Product data sheet

Specifications

Discontinued

SH3 servomotor, 140mm, 1 stack, high Torque, smooth Shaft, SinCos Multiturn 128, Brake, angular, IP54/65

SH31401M02F2000

Discontinued on: Jul 23, 2025

End-of-service on: Dec 31, 2025

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	4 A
Continuous stall torque	98.2 lbf.in (11.1 N.m) 115...480 V three phase
Continuous power	1700 W
Peak stall torque	239.0 lbf.in (27 N.m) 115...480 V three phase
Nominal output power	430 W 115 V single phase 860 W 230 V single phase 1670 W 400 V three phase 1960 W 480 V three phase
Nominal torque	97.4 lbf.in (11 N.m) 115 V single phase 96.92 lbf.in (10.95 N.m) 230 V single phase 93.8 lbf.in (10.6 N.m) 400 V three phase 92.05 lbf.in (10.4 N.m) 480 V three phase
Nominal speed	375 rpm 115 V single phase 750 rpm 230 V single phase 1500 rpm 400 V three phase 1800 rpm 480 V three phase
Maximum current Irms	10.8 A
Shaft end	Smooth shaft
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
Holding torque	203.6 lbf.in (23 N.m)
Mounting support	International standard flange
Motor flange size	5.5 in (140 mm)
Electrical connection	Straight connector
Torque constant	2.78 N.m/A 248 °F (120 °C)
Back emf constant	193 V/krpm 68 °F (20 °C)
Number of motor poles	5
Rotor inertia	9.21 kg.cm²
Stator resistance	5.3 Ohm
Stator inductance	88.55 mH
Maximum radial force Fr	1930 N 1000 rpm 1530 N 2000 rpm 1340 N 3000 rpm
Maximum axial force Fa	300 N
Type of cooling	Natural convection
Length	10.06 in (255.5 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	28.7 lb(US) (13 kg)
Sizing reference	SH31401M
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
Electrical connection	rotatable right angled connector

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

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 >

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Take-back	**No**