



ENGINEERING DIVISION

ITEM NO. 450-04-20588/589

CENTRIFUGAL PUMP DATA SHEET.

A.Z. NO. 80-701

JOB NO. 15-2-2

Process BDP
Unit Recovery Area (04)
Service Solvent Evaporator Feed
Pump Type: ☐ Horizontal ☐ Vertical
☒ Inline ☐ Turbine ☐ Sump
Pump Mfr. Goulds Pumps, Inc.

P. O. No. JSB Rev. No. 7 Date 12/5/80
Originator JSB Date 4-27-81
Revised By JSB Date 4-27-81
Size & Type 3996 MT 2x3-10 No. Req. 2

OPERATING CONDITIONS

Liquid Organic Solvent
123 GPM at 54.2 Ft. Hd. Differential
 GPM at Ft. Hd. Differential
NPSH 5.6 Ft. Available at 123 GPM
Shut Off. Ft. Head 63, P.T. % Opr. 168 Max.
Disch. Press, PSIA 40.3, Sp. Gr. at P.T. 0.68
Suct. Press, PSIA 24.3, Viscosity at P.T. CPS 0.25
Vapor Press. at P.T. PSIA 22.7

CONSTRUCTION

Case Split: Horizontal, X
Support: X
Vent: X, No. Size Drain: X, Size 3/8"
Mech. Seal Flush Tap: Size 3/8"

Nozzles	Size	Rating	Facing	Position
Suction	3"	150lbs	FF	Inline
Discharge	2"	150lbs	FF	Inline

Impeller Type Open
Diameter: Design 7 1/2" Max. 10"
Shaft Sleeve: Yes, No.
Coupling Type Falk Steelflex
Thrust/Bearing Lube: XXX, Greased for life
Seal Bypass Tap: Size 1/2"
Stuffing Box Drain: Size 1/2"
Flush Gland

MATERIALS

Case	Shaft Sleeve
Casing <u>316 SS</u>	<u>-</u>
Impeller <u>316 SS</u>	<u>-</u>
Shaft <u>316 SS</u>	Stuffing Box <u>316 SS</u>
Inner Case Parts <u>316 SS</u>	

SHAFT SEALING

Mechanical Seal Type Crane Type 8 x 5 1/2 (316 SS)
Rotating Face Material Carbon (Grade 51)
Stat. Face Material Tungsten Carbide
Other Wetted Parts Kalrez / 316SS
Packing Type - Size & No. Rings -
Lantern Ring Material - Lube
Stuffing Box Arrangements: Crane Type 24-SL
b) ☒ External Flush Conn. ☒ Throat Push.
☐ Suction Flush Loop. ☐ Cyclone Sep.
☐ Discharge Flush Loop ☐ Cooler

PERFORMANCE (By Vendor)

Proposal Curve No. CDS 2516
No. Stages 1 Design Eff. 57% BHP 2.0
For Design Impeller:
Max. BHP 2.51 Max. Head-Ft. 63
Max. Req'd. NPSH-Ft. Min. Continuous GPM
Rotation Facing Coupling End CW
Water Cooling: NO
Bearings GPM
Stuffing Box GPM
Gland GPM
Max. Allow WP PSIG at °C
Weights: Pump Base
Motor, XXXXX

Shop Tests

Shop Tests	Rec'd.	Witnessed
Running	No	
NPSH	No	
Hydrostatic. PSIG	C)	No
Imp. Dyn. Bal.	No	

DRIVER

MOTOR Purchased By Vendor
Item No. Mtd. By Vendor
HP * 7 1/2 RPM 1750
R and H Spec. No. 22-741
Control Button Mounted at Pump ☒ & Panel Board ☐
Guard for Drive - Std. No. 99-056
Motor to be high efficiency type.
* This horsepower is required for water runs.

TURBINE Purchased By
Item No. Mtd. By
HP RPM
Mfr. & Type
Inlet Steam, PSIG Temp F.
Exhaust
Steam Rate, FL LB/BHP/HR
Bearings Lube

Nozzles	Size	ASA Rating	Facing	Position
Inlet				
Exhaust				

* Motor Brake Horsepower Shall Not Exceed 90% of Nameplate Horsepower For Impeller Design At Any Point On The Curve.

REMARKS: b) Organic solvent flush will be used.
c) Hydrostatically test to manufacturer's standard.

GOULDS PUMPS, INC.

SENECA FALLS NEW YORK 13148

DUNS 222-51001

PAGE 1 OF 3
FACTORY ORDER 719868

INVOICE NO.

CUSTOMER'S P15-11049
ORDER NO. 11-24-80 TA G.P. ORDER 719868
AND DATE NUMBER

00040-9466
ROHM & HAAS BAYPORT, INC.
P.O. BOX 1330
BILL TO LA PORTE, TEXAS 77571

DESTINATION & ROUTING LATER

SHIP TO

P15-11049 ; REQ # E15-2-11049-1

MARK

VIA

☐ COLLECT ☒ PREPAY/ ADD

BRANCH ORDER NO. MAP-02898
DATE ORDER REC'D. IN ORDER DEPT. 2-2-81 DMC
DATE ENTERED 2-5-81

5-28-81 6-5-81
DATE SHIPPED

PART B/M TERRITORY

COMP. B/M

TERMS: NET 30 DAYS

ON ASSEMBLY

☒ F.O.B. SENECA FALLS, N.Y. #2 SHOP

ORDER RECEIVED FROM:

SHIP WITH H719831 719832-854
H719855-857 719858-861
H719862 & 863 719864-875
APPROX. SCHEDULED SHIPPING DATE 6-19-81
NO PARTIAL (IF CHECKED)

QTY. ORD.	P.O. ITEM NO.	EQUIP. NO.	SERVICE	SERIAL NO.	UNIT LIST PRICE	QTY. SHIPPED	TOTAL LIST PRICE	NET AMOUNT
2	450-04-20588/589		SOLVENT EVAPORATOR FEED	719C868-1-2				

MODEL NO.	SIZE	ROT.	CONST.				
3996MT	2X3-10	RH	316SS				
G.P.M.	T.N.H.	LIQUID		TEMP.	SP. GR.	EFF.	
123	54.2	ORGANIC SOLVENT		308F	.68	56	
IMPELLER	7 1/2	DIA. DRAWING	100-595	PATT.	54019	NPSHR	4
IMPELLER		DIA. DRAWING		PATT.		SUCT. PRESS	
MOTOR	H.P.	R.P.M.	PHASE	CYCLES	VOLT	FRAME	
RELIANCE	7 1/2	1750	3	60	230/460		
MOTOR ENCLOSURE				CWG	CODE		
TEFC/XE 1.15/F PER MTR SPEC							
MOTOR BY	WILL NOT COME HERE		DATA				
FACTORY	WILL COME HERE ☒ ON		M18171		ON FILE		

WITH FOLLOWING ADDITIONS, MODIFICATIONS AND/OR REQUIREMENTS.

1. FALK COUPLING
2. CPLG. GUARD
3. SHAFT SLEEVE LESS
4. STAINLESS SHAFT 316SS
5. MECHANICAL SEAL PG #2
6. 3/8" CASING DRAIN
7. FURNISH W/MONTHLY PROGRESS REPORTS
8. GREASE FOR LIFE ERGS
9. MOTOR SUPPORT

TESTS	WIT.	NON-WIT.
PERFORMANCE		
NPSH		
NOISE		
VIBRATION		
☒ HYDROSTATIC		

STANDARD ENGRG. DATA

INCLUDES: ☐ DIM PRINTS ☐ PRINTS
☐ COS (CURVES) ☐ REPRO
☐ SECTIONALS (TYPICAL)
☐ SEAL DWGS (IF APPLICABLE)
☐ MANUALS

QTY ☐ MOTOR PRINTS QTY ☐ BILLS OF MAT'L (APO'S)

ACKNOWLEDGMENT

We thank you for your order which we have entered exactly as shown. Please check specification and if incorrect notify us immediately using our factory order number from the upper right hand corner. Your order has been accepted subject to our verification of price and subject to the terms and conditions on back hereof.

GOULDS PUMPS, INC.
ENGINEERED PRODUCTS DIVISION
SENECA FALLS, N.Y. 13148

WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTIONS 6, 7, & 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED AND OF REGULATIONS AND ORDERS OF THE U.S. DEPT. OF LABOR ISSUED UNDER SEC. 14 THEREOF AND THE PRICES CHARGED ARE WITHIN APPLICABLE FEDERAL CEILING PRICE REGULATION AND ORDERS.

NO. OF INVOICES MAILING AND OTHER INSTRUCTIONS

DRIVER DATE HERE



FACTORY ORDER NO. 719868

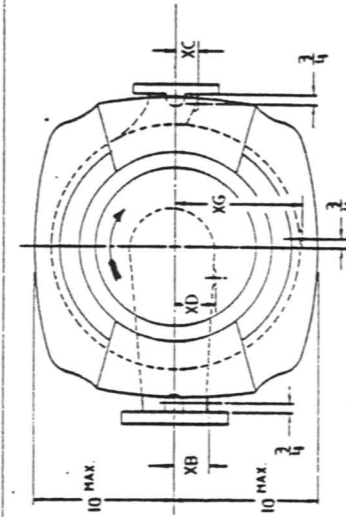
PAGE 2 OF 3

CUSTOMER'S NAME ROHM & HAAS

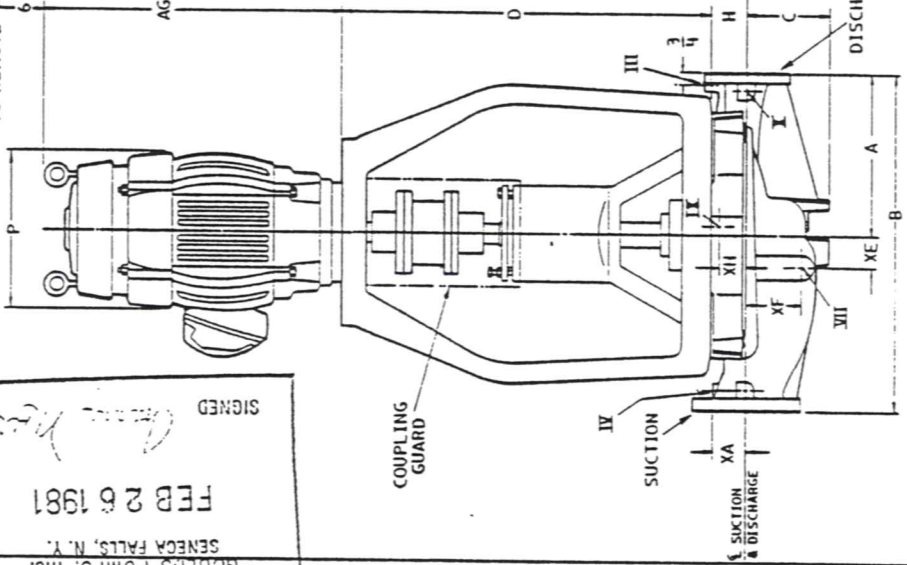
~~A-234-A-CM~~

DATA REQUIREMENTS SHEET

		Record Only	Approval Before Mfg.	Approval Before Shipping	Date Sent	Date Sent	MAILING ADDRESSES Quantity & Type
1	Dimension Print	1R+1				1	ROHM & HAAS
2	CDS Curve	1R+1					P.O. BOX 584
3	Sectionals (Typical)	1R+1					ENGR DIV.
4	Mech. Seal Dwg.	1R+1					BRISTOL, PA. 19007
5	Seal Piping Dwg.						ATTN: D. MEARS
6	Cooling Piping Dwg.					2	ROHM & HAAS BAYPORT
7	Instruction Manual ::	11					PURCH DEPT NORTH AM.
8	Tech. Manual (special)						P.O. BOX 716
9	Bill of Materials (RPO's)	1R+1					BRISTOL, PA. 19007
10	Motor Prints	1R+1					ATTN: DEL SUPPLEE
11	Motor Instruction Book	11				3	
12	Coupling Dwg.						
13	Coupling Instruction Book						
14	Noise level data (sound pressure)						
15	Chem. & Physical Analysis	1R+1	WHERE APPLICABLE				(SPECIAL INSTRUCTIONS)
16	Test Curve	1R+1	WHERE APPLICABLE				SEND A REPRO + MANUAL
17	Test Log	1R+1	WHERE APPLICABLE				TO ADDRESS #1
18	NPSH - Test Point						SEND COPIES TO ADDRESS #2
19	Hydro Test Report COMP	1R+1					
20	Vibration Test Report						
21	Noise Level Test Report						
22	Certificate of Compliance	1R+1					
23	Nozzle Loading						
24							
25	:: FURNISH INST. MANUALS FOR EACH MODEL OF PUMP						
26	(NOT EVERY FO#)						
27							
28							
29							
30							
31							
32							
33							
34							



MINIMUM HEADROOM REQUIRED
TO REMOVE MOTOR



Approved for Construction Purposes
GOULDS PUMPS, INC.
SENECA FALLS, N.Y.

FEB 26 1981

SIGNED

DIMENSIONS DETERMINED BY PUMP

DISCH SIZE	SUCT SIZE	CASING CLASS	A	B	C	H	XA	XB	XC	XD	XE	XF	XG	XH	XL	XM	WT
1-1/2	2	10	9-3/16	18-7/8	5-1/8	2-1/4	1-1/2	1-3/4	1-3/8	2-1/8	1-5/8	3	7-1/8	1-3/4	3-1/4	4-7/8	369
1-1/2	3	10	9-3/16	18-7/8	5	2-3/8	2-1/8	1-3/4	1-3/8	2-1/2	1-5/8	3-1/2	7-1/8	1-3/4	3-1/2	5	379
2	3	10	9-1/2	20	5-1/4	2-1/2	2	2-1/4	1-5/8	2-3/4	1-1/2	3-5/8	7-1/8	2	3-1/2	5	388
3	4	10	11-1/2	25	6	2-5/8	2-5/8	2-3/4	2-1/8	3-1/4	2-1/2	4-1/2	7-1/8	2-1/8	3-5/8	5-1/8	427
1-1/2	3	13	11-1/2	24	5-3/4	2-3/8	2-1/4	2-3/8	1-1/2	2-1/2	1-3/4	3-3/4	8-5/8	1-7/8	3-3/8	4-7/8	460
2	3	13	11-1/2	24	5-3/4	2-1/2	2-1/4	2-3/8	1-3/4	2-1/2	1-3/4	3-3/4	8-5/8	1-7/8	3-3/8	4-7/8	495
3	4	13	13	28	6-7/8	2-5/8	2-7/8	2-1/8	2-1/4	3-3/4	3	5	8-5/8	2-1/8	3-5/8	5-1/8	508
4	6	13	14	30	8-1/2	2-3/4	3-7/8	2-7/8	2-3/4	4-1/8	3-3/4	6-3/4	8-5/8	2-1/8	3-3/4	5-3/8	615

DIMENSIONS DETERMINED BY MOTOR

NEHA FRAME	D	10" CAS	13" CAS	AG	P	WT
143 TC	23-1/8			12	8	60
145 TC	23-1/8			13	8	65
182 TC	24-3/4	24-3/4	24-3/4	15	10	105
184 TC	24-3/4	24-3/4	24-3/4	16	10	105
213 TC	24-3/4	24-3/4	24-3/4	19	11	185
215 TC	24-3/4	24-3/4	24-3/4	19	11	185
254 TC	24-3/4	24-3/4	24-3/4	24	13	320
256 TC	24-3/4	24-3/4	24-3/4	24	13	320
284 TSC	24-3/4	24-3/4	24-3/4	24	15	350
286 TSC	24-3/4	24-3/4	24-3/4	25	15	440
324 TSC	26-3/4	26-3/4	26-3/4	27	17	540
326 TSC	26-3/4	26-3/4	26-3/4	28	17	600
364 TSC	26-3/4	26-3/4	26-3/4	30	19	834
365 TSC	26-3/4	26-3/4	26-3/4	31	19	910
404 TSC	26-3/4	26-3/4	26-3/4	33	22	1120
405 TSC	26-3/4	26-3/4	26-3/4	35	22	1235

FLANGE DIMENSIONS

I.D.	O.D.	B.C.	THK.	NO. & SIZE OF HOLES
1-1/2	5	3-7/8	11/16	4-5/8
2	6	4-3/4	3/4	4-3/4
3	7-1/2	6	15/16	4-3/4
4	9	7-1/2	15/16	8-3/4
6	11	9-1/2	1	8-7/8
1-1/2	6-1/8	4-1/2	13/16	4-7/8
2	6-1/2	5	7/8	8-3/4
3	8-1/4	6-5/8	1-1/8	8-7/8
4	10	7-7/8	1-1/4	8-7/8
6	12-1/2	10-5/8	1-7/16	12-7/8

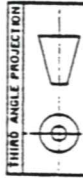
OPTIONS FURNISHED WHEN CHECKED

STUFFING BOX COVER	STANDARD	JACKETED
PACKING WITH QUENCH GLAND	☐	☐
MECHANICAL SEAL WITH FLUSH GLAND	☒	☐
MECHANICAL SEAL WITH VENT AND DRAIN	☐	☐
MECHANICAL SEAL WITH PLAIN GLAND	☐	☐
COUPLING GUARD	☒ BY GOULDS	☐ BY OTHERS

TAPPED OPENINGS

NO	SIZE	QTY	PURPOSE	FURNISHED YES	NO
I	3/8	1	LANTERN RING OR MECH. SEAL FLUSH	X	
II	3/8	2	STUFFING BOX JACKET CONNECTIONS	X	
III	3/8	1	DISCHARGE GAGE CONNECTION	X	
IV	3/8	1	SUCTION GAGE CONNECTION	X	
V	1/4	2	QUENCH CONN. FOR PACKED BOX	X	
VI	1/2	2	VENT AND DRAIN FOR MECH. SEAL	X	
VII	1/2	1	CASING DRAIN	X	
VIII	1/2	1	FLUSH CONN. FOR MECH. SEAL	X	
IX	1/2	1	STUFFING BOX DRAIN	X	
X	1/2	1	SEAL BYPASS CONNECTION	X	

MOTORS MAY BE SUPPLIED WITH "V" DESIGNATION. THIS DESIGNATION DOES NOT AFFECT DIMENSIONS OR MOUNTING.



GOULDS PUMPS, INC., SENECA FALLS, N.Y., U.S.A.

GOULDS SERIAL NO.: 719C868-1-2

CUSTOMER: ROHM & HAAS-BAYPORT, INC.

CUSTOMER P.O. NO.: P15-11049

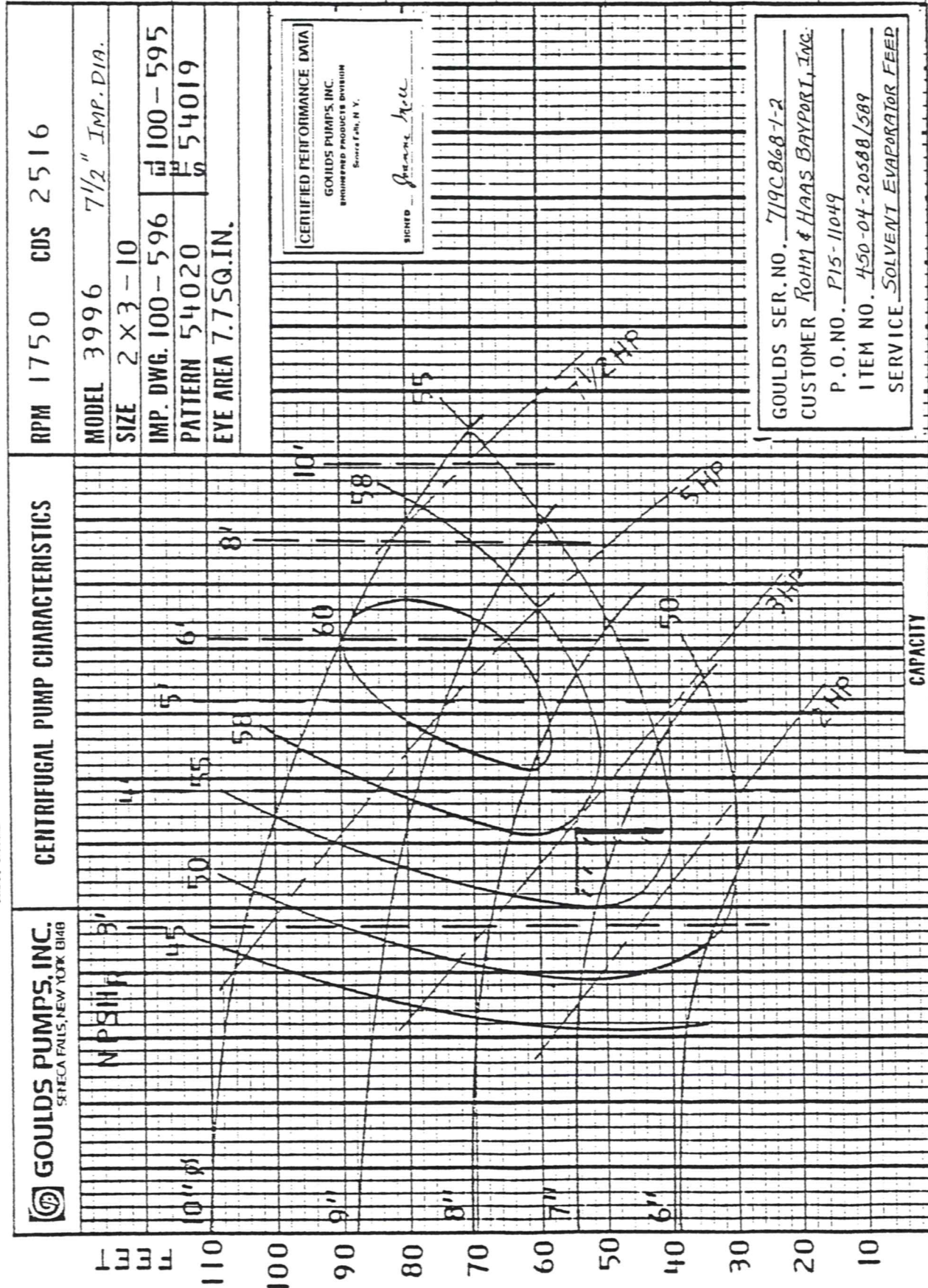
ITEM NO.: 450-04-20588/589

SERVICE: SOLVENT EVAPORATOR FEED

NOTES:
DRAWING IS NOT TO SCALE.
ALL DIMENSIONS ARE IN INCHES.
WEIGHTS ARE APPROXIMATE.

DATE 3-15-77

REV. DATE



0 10 20 30 40 50 60 280 GPM m³/h

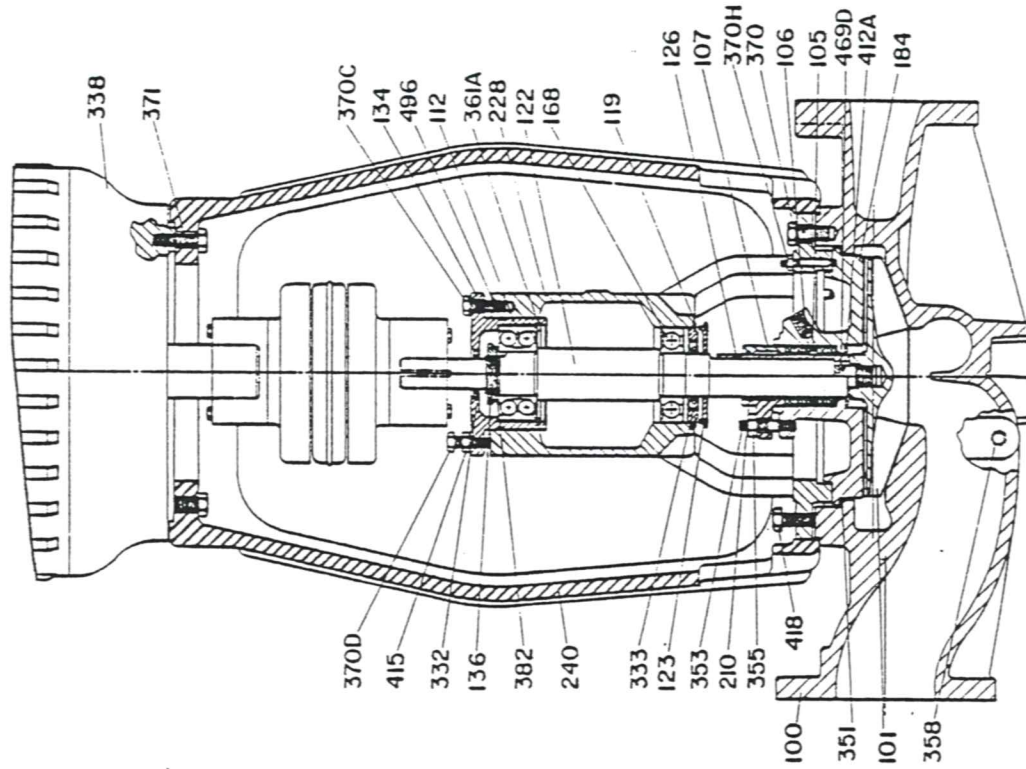
BILL OF MATERIAL

ITEM NO	QTY PER PUMP	PART NAME	MATERIAL
100	1	CASING	316 SS
101	1	IMPELLER	316 SS
105	1	LANTERN RING	GL/FLD TEFLON
106	1	STUFFING BOX PACKING	ASBESTOS
107	1	GLAND O-RING	316 SS
112	1	BALL BEARING - OTBD	STEEL
119	1	BEARING END COVER - INBD	STEEL
122	1	SHAFT	316 SS
123	1	DEFLECTOR	GL/FLD NYLON
126	1	SHAFT SLEEVE	CI
134	1	BEARING HOUSING	STEEL
136	1	BEARING LOCKNUT	STEEL
168	1	BALL BEARING - INBD	316 SS
184	1	STUFFING BOX COVER	CI
228	1	FRAME	CI
240	1	MOTOR SUPPORT	CI
332	1	GREASE SEAL	STEEL
333	1	GREASE SEAL	STEEL
338	1	MOTOR	ASBESTOS
351	1	CASING GASKET	304 SS
353	2	GLAND STUD	316 SS
355	2	HEX NUT - GLAND STUD	316 SS
358	1	PLUG - DRAIN	STEEL
361A	1	RING RING - BRG HSG	304 SS
370	8	H CAP SCREW - CASE	STEEL
370C	6	H TAP BOLT - BRG HSG	STEEL
370D	3	H TAP BOLT - IMP ADJ	STEEL
370H	2	STUD COVER - ADPTR	304 SS
371	4	H CAP SCREW - MOTOR TO SPT	STEEL
382	1	BEARING LOCKWASHER	STEEL
412A	1	O-RING IMPELLER	TEFLON
415	3	JAM NUT - BRG HSG	STEEL
418	2	H CAP SCREW - FR JACK	STEEL
469D	1	ROLL PIN - SLEEVE	420 SS
496	1	O-RING BRG HSG	BUNA-N

NOTE: IF UNIT IS FURNISHED WITH MECHANICAL SEAL, DELETE ITEMS 105, 106, 107, & 210 AND REFER TO SEAL DRAWING NO. 3P-CF-457D-1

ATTACHED

TO FOLLOW



GOULDS PUMPS, INC.
ENGINEERED PRODUCTS DIVISION
SENECA FALLS NEW YORK 13148

SECTIONAL ASSEMBLY

GRSE FOR LIFE

MODEL 3996 MT

GOULDS SERIAL NO. 719C868-1-2
CUSTOMER ROHM & HAAS BAYPORT, INC.
CUSTOMER P.O. NO. P15-11049
EQUIP-OR ITEM NO. 450-04-205881589
SERVICE SOLVENT EVAPORATOR FEED

DRAWN BY VAN

CD. BY VAJ

DATE 9-15-78

SCALE NONE

DRAWING

MODEL

3996 MT

SA996MGL

REV

2

DWG. No. SP-CF-45706-1		REV		PRINT IS PROPERTY OF CRANE PACKING CO. SUBJECT TO RETURN UPON DEMAND TITLE TO SAME NEVER SOLD OR TRANSFERRED FOR ANY REASON ALL RIGHTS TO INVENTION RESERVED		STD APP DR APP <i>[Signature]</i> RE CH P. KING 3-11-81 APP J. E. E. 2/27/81 DATE 2/27/81 SCALE NONE		TYPE-81T 1.750 D. SHAFT SEAL FOR MODEL 3196 "MT" GOULDS PUMPS INC. SENECA FALLS, N.Y.	
CRANE PACKING COMPANY 6400 W. OAKTON ST. MORTON GROVE, ILL.						FOR DIMENSIONAL DWG SEE # CF-SP-45706			

ITEM	* PART NUMBER	MATL CODE	PART NAME	QUAN TITY	MATERIAL	REL. SPARE PARTS
1	D 1751 868	9200	MATING RING	1	TUNG. CARB.	X
2	0000	228 3765	O-RING	1	KALREZ	X
3	A89 1750 023	9051	PRIMARY RING	1	CARBON	X
4	0000	224 3765	O-RING	1	KALREZ	X
5	A9T 1750 057	0550	RETAINER	1	316 SS	
6	2047		SPRING	8	316 SS	X
7	A9T 1750 059	0550	DISC	1	316 SS	
8	A9 1625 158	0550	SNAP RING	1	316 SS	
9	1/4-20x1/4 LG 1125-2004-000	0550	SET SCREW	4	316 SS	X
10	A24 1750 019	7510	PRIM. SEAL RG	1	G. F. CHEMLOY	
11	A24 1750 065	0550	RETAINER	1	316 SS	
12	3035		SPRING	4	316 SS	X
13	10-24x1/4 LG. 1110-2404-000	0550	SET SCREW	1	316 SS	X
14	BY CUST.		GASKET		ASBESTOS	
15	BY CUST.		SLEEVE			
16	BY CUST.		GLAND PLATE		316 SS	

SEAL ASSY No. A8T-1750-144 BUSH. ASSY A24-1750-63 MATING RING ASSY No.		* PART OF ASSEMBLY * SPECIAL PART CODE X 5 F 101(316) VI-1	
OPERATING CONDITIONS: LIQUID: ORGANIC SOLVENT SP. GR: .68 TEMP: 308 °F PRESS. SUCT.: SPEED: 1750 R.P.M. PRESS. DISCH.:		UNIT REF: CUST. P.O. # F04369/MS27316 A.O. # P16-11049 PROJ. # ROHM & HAAS, BRISTOL, PA. ITEM # 450-04-20588/589 EQUIP. # PUMP SERIAL # 719C868-1-2 PUMP MODEL 3996 "MT" PUMP STUFFING BOX # SHOP ORDER # 719868 B/P REF.: DWG. # CF-SP-37428 REV. A, DTD. 3/17/73 BY C.P.CO.	

DWG. No. SP-CF-45706-1

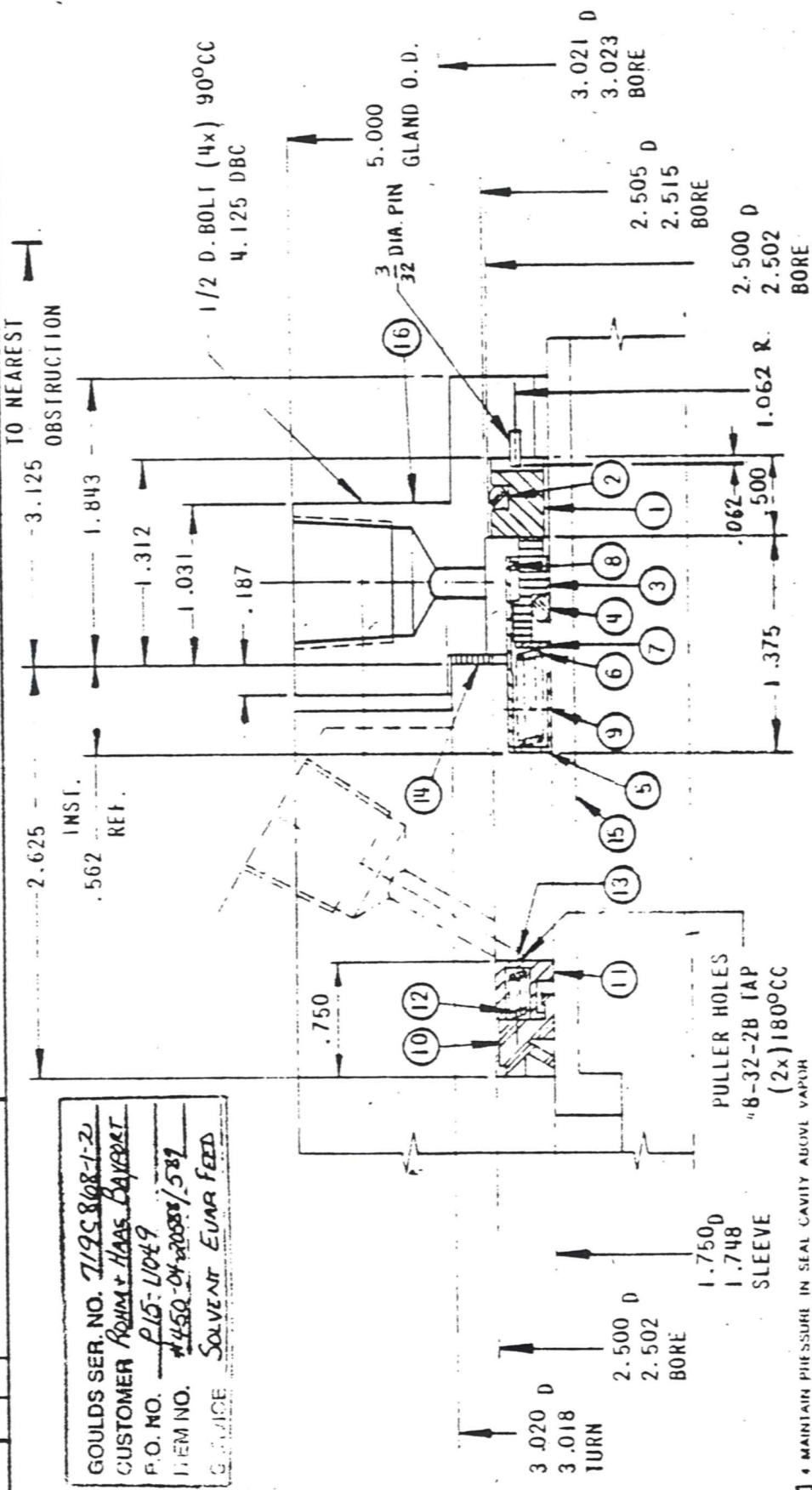
DWG No		CF-SP-45706	
RE		TYPE-811 1.750 D. SHAFT SEAL FOR MODEL 3196 "MJ" GOULDS PUMPS, INC. SENECA FALLS, N.Y.	
FOR HILL OR MIL SEE #		SP-CF-45706	
SCALE		1:1	
DATE		3-10-88	
APPROVED		P. KING 3/11/81	
RE		1.750 D. SHAFT SEAL	
FOR HILL OR MIL SEE #		SP-CF-45706	

PRINT IS PROPERTY OF CRANE PACKING CO. SUBJECT TO RETURN UPON DEMAND TITLE TO SAME IN FULL OR TRANSFERRED FOR ANY REASON. ALL RIGHTS TO INVENTION RESERVED

CRANE PACKING COMPANY
6400 W OAKTON ST
MORTON GROVE, ILL

John J. Crane

GOULDS SER. NO. 7195868-1-2
CUSTOMER *ROHM & HAAS, DAYTON*
P.O. NO. *PLS-1049*
ITEM NO. *4450-04-20000/581*
SERVICE *SOLVENT EVAP FEED*



- ☒ 1 MAINTAIN PRESSURE IN SEAL CAVITY ABOVE VAPOR POINT DURING OPERATION
- ☒ 2 BEFORE INSTALLING SEAL LUBRICATE ITEM # 284
- ☒ 3 VENT GAS ENTRAPMENT BEFORE STARTUP
- ☒ 4 CLEAN SEAL FACES BEFORE FINAL ASSEMBLY
- ☐ 5 CIRCULATE SUITABLE LIQUID INLET AT BOTTOM OUTLET AT TOP LAY
- ☐ 6 GLAND MUST BE IN CONTACT WITH SEALING DO NOT OVERSTRESS

IMPORTANT NOTES: ☒ IF REQUIRED

DWG. No. CF-SP-45706

RELIANCE

ELECTRIC COMPANY

MOTOR DIVISION, CLEVELAND, OHIO 44117, U.S.A.

DATA TRANSMITTAL AND CERTIFICATION

CUSTOMER ORDER NO. M18171		DATE 02/12/81		REQ. NO. S.O. NO. 3YE816745		REFER TO THIS NUMBER IN ALL CORRESPONDENCE	
SOLD TO:	GOULDS-ENG PRODUCTS DIV 240 FALL SENECA FALLS N Y 13148			DATA PROVIDED WITH THIS TRANSMITTAL AND CERTIFICATION IS: ☐ FOR CUSTOMER APPROVAL BY DATE: _____ Return of approval prints by the above date is required to assure scheduled shipment, delay in return and/or revision of approval prints may require shipment reschedule. Return approved D/S to data source. ☒ FINAL, APPROVED FOR CONSTRUCTION OR INSTALLATION. ☐ PRELIMINARY, ENGINEERING IS COMPLETED. ☐ REVISED, SUPERSEDES DATA PREVIOUSLY ISSUED. ☐ SEE REMARKS.			
	SAME AS "SOLD TO" UNLESS SHOWN						
SHIP TO:	GOULDS PUMPS INC 240 FALL ST SENECA FALLS, N.Y.						
DATA SOURCE	TRANSMITTAL AND CERTIFICATION ISSUED BY: <u>E. J. Quinn</u> DATE <u>APR 29 '81</u> CK BY <u>G. R. Kilborn</u> DATE <u>APR 29 '81</u> ASHTABULA PLANT 4200 BENEFIT ROAD ASHTABULA, OHIO 44004			DATE PRINTED: 03/25/81			
MOTOR OR GEN. DATA	ITEM	USED FOR			USERS PLANT		MOTOR OR GEN. D/S:
	3-3	CENTR. PUMP					602531-924
	QTY.	FRAME	7.50	HP	SERV. FA	TYPE	R.P.M.
	2	213TC			1.15	P8	1760
	PH/HZ/VOLTS-WINDING	DUTY	ENCLOSURE	AMB./INSL.	PWR. CODE	MOTOR OR GEN. C/D:	
SEE BELOW	CONT	TEFC-XT	40 F				
BEARINGS	MOUNTING & METHOD OF DRIVE		RAILS OR BASE	MODEL NUMBER		REDUCER OR AUX. D/S:	
BALL	W-6 /CPLD						
ROTAT FROM OPP. DR. END	D-C FIELD EXCITATION		DOUBLE SHAFT EXTEN.		BRAKE OR AUX. D/S:		
CW							
REDUCER STYLE	CLASS	FRAME	RATIO	OUTPUT RPM	ASSEMBLY	BLOWER MOTOR PH/HZ/VOLTS/HP	
BRAKE DATA	BRAKE TYPE	SIZE	RATING	DUTY	P.O.		
			FT/LB				
DATA FOR CONTROL	D-C MOTOR ARMATURE CURRENT: _____ AMPS				A-C MOTOR INFORMATION FOR SELECTION OF STARTER HEATERS:		
	FIELD CHARACTERISTICS PER CURVE:				CODE: <u>H</u> LOCKED AMPS: _____		
	F ₁ -F ₂	MAX. AMPS		RPM	F.L. CURRENT: <u>18/9</u> AMPS.		
	F ₁₁ -F ₂₂	MAX. AMPS		RPM			
	F ₃ -F ₄	MAX. AMPS		RPM			
SPCL. INSTALLATION FEAT. AND MISC. DATA	ADDITIONAL MOTOR OR GEN DATA:						
	PHASE: 3 HERTZ: 60 VOLTS: 230/ 460						
	LD LOC - STD						
	FR CONST RB						
	SPECIAL MARKS: 719868						
SPECIAL FEATURES: "ENERGY EFFICIENT" XE 90 C-RISE AT 1.15 S.F. WITH DRIP CVR NORMAL THRUST NEMA NOM. EFF. 90.2							
CERTIFIED DRAWINGS & DATA:							
DATE:		MOD. NO:		1 CERT D/S TO CUST ✓			
DATE:		MOD. NO:		ATTN: JOANNE MOLL			
DATE:		MOD. NO:		1 CC OF ALL PAPERWORK to 24201			

GOULDS SER. NO. 719868-1-2
 CUSTOMER ROHM & HAAS CORPORATION
 P.O. NO. DIS-11049
 ITEM NO. 450-04-20588/589
 SERVICE SOLVENT EVAPORATOR FEED

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

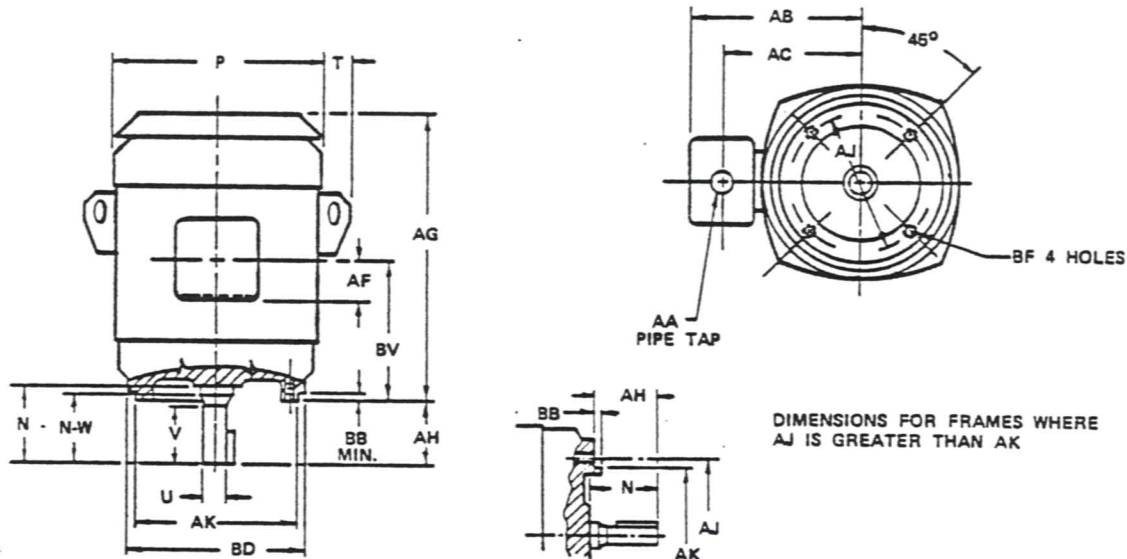
ENCLOSURE: TOTALLY ENCLOSED

COOLING: FAN COOLED

MOUNTING: FOOTLESS, NEMA "C" FACE
VERTICAL SHAFT DOWN

CONSTRUCTION: CAST IRON

FRAMES 180TC THRU 210TC



DIMENSIONS FOR FRAMES WHERE
AJ IS GREATER THAN AK

DIMENSIONS ARE IN INCHES. SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

FRAME SIZE	AG		BV		AH	N	N-W	P	T	UCD	V	AJ	AK	BB	BD	CONDUIT BOX				BF	TAP DEPTH (MIN)	B.E. SQ	KEY LGTH	WT. LBS
	STD	LGTH	STD	LGTH												AA	AB	AC	AF					
182TC-L182TC	14.81	16.31	5.88	6.62	2.62	2.94	2.75	9.50	1.44	1.1250	2.50	7.25	8.500	.25	9.00	1/4	7.25	5.75	1.94	1/2-13	.75	.250	1.75	70
184TC-L184TC	15.81	17.31	6.38	7.12	2.62	2.94	2.75	9.50	1.44	1.1250	2.50	7.25	8.500	.25	9.00	1/4	7.25	5.75	1.94	1/2-13	.75	.250	1.75	89
213TC	18.31	—	7.25	—	3.12	3.56	3.38	10.50	1.44	1.3750	3.12	7.25	8.500	.25	9.00	1	9.12	7.12	2.50	1/2-13	.75	.312	2.38	120
215TC-L215TC	20.56	21.44	8.00	8.44	3.12	3.56	3.38	10.50	1.44	1.3750	3.12	7.25	8.500	.25	9.00	1	9.12	7.12	2.50	1/2-13	.75	.312	2.38	141

- (1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.
 (2) "U" VARIES +.0000, -.0008.
 (3) "AK" VARIES +.000, -.003.
 FACE RUNOUT AND ECCENTRICITY .004 MAX. T.I.R.
 IF MOUNTING CLEARANCE DETAILS ARE REQUIRED,
 CONSULT FACTORY.
 (4) FRAMES PREFIXED BY "L"

GOULDS SER. NO. 7190868-1-2
 CUSTOMER RAHM & HAAS BAYPORT, INC.
 P.O. NO. P15-11049
 ITEM NO. 450-04-20588/589
 SERVICE SOLVENT EVAPORATOR FEED.

FRAME-_____TYPE-_____CERTIFIED FOR-_____
 ORDER-_____ITEM-_____HP-_____RPM-_____PH-_____HZ-_____VOLTS-_____
 RELIANCE SALES ORDER-_____APPROVED BY-_____DATE-_____

**RELIANCE
ELECTRIC**
 CLEVELAND, OHIO 44117 U.S.A.

DR. BY R.L. BROWN
 CK. BY R.L. Brown
 APP. BY R.L. Brown
 DATE 4-22-77

**DIMENSION
SHEET**
 SHEET 1 OF 2

602531-924
 ISSUE DATE SEPTEMBER 25, 1979