DIGITAL E-STAR® HIPERFORM®





Mueller® Digital E-Star® HiPerForm®

Digital Capacity Control for Energy Efficiency and Optimum Cooling

The patent-pending digital E-Star® HiPerForm® refrigeration unit is the latest generation of Paul Mueller Company's proprietary E-Star HiPerForm refrigeration system.

Mueller® E-Star HiPerForm's electronic valve control (EVC) constantly and precisely fine-tunes the refrigerant flow to the milk cooler throughout all conditions of the cooling cycle, resulting in maximum energy and cooling efficiencies for both conventional and robotic milking systems.

Mueller E-Star HiPerForm's capacity control system allows the option to slightly oversize the condensing unit for greater efficiency at higher milk temperatures, while automatically reducing the cooling capacity at lower milk temperatures. The capacity control feature is an enormous benefit to prevent milk freezing during low-load conditions, such as first milking on robotic dairies.

Additionally, digital E-Star HiPerForm refrigeration units are easily retrofitted to most milk cooling systems.

Paul Mueller Company's digital E-Star HiPerForm refrigeration unit ensures maximum energy and cooling efficiencies and the highest milk quality for the dairyman. It's what you'd expect from The Milk Cooling Systems Specialists™.

Mueller Digital E-Star Specifications					
Length (in)	Width (in)	Height (in)	Approximate Weight (lb)	Horsepower Available (hp)	Electrical Characteristics*
40	30	31½	390	5	208-230/60/1, 200-230/60/3, 460/60/3, 575/60/3, 200-240/50/1, 380/50/3

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



Features and Benefits

- Proprietary electronic subcooling valve and control optimizes the milk cooler evaporator for maximum operating efficiency.
- Copeland® Scroll compressor is designed to handle the large temperature changes required to cool milk.
 Scroll technology is more energy efficient and has less moving parts than reciprocating compressors.
- Condenser subcooling coil ensures subcooled liquid refrigerant for maximum evaporator efficiency.
- Enhanced condenser heat transfer surface due to enlarged tube-and-fin condenser with rifled tubing results in greater refrigeration capacity and efficiency.
- Suction line accumulator heat exchanger increases system efficiency and protects compressor during low-load conditions.
- Single, variable-speed fan with highefficiency motor maintains an even air flow to increase capacity and efficiency of the compressor.
- Electrical compartment located in the upper front portion of the unit permits easy access.
- HiPerForm is available for use with environmentally friendly HFC-507.
- Screw terminals provide positive electrical connections and reduce compressor failure.
- Mueller E-Star units, temperatures are holding within 2° after the first milking. Plus we expect a 30% increase in energy efficiency.

- CSA/cUS approved for indoor and outdoor use.
- Oil sight glass and fill port allows simple inspection of compressor oil level and provides an easy method to add or change oil for future refrigerant requirements.
- Heavy-duty, galvanized three-piece metal cover encloses and protects the unit for safe operation.
- Rust-resistant brass high- and low-side valves located in front of the unit for easy service access without removing the cover.
- Quality assured. Meets worldwide standards such as CSA and CE.



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