



COMPANY: **KOOLAIR**

REPORT: **INTEGRITY TESTING OF ABSOLUTE  
FILTER PLENUM KPA**

Reference: **180287-118**

Date: **JUNE 2018**  
Rev 1 September 2021



**KOOLAIR**

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FEDECAI 122/2017*

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## 1 SUBJECT



This document presents the results of the INTEGRITY TESTING OF ABSOLUTE FILTER PLENUM KPA in the installations of KOOLAIR located in Mostoles (Madrid-Spain)

The inspection was carried out by Ambisalud on June, 2018.

## 2 SCOPE

The test was made to the ABSOLUTE FILTER PLENUM KPA.

## 3 METHODOLOGY

INTEGRITY TESTING		PICTURES
<b>OBJETIVE</b>	Confirm that the filtration system is properly installed. Checking for leaks to confirm that the filter is free from damage in the filter media and the supporting frame is tight.	
<b>VALIDATION CRITERIA</b>	<p>Standard ISO 14644: 3 Test Methods</p> <p>The read from the clean side of the filter concentration should not exceed 0.01% of the detected before the filter to filter H14, H13 , H12 concentration .</p> <p>Filter H11 (99.9% efficiency) concentration on the clean side of the filter should be <math>\leq 0.1</math> % of the detected before.</p> <p>Finally , for H10 filters ( 95% efficiency ) , detected in the clean side of the filter should be <math>\leq 5</math>% concentration of previously</p>	
<b>METHOD</b>	Injecting the aerosol into the air stream before the filter and detect leaks with a photometer in the clean side of the filter performing a sweep of the surface thereof if possible or in the air stream after filtration .	
<b>EQUIPMENT</b>	<p>Particle generator</p> <p>Photometer</p>	

## 4 TEST DOP RESULTS

The ABSOLUTE FIKLTER PLENUM KPA result is:

MODEL	BRAND FILTER	RESULTS					
		PERIMETER FILTER			STAIN AREA FILTER		
		RESULT	STANDARD	ACCORDING	RESULT	STANDARD	ACCORDING
ABSOLUTE FIKLTER PLENUM KPA	ULPATEK	<0,01	<0,01%	YES	<0,01	<0,01%	YES

## 5 CONCLUSION

Ambisalud conducted an Integrity Test in the ABSOLUTE FILTER PLENUM KPA with on June 2018.

The results showed:

Consistently total absence of leakage in the filter media (Result = 0.0000)

Minor leakage in contact between filter and frame (Results < 0.01)

The unit KOOLAIR KPA with KOOL LED tested in the premises of KOOLAIR located in Mostoles (Madrid-Spain) were **CONFORM** to the Standard ISO 14644. 3

**NOTE.** This certificate does not expire provided the construction characteristics of the units remain unmodified.

## ANNEX I: CERTIFICATES OF QUALITY AND ENVIRONMENTAL



AMBISALUD CALIDAD AMBIENTAL, S.L.  
 CALLE VELAZQUEZ nº 100 4ºZ - Madrid  
 28006 - Madrid

### ACTA DE EMPRESA MANTENEDORA DE INSTALACIONES TERMICAS EN EDIFICIOS

REGISTRO INDUSTRIAL: 201054  
 FECHA DE CADUCIDAD: Indefinida

EMPRESA	AMBISALUD CALIDAD AMBIENTAL, S.L.					
REPRESENTANTE LEGAL	POLICARPO GONZALEZ DEL VALLE DE LA BRENA					
DOMICILIO LEGAL	CALLE VELAZQUEZ nº 100 4ºZ - Madrid (28006 - Madrid)					
N.I.F. O C.I.F.	B84605569	TIF.fje	914170428	TIF.mov	620265628	E-mail

#### ACTIVIDADES QUE AMPARA

13-B-E20 - Instalaciones Térmicas de Edificios
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**NOTA:** La empresa es responsable de mantener en vigor en todo momento todos los requisitos exigidos en la normativa aplicable a la actividad y de comunicar a la Dirección General de Industria, Energía y Minas las modificaciones de los datos presentados.

Madrid, 03 de Julio de 2013

FI. JFFE DE AREA DE INSTALACIONES INDUSTRIALES Y  
 CAPACITACION REGLAMENTARIA

Fdo: José Manuel Garayalde Brea





# AENOR

## Certificado del Sistema de Gestión de la Calidad



**ER-0814/2009**

AENOR certifica que la organización

### **AMBISALUD CALIDAD AMBIENTAL, S.L.**

dispone de un sistema de gestión de la calidad conforme con la Norma ISO 9001:2008

para las actividades: La inspección básica de calidad ambiental en interiores.  
La validación de quirófanos y salas de ambiente controlado en centros hospitalarios.

que se realizan en: OFICINAS. CL VELAZQUEZ, 100 3º. 28006 - MADRID

Fecha de primera emisión: 2009-07-17  
 Fecha de última emisión: 2015-07-17  
 Fecha de modificación: 2017-08-23  
 Fecha de expiración: 2018-07-17

Rafael GARCÍA MEIRO  
Director General

AENOR INTERNACIONAL S.A.U.  
 Génova, 6. 28004 Madrid. España  
 Tel. 91 432 60 00.- www.aenor.com





THE INTERNATIONAL CERTIFICATION NETWORK  
**CERTIFICATE**

IQNet and  
AENOR  
hereby certify that the organization

**AMBISALUD CALIDAD AMBIENTAL, S.L.**

OFICINAS.  
CL. VELAZQUEZ, 100 3º  
28006 - MADRID

for the following field of activities

Basic indoor air quality inspection.  
Validation of operating theatre and controlled indoor environment in hospitals.

has implemented and maintains a

**Quality Management System**

which fulfills the requirements of the following standard

**ISO 9001:2008**

First issued on: 2009-07-17

Last issued: 2017-08-23

Validity date: 2018-07-17

*Registration Number: ES-0814/2009*



  
Michael Drechsel  
President of IQNet

  
Rafael GARCÍA MEIRO  
Chief Executive Officer

**AENOR**

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# AENOR

## Certificado del Sistema de Gestión Ambiental



**GA-2013/0111**

AENOR certifica que la organización

### **AMBISALUD CALIDAD AMBIENTAL, S.L.**

dispone de un sistema de gestión ambiental conforme con la Norma ISO 14001:2004

para las actividades: La inspección básica de calidad ambiental en interiores.  
La validación de quirófanos y salas de ambiente controlado en centros hospitalarios.

que se realizajn en: OFICINAS. CL VELAZQUEZ, 100 3º. 28006 - MADRID

Fecha de primera emisión: 2013-04-02  
 Fecha de última emisión: 2015-07-17  
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which fulfills the requirements of the following standard

**ISO 14001:2004**

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Last issued: 2017-08-10

Validity date: 2018-07-17

*Registration Number: ES-2013/0111*



  
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 President of IQNet

  
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 Quality Austria Austria RR Russia SII Israel SIQ Slovenia SIRIM QAS International Malaysia  
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**ANNEX II: CERTIFICATES OF CALIBRATION**