MST Series

MST 60-260 K

Electronic speed controller for BLDC motors

Overview

The MST 60-260 K is a compact and rugged ESC designed for up to 60 V and 260 A, ideal for demanding applications in aerospace, robotics, and racing. Optimized for our NOVA 4 and 15 motors. Developed and manufactured in Germany.

Features

- Super robust housing for applications in the harshest environments
- Available as integrated solution for our NOVA 15 motor
- Favorable power-to-weight ratio
- Specifically designed for our high pole motor design
- Combined with our motors, the highest system efficiency can be achieved



PLETTENBERG

Specifications

Hardware P/N (1)	10-008-000-001-01	
Peak output power	24	kW
Peak current (max. 2s)	400	Α
Continuous output power (2)	15.6	kW
Continuous output current (2)	260	Α
Power dissipation at 260 A	172	W
Electric RPM limit	240,000	rpm
Voltage range	10-60	V
Length	123	mm
Width	92	mm
Height	25	mm
Weight	525	g
Recommended Phase cable length	100	cm
Recommended conductor diameter (phase/battery) Protection class	16 5 IP40	mm² AWG
Cooling	Air cooled	
Recommended air flow	3.5 m/s	
Heatsink	4.5 °C/W 3.0 °C/W (at 1 m/s air flow)	
Ambient temperature range	-20 to +100	°C
Max. temperature of ESC (as measured by sensor)	+110	°C
Position sensor input	Hall effect sensor with UVW-commutation signals	
Temperature sensor	Integrated NTC	

Notes:

- Please always provide the hardware and software part numbers (P/N) while ordering. This is required to uniquely identify the product.
- (2) Rated at 25 °C ambient temperature. Performance declines at elevated temperatures. A minimum airflow of 3.5 m/s is required.

Control Interfaces

RS232	115,200 Baud / 8N1
Analog (optional) Software P/N ⁽¹⁾ : 59-10000032	0 – 5 V
PWM (optional) Software P/N ⁽¹⁾ : 59-10000033	High level: 1.5 - 28V Low level: 0 - 0.5 V 10 - 400 Hz
CAN (optional) Software P/N (1): 59-10000034	CAN2.0

Connection Interfaces

Motor phases (A, B and C)	screw terminal M5	
Battery poles	screw terminal M6	
RS 232 / analog / digital / CAN	Harwin 12-pole (M80-5101242)	
Motor sensor	Harwin 6-pole (M80-5101242)	
Compatible with 47 kΩ NTC motor temperature sensors		

Complementary Products

- Plettenberg COTS Motors:
 - NOVA 4-50-BXX P20 LW
 - o NOVA 15-20-B**XX** P30 LW
 - o NOVA 15-25-B**XX** P30 LW
 - NOVA 15-30-BXX P30 LW
 - NOVA 15-40-BXX P30 LW
 - o NOVA 15-50-B**XX** P30 LW
 - NOVA 15-50-BXX P30 WK

Options & Customization

- Available as integrated solution for our NOVA 15 motor
- Tailored software features upon request
- MTBF/S report





MST Series





