

Sign For Receipt
(For customer)

TEIKOKU MOTOR PUMP DATA SHEET

Sheet No.

Q FQ-1824

M/S	DATE	Jan. 19, 2008
JOB NAME ****	NO. REQ'D	1
ORDER NO. ****	PROD. NO.	FQ-1824
JOB NO. ****	ITEM NO.	****
MODEL	F42-217K4G-0204S1V-AV	
	Suction Flange	ANSI 300LB 1-1/2" RF
	Discharge Flange	ANSI 300LB 1" RF
		SERRATED 125-250 AARH
	Painting Color	Silver

1. OPERATING CONDITIONS

Total Head	92 ft (28.04 m)	Capacity	41 GPM (155.19 L/min)
NPSHava./req.	**** ft(**** m) / 7.4 ft(2.25 m)	Suct. Press./ Disch. Press.	**** / ****
Liquid	D. I. Water		
SP. GR at P.T.	0.915	Vis. at P.T.	0.2 cP
Vap. Press. at P.T.	****	Melting Point	**** °F
		Pumping Temp.	396 °F
		Suspended Solid	**** wt%

2. MOTOR (Three Phase Induction Motor)

Power Supply (3 φ × 60 Hz × 460 V)

Rated Output	3.4 kW	Rated Current	7.5 A	Starting Current	37 A
Pole No.	2	Thermal Class	300	Explosion Proof	NONE
TEIKOKU Rotary Guardian	YES	Thermostat Working Temp.	**** °F		

3. MATERIALS

Casing	CF-8 304 SS	Impeller	CF-8 304 SS	Shaft	304 SS
Stator Can	ALLOY C-276	Rotor Can	316L SS	Bearing	SiC
Sleeve Thrust Collar	316 SS+Tun. Carbide	Gasket	304 SS+PTFE		

4. UTILITIES REQ'D

Motor Jacket		Casing Jacket		Circ. Tube H. Exch.	
NONE		NONE		NONE	

5. ACCESSORIES & SPARE PARTS

Foundation Bolt	**** Sets	Bearing	**** Sets	Shaft Sleeve	**** Sets	Thrust Collar	**** Sets
Gasket	**** Sets						

6. FLUSHING

Liquid	****	Flow	**** GPM	Press.	**** MPaG
--------	------	------	----------	--------	-----------

7. DRAWINGS

Dimensional Dwg.	6A-9366	Terminal Box	6A-8893	Sectional View Dwg.	6A-9367
Material List	P-28820	Wiring Inlet	BT10021	Estimated Performance Curve	SFQ-1824

8. REMARKS

Rotation: C.C.W. (Viewed From Pump Suction)

-T-USA#JN80024

-The pump and motor frame can be hot during operation. Do not touch them directly with bare hands.

-Do not cover the motor body for thermal insulation.

-Pre-heating is required on the entire motor-pump unit, except for the motor lead neck and terminal box, however, it should be noted that pre-heating at a speed of faster than 360°F per hour may damage the internal parts of the pump.

-Internal temperature of the terminal box is estimated to be approx. 176-194°F

Please select an appropriate wiring cable.

国際
コピー
01
第二
0

REV.	
------	--

TEIKOKU ELECTRIC MFG. CO., LTD.

APPROVED BY

M. Sakai

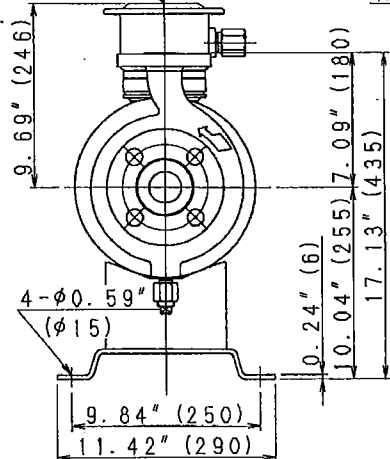
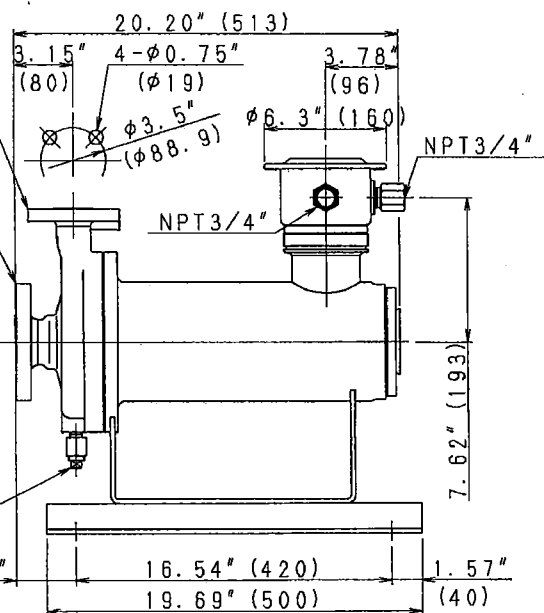
CHECKED BY

M. Sakai

DRAWN BY

M. Kondou

6A-9366

TERMINAL
BOXANSI 300Lb 1" RF
ANSI 300Lb 1 1/2" RF4-φ0.87" (φ22)
φ4.5" (φ114.3)DRAIN
NPT 1/2

FQ1623 WEIGHT: 165Lb

REVISIONS

APPROVED

CHECKED

DRAWN

SCALE

DWG. TITLE 外形図

M. Sakai

R. Matsumura

T. Inoue

FREE

DIMENSIONAL DRAWING

Dec-25-'07

TYPE: F-210-0204S1-V



株式会社 帝国電機製作所

TEIKOKU ELECTRIC MFG. CO., LTD.

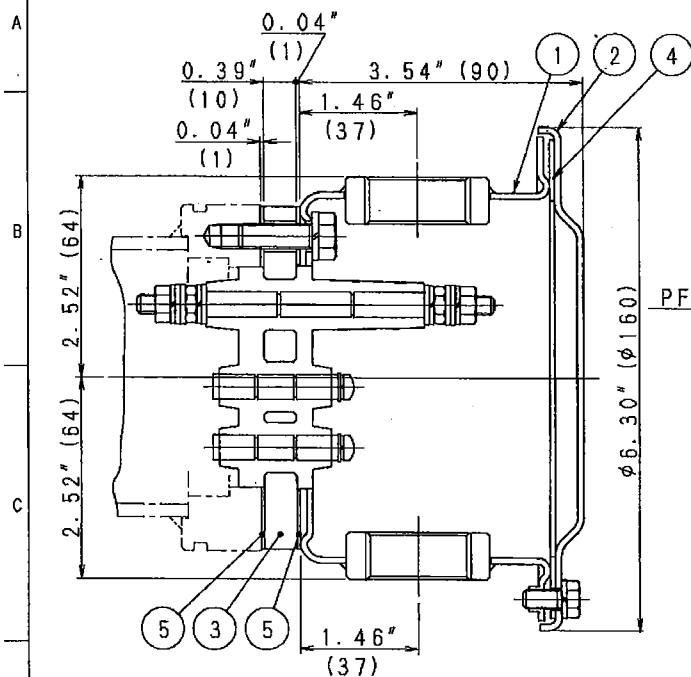
DWG. NO.

6A-9366

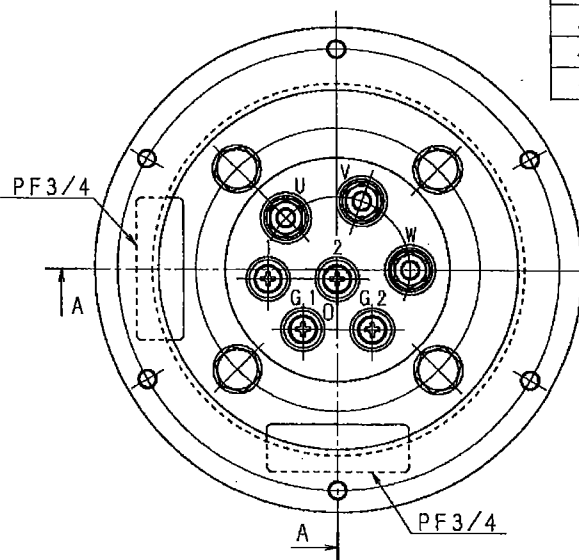
99

6A-8893

VIEW A-O-A



NO	NAME
1	TERMINAL BOX
2	TERMINAL COVER
3	TERMINAL PLATE
4	GASKET
5	GASKET



FQ1353, 1354

APPROVED	CHECKED	DRAWN	SCALE	DWG. TITLE
M. Sakai	R. Matsumura	S. Namura	FREE	端子箱 TERMINAL BOX
				(S) T/USA

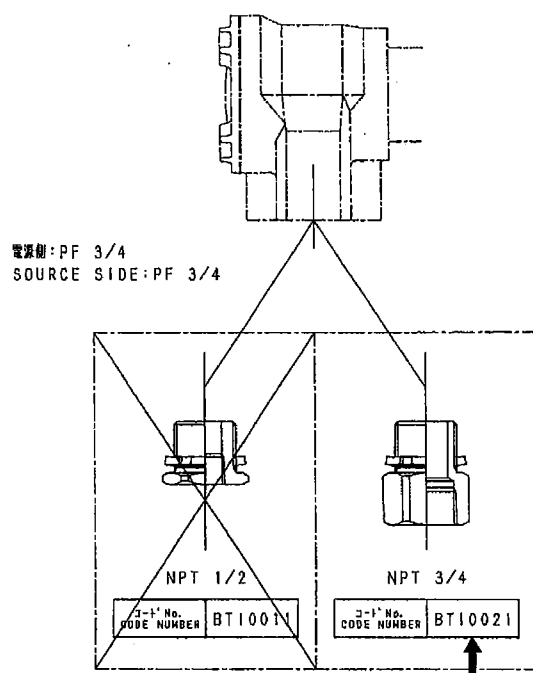
株式会社 帝国電機製作所
TEIKOKU ELECTRIC MFG. CO., LTD.

DWG. NO.

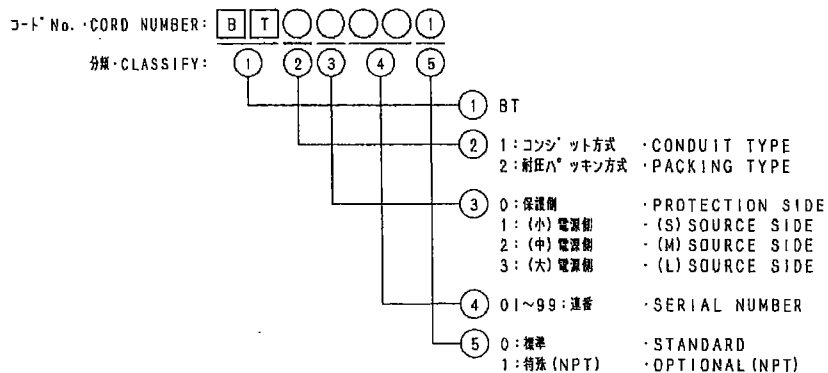
6A-8893

配線引込口 ・ WIRING INLET

保護側 電線管耐圧ねじ結合式引込方式
PROTECTION SIDE CONDUIT TYPE



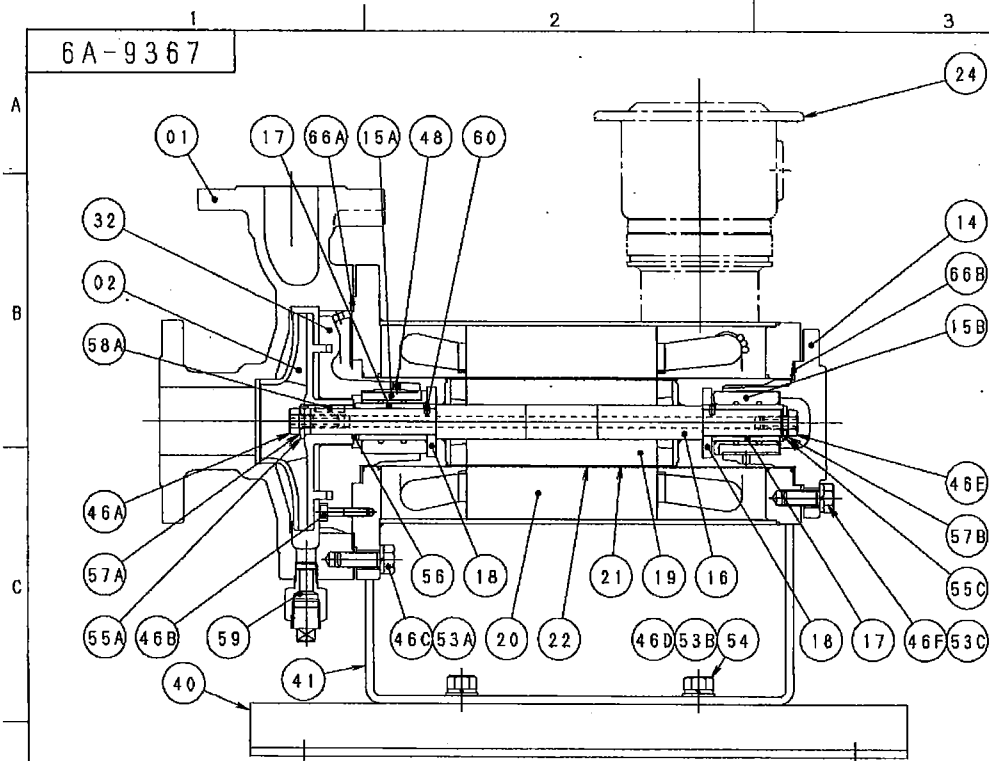
コード No. の見方 ・ EXPLANATION OF CODE NUMBER



コード分類 CODE CLASSIFY

BT10021

6A-9367



No.	NAME OF PARTS	No.	NAME OF PARTS
01	CASING	48	SET SCREW
02	IMPELLER	53A	SPRING WASHER
		53B	SPRING WASHER
14	RB HOUSING	53C	SPRING WASHER
15A	BEARING B		
15B	BEARING A	54	PLAIN WASHER
16	SHAFT	55A	WASHER
17	SHAFT SLEEVE		
18	THRUST COLLAR	55C	WASHER
19	ROTOR ASS'Y	56	ADJUSTING WASHER
20	STATOR ASS'Y	57A	LOCK WASHER
21	ROTOR CAN	57B	LOCK WASHER
22	STATOR CAN	58A	KEY
24	TERMINAL BOX ASS'Y	59	PLUG
32	FB HOUSING		
		60	PIN
40	BASE	66A	GASKET
41	HOLDER	66B	GASKET
46A	BOLT		
46B	BOLT		
46C	BOLT		
46D	BOLT		
46E	BOLT		
46F	BOLT		

FQ1623

APPROVED CHECKED DRAWN SCALE

M. Sakai R. Matsumura

T. Inoue
Dec-25-'07

FREE

DWG. TITLE 構造断面図
SECTIONAL VIEW DRAWING

TYPE: F-X-Y

DWG. NO.

6A-9367

NOTE

Bearing A---with spiral & straight grooves

Bearing B---with spiral grooves



株式会社 帝国電機製作所

TEIKOKU ELECTRIC MFG. CO., LTD.

MATERIAL LIST

(1/1)

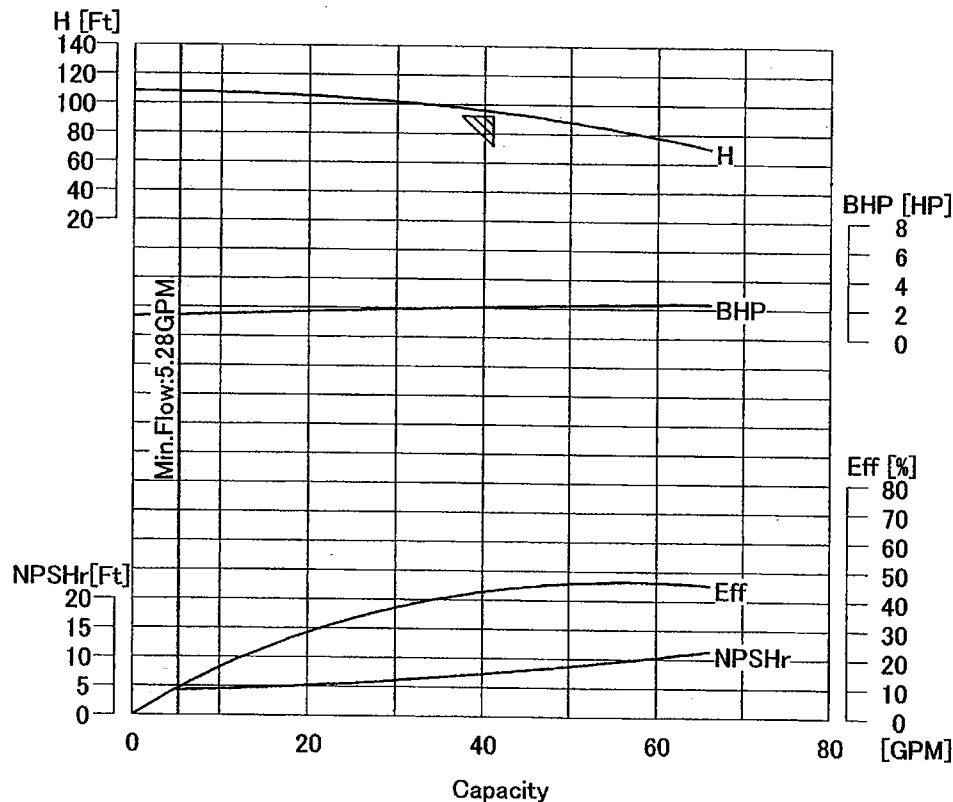
NO.	NAME	MATERIAL (JIS Std./Eq. ASTM, AISI Std.)	REMARKS
01	CASING	SCS13 / CF-8 304 SS	
02	IMPELLER	SCS13 / CF-8 304 SS	
14	R. B. HOUSING	SUS304 or SCS13 / 304 SS or CF-8 304 SS	
15A	BEARING A	SiC	
15B	BEARING A	SiC	
16	SHAFT	SUS304 / 304 SS	
17	SHAFT SLEEVE	SUS316 / 316 SS + Tun. Carbide	
18	THRUST COLLAR	SUS316 / 316 SS + Tun. Carbide	
19	ROTOR ASS' Y		
20	STATOR ASS' Y		
21	ROTOR CAN	SUS316L / 316L SS	
22	STATOR CAN	ALLOY C-276	
24	TERMINAL BOX ASS' Y	SPCC etc. / Carbon Steel etc.	
32	F. B. HOUSING	SUS304 or SCS13 / 304 SS or CF-8 304 SS	
40	BASE	SS400 / Carbon Steel	
41	HOLDER	SS400 / Carbon Steel	
46A	BOLT	SUS304 / 304 SS	
46B	BOLT	SUS304 / 304 SS	
46C	BOLT	SCM435 / AISI 4137	
46D	BOLT	S20C / Carbon Steel	
46E	BOLT	SUS316 / 316 SS	
46F	BOLT	SCM435 / AISI 4137	
48	SET SCREW	SUS316 / 316 SS	
53A	SPRING WASHER	SWRH / Carbon Steel	
53B	SPRING WASHER	SWRH / Carbon Steel	
53C	SPRING WASHER	SWRH / Carbon Steel	
54	PLAIN WASHER	SPCC / Carbon Steel	
55A	WASHER	SUS316L / 316L SS	
55C	WASHER	SUS316L / 316L SS	
56	ADJUSTING WASHER	SUS316L / 316L SS	
57A	LOCK WASHER	SUS316L / 316L SS	
57B	LOCK WASHER	SUS316L / 316L SS	
58A	KEY	SUS316 / 316 SS	
59	PLUG	SUS304 / 304 SS	
60	PIN	SUS316 / 316 SS	
66A	GASKET	SUS304 / 304 SS + PTFE	
66B	GASKET	SUS304 / 304 SS + PTFE	
(F-X-V)		APPROVED	CHECKED
		M. Sakai	R. Matsumura
			DRAWN
			M. Kondou
			Dec. 18, '07

P-28820

ESTIMATED PERFORMANCE CURVE

FQ-1824

Customer			
User			
JOB No.	****	JOB Name	****
Item No.	****	Item Name	****
Model F42-217K4G-0204S1V-AV			
Motor Rating		Operating Condition	
Frequency	60 [Hz]	TDH	92.0 [Ft]
Voltage	460 [V]	Capacity	41.0 [GPM]
Phase	3 [Ph]	Liquid D. I. Water	
Pole	2	Temp.	396 [F] 202.2 [°C]
Output	4.6 [HP] 3.40 [kW]	S.G.	0.915
Current	7.50 [A]	Vis.	0.200 [mPa·s]
		NPSHava.	[Ft]
		NPSHreq.	7.4 [Ft]
		Min.Flow	5.28 [GPM]



Remarks



Approved by

M. Sakai

Checked by

M. Sakai

Drawn by

S.KUBO
Jan. 16, 2008

Dwg.No.

SFQ-1824

H[Ft]:Total Differential Head BHP[HP]:Output Eff[%]:Pump Efficiency

F-217U-460V-0204S1-60Hz

NPSHr[Ft]:NPSHreq

No.1FQ1F4030-00

C-1.00-1.00-1.00-W-94.4-5.74-2.29-42.5-L-95.3-5.60-2.09-43.1-QH-44.27-IH-5.64-D-134.0-α-2.18

Version 2.0