

# ***Merriott***

## **Radiavector**



## What does Merriott stand for?

Our bespoke heating and cooling solutions are the better choice for commercial applications across the UK and Ireland.

Merriott offers a diverse and versatile range of designer heating solutions.

Whether they are building consultants, architects or designers, our customers can tailor our bespoke range of products to satisfy their specification requirements.

We have invested in world-class production facilities and manufacture products of the very highest standard - backed by revolutionary technology, rigorous testing and stringent quality control.

As a company, we have an unwavering commitment to innovation and sustainability, pioneering products that lead the way in design, performance and energy efficiency.

Underpinning all of this is our relationship with our customers: ensuring they can rely on best-in-class service and support, from specification right through to delivery.

---

# Content

|                                      |       |
|--------------------------------------|-------|
| Range Overview                       | 04    |
| Range Options                        | 05    |
| Heat Outputs                         | 06-09 |
| K22: 2 Panel single fin convector    | 06    |
| K34: 3 Panel double fin convector    | 07    |
| K46: 4 Panel triple fin convector    | 08    |
| K58: 5 Panel quadruple fin convector | 09    |
| Weights and Water Content            | 10    |
| Dimensional Information              | 11-12 |
| K22 & K34 models                     | 11    |
| K46 & K58 models                     | 12    |
| Mounting Details                     | 13-15 |
| Connection Details                   | 16    |
| Correction Factors                   | 17-19 |

# Range Overview

## Radiavector

The Merriott Radiavector is a low-level convector which provides high output within a small footprint.

Outputs range between 336w to 2530w per metre at  $\Delta T 50^{\circ}\text{C}$ .

Available in heights of 70mm to 280mm in 70mm increments

Available from 400mm length through to a maximum of 2000mm in increments of 100mm. Increments of 200mm are available between 2000mm and 3000mm lengths.

### OUTPUTS

All Merriott Radiavectors have been manufactured and tested in accordance with EN442.

### FINISH

All Radiavectors undergo an intensive pre-treatment process to protect against rust. In pre-treatment, they are degreased, coated with iron phosphate and rinsed prior to painting. A cathodic electrodeposition primer coating is then applied to give total coverage of the bare steel and maximum corrosion protection. The durable topcoat (epoxy polyester powder) is electrostatically applied and stove enamel baked at  $180^{\circ}\text{C}$ . The whole process is monitored to ensure continuous achievement of optimum adhesion, opacity and gloss levels.

### COLOUR

Our standard finish is semi-gloss RAL 9016 (white) in epoxy polyester powder.

An extensive range of other RAL colours are available on request.

### PACKAGING

The entire surface of the radiator, including all 4 corners, is protected by cardboard box ends and packed in shrink wrapped polythene.

### CONNECTIONS

Standard connections are 4 x 1/2" BSP connections, with BDAC configuration provided as standard, other connection configurations and connection sizes are available on request. See page 16 for details.

Flow and return positions must be specified at time of ordering.

### TESTING

The standard test pressure is 7.8 bar giving a maximum operating pressure of 6 bar, a high pressure version is available upon request (with a 10 bar operating pressure), at an additional charge.

### BRACKETS AND FEET

Merriott Radiavector are supplied with either wall bracket or box section feet, according to your specification.

Boxed feet are also available to cover pipe (see page 14) but must be specified at the time of order as retrofitting is not possible.

### GRILLES

Radiavectors are supplied with linear bar grille as standard, which can be removed if necessary.

### DIMENSIONAL TOLERANCES

Dimensional tolerances are in accordance with EN442.

### MATERIALS

Merriott Radiavector radiators are manufactured from flat steel tubes, 70mm x 11mm, with a standard thickness of 1.5mm. High pressure Radiavector radiators are manufactured from 2.0mm steel thickness.

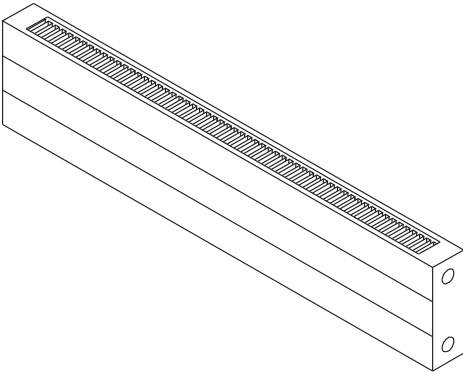
### WARRANTY

Merriott Radiavectors are guaranteed for a period of 5 years from date of purchase in respect of defective materials and workmanship. The system should be designed in accordance with British Standard Code of Practice for Water Based Heating Systems in Buildings **BS EN 12828:2012+A1:2014** and **BS EN 12831: 2003**. The installation and commissioning of the system should comply with **BS EN 14336:2004**. On completion of the installation, the system should be properly flushed and filled in accordance with the British Code of Practice for the Treatment of Water in Domestic Hot Water Central Heating Systems **BS 7593:2006**, Part L of Building Regulations and Good Practice Guidance for Scotland. Merriott strongly recommends the use of corrosion inhibitor for all applications. Failure to observe these standards may invalidate the manufacturer's warranty.

# Range Options

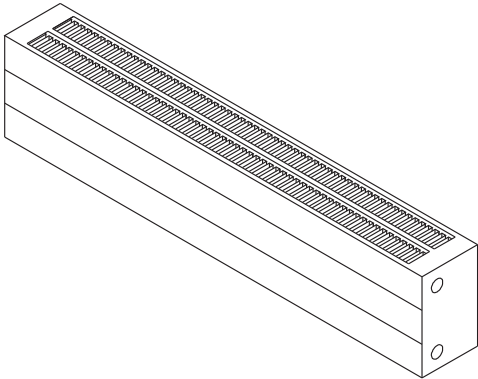
## K22

2 panel  
Single fin convector



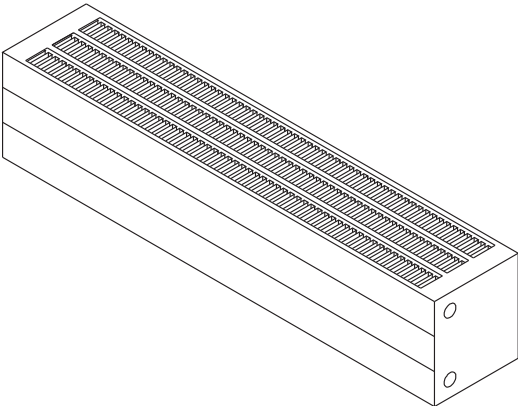
## K34

3 panel  
Double fin convector



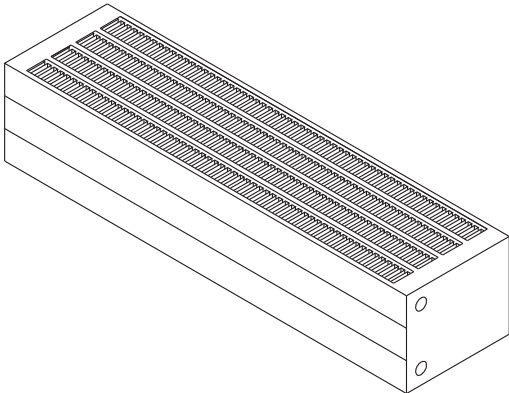
## K46

4 panel  
Triple fin convector



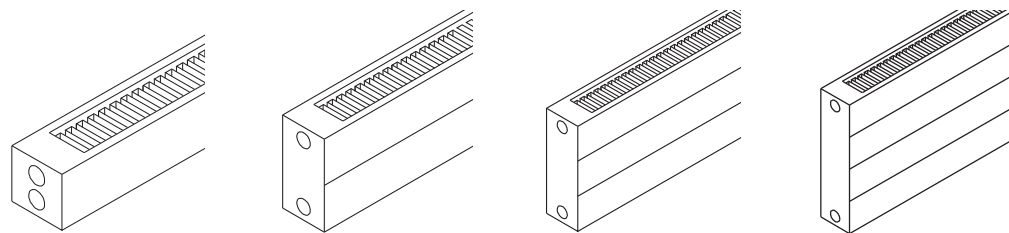
## K58

5 panel  
Quadruple fin convector



# Heat Outputs

## K22: 2 Panel single fin convector

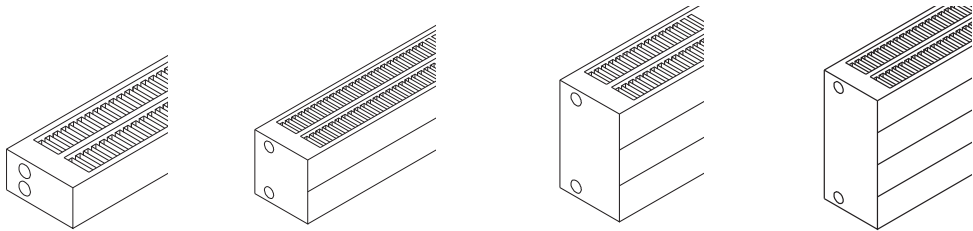


| Height (mm)                    | 70             |      | 140  |      | 210  |      | 280  |      |
|--------------------------------|----------------|------|------|------|------|------|------|------|
| Depth (mm)<br>(excl. brackets) | 72             |      | 72   |      | 72   |      | 72   |      |
| 'n'                            | 1.29           |      | 1.29 |      | 1.29 |      | 1.30 |      |
| Length<br>(mm)                 | Output (Watts) |      |      |      |      |      |      |      |
|                                | ΔT50           | ΔT30 | ΔT50 | ΔT30 | ΔT50 | ΔT30 | ΔT50 | ΔT30 |
| 400                            | 134            | 69   | 210  | 108  | 273  | 141  | 330  | 170  |
| 500                            | 168            | 87   | 262  | 135  | 341  | 176  | 413  | 212  |
| 600                            | 201            | 104  | 314  | 162  | 410  | 211  | 495  | 255  |
| 700                            | 235            | 121  | 367  | 189  | 478  | 246  | 578  | 297  |
| 800                            | 268            | 139  | 419  | 216  | 546  | 281  | 661  | 340  |
| 900                            | 302            | 156  | 472  | 243  | 614  | 317  | 743  | 382  |
| 1000                           | 336            | 173  | 524  | 270  | 683  | 352  | 826  | 425  |
| 1100                           | 369            | 191  | 577  | 297  | 751  | 387  | 908  | 467  |
| 1200                           | 403            | 208  | 629  | 324  | 819  | 422  | 991  | 510  |
| 1300                           | 436            | 225  | 681  | 351  | 888  | 457  | 1073 | 552  |
| 1400                           | 470            | 243  | 734  | 378  | 956  | 492  | 1156 | 595  |
| 1500                           | 503            | 260  | 786  | 405  | 1024 | 528  | 1239 | 637  |
| 1600                           | 537            | 277  | 839  | 432  | 1092 | 563  | 1321 | 680  |
| 1700                           | 570            | 294  | 891  | 459  | 1161 | 598  | 1404 | 722  |
| 1800                           | 604            | 312  | 943  | 487  | 1229 | 633  | 1486 | 765  |
| 1900                           | 637            | 329  | 996  | 514  | 1297 | 668  | 1569 | 807  |
| 2000                           | 671            | 346  | 1048 | 541  | 1366 | 703  | 1651 | 850  |
| 2100                           | 705            | 364  | 1101 | 568  | 1434 | 739  | 1734 | 892  |
| 2200                           | 738            | 381  | 1153 | 595  | 1502 | 774  | 1816 | 935  |
| 2300                           | 772            | 398  | 1205 | 622  | 1570 | 809  | 1899 | 977  |
| 2400                           | 805            | 416  | 1258 | 649  | 1639 | 844  | 1982 | 1020 |
| 2500                           | 839            | 433  | 1310 | 676  | 1707 | 879  | 2064 | 1062 |
| 2600                           | 872            | 450  | 1363 | 703  | 1775 | 914  | 2147 | 1105 |
| 2700                           | 906            | 468  | 1415 | 730  | 1843 | 950  | 2229 | 1147 |
| 2800                           | 939            | 485  | 1468 | 757  | 1912 | 985  | 2312 | 1189 |
| 2900                           | 973            | 502  | 1520 | 784  | 1980 | 1020 | 2394 | 1232 |
| 3000                           | 1007           | 520  | 1572 | 811  | 2048 | 1055 | 2477 | 1274 |

**NOTE:**  
All outputs are in accordance with BS EN442 certification.  
'n' = average exponent value.  
For outputs at other  $\Delta T$ 's please see calculation example on page 19.

# Heat Outputs

## K34: 3 Panel double fin convector

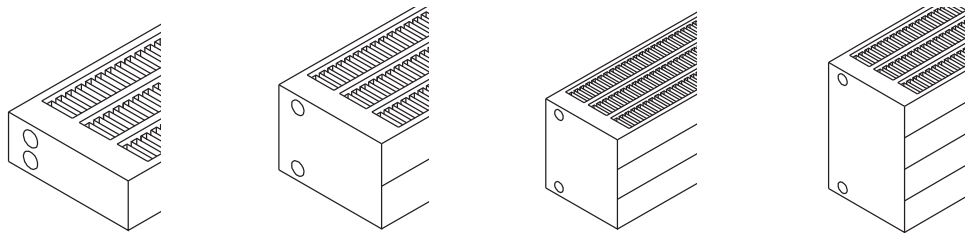


| Height (mm)                    | 70             |      | 140  |      | 210  |      | 280  |      |
|--------------------------------|----------------|------|------|------|------|------|------|------|
| Depth (mm)<br>(excl. brackets) | 133            |      | 133  |      | 133  |      | 133  |      |
| 'n'                            | 1.29           |      | 1.29 |      | 1.29 |      | 1.30 |      |
| Length<br>(mm)                 | Output (Watts) |      |      |      |      |      |      |      |
|                                | ΔT50           | ΔT30 | ΔT50 | ΔT30 | ΔT50 | ΔT30 | ΔT50 | ΔT30 |
| 400                            | 231            | 119  | 361  | 186  | 470  | 242  | 569  | 293  |
| 500                            | 289            | 149  | 451  | 233  | 588  | 303  | 711  | 366  |
| 600                            | 347            | 179  | 542  | 279  | 706  | 363  | 853  | 439  |
| 700                            | 405            | 209  | 632  | 326  | 823  | 424  | 996  | 512  |
| 800                            | 462            | 239  | 722  | 372  | 941  | 485  | 1138 | 585  |
| 900                            | 520            | 269  | 812  | 419  | 1058 | 545  | 1280 | 659  |
| 1000                           | 578            | 298  | 903  | 466  | 1176 | 606  | 1422 | 732  |
| 1100                           | 636            | 328  | 993  | 512  | 1294 | 666  | 1564 | 805  |
| 1200                           | 693            | 358  | 1083 | 559  | 1411 | 727  | 1707 | 878  |
| 1300                           | 751            | 388  | 1174 | 605  | 1529 | 787  | 1849 | 951  |
| 1400                           | 809            | 418  | 1264 | 652  | 1646 | 848  | 1991 | 1024 |
| 1500                           | 867            | 448  | 1354 | 698  | 1764 | 909  | 2133 | 1098 |
| 1600                           | 925            | 477  | 1444 | 745  | 1882 | 969  | 2275 | 1171 |
| 1700                           | 982            | 507  | 1535 | 791  | 1999 | 1030 | 2418 | 1244 |
| 1800                           | 1040           | 537  | 1625 | 838  | 2117 | 1090 | 2560 | 1317 |
| 1900                           | 1098           | 567  | 1715 | 885  | 2234 | 1151 | 2702 | 1390 |
| 2000                           | 1156           | 597  | 1806 | 931  | 2352 | 1212 | 2844 | 1463 |
| 2100                           | 1214           | 627  | 1896 | 978  | 2470 | 1272 | 2987 | 1537 |
| 2200                           | 1271           | 656  | 1986 | 1024 | 2587 | 1333 | 3129 | 1610 |
| 2300                           | 1329           | 686  | 2076 | 1071 | 2705 | 1393 | 3271 | 1683 |
| 2400                           | 1387           | 716  | 2167 | 1117 | 2822 | 1454 | 3413 | 1756 |
| 2500                           | 1445           | 746  | 2257 | 1164 | 2940 | 1514 | 3555 | 1829 |
| 2600                           | 1503           | 776  | 2347 | 1210 | 3058 | 1575 | 3698 | 1902 |
| 2700                           | 1560           | 806  | 2437 | 1257 | 3175 | 1636 | 3840 | 1976 |
| 2800                           | 1618           | 835  | 2528 | 1304 | 3293 | 1696 | 3982 | 2049 |
| 2900                           | 1676           | 865  | 2618 | 1350 | 3410 | 1757 | 4124 | 2122 |
| 3000                           | 1734           | 895  | 2708 | 1397 | 3528 | 1817 | 4267 | 2195 |

**NOTE:**  
All outputs are in accordance with BS EN442 certification.  
'n' = average exponent value.  
For outputs at other  $\Delta T$ 's please see calculation example on page 19.

# Heat Outputs

## K46: 4 Panel triple fin convector



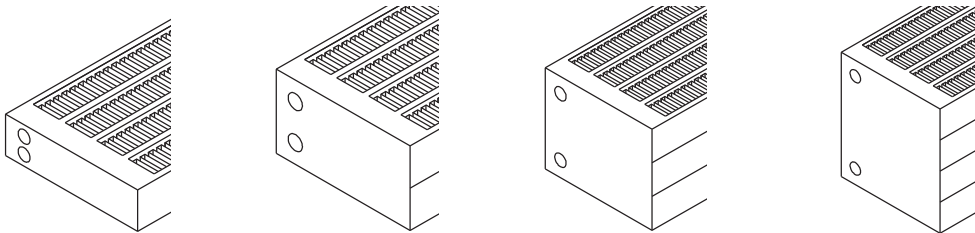
| Height (mm)                    | 70             |      | 140  |      | 210  |      | 280  |      |
|--------------------------------|----------------|------|------|------|------|------|------|------|
| Depth (mm)<br>(excl. brackets) | 194            |      | 194  |      | 194  |      | 194  |      |
| 'n'                            | 1.29           |      | 1.29 |      | 1.29 |      | 1.30 |      |
| Length<br>(mm)                 | Output (Watts) |      |      |      |      |      |      |      |
|                                | ΔT50           | ΔT30 | ΔT50 | ΔT30 | ΔT50 | ΔT30 | ΔT50 | ΔT30 |
| 400                            | 323            | 167  | 505  | 261  | 658  | 339  | 796  | 409  |
| 500                            | 404            | 209  | 632  | 326  | 823  | 424  | 995  | 512  |
| 600                            | 485            | 250  | 758  | 391  | 987  | 509  | 1194 | 614  |
| 700                            | 566            | 292  | 884  | 456  | 1152 | 593  | 1393 | 717  |
| 800                            | 647            | 334  | 1010 | 521  | 1316 | 678  | 1592 | 819  |
| 900                            | 728            | 376  | 1137 | 586  | 1481 | 763  | 1791 | 921  |
| 1000                           | 809            | 417  | 1263 | 651  | 1645 | 848  | 1990 | 1024 |
| 1100                           | 889            | 459  | 1389 | 716  | 1810 | 932  | 2189 | 1126 |
| 1200                           | 970            | 501  | 1516 | 782  | 1974 | 1017 | 2388 | 1228 |
| 1300                           | 1051           | 543  | 1642 | 847  | 2139 | 1102 | 2587 | 1331 |
| 1400                           | 1132           | 584  | 1768 | 912  | 2304 | 1187 | 2786 | 1433 |
| 1500                           | 1213           | 626  | 1895 | 977  | 2468 | 1271 | 2985 | 1536 |
| 1600                           | 1294           | 668  | 2021 | 1042 | 2633 | 1356 | 3184 | 1638 |
| 1700                           | 1375           | 710  | 2147 | 1107 | 2797 | 1441 | 3383 | 1740 |
| 1800                           | 1455           | 751  | 2274 | 1172 | 2962 | 1526 | 3582 | 1843 |
| 1900                           | 1536           | 793  | 2400 | 1238 | 3126 | 1610 | 3781 | 1945 |
| 2000                           | 1617           | 835  | 2526 | 1303 | 3291 | 1695 | 3980 | 2047 |
| 2100                           | 1698           | 877  | 2652 | 1368 | 3455 | 1780 | 4179 | 2150 |
| 2200                           | 1779           | 918  | 2779 | 1433 | 3620 | 1865 | 4378 | 2252 |
| 2300                           | 1860           | 960  | 2905 | 1498 | 3784 | 1949 | 4577 | 2355 |
| 2400                           | 1941           | 1002 | 3031 | 1563 | 3949 | 2034 | 4776 | 2457 |
| 2500                           | 2021           | 1044 | 3158 | 1628 | 4113 | 2119 | 4974 | 2559 |
| 2600                           | 2102           | 1085 | 3284 | 1694 | 4278 | 2204 | 5173 | 2662 |
| 2700                           | 2183           | 1127 | 3410 | 1759 | 4442 | 2288 | 5372 | 2764 |
| 2800                           | 2264           | 1169 | 3537 | 1824 | 4607 | 2373 | 5571 | 2866 |
| 2900                           | 2345           | 1211 | 3663 | 1889 | 4772 | 2458 | 5770 | 2969 |
| 3000                           | 2426           | 1252 | 3789 | 1954 | 4936 | 2543 | 5969 | 3071 |

**NOTE:**  
All outputs are in accordance with BS EN442 certification.  
'n' = average exponent value.  
For outputs at other  $\Delta T$ 's please see calculation example on page 19.



# Heat Outputs

## K58: 5 Panel quadruple fin convector



| Height (mm)                    | 70             |      | 140  |      | 210  |      | 280  |      |
|--------------------------------|----------------|------|------|------|------|------|------|------|
| Depth (mm)<br>(excl. brackets) | 255            |      | 255  |      | 255  |      | 255  |      |
| 'n'                            | 1.29           |      | 1.29 |      | 1.29 |      | 1.30 |      |
| Length<br>(mm)                 | Output (Watts) |      |      |      |      |      |      |      |
|                                | ΔT50           | ΔT30 | ΔT50 | ΔT30 | ΔT50 | ΔT30 | ΔT50 | ΔT30 |
| 400                            | 411            | 212  | 642  | 331  | 837  | 431  | 1012 | 521  |
| 500                            | 514            | 265  | 803  | 414  | 1046 | 539  | 1265 | 651  |
| 600                            | 617            | 318  | 964  | 497  | 1255 | 647  | 1518 | 781  |
| 700                            | 720            | 372  | 1124 | 580  | 1464 | 754  | 1771 | 911  |
| 800                            | 822            | 425  | 1285 | 663  | 1674 | 862  | 2024 | 1041 |
| 900                            | 925            | 478  | 1445 | 745  | 1883 | 970  | 2277 | 1171 |
| 1000                           | 1028           | 531  | 1606 | 828  | 2092 | 1078 | 2530 | 1302 |
| 1100                           | 1131           | 584  | 1767 | 911  | 2301 | 1185 | 2783 | 1432 |
| 1200                           | 1234           | 637  | 1927 | 994  | 2510 | 1293 | 3036 | 1562 |
| 1300                           | 1336           | 690  | 2088 | 1077 | 2720 | 1401 | 3289 | 1692 |
| 1400                           | 1439           | 743  | 2248 | 1159 | 2929 | 1509 | 3542 | 1822 |
| 1500                           | 1542           | 796  | 2409 | 1242 | 3138 | 1616 | 3795 | 1952 |
| 1600                           | 1645           | 849  | 2569 | 1325 | 3347 | 1724 | 4048 | 2083 |
| 1700                           | 1748           | 902  | 2730 | 1408 | 3556 | 1832 | 4301 | 2213 |
| 1800                           | 1850           | 955  | 2891 | 1491 | 3766 | 1940 | 4554 | 2343 |
| 1900                           | 1953           | 1008 | 3051 | 1574 | 3975 | 2047 | 4807 | 2473 |
| 2000                           | 2056           | 1062 | 3212 | 1656 | 4184 | 2155 | 5060 | 2603 |
| 2100                           | 2159           | 1115 | 3372 | 1739 | 4393 | 2263 | 5313 | 2733 |
| 2200                           | 2262           | 1168 | 3533 | 1822 | 4602 | 2371 | 5566 | 2864 |
| 2300                           | 2365           | 1221 | 3694 | 1905 | 4812 | 2478 | 5819 | 2994 |
| 2400                           | 2467           | 1274 | 3854 | 1988 | 5021 | 2586 | 6072 | 3124 |
| 2500                           | 2570           | 1327 | 4015 | 2070 | 5230 | 2694 | 6325 | 3254 |
| 2600                           | 2673           | 1380 | 4175 | 2153 | 5439 | 2802 | 6578 | 3384 |
| 2700                           | 2776           | 1433 | 4336 | 2236 | 5648 | 2909 | 6831 | 3514 |
| 2800                           | 2879           | 1486 | 4497 | 2319 | 5858 | 3017 | 7084 | 3645 |
| 2900                           | 2981           | 1539 | 4657 | 2402 | 6067 | 3125 | 7337 | 3775 |
| 3000                           | 3084           | 1592 | 4818 | 2485 | 6276 | 3233 | 7590 | 3905 |

**NOTE:**  
All outputs are in accordance with BS EN442 certification.  
'n' = average exponent value.  
For outputs at other  $\Delta T$ 's please see calculation example on page 19.

# Weight and Water Content

## K22: 2 PANEL SINGLE FIN CONVECTOR

| Height              | 70mm | 140mm | 210mm | 280mm |
|---------------------|------|-------|-------|-------|
| Dry Weight (kg/m)   | 6    | 12.3  | 18.5  | 24.7  |
| Water Content (l/m) | 1.2  | 2.3   | 3.5   | 4.7   |

## K34: 3 PANEL DOUBLE FIN CONVECTOR

| Height              | 70mm | 140mm | 210mm | 280mm |
|---------------------|------|-------|-------|-------|
| Dry Weight (kg/m)   | 9.7  | 19.6  | 29.6  | 39.6  |
| Water Content (l/m) | 1.7  | 3.7   | 5.5   | 7.4   |

## K46: 4 PANEL TRIPLE FIN CONVECTOR

| Height              | 70mm | 140mm | 210mm | 280mm |
|---------------------|------|-------|-------|-------|
| Dry Weight (kg/m)   | 13.3 | 27.1  | 40.9  | 54.6  |
| Water Content (l/m) | 2.5  | 7.6   | 7.6   | 10.1  |

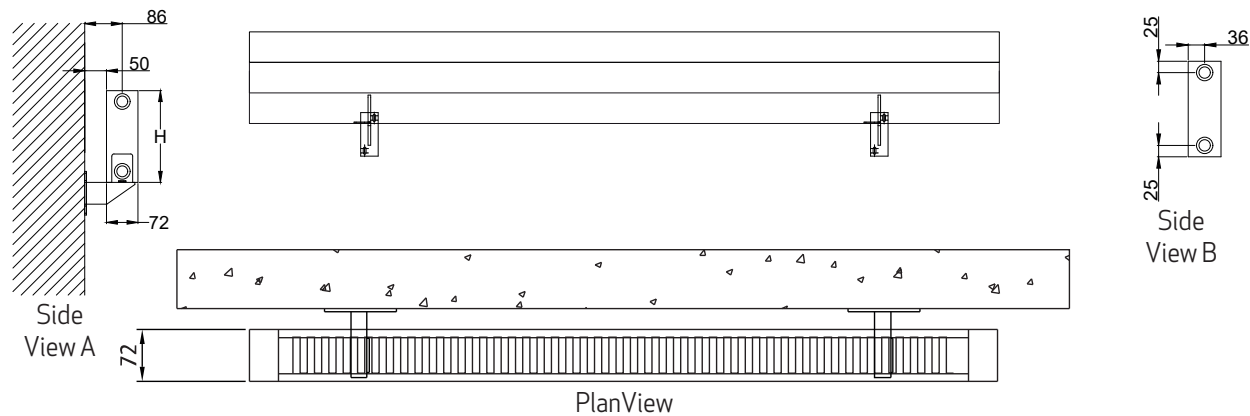
## K58: 5 PANEL QUADRUPLER FIN CONVECTOR

| Height              | 70mm | 140mm | 210mm | 280mm |
|---------------------|------|-------|-------|-------|
| Dry Weight (kg/m)   | 18   | 36.6  | 55.2  | 73.9  |
| Water Content (l/m) | 3.2  | 6.4   | 9.6   | 12.8  |

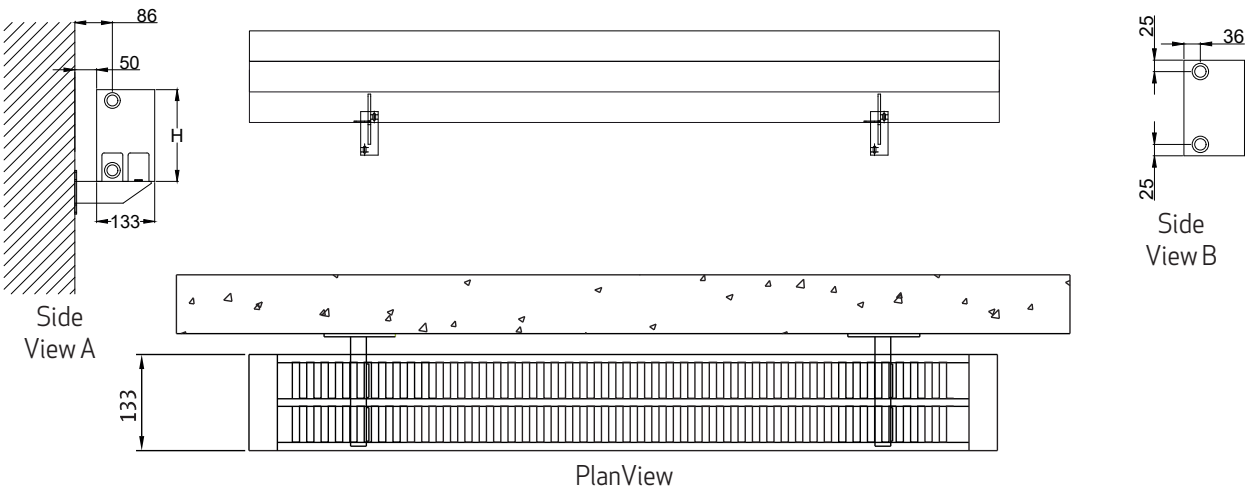
# Dimensional Information

## K22 & K34 models

### K22



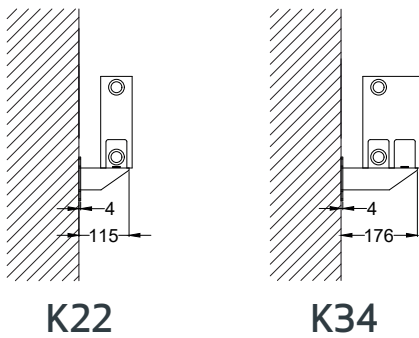
### K34



### WALL-BRACKET

The brackets used to wall mount the Radiavector are cantilever brackets. They bear their weight on prongs, from underneath the Radiavector, and not using a backclip.

Part Number: SUWBRVR

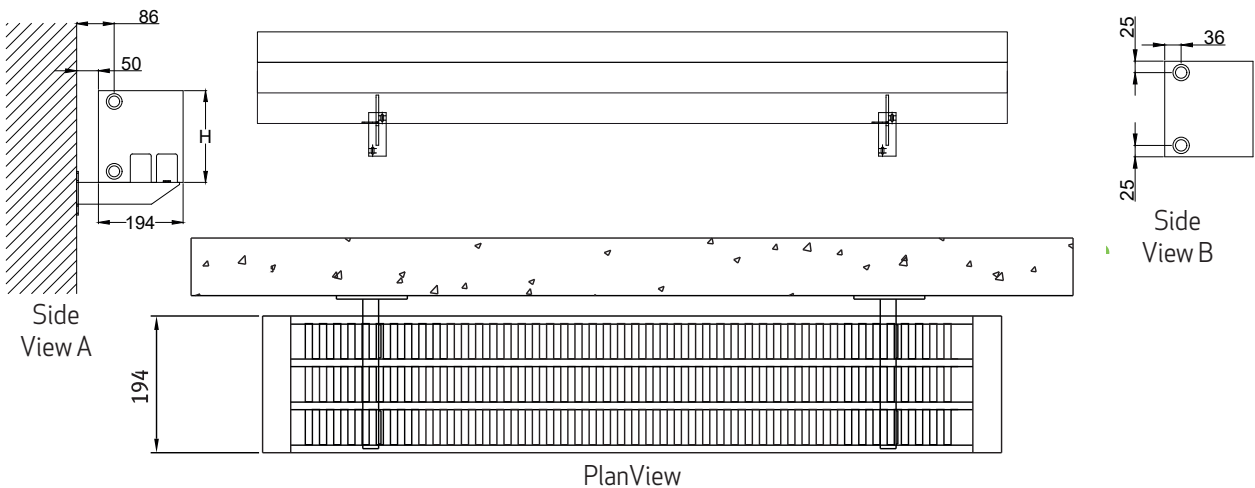


**Note:** All connection & distance dimensions shown are the same when using Wall Mounted brackets or Boxed Section Feet.

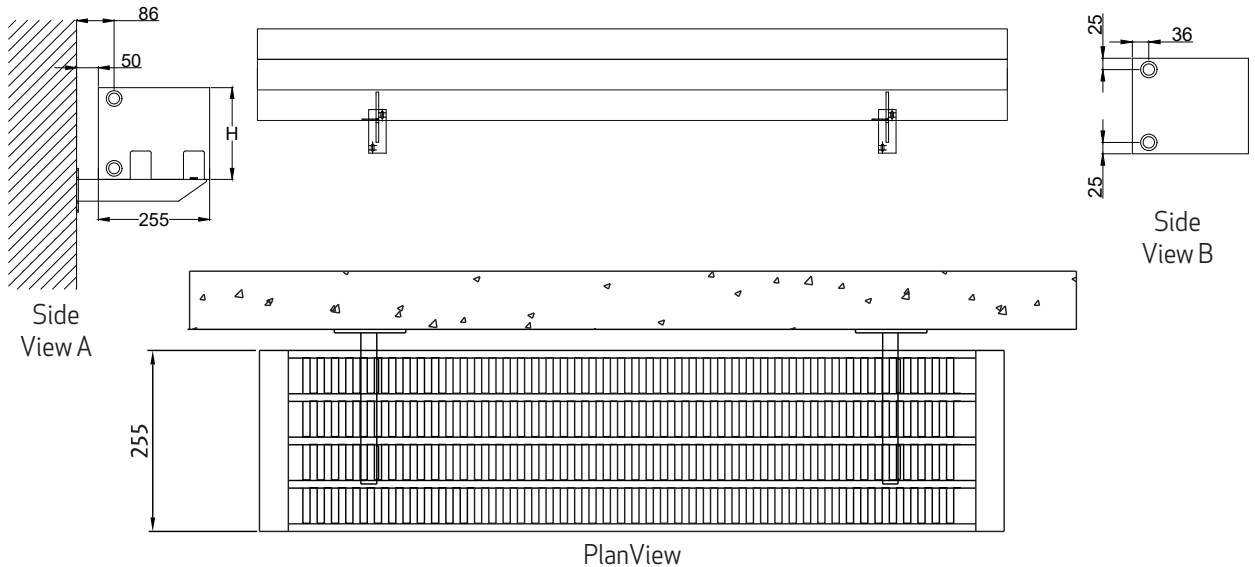
# Dimensional Information

## K46 & K58 models

### K46



### K58

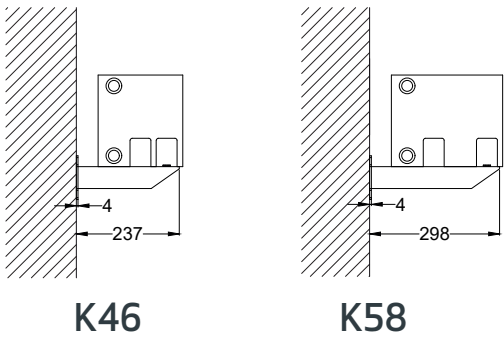


### WALL BRACKET

The brackets used to wall mount the Radiavector are cantilever brackets. They bear their weight on prongs, from underneath the Radiavector, and not using a backclip.

Part Number:

SUWBRVR

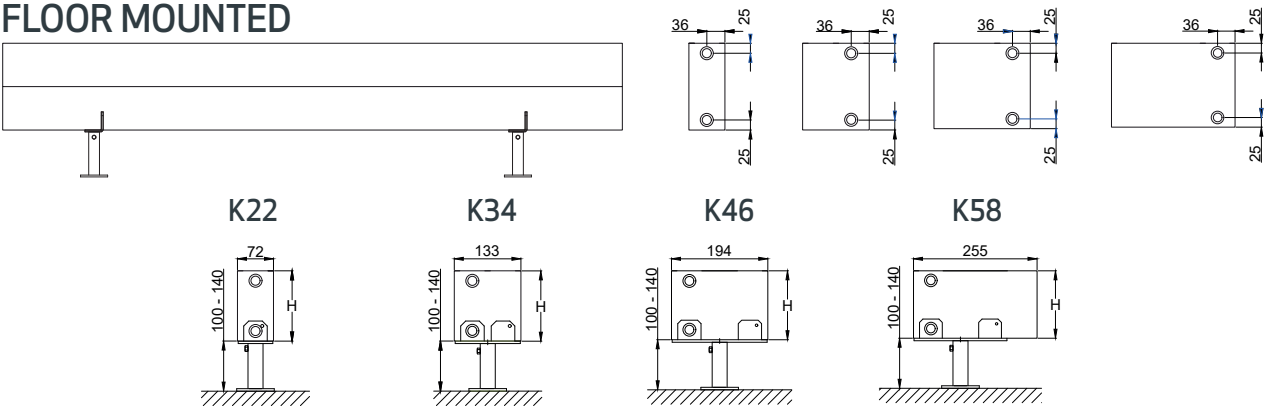


**Note:** All connection & distance dimensions shown are the same when using Wall Mounted brackets.

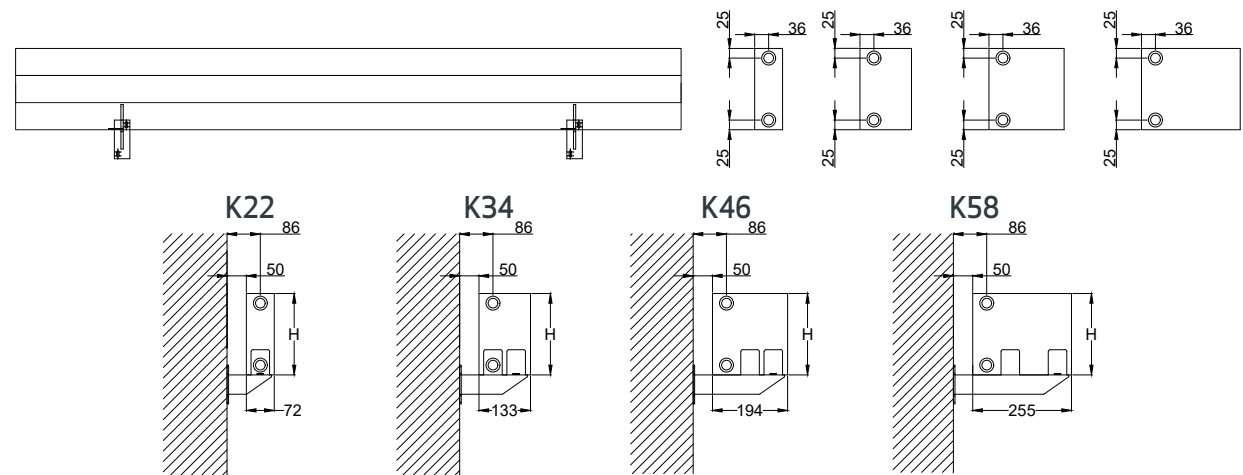
# Mounting Details

## Mounting options

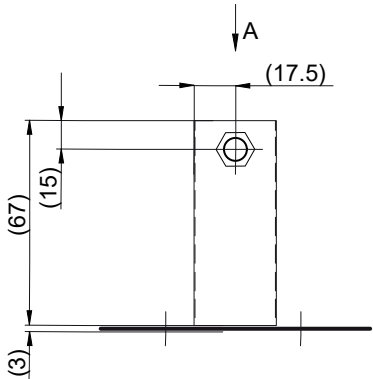
### FLOOR MOUNTED



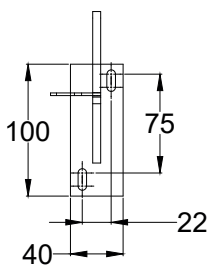
### WALL MOUNTED



### FLOOR STAND FOR FLOOR MOUNTED APPLICATIONS



### WALL BASE PLATE FOR WALL MOUNTED APPLICATIONS



# Mounting Details

## Floor mounting options

All floor mounting options are manufactured to match the same paint finish as your specified Radiavector (standard RAL 9016, other RAL colours available on request).

Merriott offers two types of floor-mounting options:

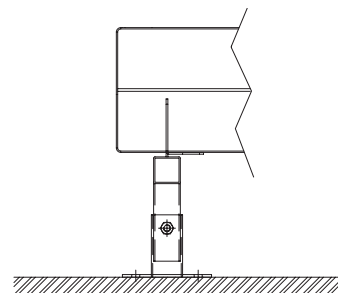
### BOX SECTION FEET:

- Standard box section feet are adjustable between 100mm-140mm
- Other heights are available on request, maximum box section foot height is 450mm

#### Part Numbers:

K22: SUPP-F056

K34,46,58: SUPP-F057

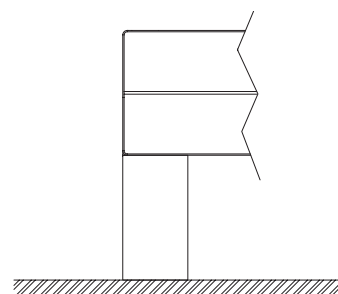


### BOX FEET:

- Standard height is 140mm, other heights are available on request

The box foot is designed to conceal pipework. This foot must be specified at the time of order and cannot be retrofitted. It can also be ordered with a cutout to allow for TRV access.

Available upon request.



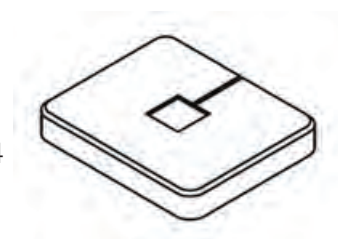
### BASE PLATE COVER:

- Plastic base plate covers in white (RAL 9016) are provided as standard

#### Part Number:

AZ1-RADVCOV-R9016

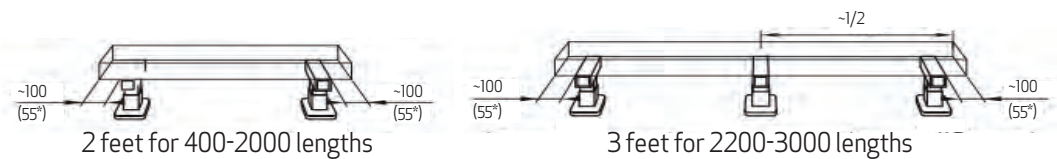
- Other colours available upon request are: Black (RAL 9005) and Grey (RAL 7024 & RAL 9006)



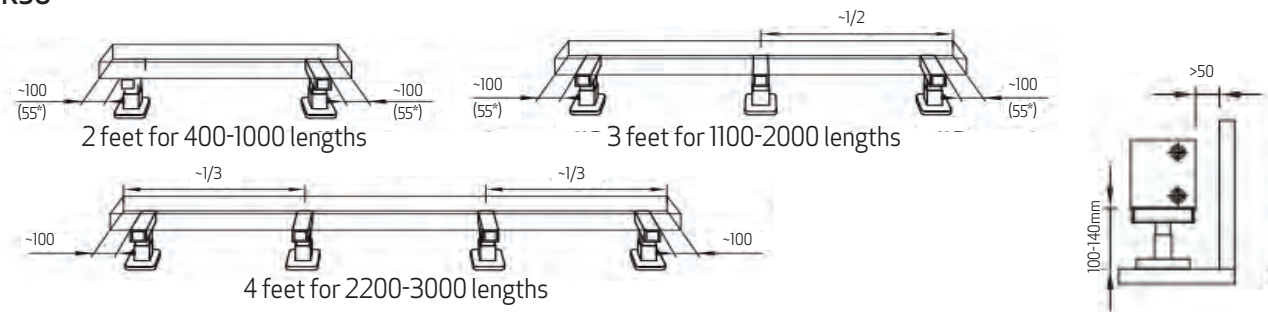
# Mounting Details

## Mounting configuration

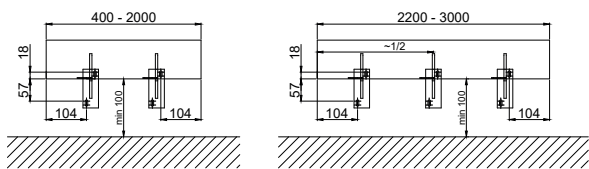
### FLOOR MOUNTING CONFIGURATION K22, K34 & K46



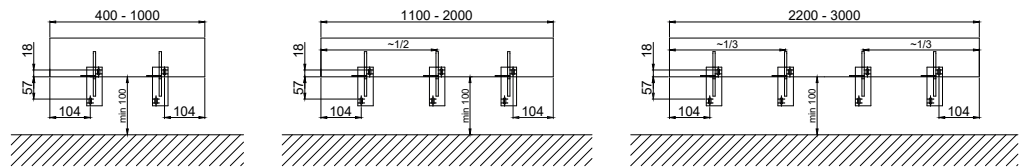
### K58



### WALL MOUNTING CONFIGURATION K22, K34 & K46

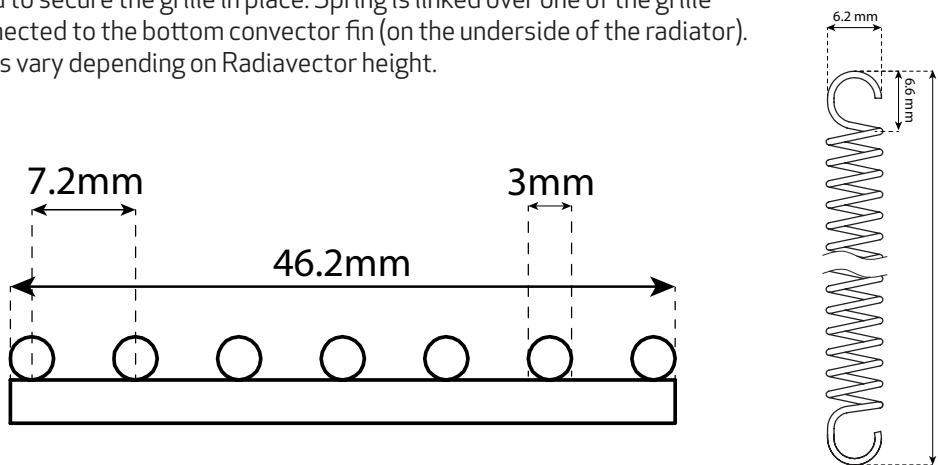


### K58



### GRILLES AND SECURITY CLIPS

Linear grilles are provided as standard and can be removed if necessary. Spring is used to secure the grille in place. Spring is linked over one of the grille bars and connected to the bottom convector fin (on the underside of the radiator). Spring heights vary depending on Radiavector height.



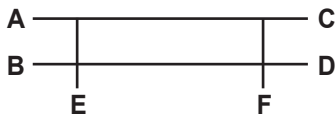
# Connection Details

## Connection Options

### CONNECTION VARIATIONS

- A, B, C, D, E, and F are connection positions
- Standard Horizontal radiator configurations are BDAC
- Other connection configurations are available on request

CONNECTION LADDER



BDAC



DBCA



ADBC



CBDA



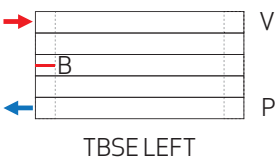
EFAC



FECA



ABDC



CDBA



### CONNECTION CENTRE DETAILS

| Rad Type | Connection Arrangement | Stub to Stub Dim. | Distance from Wall (Connection) | Distance from Wall |                    |
|----------|------------------------|-------------------|---------------------------------|--------------------|--------------------|
|          |                        |                   |                                 | Radiator Width     | Front Face To Wall |
| K22      | "A, B, C, D"           | L                 | 86                              | 72                 | 122                |
| K22      | "E, F"                 | L-34mm            | 86                              | 72                 | 122                |
| K34      | "A, B, C, D"           | L                 | 86                              | 133                | 183                |
| K34      | "E, F"                 | L-34mm            | 86                              | 133                | 183                |
| K46      | "A, B, C, D"           | L                 | 86                              | 194                | 244                |
| K46      | "E, F"                 | L-34mm            | 86                              | 194                | 244                |
| K58      | "A, B, C, D"           | L                 | 86                              | 255                | 305                |
| K58      | "E, F"                 | L-34mm            | 86                              | 255                | 305                |

L = overall length of the Radiavector  
All values in mm

For ABCD connections all connections are the same distance from the top or the bottom of the Radiavector. The dimension from the top/bottom edge of the Radiavector to the centre of the connection is 25mm. Both connections are the same distance from the wall.



# Correction Factors

## How to calculate a corrected output

1.

Calculate the Delta T including air temperature - example:  
Mean Water Temperature (MWT) = ( ° C Flow + ° C Return ) / 2 = ( 65 + 55 ) / 2 = 60 ° C  
Required Air Temperature = 21 ° C  
Delta T (ΔT) = Mean Water Temperature - Required Air Temperature = 60 - 21 = 39 ° C
2.

Note the Delta T 50 output shown for the specific size you require.
3.

Locate the Exponent ('n') for the product you have selected within the Correction Factor table and your calculated Delta T (ΔT).
4.

Multiply the Delta T 50 output noted, by the correction factor shown.

Outputs stated within this catalogue are shown at ΔT50 ° C and also calculated at ΔT30 ° C.

Multiplying factors required to calculate outputs at different Delta Ts (ΔTs) between 15 ° C and 60 ° C are shown in the Correction Factor tables overleaf.

EXAMPLE:

Radiator selected =  
K46, 210mm (Height) x 1000mm (Length)

Delta T of System (ΔT) =  
39 ° C

Exponent ('n') =  
1.29

Output @ Delta T50 =  
1645 (w)

Corrected Output =  
1645 (w) x 0.7242 (Correction Factor) = 1,191 (w) at ΔT39

|                                |                |      |
|--------------------------------|----------------|------|
| Height (mm)                    | 210            |      |
| Depth (mm)<br>(excl. brackets) | 194            |      |
| 'n'                            | 1.29           |      |
| Length (mm)                    | Output (Watts) |      |
|                                | ΔT50           | ΔT30 |
| 900                            | 1481           | 763  |
| 1000                           | 1645           | 848  |
| 1100                           | 1810           | 932  |
| 1200                           | 1974           | 1017 |

Product example: K46, 210mm high extracted from page 08.

### RESISTANCE

The design and construction of Radiavector radiators results in a very low pressure drop that can be ignored when considering system design. The correct sizing of pipework to the radiator and the pressure drop of valves fitted to it should however be taken into consideration.

# Correction Factors

## K22 & K34 models

### K22

| Height                | 70mm                  | 140mm         | 210mm  | 280mm  |
|-----------------------|-----------------------|---------------|--------|--------|
| $\Delta T(^{\circ}C)$ | Based at $\Delta T50$ |               |        |        |
| 60                    | 1.2661                | <b>1.2667</b> | 1.2671 | 1.2676 |
| 59                    | 1.2389                | <b>1.2394</b> | 1.2398 | 1.2402 |
| 58                    | 1.2118                | <b>1.2122</b> | 1.2126 | 1.2130 |
| 57                    | 1.1848                | <b>1.1852</b> | 1.1855 | 1.1858 |
| 56                    | 1.1580                | <b>1.1583</b> | 1.1585 | 1.1588 |
| 55                    | 1.1313                | <b>1.1315</b> | 1.1318 | 1.1320 |
| 54                    | 1.1047                | <b>1.1049</b> | 1.1051 | 1.1053 |
| 53                    | 1.0783                | <b>1.0785</b> | 1.0786 | 1.0787 |
| 52                    | 1.0521                | <b>1.0522</b> | 1.0523 | 1.0523 |
| 51                    | 1.0260                | <b>1.0260</b> | 1.0260 | 1.0261 |
| 50                    | 1                     | <b>1</b>      | 1      | 1      |
| 49                    | 0.9742                | <b>0.9741</b> | 0.9741 | 0.9741 |
| 48                    | 0.9485                | <b>0.9485</b> | 0.9484 | 0.9483 |
| 47                    | 0.9230                | <b>0.9229</b> | 0.9228 | 0.9227 |
| 46                    | 0.8977                | <b>0.8975</b> | 0.8974 | 0.8972 |
| 45                    | 0.8725                | <b>0.8723</b> | 0.8721 | 0.8719 |
| 44                    | 0.8475                | <b>0.8473</b> | 0.8470 | 0.8468 |
| 43                    | 0.8227                | <b>0.8224</b> | 0.8221 | 0.8219 |
| 42                    | 0.7980                | <b>0.7977</b> | 0.7974 | 0.7971 |
| 41                    | 0.7735                | <b>0.7731</b> | 0.7728 | 0.7725 |
| 40                    | 0.7492                | <b>0.7488</b> | 0.7484 | 0.7481 |
| 39                    | 0.7250                | <b>0.7246</b> | 0.7242 | 0.7238 |
| 38                    | 0.7010                | <b>0.7006</b> | 0.7002 | 0.6998 |
| 37                    | 0.6772                | <b>0.6768</b> | 0.6764 | 0.6759 |
| 36                    | 0.6537                | <b>0.6532</b> | 0.6527 | 0.6523 |
| 35                    | 0.6302                | <b>0.6298</b> | 0.6293 | 0.6288 |
| 34                    | 0.6070                | <b>0.6065</b> | 0.6060 | 0.6055 |
| 33                    | 0.5840                | <b>0.5835</b> | 0.5830 | 0.5825 |
| 32                    | 0.5612                | <b>0.5607</b> | 0.5602 | 0.5596 |
| 31                    | 0.5386                | <b>0.5381</b> | 0.5375 | 0.5370 |
| 30                    | 0.5163                | <b>0.5157</b> | 0.5151 | 0.5145 |
| 29                    | 0.4941                | <b>0.4935</b> | 0.4929 | 0.4923 |
| 28                    | 0.4721                | <b>0.4715</b> | 0.4710 | 0.4704 |
| 27                    | 0.4504                | <b>0.4498</b> | 0.4492 | 0.4486 |
| 26                    | 0.4290                | <b>0.4283</b> | 0.4278 | 0.4271 |
| 25                    | 0.4077                | <b>0.4071</b> | 0.4065 | 0.4059 |
| 24                    | 0.3868                | <b>0.3861</b> | 0.3855 | 0.3849 |
| 23                    | 0.3660                | <b>0.3654</b> | 0.3648 | 0.3642 |
| 22                    | 0.3456                | <b>0.3449</b> | 0.3443 | 0.3437 |
| 21                    | 0.3254                | <b>0.3247</b> | 0.3242 | 0.3235 |
| 20                    | 0.3055                | <b>0.3048</b> | 0.3043 | 0.3036 |
| 19                    | 0.2858                | <b>0.2852</b> | 0.2846 | 0.2840 |
| 18                    | 0.2665                | <b>0.2659</b> | 0.2653 | 0.2648 |
| 17                    | 0.2475                | <b>0.2469</b> | 0.2464 | 0.2458 |
| 16                    | 0.2288                | <b>0.2283</b> | 0.2277 | 0.2271 |
| 15                    | 0.2105                | <b>0.2099</b> | 0.2094 | 0.2089 |

### K34

| Height                | 70mm                  | 140mm         | 210mm  | 280mm  |
|-----------------------|-----------------------|---------------|--------|--------|
| $\Delta T(^{\circ}C)$ | Based at $\Delta T50$ |               |        |        |
| 60                    | 1.2661                | <b>1.2667</b> | 1.2671 | 1.2676 |
| 59                    | 1.2389                | <b>1.2394</b> | 1.2398 | 1.2402 |
| 58                    | 1.2118                | <b>1.2122</b> | 1.2126 | 1.2130 |
| 57                    | 1.1848                | <b>1.1852</b> | 1.1855 | 1.1858 |
| 56                    | 1.1580                | <b>1.1583</b> | 1.1585 | 1.1588 |
| 55                    | 1.1313                | <b>1.1315</b> | 1.1318 | 1.1320 |
| 54                    | 1.1047                | <b>1.1049</b> | 1.1051 | 1.1053 |
| 53                    | 1.0783                | <b>1.0785</b> | 1.0786 | 1.0787 |
| 52                    | 1.0521                | <b>1.0522</b> | 1.0523 | 1.0523 |
| 51                    | 1.0260                | <b>1.0260</b> | 1.0260 | 1.0261 |
| 50                    | 1                     | <b>1</b>      | 1      | 1      |
| 49                    | 0.9742                | <b>0.9741</b> | 0.9741 | 0.9741 |
| 48                    | 0.9485                | <b>0.9485</b> | 0.9484 | 0.9483 |
| 47                    | 0.9230                | <b>0.9229</b> | 0.9228 | 0.9227 |
| 46                    | 0.8977                | <b>0.8975</b> | 0.8974 | 0.8972 |
| 45                    | 0.8725                | <b>0.8723</b> | 0.8721 | 0.8719 |
| 44                    | 0.8475                | <b>0.8473</b> | 0.8470 | 0.8468 |
| 43                    | 0.8227                | <b>0.8224</b> | 0.8221 | 0.8219 |
| 42                    | 0.7980                | <b>0.7977</b> | 0.7974 | 0.7971 |
| 41                    | 0.7735                | <b>0.7731</b> | 0.7728 | 0.7725 |
| 40                    | 0.7492                | <b>0.7488</b> | 0.7484 | 0.7481 |
| 39                    | 0.7250                | <b>0.7246</b> | 0.7242 | 0.7238 |
| 38                    | 0.7010                | <b>0.7006</b> | 0.7002 | 0.6998 |
| 37                    | 0.6772                | <b>0.6768</b> | 0.6764 | 0.6759 |
| 36                    | 0.6537                | <b>0.6532</b> | 0.6527 | 0.6523 |
| 35                    | 0.6302                | <b>0.6298</b> | 0.6293 | 0.6288 |
| 34                    | 0.6070                | <b>0.6065</b> | 0.6060 | 0.6055 |
| 33                    | 0.5840                | <b>0.5835</b> | 0.5830 | 0.5825 |
| 32                    | 0.5612                | <b>0.5607</b> | 0.5602 | 0.5596 |
| 31                    | 0.5386                | <b>0.5381</b> | 0.5375 | 0.5370 |
| 30                    | 0.5163                | <b>0.5157</b> | 0.5151 | 0.5145 |
| 29                    | 0.4941                | <b>0.4935</b> | 0.4929 | 0.4923 |
| 28                    | 0.4721                | <b>0.4715</b> | 0.4710 | 0.4704 |
| 27                    | 0.4504                | <b>0.4498</b> | 0.4492 | 0.4486 |
| 26                    | 0.4290                | <b>0.4283</b> | 0.4278 | 0.4271 |
| 25                    | 0.4077                | <b>0.4071</b> | 0.4065 | 0.4059 |
| 24                    | 0.3868                | <b>0.3861</b> | 0.3855 | 0.3849 |
| 23                    | 0.3660                | <b>0.3654</b> | 0.3648 | 0.3642 |
| 22                    | 0.3456                | <b>0.3449</b> | 0.3443 | 0.3437 |
| 21                    | 0.3254                | <b>0.3247</b> | 0.3242 | 0.3235 |
| 20                    | 0.3055                | <b>0.3048</b> | 0.3043 | 0.3036 |
| 19                    | 0.2858                | <b>0.2852</b> | 0.2846 | 0.2840 |
| 18                    | 0.2665                | <b>0.2659</b> | 0.2653 | 0.2648 |
| 17                    | 0.2475                | <b>0.2469</b> | 0.2464 | 0.2458 |
| 16                    | 0.2288                | <b>0.2283</b> | 0.2277 | 0.2271 |
| 15                    | 0.2105                | <b>0.2099</b> | 0.2094 | 0.2089 |

# Correction Factors

## K46 & K58 models

### K46

| Height                | 70mm                  | 140mm         | 210mm  | 280mm  |
|-----------------------|-----------------------|---------------|--------|--------|
| $\Delta T(^{\circ}C)$ | Based at $\Delta T50$ |               |        |        |
| 60                    | 1.2661                | <b>1.2667</b> | 1.2671 | 1.2676 |
| 59                    | 1.2389                | <b>1.2394</b> | 1.2398 | 1.2402 |
| 58                    | 1.2118                | <b>1.2122</b> | 1.2126 | 1.2130 |
| 57                    | 1.1848                | <b>1.1852</b> | 1.1855 | 1.1858 |
| 56                    | 1.1580                | <b>1.1583</b> | 1.1585 | 1.1588 |
| 55                    | 1.1313                | <b>1.1315</b> | 1.1318 | 1.1320 |
| 54                    | 1.1047                | <b>1.1049</b> | 1.1051 | 1.1053 |
| 53                    | 1.0783                | <b>1.0785</b> | 1.0786 | 1.0787 |
| 52                    | 1.0521                | <b>1.0522</b> | 1.0523 | 1.0523 |
| 51                    | 1.0260                | <b>1.0260</b> | 1.0260 | 1.0261 |
| 50                    | 1                     | <b>1</b>      | 1      | 1      |
| 49                    | 0.9742                | <b>0.9741</b> | 0.9741 | 0.9741 |
| 48                    | 0.9485                | <b>0.9485</b> | 0.9484 | 0.9483 |
| 47                    | 0.9230                | <b>0.9229</b> | 0.9228 | 0.9227 |
| 46                    | 0.8977                | <b>0.8975</b> | 0.8974 | 0.8972 |
| 45                    | 0.8725                | <b>0.8723</b> | 0.8721 | 0.8719 |
| 44                    | 0.8475                | <b>0.8473</b> | 0.8470 | 0.8468 |
| 43                    | 0.8227                | <b>0.8224</b> | 0.8221 | 0.8219 |
| 42                    | 0.7980                | <b>0.7977</b> | 0.7974 | 0.7971 |
| 41                    | 0.7735                | <b>0.7731</b> | 0.7728 | 0.7725 |
| 40                    | 0.7492                | <b>0.7488</b> | 0.7484 | 0.7481 |
| 39                    | 0.7250                | <b>0.7246</b> | 0.7242 | 0.7238 |
| 38                    | 0.7010                | <b>0.7006</b> | 0.7002 | 0.6998 |
| 37                    | 0.6772                | <b>0.6768</b> | 0.6764 | 0.6759 |
| 36                    | 0.6537                | <b>0.6532</b> | 0.6527 | 0.6523 |
| 35                    | 0.6302                | <b>0.6298</b> | 0.6293 | 0.6288 |
| 34                    | 0.6070                | <b>0.6065</b> | 0.6060 | 0.6055 |
| 33                    | 0.5840                | <b>0.5835</b> | 0.5830 | 0.5825 |
| 32                    | 0.5612                | <b>0.5607</b> | 0.5602 | 0.5596 |
| 31                    | 0.5386                | <b>0.5381</b> | 0.5375 | 0.5370 |
| 30                    | 0.5163                | <b>0.5157</b> | 0.5151 | 0.5145 |
| 29                    | 0.4941                | <b>0.4935</b> | 0.4929 | 0.4923 |
| 28                    | 0.4721                | <b>0.4715</b> | 0.4710 | 0.4704 |
| 27                    | 0.4504                | <b>0.4498</b> | 0.4492 | 0.4486 |
| 26                    | 0.4290                | <b>0.4283</b> | 0.4278 | 0.4271 |
| 25                    | 0.4077                | <b>0.4071</b> | 0.4065 | 0.4059 |
| 24                    | 0.3868                | <b>0.3861</b> | 0.3855 | 0.3849 |
| 23                    | 0.3660                | <b>0.3654</b> | 0.3648 | 0.3642 |
| 22                    | 0.3456                | <b>0.3449</b> | 0.3443 | 0.3437 |
| 21                    | 0.3254                | <b>0.3247</b> | 0.3242 | 0.3235 |
| 20                    | 0.3055                | <b>0.3048</b> | 0.3043 | 0.3036 |
| 19                    | 0.2858                | <b>0.2852</b> | 0.2846 | 0.2840 |
| 18                    | 0.2665                | <b>0.2659</b> | 0.2653 | 0.2648 |
| 17                    | 0.2475                | <b>0.2469</b> | 0.2464 | 0.2458 |
| 16                    | 0.2288                | <b>0.2283</b> | 0.2277 | 0.2271 |
| 15                    | 0.2105                | <b>0.2099</b> | 0.2094 | 0.2089 |

### K58

| Height                | 70mm                  | 140mm         | 210mm  | 280mm  |
|-----------------------|-----------------------|---------------|--------|--------|
| $\Delta T(^{\circ}C)$ | Based at $\Delta T50$ |               |        |        |
| 60                    | 1.2661                | <b>1.2667</b> | 1.2671 | 1.2676 |
| 59                    | 1.2389                | <b>1.2394</b> | 1.2398 | 1.2402 |
| 58                    | 1.2118                | <b>1.2122</b> | 1.2126 | 1.2130 |
| 57                    | 1.1848                | <b>1.1852</b> | 1.1855 | 1.1858 |
| 56                    | 1.1580                | <b>1.1583</b> | 1.1585 | 1.1588 |
| 55                    | 1.1313                | <b>1.1315</b> | 1.1318 | 1.1320 |
| 54                    | 1.1047                | <b>1.1049</b> | 1.1051 | 1.1053 |
| 53                    | 1.0783                | <b>1.0785</b> | 1.0786 | 1.0787 |
| 52                    | 1.0521                | <b>1.0522</b> | 1.0523 | 1.0523 |
| 51                    | 1.0260                | <b>1.0260</b> | 1.0260 | 1.0261 |
| 50                    | 1                     | <b>1</b>      | 1      | 1      |
| 49                    | 0.9742                | <b>0.9741</b> | 0.9741 | 0.9741 |
| 48                    | 0.9485                | <b>0.9485</b> | 0.9484 | 0.9483 |
| 47                    | 0.9230                | <b>0.9229</b> | 0.9228 | 0.9227 |
| 46                    | 0.8977                | <b>0.8975</b> | 0.8974 | 0.8972 |
| 45                    | 0.8725                | <b>0.8723</b> | 0.8721 | 0.8719 |
| 44                    | 0.8475                | <b>0.8473</b> | 0.8470 | 0.8468 |
| 43                    | 0.8227                | <b>0.8224</b> | 0.8221 | 0.8219 |
| 42                    | 0.7980                | <b>0.7977</b> | 0.7974 | 0.7971 |
| 41                    | 0.7735                | <b>0.7731</b> | 0.7728 | 0.7725 |
| 40                    | 0.7492                | <b>0.7488</b> | 0.7484 | 0.7481 |
| 39                    | 0.7250                | <b>0.7246</b> | 0.7242 | 0.7238 |
| 38                    | 0.7010                | <b>0.7006</b> | 0.7002 | 0.6998 |
| 37                    | 0.6772                | <b>0.6768</b> | 0.6764 | 0.6759 |
| 36                    | 0.6537                | <b>0.6532</b> | 0.6527 | 0.6523 |
| 35                    | 0.6302                | <b>0.6298</b> | 0.6293 | 0.6288 |
| 34                    | 0.6070                | <b>0.6065</b> | 0.6060 | 0.6055 |
| 33                    | 0.5840                | <b>0.5835</b> | 0.5830 | 0.5825 |
| 32                    | 0.5612                | <b>0.5607</b> | 0.5602 | 0.5596 |
| 31                    | 0.5386                | <b>0.5381</b> | 0.5375 | 0.5370 |
| 30                    | 0.5163                | <b>0.5157</b> | 0.5151 | 0.5145 |
| 29                    | 0.4941                | <b>0.4935</b> | 0.4929 | 0.4923 |
| 28                    | 0.4721                | <b>0.4715</b> | 0.4710 | 0.4704 |
| 27                    | 0.4504                | <b>0.4498</b> | 0.4492 | 0.4486 |
| 26                    | 0.4290                | <b>0.4283</b> | 0.4278 | 0.4271 |
| 25                    | 0.4077                | <b>0.4071</b> | 0.4065 | 0.4059 |
| 24                    | 0.3868                | <b>0.3861</b> | 0.3855 | 0.3849 |
| 23                    | 0.3660                | <b>0.3654</b> | 0.3648 | 0.3642 |
| 22                    | 0.3456                | <b>0.3449</b> | 0.3443 | 0.3437 |
| 21                    | 0.3254                | <b>0.3247</b> | 0.3242 | 0.3235 |
| 20                    | 0.3055                | <b>0.3048</b> | 0.3043 | 0.3036 |
| 19                    | 0.2858                | <b>0.2852</b> | 0.2846 | 0.2840 |
| 18                    | 0.2665                | <b>0.2659</b> | 0.2653 | 0.2648 |
| 17                    | 0.2475                | <b>0.2469</b> | 0.2464 | 0.2458 |
| 16                    | 0.2288                | <b>0.2283</b> | 0.2277 | 0.2271 |
| 15                    | 0.2105                | <b>0.2099</b> | 0.2094 | 0.2089 |



Edition: August 2022

**Merriott UK & Ireland**  
Purmo Group (UK) Ltd  
Eastern Avenue, Team Valley  
Gateshead, Tyne & Wear, NE11 0PG  
0330 0415 472  
sales@merriottuk.com / sales@merriott.ie  
www.merriottuk.com

Follow us on  @merriottuk and 

In accordance with our policy of continual product improvement we reserve the right to amend the specification of these products or discontinue products without prior notification. We have compiled the content of this literature to the best of our knowledge. Any typographical, clerical or other error or omission in any literature issued by us will be subject to correction without liability being incurred by us. All rights reserved. No part of this document may be reproduced by any means without prior written consent. Please note: due to print restrictions exact colour match is not always possible, however every effort has been made to ensure as much accuracy as possible.

***Merriott***