

BMP1402F3NA2A

synchronous motor - BMP - 480 VAC - 3.95 kW
- IP65 - IEC



Main

Product or component type	Synchronous motor
Device short name	BMP
Maximum mechanical speed	3600 rpm
Nominal output power	3000 W with drive ATV32 at 3 kW 400 V three phase 3000 W with drive ATV32 at 4 kW 400 V three phase 2200 W with drive ATV32 at 2.2 kW 200 V single phase 3000 W with drive ATV320 at 3 kW 400 V three phase 3000 W with drive ATV320 at 4 kW 400 V three phase 2200 W with drive ATV320 at 2.2 kW 200 V single phase
Nominal torque	14.01 N.M with drive ATV32 at 2.2 kW 200 V single phase 9.55 N.M with drive ATV32 at 3 kW 400 V three phase 9.55 N.M with drive ATV32 at 4 kW 400 V three phase 14.01 N.M with drive ATV320 at 2.2 kW 200 V single phase 9.55 N.M with drive ATV320 at 3 kW 400 V three phase 9.55 N.m with drive ATV320 at 4 kW 400 V three phase
Nominal speed	1500 rpm with drive ATV32 at 2.2 kW 200 V single phase 3000 rpm with drive ATV32 at 3 kW 400 V three phase 3000 rpm with drive ATV32 at 4 kW 400 V three phase 1500 rpm with drive ATV320 at 2.2 kW 200 V single phase 3000 rpm with drive ATV320 at 3 kW 400 V three phase 3000 rpm with drive ATV320 at 4 kW 400 V three phase
Product compatibility	Variable speed drive ATV32 at 2.2 kW 200 V single phase Variable speed drive ATV32 at 3 kW 400 V three phase Variable speed drive ATV32 at 4 kW 400 V three phase Variable speed drive ATV320 at 2.2 kW 200...240 V single phase Variable speed drive ATV320 at 3 kW 380...500 V three phase Variable speed drive ATV320 at 4 kW 380...500 V three phase
Shaft end	Keyed
IP degree of protection	IP65 standard IP67 with IP67 kit
Holding brake	Without
Mounting support	International standard flange
Electrical connection	Rotatable right-angled connector

Complementary

Range compatibility	Altivar Machine ATV320 Altivar 32
[Us] rated supply voltage	480 V
Network number of phases	Three phase
Maximum current I _{rms}	16.5 A with drive ATV32 at 2.2 kW 200 V single phase 10.7 A with drive ATV32 at 3 kW 400 V three phase 14.3 A with drive ATV32 at 4 kW 400 V three phase 16.5 A with drive ATV320 at 2.2 kW 200 V single phase 10.7 A with drive ATV320 at 3 kW 400 V three phase 14.3 A with drive ATV320 at 4 kW 400 V three phase
Nominal operating frequency	125 Hz with drive ATV32 at 2.2 kW 200 V single phase 250 Hz with drive ATV32 at 3 kW 400 V three phase 250 Hz with drive ATV32 at 4 kW 400 V three phase 125 Hz with drive ATV320 at 2.2 kW 200 V single phase 250 Hz with drive ATV320 at 3 kW 400 V three phase 250 Hz with drive ATV320 at 4 kW 400 V three phase
Minimum operating frequency	13 Hz with drive ATV32 at 2.2 kW 200 V single phase 25 Hz with drive ATV32 at 3 kW 400 V three phase 25 Hz with drive ATV32 at 4 kW 400 V three phase 13 Hz with drive ATV320 at 2.2 kW 200 V single phase 25 Hz with drive ATV320 at 3 kW 400 V three phase 25 Hz with drive ATV320 at 4 kW 400 V three phase
Maximum operating frequency	150 Hz with drive ATV32 at 2.2 kW 200 V single phase 300 Hz with drive ATV32 at 3 kW 400 V three phase 300 Hz with drive ATV32 at 4 kW 400 V three phase 150 Hz with drive ATV320 at 2.2 kW 200 V single phase 300 Hz with drive ATV320 at 3 kW 400 V three phase 300 Hz with drive ATV320 at 4 kW 400 V three phase
Shaft diameter	24 mm
Shaft length	50 mm
Key width	8 mm
Motor flange size	140 mm
Torque constant	1.48 N.m/A at 40 °C
Number of motor poles	5
Number of motor stacks	2
Rotor inertia	32 kg.cm ²
Stator resistance	0.34 Ohm at 40 °C
Stator inductance	4.23 MH for q-axis winding at 40 °C 3.78 mH for d-axis winding at 40 °C
Maximum radial force Fr	2240 N at 1000 rpm 1780 N at 2000 rpm 1550 N at 3000 rpm
Maximum axial force Fa	0.2 x Fr
Type of cooling	Natural convection
Length	192 mm
Centring collar diameter	130 mm
Centring collar depth	3.5 mm
Number of mounting holes	4
Mounting holes diameter	11 mm
Circle diameter of the mounting holes	165 mm
Net weight	12 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	20.0 cm
Package 1 Width	26.0 cm
Package 1 Length	59.0 cm
Package 1 Weight	13.636 kg
Unit Type of Package 2	P06
Number of Units in Package 2	4

Package 2 Height	77.0 cm
Package 2 Width	80.0 cm
Package 2 Length	60.0 cm
Package 2 Weight	63.044 kg

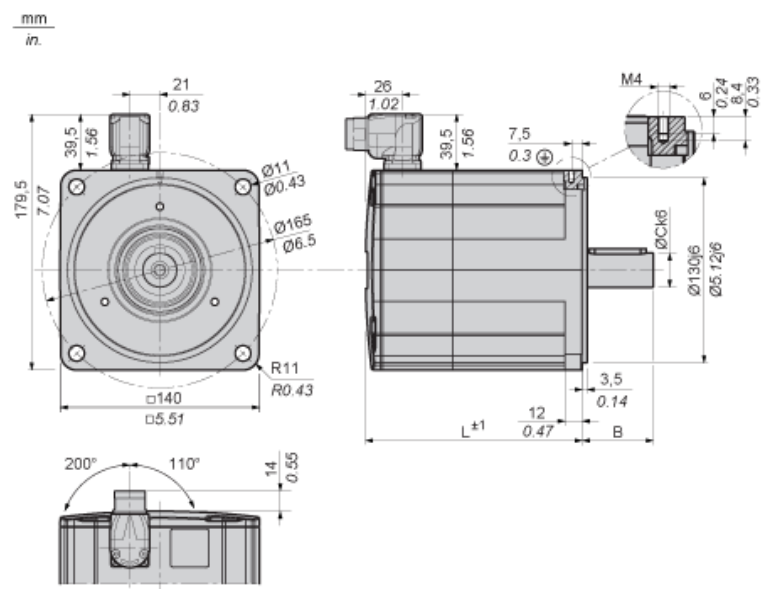
Offer Sustainability

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
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

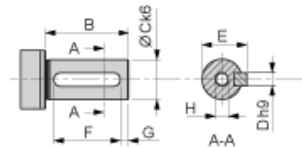
Contractual warranty

Warranty	18 months
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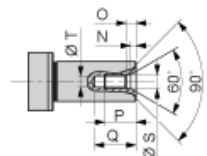
Dimensions



Parallel Key According to DIN 6885 A



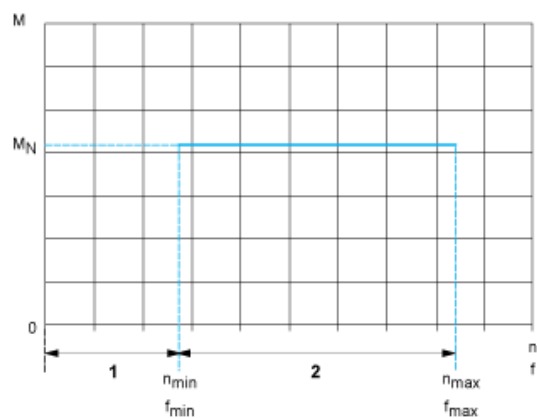
Female Thread of Shaft According to DIN 332-D



L	mm	192
in.	7.56	
B	mm	50
in.	1.97	
C	mm	24
in.	0.94	
D	mm	8
in.	0.31	
E	mm	27
in.	1.06	
F	mm	40
in.	1.57	
G	mm	5
in.	0.20	

H		M8
N	mm	3.3
in.	0.13	
O	mm	6
in.	0.24	
P	mm	19
in.	0.75	
Q	mm	25
in.	0.98	
S	mm	8.4
in.	0.33	
T	mm	6.8
in.	0.27	

Performance curves



M : Torque in Nm

n : Speed in rpm

f : frequency in Hz

1 : Only permissible during acceleration and deceleration phases.

2 : Continuous operation with the default values from the configuration file.