

# SMARTCOM<sup>3</sup> CONTROL PANEL & WARM AIR WIRING INTERCONNECTS.













## Warnings

All external wiring **MUST** comply with the current IEE wiring regulations. These instruction **MUST** be used in conjunction with the SmartCom user manual and the appropriate heater manual.

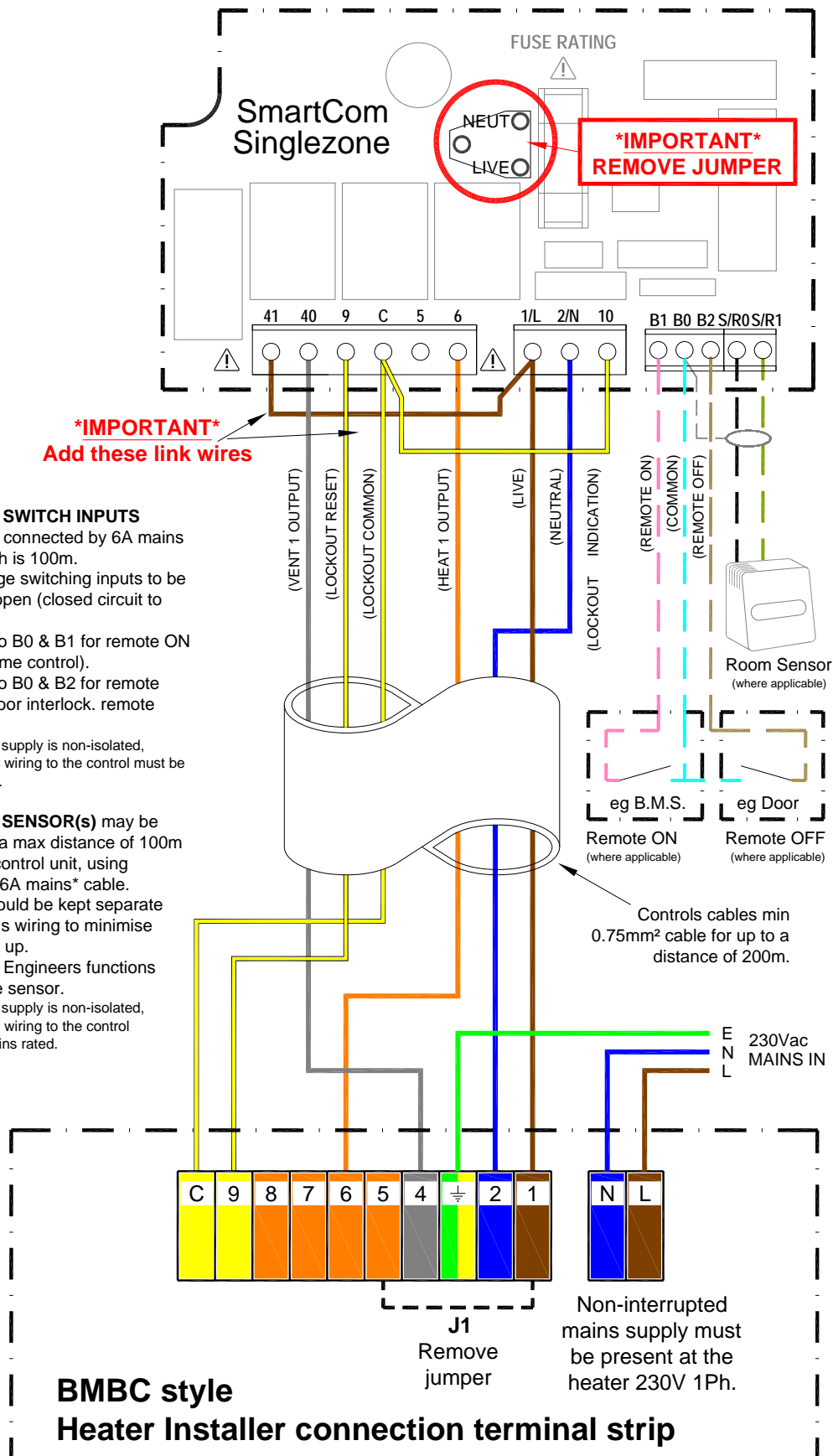


Visit our Support Database  
at [www.s-i-d.co.uk](http://www.s-i-d.co.uk)

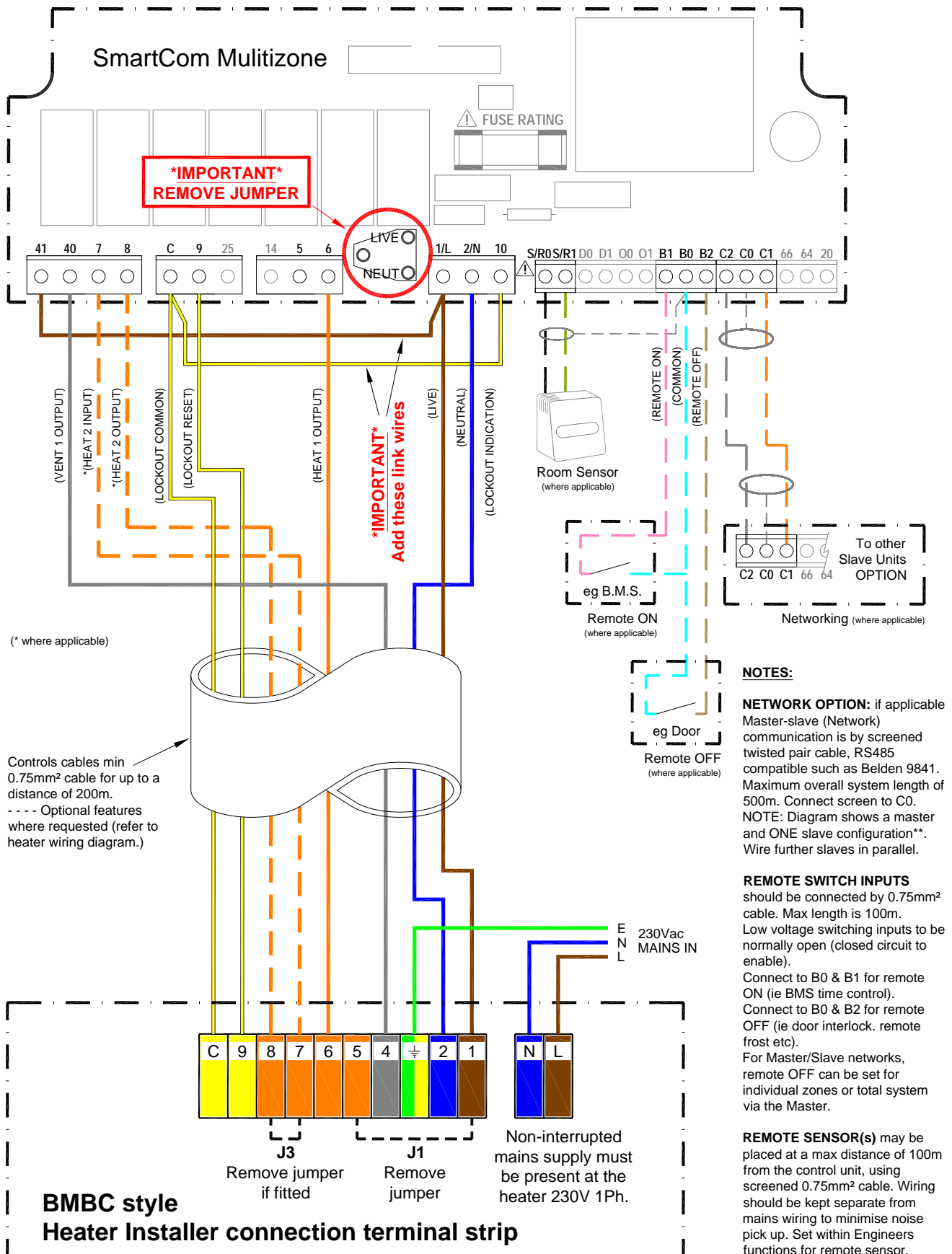
# INDEX

	Diagram Number(s)			
	Heater type	Single Stage	Two Stage	Modulation
	<b>UESA</b> <b>UDSA-3* (025-100)</b> <i>* from Jan14</i>	<b>1</b>	<b>2</b>	<b>3</b>
	<b>UDSA-2 (008-100)</b> <b>UDSA-3 (008-020)</b> <b>UDSA-3** (025-100)</b> <i>** prior to Jan14</i>	<b>4</b>	<b>5</b>	<b>6</b>
	<b>VRA-3</b>	<b>4</b>	<b>5</b>	<b>6</b>
	<b>SDH</b> <b>SHH</b>	<b>7</b>	<b>8</b>	<b>9</b>
	<b>OUHA</b>	<b>10</b>	<b>11</b>	<b>-</b>
	<b>ULSA</b>	<b>-</b>	<b>-</b>	<b>18</b>
	<b>UPA</b> <b>LCSA</b> <b>SCA</b>	<b>4</b>	<b>5</b>	<b>6</b>
	<b>ST-2 series</b> <b>UC series</b> c/w Autospark ignition	<b>12</b>	<b>13</b>	<b>14</b>
	<b>UC series</b> c/w Thermolectric (P/Pilot)	<b>15</b>	<b>16</b>	<b>17</b>

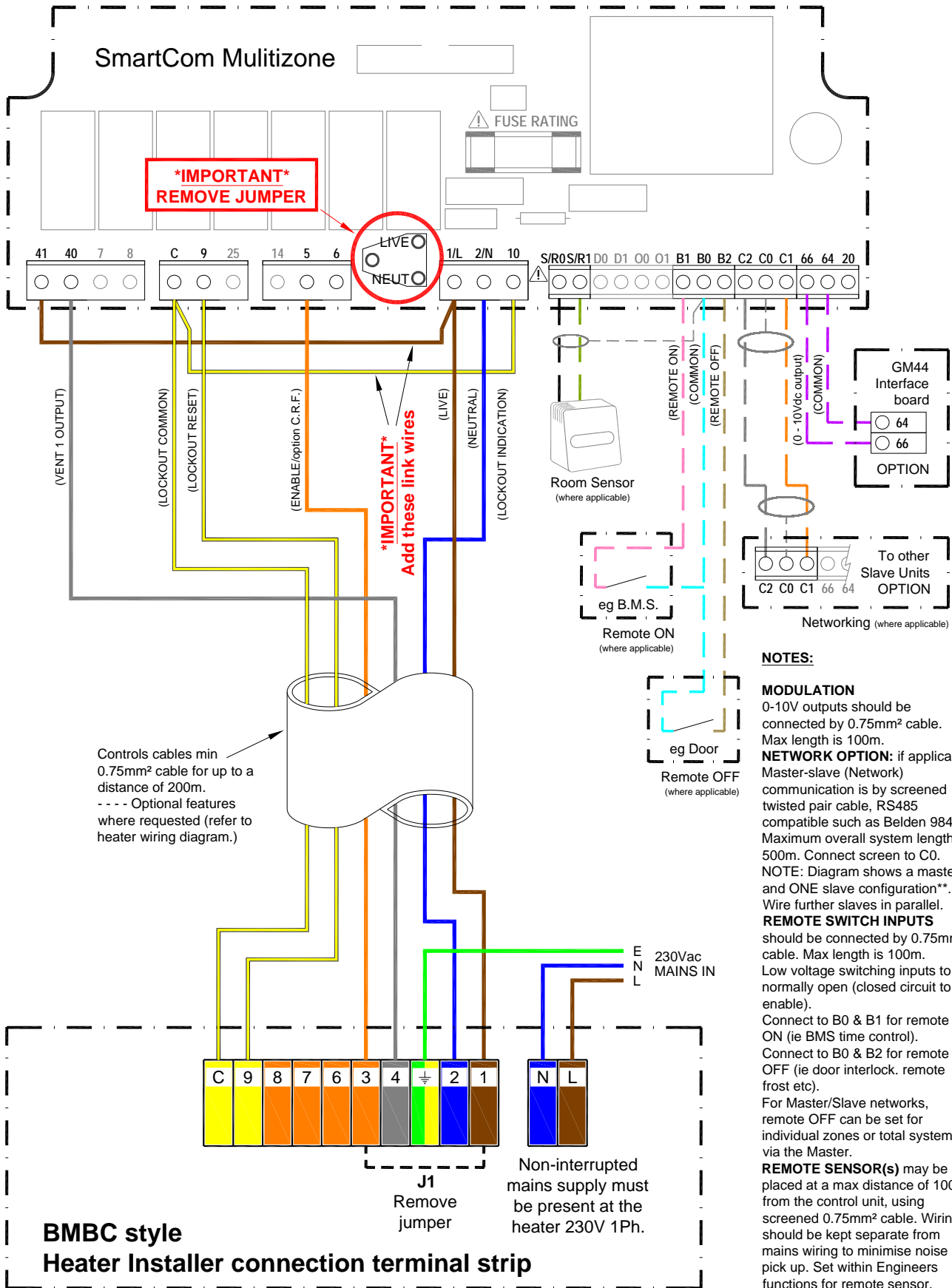
# 1 Single Stage (on/off) Heaters with BMBC Autospark ignition to remote SmartCom<sup>3</sup> SZ.



## 2 Two Stage (hi/low) Heaters with BMBC Autospark ignition to remote SmartCom<sup>3</sup> MZ (or Network).



# 3 Modulation Heaters with BMBC Autospark ignition to remote SmartCom<sup>3</sup> MZ (or Network).



**NOTES:**

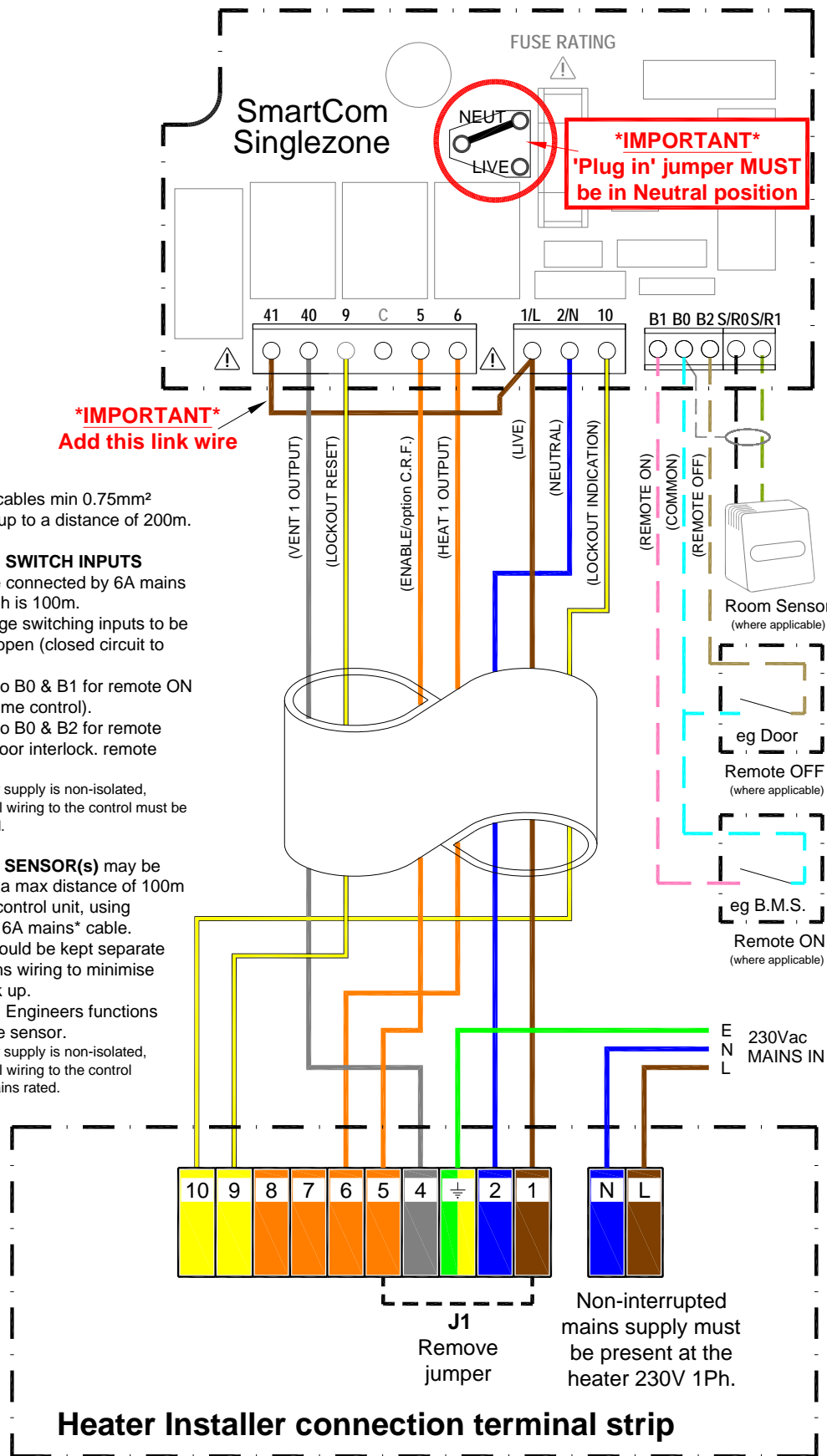
**MODULATION**  
0-10V outputs should be connected by 0.75mm<sup>2</sup> cable. Max length is 100m.

**NETWORK OPTION:** if applicable Master-slave (Network) communication is by screened twisted pair cable, RS485 compatible such as Belden 9841. Maximum overall system length of 500m. Connect screen to C0.  
NOTE: Diagram shows a master and ONE slave configuration\*\*. Wire further slaves in parallel.

**REMOTE SWITCH INPUTS** should be connected by 0.75mm<sup>2</sup> cable. Max length is 100m. Low voltage switching inputs to be normally open (closed circuit to enable).  
Connect to B0 & B1 for remote ON (ie BMS time control).  
Connect to B0 & B2 for remote OFF (ie door interlock. remote frost etc).  
For Master/Slave networks, remote OFF can be set for individual zones or total system via the Master.

**REMOTE SENSOR(S)** may be placed at a max distance of 100m from the control unit, using screened 0.75mm<sup>2</sup> cable. Wiring should be kept separate from mains wiring to minimise noise pick up. Set within Engineers functions for remote sensor.

# 4 Single Stage (on/off) Heaters with Autospark ignition to remote SmartCom<sup>3</sup> SZ.



**NOTES:**

Controls cables min 0.75mm<sup>2</sup> cable for up to a distance of 200m.

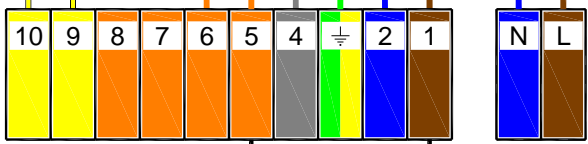
**REMOTE SWITCH INPUTS**

should be connected by 6A mains Max length is 100m. Low voltage switching inputs to be normally open (closed circuit to enable). Connect to B0 & B1 for remote ON (ie BMS time control). Connect to B0 & B2 for remote OFF (ie door interlock. remote frost etc). \*The power supply is non-isolated, therefore all wiring to the control must be mains rated.

**REMOTE SENSOR(s)** may be placed at a max distance of 100m from the control unit, using screened 6A mains\* cable. Wiring should be kept separate from mains wiring to minimise noise pick up.

Set within Engineers functions for remote sensor. \*The power supply is non-isolated, therefore all wiring to the control must be mains rated.

**Heater Installer connection terminal strip**



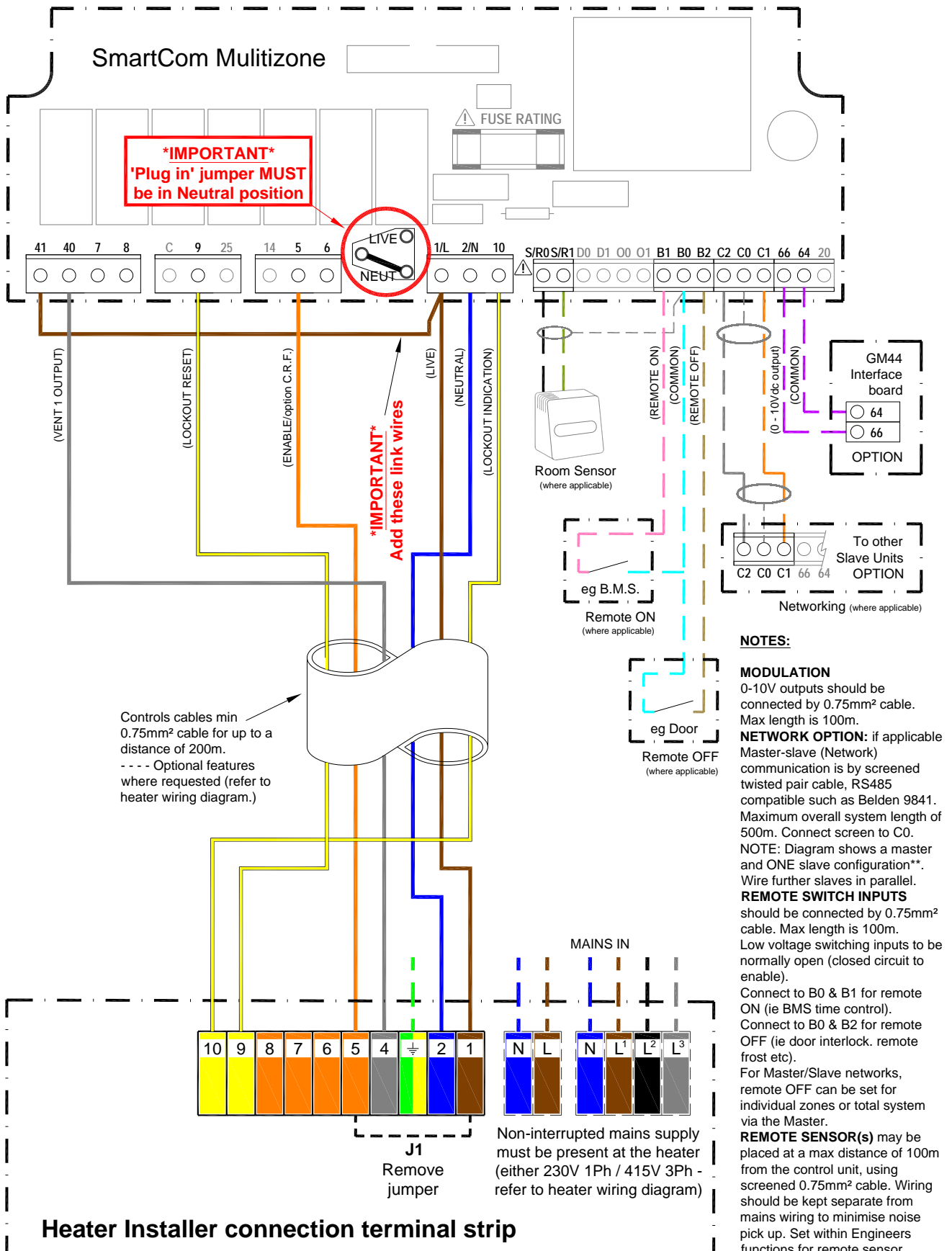
**J1**  
Remove jumper

Non-interrupted mains supply must be present at the heater 230V 1Ph.

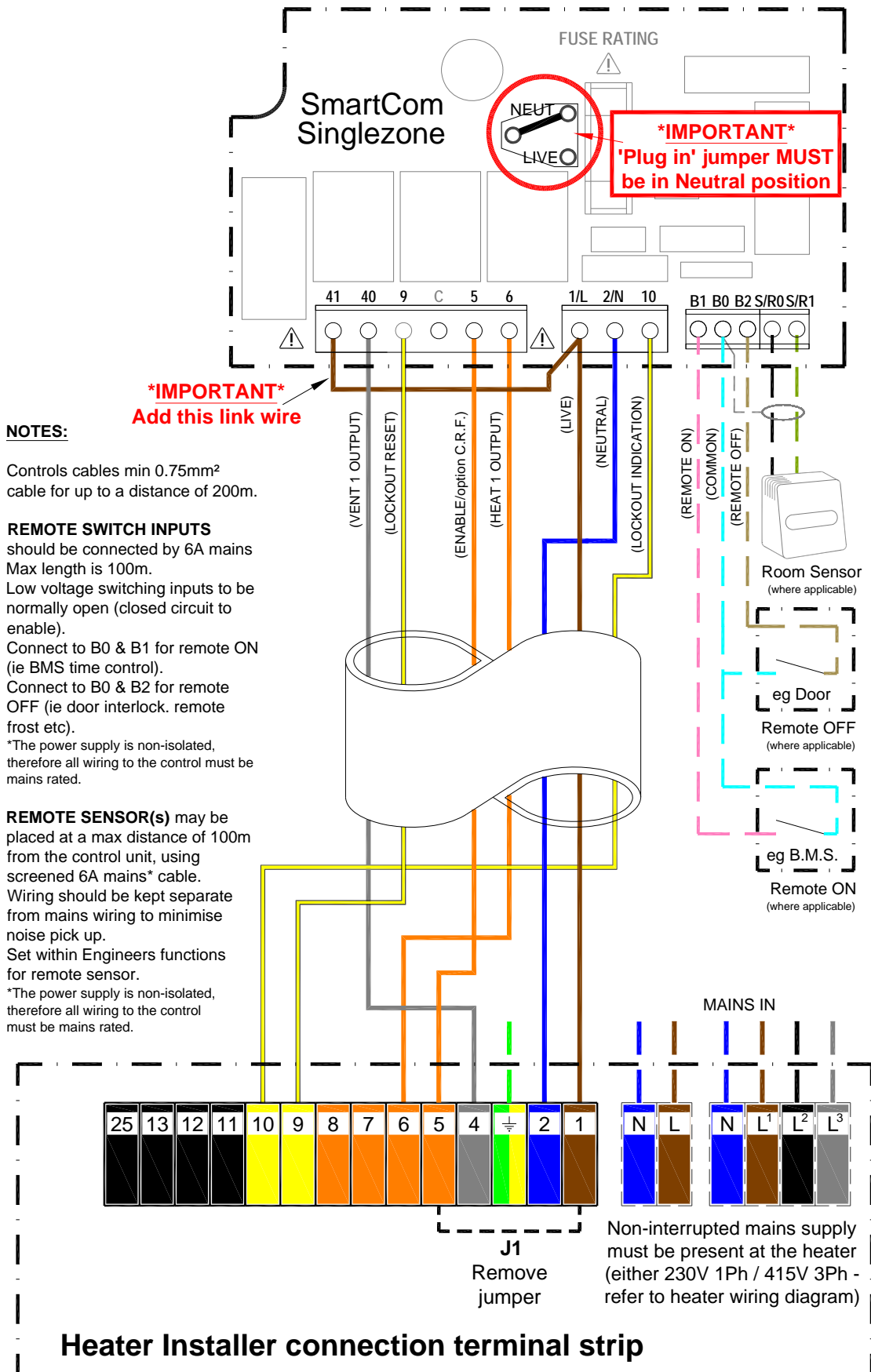
E  
N  
L  
230Vac  
MAINS IN



# 6 Modulation Heaters with Autospark ignition to remote SmartCom<sup>3</sup> MZ (or Network).

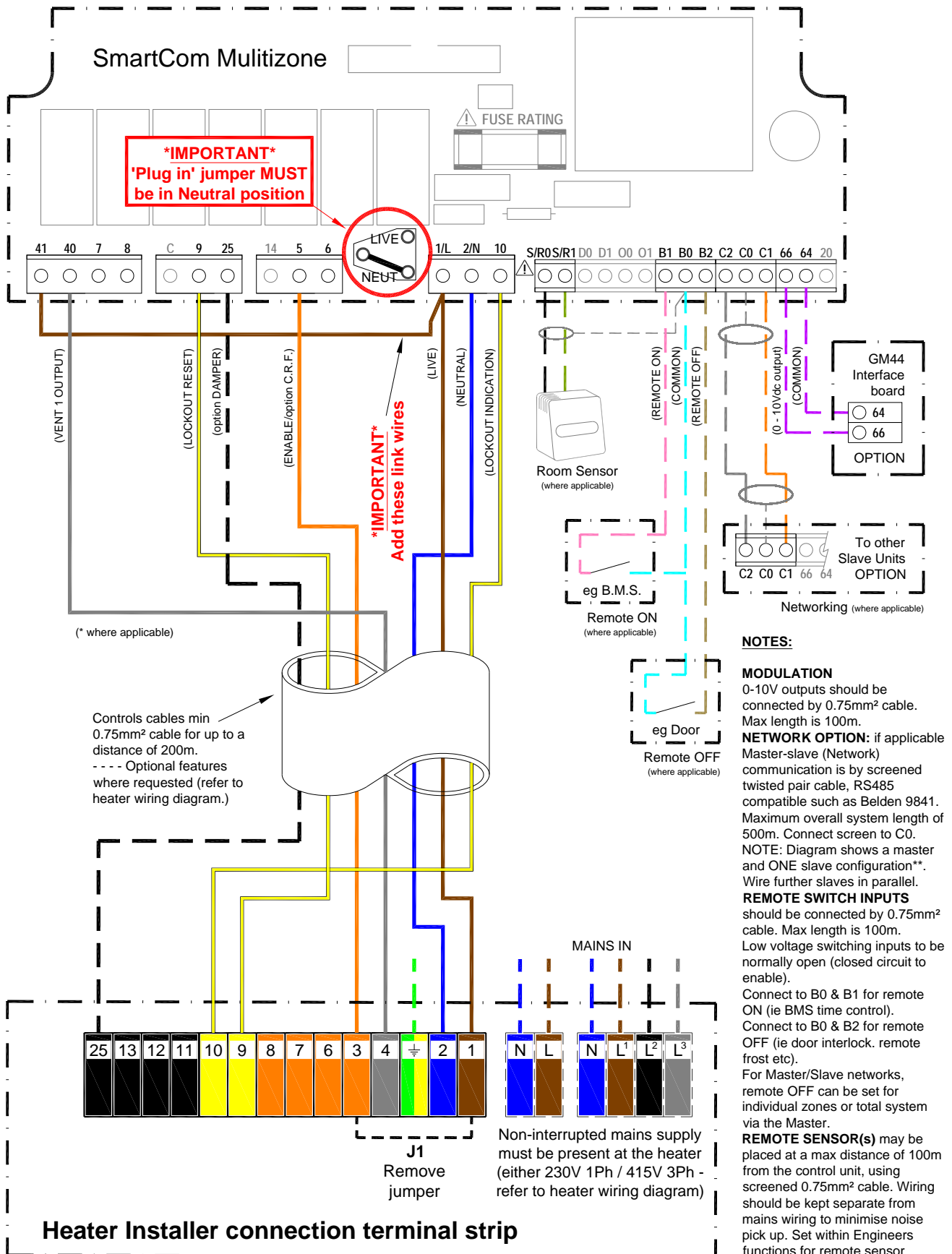


# 7 Single Stage (on/off) SDH/SHH Heaters, Autospark ignition to remote SmartCom<sup>3</sup> SZ.

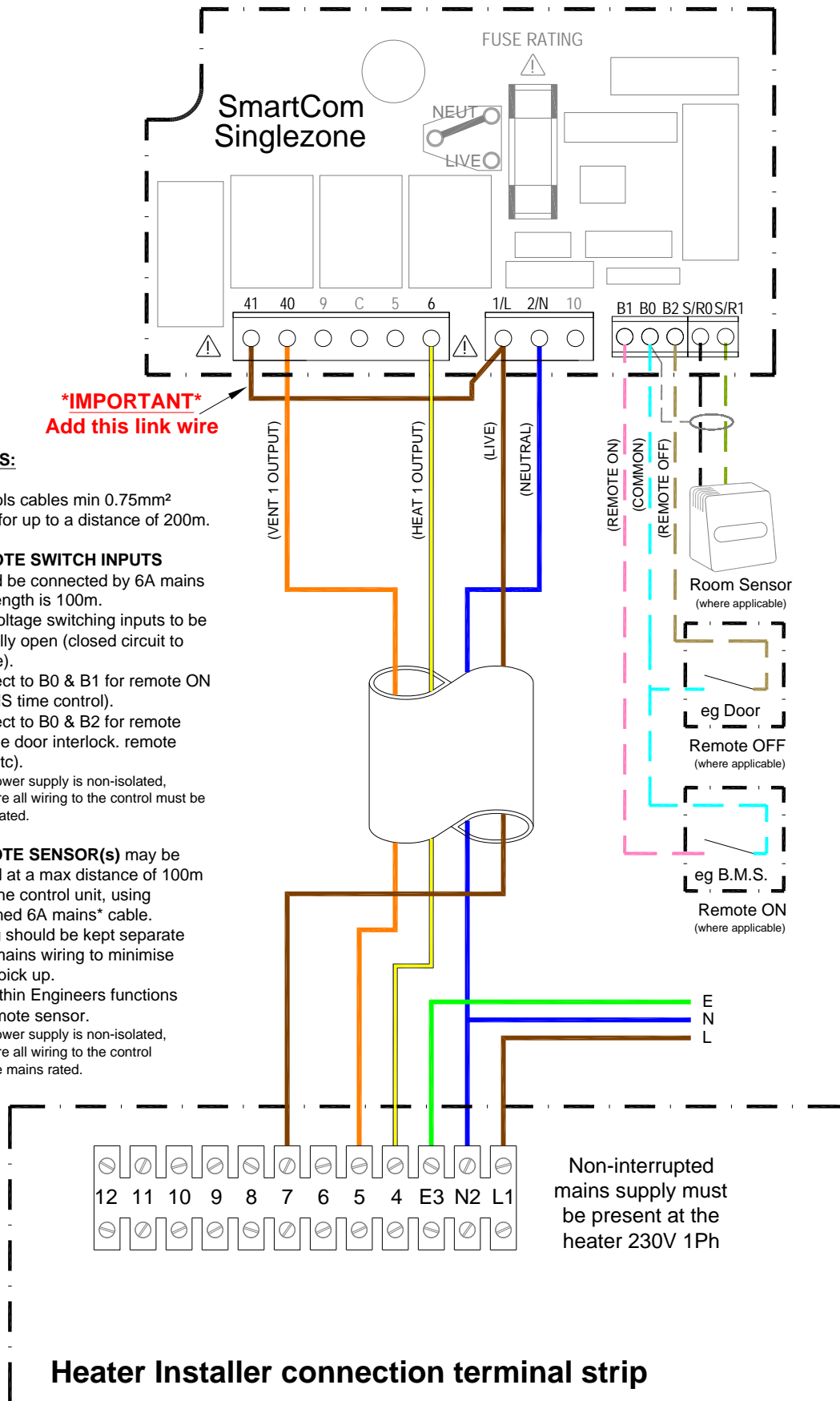




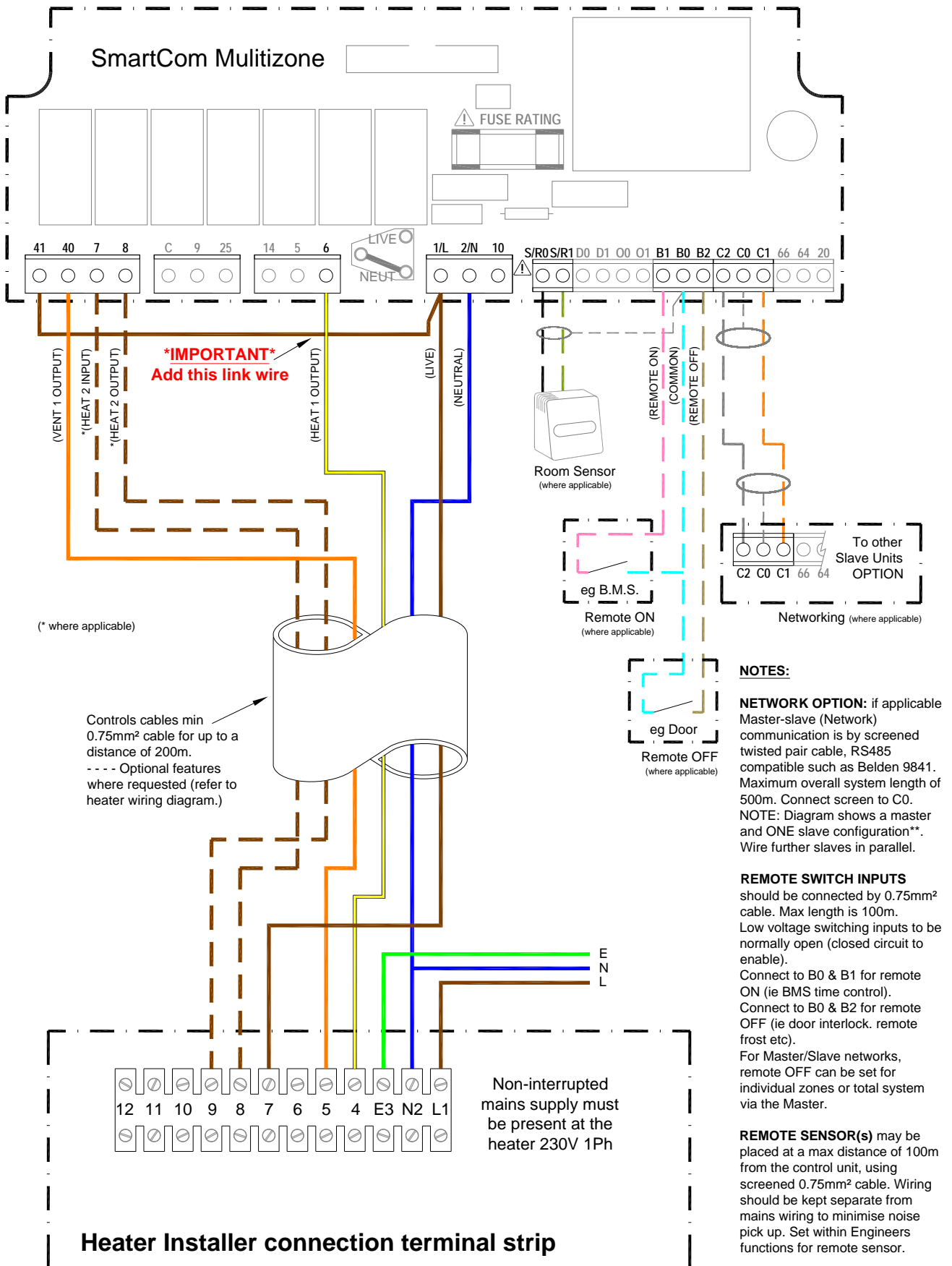
# 9 Modulation SDH/SHH Heaters, Autospark ignition to remote SmartCom<sup>3</sup> MZ (or Network).



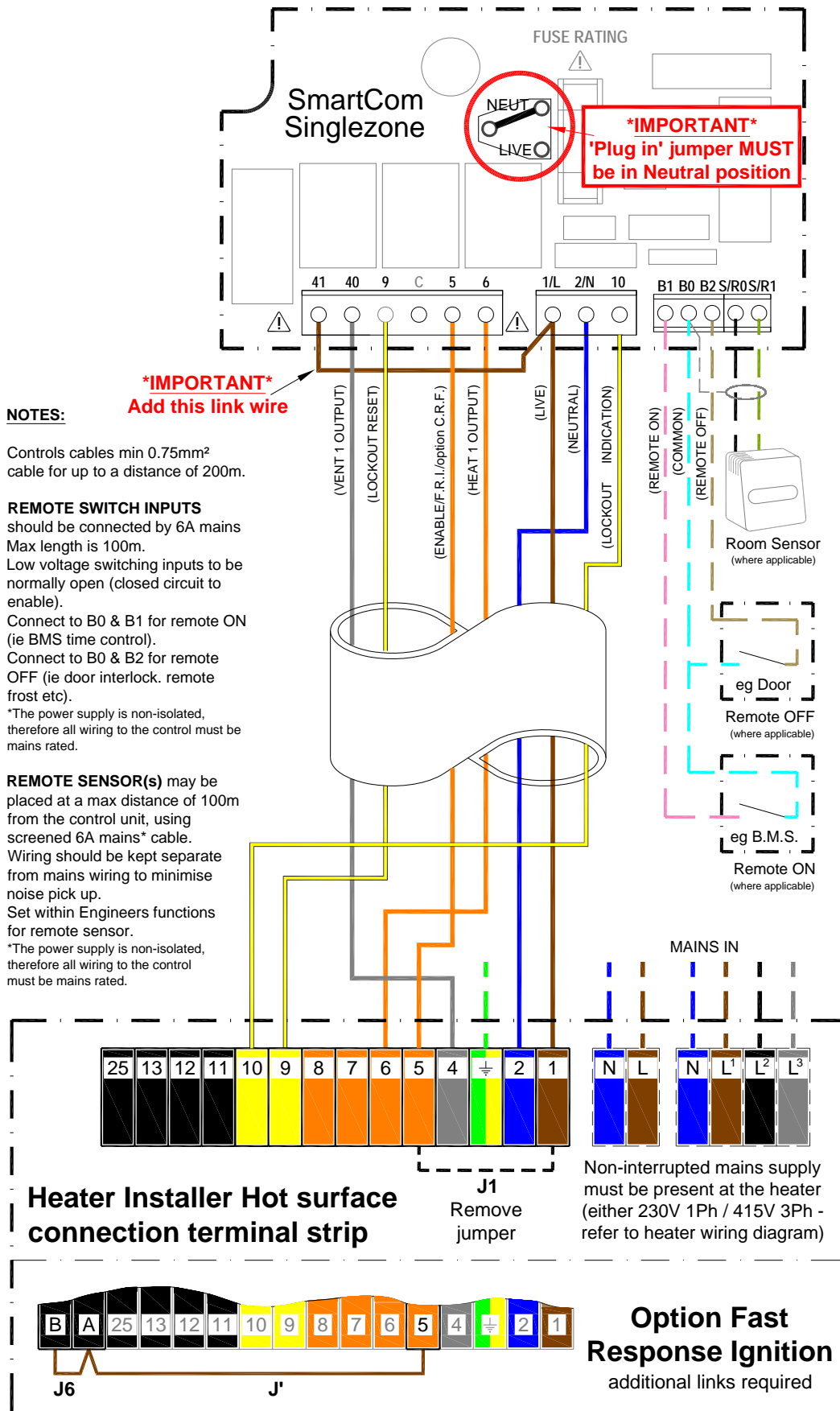
# 10 Single Stage (on/off) OUHA Heaters with Autospark to remote SmartCom<sup>3</sup> SZ.



# 11 Two Stage (hi/low) OUHA Heaters with Autospark Ignition to remote SmartCom<sup>3</sup> MZ (or Network).



# 12 Single Stage (on/off) ST Heaters with Autospark to remote SmartCom<sup>3</sup> SZ.



**NOTES:**

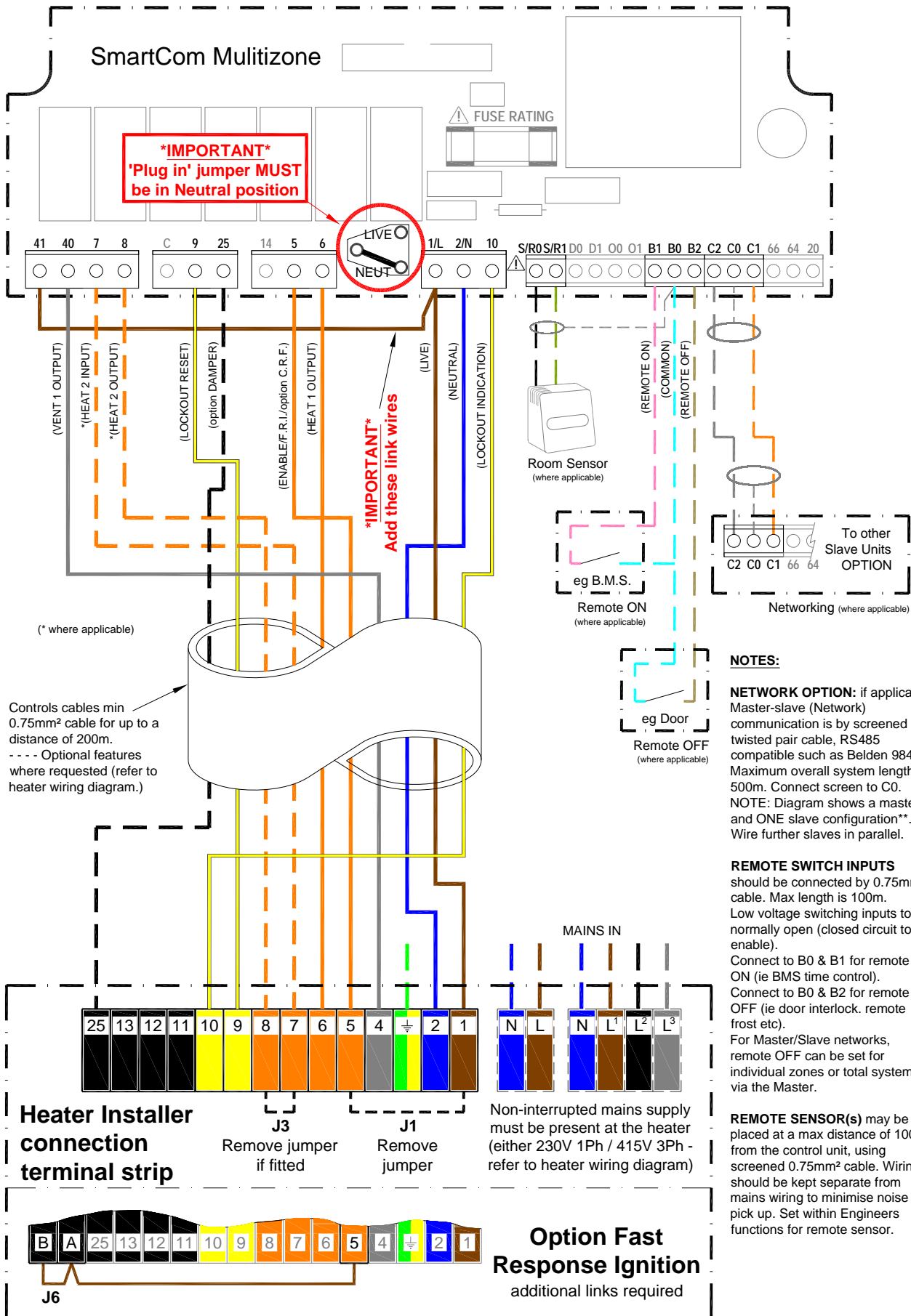
Controls cables min 0.75mm<sup>2</sup> cable for up to a distance of 200m.

**REMOTE SWITCH INPUTS**

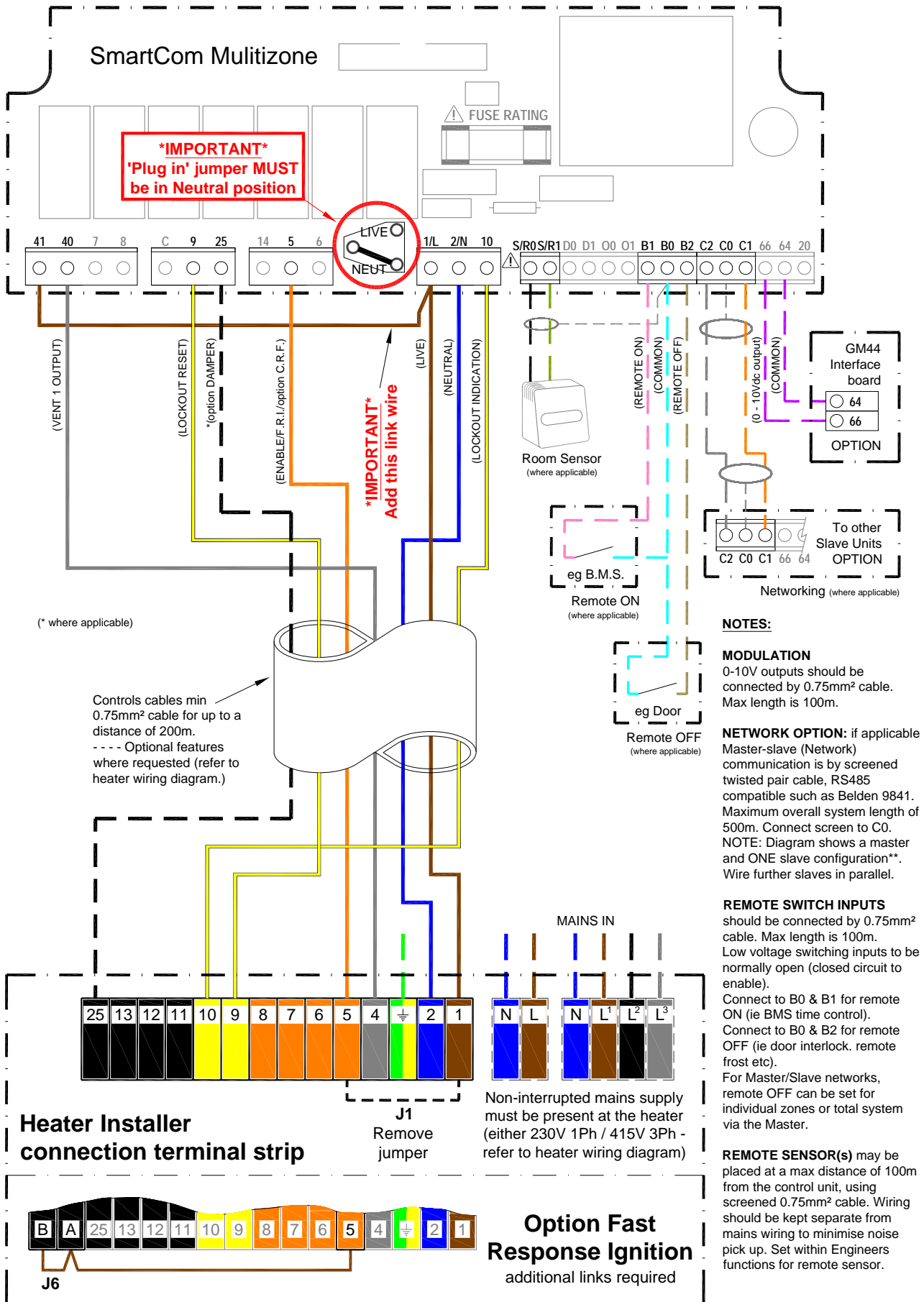
should be connected by 6A mains Max length is 100m. Low voltage switching inputs to be normally open (closed circuit to enable). Connect to B0 & B1 for remote ON (ie BMS time control). Connect to B0 & B2 for remote OFF (ie door interlock. remote frost etc). \*The power supply is non-isolated, therefore all wiring to the control must be mains rated.

**REMOTE SENSOR(s)** may be placed at a max distance of 100m from the control unit, using screened 6A mains\* cable. Wiring should be kept separate from mains wiring to minimise noise pick up. Set within Engineers functions for remote sensor. \*The power supply is non-isolated, therefore all wiring to the control must be mains rated.

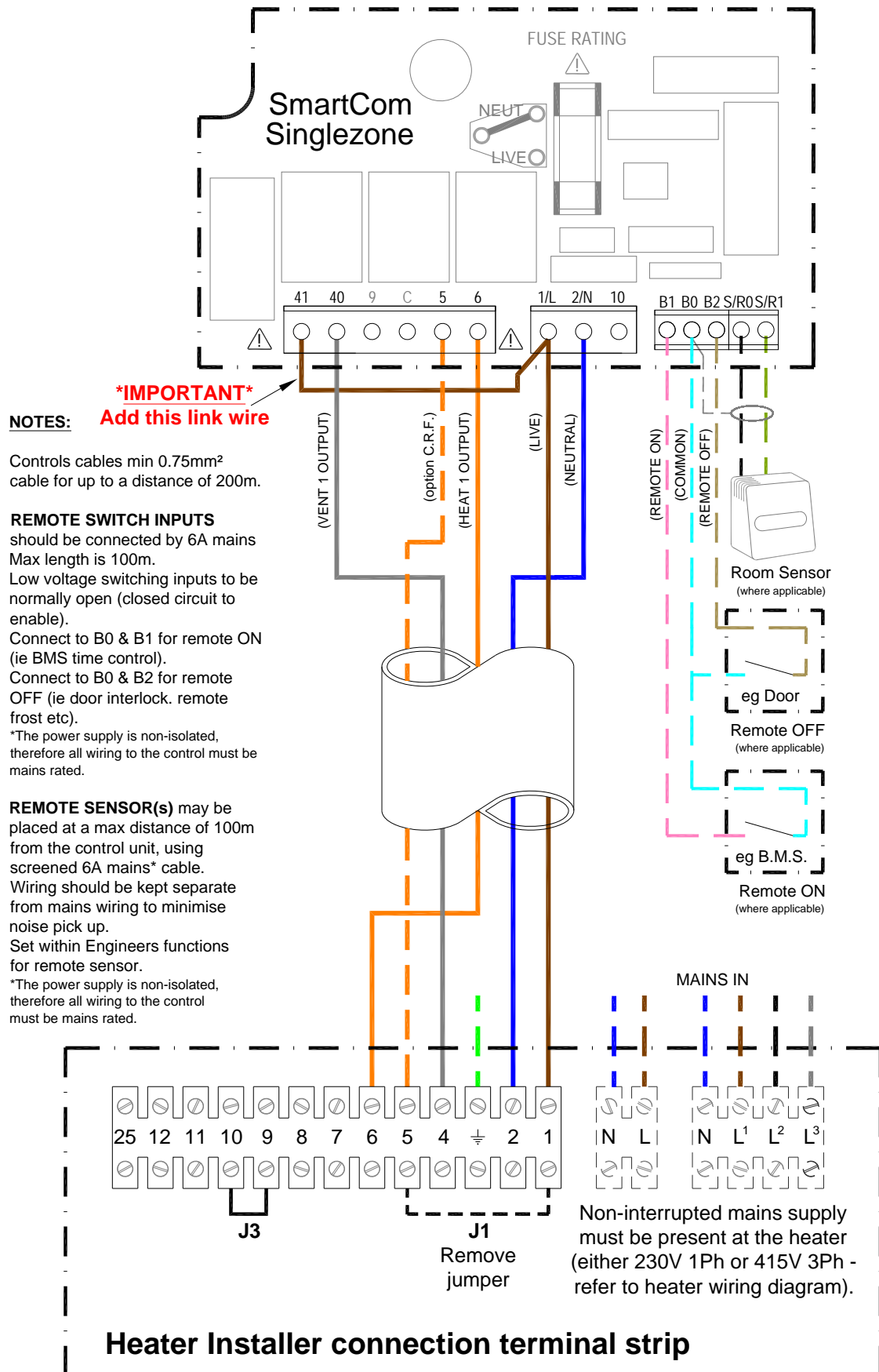
# 13 Two Stage (hi/low) ST Heaters with Autospark Ignition to remote SmartCom<sup>3</sup> MZ (or Network).



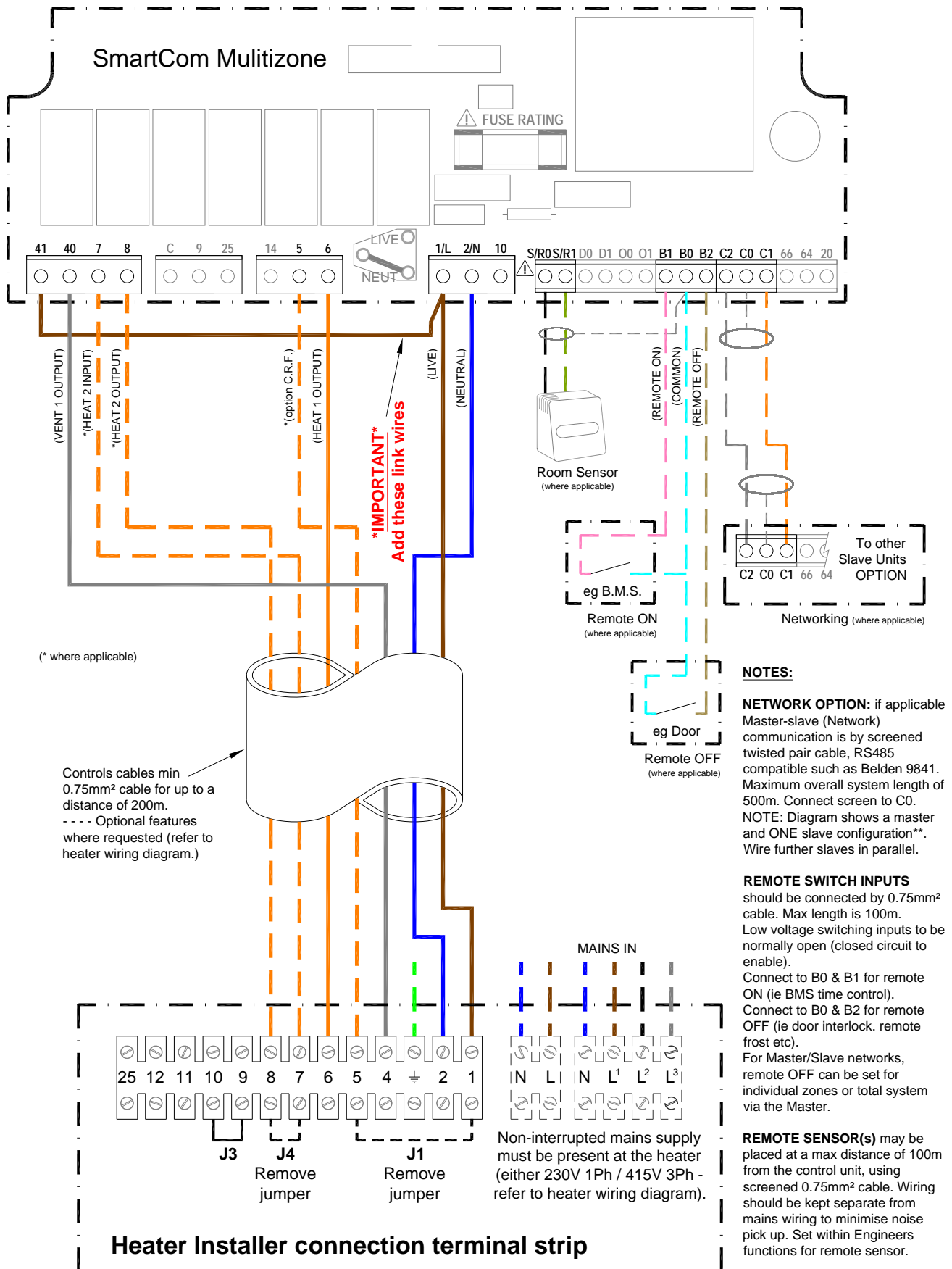
# 14 Modulation ST Heaters with Autospark ignition to remote SmartCom<sup>3</sup> MZ (or Network).



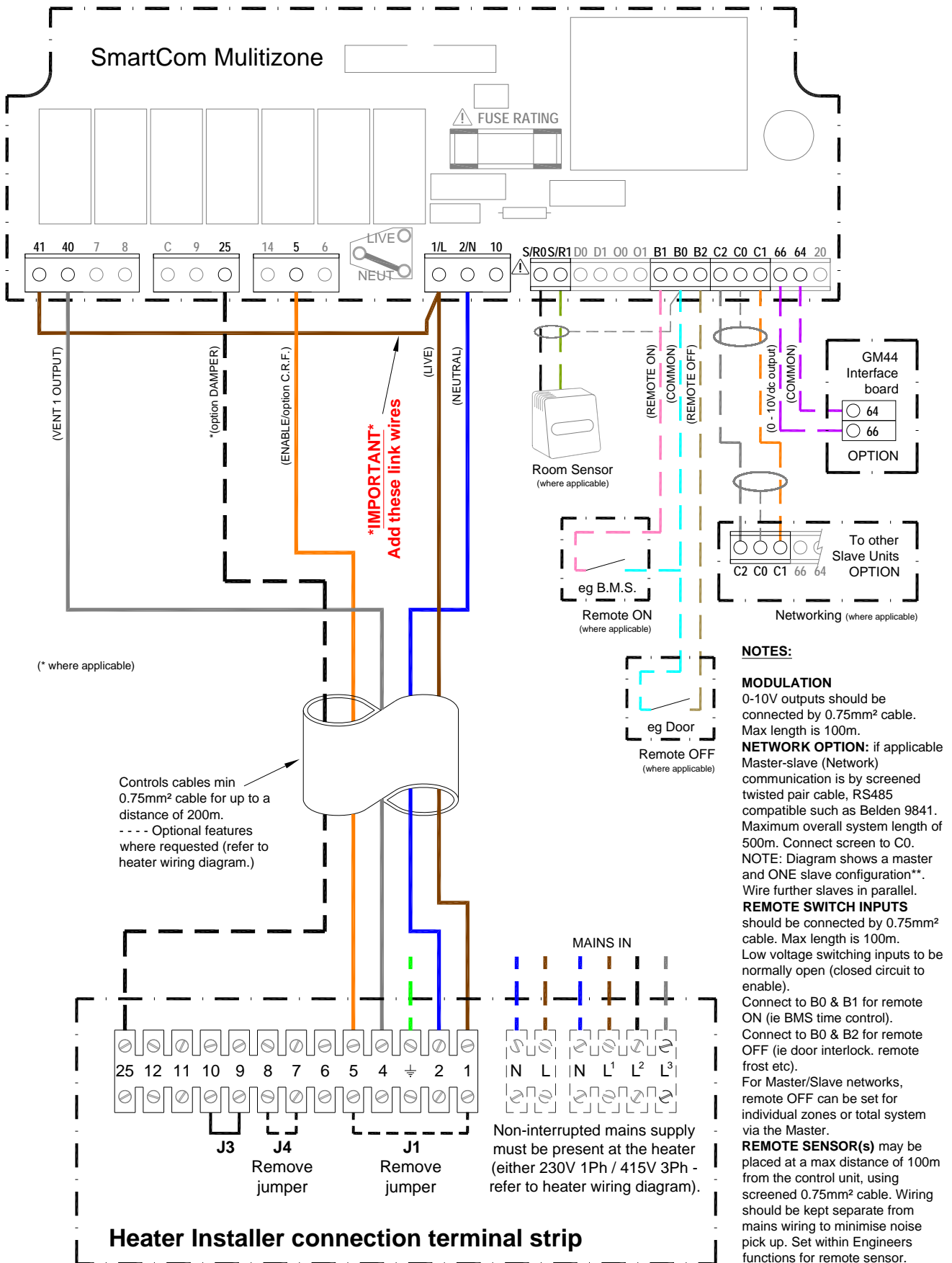
# 15 Single Stage (on/off) Heaters with Thermoelectric (permanent pilot) to remote SmartCom<sup>3</sup> SZ.



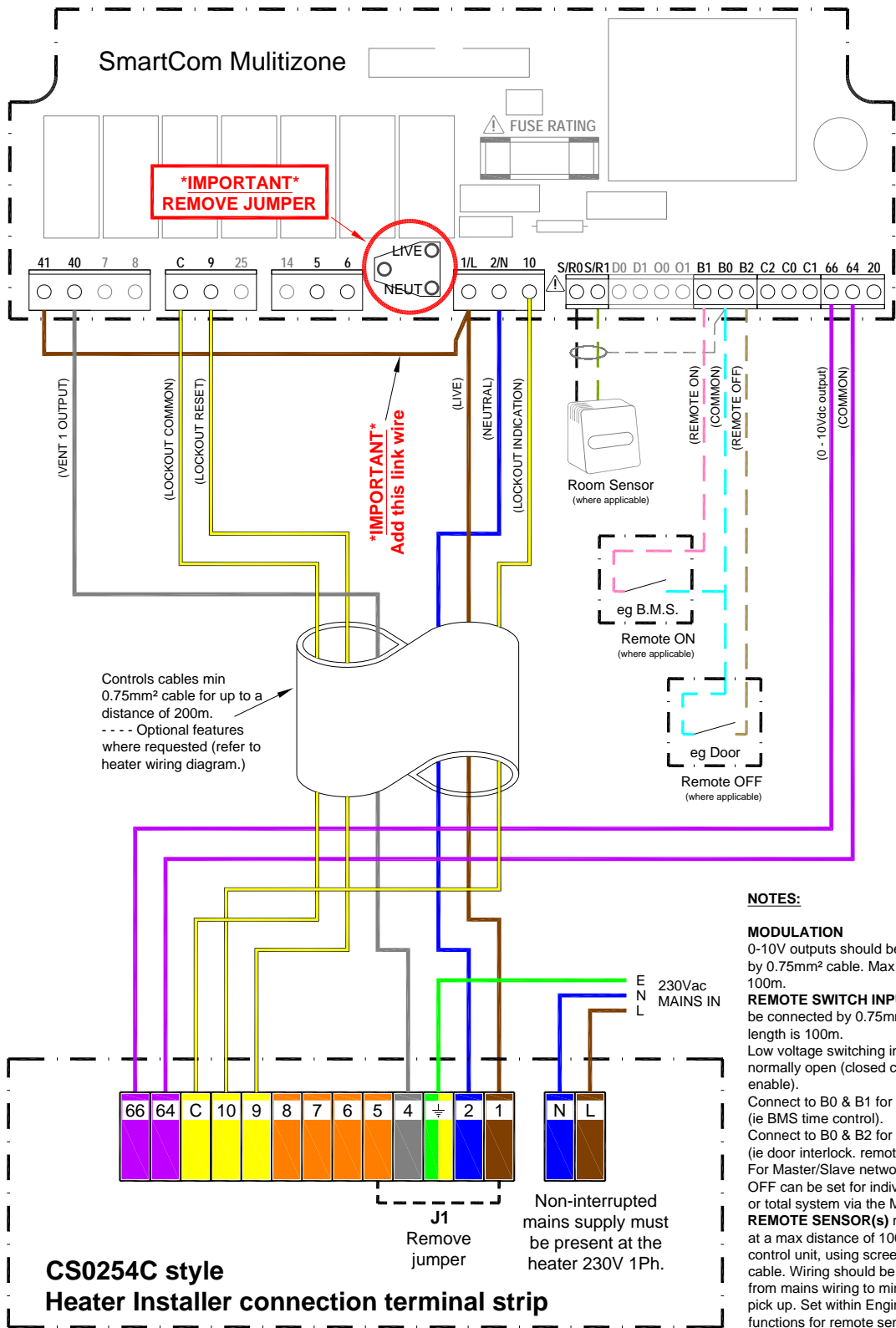
# 16 Two Stage (hi/low) Heaters with Thermoelectric (permanent pilot) to remote SmartCom<sup>3</sup> MZ (or Network).



# 17 Modulation Heaters with Thermoelectric (permanent pilot) to remote SmartCom<sup>3</sup> MZ (or Network).



# 18 Modulation ULSA Heaters with Autospark ignition to remote SmartCom<sup>3</sup> MZ.



Document reference number GB/SCOM/121/1114  
 Replaces GB/SCOM/12/02.14

# AMBIRAD

HEATING AND VENTILATION SOLUTIONS

Technical Support:

Tel: 01384 489 250  
 Fax: 01384 489 707

ambiradsales@nordyne.com  
 www.ambirad.co.uk

**AMBIRAD AIRBLOC NORDAIRNICHE BENSON**

Registered in England No. 1390934. Registered office: 10 Norwich Street, London. EC4 1BD

AmbiRad UK is a registered trademark of AmbiRad Limited. Because of continuous product innovation, AmbiRad reserves the right to change product specification without due notice.