



MTFA Multi-Filter Range

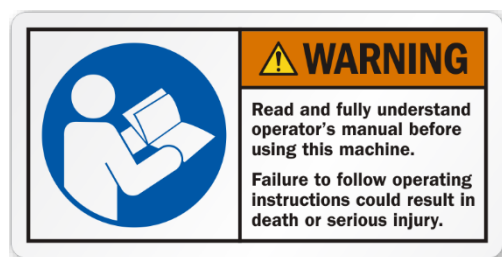
User Manual





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Dust & Fume Extraction • Waste Heating

INVENTAIR LIMITED

Runway's End ■ Carnaby Industrial Estate

Bridlington ■ East Yorkshire ■ YO15 3QY

01262 400919

sales@inventair.co.uk

www.inventair.co.uk

DECLARATION OF CONFORMITY 98/37/EC

Name of manufacturer:

INVENTAIR LIMITED

Full Postal Address including country of origin:

**Runways End
Lancaster Road
Carnaby Industrial Estate
Bridlington
ENGLAND
YO15 3QY**

Description of Product:

Dust Extraction Unit

Name, Type or Model, batch or serial Number:

MK1 - MK2 – 3 – 4 - 6 MTFA

Standards used, including number, title, issue date and other related documents.

Low Voltage Directive 73/23/EMC. Amended 93/68/EMC

Electro Magnetic Compatibility Directives 89/336/EEC. Amended 91/263/EEC

92/31/EEC

Standards EN 60034 – (IEC34) /50081-1/50081-2/50082-1/50082-2

BS 6861

Place of issue:

As Above

Name of authorized representative (please print):

ROBERT GRIFFITHS

Position of authorized representative:

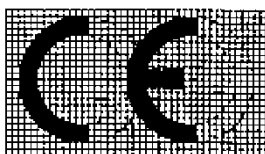
MANAGING DIRECTOR

Full Postal Address if different from manufacturers: **As Above**

DECLARATION

I declare that as the authorized representative, the above information in relation to supply/manufacture of this product is in conformity with the stated standards and other documents following the provisions of 98/37/EC Directives.

Signature of authorized representative



Unit Dimensions



MTFA RANGE PERFORMANCES

	WIDTH A	LENGTH B	MOTOR KW	VOLUME M3/H	PRESSURE MM	FILTER AREA M2	BAG CAPACITY M3	WEIGHT KG	INLET SIZE
MK1 MTFA	725	1170	2.2	1869	152.4	6	4.6	95	205
MK2 MTFA	725	1950	3	3050	178	12.7	9.1	165	224
MK3 MTFA	725	2740	5.5	4250	178	18.1	13.7	245	250
MK4 MTFA	725	3440	7.5	5950	230	24.1	18.2	325	315
MK6 MTFA	800	4750	11	7150	359	36.1	27.4	400	350
MK6 MTFA (EXTENDED)	800	4750	15	7650	380	45	27.4	435	350
MK1 MTFA (4KW H.P.)	725	1400	4	2550	305	6	4.6	95	205
MK2 MTFA (5.5KW H.P.)	725	2070	5.5	2900	355	12.7	9.1	165	210

Assembling the Filter Unit

Unpack all parts and find packet of nuts and bolts and washers.

With the dust unit motor upwards, loosely assemble all legs onto the body using 4 x 8mm Ø bolts and 4 washers to each leg.

Straighten up the legs and using a 13mm ring spanner tighten up the bolts.

With 2 men at the motor end and 1 man at the other, carefully lay the dust unit on its side, and without placing any strain on the legs lift the unit on to its feet.

Now find the end panels and fix with 6mm nuts and bolts onto body make sure the vibration bushes are on the top (as pictures below).

With this task complete place, the filter frame onto the vibration bushes and secure with nut and washer to each one.

Now follow the **filter assembly instructions** on the separate sheets.

Having now positioned the unit fix it securely to the factory floor.

Now obtain the services of a **qualified electrician**.

This competent person will require the supplied starter unit and wiring diagram and he must install the electrical regulations.

Upon completion he must test the ampage and voltage at the motor, and check it is within the motor rating stated on the motor plate secured to the motor body.

His final task is to check its rotation with the rotation arrow affixed to the motor.

Extreme care must be taken when testing for correct rotation if ducting has not been connected to the fan inlet as this open inlet and rotating fan blade will be dangerous.

Assembly Process

Wear a facemask for protection.

Insert filters from back of filter chamber working your way back towards the door taking care to check each cuff seal on each tube.

Always use nuts and washers when fixing top plate, after pushing top plate down each tube till bolt head protrudes.

Follow steps A.B.C. on separate sheet.

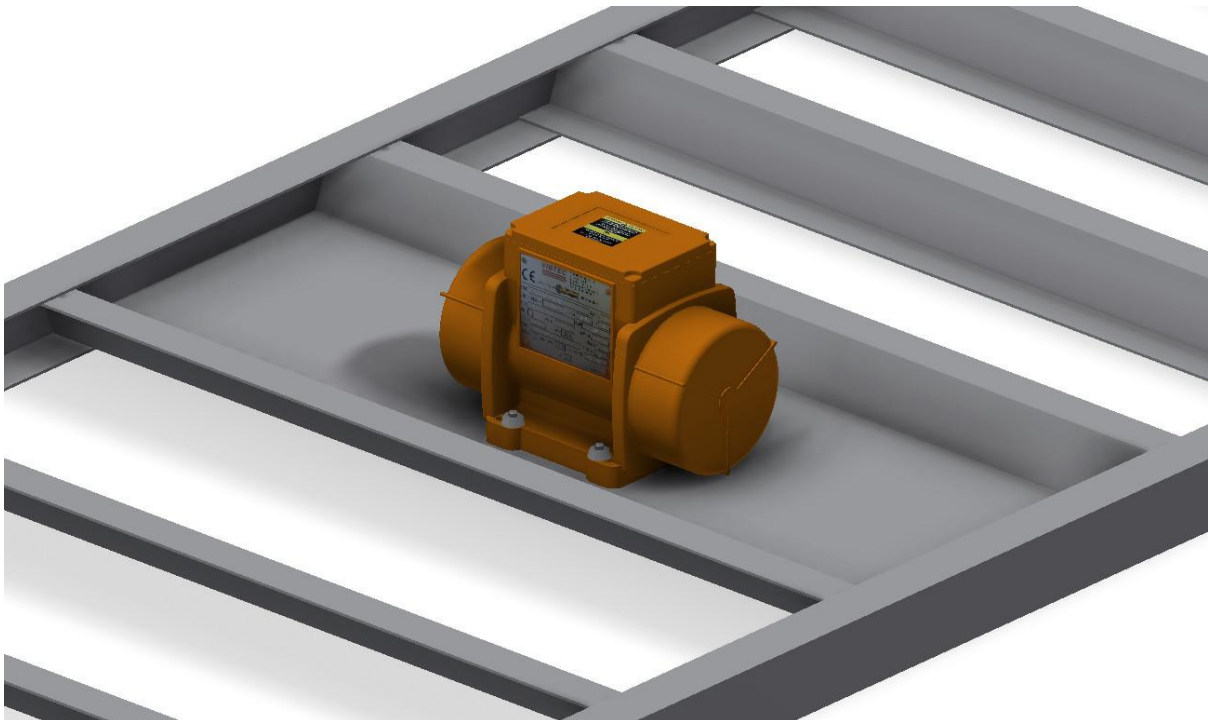
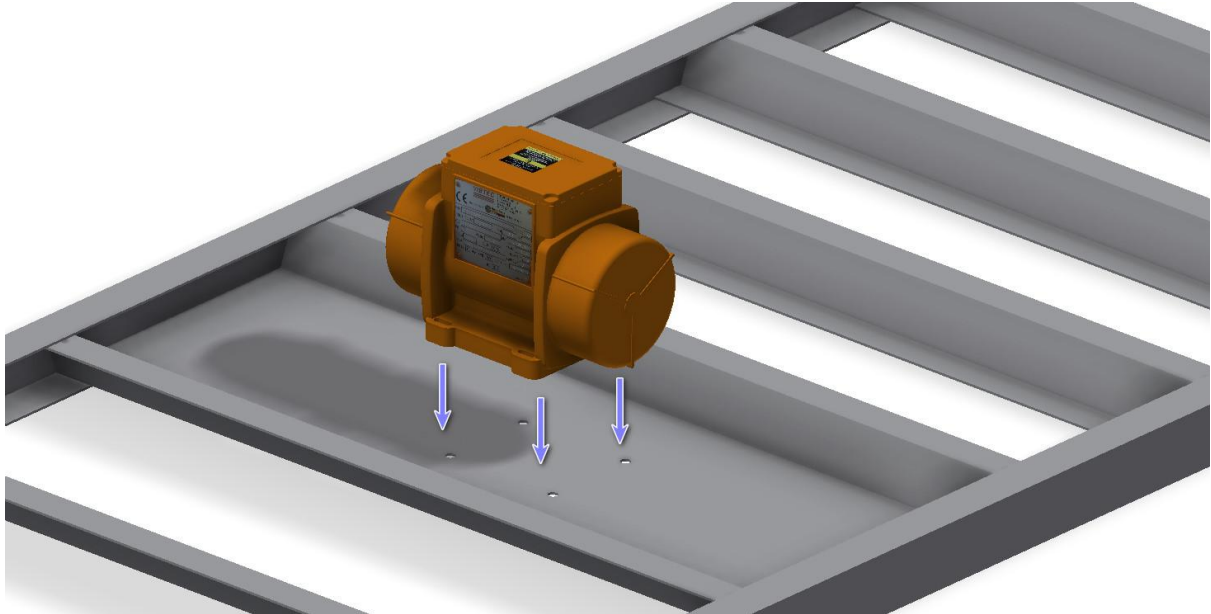
To remove filters, follow steps in reverse.

On all filter units supplied only with a weather cover to be situated outside, make sure to seal all lock formed panel joints with sealant provided.

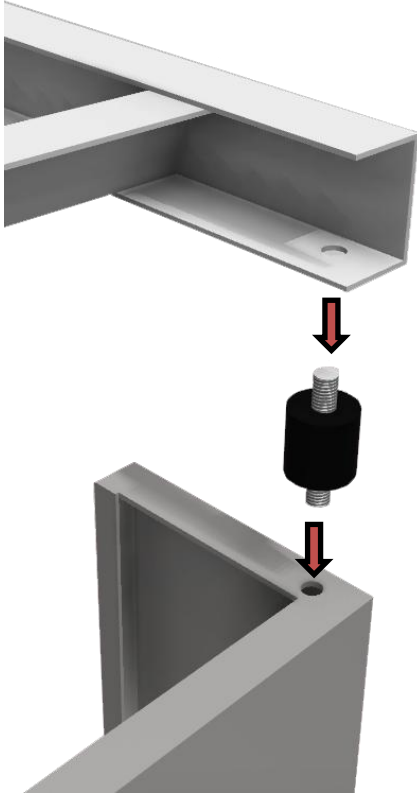


**Wear face
mask**

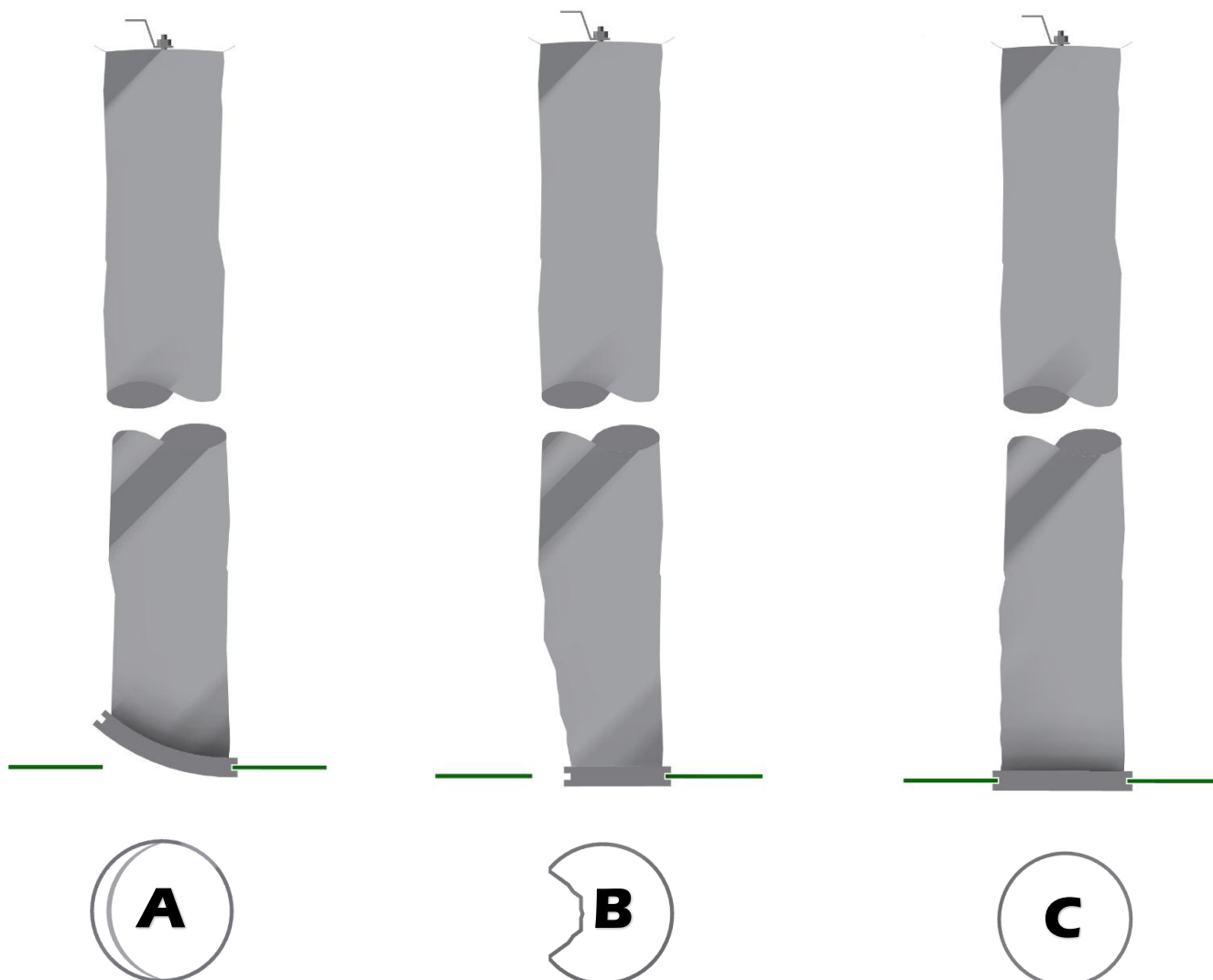
Vibration Motor Fixing Detail



Filter Frame Fixing Detail



Filter Bag Bottom Fixing



WEAR A FACE MASK WHEN FITTING THE FILTERS

Loosely fix the filter to the top plate first with nut and washer.

Allow the filter to hang straight.

Push the slot of the cuff into the cut out in the filter body. (A)

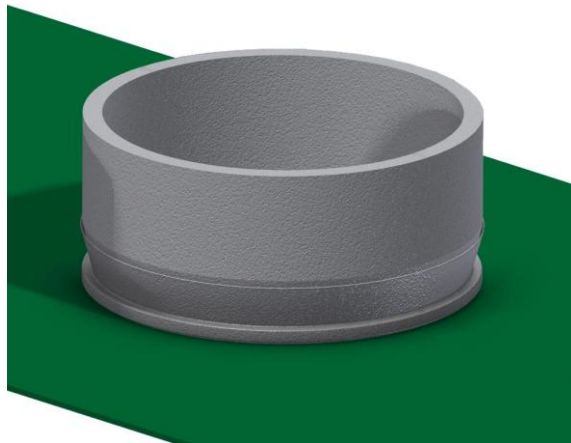
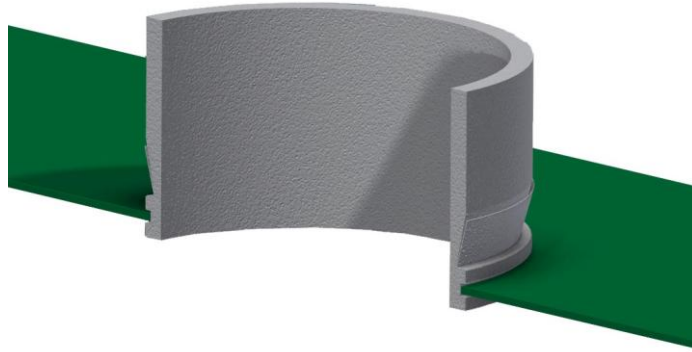
Squeeze one side whilst moving the filter into the cut out and release into place. (B)

Tighten nut on top of filter to stretch the filter tight.

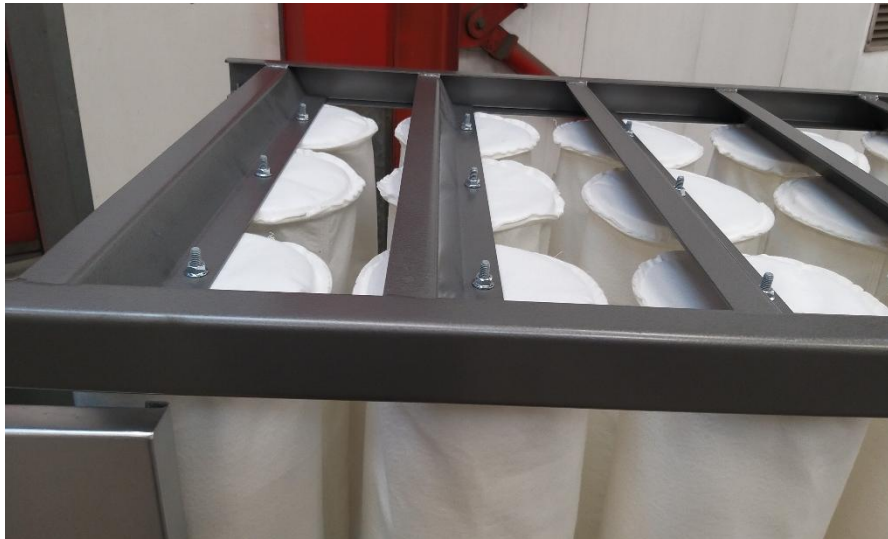
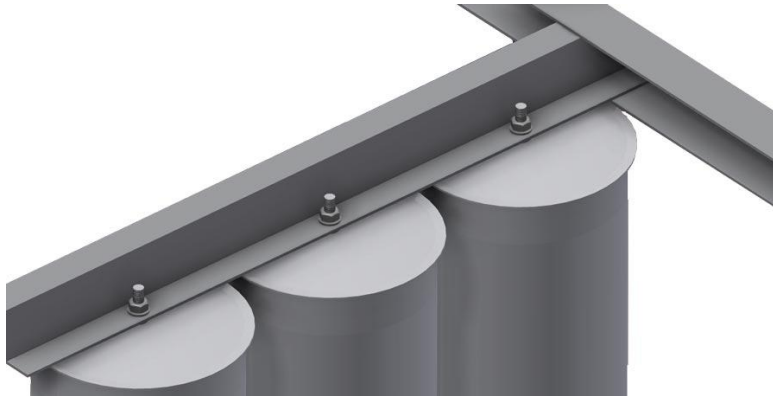
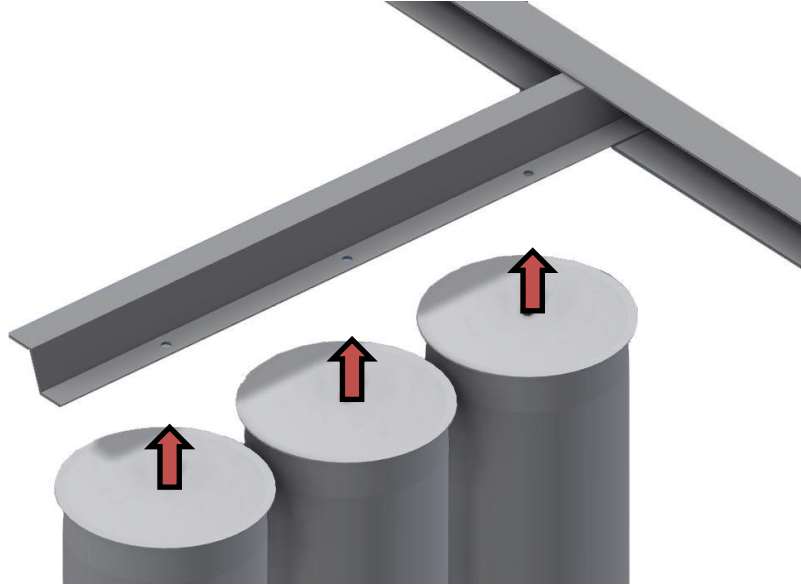
Check the filter is secure in the hole and sealed all the way around. (C)



Filter Bottom Fixing



Filter Top Fixing



Optional Upgrades

Filter Front & Back Filter Panels



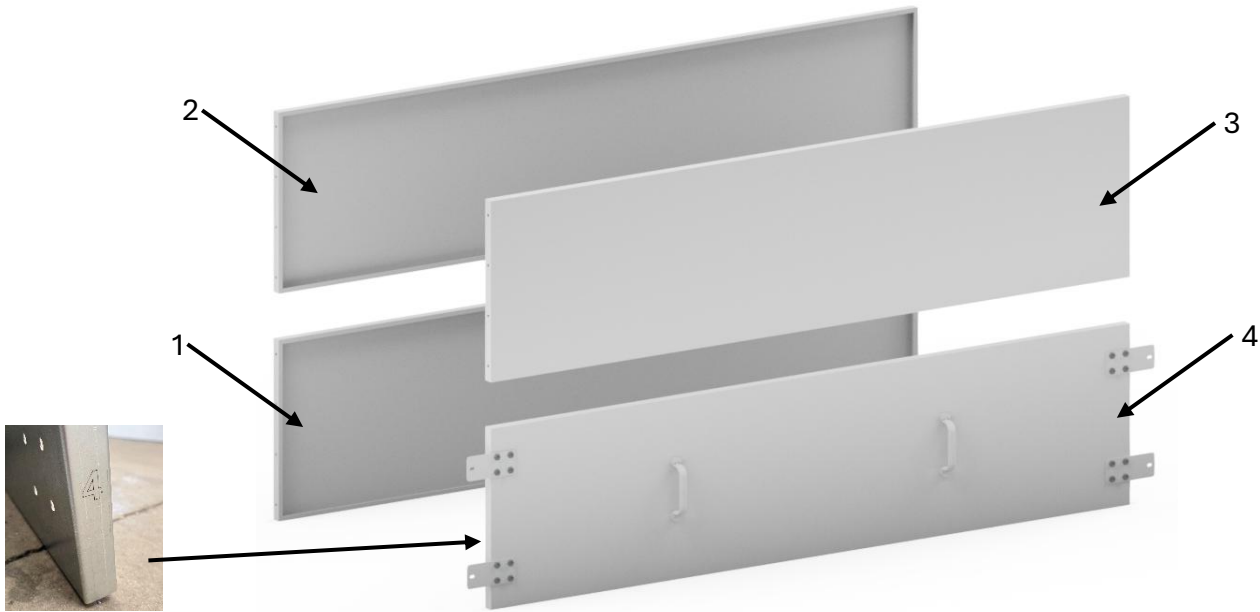
Full Weather Cover



Installation of Front & Back Filter Panels

The Front and back filter panels are numbered to suit the order of installation.

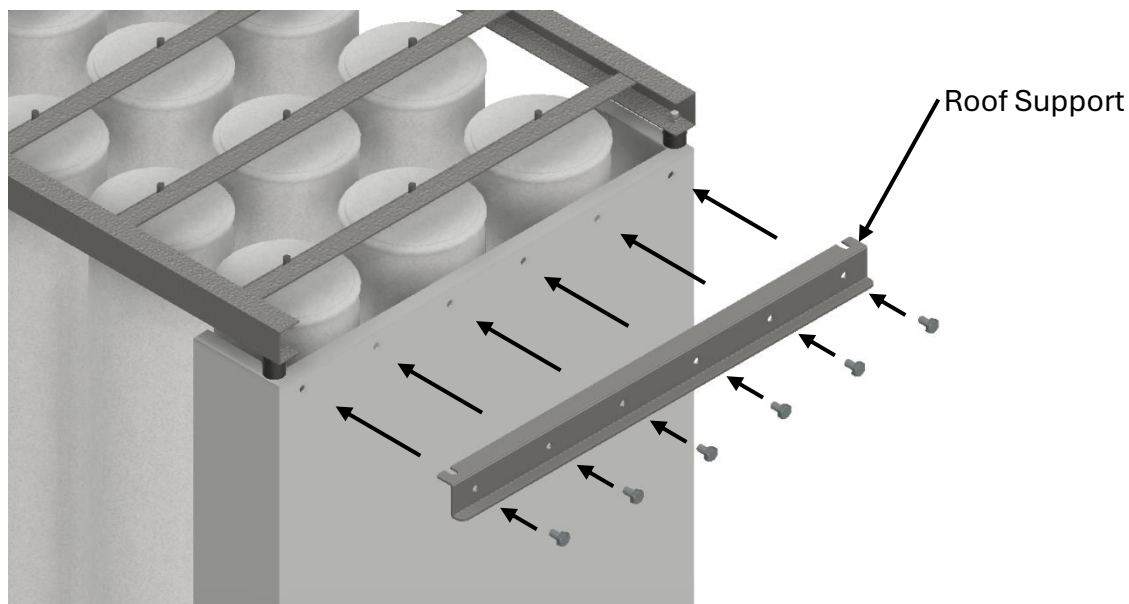
Panel No1, No 2 and No 3 should be installed prior to the filters been fitted.



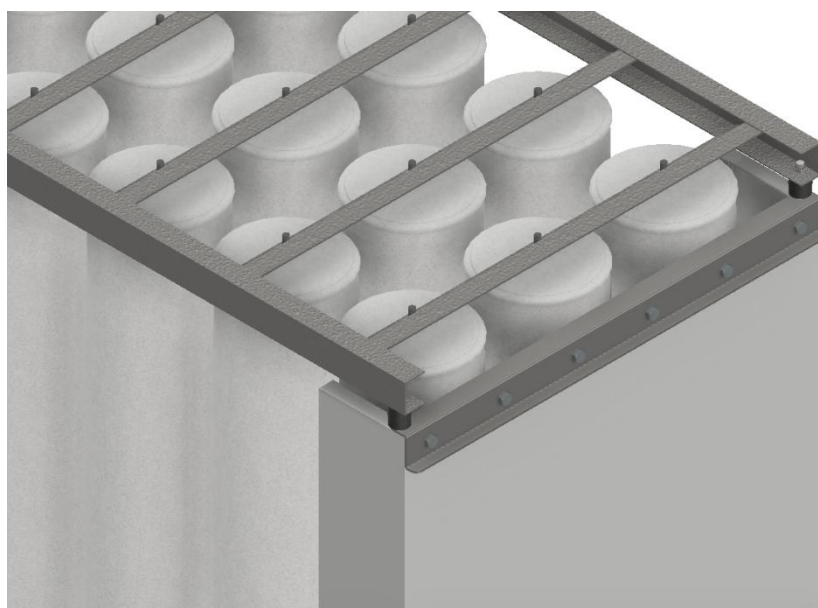
Numbers shown on end
Of each panel.



Installation of Weather Cover

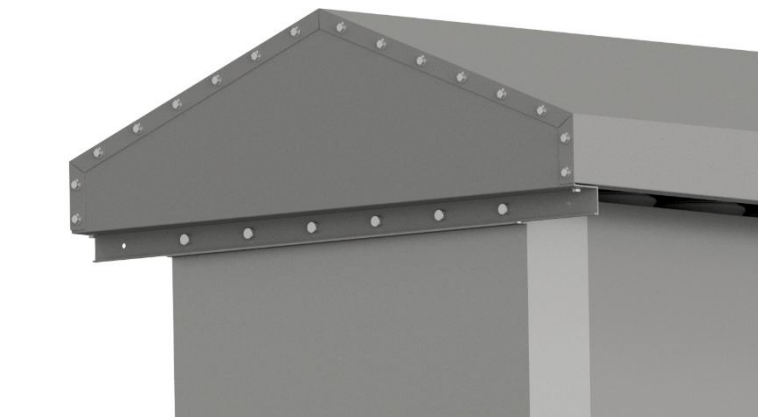
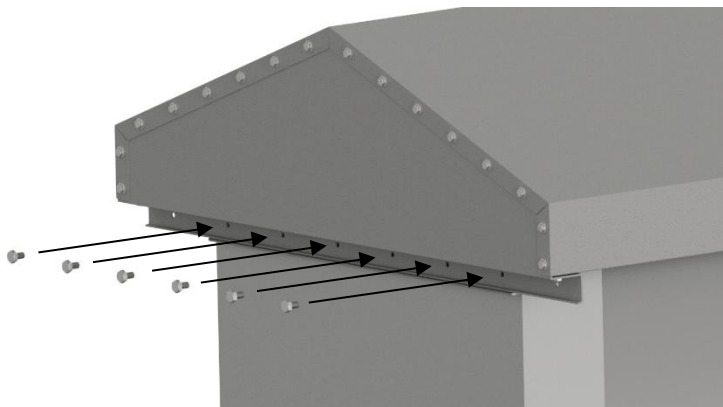
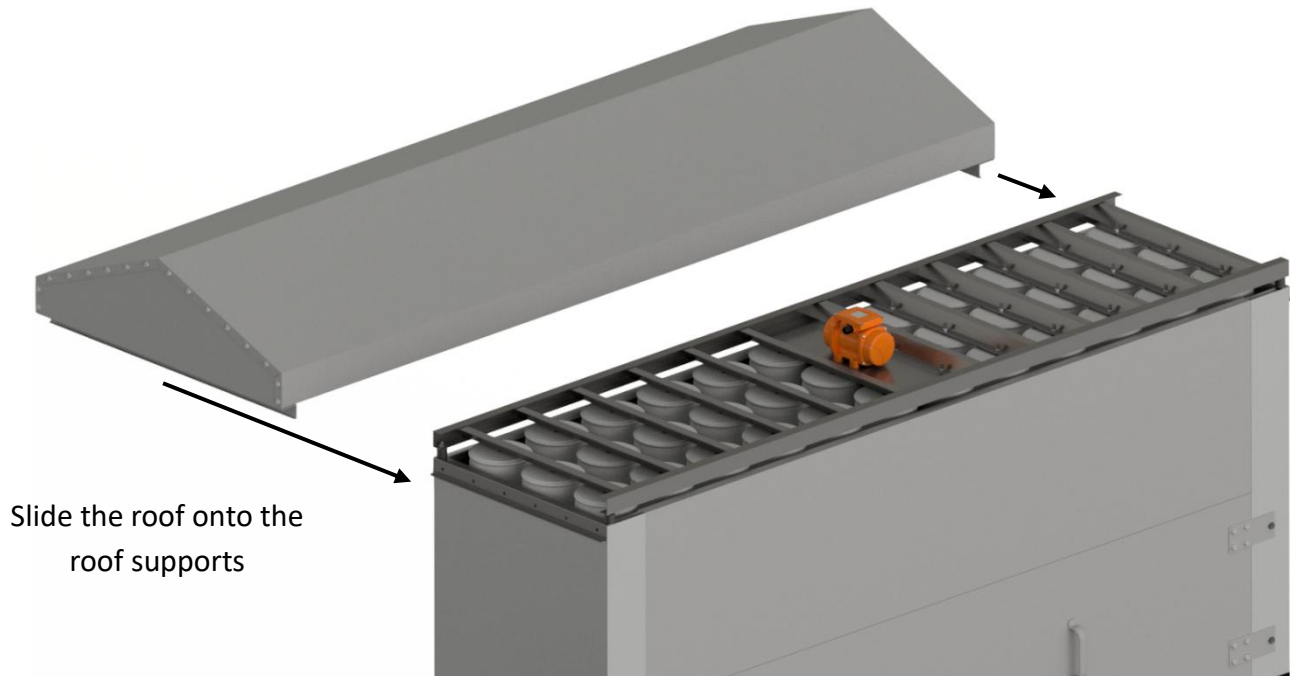


Mount the Roof support onto the galvanized end panels, on each end of the dust unit.



Roof Support mounted onto the side of the galvanized end panel.

Weather Cover / Roof Installation



Operation Guidelines for bagging units

Before turning the filter on: -

Check the plastic collection bags are connected to the bag ring spigots under the body of the unit, and that the straps are level (thus creating an air tight seal).

Also if the filter tubes at the top have not been installed by our fitters; check they are all tightly into the body of the unit and into the shaker frame at the top.

N.B: At any time after the unit's initial usage facemasks should be worn during checking / changing of any poly collection bags and/or filters.

To start the unit, press the green button on the filters own starter panel. The filter unit should now be extracting as required.

When extraction is no longer required the unit should be switched off via the red button on the filters own starter panel.

This pre-programmed starter will then go into its shutdown / clean down cycle. After a short delay the shaker motor will vibrate on the shaker frames rubber mountings. This action cleans the fine dust from inside the filters causing it to drop back into the collection bags. This vibration period lasts for approximately 20 seconds after which the filter is completely shut down.

Fan Shaker Timer



Fan Shaker Timer

This must be set on site as it may still be set from factory testing.

In most cases "Run Down" should be set at 80 secs and "Shake Time" should be set at 20 secs. (as shown in photo)

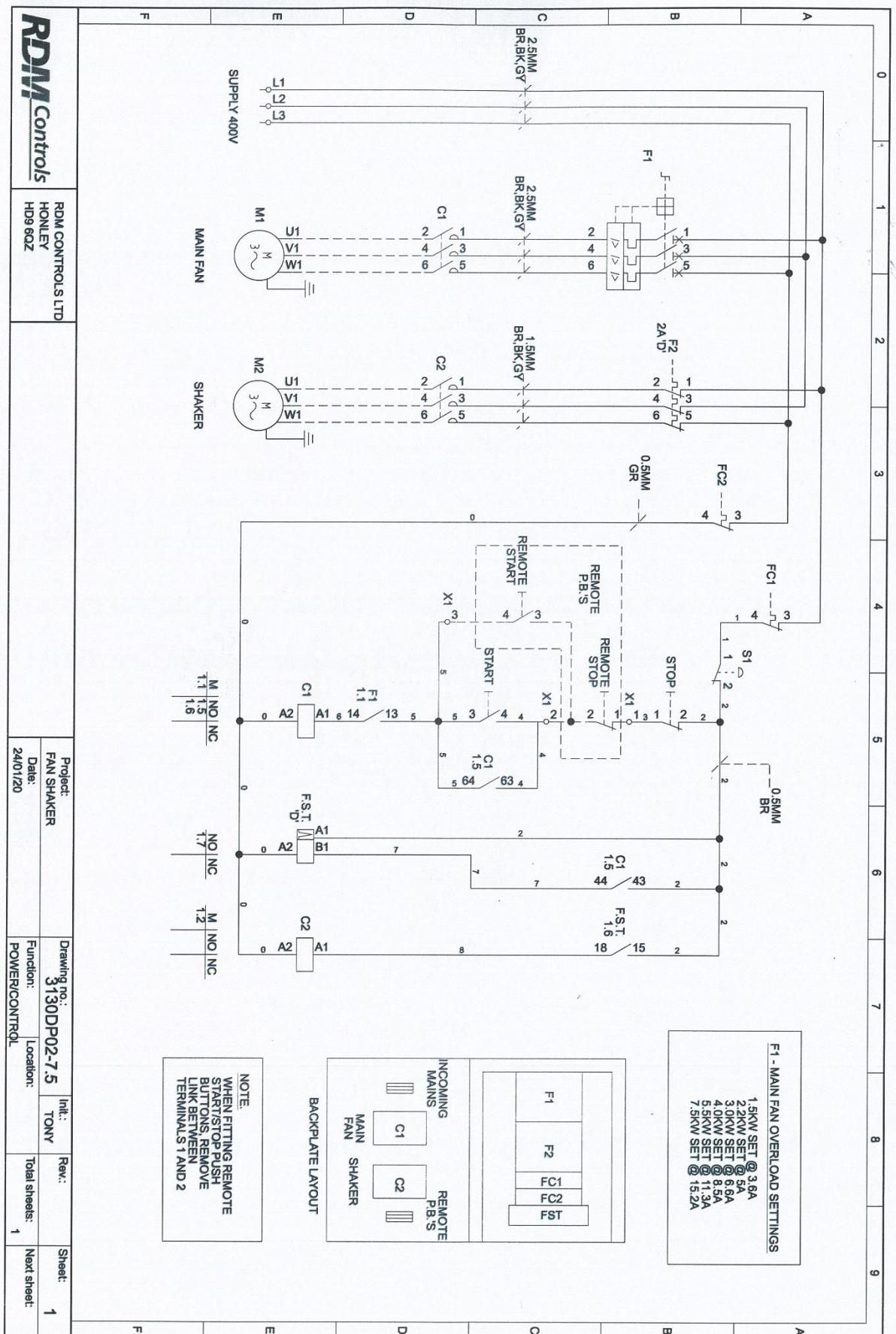
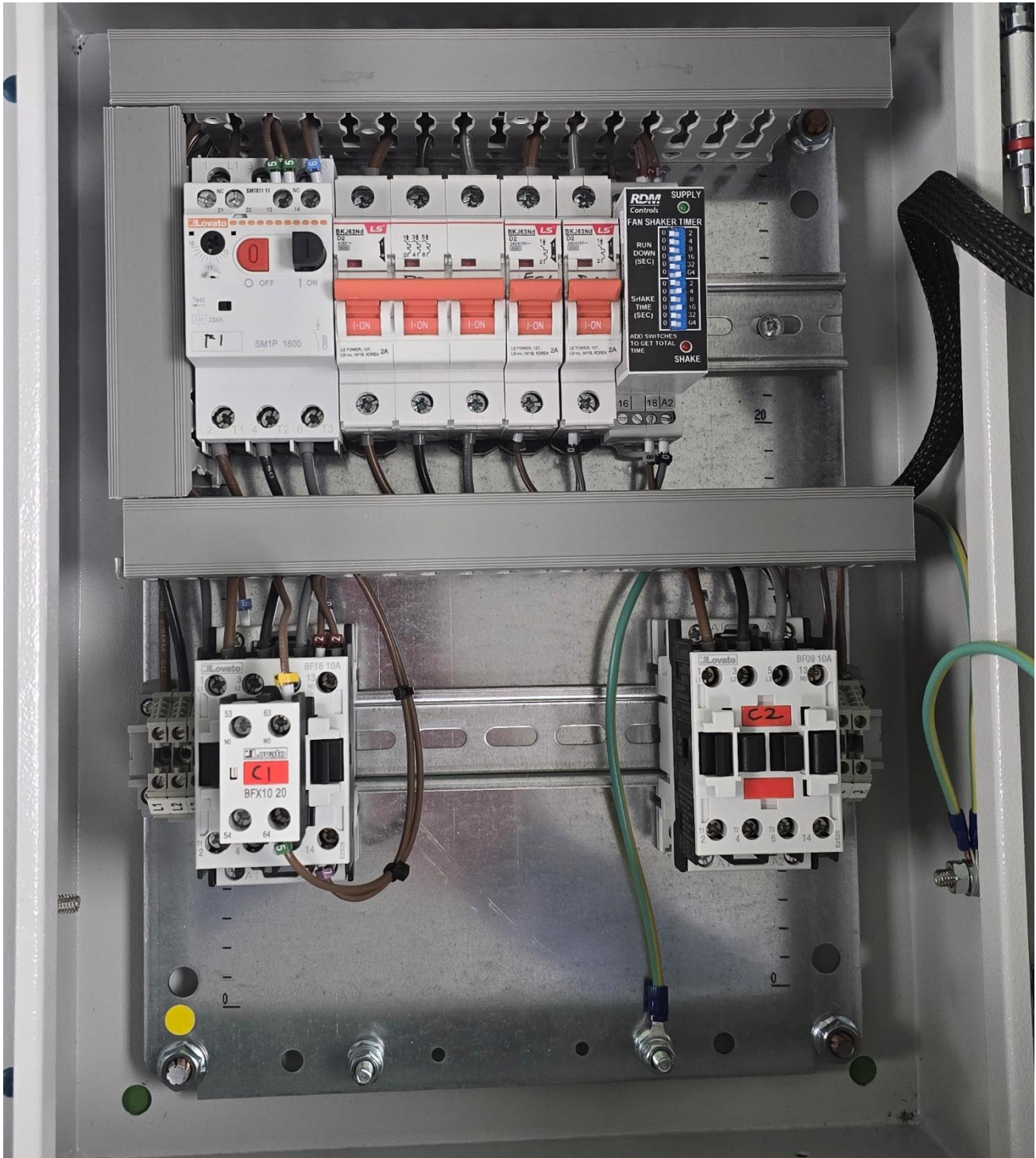


Photo of FSC D.O.L up to 7.5kw Controller from factory



If your control panel doesn't look like this, it may be the previous version (on the next page).

Amended Photo of FSC D.O.L up to 7.5kw Controller from factory

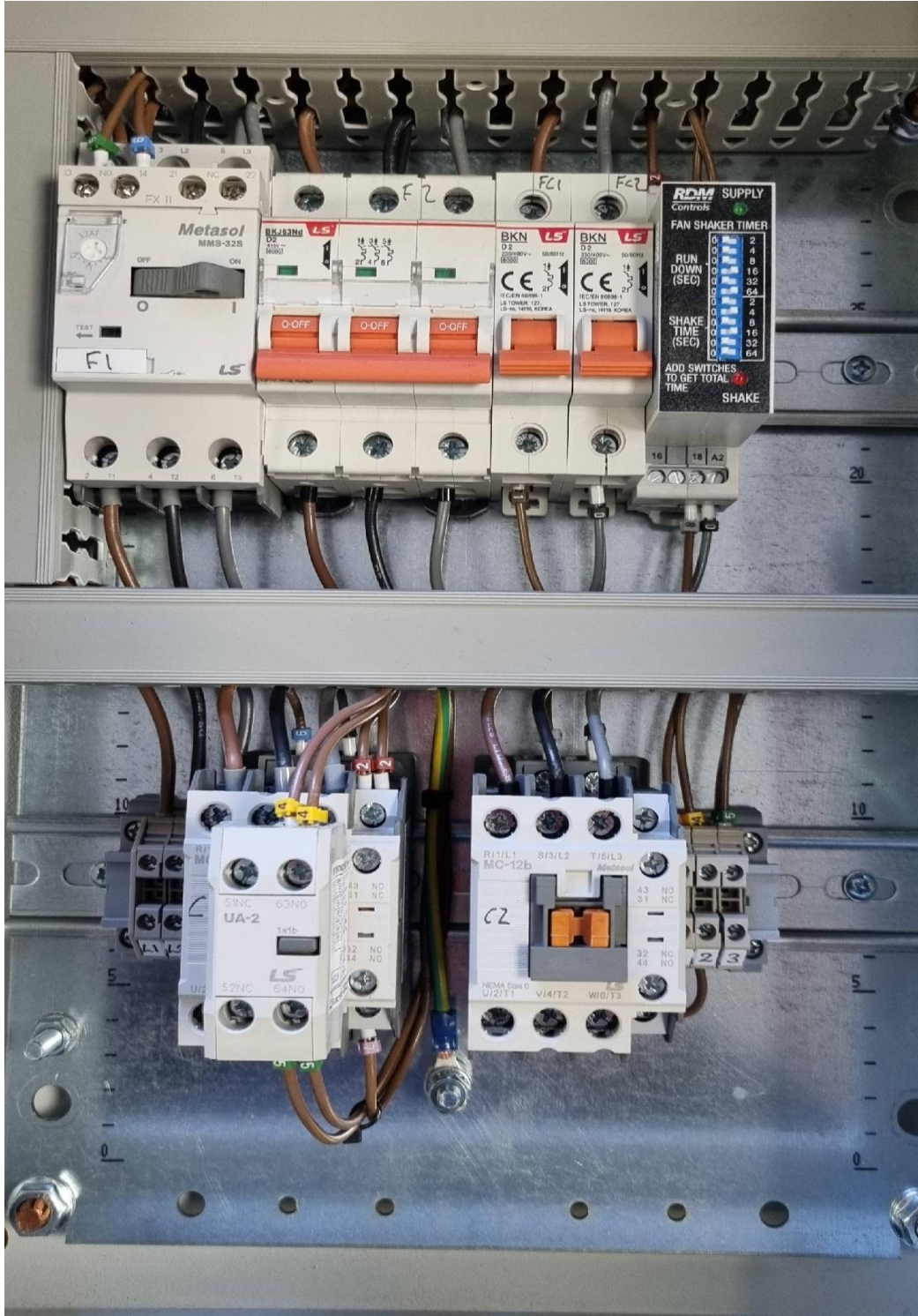
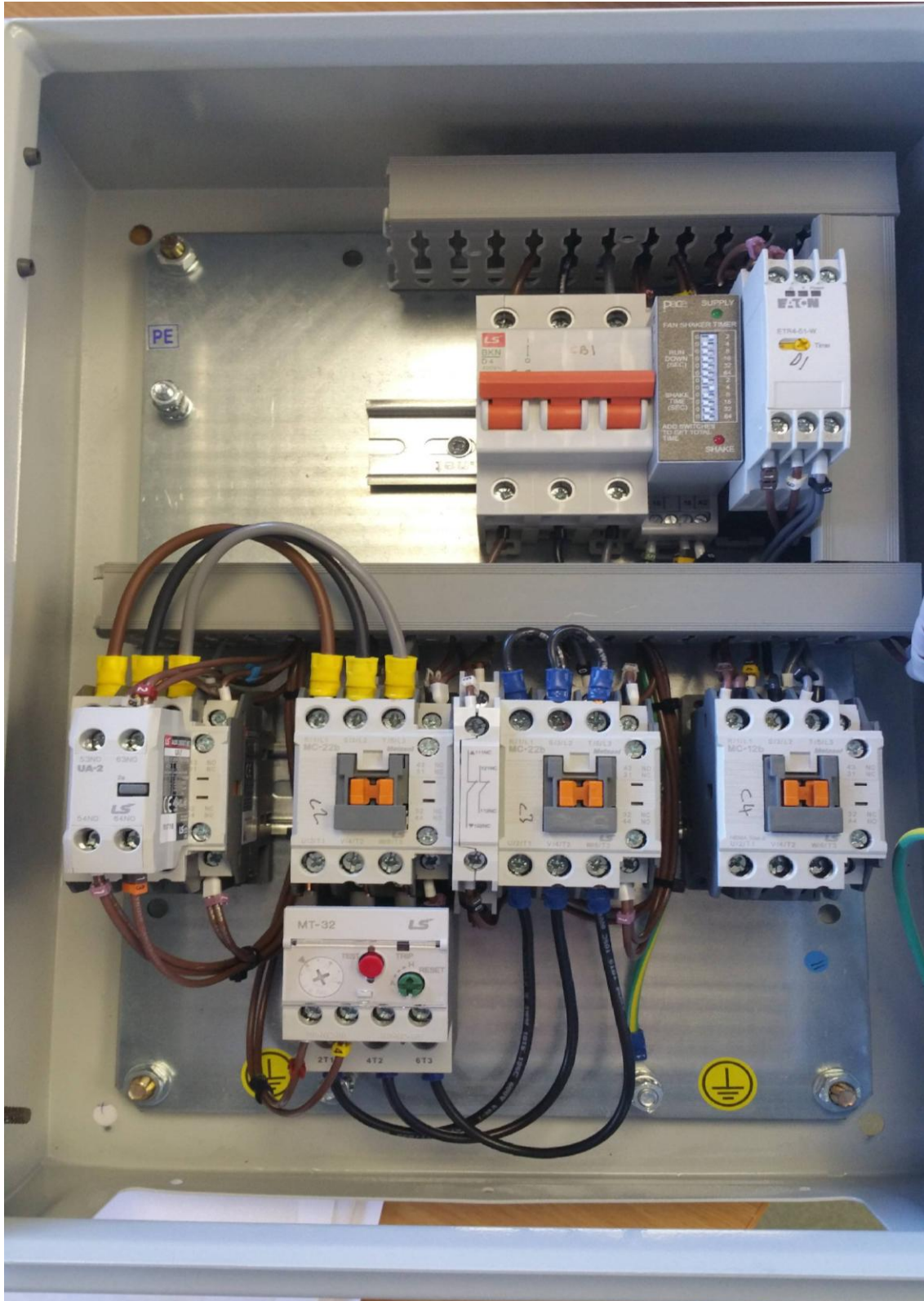
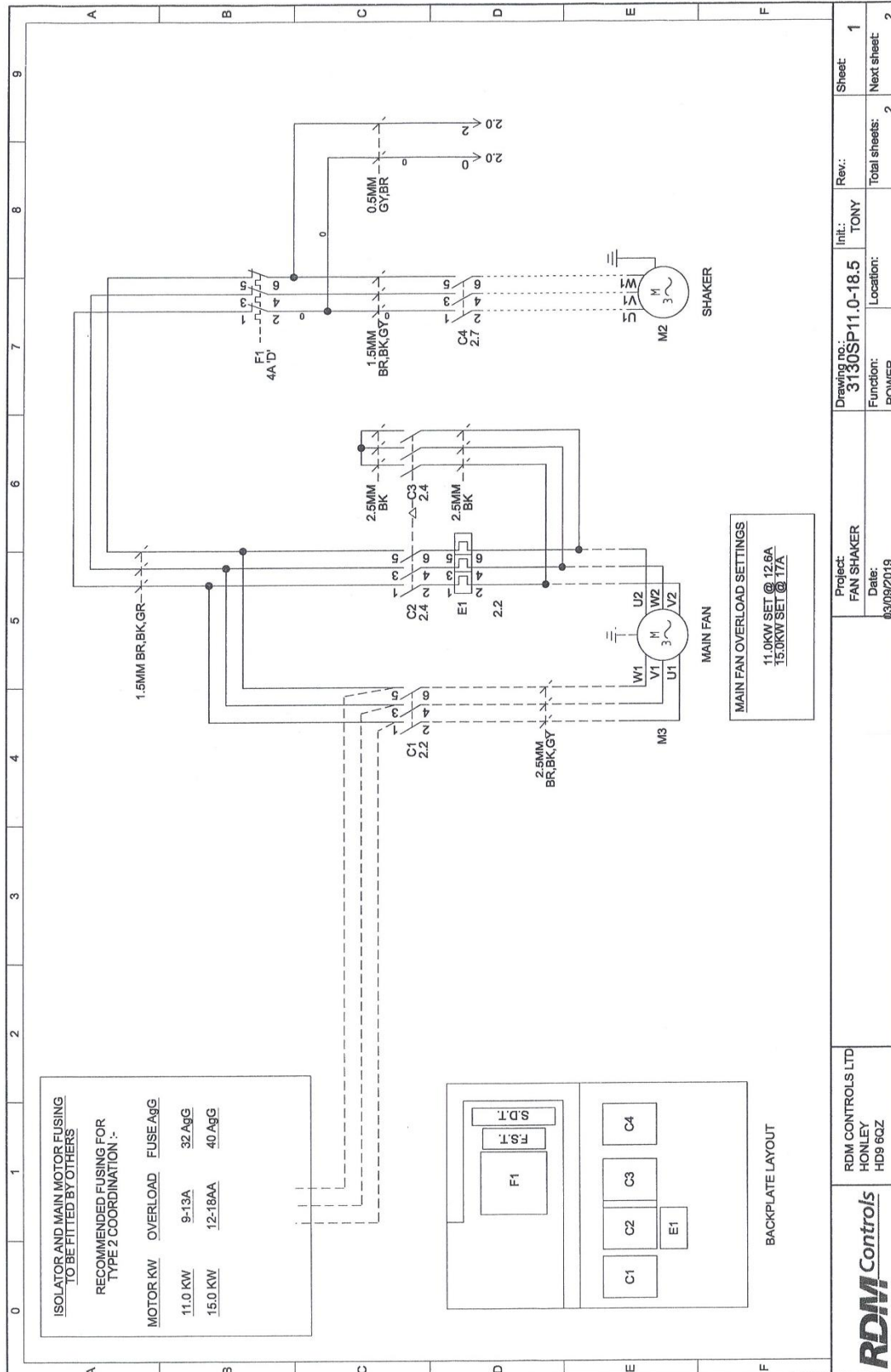


Photo of FSC star delta for 11 / 15kw



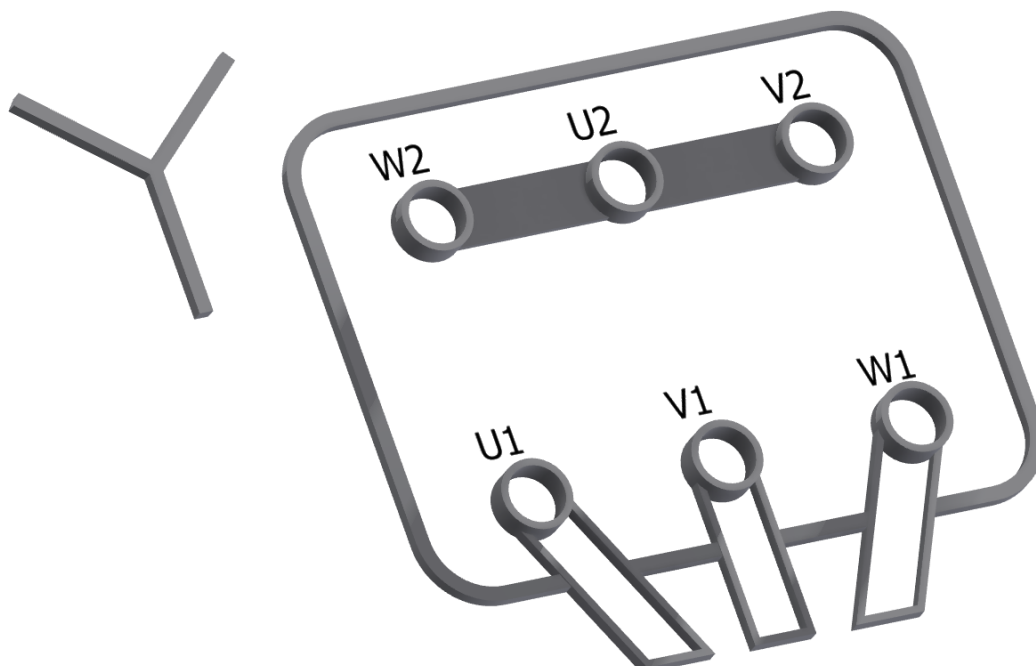


Wiring Connection Instructions for Vibtec Shaker Motor



Reference connection designation stamped on vibrator nameplate for correct wire connections.

Consult owner's/ operator's manual for installation, over-load protection, and maintenance instructions.



Electrical Installation

Electrical Installation should be carried out by qualified personnel only.
A controller is supplied separately for onsite wiring by client (see wiring diagram).

All wiring should be in accordance with the regulations of the institute of electrical engineers.
All motors have been tested and are supplied with motor terminal links already completely installed ready to connect to customer's supply.

Great care should be exercised with regard to the selection of cable size and fittings in accordance to load carrying capacity and type of environment of the installation.

A fused isolated supply is required, fitted with either motor rated H.R.C fuses (not supplied with unit) or miniature circuit breakers Type "D" to the tables below.

Check ratings on fan motor.

Direct On Line	400v 3ph 50hz	400v 3ph 50hz	400v 3ph 50hz
Motor Rating	F.L Amps	Motor Fuses	MCB Type D
2.2 Kw	4.55	16 Amp	10
3 Kw	5.95	20 Amp	10
4 Kw	7.40	20 M25	16
5.5 Kw	10.50	20 M32	20
7.5 Kw	13.90	32 M35	30

Please note F.L Amps are approx. 3x on start up.

Star Delta	400v 3ph 50hz	400v 3ph 50hz	400v 3ph 50hz
Motor Rating	F.L Amps	Motor Fuses	MCB Type D
11 Kw	20.00	32 Amp	40
15 Kw	26.50	32M35	40

% Calculation for other voltages – 3ph 50hz

	220v	230v	380v	415v	500v	550v
Amps	182%	174%	105%	98%	80%	75%

Always check and set thermal overloads to recommended values before starting.

Electrical Assistance

All Inventair control panels are manufactured by RDM Controls, based in Huddersfield.

If you have any issues with the supplied control panel, you can contact Inventair or call RDM Controls direct. Please make sure you have the Check list sheets that are inside the control panel, as you may be asked for these during the phone call.

Upon completion of all electrical installations, an IEE Installation Certificate should be issued. This may be required in support of any warranty claims relating to electrical components within the control panel.



Contact Details:

RDM Controls
Unit 2A
Queens Square Business Park
Huddersfield Road
Honley
Holmfirth
HD9 6QZ

Telephone: 01484 660503

Contact: Dave or Tony.

Warranty Information

Terms of Warranty (Pre-Owned Equipment)

All previously owned equipment, fully refurbished by ourselves, is supplied with a 6-month warranty covering mechanical failure, provided the equipment is operated within its normal working limits and has not been misused.

Terms of Warranty (New Equipment)

All new equipment supplied by ourselves is provided with a 12-month warranty covering mechanical failure, subject to the equipment being operated within its normal working limits and not misused.

Items Not Covered by Warranty (New or Pre-Owned Equipment)

This warranty does not cover:

- Parts subject to normal wear and tear, which are expected to be replaced periodically as part of routine maintenance.
- Damage resulting from negligence, accident, misuse, abuse, or improper operation or installation.

Spare/Replacement Parts

Purchase all our spare parts online: www.inventair.co.uk

POLY BAGS

INVENTAIR UNITS 600Ø - LARGE

BAG SIZE - 965mm X 1524mm (Mk1, 2,3,4,6 & MTFA)

FILTERS – NEEDLEFELT or EPITROPIC

Multi-filter 1200 Long

Multi-Filter 1500 Long



Poly Bag Straps



Filter Bag Straps



Metal Bag Straps

Black Rubber Seal 2.5 Per Neck

Black Rubber Seal 10m Roll



Metal Bins

Metal Bins C/W Castors

Metal Bag Straps C/W Vision Panels

Vibtec Shaker Motors



Anti – Vibration Mounts

