E-STAR® HIPERFORM® WITH EVC





Mueller® E-Star® HiPerForm® With EVC

Specifically Engineered and Designed for Cooling Milk!

The proprietary technology of Paul Mueller Company's E-Star® HiPerForm® refrigeration system with electronic valve control (EVC) makes it the most energy-efficient milk cooling system in the world.

Mueller® E-Star HiPerForm with 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, less energy consumption, and incomparable refrigeration efficiency.

The E-Star HiPerForm with EVC is the most cost-effective way to cool milk with a scroll refrigeration unit. A variety of upgraded features — including a Copeland® scroll compressor with an oil sight glass and fill port, a propriety fan control drive (FCD), a variable-speed fan, rifled tubing, and a subcooling coil — make the Mueller E-Star HiPerForm with EVC the most energy-efficient refrigeration unit available for the dairy industry.

The Mueller E-Star HiPerForm with EVC outperforms all other milk cooling units in terms of reliability, efficiency, and value. It's what you'd expect from The Milk Cooling Systems Specialists™.



Features and Benefits

- Factory installed, proprietary electronic subcooling valve completely floods milk cooler evaporator for maximum operating efficiency.
- Interface tool designed to assist in diagnosis of system troubleshooting and proper setup. May also be used as dual probe digital thermometer.
- Red and green LED indicators illuminate according to system's operation. A green solid light indicates the system is cooling or ready for cooling command. A green flashing light is an indication of anti-short cycle delay. A red light indicates an error or system issue.
- Factory programming for plug and play operation.
- 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 digital sensor. The EVC translates this information to control the FCD fan speed and stepper valve for precise and instantaneous refrigerant control.
- Copeland scroll compressor 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.
- Anti-short cycle. Increased compressor life with fewer stops and starts due to low load conditions or low refrigerant charge.

- Quality assured. Meets worldwide standards such as CSA and CE (specific models).
- A condenser subcooling coil maintains liquid refrigerant, ensuring maximum evaporator efficiency.
- Suction line accumulator heat exchanger increases system efficiency and protects compressor during low-load conditions
- Single, variable-speed fan with high-efficiency motor.
 The FCD maintains proper airflow to increase capacity and efficiency of the compressor and condenser.
- Electrical compartments located in the upper front portion of the unit permit easy access.
- E-Star HiPerForm is available for use with environmentally friendly HFC-507.
- Oil sight glass and fill port allows refrigerant oil to be easily changed for future HFC requirements.
- Rust-resistant brass high- and low-side valves are located in front of the unit for easy access without removing the cover.
- Heavy-duty, galvanized three-piece metal cover encloses and protects the unit for safe operation while providing easy access.

Mueller E-Star HiPerForm with EVC Specifications					
Length (in)	Width (in)	Height (in)	Approximate Weight (lb)	Horsepower Available (hp)	Electrical Characteristics*
40	30	31½	390	3.5	208-230/60/1, 200-230/60/3, 460/60/3
				5**	200-240/50/1, 380/50/3
46½	33½	421/2	450	7.5	208-230/60/3, 460/60/3, 380/50/3
				9	

^{*}Contact your Mueller representative for electrical characteristics available for each model.

^{**}Available as Digital HiPerForm E-Star with EVC.

Visit <u>dfe.paulmueller.com</u> to see all of our *COOL* products!



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