

SOLAR GUARDIAN KIT

edition 00 : data 23/01/2025

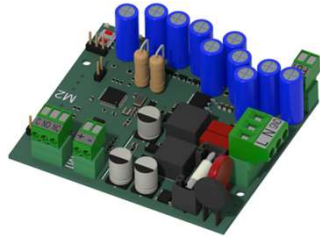
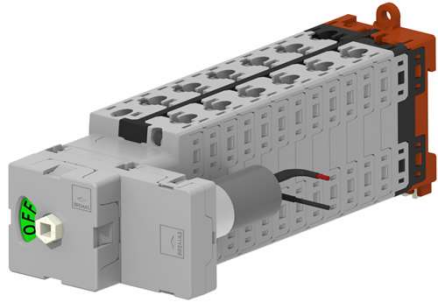


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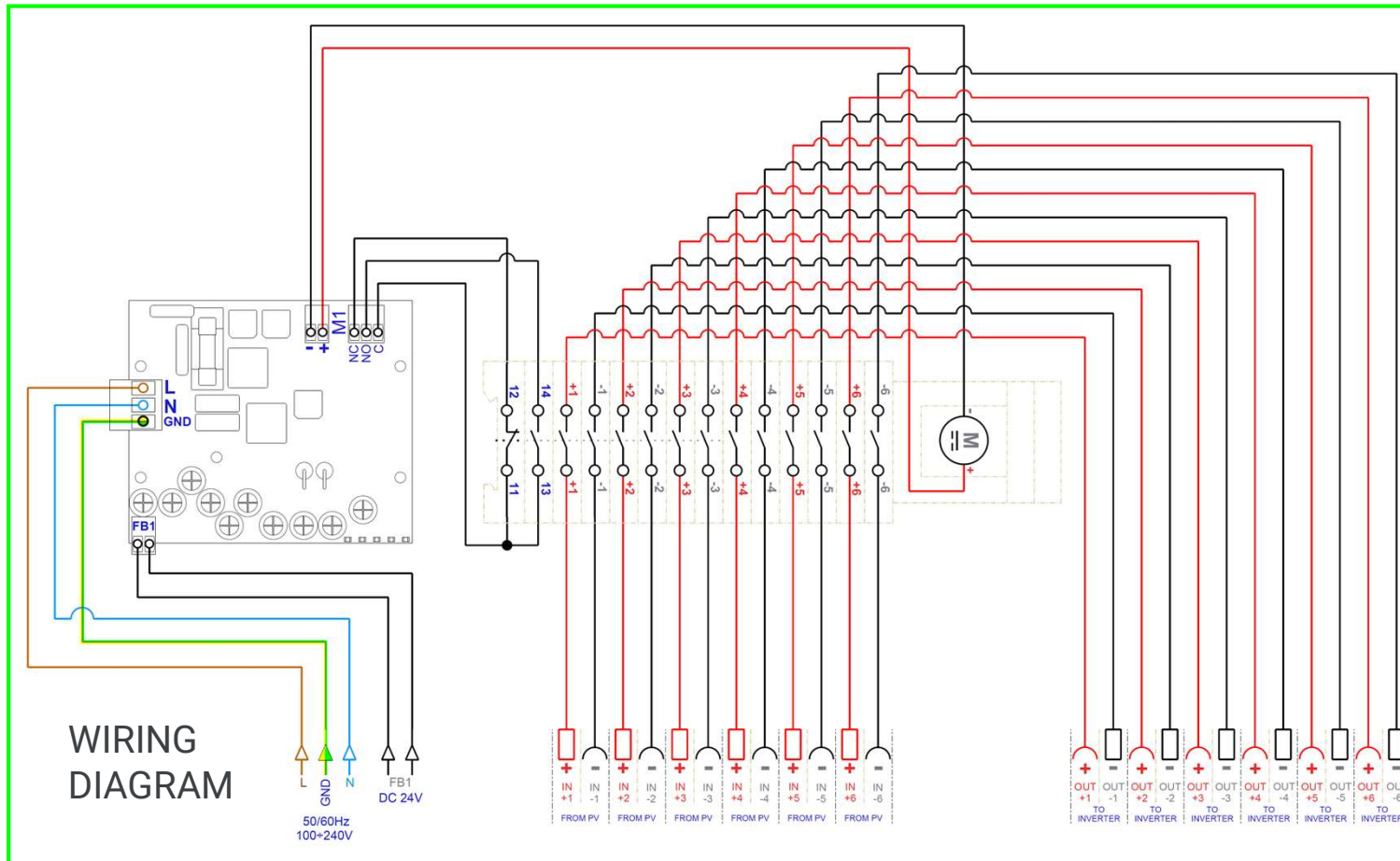


KA1002006M0AEC

SOLAR GUARDIAN KIT FOR 6 INPUTS



Kit for DIN rail
for vertical or horizontal
mounting supplied
as spare parts



DM100206M0AEDSC



Disconnect switch

Technical data according to IEC 60947-3:2021

| Utilization category | | | PV1 (DC-21B) | PV2 |
|---|------|------|--------------|------|
| Rated operational voltage | Ue | V dc | 1100 | 1100 |
| Rated operational current | Ie | A | 12 | 5 |
| Rated operational voltage (second rating) | Ue | V dc | 1000 | 1000 |
| Rated operational current (second rating) | Ie | A | 20 | 10 |
| Rated operational voltage (third rating) | Ue | V dc | 750 | 750 |
| Rated operational current (third rating) | Ie | A | 32 | 18 |
| Rated operational voltage (fourth rating) | Ue | V dc | 700 | 700 |
| Rated operational current (fourth rating) | Ie | A | 40 | 20 |
| Rated operational voltage (fifth rating) | Ue | V dc | 500 | - |
| Rated operational current (fifth rating) | Ie | A | 50 | - |
| Rated operational voltage (sixth rating) | Ue | V dc | - | - |
| Rated operational current (sixth rating) | Ie | A | - | - |
| Rated thermal current | Ith | A | 50 | |
| DC Poles | Nr. | Nr. | 12 | |
| Rated conditional short-circuit current | | kA | 5 | |
| Rated insulation voltage | Ui | V dc | 1500 | |
| Rated impulse withstand voltage | Uimp | kV | 8 | |
| Rated short-time withstand current (1 s) | Icw | A | 780 | |
| Rated short-circuit making capacity | Icm | kA | 1,4 | |
| Power loss per layer at 20 A / 50 A | | W | 0,2 / 1,25 | |
| Maximum size of the fuse for the short-circuit protection | gPV | A | 50 | |

Mechanical characteristics

| | | | |
|--|---|------------------------|---|
| Type of mounting | | | Base mounting Back-side for DIN rail or 2 screws fixing For direct operation With pre-mounted status indicator |
| Layers | | Nr. | 14 |
| Terminal screws orientation | | | Head up |
| External metal parts (screws, shaft) | | | Stainless steel |
| Cross-section of flexible/solid wires | Max. | mm ² AWG | 2x 6 2x 10 |
| Cross-section of wires with fork lug | Max. | mm ² AWG | 1x 16 1x 6 |
| Connection cable length from PCB to motor (+/-) and connection cable length of NO-NC auxiliary switches | Length | mm | ~250 |
| | Section | mm ² / AWG | 0,5 / 20 |
| FB1 and FB2 signal connection cables | Note | | Not supplied |
| | solid wire/stranded wire - min. / max. | mm ² AWG | 0,129-1,31 26-16 |
| | maximum length allowed | m | 50 |
| <i>Minimum required fine wire cross-section: IEC 60947-1, table 9</i> | | | |
| Terminal screws type | | | M4 – PH2 |
| Terminal screws tightening torque | | Nm | 1,7 ±10% |
| Net weight | | g | 680 |
| Protection degree IEC 529 EN 60529 | | | |
| To the terminal | | | IP20 |
| Ambient conditions | | | |
| Pollution degree ins. | | | 2 |
| Operational ambient temperature | | °C | -30 ÷ +50 |
| Storage ambient temperature | | °C | -30 ÷ +85 |
| Damp heat test IEC 60068-2-30 | | | 90-100% RH at +55 °C |

Motor driven actuator

Motor characteristics

| Rated operational voltage | Ue | V dc | 24 ±5% |
|------------------------------------|------|------|----------------------------------|
| Rated operational current | Ie | A | 0,4 |
| Stall current | Max. | A | 1,4 |
| Free-load current | | A | 0,10 |
| Free-load speed | Max. | rpm | 20 ±3 |
| Rated load current | | A | 0,15 |
| Rated load speed | | rpm | 17,6 ±2 |
| Output power at Max. efficiency | | W | 1,55 |
| Terminal type | | | Solder (supplied with wiring) |
| Pre-soldered cables length | | mm | 300 |
| Protection degree to the terminals | | | IP00* |

Operating features

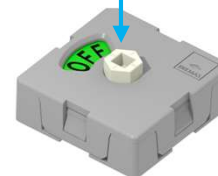
| | |
|-----------------------------|---|
| Rotation direction | Clockwise (90deg) |
| Position (status indicator) | Rotary disc with static window at 09:00 o'clock |

* Pre soldered wiring with heat-shrink sheath

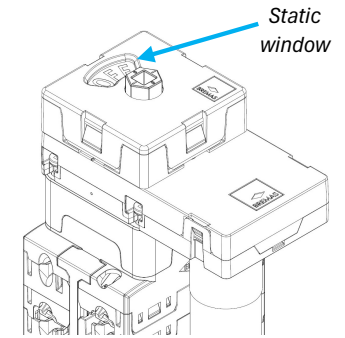
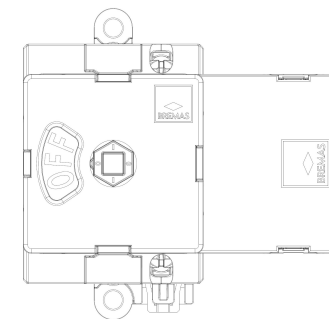
Status indicator

Emergency manual operation

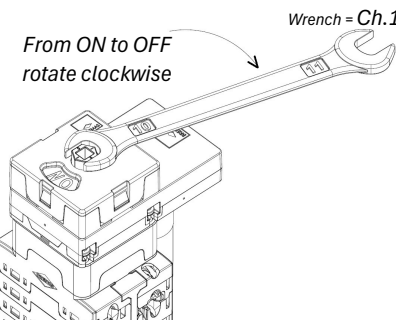
Wrench = Ch.10
or Square Key = □5



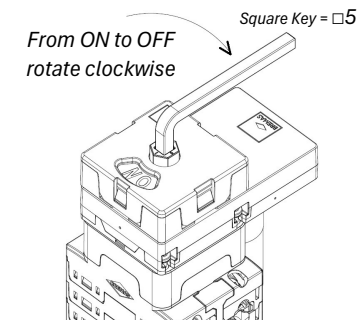
Rotary disc



Static window



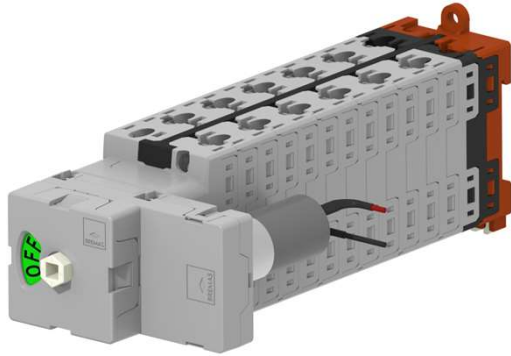
From ON to OFF
rotate clockwise



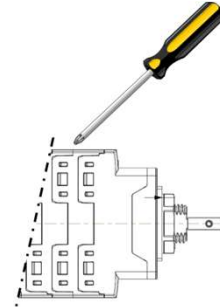
From ON to OFF
rotate clockwise

DM100206M0AEDSC

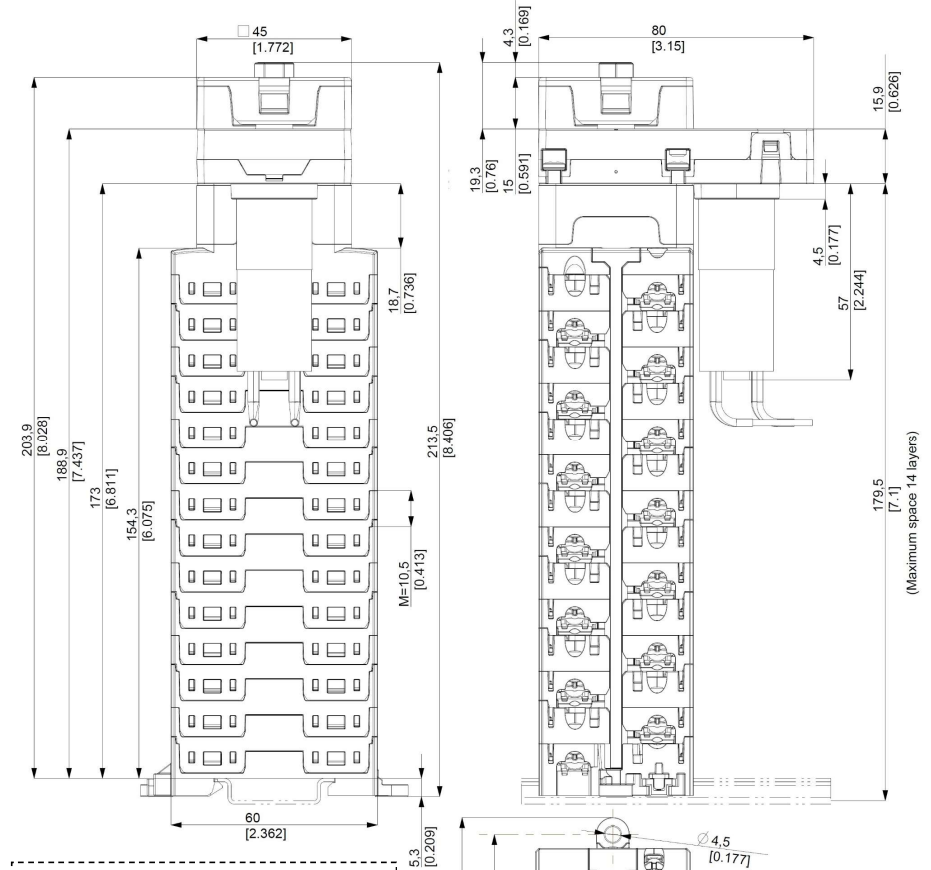
Product image



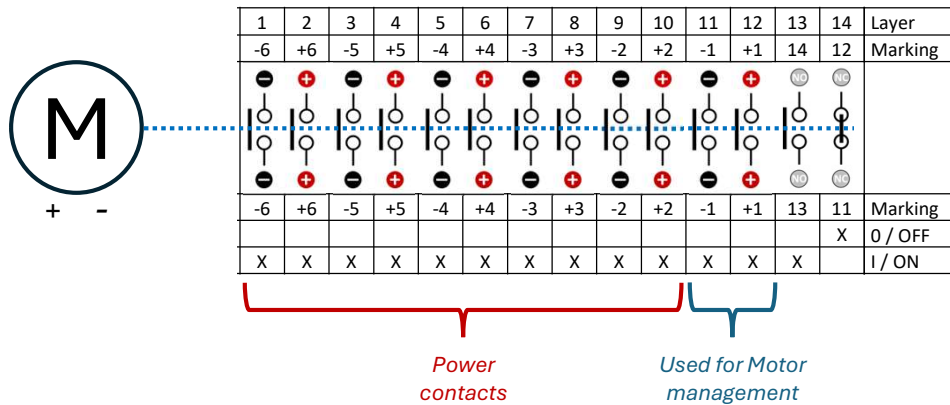
Screwdriver orientation for terminal fixing



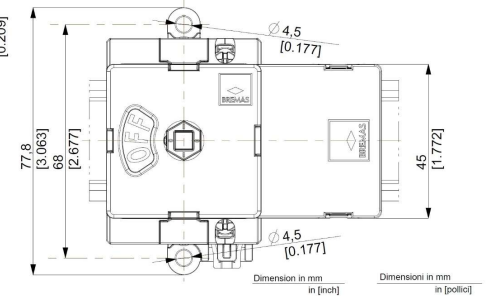
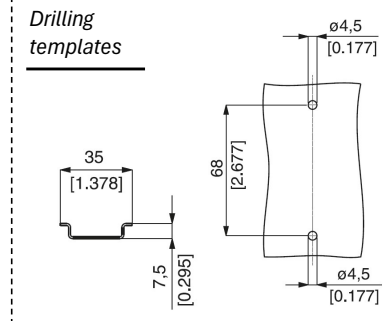
Dimensions



Electrical Diagram



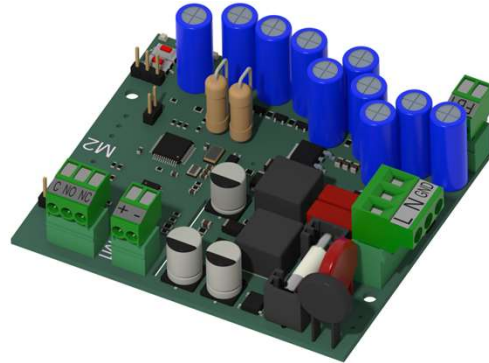
Drilling templates



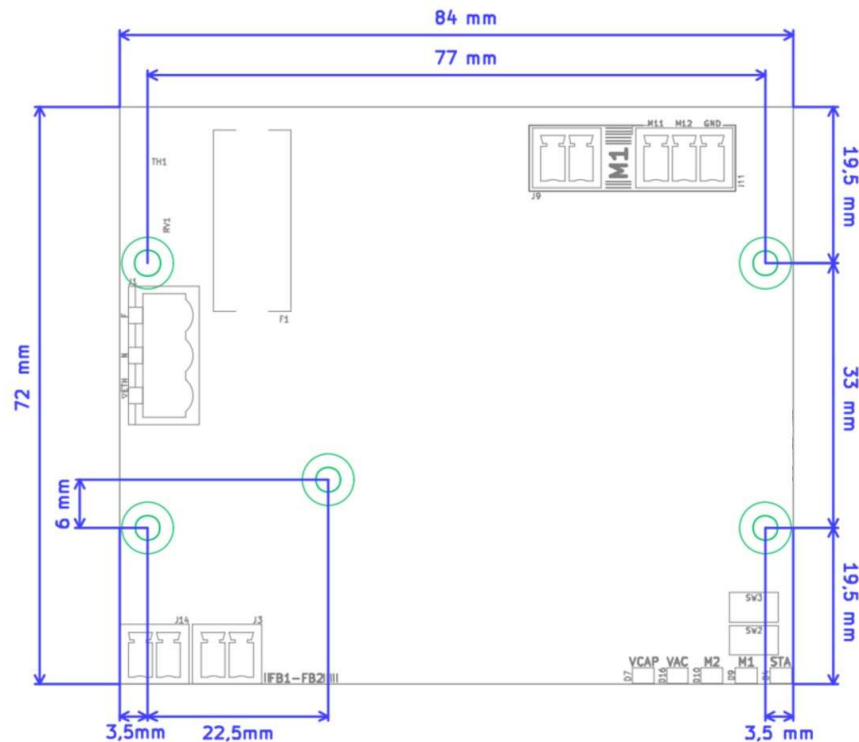
FSEB1M

Electronic board

Product image



Dimensions



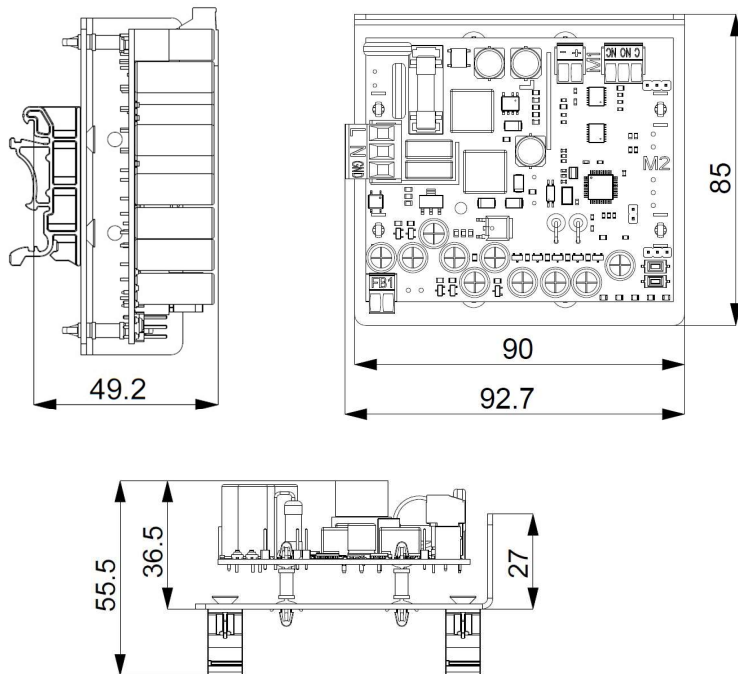
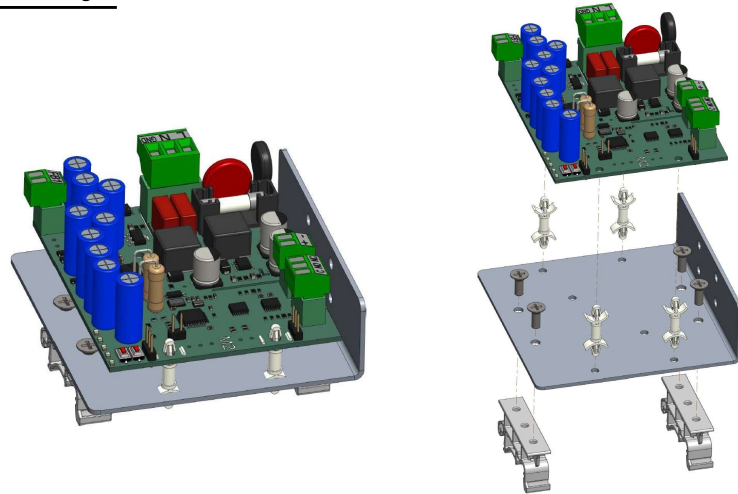
Technical data

| AC supply | | | |
|--|------|------------------------|---------------------------|
| Voltage range | | V ac | 100...240 |
| Rated operational voltage | | V ac | 230 ±5% |
| Frequency range | | Hz | 50/60 |
| Rated operational current (stand-by) | | mA | ≅ 20 |
| Rated operational current (peak) | Max. | mA | ≅ 400 |
| Overvoltage protection | | V ac | 275 (varistor) |
| Functional data | | | |
| Capacitors charging time | Max. | s | +18 |
| FB terminals (J3-J14) – Electrical parameters | Max. | | 24 Vdc – 100 mA |
| Temperature for automatic shutdown | | °C | +100 |
| Mechanical characteristics | | | |
| Dimensions (L x H x P) | | mm | 84 x 72 x 25 |
| Net weight | | g | 76 (FSEB1M) – 81 (FSEB2M) |
| Cross-section of flexible/solid wires (J1 terminal) | Max. | mm ² AWG | 2 14 |
| Cross-section of flexible/solid wires (J2-J3-J9-J11-J12-J14 terminals) | Max. | mm ² AWG | 1,3 16 |
| Ambient conditions | | | |
| Operational ambient temperature | | °C | -30 ÷ +50 |
| Storage ambient temperature | | °C | -30 ÷ +85 |
| Humidity | | | 90-100% RH at +55 °C |

FSDIN

DIN support

Horizontal mounting



Vertical mounting

