

Pool & Spa OEM Pump/Motor Replacement Guide

Square Flange and C-Flange Motors

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Motors and pumps need to be properly matched to one another to provide consistent, predictable performance. When selecting your NIDEC replacement motor you will need to know six important pieces of information:

- 1) Pump Mounting (ie. Square Flange, C-Flange, etc.)
- 2) Horsepower
- 3) Service Factor
- 4) Voltage
- 5) Frequency
- 6) Phase

Most of this information can be attained from the motor nameplate. Always be sure that the total of horsepower times service factor of your new NIDEC motor is equal to or greater than the total of horsepower times service factor of the original motor.

$$\text{Total Output HP} = (\text{horsepower}) \times (\text{service factor}) = \text{THP or SFHP}$$

PUMP OEM	BRAND NAME	CATEGORY
Aqua Flo	Ultra Flow	C
Aqua Flo	Dominator	S
Astral	2000 Series	J
Baker Hydro	Hydron	J
Carvin Pool	Cygnat	S
Carvin Pool	Magnum & Magnum Force	J
Hayward	Super Pump	J
Hayward	Super Pump II	J
Hayward	Max-Flo	J
Hayward	Max-Flo II	S
Hayward	NorthStar	N
Hayward	TriStar	T
Jacuzzi Brothers	Bronze	C
Jacuzzi Brothers	Magnum & Magnum Force	J
Jandy/Zodiac	SHPF / SHPM	S
Jandy/Zodiac	JHP / JHPU	J
Jandy/Zodiac	MHP / MHPU	J
Pentair/Sta-Rite	DuraGlas / Max-E-Glas	S
Pentair/Sta-Rite	DuraGlas II / Max-E-Glas II	S
Pentair/Letro	Legend	P
Pentair/American	Ultra-Flow	S
Pentair/American	American Eagle	C
Pentair/Pac Fab	Challenger	S
Pentair/Pac Fab	WhisperFlo	S
Pentair/Pac Fab	Hydro Pump	C
Pentair /Purex	Pinnacle	S
Speck Pumps	Models 72,S90, Super Pro, 433, & ES90	J
Waterco	Hydrostorm, Hydrostar	S
Waterway	SVL56, Champion, SMF	S
Zodiac Pool	Polaris Vac-Sweep, PB4 Booster Pump	P

CATEGORY "N" HAYWARD NORTHSTAR C-FLANGE THREADED SHAFT

HP	SERVICE FACTOR	VOLTAGE	ENERGY EFFICIENT EXTREME E® 6.5" Frame
3/4	1.85	208-230/115	ESN1072
1	1.40	208-230/115	EUSN1102
1	1.85	208-230/115	ESN1102
1 1/2	1.25	208-230/115	EUSN1152
1 1/2	1.60	208-230/115	ESN1152
2	1.20	208-230/115	EUSN1202
2	1.35	208-230	ESN1202
3	1.20	208-230	EUSN1302
3	1.60	208-230	ESN1302

CATEGORY "C" NEMA C-FLANGE KEYED SHAFT

HP	SERVICE FACTOR	VOLTAGE	STANDARD EFFICIENCY 6.5" FRAME	ENERGY EFFICIENT EXTREME E® 6.5" Frame
1/2	1.60	230/115	ASB120	ASB656
3/4	1.50	230/115	ASB121	ASB634
1	1.40	230/115	ASB122	ASB653
1.5	1.30	230/115	ASB123	ASB795
2	1.20	230	ASB124	ASB808
3	1.15	208-230		ASB817

CATEGORY "T" HAYWARD TRISTAR REPLACEMENTS-SQUARE FLANGE

HP	SERVICE FACTOR	VOLTAGE	STANDARD EFFICIENCY 6.5" FRAME	ENERGY EFFICIENT EXTREME E® 6.5" Frame
1/2	1.98	208-230/115		ET3205
3/4	1.85	208-230/115		ET3207
3/4	1.25	230/115	ASB852	
1	1.85	208-230/115		ET3210
1	1.25	230/115	ASB853	
1.5	1.60	208-230/115		ET3215
1.5	1.10	230/115	ASB854	
2	1.35	208-230		ET3220
2	1.10	230/115	ASB859	
2.5	1.04	230	ASB840	
3	1.15	208-230	ASB844	

CATEGORY "J" NEMA C-FLANGE THREADED SHAFT

HP	SERVICE FACTOR	VOLTAGE	STANDARD EFFICIENCY		ENERGY EFFICIENT EXTREME E®		ENERGY EFFICIENT VARIABLE SPEED
			6.5" FRAME	5.5" FRAME	6.5" FRAME	5.5" FRAME	
1/2	1.60	230/115	ASB126	EST1052	ASB657	ECT1052	NPTT125
3/4	1.00	230/115	ASB227	EUST1072			
	1.50	230/115	ASB127	EST1072	ASB638	ECT1072	
1	1.00	230/115	ASB228	EUST1102			NPTT165
	1.40	230/115	ASB128	EST1102	ASB654	ECT1102	
1.5	1.00	230/115	ASB229	EUST1152			NPTT225
	1.30	230/115	ASB129	EST1152	ASB796		
2	1.00	230/115	ASB230	EUST1202			NPTT270
	1.20	230	ASB130	EST1202	ASB809		
2.5	1.00	230	ASB231	EUST1252			AVS3
3	1.15	208-230			ASB818		
5	1.00	208-230			ASB819		

CATEGORY "S" SQUARE FLANGE

HP	SERVICE FACTOR	VOLTAGE	STANDARD EFFICIENCY		ENERGY EFFICIENT EXTREME E®		ENERGY EFFICIENT VARIABLE SPEED
			6.5" FRAME	5.5" FRAME	6.5" FRAME	5.5" FRAME	
1/2	1.30	230/115		EUSQ1052			NPTQ125
	1.90	230/115	ASB846	ESQ1052	ASB845	EQC1052	
3/4	1.27	230/115	ASB852	EUSQ1072		EUQC1072	NPTQ165
	1.65	230/115	ASB847	ESQ1072	ASB661	EQC1072	
1	1.25	230/115	ASB853	EUSQ1102		EUQC1102	NPTQ225
	1.65	230/115	ASB848	ESQ1102	ASB841	EQC1102	
1.5	1.10	230/115	ASB854	EUSQ1152		EUQC1152	NPTQ270
	1.50	230/115	ASB858	ESQ1152	ASB842		
2	1.10	230/115	ASB859	EUSQ1202			AVSS3
	1.30	230	ASB748	ESQ1202	ASB843		
2.5	1.04	230	ASB840	EUSQ1252			
3	1.15	208-230	ASB844		ASB844		
5	1.00	208-230			ASB850		

CATEGORY "P" POOL CLEANERS

HP	SERVICE FACTOR	VOLTAGE	BRAND	NIDEC 56™ 6.5" Frame
3/4	1.50	230/115	Polaris	ASB625
	1.50	230/115	Letro	ASB668