



THERMAL ELECTRIC ELEMENTS
AUSTRALIA



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Refrigeration Industry

Product

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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 fin for quick heat dissipation. These elements 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 insulation test and a megger reading not less than 100M Ω 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 heaters for all the leading commercial refrigeration manufacturers.

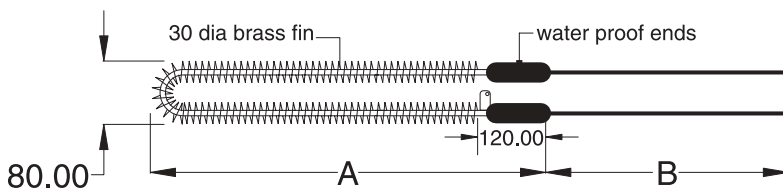


5.2

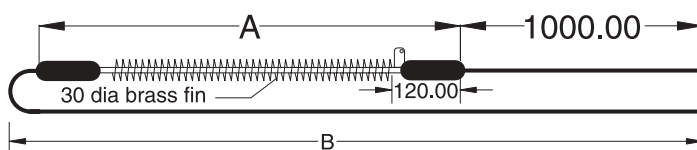
Refrigeration Industry

Thermal Defrost Heaters

| Cat No. | Dim A | Dim B | Watts | Cat No. | Dim A | Dim B | Watts |
|---------|-------|-------|-------|---------|-------|-------|-------|
| 1D | 1000 | 1500 | 1500 | 80D | 2100 | 2500 | 1800 |
| 2D | 1350 | 1500 | 1500 | 81D | 2800 | 2500 | 2000 |
| 3D | 1550 | 1500 | 1500 | 82D | 3380 | 2500 | 2500 |
| 4D | 1650 | 1500 | 1500 | 83D | 2100 | 6000 | 1800 |
| 5D | 1950 | 2000 | 2000 | 84D | 2800 | 6000 | 2000 |
| 6D | 1780 | 1500 | 2000 | 85D | 3380 | 6000 | 2500 |
| 7D | 2285 | 1500 | 2000 | 86D | 1150 | 1500 | 400 |
| 8D | 2600 | 2000 | 2000 | 88D | 1780 | 1500 | 500 |
| 9D | 3200 | 2000 | 2500 | 89D | 1490 | 1500 | 1500 |
| 10D | 2100 | 1500 | 2000 | 166861S | 3200 | 1000 | 3400 |
| 11D | 2800 | 1500 | 2000 | 166862S | 2600 | 1000 | 2750 |
| 12D | 3380 | 1500 | 2000 | 166863S | 2200 | 1000 | 2200 |
| 13D | 3750 | 2000 | 3000 | 166864S | 1600 | 1000 | 1650 |



| Cat No. | 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.

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Refrigeration Industry

Thermal Drain and 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:

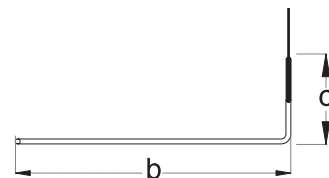
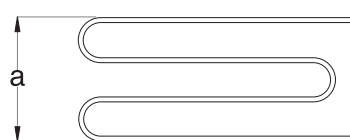
Stainless steel sheathed, low watt density heaters guarantee a longer life span as they are more robust and resistant to corrosion.

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

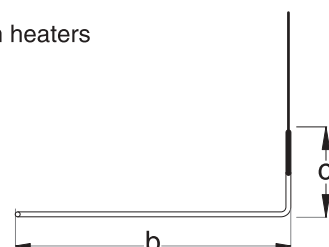
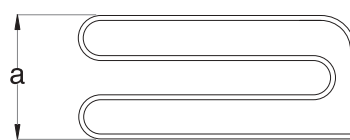
As with defrost heaters, custom designed elements can be produced for obsolete freezer cabinets, coil and drain pans.

Thermal manufacture the largest range of drain pan heaters for all of the leading commercial refrigeration manufacturers.

Thermal Drain Pan Heaters



various shaped condensate pan heaters

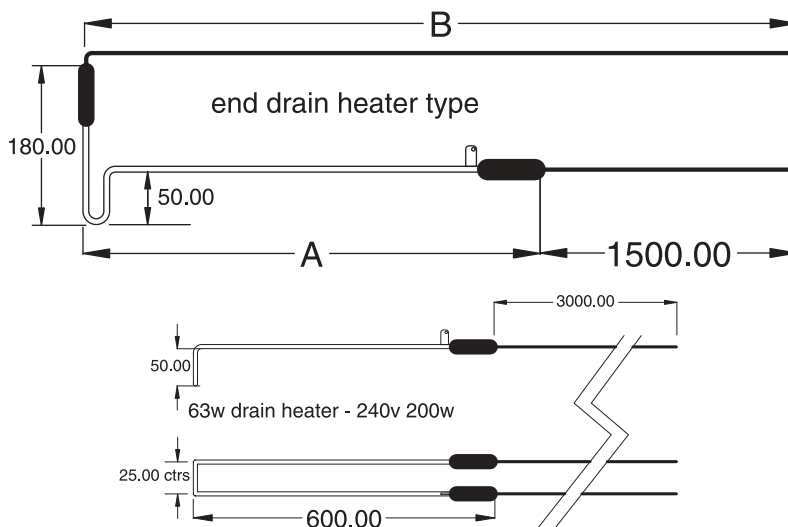


Refrigeration Industry

Thermal Drain and Condensate Pan Heaters

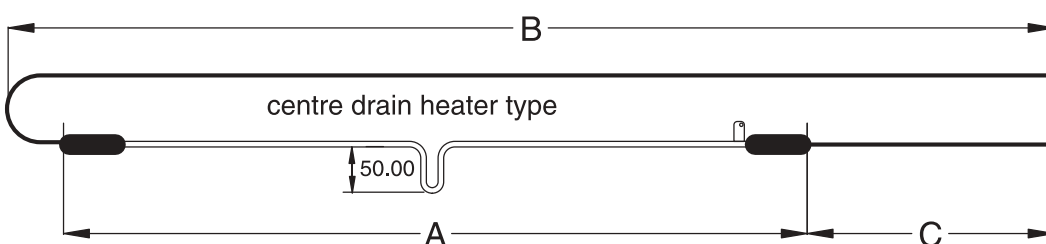
End Drain

| Cat No. | Dim A | Dim B | Watts | Cat No. | Dim A | Dim B | Watts |
|---------|-------|-------|-------|---------|-------|-------|-------|
| 51W | 1000 | 2500 | 150 | 57W | 2500 | 4000 | 200 |
| 52W | 1270 | 2770 | 200 | 58W | 3200 | 4700 | 500 |
| 53W | 1675 | 3125 | 200 | 59W | 2300 | 3800 | 200 |
| 54W | 1980 | 3480 | 500 | 60W | 2850 | 4350 | 200 |
| 55W | 1830 | 3330 | 200 | 61W | 3450 | 4950 | 200 |
| 56W | 2290 | 3790 | 200 | 62W | 3760 | 5260 | 300 |
| | | | | 63W | 600 | 3000 | 200 |



Centre Drain

| Cat No. | Dim A | Dim B | Dim C | Watts |
|---------|-------|-------|-------|-------|
| 64W | 2340 | 4500 | 1500 | 500 |
| 65W | 3550 | 5000 | 1500 | 500 |
| 67W | 1829 | 4600 | 4600 | 200 |



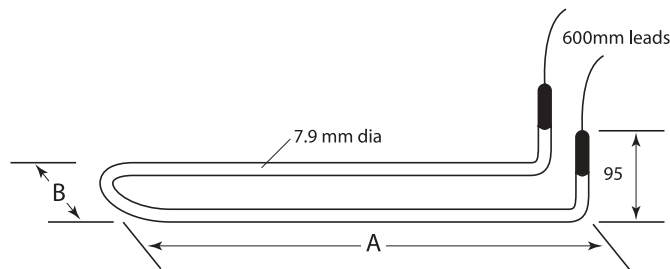
All dimensions are given in millimetres and elements are rated at 240V.
Special sizes, voltages and wattages manufactured to suit your requirements.

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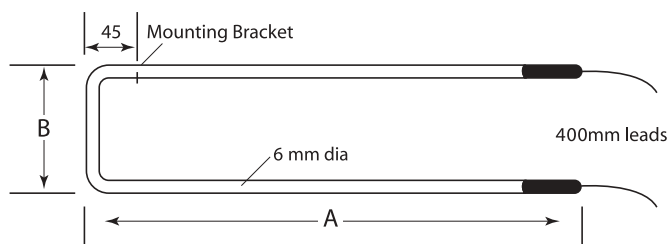
Refrigeration Industry

Defrost Heaters for Buffalo Trident Coils

| Cat No. | Dim A | Dim B | Watts | Cat No. | Dim A | Dim B | Watts |
|---------|-------|-------|-------|---------|-------|-------|-------|
| BA 1 | 570 | 85 | 1000 | BJ09 | 1030 | 160 | 400 |
| BB 2 | 1030 | 85 | 1000 | BJ10 | 1485 | 160 | 400 |
| BC 3 | 1485 | 85 | 1500 | BL11 | 2860 | 85 | 800 |
| BD 4 | 1945 | 85 | 1700 | BM12 | 3160 | 85 | 900 |
| BE 5 | 2400 | 85 | 2000 | BN13 | 2550 | 85 | 700 |
| BF 6 | 2860 | 85 | 2300 | BP14 | 2100 | 85 | 600 |
| BG 7 | 3060 | 85 | 2500 | BQ15 | 1640 | 85 | 500 |
| BH 8 | 572 | 160 | 300 | BR16 | 1335 | 85 | 400 |



| Cat No. | Dim A | Dim B | Watts | Cat No. | Dim A | Dim B | Watts |
|---------|-------|-------|-------|---------|-------|-------|-------|
| BK18 | 585 | 101 | 475 | BT26 | 890 | 132 | 550 |
| BL19 | 890 | 101 | 900 | BU27 | 1270 | 132 | 800 |
| BM20 | 1270 | 101 | 1350 | BV28 | 1650 | 132 | 1100 |
| BN21 | 1650 | 101 | 1800 | BW29 | 1345 | 132 | 900 |
| BP22 | 1345 | 101 | 1700 | BX30 | 1955 | 132 | 1200 |
| BQ23 | 1955 | 101 | 2300 | BY31 | 2565 | 132 | 1800 |
| BR24 | 2565 | 101 | 3000 | BZ32 | 3175 | 132 | 1900 |
| BS25 | 3175 | 101 | 2400 | | | | |



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

Refrigeration Industry

Thermal 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.



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Thermal Flexible Silicone Heating Elements Standard Range Rated at 240V

| 75 watts/metre | | | 100 watts/metre | | | 150 watts/metre | | |
|----------------|--------|---------|-----------------|--------|---------|-----------------|--------|---------|
| Part No. | Length | Wattage | Part No. | Length | Wattage | Part No. | 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