Kamstrup Heat Meter installation for ‘Simple’ commercial RHI installations

Part of the Commercial RHI requires heat meters to be fitted to the installation to measure the amount of eligible renewable heat generated. The number and location of these meters depends on the installation and whether the installation is deemed to be a ‘Simple’ or ‘Complex’ by Ofgem (see RHI Guidance Document Volume One).

The following provides basic guidance on the installation of a Kamstrup heat meter. This guidance is for ‘Simple’ systems only and applicable for Kensa’s Compact range of ground source heat pumps. For ‘Complex’ systems please refer to RHI Guidance Volume One. These notes should be read in conjunction with the meter installation manual.

Installation Notes for heat meters within ‘Simple’ RHI installations.

1. Assemble probe pockets – Put the stem adaptor into the 15mm port of the reducing tee and the probe pocket into the stem adaptor. Ensure the end of the probe pocket is positioned in the middle of the pipe. (This might require the stem adaptor being reduced in length).

2. Install the flow meter and the two probe pockets into the hot water circuit as indicated below: (Isolation valves (ball valve type) should ideally be also installed to allow removal or maintenance of the flow meter assembly).

A Recommended flow sensor position
B Recommended flow sensor position
C Unacceptable position due to risk of air build-up
D Acceptable in closed systems. Unacceptable position in open systems due to risk of air build-up in the system
E A flow meter ought not to be placed immediately after a valve, with the exception of block valves (ball valve type) which must be fully open when not used for blocking
F A flow meter must never be placed on the inlet side of a pump
G A flow meter ought not to be placed after a double bend in two levels.
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The probes should be positioned as close to the heat pump as possible. The pipe between probes and the heat meter should be well insulated. Do not reduce the length of the probe cables.

3. Install the cold (blue) probe into the return flow probe pocket next to the flow meter.

4. Install the hot (red) probe into the flow probe pocket.

Bill Of Material (up to 8.5kW (R407C))

1 x Kamstrup Multical 402 heat meter c/w two pulse inputs. Ultraflow flow meter w 3/4” connections
2 x 28mm x28mm x 15mm reducing tee - Primaflow PN 20053369
2 x 15mm x ½” BSP adaptor - John Guest PN MW501514N
2 x 22mm x 3/4” BSP compression coupler - Primaflow PN 21021090
2 x 22 x 28mm reducers— Primaflow PN30012435

Bill Of Material (10-32kW (R407C))

1 x Kamstrup Multical 402 heat meter c/w two pulse inputs. Ultraflow flow meter c/w 1” connections
2 x 28mm x28mm x 15mm reducing tee - Primaflow PN 20053369
2 x 15mm x ½” BSP adaptor - John Guest PN MW501514N