

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

Date: 2/21/2024

Return Request: 3/28/2024

Project: Little Rock West High School

Supplier: Sanders Supply

Manufacturer: Taco

Submittal: Plumbing (Circulating Pumps)

Submittal Number: 22 01 00-09

Drawing # and Installation: Plumbing Drawings

ARCHITECT

Lewis Architects Engineers
11225 Huron Lane, Suite 104
Little Rock, AR 72211
501-223-9302

ENGINEER

Lewis Architects Engineers
11225 Huron Lane, Suite 104
Little Rock, AR 72211
501-223-9302

GENERAL CONTRACTOR

Baldwin & Shell
1000 W. Capitol Ave.
Little Rock, AR 72201
501-374-8677

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

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chowell@comfortar.com

9924 Landers Rd.
No. Little Rock, AR 72117

CP-1,2,3



ETAIROS HVAC 901-345-6100 | info@EtairosHVAC.com

EQUIPMENT SUBMITTAL

JOB NAME: Little Rock West High School

LOCATION: Little Rock, Arkansas

ENGINEER: Lewis Architects Engineers

CONTRACTOR: Comfort Systems USA of Arkansas, Inc.

DATE: 01/04/24

SUBMITTED BY: Jack Naquin

JOB DESCRIPTION

CP-1

Taco 009-SF5 S/S Circulator Pump with 110-251SF 3/4" S/S Flanges
White Rodgers 11D18-1 Adjustable Immersion Type Aquastat with F89-2011 1/2" Brass Well

CP-2

Taco 2400-50S-3P S/S Circulator Pump with 110-251SF 3/4" S/S Flanges
White Rodgers 11D18-1 Adjustable Immersion Type Aquastat with F89-2011 1/2" Brass Well

CP-3

Taco 0013-SF3 S/S Circulator Pump with 110-251SF 3/4" S/S Flanges
White Rodgers 11D18-1 Adjustable Immersion Type Aquastat with F89-2011 1/2" Brass Well



Submittal Data Information

Model 009 Cartridge Circulator

101-032

Effective: January 12, 2015

Supersedes: May 8, 2013

Job: L.R. West High School Engineer: Lewis Architect Engineers Contractor: Comfort Systems USA of Arkansas Rep: Etairos HVAC

ITEM NO.	MODEL NO.	IMP. DIA.	G.P.M.	HEAD/FT.	H.P.	ELEC. CHAR.
CP-1	009-SF5		3	30	1/8	115v/1ph

Features

- Standard high capacity output-compact design
- Quiet, efficient operation
- Direct drive - Low power consumption
- Unique replaceable cartridge design — Field serviceable
- Self lubricating
- No mechanical seal
- Unmatched reliability - Maintenance free
- Universal flange to flange dimensions
- Cast Iron or **Stainless Steel construction**

Materials of Construction

Casing (Volute):..... Cast Iron or **St. Steel**
Stator Housing:..... Aluminum
Cartridge:..... Stainless Steel
Impeller:..... Non-Metallic
Shaft:..... Ceramic
Bearings:..... Carbon
O-Ring & Gaskets:..... EPDM

Model Nomenclature

F – Cast Iron, Flanged
SF – Stainless Steel, Flanged

Performance Data

Max. Flow: 10 GPM
Max. Range: 35 Feet
Min. Fluid Temperature: 40°F (4°C)
Max. Fluid Temperature: 230°F (110°C)
Max. Working Pressure: 150 psi
Connection Sizes:
3/4", 1", 1-1/4", 1-1/2" Flanged

Certifications & Listings

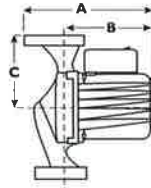
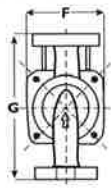


Application

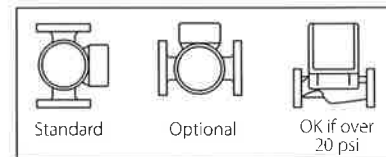
The Taco 009 is designed for a wide range of residential and light commercial higher-head/lower-flow water circulating applications. Typical uses include hydronic heating, radiant in-floor/panel heating and closed-loop solar heating systems. The Stainless Steel 009 can be used in higher-head/lower-flow heat recovery, open-loop solar heating and light commercial domestic water recirculation systems. The unique replaceable cartridge contains all of the moving parts and allows for easy service, instead of replacing the entire circulator. Compact, direct-drive, low power consumption design is ideal for high-efficiency jobs.

Pump Dimensions & Weights

Models	Casing	A		B		C		D		F		G		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
009-F5	Cast Iron	7	178	5-11/16	144	3-3/16	81	3-15/16	84	4-1/8	105	6-3/8	162	9.5	4.3
009-SF5	St. Steel	7	178	5-11/16	144	3-3/16	81	3-15/16	84	4-1/8	105	6-3/8	162	9.5	4.3



Mounting Positions

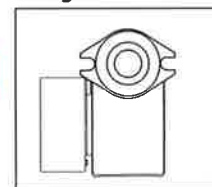


Electrical Data

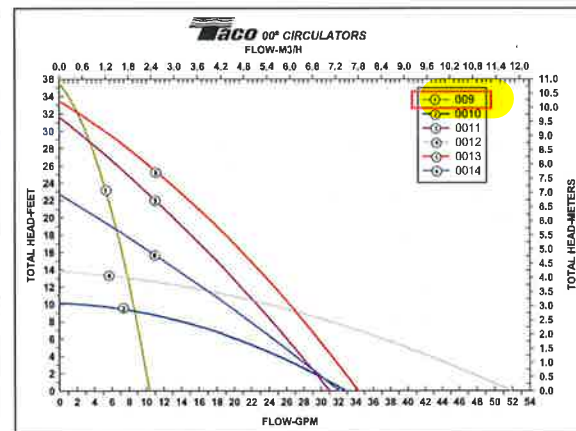
Model	Volts	Hz	Ph	Amps	RPM	HP
009-F5	115	60	1	1.40	3250	1/8
009-SF5	115	60	1	1.40	3250	1/8

Motor Type: Permanent Split Capacitor Impedance Protected
Motor Options: 220/50/1, 220/60/1, 230/60/1, 100/110/50/60/1

Flange Orientation



Performance Field - 60Hz

**Do your best work.®**

TACO INC., 1160 Cranston Street, Cranston, RI 02920 Telephone: (401) 942-8000 Fax: 942-2360
TACO (Canada), Ltd., 6180 Ordan Drive, Mississauga, Ontario L5T 2B3 Telephone: (905) 564-9422 Fax: (905) 564-9436
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101-134

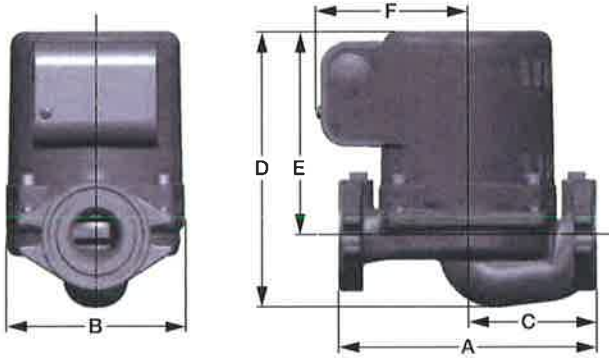
EFFECTIVE: January 5, 2023

SUPERSEDES: March 1, 2015

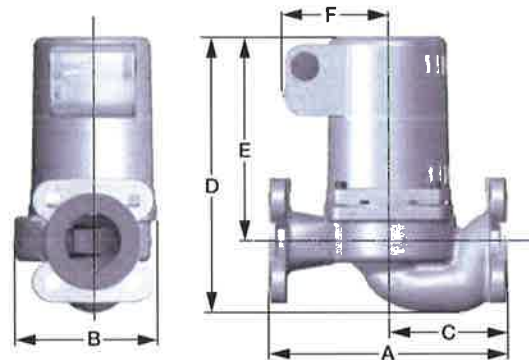
JOB L.R. West High Sch. ENGINEER Lewis Architects Engineers CONTRACTOR Comfort Systems USA of AR. REP. Etairos HVAC

ITEM CP-2	MODEL NO. 2400-50S-3P	G.P.M. 12	HEAD (FT.) 42	H.P. 1/2	ELEC. CHAR. 115v/1ph
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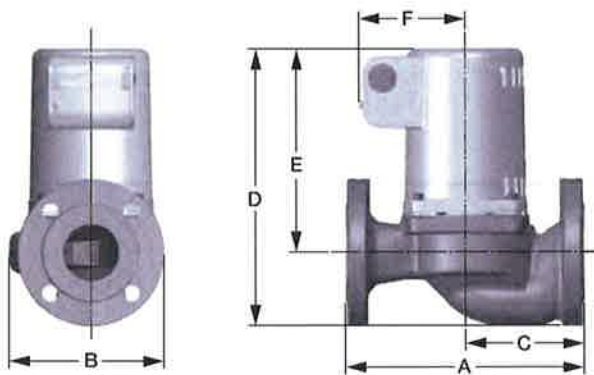
Models 2400-10-3P thru 2400-50S/2-3P



Models 2400-60-3P thru 2400-70S-3P



Models 2400-70/3-3P and 2400-70S/3-3P



PUMP DIMENSIONS & WEIGHTS

All dimensions and weights are approximate.

CAST IRON MODEL	STAINLESS STEEL MODEL	A		B		C		D		E		F		SHIP WEIGHT	
		IN.	MM	IN.	MM	IN.	MM	IN.	MM	IN.	MM	IN.	MM	LBS.	KG
2400-10-3P	2400-10S-3P	6 ³ / ₈	162	4 ¹ / ₂	114	3 ³ / ₁₆	82	6 ⁷ / ₈	175	5	127	3 ³ / ₄	95	12.0	5.5
2400-20-3P	2400-20S-3P	6 ³ / ₈	162	4 ¹ / ₂	114	3 ³ / ₁₆	82	6 ⁷ / ₈	175	5	127	3 ³ / ₄	95	12.0	5.5
2400-30-3P	2400-30S-3P	8 ¹ / ₂	216	4 ³ / ₄	121	4 ¹ / ₄	108	8	203	5 ¹ / ₄	133	3 ³ / ₄	95	14.5	6.6
2400-40-3P	2400-40S-3P	8 ¹ / ₂	216	4 ³ / ₄	121	4 ¹ / ₄	108	8	203	5 ¹ / ₄	133	3 ³ / ₄	95	14.5	6.6
2400-45-3P	2400-45S-3P	6 ³ / ₈	162	4 ⁵ / ₈	119	3 ³ / ₁₆	82	8 ³ / ₄	222	6 ⁷ / ₈	175	3 ³ / ₄	95	15.0	6.8
2400-50-3P	2400-50S-3P	6 ³ / ₈	162	4 ⁵ / ₈	119	3 ³ / ₁₆	82	8 ³ / ₄	222	6 ⁷ / ₈	175	3 ³ / ₄	95	16.0	7.3
2400-50/2-3P	2400-50S/2-3P	6 ³ / ₈	162	5 ¹ / ₄	133	3 ³ / ₁₆	82	8 ³ / ₄	222	6 ⁷ / ₈	175	3 ³ / ₄	95	16.5	7.5
2400-60-3P	2400-60S-3P	8 ¹ / ₂	216	5 ³ / ₁₆	132	4 ¹ / ₄	108	7 ⁷ / ₈	200	5 ¹ / ₄	133	3 ³ / ₄	95	18.0	8.2
2400-65-3P	2400-65S-3P	8 ¹ / ₂	216	5 ¹ / ₂	140	4 ¹ / ₄	108	9 ⁷ / ₈	251	7 ¹ / ₄	184	3 ³ / ₄	95	22.0	10.0
2400-70-3P	2400-70S-3P	8 ¹ / ₂	216	5 ¹ / ₂	140	4 ¹ / ₄	108	9 ⁷ / ₈	251	7 ¹ / ₄	184	3 ³ / ₄	95	23.0	10.4
2400-70/3-3P	2400-70S/3-3P	8 ¹ / ₂	216	6 ⁵ / ₈	168	4 ¹ / ₄	108	10 ¹ / ₂	267	7 ¹ / ₄	184	3 ³ / ₄	95	29.0	13.2

MATERIALS OF CONSTRUCTION

Casing: Cast Iron or **Stainless Steel**
 Seal Face Plate: Stainless Steel
 Motor Housing: Aluminum
 Impeller: 30% Glass-filled Noryl® *
 Impeller Insert: Stainless Steel
 Shaft: Stainless Steel
 Mechanical Seal: Carbon/Silicon-Carbide
 Motor Bearings: Permanently lubricated ball bearing
 O-Ring/Flange Gaskets: EPDM

* Noryl is a registered trademark of General Electric Co.

MODEL NOMENCLATURE

S – Stainless Steel, Flanged
Y – 230V/60/1 Motor

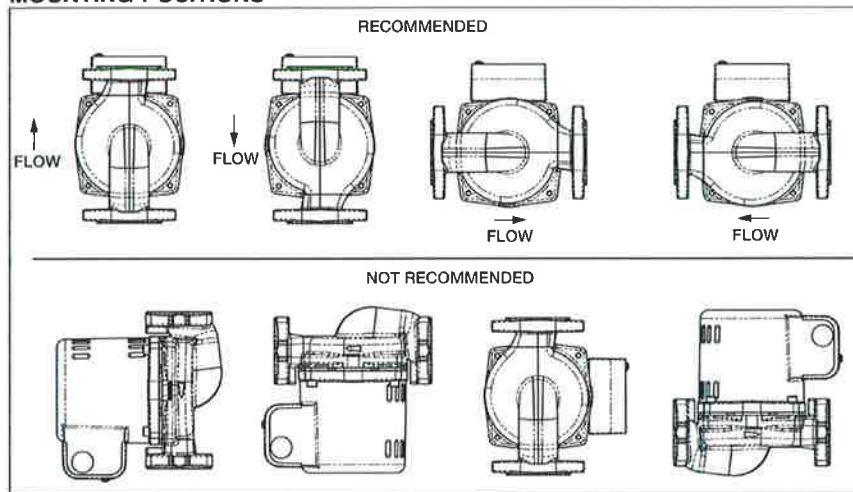
PERFORMANCE DATA

Maximum Flow: 90 GPM
 Maximum Head: 46 Feet
 Minimum Fluid Temp: 40°F (4°C)
 Maximum Fluid Temp: 225°F (107°C)
 Maximum Working Pressure: 150psi

ELECTRICAL DATA

Model Number	Hz	Ph	Amps		RPM	HP
			115 V	230 V		
2400-10-3P			1.9	NA		1/6
2400-20-3P			1.9	1.0		1/6
2400-30-3P			1.9	1.0		1/6
2400-40-3P			1.9	1.0		1/6
2400-45-3P	60	1	3.6	1.7	3450	1/3
2400-50-3P			4.9	2.4		1/2
2400-60-3P			1.9	1.0		1/6
2400-65-3P			3.6	1.7		1/3
2400-70-3P			4.9	2.4		1/2
Motor Type	Open drip proof, permanent split capacitor, thermally protected					

MOUNTING POSITIONS



2400 SERIES COMPANION FLANGE SETS

Models	CONNECTION	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"
	Iron NPT	110-251F	110-252F	110-253F	110-254F	—	—	—
2400-10/10S-3P	S. Steel NPT	110-251SF	110-252SF	110-253SF	110-254SF	—	—	—
2400-20/20S-3P	Bronze SWT	110-523BSF	110-524BSF	110-525BSF	110-526BSF	—	—	—
2400-45/45S-3P	Shut-Off NPT	SF-075T	SF-100T	SF-125T	SF-150T	—	—	—
2400-50/50S-3P	Shut-Off SWT	SF-075S	SF-100S	SF-125S	SF-150S	—	—	—
2400-50/50S/2-3P	Iron NPT	—	—	—	—	194-2124F	—	—
2", 2 bolt	S. Steel NPT	—	—	—	—	194-2124SF	—	—
2400-30/30S-3P	Iron NPT	—	—	194-1540F	194-1542F	—	—	—
2400-40/40S-3P	S. Steel NPT	—	—	194-1540SF	194-1542SF	—	—	—
	Shut-Off NPT	—	—	SF-125T-0012	SF-150T-0012	—	—	—
	Shut-Off SWT	—	—	SF-125S-0012	SF-150S-0012	—	—	—
2400-60/60S-3P	Iron NPT	—	—	—	—	185-086C	—	—
2400-65/65S-3P	Bronze NPT	—	—	—	—	185-086B	—	—
2400-70/70S-3P	Iron NPT	—	—	—	—	—	185-112C	185-113C
3", 4 bolt	Bronze NPT	—	—	—	—	—	185-112B	185-113B

Taco Comfort Solutions A Taco Family Company

Taco, Inc., 1160 Cranston Street, Cranston, RI 02920 | Tel: (401) 942-8000

Taco (Canada), Ltd., 8450 Lawson Road, Suite #3, Milton, Ontario L9T 0J8 | Tel: (905) 564-9422

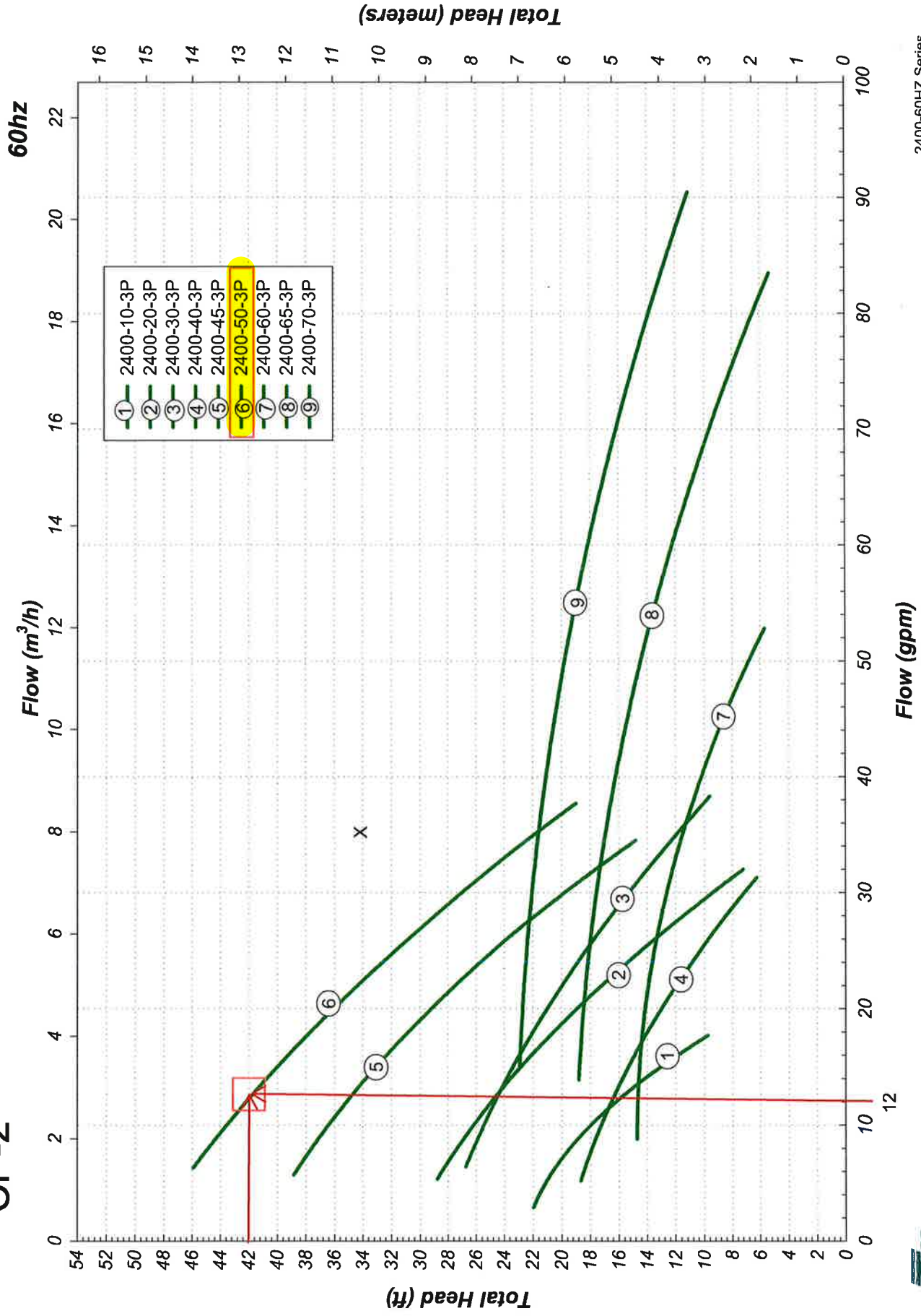
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2400 Series - High Capacity Circulators

CP-2





Submittal Data Information

101-064

Model 0013 Cartridge Circulator

Effective: January 12, 2015

Supersedes: June 13, 2013

Job: L.R. West High School Engineer: Lewis Architects Engineers Contractor: Comfort Systems USA of Arkansas Rep: Etairos HVAC

ITEM NO.	MODEL NO.	IMP. DIA.	G.P.M.	HEAD/FT.	H.P.	ELEC. CHAR.
CP-3	0013-SF3		20	17	1/6	115v/1ph

Features

- Exclusive ACB Anti-Condensate Baffle with Ambient Air Flow-Protects motor windings against condensate buildup
- High Velocity Performance — Compact design
- Quiet, Efficient operation
- Direct Drive-Low Power consumption
- Unique Replaceable Cartridge design-field serviceable
- Self lubricating
- No Mechanical Seal
- Unmatched reliability - Maintenance free
- Universal Flange to Flange dimensions
- Cast Iron or **Stainless Steel Construction**

Materials of Construction

ACB Baffle.....Non-Ferrous
Casing (Volute):.....**Cast Iron or Stainless Steel**
Stator Housing:.....Aluminum
Cartridge:.....Stainless Steel
Impeller:.....Non-Metallic
Shaft:.....Ceramic
Bearings:.....Carbon
O-Ring & Gaskets:.....EPDM

Model Nomenclature

F – Cast Iron, Flanged
SF – Stainless Steel, Flanged

Performance Data

Max. Flow: 34 GPM
Max. Head: 33 Feet
Min. Fluid Temperature: 40°F (4°C)
Max. Fluid Temperature: 230°F (110°C)
Max. Working Pressure: 150 psi
Connection Sizes:
3/4", 1", 1-1/4", 1-1/2" Flanged

Certifications & Listings

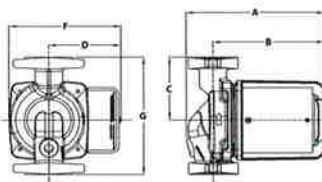


Application

The Taco 0013 is specifically designed for high head / high flow applications in Large Residential and Light Commercial systems. Ideal for high pressure drop Boilers, Fan Coil units, Heat Exchangers, larger Radiant systems, Heat Recovery and Geothermal systems. The Stainless Steel 0013 should be used on open loop systems. The unique replaceable cartridge contains all of the moving parts and allows for easy service instead of replacing the entire circulator. Universal flange to flange dimensions and orientation allows the 0013 to easily replace other models. Compact, low power consumption design makes it ideal for high-efficiency jobs.

Pump Dimensions & Weights

Models	Casing	A		B		C		D		F		G		Ship Wt.	
		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	Kg
0013-F3	Cast Iron	7-1/2	191	6-1/8	156	3-1/2	89	3-3/8	86	6	152	6-1/2	165	120	5.5
0013-SF3	St. Steel	7-1/2	191	6-1/8	156	3-1/2	89	3-3/8	86	6	152	6-1/2	165	11.5	5.2



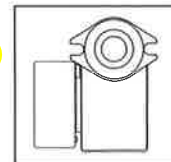
Mounting Positions



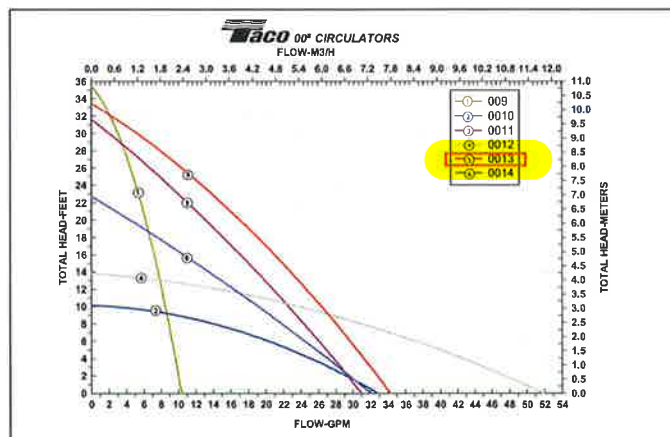
Electrical Data

Model	Volts	Hz	Ph	Amps	RPM	HP
All Models	115	60	1	2.0	3250	1/6
Motor Type	Permanent Split Capacitor Impedance Protected					
Motor Options	220/50/1, 220/60/1, 230/60/1, 100/110/50/60/1					

Flange Orientation



Performance Field - 60Hz



Taco, Inc., 1160 Cranston Street, Cranston, RI 02920 | Tel: (401) 942-8000 | FAX: (401) 942-2360

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Submittal Data Information

101-036

00® Timers/Aquastat

Effective: December 10, 2015

Supersedes: June 18, 2014

Job: L.R. West High School Engineer: Lewis Architects Engineers Contractor: Comfort Systems USA of Arkansas Rep: Etairos HVAC

ITEM NO.	MODEL NO.	
CP-1, 2, & 3	265-3	

24 Hour Analog Clock Timer

Performance Data — #265-1

Electrical Characteristics: 115/60/1
Timer Switch: 16A @115V
Timer Interval: 15 Minutes
Clock face: Hour and Minute Hands
Manual Switch: I Permanently ON
⌚ Automatic Operation
O Permanently OFF

7 Day Digital Timer

Performance Data — #265-3

Electrical Characteristics: 115/60/1
Timer Switch: 16A @115V
Timer Interval: 1 Minute (+) Adjustable
Clock face: Digital with
Circulator Programming
Capacitor Backup: 2,500 hours

Temperature Aquastat — Snap

Action Temperature Switch — #563-2

Electrical Characteristics: 115/60/1
Connections: 1/2" (Snap on circ. body)
3/4" Copper pipe
Temperature Setting: ON @ 95°F
OFF @ 115°F
Contacts: 7 amp SPDT Switch
Wire Leads: 18" — Type 18-2,
Round Premium Cable

Application

The Taco Clock Timers and Temperature Aquastat are designed to control the operation of Taco circulators on Domestic Hot Water Recirculation Systems for maximum comfort and energy efficiency. They are adaptable to any 00® Series circulator by attaching the enclosure or wiring to the electrical box.

24 Hour Analog Timer

Operates the circulator at the same pre-set times every day. Time intervals are in 15 minute increments. This user friendly clock has a raised minute hand for easy adjustments, quick-set trippers and an operation switch for Manual ON/OFF or Automatic modes.

7 Day Digital Programmable Timer

Digital Timer can be programmed to operate at different times on different days, weekdays or weekends, for maximum comfort and convenience to match family schedules. Easy circular programming clock face and LCD readout screen. Run time intervals as short as 1 minute provides maximum energy efficiency. A capacitor backup saves settings for up to 2,500 hours during power outages.

Temperature Aquastat

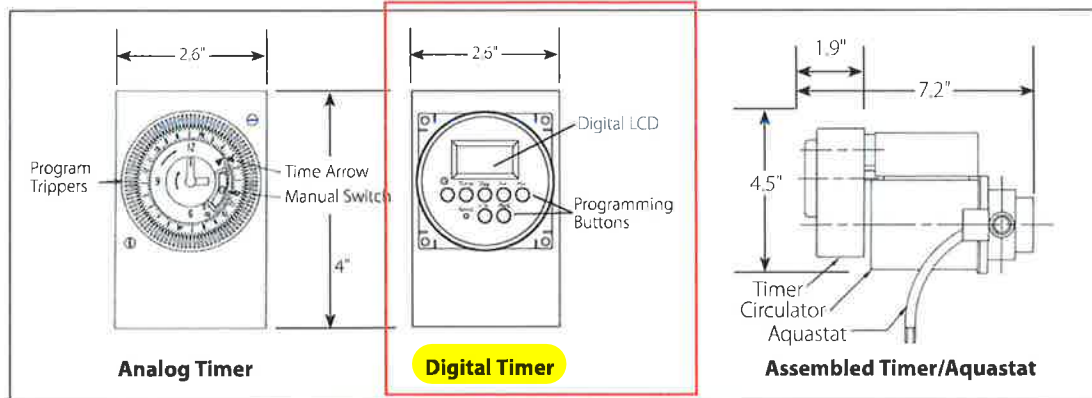
Controls pump operation to maintain system temperature between 95°F and 115°F. Easy clip-on Aquastat attaches directly to 3/4" pipe or a 1/2" sweat pump casing.

Shipping Weight

Model	Item	Lbs.	Kg
265-1	Analog Timer	.75	.35
265-3	Digital Timer	.75	.35
563-2	Aquastat	.25	.11



FOR INDOOR USE ONLY



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Taco (Canada) Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8 / (905) 564-9422 / Fax (905) 564-9436
www.TacoComfort.com



✓ 11D18-1

WELL IMMERSION SINGLE CONTROL

Types for use as High Limit, Reverse Action or SPDT Switching Action: May Be Mounted Either Horizontal or Vertical.

FEATURES

- Extra capillary length for extended shank wells.
- Special screw terminals with "ears" securely hold solid and stranded wires.
- Screwdriver-adjustable differential with direct-read indicator.
- Knockouts on top and bottom and plenty of wiring room.
- Hydraulic action element — fast acting.

SPECIFICATIONS

Dimensions 5³/₈" H + 2⁵/₁₆" coil x 2⁹/₁₆" D
 Finish Grey
 Agency U.L. listed and C.S.A. certified

PARTS AND ACCESSORIES

See end of this section for additional parts and accessories

- F145-0163 — Tube heat conductive compound
- F145-0650 — Well adapter and heat conductive compound
- F71-0924 — Well adapter only
- Immersion wells — see page 147

TYPES WITH BULBS DIRECTLY INTERCHANGEABLE WITH HONEYWELL (3⁹/₁₆" x 3⁷/₈") No wells included.

Model Number	Range	Differential	Switch Action	Full Electrical Rating	Motor Rating (Full Load)		Valves and Relays	
					120 VAC	240 VAC	24 VAC	0.3-12v DC
✓ 11D18-1 ①	100 to 240°F (38 to 116°C)	5 to 45°F (3 to 25°C)	Open on Rise	HTV See page 416	10.0A	6.0A	6.0A	1.0A
11D31-1	100 to 240°F (38 to 116°C)	7 to 45°F (4 to 25°C)	SPDT	HH See page 416	7.4A	3.7A	2.9A	—

① Has U.L. approved adjustable dial stop, factory set at 150°F maximum.

TYPES WITH TAPERED BULBS (2⁷/₁₆" x 7⁷/₈") All types include 1/2" standard shank well, unless otherwise specified.

Model Number	Range	Differential	Switch Action	Full Electrical Rating	Motor Rating (Full Load)		Valves and Relays	
					120 VAC	240 VAC	24 VAC	0.3-12v DC
1131-102 ①	100 to 240°F (38 to 116°C)	7 to 45°F (4 to 25°C)	SPDT	HH See page 416	7.4A	3.7A	2.9A	—
11B05-101	100 to 240°F (38 to 116°C)	5 to 45°F (3 to 25°C)	Close on Rise	HT See page 416	14.0A	7.0A	—	—
11B18-101 ①	100 to 240°F (38 to 116°C)	5 to 45°F (3 to 25°C)	Open on Rise	HTV See page 416	10.0A	6.0A	6.0A	1.0A
11B18-153 ②	35 to 110°F (2 to 43°C)	Fixed 2°F (1°C)	Open on Rise	HTV See page 416	10.0A	6.0A	6.0A	1.0A
11B27-9 ③	100 to 500°F (40 to 260°C)	Manual Reset	Open on Rise	FG See page 416	14.0A	7.0A	5.6A	—
11B27-10 ③	250 to 650°F (121 to 343°C)	Manual Reset	Open on Rise	FG See page 416	14.0A	7.0A	5.6A	—
11B30-104 ④	100 to 240°F (38 to 116°C)	8 to 45°F (4.5 to 25°C)	Open on Rise	HTV See page 416	10.0A	6.0A	6.0A	1.0A

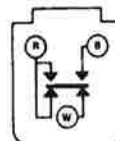
① Has U.L. approved adjustable dial stop, factory set at 150°F maximum.

② Has special straight well for 4" x 7⁷/₈" straight bulb.

③ Has 7' capillary and 3" x 3⁹/₁₆" straight bulb.

④ 3/4" standard shank well.

✻ Indicates Canadian Model Number: call 1-800-305-6953 to order



SPDT Contact Structure

HH Rated Controls

Switch Action

R-B Open on Rise

R-W Close on Rise

CONTRACTOR TIP: TESTING AUTOMATIC TEMPERATURE CONTROLS To verify a control is opening and closing properly, disconnect all power before testing. Testing must be performed with the sensing element at a temperature within the setting range of the control. For most hydronic controls with a range of 100 to 240°F, a pan of hot water is sufficient to reach the control range.

Attach an ohmmeter or continuity tester across the Open on Rise contacts. Lower the temperature setting dial to the lowest setting. If the lowest setting is below the temperature of the sensing element minus the differential of the control, the contacts should be open. Raise the temperature dial slowly. When the setting is raised above the temperature of the sensor, the contacts should close.

IMMERSION WELLS AND PACKING NUT✓ **½" and ¾" NPT Sizes for Hydronic Element Insertion****FEATURES**

- Wells are used where it is desired that the control operates from the temperature of a liquid in a closed system.
- The bulb of the control can be removed from an immersion well in the tank wall without draining the boiler tank.
- The packing nut can be used with any of the remote bulb types listed.
- Packing nuts permit closer control than wells because the bulb is directly immersed in the liquid.

SPECIFICATIONS

Compatibility..... For use in liquids that are not corrosive to brass and copper. Not recommended for use above 100 psi, 250°F (120°C)

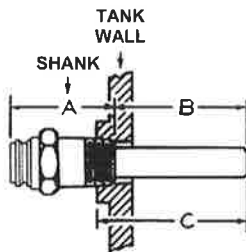
PACKING NUT

Fig. 1



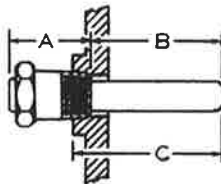
Model Number	Description	Figure Number
F55-0088	Packing nut with ½" threads	1

Fig. 2

**UNIVERSALLY INTERCHANGEABLE WELLS**

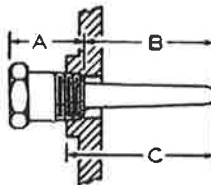
Model Number	Basic Types Well Is Used With	Bulb Size of Control Used	Well Description		Figure Number	Dimensions		
			Pipe Size NPT	Shank		A	B	C
✓ F89-0211	All	3 1/2 x 3/8"	1/2"	Standard	2	1 13/16"	3"	3 5/16"
F89-0212	All	3 1/2 x 3/8"	1/2"	Std. Extended	2	3 5/16"	3"	3 5/16"
F89-0213	All	3 1/2 x 3/8"	3/4"	Standard	2	1 13/16"	3"	3 5/16"
F89-0214	All	3 1/2 x 3/8"	3/4"	Std. Extended	2	3 5/16"	3"	3 5/16"
F89-0215	All	3 1/2 x 3/8"	3/4"	Extra Extended	2	4 13/16"	3"	3 5/16"

Fig. 3

**UNIVERSALLY INTERCHANGEABLE WELLS**

Model Number	Basic Types Well Is Used With	Bulb Size of Control Used	Well Description		Figure Number	Dimensions		
			Pipe Size NPT	Shank		A	B	C
F89-0007	230, 241, 2A38	7 1/4 x 3/8" and 6 3/4 x 3/8"	1/2"	Standard	3	1 5/8"	8 1/4"	8 9/16"
F89-0027	1609, 1629, 2A23	5 3/4 x 3/8"	1/2"	Standard	3	1 5/8"	6"	6 5/16"
F89-0033	11B06, 11B37, 11B2	3 1/2 x 7/16"	3/4"	Standard	3	1 5/8"	2 13/16"	3 1/8"
F89-0036	11B06, 11B37, 11B2	3 1/2 x 7/16"	1/2"	Standard	3	1 5/8"	2 13/16"	3 1/8"
F89-0148	All	2 15/16 x 7/16"	1/2"	Standard	3	1 5/8"	2 13/16"	3 1/2"

Fig. 4

**UNIVERSALLY INTERCHANGEABLE WELLS**

Model Number	Basic Types Well Is Used With	Bulb Size of Control Used	Well Description		Figure Number	Dimensions		
			Pipe Size NPT	Shank		A	B	C
F89-0062	11B18, 11B05, 11B55, 1131	—	1/2"	Standard	4	1 5/8"	2 13/16"	3 1/8"
F89-0063	11B18, 11B05, 11B55, 1131	—	3/4"	Standard	4	1 5/8"	2 13/16"	3 1/8"
F89-0075	11B18, 11B05, 11B55, 1131	—	1/2"	Standard	4	1 5/8"	2 13/16"	3 1/8"