



|   |  |          |        |
|---|--|----------|--------|
| Product designation                                       | Enclosed rotary cam switch                     |          |        |
| Product type designation                                  | 7GN40  |          |        |
| <b>General characteristics</b>                            |  |          |        |
| Switching diagram   | 10 - ON/OFF switch 3 poles                     |          |        |
| N° of elements  | 2  |          |        |
| Mounting form   | P25 - Plastic enclosure with red/yellow 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        | 40     |
|   | UL/CSA   | A        | 50     |
| Rated operational voltage                                 |  | V        | 480    |
| Rated operational impulse voltage                         |  | kV       | 4      |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA   | A        | 40     |
|   | 15kA   | A        | 40     |
|   | 25kA   | A        | 40     |
|   | 50kA   | A        | 40     |
|   | 63kA   | A        | 40     |
| Rated short time current $I_{cw}$                         | 1s   | A        | 1000   |
|   | Conductivity 10/5 mA/V                         |          |        |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A                                      |          | A 40   |
|   | AC15   |          |        |
|   |  | 110V     | A 25   |
|   |  | 220/230V | A 22   |
|   |  | 380/400V | A 12   |
|   |  | 660/690V | A 2    |
| Rated operational power in AC                             | Three-phase AC-3                               |          |        |
|   | 220/230V                                       | kW       | 8      |
|   |  | 380/440V | kW 15  |
|   |  | 500/690V | kW 15  |
| Single-phase AC-3   |  |          |        |
|   |  | 110V     | kW 3   |
|   |  | 220/230V | kW 6.5 |
|   |  | 380/440V | kW 8   |

|  |          |                 |                   |
|--|----------|-----------------|-------------------|
| Three-phase AC23A                      |          |                 |                   |
|  | 220/230V | kW              | 8                 |
|  | 380/440V | kW              | 18.5              |
|  | 500/690V | kW              | 22                |
| Single-phase AC23A                     |          |                 |                   |
|  | 110V     | kW              | 3                 |
|  | 220/230V | kW              | 6                 |
|  | 380/440V | kW              | 11                |
| Rated operational current in DC        |          |                 |                   |
| DC21A                                  |          |                 |                   |
|  | 48V      | A               | 40                |
|  | 60V      | A               | 40                |
|  | 110V     | A               | 6                 |
|  | 220V     | A               | 0.9               |
| DC23A (poles in series)                |          |                 |                   |
|  | 24V      | A               | 40 (1)            |
|  | 48V      | A               | 40 (2)            |
|  | 60V      | A               | 40 (3)            |
|  | 110V     | A               | 20 (3)            |
|  | 220V     | A               | 12 (4)            |
| DC13                                   |          |                 |                   |
|  | 24V      | A               | 40                |
|  | 48V      | A               | 32                |
|  | 60V      | A               | 16                |
|  | 110V     | A               | 3                 |
| Power dissipation                      |          | W               | 2.0               |
| <b>Mechanical features</b>             |          |                 |                   |
| Terminals screw                        |          |                 | M4                |
| Tightening torque for terminals max    |          | Nm              | 1.2               |
| Conductor size                         |          |                 |                   |
| AWG - Rigid cable                      |          |                 |                   |
|  | min      | AWG             | 16                |
|  | Max      | AWG             | 8                 |
| AWG - Flexible cable                   |          |                 |                   |
|  | min      | AWG             | 16                |
|  | Max      | AWG             | 10                |
| Conductor size (IEC) - Flexible cable  |          |                 |                   |
|  | min      | mm <sup>2</sup> | 1.5               |
|  | Max      | mm <sup>2</sup> | 6                 |
| Conductor size (IEC) - Rigid cable     |          |                 |                   |
|  | min      | mm <sup>2</sup> | 1.5               |
|  | Max      | mm <sup>2</sup> | 10                |
| 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              | 20                |
|  | 600V     | HP              | 20                |
| for single-phase motor                 |          |                 |                   |
|  | 120V     | HP              | 2                 |
|  | 240V     | HP              | 5                 |
| <b>Ambient conditions</b>              |          |                 |                   |

Temperature

Operating temperature

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

Storage temperature

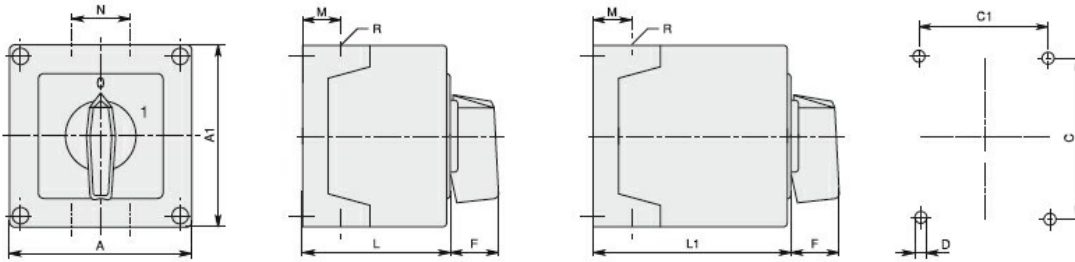
|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +70 |

Resistance & Protection

Frontal IP degree IP65

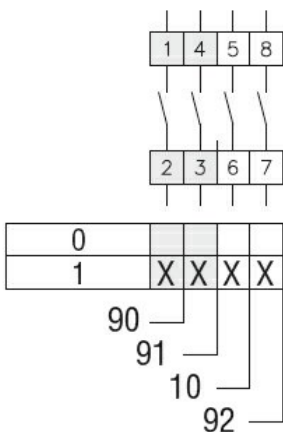
Terminals IP degree IP00

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

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IEC/EN/BS 60947-3

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IEC/EN/BS 60947-5-1

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Certificates

EAC

ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete