Formation

IDFBC-ES & IDFBC-BES PANELS

Boosting the Green Revolution in Battery Charging



GENERAL SPECIFICATIONS

Voltage Current **Output Power** Channel by panel Voltage regulation Accuracy Steady current Accuracy

150 - 500V (charge), 500V - 300V (discharge) OA - 250A (charge), OA - 250A (discharge) up to 80KW per circuit up to 10 ≤± 0,5%

≤±1%

>>> Other ranges and specifications can be available on request

iDevices Technology, accuracy and reliability, charging and testing your battery.



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The iDFBC-ES (iDevices Formation Battery Charger - Energy Save) and iDFBC-BES (iDevices Formation Battery Charger - Bidirectional Energy Save) equipment incorporate high-frequency switching technology (IGBT). This rectification system sets a new standard for efficiency and performance in battery charging. The use of this technology allows our chargers to achieve efficiency levels above 95%, resulting in significant energy savings.

With the iDFBC-BES line, it is possible to perform regenerative discharges. During the formation process, the energy discharged from the batteries is returned to the electrical grid, offering a more efficient solution for the use of this energy. This feature not only contributes to energy savings but also demonstrates our commitment to sustainable solutions.



* The values may vary depending on each customer's usage conditions.

Time (hours)

CHARACTERISTICS

- Compatible with iDFBC-View software The most advanced solution on the market for managing formation and charging profiles.
- High energy efficiency, power factor up to 0.99.
- Protection with DC breakers at the output of each circuit module.
- Regenerative discharges controlled by software (BES models only).
- Temperature monitoring.
- Emergency button with a safety relay for panel shutdown.
- DC EV protection relays at the output, isolating the battery circuit.

SPECIFICATION	IDFBCNI	IDFBCI	IDFBC-ES IDFBC-BES	CONCLUSION
Efficiency	****	****	****	Energy savings, reduced heat generation, and smaller cabinets for higher power
Ripple	****	****	****	Low current ripple enhances precision and control stability
Power Factor	****	****	****	High power factor across the entire operating range eliminates the need for capacitive banks
Load Consumption	****	****	****	Energy savings both during battery charging and at rest
Open Circuit Consumption	****	****	****	
THD	****	****	****	Less noise and interference in the electrical network
Robustness	****	****	****	Greater durability, reliability, and performance in adverse conditions
Installation Environment	****	****	****	Requires installation in controlled environments (dust, acid vapors, and temperature)
Discharge (optional)	Resistive	Resistive	Regenerative	In resistive discharge, energy is dissipated as heat, while in regenerative discharge, energy is returned to the electrical grid
Isolation	****	****	*****	Galvanically isolated circuits from each other, especially from the electrical grid, result in increased operator safety
Cabinet Size	****	****	****	Reduced charging room space or more circuits in the same area
Price	****	****	****	Initial cost per circuit

