

# Product data sheet

Specifications



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

SH31003P12F2000

Product availability: Stock - 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	6.6 A
Continuous stall torque	70.8 lbf.in (8 N.m) 115...480 V three phase
Continuous power	2400 W
Peak stall torque	250.5 lbf.in (28.3 N.m) 115...480 V three phase
Nominal output power	790 W 115 V single phase 1470 W 230 V single phase 2390 W 400 V three phase 2560 W 480 V three phase
Nominal torque	45.1 lbf.in (5.1 N.m) 480 V three phase 66.4 lbf.in (7.5 N.m) 115 V single phase 62.0 lbf.in (7 N.m) 230 V single phase 50.4 lbf.in (5.7 N.m) 400 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	28.3 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 multiturn 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.

Motor flange size	3.9 in (100 mm)
Electrical Connection	Straight connector
Torque constant	1.22 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	3.838 kg.cm <sup>2</sup>
Stator resistance	1.43 Ohm
Stator inductance	4.7 mH
Maximum radial force Fr	1050 N 1000 rpm 830 N 2000 rpm 730 N 3000 rpm 660 N 4000 rpm
Maximum axial force Fa	160 N
type of cooling	Natural convection
Length	10.7 in (271.5 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)
Net Weight	17.6 lb(US) (8 kg)
Sizing reference	SH31003P
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
compatible drive output current 3s peak 2	15 A
Electrical connection	rotatable right angled connector

## Ordering and shipping details

Category	US1PC5218359
Discount Schedule	PC52
GTIN	3606485297156
Returnability	Yes
Country of origin	DE

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	8.66 in (22.000 cm)
Package 1 Width	11.42 in (29.000 cm)
Package 1 Length	23.82 in (60.500 cm)
Package weight(Lbs)	22.589 lb(US) (10.246 kg)
Unit Type of Package 2	P12

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<b>Number of Units in Package 2</b>	12
<b>Package 2 Height</b>	17.72 in (45.000 cm)
<b>Package 2 Width</b>	31.50 in (80.000 cm)
<b>Package 2 Length</b>	47.24 in (120.000 cm)
<b>Package 2 Weight</b>	297.518 lb(US) (134.952 kg)

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## **Contractual warranty**

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<b>Warranty</b>	18 months
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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

Carbon footprint (kg CO2 eq, Total Life cycle) **5643**

Environmental Disclosure [Product Environmental Profile](#)

## Use Better

### Materials and Substances

Packaging made with recycled cardboard **Yes**

Packaging without single use plastic **No**

[EU RoHS Directive](#) **Pro-active compliance (Product out of EU RoHS legal scope)**

SCIP Number **Ead0850d-370a-47c5-8cf7-1d93c2c974a4**

REACH Regulation [REACH Declaration](#)

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](http://www.P65Warnings.ca.gov)**

PVC free **Yes**

## Use Again

### Repack and remanufacture

Circularity Profile **No need of specific recycling operations**

Take-back **No**