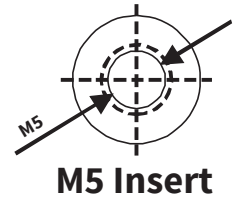
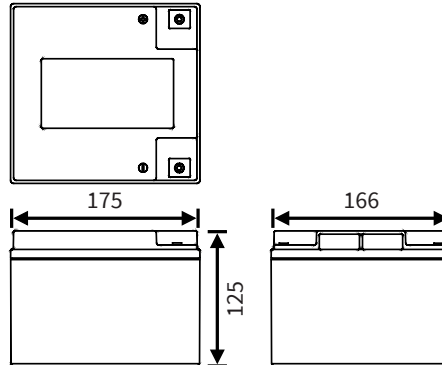


## CPR 28-12

## Railway AGM battery (15 year design life)

### Dimensions (mm)

### Standard terminal



No image available  
at this time

### Typical applications

- Railway infrastructure
- Highway infrastructure
- Vibrating applications
- UPS systems
- Data centers
- Security systems
- Air traffic power stations
- Medical equipment
- Military bases

### Features

- Service life up to 15 years
- Highly vibration and shock resistant
- Valve Regulated Lead Acid (VRLA)
- Absorbent Glass Mat Technology (AGM)
- Maintenance free
- Low self-discharge rate
- Classified as non-spillable under IATA, ADR and IMDG regulations
- Can be discharged or stored in any position without leakage
- Battery cannot be charged while upside down
- Produced under ISO 9001 & ISO 14001

Nominal voltage	12 V
Nominal capacity (1.75V/c, 25°C)	20Hr: 28.0 Ah
	10Hr: 26.6 Ah
	5Hr: 23.9 Ah
Internal resistance	≤10mΩ (fully charged)
Maximum charge current	8.4 A
Maximum discharge current	420 A (max. 5 sec)
Float use / cyclic use	13.5 - 13.8V / 14.4 - 15.0V
Self discharge	Lower than 3% per month
Operating temperature range	-20°C ~ 50°C
Designlife (20°C)	15 years in float
Standard terminal	Insert M5 (4 Nm torque)
Housing material	Flame retardant ABS (UL 94-V0)
Dimensions Length	166 mm
Dimensions Width	175 mm
Dimensions Height	125 mm
Approximate Weight	9.70 kg
Packing	1 pcs / box

### Constant Current Discharge (Ampères) per Cell\* at 25 °C (77°F)

F.V/TIME	5 Min	10 Min	15 Min	30 Min	60 Min	3 Hr	5 Hr	10 Hr	20 Hr
1.80V/cell	82.2	60.4	48.3	28.3	16.3	6.80	4.70	2.62	1.37
1.75V/cell	96.9	65.4	50.5	29.4	16.7	6.93	4.77	2.66	1.40
1.70V/cell	102.8	67.7	52.1	30.0	17.0	7.00	4.80	2.67	1.41
1.65V/cell	107.5	69.4	53.3	30.5	17.3	7.07	4.83	2.68	1.41
1.60V/cell	110.8	70.7	54.3	30.8	17.4	7.10	4.83	2.68	1.41

### Constant Power Discharge (Watts) per Cell\* at 25 °C (77°F)

F.V/TIME	5 Min	10 Min	15 Min	30 Min	60 Min	3 Hr	5 Hr	10 Hr	20 Hr
1.80V/cell	152,00	114,27	92,53	55,67	32,27	13,60	9,40	5,24	2,74
1.75V/cell	176,00	123,80	96,87	57,80	33,20	13,87	9,53	5,32	2,80
1.70V/cell	186,67	128,27	99,80	59,07	33,80	14,00	9,60	5,35	2,81
1.65V/cell	195,33	131,33	102,13	59,93	34,27	14,13	9,67	5,36	2,82
1.60V/cell	201,33	133,93	104,13	60,53	34,60	14,20	9,67	5,36	2,82

\*: Battery consists of 6 Cells

### Certifications

**WSF**  
ISO9001

**V-O**

Flame retardant casing

**WSF**  
ISO14001

- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

**WSF**  
OHSMS

**RA**  
MH19884

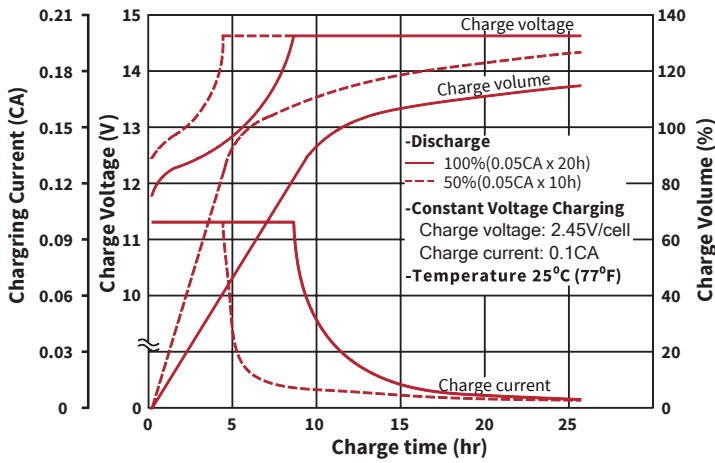
**CE**  
C#M20310-2474-E-16

**ProRail**

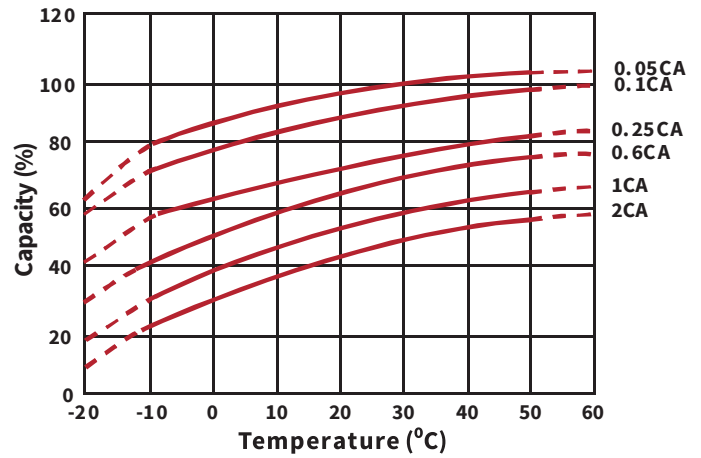
Certified product

Certificate no. 0941/2016/CoC/RC104122-02

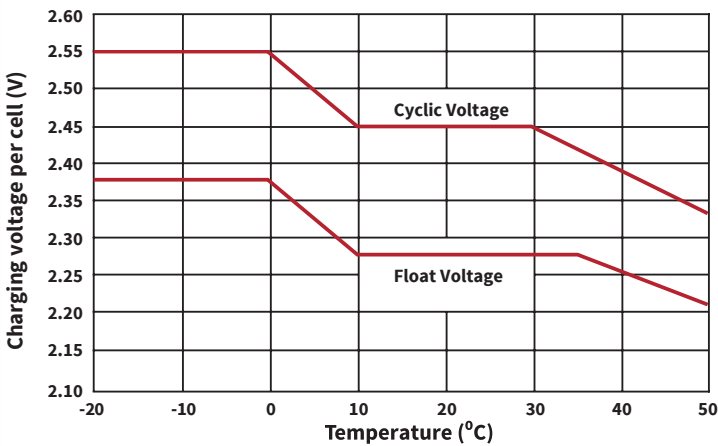
## Charge characteristics



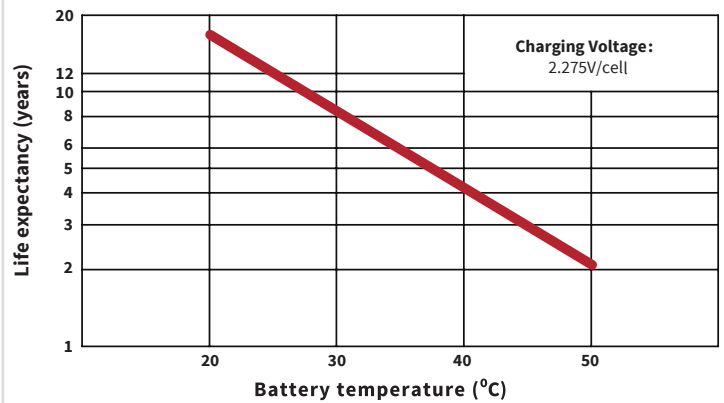
## Capacity in relation to temperature



## Charge voltage in relation to temperature



## Life expectancy in relation to temperature



## Models available

Model	Voltage	Capacity (Ah)	Dimensions (mm)	Weight (kg)
CPR 3.3-12	12	3.3	134x67x66	1.35
CPR 7-12	12	7.0	151x65x98	2.60
CPR 7.5-12	12	7.5	151x65x100	2.70
CPR 12-12	12	12	151x98x98	4.10
CPR 20-12	12	20	181x76x166	6.40
CPR 28-12	12	28	166x175x125	9.70
CPR 33-12F	12	33	195x129x179	11.50
CPR 40-12	12	40	197x165x171	14.60
CPR 65-12	12	65	350x166x174	22.70
CPR 80-12	12	80	260x168x215	26.80
CPR 95-12	12	95	329x172x218	33.20
CPR 110-12	12	110	407x173x239	40.00
CPR 150-12	12	150	483x171x240	51.80
CPR 210-12	12	210	522x240x220	73.20
CPR 170-6	6	170	260x171x244	29.20
CPR 200-2	2	200	173x111x357	16.00
CPR 300-2	2	300	171x151x358	21.20
CPR 400-2	2	400	211x176x357	31.50
CPR 500-2	2	500	241x172x359	36.00
CPR 600-2	2	600	301x175x359	46.00
CPR 800-2	2	800	410x175x358	63.00
CPR 1000-2	2	1000	475x175x356	72.00
CPR 1500-2	2	1500	400x350x369	128.00
CPR 2000-2	2	2000	490x350x371	153.00
CPR 3000-2	2	3000	710x353x369	215.00

## Cellpower family

Cellpower supplies a broad range of reliable AGM, GEL and Lithium batteries. Each product series has its own unique characteristics, so that there is a suitable battery for every application with its associated specific usage profile. Combined with the right Cellpower battery accessories, you're able to assemble a high-quality and reliable battery system.

The sealed, maintenance-free AGM lead battery type has a long operational lifetime. When used correctly, the Absorbent Glass Mat (AGM) technology offers dependable, lasting service. Additionally, AGM batteries exhibit very little self-discharge when compared with other lead-acid batteries. Sealed lead-acid batteries require low maintenance and do not need to be refilled with water or other liquids.

