

|   |                   |      |     |  |
|---|-------------------|------|-----|--|
| Product designation                                       |                   |      |     | Rotary cam switches  |
| Product type designation                                  |                   |      |     | 7GN32  |
| <b>General characteristics</b>                            |                   |      |     |  |
| Switching diagram   |                   |      |     | 53 - Changeover switch 3 poles - 2 speed motor starting with separate windings |
| N° of elements  |                   |      |     | 3  |
| 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    | 32  |  |
|   | UL/CSA            | A    | 40  |  |
| Rated operational voltage                                 |                   |      | V   | 480  |
| Rated operational impulse voltage                         |                   |      | kV  | 4  |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA              | A    | 32  |  |
|   | 15kA              | A    | 32  |  |
|   | 25kA              | A    | 32  |  |
|   | 50kA              | A    | 32  |  |
| Rated short time current $I_{cw}$                         | 1s                | kA   | 800 |  |
|   |                   |      |     | 10/5 mA/V  |
| Conductivity  |                   |      |     | 10/5 mA/V  |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A         |      |     | A 32   |
|   | AC15              |      |     |  |
| Rated operational power in AC                             | Three-phase AC-3  |      |     |  |
|   | 220/230V          | kW   | 7.5 |  |
|   | 380/440V          | kW   | 11  |  |
|   | 500/690V          | kW   | 11  |  |
|   | Single-phase AC-3 |      |     |  |
| 110V  | kW                | 2.2  |     |  |
| 220/230V  | kW                | 4    |     |  |
| 380/440V  | kW                | 6.5  |     |  |
| Three-phase AC23A   |                   |      |     |  |
| 220/230V  | kW                | 8    |     |  |
| 380/440V  | kW                | 15   |     |  |
| 500/690V  | kW                | 18.5 |     |  |
| Single-phase AC23A  |                   |      |     |  |

|  |          |                 |                   |
|--|----------|-----------------|-------------------|
|  | 110V     | kW              | 2.2               |
|  | 220/230V | kW              | 4                 |
|  | 380/440V | kW              | 7.5               |
| <hr/>                                  |          |                 |                   |
| Rated operational current in DC        |          |                 |                   |
| DC21A                                  |          |                 |                   |
|  | 48V      | A               | 32                |
|  | 60V      | A               | 32                |
|  | 110V     | A               | 6                 |
|  | 220V     | A               | 0.9               |
| <hr/>                                  |          |                 |                   |
| DC23A (poles in series)                |          |                 |                   |
|  | 24V      | A               | 32 (1)            |
|  | 48V      | A               | 32 (2)            |
|  | 60V      | A               | 32 (3)            |
|  | 110V     | A               | 15 (3)            |
|  | 220V     | A               | 12 (4)            |
| <hr/>                                  |          |                 |                   |
| DC13                                   |          |                 |                   |
|  | 24V      | A               | 32                |
|  | 48V      | A               | 25                |
|  | 60V      | A               | 16                |
|  | 110V     | A               | 3                 |
|  | 220V     | A               | 0.5               |
| <hr/>                                  |          |                 |                   |
| Power dissipation                      |          | W               | 1.5               |
| <b>Mechanical features</b>             |          |                 |                   |
| Terminals screw                        |          |                 | M4                |
| Tightening torque for terminals max    |          | Nm              | 1.2               |
| <hr/>                                  |          |                 |                   |
| Conductor size                         |          |                 |                   |
| AWG - Rigid cable                      |          |                 |                   |
|  | min      | AWG             | 16                |
|  | Max      | AWG             | 8                 |
| <hr/>                                  |          |                 |                   |
| AWG - Flexible cable                   |          |                 |                   |
|  | min      | AWG             | 16                |
|  | Max      | AWG             | 10                |
| <hr/>                                  |          |                 |                   |
| Conductor size (IEC) - Flexible cable  |          |                 |                   |
|  | min      | mm <sup>2</sup> | 1.5               |
|  | Max      | mm <sup>2</sup> | 4                 |
| <hr/>                                  |          |                 |                   |
| Conductor size (IEC) - Rigid cable     |          |                 |                   |
|  | min      | mm <sup>2</sup> | 1.5               |
|  | Max      | mm <sup>2</sup> | 6                 |
| <hr/>                                  |          |                 |                   |
| Mechanical life                        |          | cycles          | 5x10 <sup>6</sup> |
| <b>UL technical data</b>               |          |                 |                   |
| Motor power for direct-on-line control |          |                 |                   |
| for three-phase motor                  |          |                 |                   |
|  | 120V     | HP              | 5                 |
|  | 240V     | HP              | 10                |
|  | 480V     | HP              | 15                |
|  | 600V     | HP              | 15                |
| <hr/>                                  |          |                 |                   |
| for single-phase motor                 |          |                 |                   |
|  | 120V     | HP              | 2                 |
|  | 240V     | HP              | 5                 |
| <hr/>                                  |          |                 |                   |
| <b>Ambient conditions</b>              |          |                 |                   |
| Temperature                            |          |                 |                   |
| Operating temperature                  |          |                 |                   |
|  | min      | °C              | -25               |
|  | max      | °C              | +55               |

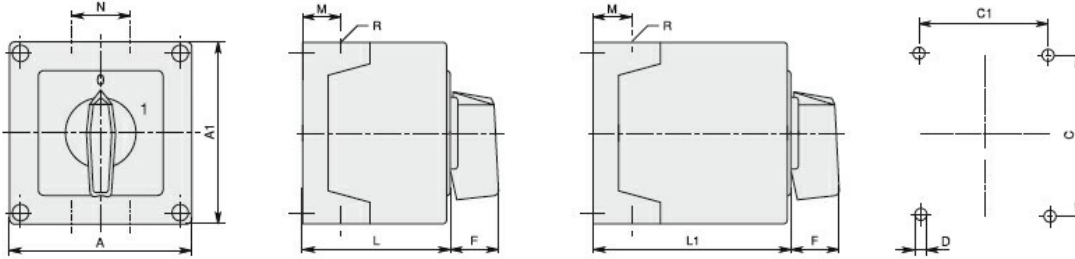
Storage temperature

min °C -40  
max °C +70

**Resistance & Protection**

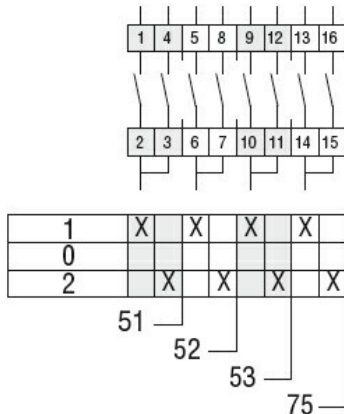
|                     |      |
|---------------------|------|
| Frontal IP degree   | IP65 |
| Terminals IP degree | IP00 |

**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

EC001105 - Off-  
load switch