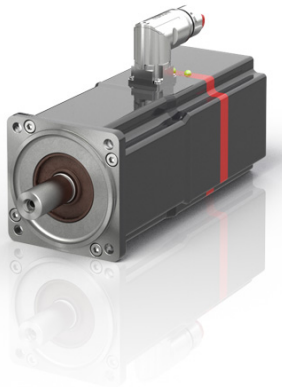
AMP8041-Ex1z | Distributed servo drive 2.40 Nm (M_0), F4 (87 mm)



Product status: Regular delivery

The AMP8041 permanent magnet-excited three-phase synchronous motor with integrated servo drive can be equipped with either multi-turn or single-turn encoders. With One Cable Automation, the EtherCAT P single cable solution, it features a simple, convenient and fail-safe connection to the AMP8600 distributed power supply module or the AMP8800 decentralized distribution module.

The three-phase synchronous motor with flange code F4 (87 mm) and motor length 1 has a shaft diameter b = 19 k6 and a free shaft end of d = 40 mm.

Drive-integrated safety functions

The AMP8000 distributed servo drive includes TwinSAFE as standard for the realization of the drive-integrated safety functions STO/SS1 according to IEC 61800-5-2. It is optionally available with the following TwinSAFE Safe Motion safety functions:

- Safe stop functions (STO, SOS, SS1, SS2)
- Safe speed functions (SLS, SSM, SSR, SMS)
- Safe position functions (SLP, SCA, SLI)
- Safe acceleration functions (SAR, SMA)
- Safe direction functions (SDIp, SDIn)
- Safe braking functions (SBC, SBT)

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.

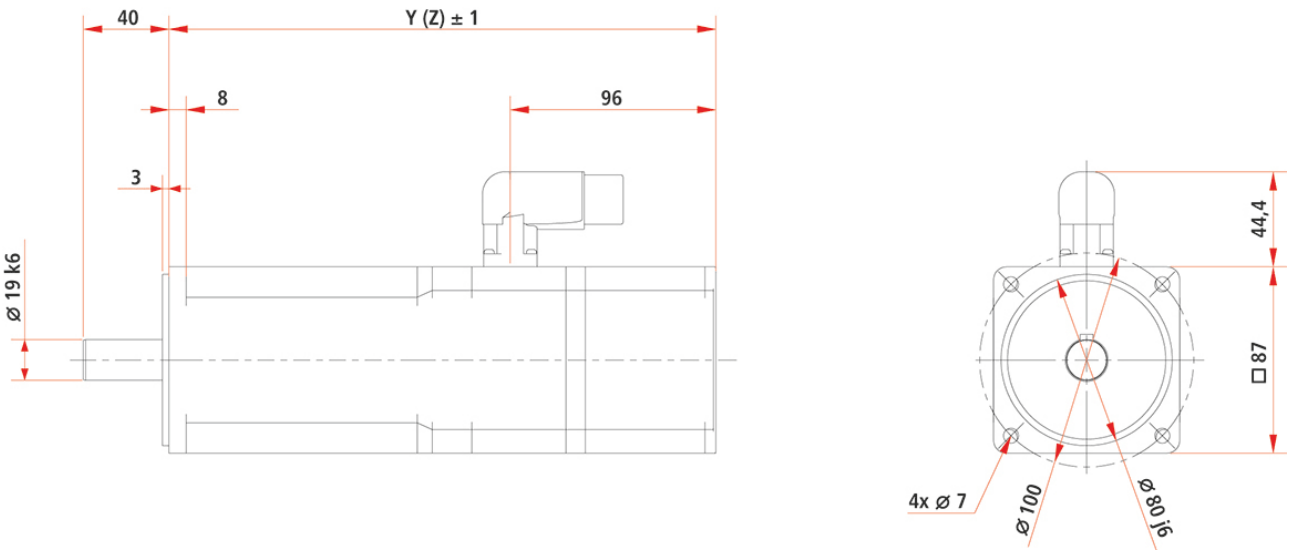
Product information

Technical data

Data for 400 V AC	AMP8041-Ex1z
Motor type	permanent magnet-excited three-phase synchronous motor with integrated servo drive
Nominal voltage	0...848 V DC
Standstill torque	2.40 Nm
Rated torque	2.20 Nm
Peak torque	9.14 Nm
Rated speed	6000 min^{-1}
Rated power	1.38 kW
Rotor moment of inertia	1.09 $kgcm^2$
Motor feedback	single-turn absolute encoder
System bus	EtherCAT
Drive profile	CiA402 according to IEC 61800-7-201 (CoE)
Connection technology	ECP B23 plug
Realization STO	by local TwinSAFE Logic or by FSoE
Safe stop functions	Safe Torque Off (STO), Safe Stop 1 (SS1)
Safety standard	EN ISO 13849-1:2015 (Cat 4, PL e), EN 61508:2010 (SIL 3) and EN 62061:2005 + A1:2013/A2:2015 (SIL CL3)
Ambient temperature (operation)	+5...+40 °C
Approvals/markings	CE, cULus, EAC

All electric quantities are RMS values.

Housing data	AMP80xx
Protection rating	IP54, IP65 (shaft seal)
Design form	flange-mounted according to IM B5, IM V1, IM V3
Material	aluminum
Coating/surface	dark gray powder coating, similar to RAL7016



Dimensions	AMP8041-Ex1z
Y (without brake)	225.5 mm
Z (with brake)	273.0 mm

Ordering information

Order reference AMP8041-Exyz	
x = 0	smooth shaft
x = 1	shaft with groove and feather key according to DIN 6885
x = 2	shaft with IP65 sealing ring and smooth shaft
x = 3	shaft with IP65 sealing ring, shaft with groove and feather key
x = 4	shaft with IP65 sealing ring, smooth shaft and sealing air connection
x = 5	shaft with IP65 sealing ring, shaft with groove and feather key and sealing air connection
z = 0	without holding brake
z = 1	with backlash-free permanent magnet holding brake
	The options cannot be installed in the field.