



8"

WF "T" CI Series

8" Rewindable

Water Filled Submersible Motor

NIAGARA 8"WF"T"CI Submersible Motor specially designed with the latest manufacturing techniques. Years of experience, superior design and better manufacturing have resulted into development of this range of motor. Which are efficient and reliable in operation Strict quality assurance during the total process assure trouble free and reliability in operation requiring minimum maintenance.

Application:

Built for coupling with submersible multistage high and low load thrust 8" pumps for clean water deep well.

Technical Features of Motors:

- 8" WF TCI Submersible Motor are Water Lubricated and rewind able.
- Upper/Lower bracket and Motor base are cast iron.
- Motor shaft is of SS 420 grade or above.
- Stator shell is of 304.
- Winding wire poly propylene with insulation Class-B.
- Flange and shaft protrusion as per NEMA standard.
- Water lubricated radial and thrust bearing.
- Degree of protection: IP 68
- mounting: vertical/horizontal.
- Single phase motors are capacitor start capacitor run.
- Dynamically balanced rotor ensure smooth running.
- Solid copper bars inserted in to our piece billet rotor offer great rigidity.
- Motor cable length: 5m/3core.

Operating Limits

- Maximum allowable rating voltage fluctuation +6%-10%.
- Range: 30 KW to 110 KW (40 to 150 HP)
- Speed: 2900 RPM 50 Hz/ 3500 RPM 60 Hz
- Maximum Liquid Temperature :50 C
- Rotation: Clockwise when viewed from motor end

Versions

- Three phase 30 KW to 130 KW, 380-400-415 Volts / 50 Hz.
- Three phase 30 KW to 130 KW, 230-380-460 Volts / 60 Hz.

Submersible Rewindable Motor

8" WFT CI

8" Submersible Rewindable Motor Performance Data 50 Hz

8 Inch Water Filled Motor

MOTOR TYPE	P _N		Thrust Load (N)	U _N (V)	I _N	I _A	n _N min-1	η (Eff.) (%) AT % LOAD			COS Ø (P.F) AT % LOAD			T _N (Nm)	L (mm)	Gross weight(kg)
	HP	kW			(Amps)			50	75	100	50	75	100			
8" WFT CI 40	40.0	30.00	45000	380	63.10	4.50	2895	80.1	83.5	84.3	0.71	0.82	0.89	98.99	1120	162.0
				400	60.20	4.60	2905	81.2	84.2	84.9	0.70	0.83	0.88	98.90		
				415	58.10	4.65	2905	80.9	84.1	84.8	0.69	0.84	0.88	98.90		
8" WFT CI 50	50.0	37.00	45000	380	77.90	4.71	2895	80.0	83.0	84.0	0.74	0.85	0.87	121.90	1210	178.0
				400	75.30	4.82	2905	81.2	84.0	85.0	0.72	0.83	0.86	121.60		
				415	74.40	4.86	2905	80.6	83.6	84.5	0.70	0.80	0.85	121.60		
8" WFT CI 60	60.0	45.00	45000	380	91.90	4.71	2895	80.4	83.2	85.1	0.72	0.86	0.88	148.50	1310	195.0
				400	90.10	4.82	2905	81.6	84.0	85.8	0.73	0.81	0.87	148.10		
				415	89.30	4.90	2905	81.4	83.8	85.6	0.71	0.80	0.84	148.10		
8" WFT CI 75	75.0	55.00	45000	380	114.00	4.90	2895	80.6	84.2	85.8	0.73	0.83	0.87	181.81	1360	206.0
				400	110.20	5.10	2910	82.1	85.3	86.5	0.72	0.82	0.86	180.60		
				415	109.00	5.20	2910	81.7	84.8	86.1	0.70	0.81	0.85	180.60		
8" WFT CI 85	85.0	63.00	45000	380	132.30	4.90	2895	80.7	84.8	86.2	0.72	0.84	0.87	198.40	1410	216.0
				400	128.10	5.00	2910	82.0	85.5	86.8	0.72	0.82	0.87	196.70		
				415	127.50	5.10	2910	81.6	85.3	86.3	0.71	0.80	0.86	196.70		
8" WFT CI 90	90.0	66.00	45000	380	134.90	4.90	2895	80.8	85.4	86.5	0.74	0.85	0.89	217.90	1420	239.0
				400	130.90	5.10	2910	82.0	85.8	87.0	0.73	0.84	0.87	216.40		
				415	129.10	5.05	2910	81.5	85.4	86.7	0.70	0.82	0.85	216.40		
8" WFT CI 100	100.0	75.00	45000	380	150.80	4.90	2895	80.9	84.8	86.1	0.74	0.86	0.88	248.10	1470	258.0
				400	147.40	5.00	2910	82.0	85.7	86.9	0.72	0.84	0.87	246.32		
				415	146.10	5.10	2910	81.8	85.5	86.7	0.70	0.80	0.85	246.32		
8" WFT CI 125	125.0	93.00	45000	380	187.20	4.90	2900	80.6	84.6	86.6	0.74	0.84	0.87	306.20	1610	271.0
				400	182.10	5.00	2910	81.6	86.5	87.7	0.71	0.80	0.86	305.30		
				415	181.00	5.05	2920	81.7	86.4	87.1	0.70	0.79	0.85	304.3		
8" WFT CI 150	150.0	110.0	45000	380	230.80	4.95	2895	79.1	83.2	85.1	0.71	0.80	0.83	362.9	1740	302.0
				400	224.60	5.05	2905	79.4	84.2	85.4	0.70	0.79	0.81	361.8		
				415	220.50	5.10	2905	80.1	84.6	86.1	0.69	0.78	0.80	361.8		
8" WFT CI 175	175.0	130.0	45000	380	273.30	4.96	2895	79.3	83.5	85.1	0.71	0.81	0.84	429.6	1940	357.0
				400	260.90	5.05	2905	79.8	84.4	85.6	0.70	0.80	0.83	428.1		
				415	256.70	5.10	2905	80.3	85.1	86.3	0.69	0.79	0.82	428.1		

Submersible Rewindable Motor

8" Submersible Rewindable Motor Performance Data 60 Hz

8" WFT CI

8 Inch Water Filled Motor

MOTOR TYPE	PN		Thrust Load (N)	Un (VOLts)	In (Amps)	IA (Amps)	nn min-1	η (Eff.) (%) AT % LOAD			COS Ø (P.F) AT % LOAD			TN (Nm)	L (mm)	Gross weight(kg)
	HP	kW						50	75	100	50	75	100			
8" WFT CI 40	40.00	30.00	45000	460	57.6	5.78	3480	82.0	84.2	85.1	0.77	0.82	0.88	82.5	1120	162.0
8" WFT CI 50	50.00	37.00	45000	220	150.2	5.78	3480	82.0	84.1	85.1	0.76	0.82	0.85	102.20	1210	178.0
				380	89.5	5.76	3500	82.6	84.6	85.5	0.76	0.83	0.86	101.40		
				460	73.1	5.76	3480	82.2	84.5	84.9	0.77	0.84	0.87	102.10		
8" WFT CI 60	60.00	45.00	45000	220	180.3	5.76	3500	83.2	84.8	86.1	0.75	0.81	0.84	123.20	1310	195.0
				380	108.1	5.81	3510	83.8	85.6	86.0	0.75	0.82	0.85	122.90		
				460	86.8	5.81	3500	83.2	85.4	86.2	0.76	0.82	0.86	123.20		
8" WFT CI 75	75.00	55.00	45000	220	217.7	5.75	3500	83.1	85.2	87.1	0.74	0.81	0.84	150.70	1360	206.0
				380	130.6	5.81	3510	84.1	86.2	87.1	0.75	0.82	0.85	150.20		
				460	105.2	5.81	3500	83.6	86.1	87.0	0.75	0.82	0.86	150.70		
8" WFT CI 85	85.00	63.00	45000	220	236.5	5.76	3500	83.2	85.3	87.3	0.75	0.81	0.85	171.40	1410	216.0
				380	145.8	5.82	3510	84.2	86.2	87.2	0.76	0.82	0.85	170.60		
				460	118.6	5.82	3500	83.7	86.2	87.2	0.76	0.83	0.86	171.40		
8" WFT CI 90	90.00	66.00	45000	220	255.2	5.76	3500	83.2	86.2	88.1	0.75	0.82	0.86	180.70	1420	239.0
				380	153.1	6.01	3510	84.8	87.1	88.0	0.75	0.82	0.86	180.20		
				460	125.2	6.01	3500	84.0	87.0	88.0	0.76	0.83	0.87	180.70		
8" WFT CI 100	100.0	75.00	45000	220	286.5	5.78	3500	83.4	86.0	88.1	0.75	0.83	0.86	205.20	1470	258.0
				380	170.2	6.02	3510	85.0	87.2	88.1	0.76	0.84	0.87	204.60		
				460	140.3	6.02	3500	84.1	87.0	88.0	0.76	0.83	0.88	205.20		
8" WFT CI 125	125.0	93.00	45000	220	362.8	5.78	3500	83.6	85.8	88.1	0.75	0.82	0.85	254.30	1610	271.0
				380	216.5	6.02	3510	84.6	87.1	88.4	0.76	0.81	0.85	253.80		
				460	175.2	6.02	3500	84.6	86.9	88.3	0.76	0.82	0.86	254.30		
8" WFT CI 150	150.0	110.0	45000	380	263.4	6.02	3500	82.3	84.6	86.1	0.75	0.81	0.86	300.60	1740	302.0
				460	214.3	6.02	3480	82.4	85.0	86.2	0.76	0.82	0.86	302.70		
8" WFT CI 175	175.0	130.0	45000	460	251.3	6.02	3480	82.5	85.1	86.3	0.76	0.82	0.86	357.20	1940	357.0