Product data sheet
Characteristics

BRS3ADW851ACA
3-phase stepper motor - 19.7Nm - shaft Ã˜19mm - L=230mm - w/o brake - connector



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	110 Mm
Length	228 Mm
Centring collar diameter	56 Mm

Complementary

Centring collar depth	3 Mm
Number of mounting holes	4
Mounting holes diameter	9 Mm
Circle diameter of the mounting holes	125.86 Mm
Electrical connection	Connector
Feedback type	Index pulse
Speed feedback resolution	10000 points/turn
Holding brake	Without
Shaft end	Parallel key
Second shaft	Without second shaft end
Shaft diameter	19 Mm
Shaft length	40 Mm
Nominal torque	16.5 N.M
Peak stall torque	16.45 N.M
Continuous stall torque	16.45 N.M
Holding torque	19.7 N.M
Rotor inertia	16 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 1000 points/turn
Accuracy error	+/- 6 arc min
Maximum starting frequency	4.7 KHz
[In] rated current	4.75 A
Resistance	1.9 Ohm (winding)

Time constant	22 Ms
Maximum radial force Fr	150 N (second shaft end) 300 N (first shaft end)
Maximum axial force Fa	330 N (tensile force) 60 N (force pressure)
Service life in hours	20000 H (bearing)
Angular acceleration	200000 Rad/S²
Net weight	11.2 Kg

Environment

Standards	IEC 60072-1 IEC 50347
Type of cooling	Natural convection
Ambient air temperature for operation	-25…40 °C
Ambient air temperature for storage	-25…70 °C
Operating altitude	<= 1000 m without power derating
Relative humidity	15…85 % 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	19.0 Cm
Package 1 Width	18.0 Cm
Package 1 Length	39.0 Cm
Package 1 Weight	11.4 Kg

Offer Sustainability

Recyclability potential, in %	93
Total lifecycle Carbon footprint	6 549 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	285.6215935347454
Carbon footprint of the manufacturing phase [A1 to A3]	286 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	4.562864076419415
Carbon footprint of the distribution phase [A4]	5 kg CO2 eq.
Carbon footprint of the installation phase [A5]	4.836412114419773
Carbon footprint of the installation phase [A5]	5 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	6241.420303371861
Carbon footprint of the use phase [B2, B3, B4, B6]	6 241 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	12.881151809135305
Carbon footprint of the end-of-life phase [C1 to C4]	13 kg CO2 eq.
Total lifecycle Carbon footprint	6549
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which
PVC free	Yes
End of life manual availability	No need of specific recycling operations Circularity Profile
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and

Contractual warranty

Warranty (in months)	18

Product Life Status :	Commercialised