

Certificate No. S 05-2714-SN162

Approval date 11/10/2016
Approved by GM Technical Standards
Report no. TAS 05-2714-SN162
Report date 12/05/2015

This certificate is issued to

Supplier Battery Specialties Australia (BSA)
240 Boundary Road, Braeside
VIC, Australia 3195

In respect of

Manufacturer Exide
Product description Sonnenschein A400 Batteries
Item identification Refer to Approved Item list for full details.

Application ARTC Network Wide
Relevant Standards SPS 02 Environmental Conditions
ESD-09-01 Signalling Power Systems

**Conditions of
Approval**

1. Only to be used with a battery charger suited for Valve Regulated Lead Acid (VRLA) batteries and for the size of battery and standing load.
2. Batteries only as per the approved list.
3. Batteries capacity to be calculated as per the level crossing design standard or power supply design standard
4. Not to be used in installations where solar is the only means of charging batteries.
5. Maintenance in accordance with TMP and maintenance service schedules.
6. No smoking in the proximity of the battery is allowed
7. Personnel Protective Equipment (PPE) must be worn whenever handling the batteries (gloves, glasses etc).
8. Batteries must be installed away from direct sunlight, in clean locations with ventilation.
9. Mechanical aids to be used when moving heavier battery cell packs.
10. Only water to be used to clean the battery surfaces.
11. Wire brushes must not be used to clean terminals, only soft non-metal brushes are allowed.
12. The supplier to ensure they continue to meet the requirements as detailed within ESG-00-15 – Quality Controlled Supplier.
13. Life expired batteries are only to be disposed of through a battery

recycling organisation.

ARTC reserves the right to conduct its own audit of the manufacture and supply of these components to AS 19011.

Any subsequent change to the design, materials or manufacturing process is not covered by this approval. The manufacturer should notify ARTC of any modification or changes in order to obtain a valid updated certificate.

Note/Comments NIL.

Issue date

Expiry date NA

Issued by

John Furness

ARTC Manager Standards



Approved Item List

| Catalogue No. | Cell Type | Amp-hour (Ah) | Conditions of Use |
|--|--------------|---------------|-------------------------------------|
| Sonnenschein A400 Battery Range | | | |
| NGA41205D5HSORA | A412/5.5 SR | 5.5 | Not to be used with solar charging. |
| NGA41208D5HSORA | A412/8.5 SR | 8.5 | |
| NGA4120012HSORA | A412/12 SR | 12 | |
| NGA4120020HSOBA | A412/20 G5 | 20 | |
| NGA4120032HSOBA | A412/32 G6 | 32 | |
| NGA4120032HSOFA | A412/32 F10 | 32 | |
| NGA4120050HSOCA | A412/50A | 50 | |
| NGA4120050HSOFA | A412/50 F10 | 50 | |
| NGA4120050HSOBA | A412/50 G6 | 50 | |
| NGA4120065HSOFA | A412/65 F10 | 65 | |
| NGA4120065HSOBA | A412/65 G6 | 65 | |
| NGA4120085HSOFB | A412/85 F10 | 85 | |
| NGA4120090HSOCA | A412/90 A | 90 | |
| NGA4120090HSOFA | A412/90 F10 | 90 | |
| NGA4120100HSOCA | A412/100 A | 100 | |
| NGA4120100HSOFA | A412/100 F10 | 100 | |
| NGA4120120HSOCA | A412/120 A | 120 | |
| NGA4120120HSOFA | A412/120 F10 | 120 | |
| NGA4120180HSOCA | A412/180 A | 180 | |
| NGA4120180HSOFA | A412/180 F10 | 180 | |