

ISO 16890:2016 - AIR FILTER TEST RESULTS

Testing organization

Name:

Politecnico di Torino - DENERG

Address:

Corso Duca degli Abruzzi, 24 - Turin - Italy

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GENERAL	LIER IESI	RESOLIS	Phone:	+39 01	11 090 44 00					
	I'V	late of report:	15/11/2017		Supervisor: Basts	Tronville				
Report no.: 10/2017 Test(s) requested by Expansion Electronic		Date of report: 15/11/2017 c S.r.l Device obtained:			Supervisor: Paolo Tronville					
DEVICE TESTED		J.I.I Devi		Filter supplied by the customer						
Model: XFE 600 (S/N 70322	(01501) N	lanufacturer:	Expansion E	ic S.r.l Construction	r.l Construction: Electrostatic precipitator					
Type of media: N/A	N	Net effective media area [m²]: N/A			Filter dimensions (W x H x D) [mm]: 592 x 592 x 218					
Filter/media electrostatic cha 8300 V DC (Wires) - 5600 V DC (	IN	Media colour: N/A			Media adhesive: N/A					
TEST DATA AND ATTACHED TEST REPORTS										
Test air flow rate [m <sup>3</sup> /s]: Test r		ort to ISO 16890-	2	Report no.: 10/2017-1						
0.9444 Test		ort to Eurovent 4	/21	Report no.: 10/2017-EU4/21						
RESULTS										
nitial pressure differential [Pa]: 64		restance [%] N/A	ePM <sub>1,min</sub> 70%	[%]:	ePM <sub>2.5,min</sub> [%]: 75%	ISO rating				
Final pressure differential [Pa]: Tes		lust capacity [g]: N/A	ePM <sub>1</sub> [%]: 70%		2.5 [%]: <i>ePM</i> 10 [%]: N/A	ISO <i>ePM</i> <sub>1</sub> 70%				
0 50	Te 100	1.0 Particle size [µm Curve 2 est dust captured 150 200  0.6 0.8 Airflow rate [m³/	250 250 1.0	300	10.0 Cor  10.0 A  350  Press fun r	Curve 1 I fractional efficiency  E;  (ISO 16890-2)  Curve 2 Inditioned fractional efficiency E <sub>D,i</sub> (ISO 16890-4)  Curve 3  Verage fractional efficiency E <sub>A,i</sub> (ISO 16890-1)  Curve 4  sure differential as a action of the airflow rate (Clean filter)  (ISO 16890-2)  Curve 5  sure differential as a ation of the test dust captured  (ISO 16890-3)				

NOTE: The results of this test relate only to the test device in the condition stated herein. The performance results cannot by themselves be quantitatively applied to predict filtration performance in all "real life" environments.

The Laboratory Manager



This report must not be reproduced without the written approval of the Head of the Department. This test report is made up of twenty pages and it should be used as a whole. The report applies to the tested device only.



**EUROVENT 4/21 - RESULT SUMMARY** 

Testing organization

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GENERAL			I								
	Test ID: 10/2017-EU4/21			Date of test: 13/10/2017			Operator: SC				
	mation			Airflow measurement:			Test sample obtained:				
Manufacturer:	Mod	lel: Coi	ncidence valu	e [p/dm³]:	[p/dm³]: Orifice		nlato		Filter	Filter supplied by the	
N/A	N/A	A	N/A		Office			s plate		customer	
DEVICE TESTED											
Model: XFE 600 (S/N 7032201501)		Manufacture	nsion Electronic S.r.l			Construction: Electrostatic precipitator					
Type of media:	N/A		Net effective	<sup>2</sup> ]: N/A Filter d			dimensions (W x H x D) [mm]: 592 x 592 x 218				
Filter/media electrostatic charge: 8300 V DC (Wires) - 5600 V DC (Plates)		Media colour	N/A Med		Media	ledia adhesive:		N/A			
Device condition:	Conditi	oned per ISC	16890-4								
Other descriptive inf	ormatio	n: N/A		41							
TEST DATA SUMM	IARY										
Test airflow rate [m³/s]: Test air temp		perature [°C]:	Test air RH	Test air RH [%]:		Test aerosol:		Loading dust:			
0.9444 20.6		- 21.7 44 - 46		N/A		ISO 12103 - 1 A2 FINE Dust					
RISULTATI											
Resistance to airflow [Pa]				,	Yearly		energy				
Measured		Measured	60	kep	consumption [l			l lest dust		dust capacity [g]	
initial:	2	final:	62	1.94	702		02	N/A		N/A	
			Te	est device pho	to				L		
		TO AND	19 grant and an order		,		No. of the last				
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				1	WEEKSE	ENGER LINE WENT WAY	************				
\$5550000000000000000000000000000000000					<b>医乳腺性性</b> 原			THE RESERVED IN		林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林林	

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The Laboratory Manager

P. Tronville