CD 2000



The bipolar corona discharge CD 2000 is used to neutralize the charge of a dust or liquid aerosol or even to electrically charge it, as required. For this purpose, a current is set on the positive and negative high voltage source so high that it is still entirely conducted through the corona discharge generated at the tip in the corona chamber, but no (or few) sparks are generated. This current is programmed via the current limitation of the HV power supplies. The voltage limitation is set slightly higher than is necessary for the current determined, such that this current flows under all circumstances (temperature, condition of the electrode). The positive and the negative high voltage supplies and the CD 2000 are independent of one another and are independently adjustable.

Benefits

- No operation license is required for radioactive instruments
- Bipolar discharge through negative and positive ions
- Applicable for solid and liquid aerosols
- Robust design
- Simple operation
- Reliable function
- Low maintenance
- Reduces your operating expenses

Applications

- Discharge of electrically charged aerosols
- Aerosol research
- Filter testing

Model Variations



CD 2000 Type A
Version with lower mixed air flow
https://www.palas.de/en/product/cd2000a



CD 2000 Type B
Version with higher mixed air flow
https://www.palas.de/en/product/cd2000b

DATASHEET

Reported data	Voltage: 0 – 6,000 V $\hat{=}$ 0 – 10 VPwer: 0 – 1,000 μA $\hat{=}$ 0 – 10 V
Volume flow (mixed air)	Type A: for 2 – 18 m^3/h, type B: for 3 – 36 m^3/h
Volume flow (suction flow)	0 – 4 m^3/h
Power supply	115 – 230 V, 50/60 Hz
Power consumption	50 W
Aerosol outlet connection	Aerosol and fed mixed air, $Ø_{inside}$ = 12 mm, $Ø_{outside}$ = 16 mm
Mixed air connection	Cleaned pressurized air, type A: $Ø_{inside}$ = 6 mm, $Ø_{outside}$ = 8 mm, type B: $Ø_{inside}$ = 13 mm
Operation principle	Ionization with corona
Mains fuse	F 3,15 A, 250 V
Aerosol inlet connection	$Ø_{inside}$ = 6 mm,Øoutside= 8 mm
Special features	Positive and negative high voltages are provided by two independent power supplies, maximum voltage: ± 6,000 V, maximum power: ± 1,000 μA