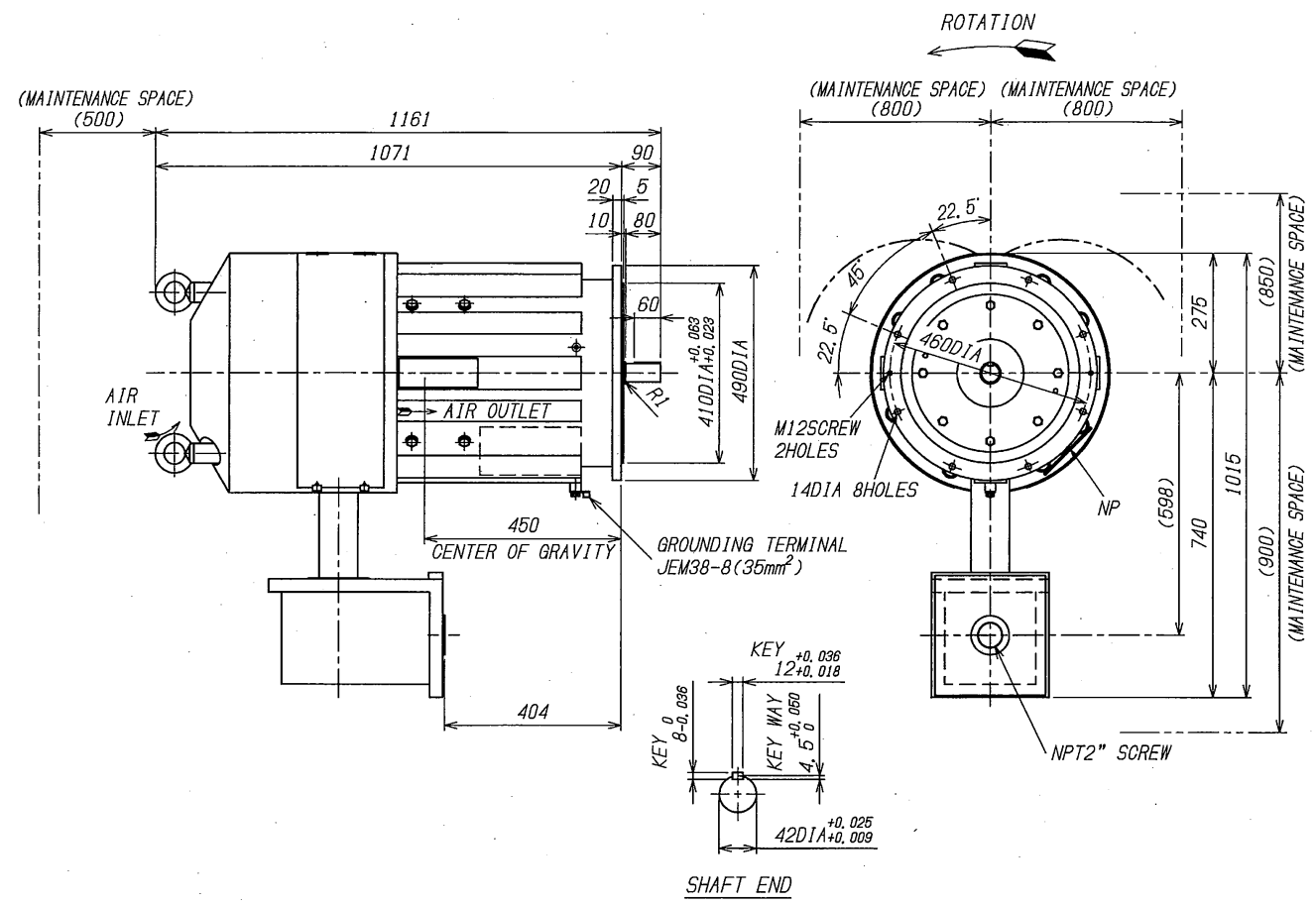


図面番号 DRAWING NO.
3MB08451
 3MB08212
 REV. MARK
 変更回数
C



MFR'S ORDER No.	M211996 BRG 2348A, B (0003052 CG 0002)
APPLICATION	BFP-T(A, B) EMERGENCY OIL PUMP
QUANTITY	2/Unit
TYPE-FORM	MSC-FCKLT
POLES	4
CAPACITY (kW)	11
RATED SPEED (rpm)	3500
VOLTS (V)	220
AMP'S (A)	66
EXCITATION	COMPOUND
TIME RATING	S1
INSULATION CLASS	F
TEMP. RISE	F
J (kg · m ²)	0.725
GD ² (kgf · m ²)	2.9
APPROX MASS (kg)	520
ROTATION (VIEW OF DRIVE SIDE)	CCW
BEARING	L. S. 6310ZZC3 O. S. 6308ZZC3
GREASE	MULTEMP SRL
COLOR	RAL5021(Water Blue)
BRUSH	MATERIAL EG111 QUANTITY 4 SIZE 2(8)X32X40ZR DRAWING No. 2ME00162P001
CONNECTION DIAGRAM DRAWING No.	3MD00856
T/BOX ARRANGEMENT DRAWING No.	3MB08452
OUTLINE OF NAMEPLATE DRAWING No.	3MB08453
REMARKS	NOISE:87dB(A)at1m(NO LOAD)

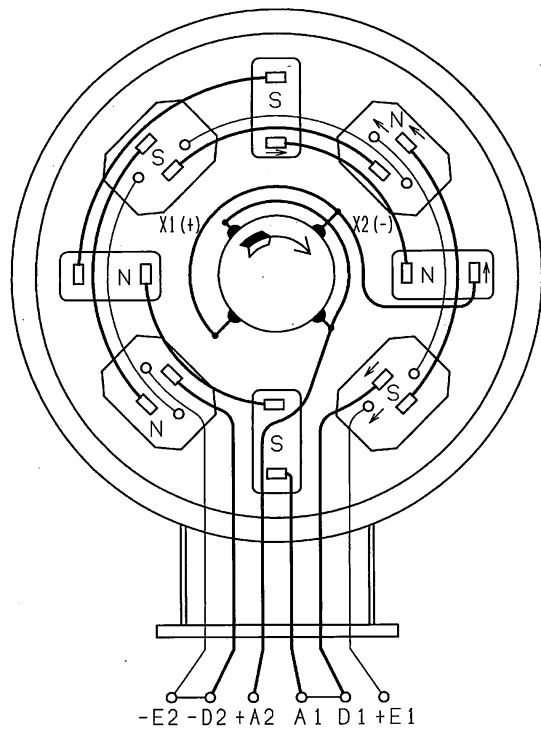
TMEIC PREVENTIVE MAINTENANCE ENGINEERING SECTION		
APPROVED BY	EXAMINED BY	PREPARED BY
<i>M. Sato</i>	<i>K. Yamada</i>	<i>J. Oe</i>
Oct. 11, 18	Oct. 11, 18	Oct. 11, 18

C	B	A	回数	REV. MARK
Oct. 11. 18	Jun. 18. 18	Apr. 11. 18	年月日	DATE
A. Ouchi	A. Ouchi	A. Ouchi	承認	APPROVED BY
Y. Takahashi	Y. Takahashi	Y. Takahashi	調査	REVIEWED BY
J. Sasagawa	J. Sasagawa	J. Sasagawa	担当	PREPARED BY
ADD DIM	CHG DESCR	CHG DESCR	記事	CONTENTS
ADD DEL	ADD DEL			

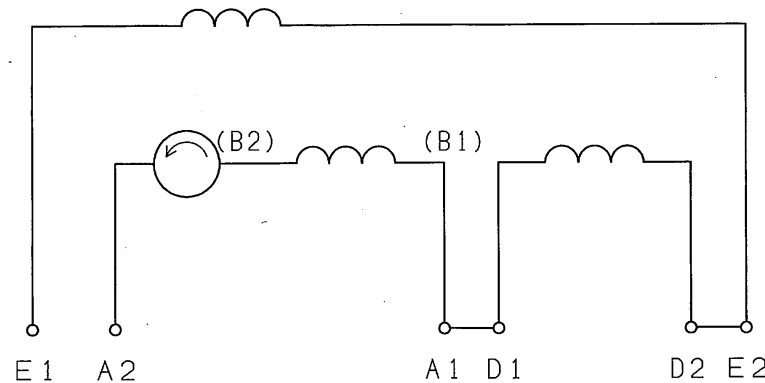
承認 APPROVED BY A. Ouchi Feb. 15. 18 設計 DESIGNED BY Y. Shimoda Feb. 15. 18 検図 CHECKED BY Y. Takahashi Feb. 15. 18 製図 DRAWN BY J. Sasagawa Feb. 15. 18	名称 TITLE OUTLINE OF 11kW D. C. MOTOR BFP-T(A, B) EMERGENCY OIL PUMP MOTOR	
	尺度 SCALE NTS 単位 UNITS m m	図面番号 DRAWING NO. 3MB08451
	川俣精機株式会社 KAWAMATA SEIKI CO., LTD.	REV. MARK C

配布先 PRESENT TO ○○○○○○

図面番号 DRAWING NO.
3MD00856
REV. MARK



VIEW FROM COMMUTATOR END



LINE POLARITIES	L +	L -
ROTATION		
COUNTERCLOCKWISE	[E1, A2]	[E2, D2]

NOTICES:
THE DIRECTION OF ROTATION IS FACING THE DRIVE END ON THE ABOVE DIAGRAM.
STANDARD: IEC60034-8

REMARKS:

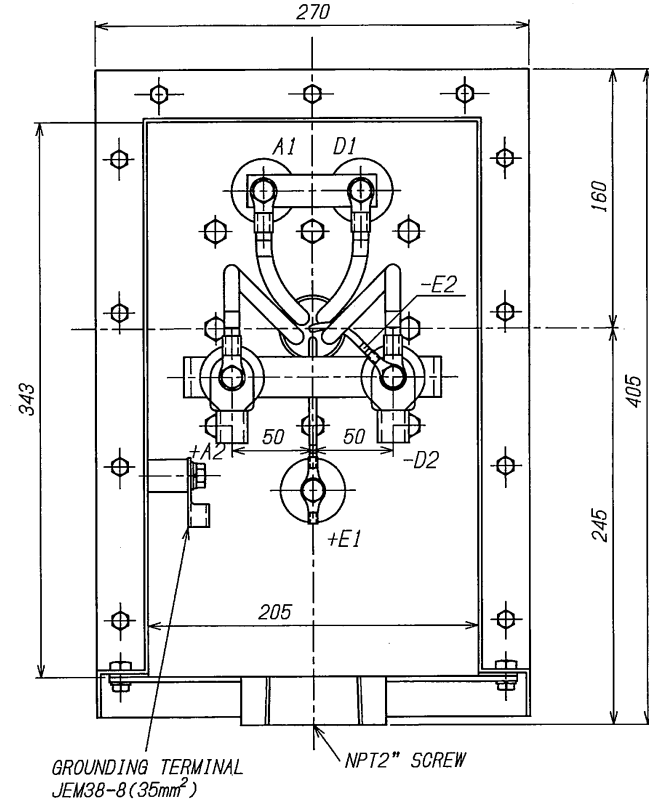
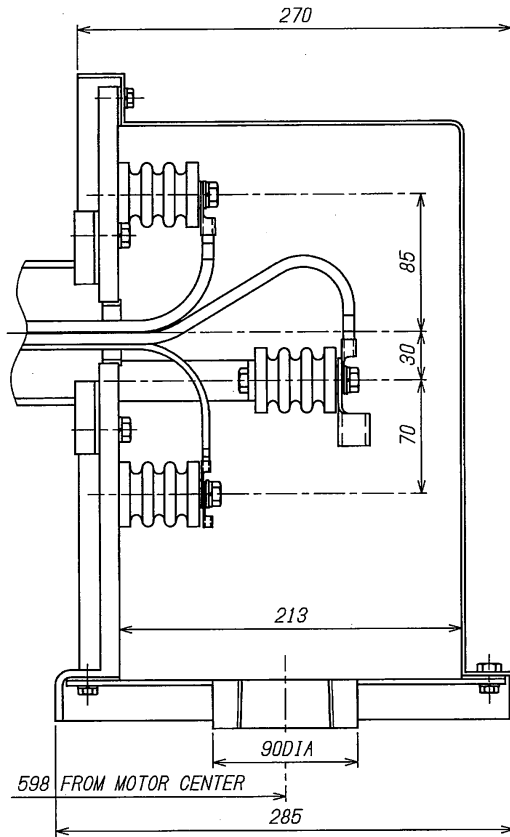
- X1—○—X2
ARMATURE WINDING
- B1—○—B2
COMMUTATING WINDING
- D1—○—D2
SERIES WINDING
- E1—○—E2
SHUNT EXCITATION WINDING

PREVENTIVE MAINTENANCE & ENGINEERING SECTION		
APPROVED BY	EXAMINED BY	PREPARED BY
<i>H. Nomura</i>	<i>K. Yamada</i>	<i>J. Oe</i>
Feb. 16.18	Feb. 16.18	Feb. 16.18

回数 REV. MARK	承認 APPROVED BY <i>A. Ouchi</i> Feb. 15.18	検閲 CHECKED BY <i>Y. Takahashi</i> Feb. 15.18	名称 TITLE
年月日 DATE	尺 度 SCALE NTS	設計 DESIGNED BY <i>J. Shimoda</i> Feb. 15.18	CONNECTION DIAGRAM
承認 APPROVED BY	單位 UNITS m m	製図 DRAWN BY <i>J. Sasagawa</i> Feb. 15.18	OF 11kW D. C. MOTOR
調査 REVIEWED BY	変 更 REVISIONS		BFP-T(A, B) EMERGENCY OIL PUMP MOTOR
担当 PREPARED BY	記事 CONTENTS		図面番号 DRAWING NO. 3MD00856
	川俣精機株式会社 KAWAMATA SEIKI CO., LTD.		REV. MARK 変更回数

配布先 PRESENT TO ○○○○○○

図面番号 DRAWING NO.
3MB08452
 規格・参考図 3MB08213
 変更回数 REV. MARK
(B)



TERMINAL MARK	TERMINAL No.	USE CABLE SIZE
+A2, -D2	JEM 80-8	XLPE 2C×1-95mm ²
+E1	JEM 5, 5-8	

PREVENTIVE MAINTENANCE & ENGINEERING SECTION		
APPROVED BY	EXAMINATED BY	PREPARED BY
<i>M. Sato</i>	<i>K. Yamada</i>	<i>J. Oe</i>
Jan. 20. 18	Jun. 20. 18	Jun. 20. 18

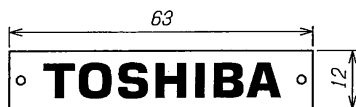
B	A	回数 REV. MARK
Jun. 18. 18	Apr. 11. 18	年月日 DATE
<i>A. Ouchi</i>	A. Ouchi	承認 APPROVED BY
<i>Y. Takahashi</i>	Y. Takahashi	調査 REVIEWED BY
<i>J. Sasagawa</i>	J. Sasagawa	担当 PREPARED BY
CHG DESCR ADD DEL	CHG DESCR	記事 CONTENTS

 尺度 SCALE NTS 単位 UNITS m m	承認 APPROVED BY A. Ouchi Feb. 15. 18	検図 CHECKED BY Y. Takahashi Feb. 15. 18
	設計 DESIGNED BY Y. Shimoda Feb. 15. 18	製図 DRAWN BY J. Sasagawa Feb. 15. 18
	 川俣精機株式会社 KAWAMATA SEIKI CO., LTD.	
	変更 REVISIONS	

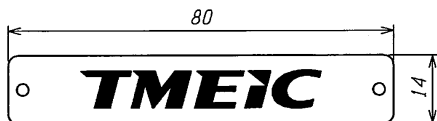
名称 TITLE	TERMINAL BOX ARRANGEMENT OF 11kW D. C. MOTOR
図面番号 DRAWING NO.	3MB08452
変更回数 REV. MARK	(B)

配布先 PRESENT TO ○○○○○○

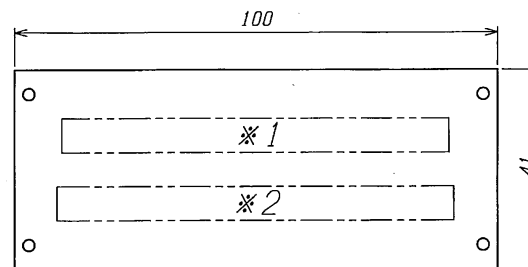
図面番号 DRAWING NO.
3MB08453
 変更回数 REV. MARK
(B)



MATERIAL : SUS304
 THICKNESS: 0.5

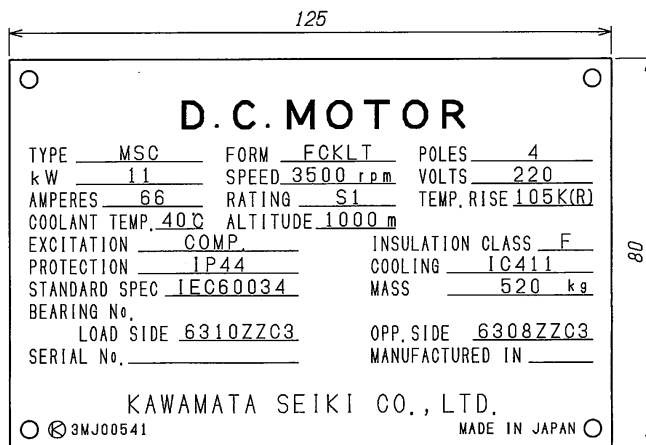


MATERIAL : SUS304
 THICKNESS: 0.5

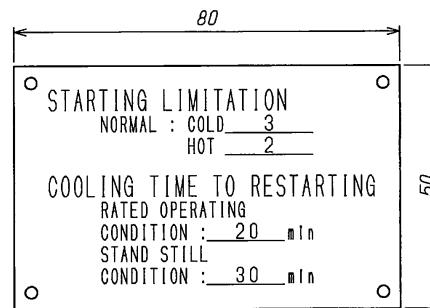


MATERIAL : SUS304
 THICKNESS: 0.8

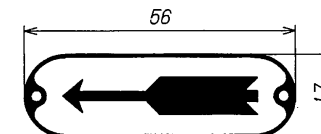
	*1	*2
Unit5	50LAV11AP003-M01	BFPT A EMERGENCY OIL PUMP MOTOR
	50LAV12AP003-M01	BFPT B EMERGENCY OIL PUMP MOTOR
Unit6	60LAV11AP003-M01	BFPT A EMERGENCY OIL PUMP MOTOR
	60LAV12AP003-M01	BFPT B EMERGENCY OIL PUMP MOTOR



MATERIAL : SUS304
 THICKNESS: 0.8



MATERIAL : SUS304
 THICKNESS: 0.8



MATERIAL : SUS304
 THICKNESS: 0.5

TMEiC PREVENTIVE MAINTENANCE & ENGINEERING SECTION
 APPROVED BY EXAMINATED BY PREPARED BY
 M. Sato E. Yamada J. Oe
 Jul. 18. 18 Jul. 18. 18 Jul. 18. 18

B	A	回数 REV. MARK
Jul. 18. 18	Jul. 11. 18	年月日 DATE
A. Ouchi	A. Ouchi	承認 APPROVED BY
Y. Takahashi	Y. Takahashi	調査 REVIEWED BY
J. Sasagawa	J. Sasagawa	担当 PREPARED BY
CHG. DESCR	CHG. DESCR	記事 CONTENTS

変更 REVISIONS	承認 APPROVED BY	検閲 CHECKED BY
⊕	A. Ouchi	Y. Takahashi
NTS	Feb. 15. 18	Feb. 15. 18
設計 DESIGNED BY	Y. Shimoda	製図 DRAWN BY
単位 UNITS	Feb. 15. 18	J. Sasagawa
m m		Feb. 15. 18

川俣精機株式会社
 KAWAMATA SEIKI CO., LTD.

名称 TITLE	図面番号 DRAWING NO.	変更回数 REV. MARK
OUTLINE OF NAMEPLATE	3MB08453	(B)
BFP-T(A, B) EMERGENCY OIL PUMP MOTOR		

配布先 PRESENT TO ○○○○○○

Motor Data Sheet

No.	Description	Unit	Manufacturer's Design Data
1.	Name of Motor	-	BFPT A/B EMERGENCY OIL PUMP MOTOR
2.	Manufacturer	-	KAWAMATA SEIKI CO.LTD.
3.	Country of Origin	-	Japan
4.	Type/Machine Code	-	MSC-FCKLT
5.	Applied Standard (characteristics)	-	IEC60034-1
6.	Ratings		
(1)	Rated output	KW	11
(2)	Service factor	-	-
(3)	Number of pole	-	4
(4)	Rated speed	min ⁻¹	3500
(5)	Rated voltage	V	220
(6)	Number of phases	-	-
(7)	Rated frequency	Hz	-
(8)	Insulation class	-	F
(9)	Temperature rise	-	F
(10)	Rated duty	-	S1
7.	Service Conditions		
(1)	Starting method	-	RESISTANCE
(2)	Direction of rotation (viewed from DE (Drive End))	-	CCW
(3)	Reverse rotation (Yes / No)	-	No
(4)	Location (Indoor / Outdoor)	-	Indoor
(5)	Enclosure IP rating	-	IP44
(a)	Motor frame	-	IP44
(b)	Terminal boxes	-	IP44
(6)	Installation (Horizontal / Vertical)	-	Vertical
(7)	Design ambient temperature	deg C	40
(8)	Explosion proof (Yes / No)	-	No
(9)	Noise level (at full-load condition, at 1m from motor frame)	dB(A)	87
8.	Characteristics		
(1)	Current		
(a)	Normal current	A	66
(b)	No-load current	A	12
(c)	Starting current	A	231
(2)	Torque		
(a)	Starting torque	%	350%
(b)	Maximum torque	%	350%
(3)	Slip at rated output	%	-
(4)	Efficiencies		
(a)	At 100% load	%	75.7
(b)	At 75% load	%	70.7
(c)	At 50% load	%	60.2
(d)	At 25% load	%	27.9
(5)	Power factor		
(a)	At rated load	%	-
(b)	At starting load	%	-
(6)	GD ² coupled with driven equipment	kg-m ²	3.13
(7)	Starting time with driven equipment	sec	Approx. 11sec

Motor Data Sheet

No.	Description	Unit	Manufacturer's Design Data
(8)	Consecutive number of motor starting	-	3
(a)	From cold condition (consecutive)	-	2
(b)	From hot condition (consecutive)	min	20
(c)	Minimum time between 2 starts (running state)	min	30
(d)	Minimum time between 2 starts (stop state)		
(9)	Allowable locked-rotor time		
(a)	At cold condition	sec	-
(b)	At hot condition	sec	-
9.	Constructions		
(1)	Stator winding connection (Wye / Delta)	-	-
(2)	Type of bearing	-	Ball
	Bearing of DE (Drive End)	-	Ball
	Bearing of NDE (Non Drive End)	-	Ball
(3)	Lubricants		
(a)	Recommended lubricant and brand name	-	MULTEMP SRL
(b)	Pouring method (if applicable)	-	N.A
(c)	Quantity of lubricant for initial filling (if applicable)	g	-
(d)	Recommended interval for recharging (if applicable)	hr	-
(e)	Recharging quantity (if applicable)	g	-
(f)	Location of pouring (indicated in the outline drawing) (if applicable)	-	-
(4)	Bearing cooling water requirement (if required)		
(a)	Quantity (if required)	m ³ /h	-
(b)	Inlet water temperature (if required)	deg C	-
(c)	Required cooling water pressure (if required)	kPa	-
(d)	Type of cooling water (if required)	-	-
(5)	Water to air heat exchanger (if applicable)		
(a)	Quantity of cooling water (if applicable)	m ³ /h	-
(b)	Inlet water temperature (if applicable)	deg C	-
(c)	Required cooling water pressure (if applicable)	kPa	-
(d)	Type of cooling water (if applicable)	-	-
(6)	Space heater (AC 220V 1 phase) (if applicable)	W	-
(7)	Weight	kg	520
10.	Related Document Numbers		
(1)	Motor outline drawing	-	3MB08451
(2)	Terminal box drawings		
(a)	For main power	-	3MB08452
(b)	For instruments	-	-
(c)	For space heater	-	-
(3)	Current transformers (for MV motors only)		
(a)	Characteristics curves (for MV motors only)	-	-
(b)	Outline drawing (for MV motors only)	-	-
(4)	Efficiency curves	-	D003052CG2-EFF
(5)	Thermal capability curves		
(a)	At cold condition	-	D003052CG2-THE
(b)	At hot condition	-	D003052CG2-THE
(6)	Starting and speed torque characteristics at 80, 90 and 100 % voltage	-	N.A.