

Product datasheet

Specifications



servo motor SH3 100
5,8Nm,key,multi,nobrake,
90°conn.IP65/IP65,6k RPM

SH31002P12A2100

EAN Code: 3606485296814

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
Network number of phases	Three phase
Continuous stall current	4.8 A
Continuous stall torque	5.8 N.m at 115...480 V three phase
Continuous power	1900 W
Peak stall torque	18.3 N.m at 115...480 V three phase
Nominal output power	580 W at 115 V single phase 1090 W at 230 V single phase 1930 W at 400 V three phase 2210 W at 480 V three phase
Nominal torque	5.5 N.m at 115 V single phase 5.2 N.m at 230 V single phase 4.6 N.m at 400 V three phase 4.4 N.m at 480 V three phase
Nominal speed	1000 rpm at 115 V single phase 2000 rpm at 230 V single phase 4000 rpm at 400 V three phase 4800 rpm at 480 V three phase
Maximum current Irms	17.1 A
Shaft end	Parallel key
Shaft diameter	19 mm
Shaft length	40 mm
key width	6 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	Without
Mounting support	International standard flange
Motor flange size	100 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	1.21 N.m/A at 120 °C
Back emf constant	77 V/krpm at 20 °C
Number of motor poles	4.0
Rotor inertia	2.31 kg.cm²
Stator resistance	2.4 Ohm
Stator inductance	6.75 mH
Maximum radial force Fr	990 N at 1000 rpm 790 N at 2000 rpm 690 N at 3000 rpm 620 N at 4000 rpm
Maximum axial force Fa	160 N
type of cooling	Natural convection
Length	204.5 mm
Centring collar diameter	95 mm
centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	9.0 mm
Circle diameter of the mounting holes	115 mm
Net weight	5.8 kg
Sizing reference	SH31002P
Network number of phases	3
Temperature copper hot	130 °C
compatible drive output current 3s peak 2	15 A
Electrical connection	rotatable right angled connector

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	21.000 cm
Package 1 Width	18.000 cm
Package 1 Length	35.600 cm
Package 1 Weight	6.600 kg
Unit Type of Package 2	S04
Number of Units in Package 2	2
Package 2 Height	30 cm
Package 2 Width	40 cm
Package 2 Length	60 cm
Package 2 Weight	14.242 kg
Unit Type of Package 3	P06
Number of Units in Package 3	8
Package 3 Height	75.000 cm

Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	64.968 kg

Contractual warranty

Warranty	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.eq.CO2 per CR, Total Life cycle)	4560
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
PVC free	Yes

Use Again

Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins