

**General characteristics**

|                   |  |
|-------------------|--|
| Switching diagram | 20 - Dahlander motor 2-speed reversing switch  |
| N° of elements    | 6  |
| Mounting form     | O98 - Rear mounting with red/yellow handle padlockable in 0, door coupling and protection covers |

**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        | 20        |     |
|   | UL/CSA             | A        | 20        |     |
| Rated operational voltage                                 |                    | V        | 480       |     |
| Rated operational impulse voltage                         |                    | kV       | 4         |     |
| Maximum fuse size for short-circuit protection $I_n$ (gG) | 10kA               | A        | 20        |     |
|   | 15kA               | A        | 16        |     |
|   | 25kA               | A        | 16        |     |
| Rated short time current $I_{cw}$                         | 1s                 | kA       | 250       |     |
|   |                    |          | 10/5 mA/V |     |
| Conductivity  |                    |          | 10/5 mA/V |     |
| Operational current $I_e$ IEC/EN                          | AC1/AC21A          | A        | 20        |     |
|   | AC15               |          |           |     |
|   | 110V               | A        | 10        |     |
|   | 220/230V           | A        | 8         |     |
|   | 380/400V           | A        | 6         |     |
|   | 660/690V           | A        | 1.5       |     |
| Rated operational power in AC                             | Three-phase AC-3   | 220/230V | kW        | 3   |
|   |                    | 380/440V | kW        | 5.5 |
|   |                    | 500/690V | kW        | 5.5 |
|   | Single-phase AC-3  | 110V     | kW        | 0.8 |
|   |                    | 220/230V | kW        | 2.2 |
|   |                    | 380/440V | kW        | 3   |
|   | Three-phase AC23A  | 220/230V | kW        | 5   |
|   |                    | 380/440V | kW        | 7.5 |
|   |                    | 500/690V | kW        | 7.5 |
|   | Single-phase AC23A | 110V     | kW        | 0.8 |
|   |                    | 220/230V | kW        | 2.5 |
|   |                    | 380/440V | kW        | 3.7 |

Rated operational current in DC  
DC21A

|      |   |      |
|------|---|------|
| 48V  | A | 20   |
| 60V  | A | 20   |
| 110V | A | 4    |
| 220V | A | 0.6  |
| 440V | A | 0.25 |

DC23A (poles in series)

|      |   |        |
|------|---|--------|
| 24V  | A | 20 (1) |
| 48V  | A | 20 (2) |
| 60V  | A | 20 (3) |
| 110V | A | 10 (3) |
| 220V | A | 8 (4)  |

DC13

|      |   |      |
|------|---|------|
| 24V  | A | 20   |
| 48V  | A | 16   |
| 60V  | A | 12   |
| 110V | A | 1    |
| 220V | A | 0.4  |
| 440V | A | 0.15 |

Power dissipation W 0.8

**Mechanical features**

Terminals screw M3

Tightening torque for terminals max Nm 0.5

Conductor size

AWG - Rigid cable

|     |     |    |
|-----|-----|----|
| min | AWG | 20 |
| Max | AWG | 12 |

AWG - Flexible cable

|     |     |    |
|-----|-----|----|
| min | AWG | 20 |
| Max | AWG | 14 |

Conductor size (IEC) - Flexible cable

|     |                 |     |
|-----|-----------------|-----|
| min | mm <sup>2</sup> | 0.5 |
| Max | mm <sup>2</sup> | 2.5 |

Conductor size (IEC) - Rigid cable

|     |                 |     |
|-----|-----------------|-----|
| min | mm <sup>2</sup> | 0.5 |
| Max | mm <sup>2</sup> | 2.5 |

Mechanical life cycles 5x10<sup>6</sup>

**UL technical data**

Motor power for direct-on-line control

for three-phase motor

|      |    |     |
|------|----|-----|
| 120V | HP | 1.5 |
| 240V | HP | 3   |
| 480V | HP | 7.5 |
| 600V | HP | 10  |

for single-phase motor

|      |    |      |
|------|----|------|
| 120V | HP | 0.75 |
| 240V | HP | 2    |

**Ambient conditions**

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 -<br>Selector switch,<br>complete |
|----------|--|