

Product 23: Ex-M Z1 Outdoor Series

[Product Photos]

[Short Desc (two Paragraphs)]

The Ex-M Z1 Outdoor Series provides a reliable and adaptable climate control solution specifically designed for hazardous Zone 1 environments. Ideal for high-risk industrial sites such as chemical plants, oil refineries, and other critical facilities, this advanced three-way split system offers maximum safety and flexibility. It includes an MCUA condenser for outdoor use alongside an MMC compressor and compatible evaporator units for indoor application, all ATEX-certified for dependable performance in challenging conditions.

Built to withstand extreme temperatures, the Ex-M Z1 Outdoor Series operates smoothly from -20°C to +42°C with the standard R407C refrigerant and can manage temperatures up to +55°C when equipped with optional R134A refrigerant. The outdoor condenser is available in configurations for either Zone 1 or Zone 2. The compressor and evaporator units can be configured for Zone 2 or safe areas, supporting customized installations based on environmental needs.

[Table Explosion Protection Specs]

EU Directive	2014/34/EU (ATEX114)
ATEX marking gas (indoor unit + compressor)	II 3G Ex h ic nAC IIB (+H2) T4 Gc
ATEX marking gas (condenser)	II 3G Ex h nAC IIB (+H2) T3 Gc
Applied standards	EN 60079-0, EN 60079-11, EN 60079-15, EN 60079-31, EN 60079-36, EN 80079-37

[Key Features Bulletpoints]

- **Certified for Hazardous Zone 1 Environments** – Specifically designed and certified for safe operation in high-risk Zone 1 settings, meeting stringent ATEX requirements.
- **Customizable Outdoor Condenser Configuration** – The outdoor condenser is available in versions for either Zone 1 or Zone 2, allowing flexibility based on specific installation needs.
- **Reliable Operation in Extreme Temperatures** – Built to handle ambient temperatures up to +55°C with optional R134A refrigerant, ensuring dependable performance in hot industrial climates.
- **Flexible Indoor Unit Options** – Available in Wall Mount, DXT, and Cassette models for adaptable indoor installations.
- **24/7 Continuous Operation** – Engineered for round-the-clock climate control, providing consistent, stable conditions essential for sensitive equipment and personnel.
- **Corrosion-Resistant Options** – Available with stainless steel and copper construction for enhanced durability in corrosive or offshore environments.

[Optional features]

- **Corrosion-Resistant Stainless Steel Casing** – Provides added durability for outdoor use in corrosive or harsh environments.
- **Customizable Coil Options** – Choose between copper-to-copper or copper/aluminum coils to optimize performance and longevity based on specific environmental needs.
- **Volt-Free Relay with High-Pressure Switch and Alarm** – Monitors pressure conditions, providing alerts for enhanced safety and operational control.
- **Compressor Noise-Reducing Jacket** – Reduces operational noise, enhancing comfort and safety in noise-sensitive areas.
- **Noise Attenuation Kit** – Additional sound-dampening features for quieter performance in industrial environments.
- **Three-Phase No-Neutral Delta Connection** – Offers industrial-grade power compatibility for demanding applications.
- **Isolator for Safe Disconnection** – Facilitates safe, easy disconnection for maintenance or servicing.

[AC Specs, series name]

Specification	Details
Outdoor Unit Models (Condensers)	Ex-M MCUA 30/1, MCUA 40/1, MCUA 50-80/1, MCUA 90-100/1, MCUA 130-165/1, MCUA 180-200/1
Cooling Capacity (kW)	3.7 - 19.9 kW, depending on model
Temperature Range	-20°C to +42°C with R407C refrigerant; up to +55°C with optional R134A refrigerant
Dimensions (HxWxD)	620x900x511 mm to 1275x1100x636 mm, depending on model
Weight (kg)	22 - 68 kg, depending on model
Indoor Unit Types	Wall Mounted, DXT, and Cassette models available for flexible indoor installations
Compressor Models	MMC 30/2, MMC 40/2, MMC 50-80/2, MMC 90-100/2, MMC 130-165/2, MMC 180-200/2
Power Options	Available in Single-Phase (1Ph) and Three-Phase (3Ph) configurations

[Linked Products: products in the same series]

Series: Ex-M Z1 Outdoor Marine SS316