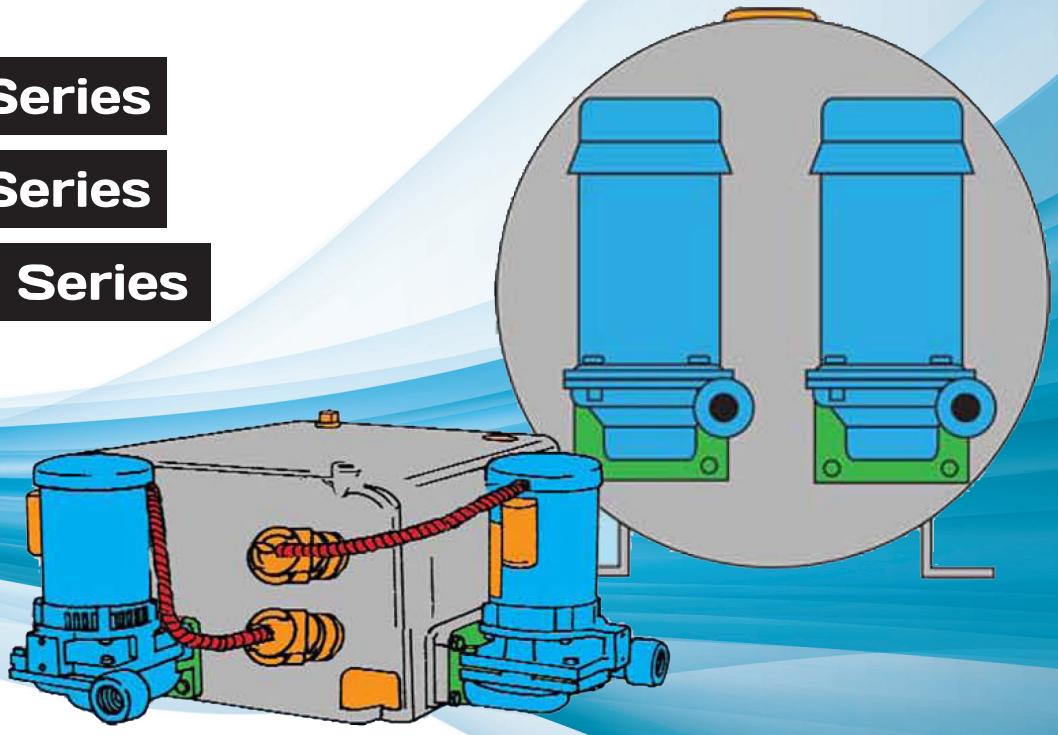
FLO FAB
SINCE 1981

Boiler Feed Unit Systems

CVC Series

BCF Series

BCFE Series



Condensate & Boiler Feed Units
Series "CVC" - Condensate
"BFC" - Boiler Feed
"BFCE" - Elevated Boiler

www.flofab.com

001-cat-2017-bfus

Go to www.flofab.com in Our Products Section to see the Master Spec - http://www.arcomnet.com/masterspec/

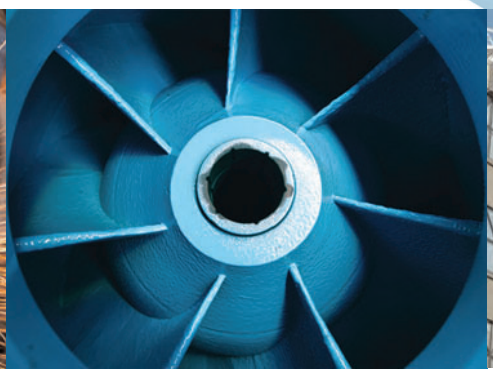
TABLE OF CONTENT

HISTORY

Flo Fab was established in 1981 by Denis Gauvreau who created and developed the products line and constantly being perfected by Marc Gauvreau, as well as by a team of professional engineers and designers. It's a combination of existing designs from several renowned products and the innovative ideas of a new generation professionals.

Through the years, Flo Fab has acquired several companies and service entities including : AQUA-PROFAB (ASME Tanks manufacturer), MÉNARD, LÉONARD ÉLECTRIQUE, PMA. , Furthermore Flo Fab purchased equipment, fabrication designs and patterns from IDEALCO, a manufacturer of shell and tube type heat exchangers.
The after sales services, sales, engineering, R&D, production, quality control, accounting and administration departments of all the above companies share the same location.

In December 2014, Marc Gauvreau, son of the founder, acquired all shares of The company. Flo Fab and is constantly investing in new state of the art innovations new product like the XRI series and Prefab Skid for Hydronic Hearing 8 cooling system, pumping systems. This has allowed Flo Fab to retain competent and experienced staff of professionals with varied and specialized abilities that constantly work on improving our existing products and add new engineered solutions that exceeding customer's expectations .
Flo Fab has grown quite rapidly and now proudly offers of a wide range of products available directly from one manufacturer. This includes pumps & pump packages, tanks, heat exchangers & hydronic accessories. This allows each project stakeholders to enjoy economical savings, peace of mind, best value for their investment and optimized total cost of ownership.


The FLO FAB pumping systems described in this brochure are packaged units, completely assembled, wired and tested at the manufacturing plant. They are designed to provide maximum efficiency, reliability and easy maintenance in compact, space saving configurations.

Each unit is individually factory tested before shipment to assure that the product is ready for service when it is received. Testing includes verification of flow rate, pressure, amperage draw and cut-in/cut-out points of all components.

Technical assistance. Your FLO FAB representative has the expertise to assist you in selecting the pumping system most suitable for your application. He is backed by a team of engineers and application specialists who can develop the most efficient, energy saving pumping system for your specific requirements.

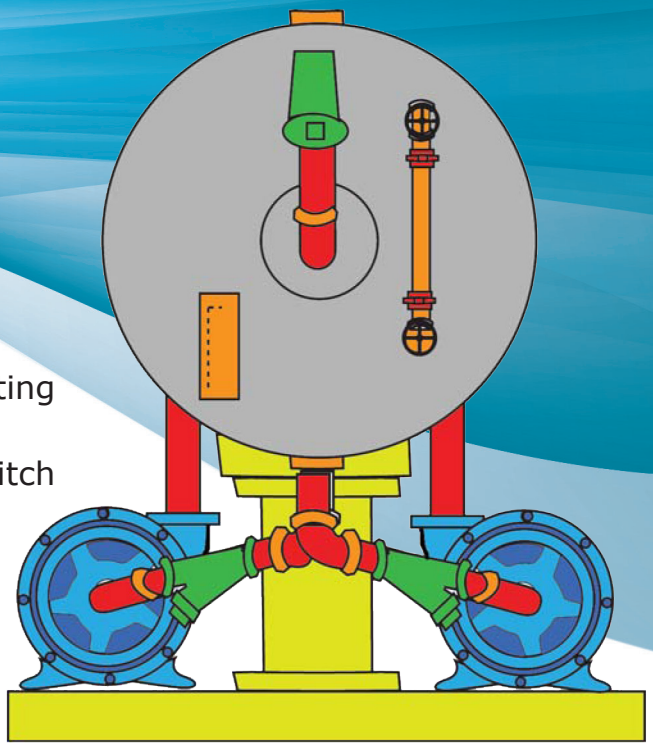
Series BFC and BFCE boiler feed pumps are used to pump and precisely control the condensate and make-up water required by the boiler(s) in low pressure steam applications. Pumping action is controlled by the fluid level in the boiler. They consist of a welded steel storage receiver equipped with make-up valve and one or more centrifugal pump(s) which are closed-coupled to an electric motor.

Boiler Feed Or Make-Up Pumps Standard Equipement

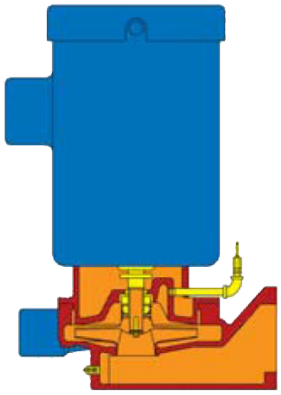
1) Float operated make up valve.
2) Gauge glass and thermometer
3) Suction isolation Butterfly valve(s) (on BFCE units only)
4) Inlet strainer(s) - "Y" (on BFCE units only)
5) Metal flexible (on BFCE units only)

Optional Equipement

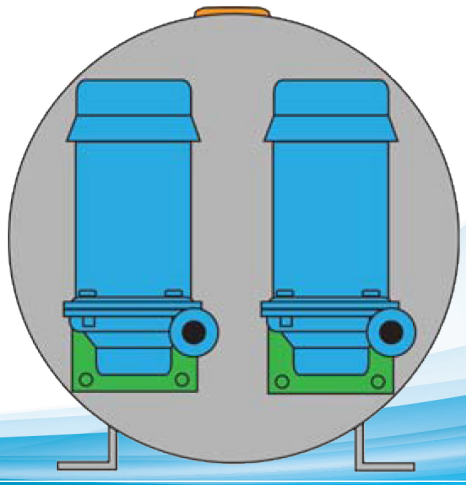
- ☐ Control panels
- ☐ Make-up feeders - external type, or reverse acting float switch and solenoid valve type
- ☐ Solenoid operated make-up valve with float switch
- ☐ Magnesium corrosion inhibitor
- ☐ Three valve bypass and inlet strainer assembly
- ☐ Feedwater preheaters (Steam Injectors)
- ☐ Discharge pressure gauges
- ☐ Discharge check valves
- ☐ Discharge gate valves
- ☐ Discharge butterfly valves



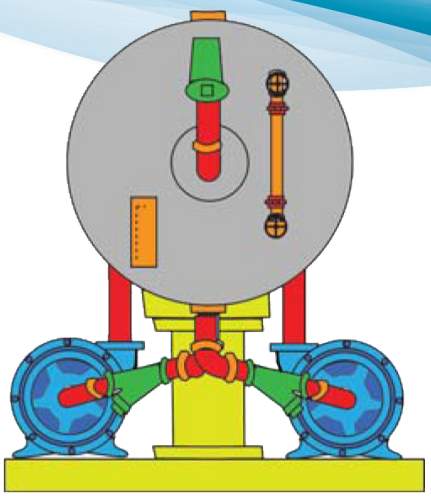
DUPLEX (D-BFCE)
ELEVATED BOILER FEED UNIT



CENTRIFUGAL PUMP SERIES GV



DUPLEX (D-BFC) BOILER FEED UNIT



DUPLEX (D-BFCE)
ELEVATED BOILER FEED UNIT

FLO FAB CENTRIFUGAL PUMP SERIES GV

Vertically flange mounted centrifugal pumps are of bronze fitted construction with mechanical shaft seal for temperatures up to 250oF (up to 300oF also available). The pump is directly bolted to the receiver tank to provide a compact, efficient design. Seal area is automatically vented and flushed to the receiver to assure adequate lubrication at all times.Back pull-out design allows servicing without disturbing the piping. Bronze enclosed impellers are precision balanced for smooth, quiet operation. Each unit is factory assembled and tested prior to shipping.

RECEIVER TANK

Rugged steel or cast iron receivers for life-time service under the most severe conditions.Low return inlet to provide adequate drainage of radiators with low elevation. Available in 50, 70, 120, 210, 300 gallons sizes. Larger sizes are also available. Condensate receiver tanks are designed for gravity return systems only, and are not to be pressurized. Tank must be vented to atmosphere to prevent pressure build-up in the tank. Vent size shall beat least 11/4» diameter.

CONTROLS

Simplex (S-BFC or S-BFCE) systems are equipped with a heavy duty adjustable float switch and a stainless steel float and rod. Duplex (D-BFC or D-BFCE) systems are equipped with an electrical alternator for alternating the pumps and to start the second pump if the first one fails or when flow rate exceeds capability of one pump. For boiler feed service the float switch, which is set to close contacts at low level, operates a water make-up valve. Both float switches are two pole devices with double break contacts. Control panel and magnetic starter also available.

MOTORS

Drip proof or TEFC NEMA standard 3450 RPM motors have dual ball bearings and
threaded stainless steel shaft. All single phase motors have built-in thermal overload protection. All three phase motors must be installed with a magnetic starter which provides full overload protection. Failure to use proper starter and overload protectors will void warranty. Single phase motors thru 2Hp are 115 V or 230 V 60Hz (50 cycles also available) and 3Hp or more are 230 V only. Three phase motors are 230 V, 460 V or 575 V 60Hz (50 cycles also available).

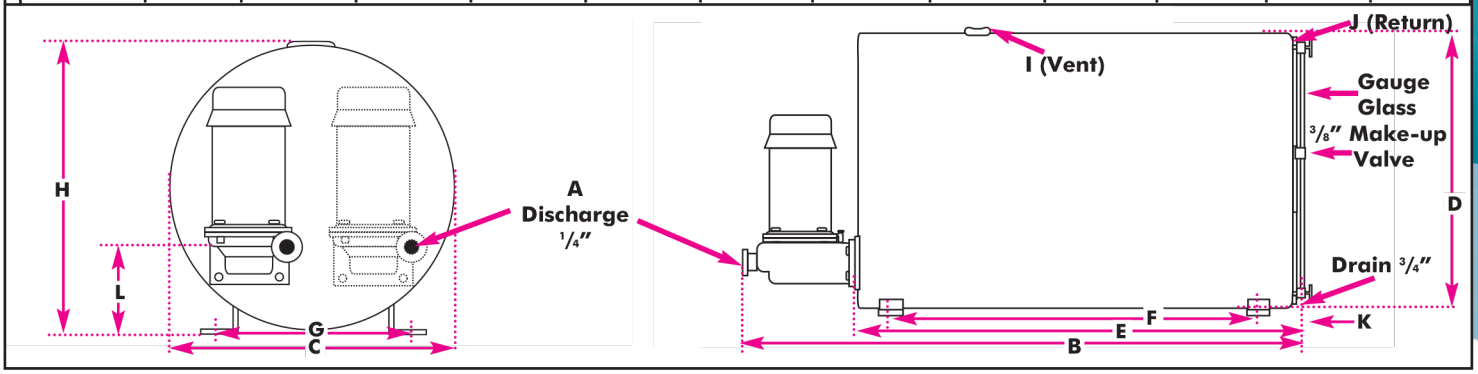
• Boiler Feed Unit
Series BFC

FLO FAB Series BFC boiler feed units are used to pump condensate and make-up water directly into the boiler(s). Pumping action is determined by a boiler mounted control which senses boiler water level requirements. Each boiler feed unit is
equipped with a heavy duty make-up valve actuated by the position of its seamless float within the receiver. The mechanism is readily adjustable for various water levels. It is mounted on the end of the receiver and can be easily removed as a complete unit.

Simplex (S-BFC) or duplex (D-BFC) units are available with cylindrical welded steel receivers in 50, 70, 120, 210, 300 gallon capacities. Simplex (S-BFC) units are also available mounted on duplex receivers to provide the option for conversion to a duplex (D-BFC) unit at a future requirement. Standard equipment also includes a water level gauge glass and a stem thermometer. When ordering, specify model number and required voltage.

NOTE: Larger units available on request.

Receiver Size	Unit Type	B	C	D	E	F	G	H	I	J	K	L
50 Gallons	S-BFC D-BFC	49" 1244.6 mm	22" 558.8 mm	22" 558.8 mm	37" 939.8 mm	33" 838.2 mm	18" 457.2 mm	21" 533.4 mm	2" 50.8 mm	2" 50.8 mm	4" 101.6 mm	7 3/16" 182.9 mm
70 Gallons	S-BFC D-BFC	47" 1193.8 mm	24" 609.6 mm	24" 609.6 mm	37" 939.8 mm	31" 787.4 mm	22" 558.8 mm	25" 635 mm	2" 50.8 mm	2" 50.8 mm	4" 101.6 mm	6 7/8" 172.7 mm
120 Gallons	S-BFC D-BFC	56" 1422.4 mm	28" 711.2 mm	28" 711.2 mm	46" 1168.4 mm	40" 1016 mm	26" 660.4 mm	29" 736.6 mm	2 1/2" 63.5 mm	2 1/2" 63.5 mm	4" 101.6 mm	6 3/8" 162.6 mm
210 Gallons	S-BFC D-BFC	81" 2057.4 mm	30" 762 mm	30" 762 mm	71" 1803.4 mm	65" 1651 mm	28" 711.2 mm	31" 787.4 mm	2 1/2" 63.5 mm	2 1/2" 63.5 mm	4" 101.6 mm	6 3/8" 162.6 mm
300 Gallons	S-BFC D-BFC	82" 2082.8 mm	36" 914.4 mm	36" 914.4 mm	72" 1828.8 mm	60" 1524 mm	32" 812.8 mm	39" 990.6 mm	3" 76.2 mm	3" 76.2 mm	6" 152.4 mm	6 3/8" 162.6 mm

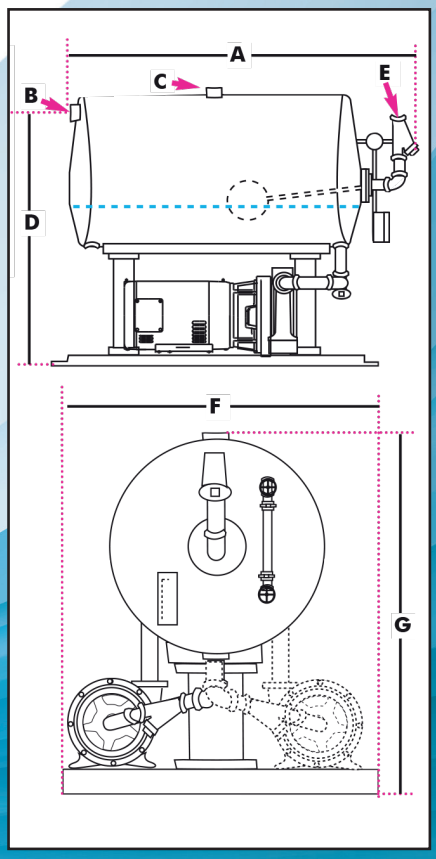


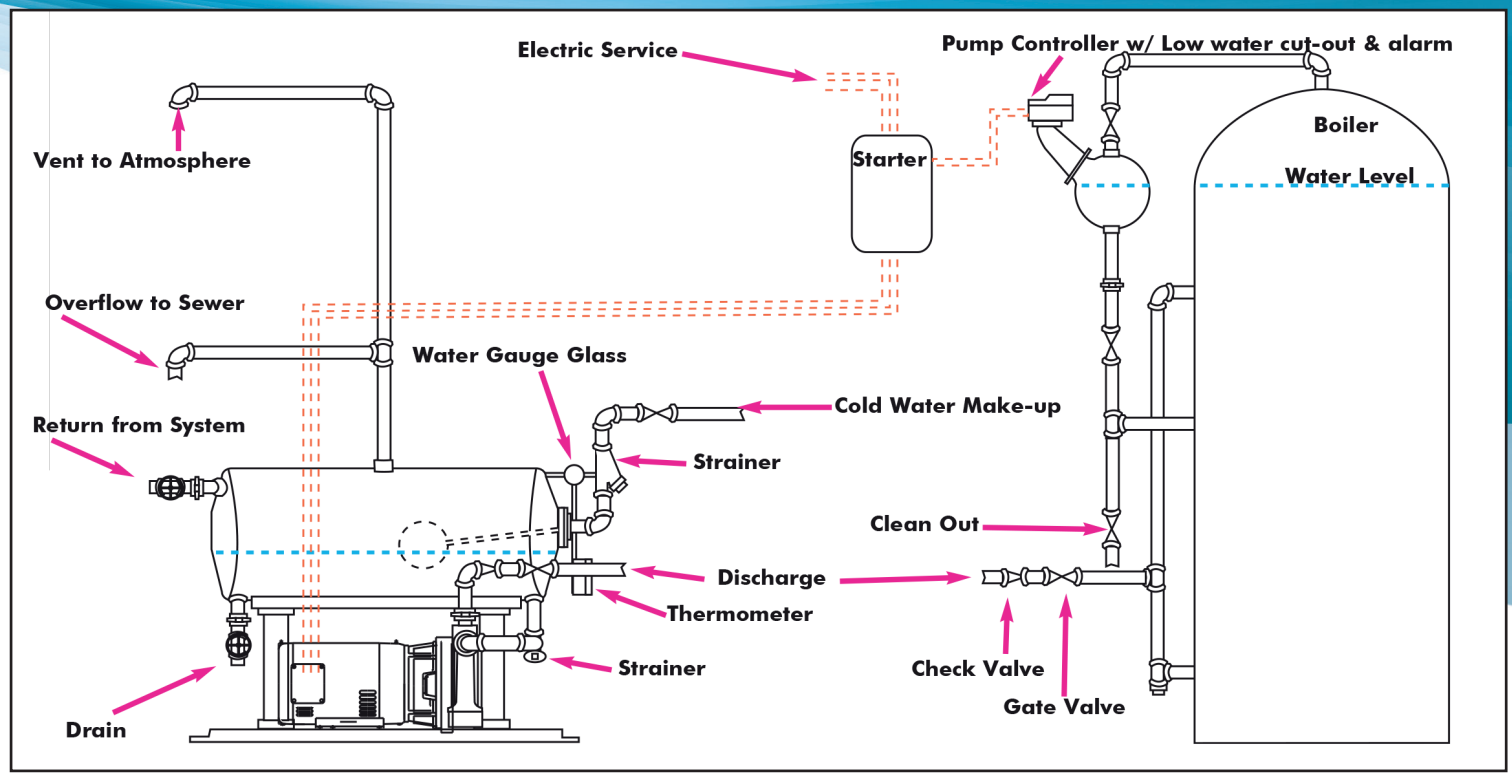
Dimensions not to be used for construction unless prints is certified by factory.

Elevated Boiler Feed Unit
Series BFCE

All the same features as the regular boiler feed units series BFC. The BFCE also includes suction isolation butterfly valve(s), inlet «Y» strainer(s) and metal flexible(s) at pump inlet(s). The elevated boiler feed units series BFCE may be an option for small space location that requires special installation. The pump(s) and motor(s) are installed beside or under the tank instead of at the end(s) for a more compact, shorter design.

Receiver Size	Unit Type	A	B	C	D	E	F	G
50 Gallons	S-BFCE	44" 1117.6 mm	2" 50.8 mm	2" 50.8 mm	45" 1143 mm	3/4" 19.05 mm	36" 914.4 mm	50" 1270 mm
	D-BFCE							
70 Gallons	S-BFCE	44" 1117.6 mm	2" 50.8 mm	2" 50.8 mm	47" 1193.8 mm	3/4" 19.05 mm	36" 914.4 mm	52" 1320.8 mm
	D-BFCE							
120 Gallons	S-BFCE	53" 1346.2 mm	2 1/2" 63.5 mm	2 1/2" 63.5 mm	50" 1270 mm	3/4" 19.05 mm	36" 914.4 mm	56" 1422.4 mm
	D-BFCE							
210 Gallons	S-BFCE	78" 1981.2 mm	2 1/2" 63.5 mm	2 1/2" 63.5 mm	52" 1320.8 mm	3/4" 19.05 mm	36" 914.4 mm	58" 1473.2 mm
	D-BFCE							
300 Gallons	S-BFC	79" 2006.6 mm	3" 76.2 mm	3" 76.2 mm	66" 1676.4 mm	3/4" 19.05 mm	42" 1066.8 mm	72" 1828.8 mm
	D-BFC							





• Boiler Feed Unit Selection Tables (3450 RPM)

Identification: _____Volts /_____Hp /_____Hz

* Using Closed Coupled Series GV6 or Series 1000 pumps

Model Specifications

Ex: D - CVC - 1010 - 15

- S = Simplex
- D = Duplex

Unit Type
- CVC = Condensate
- BFC = Boiler Feed
- BFCE = Elevated Boiler Feed

EDR & PSI
Ex: E.D.R=10,000 (10)
PSI = 10

Receiver Sizes

Engineering Equivalents

1,000 Sq. Ft. E.D.R. = 240,000BTU /Hr.
1,000 Sq. Ft. E.D.R. = 247 lbs Water evap. /Hr.
1,000 Sq. Ft. E.D.R. = ½ Gal Water evap /min.

1 Sq. Ft. E.D.R. = 240 BTU /Hr. (Steam)
1 Sq. Ft. E.D.R. = ¼ lbs Water evap. /Hr.

1 Boiler Hp = 33,475 BTU /Hr. (Steam)
1 Boiler Hp = 34.5 lbs Water evap. /Hr. (212°F)
1 Boiler Hp =.069 gal water evap. /min.
1 Boiler Hp = 140 Sq. Ft. E.D.R. (Steam)
1 Boiler Hp = 222 Sq. Ft. E.D.R. (Water)

1 US Gallon = 231 Cu. Inches

1 lbs = 2.31 Ft. of water

Series ☐ BFC or ☐ BFCE 3450 RPM

Unit Model Number ☐ Simplex ☐ Duplex	Boiler Hp E.D.R (sq. ft) BTUH (1000's)	Pump USGPM	Tank Capa. Gallons	Pump Disch Press. PSI	3450 RPM Motor Hp	3450 RPM Pump Motor Models
BFC - 0210	Hp 14 / EDR 2,000 / BTUH 490	3	15	10	1/4	GV6
BFC - 0215				15	1/3	GV6
BFC - 0220				20	1/2	GV6
BFC - 0230				30	1/2	GV6
BFC - 0240				40	3/4	GV6
BFC - 0250				50	1	GV6
BFC - 0255				55	1 1/2	GV6
BFC - 0270				70	--	--
BFC - 0280				80	--	--
BFC - 0290				90	--	--
BFC - 02100				100	--	--
BFC - 0410	Hp 29 / EDR 4,000 / BTUH 990	6	15	10	1/4	GV6
BFC - 0415				15	1/3	GV6
BFC - 0420				20	1/3	GV6
BFC - 0430				30	1/2	GV6
BFC - 0440				40	3/4	GV6
BFC - 0450				50	1	GV6
BFC - 0455				55	1 1/2	GV6
BFC - 0470				70	--	--
BFC - 0480				80	--	--
BFC - 0490				90	--	--
BFC - 04100				100	--	--
BFC - 0610	Hp 43 / EDR 6,000 / BTUH 1,480	9	15	10	1/3	GV6
BFC - 0615				15	1/3	GV6
BFC - 0620				20	1/3	GV6
BFC - 0630				30	1/2	GV6
BFC - 0640				40	3/4	GV6
BFC - 0650				50	1	GV6
BFC - 0655				55	1 1/2	GV6
BFC - 0670				70	--	--
BFC - 0680				80	--	--
BFC - 0690				90	--	--
BFC - 06100				100	--	--
BFC - 0810	Hp 57 / EDR 8,000 / BTUH 1,975	12	15	10	1/3	GV6
BFC - 0815				15	1/3	GV6
BFC - 0820				20	1/3	GV6
BFC - 0830				30	3/4	GV6
BFC - 0840				40	1	GV6
BFC - 0850				50	1 1/2	GV6
BFC - 0855				55	1 1/2	GV6
BFC - 0870				70	--	--
BFC - 0880				80	--	--
BFC - 0890				90	--	--
BFC - 08100				100	--	--

Dimensions not to be used for construction unless prints is certified by factory.

• Boiler Feed Unit Selection Tables (3450 RPM)

IDENTIFICATION: _____ VOLTS /_____ HP /_____ HZ

*** USING CLOSED COUPLED SERIES GV6 OR SERIES 1000 PUMPS**

SERIES ☐ BFC OR ☐ BFCE 3450 RPM

Unit Model Number ☐ Simplex ☐ Duplex	Boiler Hp E.D.R (sq. ft) BTUH (1000's)	Pump USGPM	Tank Capa. Gallons	Pump Disch Press. PSI	3450 RPM Motor Hp	3450 RPM Pump Motor Models
BFC - 1010	Hp 72 / EDR 10,000 / BTUH 2,470	15	15	10	1/3	GV6
BFC - 1015				15	1/3	GV6
BFC - 1020				20	1/3	GV6
BFC - 1030				30	3/4	GV6
BFC - 1040				40	3/4	GV6
BFC - 1050				50	1 1/2	GV6
BFC - 1055				55	1 1/2	GV6
BFC - 1070				70	--	--
BFC - 1080				80	--	--
BFC - 1090				90	--	--
BFC - 10100				100	--	--
BFC - 1510	Hp 108 / EDR 15,000 / BTUH 3,600	22 1/2	25	10	1/3	GV6
BFC - 1515				15	1/3	GV6
BFC - 1520				20	1/2	GV6
BFC - 1530				30	3/4	GV6
BFC - 1540				40	1	GV6
BFC - 1550				50	1 1/2	GV6
BFC - 1555				55	1 1/2	GV6
BFC - 1570				70	7 1/2	810G
BFC - 1580				80	10	810G
BFC - 1590				90	20	1020A
BFC - 15100				100	25	1020A
BFC - 2010	Hp 143 / EDR 20,000 / BTUH 4,940	30	25	10	1/3	GV6
BFC - 2015				15	1/3	GV6
BFC - 2020				20	1/2	GV6
BFC - 2030				30	3/4	GV6
BFC - 2040				40	1	GV6
BFC - 2050				50	1 1/2	GV6
BFC - 2055				55	2	GV6
BFC - 2070				70	7 1/2	810A
BFC - 2080				80	10	810A
BFC - 2090				90	10	810G
BFC - 20100				100	15	810G
BFC - 2510	Hp 179 / EDR 25,000 / BTUH 6,170	37 1/2	35	10	1/3	GV6
BFC - 2515				15	1/2	GV6
BFC - 2520				20	1/2	GV6
BFC - 2530				30	1	GV6
BFC - 2540				40	1 1/2	GV6
BFC - 2550				50	2	GV6
BFC - 2555				55	2	GV6
BFC - 2570				70	7 1/2	810A
BFC - 2580				80	7 1/2	810A
BFC - 2590				90	10	810A
BFC - 25100				100	10	810A

SERIES ☐ BFC OR ☐ BFCE 3450 RPM

Unit Model Number ☐ Simplex ☐ Duplex	Boiler Hp E.D.R (sq. ft) BTUH (1000's)	Pump USGPM	Tank Capa. Gallons	Pump Disch Press. PSI	3450 RPM Motor Hp	3450 RPM Pump Motor Models
BFC - 3010	Hp 215 / EDR 30,000 / BTUH 7,400	45	35	10	--	--
BFC - 3015				15	1/2	GV6
BFC - 3020				20	1/2	GV6
BFC - 3030				30	1	GV6
BFC - 3040				40	1 1/2	GV6
BFC - 3050				50	2	GV6
BFC - 3055				55	7 1/2	610A
BFC - 3070				70	7 1/2	810A
BFC - 3080				80	10	810A
BFC - 3090				90	10	810A
BFC - 30100				100	10	810A
BFC - 4010	Hp 285 / EDR 40,000 / BTUH 9,880	60	50	10	--	--
BFC - 4015				15	--	--
BFC - 4020				20	1	GV6
BFC - 4030				30	1 1/2	GV6
BFC - 4040				40	2	GV6
BFC - 4050				50	2	GV6
BFC - 4055				55	7 1/2	610A
BFC - 4070				70	7 1/2	810A
BFC - 4080				80	10	810A
BFC - 4090				90	10	810A
BFC - 40100				100	15	810A
BFC - 5010	Hp 358 / EDR 50,000 / BTUH 12,000	75	70	10	--	--
BFC - 5015				15	--	--
BFC - 5020				20	--	--
BFC - 5030				30	3	615J
BFC - 5040				40	5	610A
BFC - 5050				50	5	610A
BFC - 5055				55	7 1/2	815G
BFC - 5070				70	7 1/2	810A
BFC - 5080				80	10	810A
BFC - 5090				90	15	810A
BFC - 50100				100	15	810A
BFC - 6510	Hp 450 / EDR 65,000 / BTUH 15,000	97 1/2	70	10	--	--
BFC - 6515				15	--	--
BFC - 6520				20	--	--
BFC - 6530				30	3	615A
BFC - 6540				40	5	615J
BFC - 6550				50	7 1/2	615J
BFC - 6555				55	7 1/2	815G
BFC - 6570				70	10	810A
BFC - 6580				80	10	810A
BFC - 6590				90	15	810A
BFC - 65100				100	15	810A

Dimensions not to be used for construction unless prints is certified by factory.

• Boiler Feed Unit Selection Tables (1750 RPM)

IDENTIFICATION: _____ VOLTS /_____ HP /_____ HZ

*** USING CLOSED COUPLED SERIES GV6 OR SERIES 1000 PUMPS**

SERIES ☐ BFC OR ☐ BFCE 3450 RPM

Unit Model Number ☐ Simplex ☐ Duplex	Boiler Hp E.D.R (sq. ft) BTUH (1000's)	Pump USGPM	Tank Capa. Gallons	Pump Disch Press. PSI	3450 RPM Motor Hp	3450 RPM Pump Motor Models
BFC - 7510	Hp 538	112½	70	10	--	--
BFC - 7515				15	--	--
BFC - 7520				20	--	--
BFC - 7530	EDR 75,000			30	5	615A
BFC - 7540				40	5	615J
BFC - 7550				50	7½	615J
BFC - 7555				55	7½	810A
BFC - 7570	BTUH 18,000			70	10	810A
BFC - 7580				80	10	810A
BFC - 7590				90	15	810A
BFC - 75100				100	15	810A
BFC - 10010	Hp 717	150	120	10	--	--
BFC - 10015				15	--	--
BFC - 10020				20	--	--
BFC - 10030	EDR 100,000			30	5	620A
BFC - 10040				40	7½	615A
BFC - 10050				50	7½	615J
BFC - 10055				55	10	815G
BFC - 10070	BTUH 24,700			70	10	815G
BFC - 10080				80	15	815G
BFC - 10090				90	15	815G
BFC - 100100				100	15	810A

SERIES ☐ BFC OR ☐ BFCE 1750 RPM

Unit Model Number ☐ Simplex ☐ Duplex	Boiler Hp E.D.R (sq. ft) BTUH (1000's)	Pump USGPM	Tank Capa. Gallons	Pump Disch Press. PSI	1750 RPM Motor Hp	1750 RPM Pump Motor Model
BFC - 0210	Hp 14	3	15	10	¼	GV6
BFC - 0215				15	¼	GV6
BFC - 0220	EDR 2,000			20	3	1020A
BFC - 0230				30	5	1020A
BFC - 0240				40	7½	1020A
BFC - 0250	BTUH 490			50	10	1215A
BFC - 0255				55	10	1215A
BFC - 0410	Hp 29	6	15	10	¼	GV6
BFC - 0415				15	⅓	GV6
BFC - 0420	EDR 4,000			20	3	1020A
BFC - 0430				30	5	1020A
BFC - 0440				40	7½	1020A
BFC - 0450	BTUH 990			50	10	1215A
BFC - 0455				55	10	1215A
BFC - 0610	Hp 43	9	15	10	¼	GV6
BFC - 0615				15	¼	GV6
BFC - 0620	EDR 6,000			20	3	1020A
BFC - 0630				30	5	1020A
BFC - 0640				40	7½	1020A
BFC - 0650	BTUH 1,480			50	10	1215A
BFC - 0655				55	10	1215A
BFC - 0810	Hp 57	12	15	10	¼	GV6
BFC - 0815				15	¼	GV6
BFC - 0820	EDR 8,000			20	3	1020A
BFC - 0830				30	5	1020A
BFC - 0840				40	7½	1020A
BFC - 0850	BTUH 1,975			50	10	1215A
BFC - 0855				55	10	1215A
BFC - 1010	Hp 72	15	15	10	¼	GV6
BFC - 1015				15	¼	GV6
BFC - 1020	EDR 10,000			20	1½	810A
BFC - 1030				30	5	1020A
BFC - 1040				40	7½	1020A
BFC - 1050	BTUH 2,470			50	10	1215A
BFC - 1055				55	10	1215A

Dimensions not to be used for construction unless prints is certified by factory.

• Boiler Feed Unit Selection Tables (1750 RPM)

IDENTIFICATION: _____VOLTS /_____HP /_____HZ

*** USING CLOSED COUPLED SERIES GV6 OR SERIES 1000 PUMPS**

SERIES ☐ BFC OR ☐ BFCE 1750 RPM

Unit Model Number ☐ Simplex ☐ Duplex	Boiler Hp E.D.R (sq. ft) BTUH (1000's)	Pump USGPM	Tank Capa. Gallons	Pump Disch Press. PSI	1750 RPM Motor Hp	1750 RPM Pump Motor Model
BFC - 1510	Hp 108	22½	25	10	¼	GV6
BFC - 1515				15	⅓	GV6
BFC - 1520	EDR 15,000			20	1½	810A
BFC - 1530				30	2	810A
BFC - 1540				40	7½	1020A
BFC - 1550	BTUH 3,600			50	10	1215A
BFC - 1555				55	10	1215A
BFC - 2010	Hp 143	30	25	10	¼	GV6
BFC - 2015				15	⅓	GV6
BFC - 2020	EDR 20,000			20	1½	810A
BFC - 2030				30	2	810A
BFC - 2040				40	7½	1020A
BFC - 2050	BTUH 4,940			50	10	1215A
BFC - 2055				55	10	1215A
BFC - 2510	Hp 179	37½	35	10	⅓	GV6
BFC - 2515				15	1	610A
BFC - 2520	EDR 25,000			20	½	810A
BFC - 2530				30	2	810A
BFC - 2540				40	7½	1020A
BFC - 2550	BTUH 6,170			50	10	1215A
BFC - 2555				55	10	1215A
BFC - 3010	Hp 215	45	35	10	½	615J
BFC - 3015				15	¾	815G
BFC - 3020	EDR 30,000			20	1½	810A
BFC - 3030				30	2	810A
BFC - 3040				40	5	1020A
BFC - 3050	BTUH 7,400			50	10	1215A
BFC - 3055				55	10	1215A
BFC - 4010	Hp 285	60	50	10	¾	615J
BFC - 4015				15	1	810A
BFC - 4020	EDR 40,000			20	2	810A
BFC - 4030				30	5	1020A
BFC - 4040				40	7½	1020A
BFC - 4050	BTUH 9,880			50	10	1215A
BFC - 4055				55	15	1215A

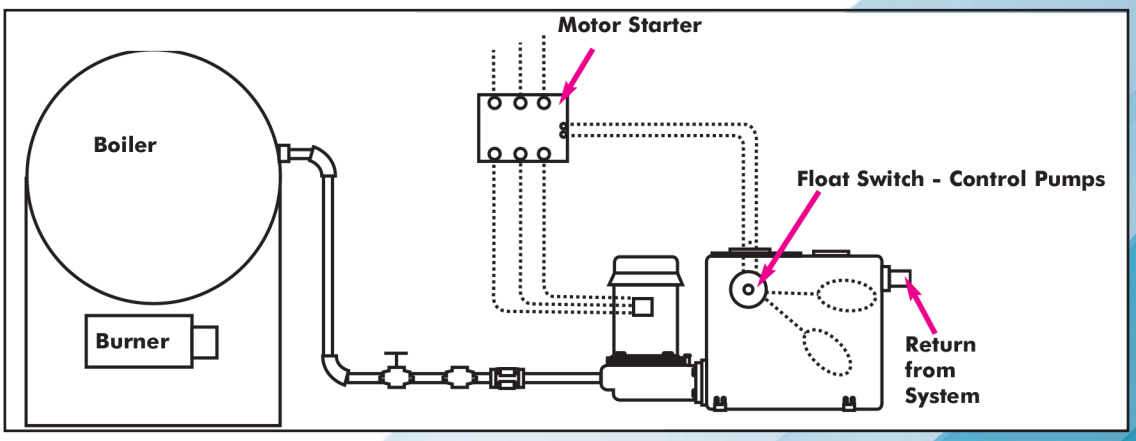
SERIES ☐ BFC OR ☐ BFCE 1750 RPM

Unit Model Number ☐ Simplex ☐ Duplex	Boiler Hp E.D.R (sq. ft) BTUH (1000's)	Pump USGPM	Tank Capa. Gallons	Pump Disch Press. PSI	1750 RPM Motor Hp	1750 RPM Pump Motor Model
BFC - 5010	Hp 358	75	70	10	¾	615J
BFC - 5015				15	1	815G
BFC - 5020	EDR 50,000			20	2	810A
BFC - 5030				30	5	810A
BFC - 5040				40	7½	1020A
BFC - 5050	BTUH 12,000			50	10	1215A
BFC - 5055				55	15	1215A
BFC - 6510	Hp 450	97½	70	10	1	615A
BFC - 6515				15	1½	815G
BFC - 6520	EDR 65,000			20	2	815G
BFC - 6530				30	5	1020A
BFC - 6540				40	7½	1020A
BFC - 6550	BTUH 15,000			50	10	1215A
BFC - 6555				55	15	1215A
BFC - 6570				70	20	1220A
BFC - 7510	Hp 538	112½	70	10	1½	620A
BFC - 7515				15	2	825A
BFC - 7520	EDR 75,000			20	3	1020A
BFC - 7530				30	5	1020A
BFC - 7540				40	15	1025A
BFC - 7550	BTUH 18,000			50	10	1215A
BFC - 7555				55	15	1215A
BFC - 7570				70	20	1220A
BFC - 10010	Hp 717	150	120	10	1½	620A
BFC - 10015				15	2	825A
BFC - 10020	EDR 100,000			20	3	825A
BFC - 10030				30	5	1020A
BFC - 10040				40	15	1025A
BFC - 10050	BTUH 24,700			50	10	1215A
BFC - 10055				55	15	1215A
BFC - 10070				70	20	1220A

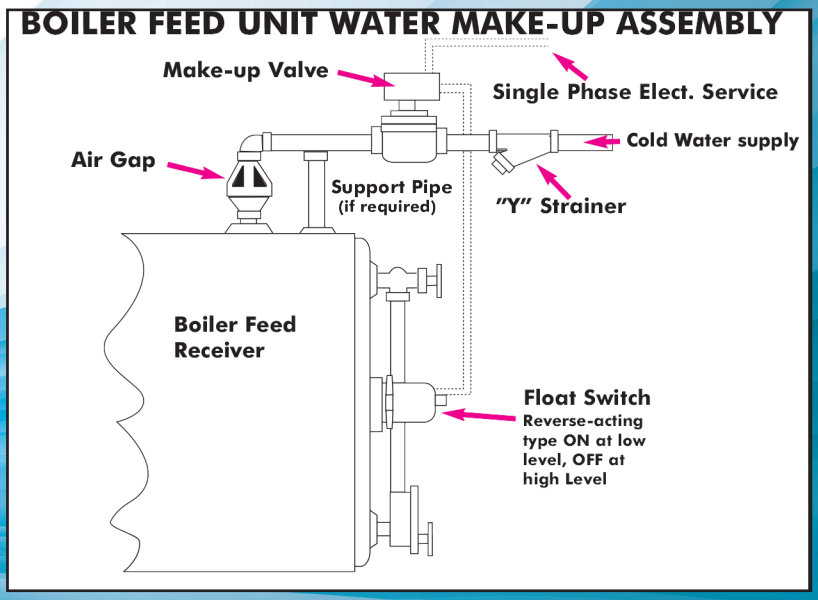
Dimensions not to be used for construction unless prints is certified by factory.

• Condensate Return Unit Series CVC

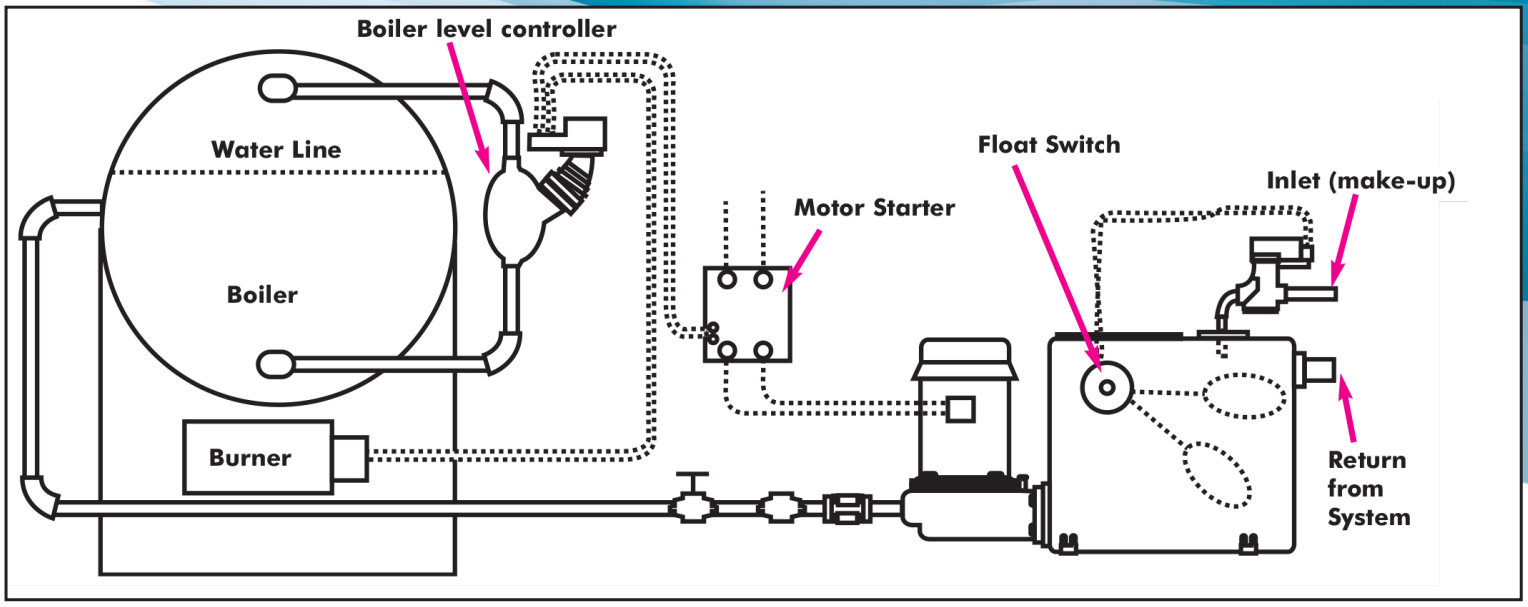
The condensate pump is operated by a float switch in the condensate tank. As water is returned from the system, it is pumped to the boiler by the condensate pump.



• Boiler Feed Unit Series BFC or BFCE

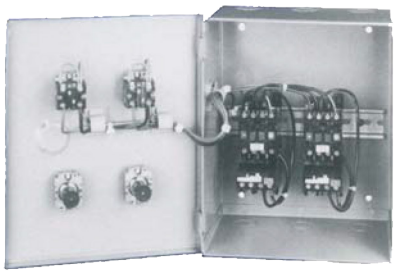


Circuit 1 - The boiler level controller operates the condensate pump feeding water to the boiler as required.
Circuit 2 - The float switch mounted in the condensate tank operates a valve adding water to the condensate tank as required.



• Control Panels
Series DCP & DCP-B

SERIES DCP

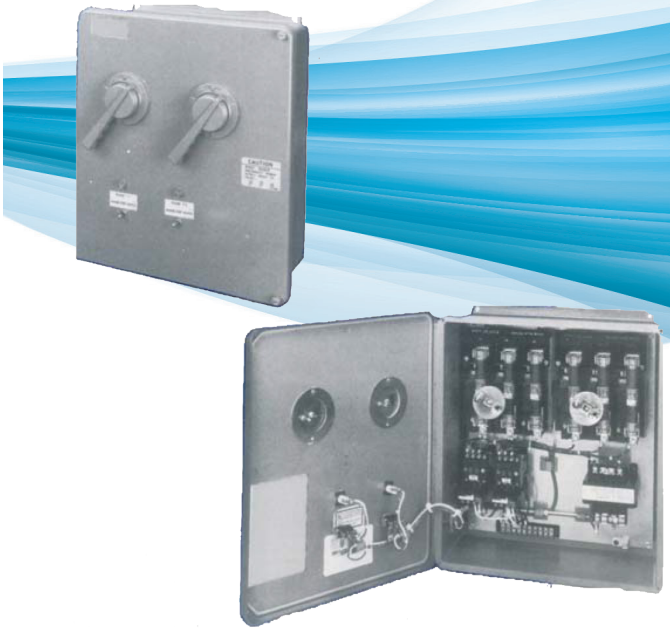


SERIES DCP CONTROL PANEL STANDARD

1) NEMA Type 1 only
2) 2 starters with 3rd leg overload protection.
3) Reset button in the cover.

OPTIONAL

- ☐ 3 position selector switch, hand-off auto, Lead-off lag,or test-off auto
- ☐ Pilot light(s) 250 V max.
- ☐ 1 electric alternator per panel (duplex models only)



SERIES DCP-B

SERIES DCP-B CONTROL PANEL WITH CIRCUIT BREAKERS STANDARD

1) NEMA Type 1
2) 2 starters, each with 3rd leg overload protection and reset button on each starter
3) Number terminal strip

OPTIONAL

- ☐ NEMA Type, 2, 3, 4X, 7, 9 or 12 Consult Factory
- ☐ Fused or non-fused disconnect(s) with interlock with provisions for padlock.
- ☐ 1 fuse block per starter
- ☐ Fused control circuit transformer 110 volt secondary
- ☐ 1 electric alternator per panel (duplex models only)
- ☐ Relays - number as required
- ☐ Selector switches on cover (1 per starter)
  Labeled- Hand-off auto
  Lead-off lag
  Boiler #1 - off - Boiler #2
  Pump #1 - off - Pump #2
  Test-off auto (spring loaded to off)
- ☐ Pilot light(s) on cover (1 per starter)
- ☐ Alarm bell with silencing switch (1 per panel)
- ☐ External reset buttons for starters1 electric alternator per panel (duplex models only)

Typical Specifications

CONDENSATE RETURN UNITS SERIES // CVC S-CVC (SIMPLEX) D-CVC (DUPLEX)

The contractor shall furnish and install a FLO FAB automatic condensate unit. Pump(s) shall be mounted vertically and flanged tothe receiver. Pump(s) shall be cast iron bronze fitted end suction centrifugal pumps with 250°F (300°F also available) mechanical seals close coupled to 115/230 Volts single or 208/460/575 Volts three phase 60 Hz, 3500 RPM, open drip-proof or totally enclosed electric motors. A vent line shall be furnished from each pump seal chamber to the receiver.

Receiver shall be 15, 25, 35, 45, 70 or 120 gallons 3/16'' black steel or cast iron with 2'' vent, 3/4'' drain and (2'' or 3'') inlet.
Simplex (S-CVC) unit shall include a UQK-2 float switch assembly.
Duplex (D-CVC) unit shall include two UQK-2 float switch with electrical alternator assemblies.
A stem thermometer and a gauge glass should be provided.
OPTIONAL: On duplex units, a NEMA 1 control panel with magnetic starter(s) should be installed (not included).

BOILER FEED UNITS SERIES // BFC S-BFC (SIMPLEX) D-BFC (DUPLEX)

The contractor shall furnish and install a FLO FAB automatic ground level boiler feed unit. Pump(s) shall be mounted vertically and flanged to the receiver. Pump(s) shall be cast iron bronze fitted end suction centrifugal pumps with 250°F (300°F also available) mechanical seals close coupled to 115/230 Volts single or 208/460/575 Volts three phase 60 Hz, 3500 RPM, open drip-proof or totally enclosed electric motors.

Receiver shall be 50, 70, 120, 210 or 300 gallons 1/4'' black steel with 2'' vent, 3/4'' drain and (2'' or 3'') inlet. Simplex (S-BFC) and duplex (D-BFC) unit shall include make-up valve, vent, a stem thermometer and a gauge glass installed on the
tank.

ELEVATED BOILER FEED UNITS SERIES // BFCE S-BFCE (SIMPLEX) D-BFCE (DUPLEX)

The contractor shall furnish and install a FLO FAB automatic elevated boiler feed unit. Pump(s) shall be mounted vertically and flanged to the receiver. Pump(s) shall be cast iron bronze fitted end suction centrifugal pumps with 250°F (300°F also available) mechanical seals close coupled to 115/230 Volts single or 208/460/575 Volts three phase 60 Hz, 3500 RPM, open drip-proof or totally enclosed electric motors.

Receiver shall be 50, 70, 120, 210 or 300 gallons 1/4'' black steel with 2'' vent, 3/4'' drain and (2'' or 3'') inlet. Simplex (S-BFCE) and duplex (D-BFCE) unit shall include make-up valve, vent, a stem thermometer and a gauge glass installed on the tank. Suction isolation butterfly valve(s), inlet «Y» strainer(s), a stem thermometer, a gauge glass and metal flexible will be provided.

OPTIONS FOR SERIES CVC - BFC & BFCE

- ☐ «Y» Strainer
- ☐ Simplex Basket Strainer (SBS)
- ☐ Receivers can be furnished in stainless steel construction.
- ☐ 3/4» Solenoid on larger units.
- ☐ NEMA 1 control panel with magnetic motor starters with HOA switch shall be furnished for each pump motor mounted and wired on receiver, for remote mounting Nema I enclosures.
- ☐ FLO FAB Series DCP Duplex control panel with magnetic starters, HOA switches, with or without circuit breakers 115 volt control circuit transformer, 3rd leg overload protection, terminal strip, Nema I enclosure shall be furnished mounted on receiver & wired, for remote wall mounting Nema I enclosure with or without electric alternator

Submittal Data Sheet

Date: _____ Month _____ Day _____ Year

Identification/Tag: _____

BILL OF MATERIALS:
CONDENSATE RETURN UNITS SERIES CVC AND/OR BOILER FEED UNITS SERIES BFC & BFCE

1) Pump(s)

A single-stage closed coupled cast iron, bronze fitted casing, leak proof mechanical shaft seal, stainless steel large diameter corrosion resistant shaft, and bronze casing wearing. These pump(s) requirement allows handling of 250 °F condensate without flashing and cavitation. The pump(s) is provided with an axial flow impeller being enclosed in a cast bronze construction. The pump(s) cast iron flanged volute has an internal cast iron baffle preventing pre-rotation of the condensate. The entire rotating assembly can be removed without disturbing the discharge or return piping.

Pump(s) Selection

CVC model #_____ BFC model #_____

- ☐ Simplex (S-CVC)
- ☐ Duplex (D-CVC)
- ☐ Simplex (S-BFC)
- ☐ Simplex (S-BFCE)
- ☐ Duplex (D-BFCE)
- ☐ Duplex (D-BFC)

Pump Capacity:_____USGPM at _____PSI

1) ☐ Centrifugal pump(s) ☐ Single Stage ☐ Multi-Stage
2) ☐ Closed Coupled

2) Motor(s)

Open-drip proof motor, standard NEMA construction. Motor bearings are sealed and factory greased for extra-long trouble-free operation. Single phase fractional Hp with dual voltage motors include built-in thermal overload protection. Motors are standard at 3450 RPM.

Motor(s) Selection

Motor(s) Hp _____ ☐ ODP ☐ TEFC ☐ XP

60Hz Speed: ☐ 3450 RPM ☐ 1750 RPM

Voltage: ☐ 115V ☐ 208V ☐ 230V ☐ 460V ☐ 575V

☐ 1 Phase ☐ 3 Phase

3) Receiver

Receiver inlet, pump(s), vent and drain connections.

Receiver Selection

Capacity _____Gallons Type: ☐ ASME ☐ Non-ASME
Shape: Cylindrical ☐ Rectangular ☐ Construction: Steel ☐
Steel w/Duratherm lining ☐ Stainless Steel ☐
Steel w/Galvanizing ☐ Cast Iron (rectangular only) ☐
Vent connection ☐ Size:_____"
Blind plate on Simplex units for future expansion ☐
Shut Off valve between receiver and pump suction (optional) ☐
Non Standard receiver ☐ Size:_____Gallons
20 years warranty (optional) ☐

Condensate (CVC) Selection

- ☐ 15 gallons
- ☐ 25 gallons
- ☐ 35 gallons
- ☐ 45 gallons
- ☐ 70 gallons
- ☐ 120 gallons

Boiler Feed (BFC or BFCE) Selection

- ☐ 50 gallons
- ☐ 70 gallons
- ☐ 120 gallons
- ☐ 210 gallons
- ☐ 300 gallons

Submittal Data Sheet Date: _____ Month _____ Day _____ Year

Identification/Tag: _____

4) Receiver Accessories

Float switch(es) and alternator connections for complete flexibility

Accessories Selection

Thermometer: Range 40°F to 300°F ☐ Straight ☐ Angle ☐ Dial ☐
Gauge glass assembly ☐ (standard except: 10 and 15 gallons receivers)
Additional receiver tappings ☐ Size:_____"
One float switch (Simplex units) ☐ Two float switches (Duplex units) ☐

5) Mechanical Controls

For CVC Units:

Automatic operation is provided by an internal mounted enclosed adjustable float switch assembly, for simplex (S-CVC) or two float switches or control panel with electrical alternator for duplex (D-CVC) operation.

The alternator shall: Change the operating sequence automatically after each cycle.
Provide simultaneous operation under peak load conditions
Operate the second pump automatically, should the active pump or its control fail.

Selection

For Simplex Units: One float switch ☐
For Duplex Units: Two float switches ☐
Control panel w/Electrical alternator ☐
NEMA _____ panel ☐ High level alarm with float ☐
Tank alert mounted ☐ Unmounted ☐ By others ☐
Isolation valve(s) (optional) if required ☐ Size:_____"
Discharge Pressure gauge(s) with mini ball valve(s) (optional) ☐
Inlet strainer for tank return connection (loose) ☐ Size:_____"
Inlet basket strainer (cast iron receiver) ☐ Size:_____"

For BFC or BFCE Units:

Automatic operation is provided by an internal mounted enclosed adjustable float switch operated by an internal make-up valve for boiler feed units.

Selection

For Simplex Units: One float switch ☐
For Duplex Units: Two float switches ☐
or Control panel w/Electrical alternator ☐
NEMA _____ panel ☐ High level alarm with float ☐
Tank alert mounted ☐ Unmounted ☐ By others ☐
Isolation valve(s) (optional) if required ☐ Size:_____"
Discharge Pressure gauge(s) with mini ball valve(s) (optional) ☐
Pressure gauge(s): Dry ☐ Liquid filled ☐
Inlet strainer for tank return connection (loose) ☐ Size:_____"
Inlet Y strainer ☐ Size:_____"
Inlet basket strainer ☐ Size:_____"
Float operated internal Make-up valve ☐
Gauge glass and shut-off valves ☐ (on BFC 15 to 200 Gallons receivers)

6) Electrical Controls

See EP panel for proper selection. All panels are CSA and/or UL approved.

Submittal Data Sheet Date: _____ Month _____ Day _____ Year

OPTIONAL MODIFICATIONS
AVAILABLE FOR CONDENSATE (CVC) AND BOILER FEED (BFC OR BFCE) UNITS

Mechanical Modifications

☐ FLO FAB Condensate Return Units Series CVC can be furnished as an Automatic boiler feed unit Series BFC or BFCE by substituting cold water make-up valve assembly for float switch, selecting a large receiver and actuating the pump motor by a boiler water level controller. (Mechanical operation or solenoid actuated by a float switch)

Electrical Modifications

☐ Totally enclosed motors and NEMA - 4 float switches and starters (motor Hp size may be increased) Wiring in seal-tight conduit

☐ Explosion proof motors and NEMA - 7 float switches and starters (motor Hp may be increased)

☐ Various magnetic starters arrangements including:
Duplex control panels, Combination starters with various forms of disconnects or circuit breakers, water resistant or explosion proof enclosures, hand-off auto switches, pilot lights and transformers providing low control voltage. All arrangements are CSA and/or UL approved. Transfer switches to alternate pump operation ☐ or transfer pump-boiler relationship in multiple boiler installations. ☐ See Table.

☐ High water alarm

☐ or low water alarm (tank alert) actuated by float switch.

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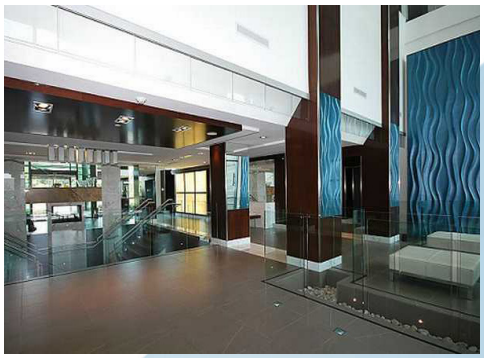

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