

Vertiv U12V380L/A

Valve-regulated lead-acid battery | L Series high-reliability battery

Electrical and mechanical specifications

Parameter	Specification
Nominal voltage	12 V
Capacity at 10-hour rate	100 Ah at 1.80 V/cell, 25°C
15-minute constant-power rating	380 W/cell at 1.70 V/cell, 25°C
Approximate weight	30.3 kg
Terminal / tightening torque	M8 / 12-16 N·m
Dimensions: L / W / case H / total H (mm)	330 / 174 / 217 / 224
Case material	ABS
Design float life at 25°C	12 years
Cycle life	>350 cycles; 40% depth of discharge
Short-circuit current	3300 A
Maximum discharge current	1200 A for 5 seconds
Approximate internal resistance, fully charged	3.6 mΩ

Charging, environment and applications

Operating parameters

Parameter	Specification
Operating temperature	-15 to 45°C
Recommended operating temperature	25 ±3°C
Float voltage	13.62 V
Equalization voltage	14.1 V
Maximum charging current	25 A
Temperature compensation	-3 mV/cell/°C
10-hour capacity at 40 / 25 / 0°C	107 / 100 / 84 %
Storage / refresh interval	6 months at 25°C; shorten the refresh interval above 25°C.
Self-discharge	<3% per month
Refresh charging	Option 1: 2.40 V/cell, current limit 0.25C, 12 h. Option 2: 2.35 V/cell, current limit 0.1C, 24 h.

Applications and source-listed standards

High-power UPS, emergency power systems, banking and commercial systems, medical equipment, automation control systems and data centers.

Standards listed in the supplied datasheet: GB/T 19638.1/2; IEC 60896-21/22; JIS C8704-2/1.

Discharge performance at 25°C

Constant-power discharge (W/cell)

End V/cell	5m	10m	15m	20m	30m	45m	1h	1.5h	2h	3h	5h	10h	20h
1.60	608.9	484.1	400.2	324.5	245.9	173.5	140.4	100.9	82.4	61.8	39.96	23.69	12.26
1.65	578.9	460.9	391.4	315.6	238.7	168.9	136.8	97.85	79.31	60.26	39.14	23.18	12.15
1.67	564.1	449.9	387.7	313.1	237.7	168.3	136.1	97.23	78.44	59.34	38.86	22.96	12.05
1.70	547	437.1	380	307.9	234.6	166.1	134.1	95.74	77.25	58.2	38.42	22.66	11.95
1.75	512.5	412.2	366.7	296.7	226	161.5	131.1	92.63	75.19	56.65	37.6	22.15	11.69
1.80	480.7	395.2	351.2	286.3	217.2	154	127.1	89.61	73.13	55	36.57	21.84	11.33

Constant-current discharge (A)

End V/cell	5m	10m	15m	20m	30m	45m	1h	1.5h	2h	3h	5h	10h	20h
1.60	355	275	223.4	180	139	93.9	71.7	52.3	42.7	32	20	11.5	6.2
1.65	333.5	258.3	210.4	170.1	132	89.4	67.9	49.1	40.8	30.7	19.5	10.9	6
1.67	323.4	250.5	204.9	166.8	128.8	87.47	66.58	48	39.93	30.01	19.2	10.72	5.937
1.70	312	241.7	198.6	162.8	125	85.2	65	46.7	38.9	29.2	18.9	10.5	5.85
1.75	291	225.4	188.5	154	118	81.4	61	44	37	27.4	18.1	10.2	5.65
1.80	265	211.1	179	146.4	113	77	57.5	41.5	34.9	26.2	17	10	5.5

Values are reproduced from the model-specific supplied datasheet. End voltage is per cell. C denotes nominal capacity in Ah; charge current expressed as C is in amperes. Design life is not a service-life guarantee.

Source and edition notes

Independently prepared English technical edition by IWELL, 22 October 2026. This is not an official Vertiv English publication. Specifications refer to the cited source revision; confirm the exact model and supplied configuration before selection.

Source: U12V380L-A-Supplied-Datasheet-ZH.pdf

Model-specific sheet, pages 1-2; the English edition includes all tabulated parameters and discharge data. Original dimensional drawings and characteristic curves remain available in the unchanged source PDF. The supplied sheet specifies total height 224 mm; the 2023 family catalog lists 225 mm. This edition retains the model-sheet value; verify the supplied battery drawing.