



ATEX-Air Conditioning Unit

1 Description

Measuring and control instruments (e.g. analyzers) installed in protective cabinets or shelters are often used in hazardous areas of refineries, chemical and petrochemical plants.

2 Application

In hot climate regions, where constant climatic conditions are essential for these sensitive measurements, it is necessary to cool and, in the winter, possibly heat the interior. INTERTEC offers both technologies in one explosion-proof designed unit.

The air conditioning unit has been designed for installation on the external wall of the protective cabinet or shelter. It is suitable for application in the open at ambient temperatures ranging from -35 °C to $+55\text{ °C}$.

Ex-approval allows for application up to zone 1.

The components of the air conditioning unit are accommodated in a corrosion-proof housing made of the same material as the INTERTEC protective cabinets. Thus, it can also be designed to meet antistatic standard to DIN EN IEC 60079-0.



All electric control components are installed in an Ex d housing or can, in the case of air-conditioning an Ex p cabinet, be installed in the explosion-proof interior of the Ex p cabinet.

For custom applications, INTERTEC can supply complete units consisting of an air conditioning unit and a protective cabinet or shelter.

Protective cabinets can also be supplied in Ex p design (see Technical Data SD019...)

3 Technical Data

	2 kW	4 kW
System Design (non control gear)	SLEX 2000W/FKS2-CLM	SLEX 4000W/ FKS4-CLM
Ingress Prot. of Internal Circuit	IP 54	
Ingress Protection of External	IP 55	
Nominal Voltage	400 V...440 V/ 50...60 Hz	
Starting Current	ca. 8 A	16 A
Rated Current	4,5 A	7,8 A
Back-up Fuse	10 A	16 A
Cooling Capacity	Q_0 =ca. 2000 W (35°C/ 35°C)	Q_0 =ca. 4000 W (35°C/ 35°C)
Operating Range	$+20\text{ °C}$... $+45\text{ °C}$; $\pm 2\text{ °C}$	
Refrigerant	R134A/ R407C	R134A
Noise Level	ca. 74 dB(A) at one meter	
Condensate Drain	Automatic (Maintenance-free)	
Housing Material	Reinforced glassfibre polyester GfP (RAL7035), antistatic Painted weather protection hood (optional stainless steel)	
Weight	ca. 120 kg	ca. 175 kg
Dimensions H x W x D	1646 x 466 x 380 mm	1845 x 600 x 451 mm
Condenser Side	At least 500 mm spacing to be provided from the wall	

Explosion Protection

ATEX Examination Certificate	TÜV 06 ATEX 2958
ATEX Type of protection (Gas)	II 2G Ex px mb e IIC T3 (Suitable for Zone 1)
CSA Certificate	CSA File # 1913298
CSA Type of Protection	Class 1, Div. 2, Class 1, Zone 1, Groups A, B, C und D
Ambient Temperature (with Cooling)	-20 °C ... $+55\text{ °C}$
Ambient Temperature (without Cooling)	-35 °C ... $+55\text{ °C}$