



OPENWELL
SUBMERSIBLE PUMPSETS
CSS / CVS & LTK Series

C.R.I. Openwell Submersible Pumpsets are ideally suitable for Openwell / Tanks where a wide fluctuation of water level occur. This work under water and rest at the bottom of the well or Tank. Hence suction and priming problem will not arise. The optimal design of impellers and diffusers enables the best possible hydraulic efficiency. Motor sealing is made by polymers, 'O' rings, oil seals and sand guard to avoid ingress of well water/sand into the motor. Pressure equalizing rubber diaphragm is provided to guard the motor from pressure and volume variation of water inside the motor. Motor must be filled with clear, cold, drinking water as detailed in our operator's manual. Three – phase motor requires an adequate motor protection control panel.



SALIENT FEATURES		SPECIFICATIONS	
<ul style="list-style-type: none">• High operating efficiency• Motor is designed with higher cooling effect to ensure the life• Easy to dismantle and repair• No suction and priming problem• Available in SS 304, CI and Noryl impellers• Available with 3 metre and 10 metre cable length	Power Range	0.37 kW - 2.2 kW (0.5HP - 3HP)	
	Speed	2880 RPM	
	Version	Single phase 220 - 240V, Three phase 380 - 415V, 50Hz AC Supply	
	Maximum total head	85 metre	
	Maximum flow rate	10 lps (36 m³/h)	
	Normal outlet size	25, 32, 40 & 50 mm	
	Degree of protection	IP 58	
	Direction of rotation	Single phase - clockwise from driving end Three phase - Electrically Reversible	
	Type of duty	S1 (Continuous)	
	Method of starting	Single Phase - CSR / CSCR; Three Phase - DOL	
		Maximum starts per hour	10 times

APPLICATIONS

- Domestic
- Multi storey buildings
- Irrigation
- Gardens
- Rural water supply

PUMPED LIQUIDS

Clean, thin, non-aggressive, non explosive, clear, cold, fresh water without abrasives & solid particles.

PERFORMANCE CHART

CSS SERIES												
HORIZONTAL OPENWELL SUBMERSIBLE PUMPSET 2880 RPM, AT RATED VOLTAGE - SINGLE PHASE 220-240 VOLTS THREE PHASE 380-415 VOLTS, 50Hz A.C. SUPPLY												

Model	kW	HP	Outlet Size in mm	m³/hr lps	0	1.80	3.60	5.40	7.20	9.00	10.80	12.60	14.40
					0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0
CSS-1*	0.37	0.5	25	Head in Metres	22	21	20	19	17	14.5	12		
CSS-3*	0.75	1	25		28	26.5	24.5	22.5	20.5	18.5	16	12.5	8.5
CSS-3H*	0.75	1	25		35	33	30.5	27.5	22.5	14.5			
CSS-24(HH)*	0.75	1	25		33	31.5	30	28.5	27	24.5	22.5		
CSS-26	1.1	1.5	25		45	43	40	37	32	21			

Model	kW	HP	Outlet Size in mm	m³/hr lps	0	1.80	3.60	5.40	7.20	9.00	10.80	12.60	14.40	16.20	18.00	19.80	21.60	23.40	25.20	27.00	28.80	30.60	32.40	34.20	36.00
					0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8.0	8.5	9.0	9.5	10.0
CSS-7*	1.1	1.5	40	Head in Metres	19	18.9	18.8	18.7	18.6	18.5	18.4	18.3	18.2	17.5	16.5	14	10								
CSS-9*	1.1	1.5	50		16	15.9	15.8	15.7	15.6	15.5	15.3	15	14.5	14	13.5	12.5	11.7	11	9.75	9	8				
CSS-13*	1.5	2	40		26	25	24.7	24.5	24.2	24	23.5	23	22.5	22	21	20	19	18	16.5	14.5	13				
CSS-16(HH)	1.5	2	40		31	30	30.5	30.2	30	29.5	29	28	26.5	24	20.5										
CSS-14*	1.5	2	50		22	21.9	21.8	21.7	21.6	21.5	21.4	21.2	21	20.7	20.5	20	19.5	18.5	17.5	17	15.7	14.5	13	12	10.5
CSS-18	2.2	3	50		32	31.5	31	30	29.5	29	28	27.5	27	26.5	25.5	25	24	22	20						

Model	kW	HP	Outlet Size in mm	m³/hr	0	1.80	3.60	5.40	7.20	9.00	10.08	12.60
				lps	0	0.5	1.0	1.5	2.0	2.5	2.8	3.5
CSS-3S	0.55	0.75	25	Head in Metres	25	24	23	22	21	20	18	16

* Marked pumpset are having ISI licence



CVS SERIES

VERTICAL OPENWELL SUBMERSIBLE PUMPSETS – 2880 RPM, AT RATED VOLTAGE – SINGLE PHASE – 220 - 240 VOLTS;
THREE PHASE – 380 - 415 VOLTS, 50Hz, A.C. SUPPLY.

Model	kW	HP	Stage	Outlet Size in mm	m³/hr lps	0	2.40	2.99	3.60	4.18	4.79	5.40	5.98	6.59	7.20
						0	0.66	0.83	1	1.16	1.33	1.5	1.66	1.83	2
CVS-35*	0.75	1	5	25/32	Head in Metres	44	41	40	39	37	31	26	21	15	10
CVS-47*	1.1	1.5	7	32/40		62	57	56	53	52	46	36	28	21	12
CVS-59*	1.5	2	9	32/40		80	74	72	70	66	60	52	44	32	20

LTK SERIES

VERTICAL OPENWELL SUBMERSIBLE PUMPSETS – 2880 RPM, AT RATED VOLTAGE – SINGLE PHASE – 220 - 240 VOLTS,
THREE PHASE – 380 - 415 VOLTS, 50Hz, A.C. SUPPLY.

Model	kW	HP	Stage	Outlet Size in mm	m³/hr lps	0	2.00	4.00	5.98
						0	0.55	1.11	1.66
LTK-3E/07M - 9	0.75	1	9	32	Head in Metres	67	60	41	10
LTK-3E/11M - 11	1.1	1.5	11	32		85	76	54	13

CSS, CVS & LTK SERIES

CHARACTERISTICS OF CLEAR COLD WATER

Maximum liquid temperature	33°C max
Permissible amount of sand	50 g/m³
Allowable solids	3000 ppm (max.)
Chloride ion density	500 ppm (max.)
Turbidity	50 ppm silica scale (max.)
Hardness (Drinking water)	300 ppm (max.)
Specific gravity	1.004 (max.)
Viscosity	1.75 x 10 ⁻⁶ m²/sec (max.)
pH Value	6.5 to 8.5

MATERIAL OF CONSTRUCTION - PUMPSET

Part Name	Material
Stator Shell	Mild Steel / SS
Diaphragm	High Nitrile Rubber
Lower Housing / Rear Cover	Cast Iron
Shaft	SS 410
Upper Housing / Front Bracket	Cast Iron
Shaft Seal	Nitrile Butyl Rubber
Thrust Assembly	Leaded Bronze & Compostos / SS 420 with Graphite Carbon
Journal Bearings	LTB 4
Sand Guard (Rubber)	Nitrile Rubber
Locking Strip / Tie Rod	Mild Steel / SS
Check Valve Housing	Cast Iron
Check Valve	Delrin
Casing / Outer Shell	Cast Iron / SS
Impeller	Cast Iron / Noryl / Delrin / SS 304
Diffuser Chamber - LTK Series	Noryl
Counter Thrust Pad	SS 304 / Hylem
Intermediate Bearing (Sleeve / Bush)	SS 304 / NBR
Suction inter Connector	Cast Iron
Pump Shaft	SS 304 / SS 410
Coupling	SS 304 / SS 410

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