

Specifications

MODELS

Code	Interface
SB4D2030H2E1-30	EtherCAT
SB4D2030E2E1-30	Modbus TCP/IP

POWER SUPPLY

Power: 12÷36 Vdc
Logic: 24 Vdc mandatory

CURRENT

0 ÷ 3.0 ARMS (0 ÷ 4.2 APEAK)

POWER STAGE

H-bridge bipolar chopper of 40 kHz

ENCODER INTERFACE

incremental encoder not isolated input 5V Differential (RS422) or 5V Single-Ended (TTL/CMOS) or 24 Vdc push-pull (not isolated)

SCI INTERFACE

service SCI interface for programming and real time debug

INPUTS

4 digital inputs not isolated

OUTPUTS

3 digital outputs not isolated

ANALOG INPUTS

1 analog input (potentiometer)

STEPLESS CONTROL TECHNOLOGY

65536 position per turn

SAFETY PROTECTIONS

Over Current, over Temperature, closed Windings phase/phase phase/ground

TEMPERATURE

Operating from 5°C to 40°C, storage from -25°C to 55°C

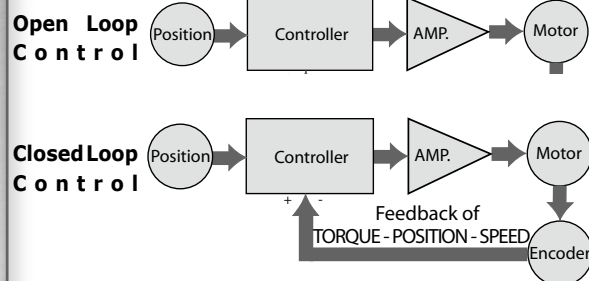
HUMIDITY

5%÷85% not condensed

PROTECTION CLASS

IP00 (open frame)

Open-loop / Closed-Loop



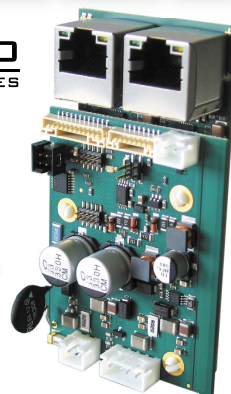
Better control compared to both an open loop stepper solution and a servo-controlled brushless solution

Full Digital Programmable Drives with fieldbus EtherCAT and Modbus TCP

for Advanced Motion Control with reduced costs

TITANIO
VECTOR - STEPPER - DRIVES

EtherCAT
Modbus TCP/IP



WARRANTY
3
YEARS

SB4D Open frame

- Compact size
- Ethercat CoE with DS402 functionalities
- Service serial for real time programming and debugging
- Compliance with the most common PLC Masters on the market
- Vectorial control, for smooth and silent movements
- Closed loop of speed, torque and position
- Easily programmable with e3PLC Programming Environment

ever
E-MOTION SOLUTIONS

EVER Motion Solutions srl

Via del Commercio, 2/4 - 9/11

Loc. S. Grato - Z.I.

26900 - LODI (LO) - Italy

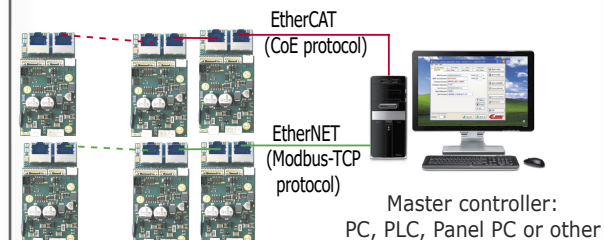
Tel. 0039 0371 412318 - Fax 0039 0371 412367

email infoever@everelettronica.it

www.everelettronica.it

Multi-Axes Systems

Slave Mode - c0680 EtherCAT per i sistemi SB4D2030H2E1-30
- c0890 Modbus TCP-IP per sistemi SB4D2030E2E1-30



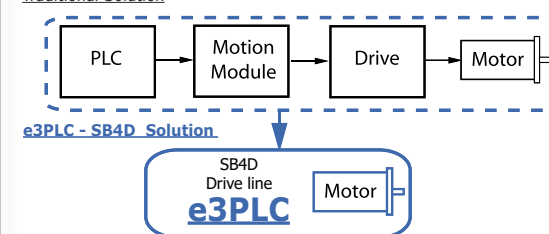
Drive control through commands by Master Controller.
Suitable for multi axes systems (up to 127 drives).
Built in Powerfull Motion Module functionality assures Perfect Synchronization among axes and reduces Master Controller workload.

Stand-Alone-Mode

User Programmable - e3PLC- c0690 for systems SB4D2030H2E1-30
- c0890 for systems SB4D2030E2E1-30

FIELD BUS DRIVES WITH AUTONOMOUS FUNCTIONING that, by integrating advanced PLC and motion controller functions in one single device, programmable by the user with the IDE for Windows PC and e3PLC, allows to reduce the traditional machine control solution.

Traditional Solution



The e3PLC IDE allows the user to access all the I/O control functions and resources, provided by the drive, and to locally program its Motion Control Module, which can also be synchronized with other drives and events of the controlled process. Thanks to the advanced functionalities of the Power Motion Module, an integrated Real-time Process Module, applications can be easily created for special applications such as:

- Labelling
- Electronic cams
- Control Sequences of cable processing
- Many other user-customized processes ...

Configuration and Programming

Fieldbus configuration
(slave) - c0680

IDE e3PLC configuration
(programmable) - c0690 / c0890

Ever co. proprietary PC Software Tools for easy and quick configuration or programming, real time debug and supervision of each system

Autonomous management of the firmware for the execution of the **homing**, of the target movement with relative or absolute quota and for the generation of the ramp profiles

Torque mode for operation with torque limitation

Speed control thanks to digital inputs, analogue inputs or fieldbus

Electronic CAM with advanced programming of internal profiles inside the drive

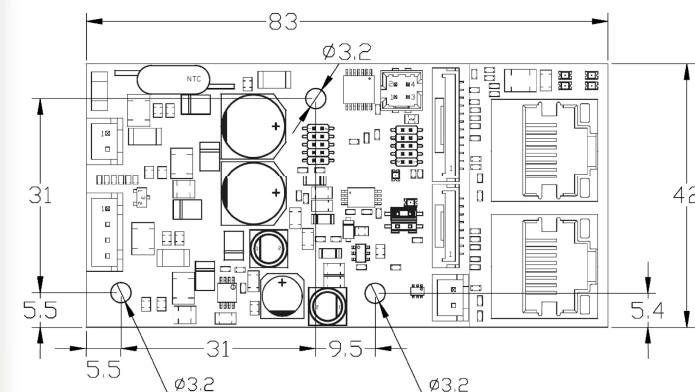
Electric shaft with encoder or analogue input with variable tracking ratio (Electric Gear)

Fast inputs and outputs for motor' start & stop and event synchronization for high speed response applications such as labeling, nick finder, flying saw etc.

Possibility to synchronize the movements in multi-axis systems, even without fieldbus

Enabling and on-the-fly changing of the motion control modes

Mechanical Data



Ordering information of SB4D open frame drives and options

Order code		Power			System Resources					
Versions	Config. (see table)	Power supply Power	Logic	Current	Interface	SCI	Digital Inputs	Digital Outputs	Analog Inputs	Encoder interface
SB4D2030H2E1-30	c0680 c0690	12 ÷ 36 Vcc	24 Vcc mandatory	0 ÷ 3.0 ARMS (0 ÷ 4.2 APEAK)	EtherCAT	For configuration and/or programming and real time debug	4	3	1	1 input 5V TTL/CMOS or 24 Vcc Push-Pull
SB4D2030E2E1-30	c0890				Modbus TCP-IP					

Configuration, Control Method and Optional Software Starter Kits

Config.	Control	Kit software code
c0680	Modalità Controllo EtherCAT	SW4_SERV00-SL
c0690	Modalità Controllo Stand-Alone e3PLC Studio IDE EtherCAT	SW4_SERV00-EE
c0890	Modalità Controllo Stand-Alone e3PLC Studio IDE Modbus TCP/IP	SW4_SERV00-EE