

Specifications

MODELS

Code	Power supply	Current	Motor power
AW5A9750	100 ÷ 240 Vac (monophase)	up to 3.0Arms (peak of 12Arms for 1s max with DC max = 10%)	up to 750 W

POWER STAGE

Ultrasonic chopper frequency 40 kHz

COMMUNICATION INTERFACE

EtherCAT or Ethernet (Modbus TCP/IP) or Profinet or CANbus and Serial (Modbus RTU)

FEEDBACK INTERFACE

Incremental encoder input 5 V differential RS422 or single-ended TTL/CMOS (isolated) or absolute encoder input SSI or BiSS-C (isolated)

POSITION SENSOR INTERFACE

Hall sensor 5 V Single-Ended (TTL/CMOS) (isolated)

SCI INTERFACE

Service SCI interface for configuration, programming and real time debugging

OPTOISOLATED INPUTS

up to 16 digital

OPTOISOLATED OUTPUTS

up to 12 digital

ANALOGUES INPUTS

up to 2 isolated

ANALOGUES OUTPUTS

up to 2 isolated

OPTOISOLATED STO INPUTS

Safe Torque Off inputs SIL3/PLe

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

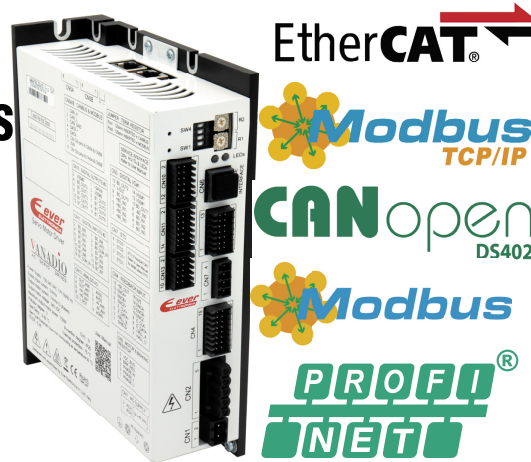
IP20

PROTECTION CLASS

Class I Equipment

AC Brushless Servodrives

VANADIO
AC - SERVO - DRIVES



EtherCAT

Modbus TCP/IP

CANopen DS402

Modbus

PROFINET

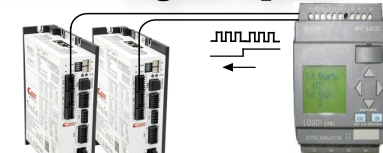
AW5A9750

- Mains power supply 240 Vac
- Incremental or absolute encoder and Hall sensor inputs
- Serial Service for real time programming and debugging
- Safe Torque Off SIL3/PLe inputs (STO)
- External braking resistor management
- Compliance with the most common PLC Masters on the market
- New e3PLC Programming Environment, easy and intuitive
- UL recognized certified



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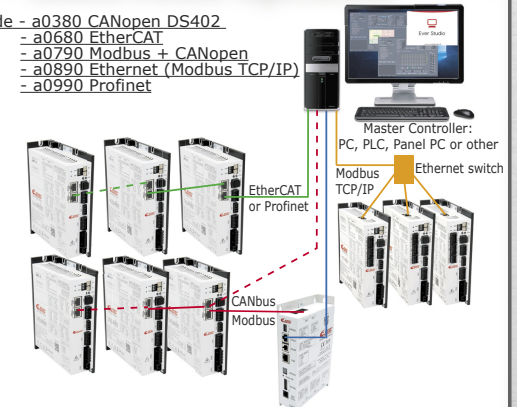
Digital Inputs



3rd part controller

Multi Axes Systems

Slave mode - a0380 CANopen_DS402
- a0680 EtherCAT
- a0790 Modbus + CANopen
- a0890 Ethernet (Modbus TCP/IP)
- a0990 Profinet



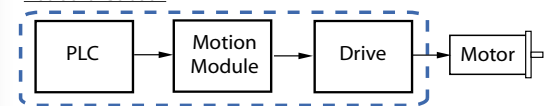
Drive control through commands by Master Controller.
Suitable for multi axes systems.
Built in powerful Motion Module functionality assures perfect synchronization among axes and reduces Master Controller workload.

Stand Alone Mode

User Programmable - eePLC- a0690 / a0790 / a0890 / a0990

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.

Traditional Solution



e3PLC Solution



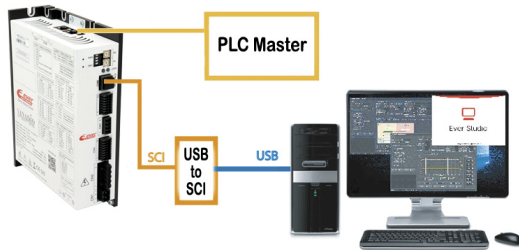
The e3PLC IDE allows the user to access all the I/O control functions and resources, provided by the drive, and to locally program its Motion Control Module, which can also be synchronized with other drives and events of the controlled process. Thanks to the advanced functionalities of the Power Motion 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 ...

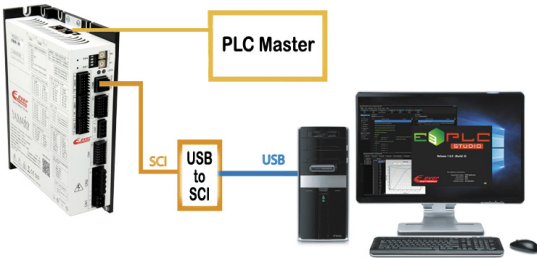
Configuration and programming

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

Fieldbus configuration (slave)



IDE e3PLC configuration (programmable)



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

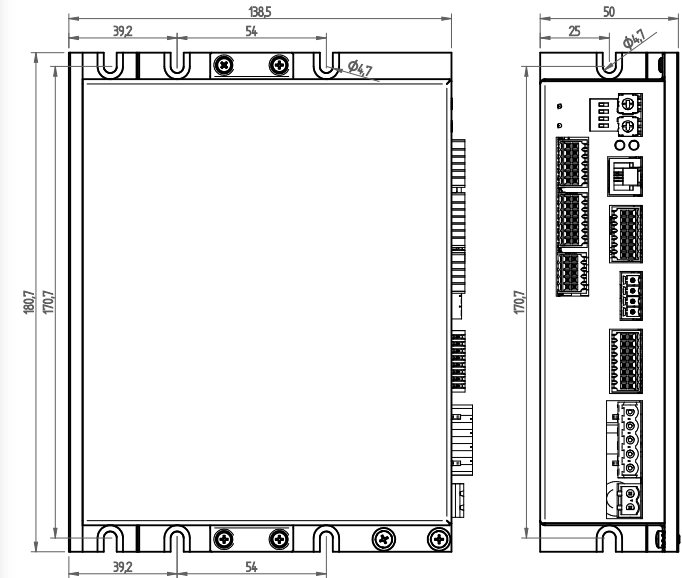
Electric shaft with encoder or analogue input with variable tracking ratio (Electric Gear)

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	D	W	
AW5A9750x2x1-20	180.7	138.5	50.0	800 approx

Ordering Information for AW5A9750

Ordering code		Power		System Resources								
Versions	Config.	Power supply	Current	Digital inputs	Digital outputs	Analogues inputs	Analogues output	Interface	STO inputs	Feedback interface	SCI interface	Control mode
Azionamenti Linea DW4												
AW5A9750L221-20	a0380	100 ÷ 240 Vac (monophase)	up to 3.0 Arms (peak of 12 Arms for 1s max with DC max = 10%)	4	3	--	--	CANbus CANopen and Serial RS485 Modbus-RTU	Safe Torque Off (STO)	Incremental or absolute Encoder and Hall sensor	Service SCI interface for programming and real time debugging	CANopen DS402
AW5A9750L2G1-20				16	12	2	2					e3PLC CANbus or e3PLC Modbus-RTU
AW5A9750L221-10	a0790			4	3	--	--					
AW5A9750L2G1-20				16	12	2	2	e3PLC Modbus TCP/IP				
AW5A9750E2G1-20	a0890			16	12	2	2					Ethernet (Modbus TCP/IP)
AW5A9750H221-20	a0680			4	3	--	--	EtherCAT				
AW5A9750H221-20	a0690	4	3	--	--	EtherCAT						
AW5A9750T221-20	a0990	4	3	--	--	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.