

NOTES:

1. DIMENSIONS IN INCHES.
2. ALL TOLERANCES:  $\pm 1/2"$
4. ESTIMATED WEIGHT:  
DRY: 1200 LB  
WET: 3900 LB
5. AREA CLASSIFICATION: ORDINARY
6. AMBIENT TEMPERATURE:  
32°F-104°F (0°C-40°C)
7. NOT ALL FEATURES ARE STANDARD

MODELS WITH RECIRCULATION PUMP OR NO PUMP

OPTIONS		DWG REF.
PUMP CONFIGURATION	NO PUMP	P5-0
	RECIRCULATION PUMP	P5-1
JUNCTION BOX TYPE RATING	TYPE 4, STEEL	P7-0
	TYPE 4X, 304 SST	P7-1
ALARM (IN USE)	NONE	-
	ISOLATED DRY CONTACTS	P12-3
MIXING VALVE QTY.	SINGLE	P30-1
	DUAL	P30-2
EXPANSION TANK	NON-ASME	P10-T
	ASME	P10-A/E

TEMPERATURE & PRESSURE RELIEF VALVE

VACUUM BREAKER

AIR ELIMINATOR

(HI-TEMP DUMP)

TANK DRAIN  
1" BALL VALVE

4X  $\varnothing$  1"  
MOUNTING HOLES  
HARDWARE BY OTHERS

CUSTOMER CONNECTION  
COLD WATER INLET  
1-1/2" NPT UNION  
95°F MAX (35°C)

CUSTOMER CONNECTION  
RECIRCULATION RETURN INLET  
1" NPT UNION  
(PUMP UNITS ONLY)

CUSTOMER CONNECTION  
TEMPERED WATER OUTLET  
1-1/2" NPT UNION  
SET TEMP: 85°F (29.4°C)

CONTROL PANEL SEE  
0580001086.D-EL  
FOR WIRING AND ELECTRICAL  
SERVICE DETAILS

PRESSURE GAUGE

2ND MIXING VALVE  
(OPTIONAL)

MIXING VALVE

CUSTOMER CONNECTION  
HI-TEMP VALVE DUMP  
1/2" NPT UNION  
>95°F (35°C)  
(RECIRCULATION  
PUMP UNITS ONLY)

RECIRCULATION PUMP  
10 GPM @ 24' TDH  
0 GPM @ 31' TDH  
(OPTIONAL)

FULL LENGTH  
FORKLIFT CHANNELS

THE ATTACHED DESIGNS ARE CONSIDERED TRADE SECRETS AND POTENTIALLY PATENTABLE. IN ACCORDANCE WITH CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT, THESE DESIGNS IN ACTUAL OR CONCEPTUAL FORMS CANNOT BE DISCLOSED, REPRODUCED OR USED WITHOUT HAWS' EXPRESS WRITTEN CONSENT.

REVISIONS				
REV	DESCRIPTION	ECN	DATE	BY
3	PER ECO	5817	5/20/2022	IR
4	PER ECO	5963	11/22/2023	DW

TANK SIZE

(TANK TEMPERATURES ARE SET AT 165°F (73.9°C) FOR USA AND 145°F (62.8°C) FOR CANADA)

TANK SIZE	TANK TEMP.	SHOWER CAPACITY (15 MIN.)	MINIMUM INLET TEMP.	OPTION SELECTED
119G	145°F/62.8°C	1	62°F/16.7°C	
	165°F/73.9°C	1	54°F/12.2°C	
120G	145°F/62.8°C	1	62°F/16.7°C	
	165°F/73.9°C	1	54°F/12.2°C	
200G	145°F/62.8°C	1	35°F/1.7°C	
	165°F/73.9°C	1	32°F/0°C	
318G	145°F/62.8°C	2	50°F/10°C	
	165°F/73.9°C	2	39°F/3.9°C	
400G	145°F/62.8°C	2	35°F/1.7°C	
	165°F/73.9°C	2	32°F/0°C	

119/120 GALLON TANK, NO PUMP

STORAGE TANK  
(318G SHOWN)  
US-165°F (73.9°C)  
CA-145°F (62.8°C)

400 GALLON TANK

119/120 GALLON TANK


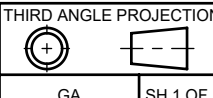
200 GALLON TANK

LEVEL SWITCH

TEMPERATURE GAUGE

EXPANSION TANK  
CUSTOMER TO  
CHARGE WITH AIR  
TO SUPPLY  
PRESSURE

IMMERSION HEATER

CUSTOMER INFO/TAG #:		 1455 KLEPPE LANE SPARKS, NEVADA 89431 USA	
JOB NUMBER:		TITLE <b>INDOOR EMERGENCY WATER TEMPERING SKID</b>	
DRAWN BY:	DP	<small>NOTICE OF PROPRIETARY INFORMATION INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF HAWS CORPORATION AND THIS DOCUMENT AND THE DATA DISCLOSED HEREIN OR HEREWITH IS NOT TO BE REPRODUCED, USED OR DISCLOSED IN WHOLE OR IN PART TO ANYONE WITHOUT THE PERMISSION OF HAWS CORPORATION.</small>	
DRAWN DATE:	06/16/21		
CHECKED BY:	DW		
CHECKED DATE:	12/11/23		
APPROVED BY:	IR	THIRD ANGLE PROJECTION 	
APPROVAL DATE:	12/11/23	SCALE 1:16	SIZE C
		PART NO. <b>0580001086.D-GA</b>	REV. <b>4</b>

NOTES:

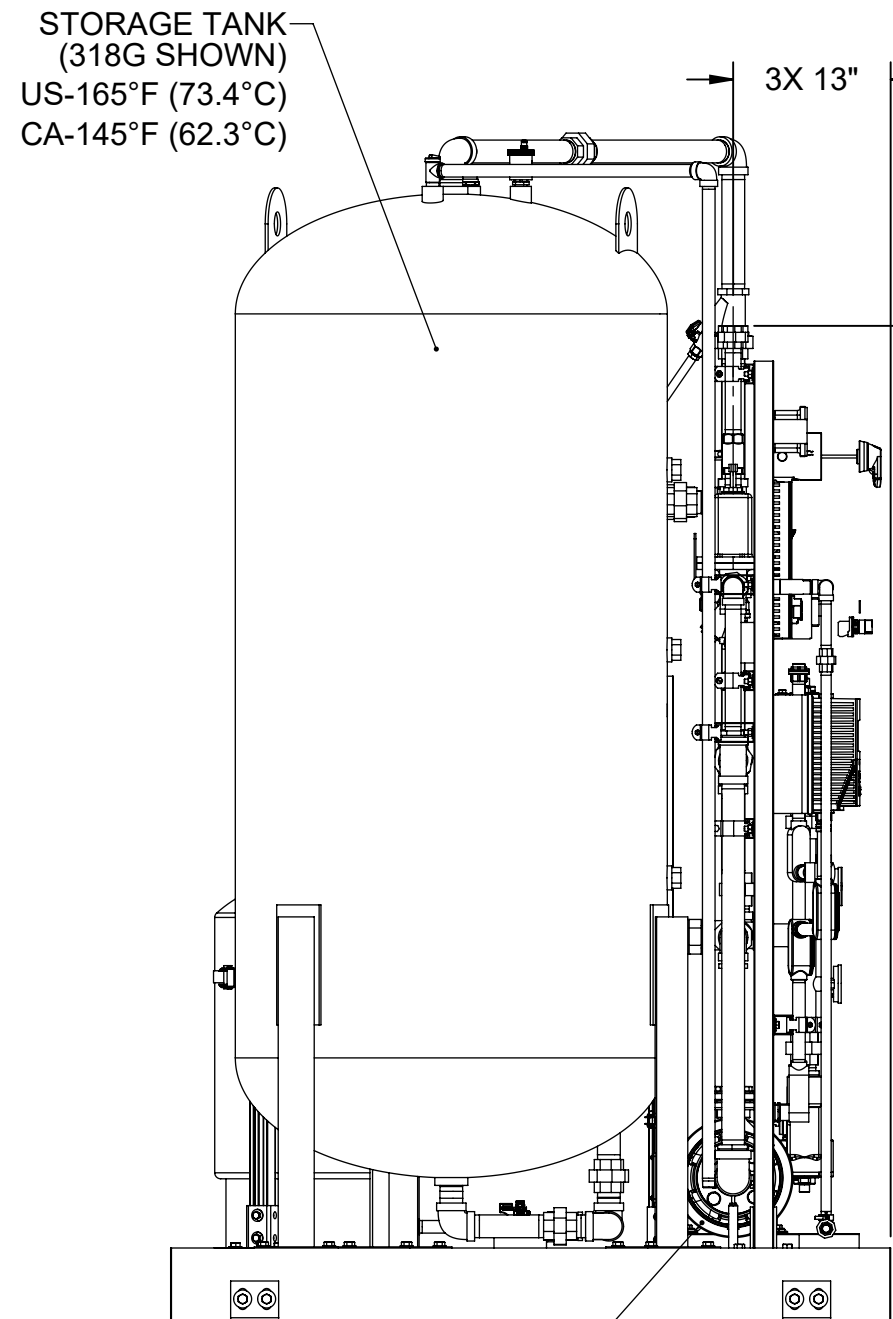
1. DIMENSIONS IN INCHES.
2. ALL TOLERANCES:  $\pm 1/2"$
3. ESTIMATED WEIGHT:  
DRY: 1200 LB  
WET: 3900 LB
4. AREA CLASSIFICATION: ORDINARY
5. AMBIENT TEMPERATURE: 32°F-104°F (0°C-40°C)
6. NOT ALL FEATURES ARE STANDARD
7. RECOMMENDED RECIRCULATION FLOWRATE: 10GPM
8. PRESSURE TRANSMITTER SETPOINT IS TYPICALLY SET TO 30PSI + ELEVATION CHANGE FROM SKID TO HIGHEST SHOWER (1FT = .433PSI)
9. A BACK PRESSURE REGULATOR IS REQUIRED FOR THE FOLLOWING CONDITION: SUPPLY PRESSURE < 30PSI + ELEVATION CHANGE FROM SKID TO HIGHEST SHOWER
10. RATINGS: CONFIGURABLE WITH TYPE 4/4X JUNCTION BOX FOR INDOOR LOCATION

OPTIONS		DWG REF.
PUMP CONFIGURATION	BOOSTER/RECIRC W/ VFD	P5-3
JUNCTION BOX TYPE RATING	TYPE 4, STEEL	P7-0
	TYPE 4X, 304 SST	P7-1
ALARM (IN USE)	NONE	-
	ISOLATED DRY CONTACTS	P12-3
MIXING VALVE QTY.	SINGLE	P30-1
	DUAL	P30-2

# MODELS WITH VFD RECIRC/BOOSTER PUMP

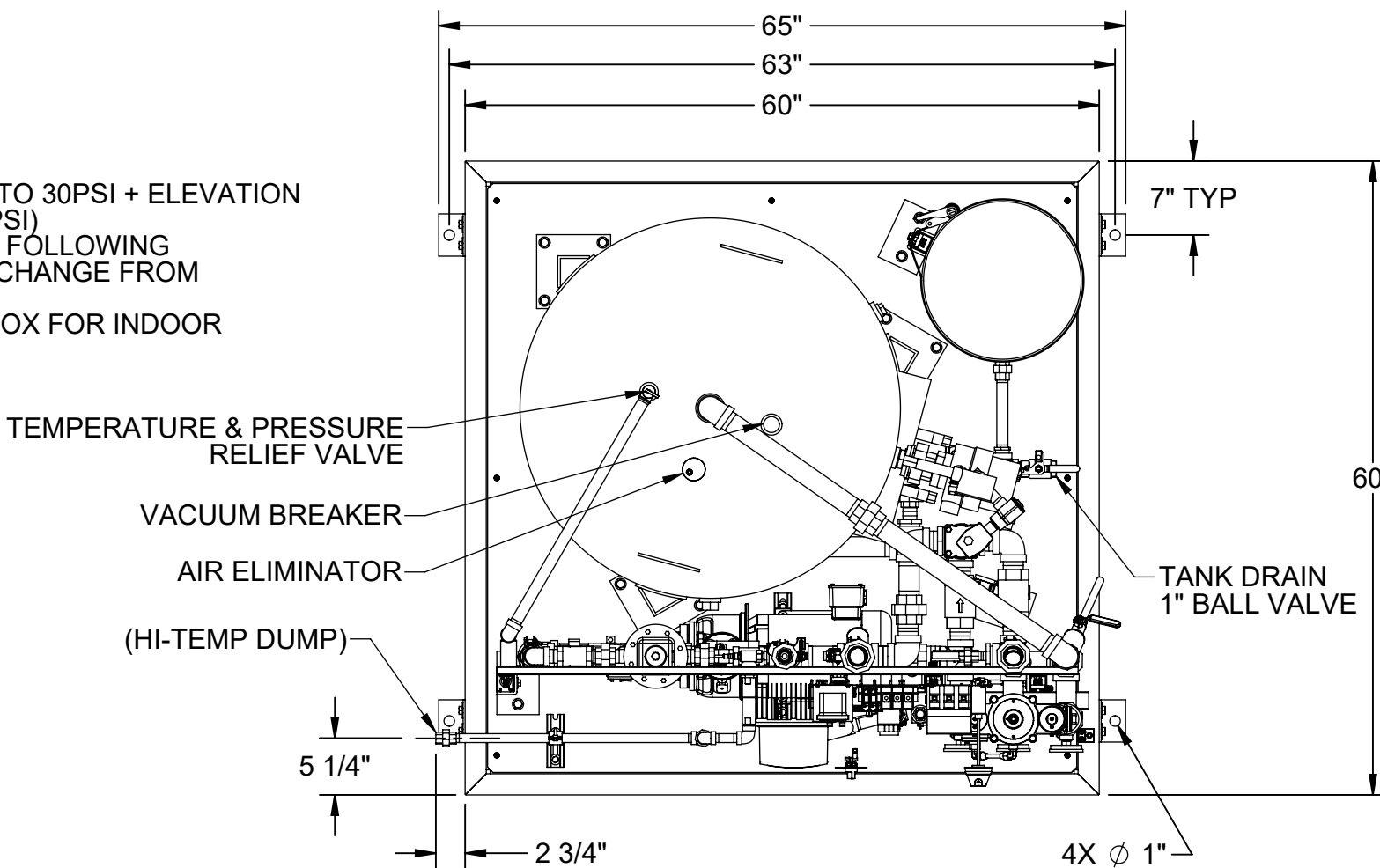
REVISIONS				
REV	DESCRIPTION	ECN	DATE	BY
3	PER ECO	5817	6/9/22	IR
4	PER ECO	5963	11/22/2023	DW

TANK SIZE				
(TANK TEMPERATURES ARE SET AT 165°F (73.9°C) FOR USA AND 145°F (62.8°C) FOR CANADA)				
TANK SIZE	TANK TEMP.	SHOWER CAPACITY (15 MIN.)	MINIMUM INLET TEMP.	OPTION SELECTED
119G	145°F/62.8°C	1	62°F/16.7°C	
	165°F/73.9°C	1	54°F/12.2°C	
120G	145°F/62.8°C	1	62°F/16.7°C	
	165°F/73.9°C	1	54°F/12.2°C	
200G	145°F/62.8°C	1	35°F/1.7°C	
	165°F/73.9°C	1	32°F/0°C	
318G	145°F/62.8°C	2	50°F/10°C	
	165°F/73.9°C	2	39°F/3.9°C	
400G	145°F/62.8°C	2	35°F/1.7°C	
	165°F/73.9°C	2	32°F/0°C	



BOOSTER/RECIRC PUMP  
60GPM @ 133' TDH  
0GPM @ 140' TDH

CUSTOMER CONNECTION  
HI-TEMP VALVE DUMP  
1/2" NPT UNION  
>95°F (35°C MAX)



CUSTOMER CONNECTION  
COLD WATER INLET  
1-1/2" NPT UNION  
95°F MAX (35°C MAX)

CUSTOMER CONNECTION  
RECIRCULATION RETURN INLET  
1" NPT UNION

PRESSURE TRANSMITTER

BACKPRESSURE REGULATOR (OPTIONAL)

FLOW SWITCH SETPOINT: 2.4GPM (OPTIONAL)

VFD

CUSTOMER CONNECTION  
TEMPERED WATER OUTLET  
1-1/2" NPT UNION  
SET TEMP: 85°F (29.4°C MAX)

CONTROL PANEL:  
SEE 0580001086.D-VFD EL  
FOR WIRING AND ELECTRICAL  
SERVICE DETAILS

PRESSURE GAUGE

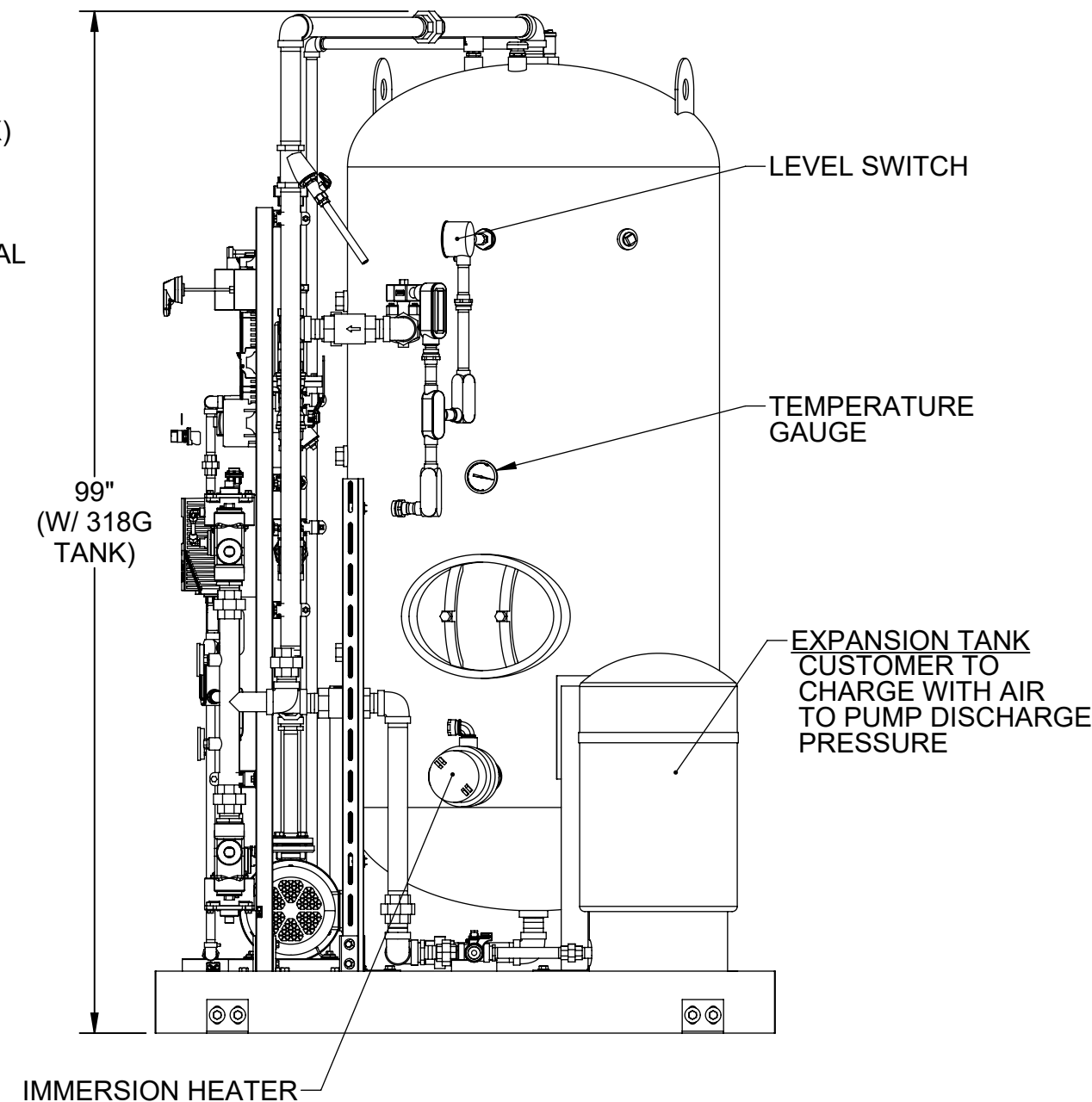
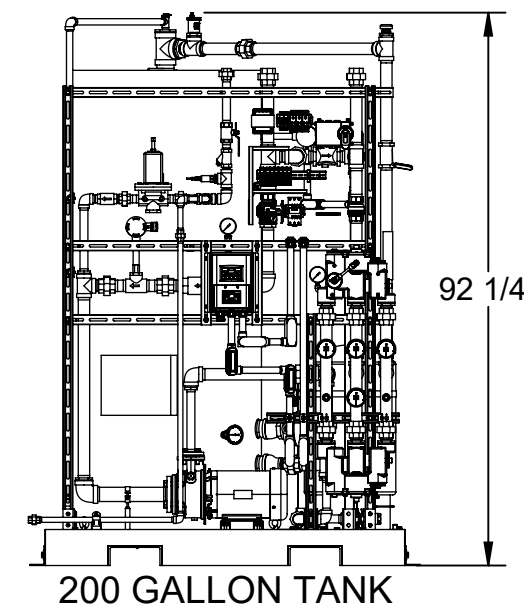
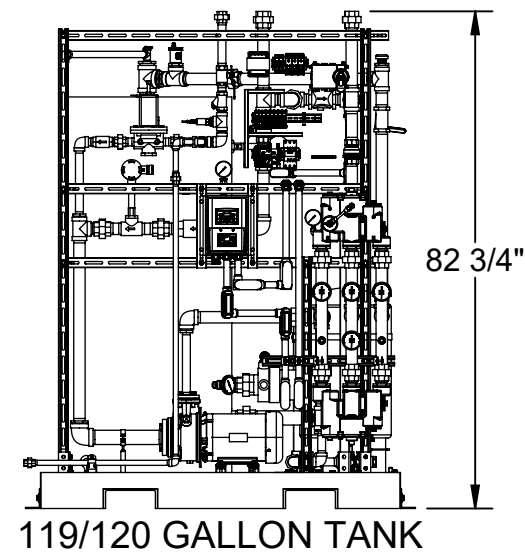
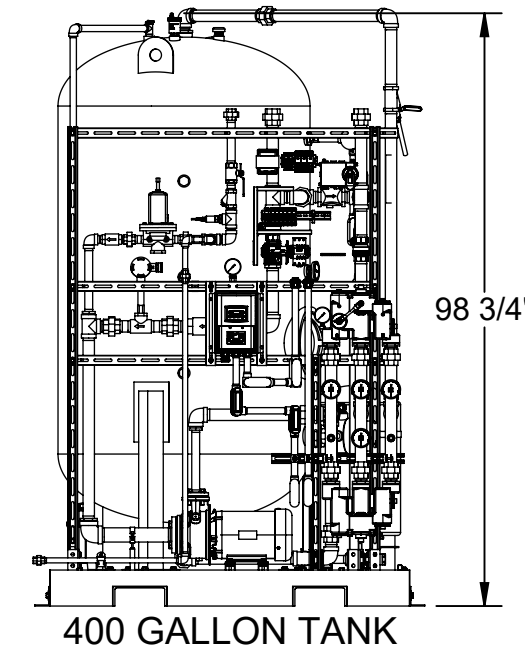
2ND MIXING VALVE (OPTIONAL)

MIXING VALVE


7 1/2"

7 3/4"

FULL LENGTH FORKLIFT CHANNELS



THE ATTACHED DESIGNS ARE CONSIDERED TRADE SECRETS AND POTENTIALLY PATENTABLE. IN ACCORDANCE WITH CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT, THESE DESIGNS IN ACTUAL OR CONCEPTUAL FORMS CANNOT BE DISCLOSED, REPRODUCED OR USED WITHOUT HAWS' EXPRESS WRITTEN CONSENT.

CUSTOMER INFO/TAG #:		 1455 KLEPPE LANE SPARKS, NEVADA 89431 USA	
JOB NUMBER:		TITLE <b>INDOOR EMERGENCY WATER TEMPERING SKID</b>	
DRAWN BY:	DP	<small>NOTICE OF PROPRIETARY INFORMATION</small> INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF HAWS CORPORATION AND THIS DOCUMENT AND THE DATA DISCLOSED HEREIN OR HEREIN IS NOT TO BE REPRODUCED, USED OR DISCLOSED IN WHOLE OR IN PART TO ANYONE WITHOUT THE PERMISSION OF HAWS CORPORATION.	
DRAWN DATE:	06/16/21		
CHECKED BY:	DW		
CHECKED DATE:	12/11/23		
APPROVED BY:	IR	SCALE	SIZE PART NO.
APPROVAL DATE:	12/11/23	1:16	C 0580001086.D-VFD GA
		REV.	4







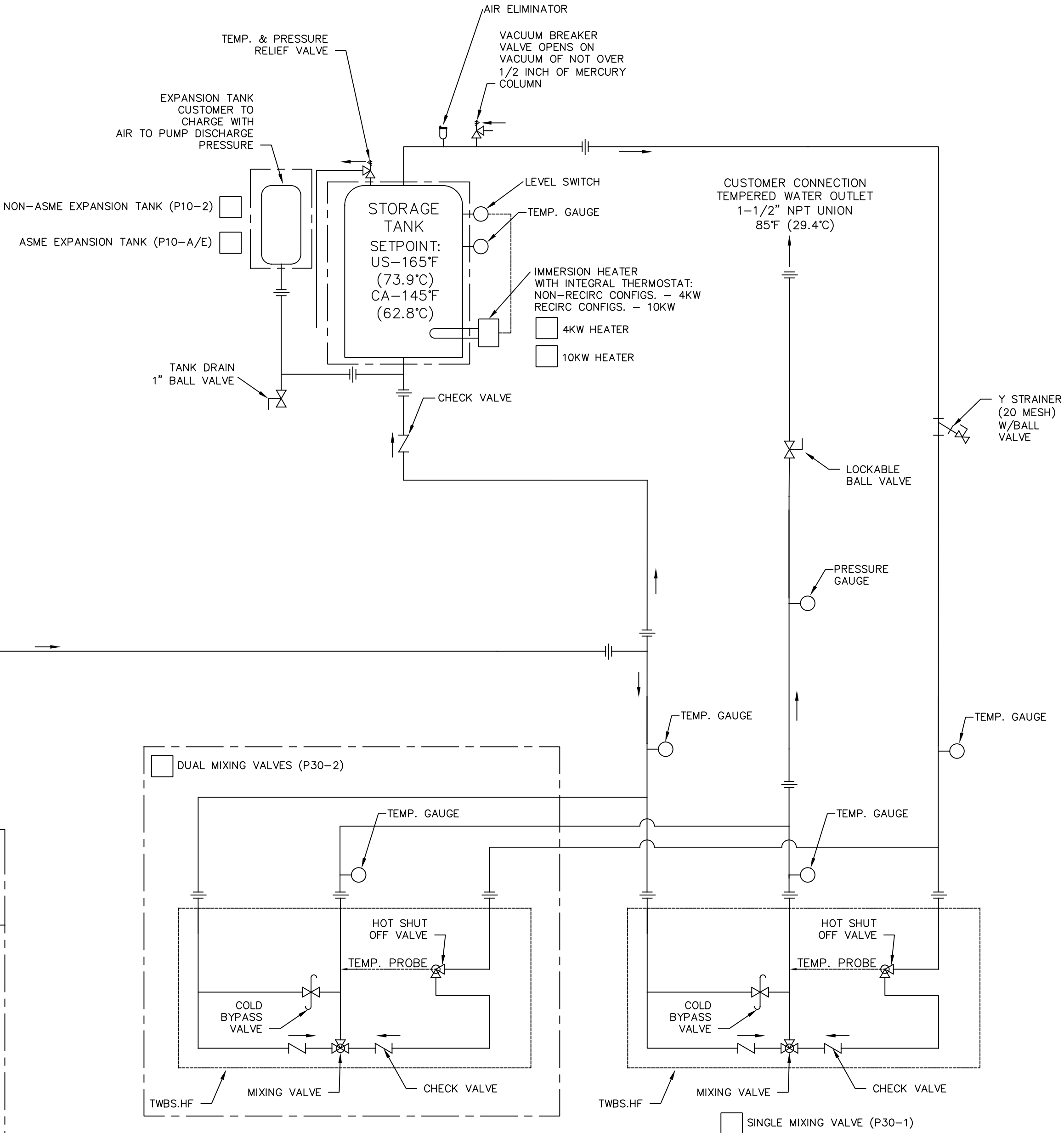
- NOTES:
- AREA CLASSIFICATION: ORDINARY
  - AVAILABLE AMBIENT TEMPERATURE RANGE: 32°F - 104°F (0°C - 40°C)
  - SEE TABLE 1 FOR PRESSURE DROP ACCROSS SKID. SHOWERS AND EYEWASHES REQUIRE 30PSI MINIMUM AT THEIR HIGHEST FLOW RATE.
  - RATINGS: CONFIGURABLE WITH TYPE 4/4X JUNCTION BOX FOR INDOOR LOCATION

REVISIONS				
REV	DESCRIPTION	ECN	DATE	BY
4	PER ECO	5963	11/22/2023	DW

PRESSURE DROP ACROSS SKID (SINGLE COMBINATION SHOWER FLOWS 30GPM)		
SKID CONFIGURATION	PRESSURE DROP	
60GPM/SST PIPE/2 TWBS	17 PSI	
60GPM/GALV PIPE/2 TWBS	24 PSI	
60GPM/SST PIPE/1 TWBS	30 PSI	
60GPM/GALV PIPE/1 TWBS	37 PSI	
30GPM/SST PIPE/2 TWBS	4 PSI	
30GPM/GALV PIPE/2 TWBS	6 PSI	
30GPM/SST PIPE/1 TWBS	8 PSI	
30GPM/GALV PIPE/1 TWBS	10 PSI	




TABLE 1

TANK SIZE (TANK TEMPERATURES ARE SET AT 165°F (73.9°C) FOR USA AND 145°F (62.8°C) FOR CANADA)				
TANK SIZE	TANK TEMP.	SHOWER CAPACITY (15 MIN.)	MINIMUM INLET TEMP.	OPTION SELECTED
119G	145°F/62.8°C	1	62°F/16.7°C	
	165°F/73.9°C	1	54°F/12.2°C	
120G	145°F/62.8°C	1	62°F/16.7°C	
	165°F/73.9°C	1	54°F/12.2°C	
200G	145°F/62.8°C	1	35°F/1.7°C	
	165°F/73.9°C	1	32°F/0°C	
318G	145°F/62.8°C	2	50°F/10°C	
	165°F/73.9°C	2	39°F/3.9°C	
400G	145°F/62.8°C	2	35°F/1.7°C	
	165°F/73.9°C	2	32°F/0°C	



OPTIONAL FEATURE THAT CAN BE CONFIGURED WHEN PURCHASED

THE ATTACHED DESIGNS ARE CONSIDERED TRADE SECRETS AND POTENTIALLY PATENTABLE. IN ACCORDANCE WITH CONFIDENTIALITY AND NON-DISCLOSURE AGREEMENT, THESE DESIGNS IN ACTUAL OR CONCEPTUAL FORMS CANNOT BE DISCLOSED, REPRODUCED OR USED WITHOUT HAWS' EXPRESS WRITTEN CONSENT.

APPROVALS		DATE	 <b>Haws®</b>	1455 KLEPPE LANE SPARKS, NEVADA 89431 USA	
DRAWN IR		09/18/20			
CHECKED DWB		12/07/23			
APPROVED IR		12/07/23			
JOB NUMBER					
CUSTOMER INFO/TAG #:			TITLE:		8780 - INDOOR EMERGENCY WATER TEMPERING SKID
			NOTICE OF PROPRIETARY INFORMATION INFORMATION CONTAINED HEREIN IS THE SOLE PROPERTY OF HAWS CORPORATION AND THIS DOCUMENT AND THE DATA DISCLOSED HEREIN OR HEREWITH IS NOT TO BE REPRODUCED, USED, OR DISCLOSED IN WHOLE OR IN PART TO ANYONE WITHOUT THE PERMISSION OF HAWS CORPORATION.		THIRD ANGLE PROJECTION  
			P&ID		SH 1 OF 1
SCALE	SIZE	PART NUMBER			REV
N/A	C	0580001086.D-PID			4

