

Product data sheet

Specifications



SH3 servomotor, 140mm, 3 stacks,
smooth Shaft, SinCos Singleturn
128, no Brake, angular, IP54/65

SH31403P01A2000

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	17.6 A
Continuous stall torque	246.05 lbf.in (27.8 N.m) 115...480 V three phase
Continuous power	4100 W
Peak stall torque	798.3 lbf.in (90.2 N.m) 115...480 V three phase
Nominal output power	1940 W 115 V single phase 3330 W 230 V single phase 4050 W 400 V three phase 3430 W 480 V three phase
Nominal torque	218.6 lbf.in (24.7 N.m) 115 V single phase 187.6 lbf.in (21.2 N.m) 230 V single phase 114.2 lbf.in (12.9 N.m) 400 V three phase 80.5 lbf.in (9.1 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	61.0 A
Shaft end	Smooth shaft
Shaft diameter	0.9 in (24 mm)
Shaft length	2.0 in (50 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 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)
Electrical connection	Rotatable right angled connector

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	1.58 N.m/A 248 °F (120 °C)
Back emf constant	105 V/krpm 68 °F (20 °C)
Number of motor poles	5.0
Rotor inertia	17.94 kg.cm²
Stator resistance	0.4 Ohm
Stator inductance	2.66 mH
Maximum radial force Fr	2420 N 1000 rpm 1920 N 2000 rpm 1670 N 3000 rpm
Maximum axial force Fa	300 N
Type of cooling	Natural convection
Length	12.9 in (327.5 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	47.0 lb(US) (21.3 kg)
Sizing reference	SH31403P
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
Electrical connection	rotatable right angled connector
Output current 3s peak	61.0 A
Inertia	0.0 kg.cm² of brake 17.94 kg.cm² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	7.874 in (20.000 cm)
Package 1 Width	10.433 in (26.500 cm)
Package 1 Length	23.622 in (60.000 cm)
Package 1 Weight	50.195 lb(US) (22.768 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	9 590 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	99 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	3 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]	9 486 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	2 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

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