

Product datasheet

Specifications



SH3 servomotor, 100mm, 1 stack,
smooth Shaft, SinCos Multiturn 128,
no Brake, angular, IP65/65

SH31001P02A2100

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	3.5 A
Continuous stall torque	2.94 N.m at 115...480 V three phase
Continuous power	1190 W
Peak stall torque	9.6 N.m at 115...480 V three phase
Nominal output power	410 W at 115 V single phase 790 W at 230 V single phase 1410 W at 400 V three phase 1630 W at 480 V three phase
Nominal torque	2.91 N.m at 115 V single phase 2.64 N.m at 230 V single phase 2.27 N.m at 400 V three phase 2.27 N.m at 480 V three phase
Nominal speed	1250 rpm at 115 V single phase 2500 rpm at 230 V single phase 5000 rpm at 400 V three phase 6000 rpm at 480 V three phase
Maximum current Irms	12.0 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 multiturn SinCos Hiperface
Speed feedback resolution	128 periods
Holding brake	Without
Mounting support	International standard flange
Motor flange size	100 mm
Electrical connection	Rotatable right angled connector

Torque constant	0.84 N.m/A at 120 °C
Back emf constant	60 V/krpm at 20 °C
Number of motor poles	4.0
Rotor inertia	1.4 kg.cm ²
Stator resistance	3.8 Ohm
Stator inductance	9.5 mH
Maximum radial force Fr	900 N at 1000 rpm 720 N at 2000 rpm 630 N at 3000 rpm 570 N at 4000 rpm 530 N at 5000 rpm
Maximum axial force Fa	160 N
Type of cooling	Natural convection
Length	168.5 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
Product weight	4.3 kg
Sizing reference	SH31001P
Network number of phases	3
Temperature copper hot	130 °C
Electrical connection	rotatable right angled connector
Output current 3s peak	12.0 A
Inertia	0.0 kg.cm ² of brake 1.4 kg.cm ² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22.400 cm
Package 1 Width	22.500 cm
Package 1 Length	40.700 cm
Package 1 Weight	5.176 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	3 336 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]	3 314 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
SCIP Number	Ead0850d-370a-47c5-8cf7-1d93c2c974a4
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
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	Yes