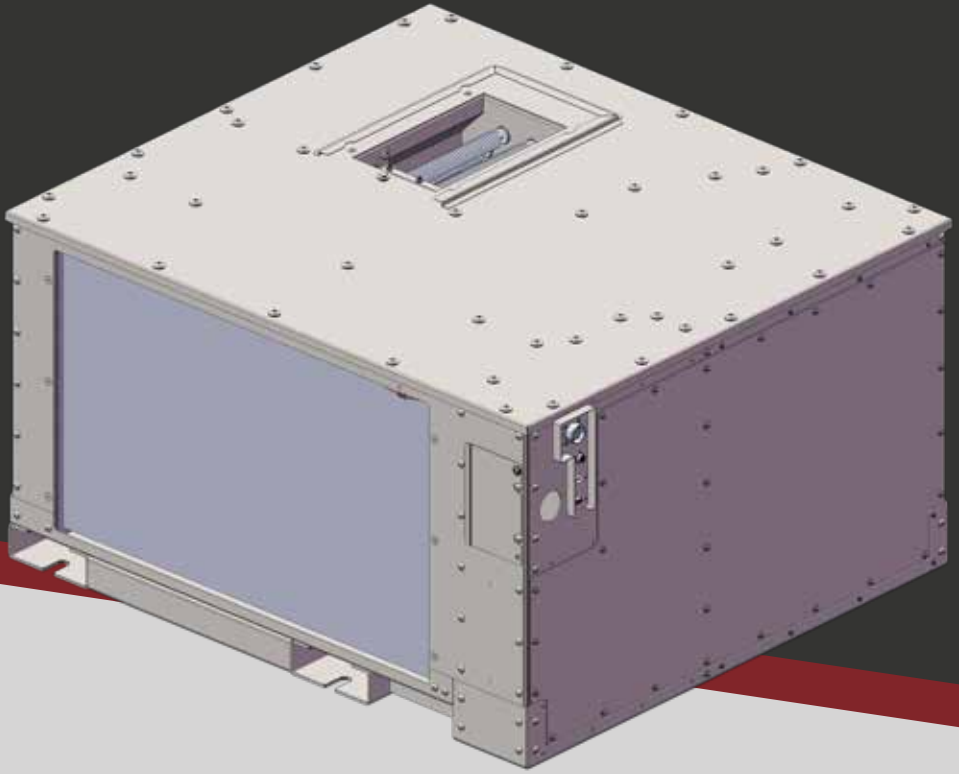


EKYCOOL CLASSIC HVAC – HIGH CAPACITY



PRODUCT OVERVIEW

The Ekyrail Ekycool Classic High Capacity HVAC is designed specifically for EMD SD50, SD60, and SD70 locomotives equipped with sub-base mounted HVAC systems. Built around a fully redundant architecture, the system incorporates two completely independent refrigeration circuits, each with its own compressor and fan assembly to ensure continued operation in the event of a partial failure.

Engineered for harsh railway environments, the system provides exceptional cooling capacity while maintaining reliable operation in temperatures ranging from -40°F to 140°F. Integrated inverter technology allows variable-speed control of brushless motors and compressors, improving efficiency and system performance.

Designed as a direct replacement for existing EMD locomotive HVAC systems, the Ekycool Classic minimizes installation complexity while maximizing reliability, uptime, and crew comfort. Advanced connectivity and onboard diagnostics also simplify troubleshooting and maintenance operations.

Ekycool Classic HVAC – High Capacity

1020285500

Product

Product	Ekycool Classic HVAC – High Capacity
Designed for	EMD SD50 / SD60 / SD70 locomotives
HVAC Installation	Under cab (Sub-base installation)

Performance

Cooling	37,000 BTU (8.79 kW) @ 95°F (35°C) 27,000 BTU (6.62 kW) @ 122°F (50°C)
Heating	38,400 BTU (11.25 kW)

Electrical

Nominal voltage	74 VDC
Inverters output	220 VAC / 60 Hz
Maximum power consumption	120 Amps in full cooling mode

Air flow

Maximum evaporator	1500 SCFM @ 1.22 static pressure
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Refrigeration System

Refrigerant	R410A
Refrigerant Charge	4 lbs 4 oz per circuit (68 oz) 8 lbs 8 oz total (132 oz)
Refrigeration circuits	2 independent refrigeration circuits
Components	Independent compressors and condenser fans
Refrigeration Control	Thermostatic Expansion Valve

Heating

Heating type	3-stage electrical resistive heating
Compressors	Rotary, 220 VAC / 60 Hz
Evaporator & Condenser Fans	Variable-speed brushless motors

Environmental Specification

Operating temperature	-40°F (-40°C) to 140°F (60°C)
Storage temperature	-40°F (-40°C) to 176°F (80°C)
Relative humidity	0% to 95% (non-condensing)

Protection

Low Pressure	75 PSI cutoff
High Pressure	650 PSI cutoff
Undervoltage	Shutdown at 64 VDC
Overvoltage	Shutdown at 85 VDC

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Connectivity

Ethernet	M12, Female, A-Coded connector
CanBus Railcan	DB-9, Male (CNB)
CanBus Ekylink	DB-9, Female (CNC)

Control & Diagnostics

Control	Rotary Switch
Diagnostics	HTML Graphic user interface
Laboratory	Intertek / ETL (Cortland, NY)

Performance Test Conditions

Cooling performance based on ARI Standard 210/240-89

- 95°F (35°C) condition: Return air 80°F (26.7°C) DB / 67°F (19.4°C) WB; Outside air 95°F (35°C) DB / 75°F (23.9°C) WB
- 122°F (50°C) condition: Return air 80°F (26.7°C) DB / 67°F (19.4°C) WB; Outside air 122°F (50°C) DB / 82°F (27.7°C) WB

Notes

- Cooling capacity reduced at ambient temperatures above 122°F (50°C)

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