## AM3073-wMyz-0000 | Servomotor 42.0 Nm ( $\mathrm{M}_{0}$ ), F7 (194 mm)


i Product status: Regular delivery (not recommended for new projects) | recommended alternative: AM8073
The AM3073 low-inertia servomotor is suitable for drive solutions with highest demands on dynamics and performance in the 400 VAC voltage range. The standstill torque of the motor depends on the winding and is in the range of $41,6 \ldots . .42 .0 \mathrm{Nm}$. The low-inertia servomotor with flange code $F 7(197 \mathrm{~mm})$ and motor length 3 has a shaft diameter $\mathrm{b}=38 \mathrm{k} 6$ and a free shaft end of $d=80 \mathrm{~mm}$.

## Product information

Technical data

| Data for 400 VAC | AM3073-wMyz-0000 |
| :--- | :--- |
| Motor type | synchronous servomotors |
| Nominal voltage | 480 V AC |
| Standstill torque | 42.0 Nm |
| Rated torque | 33.8 Nm |
| Peak torque | 169.8 Nm |
| Rated speed | $1500 \mathrm{~min}^{-1}$ |
| Rated power | 5.31 kW |
| Standstill current | 13.60 A |
| Peak current | 68.0 A |
| Torque constant | $3.10 \mathrm{Nm} / \mathrm{A}$ |


| Rotor moment of inertia | $92.0 \mathrm{kgcm}^{2}$ |
| :--- | :--- |
| Motor feedback | Resolver, BiSS B, EnDat 2.1 |
| Cooling | convection |
| Connection method | M 23 |
| Ambient temperature (operation) | $+5 . . .+40^{\circ} \mathrm{C}$ |
| Approvals/markings | $\mathrm{CE}, \mathrm{cURus}, \mathrm{EAC}$ |

All electric quantities are RMS values.
Options such as shaft seal, holding brake, absolute encoder can lead to a reduction of the nominal rating.

| Housing data | AM30xx |
| :--- | :--- |
| Protection rating | IP54 |
| Design form | flange-mounted according to IM B5, IM V1, IM V3 |
| Material | aluminum die-cast |
| Coating/surface | coated |




| Dimensions | AM3073-wMyz-0000 |
| :--- | :--- |
| a | 180 j 6 |
| b | $38 \mathrm{k6}$ |
| d | 80 mm |
| l | 215 mm |
| r | 188 mm |
| k (encoder) (without brake) | 235.7 mm |
| k (encoder) (with brake) | 287.3 mm |


| k (resolver) (without brake) | 226.5 mm |
| :--- | :--- |
| k (resolver) (with brake) | 268.5 mm |

## Ordering information

| Order reference AM3073-wMyz-0000 |  |
| :---: | :---: |
| u | flange code |
| v | motor length |
| w=0 | smooth shaft (standard) |
| $\mathrm{w}=1$ | shaft with groove and feather key according to DIN 6885 |
| $\mathrm{w}=2$ | shaft with IP65 sealing ring and smooth shaft (AM301x to AM303x) |
| w=2 | shaft with IP65 sealing ring and smooth shaft (AM304x to AM308x) |
| w=3 | shaft with IP65 sealing ring and shaft with groove and feather key (AM301x to AM303x) |
| $\mathrm{w}=3$ | shaft with IP65 sealing ring and shaft with groove and feather key (AM304x to AM308x) |
| x | winding code A...T |
| $y=0$ | resolver, 2-pole |
| $y=1$ | single-turn absolute encoder, EnDat 2.1, absolute position within one revolution, electronic identification plate, AM302x...AM304x: 512 sine periods per revolution, AM305x...AM308x: 2048 sine periods per revolution |
| $y=2$ | multi-turn absolute encoder, EnDat 2.1, absolute position within 4096 revolutions, electronic identification plate, AM302x...AM304x: 512 sine periods per revolution, AM305x...AM308x: 2048 sine periods per revolution |
| $y=3$ | single-turn absolute encoder, BiSS, absolute position within one revolution, electronic identification plate, AM302x...AM308x: 2048 sine periods per revolution |
| $y=4$ | multi-turn absolute encoder, BiSS, absolute position within 4096 revolutions, electronic identification plate, AM302x...AM308x: 2048 sine periods per revolution |
| $y=A$ | single-turn absolute encoder, Hiperface, absolute position within one revolution, electronic identification plate, AM301x: 16 sine periods per revolution |
| $y=B$ | multi-turn absolute encoder, Hiperface, absolute position within one revolution, electronic identification plate, AM301x: 4,096 sine periods per revolution |
| $\mathrm{z}=0$ | without holding brake |
| $\mathrm{z}=1$ | with holding brake for AM302x...AM308x |
| $\mathrm{a}=0$ | rotatable angular connectors for motor and feedback cable (only for AM302x up to AM307x) |
| $\mathrm{a}=1$ | supply cable 0.5 m with non-detachable plugs (only for AM301x/AM302x), only for resolver $(y=0)$ |
| $\mathrm{a}=3$ | vertical connectors for motor and feedback cables (only for AM302x up to AM307x) |
| $\mathrm{a}=5$ | yTec plug (only for AM301x) |
| $\mathrm{a}=6$ | motor connection via terminal box (only for AM308x) |
|  | The options cannot be installed in the field. Options such as shaft seal, holding brake, absolute encoder can lead to a reduction of the nominal rating. |

