Specifications

MODELS

Code	Power supply		Current
	Power	Logic	
AW5A91K5	85 ÷ 265 Vac single phase or three phases	24 Vdc (mandatory)	continuous up to 5.2 Arms (peak of 12 Arms for 2s max with DCmax = 30%)

COMMUNICATION INTERFACE
Modbus and CANbus or EtherCAT or Ethernet Modbus TCP/IP or Profinet

FEEDBACK INTERFACE
incremental encoder input 5V differential RS422 or
5V single-ended TTL/CMOS
incremental encoder output 5V differential RS422
absolute encoder input 5V BISS-C or SSI interface
Hall sensor signals input 5V single-ended TTL/CMOS

SCI INTERFACE
SCI service interface for configuration, programming and debug in real time

OPTOCOUPLED INPUTS
4 or 16 digital inputs

OPTOCOUPLED OUTPUTS
3 or 12 digital outputs

ANALOG INPUTS
up to 2 analog inputs

ANALOG OUTPUTS
up to 2 analog outputs

OPTOCOUPLED STO INPUTS
Safe Torque Off inputs

SECURITY PROTECTIONS
over/under-voltage, over current, overheating,
short circuit between motor phase to phase and phase to ground

TEMPERATURES
working from 5°C to 40°C, storage from -25°C to 55°C

HUMIDITY
5% ÷ 85% not condensing

OPTIONS
Braking resistor
Brake management

CONTROL MODES
Velocity
Torque
Electric gear
Electronic cams

PROTECTION CLASS
IP20

AC Brushless Servodrives

VANADIO
AC - SERVO - DRIVES

cRUus

CANopen DS402

Modbus

EtherCAT

Modbus TCP/IP

PROFINET
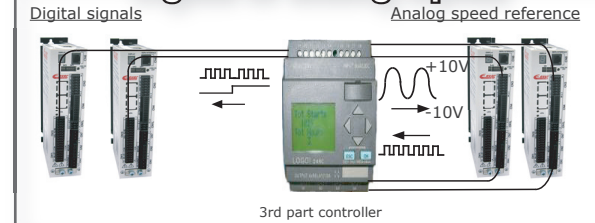
STO Safe Torque Off SIL3 PLe

GARANZIA 3 ANNI

AW5A91K5

- Several fieldbus: EtherCAT (CoE), Modbus TCP/IP, CANbus e Modbus-RTU

- Safe Torque Off inputs (STO) SIL3/PLe

- Compliance with the most common PLC Masters on the market

- Serial Service for real time programming and debugging

- New e3PLC Programming Environment, easy and intuitive

ever ELETTRONICA
the clever drive

Digital or analog inputs

Digital signals

Analog speed reference

+10V
10V

3rd part controller

Multi Axes Systems

Slave mode - a0380 CANopen DS402
- a0680 EtherCAT (CoE)
- a0790 Modbus + CANopen

Master Controller: PC, PLC, Panel PC or other

CANbus Modbus

Ethernet Modbus TCP/IP

EtherCAT

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

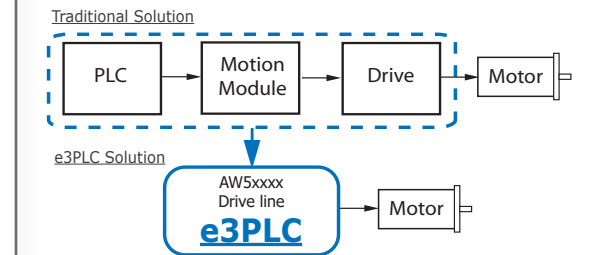## Stand Alone Mode

User Programmable - eePLC- a0690 / a0790 / a0890

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

| PLC | → | Motion Module | → | Drive | | Motor |

e3PLC Solution

AW5xxxx 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*
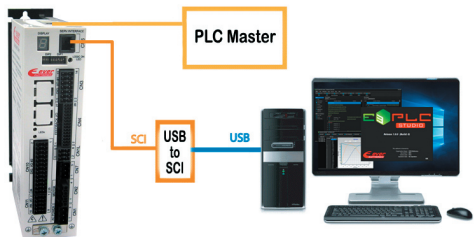- *Many other user-customized processes ...*

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
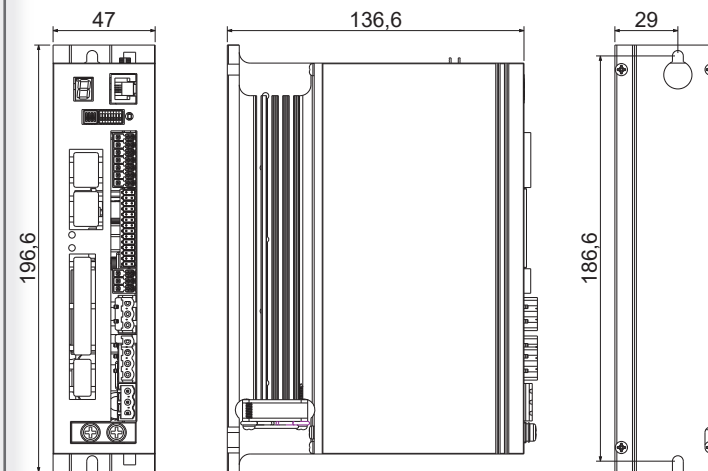
Models	Dimensions (mm)			Weight (g.)
	H	L	W	
AW5A91K5xxxx-30	196.6	136.6	47.0	550

Available Models

Mechanical Specifications

Ordering code		Power			System Resources							Installation Kits
Versions	Config.	Power Supply	Logic Power Supply	Current	Digital Inputs	Digital Outputs	Analog Inputs	Analog Outputs	Interface	SCI Interface	Control mode	Software Kits *
AW5 drives line: 91K5 models												
AW5A91K5N221-30	a0790-S0100	85 ÷ 265 Vac	24 Vdc (obbligatoria)	continuous up to 5.2 Arms (peak of 12 Arms for 2s max with DCmax = 30%)	4	3	0	0	None	For configuration and/or programming and real time debug	e3PLC freq/Dir, Indexer,	SW5_SERV00-SL
AW5A91K5N2E1-30	a0790-S0102				4	3	1	0	None		e3PLC Vrif	SW5_SERV00-SL
AW5A91K5L221-30	a0380				4	3	0	0	CANbus Canopen + Serial Modbus RTU		Fieldbus CANopen DS402	SW5_SERV00-SL
	a0790										e3PLC CANbus and Modbus RTU	SW5_SERV00-EE
AW5A91K5L2E1-30	a0380				4	3	1	0			Fieldbus CANopen DS402	SW5_SERV00-SL
	a0790										e3PLC CANbus and Modbus RTU	SW5_SERV00-EE
AW5A91K5L2G1-30	a0380				16	12	2	2			Fieldbus CANopen DS402	SW5_SERV00-SL
	a0790										e3PLC CANbus and Modbus RTU	SW5_SERV00-EE
AW5A91K5E221-30	a0890				4	3	0	0	Ethernet Modbus TCP/IP		e3PLC Ethernet Modbus TCP/IP	SW5_SERV00-EE
AW5A91K5E2G1-30	a0890				16	12	2	2			e3PLC Ethernet Modbus TCP/IP	SW5_SERV00-EE
AW5A91K5H221-30	a0680				4	3	0	0	EtherCAT (CoE)		Fieldbus EtherCAT (CoE)	SW5_SERV00-SL
	a0690										e3PLC EtherCAT (CoE)	SW5_SERV00-EE
AW5A91K5T221-30	a0990				4	3	0	0	Profinet		e3PLC Profinet	SW5_SERV00-EE

* The software kits permits the SCI communication for configuration or programming and includes cables, converters from service serial to RS485 (and with RS485 to USB converters in SW5_SERV00-xx version) and CD-Rom.