

Section 10

Refrigeration Industry



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Thermal Defrost Heaters

Defrost heaters are used for the prevention of ice build up on freezer and evaporator coils.

Construction

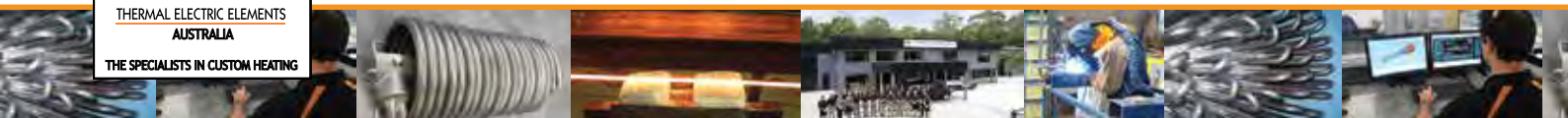
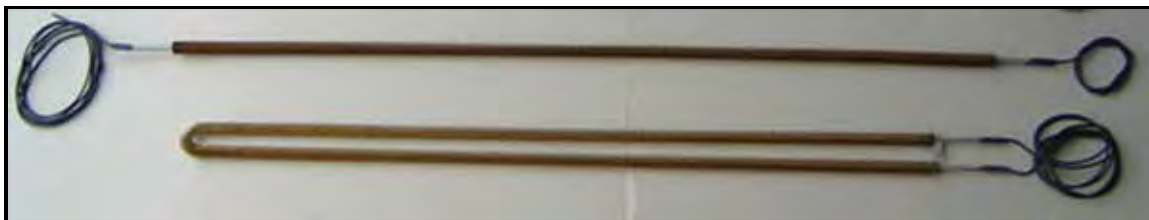
Stainless steel sheathed element with brass or stainless steel fins for quick heat dissipation. Thermal Defrost heaters are made fully water resistant by vulcanising double insulated cable to the end of the element.

Stainless steel sheathed elements are capable of reaching temperatures of 1150°C, however these temperatures are not required for refrigeration applications, thus giving a long lasting product.

Each element must pass a 1500V DC insulation test and achieve a megger reading not less than 100MΩ before leaving our plant.

A wide variety of terminations, lead lengths and lead types are available. Leads are capable of operating in temperatures of -40°C to +150°C. Custom designed heating elements can be produced for obsolete freezer cabinets, coil and drain pans.

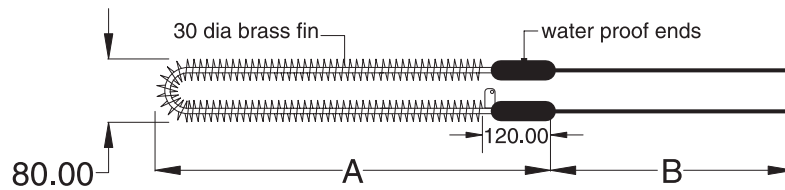
Thermal manufacture the largest range of defrost and drain pan heaters for all the leading commercial refrigeration cabinets including brands such as Muller, Kirby, Repco, Buffalo Trident, Kysor, Hussmann, Coldwright, Heatcraft and more.



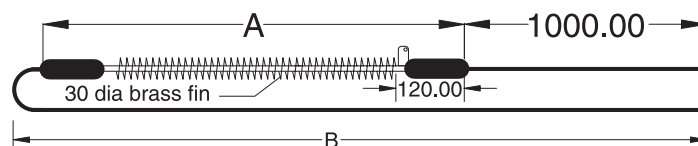
Thermal Defrost Heaters - For Island Freezer Cases

Part #	Dim A	Dim B	Watts
1D	1000	1500	1500
2D	1350	1500	1500
3D	1550	1500	1500
4D	1650	1500	1500
5D	1950	2000	2000
6D	1780	1500	2000
7D	2285	1500	2000
8D	2600	2000	2000
9D	3200	2000	2500
10D	2100	1500	2000
11D	2800	1500	2000
12D	3380	1500	2000
13D	3750	2000	3000

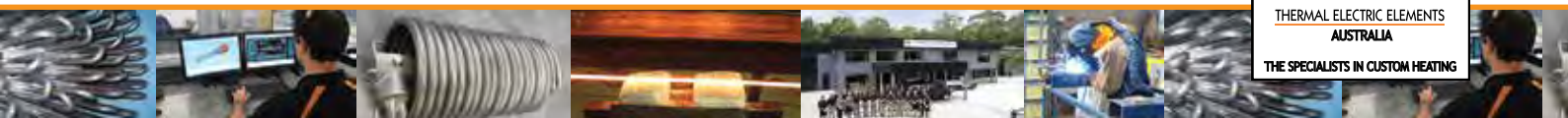
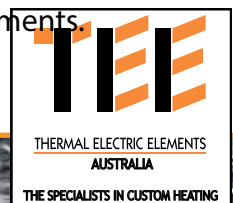
Part #	Dim A	Dim B	Watts
80D	2100	2500	1800
81D	2800	2500	2000
82D	3380	2500	2500
83D	2100	6000	1800
84D	2800	6000	2000
85D	3380	6000	2500
86D	1150	1500	400
88D	1780	1500	500
89D	1490	1500	1500
166861S	3200	1000	3400
166862S	2600	1000	2750
166863S	2200	1000	2200
166864S	1600	1000	1650



Part #	Dim A	Dim B	Watts
4980000	1020	2400	1000
4980001	1350	2750	1200
4980021	1960	3150	1600
4980022	2600	3800	2000
4980023	3200	4200	2400



All dimensions are given in millimetres and elements are rated at 240V.
Special sizes, voltages and wattages manufactured to suit your requirements.



Thermal Drain & Condensate Pan Heaters

Drain and condensate pan heaters are used for the prevention of ice build up in drain ways and condensate pans of commercial refrigeration units.

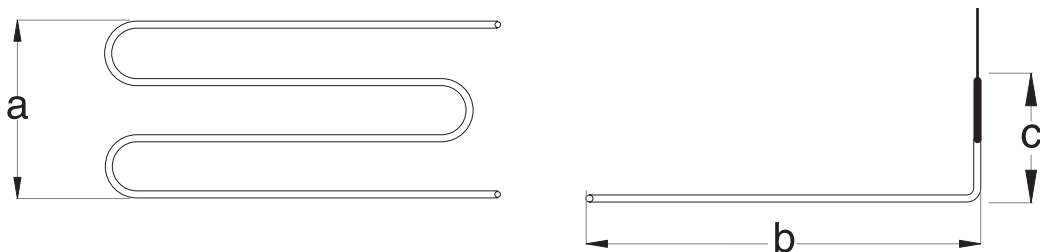
Construction

Stainless steel sheathed, low watt density heaters guarantee a longer life span as they are more robust and resistant to corrosion.

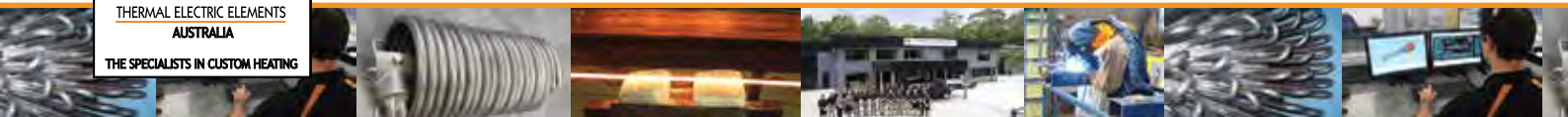
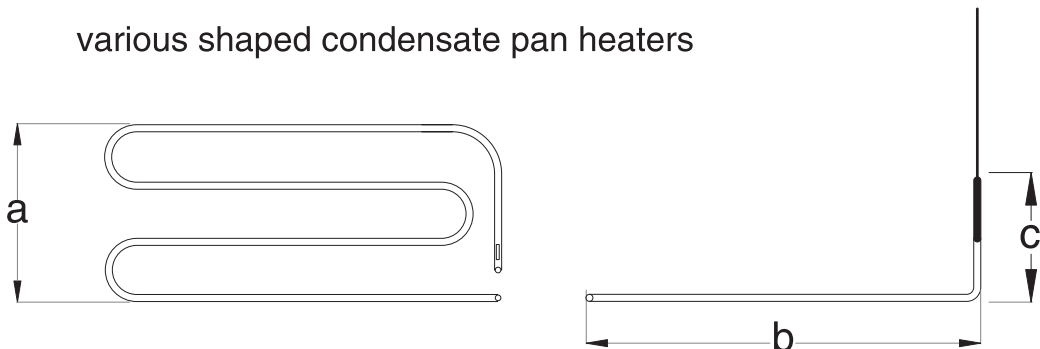
A wide variety of terminations and lead lengths are available. Leads are capable of operating in temperatures of -40°C to $+150^{\circ}\text{C}$.

As with defrost heaters, custom designed elements can be produced for obsolete freezer cabinets, coil and drain pans.

Thermal manufacture the largest range of defrost and drain heaters for all the leading commercial refrigeration cabinets including brands such as Muller, Kirby, Repco, Buffalo Trident, Kysor, Hussmann, Coldwright, Heatcraft and more.



various shaped condensate pan heaters

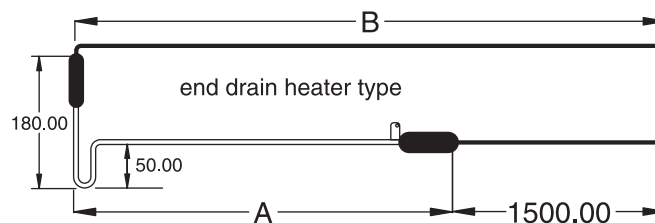


Thermal Drain & Condensate Pan Heaters

End Drain

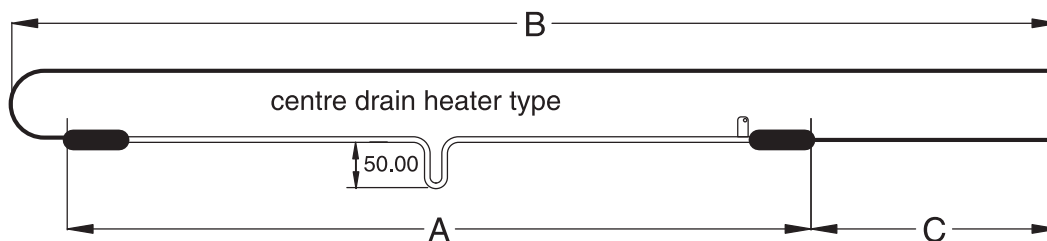
Part #	Dim A	Dim B	Watts
51W	1000	2500	150
52W	1270	2770	200
53W	1675	3125	200
54W	1980	3480	500
55W	1830	3330	200
56W	2290	3790	200

Part #	Dim A	Dim B	Watts
57W	2500	4000	200
58W	3200	4700	500
59W	2300	3800	200
60W	2850	4350	200
61W	3450	4950	200
62W	3760	5260	300

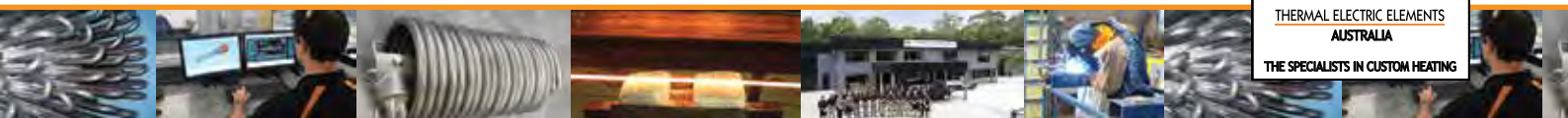


Centre Drain

Part #	Dim A	Dim B	Dim C	Watts
64W	2340	4500	1500	500
65W	3550	5000	1500	500
67W	1829	4600	4600	200



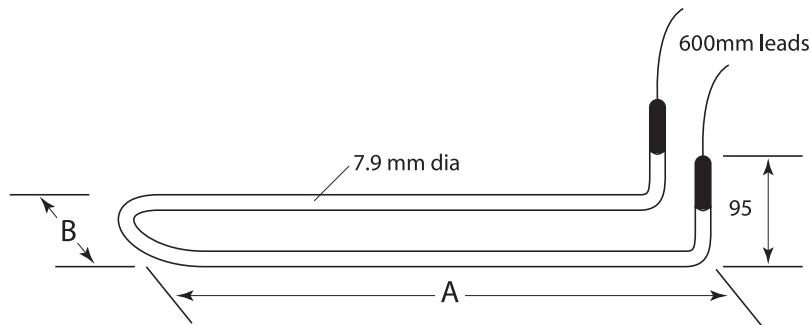
All dimensions are given in millimetres and elements are rated at 240V.
Special sizes, voltages and wattages manufactured to suit your requirements.



Defrost Heaters for Buffalo Trident Coils

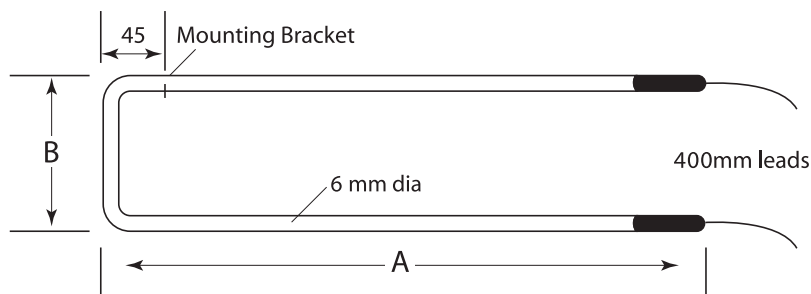
Part #	Dim A	Dim B	Watts
BA01	570	85	1000
BB02	1030	85	1000
BC03	1485	85	1500
BD04	1945	85	1700
BE05	2400	85	2000
BF06	2860	85	2300
BG07	3060	85	2500
BH08	572	160	300

Part #	Dim A	Dim B	Watts
BJ09	1030	160	400
BK10	1485	160	400
BL11	2860	85	800
BM12	3160	85	900
BN13	2550	85	700
BP14	2100	85	600
BQ15	1640	85	500
BR16	1335	85	400

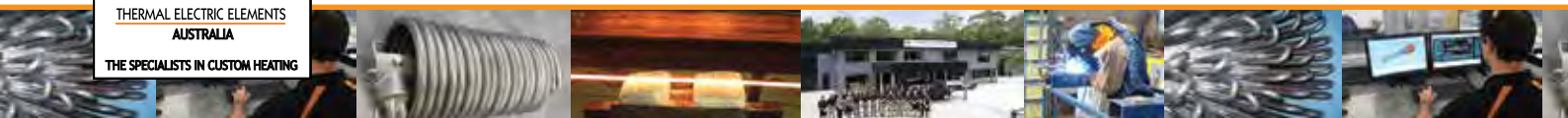


Part #	Dim A	Dim B	Watts
BK18	585	101	475
BL19	890	101	900
BM20	1270	101	1350
BN21	1650	101	1800
BP22	1345	101	1700
BQ23	1955	101	2300
BR24	2565	101	3000
BS25	3175	101	2400

Part #	Dim A	Dim B	Watts
BT26	890	132	550
BU27	1270	132	800
BV28	1650	132	1100
BW29	1345	132	900
BX30	1955	132	1200
BY31	2565	132	1800
BZ32	3175	132	1900



All dimensions are given in millimetres and elements are rated at 240V.
Special sizes, voltages and wattages manufactured to suit your requirements.



Flexible Silicone Drain Heaters

Used extensively within the commercial refrigeration industry to prevent ice build up within condensate trays and drains.

A flexible heater that is resistant to water, oils, chemicals and many harsh environments ensures a safe, reliable and economical solution.

Designed for freeze protection and process temperature maintenance along pipelines, flanges, valves and pumps; or used wherever our reliable tubular calrod type heating elements cannot be used due to uneven surfaces or obstacles prohibiting easy installation. Other applications include anti-condensation heaters for large electric motors, control enclosures, switchboards and sump heaters for diesel engines.

Construction of the Thermal Silicone Flexible Heater consists of a Nickel Chromium (NiChrome) resistance wire heli-coiled around an electrical grade high temperature fibreglass cord, insulated by a silicone rubber sheath. A second fibreglass sheath is added for further electrical and mechanical protection of the resistance wire.

The double insulated heating cable is enclosed within the third and final high temperature silicone fibreglass sheath, terminated with silicone cold tails and further sealed with a silicone rubber sealant.

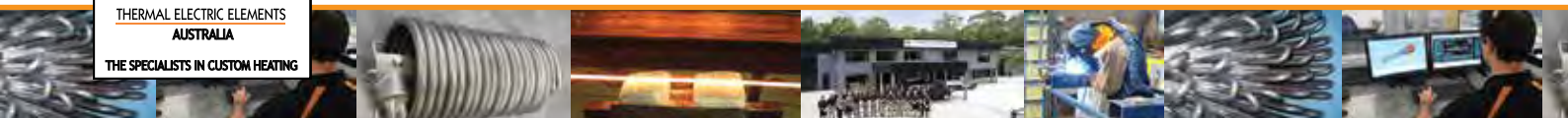
Maximum operating temperatures of 220°C. Lengths ranging from 500mm to 15 metres and various watts per metre and voltages are available on request.



Flexible Silicone Drain Heaters

75 Watts/Metre			100 Watts/Metre			150 Watts/Metre		
Part #	Length	Wattage	Part #	Length	Wattage	Part #	Length	Wattage
			SF100-05	0.5	50	SF150-05	0.5	75
SF75-1	1.0	75	SF100-1	1.0	100	SF150-1	1.0	150
SF75-2	2.0	150	SF100-2	2.0	200	SF150-2	2.0	300
SF75-3	3.0	225	SF100-3	3.0	300	SF150-3	3.0	450
SF75-4	4.0	300	SF100-4	4.0	400	SF150-4	4.0	600
SF75-5	5.0	375	SF100-5	5.0	500	SF150-5	5.0	750
SF75-6	6.0	450	SF100-6	6.0	600	SF150-6	6.0	900
SF75-7	7.0	525	SF100-7	7.0	700	SF150-7	7.0	1050
SF75-8	8.0	600	SF100-8	8.0	800	SF150-8	8.0	1200
SF75-9	9.0	675	SF100-9	9.0	900	SF150-9	9.0	1350
SF75-10	10.0	750	SF100-10	10.0	1000	SF150-10	10.0	1500
SF75-11	11.0	825	SF100-11	11.0	1100	SF150-11	11.0	1650
SF75-12	12.0	900	SF100-12	12.0	1200	SF150-12	12.0	1800
SF75-13	13.0	975	SF100-13	13.0	1300	SF150-13	13.0	1950
SF75-14	14.0	1050	SF100-14	14.0	1400	SF150-14	14.0	2100
SF75-15	15.0	1125	SF100-15	15.0	1500	SF150-15	15.0	2250

All length dimensions in metres



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