

THUNDERMAKER-III SIROCCO



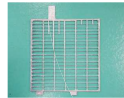
Indicator for Charging Condition and Electrolyte Level



Top Cover



Straight Connection Inter-Cell Welding



High Density Super Strong Grid of C-21 Special Alloy (Pos. Plate)



Low Impedance PE Envelop Separator



Exhaust Port

Vent plug With filter

1. Upper Grade Series

THUNDERMAKER-III SIROCCO is the up-graded series of the forerunner, THUNDERMAKER-II UNIVERSAL, having higher capacity and stronger engine starting performance. For this new series, THUNDERMAKER-III SIROCCO our Inner Lug High Density Super Strong Grid of the latest design, made of C-21 Special Alloy, Straight Connection Inter-Cell Welding and Low Impedance PE-Envelop Separator are employed. The ideal combination of these most advanced technologies has made it possible to achieve inhibition of internal impedance at extremely low level and extended service life to the maximum level for the same class of batteries. THUNDERMAKER-III SIROCCO, our ultimate MF Battery, always assures you one-strike starting and ever-comfy driving by its overwhelming power anywhere, anytime.

2. Long Life and Environment-Friendly

THUNDERMAKER-III SIROCCO has a semi-transparent milky white container, while all the other Sealed Type MF Batteries in the world are in black containers and black covers. You can always observe the electrolyte level from outside and, if the electrolyte level drops lower than the Lower Level Line, you can add water to THUNDERMAKER-III SIROCCO after opening the sealing caps. By adding water, the plates can be relieved from the risks of corrosion caused by dry-up of electrolyte and gain extended service life for certain period. It means you can use up the maximum life of THUNDERMAKER-III SIROCCO to the end, and finally you can be an environment-friendly driver helping minimizing wastage of still-usable batteries. Thus, THUNDERMAKER-III SIROCCO is so safe, so economical and so ecological. Those are unique and the extraordinary advantages of THUNDERMAKER-III SIROCCO that all the other Sealed Type MF Batteries in the world in black containers and black covers are never capable of.

3. For All Japanese Passenger Cars

As one of the most reliable and prestigious battery manufacturers in Japan, we, THE FURUKAWA BATTERY CO., LTD., are supplying our products to most of major Japanese car manufacturers as Original Equipment (OE). Our THUNDERMAKER-III SIROCCO is manufactured in the same production lines that our OE batteries are manufactured, and shipped to the market under the strict quality control and punishing inspection in the same manner that we are carrying out on our OE batteries. You will see the most advanced technology and traditional craftsmanship of Japanese automotive battery and our company creed, to contribute both to customers and environment, are crystallized in this ultimate MF Battery, THUNDERMAKER-III SIROCCO.

• Carefully read service manual before use the battery

For More Information, please contact

FB THE FURUKAWA BATTERY CO.,LTD.

<http://www.furukawadenchi.co.jp/>
Overseas Operations Department
2-4-1 Hoshikawa, Hodogaya-Ku, Yokohama City,
Kanagawa Prefecture 240-0006 JAPAN
Phone:045-336-5088 Fax:045-333-2534



THUNDERMAKER-III SIROCCO
Please refer to the URL

FB FURUKAWA BATTERY

THUNDERMAKER-III SIROCCO

JAPAN TECHNOLOGY AND QUALITY

*It's that time of year again, the time of Sirocco.
The hot wind is blustering along the highway.
The gale brings cloud mounting over the sky.
The cloud unleashes lightning displaying the
Infinite power of nature over the earth.
Somewhere along the line,
we've called Sirocco
The Thundermaker.*



Genuine Japanese Product

FURUKAWA THUNDERMAKER-III SIROCCO

JAPAN TECHNOLOGY AND QUALTY



B19

B24

D23

D26

D31

Category of Sizes:	B19	
External Overview	Dimensions	
	Length	185mm
	Width	125mm
	Height	200mm
	Total Height	227mm
JIS Model Number:	44B19R	44B19L
Weight	10.0kg	
Acid Volume	2.3ℓ	
Voltage	12V	
Capacity(20HR)	37Ah	
Reserve Capacity	49min.	
SAE Cold Cranking Amperes(-18°C)	310A	

Category of Sizes:	B24	
External Overview	Dimensions	
	Length	236mm
	Width	126mm
	Height	200mm
	Total Height	227mm
JIS Model Number:	60B24R	60B24L
Weight	12.7kg	
Acid Volume	2.9ℓ	
Voltage	12V	
Capacity(20HR)	48Ah	
Reserve Capacity	70min.	
SAE Cold Cranking Amperes(-18°C)	405A	

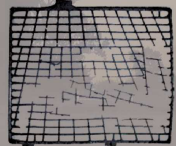
Category of Sizes:	D23	
External Overview	Dimensions	
	Length	230mm
	Width	169mm
	Height	200mm
	Total Height	225mm
JIS Model Number:	80D23R	80D23L
Weight	16.6kg	
Acid Volume	3.8ℓ	
Voltage	12V	
Capacity(20HR)	65Ah	
Reserve Capacity	100min.	
SAE Cold Cranking Amperes(-18°C)	500A	

Category of Sizes:	D26	
External Overview	Dimensions	
	Length	257mm
	Width	170mm
	Height	200mm
	Total Height	225mm
JIS Model Number:	90D26R	90D26L
Weight	18.9kg	
Acid Volume	4.0ℓ	
Voltage	12V	
Capacity (20HR)	68Ah	
Reserve Capacity	115min.	
SAE Cold Cranking Amperes (-18°C)	550A	

Category of Sizes:	D31	
External Overview	Dimensions	
	Length	304mm
	Width	171mm
	Height	200mm
	Total Height	225mm
JIS Model Number:	115D31R	115D31L
Weight	22.7kg	
Acid Volume	4.8ℓ	
Voltage	12V	
Capacity (20HR)	82Ah	
Reserve Capacity	141min.	
SAE Cold Cranking Amperes (-18°C)	735A	

Super Strong Grid made of C-21 Special Alloy

Temperature condition in engine compartment has been becoming severer because of enhancing engine power. THUNDERMAKER-III SIROCCO applies Super Strong Grid made of C-21 Special Alloy to adapt to the severer temperature condition. The grid has excellent performance for high temperature & corrosion resistance. THUNDERMAKER-III SIROCCO has around 2 times life compared to our standard calcium battery in 75°C JIS SHALLOW CYCLE ENDURANCE TEST.



Standard Calcium Grid



C21 Special Alloy Grid

Around 2 times
durability compared to
Standard Calcium Grid

SAE Cold Cranking Amperes (-18°C)

The number of amperes a battery at -18°C can deliver for 30 seconds and maintain at least 7.2 volts.

Reserve Capacity

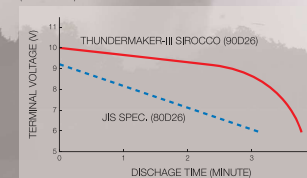
The time in minutes that a fully charged battery can deliver 25°C and maintain a terminal voltage equal to, or higher than, 10.5 volts.

Capacity (20HR)

The quantity of electricity (Ah) that a battery can deliver 20 hours rate current at 25°C and maintain a terminal voltage equal to, or higher than, 10.5 volts.

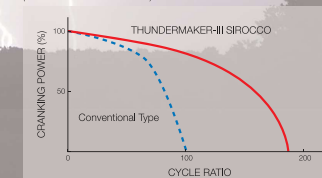
ENGINE STARTING PERFORMANCE

(-18°C 300A)



ENDURANCE CHARACTERISTICS

(75°C JIS SHALLOW CYCLE)



SELF-DISCHARGE CHARACTERISTICS

(STORAGED AT 25°C)

