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TESTING EUROPE

T1-51

DUST CHAMBER WxDxH 700X1100x600 mm

KEYWORDS

DUST CHAMBER, IEC 60529, 60068-2-68 La2, 61558-1, 61386-23, 60598-1, BS EN 60529, IS 12063, IS 13947, ANSI.

COMPLIANCE

T1-51 DUST CHAMBER WxDxH 700X1100x600 mm is designed and manufactured in compliance with IEC 60529, 60068-2-68 La2, 61558-1, 61386-23, 60598-1, BS EN 60529, IS 12063 and IS 13947

INTRODUCTION

T1-51 DUST CHAMBER WxDxH 700x1100x600 mm is intended for determining the degree of protection against harmful deposits of dust (IP5X) and against ingress of dust (IP6X). Dust protected enclosures to numeral 5 allow a limited quantity of dust to penetrate under certain conditions. Dust-tight enclosures to numeral 6 do not allow any dust to penetrate.

MAIN FEATURES

- Solid steel framework – floor standing on 4 rubber shock-absorbing feet
- Stainless steel interior AISI 304, mirror polished
- Stainless steel funnel
- Two vibrators on funnel sides to prevent dust deposits
- Timer for triggering funnel vibrators
- Heaters on funnel sides for dust drying
- Mesh product shelf stainless steel
- Galvanized steel exterior, structural varnished
- Cable port on left wall
- Easy-access full-size door with viewing wiper
- Removable dust tray – the dust does not fall on the floor when you open the door
- Vacuum connector on right wall with 3 different size connectors
- Depression turbine with brushless motor – adjustable speed
- Big easy cleaning filter removes the dust from vacuum circuit protecting the instruments
- Dust circulating turbine with brushless motor – adjustable speed
- Two air flow totalizers to cover hole range of airflows, each with its own activation valve
- Depression sensor with instrument in mbar
- Timer for programming chamber operation
- Talcum powder 20kilos included

DESCRIPTION

Dust chamber is a floor standing apparatus. Basic unit, in which is test cabinet, is equipped with sealed, lockable, full-size glass door with wiper, grid and consoles for sample mounting, entry port for possible sample supplying on the left wall and vacuum connection on the right wall. Three different vacuum connector inserts are enclosed, so that it is possible to connect the sample with one of three different size vacuum tubes. Smaller sized samples are usually connected with small diameter hose, larger with bigger diameter hose. Below the sample carrying grid is the funnel with a vibrators, which prevent excessive dust depositing on the walls and protective wire mesh on the hinge, which can be lifted for dust removal and/or exchange. On the bottom of the funnel is dust circulation turbine, which together with the vibrator assures suspension of dust in the test cabinet. On the bottom of the funnel and on its sides are also located heaters with thermostat for drying the dust.

Besides the dust circulation turbine there is also depression turbine, which draws the air out of the sample during the IP6X tests. Both turbines have brushless motors with magnets, electronic control and protection, which ensures their durable operation. The air is drawn out of the sample, through vacuum connection on the wall, through the filter, digital depression meter that is needed to control max. allowable depression in the sample and through one of the two selected air flow totalizers, that measure the quantity of air drawn through the sample, as requested in the standard. Two are needed to cover whole range 0,016 – 10 m3/h, depending on the size and condition of the sample. To select the relevant air flow totalizer each is equipped with its own selection valve.

There is another filter that is connected to pressure equalizing outlet in the chamber.

On the right side of the basic unit is located control box on the front plate of which are located all elements for controlling the operation of the chamber. On the top of it are depression instrument, depression turbine switch and potentiometer, by which the requested depression of 20 mBAR can be adjusted (if the sample allows it). There are also switch and potentiometer for control of dust circulation turbine, switches for heater and light control, push button for additional manual triggering of vibrator (otherwise it is controlled by internal timer), timer for automatic on/of switching of chamber. Beneath is a selector switch for enabling or disabling the timer and vibrator and start and stop push-buttons and switch for activating the power supply. It is also possible to adjust pause and activation times of vibrators by potentiometers that are located inside the control box.

DESIGN

Test cabinet with funnel is made of stainless steel AISI 304 (DIN W. No. 1.4301 X5CrNi18-10) http://en.wikipedia.org/wiki/Stainless_steel, doors are made of glass. It stands on four heavy duty rubber shock-absorbing screw legs which enable levelling of chamber. Housing is made of galvanized steel, non-sensitive, scratch-resistant surfaces through powder-coating RAL 7035.

TECHNICAL SPECIFICATION

Line voltage	U = 220V, 50 Hz (other optional)
Power consumption	max. 3000 VA
Heater	150 W
Depression turbine	1100 VA
Dust circulation turbine	1100 VA
Air flow totalizer 1	0,06 – 10 m3/h ±3% for flow from 0.06m3/h to 0.12m3/h ±2% for flow from 0.12m3/h to 10m3/h
Air flow totalizer 2	0,016 – 6 m3/h, ±3%
Depression sensor	Huba-Control 694.917015010 0-50 mbar = 4-20 mA max. permissible 200 mbar
Depression instrument	DAT-CON DI-10 accuracy 0,5%
Timer	ELIWELL EWTS 950, 0-9999 h

External dimensions	Width	950 mm
	Depth	1245 mm
	Height	1745 mm
Inner dimensions	Width	800 mm
	Depth	800 mm
	Height	900 mm
Weight	240 kg	

OTHER CONDITIONS

Warranty: 2 years
Support by E-mail: support@testing.si
On line Skype VIDEO support: Testing_support, matejsimonic

We will be glad to help you and to hear any feedback from you.