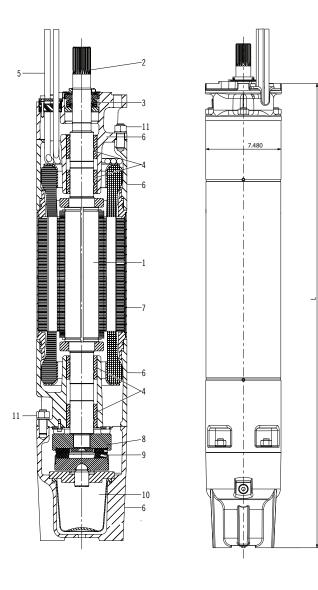
SUBMITTAL DATA SHEET

8" A.Y. McDonald Submersible Motors



8" Asynchronous two-pole submersible motor, rewindable type, with external shell made in AISI 304 stainless steel and supports in cast iron with paint coating. Cooling and lubrication of the thrust bearing assembly and carbon brushes is provided by a mixture of water and glycol. Squirrel-cage rotor mounted on self-centering thrust bearing. Overload protection must be provided by user.



Materials

	COMPONENTS	
1	Shaft	Stainless Steel
2	Shaft End	Stainless Steel AISI 304
3	Mechanical Seal	Ceramic / Carbon
4	Bearing Ring	Carbon
5	Cable	NBR
6	Structural Parts	Cast Iron
7	External Sleeve	Stainless Steel AISI 304
8	Thrust Bearing Rotating	Carbon with Antimony
9	Thrust Bearing Stationary	AISI 420
10	Diaphragm	NBR-EPDM
11	Bolts & Screws	Stainless Steel AISI 304

60 Hz Dimensions

Three Phase Motors

Туре			L	Wt.	Axial Thrust		
	[HP]	[kW]	[inch]	[lbs]	[lbf]		
	40	30	41.6"	284	10100		
	50	37	43.9"	305	10100		
	60	45	47.3"	326	10100		
60 Hz	75	55	50.6"	396	10100		
	100	75	54.7"	431	10100		
	125	92	60.5"	483	12300		
	150	110	63.0"	538	12300		

NO-LEAD: The weighted average of the wetted surface of this no-lead product contacted by consumable water contains less than one quarter of one percent (0.25%) lead.



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A.Y. McDonald considers the information on this assembly drawing correct when published. Item and option availability, including specifications, are subject to change without notice.

SUBMITTAL DATA SHEET

8" A.Y. McDonald Submersible Motors



Electrical Data 60 Hz

Three Phase Motors / 2 Pole

	P2	٧*	SF	In	In (SF)	ls/In	N	Cos φ	η	Ø	LC
[HP]	[kW]	[V]		[A]	[A]		[min ⁻¹]		%	{AWG}	[ft]
40	30	460	1.15	51	58.7	4.7	3450	0.86	82	3x16+1x6	13
50	37	460	1.15	61.4	70.6	4.7	3460	0.86	84	3x16+1x6	13
60	45	460	1.15	74.8	86.0	4.7	3460	0.86	84	3x16+1x6	13
75	55	460	1.15	90.2	103.7	4.7	3450	0.87	84	3x16+1x6	13
100	75	460	1.15	123.1	141.6	4.7	3450	0.86	84	3x25+1x25	13
125	92	460	1.15	152.8	175.7	4.4	3430	0.86	84	3x25+1x25	13
150	110	460	1.15	182.6	210.0	4.4	3430	0.86	84	3x25+1x25	13

P2: Rated output In: Rated current

Cs/Cn: Locked rotor Torque/Rated Torque

Cos φ: Power factor Cable section

 $\begin{array}{ll} \textbf{V:} & \text{Rated voltage} \\ \textbf{In (SF):} & \text{Service factor currect} \\ \textbf{P1:} & \text{Power consumption} \\ \textbf{\eta:} & \text{Efficiency} \\ \textbf{LC:} & \text{Cable length} \\ \end{array}$

SF: Service factor

Is/In: Locked rotor current/Rated current

N: R.P.M C: Capacitor

Technical Specification

Flange	NEMA 8"		
Insulation Class	Υ		
Degree of protection	IP68		
Cooling flow	40-75 HP = 0.66 ft/sec 100-150 HP = 1.64 ft/sec		
Voltage tolerance	±10%		
Max starts	40-100 HP = 15/hr 125-150 HP = 10/hr		
Max operating depth	984 ft		
Max operating pressure	425 PSI		



The stator is rewindable type and it's inserted in an AISI 304 stainless steel outer shell. The windings are made in copper insulated by PVC.



Kingsbury Type thrust bearing unit consisting of tilting pads in graphite and ceramic disc.



Shafts made of stainless steel with end part according to 8" NEMA norms. Squirrel-cage rotor made in copper. The motor is equipped with a ceramic/carbon mechanical seal.

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