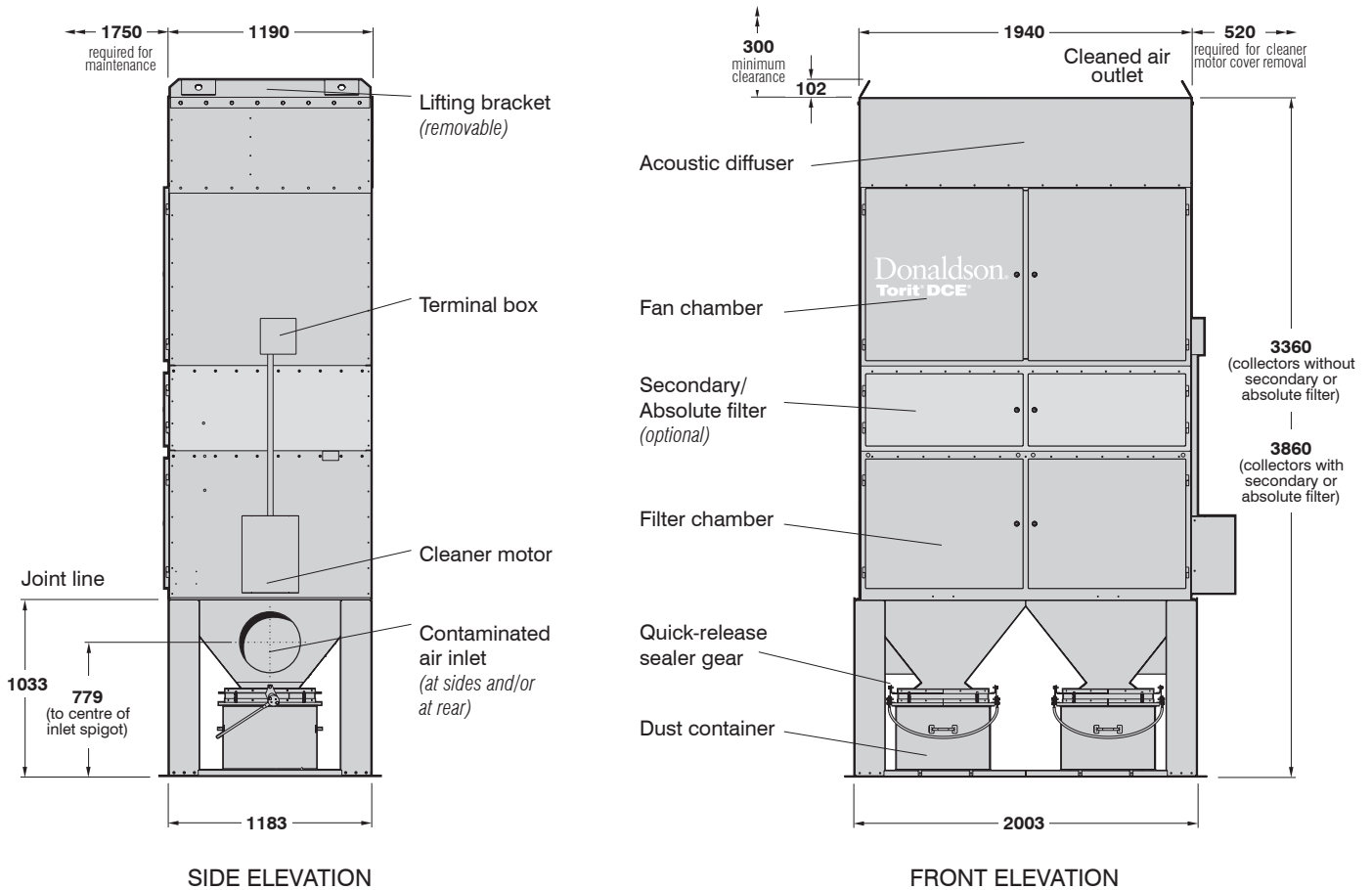


# Unimaster Dust Collectors

Series UMA 750



## UNIMASTER DUST COLLECTOR WITH DUST CONTAINER

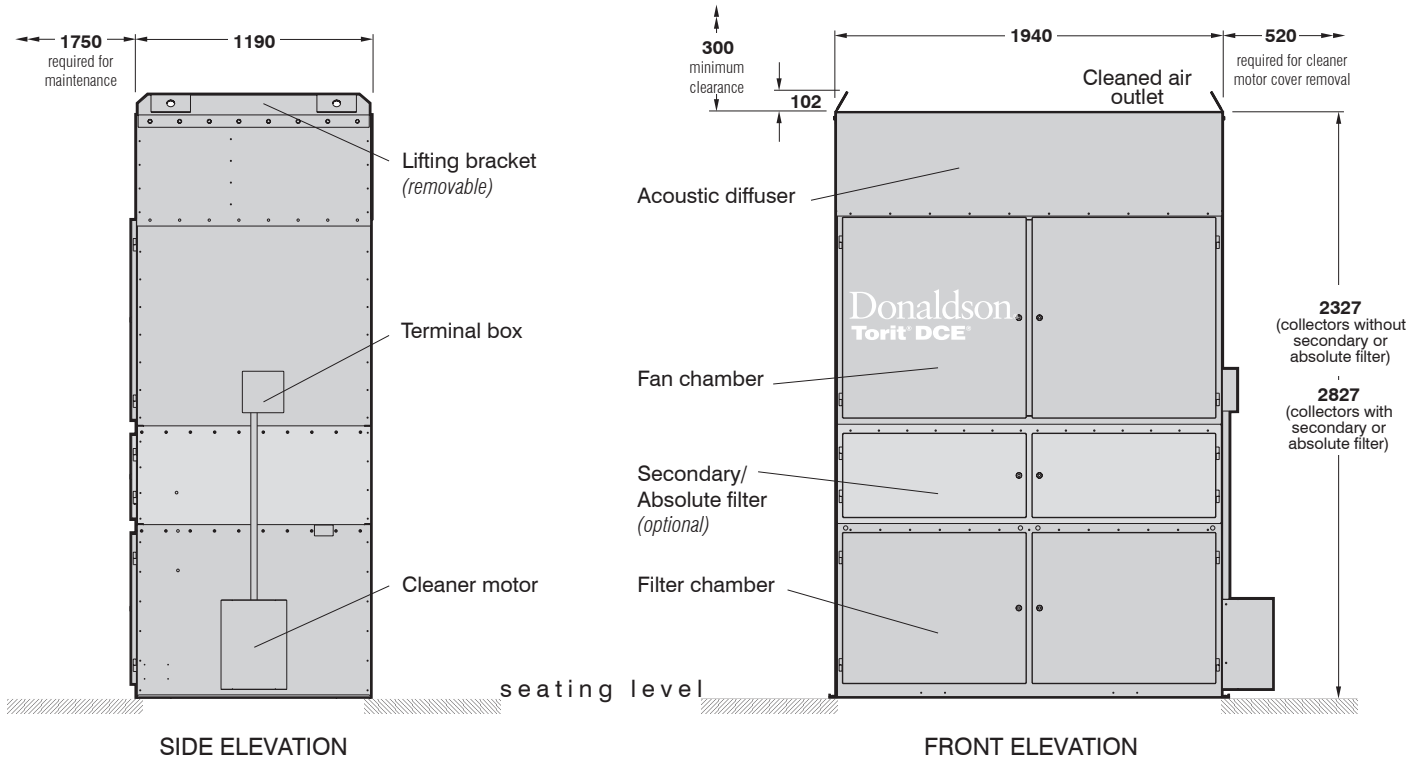
Suitable for inside locations

### SPECIFICATIONS

Type	Filtration area	Inlet spigot (inside dia.)	Fan	Motor rating	Dust container (x2)	Net weight (approx.)
UMA 756	70 m <sup>2</sup>	Ø 355 mm	KV15	11.0 kW	80 litre	1185 kg*
			KV18	15.0 kW		1200 kg*
			KV21	18.5 kW		1305 kg*

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

**Unimaster Dust Collectors – Series UMA 750**



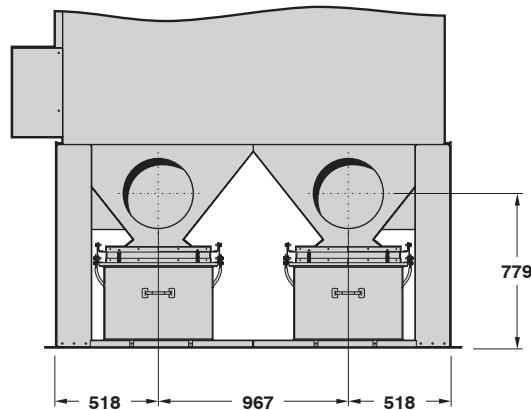
**UNIMASTER HOPPER TYPE DUST COLLECTOR**

Suitable for inside locations

**SPECIFICATIONS**

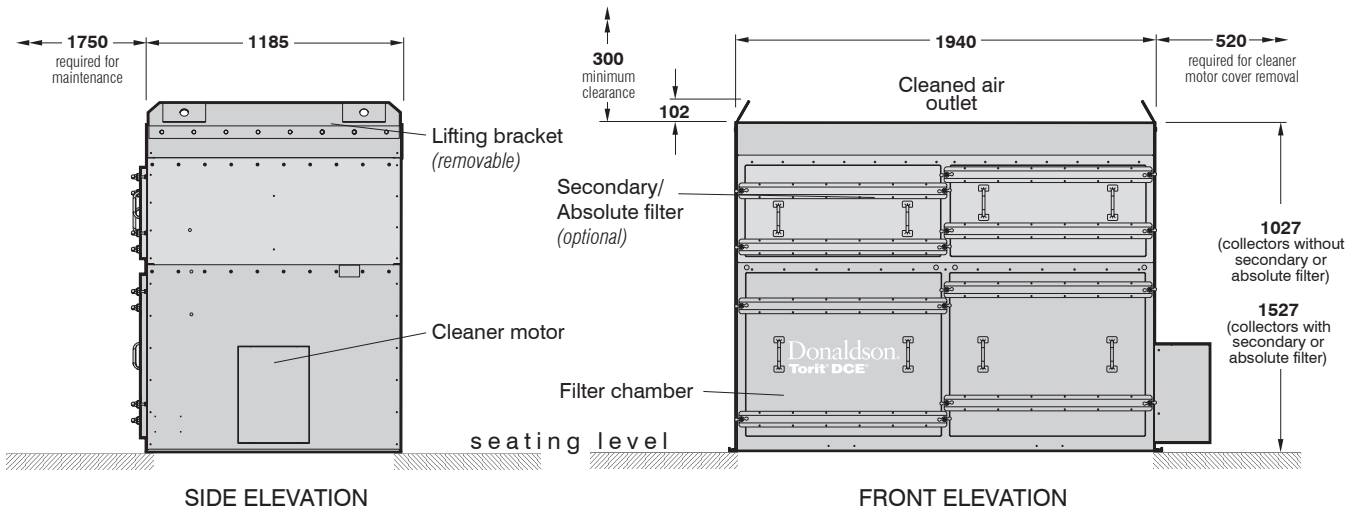
Type	Filtration area	Fan	Motor rating	Net weight (approx.)
<b>UMA 750H</b>	70 m <sup>2</sup>	KV15	11.0 kW	1000 kg*
		KV18	15.0 kW	1015 kg*
		KV21	18.5 kW	1120 kg*

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



**POSITION OF REAR CONTAMINATED AIR INLETS**

**Unimaster Dust Collectors – Series UMA 750**



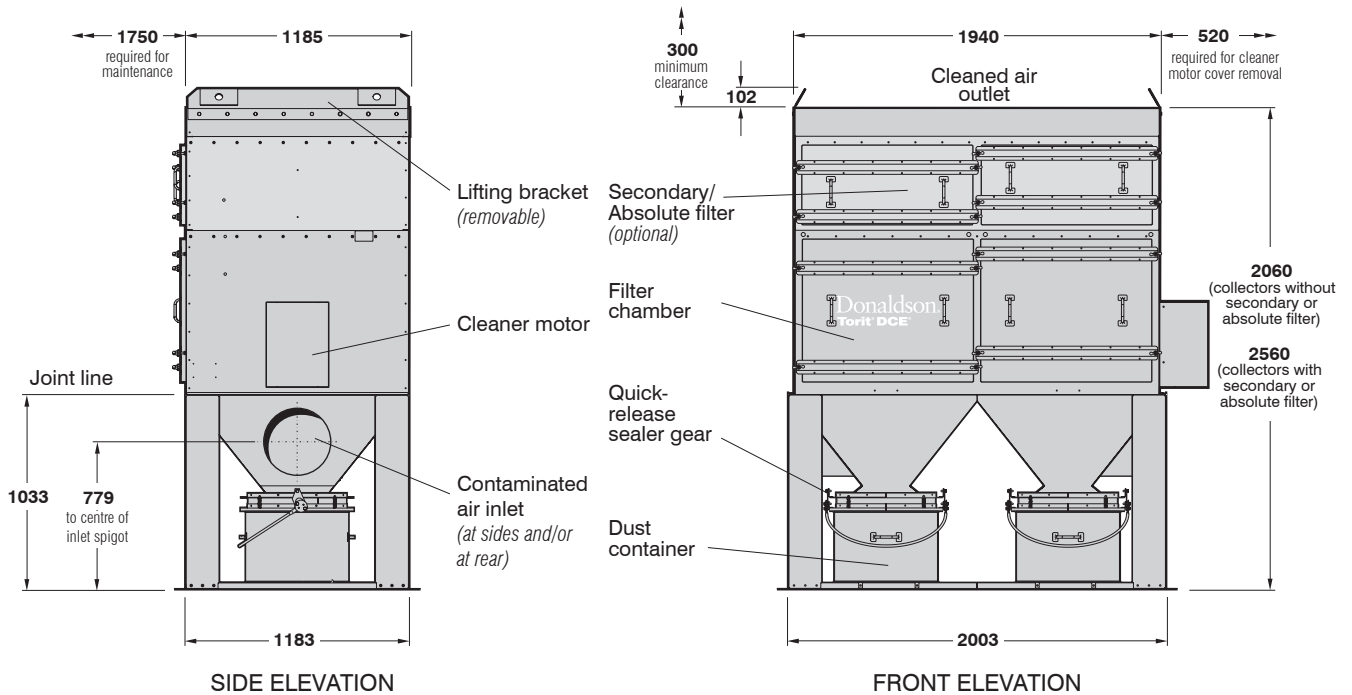
**UNIMASTER VENTING TYPE DUST COLLECTOR**

Suitable for inside locations

**SPECIFICATIONS**

Type	Filtration area	Net weight (approx.)
UMA 750V	70 m <sup>2</sup>	467 kg*

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



**UNIMASTER VENTING TYPE DUST COLLECTOR WITH DUST CONTAINERS**

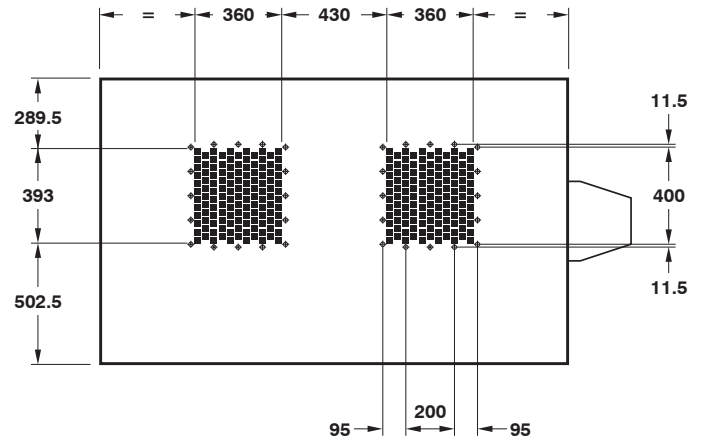
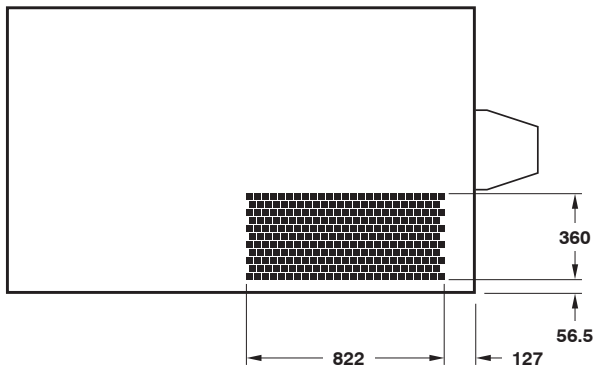
Suitable for inside locations

**SPECIFICATIONS**

Type	Filtration area	Inlet spigot (inside dia.)	Dust container (x2)	Net weight (approx.)
UMA 756V	70 m <sup>2</sup>	Ø 355 mm	80 litre	652 kg*

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

**Unimaster Dust Collectors – Series UMA 750**

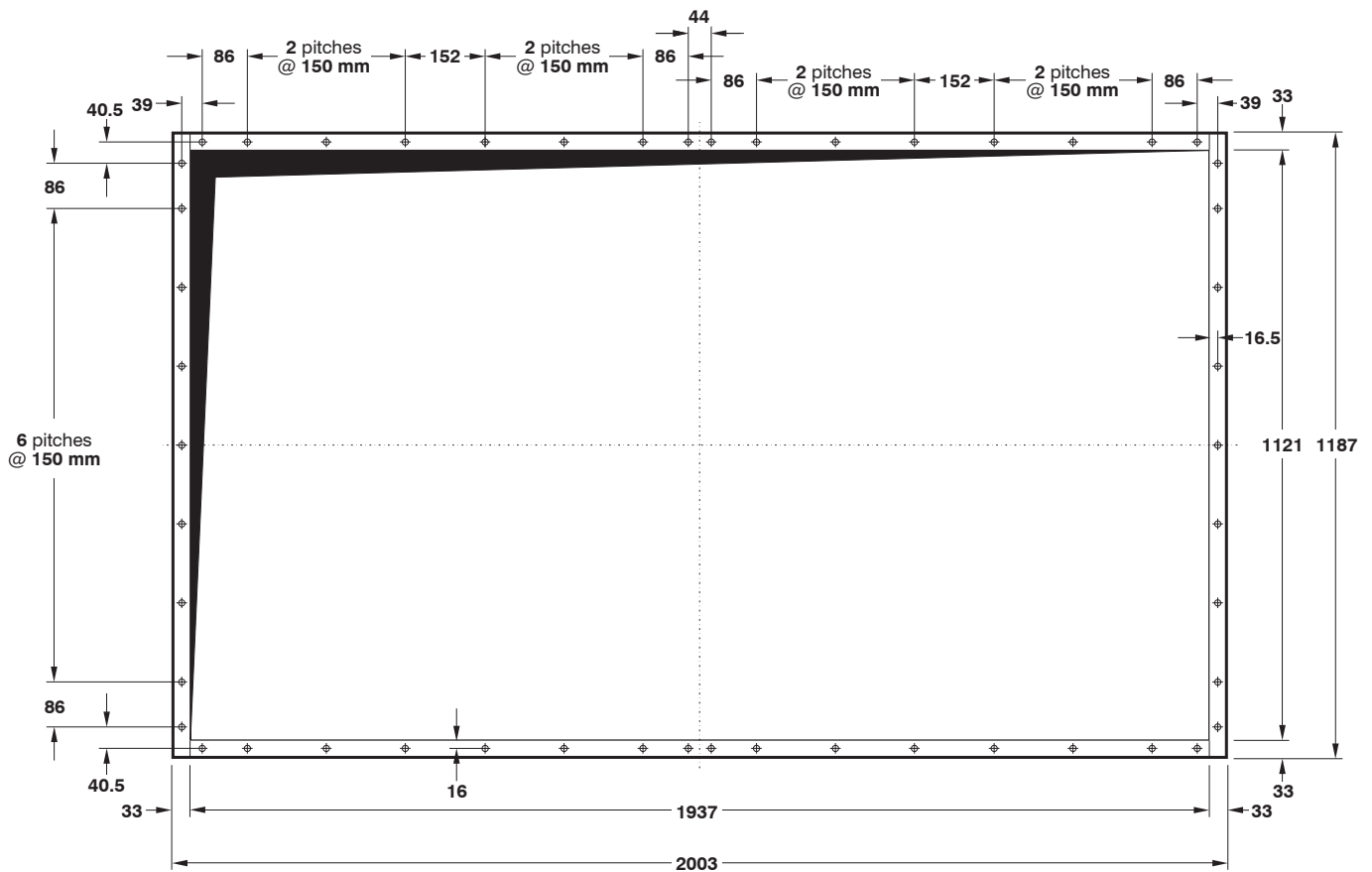


**Standard and Hopper type collectors**

**Venting type collectors**

All holes  $\varnothing$  3.5 mm. Pitch centres: 100 mm.

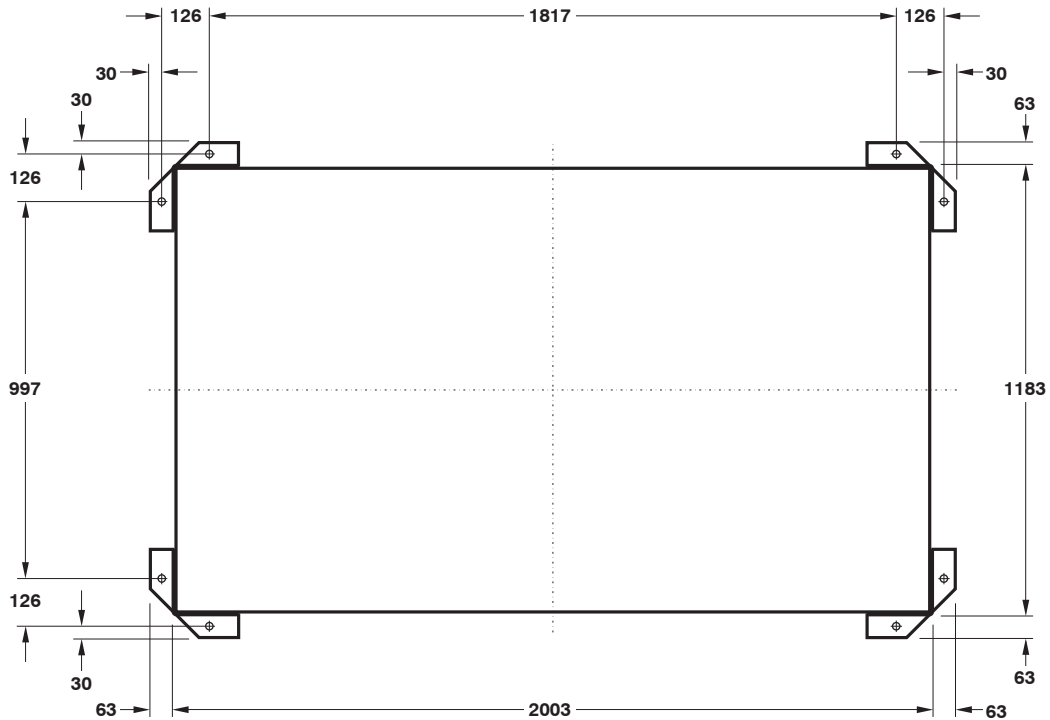
**CLEANED AIR OUTLET DETAILS**



**APERTURE AND MOUNTING FLANGE DETAILS FOR HOPPER AND VENTING TYPE COLLECTORS**

All holes  $\varnothing$  12 mm for M10 bolts

**Unimaster Dust Collectors – Series UMA 750**



**FOUNDATION DETAILS FOR COLLECTORS WITH DUST CONTAINERS**

All holes Ø20 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  $L_{ep,d}$  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.

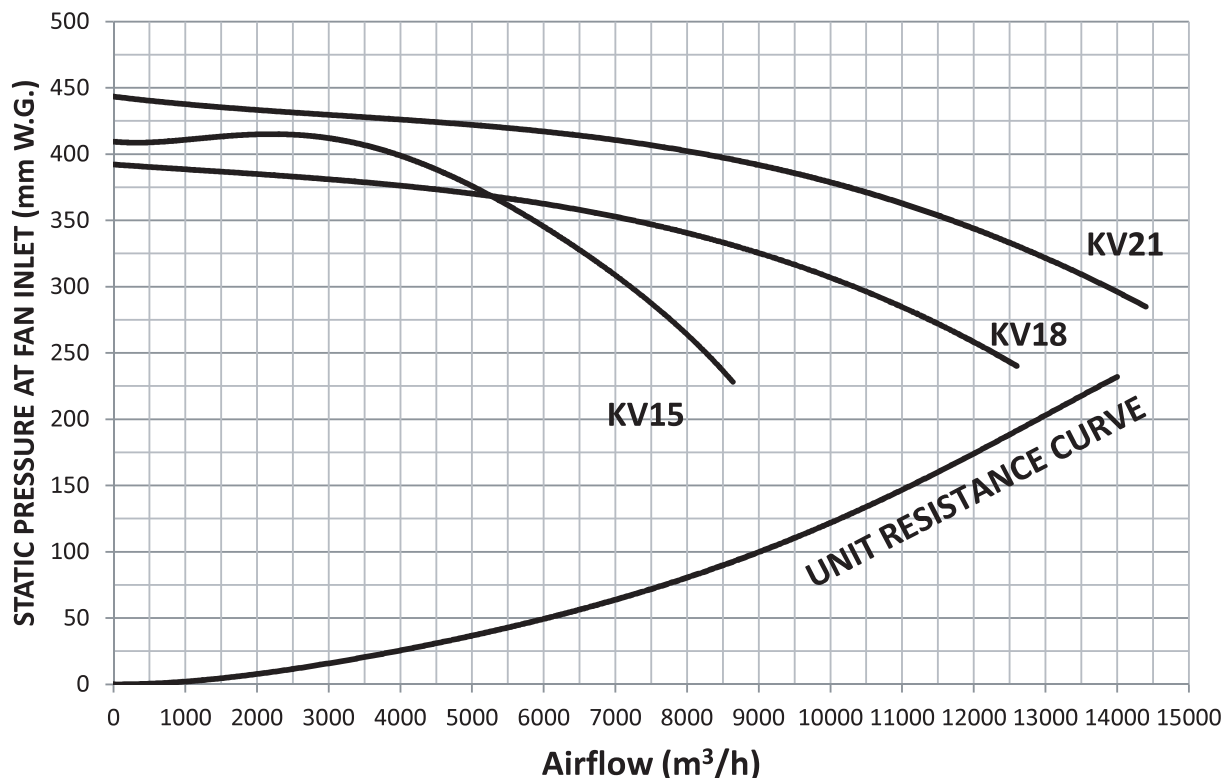
**WEIGHTED SOUND PRESSURE LEVELS**

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.

<b>KV15</b>	<b>KV18</b>	<b>KV21</b>
77 dB(A)*	79 dB(A)	80 dB(A)*

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

**Unimaster Dust Collectors – Series UMA 750**



**UNIT PERFORMANCE CURVES**

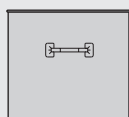
**FAN SELECTION**

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

**Typical dust densities**

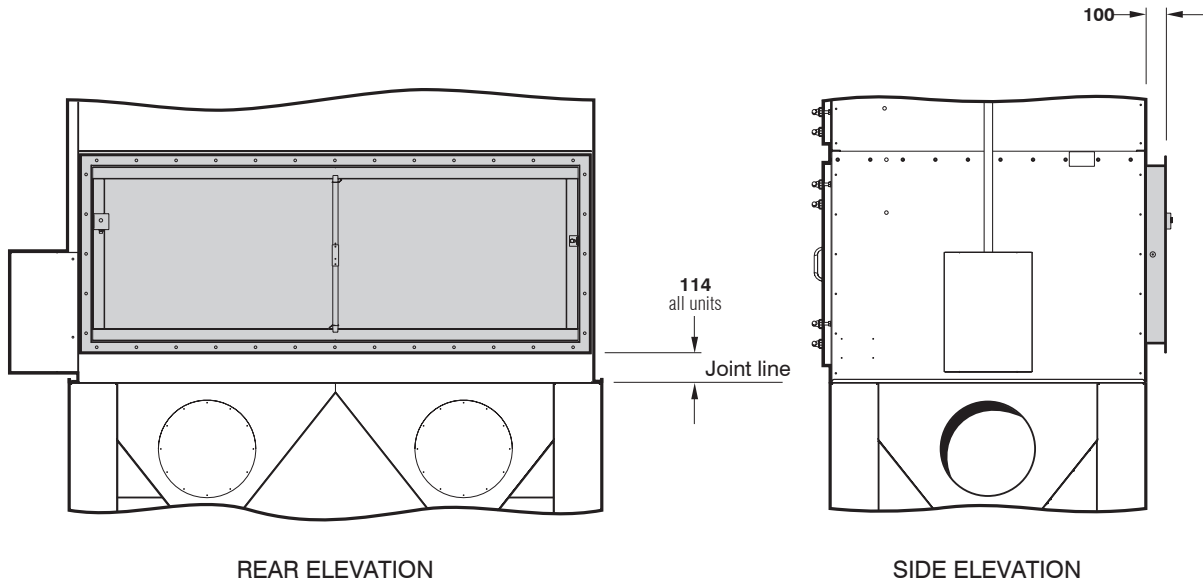
Dust	Density with 50% voidage
Sander	0.13 kg/litre
Graphite	0.80 kg/litre
Sand	1.33 kg/litre
Iron	3.58 kg/litre
Steel	3.72 kg/litre

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

**ELECTRICAL REQUIREMENTS**

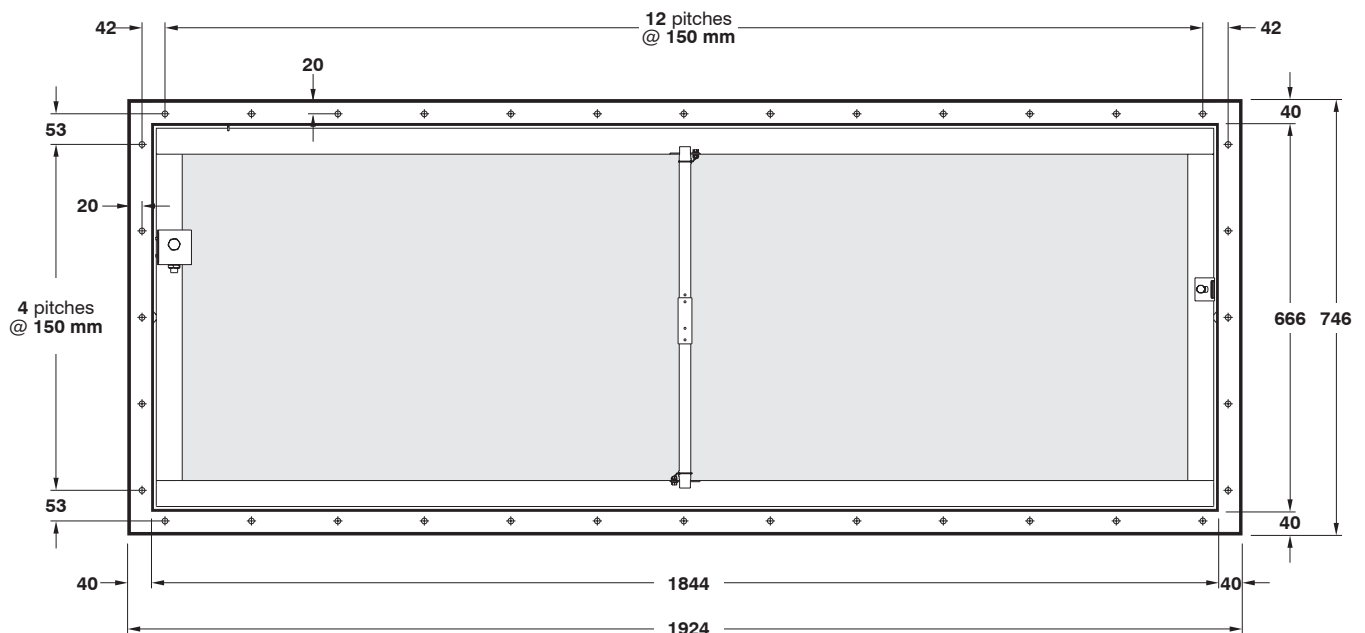
**UCS Controller**

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



**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 Ø10 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