

E-Star[®] HiPerForm[®] Condensing Unit



MUELLER

Mueller® E-Star® HiPerForm®

Specifically Engineered and Designed for Cooling Milk

Paul Mueller Company's E-Star® HiPerForm® condensing unit with electronic valve control (EVC) features a proprietary EVC designed to flood the entire milk cooler evaporator with subcooled liquid refrigerant. This process maximizes efficiency by utilizing the entire evaporator surface for cooling and eliminating the inefficient superheated vapor refrigerant found in conventional refrigeration systems.

Additionally, the E-Star HiPerForm allows the compressor to operate at significantly cooler temperatures for longer compressor life, less maintenance, reduced energy consumption, and incomparable refrigeration efficiency.

Mueller® E-Star HiPerForm is the most cost-effective way to cool milk with a Scroll condensing unit. A variety of upgraded features—including a Copeland® Scroll compressor with an oil sight glass and fill port, a variable-speed fan, rifled tubing, and a subcooling coil—ensure the E-Star HiPerForm outperforms all other milk cooling units in terms of reliability, efficiency, and value.



Features and Benefits

- When used with the Mueller HiPerForm **plus** control, MuellerSecure™ technology allows you to remotely monitor your system wherever you have an internet connection and receive alerts via text or email.
- The factory-installed, proprietary electronic subcooling valve floods the entire milk cooler evaporator for maximum operating efficiency.
- The EVC control reads the system pressure via an electronic pressure transducer and the temperature with a digital sensor, and translates this information to control the variable-speed fan and stepper valve for precise, instantaneous refrigerant control.
- The Copeland Scroll compressor is designed to handle the large temperature changes required to cool milk. Scroll technology is more energy efficient and has fewer moving parts than reciprocating compressors.
- A condenser subcooling loop maintains liquid refrigerant, ensuring maximum evaporator efficiency.
- An oil sight glass and fill port allow refrigerant oil to be easily monitored and changed for service and future HFC requirements.
- A single, variable-speed fan with a high-efficiency motor maintains the proper airflow to increase the capacity and efficiency of the compressor and condenser.
- A suction line accumulator heat exchanger increases system efficiency and protects the compressor during low load conditions.
- An anti-short cycle prolongs compressor life with fewer stops and starts due to low load conditions or low refrigerant charge.
- This quality-assured unit meets worldwide standards such as CSA and CE (specific models).

SPECIFICATIONS

MUELLER E-STAR HIPERFORM CONDENSING UNIT SPECIFICATIONS R-448A OR R-507					
Horsepower Available (HP)	Electrical Characteristics ¹	Width (in)	Depth (in)	Height (in)	Approximate Weight (lb)
3.5 ³	208-230/60/1, 208-230/60/3, 460/60/3	40.125	30.375	31.5	340
5 ^{2,3}	200-240/50/1, 380/50/3	40.125	30.375	31.5	340
7.5 ³	208-230/60/3, 460/60/3, 380/50/3	46.5	33.5	42.5	515
9 ³	208-230/60/3, 460/60/3, 380/50/3	46.5	33.5	42.5	515
15 ⁴	208-230/60/3 ⁵ , 460/60/3	65	48	70	890

¹Contact your Paul Mueller Company representative for available electrical characteristics.

²Available as a Digital E-Star HiPerForm with EVC (capacity control via hot gas bypass).

³E-Star HiPerForm 3.5, 5, 7.5, and 9-horsepower condensing units are available in R-448a or R-507.

⁴E-Star HiPerForm 15-horsepower condensing units are available in R-448a refrigerant.

⁵E-Star HiPerForm 15-horsepower condensing unit 208-230/60/3 model available in 2025.

**PAUL
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COMPANY**

Mueller® Turnkey Solutions

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Creating Quality
for **Life**

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