

# Sonnenschein A400 / A412/90F10

## 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: NGA4120090HS0FA**

### 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 1793W/Bloc CC 10h 1,8V/C 20°C 90Ah
<b>Short circuit current</b>	1733 A (IEC60896-21/22)
<b>Internal resistance</b>	7 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>	286 x 269 x 234 mm
<b>Weight</b>	33,5 kg
<b>Origin</b>	Büdingen, Germany

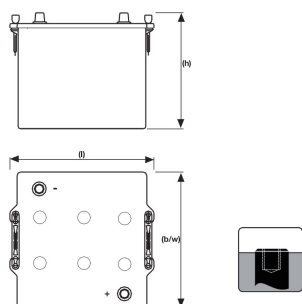
## CONSTANT POWER DISCHARGE

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	1686	1620	1493	1374	1243	1080	987	828	647	543	332	246
1,800 V/C	1940	1848	1706	1554	1395	1185	1062	891	692	574	360	267
1,750 V/C	2301	2185	1984	1796	1564	1299	1128	927	716	590	375	272
1,700 V/C	2553	2398	2177	1950	1670	1368	1172	945	727	598	375	273
1,650 V/C	2824	2598	2305	2067	1744	1415	1200	954	732	601	376	274
1,600 V/C	3046	2755	2398	2157	1793	1444	1217	961	736	604	377	275

## 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	136	117	100	89	71	55	46	30	22,8	17,6	14,8	10,4	8,9
1,800 V/C	166	142	118	100	79	61	50	32	23,5	18,3	15,5	10,8	9
1,750 V/C	186	154	128	108	84	64	52	33	24,1	18,8	15,8	11	9
1,700 V/C	206	164	137	113	87	66	53	33	24,3	18,9	16,3	11	9
1,650 V/C	225	172	142	116	88	67	53	33	24,5	19	16,3	11	9
1,600 V/C	245	177	145	118	89	68	54	34	24,5	19	16,3	11	9

## Technical drawing



## Float Voltage vs Temperature

