

Heat pump sound checker MCS020

Heat pump	power dBA	pressure dBA
Vitocal 100-A A06	64	49.8
Vitocal 100-A A08	64	49.8
Vitocal 100-A A10	64	49.8
Vitocal 100-A A12	65	50.4
Vitocal 100-A A14	68	52.7
Vitocal 100-A A16	68	52.7
Vitocal 200-A A04	53	44
Vitocal 200-A A06	54	45
Vitocal 200-A A08	55	46
Vitocal 200-A A10	56	47
Vitocal 200-A A13	56	47
Vitocal 200-A A16	56	47
Vitocal 222-A A04	53	44
Vitocal 222-A A06	54	45
Vitocal 222-A A08	55	46
Vitocal 222-A A10	56	47
Vitocal 222-A A13	56	47
Vitocal 222-A A16	56	47
Vitocal 150-A A04	51	42
Vitocal 150-A A06	51	42
Vitocal 150-A A08	51	42
Vitocal 150-A A10	56	47
Vitocal 150-A A13	56	47
Vitocal 150-A A16	56	47
Vitocal 151-A A04	51	42
Vitocal 151-A A06	51	42
Vitocal 151-A A08	51	42
Vitocal 151-A A10	56	47
Vitocal 151-A A13	56	47
Vitocal 151-A A16	56	47

Planning permission, rules for air source heat pumps:

As part of Permitted Development Rights planning permission will no longer be required as long as a few rules are adhered too.
 Only one heat pump can be installed without planning permission if you have 2 units you ALWAYS need planning permission
 The outdoor unit must be less than 0.6m³ in size
 It must not exceed 42dBA as measured at the nearest window of the next door neighbour's property.
 It must be installed by MCS installer as part of the MCS scheme.
 all details are in the table here from MIS3005

Step

- 0 what unit are you installing taken from mcs run page
- 1 sound **power** level from table above
- 2 databook sound **pressure** level from table above
- 2a how many surfaces (walls, floor and roof) are within 1m of the unit
- 3 measure the shortest distance in metres from the middle of the heat pump to the nearest door or window of the neighbours property. We call this the assesment point. The measurement must be to a room other than a bathroom, shower room, toilet or kitchen.
- 3a type in distance metres, whole numbers rounded up please
- 4 decibel reduction
- 5 answer **yes to only one** of the following
- 5a if you stand in front of the heat pump can you see the assesment point window / door
- 5b if you move 25cm from the unit can you see the assesment point window / door from the heat pump
- 5c is there a solid wall or fence between the heat pump and the neighbours house
- 6 calculated Sound **pressure** level of installation
- 7 mcs assumed background noise level
- 8 difference between heat pump noise and background
- 9 correction factor
- 9a New corrected Sound pressure level
- 10 the figure in step 9a MUST be below 42dBA to pass as permitted development

Vitocal 150-A A16

2

5 m

no

no

yes

27

dBA

40

dBA

13

dBA

0.2

dBA

40.2

dBA

PASS

4.4.1 Heat pumps should be located according to the manufacturer's instructions. For air source heat pumps, these will include consideration of factors that may detrimentally affect the performance of the heat pump system such as recirculation of chilled air.

4.4.3 Heat pumps should not be located adjacent to sleeping areas or on floors that can transmit vibration.

4.4.4 Anti-vibration pads/mats/mounts and flexible hose connections should be installed according to the manufacturer's instructions to reduce the effects of vibration on the building structure.

4.4.5 The location of external fans and heat pump compressors should be chosen to avoid nuisance to neighbours and comply with planning requirements.

4.4.7 For air source heat pumps, consideration should be given to the removal of condensate water produced during a defrost cycle from the outdoor coil. The installation should make provision to deal with this water transferring it to a suitable drain or soak away thus preventing ice build-up within the unit or its location during extreme winter conditions.

Don't forget to use pre-insulated pipe to take the heat from the heat pump to the house when installing the unit further away from the dwelling that is being heated by the heat pump.