

ICC OPERATING MANUAL ELECTRO-MECHANICAL CONTROLLER (TO REMAIN WITH THE EQUIPMENT AND THE USER)

1. SAFETY PROCEDURES

Installation

The units making up the Air Conditioning System must be installed only by a qualified engineer, following the mandatory and local codes of practice.

Handling

Care must be taken when the units are moved or lifted to ensure that everyone and everything is safe. When lifting equipment is used, it must be suitable and approved.

Application

Ensure that the unit is only used for suitable purpose / applications.

Electrical Connection

Electrical work and connections must only be made by authorised electricians in accordance with mandatory regulations and local codes of practice.

Warranty

Failure to comply with the manufacturer's installation instructions could affect the performance of the unit and invalidate the warranty. Warranty is also subject to the implementation of a planned service / maintenance agreement as documented in the warranty booklet supplied with the unit.

General

- a) All works must be carried out in accordance with manufacturer's installation and operating procedures.
- b) Good working practices must be followed at all times so that Mechanical and Electrical Hazards are kept to a minimum.
- c) The equipment has been fitted with doors and covers to prevent access during operation. These must be kept in place and additional guards fitted, if necessary.

- d) The equipment must be connected to a local external electrical isolator as one is not supplied fitted to the unit.
- e) Servicing and maintenance must only be carried out by fully qualified and competent staff. Before any work is started, electrically isolate the units to make sure they cannot be switched on accidentally and allow sufficient time for isolated parts to come to rest before removing panels. Electrical isolation switches MUST be labelled to show that they are off during servicing and maintenance operation.

NOTE
**SOME UNITS ARE DORMANT IN
STANDBY MODE AND CAN RESTART
WITHOUT WARNING IF THEY ARE NOT
ELECTRICALLY ISOLATED.**

- f) Care must be taken not to touch components or pipework which may be extremely hot or cold, for a period after the unit is electrically isolated.
- g) After completing any tasks ensure all guards, covers and doors are correctly refitted before restoring the power supply to the unit.
- h) Air conditioning equipment may generate unacceptable noise levels. If noise levels are unacceptable sound and vibration attenuators may be required. For noise level guidance refer to technical literature, or contact Qualitair, or their distributors for advice.

SPECIAL NOTE
**If anything is not clear, please contact
your distributor for clarification.**

2. OPERATION OF THE SYSTEM

Description

The system which has been installed operates on the principle of direct expansion refrigeration and consists of an indoor mounted ICC Evaporator Unit and an outdoor ICU Condensing Unit.

Configuration

The system is available in two versions:

1. Direction expansion cooling	Air Conditioning unit only
2. Direct expansion cooling with electric heating	Air conditioning unit with Heater option

Control

Control for the ICC system is by an integral thermostat which operates as described below.

Operation

The ICC / ICU unit is operated automatically by the thermostat to provide cooling or optional heating.

<p>NOTE When the unit is being serviced, it is important to make sure that the unit is isolated at the mains, not just switched off at the controller.</p>

3. OPERATION OF THE CONTROLLER

General

Two switches control the function of the unit and operate as follows:

Temperature Control Knob

Operates a heating / cooling thermostat which is adjustable within a range of 7°C – 23°C (45°F – 75°F).

Switch

Operates a combined On / Off / Fan Only, Cooler and optional heater.

Correct use of these controls will provide maximum efficiency from the unit and will prevent unnecessary tripping of safety devices.

Operation of Controls

Thermostat

Allow room temperature to settle before adjusting the control and DO NOT adjust rapidly from one setting to another.

NOTE
This is a change-over thermostat which will automatically control the function of the electric heater (if fitted).



Switch Position	
OFF (O)	The unit is stopped but the condenser crankcase heater (if fitted) is live and operating.
FAN (I)	The unit is now operating the fan only with no Heating / Cooling.
COOLER (II)	The unit is fully operative on automatic control – Cooling and Heater (if fitted) will operate to maintain the desired condition.

DO NOT
Switch to OFF or FAN and then immediately back to COOLER under any circumstances. Always allow at least 3 minutes between any operation that stops and starts the compressor.

4. MAINTENANCE

Routine Precaution & Maintenance

SWITCH OFF POWER SUPPLY AT MAINS OUTLET BEFORE COMMENCING ANY TASK.

If the evaporator fan stops, isolate the electrical supply and check the fuses.

If the condenser, compressor and fan stop, allow 30 minutes before action; the components may have stopped operating because the room is at the required temperature. Alternatively, due to low room or outside temperature, ice may have formed on the evaporator coil. In this event, the condensing unit will not operate until the ice is melted by room air passing over the evaporator coil.

Ensure that the doors of the cool storage area are closed if room conditions are to be maintained.

Remove drain tray and clean the coil at least TWO or THREE times a year.

Ensure the condensate drain is clear of any blockages.

IF FURTHER INFORMATION OR SERVICE IS NECESSARY, CONTACT YOUR QUALITAIR DEALER.

Warranty

The Qualitair system is supplied with an extended 3-year parts warranty which is detailed in the Warranty Booklet supplied with the unit. The extended warranty is valid subject to the system being serviced at least twice a year or at shorter intervals dictated by the climatic conditions or cleanliness of the operating environment. Please ensure that the maintenance procedures detailed in the warranty are adhered to (and the booklet completed) as this will help to extend the life-span and reliability of the system.

Routine Maintenance

- ❑ Servicing or maintenance must only be carried out by fully qualified and competent personnel.
- ❑ Before carrying out any work on the unit, make sure that it is ISOLATED ELECTRICALLY AT THE MAINS ISOLATOR and cannot be restarted accidentally. Place a prominent notice on the isolating switch stating that maintenance work is being undertaken and that the power must NOT be switched on. (Lock off isolator if possible.)
- ❑ Note that any orange coloured cables may remain LIVE, even when the power is turned off.

- ❑ Before any access panels are removed or doors opened, allow sufficient time for moving parts to come to rest.
- ❑ Some components may remain extremely hot or cold for a period after the unit has been switched off.
- ❑ After maintenance work has been completed, make sure that all covers and doors are correctly refitted and secured before the unit is restarted.

Spare Parts

All spare parts fitted to the units must be to the same specification as those originally fitted.

Qualitair can provide a full range of spare parts which can be obtained from the local distributor.

**IMPORTANT NOTE
PLEASE ENSURE THAT THE INSTALLER COMPLETES BOTH TABLES BELOW**

Installer / Distributor Information

Details of Installer	
Company Name	
Address	
Telephone N°	
Installing Engineer	
Date of Installation	
Indoor Unit Serial N°	
Outdoor Unit Serial N°	
Warranty Booklet N°	

Details of Distributor	
Company Name	
Address	
Telephone N°	
Date Unit Purchase	
Sales Reference	

Warranty Booklet

Ensure the warranty booklet is completed and the tear-off section returned to comply with the warranty conditions.

ICC SPARES

	ICC25	ICC35	ICC50	ICC60	ICC70
Fan Capacitor	1030166	1030166	1030166	1030166	J9991509
Controller (Electronic)	1150713	1150713	1150713	1150713	1150713
Switch	1190407S	1190407S	1190407S	1190407S	1190407S
Terminal Block	1201571	1201571	1201571	1201571	1201571
Expansion Valve	2121458S	2121460S	2121461S	2121462S	2121462S
Fan / Motor	3010560	3010562	3010562	3010562	3010563
Coil	HBK134-01	HBK134-02	HBK134-03	HBK134-04	HBK134-04
Drain Fitting	J9991329	J9991329	J9991329	J9991329	J9991329
Knob (Mechanical)	J3385015	J3385015	J3385015	J3385015	J3385015
De-Ice Stat (Mechanical)	J9990568	J9990568	J9990568	J9990568	J9990568
Heater Relay	1170067	1170067	1170067	1170067	1170067
Heater Element	J2744000	J2744000	J2744000	J2744002	J2744002
Thermostat (Mechanical)	J9990859	J9990859	J9990859	J9990859	J9990859
Controller (E + Heater)	1150714	1150714	1150714	1150714	1150714
Heater Cut-Out	J9990818	J9990818	J9990818	J9990818	J9990818
Heater Transformer	1240190	1240190	1240190	1240190	1240190
Heater Fuse	1081419	1081419	1081419	1081419	1081419
Heater Fuse Holder	1080126	1080126	1080126	1080126	1080126

CE CERTIFICATE

Eaton-Williams Air Conditioning

*(Eaton-Williams Ltd)
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Kent - TN8 6EG - England
Telephone ... 44 (0)1732 866055
Telefax ... (0)1732 863461*

ELECTROMAGNETIC COMPATIBILITY DIRECTIVE

89/336/EEC

MACHINERY DIRECTIVE

EC Declaration of Conformity
As Defined by the EC Council Directive on Machinery

89/392/EEC Annex IIA and amended by
91/368/EEC - 93/44/EEC & 93/68/EEC

We declare that the equipment designated below,
on the basis of design and construction in the form marketed by us and
when installed and operated in accordance with our information and instructions,
conforms to the EMC Directive, the PED and the essential Health and Safety requirements
of the Machinery Directive.

If alterations are made to this equipment without our approval,
this declaration becomes invalid. Furthermore, this equipment may be
assembled into other systems which may also constitute machinery and shall
not be put into service until the assembled system has been declared in conformity
with the Machinery Directive.

Model

Serial N°

Standards Applied

BS EN 292-Pt2

EMC

BS EN50081-1

EMC

BS EN50082-1

Low Voltage

EN60204 pt1

Pressure Equipment prEN14276-2

Controls Applied

BS EN ISO 9001: 1994

BSI Registered Company Q5026

Gerry Stapley

Gary Martin

Managing Directors

Qualitair

Edenaire

Moducel



QUALITAIR

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AN EATON-WILLIAMS COMPANY

As part of the policy of continuous product improvement, we reserve the right to alter specifications without notice