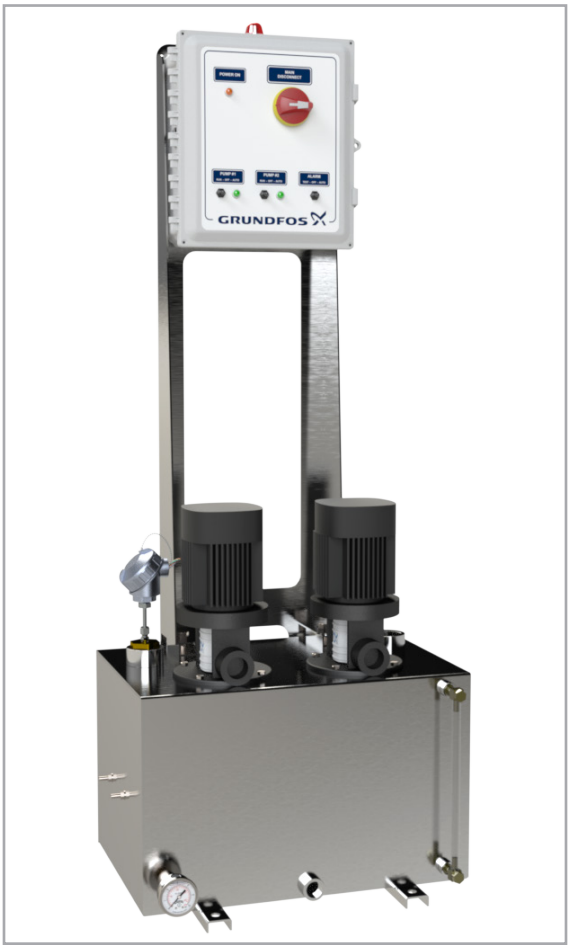
CONDENSATE RETURN UNIT

TECHNICAL DATA SHEET

The Grundfos Condensate Return Unit (CRU) is a robust design that addresses the most common issues associated with conventional Steam CRU designs. Unlike cast iron or steel receivers, the Grundfos all stainless steel receiver is resistant to rust and corrosion, providing extended service life. The Grundfos CRU utilize the Grundfos MTR multi-stage pumps that mount to the top of the receiver rather than the side of the receiver. This configuration eliminates the need for pump isolation valves or the need to shut the system down to service the pumps. Additionally, the Grundfos MTR Series pumps provide ease of maintenance and include an integral inlet strainer for added protection.

The Grundfos Condensate Return Unit control panel and multi-float switch assembly gives the end user better control and greater reliability than the mechanical float switch/ alternators typically installed in conventional condensate return units. All units include a main power disconnect (thru-the-door disconnects on three phase units), Pump HOA switches, Visual & Audible Alarms, and Dry Contacts for Remote Monitoring. The multi-float switch assembly is configured with preset levels for the pumping range as well as high-level alarm.



24 Gallon Unit Shown

RECEIVER:

- Connections: condensate inlet, vent, drain, thermometer and gauge glass assembly
- Cover plate – used during pump removal to prevent flash steam escaping
- Thermometer – Stainless Steel Bi-Metal Thermometer with Brass Well
- Gauge Glass – Brass Gauge Glass set with glass tubing and guide rods

PUMPS:

- Grundfos MTR series tank-mounted multi-stage pumps
- Stainless Steel and Cast Iron Construction
- Inlet Strainer on each pump
- Cartridge-style seal kit
- TEFC Motors

CONTROL PANEL:

- Incoming Service Main Disconnect
- Type 4X Polycarbonate Enclosure
- Visual/Audible Alarm Indication with Silencing
- Simple Relay Logic Controls
- 10mm Pump Run HOA Toggle Switches
- 10mm Neon Indicator Lights
- General Alarm Remote Monitoring Dry Contact
- Wire Labels
- Easy to access Field Terminals
- UL 508a Listing

Duplex 3ph Series

CONFIGURATIONS:

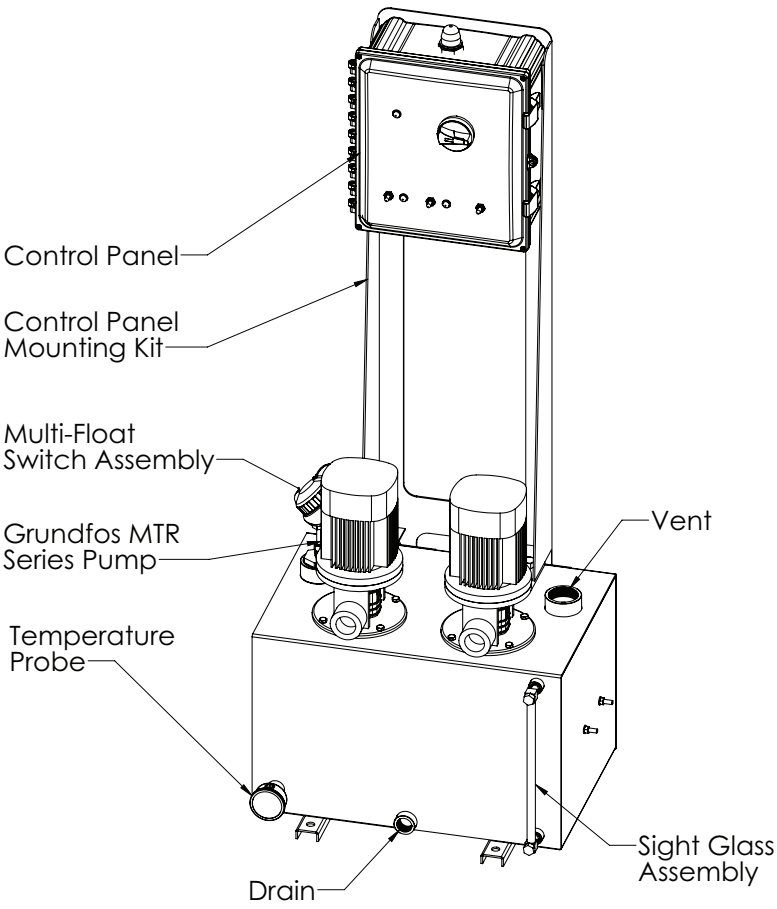
- Duplex
- Simplex
- 120vac/ 1ph
- 200/240vac / 1ph
- 200/230/480vac/ 3ph

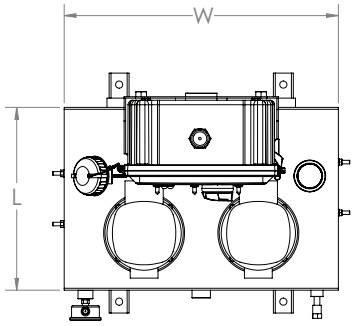
Multi-Float Switch Assembly

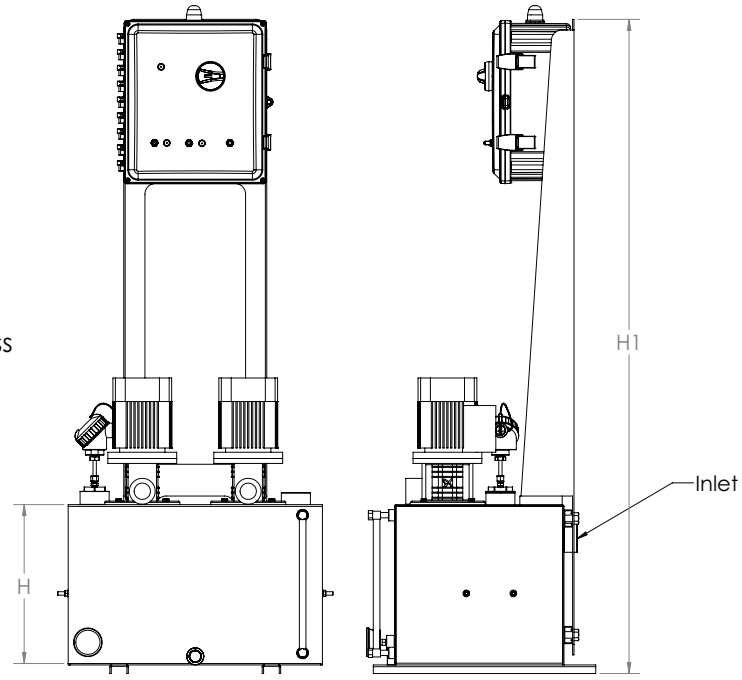
OPTIONS:

- Valve Package - includes a bronze isolation valve, check valve and balancing valve for each pump (shipped loose for field installation)
- Control Panel - shipped loose for field installation

Gallons	Dimensions				Connections				
	(L) Length	(W) Width	(H) Height	(H1) Height w/Control Panel Mount	Inlet	Vent	Sight Glass	Temperature Probe	Drain
15	14”	17”	15”	60”	3”	2”	(2) 1/2”	3/4”	1”
24	16”	24”							
44	20”	36”							
70	30”	36”			4”				







Sizing Chart

EDR	Steam lbs/hr	GPM	10 PSI Discharge Pressure / HP	20 PSI Discharge Pressure / HP	30 PSI Discharge Pressure / HP	40 PSI Discharge Pressure / HP	50 PSI Discharge Pressure / HP	60 PSI Discharge Pressure / HP	70 PSI Discharge Pressure / HP	80 PSI Discharge Pressure / HP	90 PSI Discharge Pressure / HP	Receiver Size Gallons
2,000	500	3	0.33 hp	0.33 hp	0.33 hp	0.5 hp	0.5 hp	0.5 hp	0.5 hp	0.75 hp	0.75 hp	15
4,000	1,000	6	0.33 hp	0.33 hp	0.33 hp	0.5 hp	0.75 hp	0.75 hp	0.75 hp	1 hp	1 hp	
6,000	1,500	9	0.33 hp	0.33 hp	0.33 hp	0.5 hp	0.75 hp	0.75 hp	0.75 hp	1 hp	1.5 hp	
8,000	2,000	12	0.5 hp	0.5 hp	0.5 hp	0.75 hp	1 hp	1 hp	1 hp	1.5 hp	1.5 hp	24
10,000	2,500	15	0.5 hp	0.5 hp	0.5 hp	0.75 hp	1 hp	1 hp	1.5 hp	1.5 hp	1.5 hp	
15,000	3,750	22.5	0.75 hp	0.75 hp	1 hp	1.5 hp	2 hp	2 hp	1.5 hp	3 hp	3 hp	
20,000	5,000	30	0.75 hp	1 hp	1.5 hp	1.5 hp	2 hp	2 hp	2 hp	3 hp	3 hp	
25,000	6,250	37.5	1 hp	2 hp	2 hp	2 hp	3 hp	3 hp	3 hp	5 hp	5 hp	44
30,000	7,500	45	1 hp	2 hp	2 hp	3 hp	3 hp	5 hp	5 hp	5 hp	5 hp	
40,000	10,000	60	2 hp	2 hp	5 hp	5 hp	5 hp	7.5 hp	5 hp	7.5 hp	7.5 hp	70
50,000	12,500	75	2 hp	2 hp	5 hp	5 hp	7.5 hp	7.5 hp	7.5 hp	7.5 hp	7.5 hp	

GRUNDFOS CONDENSATE RETURN UNIT TYPE KEY

41-#MTR MODEL-RS-VLV-SOP-B-F HP 3X460V

- PRODUCT CODE = 41
- # OF PUMPS
- PUMP MODEL EX: MTR5-8/8
- RS = RECEIVER SIZE
- 1.25 = 1.25"VALVE PACKAGE
- 2 = 2"VALVE PACKAGE
- SOP = STANDARD PANEL OPTIONS
- NOP = NO PANEL OPTIONS
- B = BRACKET MOUNTED PANEL
- Z = NO PANEL BRACKET
- F = FLOAT
- Z = NO FLOAT
- HP OF MOTORS
- POWER SUPPLY

EXAMPLE:

41-2MTR5-8/8-24-1.25-SOP-B-F 3HP 3X460V

DUPLEX CONDENSATE RETURN UNIT
2 X MTR5-8/8 A-WB-A-HUUE 3HP 3X230/460V 60HZ
24 GALLON RECEIVER TANK, 3"INLET, 2"VENT
1.25" VALVE PACKAGE

STANDARD PANEL OPTION PACKAGE:
WINTERS ADJUSTABLE THERMOMETER WITH WELL,
0-500°F, GAUGE GLASS ASSEMBLY,

INSTALLATION ON RECEIVER
STAINLESS STEEL FLOAT SWITCH ASSEMBLY

WEIGHT: 229 LBS

MADE IN AMERICA

c UL us LISTED

Specifications subject to change. Consult website or contact Grundfos

GRUNDFOS

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