Air Source: Split and Multi-Split (Including Variable Refrigerant Flow)

Date added to the ETL August 2002.

1. Definition of technology

A heat pump is a device that uses refrigeration technology to transfer heat from a source to the space to be heated.

2. Description of technology

An air source split or multi-split heat pump is a device which uses an electrically operated refrigeration system to transfer heat from outdoor air to the space to be heated. Additionally, it may be able to provide cooling by means of reversing the refrigeration cycle, in which case it is also referred to as a reversible 'air cooled' air conditioning unit. Units can be:

- Single split (one 'outdoor' unit connected to one 'indoor' unit)
- Dual split (one 'outdoor' unit connected to 2 'indoor' units)
- Multi-split (one 'outdoor' unit connected to 2 or more 'indoor' units)

The 'outdoor' and 'indoor' units are supplied as a matched set.

Investments in air source split and multi-split (including variable refrigerant flow) heat pumps can only qualify for Enhanced Capital Allowances if the specific product identified by the outdoor unit and the matching indoor unit(s) is named in the ETL Heat Pump Master List. To be eligible for inclusion on the ETL Heat Pump Master List, products must meet the eligibility criteria as set out below AND the Heat Pump Master List Listing Mechanism.

3. Eligibility criteria

Eligible products are required to meet the following performance criteria for both heating measured by the Coefficient of Performance (CoP) across the range of connected capacities and including 100% (full) load and cooling measured by the Energy Efficiency Ratio (EER) across the range of connected capacities including 100% (full) load where cooling is provided.

The CoP and the EER where applicable must be determined in accordance with the test procedures for the relevant product group as shown below.

	Performance	Test standard	Rating condition
Heating mode (CoP)	**>3.40**	EN14511	EN14511-2 Table 3 or 13 Standard rating conditions, Outdoor air/recycled air. Equivalent standards may be considered where equivalence can be scientifically proved.
Cooling mode (EER)	**>3.00**	EN14511	EN14511-2 Table 4 or 14 Standard rating conditions, Comfort (outdoor air/recycled air). Equivalent standards may be considered where equivalence can be scientifically proved.

">" means "greater than "

For the avoidance of doubt test data should be presented to 2 decimal place. As an example a COP of less than 3.41 would be deemed to be a fail.

4. Scope of Claim

Expenditure on the provision of plant and machinery can include not only the actual costs of buying the equipment, but other direct costs such as the transport of the equipment to site, and some of the direct costs of installation. Clarity on the eligibility of direct costs is available from HMRC.