



BMD-40DIN ver.2 is a driver designed to control torque, speed, direction, acceleration and deceleration of a DC brush motor with a power of up to 1000 W.

BMD-40DIN ver.2 provides adjustable current limiting function to protect the motor from overload. There is a brake control function. The function of switching during operation to a second preset speed using an external discrete signal has been implemented in the device.

## Technical parameters

- Voltage 12...24 VDC
- Max. motor current – 40 A
- Adjustable overload protection - 1...40 A
- Short circuit protection – 100 A
- Speed control range – 1:100
- Dimensions – 99 x 112 x45

## Motor speed and output torque control signals

- built-in potentiometer
- external potentiometer
- analog signal 0...5 V
- analog signal 0...10 V
- analog signal -10...+10 V
- analog signal 4...20 mA
- PWM signal

## Control methods

- analog speed control
- analog torque control

## Discrete control signals

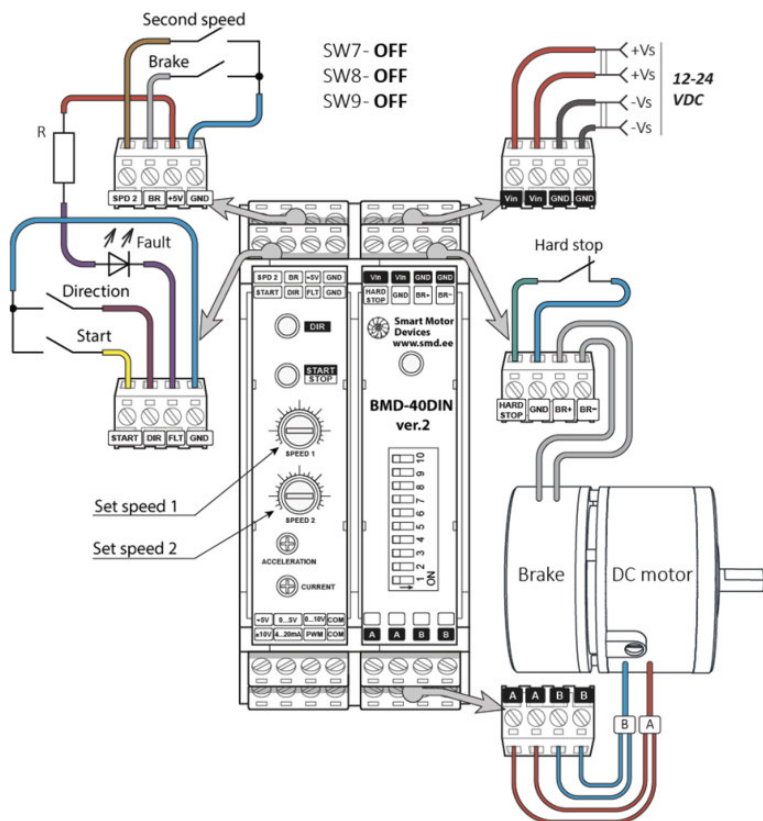
- START – start and stop of the motor
- DIR– rotation direction
- BRAKE – brake control
- SPEED 2 – switch to second speed
- HARD\_STOP – emergency motor stop



## BMD-40DIN ver.2 driver performs the following functions

- Start and stop a DC brush motor using a button at the front panel of the driver or an external signal.
- Analog speed and torque control of a DC brush motor.
- Switching to a second preset rotation speed on an external signal. The second speed is set with the built-in potentiometer.
- Control the direction of motor rotation with a button on the front panel or an external signal.
- Motor brake control.
- Setting the ratio of acceleration and deceleration.
- Motor overload protection with adjustable rated current value.
- User setting of motor stop option: with the motor windings closed to themselves or with the motor windings open.
- Short circuit protection.
- Emergency stop of a DC brush motor «HARD STOP» in case of opening of the electrical protective circuit.
- Temperature protection of power stages.

## Connection diagram of DC motor driver BMD-40DIN ver.2



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**SMART MOTOR DEVICES**  
DRIVERS AND CONTROLLERS FOR ELECTROMOTORS