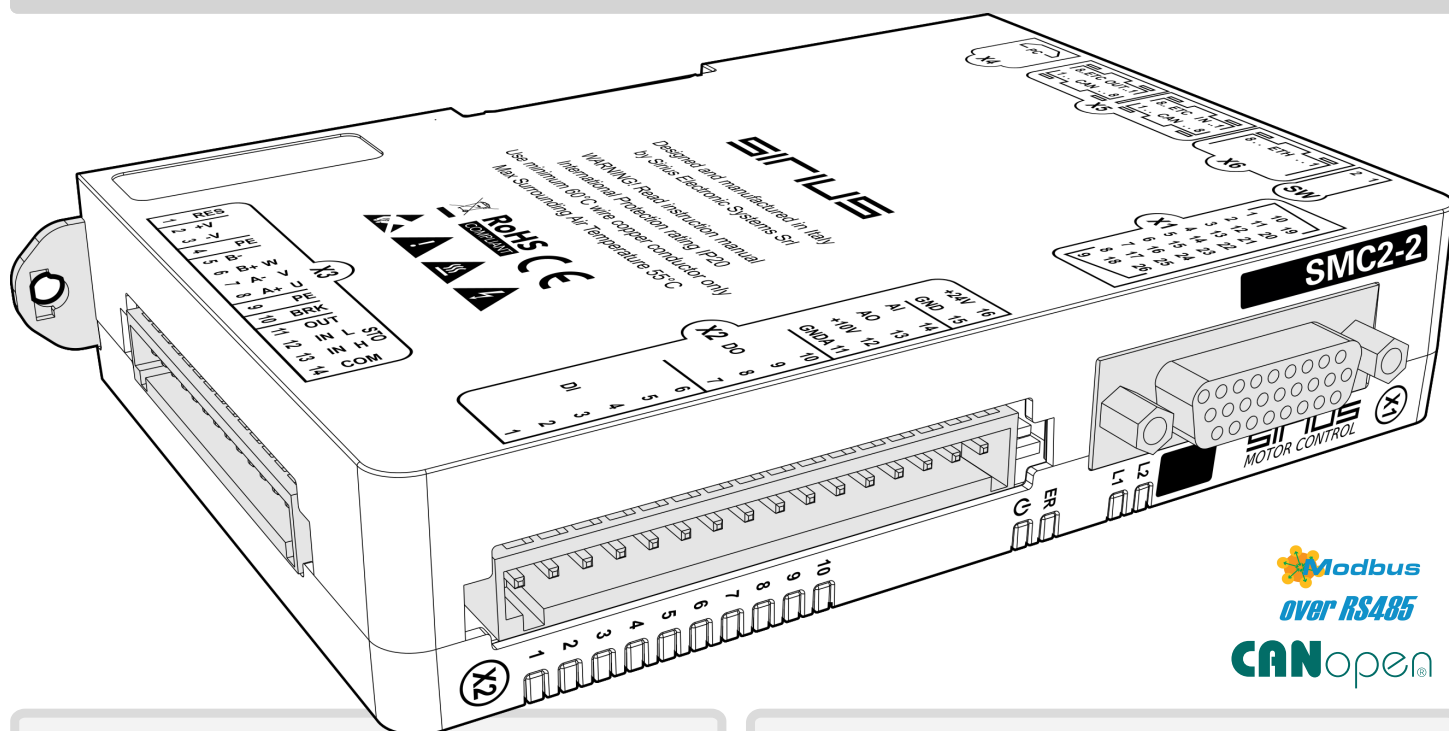


## Features

Industrial grade motor driver powered up to 48Vdc and 24V logic

7A continuous and 10A peak output. Current is limited internally to prevent any damage

Communicates with any industrial computer board or PLC via CANopen or RS485 via two RJ45 pass-through ports to allow concatenation using standard UTP ethernet patches or RJ45 ethernet connection

Drives any brushless motor using feedbacks provided by different source like Halls and TTL diff/SE

Equipped with built-in safety, fully featured motion controller

Operates as a stand-alone device or communicate via advanced networking as part of real-time multi-axis system

Programmable using IEC-61131-3 code: it's easy to set it up and tune via DeviceManager software

Operates as Motion Control Device under the DSP-402 protocol of the CANopen DS-301 application layer. DSP-402 supported modes include: Position profile, Velocity profile, Torque profile, Interpolated Position Mode (PVT) and Homing

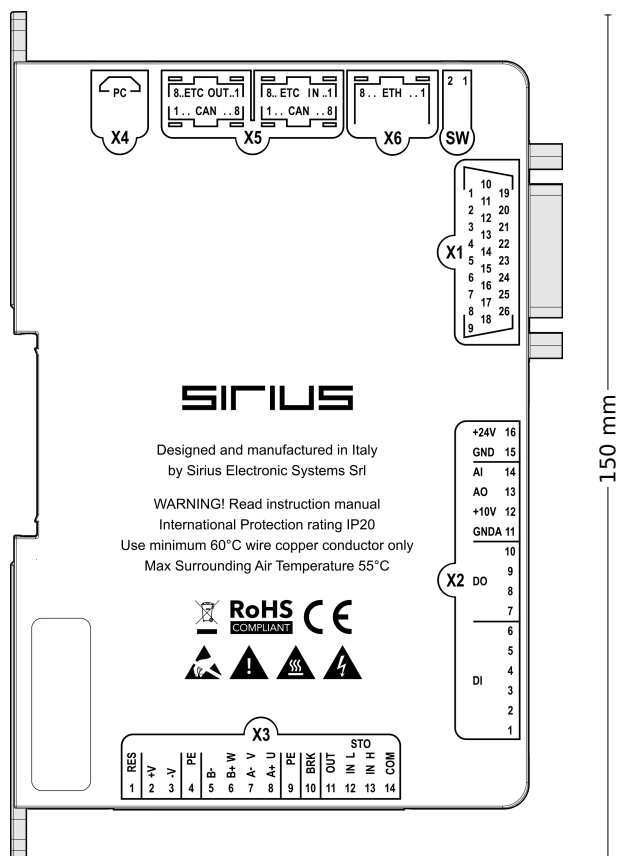
It conforms to Safety Integrity Level 3 using both PLC or TTL connection

## Tech Specs

|                  |                                                  |
|------------------|--------------------------------------------------|
| Logic supply     | 24Vdc $\pm$ 20%                                  |
| Digital IN       | 6 @ 24V 10mA (4.7us RC)                          |
| Digital OUT      | 4 @ 24V 600mA PNP                                |
| Encoder IN       | 1                                                |
| Hall Sensors     | 1                                                |
| PT100 IN         | 1                                                |
| Analog IN        | 1 @ 0-10V (12 bit resolution)                    |
| RS485 Ports      | 2 (Passthrough) optocoupled                      |
| CAN Ports        | 2 (Passthrough) optocoupled                      |
| USB Ports        | 1 USB 2.0 type B for configuration and VCOM      |
| STO current out  | 30mA (max 50mA), NPN, unprotected                |
| STO              | Safety Integrity Level 3 - PLC or TTL connection |
| Bridges input    | 19,2÷48Vdc                                       |
| Motor OUT        | 1 (2 Voice-Coil Motors)                          |
| Current OUT      | 7A                                               |
| Peak current     | 10A                                              |
| Current limiter  | Fuse + Software limiter                          |
| Voltage limiter  | Vmin / Vmax voltage comparator                   |
| Short circuit    | Logic circuit, diode                             |
| Reverse polarity | Logic circuit, diode                             |
| I <sup>2</sup> t | Continuous current                               |
| Storage C°       | -40 to +85 °C                                    |
| Operating C°     | 0 to +55 °C                                      |
| Humidity         | 0 to 95%, non condensing                         |
| Dimensions       | 150 x 97.5 x 27 mm                               |
| Weight           | 215 g                                            |
| Mounting         | 2x M3 screws or TS 35 DIN rail                   |

## SMC2-2AB030 48V, Stepper/Brushless/Voice-Coil Motor Control, CANopen®

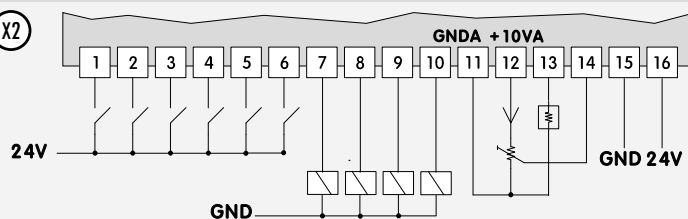
Rev 2 2026/05/19



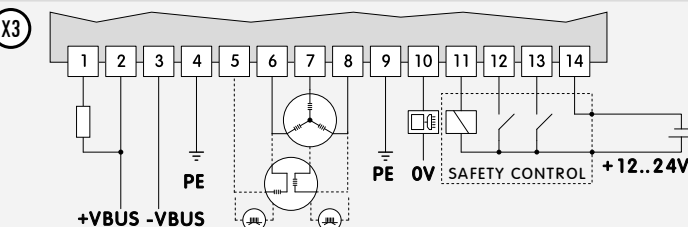
X1

| POWER  |             | FEEDBACK |          | ENCODER 1 |           |
|--------|-------------|----------|----------|-----------|-----------|
| PIN    | POWER       | PIN      | FEEDBACK | PIN       | ENCODER 1 |
| 1      | VBATT (out) | 16       | HALL_C   | 4         | #SA       |
| 2,15   | +5V (out)   | 17       | HALL_B   | 5         | SA        |
| 7,8,12 | GND         | 18       | HALL_A   | 6         | N.C.      |
| 9      | +5V_SENSE   | 25       | PTC+     | 13        | #SB       |
| CASE   | SHIELD      | 26       | PTC-     | 14        | SB        |
|        |             |          |          | 23        | SC        |
|        |             |          |          | 24        | #SC       |

X2

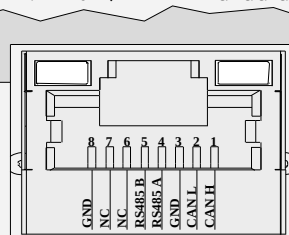


X3

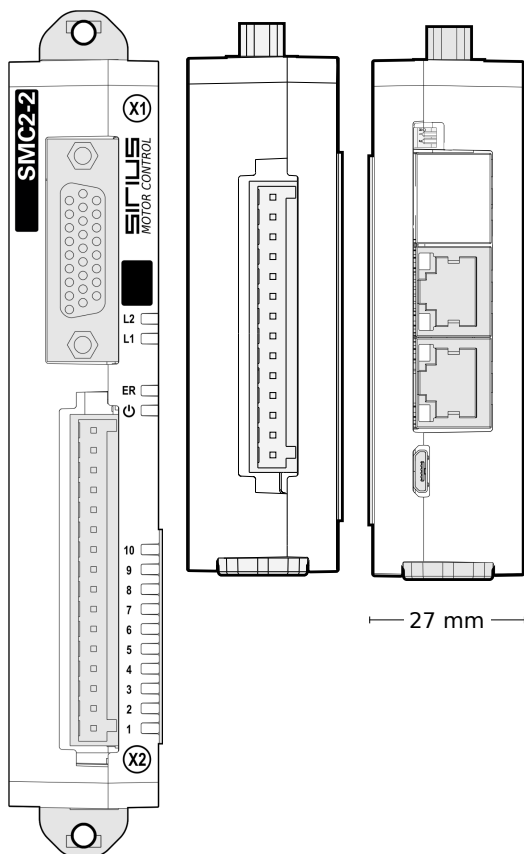
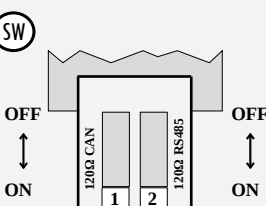


X5

CAN/RS485 (2x RJ45 standard)



SW



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