

|   |                   |     |     |   |
|---|-------------------|-----|-----|---|
| Product designation                                       |                   |     |     | Enclosed rotary cam switch              |
| Product type designation                                  |                   |     |     | 7GN25                                   |
| <b>General characteristics</b>                            |                   |     |     |   |
| Switching diagram   |                   |     |     | 12 - Star-delta motor starter switch    |
| N° of elements  |                   |     |     | 4                                       |
| Mounting form   |                   |     |     | P - Plastic enclosure with black handle |
| <b>Contact characteristics</b>                            |                   |     |     |   |
| Rated insulation voltage $U_i$                            | IEC/EN            | V   | 690 |   |
|   | UL/CSA            | V   | 600 |   |
| Rated impulse withstand voltage $U_{imp}$                 |                   |     | kV  | 6                                       |
| Conventional free air thermal current $I_{th}$            | 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 $I_n$ (gG) | 10kA              | A   | 25  |   |
|   | 15kA              | A   | 25  |   |
|   | 25kA              | A   | 25  |   |
| Rated short time current $I_{cw}$                         |                   |     | 1s  | A                                       |
|   |                   |     |     | 400                                     |
| Conductivity  |                   |     |     | 10/5 mA/V                               |
| Operational current $I_e$ 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

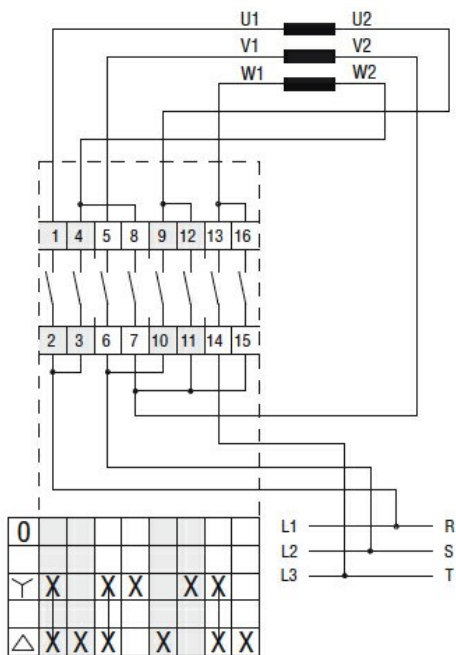
Terminals IP degree IP00

**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