



SL. NO.	DESCRIPTION	DETAILS		
1	Capacity in Ah At 27 ° C			
(a)	Initial	1100		
(ii)	Rated	1100		
(iii)	End of Life	880		
(b)	Rated Capacity(in Ah) at minimum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
(c)	Rated Capacity(in Ah) at maximum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
2	Capacity at Various Discharge Rates at 27°C			
	<i>Period of Discharge</i>	<i>Ah capacities</i>	<i>Discharge Current (Amps)</i>	<i>End Cell Voltage (Volts)</i>
	10Hr	1100.00	110.0	1.75
	9Hr	1076.90	119.7	1.75
	8Hr	1045.00	130.6	1.75
	7Hr	1008.70	144.1	1.75
	6Hr	966.90	161.2	1.75
	5Hr	916.30	183.3	1.75
	4Hr	860.20	215.1	1.74
	3Hr	788.70	262.9	1.74
	2Hr	696.30	348.2	1.7
	1Hr	550.00	550.0	1.7
	50 min	513.70	616.7	1.7
	40 min	473.00	710.2	1.7
	30 min	440.00	880.0	1.7
	20 min	396.00	1189.2	1.7
	15 min	328.57	1314.3	1.7
	10 min	240.13	1446.6	1.7
	5 min	135.19	1622.9	1.7
	1 min	40.37	2431.9	1.7
3	Maximum Momentary Current for 1 min upto cut off voltage of 1.6 V		3300	Amps
4	Expected Fault at bus due to battery		6600	Amps
5 (i)	Short Circuit Current at Battery terminals		6600	Amps
5 (ii)	Time for which the battery can withstand short circuit at terminals		5 Sec	
6	Type/No. of Negative Plates per cell	Flat pasted;19		
7	Type/No. of Positive Plates per cell	Flat pasted;18		
8	Size of negative plates, mm	440(L) x 140(W) x 3.2 (+/-1) (Thk)		
9	Size of positive plates, mm	440(L) x 140(W) x 5.3 (+/-1) (Thk)		
10	Type of Connection between cells	Bolted rigid copper connectors		
11	Type of Separators	Absorptive glass mat		
12	Thickness of Separators	4.5 (2 layers of 2.25 mm each)		
13	Dimensison of 2 volts cell (LXWXH) , mm	303 (+/-3) mm x 172 (+/-3) mm x 507 (+/- 5) mm		
14	Clearance between the bottom of the plates and container	5 mm		
15	Material of Container	Polypropylene Co-polymer		

16	(i)	Recommended Charging Rate					
		Float Charging Voltage	between ambient temp. (-)5-14 ° C	2.27 +/- 0.02 VPC			
			between ambient temp. 15-24 ° C	2.25 +/- 0.02 VPC			
			between ambient temp. 25-34 ° C	2.23 +/- 0.02 VPC			
			between ambient temp. 35-40 ° C	2.20 +/- 0.02 VPC			
		(ii)	Float Charging Current			165	Amps (Max)
		(iii)	Trickle Charging Voltage			NA	
		(iv)	Trickle Charging Current			NA	
(v)	Boost Charging Voltage		2.35	Volts			
(vi)	Boost Charging Current		220	Amps.			
(vii)	Time taken to full charge from 100% discharge state by constant voltage charging & voltage at the end of this charge		72 Hrs (Min) OCV 2.1 volts (Min.)				
(viii)	Equalising Charging Current;Voltage		NA				
17	Guaranteed efficiencies at 10 hrs rate						
	(a) Ampere-hour efficiency		90%				
	(b) Watt-hour efficiency		80%				
18	Allowable voltage ripple		1.5 % RMS of the charging voltage(Bulk charging) 0.5 % RMS of the charging voltage(Float charging)				

19	Internal Resistance of each cell at Fully Charged Condition		0.33	milli ohms min
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20	Total Resistance of Battery ; milliohms		Depending on no. of cells	
21	Overall Dimensions of each complete module (LxWxH) in mm		Length 462 +/- 5, Width 510 +/- 5, Height 363 +/- 5 (mm) (2 cell module)	
22	Weight of unpacked and complete module with electrolyte ; Kgs		148.5 +/- 5% Kgs (Single 2 cell module)	
23	Material of Modules		Powder coated MS	

24	Whether explosion vents are offered		Yes, self re-sealing rubber safety valve with flame arrestor	
25	Loss of capacity due to self discharge		< 0.5% per week of c-10 capacity	
26	The period for which the battery should be stored after supply in charged conditions		If stored in Indian ambient temp of 30 deg C cells will need freshening charge once in every three months, however if stored at higher or lower temperature freshening charge to be provided as recommended.	
27	Amount of Hydrogen evolved during normal normal float charging		Less than 200ppm normal float condition	
28	Recommended interval at which battery should be discharged at 10 hr discharge rate		Once annually	

29	No. of charge-discharge cycle battery can give during its entire life			
	at 20% DOD		4000 cycles	
	at 50% DOD		1800 cycles	
	at 80% DOD		1400 cycles	
30	Expected Life of Battery in years		20 Yrs at 27 deg C in ideal float condition.	

31	Applicable standard		IEC 60896 - 21 & 22, JIS : C 8704-2, : 1998 ANSI T1 330, GR/BAT-01/03-MARCH 2004, IS 15549 : 2005	
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GENERAL TECHNICAL PARTICULARS

UPST 1200



SL. NO.	DESCRIPTION	DETAILS		
1	Capacity in Ah			
(a)	At 27 ° C			
(i)	Initial	1200		
(ii)	Rated	1200		
(iii)	End of Life	960		
(b)	Rated Capacity(in Ah) at minimum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
(c)	Rated Capacity(in Ah) at maximum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
2	Capacity at Various Discharge Rates at 27°C			
	Period of Discharge	Ah capacities	Discharge Current (Amps)	End Cell Voltage (Volts)
	10Hr	1200.00	120.0	1.75
	9Hr	1174.80	130.5	1.75
	8Hr	1140.00	142.5	1.75
	7Hr	1100.40	157.2	1.75
	6Hr	1054.80	175.8	1.75
	5Hr	999.60	199.9	1.75
	4Hr	938.40	234.6	1.74
	3Hr	860.40	286.8	1.74
	2Hr	759.60	379.8	1.7
	1Hr	600.00	600.0	1.7
	50 min	560.40	672.7	1.7
	40 min	516.00	774.8	1.7
	30 min	480.00	960.0	1.7
	20 min	432.00	1297.3	1.7
	15 min	358.44	1433.8	1.7
	10 min	261.96	1578.1	1.7
	5 min	147.48	1770.5	1.7
	1 min	44.04	2653.0	1.7
3	Maximum Momentary Current for 1 min upto cut off voltage of 1.6 V	3600		Amps
4	Expected Fault at bus due to battery	7200		Amps
5 (i)	Short Circuit Current at Battery terminals	7200		Amps
5 (ii)	Time for which the battery can withstand short circuit at terminals	5 Sec		
6	Type/No. of Negative Plates per cell	Flat pasted; 22		
7	Type/No. of Positive Plates per cell	Flat pasted; 21		
8	Size of negative plates, mm	440(L) x 140(W) x 3.2 (+/-1) (Thk)		
9	Size of positive plates, mm	440(L) x 140(W) x 5.3 (+/-1) (Thk)		
10	Type of Connection between cells	Bolted rigid copper connectors		
11	Type of Separators	Absorptive glass mat		
12	Thickness of Separators	5.3 (2 layers of 2.65 mm each)		
13	Dimension of 2 volts cell (LXW XH) , mm	452 (+/-3) x 172 (+/-3) x 507 (+/-5 mm)		
14	Clearance between the bottom of the plates and container	5 mm		
15	Material of Container	Polypropylene Co-polymer		

16	Recommended Charging Rate		
(i)	Float Charging Voltage between ambient temp. (-)5-14 ° C between ambient temp. 15-24 ° C between ambient temp. 25-34 ° C between ambient temp. 35-40 ° C	2.27 +/- 0.02 VPC 2.25 +/- 0.02 VPC 2.23 +/- 0.02 VPC 2.20 +/- 0.02 VPC	
(ii)	Float Charging Current	180	Amps (Max)
(iii)	Trickle Charging Voltage	NA	
(iv)	Trickle Charging Current	NA	
(v)	Boost Charging Voltage	2.35	Volts
(vi)	Boost Charging Current	240	Amps.
(vii)	Time taken to full charge from 100% discharge state by constant voltage charging & voltage at the end of this charge	72 Hrs (Min) 2.1 volts(ocv)	
(viii)	Equalising Charging Current;Voltage	NA	
17	Guaranteed efficiencies at 10 hrs rate (a) Ampere-hour efficiency (b) Watt-hour efficiency	90% 80%	
18	Allowable voltage ripple	1.5 % RMS of the charging voltage(Bulk charging) 0.5 % RMS of the charging voltage(Float charging)	

19	Internal Resistance of each cell at Fully Charged Condition	0.31	milli ohms min
20	Total Resistance of Battery ; milliohms	Depending on no. of cells	
21	Overall Dimensions of each complete module (LxWxH) in mm	Length = 436 (+/-5); Width = 510 (+/-5); Height = 511 (+/-5); (Single 2 cells module)	
22	Weight of unpacked and complete module with electrolyte ; Kgs	188.0 +/-5% Kgs (Single 2 cells module)	
23	Material of Modules	Powder coated MS	

24	Whether explosion vents are offered	Yes, self re-sealing rubber safety valve with flame arrestor	
25	Loss of capacity due to self discharge	< 0.5% per week of c-10 capacity	
26	The period for which the battery should be stored after supply in charged conditions	If stored in Indian ambient temp of 30 deg C cells will need freshning charge once in every three months, however if stored at higher or lower temperature freshning charge to be provided as recommended.	
27	Amount of Hydrogen evolved during normal normal float charging	Less than 200ppm normal float condition	
28	Recommended interval at which battery should be discharged at 10 hr discharge rate	Once annually	

29	No. of charge-discharge cycle battery can give during its entire life at 20% DOD at 50% DOD at 80% DOD	4000 cycles 1800 cycles 1400 cycles	
30	Expected Life of Battery in years	20 Yrs at 27 deg C in ideal float condition.	

31	Applicable standard	IEC 60896 - 21 & 22, JIS : C 8704-2, : 1998 ANSI T1 330, GR/BAT-01/03-MARCH 2004, IS 15549 : 2005	
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SL. NO.	DESCRIPTION	DETAILS		
1	Capacity in Ah			
(a)	At 27 ° C			
(i)	Initial	1250		
(ii)	Rated	1250		
(iii)	End of Life	1000		
(b)	Rated Capacity(in Ah) at minimum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
(c)	Rated Capacity(in Ah) at maximum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
2	Capacity at Various Discharge Rates at 27°C			
	<i>Period of Discharge</i>	<i>Ah capacities</i>	<i>Discharge Current (Amps)</i>	<i>End Cell Voltage (Volts)</i>
	10Hr	1250.00	125.0	1.75
	9Hr	1223.75	136.0	1.75
	8Hr	1187.50	148.4	1.75
	7Hr	1146.25	163.8	1.75
	6Hr	1098.75	183.1	1.75
	5Hr	1041.25	208.3	1.75
	4Hr	977.50	244.4	1.74
	3Hr	896.25	298.8	1.74
	2Hr	791.25	395.6	1.7
	1Hr	625.00	625.0	1.7
	50 min	583.75	700.8	1.7
	40 min	537.50	807.1	1.7
	30 min	500.00	1000.0	1.7
	20 min	450.00	1351.4	1.7
	15 min	373.38	1493.5	1.7
	10 min	272.88	1643.8	1.7
	5 min	153.63	1844.2	1.7
	1 min	45.88	2763.6	1.7
3	Maximum Momentary Current for 1 min upto cut off voltage of 1.6 V		3750	Amps
4	Expected Fault at bus due to battery		7500	Amps
5 (i)	Short Circuit Current at Battery terminals		7500	Amps
5 (ii)	Time for which the battery can withstand short circuit at terminals		5 Sec	
6	Type/No. of Negative Plates per cell	Flat pasted; 22		
7	Type/No. of Positive Plates per cell	Flat pasted; 21		
8	Size of negative plates, mm	440(L) x 140(W) x 3.2 (+/-1) (Thk)		
9	Size of positive plates, mm	440(L) x 140(W) x 5.3 (+/-1) (Thk)		
10	Type of Connection between cells	Bolted rigid copper connectors		
11	Type of Separators	Absorptive glass mat		
12	Thickness of Separators	5.3 (2 layers of 2.65 mm each)		
13	Dimensison of 2 volts cell (LXWXH) , mm	452 (+/-3) x 172 (+/-3) x 507 (+/-5 mm)		
14	Clearance between the bottom of the plates and container	5 mm		
15	Material of Container	Polypropylene Co-polymer		

16 (i) (ii) (iii) (iv) (v) (vi) (vii) (viii) 17 (a) (b) 18	Recommended Charging Rate Float Charging Voltage between ambient temp. (-)5-14 ° C between ambient temp. 15-24 ° C between ambient temp. 25-34 ° C between ambient temp. 35-40 ° C Float Charging Current Trickle Charging Voltage Trickle Charging Current Boost Charging Voltage Boost Charging Current Time taken to full charge from 100% discharge state by constant voltage charging & voltage at the end of this charge Equalising Charging Current;Voltage Guaranteed efficiencies at 10 hrs rate (a) Ampere-hour efficiency (b) Watt-hour efficiency Allowable voltage ripple	 2.27 +/- 0.02 VPC 2.25 +/- 0.02 VPC 2.23 +/- 0.02 VPC 2.20 +/- 0.02 VPC 187.5 NA NA 2.35 250 72 Hrs (Min) 2.1 volts(ocv) NA 90% 80% 1.5 % RMS of the charging voltage(Bulk charging) 0.5 % RMS of the charging voltage(Float charging)
19 20 21 22 23	Internal Resistance of each cell at Fully Charged Condition Total Resistance of Battery ; milliohms Overall Dimensions of each complete module (LxWxH) in mm Weight of unpacked and complete module with electrolyte ; Kgs Material of Modules	0.31 milli ohms min Depending on no. of cells Length = 436 (+/-5); Width = 510 (+/-5); Height = 511 (+/-5); (Single 2 cells module) 188.0 +/-5% Kgs (Single 2 cells module) Powder coated MS
24 25 26 27 28	Whether explosion vents are offered Loss of capacity due to self discharge The period for which the battery should be stored after supply in charged conditions Amount of Hydrogen evolved during normal normal float charging Recommended interval at which battery should be discharged at 10 hr discharge rate	Yes, self re-sealing rubber safety valve with flame arrestor < 0.5% per week of c-10 capacity If stored in Indian ambient temp of 30 deg C cells will need freshning charge once in every three months, however if stored at higher or lower temperature freshning charge to be provided as recommended. Less than 200ppm normal float condition Once annually
29 30	No. of charge-discharge cycle battery can give during its entire life at 20% DOD at 50% DOD at 80% DOD Expected Life of Battery in years	4000 cycles 1800 cycles 1400 cycles 20 Yrs at 27 deg C in ideal float condition.
31	Applicable standard	IEC 60896 - 21 & 22, JIS : C 8704-2, : 1998 ANSI T1 330, GR/BAT-01/03-MARCH 2004, IS 15549 : 2005



SL. NO.	DESCRIPTION	DETAILS		
1	Capacity in Ah At 27 ° C			
(a)	Initial	1500		
(ii)	Rated	1500		
(iii)	End of Life	1200		
(b)	Rated Capacity(in Ah) at minimum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
(c)	Rated Capacity(in Ah) at maximum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
2	Capacity at Various Discharge Rates at 27°C			
	<i>Period of Discharge</i>	<i>Ah capacities</i>	<i>Discharge Current (Amps)</i>	<i>End Cell Voltage (Volts)</i>
	10Hr	1500.00	150.0	1.75
	9Hr	1468.50	163.2	1.75
	8Hr	1425.00	178.1	1.75
	7Hr	1375.50	196.5	1.75
	6Hr	1318.50	219.8	1.75
	5Hr	1249.50	249.9	1.75
	4Hr	1173.00	293.3	1.74
	3Hr	1075.50	358.5	1.74
	2Hr	949.50	474.8	1.7
	1Hr	750.00	750.0	1.7
	50 min	700.50	840.9	1.7
	40 min	645.00	968.5	1.7
	30 min	600.00	1200.0	1.7
	20 min	540.00	1621.6	1.7
	15 min	448.05	1792.2	1.7
	10 min	327.45	1972.6	1.7
	5 min	184.35	2213.1	1.7
	1 min	55.05	3316.3	1.7
3	Maximum Momentary Current for 1 min upto cut off voltage of 1.6 V	4500		Amps
4	Expected Fault at bus due to battery	9000		Amps
5 (i)	Short Circuit Current at Battery terminals	9000		Amps
5 (ii)	Time for which the battery can withstand short circuit at terminals	5 Sec		
6	Type/No. of Negative Plates per cell	Flat pasted; 26		
7	Type/No. of Positive Plates per cell	Flat pasted; 25		
8	Size of negative plates, mm	440(L) x 140(W) x 3.2 (+/-1) (Thk)		
9	Size of positive plates, mm	440(L) x 140(W) x 5.3 (+/-1) (Thk)		
10	Type of Connection between cells	Bolted rigid copper connectors		
11	Type of Separators	Absorptive glass mat		
12	Thickness of Separators	5.3 (2 layers of 2.65 mm each)		
13	Dimensison of 2 volts cell (LXWXH) , mm	452 (+/-3) x 172 (+/-3) x 507 (+/-5 mm)		
14	Clearance between the bottom of the plates and container	5 mm		
15	Material of Container	Polypropylene Co-polymer		

16	Recommended Charging Rate		
(i)	Float Charging Voltage		
	between ambient temp. (-)5-14 ° C	2.27 +/- 0.02 VPC	
	between ambient temp. 15-24 ° C	2.25 +/- 0.02 VPC	
	between ambient temp. 25-34 ° C	2.23 +/- 0.02 VPC	
	between ambient temp. 35-40 ° C	2.20 +/- 0.02 VPC	
(ii)	Float Charging Current	225	Amps (Max)
(iii)	Trickle Charging Voltage	NA	
(iv)	Trickle Charging Current	NA	
(v)	Boost Charging Voltage	2.35	Volts
(vi)	Boost Charging Current	300	Amps.
(vii)	Time taken to full charge from 100% discharge state by constant voltage charging & voltage at the end of this charge	72 Hrs (Min) 2.1 volts(ocv)	
(viii)	Equalising Charging Current;Voltage	NA	
17	Guaranteed efficiencies at 10 hrs rate		
	(a) Ampere-hour efficiency	90%	
	(b) Watt-hour efficiency	80%	
18	Allowable voltage ripple	1.5 % RMS of the charging voltage(Bulk charging) 0.5 % RMS of the charging voltage(Float charging)	



19	Internal Resistance of each cell at Fully Charged Condition	0.33	milli ohms min
20	Total Resistance of Battery ; milliohms	Depending on no. of cells	
21	Overall Dimensions of each complete module (LxWxH) in mm	Length = 436 (+/-5); Width = 510 (+/-5); Height = 511 (+/-5); (Single 2 cells module)	
22	Weight of unpacked and complete module with electrolyte ; Kgs	219 +/-5% Kgs (Single 2 cells module)	
23	Material of Modules	Powder coated MS	

24	Whether explosion vents are offered	Yes, self re-sealing rubber safety valve with flame arrestor	
25	Loss of capacity due to self discharge	< 0.5% per week of c-10 capacity	
26	The period for which the battery should be stored after supply in charged conditions	If stored in Indian ambient temp of 30 deg C cells will need freshning charge once in every three months, however if stored at higher or lower temperature freshning charge to be provided as recommended.	
27	Amount of Hydrogen evolved during normal normal float charging	Less than 200ppm normal float condition	
28	Recommended interval at which battery should be discharged at 10 hr discharge rate	Once annually	

29	No. of charge-discharge cycle battery can give during its entire life		
	at 20% DOD	4000 cycles	
	at 50% DOD	1800 cycles	
	at 80% DOD	1400 cycles	
30	Expected Life of Battery in years	20 Yrs at 27 deg C in ideal float condition.	

31	Applicable standard	IEC 60896 - 21 & 22, JIS : C 8704-2, : 1998 ANSI T1 330, GR/BAT-01/03-MARCH 2004, IS 15549 : 2005	
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SL. NO.	DESCRIPTION	DETAILS		
1	Capacity in Ah At 27 ° C			
(a)	Initial	1670		
(ii)	Rated	1670		
(iii)	End of Life	1336		
(b)	Rated Capacity(in Ah) at minimum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
(c)	Rated Capacity(in Ah) at maximum ambient temperature of (as per IS 15549 : 2005)	Formula : $C_t = \{ 1 + 0.0043 (t-27) \}$		
2	Capacity at Various Discharge Rates at 27°C			
	<i>Period of Discharge</i>	<i>Ah capacities</i>	<i>Discharge Current (Amps)</i>	<i>End Cell Voltage (Volts)</i>
	10Hr	1670.00	167.0	1.75
	9Hr	1634.93	181.7	1.75
	8Hr	1586.50	198.3	1.75
	7Hr	1531.39	218.8	1.75
	6Hr	1467.93	244.7	1.75
	5Hr	1391.11	278.2	1.75
	4Hr	1305.94	326.5	1.74
	3Hr	1197.39	399.1	1.74
	2Hr	1057.11	528.6	1.7
	1Hr	835.00	835.0	1.7
	50 min	779.89	936.2	1.7
	40 min	718.10	1078.2	1.7
	30 min	668.00	1336.0	1.7
	20 min	601.20	1805.4	1.7
	15 min	498.83	1995.3	1.7
	10 min	364.56	2196.2	1.7
	5 min	205.24	2463.9	1.7
	1 min	61.29	3692.1	1.7
3	Maximum Momentary Current for 1 min upto cut off voltage of 1.6 V	5010	Amps	
4	Expected Fault at bus due to battery	10020	Amps	
5 (i)	Short Circuit Current at Battery terminals	10020	Amps	
5 (ii)	Time for which the battery can withstand short circuit at terminals	5 Sec		
6	Type/No. of Negative Plates per cell	Flat pasted; 27		
7	Type/No. of Positive Plates per cell	Flat pasted; 26		
8	Size of negative plates, mm	440(L) x 140(W) x 3.2 (+/-1) (Thk)		
9	Size of positive plates, mm	440(L) x 140(W) x 5.3 (+/-1) (Thk)		
10	Type of Connection between cells	Bolted rigid copper connectors		
12	Type of Separators	Absorptive glass mat		
13	Thickness of Separators	5.3 (2 layers of 2.65 mm each)		
14	Dimensison of 2 volts cell (LXWXH) , mm	452 (+/-3) x 172 (+/-3) x 507 (+/-5 mm)		
15	Clearance between the bottom of the plates and container	5 mm		
16	Material of Container	Polypropylene Co-polymer		

<p>17 (i) (ii) (iii) (iv) (v) (vi) (vii) (viii) 18 19</p>	<p>Recommended Charging Rate Float Charging Voltage between ambient temp. (-)5-14 ° C between ambient temp. 15-24 ° C between ambient temp. 25-34 ° C between ambient temp. 35-40 ° C</p> <p>Float Charging Current Trickle Charging Voltage Trickle Charging Current Boost Charging Voltage Boost Charging Current</p> <p>Time taken to full charge from 100% discharge state by constant voltage charging & voltage at the end of this charge</p> <p>Equalising Charging Current;Voltage</p> <p>Guaranteed efficiencies at 10 hrs rate (a) Ampere-hour efficiency (b) Watt-hour efficiency</p> <p>Allowable voltage ripple</p>	 <p>2.27 +/- 0.02 VPC 2.25 +/- 0.02 VPC 2.23 +/- 0.02 VPC 2.20 +/- 0.02 VPC</p> <p>250.5 NA NA 2.35 334</p> <p>72 Hrs (Min) 2.1 volts(ocv)</p> <p>NA</p> <p>90% 80%</p> <p>1.5 % RMS of the charging voltage(Bulk charging) 0.5 % RMS of the charging voltage(Float charging)</p> <p>Amps (Max) Volts Amps.</p>
<p>20</p>	<p>Internal Resistance of each cell at Fully Charged Condition</p>	<p>0.31 milli ohms min</p>
<p>21 22 23 24</p>	<p>Total Resistance of Battery ; milliohms</p> <p>Overall Dimensions of each complete module (LxWxH) in mm</p> <p>Weight of unpacked and complete module with electrolyte ; Kgs</p> <p>Material of Modules</p>	<p>Depending on no. of cells</p> <p>Length = 436 (+/-5); Width = 510 (+/-5); Height = 511 (+/-5); (Single 2 cells module)</p> <p>224.34 +/-5% Kgs (Single 2 cells module)</p> <p>Powder coated MS</p>
<p>25 26 27 28 29</p>	<p>Whether explosion vents are offered</p> <p>Loss of capacity due to self discharge</p> <p>The period for which the battery should be stored after supply in charged conditions</p> <p>Amount of Hydrogen evolved during normal normal float charging</p> <p>Recommended interval at which battery should be discharged at 10 hr discharge rate</p>	<p>Yes, self re-sealing rubber safety valve with flame arrestor</p> <p>< 0.5% per week of c-10 capacity</p> <p>If stored in Indian ambient temp of 30 deg C cells will need freshning charge once in every three months, however if stored at higher or lower temperature freshning charge to be provided as recommended.</p> <p>Less than 200ppm normal float condition</p> <p>Once annually</p>
<p>30 31</p>	<p>No. of charge-discharge cycle battery can give during its entire life</p> <p> at 20% DOD at 50% DOD at 80% DOD</p> <p>Expected Life of Battery in years</p>	<p>4000 cycles 1800 cycles 1400 cycles</p> <p>20 Yrs at 27 deg C in ideal float condition.</p>
<p>32</p>	<p>Applicable standard</p>	<p>IEC 60896 - 21 & 22, JIS : C 8704-2, : 1998 ANSI T1 330, GR/BAT-01/03-MARCH 2004, IS 15549 : 2005</p>