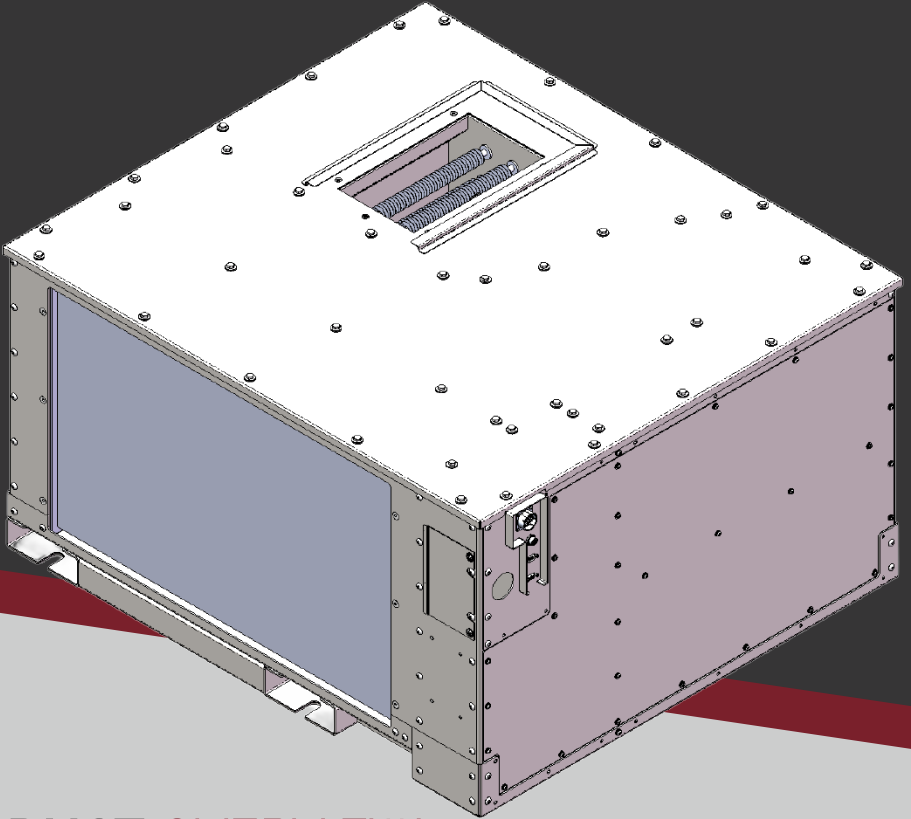


# EKYCOOL CLASSIC HVAC – HIGH CAPACITY



## 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

<b>Product</b>	
<b>Product</b>	Ekycool Classic HVAC – High Capacity
<b>Designed for</b>	EMD SD50 / SD60 / SD70 locomotives
<b>HVAC Installation</b>	Under cab (Sub-base installation)
<b>Performance</b>	
<b>Cooling</b>	37,000 BTU (8.79 kW) @ 95°F (35°C) 27,000 BTU (6.62 kW) @ 122°F (50°C)
<b>Heating</b>	38,400 BTU (11.25 kW)
<b>Electrical</b>	
<b>Nominal voltage</b>	74 VDC
<b>Inverters output</b>	220 VAC / 60 Hz
<b>Maximum power consumption</b>	120 Amps in full cooling mode
<b>Air flow</b>	
<b>Maximum evaporator</b>	1500 SCFM @ 1.22 static pressure
<b>Refrigeration System</b>	
<b>Refrigerant</b>	R410A
<b>Refrigerant Charge</b>	4 lbs 4 oz per circuit (68 oz) 8 lbs 8 oz total (132 oz)
<b>Refrigeration circuits</b>	2 independent refrigeration circuits
<b>Components</b>	Independent compressors and condenser fans
<b>Refrigeration Control</b>	Thermostatic Expansion Valve
<b>Heating</b>	
<b>Heating type</b>	3-stage electrical resistive heating
<b>Compressors</b>	Rotary, 220 VAC / 60 Hz
<b>Evaporator &amp; Condenser Fans</b>	Variable-speed brushless motors
<b>Environmental Specification</b>	
<b>Operating temperature</b>	-40°F (-40°C) to 140°F (60°C)
<b>Storage temperature</b>	-40°F (-40°C) to 176°F (80°C)
<b>Relative humidity</b>	0% to 95% (non-condensing)
<b>Protection</b>	
<b>Low Pressure</b>	75 PSI cutoff
<b>High Pressure</b>	650 PSI cutoff
<b>Undervoltage</b>	Shutdown at 64 VDC
<b>Overvoltage</b>	Shutdown at 85 VDC

[www.ekyrail.com](http://www.ekyrail.com)

Les Entreprises Ekyrail Inc  
425 Boulevard Ford  
Châteauguay, QC, J6J 4Z2

Tel: (450) 692 1376  
Fax: (450) 692 6411

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## Connectivity

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

## Control & Diagnostics

<b>Control</b>	Rotary Switch
<b>Diagnostics</b>	HTML Graphic user interface
<b>Laboratory</b>	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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