

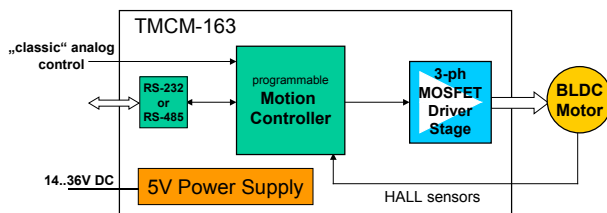
# TMCM-163

**1-Axis Motor Mounted  
BLDC Controller / Driver  
12A / 38V**

**INFO** The TCMC-163 is a controller / driver module for general brushless DC motor applications. It integrates velocity and torque control as well as a hall sensor based positioning mode. The position resolution depends on the motor, i.e. a standard 8 pole motor gives a motor axis resolution of 15 degrees. The module can be used in stand alone operation (analog voltage) or remote controlled (TMCL) via RS-232 or RS-485 interfaces (ordering option). Its small form factor (43 x 43 x 20 mm<sup>3</sup>) allows for mounting directly at the motor. The TCMC-163 fits perfectly to the QBL4208 BLDC motors.

MAIN CHARACTERISTICS

- ELECTRICAL DATA**
  - up to 12A coil current (contact to cooling plane might be required using gap pad)
  - 14V to 38V motor supply voltage
  - NEMA 17 mounting configuration
- SUPPORTED MOTORS**
  - three phase BLDC motors with hall sensors from a few watts up to 360W
  - velocity up to 100,000 rpm (el. field)
- INTERFACE**
  - RS232 or RS485 host interface
  - analog and digital control inputs
- FEATURES**
  - constant velocity drives, constant torque drives or positioning
  - on the fly alteration of motion parameters (e.g. position, velocity, acceleration)
  - high efficiency, low power dissipation
  - integrated protection: overload / overtemperature
- SOFTWARE**
  - stand-alone operation (analog voltage) or remote controlled operation (TMCL)
  - PC-based demonstration software allows setting of all parameters
- OTHER**
  - pluggable connectors for interface
  - flat connectors for motor and supply
  - RoHS compliant
  - size: 43 x 43 x 20 mm<sup>3</sup> (two stacked PCBs)



ORDER CODE	DESCRIPTION
<b>TMCM-163 (-option) V2</b>	1-axis BLDC controller / driver module 12A / 38V
<b>TMCM-163-CABLE</b>	Cable loom for TMCM-163
<b>Related products:</b>	QMot QBL 4208
<b>OPTIONS</b>	
<b>232</b>	RS-232 interface
<b>485</b>	RS-485 interface