

# Heat Dump Advanced Installation Manual

Original instructions

*English version – EN  
Sweden - SWE  
Norway - NOR*



## **Appliance types covered:**

<b>Model</b>	<b>Type</b>
09-0204-01	Heat Dump Advanced

PART No.	PI015362
REVISION:	No. 3
ISSUE DATE:	17/7/2017

## **Dear Customer**

**Please read the User Guide and Installation Manual carefully before operating this unit.**

Please keep the User Guide and Installation safe and with the unit.

Examine the equipment immediately after supply for transport damage. Contact your equipment supplier and/or carrier if necessary. Damage, which arises by inappropriate treatment or operation, is not subject to guarantee \ warranty.

Equipment manufactured or supplied by Welbilt (Halesowen) Limited complies with the current legislation and standards of the EU and represents the current standard of technology. Safety during operation may only be assured by following the instructions in this guide.

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Section 1 – Warnings

- WARNING:**

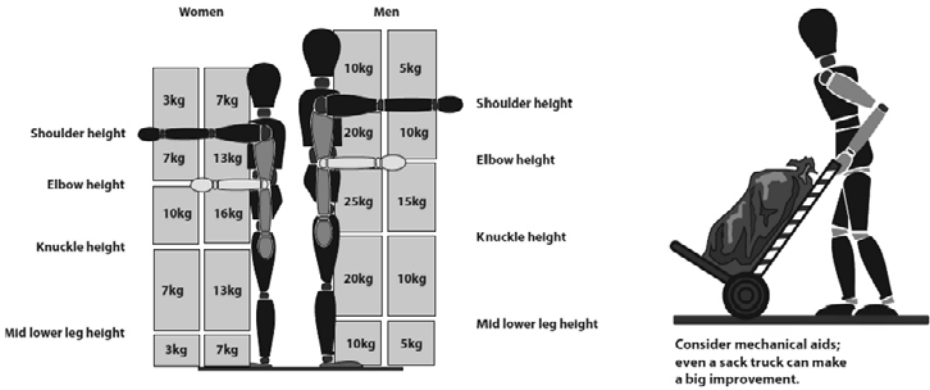
THIS APPLIANCE IS NOT TO BE USED BY PERSONS WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES OR LACK OF EXPERIENCE AND KNOWLEDGE UNLESS THEY HAVE BEEN GIVEN SUPERVISION OR INSTRUCTION.
- WARNING:**

THIS APPLIANCE IS UNSUITABLE FOR USE BY CHILDREN, AGED OR INFIRM PERSONS.
- WARNING:**

THERE ARE NO END USER SERVICEABLE PARTS. ANY FAULT OR PROBLEM WITH THE EQUIPMENT MUST ONLY BE RECTIFIED BY A QUALIFIED FACTORY APPROVED SERVICE ENGINEER (FAS).
- WARNING:**

ALTHOUGH EVERY CARE IS TAKEN DURING MANUFACTURE, DAMAGE TO THE METALWORK DURING TRANSPORT, INSTALLATION AND GENERAL USE MAY OCCUR. THIS MAY RESULT IN SHARP OR JAGGED EDGES. AVOID CONTACT WITH METAL EDGES OR OTHER POTENTIAL HAZARDS.
- WARNING:**

PLEASE REFER TO MANUAL HANDLING GUIDELINES WHEN LIFTING THIS EQUIPMENT.



BEFORE LIFTING OR MOVING THIS EQUIPMENT IT IS RECOMMENDED THAT ALL PERSONS PERFORMING THESE TASKS SHOULD RECEIVE RELEVANT TRAINING IN SAFE HANDLING.

ALL PERSONS LIFTING OR MOVING THIS EQUIPMENT MUST BE WEARING THE CORRECT PERSONAL PROTECTIVE EQUIPMENT. TO PREVENT PERSONAL INJURY WHERE PRACTICAL, TRANSPORTING

OF THE UNIT OVER EXTENDED DISTANCES SHOULD BE DONE USING A MECHANICAL AID.

ALWAYS TRANSPORT THE UNIT IN THE CORRECT UPRIGHT POSITION, NEVER ON ITS SIDE OR TOP.

**WARNING:** IT IS UNSAFE TO LIFT OR ATTEMPT TO MOVE THE APPLIANCE DURING CLEANING OR AT ANY OTHER TIME WHEN THE UNIT IS OPERATING.

**WARNING:** ONLY USE EQUIPMENT FOR ITS INTENDED USE AS DESCRIBED IN THE INSTALLATION MANUAL. THERE ARE NO OTHER RECOMMENDED USES FOR THIS EQUIPMENT. UNINTENDED USE OF THE EQUIPMENT WILL INVALIDATE YOUR WARRANTY.

THIS APPLIANCE IS ONLY TO BE USED WITH AN ACCOMPANYING WATER COOLED BEVERAGE COOLING APPLIANCE.

**WARNING:** MAXIMUM AND MINIMUM AMBIENT TEMPERATURES (RECOMMENDED):  
**MINIMUM -5 °C** (30% GPPYLENE GLYCOL/ WATER MIX)  
**MAXIMUM 32 °C**

**WARNING:** WELBILT (HALESOWEN) LIMITED HAS DONE A COMPLETE QUALITY AND FUNCTION CHECK ON EACH UNIT. NEVERTHELESS, LEAKAGES ON WATER LINES DURING OPERATION CAN NOT BE EXCLUDED TOTALLY. REGULARLY INSPECT THE EQUIPMENT FOR SIGNS OF LEAKAGE.

**WARNING:** THIS APPLIANCE SHOULD ONLY BE CONNECTED TO A SELV (24v) SUPPLY.

**WARNING:** IF THE LEAD FITTED TO THIS EQUIPMENT ON INSTALLATION IS IN ANY WAY DAMAGED IT MUST BE REPLACED. THIS WORK SHOULD ONLY BE PERFORMED BY A QUALIFIED ELECTRICAL ENGINEER.

**WARNING:** THE INSTALLATION OF THIS UNIT MAY REQUIRE THE USE OF LADDERS AND WORKING AT HEIGHT. IT IS THE INSTALLERS RESPONSIBILITY TO ENSURE THEY ARE SUITABLY TRAINED AND FOLLOW ANY WORKING AT HEIGHT NATIONAL SAFETY LEGISLATION. WELBILT RECOMMEND THAT WHEN INSTALLING THIS UNIT AT HEIGHT AN 3M RADIUS CORDON IS USED TO PREVENT INJURY SHOULD THE UNIT BE DROPPED.

**WARNING:** DO NOT DISPOSE OF THIS EQUIPMENT AS UNSORTED MUNICIPAL WASTE, CONTACT YOUR DISTRIBUTOR OR SERVICE AGENT FOR THE COLLECTION AND SAFE DISPOSAL OF THIS EQUIPMENT. WELBILT (HALESOWEN) LTD. IS A REGISTERED MEMBER OF A WEEE.

## Section 2 – General description and function of the unit

This equipment is a heat dump designed for use with water cooled carbonated and alcoholic beverage cooling equipment with an integrated glycol circulation pump or a separate glycol module. A propylene glycol/water mixture is used as a heat transfer medium. This equipment is designed to be installed externally to a building on a wall or roof using. There are NO other recommended uses for this equipment.

The Heat dump is intended to be used with the following list of Manitowoc appliances:

Icecore 15/30 cooler carbonators  
Vision beer coolers  
Ccool / Pulsar cooler carbonators  
Hyper Warwick R134a / R290 coolers

The unit should only be supplied from a 24V SELV power source.

### Miss use of the equipment

This equipment should be used only in accordance with the instructions; it should not be used for any other purpose.

The equipment is not intended for use with any other heat transfer medium other than the prescribed propylene glycol/water mixture.

The unit should not be installed in small enclosed spaces such as cupboards or pantries, where fresh air flow is restricted. Always install in a well ventilated area.

Keep the unit free from excessive heat and cold. Minimum and maximum ambient temperatures are:

**Minimum: -5°C**  
**Maximum: 32°C**

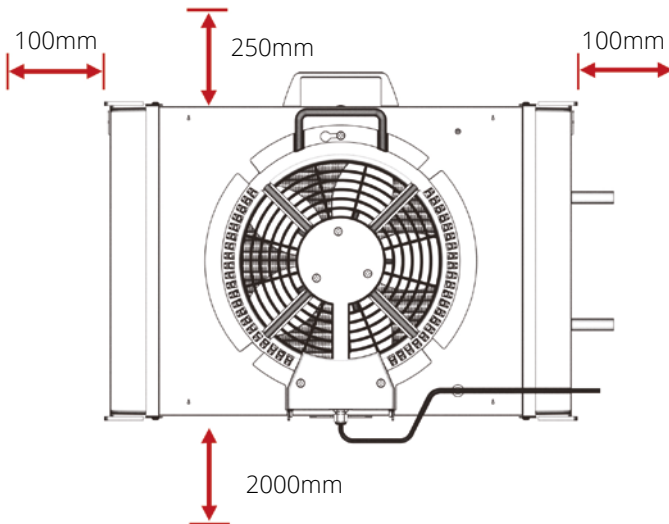
**NOTE:** *when freezing temperatures are expected the system must be run using a minimum of 30% propylene glycol/water cooling medium to prevent freezing of the system. No antifreeze other than Propylene glycol shall be used with this equipment. the use of corrosive antifreeze chemicals such as Ethylene Glycol will damage the unit.*

Misuse or use of the equipment for any other purpose than those identified above will invalidate any warranty, and may constitute a danger to yourself and others.

### Section 3 – Installation

Unpack the unit from its transportation packing and visually check for any signs of damage.

Place the unit in a convenient location preferably in a non-heat sensitive and shaded area on the outside of the building where leaves are unlikely to block the heat exchanger matrix. When siting the unit, ensure that there is sufficient space to work around the unit for installation and cleaning. The unit should be installed with the following minimum clearances;

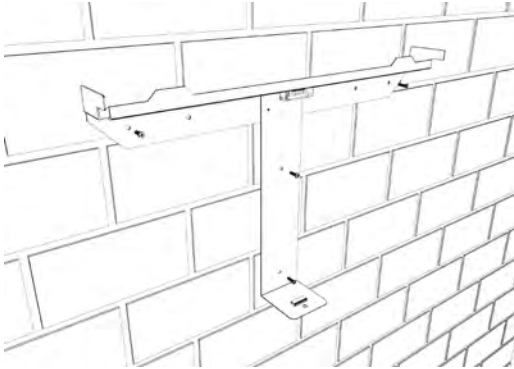


If the unit cannot be installed outside, ensure that the area is free from other heat sources and is adequately ventilated to prevent heat build-up from the hot exhaust air from the heat dump. In either situation the heat dump should be sited to allow free circulation of air.

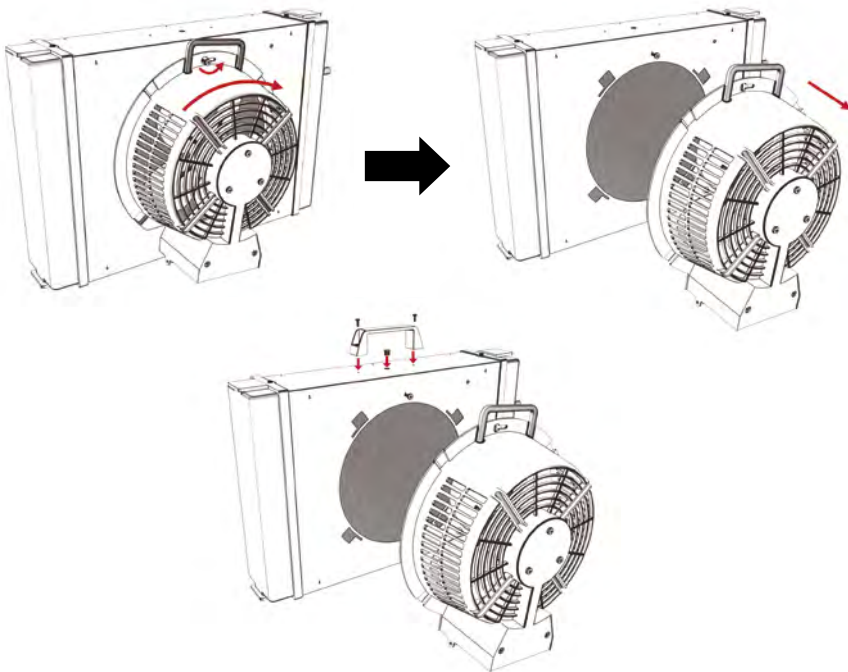
**NOTE:** *Welbilt do not recommend the installation of the heat dump in internal walkways where staff and members of the public may walk into it.*

The maximum recommended height of the heat dump above the cooler is 10 metres.

To mount the heat dump to a wall use the mounting bracket as a making guide, ensuring that the bracket is level by positioning the bubble centrally within the incorporated spirit level. Once marked out drill 4 holes in the wall and secure the mounting bracket using appropriately sized rawl plugs and corrosion resistant screws.

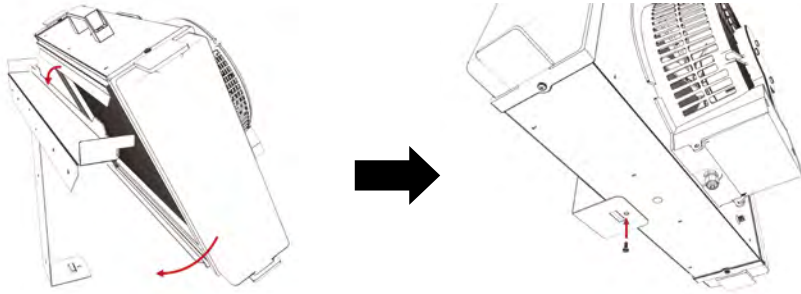


Remove the fan motor and enclosure from the heat exchanger matrix by loosening the retaining screw and twisting the enclosure clockwise to release the enclosure from the retaining mechanism.

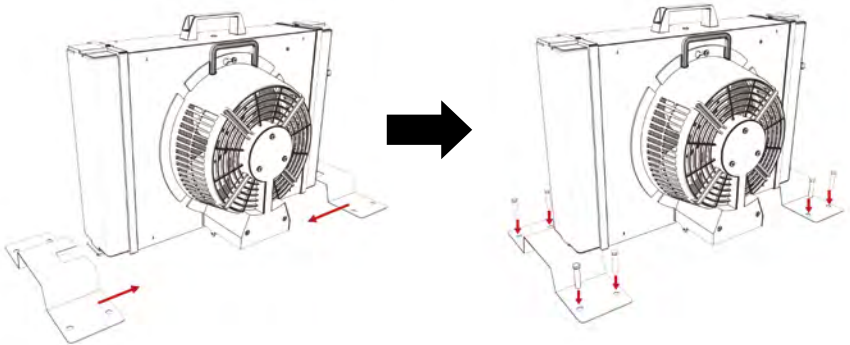




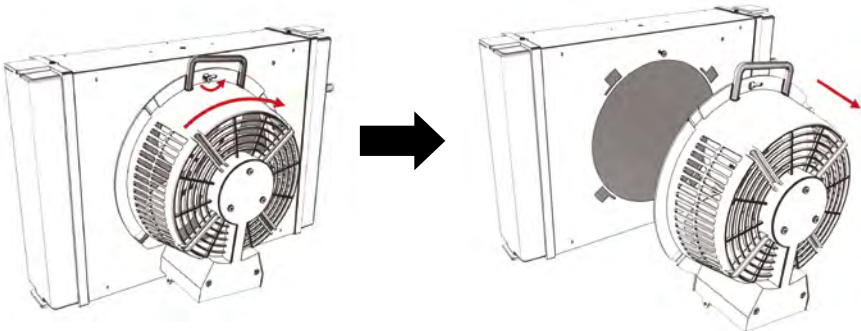
Mount the heat exchanger cartridge to the wall mounting bracket with the connection tails close to the hoses for connection. The heat exchanger cartridge may be mounted either way up to allow plumbing from the left or right hand sides. Make the plumbing connections then secure the matrix in place using the bottom retaining screw. Re-attach the fan enclosure with the electrical enclosure at the bottom.



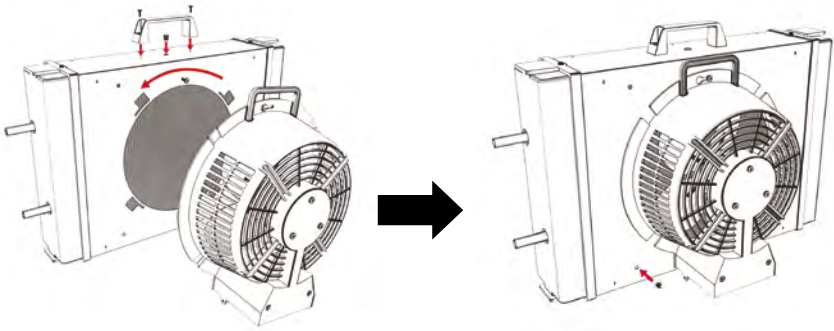
When mounting the unit on a flat roof the mounting feet part number SA015363 will be required. These slide onto the bottom of the heat exchanger matrix. Secure these feet to the flat roof.



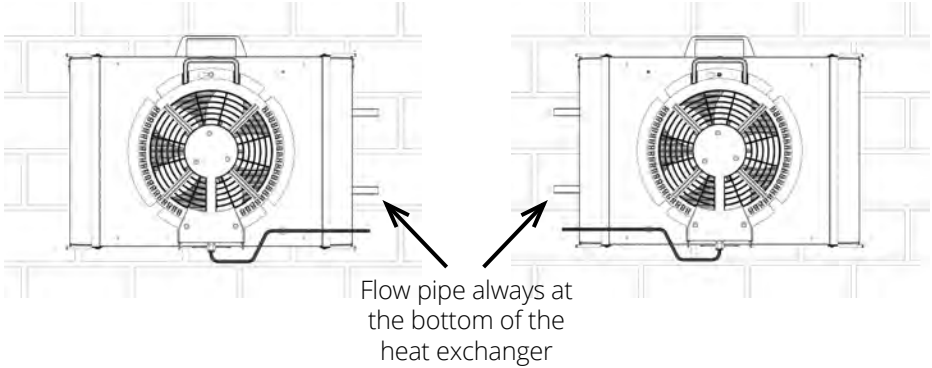
To change the mounting orientation of the unit:



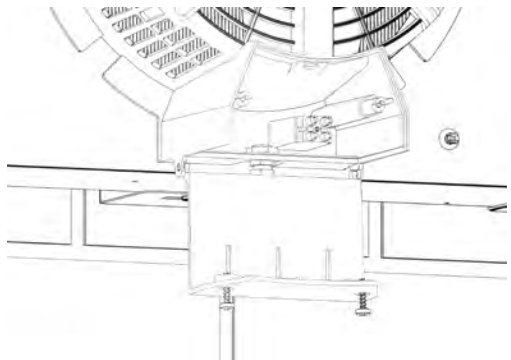
Remove the handle from the top of the unit and then remove the fan enclosure.



Flip the heat exchanger unit then reattach the handle and fan enclosure.



The unit is powered by a 24V AC SELV supply from the accompanying beverage cooling equipment. Manitowoc recommends that a minimum 1.5mm<sup>2</sup>, 2 core, insulated cable is used with the unit on a maximum 25m cable run. Where longer cable runs are required a larger core diameter cable will be required due to the voltage drop. To make the power connection remove the 2 screws securing the electrical box enclosure lid. Insert the desired cable through the incorporated strain relief bush; make the connections to the incorporated screw terminal block before tightening the strain relief bush.



## Section 4 – Maintenance and cleaning

- Service & Maintenance of the equipment should only be carried out by Manitowoc trained, competent, technicians, abiding by all the relevant statutory regulations and industry recommendations.
- Before removing the panels from the equipment the mains supply must be disconnected, either by removal of the plug from the wall socket, or in the case of hard wired equipment, switched off at the isolator. In both cases the equipment must be locked off to prevent the equipment inadvertently being powered up.
- Live testing must be avoided if possible, in most cases components can be tested with a multi-meter or insulation tester, following the instructions laid out in the service manual.
- Where live testing becomes necessary, all possible precautions to prevent injury to the maintenance technician and other people within the vicinity must be taken.

### **WARNING:**

- Personal protective equipment should always be used.
- Do not use a water or steam hose to clean the unit whilst still installed.

For the UK please follow the procedure below:

### **BASIC INSPECTION CHECKS BY THE END USER**

#### *WEEKLY:*

There is no end user training required on this appliance other than understanding the weekly basic checks for safe unit operation. It is not recommended that the end user makes any adjustments or carries out any maintenance other than:

1. Visually check the condition of the power cable.
2. Visually check the unit and its pipework for evidence of leaks.

#### *TWICE ANNUALLY:*

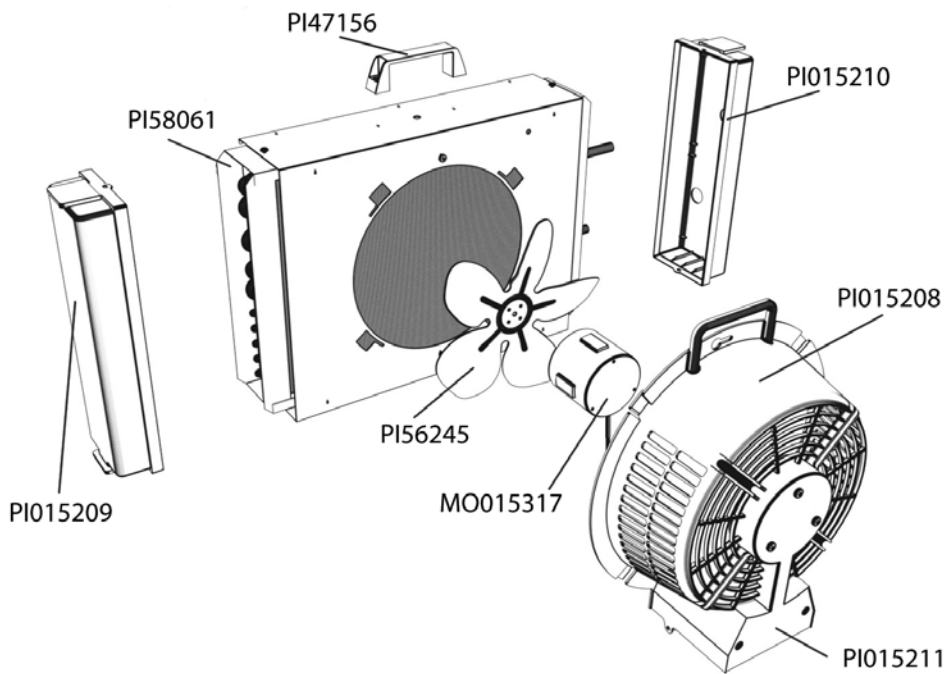
1. Isolate the unit from the power supply via the 24VAC power supply connection to the water cooled beverage cooling equipment or glycol module when maintaining the equipment.
2. Remove any extraneous debris from the unit or its casing using a vacuum cleaner or brush.
3. Remove any extraneous debris from the condenser using a soft brush
4. Reconnect the power supply to the unit

**Prevention of Freezing / Action Required if Freezing Occurs.**

In the event of freezing up the following action is recommended:

1. Isolate the unit from the base coolers electrical supply
2. Apply gentle warmth to the general area of the unit and its pipe-work taking care not to scorch or burn the pipework or insulation.
3. Check for obvious leaks
4. Reconnect the base cooler mains electricity supply.
5. Observe the unit running for a short period of time watching out for leaks, strange noises or any form of malfunction. If no problems are observed, the normal operation of the unit may be resumed.

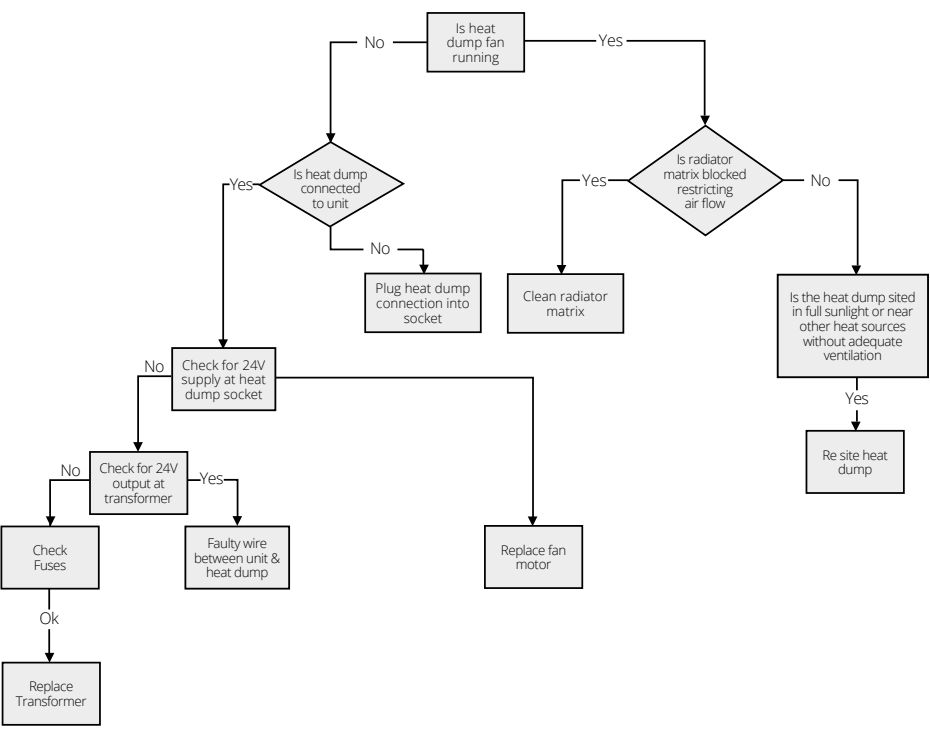
Section 5 – Spare parts list



Section 6 – Fault finding charts

# FAULT DIAGNOSIS FLOW CHART

## HEAT DUMP



Section 7 – Technical Specification

Specifications

HEAT DUMP ADVANCED  
09-0204-01

Physical Data		With wall bracket	Without wall bracket
	Height	375mm	375mm
	Width	566mm	566mm
	Depth	290mm	237mm
	Weight	9kg	9kg
Technical Data			
	Fan motor	AO Smith 24V	AO Smith 24V
	Minimum operating temp	-5°C	-5°C
	Maximum operating temp	+32°C	+32°C
	Noise level	<70dB(A)	<70dB(A)
	Nominal air flow	800m3/hour	800m3/hour

## Section 8 – Declaration of conformity



EC Declaration of Conformity In accordance with the EC Guidelines

- EC Guideline Electro Magnetic Contract 2004/108/EC
- Machinery Directive 2006/42/EC
- RoHS2 2011/65/EU
- WEEE 2002/96/EC
- REACH 1907/2006/EC

Marking of the equipment:

### - **09-0204-01 – Heat Dump Advanced**

The above named appliances have been developed, built and manufactured in agreement with above listed EC Guidelines in sole responsibility of the company Welbilt (Halesowen) Limited

The following coordinated standards have been applied:

- EN 378-1:2008 + A2:2012
- EN 378-2:2008 + A1:2009
- EN 55014-1:2006 + A1:2009 + A2:2011
- EN 55014-2:1997 + A1:2001 + A2:2008
- EN 60335-1:2012 (IEC60335-1 edition 5)
- EN 60335-2-89:2010 (IEC60335-2-89 edition 2)

A complete technical documentation is available. A quality safety system according to ISO 9001 is installed in the business.

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