Technical Bulletin TB.0806.008

AIRBLOC Air Curtain

Airbloc AC quiet application retrofit kit.

INDEX **Section**

Warnings

All external wiring MUST comply with the current IEE wiring regulations.

General information.

Airbloc air curtains are designed to provide a constant air jet to form a barrier of air over the full height of the door. Certain AC models are up to 4m.

To accommodate such high velocity, all Airbloc models incorporate powerful fans to force the jet of air to ground level therefore some noise is anticipated from the unit.

Where noise is a premium, such as churches, conservatories, large glass fronted and/or stone floored entrance halls, a retrofit pack is available which reduces the noise emission from the unit.

This technical bulletin describes in detail the procedure required to complete this task.

The information contained in this technical bulletin is designed to aid a qualified or competent service technician in the instruction it is intended for.

Tools required.

The following tools and equipment will be required to complete this task:

1. Toroidal transformer kit pt no. 900158
2. Deflection plate pt no. 102206, 101628 or 102207 * for 1.0m/1.5m and 2.0m respectively.
3. Fixing Kit comprising 5 off M5x10 pozi set screws, 6 off M5 full nuts, 6 off M4 washers & 1 off M5x 80 socket head cap.
4. Large pozi screwdriver
5. Electrical screwdriver
6. Electrical drill plus 5mm metal drill bit
7. 10mm spanner
8. 8mm spanner
9. 4mm allen key.
10. 5mm allen key

Step by step instructions.

ISOLATE ALL ELECTRICAL SUPPLIES TO THE AIR CURTAIN BEFORE PROCEDING.

The following procedure is based upon the air curtain already being in operation.

1. Using a 4mm allen key, undo the screws securing the grille and remove. (fig.1)

fig.1 – Outlet grille

2. Using a pozi screwdriver, firstly remove the 4 screws securing the bottom—then 4 screws on the top of the case and remove. (fig.2)
3. Slacken two bolts on both ends. (fig.3)
4. Using a 10mm spanner, remove three bolts securing the access plate. Carefully hinge down the access plate. (fig.4)

fig.2 – Remove cover

fig.3–Slacken side bolts

fig.4 – Access plate securing bolts

Take the weight as access plate swings down.

5. With a 10mm spanner/ pozi screwdriver**, remove the two bolts securing the element/frame assembly. Carefully remove and position the assembly safely. (fig.5) ** depending on manufacturing date.

fig.5 – Element assembly securing bolts.

6. Using an electrical drill and 5mm bit, carefully drill out the five off pop rivets locating the existing deflection plate and remove (fig.6).

fig.6– Removal of deflector plate

7. Locate the new deflection plate and re-position using M5 x 10 screws/washers and nuts.
8. Reposition the element/frame assembly into its locating slots. Replace the two bolts securing the element/frame assembly. (fig7)

fig.7 – Element assembly securing bolts.

9. Carefully close the access plate and using a 10mm spanner, replace and tighten the three securing bolts. (fig.8) and two side plate bolts.

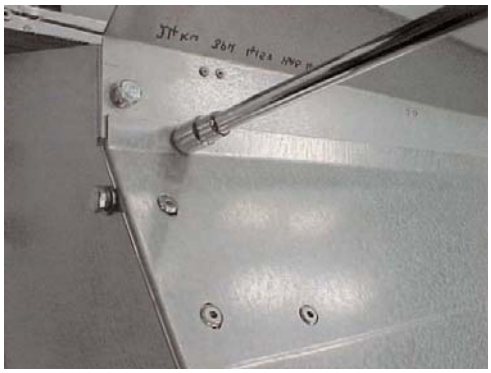


fig.8 – Access plate securing bolts

10. Locate the toroidal transformer (pt no. 900158). Assemble parts in correct order as shown in fig 9.
11. Position transformer assembly into position and using an allen key tighten onto chassis. (see fig.10)

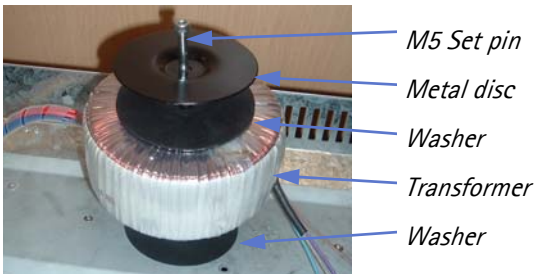


fig.9 – Assembly of transformer

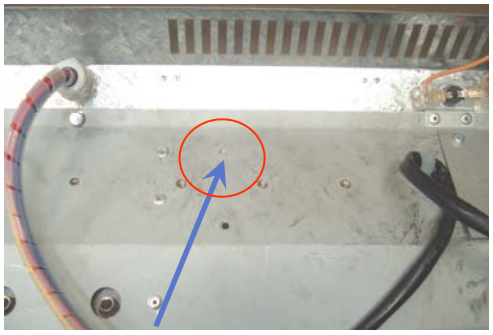


fig.10 – transformer location hole located on chassis

Note:
If a luminaire (e.g. exit sign) is present on the unit, the location holes shown in fig.10 would be covered. In this instance a new hole would need to be drilled at the opposite end of the unit. Use the 5mm set pin and a M5 nut to attach the transformer in place. Using suitable cable/connectors, extend each of the wires along the length of the unit to the terminal rail.

12. Using an electrical screwdriver, remove the incoming cable from the switchbox to the fuse terminal F1 and relocate into terminal 7/extra. (figs 15/17)
13. Using an electrical screwdriver, position stripped end of the GREY wire into **terminal F1** of the terminal strip.
14. Using an electrical screwdriver, position stripped end of the **BLUE** wire into **terminal N** of the terminal strip.
15. Using an electrical screwdriver, position stripped end of the VIOLET wire into **terminal N** of the terminal strip.
16. Using an electrical screwdriver, position stripped end of the BROWN wire into **terminal 7** of the terminal strip. (all wiring shown in figs 12-17).
17. Check all wire tightness and continuity.
18. Replace the cover and using a pozi screwdriver, replace all 4 screws securing the top of the case and remove. (fig.11)

fig.11 – Replace cover .

19. Using a 4mm allen key, replace the outlet grille.
20. Turn the mains isolator back on and operate unit.

fig.12– Ambient/LPHW additional components/ wiring.

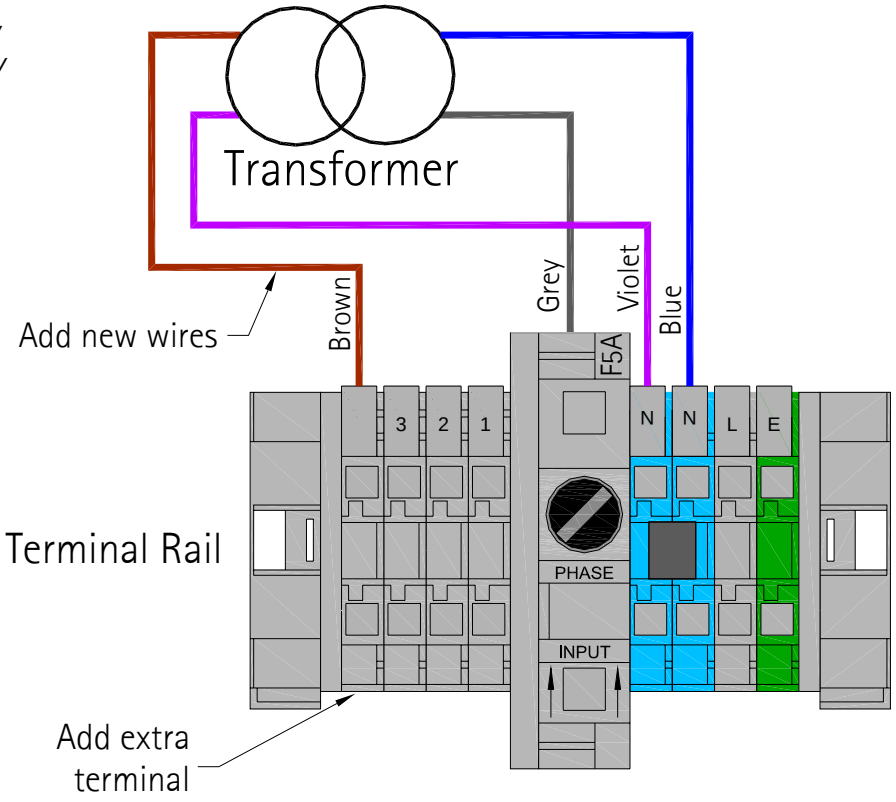
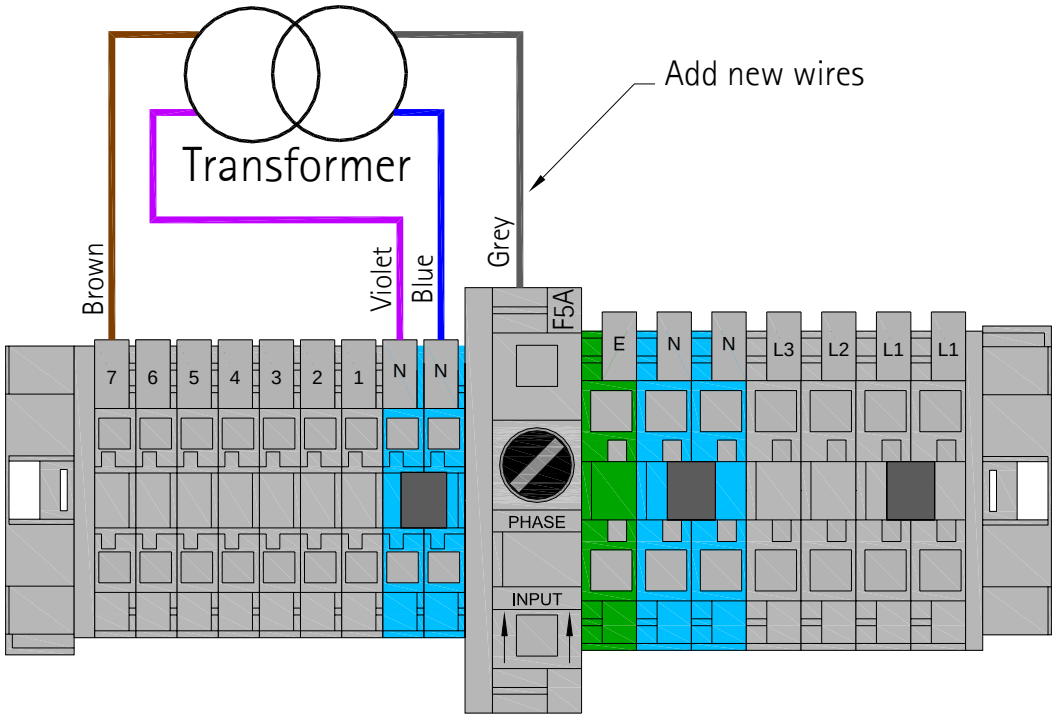


fig.13– Electrically heated additional components/wiring



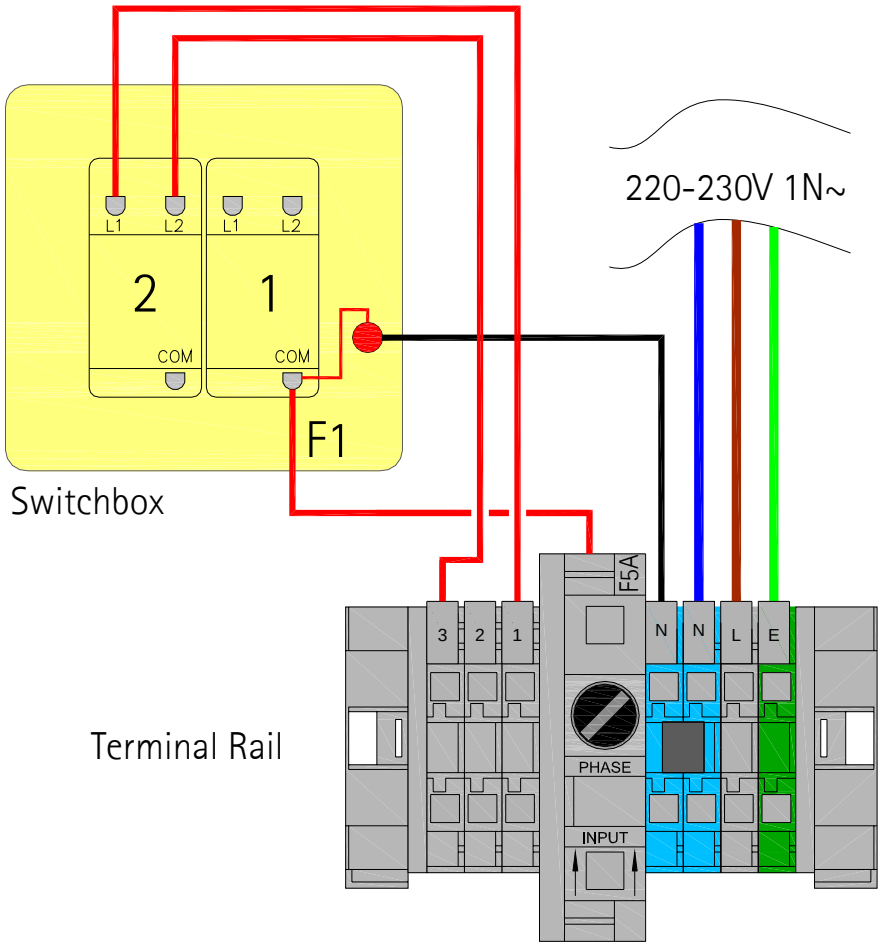


fig.14– Original interconnecting wiring.

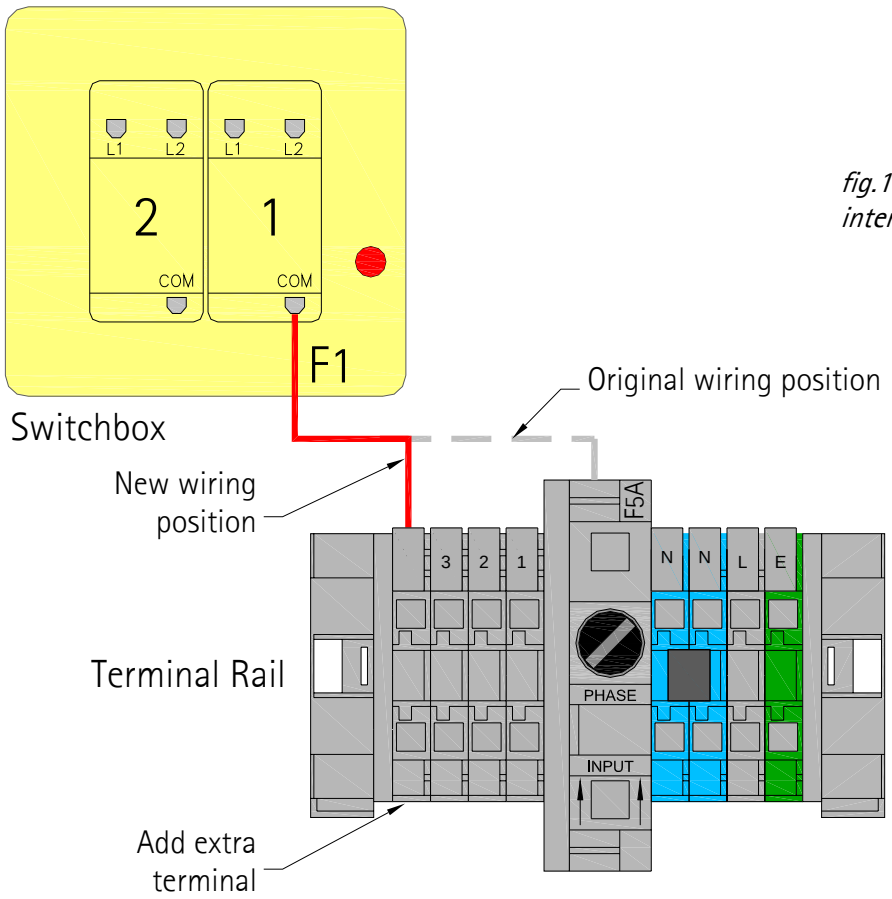


fig.15 – Alteration to interconnecting wiring

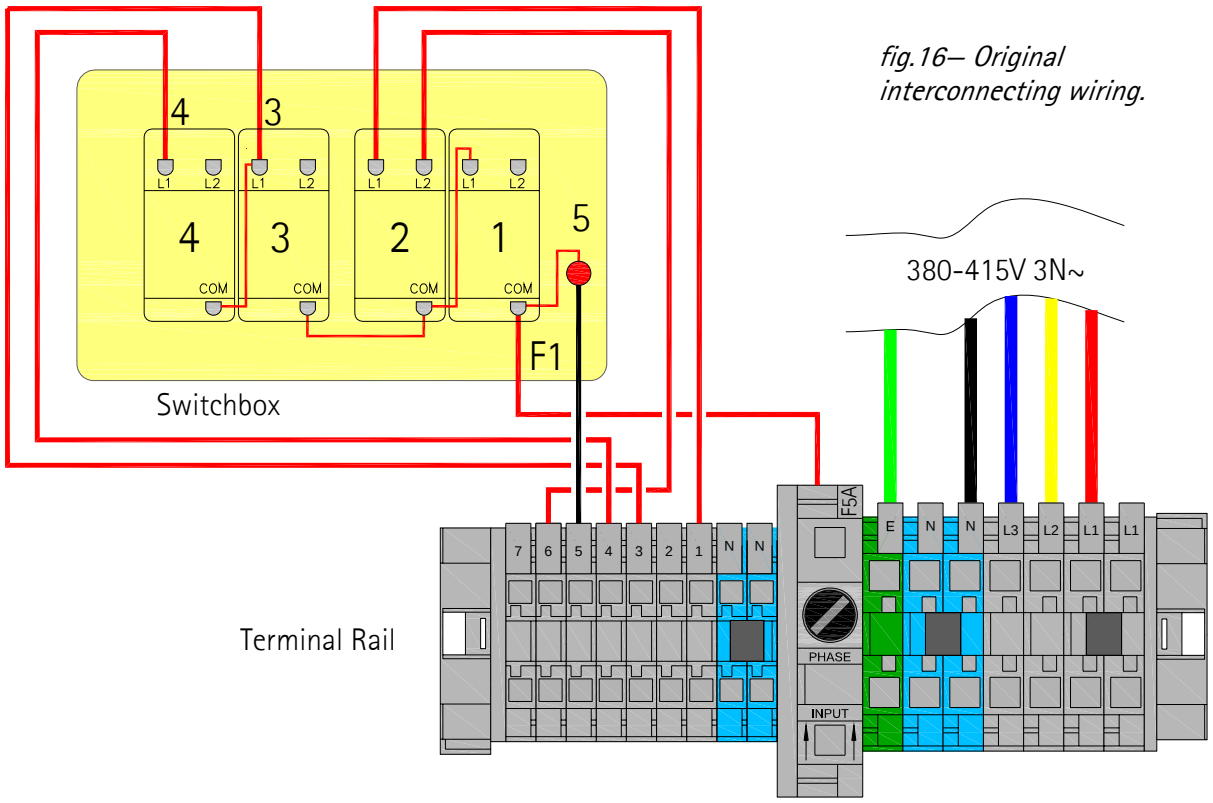


fig.16— Original interconnecting wiring.

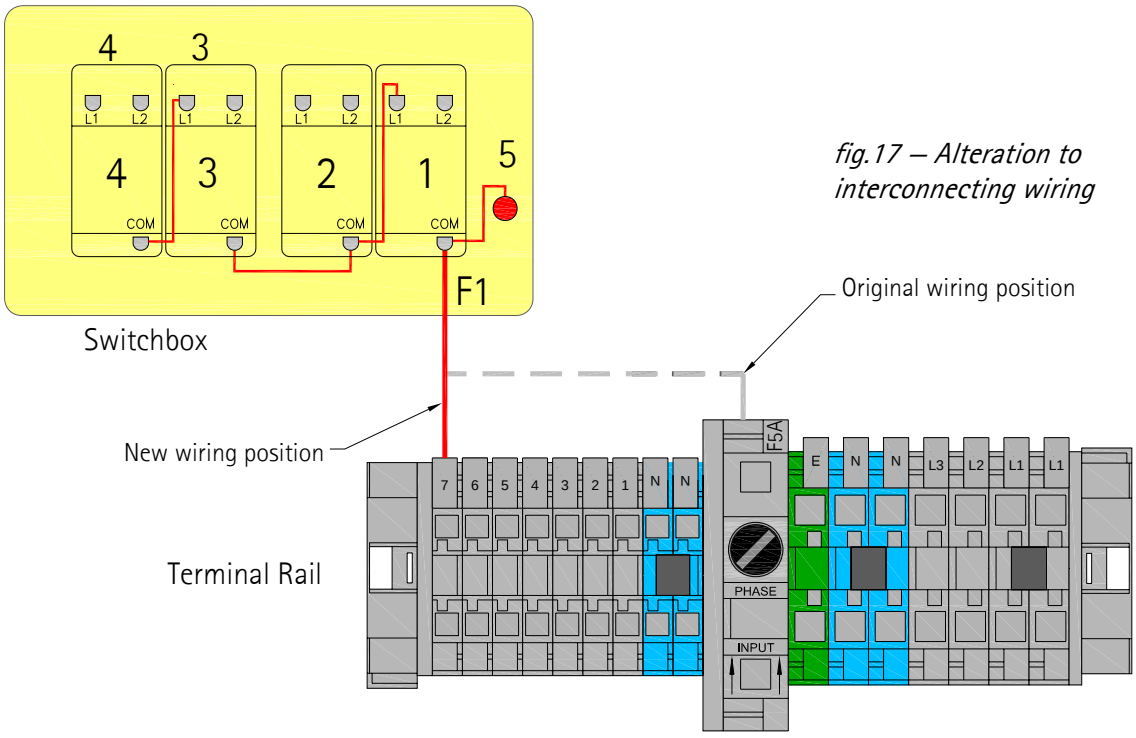


fig.17 — Alteration to interconnecting wiring

Ambi-Rad Limited Fens Pool Avenue
Brierley Hill West Midlands
DY5 1QA United Kingdom
Telephone 01384 489700
Facsimile 01384 489707
UK sales email sales@ambirad.co.uk
Website www.airbloc.co.uk
Database http://support.ambirad.co.uk

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