

E-Star[®] HiPerForm[®] with EVC



Mueller® E-Star® HiPerForm® With EVC Specifically Engineered and Designed for Cooling Milk

Paul Mueller Company's E-Star® HiPerForm® condensing unit with electronic valve control (EVC) features a proprietary electronic subcooling valve 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 with EVC enables the compressor to operate at significantly cooler temperatures for longer compressor life, less maintenance, reduced energy consumption, and incomparable refrigeration efficiency.

The E-Star HiPerForm with EVC 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 Mueller E-Star HiPerForm with EVC outperforms all other milk cooling units in terms of reliability, efficiency, and value.



MUELLER E-STAR HIPERFORM WITH EVC SPECIFICATIONS

Length (in)	Width (in)	Height (in)	Approximate Weight (lb)	Horsepower Available (hp)	Electrical Characteristics*
40.125	30.375	31.5	340	3.5	208-230/60/1, 208-230/60/3, 460/60/3
				5**	200-240/50/1, 380/50/3
46.5	33.5	42.5	515	7.5	208-230/60/3, 460/60/3, 380/50/3
			540	9	

*Contact your Mueller representative for available electrical characteristics.

**Available as Digital HiPerForm E-Star with EVC.

Features and Benefits

- The **factory-installed, proprietary electronic subcooling valve** floods the entire milk cooler evaporator for maximum operating efficiency.
- Equip your unit with an optional **interface tool** designed to assist in the diagnosis of system troubleshooting and proper setup. It may also be used as a dual probe digital thermometer.
- **Red and green LED indicators** illuminate per the system's operation. A green solid light indicates the system is cooling or a ready-for-cooling command. A green flashing light is an indication of an anti-short cycle delay. A red light indicates an error or system issue.
- Units are factory programmed for **plug-and-play operation**.
- Our **reliable system design** is forgiving of a variety of operating conditions.
- The **EVC control** reads the system pressure via an **electronic pressure transducer**. The temperature is read via a **digital sensor**. The EVC, then, 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.
- The unit is enclosed and protected by a **heavy-duty, galvanized three-piece metal cover** for safe operation and can be easily removed.
- 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).
- A **condenser subcooling loop** maintains liquid refrigerant, ensuring maximum evaporator efficiency.
- The **suction line accumulator heat exchanger** increases system efficiency and protects the compressor during low load conditions.
- A **single, variable-speed fan** with a high-efficiency motor maintains proper airflow to increase capacity and efficiency of the compressor and condenser.
- The **oil sight glass** and **fill port** allow refrigerant oil to be easily monitored and changed for service and future HFC requirements.
- The E-Star HiPerForm with EVC is available for **use with environmentally-friendly HFC-507**.
- **Rust-resistant brass high- and low-side valves** and **electrical compartments** are located in the upper front portion of the unit to permit easy access.
- When used with a HiPerForm® Plus control, **MilkSecure™ technology** allows you to remotely monitor your system wherever you have an internet connection and receive alerts via text or email.



PAUL MUELLER COMPANY

PAUL MUELLER, OUR FOUNDER



At Paul Mueller Company, we are united by a belief in quality that works for life. Our goal is to have lasting impact with every piece of processing equipment we build. This collective vision has led us from a small sheet metal shop into a global supplier of heating, cooling, processing, and storage solutions. Our equipment allows farmers, brewers, and engineers to keep their products fresh and their inventory strong. Whether our equipment preserves milk in rural areas or helps manufacture medicine with broad health benefits, we are making an impact across the globe.



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