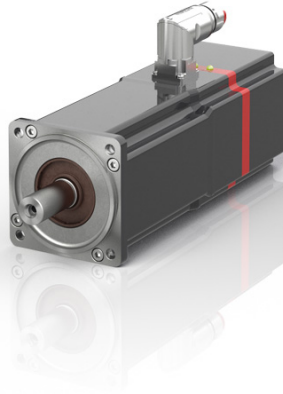


# AMP8042-Jx3z | Distributed servo drive 3.84 Nm Nm (M<sub>0</sub>), F4 (87 mm)



**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.

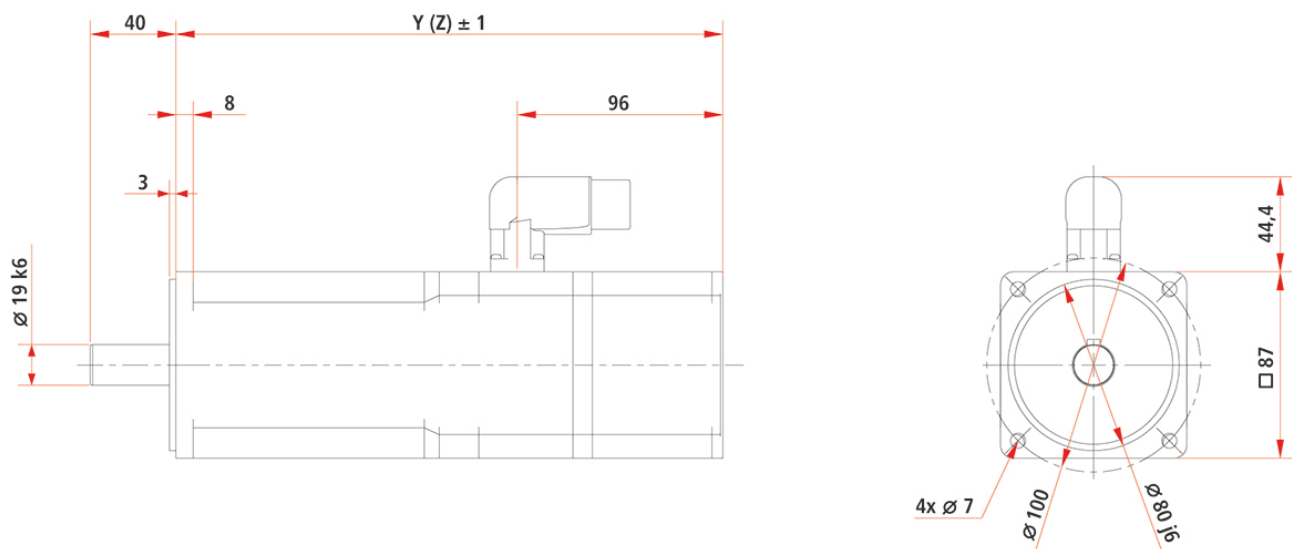
## Product information

### Technical data

| Data for 400 V AC               | AMP8042-Jx3z                                                                                                             |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Motor type                      | permanent magnet-excited three-phase synchronous motor with integrated servo drive                                       |
| Nominal voltage                 | 0...848 V DC                                                                                                             |
| Standstill torque               | 3.84 Nm                                                                                                                  |
| Rated torque                    | 1.00 Nm                                                                                                                  |
| Peak torque                     | 11.1 Nm                                                                                                                  |
| Rated speed                     | 7000 min <sup>-1</sup>                                                                                                   |
| Rated power                     | 0.73 kW                                                                                                                  |
| Rotor moment of inertia         | 1.98 kgcm <sup>2</sup>                                                                                                   |
| 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 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-Jx3z |
|-------------------|--------------|
| Y (without brake) | 255.5 mm     |
| Z (with brake)    | 303.0 mm     |

## Ordering information

| Order reference<br>AMP8042-Jxyz               |                                                                                            |
|-----------------------------------------------|--------------------------------------------------------------------------------------------|
| 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. |                                                                                            |