



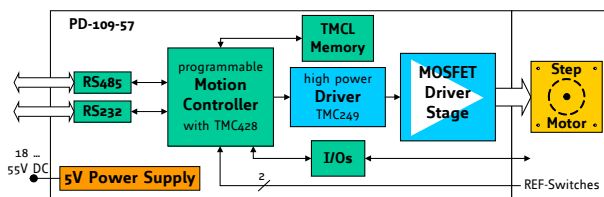
PD-109-57 V2

57mm / NEMA23
Stepper Motor with
Controller / Driver

INFO The PD-109-57 V2 is a full mechatronic solution including a 57 mm flange motor (NEMA23). It combines a convenient controller electronic with a range of different motor types. The PD-109-57 offers four motor torque options and can be controlled via RS-232 or RS-485 interface. The power supply, interface and the multi purpose I/Os can be connected via two pluggable screw connectors. The PD-109-57 V2 comes with the PC based software development environment TMCL-IDE for the Trinamic Motion Control Language (TMCL™). Using predefined TMCL™ high level commands like „move to position“ or „constant rotation“ a rapid and fast development of motion control applications is guaranteed. Communication traffic is kept very low since all time critical operations, e.g. ramp calculation are performed onboard. The TMCL™ program can be stored in the on-board EEPROM for stand-alone operation. The firmware of the module can be updated via the serial interface. With the stallGuard™ feature it is possible to detect motor overload or motor stall.

MAIN CHARACTERISTICS

- ELECTRICAL DATA**
 - 18V to 55V supply voltage
 - 3A RMS nominal motor current (5A peak possible)
- MOTOR DATA**
 - total length: 71 mm / 85 mm / 108 mm: max. torque 0.47Nm / 0.98Nm / 1.63Nm
 - please also refer to the motor datasheet
- INTERFACE**
 - RS232 and RS485 host interface
 - 2 inputs for reference/stop switches (TTL)
 - 3 general purpose input and 1 output (TTL)
- FEATURES**
 - up to 16 times microstepping
 - memory for 2048 TMCL™ commands
 - automatic ramp generation in hardware
 - on the fly alteration of motion parameters (e.g. position, velocity, acceleration)
 - stallGuard™ for sensorless motor stall detection
 - optically isolated inputs
 - dynamic current control
- SOFTWARE**
 - stand-alone operation using TMCL™ or remote controlled operation
 - PC-based application development software TMCL-IDE included
- OTHER**
 - pluggable screw terminal connectors for all external signals
 - RoHS compliant



ORDER CODE	DESCRIPTION
PD1-109-57-RS V2 (-option)	PANdrive 0.55 Nm with motor QSH5718-41-28-055 (new series)
PD2-109-57-RS V2 (-option)	PANdrive 1.01 Nm with motor QSH5718-51-28-101 (new series)
PD3-109-57-RS V2 (-option)	PANdrive 1.26 Nm with motor QSH5718-56-28-126 (new series)
PD4-109-57-RS V2 (-option)	PANdrive 1.89 Nm with motor QSH5718-76-28-189 (new series)
OPTIONS	
RS	RS-232 and RS-485 interface