

# Product data sheet

Specifications



## servo motor BMH - 65 Nm - 3500 rpm - keyed shaft - without brake - IP65/IP67

BMH1903P31A2A

### Main

Product or component type	Servo motor
Device short name	BMH
Maximum mechanical speed	3500 rpm
Continuous stall torque	43.2 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 43.2 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 57.6 N.m for LXM32MD85N4 at 32 A, 400 V, three phase 57.6 N.m for LXM32MD85N4 at 32 A, 480 V, three phase 65 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 65 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Peak stall torque	122.8 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 122.8 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 141.3 N.m for LXM32MD85N4 at 32 A, 400 V, three phase 141.3 N.m for LXM32MD85N4 at 32 A, 480 V, three phase 162.7 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 162.7 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal output power	5700 W for LXM32.D72N4 at 24 A, 400 V, three phase 5700 W for LXM32.D72N4 at 24 A, 480 V, three phase 7330 W for LXM32MD85N4 at 32 A, 400 V, three phase 7330 W for LXM32MD85N4 at 32 A, 480 V, three phase 7750 W for LXM32MC10N4 at 40 A, 400 V, three phase 7750 W for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal torque	36 N.m for LXM32.D72N4 at 24 A, 400 V, three phase 36 N.m for LXM32.D72N4 at 24 A, 480 V, three phase 35 N.m for LXM32MD85N4 at 32 A, 400 V, three phase 35 N.m for LXM32MD85N4 at 32 A, 480 V, three phase 37 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 37 N.m for LXM32MC10N4 at 40 A, 480 V, three phase
Nominal speed	1500 rpm for LXM32.D72N4 at 24 A, 400 V, three phase 1500 rpm for LXM32.D72N4 at 24 A, 480 V, three phase 2000 rpm for LXM32MC10N4 at 40 A, 400 V, three phase 2000 rpm for LXM32MC10N4 at 40 A, 480 V, three phase 2000 rpm for LXM32MD85N4 at 32 A, 400 V, three phase 2000 rpm for LXM32MD85N4 at 32 A, 480 V, three phase
Product compatibility	LXM32.D72N4 at 400...480 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Speed feedback resolution	131072 points/turn
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

Complementary

Range compatibility	Lexium 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Continuous stall current	36.1 A
Continuous power	7.95 W
Maximum current Irms	72 A for LXM32.D72N4
Maximum permanent current	124.5 A
Second shaft	Without second shaft end
Shaft diameter	38 mm
Shaft length	80 mm
Key width	70 mm
Feedback type	Single turn SinCos Hiperface
Motor flange size	190 mm
Number of motor stacks	3
Torque constant	1.8 N.m/A at 120 °C
Back emf constant	129.2 V/krpm at 120 °C
Number of motor poles	10
Rotor inertia	194.1 kg.cm²
Stator resistance	0.13 Ohm at 20 °C
Stator inductance	3.62 mH at 20 °C
Stator electrical time constant	27.8 ms at 20 °C
Maximum radial force Fr	4500 N at 1000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	310 mm
Centring collar diameter	180 mm
Centring collar depth	4 mm
Number of mounting holes	4
Mounting holes diameter	14 mm
Circle diameter of the mounting holes	215 mm
Net weight	43 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	30.0 cm
Package 1 Width	40.0 cm
Package 1 Length	79.5 cm
Package 1 Weight	45.0 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

Contractual warranty

Warranty	18 months
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Recommended replacement(s)