



# DC 490

## AGM DEEP CYCLE

6 V | 490Ah | 100 h

### Electrical Specifications

Nominal voltage	6V
Capacity (25°C)	490Ah at C <sub>100</sub>
Internal resistance (25°C)	Ca. 2.0mΩ
Temperature effect on capacity	103% at 40°C 100% at 25°C 86% at 0°C
Residual capacity after storage (25°C)	3 months: 91% 6 months: 82% 12 months: 65%

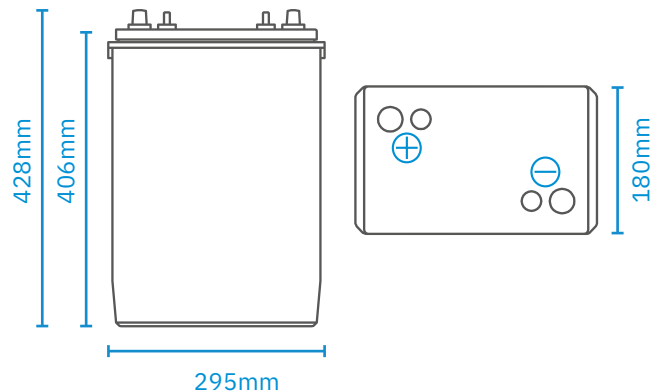
### Discharge Specifications

Capacity C <sub>100</sub>	490Ah
Capacity C <sub>20</sub>	450Ah
Capacity C <sub>10</sub>	380Ah
Capacity C <sub>5</sub>	345Ah
Capacity C <sub>3</sub>	270Ah
Max. discharge current	3000 A (5 s)

### Mechanical Specifications

Measurements (L × B × H)	295 × 180 × 428mm
Weight	57.0 kg
Terminal type	T5 / DT
Casing material	ABS
Temperature (Discharge)	-20 to 55°C
Temperature (Charging)	0 to 40°C
Temperature (Storage)	-20 to 50°C

### Measurements



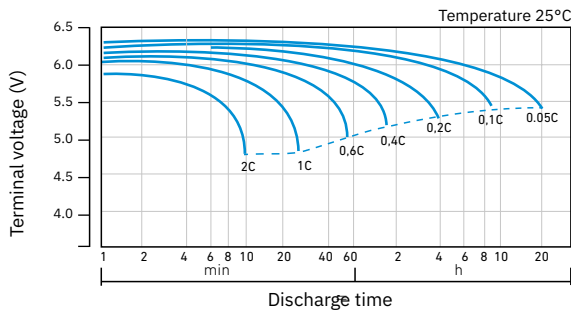
### Constant Current Discharge Characteristics (A) 25°C

F.V. / Time	15 Min	20min	30min	45min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
<b>1.85V/cell</b>	412.0	370.8	306.7	243.2	199.6	119.9	92.7	76.1	64.8	56.6	45.6	38.2	20.3
<b>1.80V/cell</b>	468.0	412.8	329.1	255.9	212.0	126.5	97.2	79.5	67.5	59.1	47.4	40.0	21.0
<b>1.75V/cell</b>		445.0	348.5	269.0	221.2	131.7	100.8	82.2	69.6	60.5	48.3	40.4	21.2
<b>1.70V/cell</b>		475.9	365.7	279.2	228.9	135.6	103.5	84.0	70.8	61.6	49.0	40.8	21.4
<b>1.65V/cell</b>			383.6	291.3	237.2	139.7	105.7	85.8	72.3	62.7	49.7	41.3	21.7
<b>1.60V/cell</b>			396.8	299.2	242.8	143.0	108.0	87.0	73.4	63.5	50.4	41.8	21.9

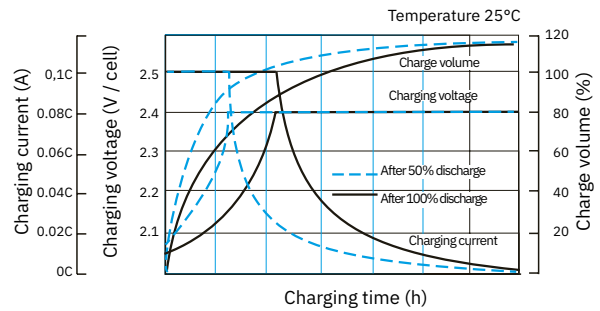
## Constant Power Discharge Characteristics 25°C

F.V. / Time	15 Min	20min	30min	45min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85 V/cell	780.1	705.3	586.2	467.6	386.1	233.2	181.1	149.3	127.7	111.8	90.5	76.0	40.3
1.80 V/cell	874.8	776.9	623.9	488.7	407.8	244.9	189.1	155.4	132.4	116.4	93.7	79.4	41.7
1.75 V/cell		827.8	655.6	510.9	423.6	254.0	195.6	163.0	136.0	118.8	95.2	80.1	42.1
1.70 V/cell		877.8	682.2	526.4	436.1	260.4	200.0	163.0	138.0	120.7	96.6	80.9	42.5
1.65 V/cell			710.2	546.3	449.3	267.1	203.5	165.9	140.4	122.4	97.8	81.8	43.0
1.60 V/cell			727.3	555.8	456.7	271.7	206.7	167.5	141.9	123.7	98.8	82.6	43.4

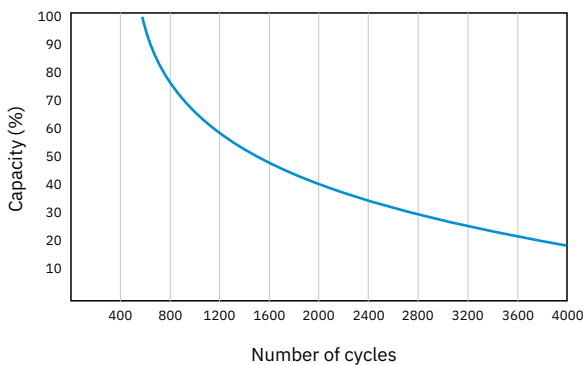
Discharge Characteristics Curve



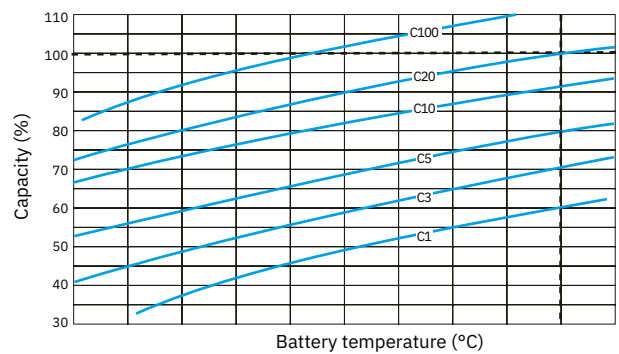
Charge Characteristics Curve For Cycle Use (IU)



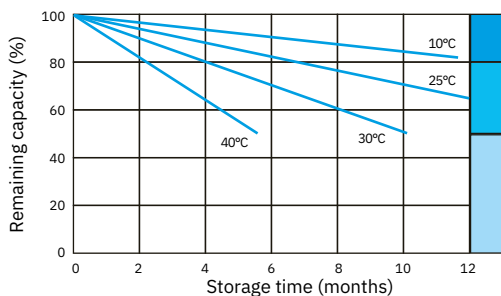
Cycle Life in relation to Depth of Discharge



Temperature Effects in Relation to Battery Capacity



Self Discharge Characteristics



- No supplementary charge required. Charge the battery if 100% capacity is required.
- Supplementary charge required. Charge the battery by any of the following methods:
  1. Charge for at least 3 days at 0.25 CA and 0.25 V/cell
  2. Charge for at least 20 h at 0.25 CA and 2.45 V / cell
  3. Charge for 8 to 10 h at 0.05 CA
- Supplementary charge may often fail to restore the capacity. The battery should never be left in storage until this state is reached.