

Product data sheet

Specifications



SH3 servomotor, 70mm, 1 stack,
smooth Shaft, SinCos Multiturn 128,
no Brake, angular, IP65/65

SH30701P02A2100

Main

Range compatibility	PacDrive 3
Device short name	SH3
Product or component type	Servo motor

Complementary

Maximum mechanical speed	8000 rpm
[Us] rated supply voltage	115...480 V
Network number of phases	Three phase
Continuous stall current	1.8 A
Continuous stall torque	11.06 lbf.in (1.25 N.m) 115...480 V three phase
Continuous power	690 W
Peak stall torque	31.0 lbf.in (3.5 N.m) 115...480 V three phase
Nominal output power	220 W 115 V single phase 440 W 230 V single phase 820 W 400 V three phase 950 W 480 V three phase
Nominal torque	12.4 lbf.in (1.4 N.m) 115 V single phase 12.4 lbf.in (1.4 N.m) 230 V single phase 9.7 lbf.in (1.1 N.m) 400 V three phase 9.7 lbf.in (1.1 N.m) 480 V three phase
Nominal speed	1500 rpm 115 V single phase 3000 rpm 230 V single phase 6000 rpm 400 V three phase 7200 rpm 480 V three phase
Maximum current Irms	5.7 A
Shaft end	Smooth shaft
Shaft diameter	0.4 in (11 mm)
Shaft length	0.9 in (23 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	2.8 in (70 mm)
Electrical connection	Straight connector

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

Torque constant	0.69 N.m/A 248 °F (120 °C)
Back emf constant	46 V/krpm 68 °F (20 °C)
Number of motor poles	3.0
Rotor inertia	0.25 kg.cm²
Stator resistance	10.4 Ohm
Stator inductance	21.3 mH
Maximum radial force Fr	660 N 1000 rpm 520 N 2000 rpm 460 N 3000 rpm 410 N 4000 rpm 380 N 5000 rpm 360 N 6000 rpm
Maximum axial force Fa	80 N
Type of cooling	Natural convection
Length	6.06 in (154 mm)
Centring collar diameter	2.4 in (60 mm)
Centring collar depth	0.10 in (2.5 mm)
Number of mounting holes	4
Mounting holes diameter	0.2 in (5.5 mm)
Circle diameter of the mounting holes	3.2 in (82 mm)
Net weight	4.6 lb(US) (2.1 kg)
Sizing reference	SH30701P
Network number of phases	3
Temperature copper hot	266 °F (130 °C)
Electrical connection	rotatable right angled connector
Output current 3s peak	5.7 A
Inertia	0.0 kg.cm² of brake 0.25 kg.cm² of motor

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.567 in (11.600 cm)
Package 1 Width	7.520 in (19.100 cm)
Package 1 Length	15.630 in (39.700 cm)
Package 1 Weight	5.591 lb(US) (2.536 kg)

Contractual warranty

Warranty (in months)	18
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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

Total lifecycle Carbon footprint	1 947 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	12 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 934 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.3 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
PVC free	Yes

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

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