Product data sheet

Specifications

SH3 servomotor, 205mm, 1 stack, keyed Shaft, SinCos Multiturn 128, Brake, angular, IP65/65

SH32051P12F2100

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	3800 rpm
[Us] rated supply voltage	115...480 V
Phase	Three phase
Continuous stall current	21 A
Continuous stall torque	326.6 lbf.in (36.9 N.m) 115...480 V three phase
Continuous power	5500 W
Peak stall torque	973.6 lbf.in (110 N.m) 115...480 V three phase
Nominal output power	2510 W 115 V single phase 4240 W 230 V single phase 5500 W 400 V three phase 5200 W 480 V three phase
Nominal torque	282.3 lbf.in (31.9 N.m) 115 V single phase 239.0 lbf.in (27 N.m) 230 V single phase 154.9 lbf.in (17.5 N.m) 400 V three phase 122.1 lbf.in (13.8 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	87.2 A
Shaft end	Parallel key
Shaft diameter	1.5 in (38 mm)
Shaft length	3.1 in (80 mm)
Key width	0.4 in (10 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	708.06 lbf.in (80 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	8.07 in (205 mm)
Electrical Connection	Straight connector
Torque constant	1.75 N.m/A 248 °F (120 °C)
Back emf constant	104 V/krpm 68 °F (20 °C)
Number of motor poles	5.0
Rotor inertia	87.4 kg.cm²
Stator resistance	0.3 Ohm
Stator inductance	2.97 mH
Maximum radial force Fr	3730 N 1000 rpm 2960 N 2000 rpm 2580 N 3000 rpm
Maximum axial force Fa	740 N
Type of cooling	Natural convection
Length	14.6 in (370.5 mm)
Centring collar diameter	7.09 in (180 mm)
Centring collar depth	0.2 in (4 mm)
Number of mounting holes	4
Mounting holes diameter	0.6 in (14 mm)
Circle diameter of the mounting holes	8.5 in (215 mm)
Product Weight	85.10 lb(US) (38.6 kg)
Sizing reference	SH32051P
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
Electrical connection	rotatable right angled connector
Output current 3s peak	87.2 A
Inertia	16.0 kg.cm² of brake 71.4 kg.cm² of motor

Ordering and shipping details

Category	US1PC5218359
Discount Schedule	PC52
GTIN	3606489917692
Returnability	No
Country of origin	DE

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	15.7 in (40 cm)
Package 1 Width	11.8 in (30 cm)
Package 1 Length	31.3 in (79.5 cm)
Package weight(Lbs)	96.23 lb(US) (43.65 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 >

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**