Specifications

POWER SUPPLY
separated for power and for logic

Model	Power Supply	Max. Out Current
SN4D2040	12 ÷ 48 Vdc	0.0 ÷ 4.0 Arms (5.65 Apeak)

COMMUNICATION INTERFACE
EherCAT CoE

ENCODER INTERFACE
incremental encoder not isolated input 5V Single-Ended (TTL/CMOS)

SCI INTERFACE
service SCI interface for programming and real time debug

OPTOISOLATED INPUTS
2 digital inputs 2-24 Vdc NPN, PNP or Line-Driver 2 MHz

OPTOISOLATED OUTPUTS
2 digital outputs PNP, 24 Vdc - 100 mA

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

SAFETY PROTECTIONS
Over/UnderVoltage, OverCurrent, OverTemperature, Phase/Phase and Phase/Ground Short

TEMPERATURE
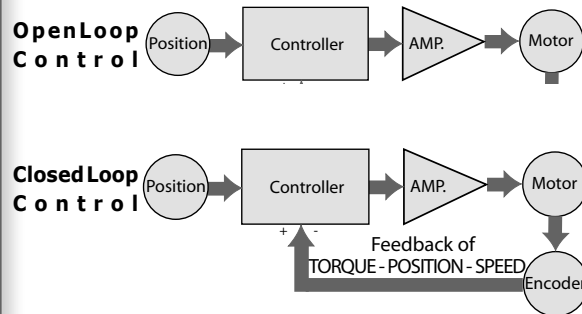operating from 5°C to 40°C, storage -25°C to 55°C

HUMIDITY
5% ÷ 85%

PROTECTION CLASS
IP65

Open loop / Closed Loop

OpenLoop Control

ClosedLoop 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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EtherCAT Fieldbus vectorial drivers for 2 phases stepper motors

Titanio
VECTOR · STEPPER · DRIVES

EtherCAT®

Controller Master:
PC, PLC, Pannello o altro

GARANZIA 3 ANNI

SN4D
Titanio drivers

- Ethercat CoE with DS402 functionalities
- Service serial for real time programming and debugging
- Compliance with the most common PLC Masters on the market
- IP65 protection
- Closed loop of speed, torque and position
- Easily programmable with e3PLC Programming Environment
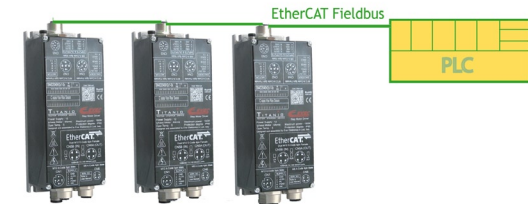

ever
ELETTRONICA
the clever drive

EtherCAT CoE DS402

Fieldbus configuration (slave) - c0680

EtherCAT (CoE) with integrated DS402 functionalities.

- Supported Modes:
  Profile Position Mode, Velocity Mode
  Profile Velocity Mode, Homing Mode
  Interpolated Position Mode
  Cyclic Synchronous Position Mode
  Cyclic Synchronous Velocity Mode

- Multiple Supported Homing Modes:
  1, 2, 17, 18, 19, 20, 21, 22, 35, 37

- Synchronization Mode:
  Free Run, Synchronous with SM Event, Distributed Clocks

- Diagnostic Service:
  EMCY, Diagnostics

- Minimum cycle time:
  500 microseconds

- Conformity with Beckhoff ET9400 Conformance Test Tool V2.1.0, master Robox ed Omron
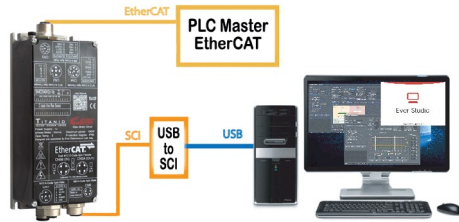

EtherCAT Fieldbus
PLC

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

Configuration software

Fieldbus configuration (slave) - c0680

IDE e3PLC configuration (programmable) - c0690

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

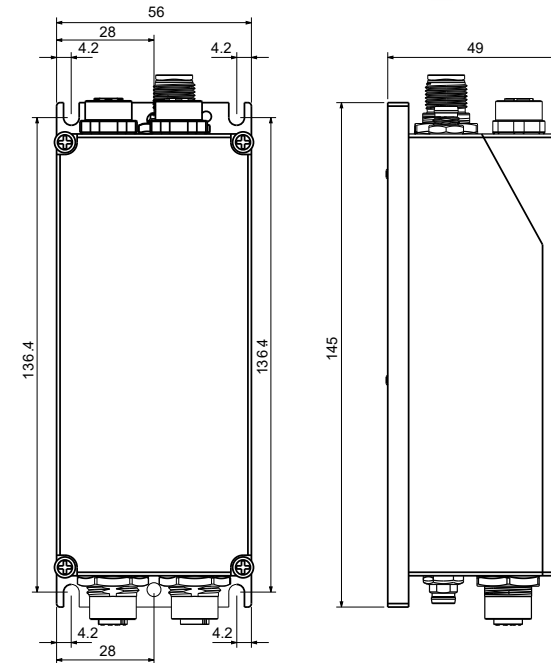**Electronic CAM** with advanced programming of internal profiles inside the drive

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	
SN4D2040H2L1-00	145.0	56.0	50.0	300 about

Ordering information for SN4D EtherCAT drives

Ordering code		Power			System resources				Control mode
Versions	Config.	Power supply	Logic Power supply	Current	Digital inputs	Digitali outputs	Interface	SCI interface	Modes
SN4D EtherCAT drives models									
SN4D2040H2L1-00	c0680	12 ÷48 Vdc	12 ÷ 48 Vdc (optional)	0 ÷ 4.0 Arms (0÷5.65 Apeak)	2	2	EtherCAT CoE	Service serial for configuration, programming and debug in real time	Fieldbus EtherCAT (slave)
	c0690								e3PLC IDE Studio (programmable)

Configuration and Programming Kits	
Kit code	**Description**
SN4D_SERV00-SL	SCI configuration communication kit with cables, service serial to RS485 and RS485 to USB converters and CD-Rom.
SN4D_SERV00-EE	SCI service eePLC programming with cables,service serial to RS485 and RS485 to USB converters and CD-Rom.