



October 4, 2016

HELLENBRAND INCORPORATED
ALAN MAST
404 MORAVIAN VALLEY ROAD
WAUNAKEE WI 53597

Re: Description: ALTERNATE PRODUCT REVIEW
Manufacturer: HELLENBRAND INCORPORATED
Product Name: (trans id 2781889) MULTIPLE BRINE RECOVERY DRAIN
Model Number(s): **USED WITH THE PM6, H125, H151 AND H200M SOFTENERS:**
TC-MAV-1", TC-MAV-1.5", TC-MAV-2" AND TC-MAV-3"
USED WITH THE H200, H300 TN2 AND TNT SOFTENERS AND ANY OTHER
HELLENBRAND SOFTENER USING A TIME CONTROLLED RELAY:
TC-MBV-1", TC-MBV-1.5", TC-MBV-2" AND TC-MBV-3"
USED WITH ANY HELLENBRAND WATER SOFTENER MODEL NOT PREVIOUSLY
SPECIFIED:
CC9900-1", CC9900-1.5", CC9900-2" AND CC9900-3"
Product File No: 20160254

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an alternate approval to s. SPS 382.41 (3) based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of October 2021. This alternate approval is contingent upon compliance with the following stipulation(s):

- The drain piping shall conform to s. SPS 384.30 (2) (c).
- The drain piping shall be sized in accordance with s. SPS 382.30 (3) (a) 2. The flow rate used to calculate drain pipe size shall be the maximum backwash flow rate.
- The drain piping shall discharge into a proper receptor that conforms to s. SPS 382.33 (8).
- The water softeners covered under this approval shall be wired/controlled such that no two systems can regenerate at the same time.
- This alternate approval applies to Hellenbrand water softeners using brine reclaim only.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,


Glen W. Schlueter
Environmental Engineer - Plumbing Product Reviewer
Department of Safety and Professional Services
Division of Industry Services
Bureau of Technical Services
(608) 267-1401 Phone
(608) 267-9723 Fax
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Hellenbrand TC-MAV Brine Diversion System Description.

The Hellenbrand Inc. TC-MAV brine diversion system uses a proprietary Hellenbrand water softener digital control to activate a MAV (Motorized Alternating Valve) for the brine diversion. Once a pre-determined time has elapsed in the regeneration cycle the water softener controller activates the MAV valve to divert sweet – unused brine back into the brine holding tank. No more than 80% of recovered brine water is used to make new brine for the next regeneration. A minimum of 20% fresh water is used to make new brine.

Where multiple softeners are used it is most cost effective to combine the softener drain lines into a single common line in order to eliminate the need for multiple MAV diversion valves.

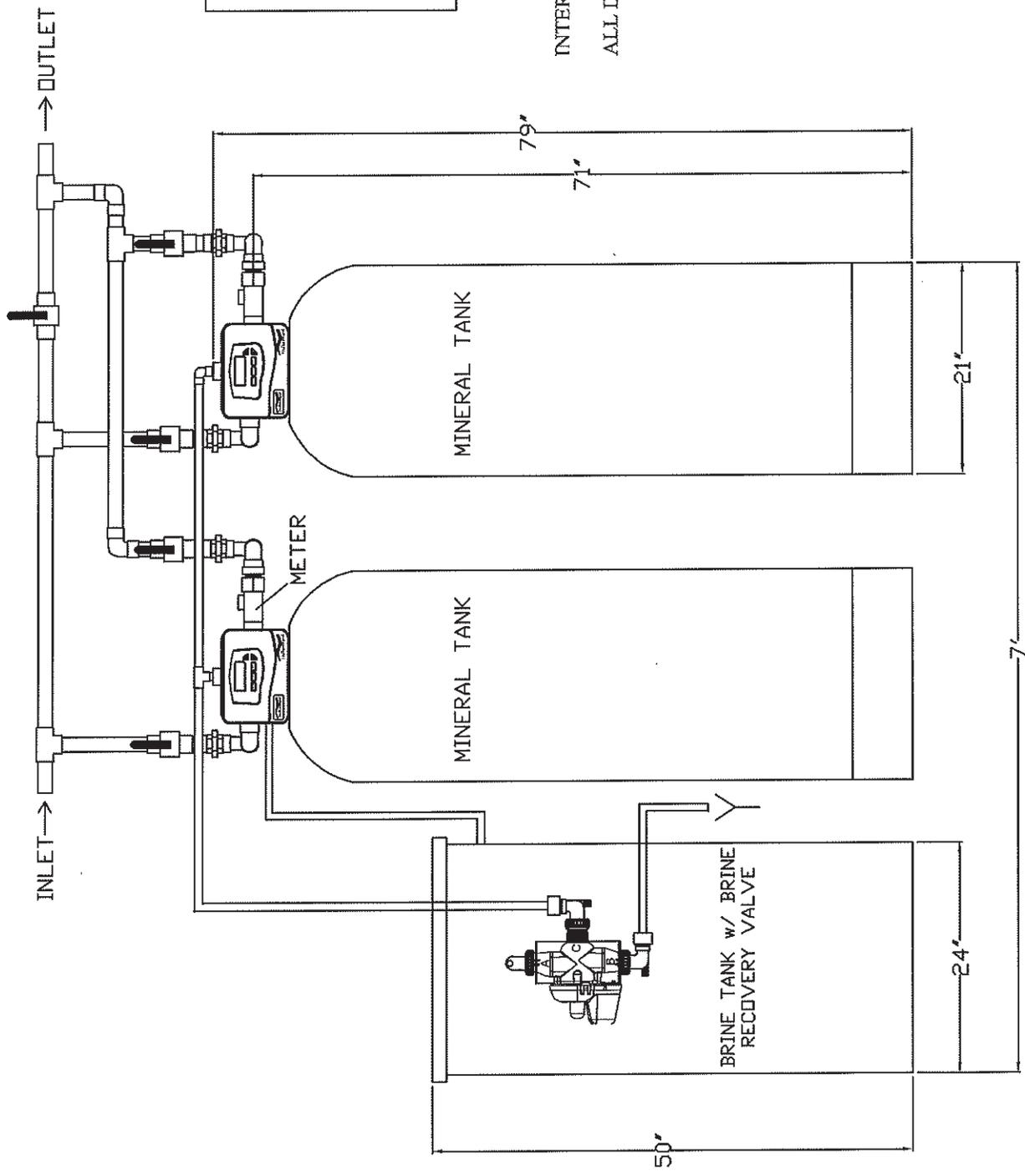
A REQUIREMENT OF THE WATER SOFTENER SYSTEMS IS THAT THEY MUST BE WIRED/CONTROLLED TO ASSURE THAT NO TWO SYSTEMS CAN REGENERATE AT THE SAME TIME.

These are used with Hellenbrand Softener models PM6, H125, H151 and H200M.

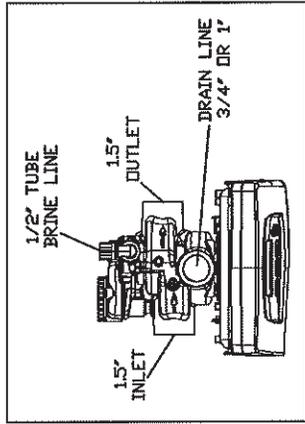
Sample installation drawings are attached.

Model numbers

**TC-MAV-1”
TC-MAV-1.5”
TC-MAV-2”
TC-MAV-3”**



TOP VIEW



INTERCONNECT PIPING PROVIDED BY INSTALLER
 ALL DIMENSIONS +/- 2"

H151-150-21 TWIN PARALLEL w/ BRINE RECOVERY	
DWG #	73-H50-151-21-TA-BR
10-28-11	
dwg by:	J.WAACK
Approved by Engineer:	
A. MAST	

Hellenbrand
its what you dont see that counts

WaunaKee, WI 53597
 (608)849-3050



Hellenbrand CC-9900 Brine Diversion System Description.

The Hellenbrand Inc. CC-9900 brine diversion system uses a conductivity sensor to monitor the brine concentration in the regeneration waste stream. Once a pre-determined concentration has been reached for a predetermined amount of time, the controller then activates a 3-way motorized ball valve to divert sweet – unused brine back into the brine holding tank. No more than 80% of recovered brine water is used to make new brine for the next regeneration. A minimum of 20% fresh water is used to make new brine.

Where multiple softeners are used it is most cost effective to combine the softener drain lines into a single common line in order to eliminate the need for multiple sensors, controllers and diversion valves.

A REQUIREMENT OF THE WATER SOFTENER SYSTEMS IS THAT THEY MUST BE WIRED/CONTROLLED TO ASSURE THAT NO TWO SYSTEMS CAN REGENERATE AT THE SAME TIME.

This system operates independently of the water softener and can be used with most any water softener system.

Sample installation drawings are attached.

Model numbers

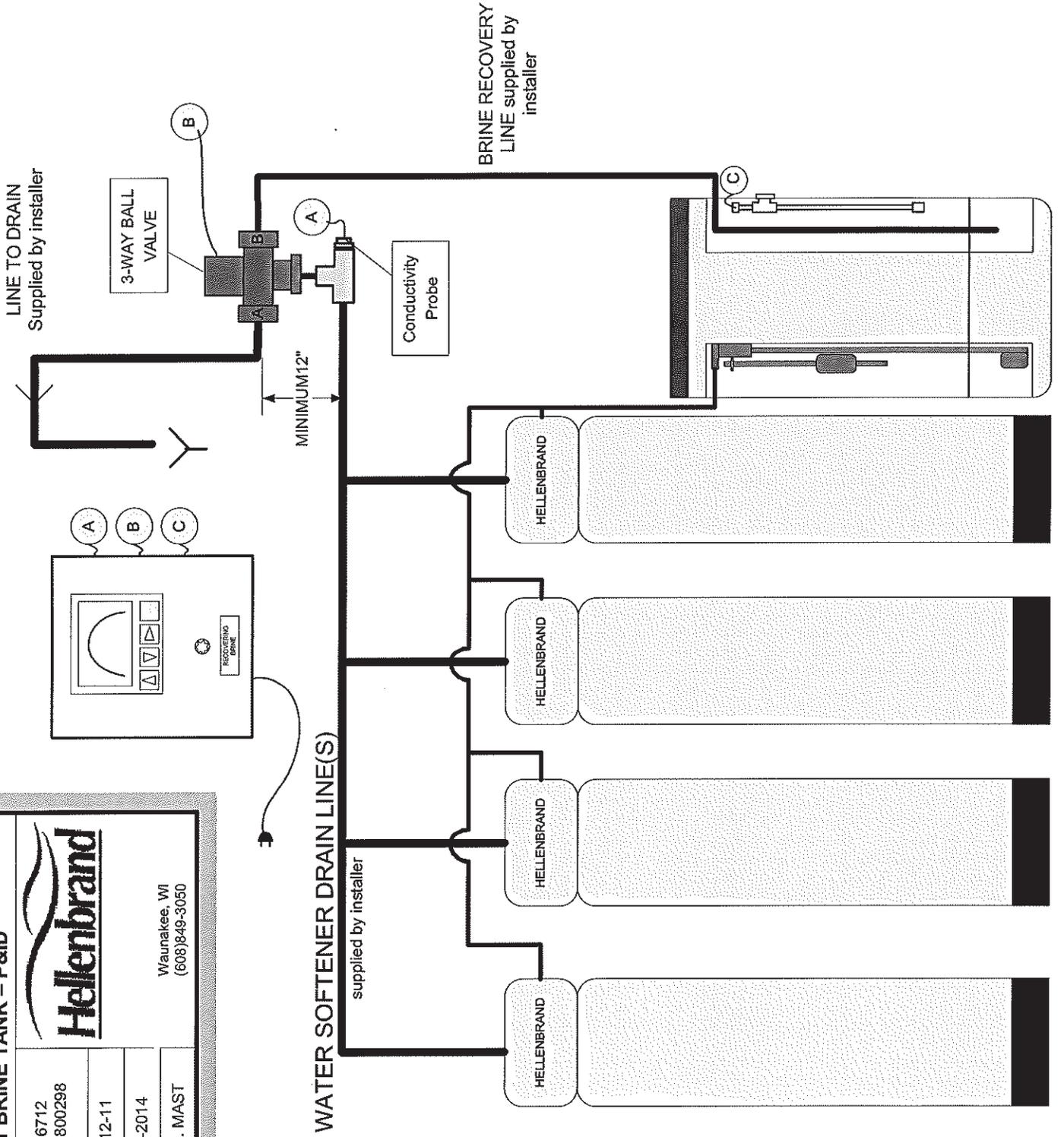
CC9900-1"

CC9900-1.5"

CC9900-2"

CC9900-3"

CC-9900 BRINE RECOVERY FOR 1 BRINE TANK - P&ID	
PART # 106712 DRAWING # 800298	
DATE: 06-12-11	
REV 02-10-2014	
DWG. BY: A. MAST	Waunakee, WI (608)849-3050





Hellenbrand TC-MBV Brine Diversion System Description.

The Hellenbrand Inc. TC-MBV brine diversion system uses a water softener controlled relay to activate the Ball Valve Control Panel. Once a pre-determined time has elapsed in the regeneration cycle relay activates the control Panel which in turn activates a 3-way motorized ball valve motorized ball valve to divert sweet – unused brine back into the brine holding tank. No more than 80% of recovered brine water is used to make new brine for the next regeneration. A minimum of 20% fresh water is used to make new brine.

Where multiple softeners are used it is most cost effective to combine the softener drain lines into a single common line in order to eliminate the need for multiple control panels and diversion valves.

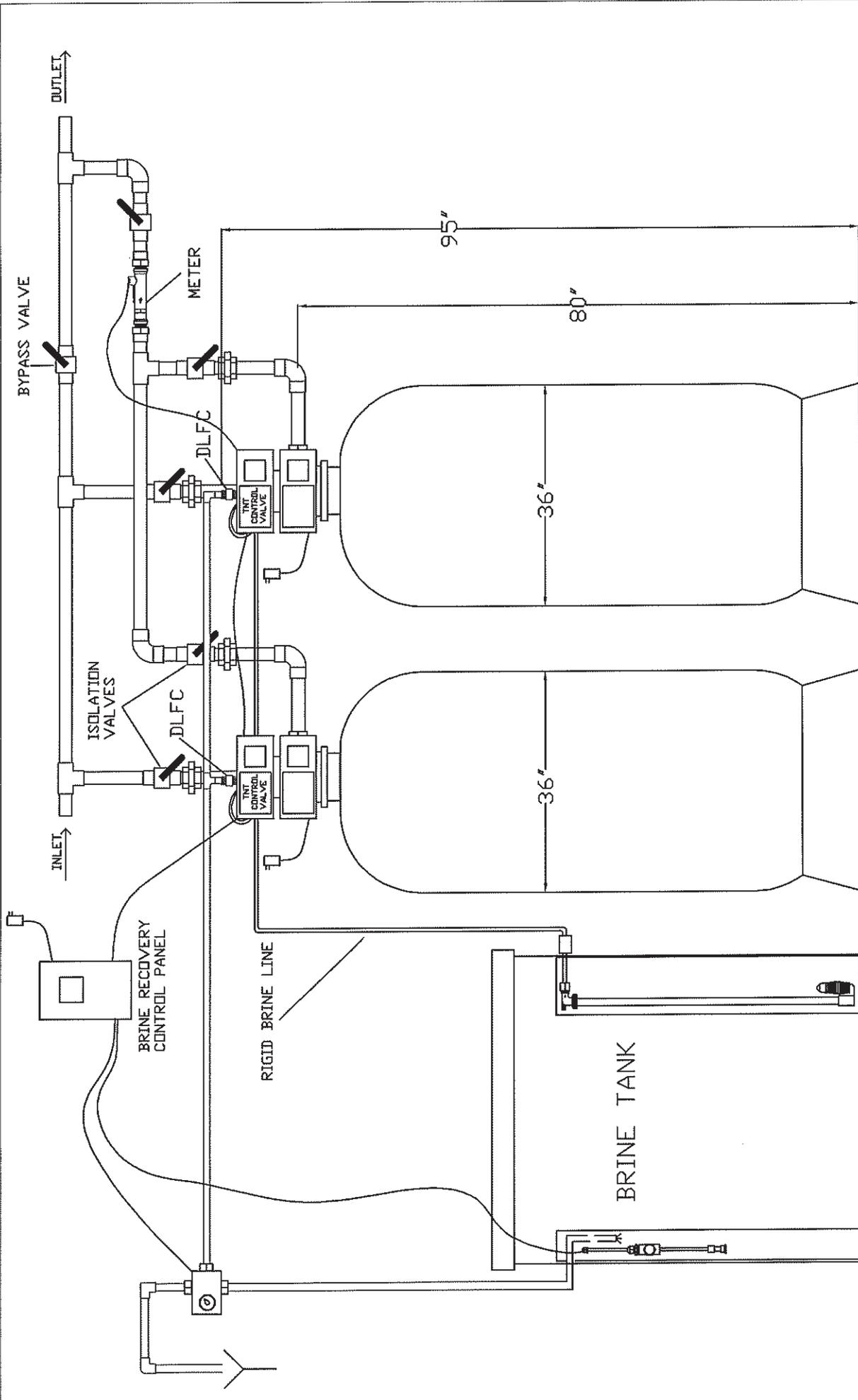
A REQUIREMENT OF THE WATER SOFTENER SYSTEMS IS THAT THEY MUST BE WIRED/CONTROLLED TO ASSURE THAT NO TWO SYSTEMS CAN REGENERATE AT THE SAME TIME.

These are used with Hellenbrand Softener models H200, H300, TN2, TNT and any other system containing a time controlled relay.

Sample installation drawings are attached.

Model numbers

**TC-MBV-1”
TC-MBV-1.5”
TC-MBV-2”
TC-MBV-3”**



TNT 600 SYSTEM 7 W/BRINE RECOVERY	
DWG #	73-TNT-600-S7-BR
dwg by:	J.W.AACK
Approved by	Engineer
Hellenbrand It's what you don't see that counts	
Waukegan, WI 53597	
(608)849-3050	
A. MAST	

INTERCONNECT PIPING IS FOR INSTALLATION REFERENCE ONLY
 AND IS TO BE SUPPLIED BY INSTALLER

1" BRINE LINE MUST BE WELL SECURED AND SUPPORTED
 FOR PROPER OPERATION

ALL DIMENSIONS +/- 1"