

Product datasheet

Specifications



SH3 servomotor, 140mm, 1 stack,
smooth Shaft, SinCos Multiturn 128,
Brake, angular, IP65/65

SH31401P02F2100

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	7.8 A
Continuous stall torque	11.1 N.m at 115...480 V three phase
Continuous power	2900 W
Peak stall torque	27 N.m at 115...480 V three phase
Nominal output power	860 W at 115 V single phase 1670 W at 230 V single phase 2890 W at 400 V three phase 3170 W at 480 V three phase
Nominal torque	10.95 N.m at 115 V single phase 10.6 N.m at 230 V single phase 9.2 N.m at 400 V three phase 8.4 N.m at 480 V three phase
Nominal speed	750 rpm at 115 V single phase 1500 rpm at 230 V single phase 3000 rpm at 400 V three phase 3600 rpm at 480 V three phase
Maximum current Irms	20.8 A
Shaft end	Smooth shaft
Shaft diameter	24 mm
Shaft length	50 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	With
Holding torque	23 N.m
Mounting support	International standard flange
Motor flange size	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	1.43 N.m/A at 120 °C
Back emf constant	100 V/krpm at 20 °C
Number of motor poles	5.0
Rotor inertia	9.21 kg.cm²
Stator resistance	1.41 Ohm
Stator inductance	8.17 mH
Maximum radial force Fr	1930 N at 1000 rpm 1530 N at 2000 rpm 1340 N at 3000 rpm
Maximum axial force Fa	300 N
Type of cooling	Natural convection
Length	255.5 mm
Centring collar diameter	130 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	11 mm
Circle diameter of the mounting holes	165 mm
Net weight	13 kg
Sizing reference	SH31401P
Network number of phases	3
Temperature copper hot	130 °C
Electrical connection	rotatable right angled connector
Output current 3s peak	20.8 A
Inertia	1.8 kg.cm² of brake 7.41 kg.cm² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	26.0 cm
Package 1 Width	20.0 cm
Package 1 Length	59.0 cm
Package 1 Weight	13.9 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	6 838 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	61 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	6 774 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	1 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