

PRODUCT CATALOGUE

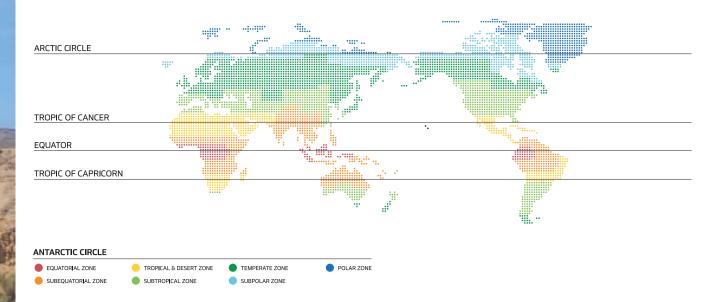
Premium Automotive Battery for HOT REGION





What happens to batteries in hot temperatures?

Hot temperatures shorten the lifespan of the battery. The temperature dependence of chemical reactions is defined by the Arrhenius equation. But more simply put, as the temperature increases so does the speed of the chemical reactions within the battery. The increase in chemical reaction speed can increase the output of the battery, but also increases the speed of battery degradation. In particular, life span shorten such as water consumption, insufficient charging and grid corrosion are greatly accelerated.

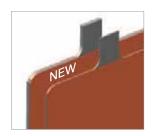


| Regional Climate | Battery life expectancy |
|------------------|-------------------------|
| Cold | 100% |
| Mild | 82% |
| Hot | 73% |
| Extreme Hot | 55% |

Reference : Midronics web info.



Why choose Enhanced Flooded Batteries for Hot region?



Heat Endurance Grid Tech.

The NEW "X-Frame Gen I I Grid Design" provides Enhanced Durability in Hot Region

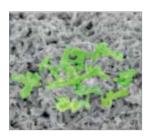
- ▶ Upgrade Grid Pattern
- ► Full Framed Thicker Grid
- ► High Tin Alloy



Enhanced Carbon Tech.

Carbon Plus Tech, Enhancing Charging Performance, preventing Undercharging and Early Discharge

- ► Carbon Black Additive
- ► Minimized Water loss

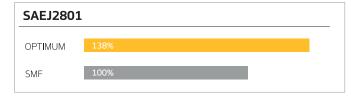


Cycle Proof Design

The New Active material Particle Control Enhances Durability of Active Material

- ▶ Positive Active Material Additional tech.
- ▶ Adding Na(Sodium) ion to the electrolyte.
- ► Extra Reserve Capacity
- ▶ Durability Premium Separator

Cycle life Test Result in 75 (SAE J2801)



ACCELERATE YOUR POWER WITH ATLASBX AUTOMOTIVE BATTERIES

Trust innovative thinking Trust advanced technology

Wherever you are going, ATLASBX Batteries will move you forward Start Stop with EFB, the primary choice of vehicle manufactures, is specially designed to meet and even go beyond all requirements of entry start stop vehicles heavily equipped with electronic devices

Technology



Technology 1 **Improved Cycling for Start Stop** 50% DoD 300% Up

Technology 2 **Enhanced Durability in Hot Region High Temperature Endurance [75°C]** 150% Up

Technology 3 **Quick Charge Charge Acceptance** 130% Up



LONG-LIFE BATTERIES HOT REGION BATTERIES

Trust ATLASBX's Innovative Technology

Take a powerful ride with ATLASBX Car batteries. Whether it's for an entry level vehicle or a high-end performance car, reliable starting power that goes all the way through till the end of your journey. ATLASBX batteries provide

As always, ATLASBX's outstanding product quality is the result of our innovative technology.







OPTIMUM EFB

| Capacity | *** | **** |
|--------------------------|------|------|
| Starting performance | *** | **** |
| Charge acceptance | **** | **** |
| Endurance life cycle | *** | *** |
| Water loss resistance | **** | **** |

****: Excellent / ****: Best / ****: Very Good / ****: Good / ****: Normal

OPTIMUM EFB



The Enhanced Flooded battery with long life service even on extreme hot region

- Longer lifetime at high temperatures compared to standard batteries with specially developed active materials
- Use of reinforced grid design and corrosion-resistant alloy
- Enhanced charge acceptance with carbon plus technology
- · Low water consumption preventing overcharging

Type List Automotive **OPTIMUM Enhanced Flooded Battery**

| | Type No. | Capacity | RC | CCA (JIS/BCI: SAE, EN: EN) | Dimension(mm) | | | | | | |
|-----|--------------|----------|-----|----------------------------------|---------------|-----|-----|-----|---------|----------|-----------|
| Gr. | | | | | L | w | н | тн | Lay-Out | Terminal | Hold-down |
| | EFB S40B19L | 35 | 50 | 330 | 187 | 127 | 200 | 220 | 0 | В | ВО |
| | EFB S40B19R | 35 | 50 | 330 | 187 | 127 | 200 | 220 | 1 | В | ВО |
| | EFB S40B19FL | 35 | 50 | 330 | 187 | 127 | 200 | 220 | 0 | В | B1 |
| | EFB S40B19LS | 35 | 50 | 330 | 187 | 127 | 200 | 220 | 0 | А | В0 |
| B19 | EFB S40B19RS | 35 | 50 | 330 | 187 | 127 | 200 | 220 | 1 | Α | В0 |
| B19 | EFB S44B19L | 40 | 60 | 370 | 187 | 127 | 200 | 220 | 0 | В | В0 |
| | EFB S44B19R | 40 | 60 | 370 | 187 | 127 | 200 | 220 | 1 | В | В0 |
| | EFB S44B19FL | 40 | 60 | 370 | 187 | 127 | 200 | 220 | 0 | В | B1 |
| | EFB S44B19LS | 40 | 60 | 370 | 187 | 127 | 200 | 220 | 0 | А | В0 |
| | EFB S44B19RS | 40 | 60 | 370 | 187 | 127 | 200 | 220 | 1 | А | ВО |
| | EFB S50B24L | 45 | 71 | 400 | 234 | 136 | 200 | 220 | 0 | В | ВО |
| | EFB S50B24R | 45 | 71 | 400 | 234 | 136 | 200 | 220 | 1 | В | ВО |
| | EFB S50B24LS | 45 | 71 | 400 | 234 | 136 | 200 | 220 | 0 | Α | ВО |
| B24 | EFB S50B24RS | 45 | 71 | 400 | 234 | 136 | 200 | 220 | 1 | А | ВО |
| 024 | EFB S55B24L | 45 | 75 | 430 | 234 | 136 | 200 | 220 | 0 | В | В0 |
| | EFB S55B24R | 45 | 75 | 430 | 234 | 136 | 200 | 220 | 1 | В | ВО |
| | EFB S55B24LS | 45 | 75 | 430 | 234 | 136 | 200 | 220 | 0 | Α | ВО |
| | EFB S55B24RS | 45 | 75 | 430 | 234 | 136 | 200 | 220 | 1 | А | ВО |
| | EFB S55D23L | 60 | 110 | 550 | 230 | 172 | 200 | 220 | 0 | Α | B1 |
| D23 | EFB S55D23R | 60 | 110 | 550 | 230 | 172 | 200 | 220 | 1 | А | B1 |
| 523 | EFB S75D23L | 65 | 115 | 580 | 230 | 172 | 200 | 220 | 0 | Α | B1 |
| | EFB S75D23R | 65 | 115 | 580 | 230 | 172 | 200 | 220 | 1 | А | B1 |
| | EFB S48D26L | 50 | 90 | 400 | 257 | 172 | 200 | 220 | 0 | Α | B1 |
| D26 | EFB S48D26R | 50 | 90 | 400 | 257 | 172 | 200 | 220 | 1 | А | B1 |
| B20 | EFB S80D26L | 70 | 125 | 600 | 257 | 172 | 200 | 220 | 0 | Α | B1 |
| | EFB S80D26R | 70 | 125 | 600 | 257 | 172 | 200 | 220 | 1 | Α | B1 |
| | EFB S65D31L | 70 | 125 | 600 | 302 | 172 | 200 | 220 | 0 | Α | B1 |
| D31 | EFB S65D31R | 70 | 125 | 600 | 302 | 172 | 200 | 220 | 1 | А | B1 |
| 831 | EFB S105D31L | 90 | 160 | 750 | 302 | 172 | 200 | 220 | 0 | Α | B1 |
| | EFB S105D31R | 90 | 160 | 750 | 302 | 172 | 200 | 220 | 1 | А | B1 |
| L1 | EFB S54470 | 44 | 80 | 390 | 208 | 174 | 190 | 190 | 0 | Α | B13 |
| L2 | EFB S55570 | 55 | 95 | 480 | 242 | 174 | 190 | 190 | 0 | Α | B13 |
| LZ | EFB S56270 | 62 | 110 | 540 | 242 | 174 | 190 | 190 | 0 | Α | B13 |
| L3 | EFB S56670 | 66 | 110 | 540 | 277 | 174 | 190 | 190 | 0 | Α | B13 |
| | EFB S57270 | 72 | 130 | 610 | 277 | 174 | 190 | 190 | 0 | Α | B13 |
| L4 | EFB S58070 | 80 | 160 | 640 | 315 | 174 | 190 | 190 | 0 | А | B13 |
| L5 | EFB S60070 | 100 | 180 | 850 | 354 | 175 | 190 | 190 | 0 | Α | B13 |

Technical Data

LAYOUT

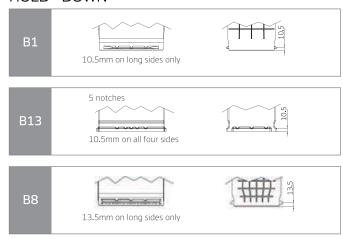


TERMINALS

| Termial | A (Standard) | B (Small) | Side |
|----------|--------------|-----------|------|
| Positive | | 8 | |
| Negative | 8 | 8 | 0 |

* DT : Dual Terminal (Standard + Side)

HOLD - DOWN



* For B0 there is no Hold-Down



Hankook & Company

2F,286, Pangyo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea Fax:+82-31-5178-8198 / www.hankook-atlasbx.com/en



The information provided in this brochure contains only general description or performance characteristics, which do not always apply as described in the specific case or which may change as a result of further development of the product. This information is merely a technical description of the product. This information is not meants or intended to be a special guarantee for a particular quality or particular durability. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. We reserve the right to make changes in availability as well as technical changes without prior notice.