

Product datasheet

Specifications



SH3 servomotor, 100mm, 2 stacks, keyed Shaft, Multiturn DSL 18bit, no Brake, OneMotorCable straight M23, IP65/65

SH31002P1BA3100

⚠ Discontinued on: 7 Aug 2023

⚠ Discontinued

Main

Range compatibility	PacDrive 3
Device short name	SH3
Product or component type	Servo motor

Complementary

Maximum mechanical speed	6000 rpm
[Us] rated supply voltage	115...480 V
Network number of phases	Three phase
Continuous stall current	4.8 A
Continuous stall torque	5.8 N.m at 115...480 V three phase
Continuous power	1930 W
Peak stall torque	18.3 N.m at 115...480 V three phase
Nominal output power	1090 W at 230 V single phase 1930 W at 400 V three phase 1930 W at 480 V three phase
Nominal torque	5.2 N.m at 230 V single phase 4.6 N.m at 400 V three phase 4.4 N.m at 480 V three phase
Nominal speed	2000 rpm at 230 V single phase 4000 rpm at 400 V three phase 4800 rpm at 480 V three phase
Maximum current Irms	17.1 A
Shaft end	Parallel key
Shaft diameter	19 mm
Shaft length	40 mm
Key width	6 mm
IP degree of protection	IP65 motor: conforming to IEC 60034-5 IP65 shaft bushing: conforming to IEC 60034-5
Encoder type	Absolute multiturn Hiperface DSL
Speed feedback resolution	262144 points/turn x 4096 turns
Holding brake	Without
Mounting support	International standard flange
Motor flange size	100 mm

Electrical connection	Straight connector
Torque constant	1.21 N.m/A at 120 °C
Back emf constant	77 V/krpm at 20 °C
Number of motor poles	4
Rotor inertia	2.31 kg.cm ²
Stator resistance	2.4 Ohm
Stator inductance	13.5 mH
Maximum radial force Fr	2660 N at 1000 rpm 2110 N at 2000 rpm 1840 N at 3000 rpm 3730 N at 1000 rpm 2960 N at 2000 rpm
Maximum axial force Fa	300 N
Type of cooling	Natural convection
Length	204.5 mm
Centring collar diameter	95 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9.0 mm
Circle diameter of the mounting holes	115 mm
Net weight	5.9 kg
Sizing reference	SH31002P
Network number of phases	3
Temperature copper hot	130 °C
Electrical connection	quicklock straight connector

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	21.0 cm
Package 1 Width	18.0 cm
Package 1 Length	35.6 cm
Package 1 Weight	6.6 kg

Contractual warranty

Warranty (in months)	18
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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 >](#)

Use Better



Materials and Substances

PVC free

Yes

Use Longer



Lifetime extension

Repair

No

Use Again



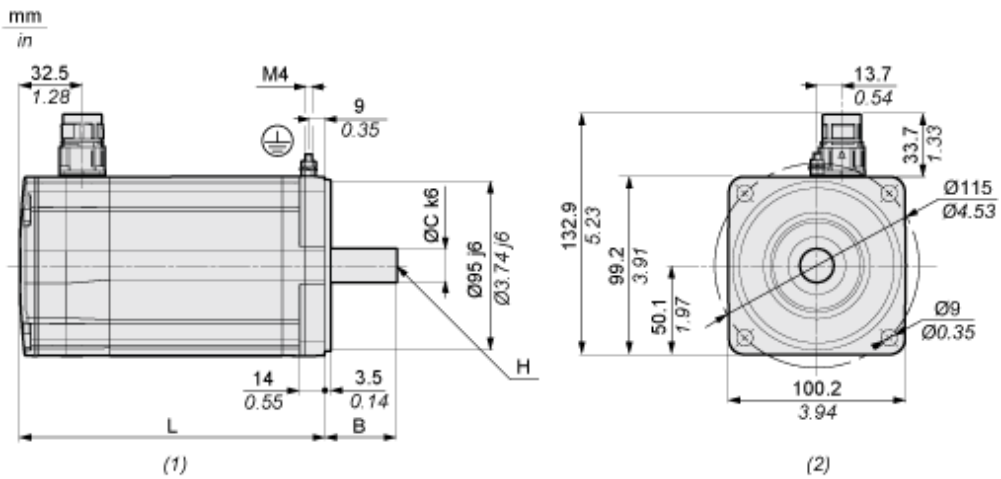
Repack and remanufacture

End of life manual availability

No need of specific recycling operations

Dimensions Drawings

Dimensions



DIN 6885 A

- (1) : Side view
- (2) : Mounting
- (3) : Feather key

Characteristic	Unit	Value
L Length without holding brake	mm (in)	204.5 (8.05)
B Shaft length	mm (in)	40 (1.57)
C Shaft diameter	mm (in)	19 (0.75)
D Width of parallel key	mm (in)	6 (0.24)
E Shaft width with parallel key	mm (in)	21.5 (0.85)
F Length of parallel key	mm (in)	30 (1.18)
G Distance parallel key to shaft end	mm (in)	5 (0.2)
H Female thread of shaft		DIN 332-D M6
Parallel key		DIN 6885-A6x6x30