REF. NO. 10-0962

PROPOSED SPECIFICATIONS FOR APPROVAL

CUSTOMER

EVG Martens GmbH & Co. KG

PART NAME

DC FAN MOTOR

MODEL

BG0703-B053-000-04

DATE <u>2010/11/9</u>

COVER

Page

SPECIFICATIONS

Pages

TOTAL

Pages

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PLEASE RETURN 1 COPY OF THIS PROPOSED DRAWING WITH YOUR SIGNATURE.

Carefully read the precautions before use and use the motor properly and safely.

In "For your use in safety", the rank of safety precautions are being divided into "warning" and "cautions". warning: Due to mishandling, a dangerous condition might occur and there is a possibility of death or serious injury.

Precautions: Due to mishandling, a dangerous condition might occur and ther is possibility of medium human disorder or material disorder. There might be cases where there are heavy damages.



Do not use in an explosive atmosphere, flammable atmosphere and locations where water falls onto. It might cause a fire, injury or electric shock.

Installation, wiring connection, inspection,etc. Should be done by a person with professional knowledge. You might get an electric shock or be injured.

 Do not move, wire or inspect the motor when applying current. You might get an electric shock or be injured. After turning switch off, kindly proceed your operations ensuring safety.

Do not pull out or push in the lead wire when applying current. You might get an electric shock.

And do not touch the connection terminals, etc. when applying current. You will get an electric shock.



 Whenever the motor is used in any equipment that holds large social and public effects, kindly consider the measures for equipment protection at equipment side once the motor stops rotation.

As you may get injured, do not put your fingers into the motor while rotation.

 Static electricity causes motor and equipment failures. Take appropriate measures against static electricity during installation of motor.

Do not hold the lead wire part. Might cause the motor to drop off.

For your use, strictly follow rated operating voltage additionally frequency, in particular, AC motors as well as environment in use, such as temperature, humidity range.

Minebea Motor Manufacturing Corporation

APD: BY	CHC. BY	DET
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BY

項目(Items)		諸元 (Description)				
モーターの種類 (Motor Type)		DCブラシレスモーター (DC Brushless Motor)				
定格 (Rating)						
定格時間 (Duty)		連続(Continuous)				
定格電圧(Rating Voltage)[\	/]	24				
使用電圧範囲 (Operating Volt	age) [V]	10.0~27.6				
起動電圧(Starting Voltage)	[V]	10.0				
定格回転速度 ☆3☆4	標準値 (Average)	2550				
(Speed) [min ⁻¹]	最小値 (Minimum)	2350				
最大風量 ☆1☆4	標準値 (Average)	0. 25				
(Max Air Flow) [m³/min]	最小値 (Minimum)	0. 23				
最大静圧 ☆2☆4	標準値 (Average)	75				
(Max Static Pressure) [Pa]	最小値 (Minimum)	60				
定格電流 ☆3☆4	標準値 (Average)	0. 09				
(Current) [A]	最大値 (Maximum)	0. 12				
定格入力 ☆3☆4	標準値 (Average)	2. 16				
(Input Power) [W]	最大値 (Maximum)	2. 88				
騒音 (Acoustical Noise) [dB]	☆3 ☆4	34. 5				

- * 測定条件 (Measuring Conditions)
- 1. 無響音室内で、かつ障害物のない大気中において測定する。 (Measurement with in anechoic test chamber under free air condition.)
- 2.測定機は、モーターの吸込側より1mの距離に位置する。

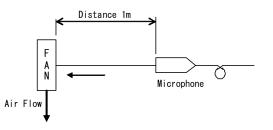
(Microphone is placed at a distance of 1m on the axis of air intake side.)

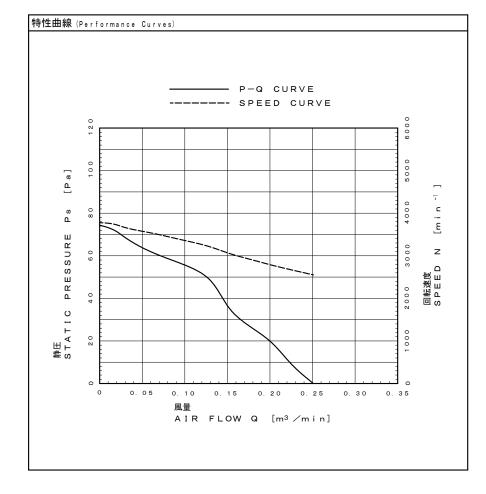
3. 暗騒音は16dB以下のこと。

(Chamber back ground noise max 16dB.)

4. 騒音は標準回転速度時。

(Acoustical noise at average speed.)





- * NOTE
 - ☆1 静圧"0"の時 (At 0 static pressure)
 - ☆2 風量"0"の時 (At 0 air flow)
 - ☆3 フリーエアー時 (At free air)
 - ☆4 室温25°Cにおいて定格電圧印加時 (At rating voltage, at 25°C)



							IB-M			₩位 U	mm		作成日 DATE 2010 / 11 品名 DESCRIPTION	/ 09
\vdash	_						r Manufacturin アモータ棋	-	Ľ	寸法L	公差	表面程士 SURF. ROUGH.	AUTO RESTART TYPE DC BRUSHLESS BLOW	
						APPROVED	CHECKED	DRAWN	_ an	L≦4	±0.1	熱処理 HEAT TREAT	品番 PART NO. (MODEL NO.)	葉番 SHEET
									公差	4 < L ≦16 16 < L ≦63	±0.2		BG0703-B053-000-04	1/3
符 MA		日 付 DATE	変更事由 REASON ECN NO.	担当 ENGINEER	承認 APPROVED	TKTN	ETKH	НКТ	TOL	63 < L ≦250 250 < L ≦1000 角度DEG	±0.5 ±0.8 ±0.5	表面处理 FINISH	図番 DRAWING NO. BG0703-B053-000-04	改訂 REV.

項目 (Items)	諸元 (Description)
規格 (Standard)	and the contributions
絶縁抵抗	DC 500V メガーにて10MΩ以上
(Insulation Resistance)	(min 10MΩ by DC 500V Megger)
(mouracron necrotanes)	フレームとリード線間
	(Between Frame and (+) Terminal)
— 絶縁耐圧	AC 700V 1s ☆5
(Dielectric Withstand Voltage)	フレームとリード線間
	(Between Frame and (+) Terminal)
	25℃にて70,000時間
(Life Expectation (L10 Life))	(70,000h at 25°C)
	寿命とは、定格雷圧印加時の電流値及び回転速度の
	どちらかが、以下の様になった状態とする。
	電流値 : 初期値 +15%以上
	回転速度 : 初期値 -15%以下
	(The motor life is decided as follows
	Current : more than +15% of initial value
	Speed : less than -15% of initial value)
許容環境温度範囲	-10°C∼+70°C (Operating)
(Allowable Ambient Temperature)	-40°C∼+70°C (Storage) ☆6
	実用上さしつかえない状態で結露無きこと。
	(No dew formation at operating and storage condition)
質量 (Mass)	90 g
保護方式 (Protection)	自動復帰方法 (Auto Restart)
	逆接続防止(Polarity Protection)☆7
耐振動 (JIS C 60068-2-6 に準拠)	全振幅 (Peak-to-Peak value of a vibration) : 1.5mm
(Vibration Test)	周波数(Frequency): 10~55Hz
	X, Y, Z 3方向各1時間
	(1h in 3 Directions, "X, Y, Z" Each)
耐衝撃 (JIS C 60068-2-27 に準拠)	加速度 (Acceleration of Gravity) : 1000m/s ²
(Shock Test)	作用時間(Time): 6ms
	X, Y, Z 3方向各1回
	(1 time in 3 Directions, "X, Y, Z" Each)
絶縁階級 (Insulation Class)	E種 (UL : Class A)
回転方向 (Rotation)	銘板側から見て時計方向
	(CW Viewed From Name Plate Side)
風吹き出し方向 (Air Flow Direction)	側面側 (Side Direction)
UL File No.	E89936
CSA File No.	LR65829
VDE File No.	1507300
生産国(Producing Country)	JAPAN, CHINA

* NOTE

- ☆5 AC 500V、1分を保証 (Guarantee AC 500V 1min)
- ☆6 但し100時間保存の24時間常温放置にて実用上問題無きこと。

(To be free of defects on practical use after 100 hours of stored at $-40^{\circ}\text{C} \sim +70^{\circ}\text{C}$ and 24 hours to ambient humidity.)

☆7 使用電圧範囲内において(+)線および、(-)線を逆接続されても異常なきこと。 (Motor withstands reverse connection for positive and negative leads.)

*特記事項(Additional Notice)

- (1) 本仕様書に記載されていない項目で特に決める必要のある項目は事前に御連絡ください。
 Any modification to these specifications requested by customer shall be negotiated between the manufacturer and the customer.
- (2) 当仕様書満足範囲において性能向上の為、部品等一部変更する場合が有ります。
 The manufacturer reserves the right to change design, parts or manufacturing processes in order to improve the performance of the fan motor.
- (3) 保管はできるだけ6ヶ月以内とし、高温多湿の場所は避けてください。 Storage area should not be in high temperature, high humidity environment, and storage term shall be within 6 months as much as possible.
- (4) 定格電圧において72時間拘束されても焼損しません。 In case of locked rotor condition, the current shutdown feature of the fan motor protects the motor for 72 hours at the rated voltage.
- (5) 納入品単体の故障により誘発される損害はご容赦いただきます。 We shall be free from compensation for any damage induced due to failure of fan motor.
- (6) ファン取り付け時は、表 1 の締め付けトルクに従って取り付けることを推奨致します。本方法以外での取り付けの際は、必ず事前に御連絡下さい。 The recommended toruque setting for fastening / mounting of this fan motor are shown in TABLE-1. In case of fastening / mounting method without recommended, please contact us before using.
- (7) 本製品は、極めて高度の信頼性を要する用途(医療装置等、多大な人的・物的損害を及ぼす恐れのある用途)に対応する仕様にはなっておりません。そのような場合には、予め弊社営業窓口までご相談下さい。
 All these products do not have specifications that can handle applications that require extremely high levels of reliability, such as medical equipment or other applications whose failure can be reasonably expected to result in serious physical and/or material damage.

Consult with your NMB/Minebea representative nearest you before using any NMB/Minebea products described or contained herein in such applications.



	TABLE-1			
締め付けトルク (Torque)	図 (Figure)	ネジサイズ (Screw Size)	トルク (Torque)	
(101 440)	FIG. 1	M4	max 0.98 [N·m]	

FIG. 1

	Motor M	
cequu	KZW 10.11.09	60
N.	ISSUED A	

[NN	IB-M	AT	\lceil	単位 U	NIT	材質 MATERIAL	作成日 DATE 2010 / 11	/ 09
									€) [品名 DESCRIPTION	
						Minebea Moto	r Manufacturin, プモータ株	-	🌣	RE S	CALE	表面程サ SURF. ROUGH.	AUTO RESTART TYPE	
						= * * * /	エータか	八五江	\vdash	寸法L	公差		DC BRUSHLESS BLOW	ER FAN
Ī						APPROVED	CHECKED	DRAWN	- 1	L≦4	±0.1	熱処理 HEAT TREAT	品番 PART NO. (MODEL NO.)	葉番 SHEET
ı									股公	4 < L ≦ 16	±0.2		BG0703-B053-000-04	2/2
									差	16 < L ≦63	±0.3			/ °
	符号	日 付	変更事由 /	担当	承認	TKTN	ETKH	HKT	1 1	63 < L ≦250	±0.5	表面处理 FINISH	図番 DRAWING NO.	改訂 REV.
	MARK	DATE	REASON ECN NO.	ENGINEER	APPROVED				TOL	250 < L ≦1000	±0.8		BG0703-B053-000-04	
		5,,,,,	NEASON /	LIVOLIVEEN	7VLD					角度DEG	±0.5		DG0700 D000-04	•

