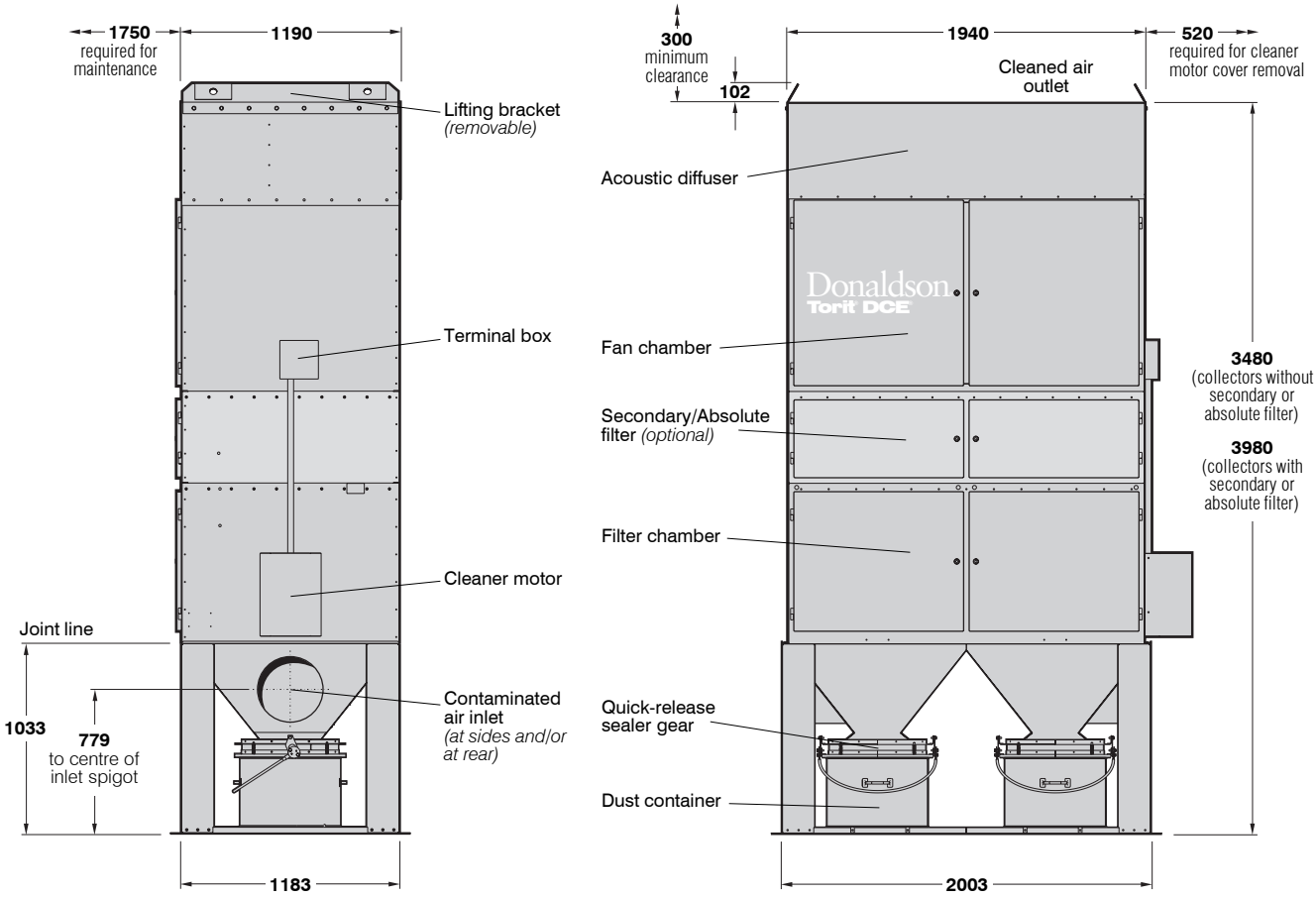
Unimaster Dust Collectors

Series UMA 750



UNIMASTER DUST COLLECTOR WITH DUST CONTAINERS

Suitable for inside locations

SPECIFICATIONS

Type	Filtration area	Inlet spigot (inside dia.)	Fan	Motor rating	Dust container (x2)	Net weight (approx.)
UMA 756	70 m²	⌀ 355 mm	K15 K18 K21	11.0 kW 15.0 kW 18.5 kW	80 litre	1185 kg* 1200 kg* 1305 kg*

*Increase weight by 193 kg for collectors with secondary or absolute filter

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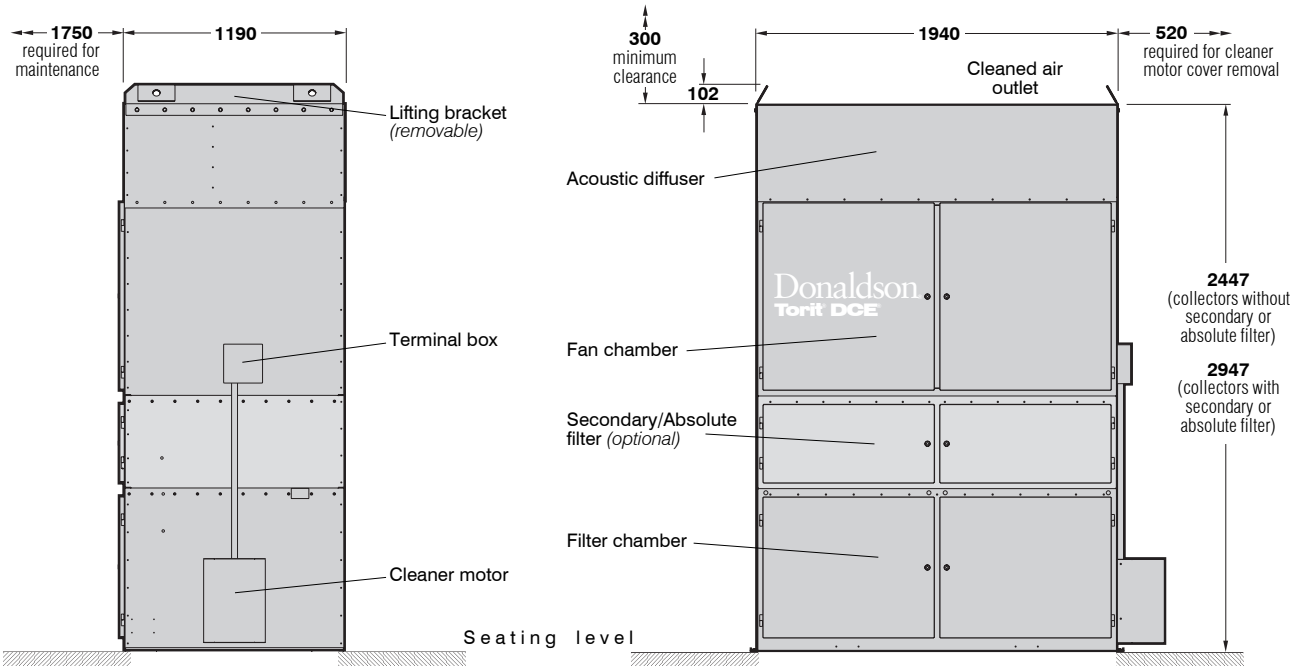


SIDE ELEVATION

FRONT ELEVATION

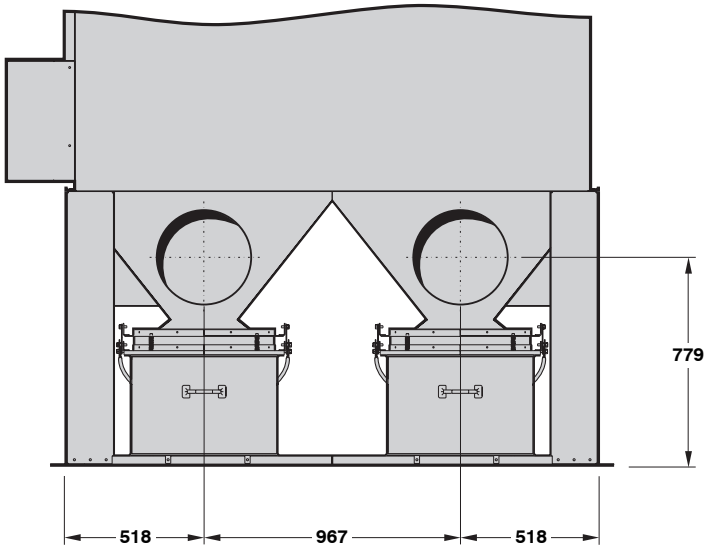
UNIMASTER HOPPER TYPE DUST COLLECTOR

Suitable for inside locations

SPECIFICATIONS

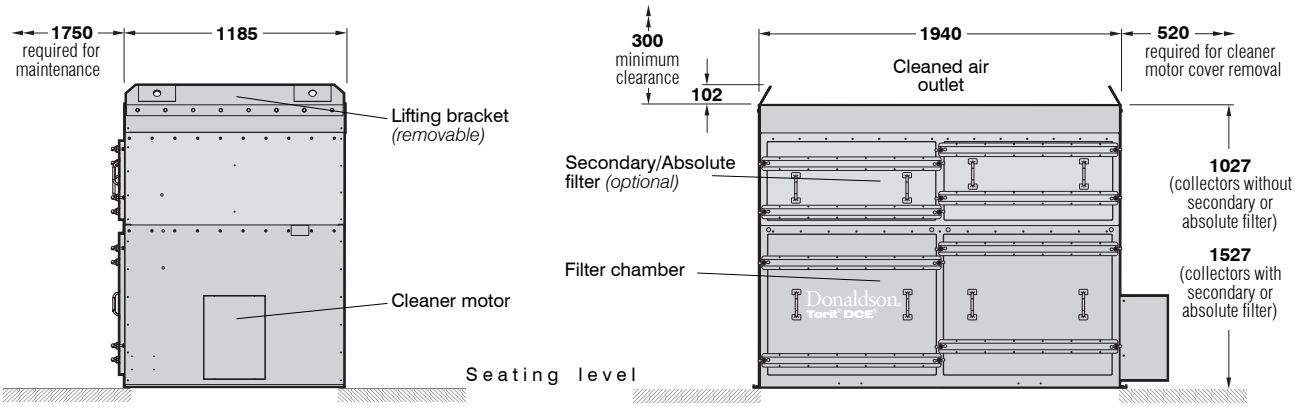
Type	Filtration area	Fan	Motor rating	Net weight (approx.)
UMA 750H	70 m²	K15 K18 K21	11.0 kW 15.0 kW 18.5 kW	1000 kg* 1015 kg* 1120 kg*

*Increase weight by 193 kg for collectors with secondary or absolute filter



REAR ELEVATION

POSITION OF REAR CONTAMINATED AIR INLETS



SIDE ELEVATION

FRONT ELEVATION

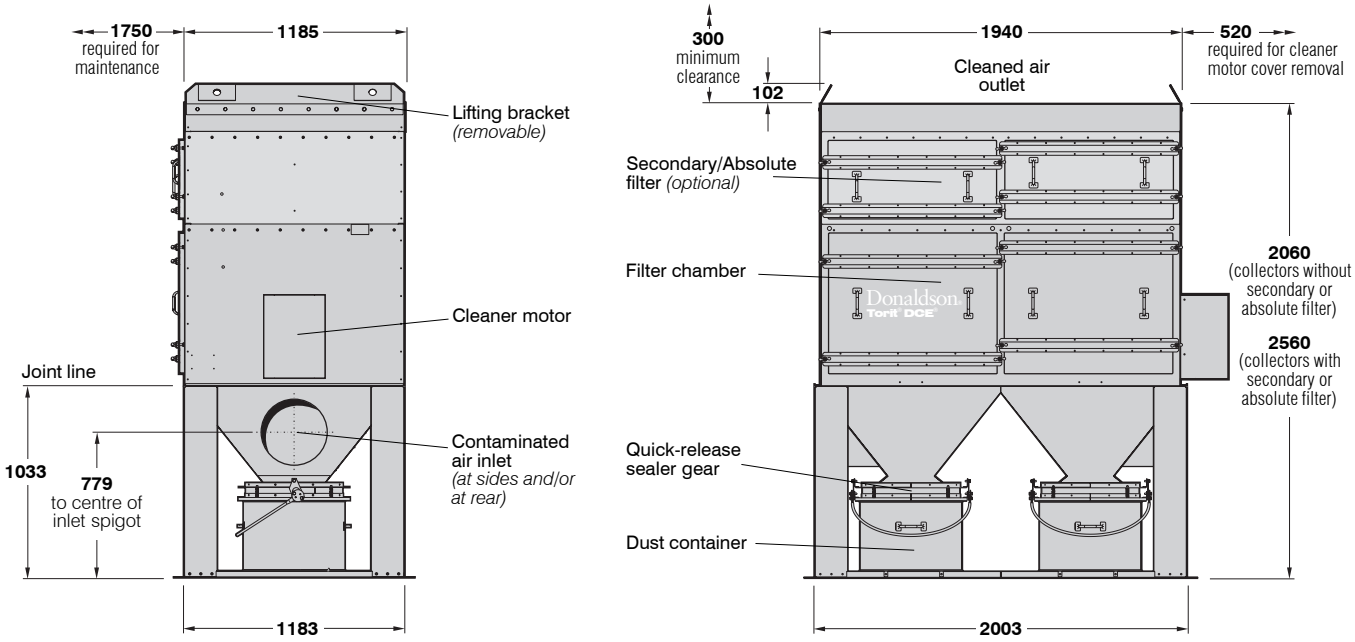
UNIMASTER VENTING TYPE DUST COLLECTOR

Suitable for inside locations

SPECIFICATIONS

Type	Filtration area	Net weight (approx.)
UMA 750V	70 m²	467 kg*

*Increase weight by 193 kg for collectors with secondary or absolute filter



SIDE ELEVATION

FRONT ELEVATION

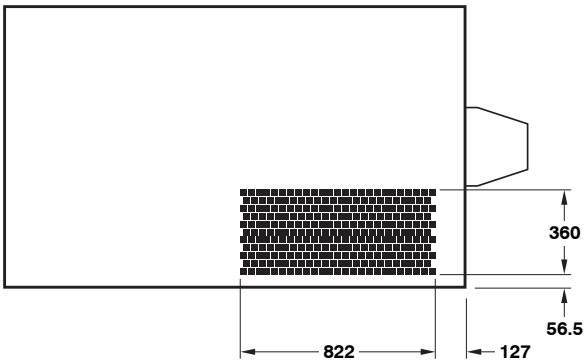
UNIMASTER VENTING TYPE DUST COLLECTOR WITH DUST CONTAINERS

Suitable for inside locations

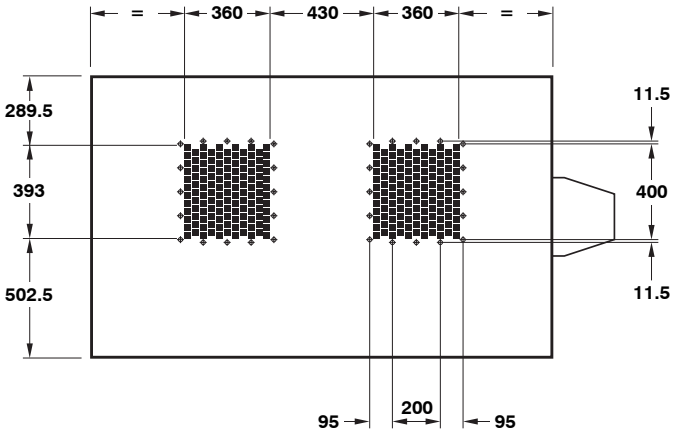
SPECIFICATIONS

Type	Filtration area	Inlet spigot (inside dia.)	Dust container (x2)	Net weight (approx.)
UMA 756V	70 m²	Ø 355 mm	80 litre	652 kg*

*Increase weight by 193 kg for collectors with secondary or absolute filter



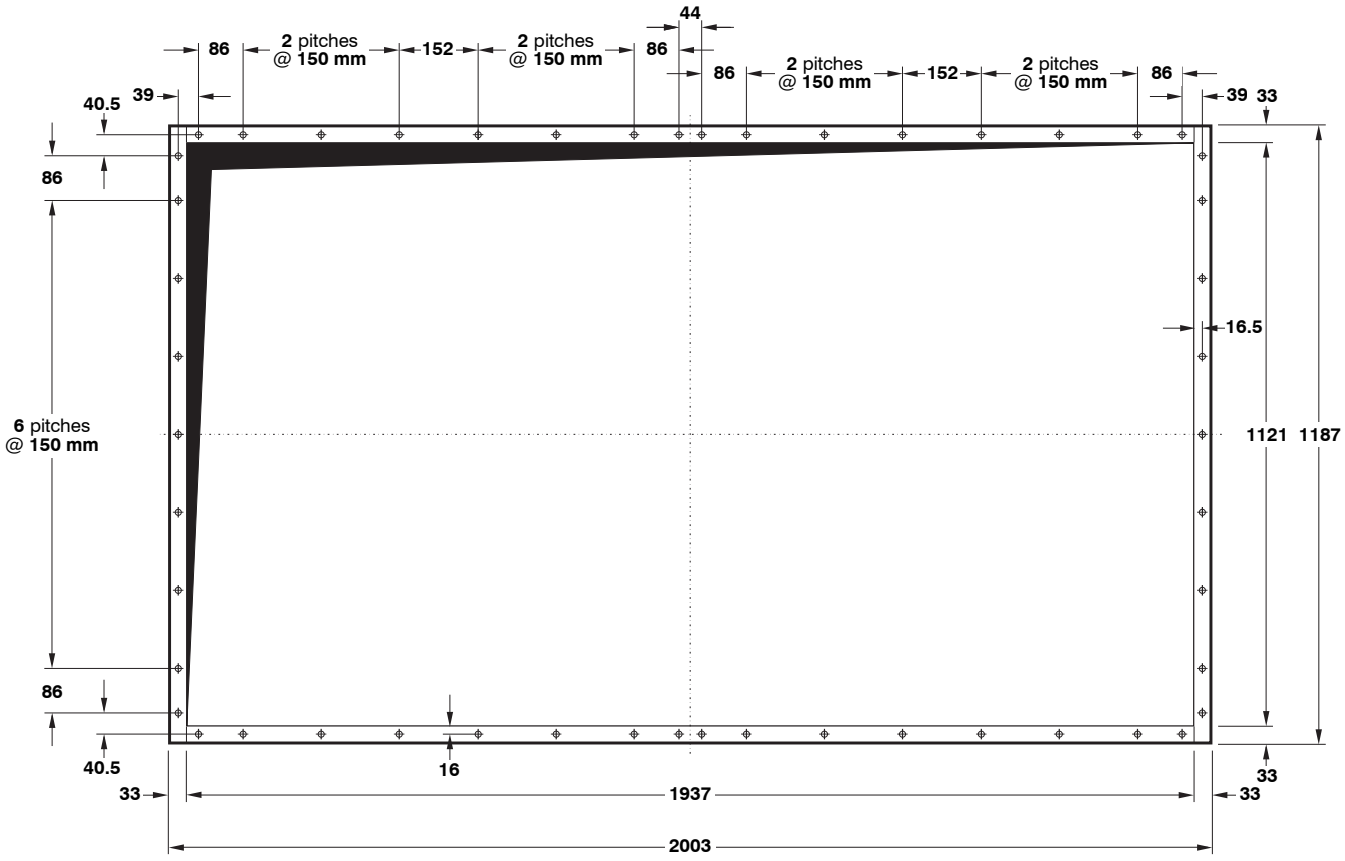
Standard and Hopper type collectors



Venting type collectors

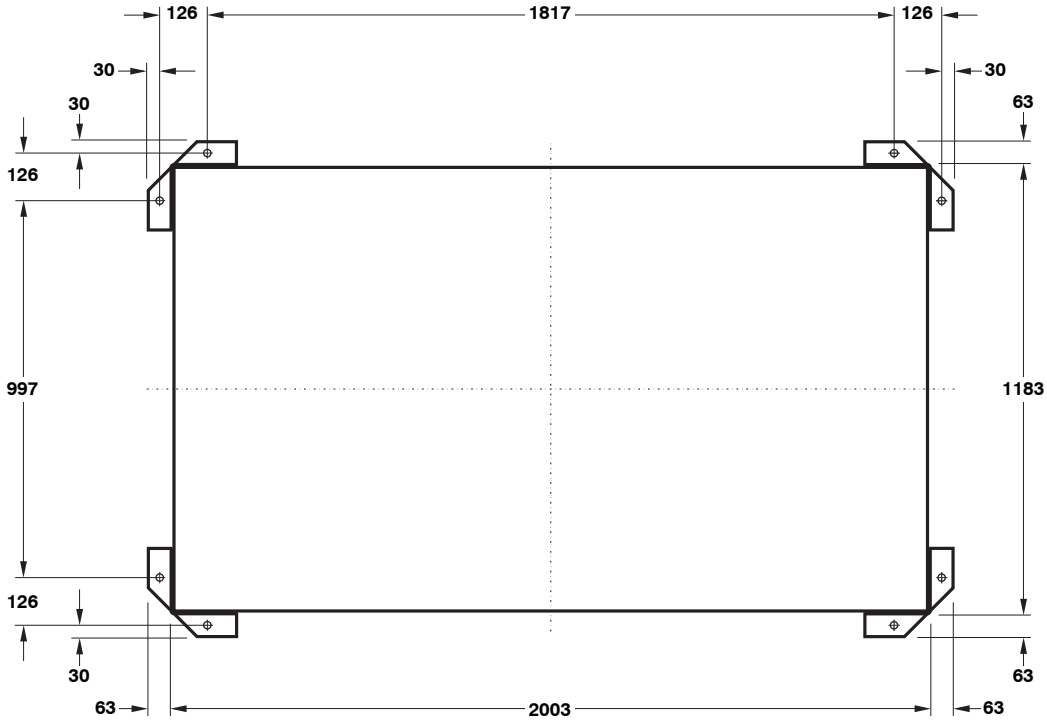
All holes ∅3.5 mm. Pitch centres: 100 mm

CLEANED AIR OUTLET DETAILS



APERTURE AND MOUNTING FLANGE DETAILS FOR HOPPER AND VENTING TYPE COLLECTORS

All holes ∅12 mm for M10 bolts



FOUNDATION DETAILS FOR COLLECTORS WITH DUST CONTAINERS

All holes ∅20 mm for suitable fixings (minimum M10)

NOISE LEVELS

Machinery noise levels are an important consideration in the design and selection of new equipment. Several EC Directives and National Laws/Regulations adopting these directives make reference to airborne noise emissions. Actions that employers are required to comply with if employees are subjected to a daily personal noise exposure Lep,d of 85 dB(A) or more are also specified.

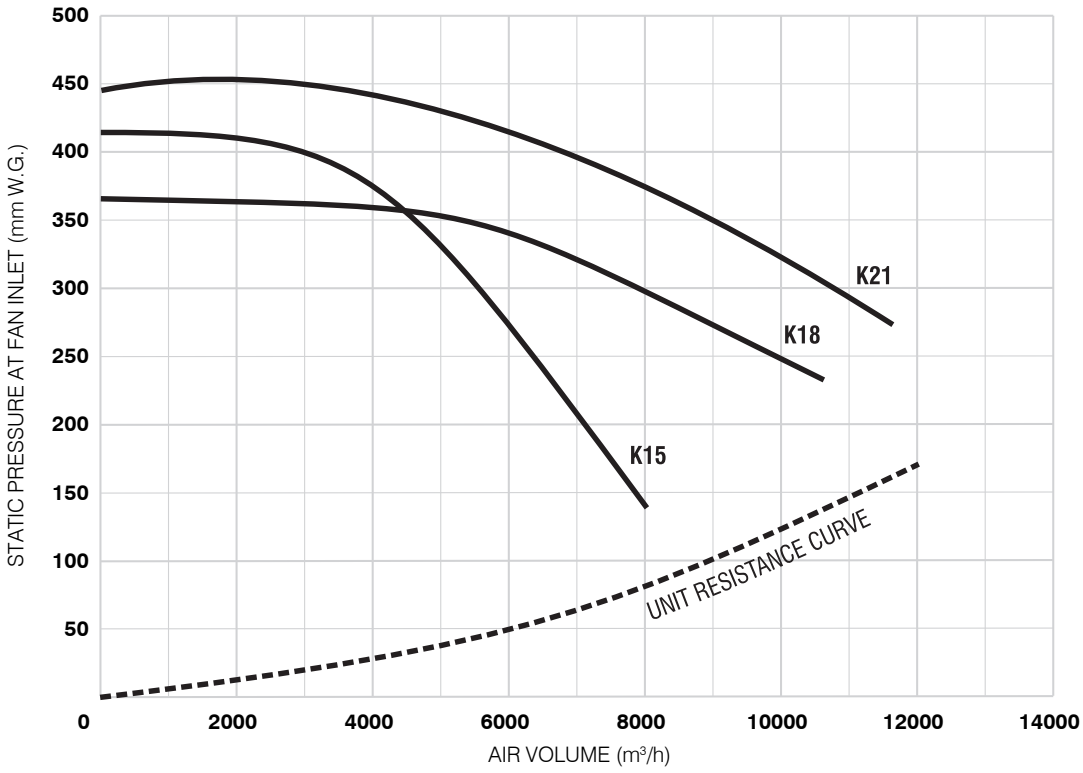
All Unimaster dust collectors, when fitted with an acoustic diffuser, secondary filter or absolute filter, operating an 8 hour shift, are below this action limit.

WEIGHTED SOUND PRESSURE LEVELS

All readings were taken in normal industrial areas, i.e. semi-reverberant surroundings, with local equipment silent. Measurements were taken at maximum air flow conditions at 1.0 metre radius from the equipment housing and 1.6 metres above base level, using a precision sound level meter and octave filter.

K15	K18	K21
77 dB(A)*	79 dB(A)	80 dB(A)*

Noise levels of installed equipment may vary due to site conditions. *Estimated data.



UNIT PERFORMANCE CURVES

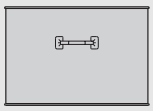
FAN SELECTION

These curves indicate static pressure available at fan inlet for a given volume when fitted inside a Unimaster dust collector.

To select the most suitable fan for a given application:

1. Determine the air volume, in m³/h, needed to entrain the dust.
2. Read off the unit resistance, in mm W.G., at air volume required.
3. Assess pressure drop over filter bags prior to cleaning, usually 50 to 100 mm W.G.
4. Estimate pressure drop through connected system – i.e. between point of entrainment and collector inlet.
5. The sum of **2**, **3** and **4** = W.G. required.
6. Consult graph for fan performances available.

DUST CONTAINER



80 litre
(3 cu.ft.)

Size	Approx net weight
80 litre	6 kg

A reasonable total load for removal by hand would be 25 kg

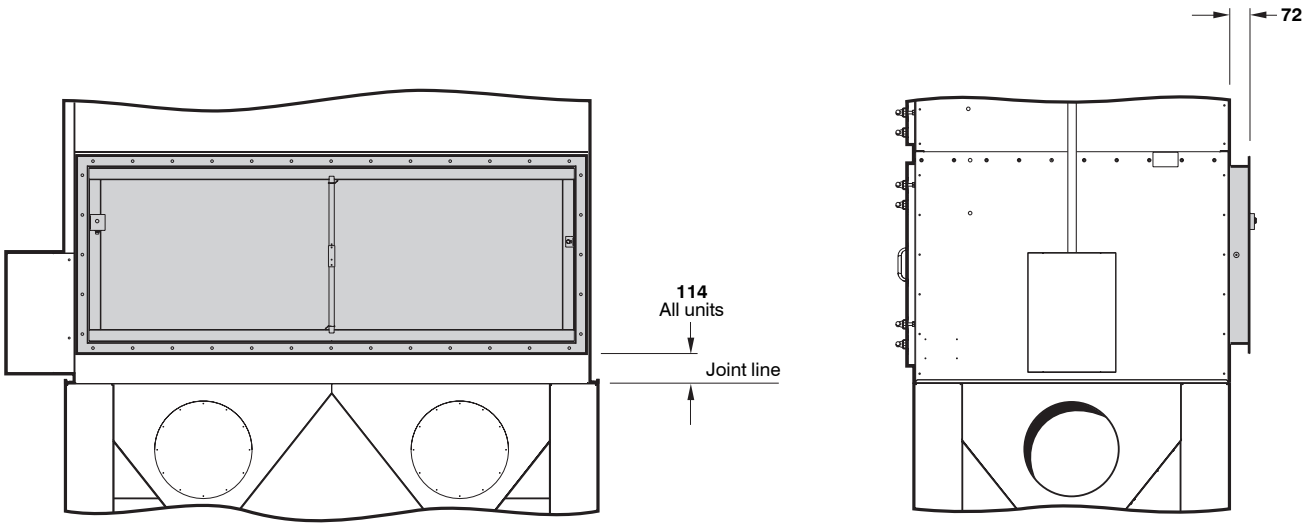
Typical dust densities

Dust	Density with 50% voidage
Sander	0.13 kg/litre
Graphite	0.80 kg/litre
Sand	1.33 kg/litre
Iron	3.58 kg/litre
Steel	3.72 kg/litre

ELECTRICAL REQUIREMENTS

UCS Controller

Voltage input: 380-420V, Three Phase, 50Hz
440-480V, Three Phase, 60Hz
or to suit local voltage

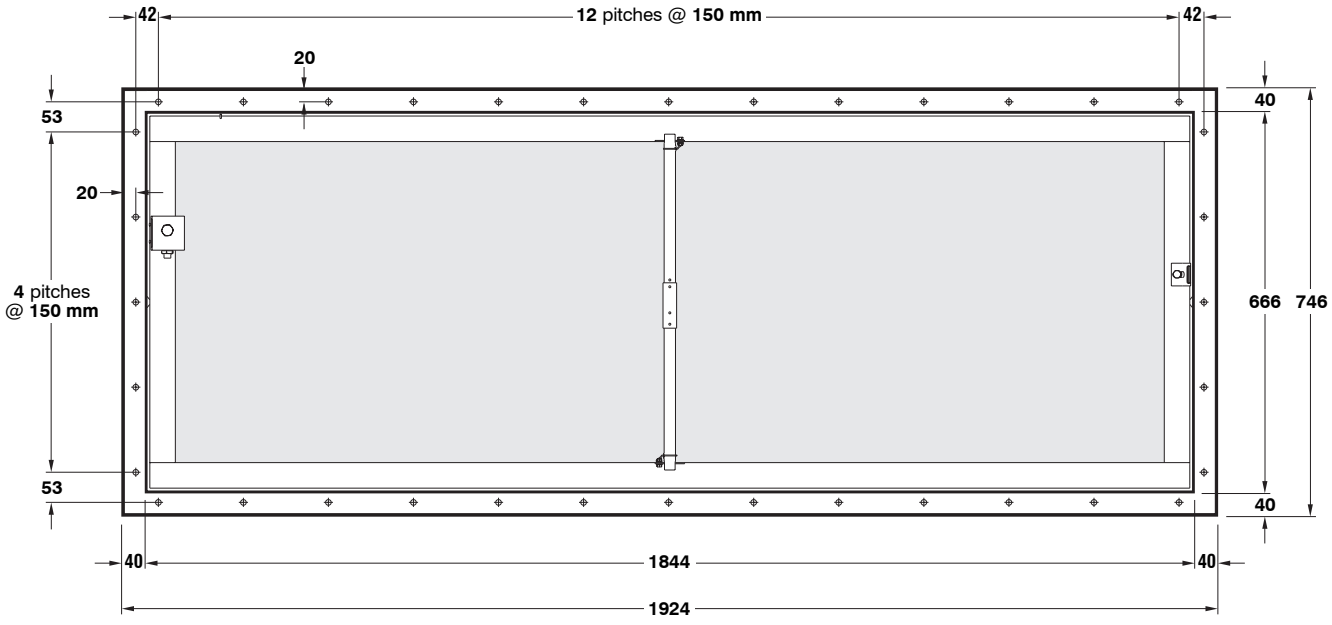


REAR ELEVATION

SIDE ELEVATION

POSITION OF OPTIONAL EXPLOSION RELIEF FLANGE

If a vent duct is not connected to the explosion relief flange, then a minimum clearance of 500 mm should be made to the rear of the collector to ensure efficient operation of the explosion venting process. Consideration should be given to the local surrounding area in regards to the pressure and flame effects.



OPTIONAL EXPLOSION RELIEF FLANGE MOUNTING DETAILS

All holes ∅10 mm for M8 bolts

DESIGN LIMITS (standard equipment)

Temperature range: –10° to +60°C

Pressure limits: Collectors with fan: as fan performance curves from shut-off to operating pressure
Venting type collectors: –300 mm W.G. to +250 mm W.G.

Dimension tolerances: ±3 mm on main dimensions; ±2 mm on detail dimensions

Equipment suitable for use in a potentially explosive atmosphere (Directive 94/9/EC) satisfying the requirements for group II category 2D and 3D T135°C is available

Donaldson
Filtration Solutions

www.donaldson.com

Humberstone Lane
Thurmaston
Leicester LE4 8HP
England
Tel +44 (0)116 269 6161
Fax +44 (0)116 269 3028
Email: IFS-uk@emea.donaldson.com

Research Park Zone 1
Interleuvenlaan 1
B-3001 Leuven (Heverlee)
Belgium
Tel +32 (0)16 383 970
Fax +32 (0)16 383 938
Email: IFS-europe@emea.donaldson.com