



For a **MasterTherm Inverter** heat pump installation, in line with latest regulations a dedicated earth leakage circuit breaker (RCD) needs to be installed. We have found the most economical unit is a **63a type B 30 mA RCD**.

Additionally, an earth connection using a conductor with cross-section 10mm<sup>2</sup> is advised and surge protection devices should be installed according to the latest regulations. The installation should always be carried out to the latest British Standards (BS7671) by a suitably competent and qualified engineer. An installation in a commercial setting may not require an RCD, this should be checked by the installer.

**Recommended overload protection (MCB) is as follows:**

<b>BoxAir Inverter Models</b>	<b>Auxiliary Heater (kW)</b>	<b>Auxiliary Heater (kW)</b>
<b>3 x 400v</b>	<b>1 x 4.5</b>	<b>2 x 4.5</b>
BA22I	-	16A type B
BA26I	-	20A type B
BA30I	-	25A type B
BA37I	-	25A type B
BA45I	-	32A type B
BA60I	-	40A type B
<b>1 x 230v</b>		
BA22I1	32A type B	40A type B
BA26I1	32A type B	40A type B
BA30I1	40A type B	50A type B
BA37I1	40A type B	50A type B
BA45I1	50A type B	63A type B

<b>AquaMaster Inverter Models</b>	<b>No Auxiliary Heater</b>	<b>Auxiliary Heater (kW)</b>
<b>3 x 400v</b>		<b>1 x 4.5</b>
AQ37I	20A type B	25A type B
AQ45I	20A type B	25A type B
AQ60I	32A type B	40A type B
AQ90I	40A type B	50A type B
<b>1 x 230v</b>		
AQ17I1	20A type B	25A type B (2kW)
AQ22I1	20A type B	25A type B
AQ26I1	20A type B	25A type B
AQ30I1	25A type B	32A type B
AQ37I1	32A type B	40A type B
AQ45I1	32A Type B	40A type B

**NOTE 1: Other Auxiliary Heater capacities are available, please ensure that the electrical supplies and equipment are suitably sized for other capacities.**

**NOTE 2: For the purpose of sizing the Maximum Demand (MD) for a property, in our experience, 50% diversity is sufficient but should always be checked by a qualified engineer against an individual properties load profile.**

*Any queries please don't hesitate to contact your installation company or MasterTherm UK.*

This document supersedes all previous guidance.