

Hazardous Area Package Unit HVAC

'Ex' Certified Air Cooled HVAC For Analyzer &
CEMS Shelters Operating In Hazardous Gas Areas



Innovative safety driven IECEx / ATEX certified hazardous area cooling solutions

Hazardous Area Package Unit HVAC



APPLICATIONS

- Analyzer Shelters
- Battery Rooms
- Electrical House
- Accommodation Rooms

TYPICAL DESIGN FEATURES

- IECEx or ATEX Zone 1 Group IIB+H2 T3 hazardous areas
- Single overall certificate of conformity
- Wide range of cooling capacities available. Customized design to specification/requirements.
- Designed for tough environments - up to 54°C Amb. Temp. as standard. R134a refrigerant with zero ozone depletion potential
- All-in-one design integrated control enclosure
- Single point power connection
- Available configured for return air with fresh air make-up or 100% fresh air single pass
- Single point power connection



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TYPICAL CONSTRUCTION FEATURES

- Casing – Galvanised steel powder coated material
- 25mm insulation foil faced in Evaporator section
- Fully hermetic Ex'd certified compressors for maximum reliability and minimum maintenance
- Non-sparking direct drive condenser and ventilation fans
- Air Cooled Condenser Coil – Cu Tube/Al Fins, with Epoxy treatment providing corrosion protection and long service





OPTIONS

- SS304 or SS316 HVAC casing
- Copper finned refrigeration coils
- Project compliant paint & colours
- Increased IP ratings
- Sand filters, bag filters and chemical filters
- Alternate certification and ambient temperature compliance
- Dual refrigeration circuits with staged compressor operation for capacity control

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Typical Specifications/Features

Typical Technical Features (Optional Configurations Available)			
Cooling Capacity	Wide range of cooling capacities available and can be custom designed to specification/requirements.		
Power Supplies. Nom	380-415V/3Ø/50Hz 440-480V/3Ø/60Hz		
Operating Ambient Range. Nom	-20°C to 50°C		
Component IP Rating	External IP55 Internal IP54		
HVAC Casing Material	Galvanised steel 304 stainless steel 316 stainless steel		
HVAC Casing Finish	Polyester powder coat – RAL7032		
Fasteners	Stainless steel		
Trailer Structural Material	Galvanised steel		
Lifting/Handling	Lifting lugs and fork lift tine access for sled-type and caster mount type equipment. Standard Tow ball for Trailer type equipment		
Refrigerant	R134a		
Compressor(s)	Fully hermetic Exd certified scroll compressors Staged operation for capacity control		
Refrigerant Controls	Included – integral to package		
Refrigeration Coils	Copper tube aluminium fins with epoxy treatment for corrosion protection		
Condensate Drip Tray	Stainless steel – includes serviceable P-trap type condensate drain		
Ventilation Fan(s)	Direct or belt drive backward curved centrifugal type Copper guarded non-sparking construction		
Condenser Fan	Direct drive axial polypropylene non-sparking type		
Fan Motors	Ex certified heavy duty TEFC motor		
Return Air Filter	High efficiency washable panel type		
Electrical Enclosure	Fully integrated certified Ex d electrical enclosure suitable for use in the specified hazardous area. Contains all motor control equipment and protection devices		
Electrical Cables	All cables - steel wire armoured connected to Ex enclosures via Ex certified glands. Intrinsically safe cables are identifiable by a pale blue PVC external cover.		
Ex Marking	IECEX: Ex d e [ia] mb IIB+H2 T3 ATEX: II (1) 2 G Ex d e [ia] mb IIB+H2 T3		
Certification		IECEX SIR 11.0155X, Sira 11ATEX1356X	
Australian Refrigeration Council Ltd. Certificate	Authorisation No: AU07408		