



THERMAC

INSULATED OPERATING BOX LOUVRE

OPERATION, SERVICE AND MAINTENANCE SCHEDULE

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“THERMAC” – INSULATED OPERATING BOX LOUVRE

OPERATION, SERVICE AND MAINTENANCE SCHEDULE

GENERAL DESCRIPTION

The Thermac ventilator is a louvred ventilator which, when fully opened may provide up to 65% free area depending upon the unit size. The unit has insulated blades which have a calculated "U" value of approximately 0.6 w/m²O° and may be operated by a range of control options.

CONTROL OPTIONS

Electro-magnet controls - de-energisation of the magnets retaining the louvre blades in the closed position will cause the unit to open by the action of springs mounted within the unit

Tubular winch - interruption of the power supply will open the ventilator by the action of springs mounted within the unit

Manual operation - disengage the cable to allow the louvre blades to open by the action of internally mounted springs.

Pneumatic operation

Electric actuator -operated from remote control panel with “open” or “close” option.

TESTING

Where the unit is part of a system providing day-to-day ventilation only, we recommend that the units be tested on a monthly basis.

Units should not be left for long periods without testing as this may affect the functioning of the unit.

OPERATING INSTRUCTIONS (TESTING ONLY)

ELECTRO-MAGNET TYPE

TO OPEN: Interruption of the power supply will cause the louvre blades to open by the action of the internally mounted springs.

TO CLOSE: Reinststate the power supply, then pull down on re-set cable until the magnet faces meet and the louvres stay closed.

Note: Care must be taken to ensure that the manual reset cable is unobstructed and free running.

240 VOLT-24 VOLT TUBULAR WINCH MOTOR

TO OPEN: Interruption of the power supply will de-activate the electro-magnet built into the tubular motor, thereby allowing control cable to unwind and the louvre blades to open by the action of the internally mounted springs attached to the control bar.

TO CLOSE: Re-instate the power supply and then turn the operating switch to the “close” position. This will re-activate the magnet contained in the motor and the motor will activate and rewind the control cable to close the louvre blades. (The motor will stop turning when the control bar makes contact with the limit switch). 24 volt supply must be maintained to hold blades in the closed position.

MANUALLY OPERATED (CLAM CLEAT)

TO OPEN: Pull cord/cable in a downwards and outwards direction to disengage the clam cleat cable grip and release the cable to open the unit.

TO CLOSE: Pull cord/cable in a downwards direction until louvre blades are closed then allow cord/cable to engage into the clam cleat assembly to hold the louvre blades in the closed position.

OPERATING CABLE - IMPORTANT

Care must be taken to ensure that the manual operating cable is installed in accordance with our recommended fixing instructions and is unobstructed and free running. Pulleys must be used when direction of cable run is changed, with number of direction changes kept to a minimum with no acute angles.

PNEUMATICALLY OPERATED

TO OPEN: Turn control panel switch to open.

TO CLOSE: Turn control panel switch to close.

ELECTRIC ACTUATOR

TO OPEN: Turn switch on control panel to “open”.

TO CLOSE: Turn switch on control panel to “close”.

MANUALLY OPERATED (WINCH TYPE)

TO OPEN: Turn handle anti-clockwise.

TO CLOSE: Turn handle clockwise.

RESET CABLE - IMPORTANT

Care must be taken to ensure that the manual reset cable located on units with electro-magnet controls, is unobstructed and free running. The cable must not be tied to the wall or restricted in any way which may prevent the unit opening.

OPERATING INSTRUCTIONS (DAY TO DAY USE)

ELECTRO MAGNET CONTROLS

NOT RECOMMENDED FOR DAY TO DAY USE

240 VOLT-24 VOLT TUBULAR WINCH MOTOR

TO OPEN: Turn the control switch to the "open" position and the motor will operate allowing the louvre blades to open on the internally mounted springs. The motor will automatically stop at the fully open position when the limit switch is activated.

TO CLOSE: Turn the control switch to the "close" position and the motor will close louvre blades. The motor will automatically stop when the louvre blades are in the closed position.

Note 1: The louvre blades may be held in any position between fully open and fully closed on either the opening cycle or closing cycle.

The closing procedure is as previously described under the "close test" heading.

Note 2: The unit must be closed during inclement weather or at the close of business when the premises are vacated.

MANUALLY OPERATED – (CLAM CLEAT)

TO OPEN: Pull cord/cable in a downwards and outwards direction to disengage the clam cleat cable grip and release the cable to open the louvre blades.

TO CLOSE: Pull cord/cable in a downwards direction until louvre blades are closed then allow cord/cable to engage into the clam cleat assembly to hold the louvre blades in the closed position.

MANUALLY OPERATED (WINCH TYPE)

TO OPEN: Turn handle anti-clockwise.

TO CLOSE: Turn handle clockwise.

HAND OPERATED/FRICTION CONTROL

TO OPEN: Pull handle downwards to open the louvre blades.

TO CLOSE: Push handle upwards to close the louvre blades

Units or normally mounted at hand height or accessed via a long pole. The blades have been tensioned so that they are relatively stiff to move and therefore should remain in the position required when operated.

PNEUMATICALLY OPERATED

TO OPEN: Turn control panel switch to open.

TO CLOSE: Turn control panel switch to closed.

Note: If units are "failsafe to open", air supply must be maintained at all times to allow units to close.
If units are "failsafe to close", the units will automatically return to the closed position.

ELECTRIC ACTUATOR

TO OPEN: Turn switch on control panel to "open".

TO CLOSE: Turn switch on control panel to "close".

MAINTENANCE

APPLICABLE FOR ALL CONTROL OPTIONS – THERMAC VENTILATOR

1. Check the fixings securing the ventilator and all ventilator fastenings/nuts/bolts/springs etc.
2. All internal drainage channels should be inspected and debris removed to ensure correct drainage and weathering.
3. Ensure that no foreign objects are interfering with the operation of the unit.
4. **Reset cable – on units operated by electro magnets, ensure the reset cables are free running and not tied off or restricted.**

CLEANING IN SITU

It is the responsibility of the customer to ensure that the goods are properly maintained.

THE USE OF ABRASIVE, POLISH OR CLEANERS SHOULD NOT BE USED.

STRONG SOLVENTS SHOULD NOT BE USED FOR CLEANING COATED SURFACES UNDER ANY CIRCUMSTANCES.

- Clean off any dirt/debris using a mild detergent and warm water using a sponge or soft cloth and, if required, a stiff (not wire) brush. The use of chemicals should be avoided.*

*See paragraph below if units are finished in polyester powder coating.

CLEANING POLYESTER POWDER COATINGS

PPC products should, under **NO CIRCUMSTANCES**, be cleaned using abrasive cleaners, strong solvents, strong alkali or acid material or cutting and abrasive polishes.

The coated products should be cleaned at periods not exceeding 12 months. In HIGHLY POLLUTED AREAS this interval should be reduced to 6 months.

Cleaning should take place using water containing a mild cleaning solution. This is to be applied using a soft brush, sponge or chamois leather.

HARD SCRUBBING MAY DAMAGE THE PPC.

ANY DAMAGED AREA MUST BE CORRECTED IMMEDIATELY.

SERVICING

It is recommended that, after installation, the ventilators should be serviced at least once a year. The frequency may have to be increased subject to the type of environment. This work to be carried out by a suitable qualified technician and any repairs or modifications reported. After carrying out the service work, the whole system should be tested to ensure that it operates in accordance with the specification for the project.

Cleaning and/or maintenance should be undertaken by a responsible contractor. It is the responsibility of the contractor to apply all necessary safety procedures under the relevant CDM requirements.

ATTENTION

If the electricity supply is interrupted i.e. due to power cut and/or shut-off for maintenance etc, and there is NO battery back-up, then any McKenzie Martin Fire Smoke Ventilation Units held shut with electro-magnets should be checked to make sure the Louvre blades are not left in the open/exhaust position and should be re-set (i.e. closed) to avoid weather penetration and/or wind damage.

TEST RECORD SHEET for McKENZIE-MARTIN LIMITED
“THERMAC” INSULATED OPERATING BOX LOUVRE

DATE	HOW OPERATED	RESULT	DETAILS OF FAILURE	SIGNATURE

**McKENZIE-MARTIN "THERMAC"
INSULATED OPERATING BOX LOUVRE
SERVICE CERTIFICATE**

USER'S NAME..... REF.NO.....

ADDRESS.....

.....

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SYSTEM COMPRISES:

Number of ventilators.....

Number of control panels and overrides.....

Number of compressors.....

Type of system, ie pneumatic, electrical, etc.....

Mode of actuation, ie automatic smoke detection, sprinkler flow switch, manual fusible link, etc

.....

SERVICE DETAILS

The system has been serviced in accordance with McKENZIE-MARTIN SERVICE & MAINTENANCE SCHEDULE in addition the following work has been carried out:

REPAIRS AND MODIFICATIONS

The following items were repaired or replaced:

The system was modified by:.....

TESTING

On completion of the above work the whole system was tested as follows:

The system was fully operational and the service was completed to our satisfaction.

User's Signature.....Position.....Date.....

Service Engineer's Signature.....Date.....