

Specifications

MODELS

Code	Power Supply	Max. Out Current
SW1D2x42	24 ÷ 40 Vdc	4.2 Arms
SW1D4080	48 ÷ 140 Vdc	8.0 Arms
SW1A4080	36 ÷ 100Vac	8.0 Arms
SW1A9x60	115 ÷ 230Vac	6.0 Arms

POWER STAGE

40 KHz bipolar chopper H bridges

OPTOISOLATED CONTROL BUSSES

RS232 / RS422 / RS485 / CANbus

INPUTS / OUTPUTS

4 or 16 optoisolated digital inputs / 2 or 10 optoisolated outputs

2 analog inputs (potentiometer or ±10Vdc)

0 or 2 analog outputs

12 dips switch for node ID and user's settings

STEP RESOLUTION

from 1 to 128 microstep

SAFETY PROTECTIONS

Over/UnderVoltage, OverCurrent, OverTemperature, Open Winding, Winding Phase/Phase/Phase/Ground Short

TEMPERATURE

operating from 0°C to 50°C, storage 0°C to 55°C

UMIDITY

0% ÷ 90%

PROTECTION CLASS

IP20

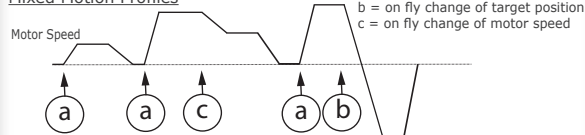
Powerful Motion Module

- Step & Direction Control Mode
- **Analog Speed Ref.** Control Mode (by potentiometer or ±10Vdc)
- Velocity Control Mode
- Wide range of Positioning Control Modes (homing, relative, absolute, target)
- **CAM Mode:** advanced cam profile can be programmed (c1490 versions)
- **Electric Gear** with programmable gear ratio to track external master reference (from fieldbus or incremental encoder) of motor Speed and Position
- High speed I/O triggered motor start & stop to event synchronizing for fast response demanding application: labelling, nick_finder, on fly cut., etc ...
- Multi Axis movements synchronization capability
- On fly change among any Motion Module Control Modes
- On fly Electric Gear Enable/Disable capability
- **Motor Stall detection** & Target Position tracking through encoder feedback

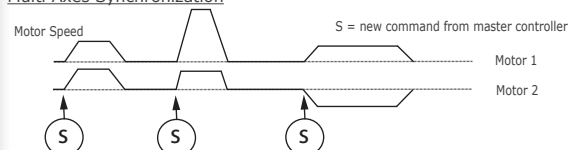
Homing Motion Profiles



Mixed Motion Profiles



Multi Axes Synchronization



Full Digital Programmable 2 Phase Step Motor Drives

Provide Advanced & Powerful Low Cost Motion Control



SW1

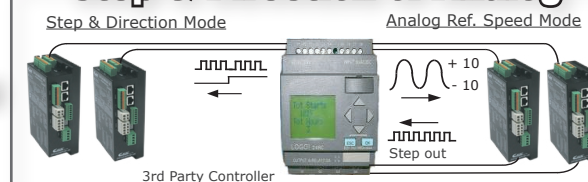
SlimLine Drives

- Multiform Control Modes
- On Board Safety provisions:
 - ✓ fully tested for direct installation unit
 - ✓ built in watch dog functionality
 - ✓ fault monitoring and handling
 - ✓ separated power supply for logic and power
 - ✓ on field working errors buffering
- Drives main features:
 - ✓ low motor vibration ✓ compact sizes
 - ✓ low mech. noise ✓ low heat generation
 - ✓ no resonance ✓ high reliability
 - ✓ safe protections ✓ high speed and torque output
 - ✓ DC/AC power supply ✓ wide range of power

Ever
ELETTRONICA
The clever drive
since 1977

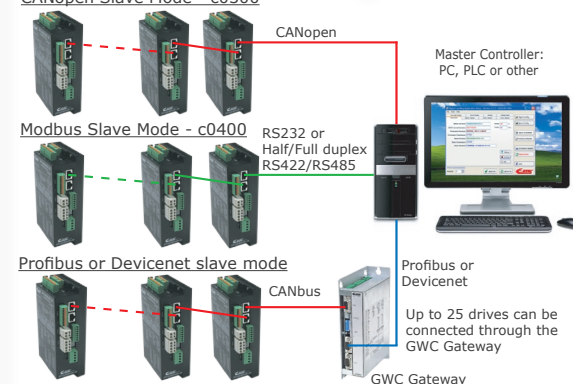
ELETTRONICA PER AUTOMAZIONE INDUSTRIALE
Via del Commercio, 2/4 -9/11
Loc. S. Grato - Z.I.
26900 - LODI (LO) - Italy
Tel. 0039 0371 412318 - Fax 0039 0371 412367
email infoever@everelettronica.it
www.everelettronica.it

Step & Direction or Analog



Multi Axes Systems

CANopen Slave Mode - c0300



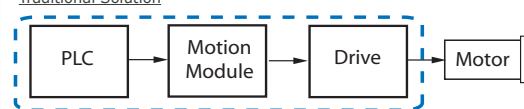
Drive control through commands by Master Controller.
Suitable for multi axes systems (up to 127 drives).
Built in Powerful Motion Module functionality assures Perfect Synchronization among axes and reduces Master Controller

Stand Alone Mode

User Programmable - eePLC- c0490

eePLC integrates PLC, Motion Module, Process Module and drive in One Device. eePLC Studio PC interface is available to friendly, fast and easy custom to machine or process device programming.

Traditional Solution



eePLC Solution



Atomic Handler permits user to access all the functionalities and resources of the device and to manage and synchronize the motion module and other drive resources to any process' events.

Access to all Powerful Motion functionalities

Built in **Process Real Time Modules** for special applications:

- Labelling
- CAM
- Wire Processing
- User Custom Process
-

eePLC Modularity and Use

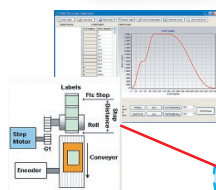
Special Quick Configuration Windows for Process Realtime Modules.

Accepts parameter setting from optional controller through serial RS232, RS422, RS485 in Modbus RTU protocol (HMI, PLC, PC, other).

Ever co. proprietary PC Software Tools for easy and quick development, configuration and supervision of each system.

PC Software Tools available:

SL_Modbus for Modbus Slave Mode
SL_CAN for CANopen Slave Mode
SL_eePLC for Stand Alone Mode



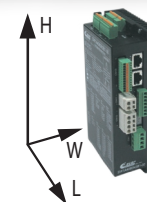
Realtime Process Special Software Modules Available:

- Labeling
- CAM
- Wire Processing
- User Custom



Digital sensor
Analog sensor
PC, PLC, HMI, ecc.

Mechanical Data



Model	Dimensions (mm)			Weight (g.)
	H	L	W	
SW1D2x42_61-00	142.0	74.0	37.0	500
SW1D4080_61-00	165.0	97.5	54.3	680
SW1D4080N3B1-00	165.0	97.5	62.3	750
SW1A4080_1-00	165.0	97.5	62.3	900
SW1A9x60_1-00	235.0	151.5	62.5	1,400

Ordering Information of SW1 Drives and Options

Order Code		Power			System Resources						Control mode	
Version	Config.	Power Supply	Logic Supply	Max Output Current	Digital Inputs	Digital Outputs	Analog Inputs	Analog Outputs	CAN	Serial	Mode	Software Starter Kit (PC Cable + Software CD-Rom)
SW1 Drive Line: Model 2042												
SW1D2042C061-00	c0300	Single 24 ÷ 40 Vdc for Power and Logic		4,2 Arms	4	2	2	0	*	-	Modalità CANopen	SW1-CANBUS-SL
SW1D2042N361-00	c0400								Modalità Modbus	SW1-RS232-SL oppure SW1-RS485-SL		
SW1D2042N361-00	c0490								eePLC	SW1-RS232-EE oppure SW1-RS485-EE		
SW1D2042N361-00	c1490								eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE		
SW1 Drive Line: Model 2142												
SW1D2142C061-00	c0300	24 ÷ 40 Vdc	24 ÷ 40 Vdc	4,2 Arns	4	2	2	0	*		Modalità CANopen	SW1-CANBUS-SL
SW1D2142N361-00	c0400								Modalità Modbus	SW1-RS232-SL oppure SW1-RS485-SL		
SW1D2142N361-00	c0490								eePLC	SW1-RS232-EE oppure SW1-RS485-EE		
SW1D2142N361-00	c1490								eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE		
SW1 Drive Line: Model 4080												
SW1D4080C061-00	c0300	48 ÷ 140 Vdc	48 ÷ 140 Vdc	8,0 Arms	4	2	2	0	*	-	Modalità CANopen	SW1-CANBUS-SL
SW1D4080N361-00	c0400								Modalità Modbus	SW1-RS232-SL oppure SW1-RS485-SL		
SW1D4080N361-00	c0490								eePLC	SW1-RS232-EE oppure SW1-RS485-EE		
SW1D4080N361-00	c1490								eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE		
SW1D4080N3B1-00	c0490	36 ÷ 100 Vac	36 ÷ 100 Vac	8,0 Arms	16	10	2	0	-	RS232 / RS422	eePLC	SW1-RS232-EE oppure SW1-RS485-EE
SW1D4080N3B1-00	c1490				eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE						
SW1A4080C061-00	c0300				4	2					Modalità CANopen	SW1-CANBUS-SL
SW1A4080C0B1-00	c0300				16	10					Modalità CANopen	SW1-CANBUS-SL
SW1A4080N361-00	c0400				4	2			-	RS232 / RS422	Modalità Modbus	SW1-RS232-SL oppure SW1-RS485-SL
SW1A4080N361-00	c0490				eePLC	SW1-RS232-EE oppure SW1-RS485-EE						
SW1A4080N361-00	c1490				eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE						
SW1A4080N3B1-00	c0490				eePLC	SW1-RS232-EE oppure SW1-RS485-EE						
SW1A4080N361-00	c1490	eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE									
SW1 Drive Line: Model 9060												
SW1A9060C061-00	c0300	Single 115 ÷ 230 Vac for Power and Logic		6,0 Arms	4	2	2	0	*	-	Modalità CANopen	SW1-CANBUS-SL
SW1A9060C0C1-00	c0300				16	10		2			Modalità CANopen	SW1-CANBUS-SL
SW1A9060N361-00	c0400				4	2		0			Modalità Modbus	SW1-RS232-SL oppure SW1-RS485-SL
SW1A9060N361-00	c0490				4	2		0			eePLC	SW1-RS232-EE oppure SW1-RS485-EE
SW1A9060N361-00	c1490				16	10		2	eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE		
SW1A9060N3C1-00	c0490								eePLC	SW1-RS232-EE oppure SW1-RS485-EE		
SW1A9060N3C1-00	c1490	eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE									
SW1 Drive Line: Model 9160												
SW1A9160C061-00	c0300	115 ÷ 230 Vac	115 ÷ 230 Vac	6,0 Arms	4	2	2	0	*	-	Modalità CANopen	SW1-CANBUS-SL
SW1A9160C0C1-00	c0300				16	10		2			Modalità CANopen	SW1-CANBUS-SL
SW1A9160N361-00	c0400				4	2		0			Modalità Modbus	SW1-RS232-SL oppure SW1-RS485-SL
SW1A9160N361-00	c0490				4	2		0			eePLC	SW1-RS232-EE oppure SW1-RS485-EE
SW1A9160N361-00	c1490				16	10		2	eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE		
SW1A9160N3C1-00	c0490								eePLC	SW1-RS232-EE oppure SW1-RS485-EE		
SW1A9160N3C1-00	c1490	eePLC + Cam	SW1-RS232-EE oppure SW1-RS485-EE									