AX5206

# **AX5206** | Digital Compact Servo Drives 2-channel





#### Product status: regular delivery

The AX5000 two-channel servo drives offer optimal function, flexibility and cost-effectiveness. The components required for operation, such as power supply unit, EMC filter and DC link capacitors, are already integrated. The control loop, which has a cascaded structure, supports fast and highly dynamic positioning tasks. EtherCAT as a high-performance system communication enables ideal interfacing with PC-based control technology.

The AX5000 drives in the two-channel version are available with different current intensities from 2 x 1.5 A to 2 x 6 A. These are two separate channels, whose rated current can be adapted to the respective connected motor. With the help of the flexible adjustment option, a larger motor can also be connected to a two-channel device when the second channel is driving a smaller motor. The allowable sum current of the device must be taken into account when adjusting.

The AX-Bridge quick connection system enables simple and fast connection of several AX5000 devices to form a multi-axis system. The plug-in supply and connection modules connect power supply, DC link and 24 V DC control voltage. Different types and sizes of motor such as synchronous, linear, torque, asynchronous and voice coil motors can be connected to the AX5000 without additional measures. The multi-feedback interface supports all common standards. The model of sensorless operation of synchronous and asynchronous motors can also be parameterized.

The optional AX58xx enables the typical drive-integrated safety functions and the fulfillment of the requirements of EN ISO 13849-1:2015 (Cat. 4, PL e), EN 61508:2010 (SIL 3) and EN 62061:2005 + A1:2013/A2:2015 (SIL CL3)

The AX5000 has been specifically developed for EtherCAT, as the latter's advantages are optimally exploited in the drive technology. This includes in particular the short cycle time – even in networks with many devices – as well as the synchronicity and simultaneity.

The TwinCAT 3 Drive Manager 2 serves as commissioning tool. Thanks to the structured design and the wide range of functions, commissioning of the axis is simple and intuitive.



AX5206 https://www.beckhoff.com/ax5206

## **Product information**

#### Technical data

Technical data	AX5206
Function	servo drive
Channels	2
Rated supply voltage	3 x 100480 V AC ±10 %
DC link voltage	max. 875 V DC
Rated output current (channel)	6 A
Peak output current (channel)	13 A
Feedback	SinCos 1 Vpp , resolver , EnDat 2.1 , Hiperface , BiSS B , OCT
System bus	EtherCAT
Drive profile	SERCOS™ profile for servo drives according to IEC 61800-7-204 (SoE)
Ambient temperature (operation)	0+50 °C (see documentation)
Approvals/markings	CE, cULus, EAC

Housing data	AX51xx   AX52xx
Protection rating	IP20

Dimensions	AX5206
Height without connectors	274 mm
Depth without connectors	232 mm
Width	92 mm

## Ordering information

Ordering information	AX5206-0000-0x0x
AX5206-0000-0200	Digital Compact Servo Drive, 2-axis module, 100480 V AC, rated output current 2 x 6 A, EtherCAT interface, OCT, hardware version 2.0, firmware version 2.06 $^{(1)}$
AX5206-0000-0202	Digital Compact Servo Drive, 2-axis module, 100480 V AC, rated output current 2 x 6 A, EtherCAT interface, OCT, hardware version 2.0, firmware version $\geq$ 2.10 <sup>(1)</sup>

<sup>&</sup>lt;sup>(1)</sup> compatible with AX5805, AX57xx, AX5021 and AX5801-0200

