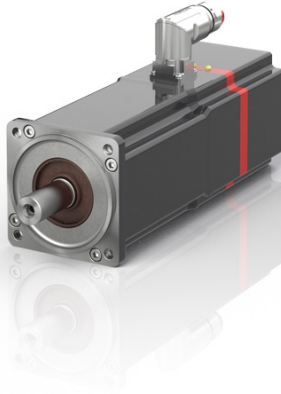


# AMP8042-Fx4z | Distributed servo drive 4.05 Nm (M<sub>0</sub>), F4 (87 mm)



**i Product status:** Regular delivery

The AMP8042 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 2 has a shaft diameter  $b = 19\text{ k6}$  and a free shaft end of  $d = 40\text{ mm}$ .

## 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.

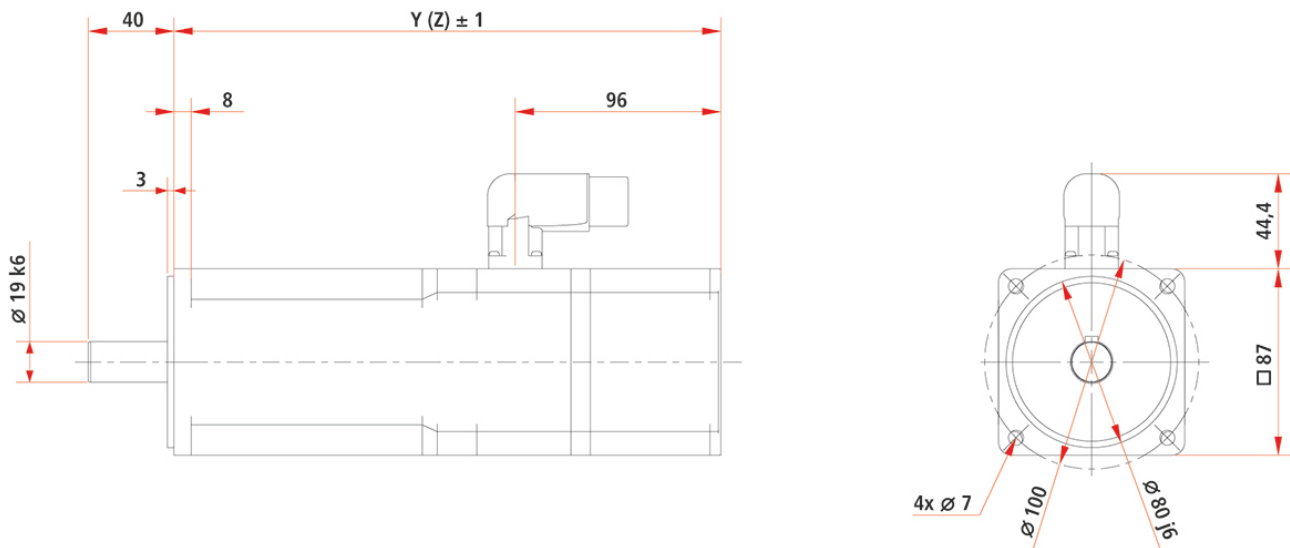
## Product information

### Technical data

Data for 400 V AC	AMP8042-Fx4z
Motor type	permanent magnet-excited three-phase synchronous motor with integrated servo drive
Nominal voltage	0...848 V DC
Standstill torque	4.05 Nm
Rated torque	3.15 Nm
Peak torque	16.2 Nm
Rated speed	5000 min <sup>-1</sup>
Rated power	1.65 kW
Rotor moment of inertia	1.98 kgcm <sup>2</sup>
Motor feedback	multi-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 Operating Stop (SOS), Safe Stop 1 (SS1), Safe Stop 2 (SS2)
Safe acceleration functions	Safe Maximum Acceleration (SMA), Safe Acceleration Range (SAR)
Safe braking functions	Safe Brake Control (SBC), Safe Brake Test (SBT)
Safe direction functions	Safe Direction positive (SDIp), Safe Direction negative (SDIn)
Safe speed functions	Safely Limited Speed (SLS), Safe Speed Range (SSR), Safe Speed Monitor (SSM), Safe Maximum Speed (SMS)
Safe position functions	Safely Limited Position (SLP), Safe CAM (SCA), Safely Limited Increment (SLI)
Safety standard	EN ISO 13849-1:2015 (up to Cat 4, PL e), EN 61508:2010 (up to SIL 3) and EN 62061:2005 + A1:2013/A2:2015 (up to 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	AMP8042-Fx4z
Y (without brake)	255.5 mm
Z (with brake)	303.0 mm

## Ordering information

Order reference AMP8042-Fxyz	
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.	