

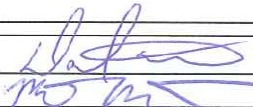
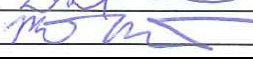
# WATER BYPASS PANEL OPERATING MANUAL



DTS Part Number: \_\_\_\_\_

DTS Serial Number: \_\_\_\_\_

## REVISION HISTORY

LEVEL	DATE	REVISION DESCRIPTION	SIGNATURES
1	31 March 2010	Draft	_____
2	20 August 2010	Updated photos	_____
3	17 June 2011	Updated drawing	_____
4	12 December	Updated photo	 1-3-12  1-7-12
5			_____
6			_____
7			_____

## Table of Contents

REVISION HISTORY .....	2
FOR YOUR SAFETY .....	4
INSTALLATION.....	5
OPERATION.....	6
MAINTENANCE.....	7
COMPONENT INFORMATION.....	13
DRAWINGS.....	10

## 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 Water bypass 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 Water Bypass Panel consists of valving to switch cooling fluid source from the Heat Exchanger Cabinet (HEC) 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.<sup>1</sup>



**Figure 1**

2. The Water Bypass Panel is designed to be installed in the equipment room indoors only. The Water Bypass Panel must be installed in the piping connecting the HEC to the Cryogenic Compressor. An assortment of hose and fittings are included to complete the fluid connections needed for typical installations (Figure 2).



**Figure 2**

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<sup>1</sup> If the source is potable water then a backflow preventer must be installed on the Alternate Fluid Supply line.

- Fluid supply pressure gage, temperature gage and a flow rate meter are included in the panel. See the Cryogenic Compressor Owner's Manual for fluid temperature and flow requirements to determine a proper fluid source and return (return/drain).



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

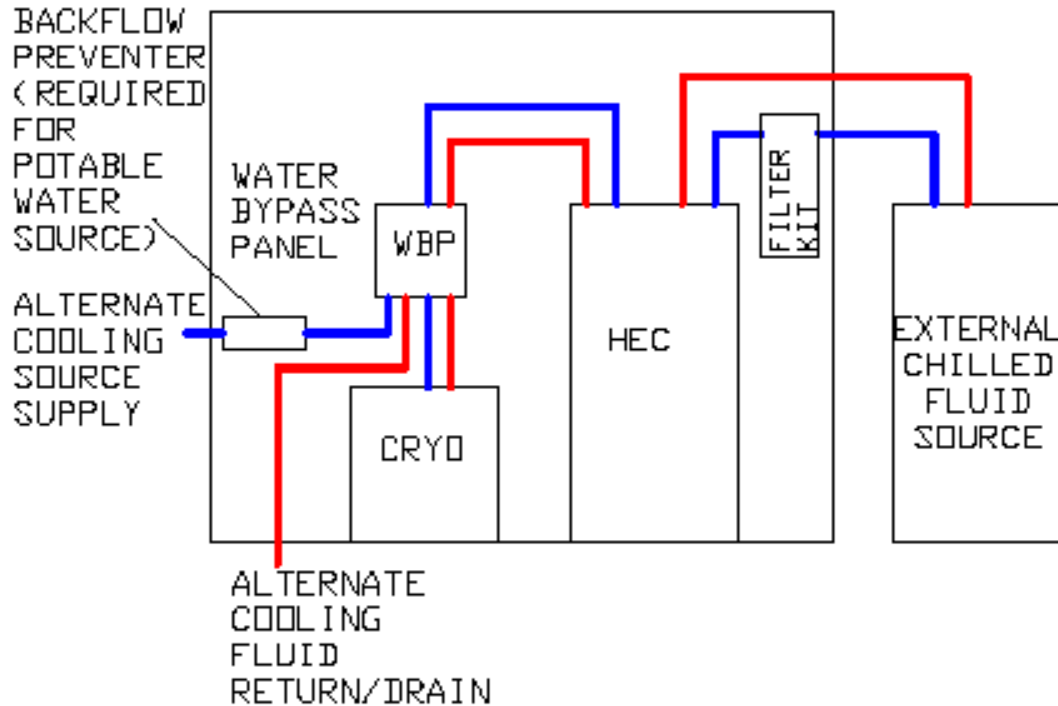


Figure 3

## OPERATION

- To switch to Alternate Cooling Water Supply the panel door must be opened.
- Manually operate the valve set according to the valve position label. The valve must be quickly operated to the full stroke valve position to prevent mixing of the Alternate Cooling Fluid Source into the dedicated cooling fluid that comes from the HEC.



Figure 4



Figure 5

3. Observe the fluid flow on the meter provided. If the alternate fluid is city water, monitor the drain to make sure that drain capacity exceeds the Alternate Cooling Fluid Source flow rate.
4. When the dedicated cooling fluid source is re-established switch the valves quickly back to the HEC supply position. Check the glycol concentration of the external chilled fluid source (Heat Exchanger)<sup>2</sup>.

## MAINTENANCE

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



For flow rates up to 2 gallon/minute the Water Bypass Panel will have a pressure drop of 3 psid clean, the strainer should be cleaned when the pressure drop exceeds 5 psid.

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<sup>2</sup> The glycol concentration should be maintained according to the Heat Exchanger Owner's Manual.

## TAGGING INSTRUCTIONS

- ☐ A) MANUALS MUST SHIP WITH MACHINE OR MACHINE DOES NOT SHIP.
- ☐ B) PLACE ADDITIONAL TAGS INSIDE THE MACHINE.
- ☐ C) PLACE ADDITIONAL TAGS INSIDE THE ELECTRICAL ENCLOSURE MOUNTED ON TAG RAILS WHICH ARE RIVETED TO THE PANEL. ADD NOTE TO ELECTRICAL PRINTS.
- ☐ D) TAGS OUTSIDE AND OUTSIDE THE ELECTRICAL ENCLOSURE NEED TO BE RIVETED.
- ☐ E) TAGS INSIDE THE MACHINE NEED TO BE RIVETED.
- ☐ F) SEQUENCE OF OPERATION TAG REQUIRED
- ☐ G) INLET AND OUTLET TAGS ONLY TO BE RIVETED.
- ☐ H) SPECIAL LANGUAGE TAGS ARE REQUIRED.
  - ☐ FRENCH                      ☐ GERMAN
  - ☐ SPANISH                      ☐ OTHER (SEE SPECIAL INSTRUCTIONS)

SPECIAL INSTRUCTIONS:

[illegible]

\* PARTS NOT SHOWN ON  
DRAWING DETAIL

ALL DIMENSIONS ARE IN INCHES

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4/28/16	NOT FLAT BON, RE-EXPORTED	JMK(B, 2449)
DATE	DESCRIPTION OF REVISION	APPROVED BY

**Dimplex**  
Thermal Solutions



DESIGN BY: JMK

DRAWN BY: JMK

KALAMAZOO, MI  
PH (800) 968-5665  
WWW.DIMPLEXTHERMAL.COM

### FILTER INTERFACE PANEL

## TABLE OF CONTENTS

DRAWING NO.	800199 000
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**NOTE:**

TAR TAPE IS ONLY TO BE USED ONLY ON BRASS SUCTION LINE VIBRATION ELIMINATORS.

1. BEFORE STARTING! SEE PLUMBING BOM FOR ANY PRE-CUT INSULATION

2.  $\frac{1}{2}$ " INSULATION ON ALL TANK SURFACES EXCLUDING THE TOP OF RECTANGLE TANKS

3.  $\frac{1}{2}$ " INSULATION ON ALL PLUMBING HEAT EXCHANGERS EXCLUDING SUBMERSED COIL

4. SINGLE LAYER TAR TAPE STARTING 2" BELOW BRASS SUCTION LINE VIBRATION ELIMINATOR ENDING 2" ABOVE BRASS VIBRATION ELIMINATOR. STAINLESS STEEL VIBRATION ELIMINATORS DO NOT REQUIRE ANY TAR TAPE.

5.  $\frac{1}{2}$ " INSULATION ON REFRIGERATION SUCTION LINE AND COMPONENTS STARTING AT THE BOTTOM

6.  $\frac{1}{2}$ " INSULATION ON ALL PLUMBING COMPONENTS EXCLUDING CLEAR PORTION OF SIGHT GLASS

7.  $\frac{1}{2}$ " INSULATION ON HEATER SHEATHS

8. SHELL AND TUBE WATER COOLED CONDENSER AND WATER COOLED CONDENSER PIPING NOT TO BE INSULATED.



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4847	11-30-12	TAR TAPE BRASS VIB ELIMINATOR LOK
1141	7/30/15	ADDED WATER COOLED CONDENSER MOUNTING
REVISED BY	DATE	DESCRIPTION OF REVISION
APPROVED BY		

**Dimplex**  
Thermal Solutions

DESIGN BY: MAB  
DATE: 9/30/13  
DRAWN BY: MAB  
PAGE 1 OF 1

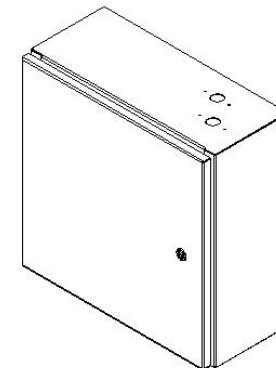


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**INSULATION PACKAGE**

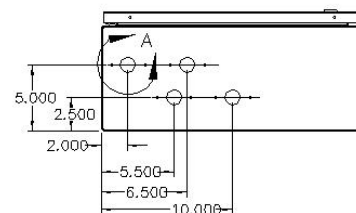
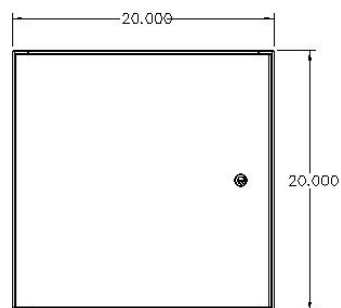
C

DRAWING NO.  
457695



NOTES:

1. DO NOT INSTALL THE PANEL MOUNTING STUDS.
2. DO NOT INSTALL THE DOOR GROUND STUD OR THE GROUND STUD INSIDE OF THE BOX
3. DO NOT INSTALL THE DRAWING MOUNTING POCKET OR POCKET STUDS.
4. PUNCH THE HOLES SHOWN.
5. BOX TO BE POWDERED COATED SCE-09 STANDARD GRAY INSIDE AND OUTSIDE

[illegible]

