Specifications

POWER SUPPLY
24 Vdc (NEMA17) and 36 Vdc (NEMA23)

RATED TORQUE
up to 0.25 Nm (NEMA17) and up to 0.44 Nm (NEMA23) at 4000 rpm

MOTOR POWER
up to 104 W (NEMA17) and up to 184 W (NEMA23)

SAFETY PROTECTIONS
Over current, overheating, short circuit between motor phase to phase and phase to ground

FEEDBACK CONTROL
Hall sensor (velocity) or incremental magnetic encoder and absolute single-turn encoder (position)

CONTROL INTERFACE
Modbus or CANbus (not isolated)

SERVICE INTERFACE
SCI Service Serial for configuration, programming and real time debugging

INPUTS and OUTPUTS
3 digital inputs not isolated
2 digital outputs not isolated
1 analog input (potentiometer or 0-10Vcc) not isolated

CLASS PROTECTION
IP20

TEMPERATURES
Operating temperatures from 5°C to 40°C, storage temperatures from -25°C a 55°C
Humidity: 5%÷85% not condensed

BLDC motors with integrated fieldbus drives

Platino
BLDC - SERVO - DRIVES

CANopen

Modbus

GARANZIA 3 ANNI

DM4
Integrated Servomotors

- Analog input for speed control
- Absolute single-turn encoder
- CANbus Canopen fieldbus with DS402 functionalities integrated or Modbus RTU Serial
- SCI Serial Service for configuration, programming and real time debugging
- e3PLC IDE for a fast, easy and intuitive programming

ever ELETTRONICA
the clever drive

Digital or Analog Inputs

Controll with frequency   Analog Ref. Speed Mode

Other constructor's Controller
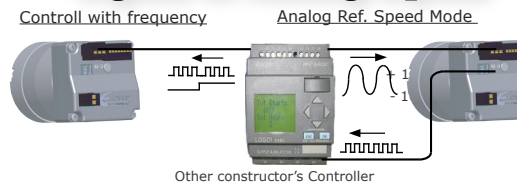
Fieldbus Systems

CANopen Slave - d0380

CANbus

Modbus RTU Slave - d0490

Serial

Controller Master:
PC, PLC or other

Drives control through commands by Master Controller.
Suitable for multi axes systems (up to 127 drives).
Built in powerful Motion Module functionalities, assures perfect synchronization among axes and reduces Master Controller workload.

Stand-Alone Systems

Programmable by the user - e3PLC- d0390 / d0490

e3PLC integrates PLC, Motion Module, Process Module and drive in just one device. e3PLC Studio PC Interface is available for a use-friendly, fast and easy programming of the machine or for process device customization.

Traditional Solution

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

e3PLC Solution

DM4D Drive line — **e3PLC** — Motor
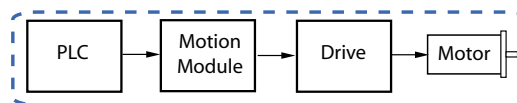
e3PLC IDE allows the user to access all the functions and resources of the device, and to locally program its Motion Module, which can also be synchronized with other drives and events of the controlled process.

Thanks to the advanced functionalities of the Power Motion Module, an integrated Real-time Process Module, applications can be easily created for special application such as:

- Handling
- Food industry
- Textile industry
- Automatic tickets gate
- Barriers and gates and many other user-customized processes...
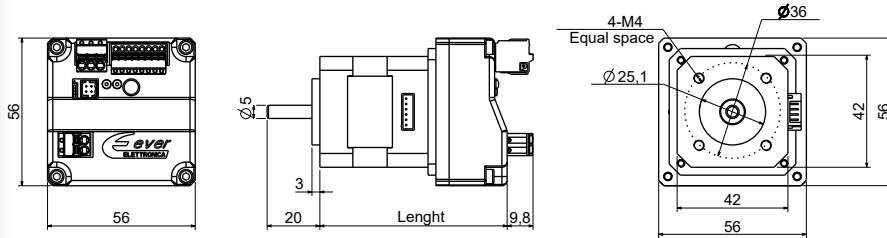
Configuration or programming

Fast configuration with Ever e3PLC Studio for Windows PC, which allows the complete configuration of the device and a real time debug.
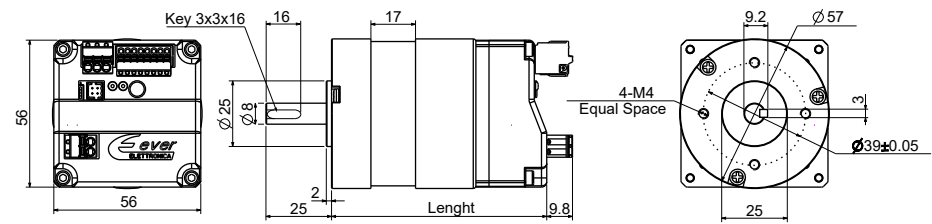

PLC Master

SCI | USB to SCI | USB

PLC Master

SCI | USB to SCI | USB

Ever Elettronica's IDE e3PLC Studio, for Windows PC, means a fast and easy way to program, configure and supervise each system.

Mechanical Data, Motor and Position sensor's characteristics

NEMA17

Models	Rated Torque	Peak Torque	Velocity	Power	Type of sensor	Lenght
DM4D1026_2R1BS0	0.06 Nm	0.19 Nm	4000 rpm	26 W	Hall	71 mm
DM4D1026_2R1GM0					Incremental magnetic encoder and absolute single-turn	
DM4D1052_2R1CS0	0.13 Nm	0.38 Nm		52 W	Hall	91 mm
DM4D1052_2R1HM0					Incremental magnetic encoder and absolute single-turn	
DM4D1078_2R1DS0	0.19 Nm	0.56 Nm		78 W	Hall	111 mm
DM4D1078_2R1IM0					Incremental magnetic encoder and absolute single-turn	
DM4D1104_2R1ES0	0.25 Nm	0.75 Nm		104 W	Hall	130 mm
DM4D1104_2R1LM0					Incremental magnetic encoder and absolute single-turn	

NEMA23

Models	Rated Torque	Peak Torque	Velocity	Power	Type of sensor	Lenght
DM4D1046_2R5BS0	0.11 Nm	0.39 Nm	4000 rpm	46 W	Hall	82 mm
DM4D1046_2R5GM0					Incremental magnetic encoder and absolute single-turn	
DM4D1092_2R5CS0	0.22 Nm	0.63 Nm		92 W	Hall	102 mm
DM4D1092_2R5HM0					Incremental magnetic encoder and absolute single-turn	
DM4D1134_2R5DS0	0.32 Nm	0.61 Nm		134 W	Hall	122 mm
DM4D1134_2R5IM0					Incremental magnetic encoder and absolute single-turn	
DM4D1184_2R5ES0	0.44 Nm	0.63 Nm		184 W	Hall	142 mm
DM4D1184_2R5LM0					Incremental magnetic encoder and absolute single-turn	

Integrated Drives Data

Models		Power	System resources					
Versions	Config. (*cf. table)	Power Supply	Fieldbus	SCI Serial Service	Digital Inputs	Digital Outputs	Analog Inputs	Service Kit
DM4D1___C2R1__0	d0380 d0390	24 Vdc	CANbus Canopen	for configuration, programming and real time debugging	3	2	1	DM4D1_SERV00-SL DM4D1_SERV00-EE
DM4D1___C2R5__0		36 Vdc						
DM4D1___M2R1__0	d0490 d0490	24 Vdc	Modbus RTU Serial					
DM4D1___M2R5__0		36 Vdc						

Configuration and Control Modes	
Config.	Control
d0380	CanOpen Fieldbus (CiA DS402 profile)
d0390	Stand-Alone and programmable with e3PLC Studio IDE CanOpen
d0490	Fieldbus Modbus RTU or Stand-Alone and programmable with e3PLC Studio IDE Modbus RTU