



AX5203 | Digital Compact Servo Drives 2-channel



i **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.

Product information

Technical data

Technical data	AX5203
Function	servo drive
Channels	2
Rated supply voltage	3 x 100...480 V AC $\pm 10\%$
DC link voltage	max. 875 V DC
Rated output current (channel)	3 A
Peak output current (channel)	10 A
Feedback	SinCos 1 V _{PP} , 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

Dimensions	AX5203
Height without connectors	274 mm
Depth without connectors	232 mm
Width	92 mm

Ordering information

Ordering information	AX5203-0000-0x0x
AX5203-0000-0200	Digital Compact Servo Drive, 2-axis module, 100...480 V AC, rated output current 2 x 3 A, EtherCAT interface, OCT, hardware version 2.0, firmware version 2.06 ⁽¹⁾
AX5203-0000-0202	Digital Compact Servo Drive, 2-axis module, 100...480 V AC, rated output current 2 x 3 A, EtherCAT interface, OCT, hardware version 2.0, firmware version ≥ 2.10 ⁽¹⁾

⁽¹⁾ compatible with AX5805, AX57xx, AX5021 and AX5801-0200