

# Sonnenschein A400 / A412/180A

## 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: NGA4120180HS0CA**



### 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 (Underwriters 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 lead-acid 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 3701W/Bloc CC 10h 1,8V/C 20°C 180Ah
<b>Short circuit current</b>	3227 A (IEC60896-21/22)
<b>Internal resistance</b>	3,8 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>	274 x 518 x 238 mm
<b>Weight</b>	63 kg
<b>Origin</b>	Büdingen, Germany

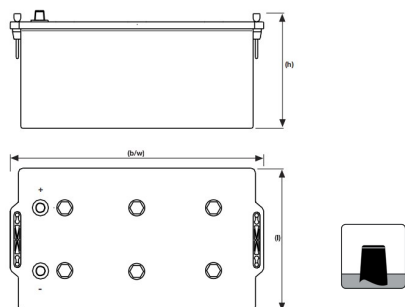
## CONSTANT POWER DISCHARGE

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	3475	3324	3112	2959	2679	2284	2011	1563	1215	1016	632	467
1,800 V/C	4109	3898	3559	3336	3012	2595	2241	1756	1339	1105	687	507
1,750 V/C	4556	4307	3950	3659	3316	2821	2399	1876	1414	1157	695	515
1,700 V/C	4990	4742	4298	3929	3477	2976	2503	1945	1455	1185	697	517
1,650 V/C	5419	5099	4628	4163	3589	3074	2565	1978	1475	1198	700	518
1,600 V/C	5825	5395	4832	4361	3701	3130	2599	1994	1484	1204	702	519

## 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	240	193	170	156	130	103	84	59	42,6	34,1	28,6	19,2	16,5
1,800 V/C	291	235	195	171	144	112	90	62	44,7	35,5	29,7	19,9	18
1,750 V/C	329	266	216	185	152	117	94	63	45,6	36,1	30,2	20,2	18
1,700 V/C	366	287	234	199	156	120	95	64	46	36,4	30,4	20,2	18
1,650 V/C	399	305	250	212	159	122	96	64	46	36,4	30,4	20,2	18
1,600 V/C	439	322	258	217	162	123	96	64	46,1	36,4	30,4	20,2	18

## Technical drawing



## Float Voltage vs Temperature

