

Thermal-Elements

Thermal-Elements B.V.
Regentesselaan 9A
2281 VA Rijswijk
Netherlands

IR Products

prices and modules
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T +31(0) 70-3906777
F +31(0) 70-3906046
E info@thermal-elements.com
I www.thermal-elements.com



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Introduction

Thermal-Elements provide all three forms of Infrared Heating Element:

- Long wave - Ceramic elements
- Medium wave - Quartz elements
- Short wave - Quartz Tungsten elements

And also

- Aluminised Steel Reflector and Projector systems.
- Custom designed Heating Platens / Ovens.
- Ceramic Terminal Blocks.

With the Ceramic and Quartz emitters ranging in surface temperature from 150°C (300°F) to 730°C (1346°F) and the Tungsten bulb capable of reaching in excess of 2400°C (4350°F), Thermal-Elements provides a complete line of radiant infrared heating elements. At Thermal-Elements our objective is to provide heating solutions through the effective and efficient application of Infrared Technology. Thermal-Elements prides itself in being able to provide a first class service to our customers, provide a first class quality product at a competitive price, and adopt a flexible and innovative approach.

The company is young, skilled, versatile, highly motivated and with a depth of experience in infrared heating. The cornerstone of the company has always been the highly specialised niche market of infrared heating, both in Ceramics and Quartz, and the development of heating systems. The purpose of this product information is to introduce you to Thermal-Elements, the range of products manufactured and why infrared heating may be the solution for you.

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1 Ceramics

1.1 L.F.F.E. Large Full Fat Element

Dwg No. 050203A
245 x 90mm (9.65" x 3.54")
300W - 1400W



1.2 L.F.T.E. Large Full Trough Element

Dwg No. 050203B
245 x 110mm (9.65" x 4.33")
300W - 1400W



1.3 F.F.E. Full Flat Element

Dwg No. 190401B
245 x 60mm (9.65" x 2.36")
150W - 1000W



1.4 F.T.E Full Trough Element

Dwg No. 130201A
245 x 60mm (9.65" x 2.36")
150W - 1000W



1.5 H.F.E Half Flat element

Dwg No. 190401C
122 x 60mm (4.8" x 2.36")
125W - 500W



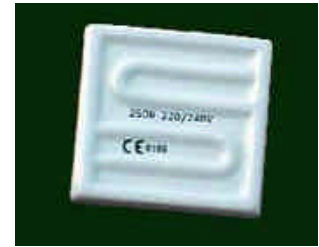
1.6 H.T.E. Half Trough Element

Dwg. No. 130201B
122 x 60mm (4.8" x 2.36")
125W- 500W



1.7 Q.F.E Quarter Flat Element

Dwg No.190401D
60 x 60 mm (2.36" x 2.36")
125W - 250W



1.8 Q.T.E. Quarter Trough Element

Dwg No. 050203C
60 x 60 mm (2.36" x 2.36")
125W - 250W



1.9 S.F.S.E. Square Flat Solid Element

Dwg No. 190401A
122 x 122 mm (4.8" x 4.8")
150W-750W



1.10 E.S.E. Ceramic Bulbs

Dwg No. 050203D
dia. 80 x 110mm (dia.3.15" x 4.33")
60W & 100W

Dwg No. 050203E
dia.95 x140mm (dia.3.74"x 5.51")
150W & 250W 230V



1.11 Cerix thermocouple

Dwg No. 050203F
Ceramic element with built in
Type K thermocouple
Calibrated ex. element
Standard ex. element
Thermocouple J
Standard ex. element



1.12 S.F.E.H Square Flat Element Hollow

Dwg No. 050203G
122 x122mm (4.8" x 4.8")
250W - 800W



1.13 F.F.E.H Full Flat Element Hollow

Dwg No.080702E
245 x 60 mm (9.65" x 2.36")
150W - 800W



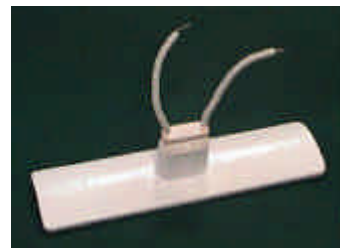
1.14 H.F.E.H Half Flat Element Hollow

Dwg No. 050203H
122 x 60 mm (4.8" x 2.36")
125W - 400W



1.15 F.T.E.L.N. Full Trough Element Long Neck

Dwg No. 270602A
245 x 60 mm (9.65" x 2.36")
150W - 1000W



1.16 Q.C.E. Quarter Curved Element

Dwg No. 050203I
60 x 60 mm (2.36" x 2.36")
150W - 250W



1.17 F.F.E.S. Full Flat Element Slim

Dwg No. 060202A
245 x 40mm (9.65" x 1.57")
150W - 650W



2 Quarts

2.1 F.Q.E.G. Full Quartz Element Gold

with **Gold Backed Tubes**

Dwg. No. 050203J

247 x 62.5 mm (9.72" x 2.46")

250W - 1000W



2.2 F.Q.E. Full Quartz Element

Dwg. No. 060201A-R2

247 x 62.5 mm (9.72" x 2.46")

250W - 1000W



2.3 H.Q.E. Half Quartz Element

Dwg.No. 060201B-R1

123.5 x 62.5 mm (4.86" x 2.46")

125W - 500W



2.4 Q.Q.E. Quarter Quartz Element

Dwg.No.060201E-R1

62.5 x 62.5 mm (2.46" x 2.46")

125W - 250W



2.5 F.Q.E.G. Full Quartz Element Gold

Stainless Steel Bodies with Gold Backed Tubes

Dwg.No. 050203K

247 x 62.5 mm (9.72" x 2.46")

250W - 1200W



2.6 P.F.Q.E. Pillar Full Quartz Element

Dwg. No. 100101A -R2
247 x 62.5 mm
(9.72" x 2.46")
250W - 1000W



2.7 P.H.Q.E. Pillar HalfQuartz Element

Dwg. No. 050203L
123.5 x 62.5 mm (4.86" x 2.46")
125W - 500W



2.8 S.Q.E. Special Quartz Element

Dwg No. 050203M
123.5 x 123.5mm (4.86" x 4.86")
150W - 1000W

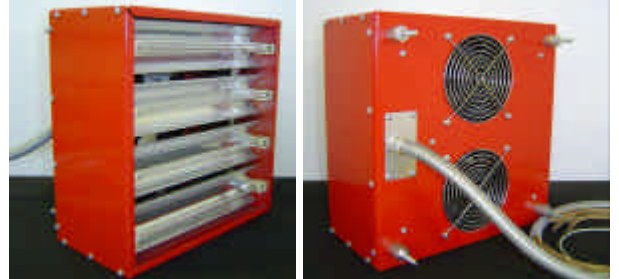


3 Quarts Tungsten Fast IR

3.1 FastIR 305

Dwg. No. 041103B
305 x 305mm (12" x 12")
Fitted with 1000W quartz tungsten/halogen heaters (QTM)

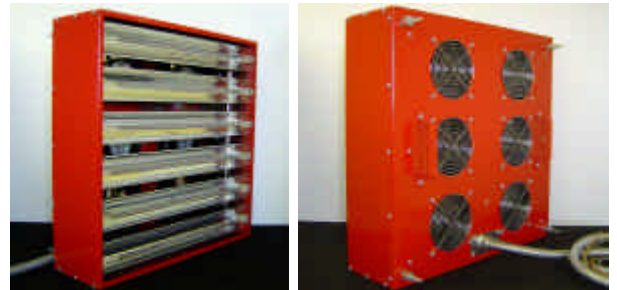
4 tube config. - 4KW
5 tube config. - 5KW



3.2 FastIR 500

Dwg. No. 041103A
500 x 500mm (19.7" x 19.7")
Fitted with 2000W quartz tungsten/halogen heaters (QTL)

6 tube config. - 12KW
7 tube config. - 14KW



3.3 QTM - Quartz Tungsten Medium

Dwg No. 150601A
dia.10 X 277mm(dia.0.39"x 10.91")
750/1000W, 230/240V



3.4 Q.T.L. - Quartz Tungsten Long

Dwg No. 140601A
dia.10 x 473mm (dia.0.39"x18.62")
1500/1750/2000W, 230/240V



4 Quartz halogen heaters

4.1 Quartz halogen heaters

- Range of different sizes
- Range of wattages and voltages
- Available in clear and coloured glass
- Range of termination options
- Available with gold and ceramic reflective coatings



5 Product Accessories

5.1 Ceramic Bulb Reflector

Dwg No. 050203N
dia.210 x 117mm
dia.(8.27" x 4.61")



5.2 E27 Edison Screw Bulb Holder

Dwg No. 161202A
dia.53 x 74mm
dia.(2.09" x 2.91")



5.3 2P Ceramic Terminal End Blocks

(>) with metal fitting
Dwg No. 050203O
40 x 32 x 20mm
(1.57" x 1.26" x 0.79")



5.4 3P Ceramic Terminal End Blocks

(>) with metal fitting
Dwg No. 210803C
62 x 32 x 20mm
(1.57" x 1.26" x 0.79")



5.5 2P Ceramic Terminal End Blocks

(>) no metal fitting
Dwg No. 050203O
40 x 32 x 20mm
(1.57" x 1.26" x 0.79")



5.6 3P Ceramic Terminal End Blocks

(>) no metal fitting

Dwg No. 210803C

62 x 32 x 20mm

(1.57" x 1.26" x 0.79")



5.7 TB 2C (Closed Type) With Fitting

Dwg No.050203Q

35 x 31 x 23mm

(1.38" x 1.22" x 0.91")



5.8 TB 3C (Closed Type) With Fitting

Dwg No. 050203R

51 x 31 x 23mm

(2.01" x 1.22" x 0.91")



5.9 PAS STANDARD - Projector aluminised steel

Supplied **without** heaters

PAS 1- Dwg. No. 050203W
94mm x 96mm x 256mm (3.7" x 3.78" x 10.08")

PAS 2 - Dwg. No. 111200A - R1
94mm x 96mm x 506mm (3.7" x 3.78" x 19.92")

PAS 3 - Dwg. No. 050203X
94mm x 96mm x 756mm (3.7" x 3.78" x 29.76")

PAS 4 - Dwg. No. 120700A -R 1
94mm x 96mm x 1006mm (3.7" x 3.78" x 39.61mm)

PAS 5 - Dwg. No. 050203Y
94mm x 96mm x 1256mm (3.7" x 3.78" x 49.45")



5.10 PAS INSULATED - fitted with additional thermal insulation and heater

Heater type FTELN in wattages up to 500W

Suitable for outdoor covered use. Available in red powder coat or polished aluminised steel finish. Prices include heaters.

PAS 1- Dwg. No. 050203W
94mm x 96mm x 256mm (3.7" x 3.78" x 10.08")

PAS 2 - Dwg. No. 111200A - R1
94mm x 96mm x 506mm (3.7" x 3.78" x 19.92")

PAS 3 - Dwg. No. 050203X
94mm x 96mm x 756mm (3.7" x 3.78" x 29.76")

PAS 4 - Dwg. No. 120700A -R 1
94mm x 96mm x 1006mm (3.7" x 3.78" x 39.61mm)

PAS 5 - Dwg. No. 050203Y
94mm x 96mm x 1256mm (3.7" x 3.78" x 49.45")



5.11 RAS STANDARD - Aluminised Steel Reflector

Supplied without heaters.

RAS 1 - Dwg.No. 300600A - R1
100mm x 63mm x 254mm
(3.94 x 2.48" x 10")

RAS 2 - Dwg. No. 050203U
100mm x 63mm x 504mm
(3.94" x 2.48" x 19.84")

RAS 3 - Dwg. No. 031201A - R1
100mm x 63mm x 754mm
(3.94" x 2.48"x 29.69")

RAS 4 - Dwg. No. 050203V
100mm x 63mm x1004mm
(3.94" x 2.48" x 39.53")

RAS 5 - Dwg. No. 220601A - R1
100mm x 63mm x 1254mm
(3.94" x 2.48" x 49.37")



5.12 RAS INSULATED - fitted with additional thermal insulation

Must be used with heater type FTELN.

Supplied without heaters.

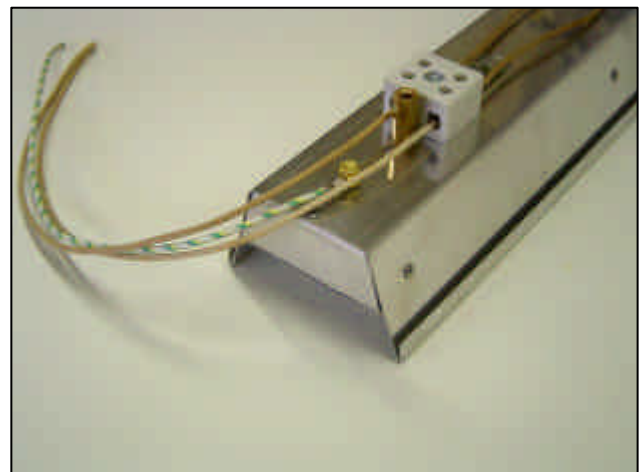
RAS 1
90mm x 75mm x 254mm (3.54 x 2.95" x 10")

RAS 2
90mm x 75mm x 504mm (3.54" x 2.95" x 19.84")

RAS 3
90mm x 75mm x 754mm (3.54" x 2.95"x 29.69")

RAS 4
90mm x 75mm x1004mm (3.54" x 2.95" x 39.53")

RAS 5
90mm x 75mm x 1254mm (3.54" x 2.95" x 49.37")



5.13 Panel heaters

1. Available with surface face of anodised aluminium and glass
2. Range of different sizes available
3. Range of wattages available for varying supply voltages
4. Multizone options with removable miniature thermocouple plug
5. Electrical connection via threaded stud terminal, connector block or flag terminal

PRICE ON REQUEST



5.14 Mounting Bracket

DWG. NO. 090103A

73x 54x 25mm (2.87" x 2.13" x 0.98")



5.15 Stainless Steel Buzz Bars

Dwg. No. 050203Z

8 x 2 x 1000mm

(0.31" x 0.08" x 39.37")

Buzz Bars / Metre



5.16 Steel Wave Spring and Clip

Dwg. No. 100501A



5.17 One piece spring (steel)



5.18 V-clips

Dwg. No. 060203A



5.19 Ceramic beads - loose

1 kg



5.20 Ceramic beads - strung

1 kg



6 Options

VOLTAGE 100V – 480V. CE AND UL APPROVED. 230V STANDARD

FQE, HQE or PFQE Supplied with centre tube reference T/C Type K Additional

FQE, HQE or PFQE Supplied with over Temperature Safety T/C Type K Additional

NON – Standard Voltage . (Set up Charges).

Less Than 50pcs Additional
50pcs TO 100pcs Additional

Extra Lead Length. 50mm Approx 2 Inches –Additional

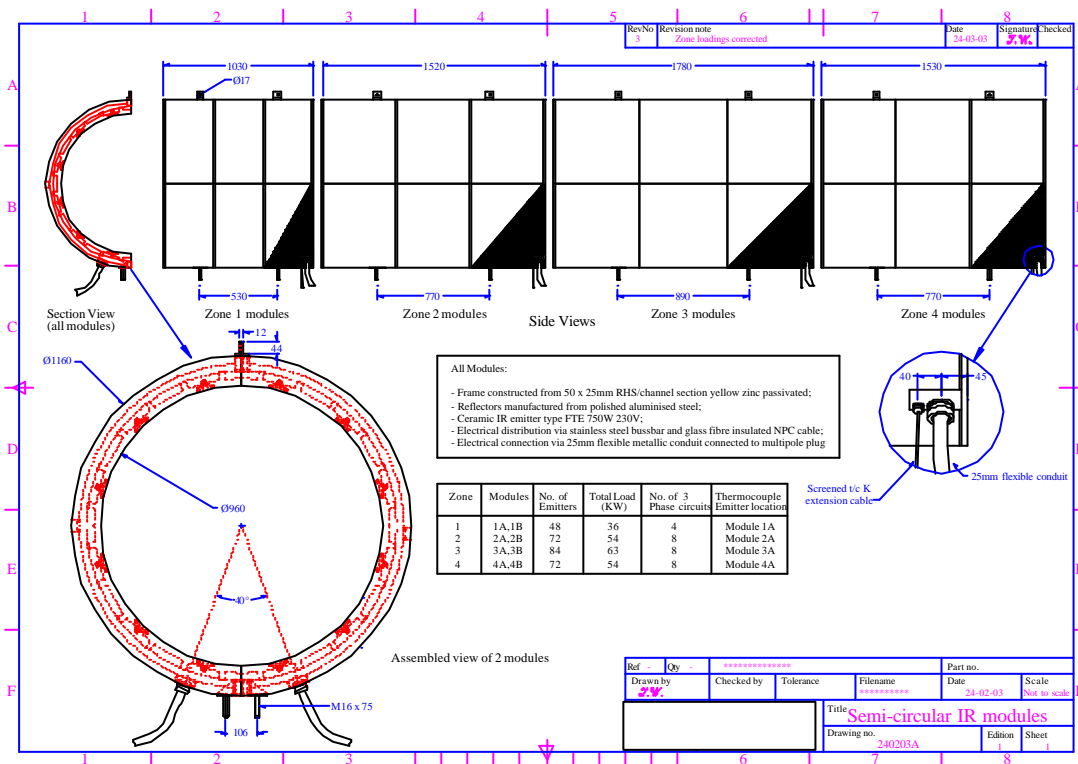
Prices are excluding V.A.T

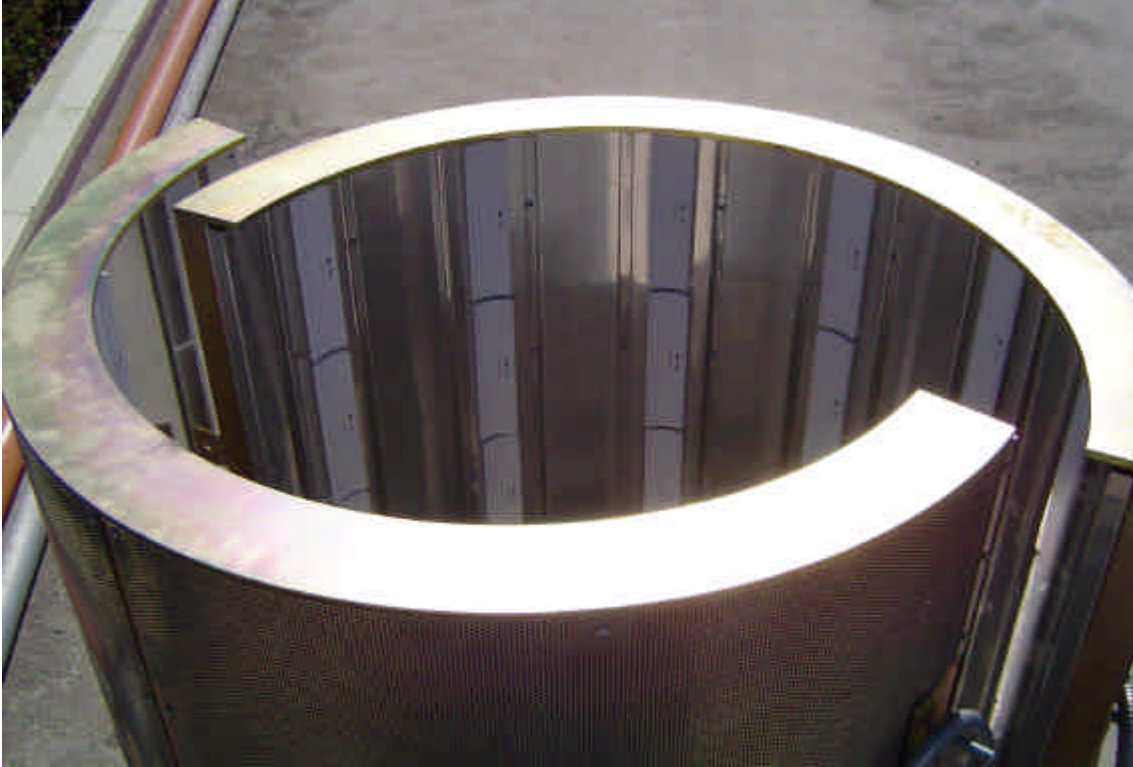
7 Document 1

Sample Project A

Description: Four zone, 207KW circular infrared heating system utilising long wave ceramic emitters.

Application: Drying of coarse stone aggregate in rotating steel tube. Application required easy and rapid disassembly of heated sections to facilitate maintenance.

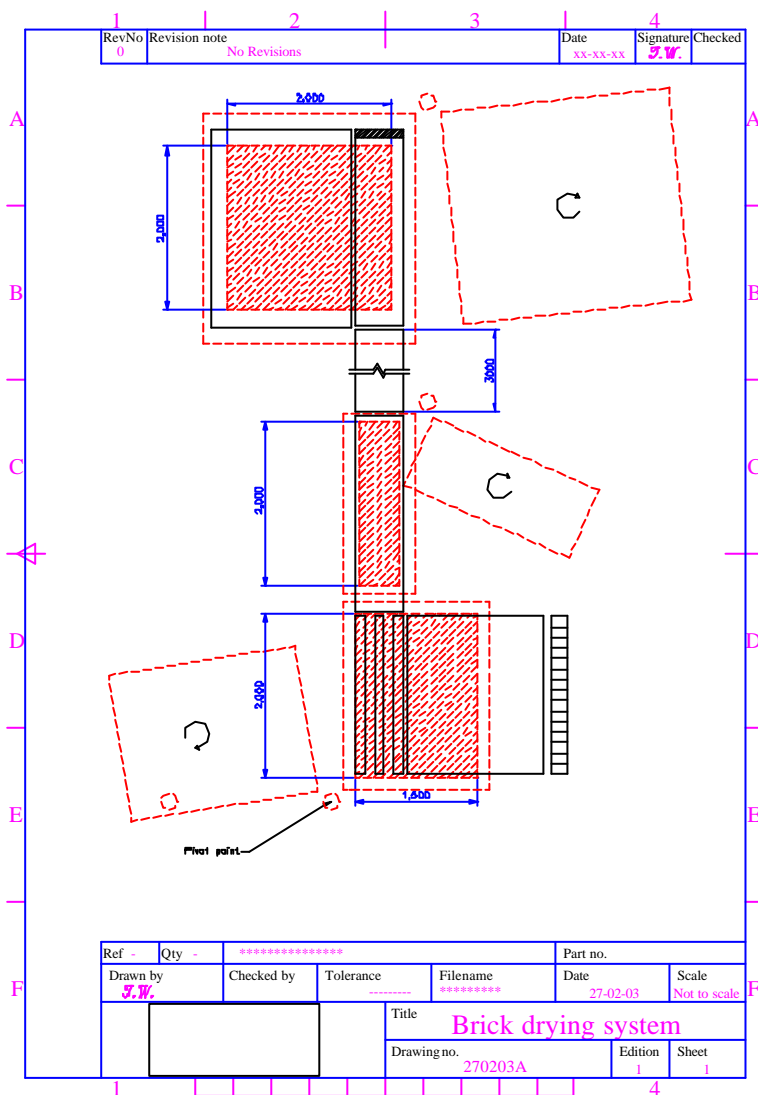




Sample Project B

Description: Eleven zone, 336KW horizontal heating system utilising medium-short wave FastIR (quartz tungsten) heaters.

Application: Rapid drying of bricks on a high-speed conveyor line. Application also required that heating zones could be rotated out of position for access to conveyor.





8 Product Quote

Please use General request or Purchase order form.

www.thermal-elements.com