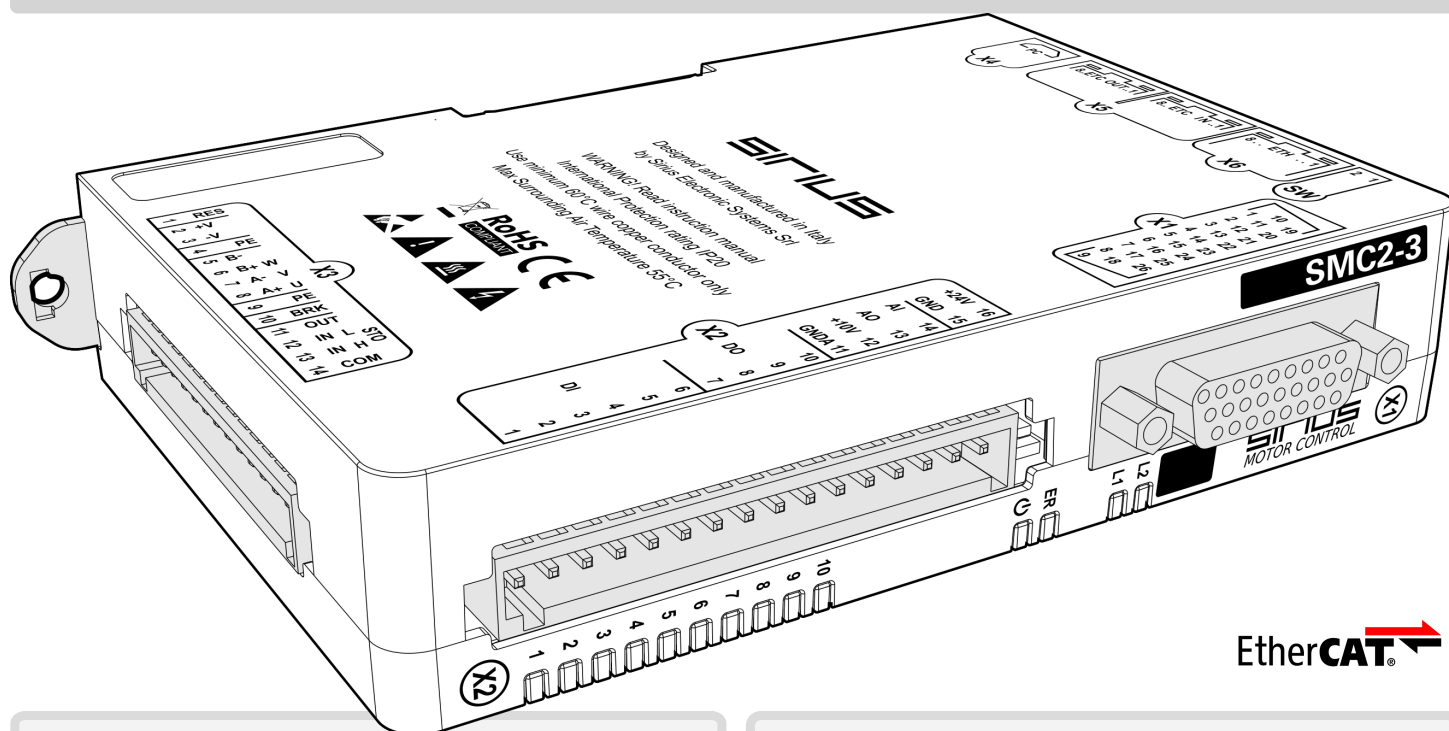




EtherCAT®

Features

Industrial grade motor driver powered up to 80Vdc and 24V logic

14A continuous and 20A 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, TTL diff/SE, EnDat2.2, Biss-C

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-651131-3 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

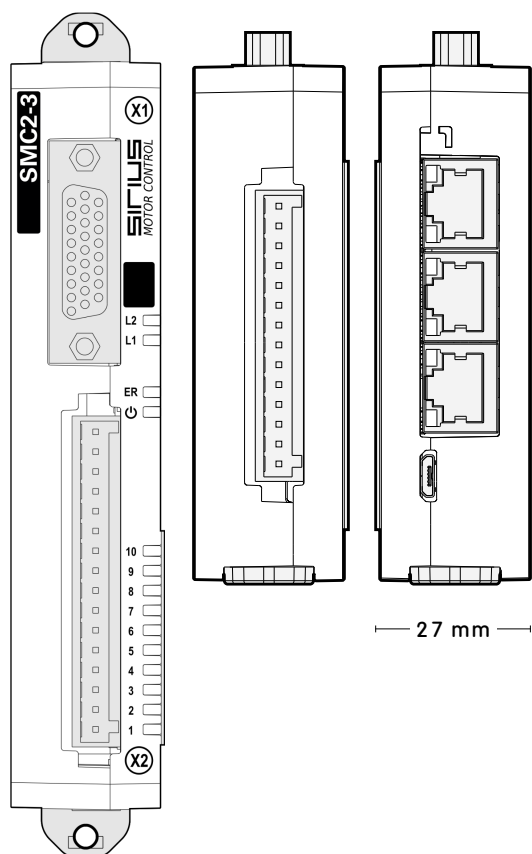
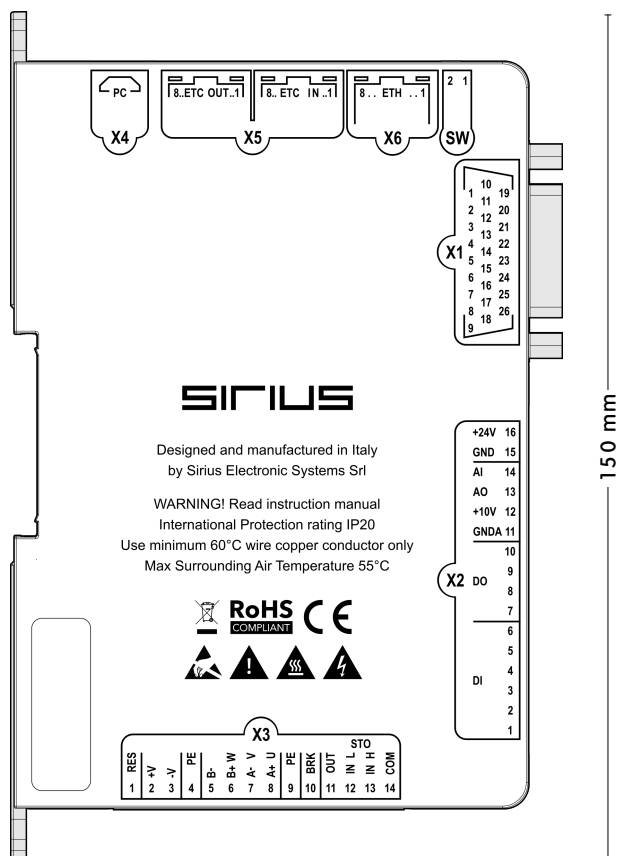
It conforms to Safety Integrity Level 3 using both PLC or TTL connection

Tech Specs

Logic supply	24Vdc $\pm$ 20%
Digital IN	6 @ 24V 10mA (4.7us RC)
Digital OUT	4 @ 24V 600mA PNP
Encoder IN	2
Hall Sensors	1
PT100 IN	1
Analog IN	1 @ 0-10V (12 bit resolution)
Analog OUT	1 @ 0-10V (12 bit resolution)
EtherCAT	2 (Passthrough) for slave connection
Ethernet	1 10/100Mbps for command and configuration
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	19,2-80Vdc
Motor OUT	1 (2 Voice-Coil Motors)
Current OUT	14A
Peak current	20A
Current limiter	Fuse + Software limiter
Voltage limiter	Vmin / Vmax voltage comparator
Short circuit	Logic circuit, diode
Reverse polarity	Logic circuit, diode
I ² 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

SMC2-3FC130 80V, Stepper/Brushless/Voice-Coil Motor Control, EtherCAT®

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X1

POWER		FEEDBACK	
PIN	POWER	PIN	
2,15	+5V (out)	16	HALL_C
1,7,8,12	GND	17	HALL_B
9	+5V_SENSE	18	HALL_A
CASE	SHIELD	25	PTC+
		26	PTC-

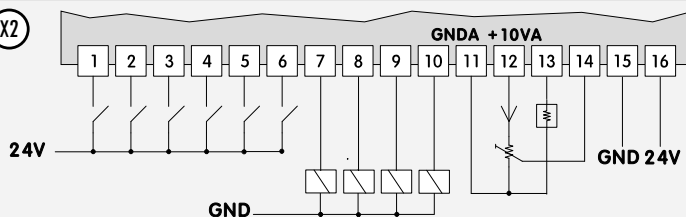
ENCODER 0 (MOTOR FEEDBACK)

PIN	TTL SING.	TTL DIFF.	ENDAT 2.2	SIN COS	BISS-C
4		#SA	#CLK	#SIN	#CLK
5	SA	SA	CLK	SIN COS	CLK
6	N.C.	N.C.	OV	N.C.	OV
13		#SB	#DAT	#COS	#DAT
14	SB	SB	DAT	COS	DAT
23	SC	SC		SINCOS_SC	
24		#SC		#SINCOS_SC	

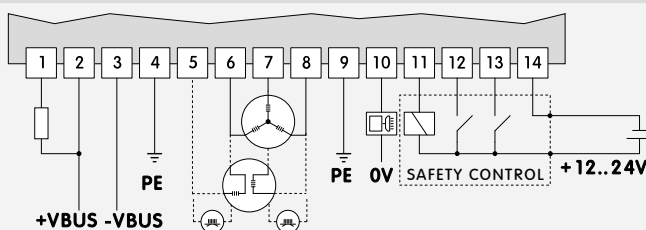
ENCODER 1

PIN	TTL SING.	TTL DIFF.	ENDAT 2.2	BISS-C	CW/CCW
3	N.C.	N.C.	OV	OV	N.C.
10		#SA	#CLK	#CLK	
11	SA	SA	CLK	CLK	PULSE
19	SC	SC			
20		#SC			
21	SB	SB	DAT	DAT	DIRECTION
22		#SB	#DAT	#DAT	

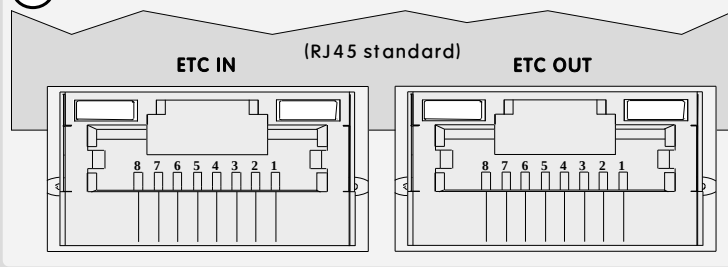
X2



X3



X5



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