

TECHNICAL SPECIFICATIONS OF SAKTHI TUBULAR STATIONARY BATTERIES

TYPE	NOMINAL VOLTAGE	CAPACITY IN AH @ 10 HR.RATE UPTO 1.75 /CELL AT 270 C	OVERALL DIMENSION +/- 5MM IN MM			WEIGHT		ACID VOL. IN LTS.	CHARGING CURRENT, AMPS		
			L	B	H*	Dry Kgs	Wet Kgs		Upto 2.4 V/Cell	Nominal Finish	Trickle mA
H.R Horizontal Regular Models											
3 ST 40 HVLM	6	40	440	185	385	17.6	35.5	14.5	4	2	40
3 ST 60 HVLM	6	60	440	185	385	24.3	42.1	14.25	6	3	60
3 ST 80 HVLM	6	80	440	185	385	26.8	43	12.96	8	4	80
3 ST 100 HVLM	6	100	440	185	385	29.4	46.5	13.7	10	5	100
3 ST 120 HVLM	6	120	440	185	385	33.4	48.5	12.5	12	6	120
3 ST 150 HVLM	6	150	440	185	385	37.6	51.7	12.2	15	7.5	150
3 ST 180 HVLM	6	180	440	185	385	38.2	53	12	18	9	180
3 ST 200 HVLM	6	200	440	185	385	40.1	56	11.84	20	10	200
6 ST 20 HRLM	12	20	355	170	250	17.56	25	6	2	1	20
6 ST 30 HRLM	12	30	355	170	250	18	25.8	6.24	3	1.5	30
6 ST 40 HRLM	12	40	425	175	245	22.2	31	6.5	4	2	40
6 ST 60 HRLM	12	60	511	222	267	32	47.8	11.7	6	3	60
6 ST 80 HRLM	12	80	511	222	267	38.2	50	10	8	4	80
6 ST 100 HRLM	12	100	511	279	270	45.7	61.6	12.72	10	5	100
6 ST 120 HRLM	12	120	511	279	270	50.8	66.2	12.2	12	6	120
6 ST 140 HJLM	12	140	522	280	360	51.68	74	19	14	7	140
6 ST 150 HRLM	12	150	522	280	360	56.7	79	18.5	15	7.5	150
6 ST 175 HJLM	12	175	522	280	360	69.7	92	18.25	17.5	8.75	175
6 ST 180 HRLM	12	180	522	280	360	72.7	95	18	18	9	180
6 ST 210 HJLM	12	210	522	280	360	88.7	111	17.5	21	10.5	210
Vertical H.R. Models											
6 ST 80 HVLM	12	80	435	180	420	40.5	56	12.4	8	4	80
6 ST 100 HVLM	12	100	435	180	420	45.2	61	12.6	10	5	100
6 ST 120 HVLM	12	120	435	180	420	51.1	65	12.12	12	6	120
6 ST 150 HVLM	12	150	435	180	420	57.2	72	11.84	15	7.5	150
P.P. Horizontal Regular Models											
6 ST 10 PRLM	12	10	200	130	250	6.25	10	3	1	0.5	10
6 ST 15 PRLM	12	15	200	130	250	10.68	14	2.65	1.5	0.75	15
6 ST 20 PRLM	12	20	325	175	250	13.56	21	6	2	1	20
6 ST 30 PRLM	12	30	325	175	250	13.7	21.5	6.2	3	1.5	30
6 ST 40 PRLM	12	40	420	165	235	17.5	25	6.5	4	2	40
6 ST 60 PRLM	12	60	500	180	265	27.6	41	11.7	6	3	60
6 ST 80 PRLM	12	80	500	180	265	29.88	43	10	8	4	80
6 ST 100 PRLM	12	100	540	270	285	37.25	53	12.7	10	5	100
6 ST 120 PRLM	12	120	540	270	285	43	58	12.2	12	6	120
6 ST 140 PJLM	12	140	505	270	325	44.7	67	19	14	7	140
6 ST 150 PJLM	12	150	505	280	325	43.7	66	18.5	15	7.5	150
6 ST 175 PJLM	12	175	505	280	325	63.7	85	18.25	17.5	8.75	175
6 ST 180 PJLM	12	180	505	280	325	65.7	88	18	18	9	180
6 ST 210 PJLM	12	210	505	280	325	81.7	104	17.5	21	10.5	210
P.P. Vertical Models											
6 ST 80 PVLM	12	80	500	190	435	32	47	12.5	8	4	80
6 ST 100 PVLM	12	100	500	190	435	40	52	12.3	10	5	100
6 ST 120 PVLM	12	120	500	190	435	44	56	12	12	6	120
6 ST 150 PVLM	12	150	500	190	435	51	63	11.8	15	7.5	150

* Add 50mm for Height including float.

SELECTION OF BATTERY CAPACITY

$$\text{Ah of the Battery} = \frac{\text{UPS Capacity} \times \text{Backup time required}}{\text{Battery Voltage} \times \text{Efficiency} \times \text{D.R.F. Of UPS of Inverter Or UPS}}$$

(Approx.)

D.R.F. (DERATING FACTOR) OF BATTERY (APPROX.)

DISCHARGE TIME (Back - up Time) % OF CAPACITY OF BATTERY (10 HR RATE) END VOLTAGE PER CELL	HOURS						MINUTES		
	10	5	4	3	2	1	30	15	5
		100	83.3	78.2	71.7	63.3	50	38	30
	1.8	1.8	1.8	1.8	1.75	1.75	1.75	1.7	1.7