

Very compact full digital servodrive 60 & 100 Vdc power supply range for Brushless & Brush servomotors. Driving motor ranges up to 3 Nm, encoder or armature feedback.

## Micro digital One

CANopen ModBus RTU EtherCAT

The **Micro digital One** is a very compact full digital regenerative servo drive for permanent Brushless & Brush DC servomotors.

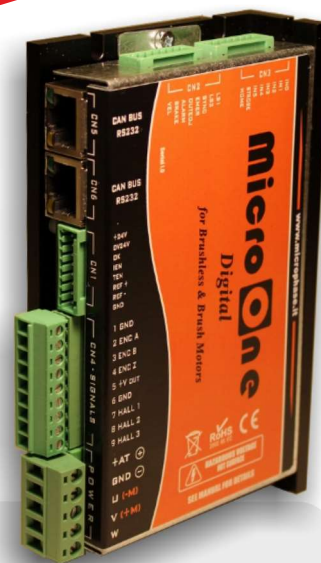
Possible control methods include velocity, position and torque modes. There are many different type of operating mode: +/-10V, ModBus RTU, CanOpen, S-NET, S-CAN, Profibus-DP<sup>(1)</sup>, and EtherCAT<sup>(2)</sup>

The **Micro digital One** series drives push high performance servo technology into lower power applications without compromising on reliability or package size.

### ► Technical data

- Four quadrant regenerative operation
- Single supply DC voltage
- Internal setting for **Brushless o DC mode**
- 5 diagnostic Leds (State and Alarms) , 4 CanOpen activity Leds
- Protections for: Over/Under voltage, max. temperature reaches, Over current, Ixt motor current, hall missing
- Power and signals extractable connectors
- Current loop bandwidth: 3 KHz
- Velocity loop bandwidth: 250 Hz
- Operating mode
  - Velocity reference (differential): ±10 VDC
  - Torque control
  - Position control with internal SAP positioner (29 positions)
  - CanOpen Ds402, S-NET, S-CAN, Rs422 interface ModBus RTU,
- 8+4 opto-isolated digital inputs: 24 VDC - 7mA (6 programmable)
- 4 opto-isolated digital outputs: 24 VDC - 0,5A max (programmable)
- 1 Drive Ok Output with internal contact at +24V (100mA)
- +24V Back-up input for internal logic
- Internal dynamic motor brake function
- Free **Speed Watcher** Software interface for the programming drive
- Operating at rated data: 0 ÷ 45°C (no derating)
- Enclosure protection: Ip20

(1) With gateway (2) Available from July 2013



### Software

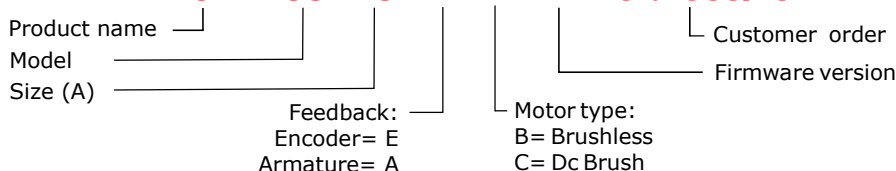
**Speed Watcher** is a software to make fast and simple the tasks development. Vector Step drives support up to 29 inputs or field-bus selectable movement sequences. Every task can be individually executed or to be linked to other ones in order to obtain complex movement profiles.



MODEL		MICRO DIGITAL ONE 65				MICRO DIGITAL ONE 100			
DC Voltage Supply (VDC)		65				100			
DC Voltage Range (VDC)		19 - 84				31 - 132			
Size (A)		2	4	7	10	2	4	7	10
Rated Current (A)		2	4	7	10	2	4	7	10
Peak Current (1) (A)		4	8	14	20	4	8	14	20
Rated Power (2) (W)		116	232	406	580	180	360	630	900
Peak Power (3) (W)		232	464	812	1060	360	720	1260	1800

Order code example:

**MCD1 - 65 - 10 - E - B - XXX - ord. 966/13**

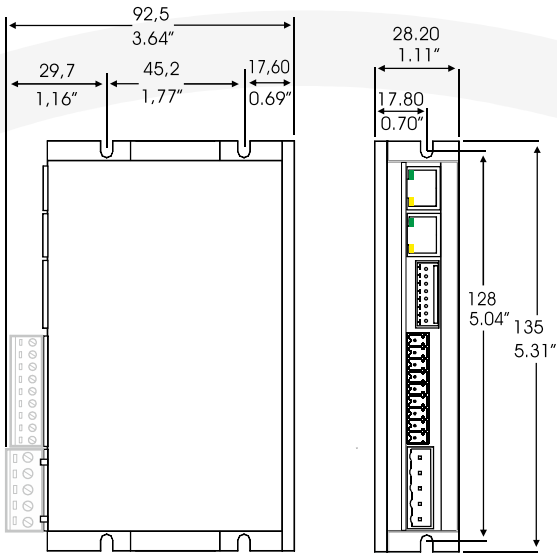


Label example:

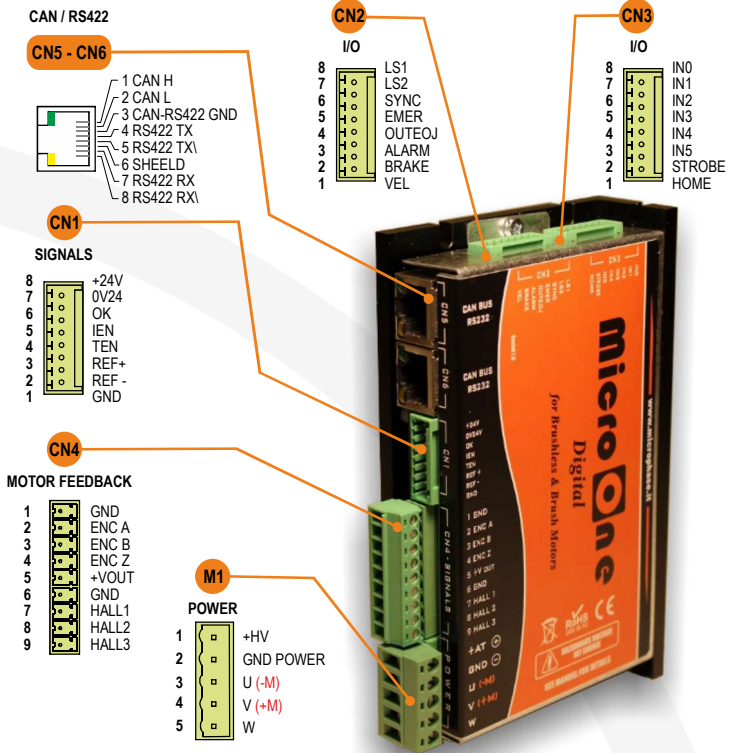
**MCD1-65-10-E-B-XXX  
ord. 966/13**

(1) Peak current (Adc) for 2 sec. (2) Power of amplifier at the rated current and rated voltage (3) Power of amplifier at the peak current and rated voltage

## General Description

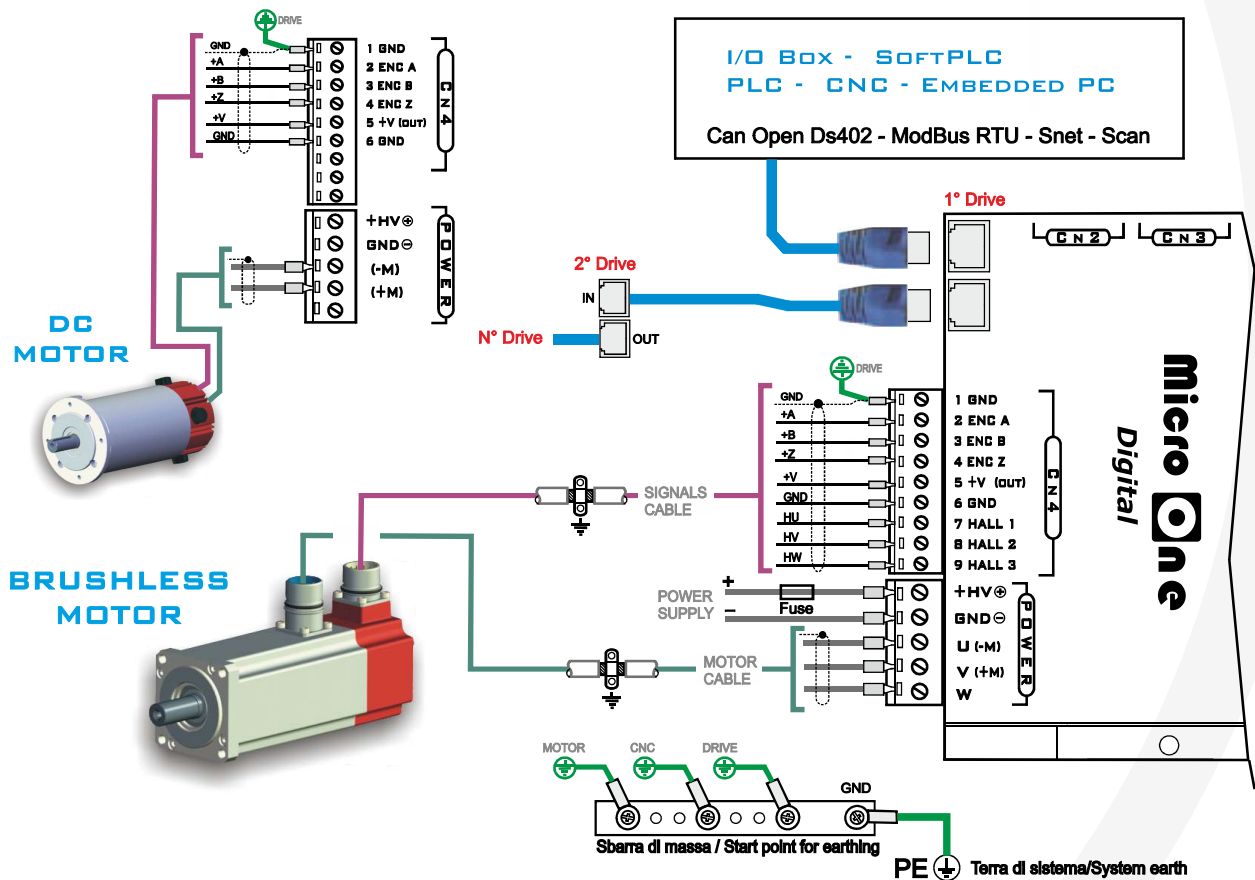


\*Dimensions in mm / inch



[ Datasheet Micro digital One (eng) - 2 of 2 ]

## Connection examples



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**ACCESSORIES:** PX or S140-160-180 Servomotors with range 0,35 - 2,5Nm - Motor cable - Motor Choke - Single or three-phase transformers - power supply part (capacitors, power bridges) - Rj45 communication cable - USB/RS422 interface