

Product datasheet

Specifications



AC servo motor BSH - 0.21N.m - 9000 rpm - untapped shaft - without brake - IP65

BSH0401P27A2A

EAN Code: 3606485467146

Main

Device short name	BSH
Product or component type	Servo motor
Maximum mechanical speed	10000 rpm
Continuous stall torque	0.21 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 0.21 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.21 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase
Peak stall torque	0.8 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 0.8 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.8 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase
Nominal output power	166 W for LXM32.U60N4 at 1.5 A, 480 V, three phase 166 W for LXM32.U60N4 at 1.5 A, 400 V, three phase 77 W for LXM32.U45M2 at 1.5 A, 230 V, single phase
Nominal torque	0.176 N.m for LXM32.U60N4 at 1.5 A, 480 V, three phase 0.176 N.m for LXM32.U60N4 at 1.5 A, 400 V, three phase 0.184 N.m for LXM32.U45M2 at 1.5 A, 230 V, single phase
Nominal speed	9000 rpm for LXM32.U60N4 at 1.5 A, 480 V, three phase 9000 rpm for LXM32.U60N4 at 1.5 A, 400 V, three phase 4000 rpm for LXM32.U45M2 at 1.5 A, 230 V, single phase
Shaft end	Smooth shaft
IP degree of protection	IP65 standard
Speed feedback resolution	32768 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connectors

Complementary

Range compatibility	Lexium 32
supply voltage max	400 V
Network number of phases	Three phase
Continuous stall current	1.12 A
maximum continuous power	220 W
Maximum current Irms	4.7 A for LXM32.U60N4 at 480 V 4.7 A for LXM32.U60N4 at 400 V 4.7 A for LXM32.U45M2 at 230 V
Maximum permanent current	1.12 A
Switching frequency	8 kHz
Second shaft	Without second shaft end

Shaft diameter	8 mm
Shaft length	25 mm
Feedback type	Multiturn SinCos Hiperface
Motor flange size	40 mm
Number of motor stacks	1
Torque constant	0.19 N.m/A at 120 °C
Back emf constant	13.6 V/krpm at 20 °C
Number of motor poles	5.0
Rotor inertia	0.0232 kg.cm ²
Stator resistance	17.2 Ohm at 20 °C
Stator inductance	7.3 mH at 20 °C
Stator electrical time constant	0.85 ms at 20 °C
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	73.4 mm
Centring collar diameter	30 mm
Centring collar depth	2.5 mm
Number of mounting holes	4
Mounting holes diameter	4.5 mm
Circle diameter of the mounting holes	46 mm
Net weight	0.4 kg
Sizing reference	BSH0401P
Network number of phases	3
Accuracy error [angular]	0.08 °
Temperature copper hot	120 °C
Temperature magnet hot	100 °C
Temperature magnet rt	20 °C
Output current 3s peak	4.5 A
Inertia	0.0 kg.cm ² of brake 0.023 kg.cm ² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.0 cm
Package 1 Width	17.0 cm
Package 1 Length	24.0 cm
Package 1 Weight	627.0 g

Logistical informations

Country of origin	DE
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Contractual warranty

Warranty (in months)

18



Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Total lifecycle Carbon footprint **198**

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard **Yes**

Packaging without single use plastic **No**

[EU RoHS Directive](#) **Pro-active compliance (Product out of EU RoHS legal scope)**

SCIP Number **8c11b0c9-e501-4810-83eb-05fc6605ede4**

REACH Regulation [REACH Declaration](#)

PVC free **Yes**

Use Again

Repack and remanufacture

End of life manual availability **No need of specific recycling operations**

Take-back **No**

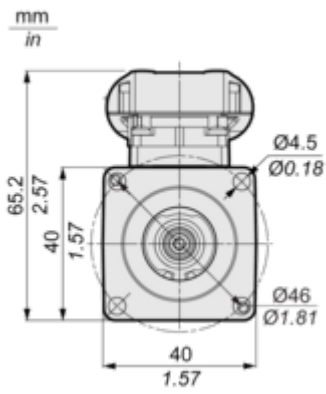
WEEE Label  **The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Dimensions Drawings

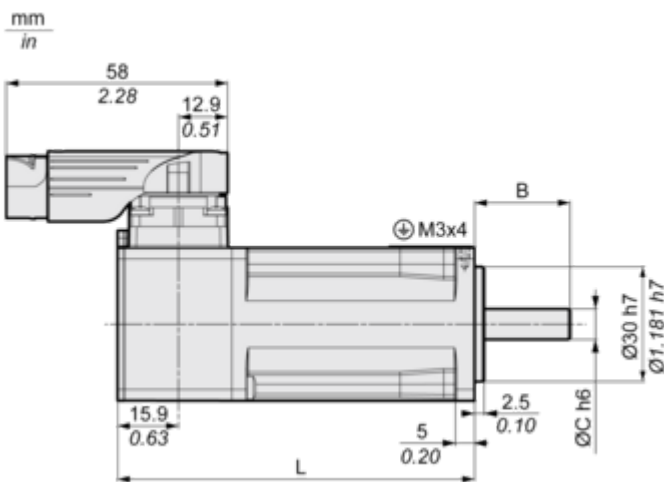
Servo Motors Dimensions

For Servo Motor without Brake

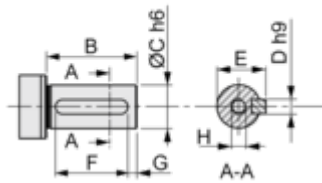
Front view



Left view



DIN 6885 A



	Dimensions in mm	Dimensions in in.
L	73.4	2.89
B	25	0.98
C	8	0.31
D	3	0.12

	Dimensions in mm	Dimensions in in.
E	9.2	0.36
F	12	0.47
G	4	0.16
H	DIN 332 DS M3 x 9	
A	DIN 6885-A3x3x12	