



Support, Protection and Mounting for Air Source Heat Pumps



Pump House Protective Guards: The Asset Protector

RAC MARKET

With over 100,000 condenser units installed in the UK every year, many are installed on the roof or mounted on the wall. However, when these options are not available they are installed at ground level in areas exposed to accidental or malicious damage.

Pump House have been supplying the HVAC sector with protective guards and wall mounting brackets for many years, supplying large volumes through most of the major wholesalers.



HEATING MARKET

The Air Source Heat Pump (ASHP) market is very new, but growing rapidly. With government drivers in renewable technology both new and social housing sectors are being driven for reduced CO2 products.

LESSONS LEARNED

In the early days the RAC sector installations of the lower cost external condenser units, guards were rarely used. The perception being that the cost of the condenser unit was low and did not therefore justify the cost of protective guard.

Within a few years, however, many air conditioning users realised that the consequences of damaged/ decommissioned units, such as the cost of engineer call-outs and the pure inconvenience of having no air conditioning, were as high a cost as the unit replacement. These costs when added together more than justify protecting the unit with a guard.

With ASHP installations it would appear that over the past two years the lessons from the RAC sector have yet to transfer over to the heating market. Heat pumps are predominantly domestic and tend to be located in exposed areas to the side or rear of homes and have a far greater tendency for accidental damage. We are seeing an increased number of retrofit guards being installed. The capital cost of the ASHP is also far greater than the AC equivalent which makes protection even more vital.



One of the most critical effects are to the home owner. If the heat Pump fails due to damage it can result in complete loss of heating and hot water.

Air Source Heat Pumps & Air Conditioning Condensers

EXTERNAL EXPOSURE

The external installation has four critical areas of exposure:-

- The Condenser Casing
- The Condenser Coil and Internals
- The Pipework
- The Electrical Isolator Switch and Cables

The condenser casing can be easily damaged if in exposed areas with accidental damage or acts of vandalism. Cosmetic damage can be lived with, however external damage can cause interference with the fan or increased pressure on the coil.



Minor damage to the coils can reduce overall efficiency or in serious cases result in refrigerant leakage. Electrical cable damage is not normally a common problem, however nuisance call outs due to the external isolator being switched off maliciously or by accident, can be a costly and irritating issue.

COST COMPARISONS

With typical engineer call out rates between £50 and £200 depending on contractor and time of day. Air Source Heat Pump spares and repair costs for fan covers, fan blades and pipe work range from £20 to £120 depending on the extent of damage and unit type. Complete unit replacements can be up to several thousand pounds depending on the unit type and output rate.

Example 1 : Damage to front cover and fan of the heat pump.

Invoice Total £266.57

Example 2 : Severe damage to heat pump requiring complete replacement.

Invoice Total £ 3,901.34

A FLEXIBLE SOLUTION

The external installation can however be protected with the fitting of a guard. Typically there are three sizes for heat pumps 1 x Medium and 2 x Large which will accommodate the majority of units on the market.

The flexible guards are designed for a one person assembly and wall mounted to ensure the unit, associated pipe work and electrics are fully protected.



Additional back and bottom panels are available for high level or free standing installations. The unique design has slide out side and top panels which can be simply removed and replaced for access to the heat pump during service and maintenance.

Call 0115 900 5858 or visit www.pumphousepumps.com



Our Solution to Support, Protect and Mount Air Source Heat Pumps

Pump House have now extended its range of air conditioning guards, wall mounting brackets, trays and mounting flexi-feet to accommodate the requirements of air source heat pumps.

The metal products have a hard-wearing, weather-protected textured finish (RAL 7032). The steel mesh guards have a unique sliding panel system which means that all panels can be assembled and removed easily. This offers a quick and easy solution for installation and maintenance. Additional bottom / back panels are available for stand alone or high wall options.

A NEW addition to the Pump House range are the *flexi* Foot. These offer a safe method to support the unit off the floor surface and reduce any vibration.

The Brackets come flat packed and offer a quick and easy method to supporting the Air Source Heat Pump on external walls. By adding a metal tray with fixing arms to collect any condensate will provide a neat finish.

Air Source Heat Pump Guards (Figures in brackets indicate approximate internal dimensions)					
Model	Size	Height	Width	Depth	Weight
CG-M	Medium	1150mm (1120mm)	1150mm (1120mm)	650mm (640mm)	30 kg
CG-900L-INV	Large	1150mm (1120mm)	1450mm (1420mm)	900mm (880mm)	42 kg
CG-900L-SQ	Large Square	1450mm (1420mm)	1450mm (1420mm)	900mm (880mm)	46 kg
CG-900XL	Extra Large	1750mm (1720mm)	1450mm (1420mm)	900mm (880mm)	56 kg

Air Source Heat Pump Brackets					
Model	Type	Load Capacity	Crossbar	Upright	Support Arm
CBR1-XL	Type 1	250 kg	-	550mm	700mm
CBR1-XXL	Type 1	250 kg	-	550mm	1000mm
CBR2-L	Type 2	140 kg	1100mm	550mm	540mm
CBR2-XL	Type 2	250 kg	1100mm	550mm	700mm

NEW Mounting FLEXI-FEET				
Model	Length	Width	Height	Weight
FF-250-S	250mm	185mm	100mm	2.8kg
FF-400-S	400mm	185mm	100mm	4.6kg
FF-600-S	600mm	185mm	100mm	7.6kg



Heavy Duty Collection Trays			
Model	Size	Length	Width
CCTM-800	Small	800mm	400mm
CCTM-1100	Large	1100mm	400mm



Pump House
 Glaisdale Drive East, Nottingham, NG8 4LY
 Tel ~ 0115 900 5858 Fax ~ 0115 929 4468

Email ~ sales@pumphousepumps.com Website ~ www.pumphousepumps.com

