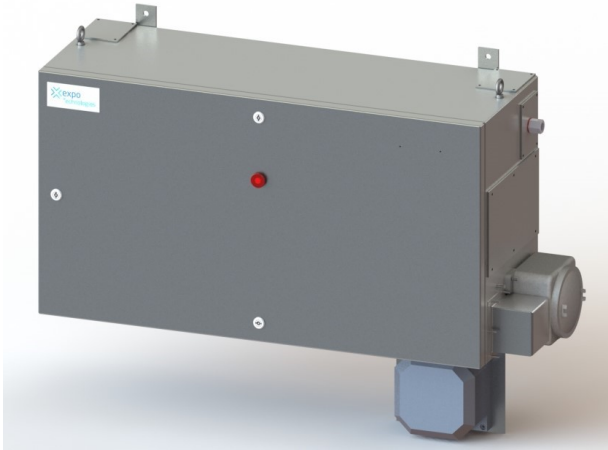


Solutions for very low air temperatures



Advantages

- Packaged solution for air supply for Expo motor purge systems at very low temperatures.
- Suitable for ATEX Zone 1 applications
- Heater power up to 6.4kW
- Flow capacities up to 9,000 NIpm (318 SCFM)
- Local and remote low temperature alarm
- Robust stainless-steel construction

Overview

Expo's low temperature motor purge systems are certified for use in ambient temperatures as low as -60°C (-76°F). However, the compressed air supply temperature can be no lower than -40°C (-40°F).

In cases where the air supply temperature is lower, Expo can supply in-line air heaters that pre heat the incoming air before it enters the purge system.

Specifications

	Size 3	Size 5
Power consumption	2.1 kW	6.4 kW
Air flow rate	500-4,000 NI/m (17-141 SCFM)	1,000-9,000 NI/m (35-318 SCFM)
Dimensions	1100x375x700mm (43.3x14.8x27.6")	1100x675x700mm (43.3x26.6x27.6")
Weight	100Kg	160Kg
Input air temperature	Greater than -47°C (-53°F)	
Ambient temperature	-50°C to $+50^{\circ}\text{C}$ (-58°F to $+122^{\circ}\text{F}$)	
Air pressure	4-7 barg (58-101.5 psi)	
Supply voltage	210-250 VAC single phase	
Explosion protection	ATEX Zone 1, IIC, T3	

Principle of Operation

The pre-heater is designed to elevate and maintain the temperature of purge system air within a specified temperature range. Air is passed through coiled tubes that are heated using self-limiting trace heating cable. This eliminates any risk of over-heating.

Switching of power to the air heater is controlled by a capillary tube thermostat. A second thermostat gives both local and remote alarm signals when the output air temperature drops below a pre-determined value.

This alarm indicates that user intervention may be required to ensure that the temperature conditions of the purge system certificate are maintained, and that safe operation can be continued.

