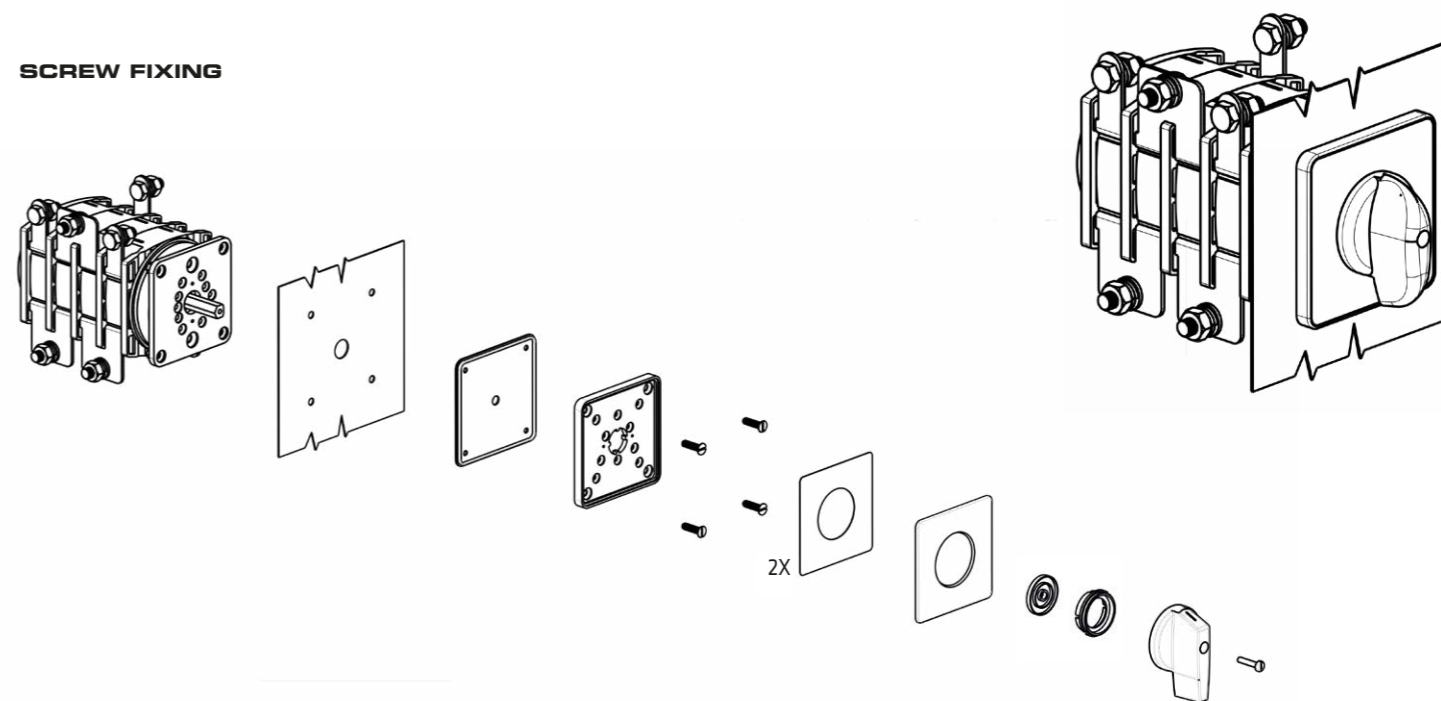
| RANGE AC21A | 63A - 80A |

SCREW FIXING



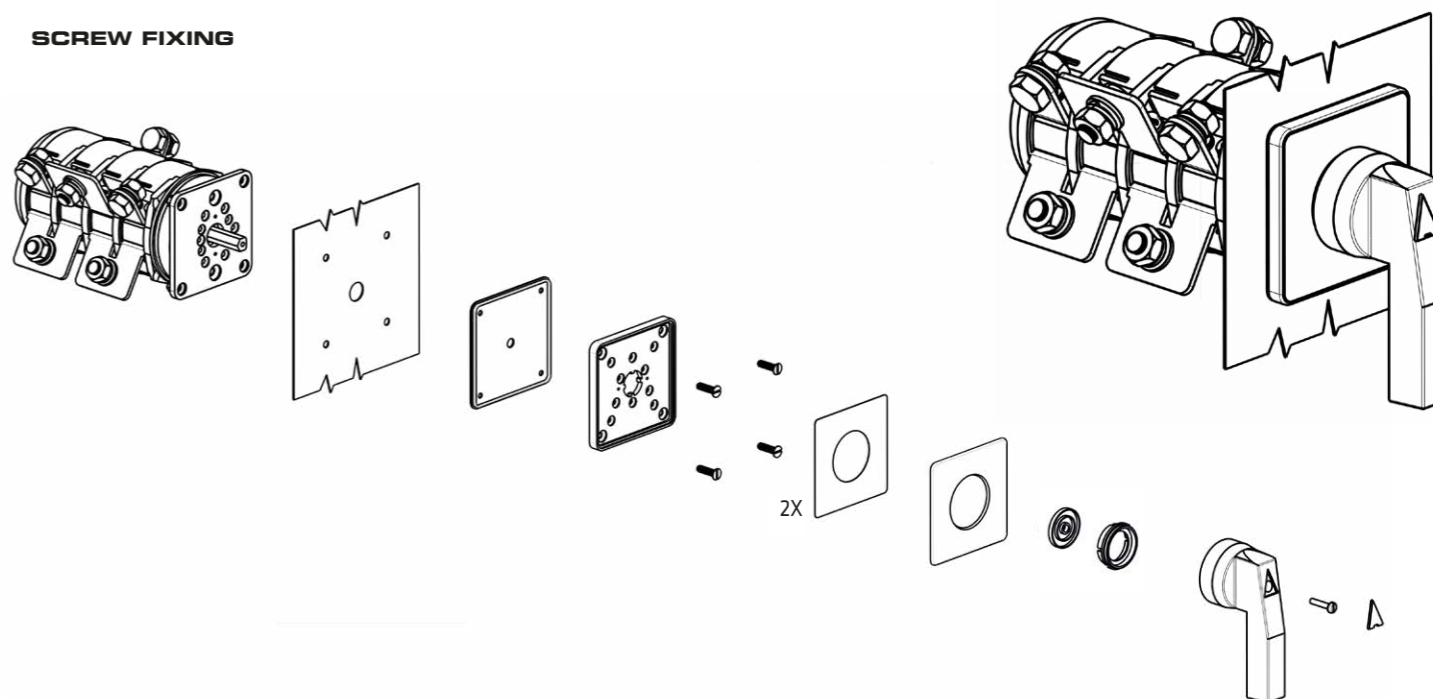
| RANGE AC21A | 125A |

SCREW FIXING



| RANGE AC21A | 200A |

SCREW FIXING





REAR PANEL MOUNTING

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

| | | | |
|--|-----------|--|-------------------------------|
| | 12-16-20A | | 90° |
| | 25-32-40A | | 90° |
| | 63-80A | | 1 2 |
| | 125A | | 1 3 2 4 |
| | 200A | | 1 3 5 2 4 6 |
| | 200A | | 1 3 5 7 2 4 6 8 |
| | 200A | | 1 3 5 7 9 2 4 6 8 10 |
| | 200A | | 1 3 5 7 9 11 2 4 6 8 10 12 |
| | 200A | | 1 3 5 2 4 6 |

| 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 | - |

| 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 | 210/0001-1 | 450/0001 | 450/0001 |
| | ø22 | 062X/0001 | 062X/0001-1 | 062/0007 | - | - | - | - | - | - | - | - |
| | ø22 | 057X/0001 | 057X/0001-1 | 057X/0007 | - | - | - | - | - | - | - | - |
| | ø22 | - | - | - | 028X | - | - | - | - | - | - | - |
| | ø22 | - | - | - | 029X | - | - | - | - | - | - | - |

UL50 NEMA Type 1-4-4X
 Key removable at "0" position
 Body mounting rotated by 90°
 Key removable at 0° and 180°



REAR PANEL MOUNTING

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

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

| SERIEs | AC21A | 1 POLE | 2 POLES | 3 POLES | 4 POLES |
|--------|-------|-----------|-----------|-----------|-----------|
| P012 | 12A | P0120008R | P0120009R | P0120010R | P0120011R |
| P016 | 16A | P0160008R | P0160009R | P0160010R | P0160011R |
| P020 | 20A | P0200008R | P0200009R | P0200010R | P0200011R |
| 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 |

| ACTUATOR | FIXING | P012 - P016 - P020 | C025 - C032 - C040 | C063 - C080 | G125 | G200 |
|----------|--------|--------------------|--------------------|-------------|----------|----------|
| | | 45° | NO | 45° | 60° | 60° |
| | screw | 001/0008 | - | 007/0008 | 201/0008 | 441/0008 |
| | 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 | - | - | - |

UL50 NEMA Type 1-4-4X
 Key removable at "0" position
 Body mounting rotated by 90°
 Key removable at 0° and 180°

REAR PANEL MOUNTING

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



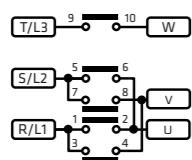
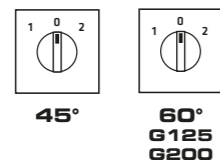
12-16-20A

25-32-40A

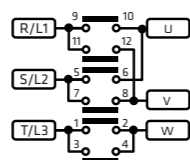
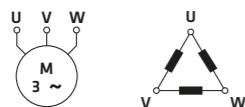
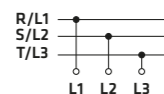
63-80A

125A

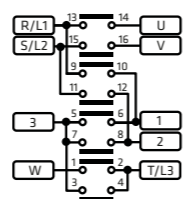
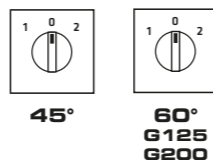
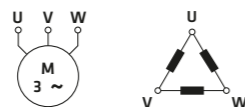
200A



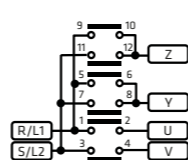
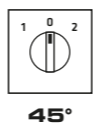
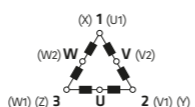
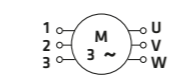
| | | | | |
|------|-------|---|---|---|
| 3 | | | | |
| 9-10 | X | | X | |
| 7-8 | X | | | |
| 5-6 | | | X | |
| 3-4 | | | X | |
| 1-2 | X | | | |
| WAF | CONT. | 1 | 0 | 2 |



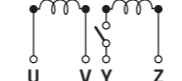
| | | | | |
|-------|-------|---|---|---|
| 3 | | | | X |
| 11-12 | X | | | |
| 9-10 | X | | | |
| 7-8 | X | | | |
| 5-6 | | | X | |
| 3-4 | | | X | |
| 1-2 | X | | | |
| WAF | CONT. | 1 | 0 | 2 |



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



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



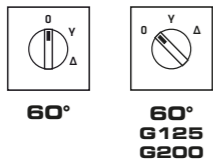
| SERIES | AC21A | REVERSING SWITCH 3 POLES | REVERSING SWITCH 3 POLES WITH SPRING RETURN TO ZERO | DAHLENDER POLE CHANGING TWO SPEED SWITCH | REVERSING SWITCH SINGLE PHASE WITH CENTRIFUGAL CUT-OUT |
|--------|-------|--------------------------|---|--|--|
| P012 | 12A | P0120012R | P0120013R | P0120014R | P0120016R |
| P016 | 16A | P0160012R | P0160013R | P0160014R | P0160016R |
| P020 | 20A | P0200012R | P0200013R | P0200014R | P0200016R |
| 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 | - |

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

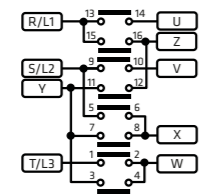
▲ UL50 NEMA Type 1-4-4X ▲ Key removable at "0" position
 ▲ Body mounting rotated by 90° ▲ Key removable at 0° and 180°



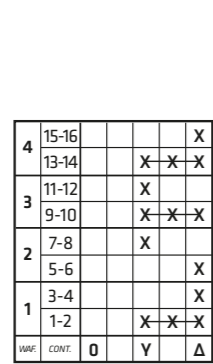
12-16-20A



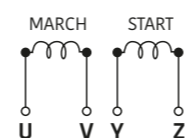
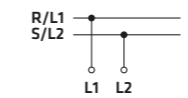
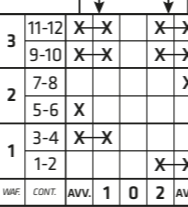
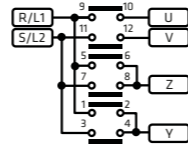
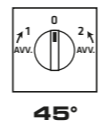
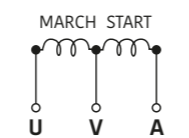
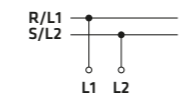
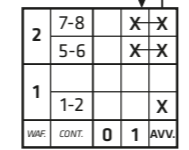
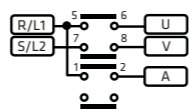
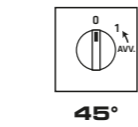
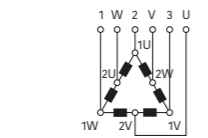
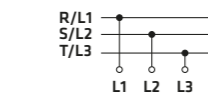
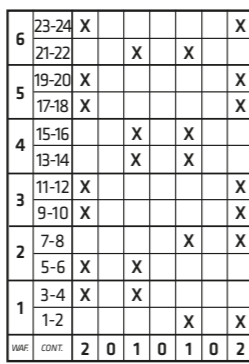
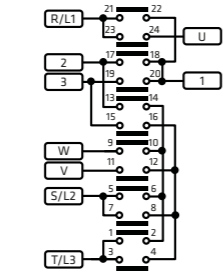
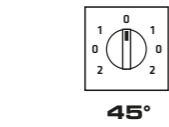
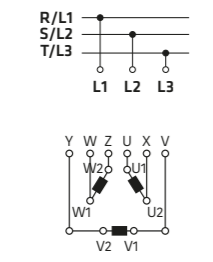
25-32-40A



125A



200A



| 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 | - | - | - |

| ACTUATOR | FIXING | P012 - P016 - P020 | | | | C025 - C032 C040 | | C063 - C080 | G125 | G200 |
|----------|--------|--------------------|-----------|-----------|-----------|---------------------|----------|-------------|------|----------|
| | | | | | | | | | | |
| | | 60° | 45° | 45° | 45° | NO | 60° | 45° | 60° | 60° |
| | screw | 001/0015 | 001/0031 | 001/0017 | 001/0018 | - | 007/0015 | 007/0031 | - | 441/0015 |
| | 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 | - | - | - | - | - | - | - | - | - |
| | ø22 | - | - | - | - | - | 028X | - | - | - |
| | ø22 | - | - | - | - | - | 029X | - | - | - |

| ACTUATOR | FIXING | P012 - P016 - P020 | | | | C025 - C032 C040 | | C063 - C080 | G125 | G200 |
|----------|--------|--------------------|---|---|---|---------------------|---|-------------|------|------|
| | ø22 | - | - | - | - | - | - | - | - | - |
| | ø22 | - | - | - | - | - | - | - | - | - |

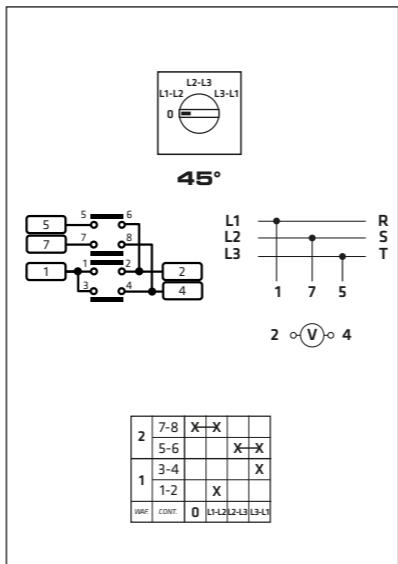
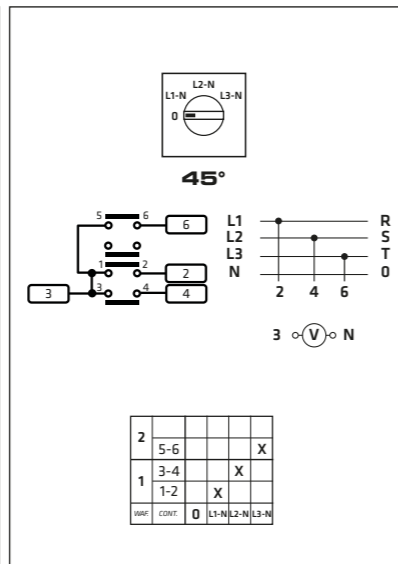
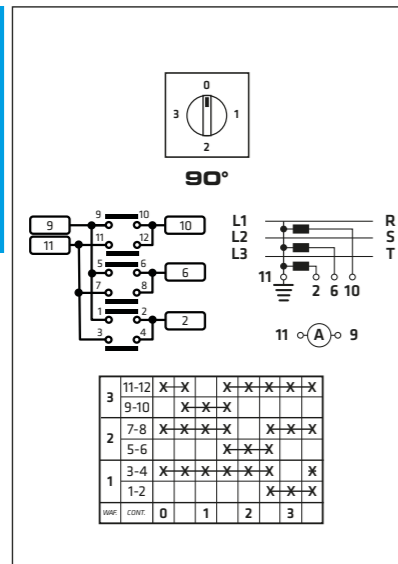


REAR PANEL MOUNTING

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



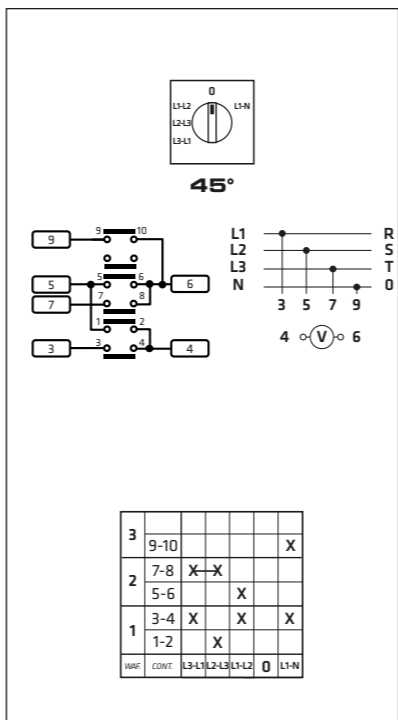
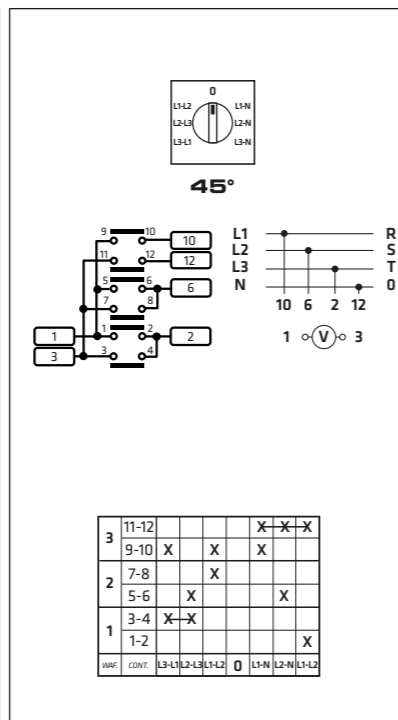
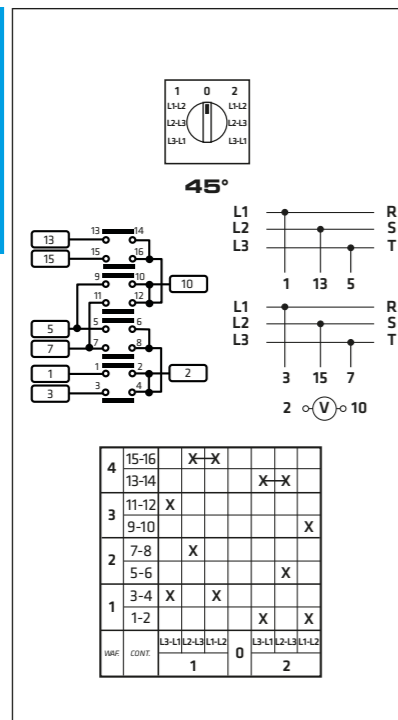
12-16-20A



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



12-16-20A



| 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 |

| 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 | - | - | - | - | - | - | - |
| | screw | - | - | - | - | - | - | 028X |
| | ø22 | - | - | - | - | - | - | 028X |
| | screw | - | - | - | - | - | - | 029X |
| | ø22 | - | - | - | - | - | - | 029X |



REAR PANEL MOUNTING

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



12-16-20A



25-32-40A



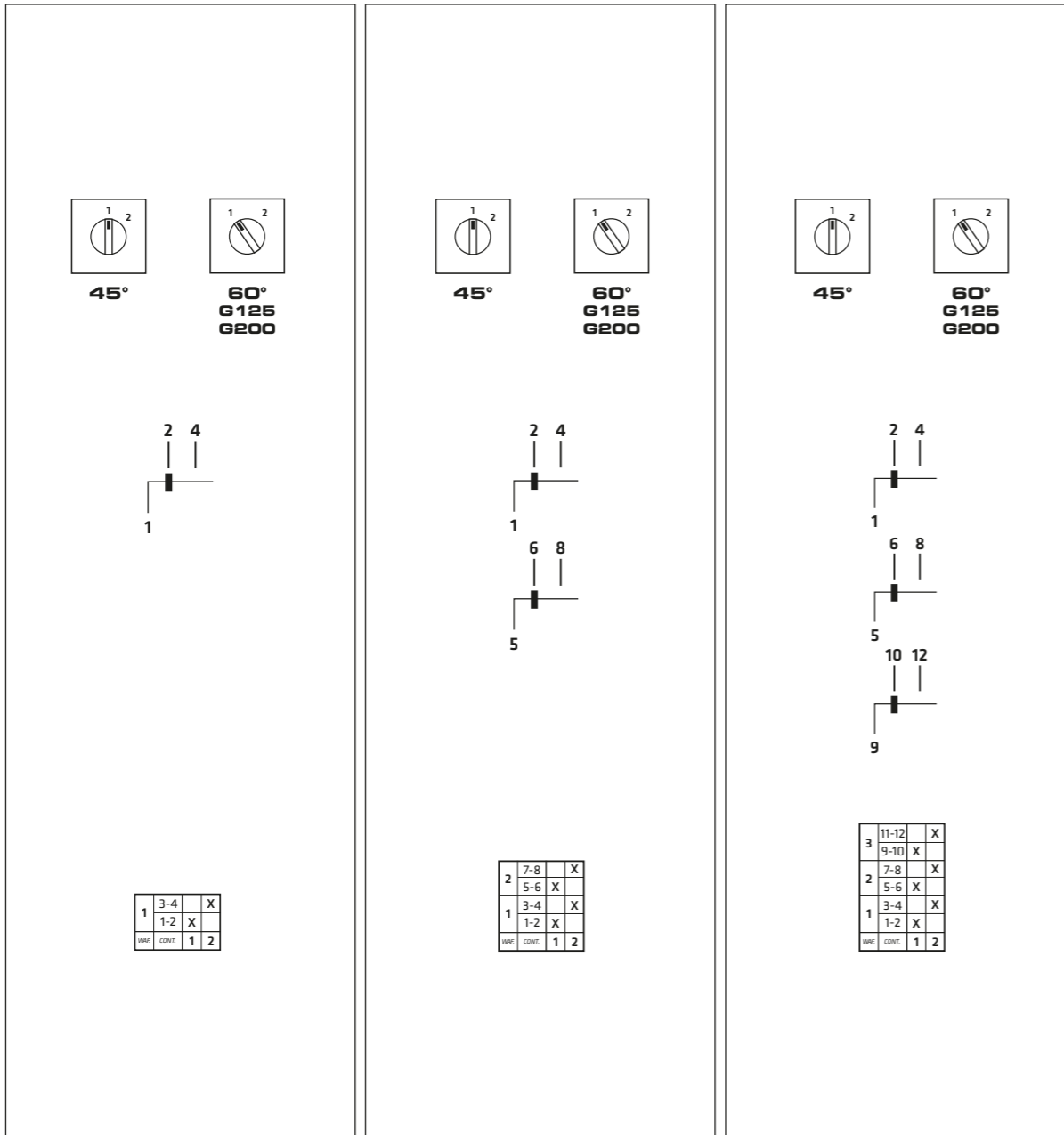
63-80A



125A



200A



| 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 |

| ACTUATOR | FIXING | P012 - P016 - P020 | C025 C032 C040 | C063 C080 | G125 | G200 |
|----------|--------|--------------------|----------------------|--------------|----------|----------|
| | | 45° | NO | 45° | 45° | 60° |
| | screw | 001/0025 | - | 007/0025 | 201/0025 | 441/0025 |
| | ø22 | 056X/0025 | - | - | - | - |
| | screw | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | screw | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | screw | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | screw | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | ø22 | - | 028X | - | - | - |
| | ø22 | - | 029X | - | - | - |

▲ Key removable at 0° and 180°

REAR PANEL MOUNTING

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



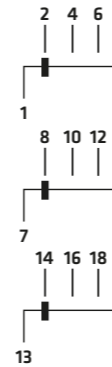
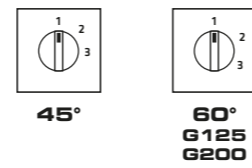
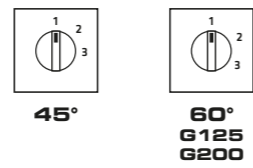
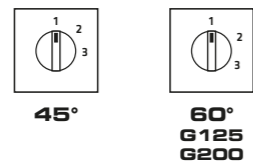
12-16-20A

25-32-40A

63-80A

125A

200A



| | | | | |
|------|-------|---|---|---|
| 2 | 5-6 | | | X |
| 1 | 3-4 | X | | |
| | 1-2 | X | | |
| NOV. | 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 | | |
| NOV. | CONT. | 1 | 2 | 3 |

| | | | | |
|------|-------|---|---|---|
| 5 | 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 | | |
| NOV. | CONT. | 1 | 2 | 3 |

| SERIES | AC21A | 1 POLE | 2 POLES | 3 POLES |
|--------|-------|-----------|-----------|-----------|
| P012 | 12A | P0120038R | P0120039R | P0120040R |
| P016 | 16A | P0160038R | P0160039R | P0160040R |
| P020 | 20A | P0200038R | P0200039R | P0200040R |
| 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 |

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

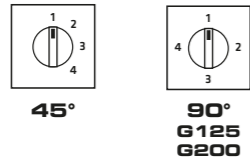


REAR PANEL MOUNTING

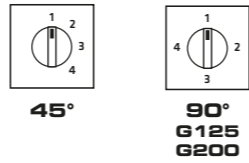
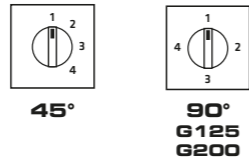
PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12



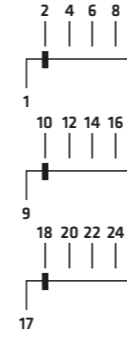
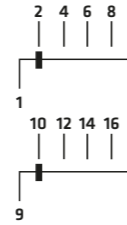
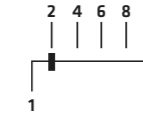
12-16-20A



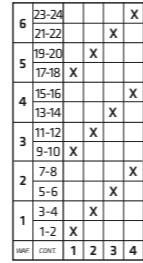
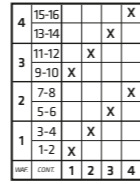
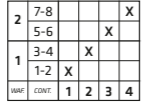
25-32-40A



125A



200A



| 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 |

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



STEP SWITCHES 0-1-2 WITH ZERO | TYPE R

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



REAR PANEL MOUNTING

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

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-------|-----|-----|---|--|-----|---|--|------|-------|---|-----|---|---|-----|--|---|--|-----|---|--|---|-----|--|---|--|-----|---|--|------|-------|---|-----|--|---|-------|--|---|--|------|---|--|---|-----|--|---|--|-----|---|--|---|-----|--|---|--|-----|---|--|------|-------|---|-----|
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">12-16-20A</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 45° </div> <div style="text-align: center;"> 60° G125 G200 </div> </div> <div style="text-align: center; margin-top: 20px;"> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <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>VAR.</td><td>CONT.</td><td>0</td><td>1 2</td></tr> </table> | 1 | 3-4 | | X | | 1-2 | X | | VAR. | CONT. | 0 | 1 2 | <p style="writing-mode: vertical-rl; transform: rotate(180deg);">25-32-40A</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 45° </div> <div style="text-align: center;"> 60° G125 G200 </div> </div> <div style="text-align: center; margin-top: 20px;"> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <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>VAR.</td><td>CONT.</td><td>0</td><td>1 2</td></tr> </table> | 2 | 7-8 | | X | | 5-6 | X | | 1 | 3-4 | | X | | 1-2 | X | | VAR. | CONT. | 0 | 1 2 | <p style="writing-mode: vertical-rl; transform: rotate(180deg);">63-80A</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> 45° </div> <div style="text-align: center;"> 60° G125 G200 </div> </div> <div style="text-align: center; margin-top: 20px;"> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 20px;"> <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>VAR.</td><td>CONT.</td><td>0</td><td>1 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 | | VAR. | CONT. | 0 | 1 2 |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VAR. | CONT. | 0 | 1 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VAR. | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VAR. | CONT. | 0 | 1 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 125A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| SERIES | AC2-1A | 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 |

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

42 Switches from 12A to 40A: replace the number "0" with letter "X" to order the open terminal protection (es. P012... > PX12...). See to page 8.

Key removable at 0° and 180°

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

12-16-20A

25-32-40A

125A

200A

45° 90°
G125 G125
G200 G200

45° 90°
G125 G125
G200 G200

45° 90°
G125 G125
G200 G200

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

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

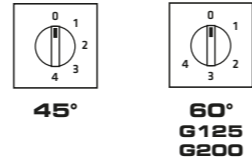
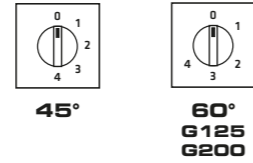
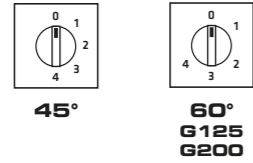


REAR PANEL MOUNTING

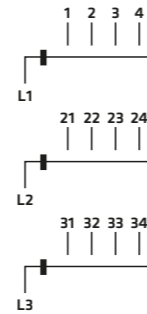
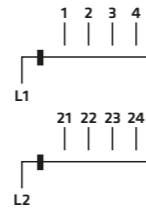
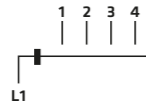
PROTECTION CLASS EN60529 - IP65 UL50 NEMA TYPE 1-4-4X-12



12-16-20A



25-32-40A



125A

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

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



200A

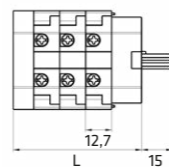
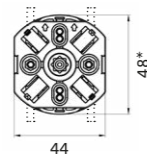
| SERIES | AC21A | 1 POLE | 2 POLES | 3 POLES |
|--------|-------|-----------|-----------|-----------|
| P012 | 12A | P0120030R | P0120036R | P0120037R |
| P016 | 16A | P0160030R | P0160036R | P0160037R |
| P020 | 20A | P0200030R | P0200036R | P0200037R |
| C025 | 25A | C0250030R | C0250036R | C0250037R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

| ACTUATOR | FIXING | P012 - P016 - P020 | C025 C032 C040 | C063 C080 | G125 | G200 |
|----------|--------|--------------------|----------------------|--------------|----------|----------|
| | | 45° | 45° | - | 60° | 60° |
| | screw | 001/0030 | 007/0030 | - | 441/0030 | 461/0030 |
| | ø22 | 056X/0030 | - | - | - | - |
| | screw | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | screw | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | screw | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | screw | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | ø22 | - | - | - | - | - |
| | ø22 | - | 028X | - | - | - |
| | ø22 | - | 029X | - | - | - |

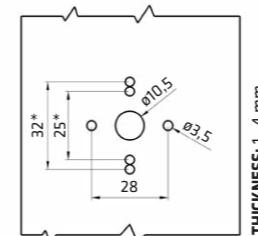
REAR PANEL MOUNTING | ACTUATORS SCREW FIXING



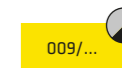
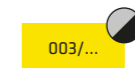
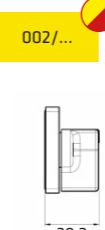
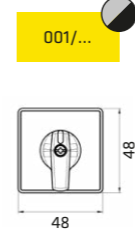
12-16-20A



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

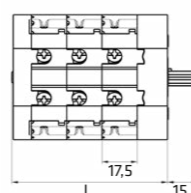
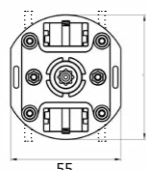


FIXING:
Captive M3 bolt - 28 mm
* ALTERNATIVE FIXING
Screwplast 25 or 32 mm

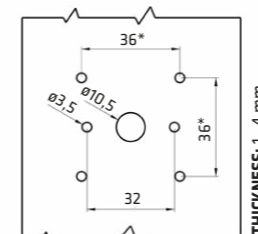


* If cam switch is provided of external bridge (wafer to wafer) the height will be increased of ~ 2 mm for the lower and upper sides.

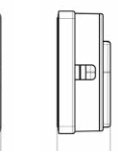
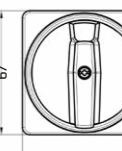
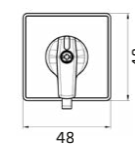
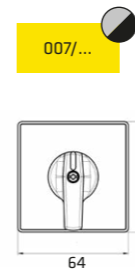
25-32-40A



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

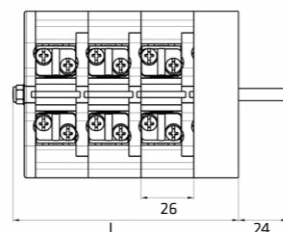
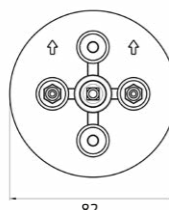


FIXING:
Captive M3 bolt - 32 mm
* ALTERNATIVE FIXING
Screwplast □36 mm

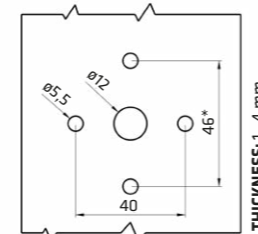


* If cam switch is provided of external bridge (wafer to wafer) the height will be increased of ~ 1 mm for the lower and upper sides.

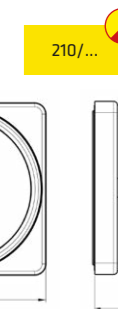
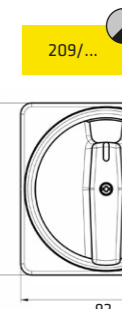
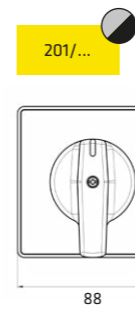
63-80A



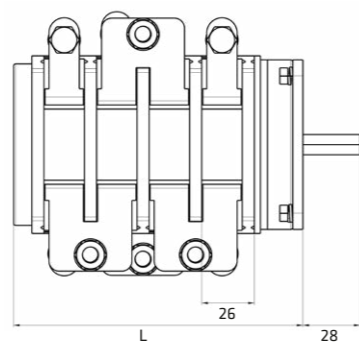
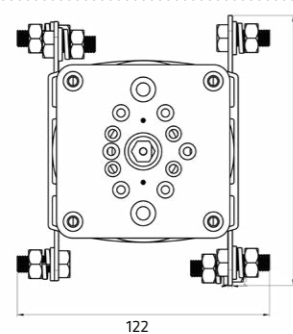
| WAFER GAP | L x WAFER N° | | | | | |
|-----------|--------------|------|-------|-------|-----|-------|
| 26 | 1 | 2 | 3 | 4 | 5 | 6 |
| | 59,1 | 85,1 | 111,1 | 137,1 | 163 | 189,1 |



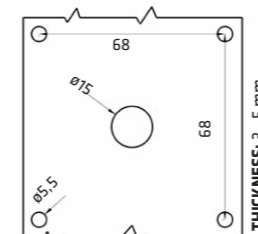
FIXING:
Captive M5 bolt - 40 mm
* ALTERNATIVE FIXING
M5 - 46 mm



125A



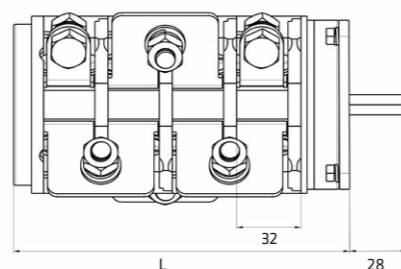
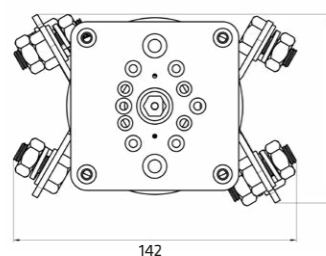
| WAFER GAP | L x WAFER N° | | | | | |
|-----------|--------------|----|-----|-----|-----|-----|
| 26 | 1 | 2 | 3 | 4 | 5 | 6 |
| | 66 | 92 | 118 | 144 | 170 | 196 |



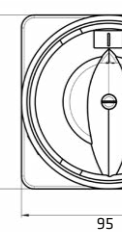
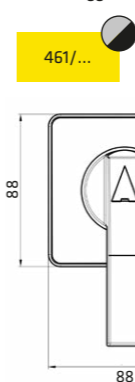
FISSAGGIO:
M5 bolt □68 mm



200A

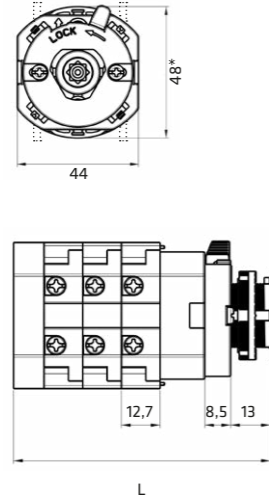


| WAFER GAP | L x WAFER N° | | | | | |
|-----------|--------------|-----|-----|-----|-----|-----|
| 32 | 1 | 2 | 3 | 4 | 5 | 6 |
| | 72 | 104 | 136 | 168 | 200 | 232 |

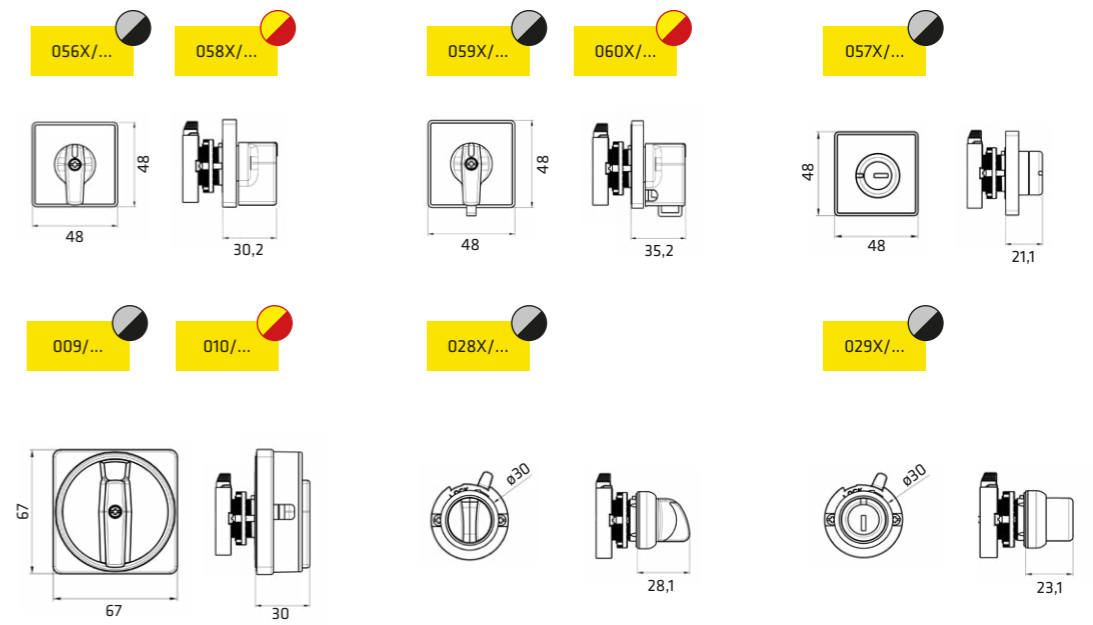
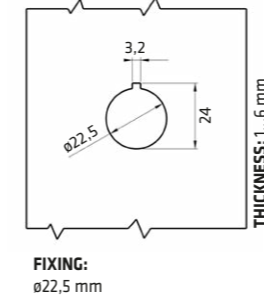




12-16-20A



| 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.



GIOVENZANA
INTERNATIONAL B.V.



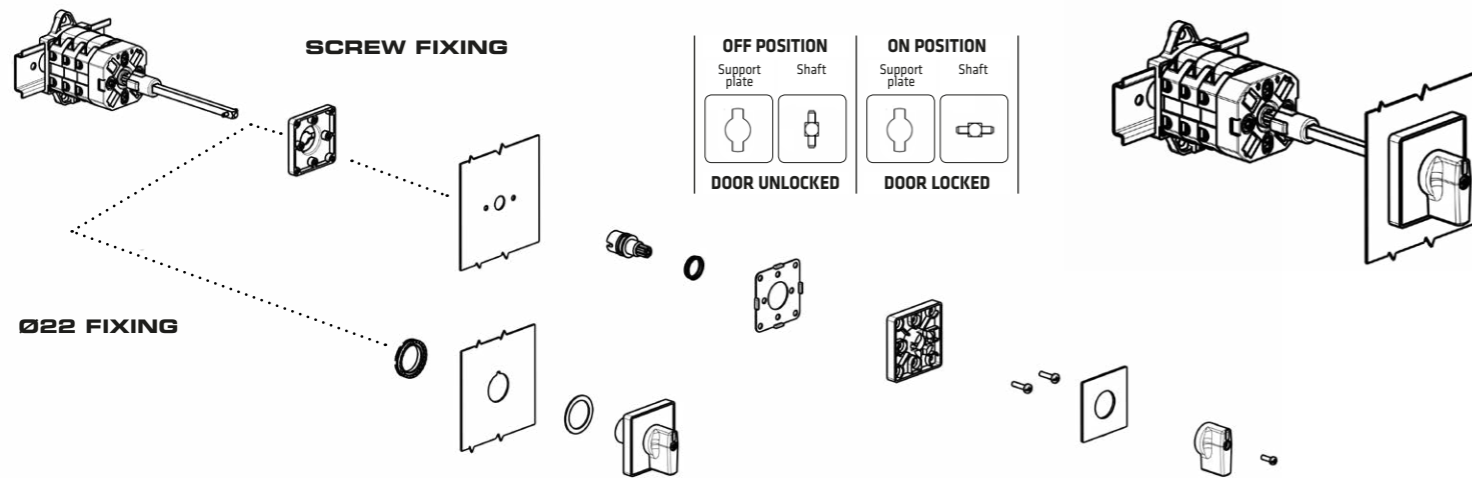
GIOVENZANA
INTERNATIONAL B.V.



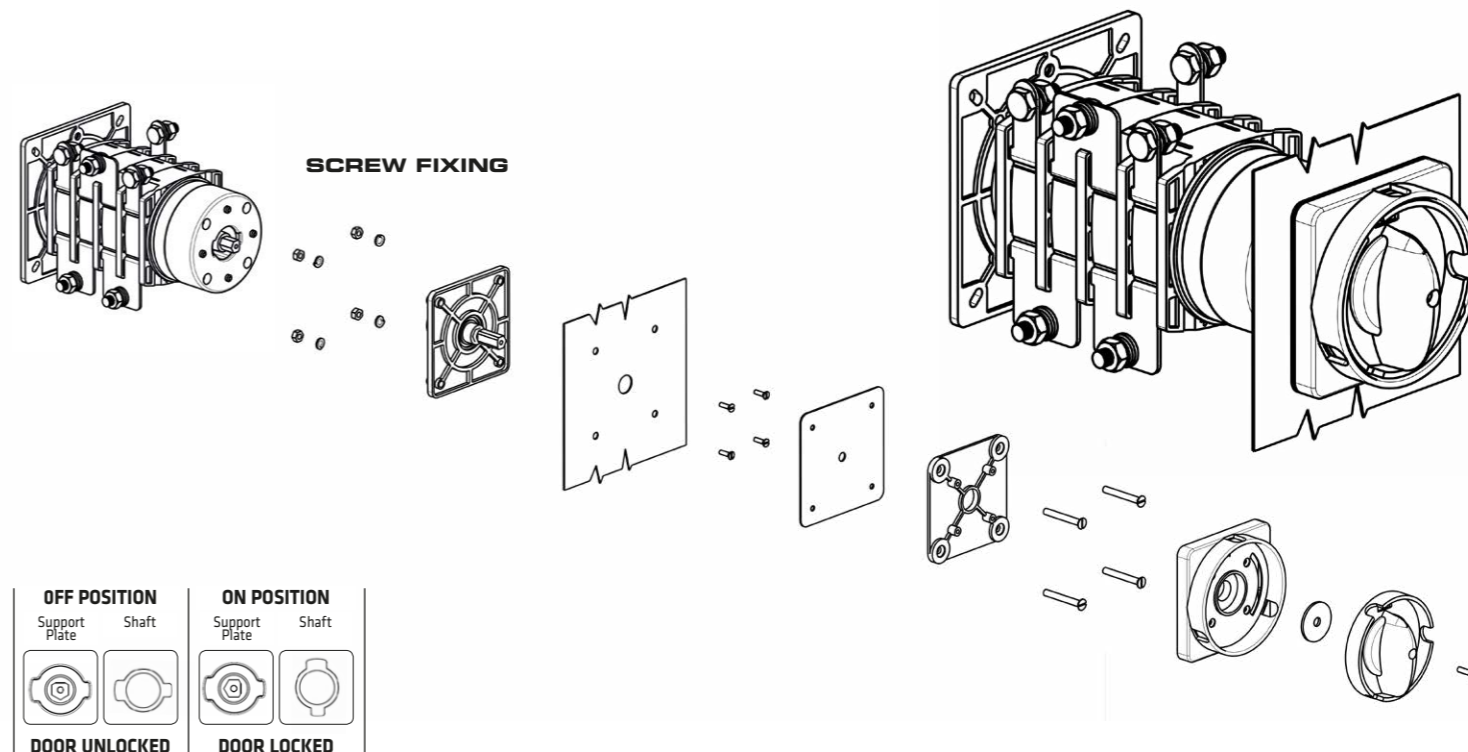
PHOENIX CAM SWITCHES
BASE MOUNTING - B

B **BASE MOUNTING**

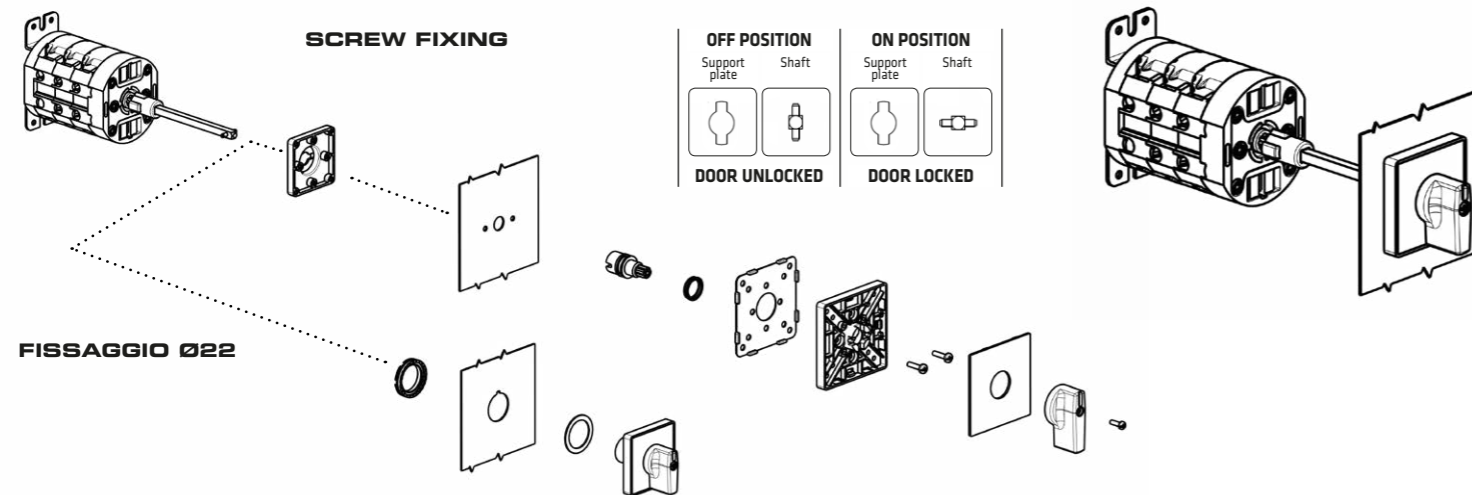
| RANGE AC21A | 12A - 16A - 20A |



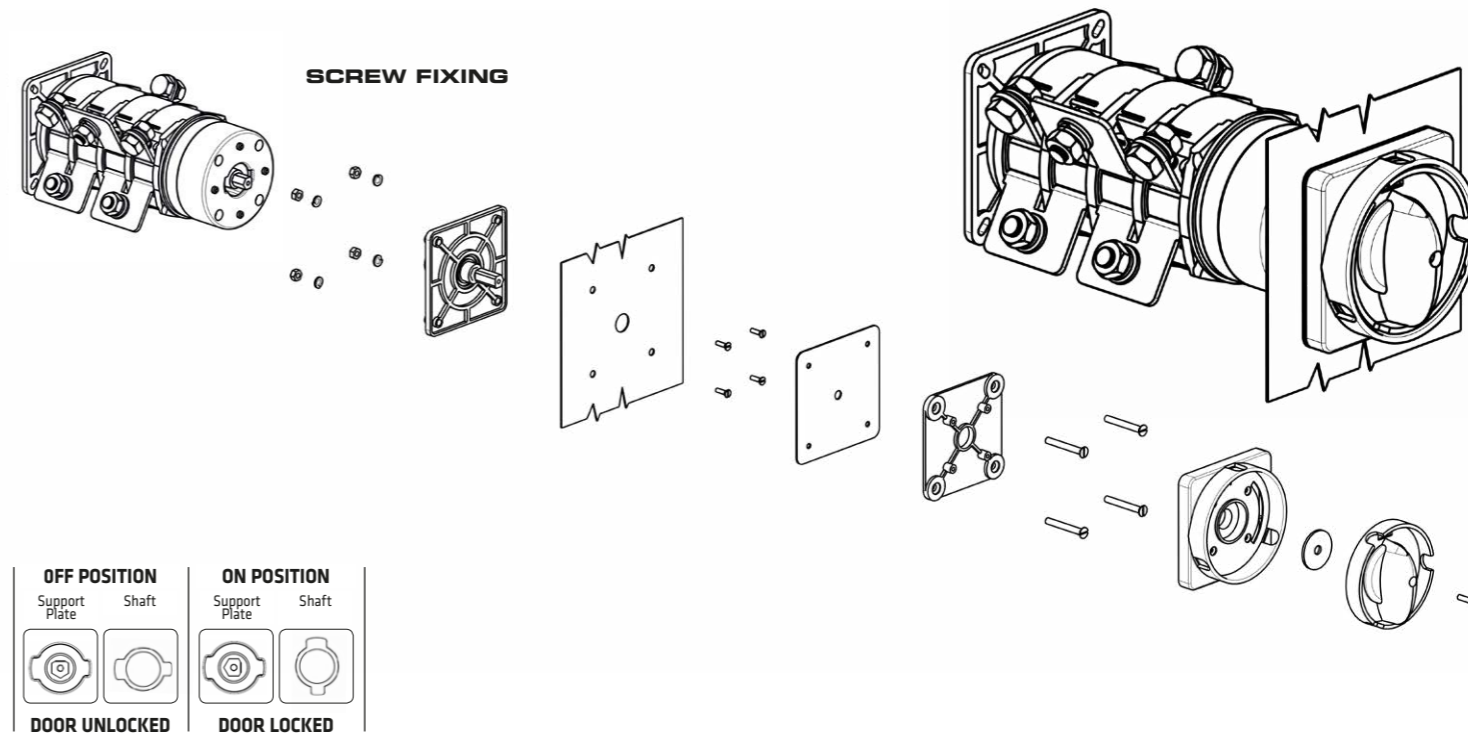
| RANGE AC21A | 125A |



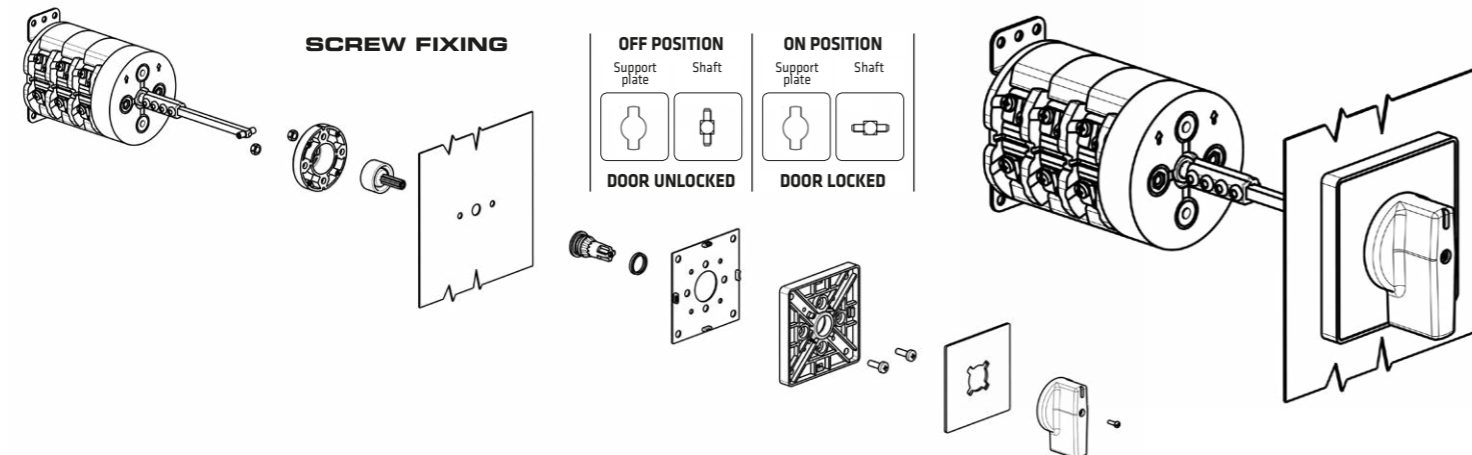
| RANGE AC21A | 25A - 32A - 40A |



| RANGE AC21A | 200A |



| RANGE AC21A | 63A - 80A |



B

BASE MOUNTING

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

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------|-----------|---|---|-----|--|---|--|-----|--|---|------|-------|---|---|---|---|-----|--|---|---|-----|--|---|--|-----|--|---|------|-------|---|---|--|---|-----|--|---|--|-----|--|---|---|-----|--|---|--|-----|--|---|------|-------|---|---|--|---|-------|--|---|--|------|--|---|---|-----|--|---|--|-----|--|---|---|-----|--|---|--|-----|--|---|------|-------|---|---|
| | 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>VARF</td><td>CONT.</td><td>0</td><td>1</td></tr></table> | 1 | 3-4 | | X | | 1-2 | | X | VARF | 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>VARF</td><td>CONT.</td><td>0</td><td>1</td></tr></table> | 2 | 5-6 | | X | 1 | 3-4 | | X | | 1-2 | | X | VARF | 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>VARF</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 | VARF | 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>VARF</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 | VARF | CONT. | 0 | 1 |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1-2 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONT. | 0 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 5-6 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1-2 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONT. | 0 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5-6 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1-2 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | CONT. | 0 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 11-12 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 9-10 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5-6 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1-2 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VARF | 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 |

| ACTUATOR | FIXING | P012 - P016 - P020 | C025 - C032 - C040 | C063 - C080 | G125 | G200 |
|-----------------------|--------|--------------------|--------------------|-------------------|------------|--|
| | | | | | | |
| | 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 |
| | ø22 | 063/0001 | 063/0001-1 | 063/0001 | 063/0001-1 | 211/0001-1 |
| | screw | 012/0001 | 012/0001-2 | 012/0001 | 012/0001-2 | 212/0001 |
| | ø22 | 064/0001 | 064/0001-1 | 064/0001 | 064/0001-1 | 212/0001-1 |
| DOORLOCK SHAFT | | 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.

▲ UL50 NEMA Type 1-4-4X

▲ Metallic shaft can be cut according customer needs. Longer metallic shaft are available in accessories to page 77.

CHANGEOVER SWITCHES 1-0-2 | TYPE B

ACTUATORS CHANGEOVER SWITCHES 1-0-2 | TYPE B

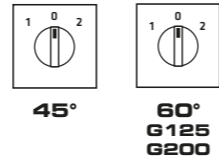
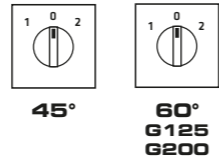
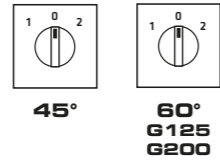
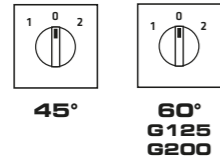
B

BASE MOUNTING

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



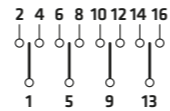
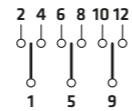
12-16-20A



25-32-40A



63-80A



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

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

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

| | | | |
|------|-------|-------|---|
| 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 | |
| WARF | CONT. | 1 0 2 | |

| SERIES | AC21A | 1 POLE | 2 POLES | 3 POLES | 4 POLES |
|--------|-------|-----------|-----------|-----------|-----------|
| P012 | 12A | P0120008B | P0120009B | P0120010B | P0120011B |
| P016 | 16A | P0160008B | P0160009B | P0160010B | P0160011B |
| P020 | 20A | P0200008B | P0200009B | P0200010B | P0200011B |
| 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 | - | - | - | - |

| 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 | - | - | - |
| DOORLOCK SHAFT | | | | | | |
| | | 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.

▲ UL50 NEMA Type 1-4-4X

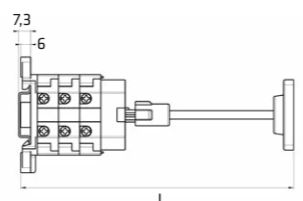
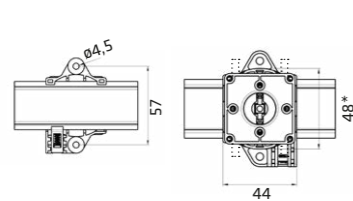
▲ Metallic shaft can be cut according customer needs. Longer metallic shaft are available in accessories to page 77.

B

BASE MOUNTING | ACTUATORS SCREW FIXING



12-16-20A



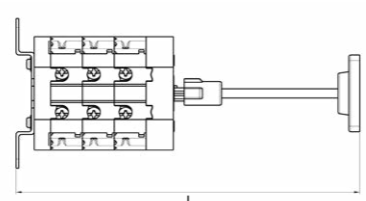
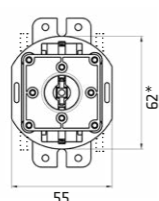
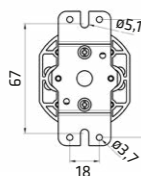
| WAFER GAP | L x WAFER N° | | | | | | |
|-----------|--------------|-------|-------|-------|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| 12,7 | min* | 80,4 | 93,1 | 105,8 | 118,5 | 131,2 | 143,9 |
| | max | 138,4 | 151,1 | 163,8 | 176,5 | 189,2 | 201,9 |

* 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



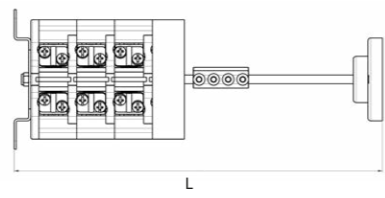
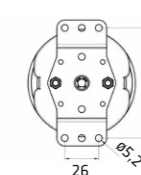
| WAFER GAP | L x WAFER N° | | | | | | |
|-----------|--------------|-----|-------|-----|-------|-----|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| 17,5 | min* | 96 | 113,5 | 131 | 148,5 | 166 | 183,5 |
| | max | 154 | 171,5 | 189 | 206,5 | 224 | 241,5 |

* 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.



63-80A

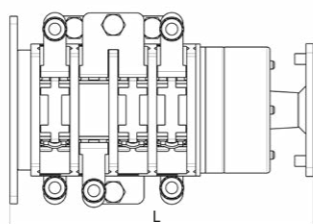
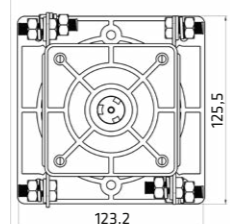
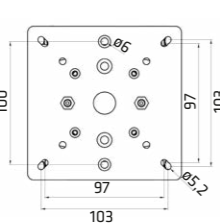


| WAFER GAP | L x WAFER N° | | | | | | |
|-----------|--------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| 26 | min* | 148 | 174 | 200 | 226 | 252 | 278 |
| | max | 196 | 222 | 248 | 274 | 300 | 376 |

* Minimum length with cut shaft.



125A

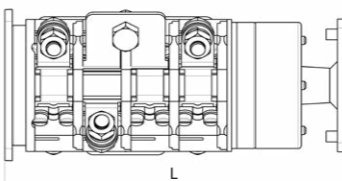
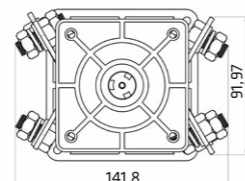
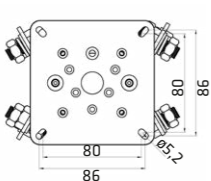


| WAFER GAP | L x WAFER N° | | | | | | |
|-----------|--------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| 26 | min* | 125 | 151 | 177 | 203 | 229 | 255 |

* Direct doorlock coupling bloccoporta (no metallic shaft).

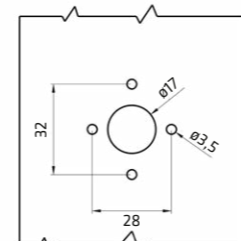


200A



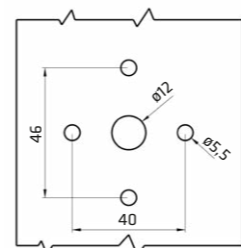
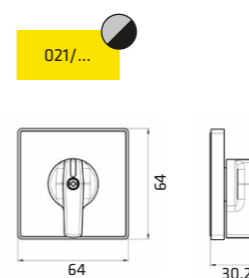
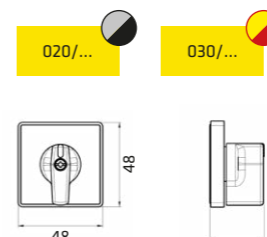
| WAFER GAP | L x WAFER N° | | | | | | |
|-----------|--------------|-----|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 | |
| 32 | min* | 131 | 163 | 195 | 227 | 259 | 291 |

* Direct doorlock coupling bloccoporta (no metallic shaft).



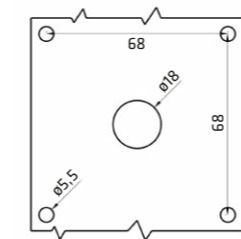
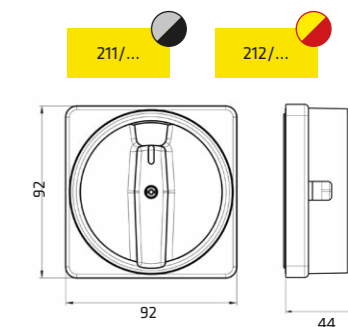
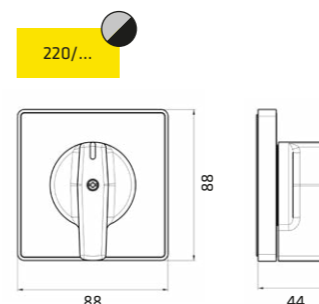
FIXING:
Screwplast 28 or 32 mm

THICKNESS: 1...4 mm



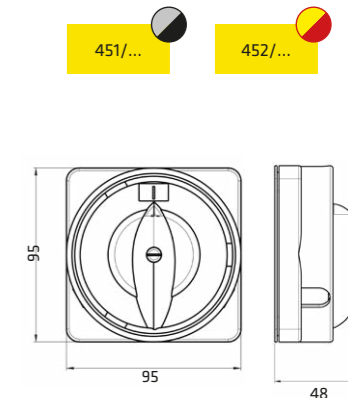
FIXING:
Screwplast 40 or 46 mm

THICKNESS: 1...10 mm

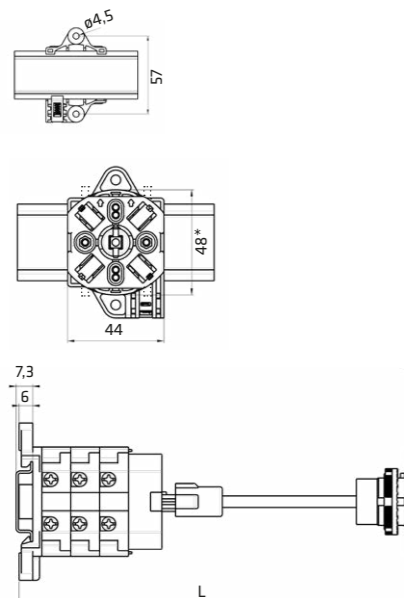


FIXING:
M5 bolt □68 mm

THICKNESS: 3...5 mm



12-16-20A

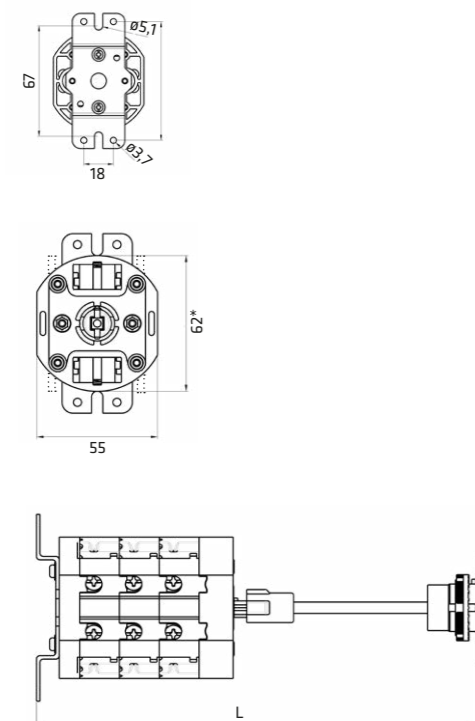


| WAFER GAP | PANEL THICKNESS | L x WAFER N° | | | | | | |
|-----------|-----------------|--------------|-------|-------|-------|-------|-------|-------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | |
| 12,7 | 1 mm | min* | 84,2 | 96,9 | 109,6 | 122,3 | 135 | 147,7 |
| | | max | 143,7 | 156,4 | 169,1 | 181,8 | 194,5 | 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.

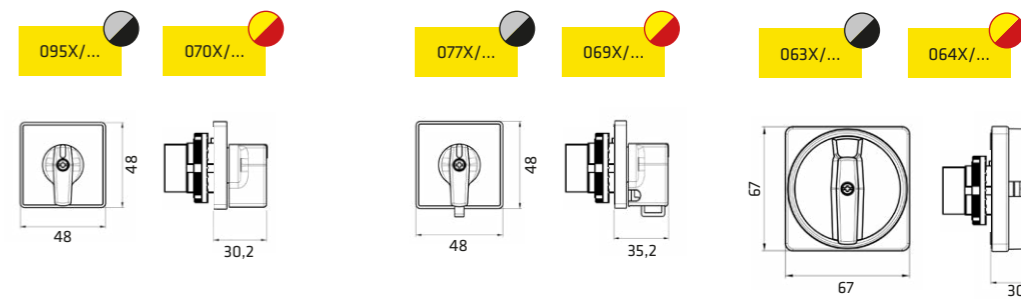
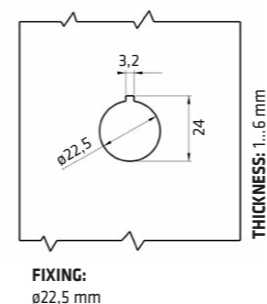
25-32-40A



| 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.





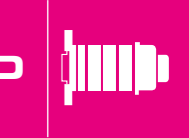
GIOVENZANA
INTERNATIONAL B.V.



GIOVENZANA
INTERNATIONAL B.V.



PHOENIX CAM SWITCHES
DIN MOUNTING - D



PHOENIX CAM SWITCHES | TYPE D

DIMENSIONS AND DRILLING PLAN | TYPE D

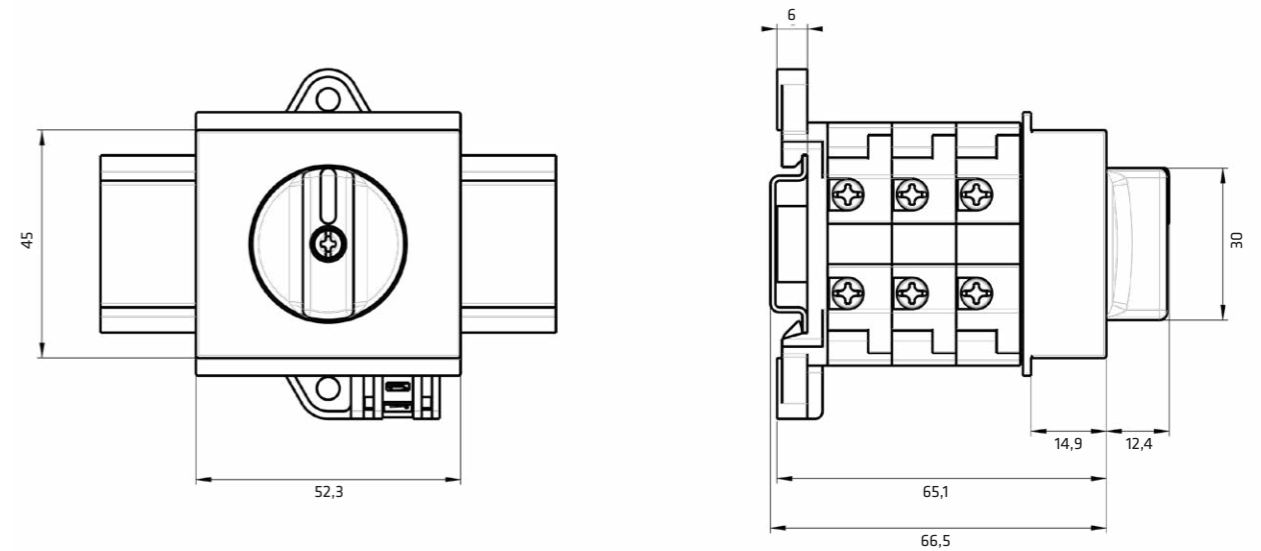
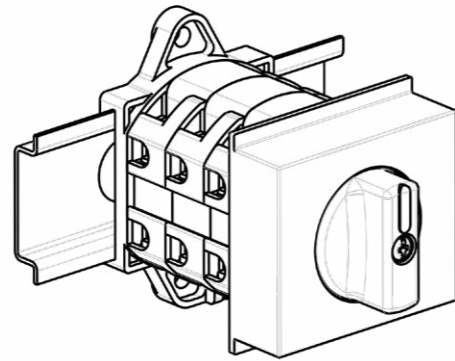


DIN MOUNTING 46 mm

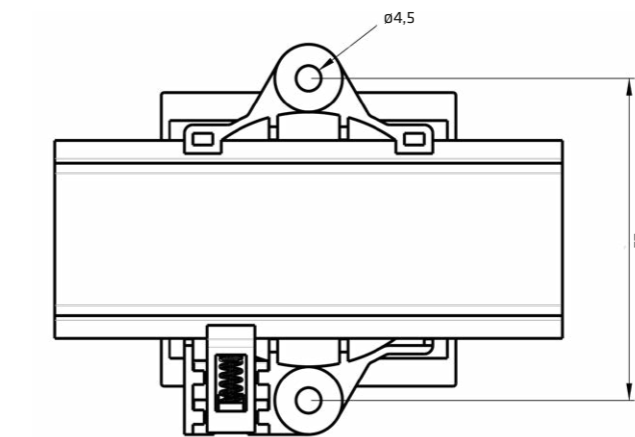
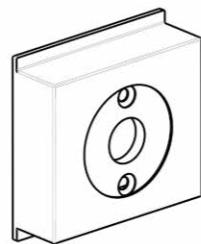
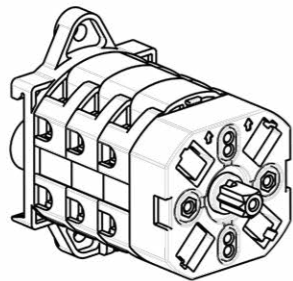
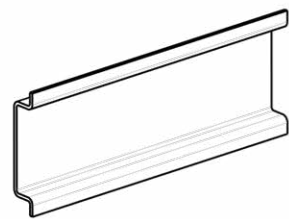
Only switches DIN rail mounting 46 mm standard boxes

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

DIN EN46277/3



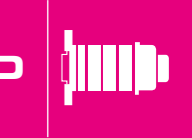
**STEADY Length
3 WAFERS**



**ADDITIONAL FIXING
HOLES**



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



ON-OFF SWITCHES 0-1 | TYPE D

ACTUATORS ON-OFF SWITCHES 0-1 | TYPE D

DIN MOUNTING 46 mm

Only switches DIN rail mounting 46 mm standard boxes



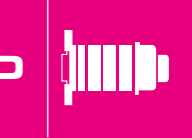
12-16-20A

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|----------------|--------------------|------------------------|-----------------------------|-----------------------------------|-----|--|--|--|--|------|-------|---|---|--|---|---|-----|--|---|-----|--|--|---|------|-------|---|---|--|---|-----|--|---|---|-----|--|---|-----|--|--|---|------|-------|---|---|---|---|-----|--|---|---|-----|--|---|---|-----|--|---|-----|--|--|---|------|-------|---|---|---|---|------|--|---|---|-----|--|---|---|-----|--|---|---|-----|--|---|-----|--|--|---|------|-------|---|---|--|---|-------|--|---|---|------|--|---|---|-----|--|---|---|-----|--|---|---|-----|--|---|-----|--|--|---|------|-------|---|---|
| 90° | 90° | 90° | 90° | 90° | 90° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 2 | 1 3 2 4 | 1 3 5 2 4 6 | 1 3 5 7 2 4 6 8 | 1 3 5 7 9 2 4 6 8 10 | 1 3 5 7 9 11 2 4 6 8 10 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <tr><td>1</td><td></td><td></td><td></td><td>X</td></tr> <tr><td>1-2</td><td></td><td></td><td></td><td></td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td><td></td></tr> </table> | 1 | | | | X | 1-2 | | | | | WARF | CONT. | 0 | 1 | | <table border="1"> <tr><td>1</td><td>3-4</td><td></td><td>X</td></tr> <tr><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></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>1-2</td><td></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>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>1-2</td><td></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 | 2 | 5-6 | | X | 1 | 3-4 | | X | 1-2 | | | X | WARF | CONT. | 0 | 1 | <table border="1"> <tr><td>3</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>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>1-2</td><td></td><td></td><td>X</td></tr> <tr><td>WARF</td><td>CONT.</td><td>0</td><td>1</td></tr> </table> | 3 | 9-10 | | X | 2 | 7-8 | | X | 2 | 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>3</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>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>1-2</td><td></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 | 3 | 9-10 | | X | 2 | 7-8 | | X | 2 | 5-6 | | X | 1 | 3-4 | | X | 1-2 | | | X | WARF | CONT. | 0 | 1 |
| 1 | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| WARF | CONT. | 0 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| WARF | CONT. | 0 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 5-6 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 3 | 9-10 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 3 | 11-12 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 9-10 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 5-6 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ACTUATOR | P012 - P016 - P020 |
|----------|--------------------|
| 90° | 90° |
| - | 027/0001 |



| 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 |



CHANGEOVER SWITCHES 1-0-2 | TYPE D

ACTUATORS CHANGEOVER SWITCHES 1-0-2 | TYPE D



DIN MOUNTING 46 mm

Only switches DIN rail mounting 46 mm standard boxes

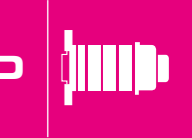


12-16-20A

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------|---------|---------|---|---|--|-----|---|--|--|------|-------|---|---|---|--|---|-----|--|--|---|--|-----|---|--|--|---|-----|--|--|---|--|-----|---|--|--|------|-------|---|---|---|--|---|-------|--|--|---|--|------|---|--|--|---|-----|--|--|---|--|-----|---|--|--|---|-----|--|--|---|--|-----|---|--|--|------|-------|---|---|---|---|---|-------|--|--|---|--|-------|---|--|--|---|-------|--|--|---|--|------|---|--|--|---|-----|--|--|---|--|-----|---|--|--|---|-----|--|--|---|--|-----|---|--|--|------|-------|---|---|---|
| 45° | 45° | 45° | 45° | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| <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>VAR.</td><td>CONT.</td><td>1</td><td>0</td><td>2</td></tr> </table> | 1 | 3-4 | | | X | | 1-2 | X | | | VAR. | CONT. | 1 | 0 | 2 | <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>VAR.</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 | | | VAR. | CONT. | 1 | 0 | 2 | <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>VAR.</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 | | | VAR. | CONT. | 1 | 0 | 2 | <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>VAR.</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 | | | VAR. | CONT. | 1 | 0 | 2 |
| 1 | 3-4 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 2 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 3 | 11-12 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 9-10 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 7-8 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 5-6 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 3-4 | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1-2 | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VAR. | 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VAR. | CONT. | 1 | 0 | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| ACTUATOR | P012 - P016 - P020 |
|----------|--------------------|
| | 45° |
| 027/0008 | |

| 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 |



AMMETER AND VOLTMETER SWITCHES | TYPE D

ACTUATORS AMMETER AND VOLTMETER SWITCHES | TYPE D

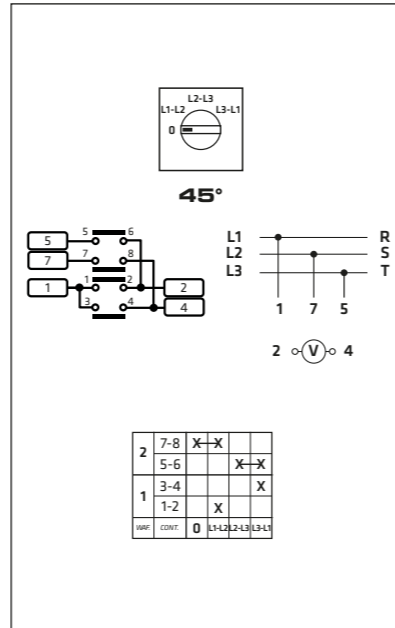
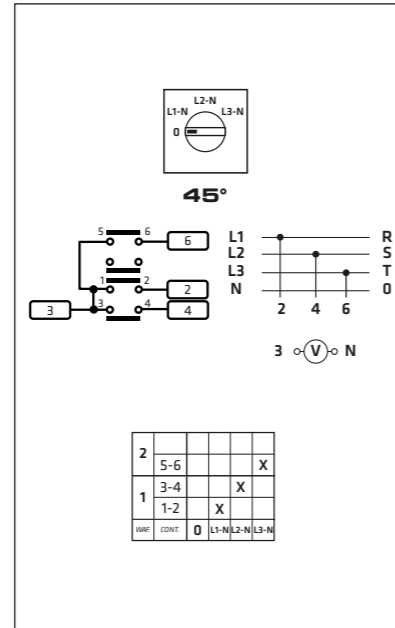
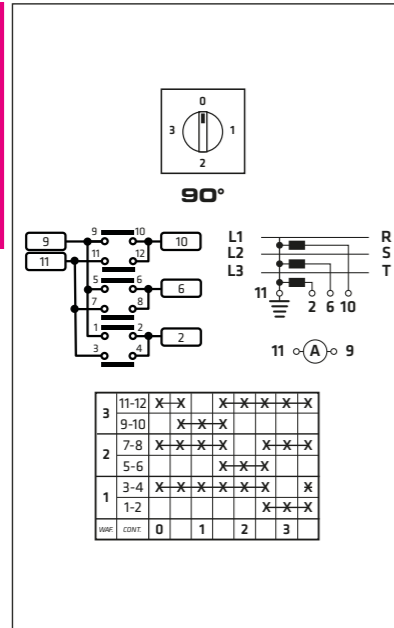


DIN MOUNTING 46 mm

Only switches DIN rail mounting 46 mm standard boxes



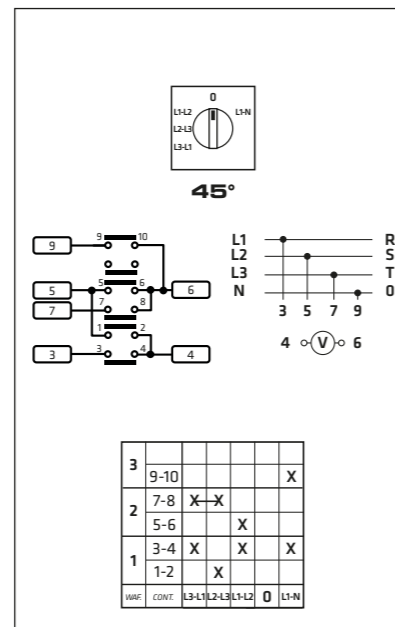
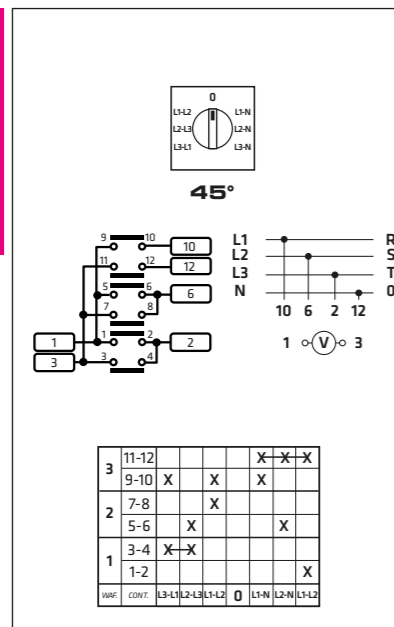
12-16-20A



| 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 |

ACTUATOR

P012 - P016 - P020

| | | | | |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| <p>90°</p> <p>027/0019</p> | <p>45°</p> <p>027/0020</p> | <p>45°</p> <p>027/0021</p> | <p>45°</p> <p>027/0023</p> | <p>45°</p> <p>027/0024</p> |
|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|




GIOVENZANA
INTERNATIONAL B.V.



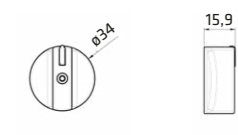
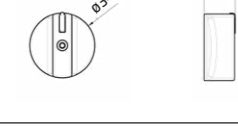
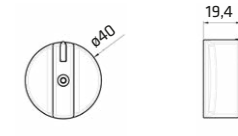
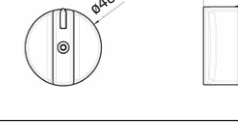
PHOENIX CAM SWITCHES
ACCESSORIES



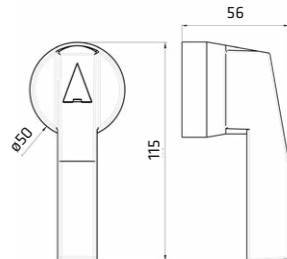


PHOENIX CAM SWITCHES | ACCESSORIES

KNOBS

| R | 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 |  |

| R | 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 |  |

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

All knobs are supplied with fixing screws.
* See gaskets to page 76.

PHOENIX CAM SWITCHES | ACCESSORIES

PHOENIX CAM SWITCHES | ACCESSORIES

PROTECTIONS

| R | | BOOT PROTECTION | | SERIES | WAFER | DIAMETER | CODE |
|--------|-------|-----------------|----------|----------|----------|----------|------|
| | | P012 | Max 3 | 65 | 11706031 | | |
| | | P016 | | | | | |
| P020 | | | | | | | |
| | | SERIES | WAFER | DIAMETER | CODE | | |
| | | C025 | Max 3 | 85 | 20101005 | | |
| | | C032 | | | | | |
| C040 | | | | | | | |
| SERIES | WAFER | DIAMETER | CODE | | | | |
| P012 | 2 | 65 | 11702038 | | | | |
| P016 | | | | | | | |
| P020 | | | | | | | |
| SERIES | WAFER | DIAMETER | CODE | | | | |
| C025 | 2 | 85 | 11706332 | | | | |
| C032 | | | | | | | |
| C040 | | | | | | | |

| R | | SOFT BOOT PROTECTION | | SERIES | WAFER | DIAMETER | CODE |
|---|--|----------------------|-------|--------|----------|----------|------|
| | | P012 | Max 3 | 65 | 20101007 | | |
| | | P016 | | | | | |
| | | P020 | | | | | |

GASKETS IP65

| R | | S | | R | |
|--------|---------|--------|----------|--------|----------|
| SERIES | CODE | SERIES | CODE | SERIES | CODE |
| P012 | 2800012 | C025 | 15000015 | C063 | 15010016 |
| P016 | | | | | |
| P020 | | | | | |
| C032 | | C080 | | | |

FIXING KEY

| R | | B | | FIXING KEY Ø 22,5 mm | |
|---|--|---|--|----------------------|--|
| | | | | PCF | |

SQUARE LONG DOORLOCK SHAFT

| B | | □5 mm | | SERIES | L/mm | CODE |
|--------|------|----------|-----|----------|------|------|
| | | P012 | 185 | 20401089 | | |
| | | P016 | | | | |
| | | P020 | | | | |
| SERIES | L/mm | CODE | | | | |
| C025 | 300 | 20401164 | | | | |
| C032 | | | | | | |
| C040 | | | | | | |
| SERIES | L/mm | CODE | | | | |
| C063 | 300 | 20900046 | | | | |
| C080 | | | | | | |

PROTECTION/KNOB FOR DOORLOCK SHAFT □ 5mm

| B | | SERIES | CODE |
|---|--|-----------|----------|
| | | 12 ... 40 | 11706094 |

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

BYPASS PROTECTIONS ø50 WITH LOCKING FACILITY

| R | | SCREW FIXING | | FIXING | | CODE |
|-----------------------------------|--|--------------|-----|------------|--|--------|
| | | screw* | ø22 | PPF3-4 | | |
| | | ø22 | | PPF3-5 | | |
| * Fixing screws are not supplied. | | | | | | |
| | | R | | ø22 FIXING | | FIXING |
| | | screw* | ø22 | PPF3-6 | | |
| | | ø22 | | PPF3-7 | | |
| * Fixing screws are not supplied. | | | | | | |

KT ADAPTOR PLATE IP65 □36 / □48

| R | | SERIES | CODE |
|---|--|-----------|-----------|
| | | 12 ... 40 | KIT 36/48 |

Complete with gasket IP65 and fixing screw.

IP65 THERMOPLASTIC ENCLOSURES

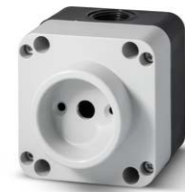
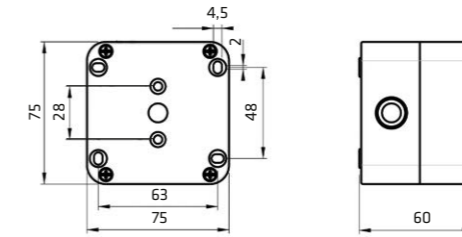


PQCOGN

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 | | |

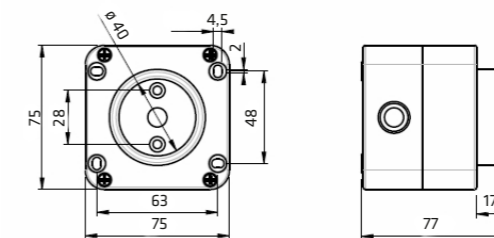


PQCPGN

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 | | |

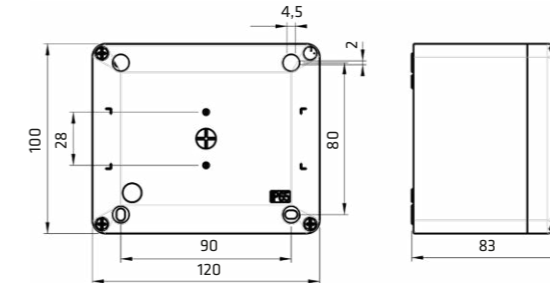


BF 1/2NGO

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 | | |

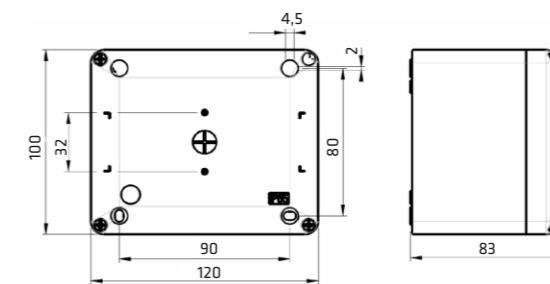


BF 1/6NGO

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 | | |

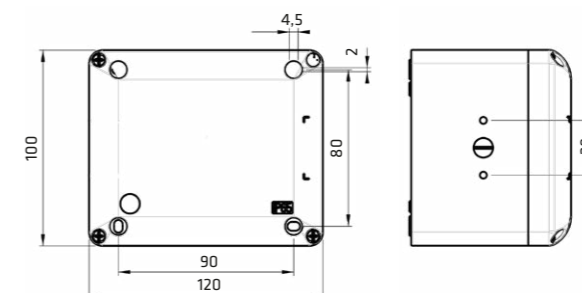


BL 1/ONGO

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 | | |



IP65 THERMOPLASTIC ENCLOSURES

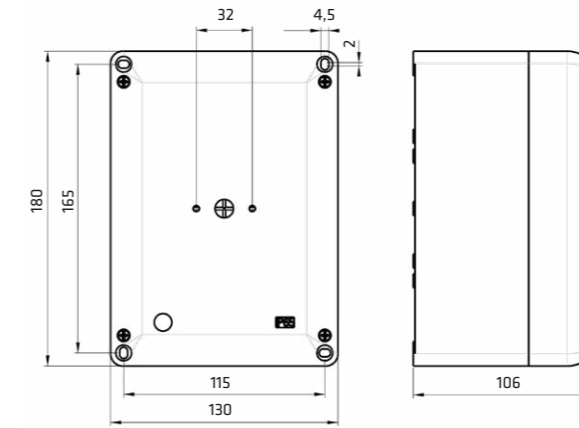


BF4/GNGO

IP65 □

- Front knob
- **Dimensions:** 130x180x106 mm
- Black box - grey cover
- Cable entry: 4x knock-out M25/M32 + 2x ø22,5mm closed hole on the bottom.

| SERIES | WAFER | CODE |
|--------|-------|----------|
| C025 | Max 3 | BF4/GNGO |
| C032 | | |
| C040 | | |

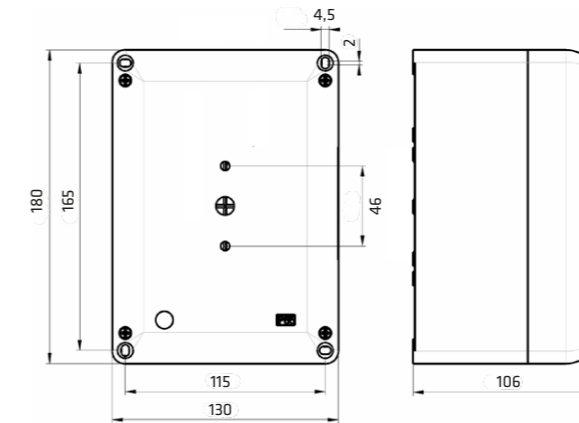


BF4/HNGO

IP65 □

- Front knob
- **Dimensions:** 130x180x106 mm
- Black box - grey cover
- Cable entry: 4x knock-out M25/M32 + 2x ø22,5mm closed hole on the bottom.

| SERIES | WAFER | CODE |
|--------|-------|----------|
| C063 | Max 2 | BF4/HNGO |
| C080 | | |



IP65 ALUMINUM ENCLOSURES

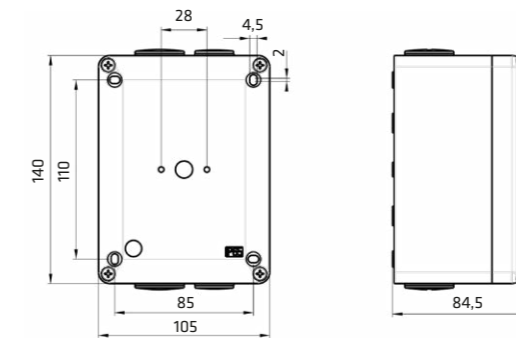


BFA/ANGO

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 | | |

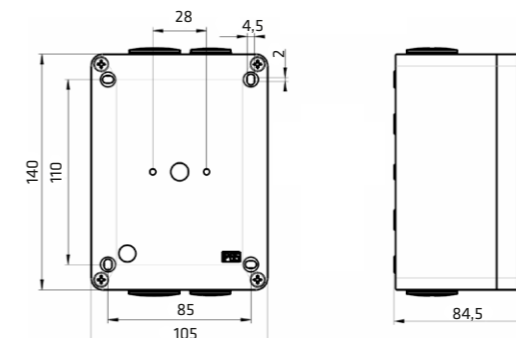


BFA/BNGO

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 | | |



RANGE OVERVIEW AND GENERAL CHARACTERISTICS



COMPLY WITH RULES

IEC 947-3, EN 60947-3, UL508



| SERIES | | PO12-PO16-PO20 PX12-PX16-PX20 | C025-C032-C040 CX25-CX32-CX40 | | |
|--|--|---|--|--|--|
| Protection class | control EN 60529 (UL50) NEMA 4X 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 | EN 60947-1 | II | II | | |
| Pollution grade | EN 60947-1 | 3 | 3 | | |
| Flammability | UL94 | 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 | IEC 68 part 2-3 IEC 68 part 2-30 | Hot damp Unsettled hot damp | Hot damp Unsettled hot damp | | |
| Terminal screw identification | | EN50013 | EN50013 | | |
| Connections | Terminal block caliber EN60947-1 Terminal screw Screwing torque EN60947-1 UL508 | 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 mm ² AWG | 1x0,75/4 - 2x0,75/2,5 10 - 18 | 2x2,5/10 14 - 6 | | |
| | Solid conductors min/max mm ² AWG | 1x0,75/4 - 2x0,75/2,5 10 - 18 | 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 | mil./cl | 1 1 1 | 1 1 1 | | |
| Electrical lifetime at 120 operations for hour | mil./cl | 1 0,75 0,75 | 1 0,75 0,75 | | |

| CERTIFICATIONS | | PO12 PX12 | PO16 PX16 | PO20 PX20 | C025 CX25 | C032 CX32 | C040 CX40 |
|----------------|--------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| CE | CE mark - Europe | ■ | ■ | ■ | ■ | ■ | ■ |
| cUL | cUL Listed - USA and Canada | ● | ● | ● | ● | ● | ● |
| IMQ | IMQ Istituto Marchio Qualità - Italy | ● | ● | ● | ● | ● | ● |
| CCC | CCC Cina | ● | ● | ● | ● | ● | ● |
| EAC | EAC Russia | ● | ● | ● | ● | ● | ● |

| 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 |
|------|------|------|------|
| ■ | ■ | ■ | ■ |
| ● | ● | ● | ● |
| ● | ● | | |

PHOENIX CAM SWITCHES
PHOENIX CAM SWITCHES
ELECTRICAL CHARACTERISTICS

| EN 60947-3 CHARACTERISTICS | | | PO12 - PX12 | PO16 - PX16 | PO20 - PX20 |
|--|----|--|-------------|-------------|-------------|
| Rated operating voltage Ue | V | | 690 | 690 | 690 |
| Rated insulation voltage Ui | V | | 690 | 690 | 690 |
| Rated impulse withstand voltage Uimp (sectionable) | kV | | 4 | 4 | 4 |
| Rated thermal current Ith | A | | 16 | 20 | 25 |
| Rated thermal current in enclosed Ithe | A | | 12 | 16 | 20 |
| Frequency | Hz | | 50/60 | 50/60 | 50/60 |

| RATED OPERATING CURRENT Ie: alternate current | | | PO12 - PX12 | PO16 - PX16 | PO20 - PX20 |
|---|------------------------|-----------|-------------|-------------|-------------|
| 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 |
| | | A | 80 | 104 | 128 |
| | | A | 80 | 112 | 128 |
| | | A | 80 | 112 | 128 |
| Power dissipation for each pole | W | 0,3* | 0,35* | 0,4* | |

| RATED OPERATING CURRENT Ie: direct current | | | PO12 - PX12 | PO16 - PX16 | PO20 - PX20 |
|---|---------------|---|-------------|-------------|-------------|
| 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 |

| SHORT CIRCUIT CHARACTERISTICS | | | PO12 - PX12 | PO16 - PX16 | PO20 - PX20 |
|--|------|---|-------------|-------------|-------------|
| Rated short-time short circuit withstand current Icw (1 s) | A | | 300 | 300 | 300 |
| Rated short circuit making capacity Icm | A | | 1200 | 1200 | 1200 |
| Conditional rated short circuit withstand current | kA | | 5 | 5 | 5 |
| Fuse rating gG | 690V | A | 20 | 20 | 20 |

| UL 508 CHARACTERISTICS | | | PO12 - PX12 | PO16 - PX16 | PO20 - PX20 |
|------------------------|------------------------|------------------|-------------|-------------|-------------|
| 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) |

| 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) |

EXECUTION ON DEMAND

ORDER FORM FOR SPECIAL SCHEME ON REQUEST

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.



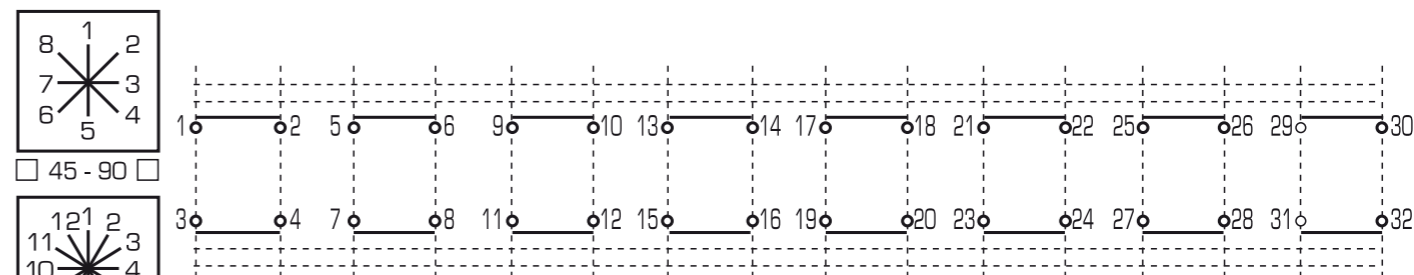
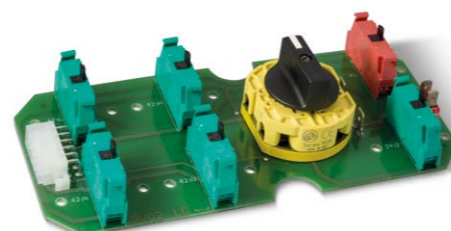
COAXIAL COUPLING

- Power Unit + Aux Unit.



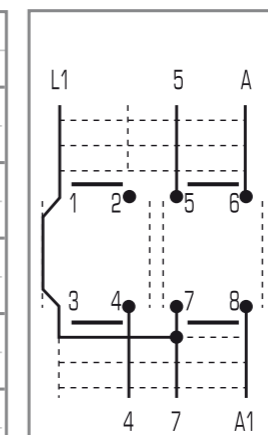
CAM SWITCH

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



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

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



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

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

| 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. _____

UNITED STATES CANADA
CANADA
UNITED STATES

GREENLAND
GREENLAND



LOGISTICS

Giovenzana International B.V. to support the market and his different necessity has created this organization that is always in process to cover territory in five different hubs.

SALES OFFICE

GIOVENZANA INTERNATIONAL B.V.

Budapest, Hungary - Office and Delivery

G.T.R. LLC

Moscow, Russian Federation - Office and Logistic Hub

GIOVENZANA CONTROLS INDIA Pvt. Ltd.

Mumbai, India - Office

GIOVENZANA DEUTSCHLAND

Hannover, Germany - Office

GIOVENZANA do Brasil

São Paulo, Brasil - Office and Logistic Hub

Branch

GIOVENZANA INTERNATIONAL B.V.

Dubai U.A.E. - Office and Logistic Hub for ME and FE included China, India, Oceania, Africa

Headquarter

GIOVENZANA INTERNATIONAL B.V.

Amsterdam, The Netherland - Industrial and Commercial

Manufacturers units

G.G.T. Srl

Milan, Italy - Historical Unit

G.G.Space Kft

Budapest, Hungary

Engineering

Electra Engineering Srl

Milan, Italy

Logistic warehouses

ITALY

HUNGARY

RUSSIAN FEDERATION

DUBAI U.A.E.

BRASIL

NEW ZEALAND

AUSTRALIA
AUSTRALIA
AUSTRALIA

INDONESIA
PAPUA
NEW
GUINEA

VIETNAM
LAOS
THAILAND
CAMBODIA
PHILIPPINES

CHINA
CHINA

INDIA

JAPAN

RUSSIA
RUSSIA
RUSSIA

RUSSIA