

# Electrical data



## 1 $\phi$ 4" 230 Volts, 50 Hz, 2900 rpm, Submersible motors (SF 1.15)

Size	kW	hp	Max. load current incl.SF I <sub>n</sub> [A]	Motor efficiency [%]			Cos $\phi$			Ist/In
				$\eta$ 50 %	$\eta$ 75 %	$\eta$ 100 %	50%	75%	100%	
4"	0.37	0.5	3.95	48.0	54.0	57.0	0.58	0.68	0.77	3.4
4"	0.55	0.75	5.80	49.5	56.5	59.5	0.52	0.65	0.74	3.5
4"	0.75	1.0	7.45	52.0	58.0	60.0	0.57	0.69	0.79	3.6
4"	1.1	1.5	8.5	62.0	69.5	72.5	0.99	0.99	0.99	4.3
4"	1.5	2.0	10.2	56.5	66.5	71.0	0.91	0.96	0.98	3.9
4"	2.2	3.0	14.0	67.0	73.0	75.0	0.91	0.94	0.96	4.4

## 3 $\phi$ 230 Volts, 50 Hz, 2900 rpm, Submersible motors (SF 1.0)

Size	kW	hp	Max. load current incl.SF I <sub>n</sub> [A]	Motor efficiency [%]			Cos $\phi$			Ist/In
				$\eta$ 50 %	$\eta$ 75 %	$\eta$ 100 %	50%	75%	100%	
4"	0.37	0.5	2.55	51.0	59.5	64.0	0.44	0.55	0.64	3.7
4"	0.55	0.75	4.00	48.5	57.0	64.0	0.42	0.52	0.64	3.5
4"	0.75	1.0	4.20	64.0	69.5	73.0	0.50	0.62	0.72	4.6
4"	0.75	1.0	3.35	66.8	71.1	72.9	0.66	0.76	0.82	5.1
4"	1.1	1.5	6.20	62.5	69.0	73.0	0.47	0.59	0.72	4.6
4"	1.1	1.5	5.00	69.1	73.2	75.0	0.57	0.70	0.78	5.2
4"	1.5	2.0	7.65	68.0	73.0	75.0	0.50	0.64	0.75	5.0
4"	1.5	2.0	7.40	66.6	71.4	72.9	0.53	0.66	0.74	4.5
4"	2.2	3.0	10.0	72.5	75.5	76.0	0.56	0.71	0.82	4.7
4"	2.2	3.0	11.6	64.5	70.8	73.3	0.44	0.58	0.69	4.2
4"	3.0	4.0	14.6	67.5	72.8	74.6	0.48	0.62	0.73	4.4
4"	4.0	5.5	17.6	73.9	77.4	77.9	0.52	0.67	0.77	4.9
4"	5.5	7.5	24.2	76.0	78.8	79.6	0.51	0.66	0.76	4.9
6"	5.5	7.5	24.8	77.0	79.0	80.0	0.51	0.64	0.73	4.5
6"	7.5	10.0	32.0	79.0	83.0	82.0	0.55	0.68	0.77	4.6
6"	9.2	12.5	39.5	77.0	80.0	80.0	0.56	0.70	0.78	4.8
6"	11	15	45.0	81.0	82.5	82.5	0.60	0.72	0.79	4.8
6"	13	17.5	54.5	81.0	82.5	82.5	0.58	0.71	0.78	4.8
6"	15	20.0	62.0	82.0	83.5	83.5	0.59	0.71	0.78	5.2
6"	18.5	25	76.5	82.5	84.5	84.0	0.56	0.69	0.77	5.3
6"	22	30	87.5	84.5	85.0	84.0	0.61	0.74	0.81	5.2
6"	26	35	104	83.5	84.0	83.5	0.61	0.73	0.81	5.0
6"	30	40	120	83.0	84.0	83.0	0.59	0.72	0.80	5.0

**3 $\phi$  230 Volts, 50 Hz, 2900 rpm, Submersible motors (SF 1.15)**

Size	kW	hp	Max. load current incl.SF I <sub>n</sub> [A]	Motor efficiency [%]			Cos $\phi$			Ist/I <sub>n</sub>
				$\eta$ 50 %	$\eta$ 75 %	$\eta$ 100 %	50%	75%	100%	
6"	5.5	7.5	25.0	71	75	76	0.61	0.72	0.78	3.5
6"	7.5	10.0	33.5	72	76	77	0.59	0.71	0.78	3.5
6"	9.2	12.5	40.5	74	77	78	0.59	0.71	0.78	3.6
6"	11	15.0	50.0	74	78	79	0.53	0.66	0.74	3.8
6"	13	17.5	56.0	77	80	80	0.57	0.69	0.77	3.9
6"	15	20	62.5	79	82	82	0.58	0.71	0.79	4.3
6"	18.5	25	75.0	80	82	82	0.61	0.75	0.81	4.2
6"	22	30	87.0	82	84	83	0.61	0.74	0.81	5.3
6"	26	35	106	81	83	83	0.57	0.7	0.78	5.6
6"	30	40	118	82	83	82	0.63	0.76	0.82	4.8
6"	37	50	148	82	84	83	0.59	0.72	0.81	5.4
8"	22	30	82.5	80	84	84	0.71	0.80	0.84	5.3
8"	26	35	95.5	81	84	84	0.76	0.83	0.86	5.1
8"	30	40	110	83	85	86	0.71	0.80	0.84	5.7
8"	37	50	134	83	86	86	0.73	0.82	0.85	5.7
8"	45	60	168	84	87	88	0.62	0.74	0.81	6.0
8"	55	75	214	84	87	88	0.57	0.70	0.77	5.9
8"	63	85	210	87	89	89	0.81	0.87	0.90	5.7

**3 $\phi$  400 Volts, 50 Hz, 2900 rpm, Submersible motors (SF 1.15)**

Size	kW	hp	Max. load current incl.SF I <sub>n</sub> [A]	Motor efficiency [%]			Cos $\phi$			Ist/In
				$\eta$ 50 %	$\eta$ 75 %	$\eta$ 100 %	50%	75%	100%	
4"	0.37	0.5	1.4	51.0	59.5	64.0	0.44	0.55	0.64	3.7
4"	0.55	0.75	2.2	48.5	57.0	64.0	0.42	0.52	0.64	3.5
4"	0.75	1.0	2.3	64.0	69.5	73.0	0.50	0.62	0.72	4.7
4"	0.75	1.0	1.84	68.1	71.6	72.8	0.69	0.79	0.84	4.9
4"	1.1	1.5	3.40	62.5	69.0	73.0	0.47	0.59	0.72	4.6
4"	1.1	1.5	2.75	70.3	74.0	74.4	0.62	0.74	0.82	5.1
4"	1.5	2.0	4.2	68.0	73.0	75.0	0.50	0.64	0.75	5.0
4"	1.5	2.0	4.0	69.1	72.7	73.7	0.55	0.69	0.78	4.3
4"	2.2	3.0	5.0	72.5	75.5	76.0	0.56	0.71	0.82	4.7
4"	2.2	3.0	6.05	67.9	73.1	74.5	0.49	0.63	0.74	4.5
4"	3.0	4.0	7.85	71.5	74.5	75.2	0.53	0.67	0.77	4.5
4"	4.0	5.5	9.60	77.3	78.4	78.0	0.57	0.71	0.80	4.8
4"	5.5	7.5	13.0	78.5	80.1	79.8	0.57	0.72	0.81	4.9
4"	7.5	10.0	18.8	75.2	78.2	78.2	0.52	0.67	0.78	4.5
6"	5.5	7.5	13.6	78.0	80.0	80.5	0.55	0.67	0.77	4.4
6"	7.5	10.0	17.6	81.5	82.0	82.0	0.60	0.73	0.80	4.3
6"	9.2	12.5	21.8	78.0	80.0	79.5	0.61	0.73	0.81	4.6
6"	11	15	24.8	82.0	83.0	82.5	0.65	0.77	0.83	4.7
6"	13	17.5	30.0	82.5	83.5	82.0	0.62	0.74	0.81	4.6
6"	15	20	34.0	82.0	83.5	83.5	0.64	0.76	0.82	5.0
6"	18.5	25	42.0	83.5	84.5	83.5	0.62	0.73	0.81	5.1
6"	22	30	48.0	84.5	85.0	83.5	0.67	0.77	0.84	5.0
6"	26	35	57.0	84.5	85.0	84.0	0.66	0.77	0.84	4.9
6"	30	40	66.5	84.5	85.0	84.0	0.64	0.77	0.83	4.9

**3 $\phi$  400 Volts, 50 Hz, 2900 rpm, Submersible motors (SF 1.15)**

Size	kW	hp	Max. load current incl.SF I <sub>n</sub> [A]	Motor efficiency [%]			Cos $\phi$			Ist/In
				$\eta$ 50 %	$\eta$ 75 %	$\eta$ 100 %	50%	75%	100%	
6"	5.5	7.5	14.4	71	75	76	0.60	0.71	0.77	3.5
6"	7.5	10	19.2	72	76	77	0.59	0.71	0.78	3.6
6"	9.2	12.5	22.8	75	78	78	0.61	0.73	0.79	3.5
6"	11	15	27.5	74	78	78	0.58	0.71	0.79	3.7
6"	13	17.5	32.0	77	79	79	0.63	0.75	0.79	3.8
6"	15	20	36.5	76	89	79	0.59	0.72	0.80	4.2
6"	18.5	25	43.5	89	81	81	0.60	0.72	0.80	4.5
6"	22	30	51.5	81	83	83	0.57	0.70	0.79	5.5
6"	26	35	61.0	81	83	83	0.57	0.70	0.78	5.7
6"	30	40	68.2	83	84	84	0.61	0.73	0.81	5.0
6"	37	50	84.5	82	84	83	0.60	0.73	0.81	5.1
8"	22	30	48.0	80	82	82	0.72	0.81	0.84	5.3
8"	26	35	56.2	80	82	82	0.76	0.83	0.85	5.1
8"	30	40	54.0	82	84	84	0.74	0.82	0.85	5.7
8"	37	50	78.5	82	84	84	0.74	0.82	0.85	5.7
8"	45	60	96.5	84	86	86	0.65	0.76	0.82	6.0
8"	55	75	114	84	86	86	0.72	0.81	0.85	5.9
8"	63	85	132	85	87	87	0.66	0.78	0.83	5.7
8"	75	100	152	86	87	87	0.71	0.82	0.86	5.8
8"	92	125	186	87	88	87	0.72	0.82	0.86	5.9
8"	110	150	224	86	87	87	0.73	0.83	0.87	5.8

**Ist/In : Locked rotor current/Rated amperage**

**$\eta$  : Efficiency**

**Cos  $\phi$  : Power factor**