

Forclean - Circulating unit

CIRCULATING UNIT (CU) TO BE INSTALLED BELOW SUSPENDED CEILING OR ONTO MOVABLE BOX



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 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 protective effect is enhanced by attaching flexible or fixed screens along the perimeter of the unit.

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.

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S1: Type

110.04: circulating unit (CU) to be installed below suspended ceiling or onto movable box

A, B etc. - number of product change

S2: Number of CUs in the laminar field for one controlling device

1 ÷ 9 : layout must be documented in a drawing

S3: HEPA filter material and seal

G: aluminium filter with gel seal

P: aluminium filter with rubber seal

S4: HEPA filter filtration class

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

14: H14 class filter is supplied with a height of 91, 105, 115 and 130 mm

S5a: HEPA filter dimensions - rubber filters (P)

01: 965x555x69 (H13 only)

02: 965x555x115 (H13, H14)

03: 1180x555x69 (H13 only)

04: 1180x555x115 (H13, H14)

S5b: HEPA filter dimensions - gel filters (G)

21: 965x555x80 (H14 only)

22: 965x555x105 (H14 only)

23: 965x555x130 (H14 only)

24: 1180x555x80 (H14 only)

25: 1180x555x105 (H14 only)

26: 1180x555x130 (H14 only)

S6: Outlet design

L: perforated metal sheet

P: laminarizator

S7: Fan and motor type

02: fan 355 with EC motor and integrated electronics, low pressure

S8: CU dimensions (WxDxH)

WxDxH - W = width x D = depth, H = Height without pre-filter and electrical equipment box (mm)

S9: Regulation method

P: manual continuous regulation without feedback

U: automatic continuous regulation with feedback

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S10: Control

C: control from COP
E: control from COP and foil keyboard
F: foil keyboard
P: control panel with switches
V: one switch - only for movable laminar boxes

S11: Air velocity indicator

I: airflow indication - only when controlling via foil keyboard (still under development)
O: without airflow indication

S12: Lighting - only for the laminarizator version

L0: without lighting
L1: with fluorescent lighting

S13: Suction method

H1: upper suction without pre-filter with cover
H2: upper suction with pre-filter - filtration class G3
S1: bottom suction from room without pre-filter
S2 : bottom suction from room with filtration fabric - filtration class G3
V1: suction without pre-filter via HVAC superstructure with upper round neck
V2 : suction without pre-filter via HVAC superstructure with upper square neck
V3: suction without pre-filter via HVAC superstructure with side rectangular neck

S14: Shape of laminar flow field

D: long rectangle connected with short sides
K: short rectangular array
L: L-shaped array - screens and covering must be documented in a drawing
O: rectangle - 1 unit or array connected only with longer sides

S15: Locations of holders of screens and additional covering - also applies to laminar fields (except for L-shapes)

BPB : screens at side, front, side side
OBV: screens along the whole perimeter of the unit
PBZ: screens at front, side, rear side
PLE: screens at front and left side (front side is longer), same as rear and right side
PPR: screens at front and right side (front side is longer), same as rear and left side
PRE: screens at front (longer) side
ZDN: screens and covering not specified

S16: Height of expanded-metal covering to the suspended ceiling

000: without covering
200÷999 : height of covering (between upper edge of CU and suspended ceiling) must not be less than 200 mm

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S17: Screens

Z0 : without screens

Z1 : flexible slat screens

Z2: fixed screens

Z3: flexible antistatic slat screens

Z4: fixed antistatic screens

S18: Screen length

od 0250 : length of screens in mm (min. length of screens 250 mm)

S19: Material and surface finish

N4F8: stainless steel AISI 304 FIN 8

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

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

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

9010: steel sheet class 11, hue RAL 9016