

|   |                   |    |     |  |
|---|-------------------|----|-----|--|
| Product designation                                       |                   |    |     | Rotary cam switches  |
| Product type designation                                  |                   |    |     | 7GN12  |
| <b>General characteristics</b>                            |                   |    |     |  |
| Switching diagram   |                   |    |     | 19 - Dahlander motor control switch 0-1-2  |
| N° of elements  |                   |    |     | 4  |
| Mounting form   |                   |    |     | O98 - Rear mounting with red/yellow handle padlockable in 0, door coupling and protection covers |
| <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  | 16  |  |
|   | UL/CSA            | A  | 15  |  |
| Rated operational voltage                                 |                   |    | V   | 480  |
| Rated operational impulse voltage                         |                   |    | kV  | 4  |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA              | A  | 16  |  |
|   | 15kA              | A  | 10  |  |
|   | 25kA              | A  | 10  |  |
| Rated short time current $I_{cw}$                         |                   |    | 1s  | kA   |
|   |                   |    |     | 200  |
| Conductivity  |                   |    |     | 10/5 mA/V  |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A         |    | A   | 16   |
|   | AC15              |    |     |  |
|   | 110V              | A  | 10  |  |
|   | 220/230V          | A  | 8   |  |
|   | 380/400V          | A  | 4   |  |
|   | 660/690V          | A  | 1.5 |  |
| Rated operational power in AC                             | Three-phase AC-3  |    |     |  |
|   | 220/230V          | kW | 2.5 |  |
|   | 380/440V          | kW | 4   |  |
|   | 500/690V          | kW | 5.5 |  |
|   | Single-phase AC-3 |    |     |  |
|   | 110V              | kW | 0.8 |  |
|   | 220/230V          | kW | 1.5 |  |
|   | 380/440V          | kW | 2.2 |  |
|   | Three-phase AC23A |    |     |  |
|   | 220/230V          | kW | 3   |  |
|   | 380/440V          | kW | 5.5 |  |
|   | 500/690V          | kW | 7.5 |  |
| Single-phase AC23A  |                   |    |     |  |

|  |          |                 |                   |
|--|----------|-----------------|-------------------|
|  | 110V     | kW              | 0.8               |
|  | 220/230V | kW              | 1.7               |
|  | 380/440V | kW              | 3                 |
| <hr/>                                  |          |                 |                   |
| Rated operational current in DC        |          |                 |                   |
| DC21A                                  |          |                 |                   |
|  | 48V      | A               | 12                |
|  | 60V      | A               | 12                |
|  | 110V     | A               | 4                 |
|  | 220V     | A               | 0.6               |
|  | 440V     | A               | 0.25              |
| <hr/>                                  |          |                 |                   |
| DC23A (poles in series)                |          |                 |                   |
|  | 24V      | A               | 10 (1)            |
|  | 48V      | A               | 10 (2)            |
|  | 60V      | A               | 10 (3)            |
|  | 110V     | A               | 5 (3)             |
|  | 220V     | A               | 5 (4)             |
| <hr/>                                  |          |                 |                   |
| DC13                                   |          |                 |                   |
|  | 24V      | A               | 12                |
|  | 48V      | A               | 10                |
|  | 60V      | A               | 8                 |
|  | 110V     | A               | 1                 |
|  | 220V     | A               | 0.4               |
|  | 440V     | A               | 0.15              |
| <hr/>                                  |          |                 |                   |
| Power dissipation                      |          | W               | 0.8               |
| <b>Mechanical features</b>             |          |                 |                   |
| Terminals screw                        |          |                 | M3                |
| Tightening torque for terminals max    |          | Nm              | 0.5               |
| <hr/>                                  |          |                 |                   |
| Conductor size                         |          |                 |                   |
| AWG - Rigid cable                      |          |                 |                   |
|  | min      | AWG             | 20                |
|  | Max      | AWG             | 12                |
| <hr/>                                  |          |                 |                   |
| AWG - Flexible cable                   |          |                 |                   |
|  | min      | AWG             | 20                |
|  | Max      | AWG             | 14                |
| <hr/>                                  |          |                 |                   |
| Conductor size (IEC) - Flexible cable  |          |                 |                   |
|  | min      | mm <sup>2</sup> | 0.5               |
|  | Max      | mm <sup>2</sup> | 2.5               |
| <hr/>                                  |          |                 |                   |
| Conductor size (IEC) - Rigid cable     |          |                 |                   |
|  | min      | mm <sup>2</sup> | 0.5               |
|  | Max      | mm <sup>2</sup> | 2.5               |
| <hr/>                                  |          |                 |                   |
| Mechanical life                        |          | cycles          | 3x10 <sup>6</sup> |
| <b>UL technical data</b>               |          |                 |                   |
| Motor power for direct-on-line control |          |                 |                   |
| for three-phase motor                  |          |                 |                   |
|  | 120V     | HP              | 1.5               |
|  | 240V     | HP              | 3                 |
| <hr/>                                  |          |                 |                   |
| for single-phase motor                 |          |                 |                   |
|  | 120V     | HP              | 0.5               |
|  | 240V     | HP              | 1                 |
| <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 | IP40 |
|-------------------|------|

|                     |      |
|---------------------|------|
| Terminals IP degree | IP00 |
|---------------------|------|

**ETIM classification**

ETIM 8.0

EC001029 -  
 Selector switch,  
 complete