

Circulating unit

CIRCULATING UNIT (CU) FOR HEAVY SUSPENDED CEILING

Circulating units are used to supply filtered air to a workplace and to protect the product from ambient contamination. The design of the circulating unit, together with suitable regulation, provides uniform laminar airflow at the outlet under the unit, with the required speed in the range of $0.3 \div 0.45 \text{ m.s}^{-1}$ (when air density $\rho = 1.2 \text{ kg.m}^3$).

The circulating unit is usually installed in the grid of the heavy FOR CLEAN suspended ceiling. To stabilize the laminar flow, it is recommended to install flexible or fixed screens along the perimeter of the unit, attached to a separate suspension grid structure. When installing the circulating unit in areas without a defined class of cleanliness or in an environment with increased dust generation, a pre-filter is mounted at the suction inlet of the unit.

MORE INFORMATION, PHOTOS



TECHNICAL DATA

Type

circulating unit (CU) for heavy suspended ceiling

A, B, etc. - number of product change

Number of CUs in a standard laminar field for one controlling device

layout must be documented in a drawing

HEPA filter material and seal

MDF frame with rubber seal

aluminium filter with rubber seal

HEPA filter filtration class

H13 class filtration - H13 class filter is supplied with a height of 69 and 115 mm

H14 class filtration - H14 class filter is supplied with a height of 115

HEPA filter dimensions

1180x555x69 (H13 only)

1180x555x115 (H13, H14)

Outlet design

laminarizator (attached to separate facing which is anchored to supporting profiles of heavy suspended ceiling)

perforated metal sheet (attached to separate facing which is anchored to supporting profiles of heavy suspended ceiling)

only an expanded metal grille at filter - standard

Fan and motor type

fan 355 with EC motor and integrated electronics, low pressure

CU dimensions (WxDxH)

380 mm

WxDxH - W = width, D = depth, H = Height without pre-filter and electrical equipment box (mm). CU dimensions (mm) 1250x625, CU height (mm) without pre-filter and electrical equipment box 335 and 380 mm.

Regulation method

manual continuous regulation without feedback

automatic continuous regulation with feedback

Control

control from COP

control from COP and foil keyboard

foil keyboard

control panel with switches

Air velocity indicator

airflow indication - only when controlling via foil keyboard (still under development)

without airflow indication

Lighting - only for the laminarizator version

without lighting

Suction method

upper suction with pre-filter - filtration class G3

suction without pre-filter via HVAC superstructure with upper round neck

suction without pre-filter via HVAC superstructure with upper square neck

suction without pre-filter via HVAC superstructure with side rectangular neck

Shape of laminar flow field

long rectangle connected with short sides

short rectangular array

L-shaped array - screens and covering must be documented in a drawing

rectangle - 1 unit or array connected only with longer sides

Locations of holders of screens and additional covering - also applies to laminar fields (except for L-shapes)

screens at side, front, side side

screens along the whole perimeter of the unit

screens at front, side, rear side

screens at front and left side (front side is longer), same as rear and right side

screens at front and right side (front side is longer), same as rear and left side

screens at front (longer) side

screens and covering not specified

Height of expanded-metal covering to the suspended ceiling

always without covering

Screens

without screens

flexible slat screens

fixed screens

flexible antistatic slat screens

fixed antistatic screens

Screen length

length of screens in mm (min. length of screens 250 mm)

Material and surface finish

steel sheet class 11, hue RAL 1015, 5% extra charge

steel sheet class 11, hue RAL 6027, 5% extra charge

steel sheet class 11, hue RAL 9002, 5% extra charge

steel sheet class 11, hue RAL 9016

aluminium without surface finish

aluminium with anodized surface - white (for an extra charge, by agreement with the customer)

aluminium with anodized surface - grey (for an extra charge, by agreement with the customer)