

Industrial Batteries / Network Power

**Sonnenschein SOLAR**

dryfit<sup>®</sup> ✦  
✦ inside



»Premium quality for  
renewable energy«



# Industrial Batteries

## The strong range of Network Power

Energy storage solutions for critical systems that require uninterrupted power supply. GNB® Industrial Power offers powerful batteries for your individual needs.

Applications	Battery ranges																	
	Sonnenschein						Marathon		Sprinter		Absolyte	Powerfit	Classic					
	A400/A600	A400 FT	A500	A700	Solar	Rail	M FT	M/L/XL	S	P/XP	GP/GX	S200/S300	GRoE	OCSM	OPzS	Energy Bloc/OGi	Solar	Rail
Telecom	●	●	●	●			●	●	●	●	●			●	●	●		
UPS		●	●	●			●	●	●	●	●			●		●		
Emergency lighting	●		●					●		●		●			●	●		
Security	●		●	●						●		●		●	●			
Utility	●	●		●			●	●	●	●	●		●	●	●	●		
Railways	●	●	●	●		●	●	●	●	●	●			●		●		●
Photovoltaic					●						●							●
Universal	●	●	●	●			●	●	●	●	●	●		●	●	●		

### The GNB Network Power brand overview

**ABSOLYTE™** **MARATHON™** > VRLA batteries (Valve Regulated Lead Acid) in which the electrolyte is fixed in a glassmat (AGM)  
**Sprinter®** **Powerfit™** > Excellent high current capability  
 > Especially economical  
 > Maintenance-free (no topping up)

> VRLA batteries (Valve Regulated Lead Acid) in which the electrolyte is fixed in a gel (dryfit technology)  
 > Inventor of Gel technology  
 > Highest reliability, even in non-optimal conditions  
 > Particularly suitable for cyclic applications  
 > Maintenance-free (no topping up)

**Classic™** > Conventional lead-acid batteries with liquid electrolyte  
 > Extreme reliability, proven over decades  
 > Low maintenance



Further information about service is available on page 10.

## Sonnenschein A600 SOLAR

### Unmatched dryfit Gel technology for renewable energy storage

Sonnenschein A600 SOLAR is a premium range, developed specifically for applications where cycling is required. It has extraordinary energy-saving features in addition with robust reliability, proven for decades in many installations worldwide.

#### Your benefit:

- > **Exceptional cycling performance** – 3000+ cycles at 60 % Depth of Discharge\* C<sub>10</sub>
- > **dryfit Gel technology** – leak proof
- > **Lowest energy consumption** – saving costs
- > **Strong tubular plate technology** – for longer life in the toughest conditions
- > **Proof against deep discharge** – greater long-term energy delivery
- > **Horizontal mounting possible** – easy installation and maintenance
- > **Completely recyclable** – low CO<sub>2</sub>-footprint



#### Specifications

- > Nominal capacity 294 – 3919 Ah C<sub>120</sub> (20 °C)
- > Cycling performance at 20 °C (with IU charging): 2400 cycles at 60 % Depth of Discharge (C<sub>10</sub>) at 20 °C  
For enhanced performance and for systems ≥ 48 V we recommend IUI charging, to reach 3000+ cycles at 20 °C
- > Designed in accordance with IEC 61427 and IEC 60896-21/22
- > Long shelf life up to 2 years at 20 °C without recharge due to the very low self discharge rate
- > Also available as flame-retardant version on request (V0)
- > Manufactured in Europe in our ISO 9001 certified production plants
- > Trouble-free transport of operational blocks, no restrictions for rail, road, sea and air transportation (IATA, DGR, clause A67)
- > Approval: UL (Underwriter Laboratories)

Nominal capacity 294 – 3919 Ah C <sub>120</sub>	Single cell	Tubular plate	Recyclable	Valve regulated lead-acid batteries	Proof against deep discharge	Maintenance-free (no topping up)	3000+ cycles at 60 % DoD* C <sub>10</sub>

\*with IUI charging, at 20 °C

## Sonnenschein A600 SOLAR

### Technical Data

#### Technical characteristics and data

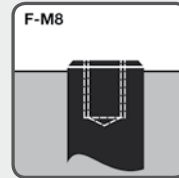
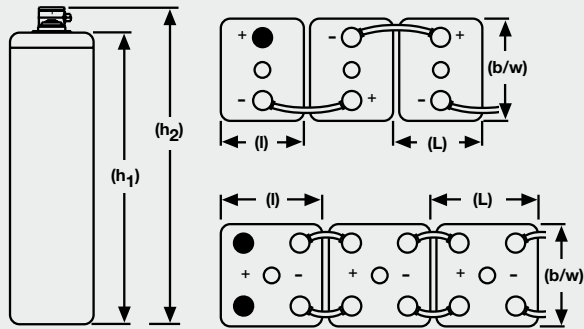
Type	Part number	Nom. voltage	Nominal capacity $C_{120}$ 1.85 Vpc 20 °C	Discharge current $I_{120}$	Length (l)	Width (b/w)	Height (h1)	Height (h2)	Weight	Terminal	Pole pairs
		V	Ah	A	max. mm	max. mm	max. mm	max. mm	approx. kg		
A602/295 Solar	NGS6020295HSOFA	2	294	2.45	105	208	357	399	19.0	F-M8	1
A602/370 Solar	NGS6020370HSOFA	2	367	3.05	126	208	357	399	23.0	F-M8	1
A602/440 Solar	NGS6020440HSOFA	2	440	3.66	147	208	357	399	27.0	F-M8	1
A602/520 Solar	NGS6020520HSOFA	2	519	4.32	126	208	473	515	30.0	F-M8	1
A602/625 Solar	NGS6020625HSOFA	2	623	5.19	147	208	473	515	35.0	F-M8	1
A602/750 Solar	NGS6020750HSOFA	2	727	6.05	168	208	473	515	39.0	F-M8	1
A602/850 Solar	NGS6020850HSOFA	2	848	7.06	147	208	648	690	49.0	F-M8	1
A602/1130 Solar	NGS6021130HSOFA	2	1131	9.42	212	193	648	690	66.0	F-M8	2
A602/1415 Solar	NGS6021415HSOFA	2	1413	11.7	212	235	648	690	80.0	F-M8	2
A602/1695 Solar	NGS6021695HSOFA	2	1695	14.1	212	277	648	690	95.0	F-M8	2
A602/1960C Solar	NGS6021960HSOFB	2	1959	16.3	212	277	717	759	115	F-M8	2
A602/2600 Solar	NGS6022600HSOFA	2	2613	21.7	216	400	775	816	160	F-M8	3
A602/3270 Solar	NGS6023270HSOFA	2	3266	27.2	214	489	774	816	198	F-M8	4
A602/3920 Solar	NGS6023920HSOFA	2	3919	32.6	214	578	774	816	238	F-M8	4

#### Capacities $C_1 - C_{120}$ (20 °C)

Type	$C_1$ 1.67 Vpc	$C_3$ 1.75 Vpc	$C_5$ 1.77 Vpc	$C_{10}$ 1.80 Vpc	$C_{100}$ 1.85 Vpc	$C_{120}$ 1.85 Vpc
A602/295 Solar	123	167	193	218	286	294
A602/370 Solar	154	209	241	272	357	367
A602/440 Solar	185	251	290	326	429	440
A602/520 Solar	229	307	342	380	505	519
A602/625 Solar	275	369	410	456	606	623
A602/750 Solar	321	431	479	532	707	727
A602/850 Solar	367	513	626	681	829	848
A602/1130 Solar	489	684	834	908	1105	1131
A602/1415 Solar	612	855	1043	1135	1382	1413
A602/1695 Solar	734	1026	1252	1363	1658	1695
A602/1960C Solar	824	1209	1359	1573	1937	1959
A602/2600 Solar	1047	1548	1782	2025	2547	2613
A602/3270 Solar	1309	1935	2228	2532	3184	3266
A602/3920 Solar	1571	2322	2673	3038	3821	3919

# Sonnenschein A600 SOLAR

## Drawings with terminal position, terminal and torque



20 Nm

*Not to scale!*

## Battery Service – Energy Solutions

### Keeping your Business in Motion

#### GNB® is the Expert

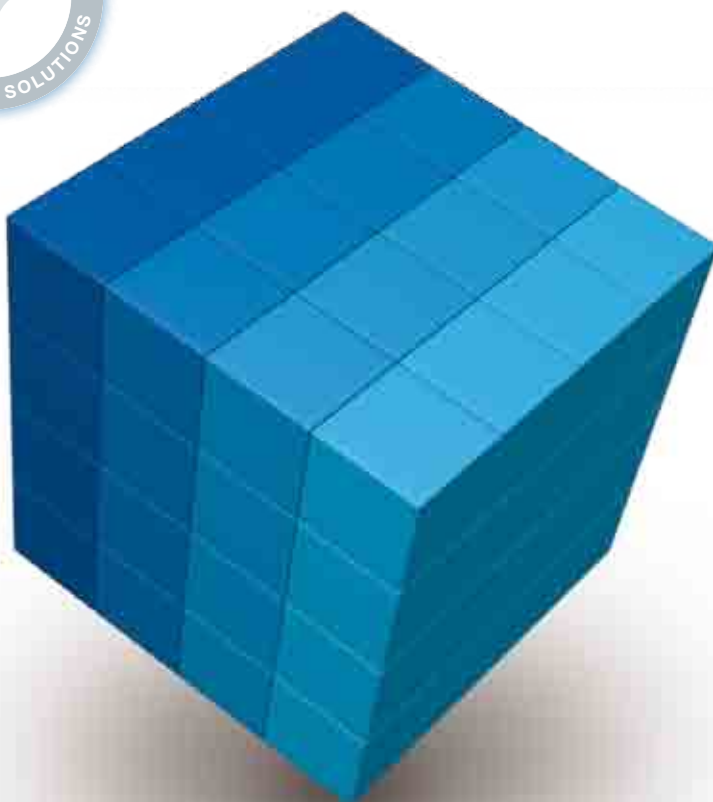
Who could do this job better than the professionals of a company with more than 100 years of experience in battery development, production and application?

**Leave the responsibility for the maintenance of your batteries and chargers to the professionals: a GNB service contract provides you with exceptional economic advantages through time savings, cost savings and safety!**



#### Installation of Batteries and Systems for Network Power

- > Development of complete turnkey solutions from the design concept to installation and commissioning.
- > Installation according to legal and safety regulations including CE certification by approved installation technicians.
- > Training and certification of external installation technicians according to CE regulations.



- ✦ Inspection Contract
- ✦ Maintenance Contract
- ✦ Lifetime Warranty Contract
- ✦ Full Service Contract



**»GNB Service – individualized, professional and all over Europe!«**





**Exide Technologies**, with operations in more than **80 countries**, is one of the world's largest producers and recyclers of lead-acid batteries. Exide Technologies provides a comprehensive and customized range of stored electrical energy solutions. Based on **over 100 years of experience** in the development of innovative technologies, Exide Technologies is an esteemed partner of OEMs and serves the spare parts market for industrial and transportation applications.

**GNB® INDUSTRIAL POWER** – A division of Exide Technologies – offers an **extensive range of storage products and services**, including solutions for telecommunication systems, railway applications, mining, photovoltaic (solar energy), uninterrupted power supply (UPS), electrical power generation and distribution, fork lifts and electric vehicles.

**Exide Technologies** takes pride in its commitment to a better **environment**. Its Total Battery Management programme, (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.



»The **next Level** of  
**Energy Management**«

**GNB® INDUSTRIAL POWER** devises enduring energy concepts that convince with efficiency, flexibility and profitability.