



MARCH PUMPS

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809-HS HOT WATER PUMPS

DESCRIPTION & OPERATION: 809-HS Series hot water booster centrifugal magnetic drive pumps 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.

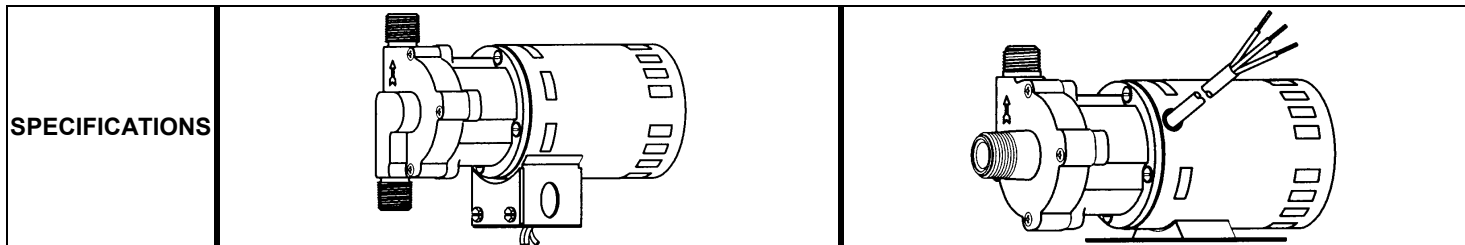
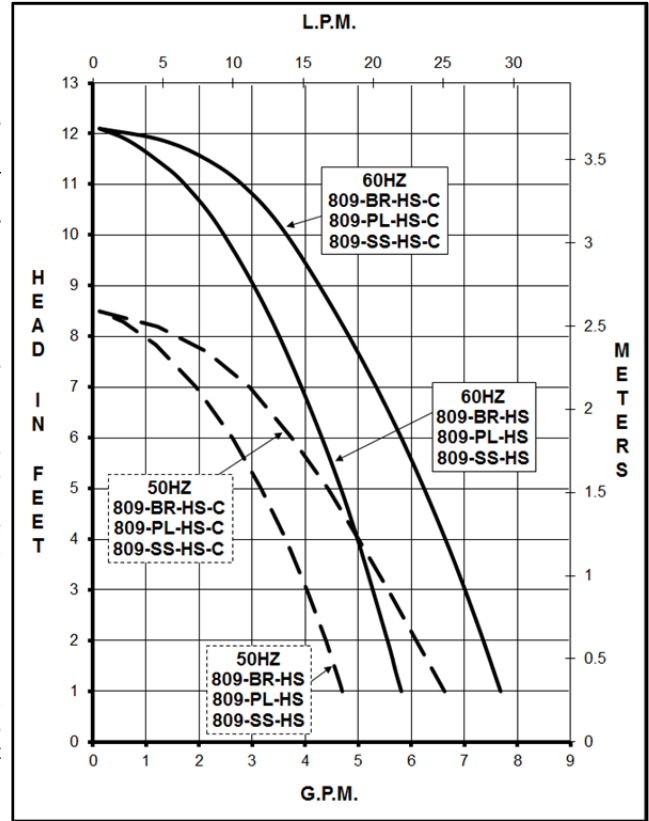
INSTALLATION: 809-HS pumps should be installed with the pump housing arrow pointing in the direction of flow within the system. If the arrow indicating flow is not in the direction required, remove the housing screws holding the housing to the motor bracket and rotate the housing assembly as required. Replace the screws and tighten. The pump is composed of a wet end assembly which can be separated by unscrewing the housing screws. The pump will then separate into 2 parts. The liquid will be contained within the wet end assembly unless the rear housing screws on the rear housing are loosened.

LUBRICATION: The motor should be oiled annually 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 year round it should be oiled every six months. Do not over oil.

GENERAL SAFETY INFORMATION: Follow all local electrical and safety codes, and 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 and in draining hot water from the pump or the system. March cannot recommend the 809 Series out of bronze where the liquid is used for human consumption per California Law due to the presence of lead.

*UL Recognition on pumps, file E80954, is for water only. (809-BR-HS, 809-PL-HS) Motors are U.L. Yellow Card listed, impedance protected or thermal overload protected. Complete pump under U.L. file E80954.

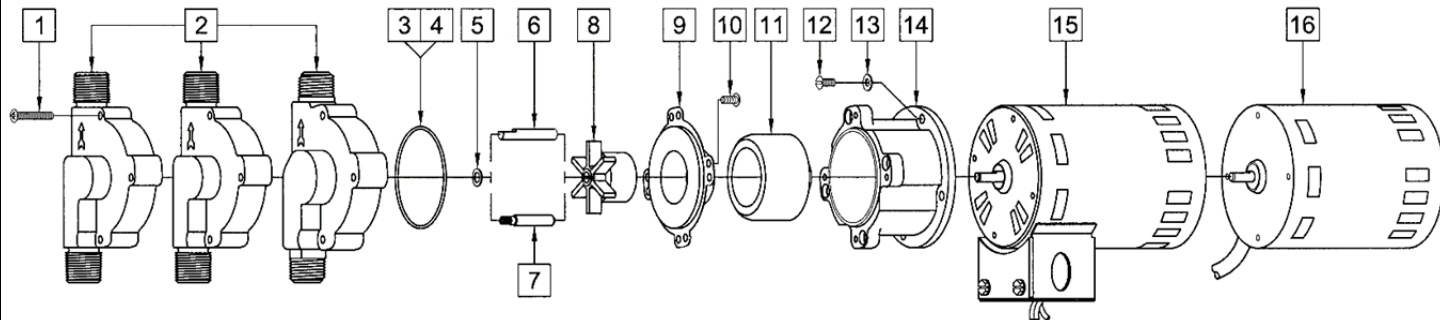
ELECTRICAL: Motors are available in different electrical configurations such as 115V 50/60 Hz or 230 Volt 50/60 Hz, 1 Phase and rated for continuous duty. 115 Volt models 809-BR-HS, 809-PL-HS, & 809-SS-HS have a conduit box, 230 Volt have a 3 foot (0.9 m) cord. Models 809-BR-C-HS, 809-PL-C-HS, & 809-SS-C-HS have a 3 foot (0.9 m) cord. Motors are air cooled.



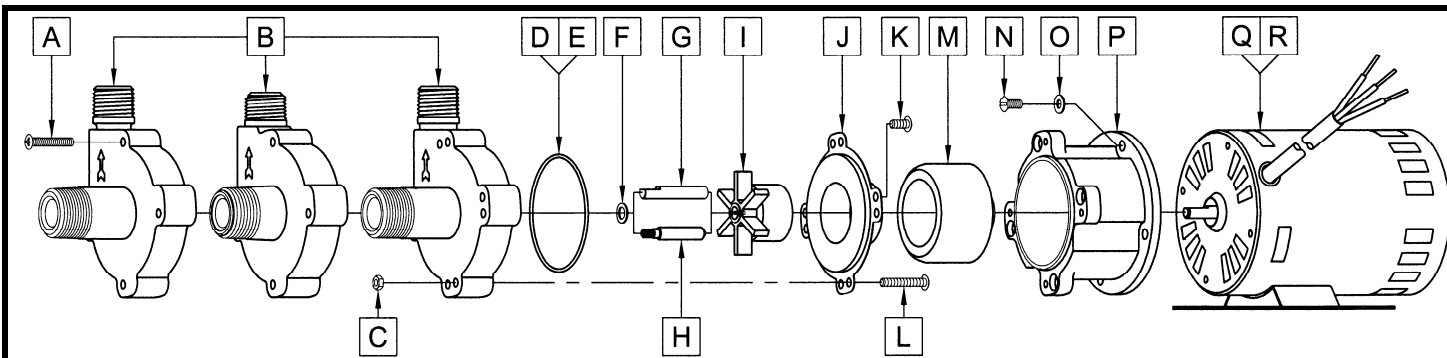
SPECIFICATIONS		809-BR-HS				809-PL-HS				809-SS-HS				809-BR-HS-C				809-PL-HS-C				809-SS-HS-C											
Product #	115 V	0809-0058-0100				0809-0058-0300				0809-0215-0700				0809-0058-0200				0809-0180-0100				0809-0177-0100											
	230 V	0809-0059-0100				0809-0059-0300				0809-0215-0800				0809-0059-0200				0809-0180-0200				0809-0177-0200											
Model Abbreviations		BR: Bronze				PL: Polysulfone				SS: Stainless				BR: Bronze				PL: Polysulfone				SS: Stainless											
		Inline Inlet & Outlet				Inline Inlet & Outlet				Inline Inlet & Outlet				C: Center Inlet				C: Center Inlet				C: Center Inlet											
UNITS		60 Hz		50 Hz		60 Hz		50 Hz		60 Hz		50 Hz		60 Hz		50 Hz		60 Hz		50 Hz		60 Hz		50 Hz									
Max Flow		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm		6 gpm / 18.9 lpm									
Max Head		12.1 ft / 5.23 psi		2.5 m		12.1 ft / 5.23 psi		2.5 m		12.1 ft / 5.23 psi		2.5 m		12.1 ft / 5.23 psi		2.5 m		12.1 ft / 5.23 psi		2.5 m		12.1 ft / 5.23 psi		2.5 m									
Inlet		1/2" MPT				1/2" MPT				1/2" MPT				3/4" MPT				3/8" FPT & 3/4" MPT				3/4" MPT											
Outlet		1/2" MPT				1/2" MPT				1/2" MPT				1/2" MPT				1/2" MPT				1/2" MPT											
Internal Pressure		150 psi / 10 bar Max				50 psi / 3.4 bar Max				150 psi / 10 bar Max				150 psi / 10 bar Max				50 psi / 3.4 bar Max				150 psi / 10 bar Max											
Liquid Temperature		250 °F / 121 °C Max				250 °F / 121 °C Max				250 °F / 121 °C Max				250 °F / 121 °C Max				250 °F / 121 °C Max				250 °F / 121 °C Max											
Packed Weight		5.80 lbs / 2.63 kg				5 lbs / 2.3 kg				6 lbs / 2.7 kg				6.20 lbs / 2.81 kg				5 lbs / 2.3 kg				6 lbs / 2.7 kg											
ELECTRICAL 60 Hz		W	A	Hp	Rpm	W	A	Hp	Rpm	W	A	Hp	Rpm	W	A	Hp	Rpm	W	A	Hp	Rpm	W	A	Hp	Rpm	W	A	Hp	Rpm				
115 V		87	1.4	1/25	3450	87	1.4	1/25	3450	87	1.4	1/25	3450	97	1.4	1/25	3450	97	1.4	1/25	3450	97	1.4	1/25	3450	97	1.4	1/25	3450				
230 V		90	0.7	1/25	3450	90	0.7	1/25	3450	90	0.7	1/25	3450	101	0.7	1/25	3450	101	0.7	1/25	3450	101	0.7	1/25	3450	101	0.7	1/25	3450				
ELECTRICAL 50 Hz		W	A	kW	Rpm	W	A	kW	Rpm	W	A	kW	Rpm	W	A	kW	Rpm	W	A	kW	Rpm	W	A	kW	Rpm	W	A	kW	Rpm	W	A	kW	Rpm
115 V		100	1.4	0.029	2850	100	1.4	0.029	2850	100	1.4	0.029	2850	109	1.4	0.029	2850	109	1.4	0.029	2850	109	1.4	0.029	2850	109	1.4	0.029	2850				
230 V		104	0.7	0.029	2850	104	0.7	0.029	2850	104	0.7	0.029	2850	110	0.7	0.029	2850	110	0.7	0.029	2850	110	0.7	0.029	2850	110	0.7	0.029	2850				
Overall Pump Size		H	W	L	H	W	L	H	W	L	H	W	L	H	W	L	H	W	L	H	W	L	H	W	L	H	W	L					
115 V		Inches	5.31	3.33	7.74	5.31	3.38	7.74	5.31	3.33	7.74	4.50	3.50	8.94	4.37	3.50	8.43	4.50	3.50	8.62	11.4	8.8	21.8	11.4	8.8	21.8	11.4	8.8	21.8				
		cm	13.4	8.4	19.6	13.4	8.5	19.6	13.4	8.4	19.6	11.4	8.8	22.7	11.0	8.8	21.4	11.4	8.8	21.8	11.4	8.8	21.8	11.4	8.8	21.8							
230 V		Inches	4.87	3.33	7.74	4.88	3.38	7.74	4.87	3.33	7.74	4.50	3.50	8.94	4.37	3.50	8.43	4.50	3.50	8.62	11.4	8.8	21.8	11.4	8.8	21.8	11.4	8.8	21.8				
		cm	12.3	8.4	19.6	12.3	8.5	19.6	12.3	8.4	19.6	11.4	8.8	22.7	11.0	8.8	21.4	11.4	8.8	21.8	11.4	8.8	21.8	11.4	8.8	21.8							

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

PARTS LIST



#	DESCRIPTION	809-BR-HS	809-PL-HS	809-SS-HS	SIZE (Inches)	QTY.	809-BR-HS	809-PL-HS	809-SS-HS
1	Screw (Housing)	Steel	Steel	Stainless	#8-32 x 1 Lg.	4	0923-0003-1000		0809-0205-1000
2	Pump Housing	Bronze	Polysulfone	Stainless	Inline Inlet & Outlet	1	0809-0013-0000	0809-0079-0100	0809-0211-0010
3	"O" Ring	Silicone		Silicone	0.070 CS x 2.441 ID	1	0809-0165-1000		0809-0165-1000
4	"O" Ring		Silicone		1/16 CS x 2-3/8 ID	1		0809-0027-1000	
5	Thrust Washer		Teflon			1		0809-0043-1000	
6	*Shaft		Stainless		"D" Flat	1		0809-0161-1000	
7	*Shaft		Stainless		Left-Hand Thread	1	0809-0214-1000		0809-0214-1000
8	Impeller		Ryton/Teflon/Glass		1-11/16 Dia.	1		0809-0005-0200	
9	Rear Housing		Stainless			1		0809-0012-1000	
10	Screw (Rear Housing)		Stainless		#8-32 x 3/8 Lg.	4		0135-0040-1000	
11	Drive Magnet					1		0125-0083-0100	
12	Screw		Stainless		#8-32 x 3/8 Lg.	4		0135-0040-1000	
13	Washer		Stainless		#8	4		0858-0004-1000	
14	Motor Bracket		Plastic			1		0809-0058-1000	
15	Motor 115 V, 50/60 Hz				Conduit Box	1		0809-0090-1000	
16	Motor 230 V, 50/60 Hz				w/Cord, No Base	1		0135-0037-1000	



#	DESCRIPTION	809-BR-HS-C	809-PL-HS-C	809-SS-HS-C	SIZE (Inches)	QTY.	809-BR-HS-C	809-PL-HS-C	809-SS-HS-C
A	Screw (Housing)	Steel	Steel	Stainless	#8-32 x 1 Lg.	4	0923-0003-1000		0809-0205-1000
B	Pump Housing	Bronze	Polysulfone	Stainless	Center Inlet	1	0809-0142-0000	0809-0179-0100	0809-0150-0010
C	Hex Nut			Stainless	#8-32	4			0991-0004-1000
D	"O" Ring	Silicone		Silicone	0.070 CS x 2.441 ID	1	0809-0165-1000		0809-0165-1000
E	"O" Ring		Silicone		1/16 CS x 2-3/8 ID	1		0809-0027-1000	
F	Thrust Washer		Teflon			1		0809-0043-1000	
G	*Shaft		Stainless		"D" Flat	1		0809-0161-1000	
H	*Shaft		Stainless		Left-Hand Thread	1	0809-0214-1000		0809-0214-1000
I	Impeller		Ryton/Teflon/Glass		1-11/16 Dia.	1		0809-0005-0200	
J	Rear Housing		Stainless			1		0809-0012-1000	
K	Screw (Rear Housing)		Stainless		#8-32 x 3/8 Lg.	4	0135-0040-1000		
L	Screw		Stainless		#8-32 x 1 Lg.	4			0809-0205-1000
M	Drive Magnet					1		0125-0083-0100	
N	Screw		Stainless		#8-32 x 3/8 Lg.	4		0135-0040-1000	
O	Washer		Stainless		#8	4		0858-0004-1000	
P	Motor Bracket		Plastic			1		0809-0058-1000	
Q	Motor 115 V, 50/60 Hz				w/Cord & Base	1		0809-0123-1000	
R	Motor 230 V, 50/60 Hz				w/Cord & Base	1		0809-0124-1000	

DISASSEMBLY & REASSEMBLY

The motor can be removed from the wet end assembly without draining the liquid from the system. To do so remove four 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 rear housing 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 "O" ring anytime the rear housing is removed.

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

0809-0053-1100 R11

*Check shaft type before ordering replacement parts.

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