

# Product data sheet

Specifications



SH3 servomotor, 100mm, 1 stack, smooth Shaft, Singleturn DSL 18bit, no Brake, OneMotorCable angular M23, IP54/65

SH31001P0AA4000

**Product availability: Non-Stock - Not normally stocked in distribution facility**

## 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
Phase	Three phase
Continuous stall current	3.5 A
Continuous stall torque	26.02 lbf.in (2.94 N.m) 115...480 V three phase
Continuous power	1190 W
Peak stall torque	85.0 lbf.in (9.6 N.m) 115...480 V three phase
Nominal output power	690 W 230 V single phase 1190 W 400 V three phase 1190 W 480 V three phase
Nominal torque	23.37 lbf.in (2.64 N.m) 230 V single phase 20.09 lbf.in (2.27 N.m) 400 V three phase 20.09 lbf.in (2.27 N.m) 480 V three phase
Nominal speed	2500 rpm 230 V single phase 5000 rpm 400 V three phase 6000 rpm 480 V three phase
Maximum current Irms	12.0 A
Shaft end	Smooth shaft
Shaft diameter	0.7 in (19 mm)
Shaft length	1.6 in (40 mm)
IP degree of protection	IP65 motor: conforming to IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to IEC 60034-5
Encoder type	Absolute single turn Hiperface DSL
Speed feedback resolution	262144 points/turn
Holding brake	Without
Mounting Support	International standard flange
Motor flange size	3.9 in (100 mm)
Electrical Connection	Rotatable right angled connector
Torque constant	0.84 N.m/A 248 °F (120 °C)

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Back emf constant	60 V/krpm 68 °F (20 °C)
Number of motor poles	4.0
Rotor inertia	1.40 kg.cm <sup>2</sup>
Stator resistance	3.8 Ohm
Stator inductance	19 mH
Maximum radial force Fr	1530 N 2000 rpm 1340 N 3000 rpm 1930 N 1000 rpm
Maximum axial force Fa	300 N
Type of cooling	Natural convection
Length	6.6 in (168.5 mm)
Centring collar diameter	3.7 in (95 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (9.0 mm)
Circle diameter of the mounting holes	4.5 in (115 mm)
Net Weight	9.5 lb(US) (4.3 kg)
Sizing reference	SH31001P
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
Electrical connection	quicklock rotatable right angled connector
Output current 3s peak	12.0 A
Inertia	0.0 kg.cm <sup>2</sup> of brake 0.0 kg.cm <sup>2</sup> of motor

## Ordering and shipping details

Category	US1PC5218359
Discount Schedule	PC52
GTIN	3606481803696
Returnability	No
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	7.677 in (19.500 cm)
Package 1 Width	8.780 in (22.300 cm)
Package 1 Length	15.984 in (40.600 cm)
Package weight(Lbs)	11.107 lb(US) (5.038 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 >](#)



### Environmental footprint

Total lifecycle Carbon footprint	2 822 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	21 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.6 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2 799 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.5 kg CO2 eq.

## Use Better



### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	Ead0850d-370a-47c5-8cf7-1d93c2c974a4
REACH Regulation	<a href="#">REACH Declaration</a>
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>
PVC free	Yes

## Use Longer



### Lifetime extension

Repair	No
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## Use Again

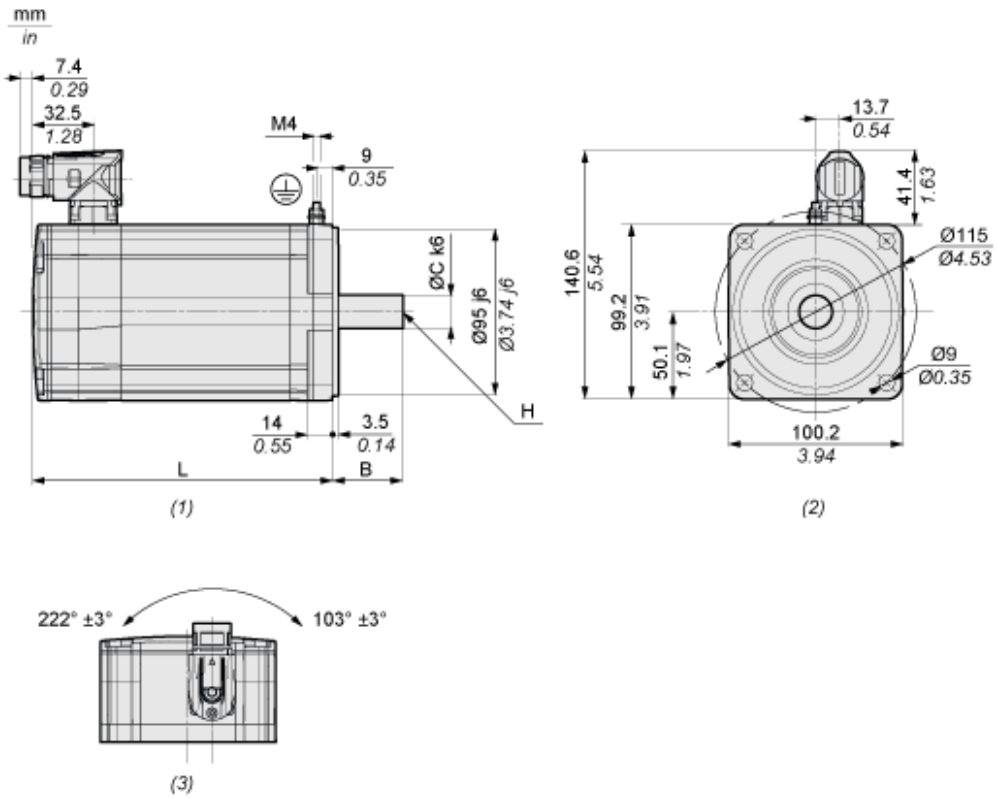


### Repack and remanufacture

Circularity Profile	No need of specific recycling operations
Take-back	No

Dimensions Drawings

Dimensions



- (1) : Side view
- (2) : Mounting
- (3) : Rotating area

Characteristic	Unit	Value
L Length without holding brake	mm (in)	168.5 (6.63)
B Shaft length	mm (in)	40 (1.57)
C Shaft diameter	mm (in)	19 (0.75)
H Female thread of shaft		DIN 332-D M6