



**2050-2, -3, -4**





## **2050-2, -3, -4 Ionised Air Blowers**

### Operating Instructions

# 2050 Ionised Air Blower

## Installation and Maintenance Instructions

*It is important that these instructions are read and understood before installing or operating this equipment.*

### System: How it Works

The 2050 series of multi-fan Ionised Air Blowers are compact static eliminators which has been designed for use in a wide range of application in industry - from general electronics and clean room applications to plastics, packaging, food and medical applications.



### Checking on Delivered Equipment

The equipment leaves our factory in suitable protective packaging. Please check that it is in good condition when it arrives. If there is visible damage contact the factory or one of our distributors immediately, before carrying out any installation.

Check that the parts which have been received are the same as you have ordered.

Loose parts:            Body of Blower with swivel mounting brackets  
                              Power Supply for 100V - 240V 47-63Hz + IEC connector  
                              Earth wire - should be connected to earth connector  
                              Optional Filters

## Electrical

The Blower is powered by 12V DC. A 12V power supply is provided with each Blower for connection to a 100-240V AC, 47 - 63Hz supply.

Connect the AC Power Supply to the 12V socket on the reverse of the Blower and to the mains electricity supply. The supply must have an earth. The power supply has a small green light to show the presence of electricity.

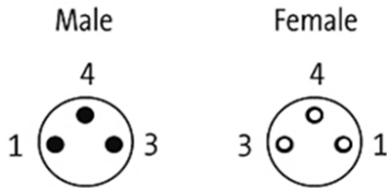
It is possible to supply 12VDC direct from the machine's controls.

Important: the 0V line must also be connected to a good earth/ground.

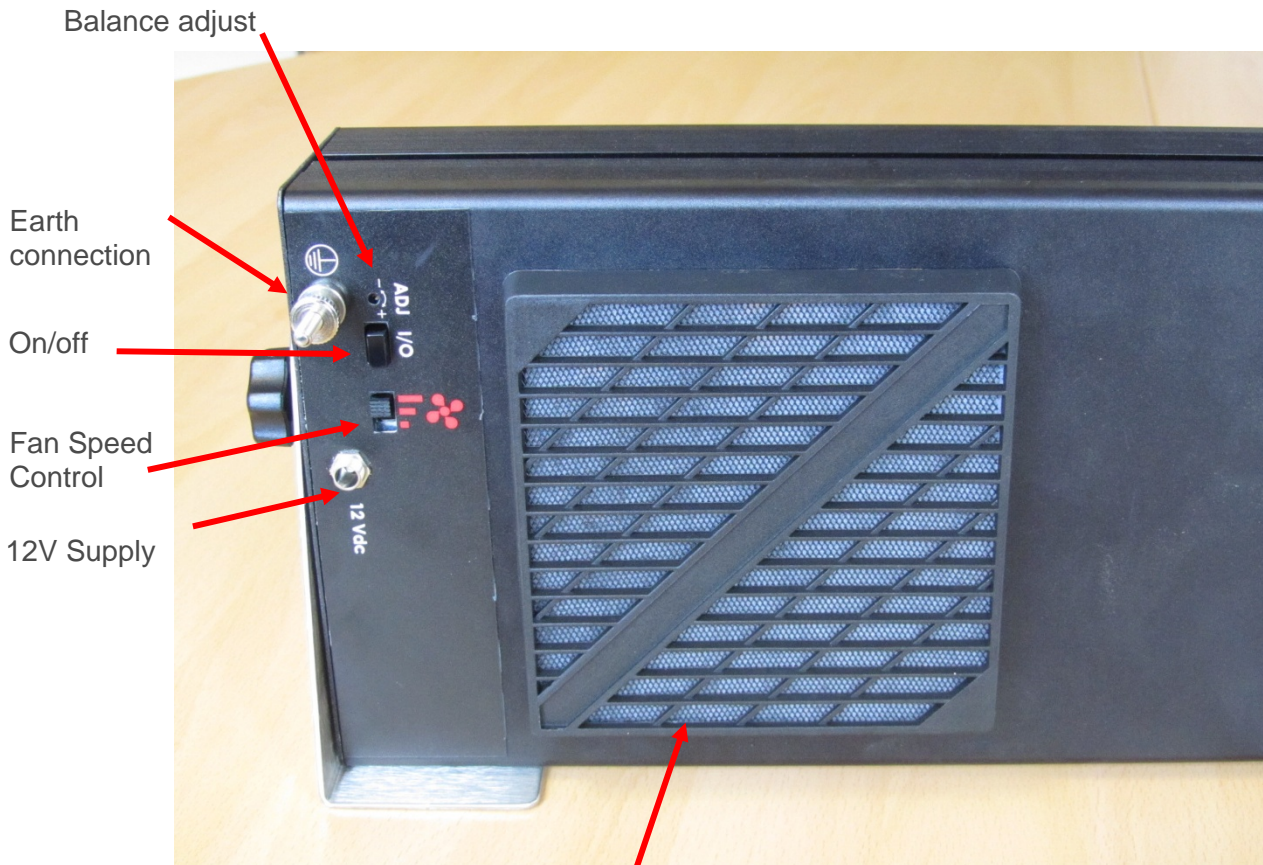
The connector on the Blower is a 3-Pole M8 male flange plug. It is compatible with 3-Pole M8 female cable mounted connectors such as:

**Lumberg** part number: **RKMV 4-07/xM** ( x = 2,5,or 10 )

**Murr** part number: **7000-08061-611xxx** ( x = 150, 300, 500, 750 )



Pin	Colour	Function
1	Brown	Not used
3	Blue	0V + Earth
4	Black	12V



Optional Filter with removable and replaceable filter elements.

## Operation and Performance

The 2050 is ready for action.

The Controls are shown above.

The optional fan filters contain two filter elements - a mesh filter and a non-woven filter. A filter reduces airflow, which in turn reduces performance. If both filter elements are used the performance of the Blower will be much less than a Blower without a filter.

Please contact factory for performance specification.

## Operation Continued.

**On-Off:** Push Button. The operation LED initially turns red, then after one or two seconds it turns green to show System OK.

**Fan Speed:** 3 Speed selection

High Speed	= up to 170m <sup>3</sup> /hour per fan
Medium Speed	= approx. 100m <sup>3</sup> /hour per fan
Low Speed	= approx. 50m <sup>3</sup> /hour per fan

**Balance Control:** The electrical balance is factory set to +/- 10V and should stay within a +/- 30V range. If balance is critical to the application, it should be checked with a charge plate monitor or similar equipment. The balance adjustment is with a 2mm screwdriver.



Operation LED  
Green: Systems OK  
Red: Fault

## Technical

Noise: Low Speed 45dB for 1 fan  
High Speed: 56dB for 1 fan

Humidity: max. 70% non-condensing

## Maintenance and Cleaning

***IMPORTANT: Do not touch the emitters whilst the unit is turned on. The 2050 Blower should be turned off before any maintenance or cleaning. There are no user serviceable parts in the 2050 Blower and it should not be opened as there is a danger of electric shock. If there is a fault or query—contact the factory or an authorised distributor.***

Emitters will have a long life but must be kept clean to maintain performance and balance. Use a soft plastic brush to remove dust and contaminants from the tips.

## Health and Safety

***IMPORTANT: Do not touch the emitters whilst the unit is turned on. The 2050 Blowers should be turned off before any maintenance or cleaning.***

***There are no user serviceable parts in the 2050 Blower and it should not be opened as there is a danger of electric shock. The warranty will be void if the customer opens the Blower or attempts to make repairs. If there is a fault or query - contact the factory or an authorised distributor.***

The 2050 Blower contains electricity at a high voltage and should be treated with care.

The emitters in the Blower are resistively coupled in series with the 6kV high voltage source but they are not shockproof and should not be touched with any conductive parts. A soft plastic brush is recommended for cleaning.

The ozone emission from the high voltage discharge is less than 0.1ppm and within International Standards.

We know of no other health hazards attributable to this equipment.

## **EC Declaration**

We confirm that this equipment has been tested and conforms to the following EC Directives:

89/336/EEC (Electromagnetic Compatibility)

72/23/EEC (Low Voltage Directive)

and is entitled to display the CE Mark.

## **Spare Parts:**

Fan: EBM Pabst 4412F. Fraser part 80606

Filter Elements: EBP Pabst FP120T Fraser part 80794

### **Fraser Anti-Static Techniques Ltd**

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