## SH31001P1AF4000

SH3 OMC motor 100mm 1 st. IP65/54 keyed sh. DSL single turn ang.conn.M23 brake





#### Main

Range compatibility	PacDrive 3
Device short name	SH3P
Product or component type	Servo motor

Complementary

IUS) rated supply voltage         115480 V           Network number of phases         Three phase           Continuous stall current         3.5 A           Continuous power         1190 W           Peak stall torque         9.6 N.m at 115480 V three phase           Nominal output power         690 W at 230 V single phase 1190 W at 400 V three phase 1190 W at 480 V three phase 1190 W at 480 V three phase 2.27 N.m at 480 V three phase 6000 rpm at 480	Maximum mechanical speed	6000 rpm
Continuous stall current 2.94 N.m at 115480 V three phase Continuous power 1190 W Peak stall torque 9.6 N.m at 115480 V three phase Nominal output power 680 W at 230 V single phase 1190 W at 400 V three phase 1190 W at 480 V three phase 120 V single p	[Us] rated supply voltage	115480 V
Continuous stall torque         2.94 N.m at 115480 V three phase           Continuous power         1190 W           Peak stall torque         9.6 N.m at 115480 V three phase           Nominal output power         690 W at 230 V single phase           1190 W at 480 V three phase         1190 W at 480 V three phase           Nominal torque         2.64 N.M at 230 V single phase           2.27 N.M at 400 V three phase         2.27 N.M at 400 V three phase           Nominal speed         2500 rpm at 230 V single phase           5000 rpm at 230 V single phase         5000 rpm at 230 V single phase           5000 rpm at 400 V three phase         6000 rpm at 400 V three phase           Maximum current Irms         12 A           Shaft end         Parallel key           Shaft diameter         19 mm           Shaft end         Parallel key           Shaft diameter         19 mm           Shaft begth         40 mm           Key width         6 mm           IP degree of protection         IP85 motor: conforming to EN/IEC 60034-5           IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5           IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5           Encoder type         Absolute single turn Hiperface DSL           Speed feedback resoluti	Network number of phases	Three phase
Continuous power         1190 W           Peak stall torque         9.6 N.m at 115480 V three phase           Nominal output power         690 W at 230 V single phase 1190 W at 400 V three phase           1190 W at 480 V three phase         1190 W at 400 V three phase           Nominal torque         2.64 N.M at 230 V single phase 2.27 N.m at 480 V three phase           2.27 N.M at 400 V three phase         2.27 N.m at 480 V three phase           Nominal speed         2500 rpm at 230 V single phase 5000 rpm at 400 V three phase           6000 rpm at 400 V three phase         6000 rpm at 400 V three phase           Maximum current lrms         12 A           Shaft end         Parallel key           Shaft lend         Parallel key           Shaft length         40 mm           Key width         6 mm           IP degree of protection         IP65 motor: conforming to EN/IEC 60034-5           IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5           Encoder type         Absolute single turn Hiperface DSL           Speed feedback resolution         262144 points/turn           Holding torque         9 N.m           Mounting support         International standard flange           Motor flange size         100 mm           Electrical connection         Straight connector     <	Continuous stall current	3.5 A
Peak stall torque 9.6 N.m at 115480 V three phase  Nominal output power 690 W at 230 V single phase 1190 W at 480 V three phase 1190 W at 480 V three phase 1190 W at 480 V three phase 2.27 N.m at 480 V three phase 5000 rpm at 230 V single phase 5000 rpm at 480 V three phase 6000 rpm at 480 V three phas	Continuous stall torque	2.94 N.m at 115480 V three phase
Nominal output power 1690 W at 230 V single phase 1190 W at 480 V three phase 1190 W at 480 V three phase 2.27 N.M at 480 V three phase 5000 rpm at 230 V single phase 5000 rpm at 480 V three phase 6000 rpm at 480 V t	Continuous power	1190 W
Nominal torque 2.64 N.M at 230 V single phase 2.27 N.M at 480 V three phase 3.27 N.M at 480 V three phase 4.27 N.M at 480 V three phase 4.28 V single phase 5.000 rpm at 230 V single phase 6.000 rpm at 480 V three phase 6.0	Peak stall torque	9.6 N.m at 115480 V three phase
2.27 N.M at 400 V three phase 2.27 N.m at 480 V three phase Nominal speed  25000 rpm at 230 V single phase 50000 rpm at 480 V three phase 6000 rpm at 480 V three phase 6000 rpm at 480 V three phase Maximum current Irms  12 A  Shaft end Parallel key Shaft diameter 19 mm Shaft length 40 mm  Key width 6 mm  IP degree of protection IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 Speed feedback resolution 262144 points/turn Holding brake With Holding torque 9 N.m  Mounting support International standard flange Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C Back emf constant 60 V/krpm at 20 °C Number of motor poles 4 Rotor inertia	Nominal output power	1190 W at 400 V three phase
Sour pm at 400 V three phase 6000 rpm at 480 V three phase 6000 rpm at 480 V three phase  Maximum current Irms  12 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 EN/IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 Encoder type Absolute single turn Hiperface DSL  Speed feedback resolution 262144 points/turn  Holding brake With  Holding torque 9 N.m  Mounting support International standard flange  Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia	Nominal torque	2.27 N.M at 400 V three phase
Shaft end Parallel key  Shaft diameter 19 mm  Shaft length 40 mm  Key width 6 mm  IP degree of protection IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5  Encoder type Absolute single turn Hiperface DSL  Speed feedback resolution 262144 points/turn  Holding brake With  Holding torque 9 N.m  Mounting support International standard flange  Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Nominal speed	5000 rpm at 400 V three phase
Shaft diameter 19 mm  Shaft length 40 mm  Key width 6 mm  IP degree of protection IP65 motor: conforming to EN/IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 Encoder type Absolute single turn Hiperface DSL  Speed feedback resolution 262144 points/turn  Holding brake With  Holding torque 9 N.m  Mounting support International standard flange  Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Maximum current Irms	12 A
Shaft length 40 mm  Key width 6 mm  IP degree of protection IP65 motor: conforming to EN/IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 Encoder type Absolute single turn Hiperface DSL  Speed feedback resolution 262144 points/turn  Holding brake With  Holding torque 9 N.m  Mounting support International standard flange  Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Shaft end	Parallel key
Key width 6 mm  IP degree of protection IP65 motor: conforming to EN/IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 Encoder type Absolute single turn Hiperface DSL  Speed feedback resolution 262144 points/turn Holding brake With Holding torque 9 N.m  Mounting support International standard flange Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Shaft diameter	19 mm
IP degree of protection  IP65 motor: conforming to EN/IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5 Encoder type  Absolute single turn Hiperface DSL Speed feedback resolution 262144 points/turn Holding brake With Holding torque 9 N.m  Mounting support International standard flange Motor flange size 100 mm  Electrical connection Straight connector Torque constant 0.84 N.m/A at 120 °C Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Shaft length	40 mm
IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5  Encoder type Absolute single turn Hiperface DSL  Speed feedback resolution 262144 points/turn  Holding brake With  Holding torque 9 N.m  Mounting support International standard flange  Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Key width	6 mm
Speed feedback resolution  262144 points/turn  Holding brake  With  Holding torque  9 N.m  Mounting support  International standard flange  Motor flange size  100 mm  Electrical connection  Straight connector  Torque constant  0.84 N.m/A at 120 °C  Back emf constant  60 V/krpm at 20 °C  Number of motor poles  4  Rotor inertia  2.018 kg.cm²	IP degree of protection	IP65 motor: conforming to EN/IEC 60034-5 IP54 shaft bushing without shaft seal ring: conforming to EN/IEC 60034-5
Holding brake With  Holding torque 9 N.m  Mounting support International standard flange  Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Encoder type	Absolute single turn Hiperface DSL
Holding torque 9 N.m  Mounting support International standard flange  Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Speed feedback resolution	262144 points/turn
Mounting support  International standard flange  Motor flange size  100 mm  Electrical connection  Straight connector  Torque constant  0.84 N.m/A at 120 °C  Back emf constant  60 V/krpm at 20 °C  Number of motor poles  4  Rotor inertia  2.018 kg.cm²	Holding brake	With
Motor flange size 100 mm  Electrical connection Straight connector  Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Holding torque	9 N.m
Electrical connection  Straight connector  Torque constant  0.84 N.m/A at 120 °C  Back emf constant  60 V/krpm at 20 °C  Number of motor poles  4  Rotor inertia  2.018 kg.cm²	Mounting support	International standard flange
Torque constant 0.84 N.m/A at 120 °C  Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Motor flange size	100 mm
Back emf constant 60 V/krpm at 20 °C  Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Electrical connection	Straight connector
Number of motor poles 4  Rotor inertia 2.018 kg.cm²	Torque constant	0.84 N.m/A at 120 °C
Rotor inertia 2.018 kg.cm <sup>2</sup>	Back emf constant	60 V/krpm at 20 °C
<u> </u>	Number of motor poles	4
Stator resistance 3.8 Ohm	Rotor inertia	2.018 kg.cm²
	Stator resistance	3.8 Ohm

Stator inductance	19 mH
Maximum radial force Fr	1340 N at 3000 rpm
	1930 N at 1000 rpm 1530 N at 2000 rpm
	<u> </u>
Maximum axial force Fa	300 N
Brake pull-in power	12 W
Type of cooling	Natural convection
Length	199.5 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	5.0 kg

### Packing Units

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Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	21.0 cm	
Package 1 Width	18.0 cm	
Package 1 Length	35.6 cm	
Package 1 Weight	5.7 kg	

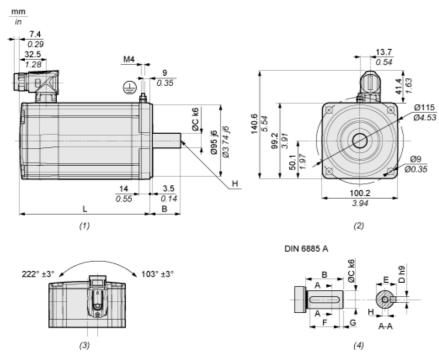
#### Offer Sustainability

Green Premium product		
<sup>™</sup> REACh Declaration		
Pro-active compliance (Product out of EU RoHS legal scope)		
Yes		
☑ China RoHS Declaration		
₫Yes		
Product Environmental Profile		
No need of specific recycling operations		
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins		
Yes		



# SH31001P1AF4000

#### **Dimensions**



(1): Side view(2): Mounting(3): Rotating area(4): Feather key

Characteristic		Unit	Value
L	Length with holding brake	mm (in)	199.5 (7.85)
В	Shaft length	mm (in)	40 (1.57)
С	Shaft diameter	mm (in)	19 (0.75)
D	Width of parallel key	mm (in)	6 (0.24)
E	Shaft width with parallel key	mm (in)	21.5 (0.85)
F	Length of parallel key	mm (in)	30 (1.18)
G	Distance parallel key to shaft end	mm (in)	5 (0.2)
Н	Female thread of shaft		DIN 332-D M6
	Parallel key		DIN 6885-A6x6x30