LIBERATOR®

Railway Diesel Locomotive Starting Batteries KDZ-501 and KDZ-651

DESIGNED FOR 180-DAY WATERING INTERVALS

Tray
- 16 Cell High-Impact Polyethylene Container and Cover

Individual Cell
- Heat Sealed, High-Impact Polypropylene Jar and Cover
- EPDM Rubber Grommet Post Seal

Specific Gravity (nominal) Fully Charged
- 1.250 at 77° F (25° C)

Terminals
- Copper Cored

Separators
- Microporous Polyethylene Material

Electrolyte Reserve (nominal)
- 3.15" Above Plates

Inter-Cell and Inter-Tray Connectors
- Insulated Flexible Cable

Positive Plates
- Low Antimony (4.5%) Alloyed Lead Grids

Negative Plates
- Low Antimony (3.2%) Alloyed Lead Grids

KDZ-501

KDZ-651

<u>Discharge Data to 1.0 Volts Per Cell</u>

KDZ-501 5 minutes: 1200 A
5 seconds: 2500 A

KDZ-651 5 minutes: 1500 A
5 seconds: 3200 A

MADE WITH PRIDE IN THE USA BY GNB INDUSTRIAL POWER

PLATE DIMENSIONS

Plate	Height		Width		Thickness	
	inches	mm	inches	mm	inches	mm
Positive	11.02	280	5.80	147	0.215	5.5
Negative	11.02	280	5.80	147	0.150	3.8

SPECIFICATIONS

Unit Type	Cells per Unit	Plates per Cell	Amp. Hr. Capacities, 1.250 Specific Gravity at 77 F to 1.75 VPC average	Unit Dimensions						Approx. Net Weight per Unit	
			8 Hour Rate	Length		Width		Height			
				inches	mm	inches	mm	inches	mm	lbs.	kg.
KDZ-501	16	21	500	26.9	683	33.9	861	21.2	539	1300	591
KDZ-651	16	27	650	27.4	696	45.1	1146	21.2	539	1700	773

Design and/or specifications subject to change without notice.

ESTABLISHED RELIABILITY AND PERFORMANCE

For over a century, GNB Industrial Power has been a technological leader in the development of industrial lead acid batteries. GNB's continuing commitment to research and development and listening to what customers need has led to significant improvements in the design of our railway diesel locomotive starting batteries.

Like the predecessor GNB® KDZ-EM500 and KDZ-EM650, the LIBERATOR® KDZ-501 and KDZ-651 railway diesel locomotive starting batteries were designed to maximize starting power through low internal resistance. This means excellent cranking capacity for locomotive starting. And, the incorporation of more electrolyte in each cell increases the amount of time between battery watering by 50% and lowers the annual cost of battery maintenance.

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