Product data sheet

Specifications



servo motor SH3 100 5,8Nm,key,single,brake, 90Â°conn.IP54/IP65,6k RPM

SH31002P11F2000

Product availability: Non-Stock - Not normally stocked in distribution facility

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
Phase	Three phase
Continuous stall current	4.8 A
Continuous stall torque	51.3 lbf.in (5.8 N.m) 115...480 V three phase
Continuous power	1900 W
Peak stall torque	162.0 lbf.in (18.3 N.m) 115...480 V three phase
Nominal output power	580 W 115 V single phase 1090 W 230 V single phase 1930 W 400 V three phase 2210 W 480 V three phase
Nominal torque	48.7 lbf.in (5.5 N.m) 115 V single phase 46.02 lbf.in (5.2 N.m) 230 V single phase 40.7 lbf.in (4.6 N.m) 400 V three phase 38.9 lbf.in (4.4 N.m) 480 V three phase
Nominal speed	1000 rpm 115 V single phase 2000 rpm 230 V single phase 4000 rpm 400 V three phase 4800 rpm 480 V three phase
Maximum current Irms	17.1 A
Shaft end	Parallel key
Shaft diameter	0.7 in (19 mm)
Shaft length	1.6 in (40 mm)
Key width	0.2 in (6 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	With
Holding torque	79.7 lbf.in (9 N.m)
Mounting Support	International standard flange

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

Motor flange size	3.9 in (100 mm)
Electrical Connection	Rotatable right angled connector
Torque constant	1.21 N.m/A 248 °F (120 °C)
Back emf constant	77 V/krpm 68 °F (20 °C)
Number of motor poles	4.0
Rotor inertia	2.928 kg.cm²
Stator resistance	2.4 Ohm
Stator inductance	6.75 mH
Maximum radial force Fr	990 N 1000 rpm 790 N 2000 rpm 690 N 3000 rpm 620 N 4000 rpm
Maximum axial force Fa	160 N
Type of cooling	Natural convection
Length	9.2 in (234.5 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)
Product Weight	13.9 lb(US) (6.3 kg)
Sizing reference	SH31002P
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
Electrical connection	rotatable right angled connector
Output current 3s peak	17.1 A
Inertia	0.618 kg.cm² of brake 2.31 kg.cm² of motor

Ordering and shipping details

Category	US1PC5218359
Discount Schedule	PC52
GTIN	3606485296777
Returnability	Yes
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	8.3 in (21.0 cm)
Package 1 Width	7.09 in (18.0 cm)
Package 1 Length	14.02 in (35.6 cm)
Package weight(Lbs)	16.3 lb(US) (7.4 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	**4 564 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**32 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**1 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]	**4 529 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.7 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**
California proposition 65	**WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov**
PVC free	**Yes**

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

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