BRS39AW270ABA

3-phase stepper motor - 4.52Nm - shaft Ã~ 9.5mm - L=98 mm - w/o brake - term box





Main

Range compatibility	Lexium SD3
Product or component type	Motion control motor
Device short name	BRS3
Maximum mechanical speed	3000 rpm
Motor type	3-phase stepper motor
Number of motor poles	6
Supply voltage limits	230 V AC 325 V DC
Mounting support	Flange
Motor flange size	85 mm
Length	141 mm
Centring collar diameter	73 mm

Complementary

o implementary	
Centring collar depth	2 mm
Number of mounting holes	4
Mounting holes diameter	6.5 mm
Circle diameter of the mounting holes	98.99 mm
Electrical connection	Terminal box
Holding brake	Without
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	9.5 mm
Shaft length	30 mm
Nominal torque	4 N.m
Peak stall torque	3.82 N.m
Continuous stall torque	3.82 N.m
Holding torque	4.52 N.m
Rotor inertia	2.2 kg.cm²
Resolution	1.8 °, 0.9 °, 0.72 °, 0.36 °, 0.18 °, 0.09 °, 0.072 °, 0.036 ° step angle 200, 400, 500, 1000, 2000, 4000, 5000, 10000 steps number of full steps per revolution
Accuracy error	+/- 6 arc min
Maximum starting frequency	5.3 kHz
[In] rated current	2 A
Resistance	5.8 Ohm (winding)
Time constant	9 ms
Maximum radial force Fr	100 N (first shaft end) 50 N (second shaft end)
Maximum axial force Fa	175 N (tensile force) 30 N (force pressure)
Service life in hours	20000 h (bearing)
Angular acceleration	200000 rad/s²
Net weight	3.2 kg

Environment

Standards	IEC 60072-1		
Ciandaldo	IEC 50347		
Type of cooling	Natural convection		
Ambient air temperature for operation	-2540 °C		
Ambient air temperature for storage	-2570 °C		
Operating altitude	<= 1000 m without power derating		
Relative humidity	1585 % without condensation		
Vibration resistance	20 m/s² maximum A conforming to IEC 60034-14		
IP degree of protection	IP41 shaft bushing: conforming to IEC 60034-5 IP56 total except shaft bushing: conforming to IEC 60034-5		
Temperature class	F winding conforming to IEC 60034-1		

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22 cm
Package 1 Width	19.5 cm
Package 1 Length	40 cm
Package 1 Weight	4.134 kg
Unit Type of Package 2	S06
Number of Units in Package 2	12
Package 2 Height	73.5 cm
Package 2 Width	60 cm
Package 2 Length	80 cm
Package 2 Weight	63.364 kg
Unit Type of Package 3	P06
Number of Units in Package 3	12
Package 3 Height	77 cm
Package 3 Width	80 cm
Package 3 Length	60 cm
Package 3 Weight	58.108 kg

Offer Sustainability

Sustainable offer status	Green Premium product		
REACh Regulation	☑ REACh Declaration		
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)		
Mercury free	Yes		
China RoHS Regulation	☑ China RoHS Declaration		
RoHS exemption information	€Yes		
Environmental Disclosure	Product Environmental Profile		
Circularity Profile	No need of specific recycling operations		
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins		
PVC free	Yes		

Contractual warranty

Contractadi Warranty	
Warranty	18 months

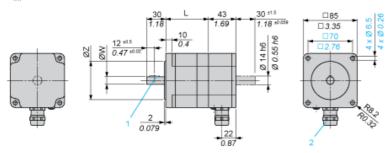
Product data sheet Dimensions Drawings

BRS39AW270ABA

Dimensions

3-Phase Stepper Motor in Terminal Box Version





Dimensions in mm

L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)	Cable gland (2)
97.5 (+0.6) (-0.8)	9.5 h6	73 h8	3 x 5	ISO M20 x 1.5

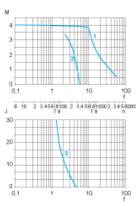
Dimensions in in.

L	Shaft diameter ØW	Centring collar ØZ	Woodruff key DIN 6888 (1)	Cable gland (2)
3.84 (+0.023) (-0.031)	0.37 h6	2.87 h8	0.12 x 0.20	ISO M20 x 1.5

BRS39AW270ABA

Torque Characteristics

Measurement at 1000 Steps/Revolution, Nominal Voltage DC Bus U_{N} and Phase Current I_{N}



 $\begin{array}{lll} M: & Torque \ in \ Nm \\ n: & Speed \ in \ rpm \\ f: & Frequency \ in \ kHz \end{array}$

J: Rotor inertia in kg.cm²

1: Pull-out torque2: Pull-in torque

3: Maximum load inertia