

# Product datasheet

Specifications



SH3 servomotor, 55mm, 2 stacks,  
keyed Shaft, SinCos Multiturn 128,  
no Brake, angular, IP65/65

SH30552P12A2100

## Main

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

## Complementary

Maximum mechanical speed	9000 rpm
[Us] rated supply voltage	115...480 V
Network number of phases	Three phase
Continuous stall current	1.2 A
Continuous stall torque	0.71 N.m at 115...480 V three phase
Continuous power	530 W
Peak stall torque	2.5 N.m at 115...480 V three phase
Nominal output power	160 W at 115 V single phase 310 W at 230 V single phase 600 W at 400 V three phase 670 W at 480 V three phase
Nominal torque	0.77 N.m at 115 V single phase 0.75 N.m at 230 V single phase 0.63 N.m at 400 V three phase 0.63 N.m at 480 V three phase
Nominal speed	2000 rpm at 115 V single phase 4000 rpm at 230 V single phase 6000 rpm at 400 V three phase 6000 rpm at 480 V three phase
Maximum current Irms	4.8 A
Shaft end	Parallel key
Shaft diameter	9 mm
Shaft length	20 mm
Key width	3 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	55 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	0.59 N.m/A at 120 °C
Back emf constant	40 V/krpm at 20 °C
Number of motor poles	3.0
Rotor inertia	0.096 kg.cm <sup>2</sup>
Stator resistance	17.4 Ohm
Stator inductance	18.2 mH
Maximum radial force Fr	370 N at 1000 rpm 290 N at 2000 rpm 260 N at 3000 rpm 230 N at 4000 rpm 220 N at 5000 rpm 200 N at 6000 rpm 190 N at 7000 rpm 190 N at 8000 rpm
Maximum axial force Fa	40 N
Type of cooling	Natural convection
Length	154.4 mm
Centring collar diameter	40 mm
Centring collar depth	2 mm
Number of mounting holes	4
Mounting holes diameter	5.5 mm
Circle diameter of the mounting holes	63 mm
Product weight	1.5 kg
Sizing reference	SH30552P
Network number of phases	3
Temperature copper hot	130 °C
Electrical connection	rotatable right angled connector
Output current 3s peak	4.8 A
Inertia	0.0 kg.cm <sup>2</sup> of brake 0.096 kg.cm <sup>2</sup> of motor

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.5 cm
Package 1 Width	19.0 cm
Package 1 Length	39.5 cm
Package 1 Weight	1.9 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	1 429 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	8 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	1 420 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	0.2 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	<a href="#">Compliant By Exemption</a>
REACH Regulation	<a href="#">Reference contains Substances of Very High Concern above the threshold</a>
PVC free	Yes

## Use Longer



### Lifetime extension

Repair	No
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## Use Again



### Repack and remanufacture

End of life manual availability	No need of specific recycling operations
Take-back	Yes