

### General characteristics

|                   |  |
|-------------------|--|
| Switching diagram | 19 - Dahlander motor control switch 0-1-2      |
| N° of elements    | 4  |
| Mounting form     | P25 - Plastic enclosure with red/yellow handle |

### Contact characteristics

|   |                    |          |           |      |
|---|--------------------|----------|-----------|------|
| 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               |          |           |      |
|   | 110V               | A        | 25        |      |
|   | 220/230V           | A        | 20        |      |
|   | 380/400V           | A        | 10        |      |
|   | 660/690V           | A        | 2         |      |
| 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  |
| Rated operational current in DC                           |                    |          |           |      |
| DC21A   |                    |          |           |      |

|  |      |                 |                   |
|--|------|-----------------|-------------------|
|  | 48V  | A               | 32                |
|  | 60V  | A               | 32                |
|  | 110V | A               | 6                 |
|  | 220V | A               | 0.9               |
| DC23A (poles in series)                | 24V  | A               | 32 (1)            |
|  | 48V  | A               | 32 (2)            |
|  | 60V  | A               | 32 (3)            |
|  | 110V | A               | 15 (3)            |
|  | 220V | A               | 12 (4)            |
| DC13                                   | 24V  | A               | 32                |
|  | 48V  | A               | 25                |
|  | 60V  | A               | 16                |
|  | 110V | A               | 3                 |
|  | 220V | A               | 0.5               |
| Power dissipation                      |      | W               | 1.5               |
| <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> | 4                 |
| Conductor size (IEC) - Rigid cable     | min  | mm <sup>2</sup> | 1.5               |
|  | Max  | mm <sup>2</sup> | 6                 |
| 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                |
| 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               |
| <b>Resistance &amp; Protection</b>     |      |                 |                   |
| Frontal IP degree                      |      |                 | IP65              |

Terminals IP degree

IP00

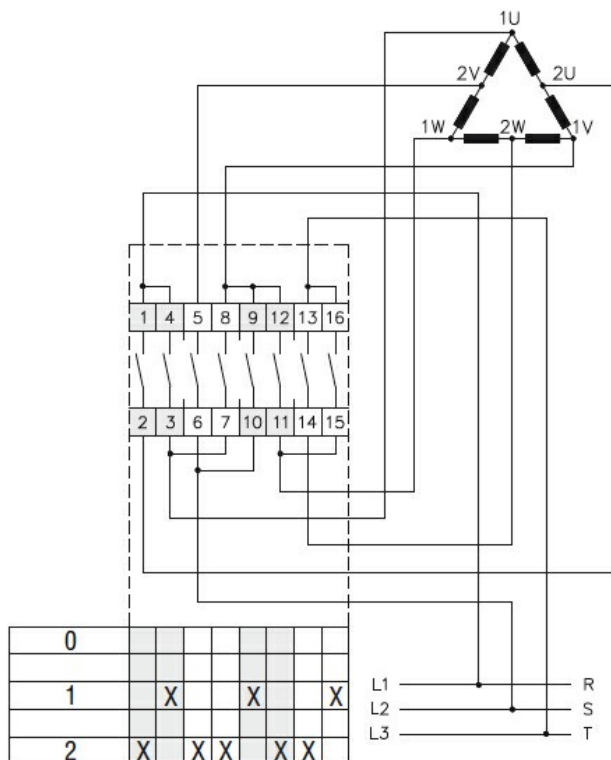
**Dimensions**

| 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 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 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Ⓟ   |                | 1-2                | 3-5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN40Ⓟ   |                | 1-2                | 3-5 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63    |                | 1-2                | 3-4 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN32Ⓟ   | 125x175        | 1-2                | 3-4 | 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    | 198x248        | -                  | 1-7 | 198        | 248 | 190-210 | 140-180 | 5.5 | 32 | 35 | 104  | -    | 166.5 | 6xPG16-<br>21-29 | IP65              |
| 7GN40    |                | -                  | 1-7 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN63Ⓟ   |                | -                  | 1-6 |            |     |         |         |     |    |    |      |      |       |                  |                   |
| 7GN125ⓅⓅ |                | -                  | 1-4 |            |     |         |         |     |    |    |      |      |       |                  |                   |

Ⓟ Standard dimensions for cam switch in plastic enclosure with black handle (P).

Ⓟ D Standard dimensions for cam switch in plastic enclosure with red/yellow handle padlockable in 0 (P25).

**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