



MARCH PUMPS

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821 HOT WATER PUMPS 869 HOT OIL PUMPS

DESCRIPTION & OPERATION: The March 821 Series hot water booster and 869 Series hot oil circulator 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.

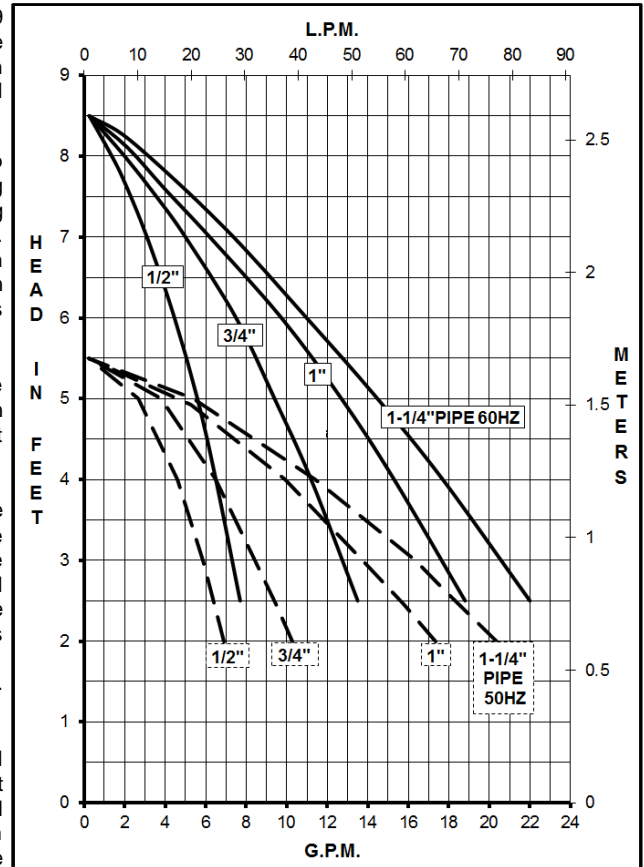
INSTALLATIONS: The 821 & 869 Series pumps should be installed with the pump housing arrow pointing in the direction of flow within the system. If the arrow indicating flow is not in the direction required, remove the socket head housing screws holding the housing to the motor bracket and rotate the housing 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.

LUBRICATION: The 821 & 869 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.

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. 821 pumps are recognized under the component program of Underwriters Laboratories Inc. File E80954. UL Recognition on 821 pumps, file E80954, is for water only.

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.

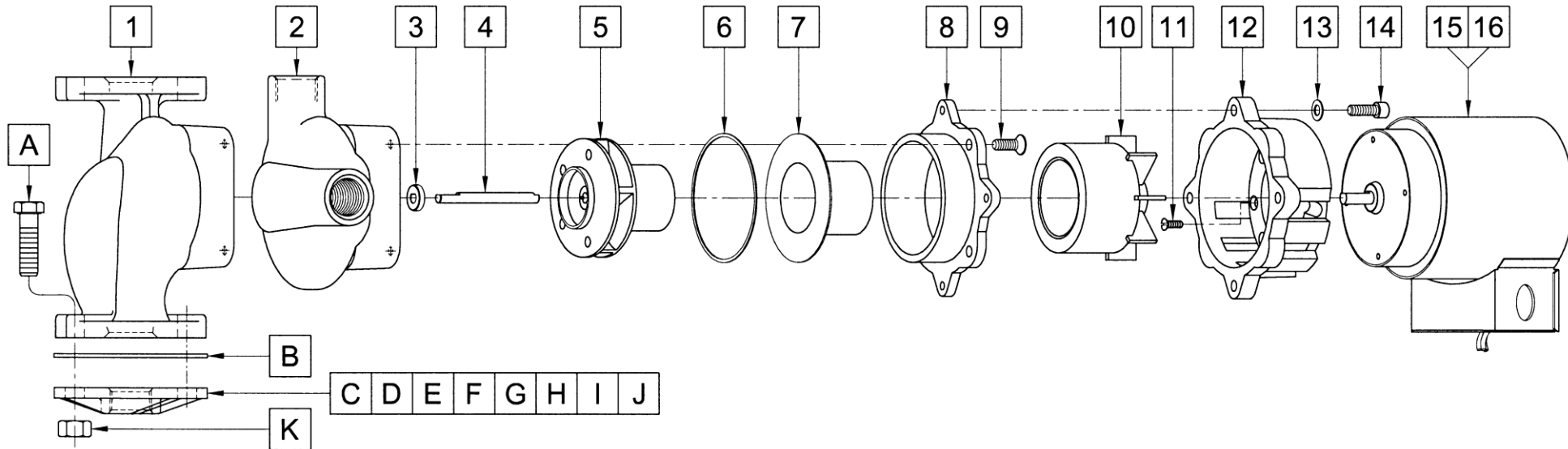
LIMITED WARRANTY: March pumps are guaranteed only against defects in workmanship or materials for a period of one year from date of manufacture pumping water. For the complete warranty and to register online go to www.marchpump.com/warranty-registration



SPECIFICATIONS									
	821-BR	821-CI	869-CI	821-BR-T	821-CI-T	869-CI-T			
Model Abbreviations	BR: Bronze, CI: Cast Iron, T: Threaded			BR: Bronze, CI: Cast Iron, T: Threaded					
Max Flow	60Hz {22 gpm} - 50Hz {75.7 lpm}			60Hz {14 gpm} - 50Hz {45.4 lpm}					
Max Head	60Hz {8.5 ft / 3.7 psi} - 50Hz {1.6 m}			60Hz {8.5 ft / 3.7 psi} - 50Hz {1.6 m}					
Inlet - Outlet	Flange - Flange			3/4" FPT - 3/4" FPT					
Internal Pressure	150 psi / 10 bar Max			150 psi / 10 bar Max					
Liquid Temperature	250°F / 121°C Max		350°F / 176°C Max	250°F / 121°C Max		350°F / 176°C Max			
Overall Size (H x W x L)	6.31" x 4.87" x 9.68" - 16.0 cm x 12.3 cm x 24.5 cm			6.19" x 5.37" x 9.28" - 15.7 cm x 13.6 cm x 23.5 cm					
Packed Weight	14.5 lbs / 6.5 kg	14 lbs / 6.3 kg	14 lbs / 6.3 kg	12 lbs / 5.4 kg	11.5 lbs / 5.2 kg	11.5 lbs / 5.2 kg			
Models	821-BR, 821-CI, & 869-CI			821-BR-T, 821-CI-T, & 869-CI-T					
	60Hz - 115V	50Hz - 115V	60Hz - 230V 50Hz - 230V	60Hz - 115V	50Hz - 115V	60Hz - 230V 50Hz - 230V			
Motor Type	Air Cooled			Air Cooled					
1 Phase	Watts - Amps	113 - 1.6	108 - 1.8	113 - 0.8	108 - 0.9	101 - 1.6	102 - 1.8	101 - 0.8	102 - 0.9
	Hp / Kw - Rpm	1/20 - 1600	0.037 - 1350	1/20 - 1600	0.037 - 1350	1/20 - 1600	0.037 - 1350	1/20 - 1600	0.037 - 1350
Electrical Connection	Conduit Box			Conduit Box					

All specifications & data are based on pumping water & are intended as a guideline only. Specifications may vary with different motors.

PARTS LIST



#	DESCRIPTION	BR, BR-T	CI, CI-T	SIZE (Inches)	QTY.	821 BR	821 CI	821 BR-T	821 CI-T	869 CI	869 CI-T
1	Pump Housing	Bronze	Cast Iron	Flanged	1	0821-0064-0000	0821-0025-0001			0869-0031-0000	
2	Pump Housing	Bronze	Cast Iron	3/4 Threaded	1			0821-0075-0000	0821-0080-0001		0869-0032-0000
3	Thrust Washer		Ceramic		1			0821-0079-1000			
4	Shaft		Stainless		1		0821-0036-1000				
	Shaft		Ceramic		1					0869-0015-1000	
5	Impeller w/Bushing		Ryton/Carbon	2.875 Dia.	1		0821-0023-0200				
	Impeller w/Bushing		Nylon/Carbon	2.875 Dia.	1					0869-0003-0200	
6	Gasket		Nitrile/Fibre	2.968 ID x 0.031 Thick	1			0804-0050-1000			
7	Rear Housing		Stainless		1			0821-0035-0100			
8	Housing Connecting Ring		Aluminum		1			0821-0044-0000			
9	Flat Head Connecting Screw		Steel	1/4-20 x 3/4 Lg.	4			1043-0009-1000			
10	Drive Magnet				1			0821-0086-0100			
11	Screw Flat Head		Stainless	#8-32 x 1/2 Lg.	4			0210-0028-1000			
12	Motor Bracket		Plastic		1			0821-0104-1000			
13	Washer		Stainless	1/2 O.D.	4			0155-0021-1000			
14	Socket Head Housing Screw		Steel	1/4-20 x 3/4 Lg.	4			0804-0052-1000			
15	Motor, 115V, 50/60Hz				1			0821-0084-1000			
16	Motor, 230V, 50/60Hz				1			0821-0088-1000			

OPTION PARTS FOR ALL MODELS

#	DESCRIPTION	MATERIAL	SIZE (Inches)	QTY.	PART #	#	DESCRIPTION	MATERIAL	SIZE (Inches)	QTY.	PART #
A	Hex Head Screw	Steel	7/16-14 x 1-1/2 Lg.	4	0804-0054-1000	G	Flange	Bronze	1-1/4	2	0821-0072-0000
B	Gasket, Flange	EPDM		1	0821-0105-1000	H	Flange	Steel	1-1/4	2	0821-0048-0000
C	Flange	Bronze	3/4	2	0821-0069-0000	I	Flange	Bronze	1-1/2	2	0821-0066-0000
D	Flange	Steel	3/4	2	0804-0047-0000	J	Flange	Cast Iron	1-1/2	2	0821-0049-0000
E	Flange	Bronze	1	2	0821-0065-0000	K	Hex Nut	Steel	7/16-14	4	0804-0055-1000
F	Flange	Steel	1	2	0821-0045-0000						

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

0821-0063-1000 R19