

## Sonnenschein A400 / A412/32F10

### 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: NGA4120032HS0FA**

#### 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 ≥ 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](#)

#### EXIDE Distributionscenter Frankfurt a.M.

ACCU-24 Batterien & Systeme GmbH  
Untergasse 5  
63688 Gedern  
Tel.: +49 (0) 06045 952520  
Fax: +49 (0) 06045 952966  
[www.ACCU-24.de](http://www.ACCU-24.de)

[info@accu-24.de](mailto:info@accu-24.de)



## 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 687W/Bloc<br>CC 10h 1,8V/C 20°C 32Ah |
| <b>Short circuit current</b> | 784 A (IEC60896-21/22)                                    |
| <b>Internal resistance</b>   | 15 mΩ (IEC60896-21/22)                                    |

|                                 |                    |
|---------------------------------|--------------------|
| <b>Terminal</b>                 | F-M10              |
| <b>Terminal Torque</b>          | 17 Nm              |
| <b>Container</b>                | PP (Polypropylene) |
| <b>Temperature range</b>        | -40°C to 55°C      |
| <b>Dimensions (l x b/w x h)</b> | 210 x 175 x 181 mm |
| <b>Weight</b>                   | 14,1 kg            |
| <b>Origin</b>                   | Büdingen, Germany  |

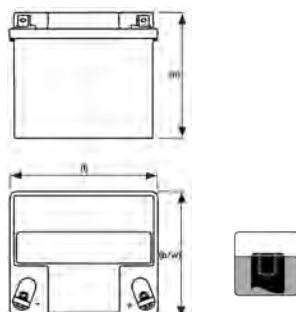
## CONSTANT POWER DISCHARGE

| 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 | 680   | 634   | 580   | 532   | 483    | 414    | 366    | 304    | 234    | 194 | 128 | 92  |
| 1,800 V/C | 826   | 764   | 677   | 621   | 562    | 468    | 403    | 332    | 252    | 207 | 135 | 98  |
| 1,750 V/C | 959   | 881   | 776   | 691   | 613    | 509    | 431    | 350    | 263    | 215 | 139 | 99  |
| 1,700 V/C | 1064  | 990   | 861   | 752   | 639    | 537    | 450    | 358    | 269    | 219 | 139 | 100 |
| 1,650 V/C | 1161  | 1069  | 916   | 801   | 667    | 554    | 462    | 362    | 273    | 221 | 139 | 100 |
| 1,600 V/C | 1245  | 1143  | 952   | 835   | 687    | 565    | 469    | 366    | 276    | 223 | 140 | 101 |

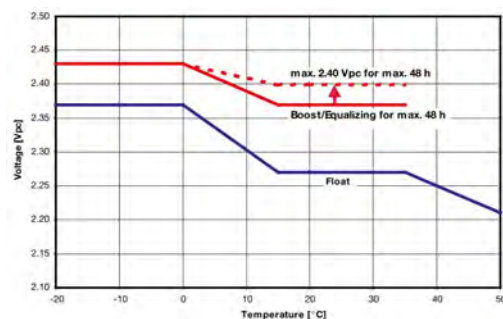
## CONSTANT CURRENT DISCHARGE

| 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 | 53    | 43     | 36     | 32     | 28     | 21     | 17  | 11  | 8,1 | 6,5 | 5,4 | 3,7 | 3    |
| 1,800 V/C | 63    | 51     | 42     | 36     | 30     | 23     | 19  | 12  | 8,6 | 6,8 | 5,7 | 3,9 | 3,2  |
| 1,750 V/C | 73    | 57     | 46     | 39     | 31     | 24     | 19  | 12  | 8,8 | 6,9 | 5,8 | 3,9 | 3,2  |
| 1,700 V/C | 84    | 61     | 50     | 42     | 32     | 25     | 20  | 12  | 8,9 | 7   | 5,8 | 3,9 | 3,2  |
| 1,650 V/C | 94    | 65     | 52     | 43     | 33     | 25     | 20  | 12  | 8,9 | 7   | 5,8 | 3,9 | 3,2  |
| 1,600 V/C | 101   | 68     | 54     | 44     | 33     | 25     | 20  | 12  | 8,9 | 7   | 5,8 | 3,9 | 3,2  |

## Technical drawing



## Float Voltage vs Temperature



**EXIDE** Distributionscenter Frankfurt a.M.

**ACCU-24 Batterien & Systeme GmbH**  
 Untergasse 5  
 63688 Gedern  
 Tel.: +49 (0) 06045 952520  
 Fax: +49 (0) 06045 952966  
[www.ACCU-24.de](http://www.ACCU-24.de)

[info@accu-24.de](mailto:info@accu-24.de)

