

# Heatsan Valve Isolation Interface Kit for MediQA or MROZ



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#### **1. THEORY OF OPERATION**

The Heatsan Valve Isolation Interface Kit is used with the Heatsan to isolate any external equipment that is connected to the loop. There are 4 valves that can be installed in the plumbing to send loop flow to equipment such as Bicarb Mixers, Acid Mixers, or wash out sinks requiring RO water. The valves will close when the Heatsan needs to take control of the loop and send hot water into the loop for disinfection. By stopping the flow of hot water to external equipment, several issues can be prevented. If the equipment not rated for high heat operations. Removes the risk to personnel if they come into contact with equipment that might dispense hot water. Prevents causing an error on the Heatsan for water loss and aborting a cycle before proper disinfection has occurred.

#### 2. INSTALLATION

There are polycarbonate brackets provided for mounting the Heatsan Valve Isolation Interface box to a wall.

The Heatsan Valve Isolation Interface box should be located close to a dedicated 115VAC, GFCI outlet that is within plug-in distance for the attached power cord. The box should also be within plug in distance from the isolation manifold valves so the valves can be wired to the box.

#### WARNING: WHEN MAKING ELECTRICAL CONNECTIONS MAKE SURE THAT THE DEVICES ARE IN A SAFE ELECTRICAL CONDITION. SERIOUS INJURY OR DEATH COULD OCCUR!

ISO Cable (1)

The connector end of the cable plugs into the Heatsan Valve Isolation Interface box in the receptacle marked ISO.



Wire the flying leads on the other end of the cable into the Heatsan control panel according to the following drawings. Verify the Disconnect that feeds power to Heatsan unit is turned off. Route the ISO cable to entryway in control panel labeled "ISO". Route cabling away from known high heat sources. Cover any wires not connected inside the panel with electrical tape and store in the panel.



BOTTOM OF HEATSAN ENCLOSURE SHOWN

Normally Open Valves (V1, V2, V3, V4)

After mounting the Heatsan Valve Isolation Interface box, the plumbing for the Loop needs to be modified so any external devices will be routed through the isolation valve manifolds. The valves are 3/4", and they close based on the signal from the Heatsan controller, any device connected to the valve manifold will be isolated from the loop when the Heatsan takes control and sends hot water into the loop for disinfection. Up to 4 manifolds can be used with the Heatsan Valve Isolation Interface box.



#### ALL PURPOSE MANIFOLD (001-144-0001)

#### ACID MANIFOLD (001-144-0002)



#### **BICARB MANIFOLD (001-144-0005)**



VC Cable (4)

CONNECTION CHART

There are 4 receptacles on the Heatsan Valve Isolation Interface box, labeled as V1, V2, V3, and V4. There are four VC cables, each one labeled as VC. To keep the cables organized the electrician installing the wiring should mark each cable as 1, 2, 3, or 4 on the VC label. Once identified, the round plug end should be inserted into the matching receptacle in the Heatsan Valve Isolation Interface box. The DIN connector is mounted to the top of the appropriate solenoid valve. V1 is connected to Valve 1, V2 is connected to Valve 2, V3 is connected to Valve 3, and finally V4 is connected to Valve 4. The VC cables may be cut shorter and rewired if desired.



WIRE COLOR	FROM	TERMINAL	CONNECTION	то	TERMINAL	CONNECTION	
BLACK -1		PIN -1	SCREW TERMINAL		RECEPTACLE -2	SCREW TERMINAL	
BLACK -2	FIELD WIREABLE	PIN -2	SCREW TERMINAL	SOLENOID VALVE	RECEPTACLE -1	SCREW TERMINAL	
BLACK -3	CONNECTOR	PIN -3	SCREW TERMINAL	DIN CONNECTOR	RECEPTACLE -3	SCREW TERMINAL	
GREEN/YELLOW		PIN4	SCREW TERMINAL		RECEPTACLE -@	SCREW TERMINAL	



3. START-UP

After the mounting, wiring, and plumbing has been completed for the Heatsan Isolation Interface Kit, the unit is ready to be started up. The Heatsan will function as normal. With no patients connected to the loop a manual Heatsan cycle can be initiated. During the Heatsan Operation stage (Heatsan takes control of the loop and releases hot water into the loop) the isolation valves will close to turn off all water flow to any external devices. Verify that the water flow is stopped and that the valves have closed. When the Heatsan process has completed and it goes into Standby, the control of the loop is returned to the RO device and the valves (V1, V2, V3, and V4) will open.

If all valves are operating properly and opening / closing at the correct times, then the Isolation kit has been installed properly and is functioning correctly.

#### 4. DRAWINGS









CONNECTION	CHART	S								
WIRE	WIRE	LABEL	FROM	٨	CONNE	CTION	ТО		CONNE	CTION
RED	18	1A	FU1	-0UT	BARE	WIRE	PS1	Ļ	BARE	WIRE
WHITE	18	2	PS1	-N	BARE	WIRE	TB1	-2	BARE	WIRE
GREEN/YELLOW	14	Ι	PS1	-@	BARE	WIRE	TB1	-GND	BARE	WIRE
BLUE	20	24A	PS1	-(+)	BARE	WIRE	FU2	-INPUT	BARE	WIRE
BLUE	20	24B	FU2	-0UT	BARE	WIRE	CR1	-11	BARE	WIRE
WHITE/BLUE	20	24C	PS1	-(-)	BARE	WIRE	TB1	-24C	BARE	WIRE
BLUE	20	DCOK	PS1	-DC OK	BARE	WIRE	CRO	-A1	BARE	WIRE
WHITE/BLUE	20	24C	CRO	-A2	BARE	WIRE	TB1	-24C	BARE	WIRE

100	22		VCT IOU								20.4	202				VC1		CONNECTOR
BROWN	WHITE	BLACK	BLUE	WHITE	BROWN	WIRE												
24C	Y21	GND	VC43	24C	VC41	GND	VC33	24C	VC31	GND	VC23	24C	VC21	GND	VC13	24C	VC11	WIRE
ISO -2	ISO -1	VC1 -4	VC1 -3	VC1 -2	VC1 -1	VC1 -4	VC1 -3	VC1 -2	VC1 -1	VC1 -4	VC1 -3	VC1 -2	VC1 -1	VC1 -4	VC1 -3	VC1 -2	VC1 -1	FROM
BARE WIRE	CONNECTION																	
CR1 -A2	CR1 -A1	TB1 -GND	CR4 -12	TB1 -24C	CR4 -14	TB1 -GND	CR3 -12	TB1 -24C	CR3 -14	TB1 -GND	CR2 -12	TB1 -24C	CR2 -14	TB1 -GND	CR1 -12	TB1 -24C	CR1 -14	то
BARE WIRE	CONNECTION																	

ENCLOSURE BILL OF MATERIALS

1-22	66-0155	1	CONNECTOR, RECEPTACLE, 8-PIN, FEMALE, M12, PANEL MOUNT
1-21	66510621	1	CONNECTOR, CORD GRIP, 0.5NPT
1-20	64-0034	1	JUMPER, RELAY, GREY
1-19	66932111	1	LINE,CORD,120V,14/3,HOSP GRADE,STRIPPED ENDS
1-18	66-0135	4	CONNECTOR, RECEPTACLE, 4-PIN, FEMALE, M12, PANEL MOUNT
1-17	64760151	8"	DIN RAIL, 35MM
1-16	64-0033	5	RELAY, 1PDT, 24VDC, SPRING CAGE
1-15	66-0133	1	TERMINAL MARKERS, BLANK
1-14	66-0161	1	JUMPER, TERMINAL, 2 POSITION
1-13	66-0131	1	END PLATE, GREY
1-12	66-0130	2	TERMINAL BLOCK, GREEN/YELLOW, 2 TIER, 4 COND.
1-11	66-0129	2	TERMINAL BLOCK, GREY, 2 TIER, 2 COND.
1-10	66-0128	3	TERMINAL BLOCK, GREY, 2 TIER, 4 COND.
1-9	66-0127	1	END PLATE, ORANGE
1-8	63-0023	2	FUSE HOLDER, GREY
1-7	63-0022	2	END BARRIER, GREY
1-6	63-0026	1	FUSE, 2.5A, SLOW BLOW
1-5	63-0021	1	FUSE, 3A
1-4	77-0021	1	POWER SUPPLY, 24VDC, 120W
1-3	60-0053	1	BRACKET, WALL MOUNT
1-2	60-0052	1	SUBPANEL, PLATED STEEL, 8.78x5.83
1-1	60-0051	1	ENCLOSURE, POLYCARBONATE, OPAQUE, 9.61x6.65x5.59
ITEM #	AMERIWATER P/N	1	DESCRIPTION

#### 5. REPLACEMENT PARTS LIST

Part #	Description
53-0035	HEATSAN VALVE ISOLATION INTERFACE
066-0001	CABLE, INTERFACE ISO
66-0152	CABLE, VALVE, DIN TO MENCOM
000-HVIS	HEATSAN VALVE ISOLATION SYSTEM
001-144-0001	VAL ASSY, HEATSAN ISOLATION MANIFOLD
001-144-0002	MANIFOLD ASSY, ACID SAMPLE, ISOLATION
001-144-0003	MANIFOLD ASSY, ACID SAMPLE PORT
001-144-0004	VAL ASSY, ACID ISOLATION
001-144-0005	VAL ASSY, BICARB ISOLATION
59-0054	VAL,SOL,.75NPT,NO,24VDC COIL

### \land WARNING

This product can expose you to chemicals such as vinyl chloride (used in the production of PVC) or Nickel (used in the production of stainless steel), that are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Dear Valued Customer,

California Proposition 65 (Prop 65) is the Safe Water and Toxic Enforcement Act of 1986. The State of California began enforcing amendments to California Prop 65 at the end of August 2018. Prop 65 requires manufacturers to provide a clear and reasonable warning to residents of California about chemicals used in products that they purchase that are included on the Prop 65 Chemical List. The chemicals included on the list are chemicals that are known to the State of California to cause cancer, birth defects, or other reproductive harm. One such chemical is Vinyl Chloride, a compound used to produce Polyvinyl Chloride (PVC). The AmeriWater system you have purchased may contain PVC or stainless steel parts.

While warnings are only required in the State of California, AmeriWater has initiated the use of Prop 65 labeling for all products to ensure compliance with California regulations. Please note that the above warning does not necessarily mean that the product that you have purchased is unsafe. Products that have been cleared for market by FDA have been determined to be safe and effective by the United States Food and Drug Administration. The warning is simply a requirement by the State of California. If you wish to obtain additional information, please visit: p65warnings.ca.gov. You may also contact your AmeriWater representative if you have any questions.

Thank you for your understanding and we look forward to continuing to serve you.