

## CSS Magnum Plus

Prodotti freschi o congelati,  
più veloce è meglio

- Temperatura minima
- Abbassamento rapido della temperatura
- Preciso controllo della temperatura
- Bassi consumi energetici
- Tecnologia collaudata e design semplice
- Assistenza globale

### DATI TECNICI

FLUSSO D'ARIA		FUNZIONI	
Tipo di unità	High capacity Refrigeration unit for installation in 10, 20, 40 or 45 □ containers for stationary applications. All Aluminum "Picture frame" R-404A or R-452A Refrigerant. Charge 4.0 kg (8.8 lbs) Copeland Scroll compressor. Emerson MP4000 controller	Ricambio aria fresca	Unit allow fresh air exchange to cargo area. Using: Rotating disk in 0-100 m3/h. And hinged door for 100 m3/h, 150 m3/h, 175 m3/h, 215 m3/h, or 225 m3/h. Optional to get sensor and log in datalogger.
Dispersione termica richiesta della cella	42 Watt/°K @ 20C wall temperature, to ensure set-point at ambient	Livello di rumorosità	Soundpower per ISO 3744:2010) is 90.1 dB(A) with set-point -30°C running 400V/50 Hz. 94.9dB(A) with set-point -30°C running 400V/60 Hz.
Protezione container	Pressure equalization valve (1400 Pascal / 140 mm WG) to avoid excessive vacuum in the container	Certificazioni e norme di progettazione	ISO1496-2 CE Pharma GDP AHRI ATO (former Sprenger Institute) ATP American Bureau of Shipping, Lloyds and Bureau Veritas USDA TIR (International Customs Regulations for Containers)
Gamma di mantenimento del punto di riferimento	-40°C to +30°C (-40°F to 86°F)		
Intervallo temperatura ambiente	-30°C to +50°C (-22°F to 122°F)		

CAPACITÀ DI RAFFREDDAMENTO A TEMPERATURA AMBIENTE +37,8 °C (100 °F)		ELETTRICITÀ	
Al punto di riferimento +21,1 °C (70 °F)	16,500 watt @ 460V/60Hz 14,220 watt @ 400V/50Hz	Alimentatore	A/C 400 to 500 Volt 3 phase 60 Hz ±2,5% A/C 360 to 460 Volt 3 phase 50 Hz ±2,5%
Al punto di riferimento +1,7 °C (35 °F)	11,900 watt @ 460V/60Hz 10,260 watt @ 400V/50Hz	Interruttore principale	25 Amp
Al punto di riferimento -17,8 °C (0 °F)	7,200 watt @ 460V/60Hz 6,210 watt @ 400V/50Hz	Cavo di alimentazione	18.3 m (60 LF) cable (4phase and ground) with CEE17 power plug (32 Amp; ground 3h). Control box is equipped with a 3 m cable 230V/16 Amp 3 phase power plug to provide output for light, man-trap alarm
Al punto di riferimento -28,9 °C (-20 °F)	5,000 watt @ 460V/60Hz 4,310 watt @ 400V/50Hz	Riscaldatori per modalità sbrinamento/riscaldamento	3 * 1,360 watt electrical resistance heaters. Optional to get 3*2,000 watt heater, and allow cargo temperature +40C
Al punto di riferimento -40 °C (-40 °F)	3,700 watt @ 460V/60Hz 3,190 watt @ 400V/50Hz		
Capacità di riscaldamento massima	5,250 watt @ 460V/60Hz		

### SISTEMA DI CONTROLLO

Generale	Advanced Microprocessor MP4000 Emerson Controls Temperature control using 5 PT1000 sensors and 1 NTC for compressor. Main control temperature sensors for Supply and Return air are PT1000 Class A per EN60751:2008 i.e. with accuracy of +/-0.15°C (+/-0.27°F) Temperature accuracy in "non-optimized energy savings mode": Chilled temperature +/-0.25°C (+/-0.45°F) Frozen
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temperature set-points: +/- 1 °C (+/-1.8°F) Datalogger document system parameters and changes, results of Pre-Trip Inspections, Alarms & messages, as well as temperature logs. Temperature logs are defaulted to 1 hour interval, and user can change to other interval. Datalogger memory allow 15,000 temperature logs When power is disconnected, datalogger continue to log temperatures for 120 logs (3 days \* 24 hr interval). 4 USDA cargo sensor ports with Deutsch receptacles (Option supply of 15m (49 LF) long cables with NTC sensor (accuracy +/- 0.15°C (+/-0.27°F)) Telematics (option) to allow two-way communication with controller. Using Global Network Satellite System and Global cellular LTE, 2G, 3G signal) Datalogger can be retrieved via serial port on unit, via SD-card or via Telematics Controller continuously monitor health of system and components, an early indication can trigger a "message" and a critical issues trigger an "alarm" Unit controller has LED that flash red if "Alarm" is active Defrost: To melt ice entering with cargo, and/or from door openings electrical defrost heaters are installed with capacity 4,080 watt @ 460/60Hz and 3,520 watt @ 400V/50Hz. Defrost activates after 2 hour, after that controller monitor coil temperature, and allow upto 48 hour before a timed defrost. Controller monitor between evaporator coil sensor and return air sensor. Dehumidification: Humidity in cargo area can be controlled between 50 and 98 rH%. This is controlled by re-heating the evaporator air with the defrost heaters. Accuracy at rH set-point: 50% to 75%: +/-1.5% 75% to 95%: +/-3.0%