

Heatmat specification

Thermonet BASIC 100w/m ²					Thermonet EZ 150w/m ²					Thermonet EXTRA 200w/m ²				
STOCK NO	SIZE (M)	AREA (M ²)	OUTPUT (WATTS)	LOAD (A)	STOCK NO	SIZE (M)	AREA (M ²)	OUTPUT (WATTS)	LOAD (A)	STOCK NO	SIZE (M)	AREA (M ²)	OUTPUT (WATTS)	LOAD (A)
5009	1.8 x 0.5	0.90	91	0.4	5100	1.4 x 0.5	0.70	105	0.5	5180	1.0 x 0.5	0.50	100	0.4
5015	3.0 x 0.5	1.50	150	0.7	5101	2.6 x 0.5	1.30	195	0.8	5182	2.0 x 0.5	1.00	200	0.9
5020	4.0 x 0.5	2.00	200	0.9	5115	3.2 x 0.5	1.60	240	1.0	5183	3.0 x 0.5	1.50	300	1.3
5025	5.0 x 0.5	2.50	250	1.0	5120	4.0 x 0.5	2.00	300	1.3	5185	4.0 x 0.5	2.00	400	1.7
5030	6.1 x 0.5	3.05	305	1.3	5125	5.0 x 0.5	2.50	375	1.6	5186	5.0 x 0.5	2.50	500	2.2
5035	7.0 x 0.5	3.50	350	1.5	5103	5.8 x 0.5	2.90	437	1.9	5187	6.0 x 0.5	3.00	600	2.6
5040	8.1 x 0.5	4.05	405	1.8	5135	6.8 x 0.5	3.40	510	2.2	5188	8.0 x 0.5	4.00	800	3.5
5049	9.9 x 0.5	4.95	500	2.2	5104	8.1 x 0.5	4.05	608	2.6	5189	10.0 x 0.5	5.00	1000	4.3
5060	12.2 x 0.5	6.10	610	2.7	5105	9.9 x 0.5	4.95	742	3.2	5190	11.0 x 0.5	5.50	1100	4.8
5062	16.0 x 0.5	8.00	800	3.5	5106	13.0 x 0.5	6.50	975	4.2	5191	12.0 x 0.5	6.00	1200	5.2
5064	20.0 x 0.5	10.00	1000	4.3	5107	15.0 x 0.5	7.50	1125	4.9	5192	14.0 x 0.5	7.00	1400	6.0
					5108	17.0 x 0.5	8.50	1280	5.6	5193	16.0 x 0.5	8.00	1600	7.0
					5109	18.4 x 0.5	9.20	1380	6.0	5194	18.0 x 0.5	9.00	1800	8.0
					5110	20.0 x 0.5	10.00	1511	6.6	5195	21.0 x 0.5	10.50	2100	9.0
					5112	24.0 x 0.5	12.00	1814	7.9	5196	24.0 x 0.5	12.00	2400	10.4
					5114	28.0 x 0.5	14.00	2250	9.8					
					5116	32.0 x 0.5	16.00	2400	10.4					

Load calculation / control rating / thermostat location

Prior to installation, work out the electrical requirements.

CHECKLIST

- TOTAL HEATMAT CURRENT DRAW (AMPS)
- HEATMAT CONTROL RATINGS
- THERMOSTAT LOCATION
- CIRCUIT PROTECTION

Total heatmat current draw

Firstly calculate the total load. The load in watts(W) of each heatmat is shown on the heatmat factory test certificate. To find the total load, add the load of each individual heatmat together.

Sum of individual heatmat loads = Total load(W)

Calculate the current draw in amps(A) by dividing the total load(W) by the working voltage.

$$\frac{\text{Total load W}}{230 \text{ v}} = \text{Total current draw A}$$

Heatmat control ratings

Thermonet heatmats must be controlled by a Thermonet thermostat. Thermostats have a maximum current draw rating of 16.0A.

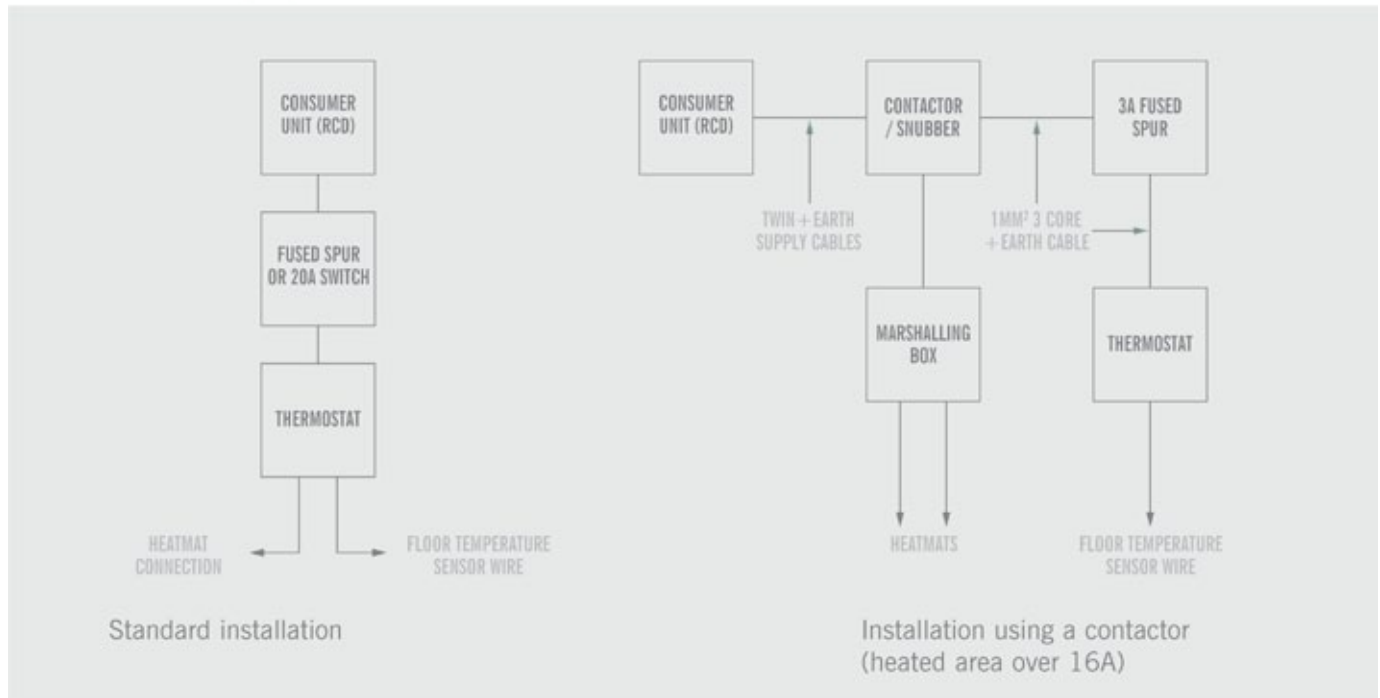
If the total current draw exceeds 16.0A and the system has to be controlled by a single thermostat, a contactor/snubber must be used in addition to the thermostat. The rating of the contactor/snubber must always exceed the total current draw of the system.

ALL ELECTRICAL WORK MUST CONFORM TO CURRENT IEE WIRING REGULATIONS AND BE CHECKED OR CARRIED OUT BY A QUALIFIED ELECTRICIAN. ELECTRICAL INSTALLATION WORK IN DWELLINGS IS SUBJECT TO THE BUILDING REGULATIONS PART P

25.0A CONTACTOR / SNUBBER STOCK NO 5279

40.0A CONTACTOR / SNUBBER STOCK NO 5280

Schematic wiring layouts



Alternatively larger areas can be divided into zones. The total heatmat current draw for each zone must not exceed the maximum rating of the thermostat or contactor/snubber controlling that zone.

One benefit of zoning larger areas is that each zone can have different thermostat settings leading to enhanced efficiency. The floor area of each zone is governed by the area of the heatmat(s) in each zone. Heatmats must never be shortened or joined together in series.

Thermostat Location

Select a location for the thermostat. Thermostats require an electrical supply and a conduit feed to floor level. Thermostat operation is via a floor temperature sensor. Thermostats are suitable for all locations except wet zones as defined in the current IEE wiring regulations (less than 600mm from any bath or shower).

The recommended thermostat position is 1.3m above floor and within a 3m wiring run of the heatmat(s). Where possible thermostats should be flush mounted. If required thermostats can be located in cupboard spaces or up to 50m away from the room to be heated.

Installations of three or more heatmats controlled by a single thermostat will require the heatmat connection wires to terminate at a separate location. We recommend installing a marshalling box just above skirting level and in line with the thermostat mounting box. Use this marshalling box to house a terminal block and take single wire feeds to the thermostat.

Where possible, 2 x 20mm conduits should be installed between the thermostat, termination mounting box (if fitted) and the floor level to facilitate wiring.

TURN OFF THE ELECTRICAL SUPPLY AT THE POWER DISTRIBUTION UNIT TO AVOID RISK OF ELECTRICAL SHOCK

THE ELECTRICAL SUPPLY TO THE INSTALLATION MUST ALWAYS BE PROTECTED BY A RESIDUAL CURRENT DEVICE (RCD) THE TRIPPING CURRENT RATING OF THE RCD MUST NOT EXCEED 30MA