

AMK

AMKASYN

VARIABLE SPEED DRIVES

AMKASYN

Main Spindle Motors DH

Technical Data

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2399.1E

Part-No.: 25779

AMK

Arnold Müller, Antriebs- und Steuerungstechnik GmbH & Co. KG, D-73230 Kirchheim/Teck,
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1 AMKASYN main spindle motors DH

AMKASYN main spindle motors DH are highly dynamic and sturdy three-phase asynchronous motors and are especially suitable as main drives or high power servo drives. These motors feature a constant power speed range of 1:3, with rated power up to 38 kW and rated torque up to 240 Nm.

200 to 300% of rated torque can be delivered briefly up to rated speed. The heavy duty design and strengthened bearings permit high radial loads.

AMKASYN main spindle motors DH in addition display very good servo properties. They can be used in speed control, position and synchronous control in combination with the digital AMK inverters type AMKASYN.

Features

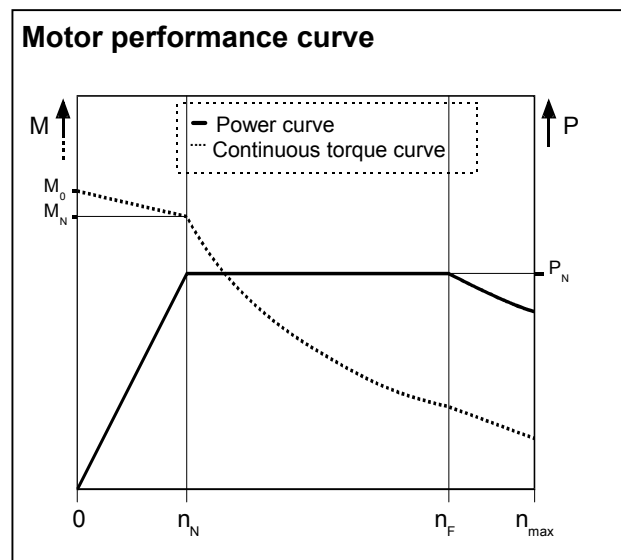
- Low maintenance
- Heavy duty bearings
- TEFC - totally enclosed fan cooled; airflow towards the output shaft (optional reverse airflow)
- High overload capacity
- Outstanding servo properties

Standard version

| | |
|----------------------|-----------------------------------|
| Mounting: | B5 Metric flange |
| Degree of protection | IP 54 |
| Motor connection | Terminal box |
| Position feedback: | Optical sine wave encoder, Type I |
| Keyway: | Standard |
| Airflow direction | Towards output shaft |

Options

- Holding brake
- Shaft end without keyway
- Reverse fan airflow
- Higher rated balancing
- Higher rated runout tolerances

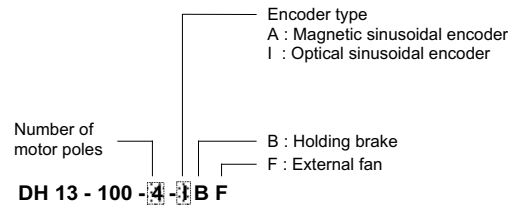


2 Technical data DH

Rated voltage 350V

| Motor type | M ₀ [Nm] | M _N [Nm] | P _N [kW] | I _N [A] | I _M [A] | I _{M1} [A] | T _R [s] | n _N [1/min] | n _F [1/min] | n _{max} [1/min] | J *10 ⁻³ [kgm ²] | m [kg] | L [mm] | LBr [mm] |
|----------------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|-----------------------|---------------------------|---------------------------|-----------------------------|--|-----------|-----------|-------------|
| DH 10- 40-4-..F-1500 | 43 | 40 | 6,3 | 15 | 5,5 | 3,7 | 0,17 | 1500 | 4500 | 5500 | 18 | 57 | 500 | 579 |
| DH 10- 55-4-..F-1800 | 56 | 53 | 10 | 22,5 | 8,0 | 5,0 | 0,14 | 1800 | 3600 | 5500 | 22 | 71 | 600 | 679 |
| DH 13- 60-4-..F-1500 | 68 | 60 | 9,5 | 23 | 8,0 | 4,5 | 0,28 | 1500 | 3000 | 5000 | 46 | 90 | 520 | 610 |
| DH 13-100-4-..F-1500 | 100 | 95 | 15 | 32 | 15,5 | 6,3 | 0,28 | 1500 | 3000 | 5000 | 80 | 125 | 630 | 720 |
| DH 13-120-4-..F-1500 | 125 | 110 | 17,5 | 39 | 16,0 | 11,0 | 0,35 | 1500 | 3000 | 5000 | 95 | 145 | 680 | 770 |
| DH 13-150-4-..F-1800 | 155 | 148 | 28 | 63 | 25,5 | 15,0 | 0,31 | 1800 | 3200 | 5000 | 120 | 180 | 780 | 870 |
| DH 16-180-4-..F-1500 | 190 | 180 | 28 | 62 | 16,0 | 10,5 | 0,4 | 1500 | 3000 | 4500 | 160 | 220 | 725 | 870 |
| DH 16-240-4-..F-1500 | 255 | 240 | 38 | 78 | 25,0 | 16,0 | 0,35 | 1500 | 3000 | 4500 | 210 | 265 | 825 | 970 |

3 AMKASYN Motor name plate (asynchronous motor DH)



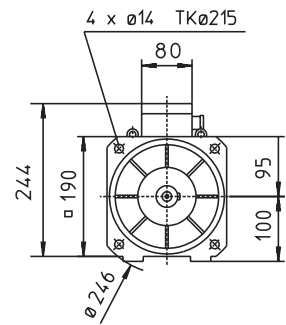
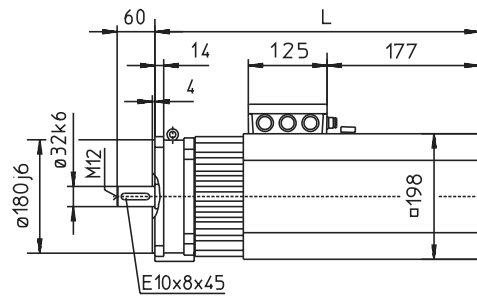
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|------------|---|----------------|----------|----------------------------|----------------|
| AMK | Arnold Müller GmbH & Co. KG D-73230 Kirchheim/Teck | S.-Nr. | - | VDE 0530-T1:1995 MOT 3~ | CE |
| Type | DH 13 - 100 - 4 - 1 B F | | | LÜFTER / FAN | BREMSE / BRAKE |
| P | 15 kW | M | 95 Nm | U | 350 V |
| | 34 A | IP | 54 | U _L | 3 x 400 V |
| | 10.5 A | I _M | 6.3 A | T _R | 0.280 s |
| | Encoder | 1000 P/Rev | ISO.-KL. | F | I _L |
| KD-Nr: | n _{max} | 1500 / 5000 | r/min | f _L | 50 Hz |
| | | | | M _{Br} | 100 Nm |

IM, IM1 : Magnetizing current
M : Nominal motor torque
TR : Rotor time constant
I : Nominal motor current
n : Nominal motor speed
P/Rev : Encoder periods per revolution

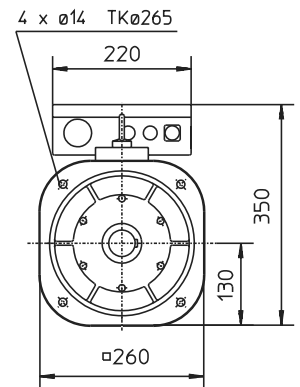
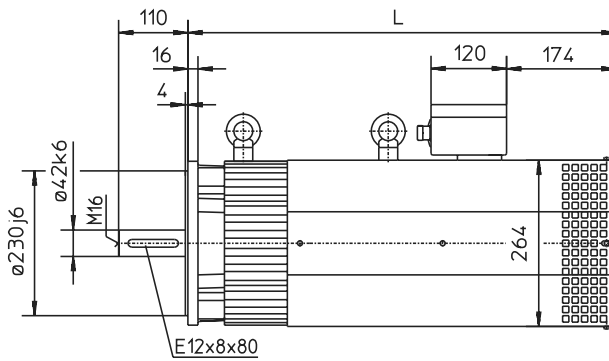
4 Dimensions DH

Dimensions in mm

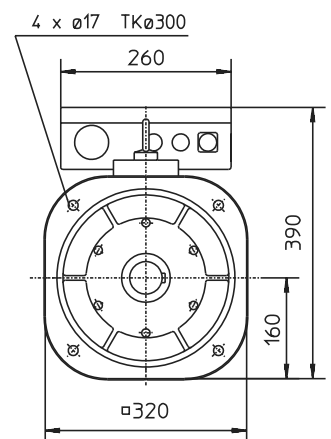
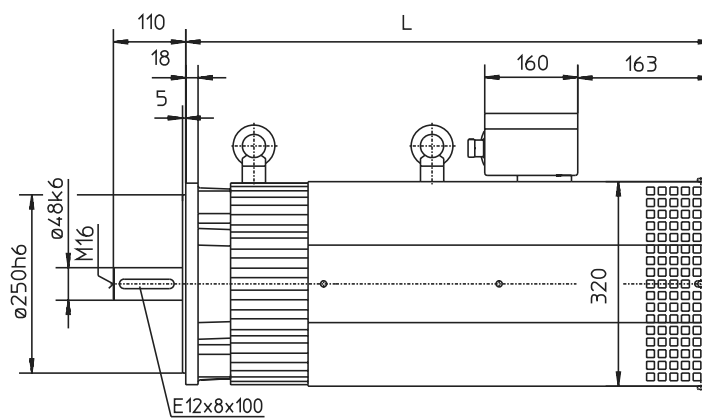
DH 10



DH 13



DH 16



5 Impressum

Title **AMKASYN Motors DH**

Objective **Technical data and Dimensions of the Motor series DH**

Part-Number **25779**

History

| Date |
|---------|
| 1999/32 |

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- Nameplate data
- Software version
- System configuration and application
- Description of problem and presumed cause of failure
- Diagnostic message (error code)

Publisher

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