



# BC50

## Motor Controller

### Datasheet

# BC50 MOTOR CONTROLLER

## Product description

The BC50 motor controller is designed to control the NDW motorized E-rollers. Its primary function is to control both the speed and the direction of the motorized roller through a user friendly interface. A graphical user interface (LCD display) and straightforward buttons can be used to change the settings. Therefore, no dip switches are required. External control is possible using simple I/O control, i.e. by using a PLC.

## Intended use

The BC50 controller, in combination with NDW motorized E-rollers, can be used to drive conveyor systems in a wide range of industrial intralogistics and manufacturing applications.

## Key features

- User friendly interface
- Stand-alone operation or simple I/O control
- Protection against induced overvoltage of motorized E-roller
- Stall protection
- Energy efficient and low start-up current
- Speed and error feedback on graphical UI
- Both PNP and NPN compatible. Configurable in the settings.

# PRODUCT INFORMATION

## Technical Data

<b>Rated voltage</b>	24Vdc
<b>Voltage range</b>	18Vdc to 26Vdc
<b>Current consumption (idle)</b>	0.1A
<b>Current consumption (max load)</b>	2A (1)
<b>Startup current limit</b>	2A (2)
<b>Power consumption (max load)</b>	50W (1)
<b>Number of motorized E-roller connections</b>	1
<b>Protection rate</b>	IP20
<b>Ambient temperature in operation</b>	0 °C to +40 °C, non-condensing
<b>Compatible NDW E-rollers</b>	ER-Series: 30, 50, 100, 400, 800 RPM
<b>Speed and direction control</b>	Graphical UI or via external I/O (PLC)
<b>Stall protection for E-roller</b>	Yes
<b>Overvoltage protection for E-roller</b>	Yes
<b>Compatibility</b>	PNP and NPN
<b>Signaling</b>	Graphical UI and Error signal (I/O)
<b>Dimensions</b>	133 x 55 x 27 mm
<b>Max installation height</b>	1000 m

1. Actual power consumption depends on the application conditions, such as actual load, section length, slope etc.
2. A very short current peak of <40ms will occur during startup of the E-roller.

## Available accessories

### 24V power cable

24V power cable with one-sided connector, length 5000mm  
Article number: 901-10201

### Communication cable

Communication cable with one-sided connector, length 5000mm  
Article number: 901-10202

### E-roller extension cables

Motor extension cable 1500 mm  
M8 6-pin A-coded, IP65, male to female, length 1500 mm  
Article number: 901-10100

Motor extension cable 3000 mm  
M8 6-pin A-coded, IP65, male to female, length 1500 mm  
Article number: 901-10101

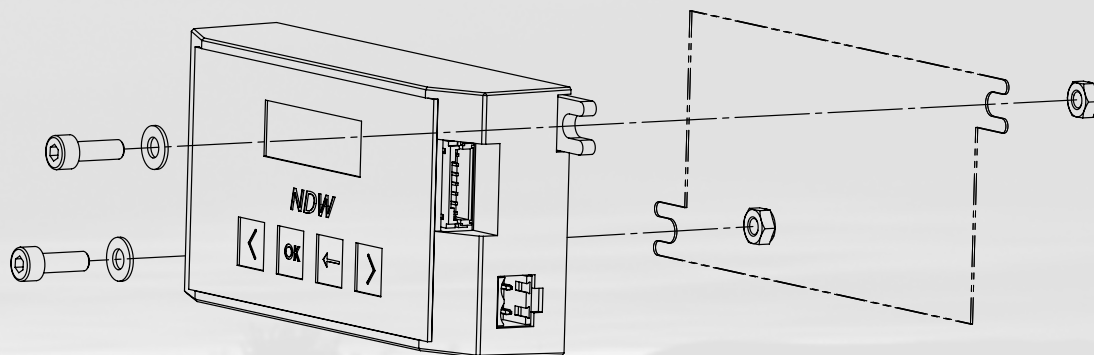
*Custom cable lengths available on request.*

## Mounting Information

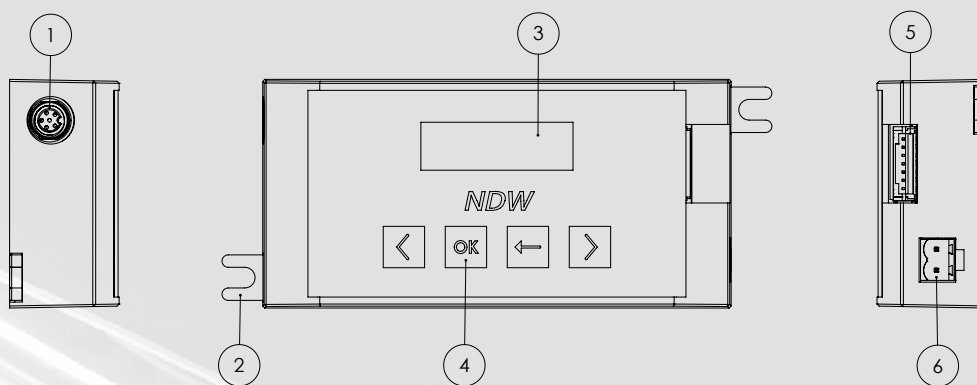
• 2x M4 bolt

• 2x M4 washer

• 2xM4 locking-nut



## Components



- |                            |                                |
|----------------------------|--------------------------------|
| ① E-roller connection      | ④ Navigation buttons           |
| ② Mounting brackets        | ⑤ I/O communication connection |
| ③ Graphical user interface | ⑥ Power supply connection      |

## Dimensions

