Air Refrigeration Unit - ARU

The standalone, independent next generation cooling unit for highly efficient galley cooling



Climbing higher. Together.



Characteristics

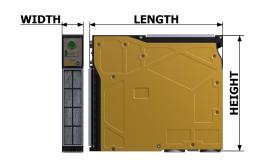
- Provides cooling capacity for up to six trolleys
- Cooling capacity self-controlled in the range from 1000 to 4000 BTU

Benefits

- Simple aircraft installation (few air ducts, no pipes, no pumps)
- Weight reduction
- Low noise emission due to self-controlled performance
- High efficiency (less electrical power)
- Variable frequency
- Designed to be used across all programs
- Retrofittable
- No additional boost fan
- No additional electronics

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Technical Data

DIMENSIONS & WEIGHT			
Length [mm/inch]	Height [mm/inch]	Width [mm/inch]	Weight [kg/lb]
632/25 (maximum)	552/22 (maximum)	100/4 (maximum)	20/44 (maximum)

ELECTRICAL			
Power Supply		115 VAC variable frequency	
Power Consumption [VA]		< 1600	
Power Factor		0.98	
Connector Type		EN 3646 RS7 22 55 FN (signal) EN 3646 RS7 10 06 MN (power)	
Interfaces	I/O	2 x CAN bus 1 x motor driver and control interface 28VDC	
	Inputs	8 x pin programming 6 x temperature sensors, external, digital 3 x temperature selection	
	Outputs	1 x ON indication light 1 x FAULT indication light 1 x temperature warning indication light	

PERFORMANCE DATA		
Cooling Capacity incl. Defrost Cycle	comparable to chillers from 1000 up to 4000 BTU	
Galley Target Temperature adjustable	from 4°C / 39°F to 16°C / 60°F in steps of 2°C / 4°F	
Cooling Performance up to max. Cabin Temp.	32°C / 90°F	
Evaporator Air Outlet Temperature limited to	-2°C / 28°F	
Evaporator Fan Air Volume Flow (through Galley)	120 l/s / 254 cfm (averaged over cooling cycle)	
Evaporator Fan Pressure Rise	650 Pa / 2.6 inch H ₂ O	
Condenser Fan Air Volume Flow	120 l/s / 254 cfm	
Condenser Fan Pressure Rise including inlet filter pressure loss	600 Pa / 2.4 inch H ₂ O	