



# MARCH PUMPS

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**DESCRIPTION & OPERATION:** The March 821 Series hot water booster units are centrifugal magnetic drive pumps that are built to handle liquid transfer in heating and cooling operations. Contact the factory for application assistance. Pumps are not self priming, lack a suction lift, and thus require a flooded suction. Pumps cannot be run dry.

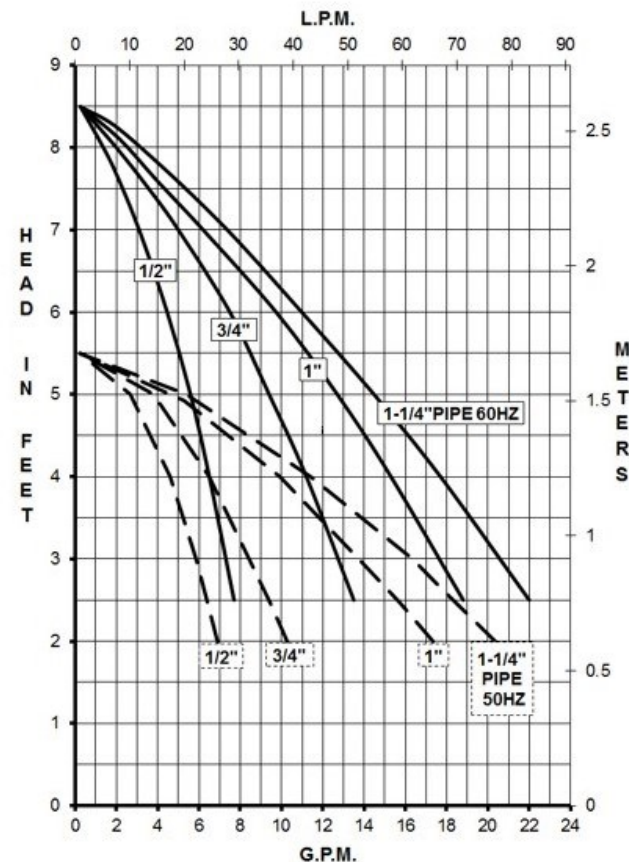
**INSTALLATIONS:** The pumps should be installed with the pump housing arrow pointing in the direction of flow within the system. If the arrow indicating flow is not in the direction required, remove the socket head housing screws holding the housing to the motor bracket and rotate the housing assembly as required. Replace the screws and tighten. The pump is composed of a wet end assembly, which can be separated by unscrewing the socket head housing screws. The pump will then separate into 2 parts. The liquid will be contained within the wet end assembly unless the flat head connecting screws on the rear housing are loosened.

**GENERAL SAFETY INFORMATION:** Follow all local safety codes & the Occupational Safety and Health Act (OSHA). Make certain that the power source conforms to the requirements of your equipment. Always disconnect power source before performing any work on or near the electric motor. Caution must be exercised to relieve any pressure in the system & in draining hot liquid from the pump or the system. March cannot recommend the 821 Series out of bronze where the liquid is used for human consumption per California Law due to the presence of lead.

**DISASSEMBLY & REASSEMBLY:** The motor can be removed from the wet end assembly without draining the liquid from the system. To do so remove four socket head housing screws and slide the motor assembly away. If parts inside the wet end assembly must be removed, isolate the pump or drain the system. When the system is drained and cool, remove the four flat head connecting screws from the rear of the housing. The rear housing can now be removed. Remaining pump parts can be removed. Replace any worn or damaged parts. Replace the gasket anytime the rear housing is removed.

**ELECTRICAL:** Motors are air cooled and have a conduit box for electrical connections. Motors are available in different electrical configurations such as 115 Volt 50/60Hz or 230 Volt 50/60Hz, 1 Phase. The motors are U.L. listed and rated for continuous duty.

## 821-BR, 821-CI, 821-SS

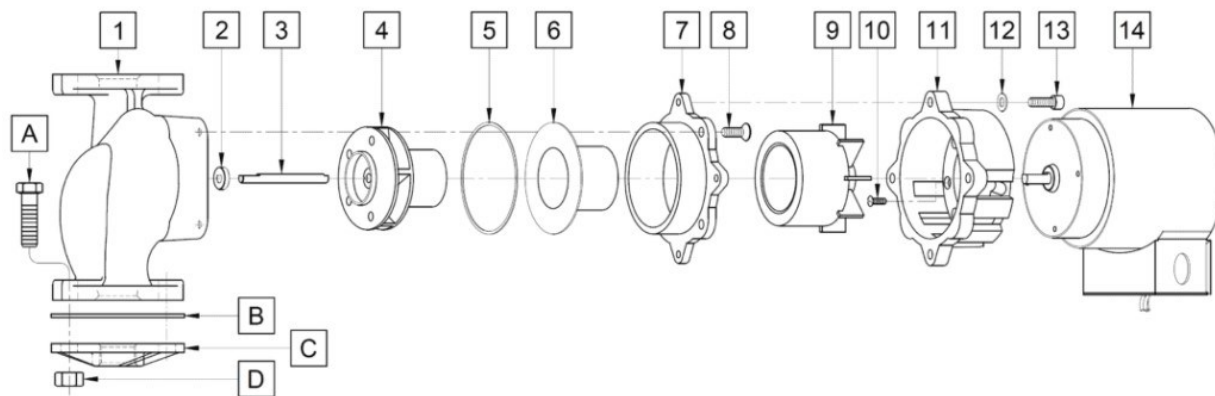


Specifications		821-BR	821-CI	821-SS
Product	115V	0821-0084-0500	0821-0084-0100	0821-0117-0100
	230V	0821-0084-0600	0821-0084-0300	0821-0118-0100
Inlet-Outlet		Flange-Flange	Flange-Flange	Flange-Flange
Max Internal Pressure		150PSI (1034 kPa)	150PSI (1034 kPa)	150PSI (1034 kPa)
Max Liquid Temperature		250F (121C)	250F (121C)	250F (121C)

	60Hz											50Hz												
	Max Flow		Max Head			Electrical						Max Flow		Max Head			Electrical							Packed Weight
Model	GPM	LPM	FT	PSI	M	Ph	V	A	HP	kW	RPM	GPM	LPM	Feet	PSI	M	Ph	V	A	HP	kW	RPM	Pounds	
821-BR	22	83.3	8.5	3.67	2.6	1	115 or 230	1.6 or 0.8	1/20	0.037	1600	20	75.7	5.2	2.25	1.6	1	115 or 230	1.8 or 0.9	1/20	0.037	1350	14.5	
821-CI	22	83.3	8.5	3.67	2.6	1	115 or 230	1.6 or 0.8	1/20	0.037	1600	20	75.7	5.2	2.25	1.6	1	115 or 230	1.8 or 0.9	1/20	0.037	1350	14	
821-SS	22	83.3	8.5	3.67	2.6	1	115 or 230	1.6 or 0.8	1/20	0.037	1600	20	75.7	5.2	2.25	1.6	1	115 or 230	1.8 or 0.9	1/20	0.037	1350	14.5	
All specifications & data are based on pumping water & are intended as a guideline only. Specifications may vary with different motors.																							0821-0063-1100	

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821-BR				821-CI			
Item	Part Number	QTY REQ	Description	Item	Part Number	QTY REQ	Description
1	0821-0064-0000	1	Flanged Pump Housing (Bronze)	1	0821-0025-0001		Flanged Pump Housing (Cast Iron)
2	0821-0079-1000	1	Thrust Washer (Ceramic)	2	0821-0079-1000	1	Thrust Washer (Ceramic)
3	0821-0036-1000	1	Shaft (303 Stainless Steel)	3	0821-0036-1000	1	Shaft (303 Stainless Steel)
4	0821-0023-0200	1	2.875 Diameter Impeller with Bushing (Ryton/Carbon)	4	0821-0023-0200	1	2.875 Diameter Impeller with Bushing (Ryton/Carbon)
5	0804-0050-1000	1	2.968" ID x 0.031" Thick Gasket (Nitrile/Fibre)	5	0804-0050-1000	1	2.968" ID x 0.031" Thick Gasket (Nitrile/Fibre)
6	0821-0035-0100	1	Rear Housing (304 Stainless Steel)	6	0821-0035-0100	1	Rear Housing (304 Stainless Steel)
7	0821-0044-0001	1	Housing Connecting Ring (Aluminum)	7	0821-0044-0001	1	Housing Connecting Ring (Aluminum)
8	1043-0009-1000	4	1/4"-20 x 3/4"Lg. Flat Head Connecting Screw (Steel)	8	1043-0009-1000	4	1/4"-20 x 3/4"Lg. Flat Head Connecting Screw (Steel)
9	0821-0086-0100	1	Drive Magnet	9	0821-0086-0100	1	Drive Magnet
10	0210-0028-1000	4	#8-32 x 1/2" Long Flat Head Screw (Stainless)	10	0210-0028-1000	4	#8-32 x 1/2" Long Flat Head Screw (Stainless)
11	0821-0106-1000	1	Motor Bracket (Plastic)	11	0821-0106-1000	1	Motor Bracket (Plastic)
12	0155-0021-1000	4	1/2"OD Washer (Stainless)	12	0155-0021-1000	4	1/2"OD Washer (Stainless)
13	0804-0052-1000	4	1/4"-20 x 3/4" LG. Socket Head Housing Screw (Steel)	13	0804-0052-1000	4	1/4"-20 x 3/4" LG. Socket Head Housing Screw (Steel)
14	0821-0084-1000	1	Motor, 1 Phase, 115V, 50/60 Hz	14	0821-0084-1000	1	Motor, 1 Phase, 115V, 50/60 Hz
14	0821-0088-1000	1	Motor, 1 Phase, 230V, 50/60 Hz	14	0821-0088-1000	1	Motor, 1 Phase, 230V, 50/60 Hz
821-SS				Options			
1	0821-0116-0010	1	Flanged Pump Housing (304 Stainless Steel)	A	0804-0054-1000	4	7/16"-14 x 1-1/2"Lg. Hexe Head Screw (Steel)
2	0821-0079-1000	1	Thrust Washer (Ceramic)	B	0821-0105-1000	2	Gasket, Flange (EPDM)
3	0821-0036-1000	1	Shaft (303 Stainless Steel)	C	0821-0069-0000	2	3/4" Flange (Bronze)
4	0821-0023-0200	1	2.875 Diameter Impeller with Bushing (Ryton/Carbon)	D	0821-0065-0000	2	1" Flange (Bronze)
5	0804-0050-1000	1	2.968" ID x 0.031" Thick Gasket (Nitrile/Fibre)	E	0821-0072-0000	2	1-1/4" Flange (Bronze)
6	0821-0035-0100	1	Rear Housing (304 Stainless Steel)	F	0821-0066-0000	2	1-1/2" Flange (Bronze)
7	0821-0044-0001	1	Housing Connecting Ring (Aluminum)	G	0804-0047-0000	2	3/4" Flange (Steel)
8	1043-0009-1000	4	1/4"-20 x 3/4"Lg. Flat Head Connecting Screw (Steel)	H	0821-0045-0000	2	1" Flange (Steel)
9	0821-0086-0100	1	Drive Magnet	I	0821-0048-0000	2	1-1/4" Flange (Steel)
10	0210-0028-1000	4	#8-32 x 1/2" Long Flat Head Screw (Stainless)	J	0821-0049-0000	2	1-1/2" Flange (Cast Iron)
11	0821-0106-1000	1	Motor Bracket (Plastic)	K	0804-0055-1000	4	7/16"-14 Hex Nut (Steel)
12	0155-0021-1000	4	1/2"OD Washer (Stainless)	<b>Materials in contact with the liquid:</b>			
13	0804-0052-1000	4	1/4"-20 x 3/4" LG. Socket Head Housing Screw (Steel)	<b>821-BR:</b> Bronze, Ceramic, Nitrile/Fibre, 304SS, 303SS, Ryton/Teflon/Carbon			
14	0821-0084-1000	1	Motor, 1 Phase, 115V, 50/60 Hz	<b>821-CI:</b> Cast Iron, Ceramic, Nitrile/Fibre, 304SS, 303SS, Ryton/Teflon/Carbon			
14	0821-0088-1000	1	Motor, 1 Phase, 230V, 50/60 Hz	<b>821-SS:</b> 304SS, Ceramic, Nitrile/Fibre, 303SS, Ryton/Teflon/Carbon			

NOTE: Contact Factory for other materials and/or parts not listed.

Special voltage motors are available upon special order.

**LUBRICATION:** The 821 motor should be oiled at least once a year at the start of the heating season with 4 or 5 drops of SAE 20 weight non-detergent oil in each bearing. If the pump is used daily, it should be oiled every six months. Do not over oil. No oiling is required on ball bearing motors.

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