

### General characteristics

|                   |                                            |
|-------------------|--------------------------------------------|
| Switching diagram | 11 - 3-phase<br>motor reversing<br>switch  |
| N° of elements    | 3                                          |
| Mounting form     | U - Front<br>mounting with<br>black handle |

### Contact characteristics

|                                                           |          |    |           |
|-----------------------------------------------------------|----------|----|-----------|
| Rated insulation voltage $U_i$                            |          |    |           |
|                                                           | IEC/EN   | V  | 480       |
|                                                           | UL/CSA   | V  | 240       |
| Rated impulse withstand voltage $U_{imp}$                 |          | kV | 4         |
| Conventional free air thermal current $I_{th}$            |          |    |           |
|                                                           | IEC/EN   | A  | 10        |
|                                                           | UL/CSA   | A  | 10        |
| Rated operational voltage                                 |          | V  | 480       |
| Rated operational impulse voltage                         |          | kV | 4         |
| Maximum fuse size for short-circuit protection $I_n$ (gG) |          |    |           |
|                                                           | 10kA     | A  | 16        |
| Rated short time current $I_{cw}$                         |          |    |           |
|                                                           | 1s       | kA | 250       |
| Conductivity                                              |          |    | 10/5 mA/V |
| Operational current $I_e$ IEC/EN                          |          |    |           |
| AC1/AC21A                                                 |          |    |           |
|                                                           |          | A  | 10        |
| AC15                                                      |          |    |           |
|                                                           | 110V     | A  | 5         |
|                                                           | 220/230V | A  | 3         |
|                                                           | 380/400V | A  | 2         |
| Rated operational power in AC                             |          |    |           |
| Three-phase AC-3                                          |          |    |           |
|                                                           | 220/230V | kW | 1.5       |
|                                                           | 380/440V | kW | 2.2       |
| Single-phase AC-3                                         |          |    |           |
|                                                           | 110V     | kW | 0.3       |
|                                                           | 220/230V | kW | 0.55      |
|                                                           | 380/440V | kW | 0.75      |
| Three-phase AC23A                                         |          |    |           |
|                                                           | 220/230V | kW | 1.8       |
|                                                           | 380/440V | kW | 3         |
| Single-phase AC23A                                        |          |    |           |
|                                                           | 110V     | kW | 0.7       |
|                                                           | 220/230V | kW | 0.75      |
|                                                           | 380/440V | kW | 1.1       |
| Rated operational current in DC                           |          |    |           |
| DC21A                                                     |          |    |           |
|                                                           | 48V      | A  | 10        |
|                                                           | 60V      | A  | 7         |
|                                                           | 110V     | A  | 2         |
|                                                           | 220V     | A  | 0.7       |
|                                                           | 440V     | A  | 0.2       |
| DC13                                                      |          |    |           |

|                   |      |   |     |
|-------------------|------|---|-----|
|                   | 24V  | A | 3   |
|                   | 48V  | A | 3   |
|                   | 60V  | A | 2   |
|                   | 110V | A | 1   |
|                   | 220V | A | 0.3 |
|                   | 440V | A | 0.1 |
| Power dissipation | W    |   | 0.4 |

#### Mechanical features

|                                     |    |  |      |
|-------------------------------------|----|--|------|
| Terminals screw                     |    |  | 2.5M |
| Tightening torque for terminals max | Nm |  | 0.4  |

#### Conductor size

##### AWG - Rigid cable

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

##### 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> | 1.5 |

##### Conductor size (IEC) - Rigid cable

|     |                 |     |
|-----|-----------------|-----|
| min | mm <sup>2</sup> | 0.5 |
| Max | mm <sup>2</sup> | 1.5 |

|                 |        |  |                   |
|-----------------|--------|--|-------------------|
| Mechanical life | cycles |  | 1x10 <sup>6</sup> |
|-----------------|--------|--|-------------------|

#### UL technical data

##### Motor power for direct-on-line control

##### for three-phase motor

|      |    |   |
|------|----|---|
| 240V | HP | 2 |
|------|----|---|

##### for single-phase motor

|      |    |      |
|------|----|------|
| 240V | HP | 0.75 |
|------|----|------|

#### Ambient conditions

##### Temperature

##### Operating temperature

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

##### Storage temperature

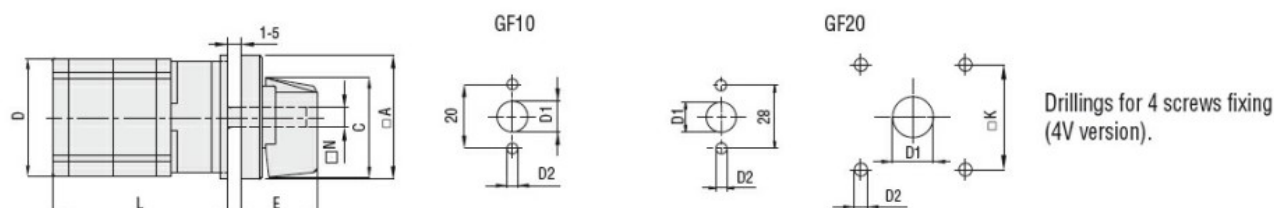
|     |    |     |
|-----|----|-----|
| min | °C | -40 |
| max | °C | +70 |

#### Resistance & Protection

|                   |      |
|-------------------|------|
| Frontal IP degree | IP40 |
|-------------------|------|

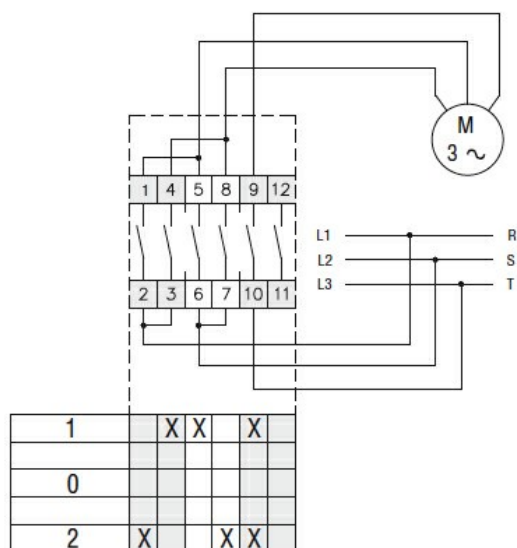
|                     |      |
|---------------------|------|
| Terminals IP degree | IP20 |
|---------------------|------|

#### Dimensions



| Series | Dimensions |      |    |     |     |      |    |    | L Number of elements |      |    |      |    |       |     |       |     |       |     |       |
|--------|------------|------|----|-----|-----|------|----|----|----------------------|------|----|------|----|-------|-----|-------|-----|-------|-----|-------|
|        | □A         | C    | D  | ØD1 | ØD2 | E    | □K | N  | 1                    | 2    | 3  | 4    | 5  | 6     | 7   | 8     | 9   | 10    | 11  | 12    |
| GF10   | 30         | 24   | 29 | 9   | 3.2 | 18.5 | —  | Ø5 | 40                   | 52   | 64 | 76   | 88 | 100   | 112 | 124   | —   | —     | —   | —     |
| GF20   | 48         | 39.5 | 36 | 12  | 5   | 26.5 | 36 | □6 | 44                   | 57.5 | 71 | 84.5 | 98 | 111.5 | 125 | 138.5 | 152 | 165.5 | 179 | 192.5 |

## Wiring diagrams



## Certifications and compliance

## Compliance

CSA C22.2 n° 14

IEC/EN/BS 60947-1

IEC/EN/BS 60947-3

IEC/EN/BS 60947-5-1

UL60947-4-1

## Certificates

cULuS

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EAC

## ETIM classification

ETIM 8.0

EC001029 -  
Selector switch,  
complete