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 Warminster, PA 18974
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 ☎ 267-486-1037

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 Houston, TX 77092
www.TeikokuPumps.com
 ☎ 713-983-9901
 ☎ 713-983-9919

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 Belmont, WV 26134
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 ☎ 304-684-2459
 ☎ 304-684-7593

Proposal

Date	Quote No.	Inquiry No.	Project Name	Terms (in US Currency)	
7-28-2014	2014-18338			Net 30	
To:			Representative for Teikoku USA, Inc.		
Rick Vondra Patriot Renewable Fuels, LLC			Travis Munn Superior Industrial Equipment		
Address:			1609 Afton Road Sycamore, Illinois 60178		
P.O. Box 560 Annawan, Illinois 61234					
Country:			United States		
Phone:			815-899-8900		
Fax:			815-899-8898		
Email:			tmunn@superiorpumps.com		
rvondra@patriotethanol.com					
We promise to furnish the equipment listed below at the price shown subject to Teikoku USA's Conditions of Sale. FOB Factory					
Item No.	Equip No.	Quantity	Pump Model	Unit Price	Total Price
9	P-107	1	F41-217U4L-0204S1-AV	\$7,887.00	\$7,887.00
Application Data:		Materials of Construction:		Motor Data:	
Fluid:	Triolein	Pump Case:	304SS	Insulation:	Class 300
TDH (feet):	148.0	Impeller:	304SS	Frame:	217
Capacity (GPM):	36.4	Gaskets/O-rings:	PTFE	Stator Fill:	None
Specific Gravity:	0.824	Rotor Liner:	316L SS	Voltage:	460
Viscosity (cps):	3.8	Stator Liner:	Hast C	Phase:	3
Op. Temp. (F):	302.0	Brg. Hsg./Adapter:	304 SS	Hertz:	60
Vapor Press. (psia):		Shaft:	304SS	RPM:	3450
Sp. Ht. (BTU/lbmF):		Bearings:	Carbon Graphite 10F	Design Power (HP):	3.1
Suct. Press. (psig):		Shaft Sleeves/TC's:	316 SS + Stellite	Runout Power (HP):	3.7
Dsch. Press. (psig):		Suct. Conn:	1-1/2 inch / 150# RF	Motor Rating (HP):	4.6
Diff. Press. (psi):	52.7	Dsch. Conn.:	1 inch / 150# RF	F.L. Amp:	7.5
NPSHAvail. (feet):	***	Case Drain:	1/2" NPT	F.L. KW:	
NPSHReq. (feet):	5.8	Adapter:	No	Start KVA:	
Eff. @ Diam. (%):	37.2	Circulation Path:	Standard	Motor Rating:	TELC
Imp. Diam. (in):	6.34	Net Wgt. (lbs):	198.0	Area Class:	Class 1, Group C & D, Div 2
Design Pressure	150 PSI				
Options:			Thermal TCO (F): None		
Hydraulic Test: Non-Witnessed			Perf. Curve No.: Attached		
NPSH Test: Non-Witnessed			Bulletin Number: Teikoku Standard		
Hydrostatic Test: Non-Witnessed			Outline Dwg.: Attached		
Shipment can be improved by 3 weeks by adding \$633.60 per pump for air freight.			Shipment: 16		
Standard TRG bearing wear monitor included.			(wks) after drwg. approval or mfg. release.		
			Comments:		

Thank you for your inquiry.
 Please feel free to visit our website at: www.TeikokuPumps.com
 Abhilash Abraham/AE x 2847



ESTIMATED PERFORMANCE CURVE

Date : 2014/7/28
No :
Dwg. No. :

SP

Item No.
Model

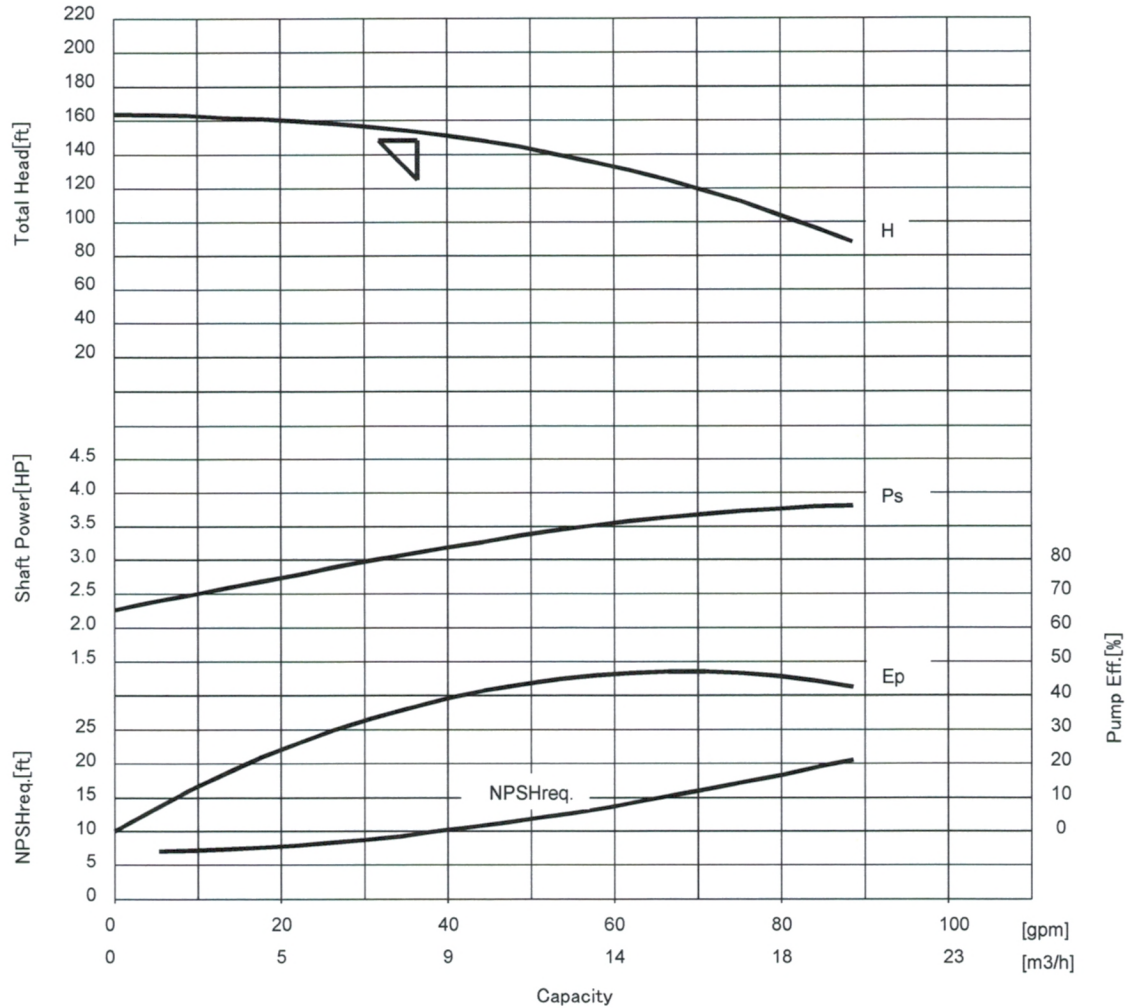
P-107
F41-217U4L-0204S1-AV

Item Name

Frequency 60 Hz
Voltage 460 V
Phase 3
Pole 2
Output 4.6 HP
Current 7.5 A
Ex-proof d2G2

Total Head 148 ft
Capacity 36.4 gpm 8.3 m3/h
Min.Flow 5.3 gpm 1.2 m3/h
Liquid Triolein
Temp. 302 degF
S.G. 0.824
NPSHavail. *** ft
Vis. 3.8 mPas
NPSHreq. 5.8 ft

217U-0204S1	
F-TYPE	
Judgement	
good	
d2G2	
Date	2014/7/28
CQ	0.99
CH	1.00
CE	0.96
H	148.0
Q	36.4
SG	0.824
VIS	3.8
P	4.56
I	7.5
HL	153.0
IL	6.45
PsL	3.11
EpL	37.2
NL	3409.5
QH	42.5
IH	6.6
Dia/STG	Dia=161
P/PsL	1.47
1 HW/HX	
2 (Dmn/Dmx)^2	
3 Dia ave.	
4 MAX Dia	166
5 MIN Dia	130
6 M8/M10	
HW	150.6
IW	6.82
PsW	3.54
EpW	39.1
NW	3377.8
NPSHstd	5.80
1>2	
3*0.97>5	
1>6*0.95	
4*0.98>3	
INS.CLASS	Class 300
MAX.TEMP	338



Remarks :

REV.	Date	Description

APPROVED BY	CHECKED BY	DRAWN BY

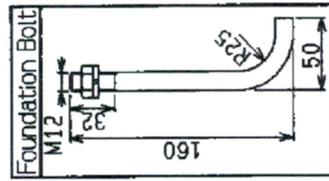
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TEIKOKU ELECTRIC MFG. CO., LTD.

Version NTP11.15EN2

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For Preliminary Reference Only.
Quoted pump will have 150 # Flanges

DWG. TITLE 外形 ☒ DIMENSIONAL DRAWING
TYPE: F-210-020451-Y

株式會社帝國電機製作所
TEIKOKU ELECTRIC MFG. CO., LTD.

ORG. NO. 4W-9527