Product data sheet

Specifications

SH3 servomotor, 140mm, 4 stacks, keyed Shaft, SinCos Singleturn 128, no Brake, angular, IP65/65

SH31404P11A2100

Main

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

Complementary

Maximum mechanical speed	4000 rpm
[Us] rated supply voltage	115...480 V
Network number of phases	Three phase
Continuous stall current	21.3 A
Continuous stall torque	295.6 lbf.in (33.4 N.m) 115...480 V three phase
Continuous power	4040 W
Peak stall torque	1167.4 lbf.in (131.9 N.m) 115...480 V three phase
Nominal output power	2370 W 115 V single phase 4130 W 230 V single phase 4040 W 400 V three phase 4190 W 480 V three phase
Nominal torque	267.3 lbf.in (30.2 N.m) 115 V single phase 232.8 lbf.in (26.3 N.m) 230 V single phase 114.2 lbf.in (12.9 N.m) 400 V three phase 98.2 lbf.in (11.1 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	95.6 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	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	5.5 in (140 mm)

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

Electrical connection	Rotatable right angled connector
Torque constant	1.57 N.m/A 248 °F (120 °C)
Back emf constant	104 V/krpm 68 °F (20 °C)
Number of motor poles	5.0
Rotor inertia	23.7 kg.cm²
Stator resistance	0.28 Ohm
Stator inductance	2.035 mH
Maximum radial force Fr	2660 N 1000 rpm 2110 N 2000 rpm 1840 N 3000 rpm
Maximum axial force Fa	300 N
Type of cooling	Natural convection
Length	15.06 in (382.5 mm)
Centring collar diameter	5.1 in (130 mm)
Centring collar depth	0.1 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.4 in (11 mm)
Circle diameter of the mounting holes	6.5 in (165 mm)
Net weight	57.3 lb(US) (26 kg)
Sizing reference	SH31404P
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
Electrical connection	rotatable right angled connector
Output current 3s peak	95.6 A
Inertia	0.0 kg.cm² of brake 23.7 kg.cm² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.7 in (40.0 cm)
Package 1 Width	11.8 in (30.0 cm)
Package 1 Length	31.3 in (79.5 cm)
Package 1 Weight	61.7 lb(US) (28.0 kg)

Contractual warranty

Warranty (in months)	18

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	**9 592 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**123 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**4 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0.2 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**9 463 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**3 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**

Use Again

Repack and remanufacture

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