



PUMP DATA SHEET

Flu-Con/Bibb	
INGERSOLL-RAND ORDER	002-35778
SERIAL NUMBERS	0889013/4/5
PUMP APPLICATION	Boiler Feed
LIQUID PUMPED	330°F water
SPECIFIC GRAVITY	902
PUMP SIZE	4500DAN2
DRIVER	1500-hp motor
PUMP RATING	887 gpm @ 3560 rpm
NET POSITIVE SUCTION HEAD REQUIRED	13 ft
NET POSITIVE SUCTION HEAD AVAILABLE	80 ft
TOTAL HEAD	5225 ft
SUCTION PRESSURE	80 psid
DISCHARGE PRESSURE	2120 psid
PUMP EFFICIENCY	77.9%
PUMP ROTATION	CCW (SHV)
HYDROTEST PRESSURE	3800 psid
BEARING LUBRICATION	Force Feed
PUMP HOLD-DOWN TORQUE VALUE	185-215 ft-lb

APPROXIMATE WEIGHTS

PUMP	5750 lbs
DRIVER	5640 lbs
BEDPLATE	3175 lbs



ORDERING INSTRUCTIONS

Mail your order to the nearest Ingersoll-Rand Office.

Refer to your Assembly Drawings which have every part numbered to correspond with the Engineering Parts Lists furnished.

The following should be included when ordering any parts for your pump.

INGERSOLL-RAND ORDER 002-35778
PUMP SERIAL NUMBER 0889013/4/5
PUMP SIZE 4X11DA12

EXAMPLE

NAME OF PART SHAFT
PART NUMBER 62346408
QUANTITY 1

EXAMPLE

NAME OF PART IMPELLER RING
PART NUMBER FRONT RING FOR IMPELLER 62388293
QUANTITY 1

CURVE NO. 63749
DATE 80C90

CURVES ARE APPROXIMATE. PUMP GUARANTEED FOR ONE SET OF CONDITIONS. CAPACITY, HEAD AND EFFICIENCY GUARANTEES ARE BASED ON SHOP TEST AND WHEN HANDLING CLEAR, COLD, FRESH WATER AT A TEMPERATURE OF NOT OVER 85°F AND NOT OVER 10 FOOT SUCTION LIFT.

IMPELLER EYE AREA = 21 SQ. IN.

IMPELLER PATT. NO. 4X11DA3A/D/E DIA

11.03" MAX

DIFFUSOR PATT. NO.

10.94"

8.88" MIN

BHP - SP. GR. = 1.00

BHP - SP. GR. = .902

NPSHR (TYPICAL)

EFFICIENCY

TOTAL HEAD

This will certify that curve 63749 is based on a performance test on the pump with serial no. 0889013 on Ingersoll-Rand order 002-35778

W. Williams 80C90

CUSTOMER - FRU CON
CUST. ORD. - 708490.01-000016
CUST. IT. - P-BF-1A
SERVICE - BOILER FEED

CHARACTERISTIC CURVE

NO. 4X11

TYPE DA-12

PUMP

3560 R.P.M.

PUMP NO.

0889013

ORDER NO.

002-35778

INGERSOLL-RAND

PUMPS

DATE 80C90

CURVE 63749

GALLONS PER MINUTE

TOTAL HEAD IN FEET

152906

PERCENT EFFICIENCY

NPSH - FT.

BRAKE HORSE POWER

INGERSOLL-RAND CO.
CAMERON DIVISION
PHILLIPSBURG PLANT

(CCMS)

PARENT
PART NO.

REV D
LVL A

PT SIZE
AY 4X11-12

SYMBOL
CODE

NOUN
CODE

PL MATL SPEC
DA-B 500

BOILER FEED PUMP PUMP ASSEMBLY I

PLANT CODE

REPORT NO. 02990
RUN 03 SEP 89
SHEET 2 OF 4
RELEASE
DATE

DRAWING NUMBER

IN-OUT
ST DATE ECN REV
ASTM A217 GR CAL5

FND CLASS D	NO. SPARE A	QUANTITY	UM	COMP PART NO.	PT SIZE	SYMBOL CCODE	NOUN CODE	PL MATL SPEC	DESCRIPTION	CASING MACH FINAL
001	Y	1	PC	62308251	MO 4X11-12	DA-B	183 HA	831	CASING MACH FINAL	
002	3 Y	1	PC	62308285	AY 4X11-12	DA-B	184		ROTOR ASSEMBLY	
003	2 3 Y	1	PC	62274287	MP 725	D	006	655	CASING RING	!
004	2 3 Y	1	PC	62274295	MP 624	D	006	655	CASING RING	!
005	2 3 Y	10	PC	62299110	MO 4X11	DA	060 BA	913	CHANNEL RING	
006	2 3 C	1	PC	62418017	MP 4X11	DA	407 B	913	CENTER BUSHING	
007	2 3 Y	1	PC	62389129	MP 4X11	DA	441 A	905 GRAPH	THROTTLING BUSH	
008	2 3 C	2	PC	62046883	MP 319	D	088	20	STUFF BOX BUSH	!
012	2 3 Y	26	PC	62189816	PP -12X-38	TYPE H	029	AISI 316	GROOVE PIN	
013	3 Y	2	PC	62120712	PP CFS95994	881	429	XF511DI	JOHN CRANE	
018		8	PC	62A34394			314		STUD .62X3.50	
020		8	PC	12A5C8			STEEL		WASHERS 5/8"	
021		8	PC	38A4K7			377		NUT .62	
022	3 X	1	PC	18VFL164X3A			9		COUPLING NUT	!
023	3	2	PC	109A2A46			318		SET SCR .38X.50	
024	3 X	1	PC	11A9-C-347			266		KEY .75X3.00	
025		9	PC	30A7S3			STEEL		PLUG .25	
026		9	PC	30A7S5			STEEL		PLUG .50	
027		8	PC	30A7S6			STEEL		PLUG .75	
035	C	1	PC	62218755	MP 350	B	199	204	RAD BRG BODY/CAP	

CUST. P.O. #708490.01-000016
I.R. ORD. #002-35778-00

A = DRAWING AVAILABILITY

PT = PART TYPE

PL = PATTERN LETTERS

ECN
NO. = ENGR CHANGE NOTICE

ST = STATUS

INGERSOLL RAND CO.
CAMEROON DIVISION
PHILLIPSBURG PLANT

(CCMS)

ENGINEERING PARTS LIST

BOILER FEEDPUMP PUMP ASSEMBLY

PARENT PART NO. 62380418 DA Y AY 4X11-12 DA-B 500
REV B PT SIZE SYMBOL NOUN CODE PL MATL SPEC
PT SIZE

REPORT NO. 02990
RUN 03 SEP 89
SHEET 3 OF 4

RELEASE
DATE

-----DRAWING NUMBER-----<NAIL SPEC><LIST #>

FND CLASS	U	Q	UM	COMP	PART NO.	PT SIZE	SYMBOL	NOUN	CODE	PL	MATL SPEC	DESCRIPTION	IN-OUT	ECN	REV
NO.	SPARE	A	Q	U	PT NO.	PT SIZE	CODE	CODE	PL	MATL SPEC	DESCRIPTION	ST	DATE	NO.	LVL
036	C	1	PC	62156872	MP	350	B	200	204		THR BRG BODY/CAP				
037	C	3	PC	62119144	PP	350	B	157	673		FLINGER				
038	3	9	PC	109A2A7				318			SET SCR .25X.75				
039	2 3 Y	2	PC	62340062	PP	350	B	191	STL/RABBITT		BEARING LINING				
040	X	2	PC	25A13-C-322				STEEL			ROLL PIN				
042		12	PC	35A2C479				175			SCREW 1.00X2.50				
043		8	PC	112A2A90				318			SET SCR				
044	X	4	PC	13A13-C-110				STEEL			#9X3.00 TAPER PIN				
045		4	PC	38A4C5				175			NUT .50				
046	3 X	1	PC	30-5-13-B				673			KTIB-JJ(6X6)				
047	3	2	PC	225D308CX1				17			SEALING RING	+			
048	3 X	1	PC	300B28KX1				266			THRUST COLLAR	1			
049	3 X	1	PC	11A9-C-2125				669			KEY .38X.62				
050	1 2 3 X	1	PC	91A11-S-149-E-216				669			SHIM				
051	1 2 3 X	1	PC	91A11-S-149-H-216				669			SHIM				
052	1 2 3	1	PC	91A11-S-149-K-216				669			SHIM				
053	1 2 3	1	PC	91A11-S-149-L-216				669			SHIM				
054	1 2 3 Y	1	PC	62130448	PP	1.76X2.25 .06 THK	257	669			SHIM				
055	3 X	1	PC	175D128BX1				17			LOCK NUT				
056	3	3	PC	109A2A2				318			SET SCR .25X.31				

CUST. P.O. #708490.01-000016
I.R. ORD. #002-35778-00

U = DRAWING AVAILABILITY PT = PART TYPE PL = PATTERN LETTERS ECN NO. = ENGR CHANGE NOTICE ST = STATUS

IMPERIAL-KAND CO.
CAMERON DIVISION
PHILLIPSBURG PLANT

ENGINEERING DEPT. DATE: 1-1-67

BOILER FEEDPUMP PUMP ASSEMBLY

PARENT PART NO. LVL A REV D PT SIZE SYMBOL NOUN CODE PL MATL SPEC
62388418 UA Y AY 4X11-12 DA-B 500

REPORT NO. 02990
RUN 03 SEP 89
SHEET 4 OF 4

RELEASE
DATE

DRAWING NUMBER: <<MAIL SPEC><LIST #>

END CLASS D	NO. SPARE A	QUANTITY	UM	COMP	PT SIZE	SYMBOL CODE	NOUN CODE	PL	MATL SPEC	DESCRIPTION	IN-OUT ST	ECN NO.	REV LVL
057	1 2 3	1	PC	2810257HX1			669			SHIM			
058	1 2 3	1	PC	2810257HX2			669			SHIM			
059	1 2 3	1	PC	2810257HX3			669			SHIM			
060	1 2 3	1	PC	2810257HX4			669			SHIM			
061	1 2 3	1	PC	2810257HX5			669			SHIM			
062	X	1	PC	275B172JX3			204			SUPPORT HO			
063	Y	1	PC	62189550 PP .25X.50			029		AISI B1112	GROOVE PIN			
064		8	PC	35A2C221			175			SCREW .50X1.50			
065		4	PC	62A3C66			175			STUD .31X2.25			
066		4	PC	38A4C2			175			NUT .31			
067		1	PC	APLO75LJ33-1			ALUM			LOVEJOY CPLG			
068		1	PC	ASLO75LJ439-1			ALUM			COUPLING SPIDER			
069		1	PC	ADLO75LJ34-10			ALUM			LOVEJOY CPLG			
070	Y	1	PC	62059191 PP INF-D-1			TUTHILL 702			OIL PUMP/BRZ BUSH			
071	Y	2	PC	62009477 PP .50NPT			B19929GC 750		STEEL	AIR-MAZE BREATHER			
072		2	PC	30A7S7			STEEL			PLUG 1.00			
100	1 2 3	1	PC	251A11X1X2800X7300			G107			GASKET			

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CUSTOMER: FRU-CON CONSTRUCTION CORP.
CUST. P.O. #708490.01-000016
I.R. ORD. #002-35778-00

ENGINEERING PARTS LIST

BOILER FEEDPUMP ROTOR ASSEMBLY

INGERSOLL-RAND CO.
(CCMS)
CAMERON DIVISION
PHILLIPSBURG PLANT

PARENT REV D
PART NO. LVL A
62388285 UA Y
PT SIZE
AY 4X11-12 DA-B 184

-----DRAWING NUMBER----->>MATERIAL SPEC<<LIST #>

FND CLASS	D	QUANTITY	UM	COMP	PART NO.	PT SIZE	SYMBOL	NOUN	SYMBOL	NOUN	PL	MATL	SPEC	DESCRIPTION
NO.	SPARE	A					CODE	CODE	CODE	CODE				
001	Y	1	PC	62388293	MD	4X11	DA	003	A	831/655				IMPELLER
002	Y	1	PC	62388301	MD	4X11	DA	003	E	831/655				IMPELLER
003	Y	1	PC	62388319	MD	4X11	DA	003	E	831/655				IMPELLER
004	Y	1	PC	62388327	MD	4X11	DA	003	E	831/655				IMPELLER
005	Y	1	PC	62388335	MD	4X11	DA	003	E	831/655				IMPELLER
006	Y	1	PC	62388343	MD	4X11	DA	003	E	831/655				IMPELLER
007	Y	1	PC	62388350	MD	4X11	DA	003	D	831/655				IMPELLER
008	Y	1	PC	62388368	MD	4X11	DA	003	D	831/655				IMPELLER
009	Y	1	PC	62388376	MD	4X11	DA	003	D	831/655				IMPELLER
010	Y	1	PC	62388384	MD	4X11	DA	003	D	831/655				IMPELLER
011	Y	1	PC	62388392	MD	4X11	DA	003	D	831/655				IMPELLER
012	Y	1	PC	62388400	MD	4X11	DA	003	D	831/655				IMPELLER
015	C	1	PC	62346408	MP	4X11-12	DA	010	814					SHAFT
016		12	PC	11A9-G-81				20-CF						KEY .25X1.50
017	X	1	PC	11A9-S-91				20-CF						KEY .25X3.50
020	Z	10	PC	62274295	MP	624	D	006	655					CASING RING
021	Z	1	PC	62341490	MP	4X11	DA	408	655					CENTER SLEEVE
022	Z	1	PC	62332317	MP	3182-4240 S		440	655					THROTTLING SLEEVE
025	C	13	PC	62004684	MP	300	D	252	20					SPLIT RING

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