

- A - Atmosphere
- FS - Flow Switch
- FO - Flow Open
- FC - Flow Closed
- H - Heater
- LC - Level Control
- LI - Liquid Level Indicator
- LS - Level Switch
- MI - Moisture Indicator
- NO - Normally Open
- NC - Normally Closed
- PC - Pressure Control
- PE - Pneumatic Pressure Switch
- PI - Pressure Indicator
- PIC - Pressure Indicating Controller
- PLS - Process Liquid Supply
- PLR - Process Liquid Return
- PS - Pressure Switch
- PSD - Pressure Switch, Differential
- PT - Pressure Transducer
- RTD - Resistance Temperature Detector
- SV - Solenoid Valve
- TE - Thermocouple or RTD
- TI - Temperature Control
- TIC - Temperature Indicating Controller
- TS - Temperature Switch
- TW - Thermo Well
- VS - Water Supply
- VR - Water Return

- RL - Refrigerant Liquid Line
- RS - Refrigerant Suction Line
- RD - Refrigerant Discharge Line
- RLU - Lube Oil Line
- Field Piping
- Electrical
- Instrument Air Line
- Capillary

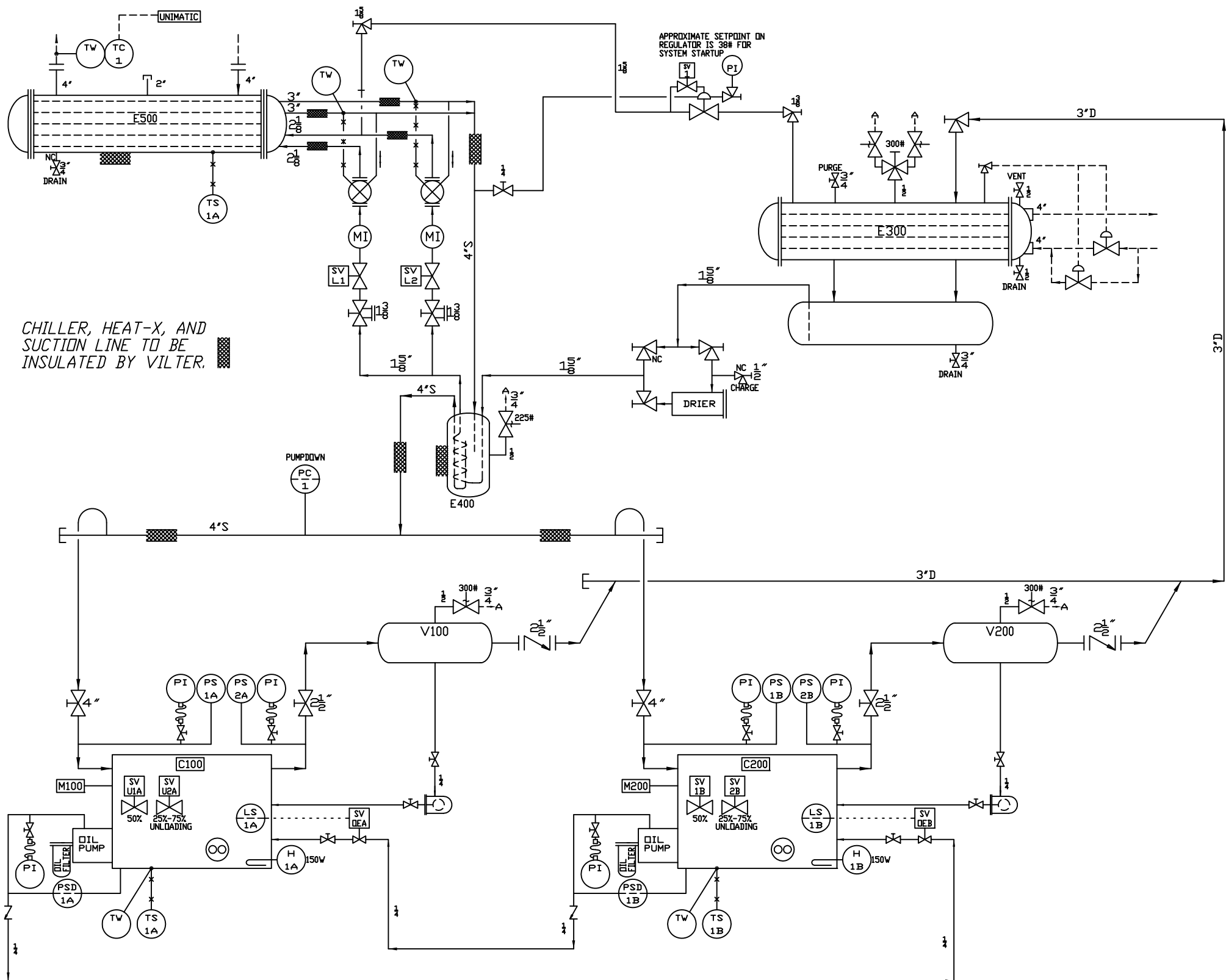
- 3-Way Valve
- Angle Valve
- Globe Valve
- Butterfly Valve
- Plug Valve
- Ball Valve
- Relief Valve
- Solenoid Valve

- Thermostatic 3-way Valve
- Check Valve
- Stop/Check Valve
- Stop/Strainer Valve
- Inlet Pressure Regulating Valve
- Outlet Pressure Regulating Valve
- Differential Pressure Regulating Valve
- Pneumatic Pressure Regulating Valve

- Hand Expansion Valve
- Panel Mounted (visible) Instrument
- Panel Mounted (hidden) Instrument
- Locally Mounted Instrument
- Venturi
- Low Side Float Valve
- High Side Float Valve
- Heater
- Pump
- Bulb & Capillary
- Thermostatic Expansion Valve
- Steady Mount
- Vibration Absorber
- Insulation
- DCS Control
- Flange Set
- Strainer
- Thermo Well
- Rupture Disk
- Sight Glass

MAJOR COMPONENT TAG KEY: C000 / Compressor, E000 / Exchanger, P000 / Pump, M000 / Motor, V000 / Vessel

LINE	TAG NO.	COMPONENT DESCRIPTION	INFORMATION SPECIFIC TO COMPONENT
1	C100	RECIPROCATING COMPRESSOR	CAPACITY= 40.5TR @ 16°F SUCTION(38.7PSIG)
2	C200	MODEL #M17K354ESD, R22	POWER= 588HP @ 105°F CONDENSING(210PSIG)
3	M100	ELECTRIC DRIVE MOTOR	SPEED=1800RPM, DIRECT DRIVEN, R22
4	M200	ELECTRIC DRIVE MOTOR	60HP, 1800RPM, TEFC, 364T FRAME, 230/460V
5	M200		SUITABLE FOR FULL VOLTAGE STARTING
6	V100	OIL SEPARATOR, 12"DIA.X30"LONG	DESIGN PRESSURE= 300PSIG @ 400°F
7	V200		
8	E100/V300	CONDENSER, 12"DIA.X12"LONG, 2-PASS	T.S. DESIGN PRESSURE= 150PSIG
9		WITH INTEGRAL RECEIVER, 6"DIA.X8'LG	S.S. DESIGN PRESSURE= 300PSIG
10			168GPM OF 85°F WATER IN, 4PSID
11	E200	LIQUID TO SUCTION EXCHANGER	DESIGN PRESSURE= 300PSIG
12	E300	PROPYLENE GLYCOL CHILLER	200GPM OF 30% PROPYLENE GLYCOL FROM
13		14"DIA.X12"LONG, 2-PASS	40°F INLET TO 30°F OUTLET, 14PSID
14			T.S. DESIGN PRESSURE= 225PSIG
15			S.S. DESIGN PRESSURE= 150PSIG
16			
17		CONTROL WIRING	1Ø/60HZ/115V, NEMA 1



THIS IS A COMPONENT AND FLOW DIAGRAM DRAWING ONLY. DO NOT USE THIS DRAWING FOR THE ACTUAL PIPING LAYOUT. USE SOUND REFRIGERATION PIPING PRACTICES CONCERNING THE HORIZONTAL RUNS, VERTICAL LIFTS, HEADERS, BENDS, TRAPS, ETC...

CONFIDENTIAL PROPERTY OF

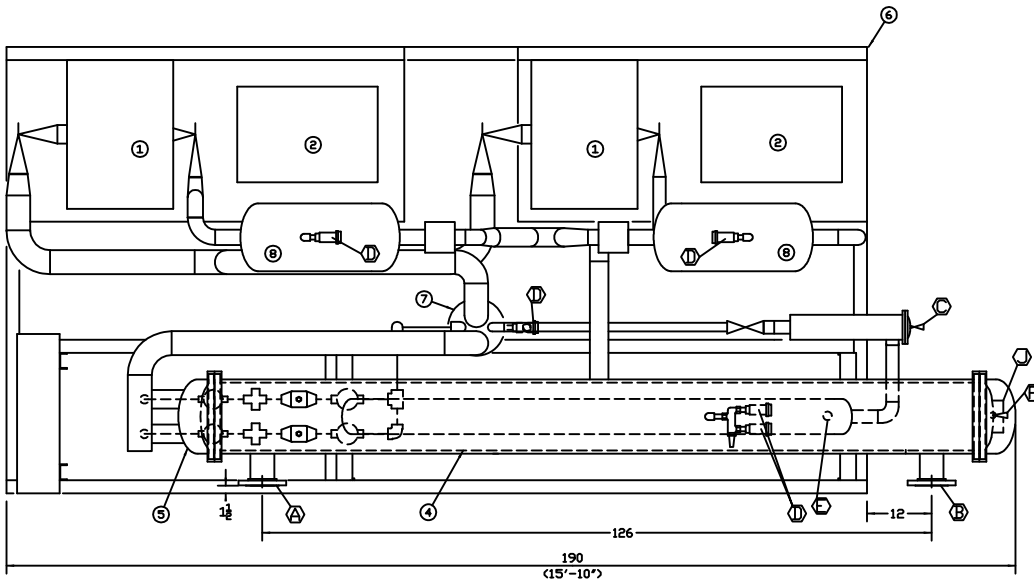
VILTER MANUFACTURING CORPORATION
CUDAHY, WISCONSIN 53118-8904
TELEPHONE No. (414) 744-0111

DRAWN BY	WCS	CHECKED BY	SCALE	NONE
REDRAWN BY		APPROVED	DATE	11/22/97
TITLE: P&I DIAGRAM				
FOR: YOUNG SUPPLY				
ORDER NO.	H74428 97D714 R2			

USED ON DWG. SIMILAR TO DWG. IDENTICAL TO DWG. MADE FROM DWG.

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ITEM	SYM	REVISION	DRAWN BY	APPR. BY	DATE
R2		UNIMATIC IS NOW OPERATED BY PROCESS TEMPERATURE			03-02-98
R1		TS 1A, 1B ARE LOCALLY MOUNTED, PS ARE LOCALLY MOUNTED, PC IS NOW COMMON TO BOTH SUCTIONS	MGS		1-20-98

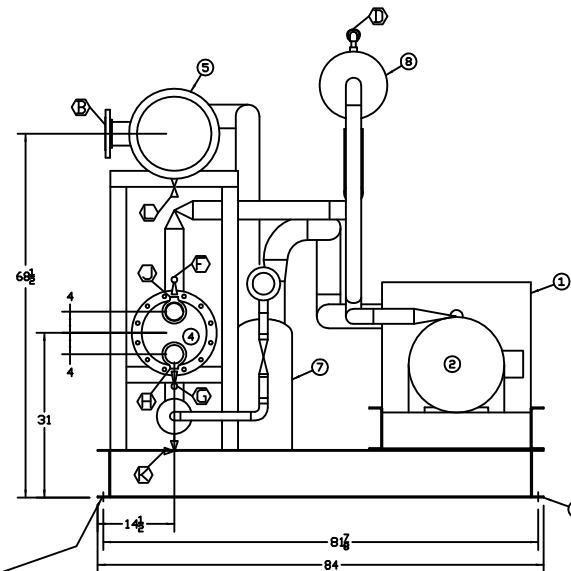
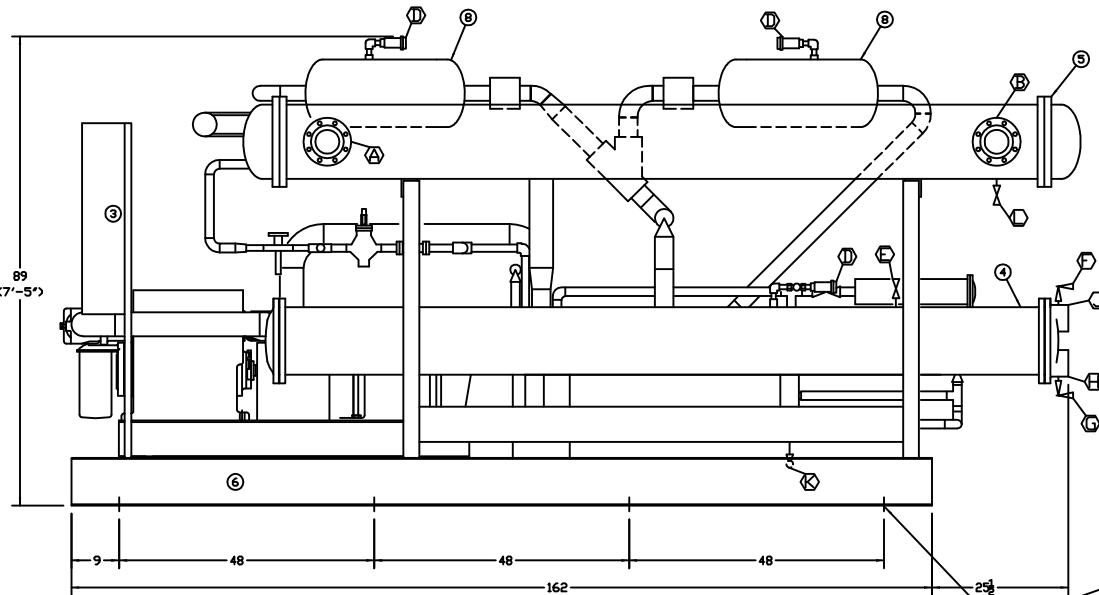
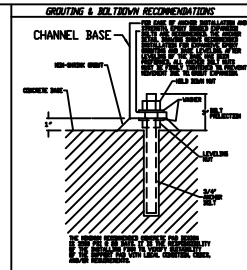


CONNECTION SCHEDULE			
I. D.	SIZE	CONNECTION	FUNCTION
A	4"	150# ANSI FLANGE	GLYCOL INLET
B	4"	150# ANSI FLANGE	GLYCOL OUTLET
C	1/2"	FPT	R22 CHARGE
D	(5/8)	FPT	300# RELIEF
E	1/2"	FPT	PURGE
F	1/2"	FPT	TS VENT
G	1/2"	FPT	TS DRAIN
H	4"	FPT	WATER INLET
J	4"	FPT	WATER OUTLET
K	3/4"	FPT	DRAIN
L	3/4"	FPT	PROCESS DRAIN

ITEM	QTY	DESCRIPTION
1	1	COMPRESSOR 35455 DIRECT DRIVE R22
2	1	MOTOR 60HP, 1800 RPM, TEFC, 460V ACROSS THE LINE
3	1	CONTROL PANEL NEMA-12
4	1	CONDENSER 12"x12LG 2P V/6"x8PLG RECEIVER SUMP
5	1	CHILLER 12"x12LG 2PASS 2 CIRCUIT
6	1	STRUCTURAL STEEL BASE
7	1	HEAT EXCHANGER 10"
8	1	SEPARATOR 10"x30"

PROCESS PACKAGES & SYSTEMS NOTES:

- 1) PIPING TO BE CLEAN & FREE OF SCALE AFTER WELDING.
- 2) ALL DIMENSIONS ARE IN INCHES.
- 3) CHARGE EACH COMPRESSOR WITH 3-1/2 GALLONS OF REFRIGERATION OIL.
- 4) REFRIGERANT: R-22
- 5) SYSTEM DESIGN PRESSURE:
HIGH SIDE: 300 PSIG
LOW SIDE: 225 PSIG
SYSTEM TEST PRESSURE:
HIGH SIDE: 330 PSIG
LOW SIDE: 248 PSIG
- 6) DIMENSION TOLERANCES ARE +/- 1/4".
JBSITE PREPPING TO CONNECTIONS IS NOT RECOMMENDED.
- 7) ESTIMATED SHIPPING WT.: 7,250 LBS.
CONDENSER WATER WT.: 120 LBS.
CHILLER PROCESS WT.: 500 LBS.
REFRIGERANT CHARGE WT.: 725 LBS.
ESTIMATED OPERATING WT.: 8,600 LBS.
- 8) VILTER FABRICATION SPECS.
PAINT: T00378
PRESSURE TEST: T35064
- 9) INSULATION NOT BY VILTER.



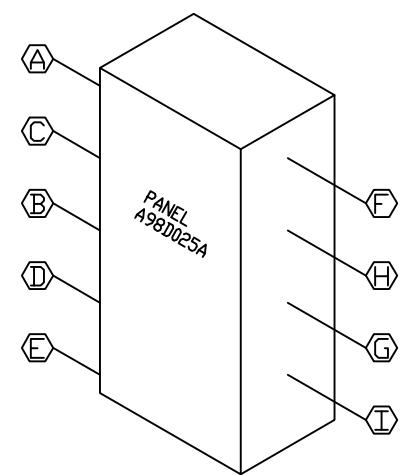
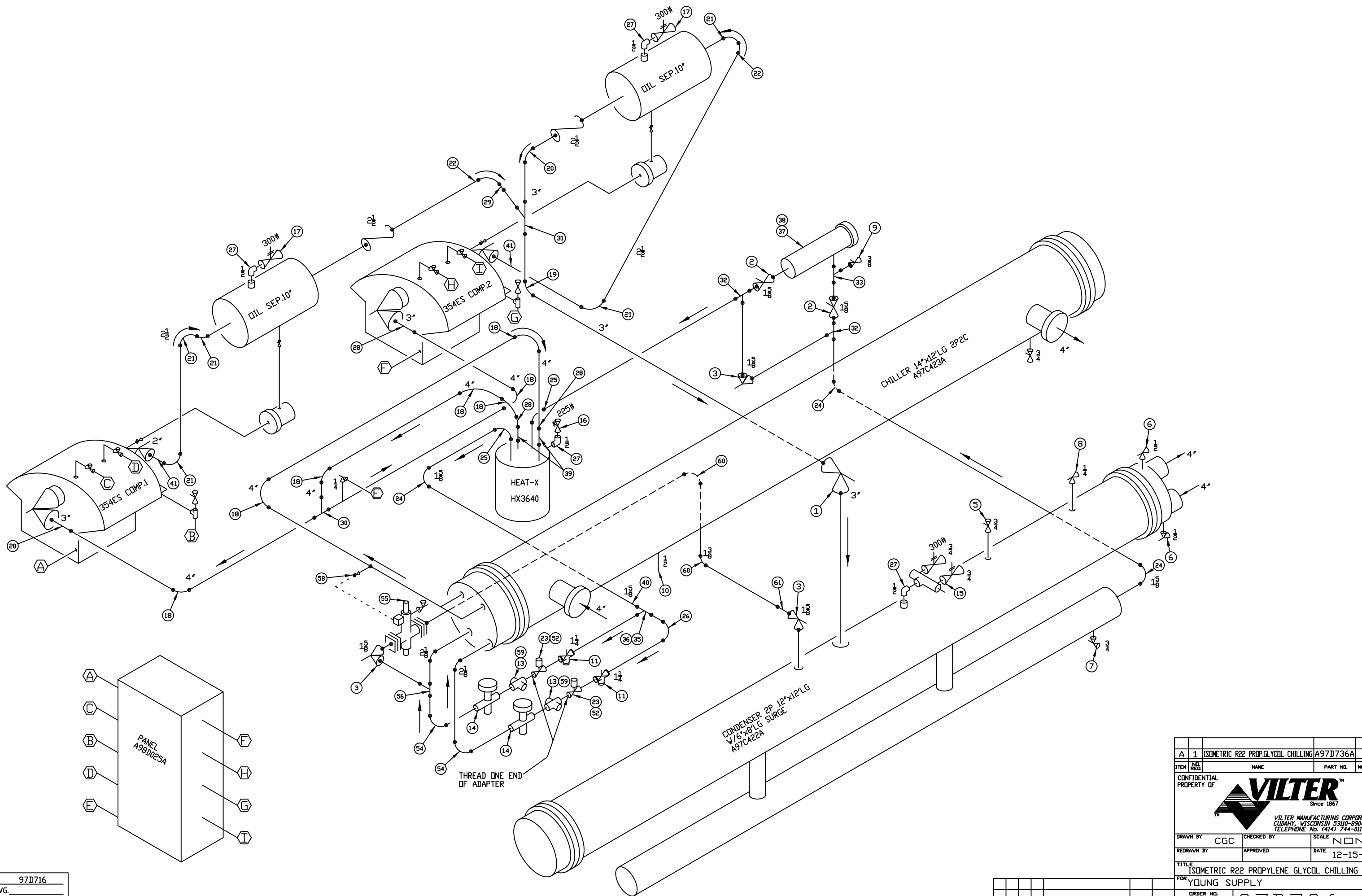
USED ON DWG. _____
SIMILAR TO DWG. _____
IDENTICAL TO DWG. _____
MADE FROM DWG. _____

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(Ø)3/4" DIA MOUNTING HOLES

A 1 UNIT R22 PROP GLYCOL CHILLING A97D716A			
ITEM NO.	NAME	PART NO.	INTERNAL
CONFIDENTIAL PROPERTY OF			
		VILTER MANUFACTURING CORPORATION CLUNA, WISCONSIN 53005-2004 TELEPHONE NO. (414) 744-0111	
		DRAWN BY CGC CHECKED BY _____ APPROVED BY _____ DATE 12-11-97	TITLE R22 PROPYLENE GLYCOL CHILLING UNIT FOR YOUNG SUPPLY ORDER NO. H74428 97D716 R0

REV	DATE	BY	APP



USED ON DWG. 97D716
 SIMILAR TO DWG.
 IDENTICAL TO DWG.
 MADE FROM DWG.

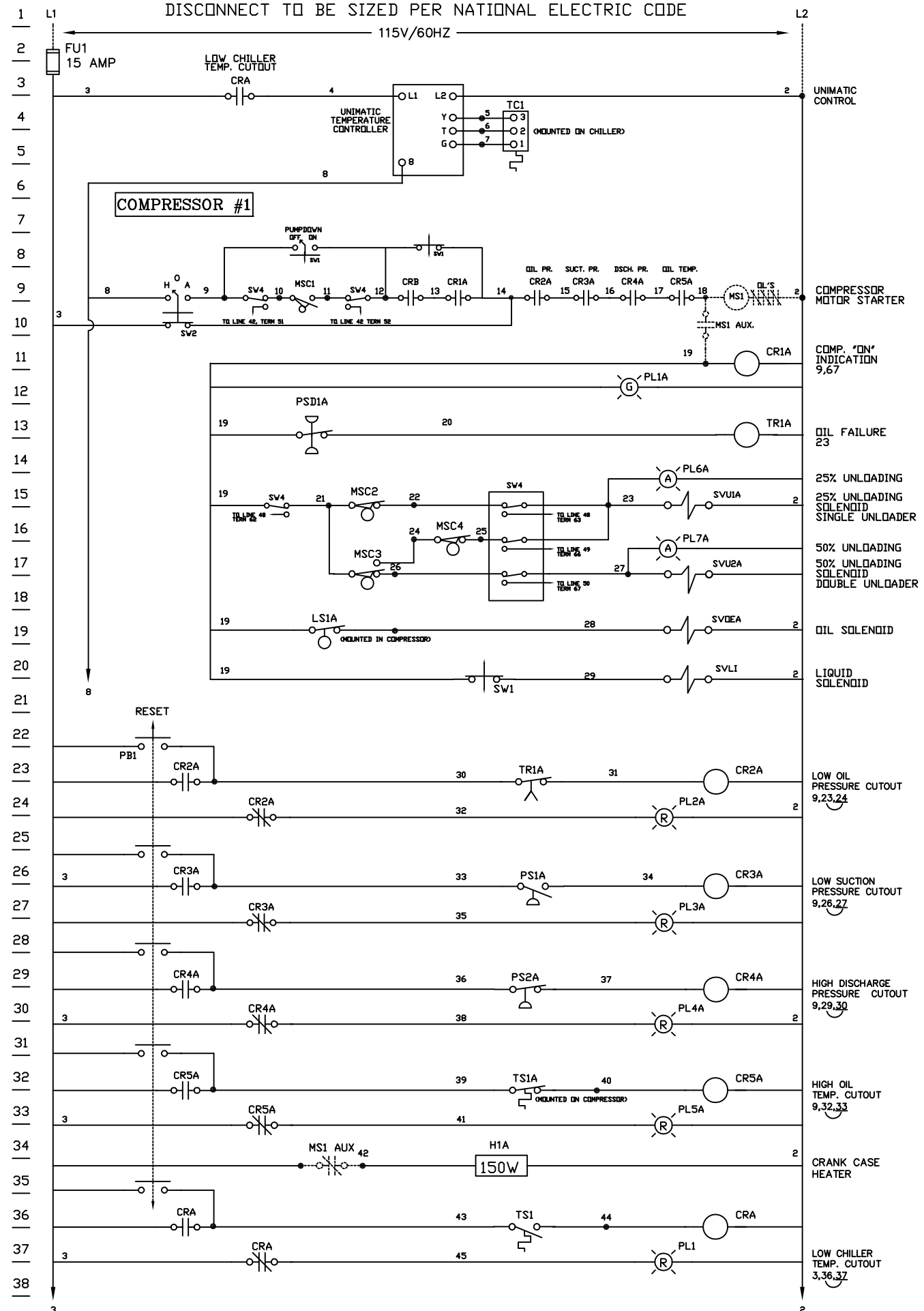
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AREA	DATE	BY	REVISION	APPR.	DATE
R1	3-5-98		ADDED PANEL AND CONNECTIONS		

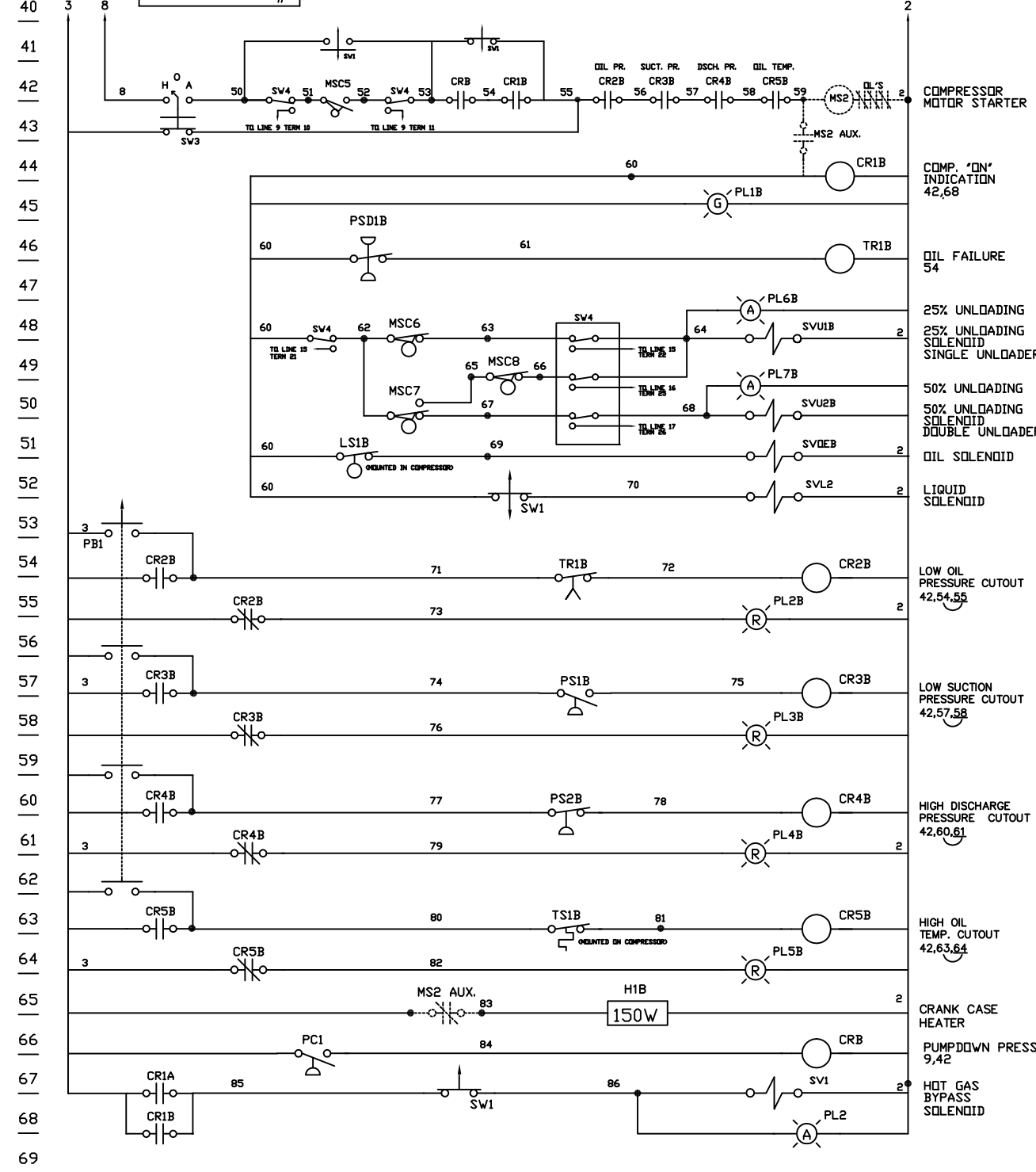
A	1	ISOMETRIC R22 PROPYLENE GLYCOL CHILLING	A97D736A	
ITEM NO.	REQ.	NAME	PART NO.	MATERIAL
CONFIDENTIAL PROPERTY OF				
<small>VILTER MANUFACTURING CORPORATION CUDAHY, WISCONSIN 53110-8904 TELEPHONE No. (414) 744-0111</small>				
DRAWN BY	CGC	CHECKED BY	SCALE	NONE
REDRAWN BY		APPROVED	DATE	12-15-97
TITLE				
ISOMETRIC R22 PROPYLENE GLYCOL CHILLING				
FOR YOUNG SUPPLY				
ORDER NO.	H74428	97D736	R1	

CONTROL CIRCUIT #1

DISCONNECT TO BE SIZED PER NATIONAL ELECTRIC CODE



COMPRESSOR #2



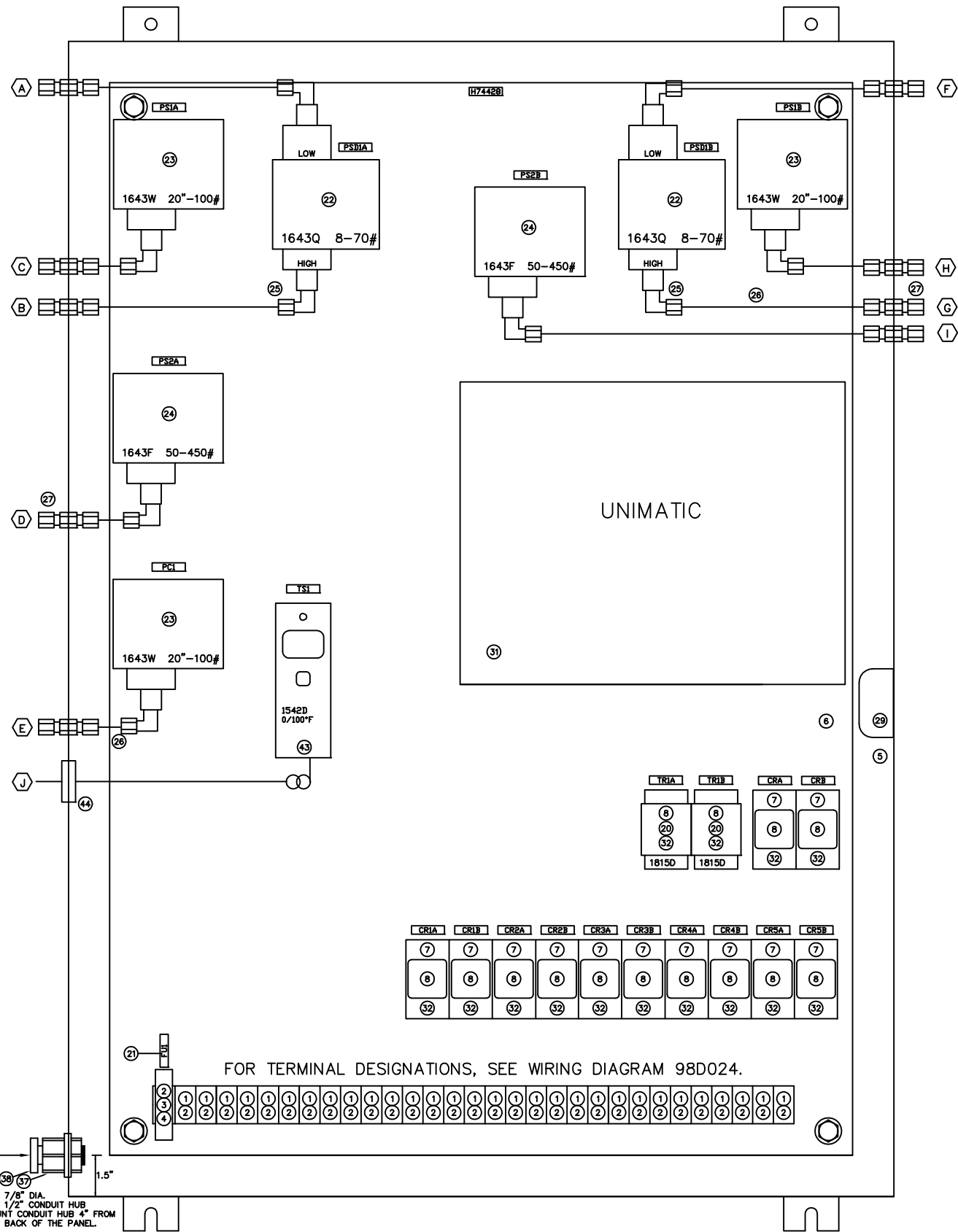
- NOTES:
- CONTROL WIRING PER NEMA 1.
 - ALL CONTROL WIRING #14 AWG, JIC COLOR CODE UNLESS OTHERWISE NOTED.
 - DOTTED WIRING REPRESENTS FIELD WIRING.
 - DOTTED COMPONENTS NOT BY VILTER.
 - DENOTES TERMINAL IN FILTER CONTROL PANEL.
 - REFERENCE DRAWING: ENCLOSURE LAYOUT 98D025 P & I DIAGRAM: 97D714

COMPRESSOR MODEL NUMBER: M17K354ESD
 PROGRAM VERSION: 9.xx

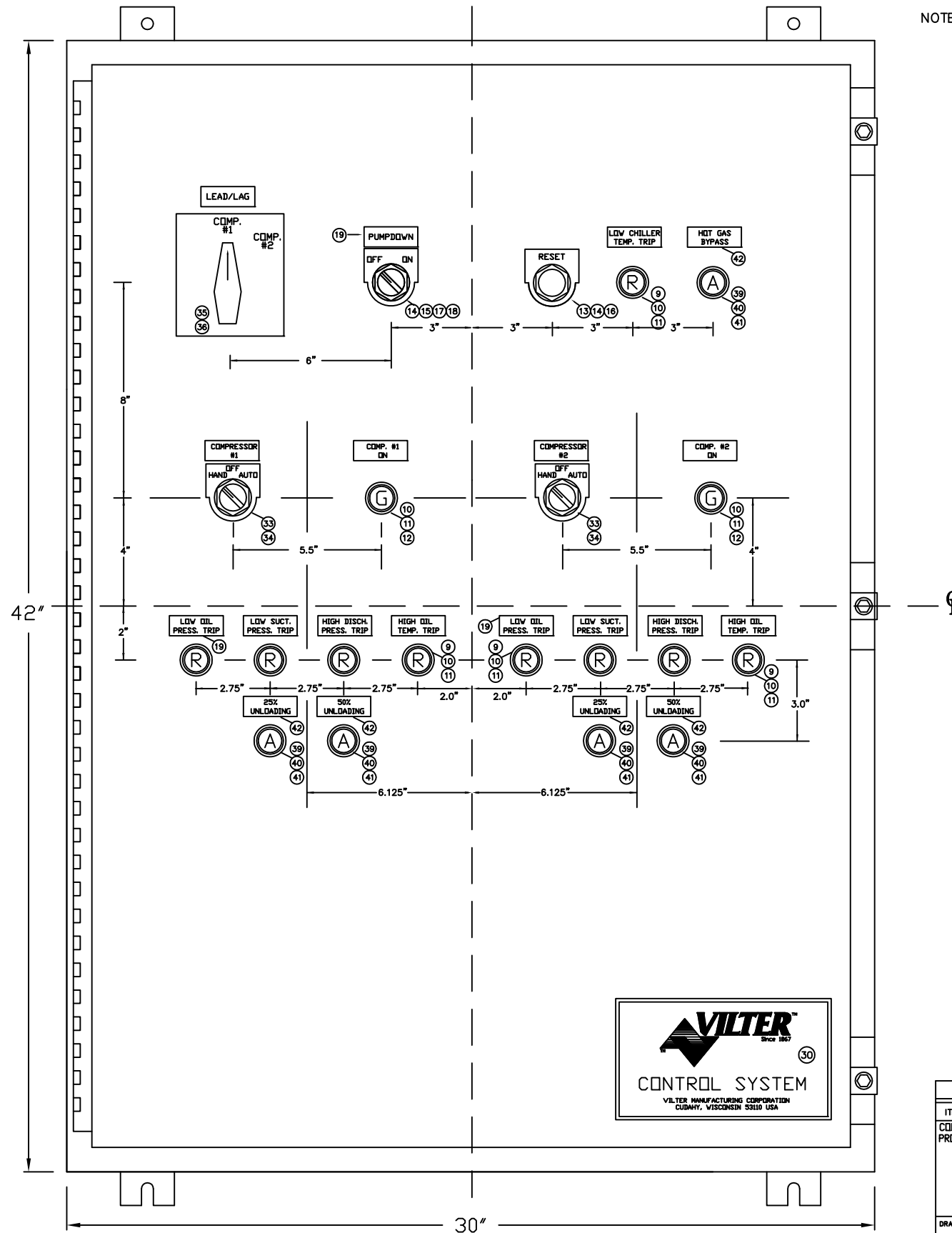
1	1	W.D. RECIP. COMPRESSOR	98D024
ITEM NO.	REV.	NAME	PART NO.
CONFIDENTIAL PROPERTY OF			
VILTER Since 1867			
VILTER MANUFACTURING CORPORATION CUDAHY, WISCONSIN 53110-8904 TELEPHONE No. (414) 744-0111			
DRAWN BY	KVL	CHECKED BY	SCALE NONE
TRACED BY		APPROVED	DATE 1-20-98
TITLE WIRING DIAGRAM - ELECTRO-MECHANICAL CONTROL OF RECIPROCATING COMPRESSOR 115VAC			
FOR YOUNG SUPPLY - P/N 8447001			
ORDER NUMBER	H74428	98D024	R1

1	ADDED PILOT LIGHTS FOR CAPACITY AND HOT GAS INDICATION, AND MODIFIED UNIMATIC TO TEMP. CONTROL.	KVL	2/25/98
ITEM SYM	REVISION	APPR. BY	DATE

SUBPANEL LAYOUT



ENCLOSURE DOOR LAYOUT



NOTES:

- 1) ALL CUTOUTS MUST BE DEBURRED
- 2) REFERENCE WIRING DIAGRAM : 98D024
- 3) ALL CUTOUTS AND MTG. HOLES BY ENCLOSURE MANUFACTURER.
- 4) ALL COMPONENTS MOUNTED BY VILTER.

- (A) CRANKCASE PRESSURE - COMP. #1
- (B) OIL PUMP PRESSURE - COMP. #1
- (C) SUCTION PRESSURE - COMP. #1
- (D) DISCHARGE PRESSURE - COMP. #1
- (E) SUCTION PRESSURE - COMMON HEADER
- (F) CRANKCASE PRESSURE - COMP. #2
- (G) OIL PUMP PRESSURE - COMP. #2
- (H) SUCTION PRESSURE - COMP. #2
- (I) DISCHARGE PRESSURE - COMP. #2
- (J) LOW CHILLER TEMPERATURE WELL

BRING IN AC WIRING HERE

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1	1	RECIP. CONTROL PANEL	A98D025A
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CONFIDENTIAL PROPERTY OF

VILTER MANUFACTURING CORPORATION
CUDAHY, WISCONSIN 53110-8904
TELEPHONE No. (414) 744-0111

DRAWN BY	KVL	CHECKED BY	SCALE	.375" = 1"
TRACED BY		APPROVED	DATE	1-20-98

TITLE ELECTRO-MECHANICAL CONTROL PANEL LAYOUT FOR RECIPROCATING COMPRESSOR: 115V

FOR YOUNG SUPPLY - P/N 8447001

ORDER NUMBER	H74428	98D025	R
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ITEM	SYM	REVISION	APPR. BY	DATE
1		ADDED PILOT LIGHT FOR CAPACITY AND HOT GAS INDICATION, AND MODIFIED UNIMATIC TO TEMP. CONTROL	KVL	2/25/98