Specifications

MODELS

Code	Power supply	Current
SW5A9030	100 ÷ 240 Vac (monophase)	3.0 Arms (4.2 Apk)

EMULATED STEP RESOLUTION
Stepless Control Technology (65536 position per turn)

COMMUNICATION INTERFACES
EtherCAT or Ethernet (Modbus TCP/IP) or Profinet or CANopen + Serial (Modbus RTU)

ENCODER INTERFACES
incremental encoder input 5V differential RS422 or single-ended TTL/CMOS (isolated)
absolute encoder input 5V SSI or BISS-C (isolated)

SCI INTERFACE
SCI service interface for programming and real time debug

OPTOCOUPLED INPUTS
up to 16 digital inputs

OPTOCOUPLED OUTPUT
up to 12 digital outputs

ANALOG INPUTS
up to 2 isolated inputs

ANALOG OUTPUT
up to 2 isolated outputs

OPTOCOUPLED STO INPUTS
Safe Torque Off inputs

SAFETY PROTECTIONS
over/under-voltage, over current, overheating, short circuit between motor phase to phase and phase to ground
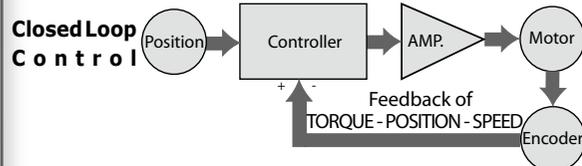
TEMPERATURES
working from 5°C to 50°C, storage from -25°C to 55°C

HUMIDITY
5% ÷ 85% not condensing

PROTECTION DEGREE
IP20

PROTECTION CLASS
Class I Equipment

Open Loop / Closed Loop

OpenLoop Control

Closed Loop Control

Feedback of TORQUE - POSITION - SPEED

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

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Programmable vectorial drivers for 2 phases stepper motors

TITANIO VECTOR · STEPPER · DRIVES

EtherCAT®

Modbus TCP/IP

PROFI NET®

CANopen DS402

Modbus

cULus

STO Safe Torque Off SIL3 PLe
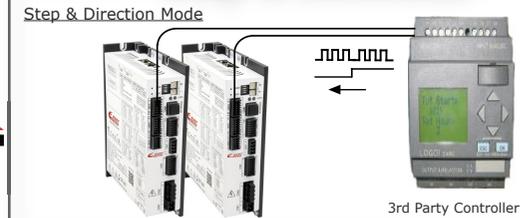
WARRANTY 3 YEARS

SW5A9030

- Powered from the main AC supply
- Vectorial control
- Absolute or incremental encoder inputs
- Safe Torque Off inputs (STO) SIL3/PLe
- Closed loop
- Serial Service for real time programming and debugging
- New e3PLC Programming Environment, easy and intuitive
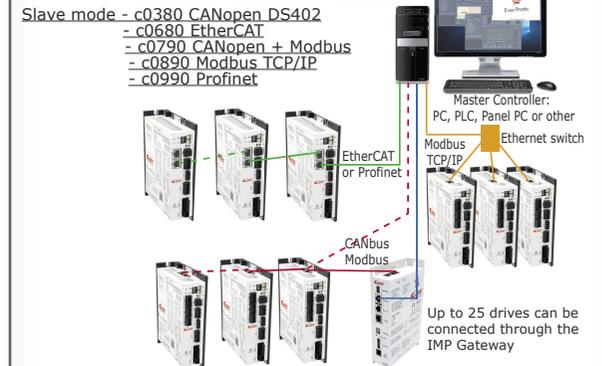- UL recognized certified

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
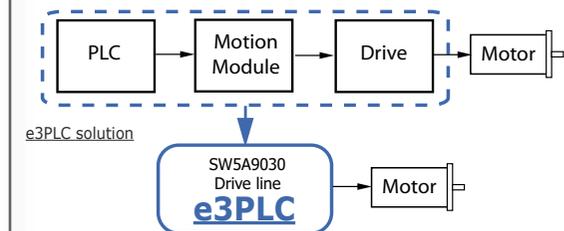www.everelettronica.it

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Step & Direction

Step & Direction Mode

3rd Party Controller

Multi Axes Systems

Slave mode - c0380 CANopen DS402
- c0680 EtherCAT
- c0790 CANopen + Modbus
- c0890 Modbus TCP/IP
- c0990 Profinet

Master Controller: PC, PLC, Panel PC or other

EtherCAT or Profinet

Modbus TCP/IP

Ethernet switch

CANbus Modbus

Up to 25 drives can be connected through the IMP Gateway

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- c0790 / c0690 / c0890 / c0990

FIELDBUS 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.

PLC → Motion Module → Drive → Motor

e3PLC solution

SW5A9030 Drive line **e3PLC** → Motor

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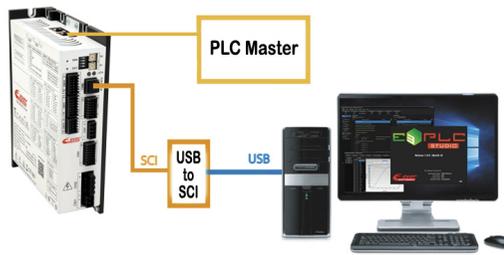- Labelling
- Electronic cams
- Control Sequences of cable processing
- Many other user-customized processes ...

Configuration software

Fieldbus configuration (slave)

IDE e3PLC configuration (programmable)

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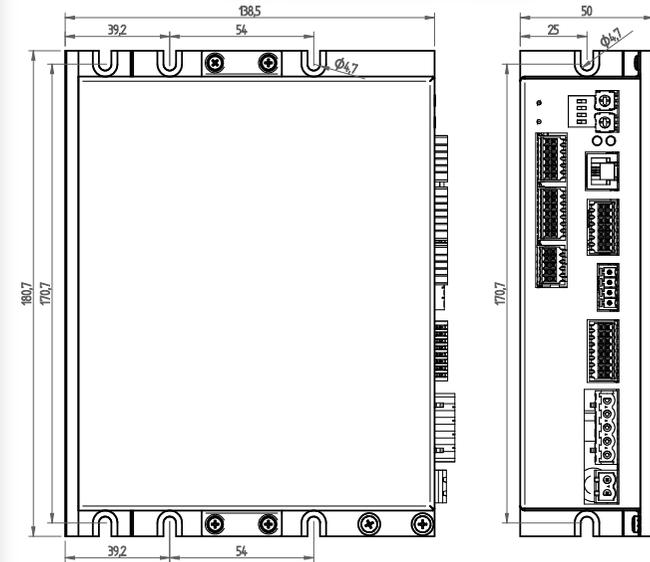
Electric shaft with encoder or analogue input with variable tracking ratio (Electric Gear)

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

Models	Dimensions (mm)			Weight (g.)
	H	L	W	
SW5A9030x2x1-20	180.7	50.0	138.5	800 g. approx

Ordering Information for SW5A9030 Drives

Ordering code		Power		System Resources							
Versions	Config.	Power Supply	Current	Digital Inputs	Digital Outputs	Analog Inputs	Analog Outputs	STO Inputs	Interface	SCI Interface	Control Mode
SW5A9030 Drives Line											
SW5A9030L221-20	c0380	100 ÷ 240 Vac (monophase)	3.0 Arms (4.2 Apeak)	4	3	---	---	Safe Torque Off	CANbus Canopen + Serial Modbus	For configuration or programming and real time debug.	Fieldbus CANBus DS402
	c0790										e3PLC CANbus + Modbus
SW5A9030L2G1-20	c0380			16	12	2	2				Fieldbus CANBus DS402
	c0790										e3PLC CANbus + Modbus
SW5A9030E2G1-20	c0890			16	12	2	2		Ethernet (Modbus TCP/IP)		e3PLC CANbus + Modbus TCP/IP
SW5A9030H221-20	c0680			4	3	---	---		EtherCAT		Fieldbus EtherCAT
	c0690										e3PLC EtherCAT
SW5A9030T221-20	c0990			4	3	---	---		Profinet		e3PLC CANbus + Profinet

Configuration and Programming Kits	
Kit code	Description
SW5_SERV00-SL	SCI service kit with cables, service serial to RS485 and RS485 to USB converters and Ever Studio configuration software.
SW5_SERV00-EE	SCI service kit with cables, service serial to RS485 and RS485 to USB converters and e3PLC programming software.