

# Sonnenschein A400 / A412/100A

## INDUSTRIAL BATTERIES / NETWORK POWER

The Sonnenschein A400 range is a reference for energy storage, with proven reliability in many installations worldwide. The success of A400 batteries comes from the superior dryfit technology, available in a wide range of models to provide a solution for every power need.

**Part Number: NGA4120100HS0CA**

### APPLICATIONS



### SPECIFICATIONS

- Exceptional energy storage capacity combined with long life
- Thick grid plates with high quality lead calcium alloy, for enhanced corrosion resistance and stability
- Very low gassing due to the internal gas recombination
- Classification according to EUROBAT 2015: "> 12 years – Very Long Life"
- Shelf life up to 2 years at 20°C without recharge due to the very low self discharge rate
- Designed in accordance with IEC 60896-21/-22
- Trouble-free transport of operational blocks, no restrictions for rail, road, sea and air transportation (IATA, DGR, clause A67)
- Approval: UL (Underwriter Laboratories)
- Manufactured in Europe in our ISO 9001 certified production plants



Design life  
15 years for  
blocks  $\geq 20$  Ah  
12 years for  
blocks  $< 20$  Ah



Block  
battery



Grid plate



Recyclable



Valve  
regulated  
lead-acid  
batteries



Proof  
against deep  
discharge



Maintenance  
free (no  
topping up)

### RECYCLE WITH EXIDE.



Exide Technologies takes pride in its commitment to a better environment. An integrated approach to manufacturing, distributing and recycling of leadacid batteries has been developed to ensure a safe and responsible life cycle for all of its products.



For more information please  
[contact your local dealer](#)

## TECHNICAL CHARACTERISTICS AND DATA

|                              |                                                             |
|------------------------------|-------------------------------------------------------------|
| <b>Nominal voltage</b>       | 12 V                                                        |
| <b>Float charge</b>          | 2,27 V/C @ 20 °C                                            |
| <b>Capacity</b>              | CP 10min 1,6V/C 20°C 1885W/Bloc<br>CC 10h 1,8V/C 20°C 100Ah |
| <b>Short circuit current</b> | 1777 A (IEC60896-21/22)                                     |
| <b>Internal resistance</b>   | 6,9 mΩ (IEC60896-21/22)                                     |

|                                 |                    |
|---------------------------------|--------------------|
| <b>Terminal</b>                 | A                  |
| <b>Terminal Torque</b>          | 8 Nm               |
| <b>Container</b>                | PP (Polypropylene) |
| <b>Temperature range</b>        | -40°C to 55°C      |
| <b>Dimensions (l x b/w x h)</b> | 189 x 513 x 219 mm |
| <b>Weight</b>                   | 36,5 kg            |
| <b>Origin</b>                   | Büdingen, Germany  |

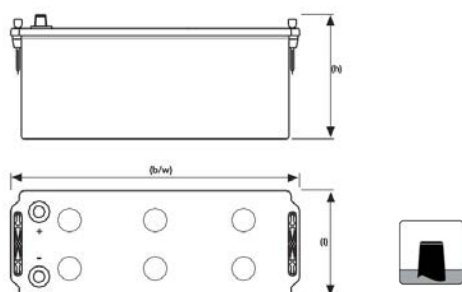
## CONSTANT POWER DISCHARGE

| W @ 20 °C | 2 min | 3 min | 5 min | 7 min | 10 min | 15 min | 20 min | 30 min | 45 min | 1 h | 2 h | 3 h |
|-----------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-----|-----|-----|
| 1,850 V/C | 1873  | 1792  | 1625  | 1482  | 1329   | 1144   | 1048   | 861    | 674    | 567 | 335 | 252 |
| 1,800 V/C | 2076  | 1986  | 1828  | 1644  | 1454   | 1236   | 1112   | 935    | 719    | 597 | 364 | 274 |
| 1,750 V/C | 2498  | 2364  | 2139  | 1928  | 1636   | 1348   | 1176   | 972    | 742    | 613 | 383 | 280 |
| 1,700 V/C | 2792  | 2604  | 2347  | 2090  | 1749   | 1414   | 1216   | 987    | 752    | 620 | 385 | 282 |
| 1,650 V/C | 3108  | 2827  | 2475  | 2216  | 1831   | 1459   | 1242   | 993    | 756    | 623 | 387 | 283 |
| 1,600 V/C | 3354  | 2992  | 2567  | 2301  | 1885   | 1488   | 1258   | 999    | 759    | 625 | 388 | 284 |

## CONSTANT CURRENT DISCHARGE

| A @ 20 °C | 5 min | 10 min | 15 min | 20 min | 30 min | 45 min | 1 h | 2 h | 3 h  | 4 h  | 5 h  | 8 h  | 10 h |
|-----------|-------|--------|--------|--------|--------|--------|-----|-----|------|------|------|------|------|
| 1,850 V/C | 144   | 124    | 105    | 93     | 72     | 56     | 46  | 31  | 23,5 | 17,9 | 15,2 | 10,8 | 9,6  |
| 1,800 V/C | 176   | 150    | 125    | 104    | 81     | 62     | 50  | 32  | 24,1 | 18,7 | 15,9 | 11,3 | 10   |
| 1,750 V/C | 194   | 160    | 134    | 112    | 86     | 65     | 52  | 33  | 24,8 | 19,2 | 16,3 | 11,4 | 10   |
| 1,700 V/C | 213   | 171    | 141    | 117    | 89     | 67     | 53  | 34  | 25,1 | 19,4 | 17   | 11,4 | 10   |
| 1,650 V/C | 232   | 178    | 146    | 120    | 90     | 68     | 54  | 34  | 25,3 | 19,5 | 17   | 11,4 | 10   |
| 1,600 V/C | 253   | 183    | 149    | 121    | 91     | 69     | 54  | 34  | 25,4 | 19,6 | 17   | 11,4 | 10   |

## Technical drawing



## Float Voltage vs Temperature

