# CSS SuperFreezer

## Temperaturas ultrabajas para las cargas críticas

- Capacidad de refrigeración extrema.
- Mantenga temperaturas ultrabajas de hasta -70°C.
- Proteja las cargas más sensibles y valiosas.
- Esta solución se puede utilizar para transporte terrestre o marítimo, o para almacenamiento.

DATOS TÉCNICOS

| El caudal de aire | |
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| Tipo de unidad | Ultra-Low temperature unit for installation in Reefer containers for stationary applications. All Aluminum "Picture frame". Cascade system with dual refrigeration circuit. R134a with Copeland 3 cylinder compressor. Charge 3.5 kg (7.7 lbs) R23 with Copeland Scroll compressor. Charge 3.2 kg (7.0 lbs) |
| Protección del contenedor | Pressure equalization valve (1400 Pascal / 140 mm WG) to avoid excessive vacuum in the container |
| Rango de puntos de consigna | -70°C to -10°C (-94°F to -14°F) |
| Rango de temperaturas ambiente | -30°C to +37.8°C (-22°F to |

| Características | |
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| Nivel de ruido | 80db (A) in 250 Hz band. Measurement taken in front of the unit 1,5 m distance and 1,2 m above ground, with the unit operating at 50 Hz |
| Certificaciones y estándares de diseño | ISO1496-2 CE ATP AHRI USDA TIR (International Customs Regulations for Containers) |
| Peso de la unidad SuperFreezer | 630 kg (1,390 lbs) |

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| | 100°F) |
| Fuga térmica requerida de compartimento de 3,05 m (10 pies) | 18 Watt/°K @ 20C wall temperature, to ensure set-point at ambient |
| Fuga térmica requerida de compartimento de 6,1 m (20 pies) | 20 Watt/°K @ 20C wall temperature, to ensure set-point at ambient |

| **Capacidad de refrigeración**<br>A una temperatura ambiente de +37,8°C (100°F) | |
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| A un punto de consigna de -60°C (-76°F) | 5,850 watt @ 460V/60Hz 5,086 watt @ 400V/50Hz |
| A un punto de consigna de -70°C (-94°F) | 3,880 watt @ 460V/60Hz 3,344 watt @ 400V/50Hz |
| A un punto de consigna de -30°C (-22°F) | 8,250 watt @ 460V/60Hz 7,112 watt @ 400V/50Hz |

| **Controlador** | |
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| Información general | Advanced Microprocessor MP3000 Emerson Controls Temperature control using 6 NTC sensors Temperature accuracy: +/- 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 |

| **Electricidad** | |
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| Fuente de alimentación | A/C 400 to 500 Volt 3 phase 60 Hz ±2,5% A/C 360 to 460 Volt 3 phase 50 Hz ±2,5% |
| Disyuntor principal | 32 Amp |
| Cable de alimentación: | 18.3 m (60 LF) cable (3phase and ground) with CEE17 power plug (32 Amp; ground 3h) |
| Consumo de energía máximo | 19 kw during "pull down" |

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| | 1 hour interval, and user can change to 30 min, 2 or 4 hr 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). 3 USDA cargo sensor ports with Cannon receptacles (Option supply of 15m (49 LF) long cables with PT100 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, or via Telematics Controller continuously monitor health of system and components, an early indication |

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| | can trigger a "message" and a critical issues trigger an "alarm" Unit controller has LED that flash red if an "Alarm" is active Defrost: To melt ice entering with cargo, and/or from door openings electrical defrost heaters are installed with capacity 8,160 watt @ 460/60Hz and 6,300 watt @ 400V/50Hz. Defrost activate every 6 hours, or per user s controller set-up using temperature difference between evaporator coil sensor and return air sensor. |