

Product datasheet

Specifications



SH3 servomotor, 100mm, 3 stacks,
smooth Shaft, SinCos Singleturn
128, no Brake, angular, IP65/65

SH31003P01A2100

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	6.6 A
Continuous stall torque	8 N.m at 115...480 V three phase
Continuous power	2400 W
Peak stall torque	28.3 N.m at 115...480 V three phase
Nominal output power	790 W at 115 V single phase 1470 W at 230 V single phase 2390 W at 400 V three phase 2560 W at 480 V three phase
Nominal torque	5.1 N.m at 480 V three phase 7.5 N.m at 115 V single phase 7 N.m at 230 V single phase 5.7 N.m at 400 V three phase
Nominal speed	1000 rpm at 115 V single phase 2000 rpm at 230 V single phase 4000 rpm at 400 V three phase 4800 rpm at 480 V three phase
Maximum current Irms	28.3 A
Shaft end	Smooth shaft
Shaft diameter	19 mm
Shaft length	40 mm
IP degree of protection	IP65 motor: conforming to IEC 60034-5 IP65 shaft bushing: conforming to IEC 60034-5
Encoder type	Absolute single turn SinCos Hiperface
Speed feedback resolution	128 periods
Holding brake	Without
Mounting support	International standard flange
Motor flange size	100 mm
Electrical connection	Straight connector

Excluding VAT and subject to change. Please check with your local distributor through "Where to buy"

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Torque constant	1.22 N.m/A at 120 °C
Back emf constant	77 V/krpm at 20 °C
Number of motor poles	4.0
Rotor inertia	3.22 kg.cm²
Stator resistance	1.43 Ohm
Stator inductance	4.7 mH
Maximum radial force Fr	1050 N at 1000 rpm 830 N at 2000 rpm 730 N at 3000 rpm 660 N at 4000 rpm
Maximum axial force Fa	160 N
Type of cooling	Natural convection
Length	240.5 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	7.5 kg
Sizing reference	SH31003P
Network number of phases	3
Temperature copper hot	130 °C
Electrical connection	rotatable right angled connector
Output current 3s peak	28.3 A
Inertia	0.0 kg.cm² of brake 3.22 kg.cm² of motor

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	8.1 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	5 642 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	35 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	5 605 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.8 kg CO2 eq.

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	Ead0850d-370a-47c5-8cf7-1d93c2c974a4
REACH Regulation	REACH Declaration
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

End of life manual availability	No need of specific recycling operations
Take-back	No