ENERTEC MODEL 674S

General Specifications	
ENERTEC Nº	23BAT674S-RED
SAP Nº	213571

Electrical Specifications	
Voltage (V)	12
Capacity (Ah) 20 Hour Rate	105
Cold Cranking Amps @ (- 18º C) En	800
Reserve Capacity @ 25Amps (Minutes)	190
Load Test	315 Amps for 15 seconds (above 9.3 Volts)
Operating Temperature:	- 18ºC to 52ºC

Dimensions	
Max. Length (mm): (L)	330
Max. Width (mm): (W)	175
Max. Height (mm): (L)	240

Container	
Mass (Weight Kg)	24
Case Material	Poly Propylene
Flame Arrestor (FA):	Yes
Bottom hold down:	B01
Type of Terminal:	Stud Terminal

Grid Design

Calcium- Silver Power frame Grid Technology delivers consistant power reserves to meet any challenge. The grid alloy, unique in Europe, is formed of a positive calcium-Silver grid and a negative Calcium grid, reducing the batteries water consumption to a minimum. Battery expected design life in a UPS application between 3-5 years under correct operating conditions.

Warranty

The Enertec battery is guaranteed for two year against manufacturing and material defects in automotive applications from the purchasing date as indicated on the invoice. The battery is quaranteed for one year when used in UPS applications. The guarantee does not cover flat or discharged batteries, bent, burnt or broken terminals or casings or fitment in applications for which it was not designed. The warranty covers the replacement of the defective battery with an equivalent new battery. This warranty does not in any way cover personal loss or damage owing to hidden defects. Before validating the warranty, Enertec Batteries (Pty) Ltd will recharge and test the battery according to JC – AS instructions. Please contact Enertec Batteries (Pty) Ltd directly for more details on Warranty Terms and Conditions.

Float charging of Enertec standby power batteries

Enertec standby power batteries, can be maintained at a full charge by float charging at 13.5 volts/80˚ F (27 ˚C) for long periods of time. Battery electrolyte consists of a mixture of sulphuric acid (37 %) at full charge) and water. Acid is heavier than water and will collect at the bottom of cell, in stationary applications. To overcome this electrolyte stratification, it is recommended that the battery be given an equalization charge at six-month intervals. An equalization charge entails charging the battery (which is fully charged) at 15.5 volts/80˚ F (27˚ C) for six hours. An equalization charge promotes gassing which will effectively mix the electrolyte.

Both float and equalization voltages should be compensated for temperatures that are either above or below 80˚ F (27˚ C). For each degree below 80˚ F (27˚ C) add 0.019 (0.033) volts. Conversely for each degree risen above 80˚ F (27˚ C) subtract 0.019 (0.033) volts. Please note, however, that a battery has a large mass and does not respond quickly to changes in ambient temperature. It is also typical for standby batteries to be exposed to temperature swings and it may be necessary to select an average temperature value. The following table should be of help in applying temperature compensation to standby power applications.

Battery Temp	Float Voltage	Equalization Voltage
15˚ F / -9.4˚ C	14.70	16.70
20˚ F / -6.7˚ C	14.61	16.61
30˚ F / -1.1˚ C	14.42	16.42
40˚ F / 4.4˚ C	14.24	16.24
50˚ F / 10.0˚ C	14.06	16.06
60˚ F / 15.6˚ C	13.87	15.87
70˚ F / 21.1˚ C	13.69	15.69
80˚ F / 27˚ C	13.50	15.50
90˚ F / 32.2˚ C	13.32	15.32
100˚ F /37.6˚ C	13.14	15.14
110˚ F / 43.3˚ C	12.96	14.96
120˚ F / 48.9˚ C	12.77	14.77

Performance characteristics for 105 Amp Hour battery in UPS applications

MINUTES	1	2	5	7	10	15	20	25	30	60	90	120	180
Outpoint 2.00Vdc/cell, 12.00Vdc													
Current (amps)	185	128	103	84	66	50	40	38	36	29	25	21	15
Watts / Cell	370	256	206	168	132	100	80	76	72	59	50	42	30
Watts / Battery	2220	1536	1236	1008	792	600	480	456	432	348	300	252	180
Ampere-hours	3	4	8	10	11	12	13	16	18	29	38	42	45
Outpoint 1.92Vdc/cell, 11.52Vdc													
Current (amps)	220	203	146	105	98	87	75	69	63	47	36	29	23
Watts / Cell	422	390	280	202	188	167	144	133	121	90	69	56	44
Watts / Battery	2532	2340	1680	1212	1129	1002	864	798	726	540	414	336	265
Ampere-hours	4	5	12	13	17	22	25	29	32	47	54	58	69
Outpoint 1.83Vdc/cell, 10.98Vdc													
Current (amps)	266	232	182	157	135	112	98	85	77	48	37	31	24
Watts / Cell	487	425	333	287	247	205	179	156	141	88	68	57	44
Watts / Battery	2922	2547	1998	1724	1482	1230	1076	933	846	527	406	340	264
Ampere-hours	5	7	15	19	23	26	32	36	39	48	56	62	72
Outpoint 1.75Vdc/cell, 10.50Vdc													
Current (amps)	300	250	200	174	150	130	110	95	82	50	38	33	25
Watts / Cell	525	438	350	315	268	228	193	166	144	88	67	58	44
Watts / Battery	3150	2625	2100	1890	1575	1365	1155	998	861	525	399	348	263
Ampere-hours	5	8	17	20	25	33	37	40	41	50	58	66	75
Outpoint 1.67Vdc/cell, 10.02Vdc													
Current (amps)		280	230	200	170	140	118	103	91	56	41	35	26
Watts / Cell		467	388	333	283	233	197	172	152	93	69	59	43
Watts / Battery		2800	2300	2060	1700	1400	1180	1030	910	560	414	354	260
Ampere-hours		8	18	24	29	35	39	43	46	56	61	70	78
Outpoint 1.55Vdc/cell, 9.30Vdc													
Current (amps)			300	265	190	150	128	112	100	62	44	37	27
Watts / Cell			465	411	295	233	198	174	155	96	68	57	42
Watts / Battery			2790	2465	1767	1395	1190	1042	930	576	408	344	251
Ampere-hours			24	31	32	38	42	47	50	62	66	74	81