

# Product data sheet

## Characteristics

# SH31401P12F1200

servo motor SH3 140

11,1Nm,key,multi,brake,str.conn,IP65/IP67,4k RPM



### Main

Range Compatibility	PacDrive 3
Product or Component Type	Servo motor
Device short name	SH3.....P

### Complementary

Maximum mechanical speed	4000 rpm
[Us] rated supply voltage	115...480 V
Phase	Three phase
Continuous stall current	7.8 A
Continuous stall torque	98.24 lbf.in (11.1 N.m) 115...480 V three phase
Continuous power	2900 W
Peak stall torque	238.97 lbf.in (27 N.m) 115...480 V three phase
Nominal output power	860 W 115 V single phase 1670 W 230 V single phase 2890 W 400 V three phase 3170 W 480 V three phase
Nominal torque	96.92 Lbf.In (10.95 N.m) 115 V single phase 93.82 Lbf.In (10.6 N.m) 230 V single phase 81.43 Lbf.In (9.2 N.m) 400 V three phase 74.35 lbf.in (8.4 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	20.8 A
Shaft end	Parallel key
Shaft diameter	0.94 in (24 mm)
Shaft length	1.97 in (50 mm)
Key width	0.31 in (8 mm)
IP degree of protection	Motor IP65 EN/IEC 60034-5 Shaft bushing IP65 EN/IEC 60034-5 Housing IP67 EN/IEC 60034-5
Encoder type	Absolute multturn SinCos Hiperface
Speed feedback resolution	128 periods
Holding brake	With
Holding torque	203.57 lbf.in (23 N.m)
Mounting Support	International standard flange
Motor flange size	5.51 in (140 mm)
Electrical Connection	Straight connector
Torque constant	1.43 N.m/A 248 °F (120 °C)
Back emf constant	100 V/krpm 68 °F (20 °C)
Number of motor poles	5

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Rotor inertia	9.21 kg.cm <sup>2</sup>
Stator resistance	1.41 Ohm
Stator inductance	23.72 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	5.12 in (130 mm)
Centring collar depth	0.14 in (3.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.43 in (11 mm)
Circle diameter of the mounting holes	6.50 in (165 mm)
Net Weight	28.66 lb(US) (13 kg)

### Ordering and shipping details

Category	18359-PACDRIVE3 SERVO MOTORS
Discount Schedule	PC52
Returnability	No

### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	0.39 in (1 cm)
Package 1 Width	0.39 in (1 cm)
Package 1 Length	0.39 in (1 cm)
Package 1 Weight	2.20 lb(US) (1 kg)

### Contractual warranty

Warranty	18 months
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