

Product data sheet

Specifications



SH3 servomotor, 100mm, 4 stacks, keyed Shaft, SinCos Multiturn 128, Brake, straight, IP54/65

SH31004P12F1000

⚠ Discontinued on: Jul 23, 2025

⚠ End-of-service on: Dec 31, 2025

⚠ 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	6.2 A
Continuous stall torque	88.5 lbf.in (10 N.m) 115...480 V three phase
Continuous power	2500 W
Peak stall torque	358.5 lbf.in (40.5 N.m) 115...480 V three phase
Nominal output power	780 W 115 V single phase 1490 W 230 V single phase 2480 W 400 V three phase 2600 W 480 V three phase
Nominal torque	87.6 lbf.in (9.9 N.m) 115 V single phase 84.08 lbf.in (9.5 N.m) 230 V single phase 69.9 lbf.in (7.9 N.m) 400 V three phase 61.07 lbf.in (6.9 N.m) 480 V three phase
Nominal speed	750 rpm 115 V single phase 1500 rpm 230 V single phase 3000 rpm 400 V three phase 3600 rpm 480 V three phase
Maximum current Irms	32.3 A
Shaft end	Parallel key
Shaft diameter	0.9 in (24 mm)
Shaft length	2.0 in (50 mm)
Key width	0.3 in (8 mm)
IP degree of protection	IP54 shaft bushing without shaft seal ring: conforming to IEC 60034-5 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	With

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

Holding torque	106.2 lbf.in (12 N.m)
Mounting support	International standard flange
Motor flange size	3.9 in (100 mm)
Electrical connection	Rotatable right angled connector
Torque constant	1.62 N.m/A 248 °F (120 °C)
Back emf constant	103 V/krpm 68 °F (20 °C)
Number of motor poles	4.0
Rotor inertia	5.245 kg.cm ²
Stator resistance	1.81 Ohm
Stator inductance	18.35 mH
Maximum radial force Fr	1070 N 1000 rpm 850 N 2000 rpm 740 N 3000 rpm
Maximum axial force Fa	160 N
Type of cooling	Natural convection
Length	12.1 in (307.5 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	21.8 lb(US) (9.9 kg)
Sizing reference	SH31004P
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
Electrical connection	straight connector
Output current 3s peak	32.3 A
Inertia	1.025 kg.cm ² of brake 0.0 kg.cm ² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.071 in (20.500 cm)
Package 1 Width	23.661 in (60.100 cm)
Package 1 Length	10.512 in (26.700 cm)
Package 1 Weight	24.5 lb(US) (11.1 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 >](#)

Use Better

Materials and Substances	
EU RoHS Directive	Compliant By Exemption
PVC free	Yes

Use Longer

Lifetime extension	
Repair	No

Use Again

Repack and remanufacture	
Circularity Profile	No need of specific recycling operations