

|                                                        |          |    |     |                                         |
|--------------------------------------------------------|----------|----|-----|-----------------------------------------|
| Product designation                                    |          |    |     | Enclosed rotary cam switch              |
| Product type designation                               |          |    |     | 7GN25                                   |
| General characteristics                                |          |    |     |                                         |
| Switching diagram                                      |          |    |     | 135 - Multi-step<br>0-1-2 3 poles       |
| N° of elements                                         |          |    |     | 3                                       |
| Mounting form                                          |          |    |     | P - Plastic enclosure with black handle |
| Contact characteristics                                |          |    |     |                                         |
| Rated insulation voltage Ui                            |          |    |     |                                         |
|                                                        | IEC/EN   | V  | 690 |                                         |
|                                                        | UL/CSA   | V  | 600 |                                         |
| Rated impulse withstand voltage Uimp                   |          |    |     | kV 6                                    |
| Conventional free air thermal current Ith              |          |    |     |                                         |
|                                                        | IEC/EN   | A  | 25  |                                         |
|                                                        | UL/CSA   | A  | 30  |                                         |
| Rated operational voltage                              |          |    |     | V 480                                   |
| Rated operational impulse voltage                      |          |    |     | kV 4                                    |
| Maximum fuse size for short-circuit protection In (gG) |          |    |     |                                         |
|                                                        | 10kA     | A  | 25  |                                         |
|                                                        | 15kA     | A  | 25  |                                         |
|                                                        | 25kA     | A  | 25  |                                         |
| Rated short time current Icw                           |          |    |     |                                         |
|                                                        | 1s       | kA | 400 |                                         |
| Conductivity                                           |          |    |     | 10/5 mA/V                               |
| Operational current Ie IEC/EN                          |          |    |     |                                         |
| AC1/AC21A                                              |          |    |     |                                         |
|                                                        |          | A  | 25  |                                         |
| AC15                                                   |          |    |     |                                         |
|                                                        | 110V     | A  | 16  |                                         |
|                                                        | 220/230V | A  | 12  |                                         |
|                                                        | 380/400V | A  | 8   |                                         |
|                                                        | 660/690V | A  | 2   |                                         |
| Rated operational power in AC                          |          |    |     |                                         |
| Three-phase AC-3                                       |          |    |     |                                         |
|                                                        | 220/230V | kW | 5.5 |                                         |
|                                                        | 380/440V | kW | 7.5 |                                         |
|                                                        | 500/690V | kW | 7.5 |                                         |
| Single-phase AC-3                                      |          |    |     |                                         |
|                                                        | 110V     | kW | 1.5 |                                         |
|                                                        | 220/230V | kW | 3   |                                         |
|                                                        | 380/440V | kW | 5.5 |                                         |
| Three-phase AC23A                                      |          |    |     |                                         |
|                                                        | 220/230V | kW | 6.5 |                                         |
|                                                        | 380/440V | kW | 11  |                                         |
|                                                        | 500/690V | kW | 11  |                                         |
| Single-phase AC23A                                     |          |    |     |                                         |
|                                                        | 110V     | kW | 1.5 |                                         |
|                                                        | 220/230V | kW | 3.7 |                                         |
|                                                        | 380/440V | kW | 5.5 |                                         |
| Rated operational current in DC                        |          |    |     |                                         |

### DC21A

|      |   |     |
|------|---|-----|
| 48V  | A | 25  |
| 60V  | A | 25  |
| 110V | A | 4   |
| 220V | A | 0.7 |

### DC23A (poles in series)

|      |   |        |
|------|---|--------|
| 24V  | A | 25 (1) |
| 48V  | A | 25 (2) |
| 60V  | A | 25 (3) |
| 110V | A | 12 (3) |
| 220V | A | 10 (4) |

### DC13

|      |   |     |
|------|---|-----|
| 24V  | A | 25  |
| 48V  | A | 20  |
| 60V  | A | 16  |
| 110V | A | 1.5 |
| 220V | A | 0.4 |

|                   |   |     |
|-------------------|---|-----|
| Power dissipation | W | 1.1 |
|-------------------|---|-----|

### Mechanical features

|                 |      |
|-----------------|------|
| Terminals screw | M3.5 |
|-----------------|------|

|                                     |    |     |
|-------------------------------------|----|-----|
| Tightening torque for terminals max | Nm | 0.8 |
|-------------------------------------|----|-----|

### Conductor size

#### AWG - Rigid cable

|     |     |    |
|-----|-----|----|
| min | AWG | 20 |
| Max | AWG | 10 |

#### AWG - Flexible cable

|     |     |    |
|-----|-----|----|
| min | AWG | 20 |
| Max | AWG | 12 |

#### Conductor size (IEC) - Flexible cable

|     |                 |     |
|-----|-----------------|-----|
| min | mm <sup>2</sup> | 0.5 |
| Max | mm <sup>2</sup> | 4   |

#### Conductor size (IEC) - Rigid cable

|     |                 |     |
|-----|-----------------|-----|
| min | mm <sup>2</sup> | 0.5 |
| Max | mm <sup>2</sup> | 4   |

|                 |        |                   |
|-----------------|--------|-------------------|
| Mechanical life | cycles | 5x10 <sup>6</sup> |
|-----------------|--------|-------------------|

### UL technical data

#### Motor power for direct-on-line control

##### for three-phase motor

|      |    |    |
|------|----|----|
| 120V | HP | 3  |
| 240V | HP | 5  |
| 480V | HP | 10 |
| 600V | HP | 15 |

##### for single-phase motor

|      |    |     |
|------|----|-----|
| 120V | HP | 1.5 |
| 240V | HP | 3   |

### Ambient conditions

#### Temperature

##### Operating temperature

|     |    |     |
|-----|----|-----|
| min | °C | -25 |
| max | °C | +55 |

##### Storage temperature

|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +70 |

### Resistance & Protection

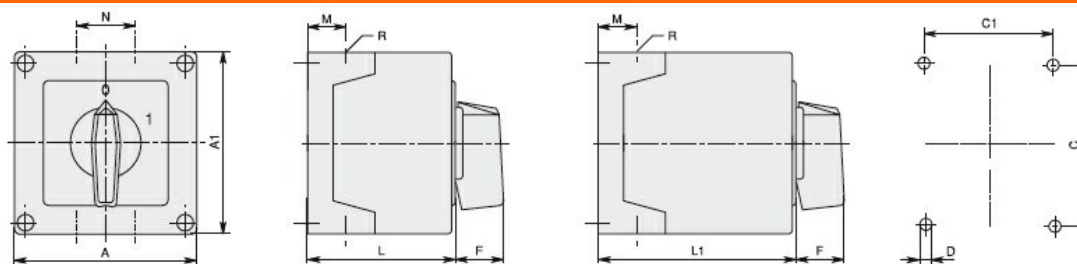
Frontal IP degree

IP65

Terminals IP degree

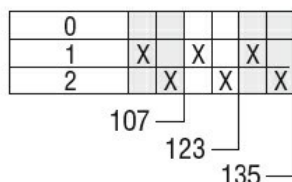
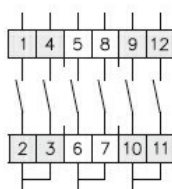
IP00

## Dimensions



| Series | Enclosure size | Number of elements |       | Dimensions |     |      |     |     |    |    |      |      |       | Cable entry      | Protection degree |
|--------|----------------|--------------------|-------|------------|-----|------|-----|-----|----|----|------|------|-------|------------------|-------------------|
|        |                | L                  | L1    | A          | A1  | C    | C1  | D   | F  | M  | N    | L    | L1    |                  |                   |
| 7GN12  | 75x75          | 1 - 2              | 3 - 4 | 75         | 75  | 50   | 64  | 4.5 | 19 | 14 | 28   | 57.5 | 79.8  | 4xPG13.5         | IP65              |
| 7GN20  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN25  |                | 1                  | 2 - 3 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN12  | 90x90          | 1 - 3              | 4 - 6 | 90         | 90  | 79   | 63  | 4.5 | 25 | 19 | 30   | 71.3 | 98.3  | 4xPG16           | IP65              |
| 7GN20  |                | 1 - 3              | 4 - 6 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN25  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN32  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN40  |                | 1                  | 2 - 3 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN12  | 110x110        | 1 - 4              | 5 - 8 | 110        | 110 | 98.4 | 83  | 4.5 | 32 | 21 | 39.5 | 85.5 | 119.5 | 4xPG21           | IP65              |
| 7GN20  |                | 1 - 4              | 5 - 8 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN25  |                | 1 - 3              | 4 - 5 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN32  |                | 1 - 3              | 4 - 5 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN40  |                | 1 - 2              | 3 - 5 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN63  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN32  | 125x175        | 1 - 3              | 4 - 5 | 125        | 175 | 146  | 112 | 5.5 | 32 | 21 | 68   | 84.3 | 118.3 | 4xPG21<br>2xPG11 | IP65              |
| 7GN40  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN63  |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN125 |                | 1                  | 2     |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN32  | 180x254        | 1 - 5              | 6 - 8 | 180        | 254 | 120  | 190 | 5.5 | 32 | 35 | 76   | 121  | 175   | 4xPG29<br>2xPG11 | IP65              |
| 7GN40  |                | 1 - 4              | 5 - 7 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN63  |                | 1 - 3              | 4 - 6 |            |     |      |     |     |    |    |      |      |       |                  |                   |
| 7GN125 |                | 1 - 2              | 3 - 4 |            |     |      |     |     |    |    |      |      |       |                  |                   |

## Wiring diagrams



## Certifications and compliance

### Compliance

IEC/EN/BS 60947-1

IEC/EN/BS 60947-3

IEC/EN/BS 60947-5-1

### Certificates

EAC

## ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete