

# Manual Switch-Over Panel Operating Manual



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## FOR YOUR SAFETY

### 1. Signs and Symbols:

Throughout the operating manual, the information and notices below are identified by graphical symbols.



#### **DANGER!**

Safety note indicating imminent danger. Failure to heed the warning may result in serious bodily injury and even death.



#### **CAUTION!**

Safety note indicating the presence of potential hazard. Failure to heed the safety notice may result in minor bodily injury or damage to the equipment.



#### **INFORMATION!**

This symbol identifies important information or a useful tip concerning the application or service of the unit.

### 2. Safety Notes:

For the installation and operation of the water bypass panel, the following regulations and safety notes have to be observed.



Any work on the Manual Switch-Over Panel may only be performed by qualified personnel. All relevant accident prevention regulations have to be observed.



Any national regulations applicable in the country of installation must be observed.

## INSTALLATION

1. The Manual Switch-Over Panel consists of valves to manually switch cooling fluid source from the Chiller System to an Alternate Cooling Fluid Supply. The Alternate Cooling Fluid Supply is typically city water but may also be derived from the building central chilled water supply.



*Caution: Make sure all piping is clean before installation.*

2. The Manual Switch-Over Panel is designed to be installed indoors only. The Manual Switch-Over Panel must be installed in the piping connecting the Chiller System, Alternate Cooling Fluid Supply and the main process. The connections on the Manual Switch-Over Panel are shown in Figure 1.



**Figure 1**

3. Install the proper size piping between the Manual Switch-Over Panel and the Chiller System, Alternate Cooling Fluid Supply and the main process. Install a 50 micron strainer or filter between the Alternate Cooling Fluid Supply and the Manual Switch-Over Panel. (Refer to Figure 2 for system diagram)
4. Fluid supply pressure gages, temperature gages and a flow rate meter are included in the panel. Refer to the requirements of the process to determine the minimum required flow rate. Adjust the flow switch setting based on the proper flow rate.

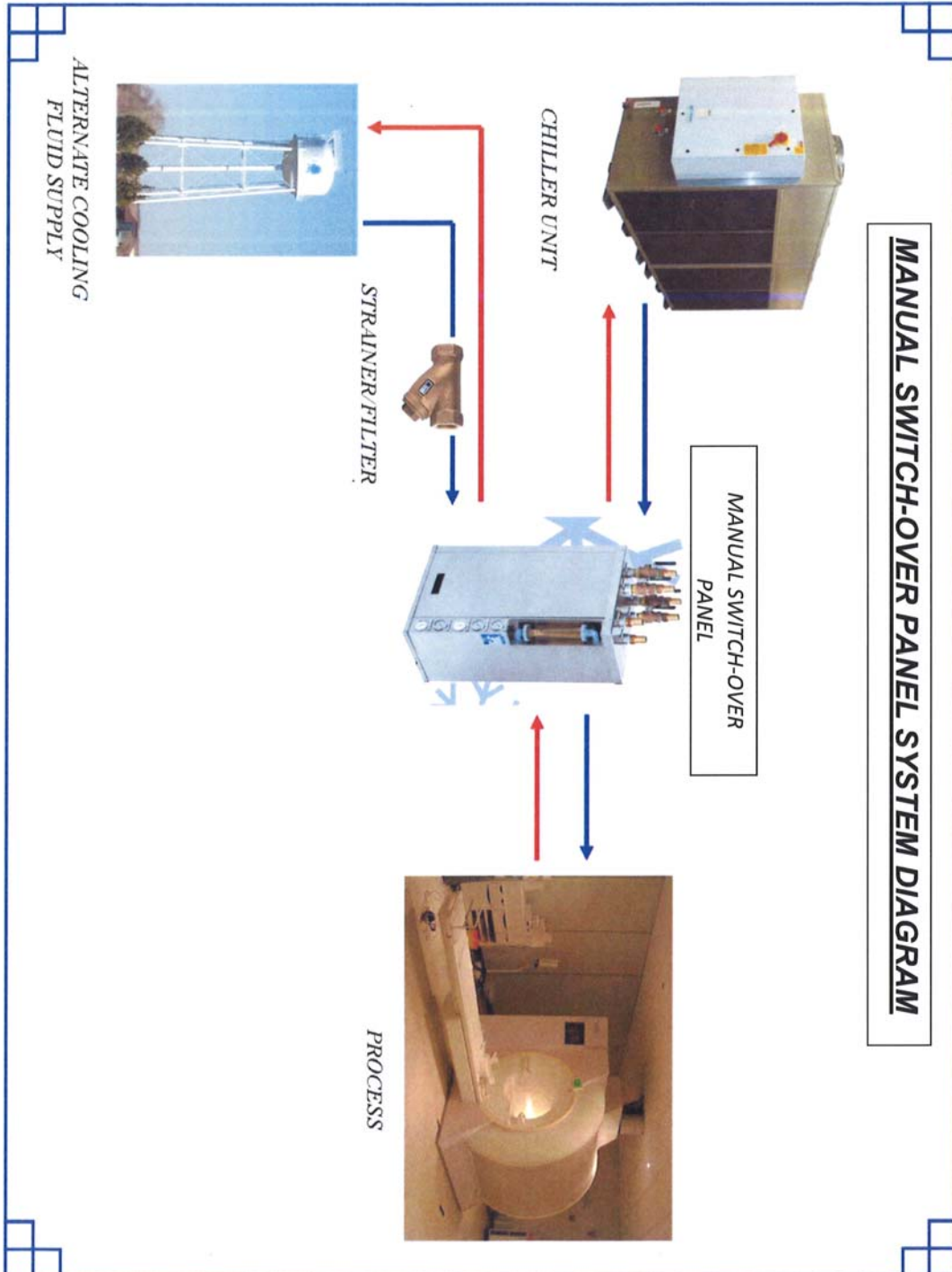


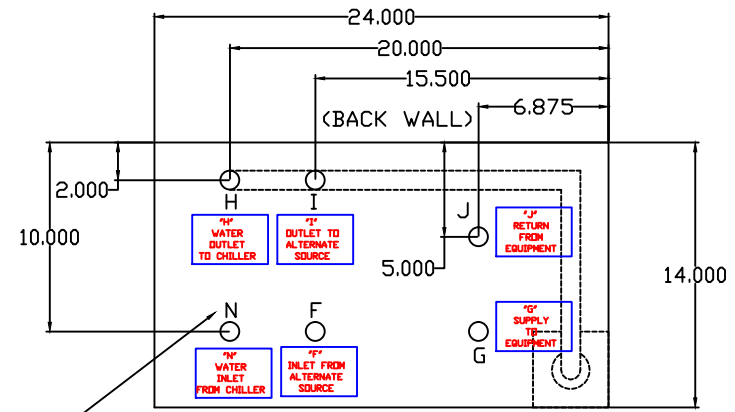
Figure 3

## MAINTENANCE



Clean the fluid strainer and/or filter one hour after initial use then annually or as required.

# DRAWINGS



**MANUAL SWITCH-OVER PROCEDURE**

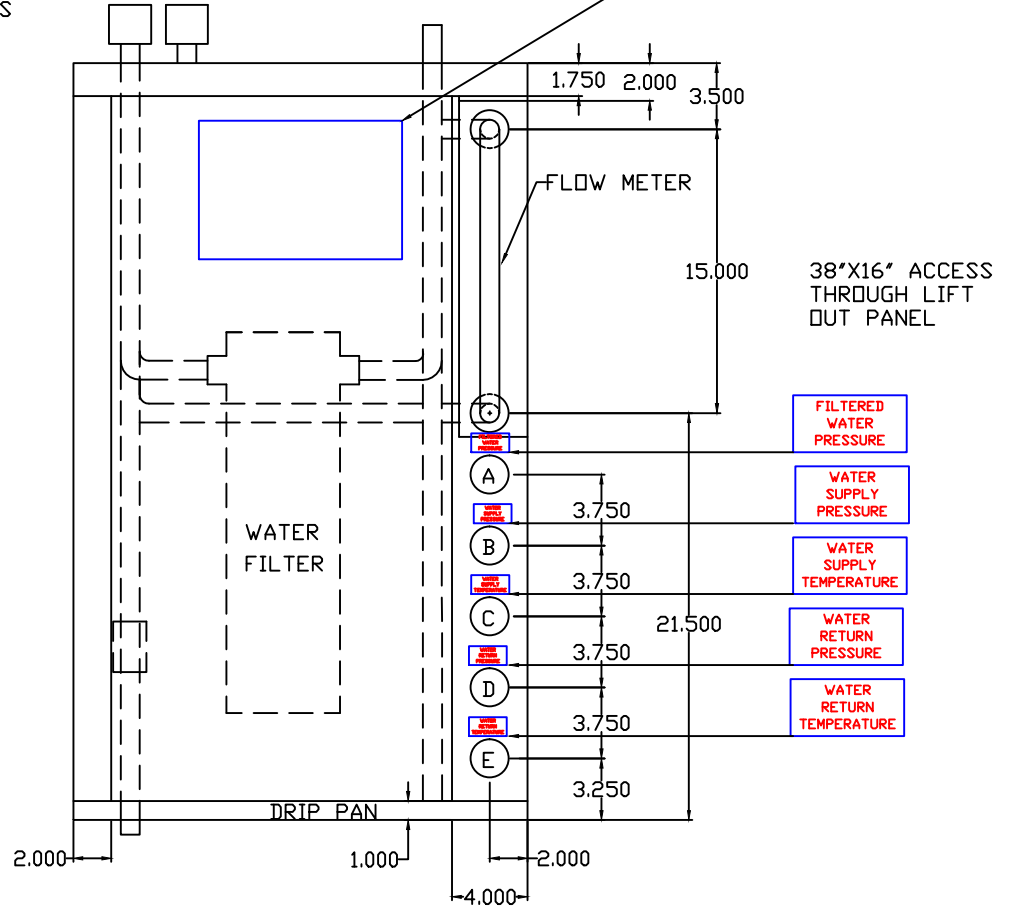
**SWITCH FROM CHILLER TO ALTERNATE SOURCE**  
 1) CLOSE VALVE "N" (WATER INLET FROM CHILLER)  
 2) CLOSE VALVE "H" (WATER OUTLET TO CHILLER)  
 3) OPEN VALVE "I" (OUTLET TO ALTERNATE SOURCE)  
 4) OPEN VALVE "F" (INLET FROM ALTERNATE SOURCE)

**SWITCH FROM ALTERNATE SOURCE TO CHILLER**  
 1) CLOSE VALVE "F" (INLET FROM ALTERNATE SOURCE)  
 2) CLOSE VALVE "I" (OUTLET TO ALTERNATE SOURCE)  
 3) OPEN VALVE "H" (WATER OUTLET TO CHILLER)  
 4) OPEN VALVE "N" (WATER INLET FROM CHILLER)

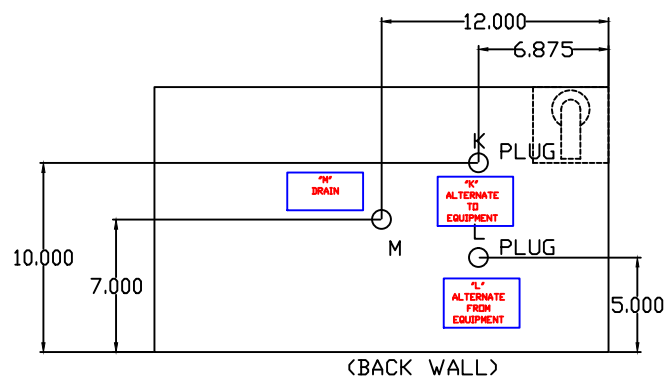
NOTES:  
 FILTER MUST BE INSULATED (BODY AND HEAD)  
 ALL INTERNAL PIPING MUST BE INSULATED TO HELP PREVENT CONDENSATION.  
 GAUGE TAGS MUST BE PLACED AS NOTED.

FILTER PANEL IS EQUIPPED WITH VALVES ON PORTS H,I,N,F

FILTER PANEL TO BE SHIPPED WITH REPLACEMENT FILTERS



- A: FILTERED WATER PRESSURE
- B: WATER SUPPLY PRESSURE
- C: WATER SUPPLY TEMPERATURE
- D: WATER RETURN PRESSURE
- E: WATER RETURN TEMPERATURE
- F: 1 1/2" NPT INLET FROM ALTERNATE WATER SOURCE WITH HOSEBARB
- G: 1 1/2" SUPPLY TO EQUIPMENT WITH HOSEBARB
- H: 1 1/2" NPT OUTLET WATER TO CHILLER WITH HOSEBARB
- I: 1 1/2" NPT OUTLET TO ALTERNATE SOURCE WITH HOSEBARB
- J: 1 1/2" RETURN FROM EQUIPMENT WITH HOSEBARB
- K: 1 1/2" ALTERNATE TO EQUIPMENT (PLUGED)
- L: 1 1/2" ALTERNATE FROM EQUIPMENT (PLUGED)
- M: 1" NPT DRAIN
- N: 1 1/2" NPT WATER INLET FROM CHILLER WITH HOSEBARB



ALL DIMENSIONS ARE IN INCHES

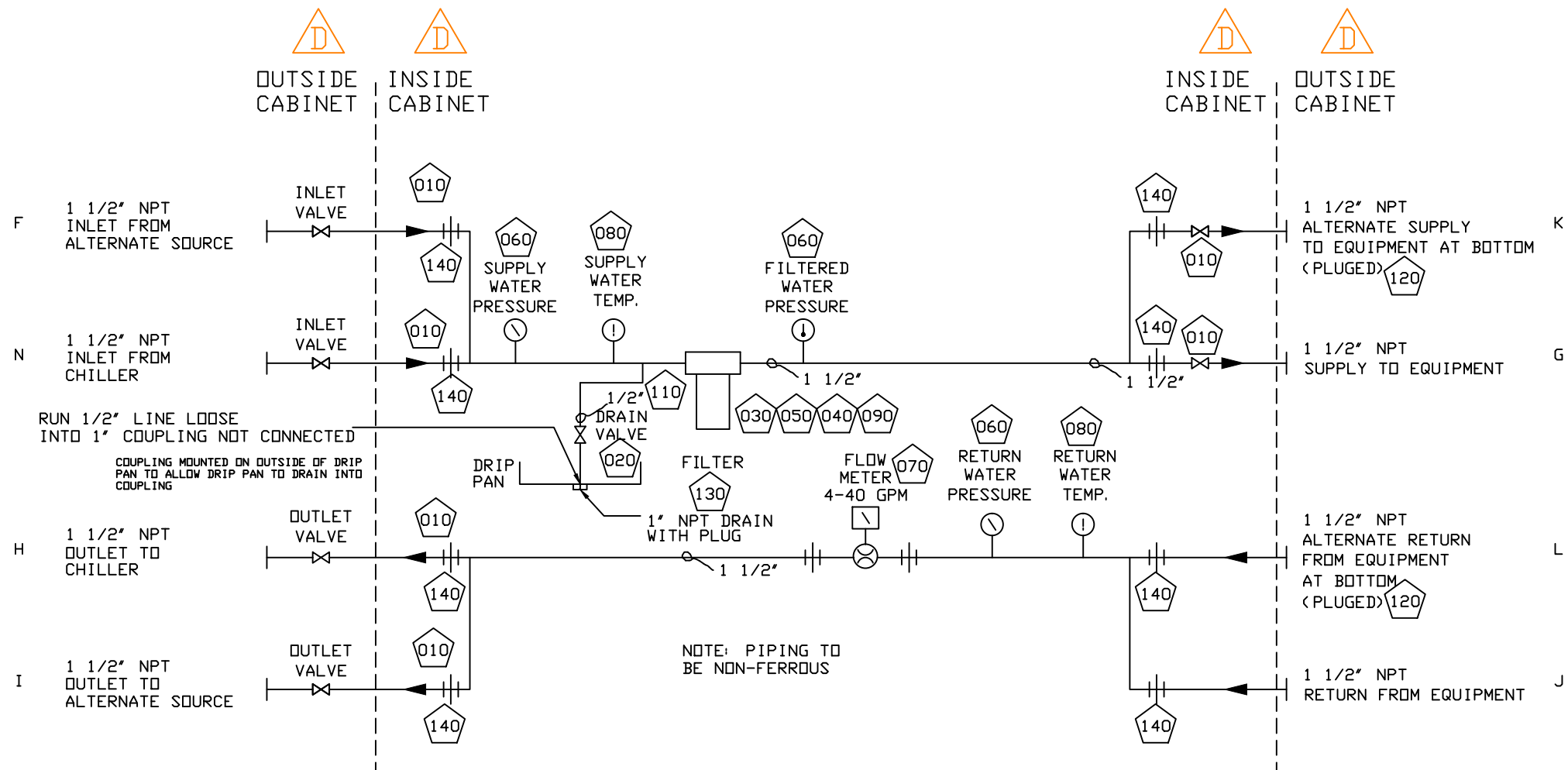
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DATE	DESCRIPTION OF REVISION	APPROVED BY
10/28/14	UPDATED TITLE BLOCK	YMU
04/24/14	ADD TAG FOR SWITCH-OVER	MAR
07-24-00	UPDATED PORT DISCRPTIONS	BKS
02-23-00	ADDED NOTE ABOUT TAG PLACEMENT	BKS
01-10-00	INSULATED FILTER NOTE	BKS
06-07-99	RED FOLDER DRAWING	BKS

<b>Dimplex</b> Thermal Solutions		
DESIGN BY:	DRAWN BY: BRIAN	
DATE: 08-16-98	PAGE 1 OF 1	KALAMAZOO, MI. PH (800) 968-5665 WWW.DIMPLEXTHERMAL.COM
<b>CHILLED WATER SUPPLY INTERFACE PANEL</b>		<b>LAYOUT</b>





PIPING PARTS

**F**

SHIP LOOSE  
SEE NOTE BELOW

NO.	DESCRIPTION	PART#	QTY	TYPE
	CHILLER INTERFACE PANEL MCHNCL	201834		ASSY
010	VALVE BALL BRASS 1-1/2"	4113150	6	PC
020	VALVE BALL BRASS 1/2"	4113051	1	PC
030	150236 FILTER 1-1/2" BIG BLUE # 20	4330006	1	PC
040	R50-BBS FILTER CARTRIDGE 50 MICRON	4331001	2	PC
050	SW-3 WRENCH 150296 PENTAIR	4331005	1	PC
060	GAUGE PIPING CBM 0-100 PSI/0-7 BAR	4243100	3	PC
070	F-451004LHNE FLOW METER 4-40 GPM	4290030	1	PC
080	V25673314-120 TEMPERATURE GAUGE	4220105	2	PC
090	CARTRIDGE COUPLER FOR #20 FILTER	4331013	1	PC
100	TUBING 1-5/8 HARD COPPER ACR	7313010	20	FT
110	A-4540 CONNECTOR 5/8 FL X 1/2 NPTE	7650400	1	PC
120	PLUG 1-1/2 MPT BR	7512902	2	PC
130	PLUG 1 MPT BR	7508900	1	PC
140	UNION 1-1/2 C X 1-1/2 MPT	7512402	8	PC
150	A-5157 NUT SHORT FORGED 5/8 FL	7650200	1	PC
160	A-5051 NUT SHORT FORGED 1/4 FL	7610200	1	PC
170	NIPPLE 1-1/2 MPT X 6 BR	7512006	1	PC
180	HOSE 1-1/2 RED WINGFOOT 250 PSI	4410004	8	FT

NOTE:

- 1) PLUG TO BE INSTALLED IN BOTTOM PORTS.
- 2) POSITION VALVE HANDLES SO THAT THE HANDLES ARE ACCESSIBLE FROM THE FRONT AND ARE FREE TO MOVE.
- 3) ALL PIPING AND FITTINGS INCLUDING HOSE IS TO BE INSULATED WITH FOAM TAPE ONLY
- 4) USE SIL-FLOS WHERE PRACTICAL USE SOFT SOLDER ONLY ON THE UNIONS
- 5) AFTER TESTING REMOVE FLOW METER (LEAVE ELBOWS) AND PLACE IN ORIGINAL BOX FOR SHIPMENT.

NOTE: PIPING TO BE NON-FERROUS

\* PARTS NOT SHOWN ON DRAWING DETAIL

ALL DIMENSIONS ARE IN INCHES

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DATE	DESCRIPTION OF REVISION	APPROVED BY
04/03/15	REMOVED HOSEBARBS (7512901)	JPJH, 004153
10/28/14	UPDATED TITLE BLOCK	YMU<G>
12/19/11	ADD SHIP LOOSE NOTE	JRW<F>
05/05/10	ADDED INSIDE/OUTSIDE	JMK<E>
12/06/02	ADDED NOTE 5	BKS<D>
09/04/02	FLOW METER WAS F-451003LHNE	BKS<C>
10/24/01	RED FOLDER DRAWING	BKS<B>
04/24/01	ADDED NOTE FOR 2 HOSE CLAMPS	BKS<A>

**Dimplex Thermal Solutions**

**Koolant Coolers**

DESIGN BY: YMU<G> DRAWN BY: BRIAN  
 DATE: 02-23-01 PAGE 1 OF 1

KALAMAZOO, MI.  
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**CHILLED WATER INTERFACE PANEL**

**MECHANICAL**

DRAWING NO. 201834

