ARIET GEL 6GFM-120 (12V, 120Ah)

Battery construction

Component	Positive plate	Negative plate	Case	Cover	Valve	Terminals	Separator	Electrolyte
Material	Lead dioxide	Lead	ABS		Acid-resistant rubber	Brass	GEL	Gelled sulfuric acid solution

Benefits

- The battery case is made of flame-retardant ABS plastic.
- GEL technology.
- Long service life.
- Resistant to deep discharges.
- No acid leaks, ensuring safe operation with other equipment.
- No gas emissions; natural ventilation is sufficient.
- No need to monitor water level or refill.
- Temperature-stable performance characteristics.

Charging parameters

Cyclic mode (14.1–14.4 V/bat)

Max discharge current (25°C).....950 A
Max charge current.....30.0 A
Temperature compensation.....18 mV/bat

Float mode (13.5–13.8 V/bat)

Temperature compensation.....18 mV/bat

Technical specifications

Nominal voltage.....12 V
Number of cells.....6
Service life at 20 ± 5 °C.....10–12 years
Rated capacity (25 °C)

10-hour discharge (12.0 A; 10.8 V/battery)..120 Ah
5-hour discharge (19.7 A; 10.5 V/battery)...98.5 Ah
1-hour discharge (69.8 A; 9.9 V/battery)..69.8 Ah

Self-discharge.....3% of capacity per month at 25 °C
Internal resistance
of fully charged battery (25 °C).....4.0 mΩ

Operating temperature range

Discharge.....-20 to +60 °C
Charge.....-10 to +50 °C
Storage.....-20 to +60 °C

Dimensions (±2 mm)

Length, mm.....410
Width, mm.....176
Height, mm.....224
Weight (±3%), kg.....36.5
Terminal type.....M8 Stud

Constant current discharge, A (at 25°C)

V/bat	15 min	30 min	45 min	1 h rate	3 h rate	5 h rate	8 h rate	10 h rate	20 h rate
9,6	192	118	86,2	70,4	31,4	20,6	14,5	12,2	6,36
9,9	192	114	84,6	69,8	30,9	20,7	14,4	12,2	6,31
10,2	183	110	82,3	68,6	30,4	20,3	14,2	12,1	6,25
10,5	176	106	79,6	66,3	29,9	19,7	14,0	12,0	6,05
10,8	164	104	77,6	64,1	27,6	18,9	13,7	12,0	6,03

Constant power discharge, V/cell (at 25°C)

V/cell	15 min	30 min	45 min	1 h rate	3 h rate	5 h rate	8 h rate	10 h rate	20 h rate
1,60	363	223	169	138	58,3	38,9	27,4	23,2	12,1
1,65	352	216	168	135	55,7	38,2	26,7	22,5	11,9
1,70	340	210	154	129	53,9	37,7	26,5	22,2	11,5
1,75	329	203	152	126	53,1	36,8	26,1	22,0	11,3
1,80	305	196	147	122	52,0	36,4	26,0	21,8	11,2