

servo motor BMH - 100 Nm - 3000 rpm - keyed shaft - with brake - IP65/IP67

BMH1904P31F2A

EAN Code: 3606481041999

Main

Device short name	ВМН	
Product or component type	Servo motor	
Maximum mechanical speed	3000 rpm	
Continuous stall torque	100 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 100 N.m for LXM32MC10N4 at 40 A, 480 V, three phase	
Peak stall torque	230 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 230 N.m for LXM32MC10N4 at 40 A, 480 V, three phase	
Nominal output power	16000 W for LXM32MC10N4 at 40 A, 400 V, three phase 16000 W for LXM32MC10N4 at 40 A, 480 V, three phase	
Nominal torque	76.4 N.m for LXM32MC10N4 at 40 A, 400 V, three phase 76.4 N.m for LXM32MC10N4 at 40 A, 480 V, three phase	
Nominal speed	2000 rpm for LXM32MC10N4 at 40 A, 400 V, three phase 2000 rpm for LXM32MC10N4 at 40 A, 480 V, three phase	
Shaft end	Smooth shaft	
IP degree of protection	IP65 standard IP20 with fan module	
Speed feedback resolution	131072 points/turn	
Holding brake	With	
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	40 A	
Maximum current Irms	100 A for LXM32MC10N4 100 A	
Maximum permanent current	100 A	
Second shaft	Without second shaft end	
Shaft diameter	38 mm	
Shaft length	80 mm	
key width	10 mm	
Feedback type	Single turn SinCos Hiperface	
Holding torque	80 N.m holding brake	

Motor flange size	190 mm	
Number of motor stacks	4	
Torque constant	2.5 N.m/A at 120 °C	
Back emf constant	168 V/krpm at 120 °C	
Number of motor poles	10	
Rotor inertia	298.2 kg.cm²	
Stator resistance	0.16 Ohm at 20 °C	
Stator inductance	4.74 mH at 20 °C	
Stator electrical time constant	29.6 ms at 20 °C	
Maximum radial force Fr	3800 N at 1000 rpm 3700 N at 2000 rpm 3600 N at 3000 rpm	
Maximum axial force Fa	0.2 x Fr	
Brake pull-in power	40 W	
type of cooling	Fan	
Length	523 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	64.2 kg	
Sizing reference	BMH1904P	
Network number of phases	3	
Accuracy error [angular]	1.4 °	
Temperature copper hot	135 °C	
Temperature magnet hot	130 °C	
Temperature magnet rt	20 °C	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	40 cm
Package 1 Width	30 cm
Package 1 Length	79.5 cm
Package 1 Weight	62.6 kg

Logistical informations

Country of origin DE

Contractual warranty

Warranty 18 months



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	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	17473
Environmental Disclosure	Product Environmental Profile

Use Better

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	A7df881f-135f-4256-b8c2-ea55d4c9a151
REACh Regulation	REACh Declaration
PVC free	Yes

Use Again

○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins