

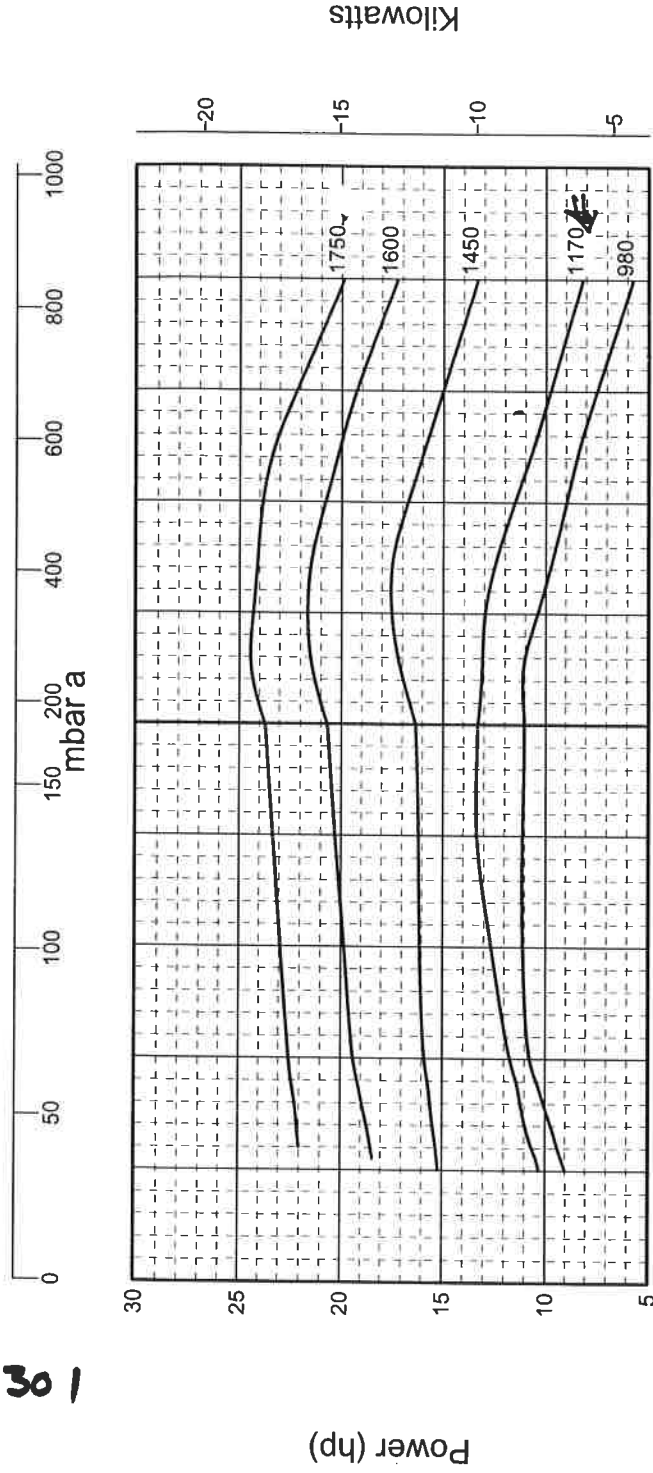
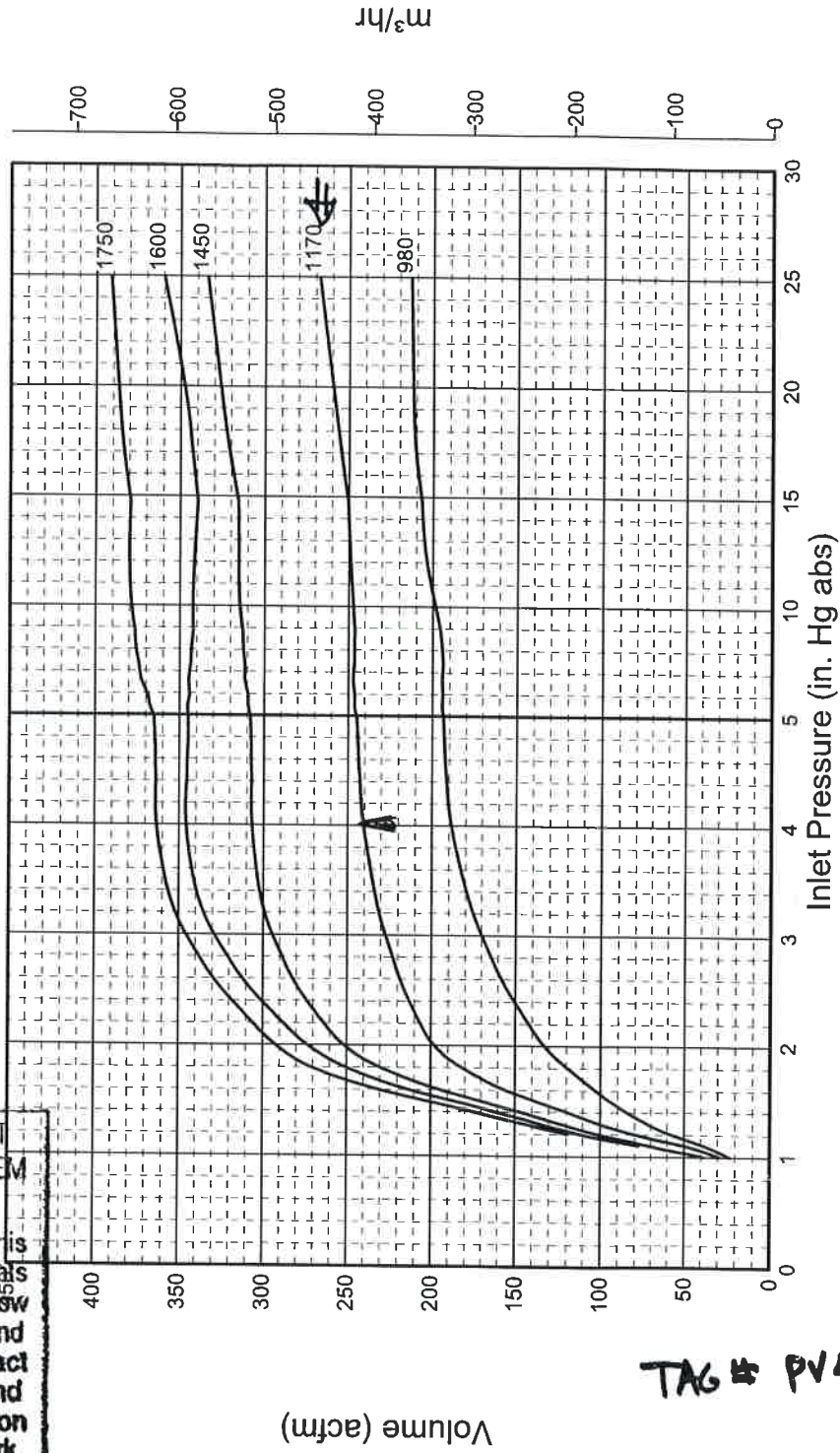
CENTRAL Illinois Energy

PV-4301

NASH
A Gardner Denver Product

Spectra XL/ GL 60 Vacuum Pump

Performance Data



TAG # PV4301

FURNISH AS-SUBMITTED REVISE AND RESUBMIT
 REJECTED SUBMIT SPECIFIED ITEM
 FURNISH AS CORRECTED

Corrections or comments made on the shop drawings during this review do not relieve supplier from compliance with requirements of the drawings and specifications. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents. The supplier is responsible for: Confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

Lurgi INC.
MEMPHIS, TN

Date 3/21/07 By W. Schlenker

1. Performance curves are based on operating conditions with saturated air at a temperature of 68° F (20° C), operating water at a temperature of 60° F (15° C) and a discharge pressure of 29.92 in. HgA (1013 mbar).
2. Tolerance to HEI/Pneurop standards.
3. Operating conditions other than stated above may result in different capacities or power. Please contact the home office for details.
4. Reference Curve No. EN1385-001 rev B

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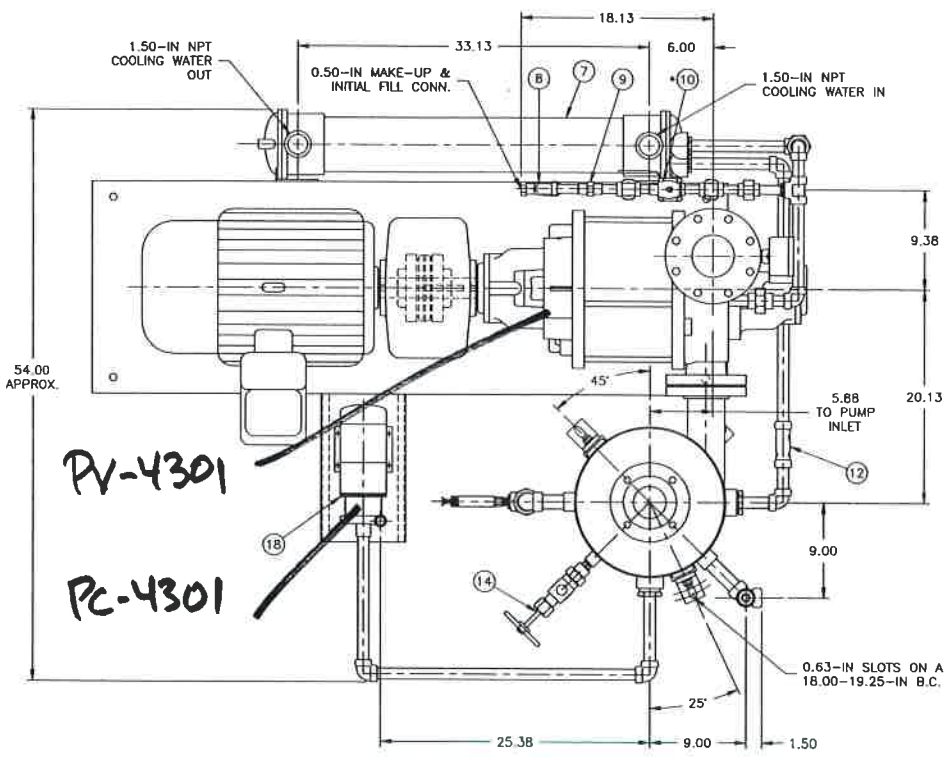
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06018
 CIE: ETHANOL
 Canton, Illinois
RECEIVED MAR 12 2007
 File: 17.1PV4301
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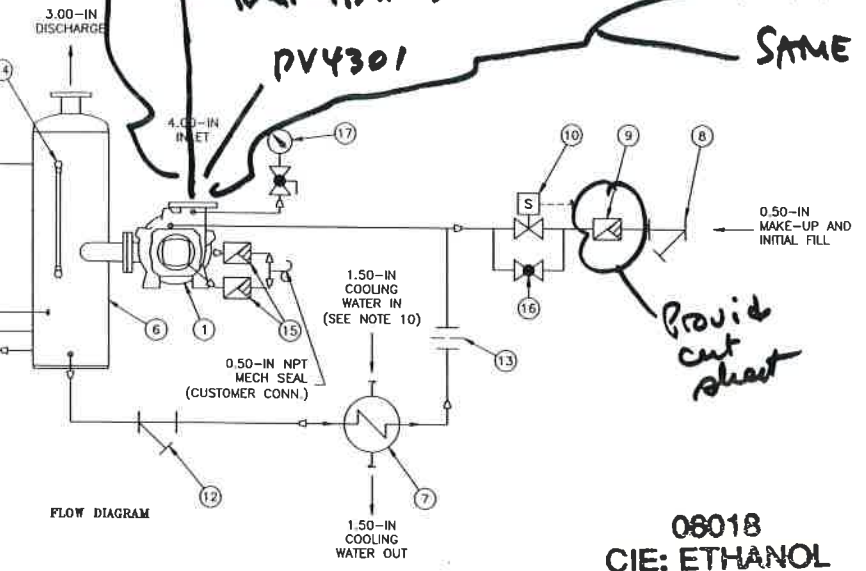
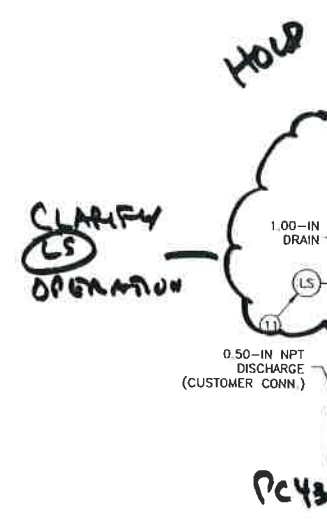
FIELD FILE

Lurgi INC.
MEMPHIS, TN

DWG. NO.	D-804305	SH	1	REV.	A
REVISIONS					
ZONE	REV	DESCRIPTION	DATE	APPROVED	
	A	ORIGINAL	02/07/07	HS	



PV-4301
PC-4301



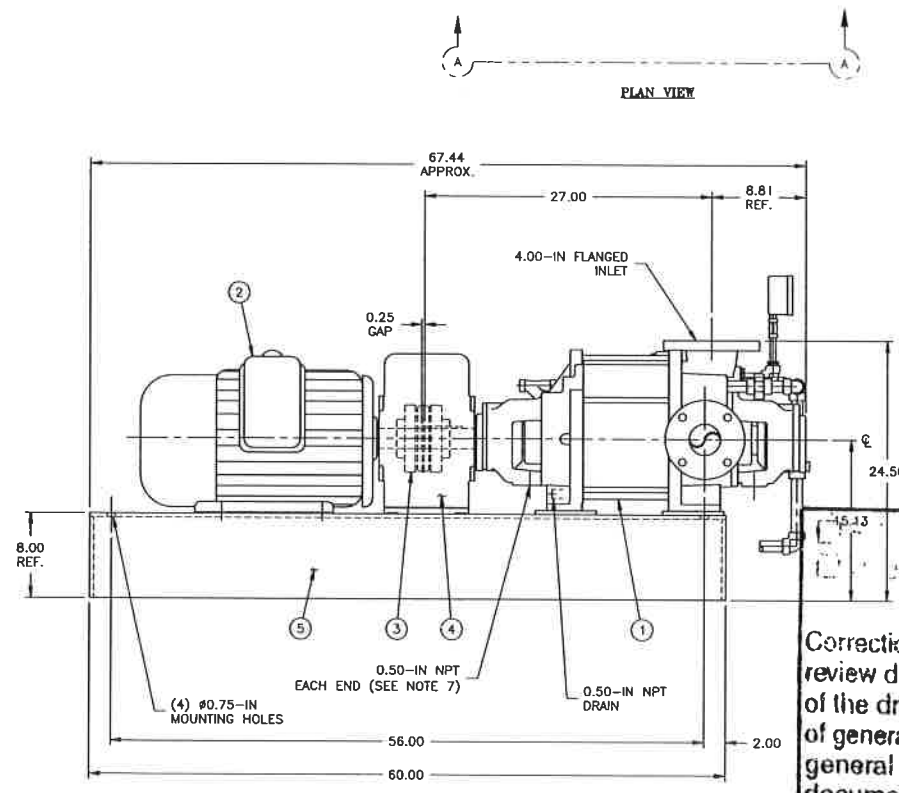
BILL OF MATERIALS

KEY NO	ITEM
1.)	VACUUM PUMP
2.)	MOTOR
3.)	COUPLING
4.)	COUPLING GUARD
5.)	BASE
6.)	SEPARATOR
7.)	HEAT EXCHANGER
8.)	STRAINER (MAKE-UP)
9.)	FLOW CONTROL VALVE (MAKE-UP)
10.)	SOLENOID VALVE (MAKE-UP)
11.)	LEVEL SWITCH (MAKE-UP)
12.)	STRAINER (RECIRC. LINE)
13.)	ORIFICE UNION (RECIRC. LINE)
14.)	GAUGE GLASS
15.)	FLOW CONTROL VALVE (MECH. SEAL)
16.)	BALL VALVE-SOLENOID BY-PASS
17.)	VACUUM GAUGE W/ADJ-COCK
18.)	CENTRIFUGAL PUMP

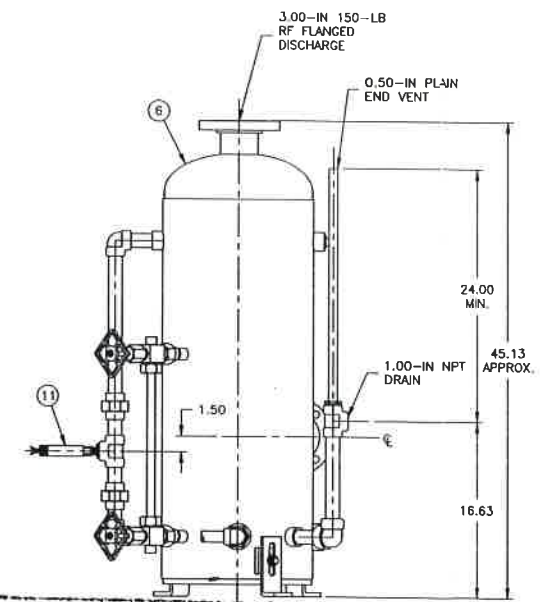
08018
CIE: ETHANOL
Canton, Illinois
RECEIVED MAR 2 2007

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PC-4301
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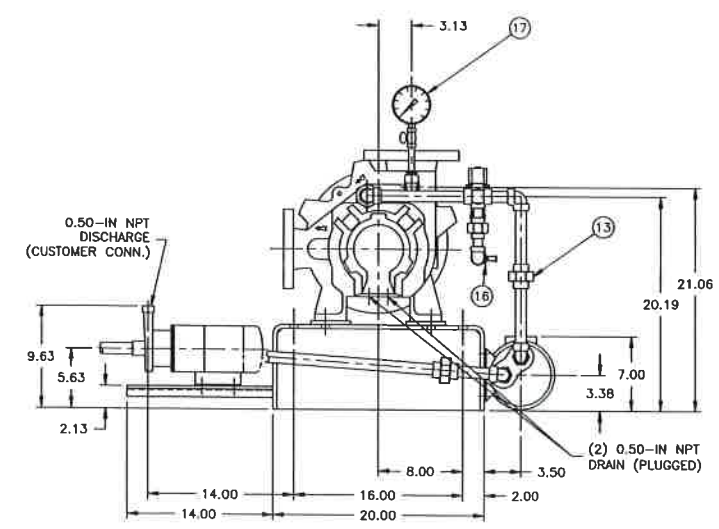
- NOTES:**
- REFER TO ENGINEERING DATA SHEET FOR CERTIFICATION AND ITEMS SPECIFICALLY FURNISHED FOR THIS ORDER.
 - STAINLESS STEEL TEMPORARY SCREEN FOR PUMP INLET WILL BE SUPPLIED BY GARDNER DENVER NASH LLC. FOR PROTECTION FROM FOREIGN MATERIAL DURING START UP PERIOD. TWO SCREENS (0.25-IN & NO. 30 MESH) WILL BE SUPPLIED WITH STAINLESS STEEL PUMPS. THE NO. 30 MESH SCREEN SHOULD BE INSTALLED ON THE UPSTREAM SIDE OF THE 0.25-IN MESH SCREEN.
 - FOUNDATION BOLTS ARE NOT FURNISHED.
 - IRON PUMP FLANGES ARE FLAT FACE. ST. ST'L PUMP FLANGES ARE RAISED FACE. FLANGES CONFORM TO ANSI CLASS 125/150 BOLT PATTERNS. BOLT HOLES STRADDLE CENTERLINES.
 - PUMP PIPE THREAD CONNECTIONS ARE ANSI B1.20.1.
 - FOR INSTALLATION AND OPERATION SEE INSTRUCTION BULLETINS. FINAL ALIGNMENT OF COUPLING TO BE DONE AT JOBSITE.
 - STUFFING BOX DRIP TRAY DRAIN CONNECTION FOR PUMPS WITH PACKING, PIPE AWAY TO DRAIN.
 - SOLIDLY GROUND UNIT. DO NOT USE PIPING SYSTEM FOR GROUND.
 - INLET PIPING IS NOT FURNISHED WITH THE STANDARD PACKAGE. A TEE IS FURNISHED WHEN ITEM 51 IS ORDERED. ITEMS 50 AND 53 WILL SHIP LOOSE UNLESS ITEM 51 IS ORDERED.
 - HEAT EXCHANGER COOLING WATER REQUIREMENTS: 19 GPM MAX.
 - MECHANICAL SEALS ARE SUPPLIED WITH STAINLESS STEEL VACUUM PUMPS. MECHANICAL SEALS REQUIRE 0.5 GPM/PER SEAL EXTERNAL FLUSH.



ELEVATION VIEW
SEPARATOR REMOVED FOR CLARITY



END VIEW
SEPARATOR REMOVED FOR CLARITY
VIEWED AT THIS END DIRECTION
OF ROTATION IS COUNTER-CLOCKWISE



UNLESS OTHERWISE NOTED -
 FURNISH AS CORRECTED
 SUBMIT SPECIFIC
 REUSE AND RESUBMIT
 REJECT

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Lurgi INC.
MEMPHIS, TN
Date: 3/21/07
By: Wm. Schlenker

FIELD FILE

PROJECT# 152429
SALES# 152317

THIS DRAWING CONTAINS PROPRIETARY INFORMATION OF GARDNER DENVER NASH LLC. PERMISSION IS HEREBY GIVEN TO ANY GARDNER DENVER NASH CUSTOMER TO USE AND REPRODUCE THE INFORMATION CONTAINED HEREIN IN CONNECTION WITH THE CUSTOMER'S USE OF ANY GARDNER DENVER NASH PRODUCT. NO OTHER USE MAY BE MADE OF THIS INFORMATION WITHOUT WRITTEN PERMISSION FROM GARDNER DENVER NASH LLC.				DWN	JAL	DATE	02/07/07
- UNLESS OTHERWISE NOTED -				CHKR	HS	DATE	02/07/07
DIMENSIONAL UNITS ARE: INCHES $\frac{mm}{in}$				APVD DSGN	HS	DATE	02/07/07
- TOLERANCES -				APVD ENGR	HS	DATE	02/07/07
GENERAL	MOUNTING HOLE LOCATIONS	PIPE CONNECTION LOCATIONS < 2-IN NPS	> 2-IN NPS	APVD QA		SIZE	FSCM NO.
± 0.13 [3.2]	± 0.06 [1.6]	± 0.25 [6.4]	± 0.50 [12.7]			D	42280
PROJECTION				SCALE	NTS	DWG. NO.	D-804305
						REV	A
						SHEET	1 OF 1

NASH Gardner Denver Nash LLC
VECTRA XL-60 VAC. PUMP
RECIRC. SEAL, DIRECT DRIVE
316 STAINLESS STEEL

Bulletin No. 986-A

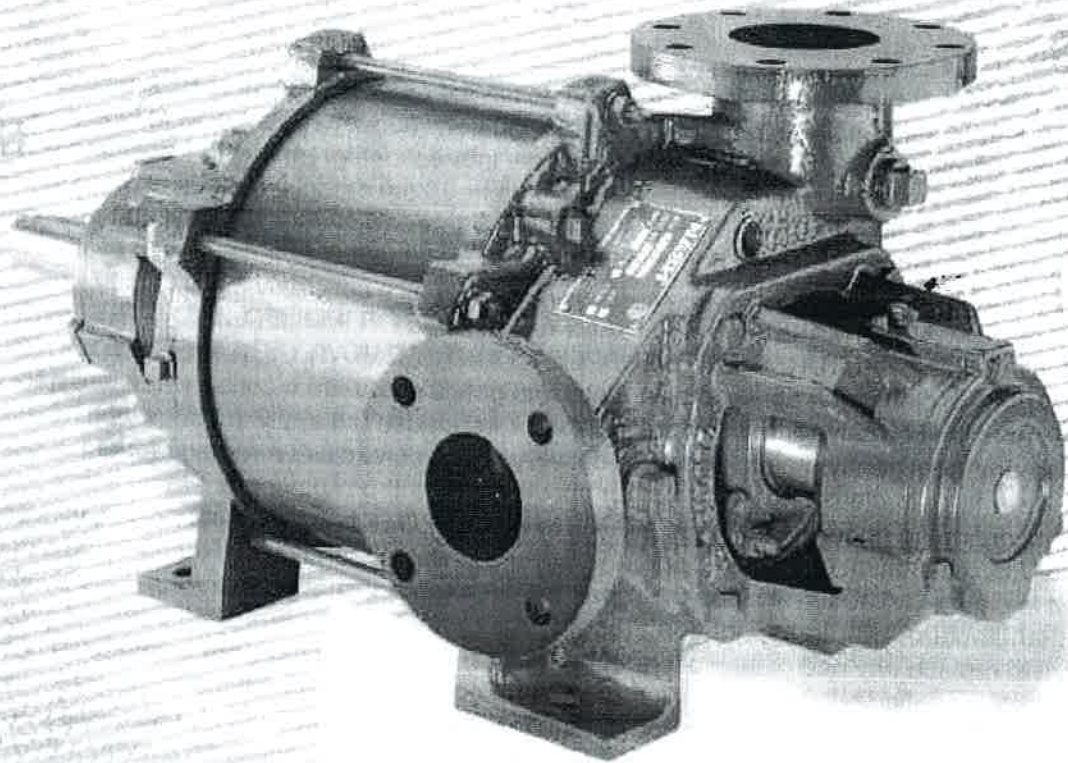


06018
CIE: ETHANOL
Canton, Illinois
06.07.07
File: 17.1PV4301
PV4201, PV4205
0180037 012

Operation & Maintenance

VECTRA™ XL

Vacuum Pumps and Compressors



FIELD FILE

