Sealed lead-acid battery

EUROPOWER®

Model: EV 9 - 12

EV Series

EV type batteries are made in AGM technology and are constructed by plates,separators, safety valves and a container. Since the electrolyte is held by a glass-mat separator and plates, the batteries can be used in any chosen position without the risk of leakage. EV type batteries have a pressure relief valves that allows safe dispersal of any excess pressure inside the cell (VRLA). EV type batteries have been designed for standby use in uninterruptible power supplies (UPS).They have standard dimensions and a much lower internal resistance. Thanks to this the EV type batteries have a larger capacity and very good constant power and constant current discharge characteristics, especially for short discharge times (5-20min).

TECHNICAL DATA

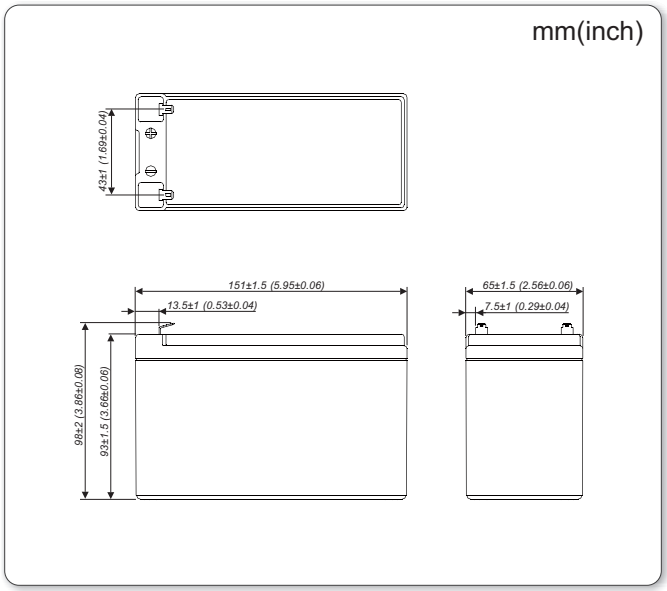
Nominal voltage		12 V
Nominal capacity		8 Ah / C_{10}
Cell per unit		6
Technology		AGM
Design life		6~9 years @ 20°C* 5 years @ 25°C
Dimensions	height	100,0 mm
	length	151,0 mm
	width	65,0 mm
Weight		~2,75 kg
Capacity @ 25°C	10h 800mA @1,75V/cell	8,0 Ah
	15min 216W @1,30V/cell	4,5 Ah
Ambient nominal temperature range	charge	0°C ~ 40°C
	discharge	-20°C ~ 50°C
	storage	-20°C ~ 40°C
Internal resistance	@ fully charge battery	≤15 mΩ
Charging voltage @ 20°C	standby use	13,5V to 13,8V (-18 mV/°C)
	cycle use	14,4 V to 15,0V (-24 mV/°C)
Charging current	recommended	0,8 A
	maximum	2,4 A
Maximum discharge current (for 5 sec)		120 A
Capacity retention during storage @ 20°C (self discharge)	after 1 month	97 %
	after 6 months	80 %
	after 12 months	63 %
Container material	standard	ABS UL 94-HB
	optional	ABS UL 94-V0**
Terminal	faston F1,F2	T1,T2
Terminal hardware initial torque		-

*) - According to Eurobat (General Purpose group) **) - Flame-retardant

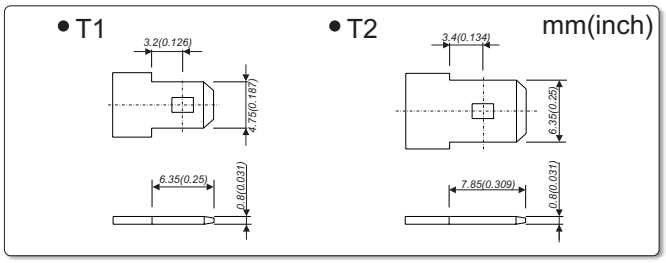
APPLICATIONS

- uninterruptible power supplies (UPS)
- emergency lighting systems
- telecommunication PABX
- cash registers and fiscal printers
- fire and security systems
- solar powered systems
- golf-carts, wheelchairs
- medical equipment
- mobile and portable equipment – cycle use
- measuring devices

DIMENSIONS



TERMINALS



NO TRANSPORT RESTRICTED

Not restricted for air, surface and water transport. Classified as non-hazardous material (*IATA/ICAO Special Provision A67, DOT-CFR Title 49 parts 171-189, IMDG amendment 27*)

DISCHARGE CHARACTERISTICS

• Constant current (Current [A], 25[°C] / 77[°F])

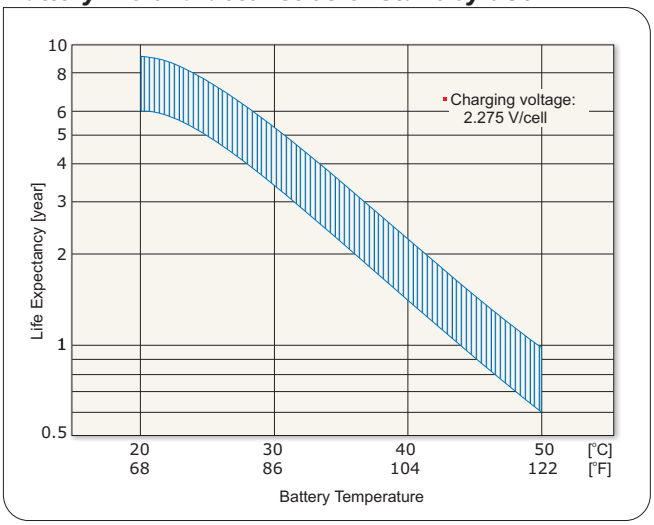
F.V. v/cell	Discharge time 5 min	10 min	15 min	20 min	25 min	30 min	40 min	50 min	60 min	90 min	120 min
1,80	32,95	22,11	15,79	13,35	11,48	10,03	7,569	6,293	5,517	3,875	3,042
1,75	40,09	24,68	17,17	14,14	12,05	10,45	7,855	6,494	5,642	3,958	3,100
1,70	42,95	25,96	17,95	14,67	12,41	10,68	8,040	6,628	5,742	4,025	3,150
1,65	44,18	26,45	18,34	14,90	12,59	10,81	8,141	6,703	5,792	4,050	3,167
1,60	45,00	26,81	18,55	15,03	12,69	10,89	8,192	6,762	5,833	4,067	3,175
1,50	45,41	27,04	18,69	15,13	12,76	10,95	8,234	6,795	5,850	4,075	3,183

• Constant power (Power [W/cell], 25[°C] / 77[°F])

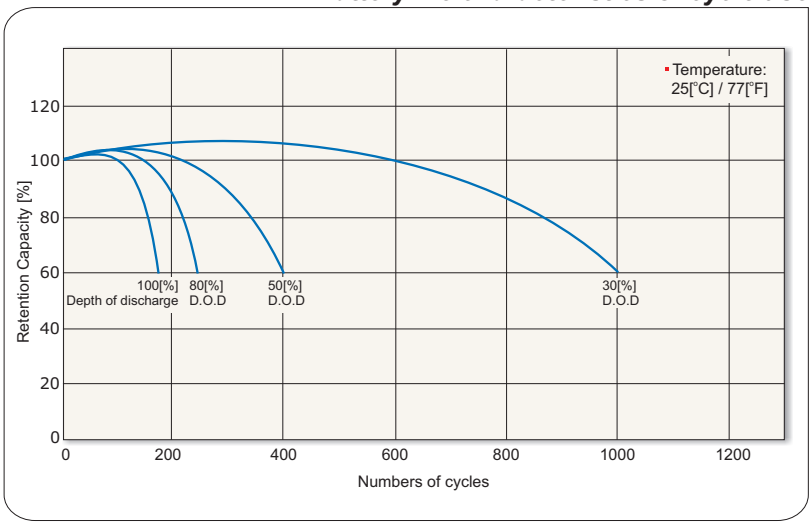
F.V. v/cell	Discharge time 5 min	10 min	15 min	20 min	25 min	30 min	40 min	50 min	60 min	90 min	120 min
1,80	61,5	42,0	30,4	25,9	22,4	19,7	15,0	12,5	11,0	7,8	6,0
1,75	73,5	46,8	33,0	27,4	23,5	20,5	15,5	12,9	11,2	7,9	6,2
1,70	78,7	49,3	34,5	28,5	24,2	21,0	15,9	13,2	11,4	8,0	6,3
1,65	81,0	50,2	35,3	28,9	24,6	21,2	16,1	13,3	11,5	8,1	6,3

F.V. - Final voltage

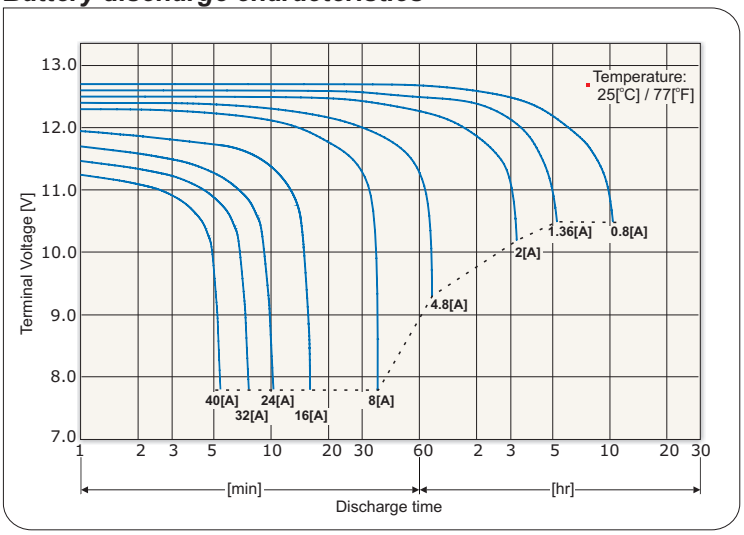
Battery life characteristics of standby use



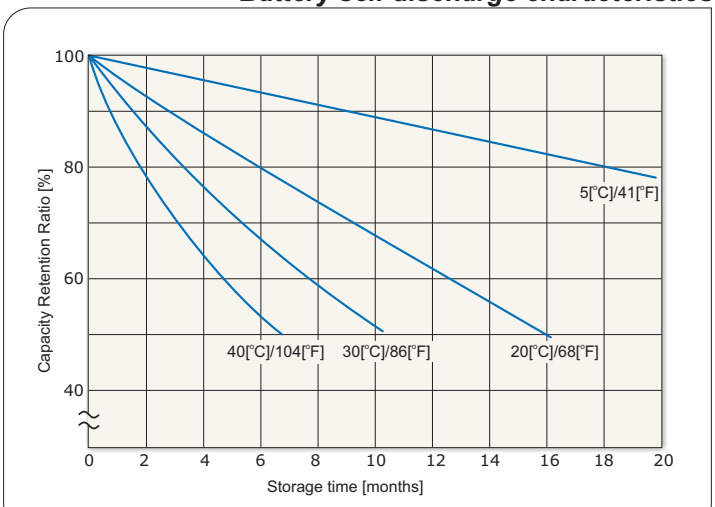
Battery life characteristics of cycle use



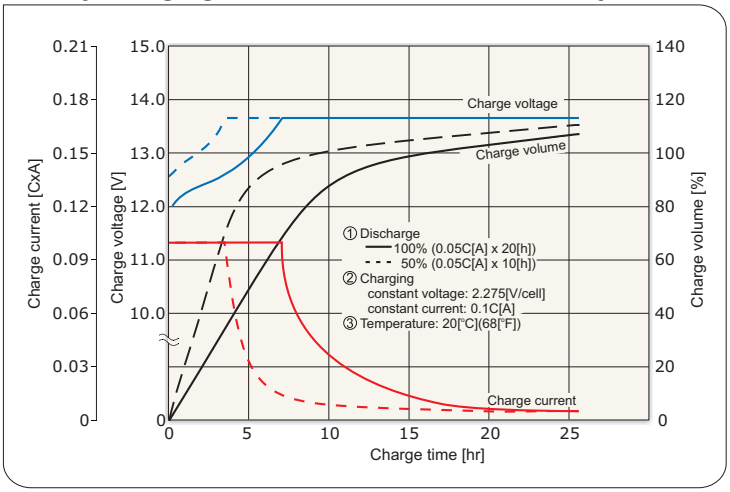
Battery discharge characteristics



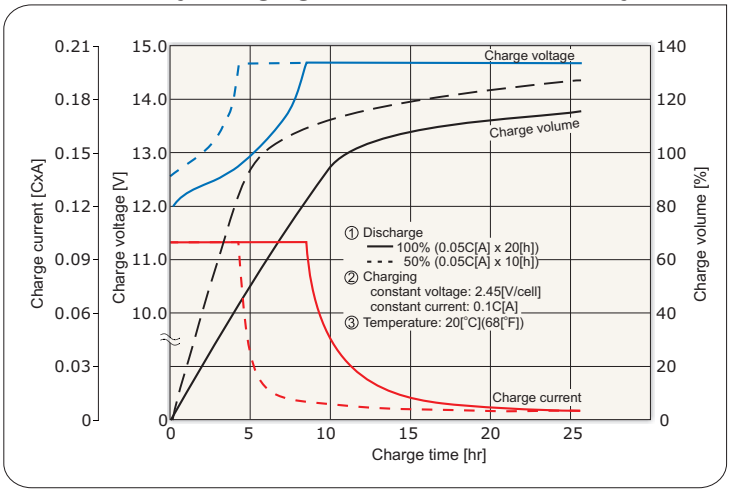
Battery self discharge characteristics



Battery charging characteristics for the standby use



Battery charging characteristics for the cycle use



Battery discharge current and final discharge voltage

Discharge current [A]	1.6 > I	1.6 ≤ I < 4	4 ≤ I < 8	9 ≤ I
Final discharge voltage [V/cell]	1.75	1.70	1.55	1.30

*) **C** - Capacity

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