

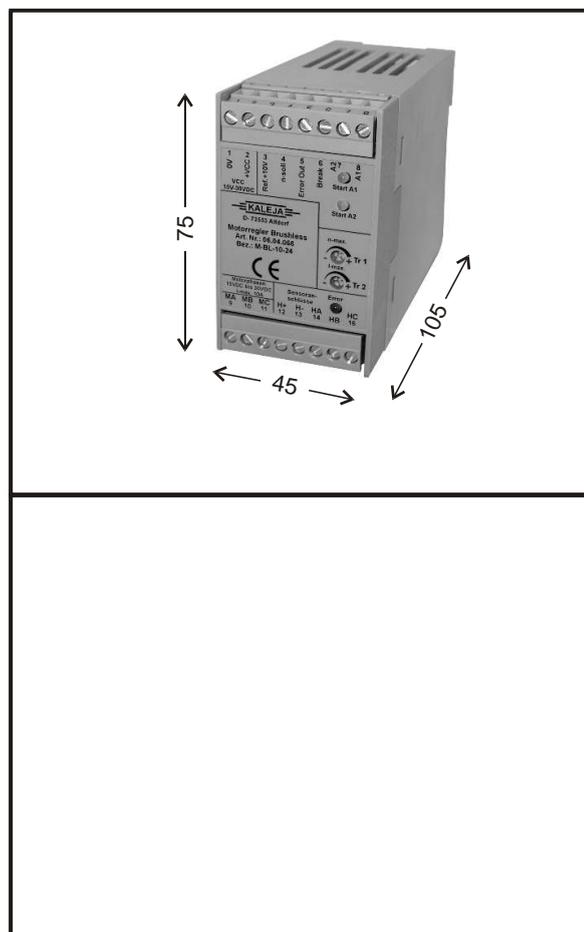
KALEJA GmbH  
D-73553 Alfdorf

## Motor control for brushless DC motors 24VDC

Model for switched currents up  
to 10A with speed control and  
current monitoring. Two-quadrant  
operation.

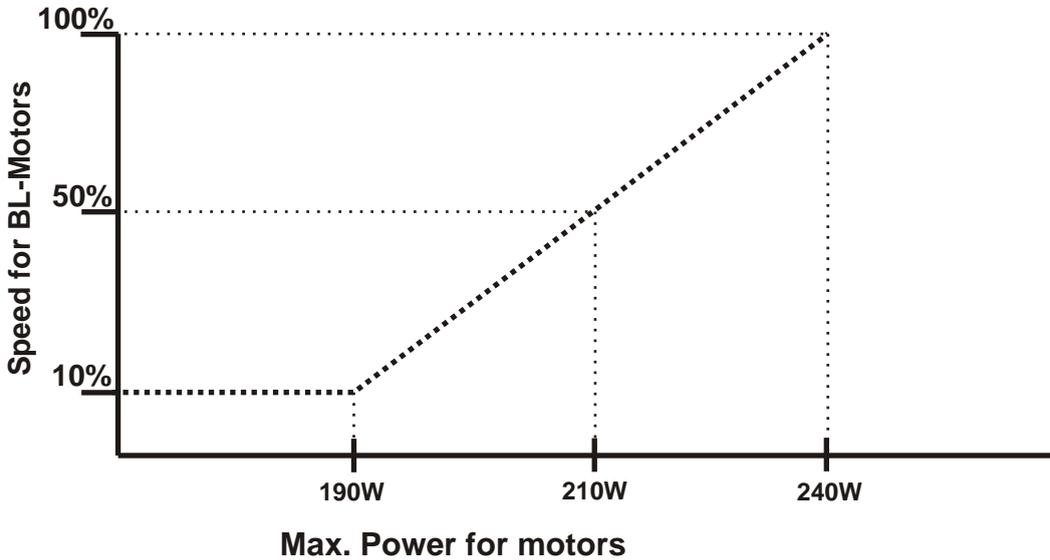
Snap-fit for DIN rail EN 50022

Model width: 45mm



<b>Short Designation Type</b>	<b>Nominal voltage 24VDC</b> M-BL-10-24
<b>Order no. (Art.no)</b>	<b>06.04.066</b>
<b>Specifications: input circuit</b>	
Nominal voltage / control voltage	24 VDC
Nominal voltage range min. / max.	15V to 30VDC
Input current at Un	60mA
Analogue input rotational speed control	0V to 10VDC
External potentiometer for speed control	10 Kohm
<b>Specifications: Output circuit</b>	
<b>MOS-FET</b>	
Switching voltage range / motor voltage	15V to 30VDC
Max. Rated load current	10A
Stromüberwachung Tr. 2 min. / max.	2A to 11,5A
Signal output current monitor	I-max. 50mA
Hall sensor supply for control	6,3 VDC
Hall sensor arrangement	120°
Dynamic brake ON/OFF	Terminal 6 (Break)
<b>Further specifications</b>	
Allowable ambient temperature	-20°C to + 50°C
Vibration resistance a/r (10...500Hz)	> 20 / 5
Overload protection	Yes
DIN VDE-regulations	VDE 0110, 0160 in sep. Parts
Mounting position / installation	Snap-fit, modular
Type of connection: screwed connection / plug-in	Single wire 4mm <sup>2</sup> , finely. 2,5mm <sup>2</sup>
Case dimensions: w x h x d	45mm x 75mm x 105mm

The control M-BL-10-24 is a motor control for EC motors (3-phase, 3 Hall sensors 120° arrangement). It ensures safe starting and turning off of brushless motors. The rotary speed control of the motors may be set via a potentiometer or analogue voltage 0-10VDC. Trimmer Tr1 (n-max.) at the face of the control is used to set the desired maximum speed for the motor, restricting external control to the set speed. Trimmer Tr2 (I-max) may be used to set the maximum motor current. Once the set motor current has been reached, the control will turn off the load circuit, the LED lights up and at terminal 5 „error out“ the signal will change from 0V to VCC; max. load for this output is 50mA. Reset for turning off will occur if terminals 7 „A2“, and 8 „A1“ are not triggered. If terminal 6 „BREAK“ is not triggered, dynamic braking will be carried out after the motor was



### For detailed connection diagrams

### SPS

