TECHNOSOFT IPOS8020

Motion controller drive - 20A

P029.026.E201
iPOS8020 BX-CAN (80V, 20A, closed-frame, encoder, CAN)

- Power up to 1600W, continuous/peak current 20/40A, supply voltage 12-80VDC
- Built-in motion controller, 2 STO inputs compatible with SIL3/Cat3/PLe
- For brushed DC, BLDC and stepper motors
- Communication via RS-232 (TMLCAN) and CANopen (default) or EtherCAT (optional)
- Open PCB or enclosed design

PRODUCT DESCRIPTION

The iPOS8010 and iPOS8020 intelligent drives offer a very compact, cost-effective solution for controlling brushless motors, DC and stepper brushes up to 800W or 1600W, with rated voltages up to 80V.

Using a CAN or EtherCAT bus, the iPOS8010 and iPOS8020 modules embed the motion controller, drive, and PLC functions in a single unit. CAN versions can act as standard CANopen drives or as intelligent drives that can execute complex motion profiles, programmed directly at the drive level using TML. As intelligent drives, they can perform many of the tasks of the central unit, eliminating the need for such a device in many single or multi-axle applications. EtherCAT versions can also act as standard EtherCAT drives (CoE protocol) or as intelligent child devices that can independently perform complex motion functions from the drive's memory.

Equipped with 2 feedback connectors, the iPOS8010 and iPOS8020 drives can use both the motor position and the load in advanced double-loop control algorithms that minimize the negative effects of backlash. Depending on the model, different combinations of incremental resolvers and absolute encoders can be used. The iPOS80x0 BX models support functional safety requirements with 2 STO integrity tabs offering a SIL3 / Cat3 / PLe integrity level that facilitates the integration of the Technosoft drive into safety-related installations.

iPOS80x0 drives can be quickly configured and tuned using one of the Technosoft, EasySetUp or EasyMotion Studio software platforms. EasySetUp is recommended when motion programming is done exclusively using an external device (PC or PLC with Technosoft, CANopen or EtherCAT master libraries), while EasyMotio Studio includes both drive configuration and motion programming using TML.

TECHNICAL DATA

Analogue Inputs	2
Communication	CANopen, RS232, TMLCAN
Compatible motor technology	PMSM motor, Voice coil actuator, Brushless DC motor, Stepper motor, Linear motor, DC
Control type	Electronic cam, Electronic gearing, Position, Speed, Torque
Digital inputs	4
Digital outputs	4
Nominal current	20 A
Peak current	40 A
Positioning feedback	SSI, EnDaT 2.2, 1 Vpp Sin/Cos, Incremental, Digital hall sensors, Sensorless, Tachogenerator

Power	1600 W
Supplier	Technosoft
Supply voltage	12 V DC, 24 V DC, 36 V DC, 48 V DC, 56 V DC, 72 V DC
Weight	240 g