

| FW-E-FF                              |                |                   |      |       |               |      |        |              |     |       |               |      |       |               |     |      |               |     |       |
|--------------------------------------|----------------|-------------------|------|-------|---------------|------|--------|--------------|-----|-------|---------------|------|-------|---------------|-----|------|---------------|-----|-------|
| Heating 4 pipe @ 0 ESP               |                |                   |      |       |               |      |        |              |     |       |               |      |       |               |     |      |               |     |       |
| Air Temperature                      |                | DB:18°C - WB:**°C |      |       |               |      |        |              |     |       |               |      |       |               |     |      |               |     |       |
| Water Temperature                    | Delta T °C     | ΔT=5              |      |       |               |      |        | ΔT=10        |     |       |               |      |       | ΔT=20         |     |      |               |     |       |
|                                      | Water In / Out | 45 °C - 40 °C     |      |       | 65 °C - 60 °C |      |        | 50 °C - 40°C |     |       | 65 °C - 55 °C |      |       | 50 °C - 30 °C |     |      | 90 °C - 70 °C |     |       |
| Model / Fan Speed                    |                | Th                | Wf   | Wpd   | Th            | Wf   | Wpd    | Th           | Wf  | Wpd   | Th            | Wf   | Wpd   | Th            | Wf  | Wpd  | Th            | Wf  | Wpd   |
|                                      |                | kW                | l/h  | kPa   | kW            | l/h  | kPa    | kW           | l/h | kPa   | kW            | l/h  | kPa   | kW            | l/h | kPa  | kW            | l/h | kPa   |
| FWE04F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 0.98              | 168  | 2.03  | 1.83          | 315  | 5.85   | 1.01         | 87  | 0.91  | 1.69          | 145  | 1.63  | 0.64          | 27  | 0.54 | 2.48          | 106 | 1.11  |
|                                      | V2 (L)         | 1.22              | 210  | 2.88  | 2.29          | 394  | 8.84   | 1.26         | 108 | 1.13  | 2.11          | 181  | 2.26  | 0.79          | 34  | 0.56 | 3.09          | 133 | 1.45  |
|                                      | V3 (M)         | 1.40              | 240  | 3.60  | 2.61          | 450  | 11.38  | 1.44         | 124 | 1.32  | 2.40          | 207  | 2.80  | 0.91          | 39  | 0.58 | 3.53          | 152 | 1.74  |
|                                      | V4 (H)         | 1.58              | 272  | 4.49  | 2.96          | 509  | 14.47  | 1.63         | 140 | 1.56  | 2.72          | 234  | 3.45  | 1.03          | 44  | 0.60 | 4.00          | 172 | 2.09  |
| FWE05F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 1.00              | 172  | 2.08  | 1.88          | 323  | 6.02   | 1.03         | 89  | 0.92  | 1.73          | 148  | 1.67  | 0.65          | 28  | 0.54 | 2.53          | 109 | 1.13  |
|                                      | V2 (L)         | 1.25              | 215  | 2.95  | 2.34          | 403  | 9.09   | 1.29         | 111 | 1.15  | 2.15          | 185  | 2.32  | 0.81          | 35  | 0.56 | 3.16          | 136 | 1.48  |
|                                      | V3 (M)         | 1.43              | 246  | 3.70  | 2.67          | 460  | 11.70  | 1.47         | 126 | 1.35  | 2.46          | 211  | 2.87  | 0.93          | 40  | 0.58 | 3.61          | 155 | 1.77  |
|                                      | V4 (H)         | 1.62              | 278  | 4.60  | 3.03          | 521  | 14.88  | 1.67         | 143 | 1.59  | 2.79          | 240  | 3.54  | 1.05          | 45  | 0.61 | 4.09          | 176 | 2.14  |
| FWE06F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 1.24              | 213  | 3.45  | 2.32          | 399  | 9.59   | 1.28         | 110 | 1.65  | 2.14          | 184  | 2.82  | 0.81          | 35  | 1.06 | 3.14          | 135 | 1.98  |
|                                      | V2 (L)         | 1.48              | 255  | 4.50  | 2.78          | 477  | 13.26  | 1.53         | 131 | 1.93  | 2.55          | 219  | 3.59  | 0.96          | 41  | 1.09 | 3.75          | 161 | 2.40  |
|                                      | V3 (L1)        | 1.72              | 296  | 5.73  | 3.23          | 555  | 17.56  | 1.78         | 153 | 2.25  | 2.97          | 255  | 4.50  | 1.12          | 48  | 1.12 | 4.35          | 187 | 2.89  |
|                                      | V4 (M)         | 1.80              | 310  | 6.16  | 3.37          | 580  | 19.08  | 1.85         | 159 | 2.37  | 3.10          | 267  | 4.82  | 1.17          | 50  | 1.14 | 4.55          | 196 | 3.06  |
|                                      | V5 (H)         | 1.94              | 334  | 6.99  | 3.63          | 625  | 22.00  | 2.00         | 172 | 2.59  | 3.34          | 287  | 5.44  | 1.26          | 54  | 1.16 | 4.90          | 211 | 3.39  |
| FWE08F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 1.83              | 314  | 4.23  | 3.42          | 588  | 9.92   | 1.88         | 162 | 2.51  | 3.14          | 270  | 3.63  | 1.18          | 51  | 1.90 | 4.61          | 198 | 2.83  |
|                                      | V2 (L)         | 2.21              | 381  | 5.32  | 4.15          | 713  | 13.63  | 2.28         | 196 | 2.81  | 3.81          | 328  | 4.44  | 1.44          | 62  | 1.93 | 5.60          | 241 | 3.27  |
|                                      | V3 (M)         | 2.71              | 466  | 6.99  | 5.07          | 873  | 19.37  | 2.79         | 240 | 3.27  | 4.67          | 401  | 5.69  | 1.76          | 76  | 1.99 | 6.85          | 294 | 3.96  |
|                                      | V4 (H)         | 3.12              | 536  | 8.60  | 5.84          | 1004 | 24.94  | 3.21         | 276 | 3.71  | 5.37          | 462  | 6.90  | 2.03          | 87  | 2.04 | 7.88          | 339 | 4.62  |
| FWE10F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 2.14              | 368  | 5.30  | 4.01          | 690  | 13.09  | 2.21         | 190 | 2.95  | 3.69          | 317  | 4.48  | 1.39          | 60  | 2.13 | 5.41          | 233 | 3.39  |
|                                      | V2 (L)         | 2.59              | 446  | 6.76  | 4.86          | 835  | 18.11  | 2.67         | 230 | 3.35  | 4.47          | 384  | 5.57  | 1.68          | 72  | 2.17 | 6.55          | 282 | 3.98  |
|                                      | V3 (M)         | 2.99              | 515  | 8.28  | 5.60          | 964  | 23.34  | 3.08         | 265 | 3.77  | 5.15          | 443  | 6.71  | 1.94          | 84  | 2.22 | 7.56          | 325 | 4.60  |
|                                      | V4 (H)         | 3.24              | 556  | 9.30  | 6.06          | 1042 | 26.87  | 3.33         | 287 | 4.05  | 5.57          | 479  | 7.47  | 2.10          | 90  | 2.25 | 8.18          | 351 | 5.02  |
|                                      | V5 (H1)        | 3.49              | 600  | 10.46 | 6.53          | 1124 | 30.86  | 3.60         | 309 | 4.36  | 6.01          | 517  | 8.33  | 2.27          | 97  | 2.29 | 8.82          | 379 | 5.49  |
| FWE12F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 2.17              | 374  | 5.89  | 4.07          | 699  | 13.90  | 2.24         | 192 | 3.47  | 3.74          | 322  | 5.05  | 1.41          | 61  | 2.63 | 5.49          | 236 | 3.92  |
|                                      | V2 (L)         | 2.62              | 451  | 7.37  | 4.91          | 845  | 18.98  | 2.70         | 232 | 3.88  | 4.52          | 389  | 6.15  | 1.70          | 73  | 2.68 | 6.63          | 285 | 4.53  |
|                                      | V3 (L1)        | 3.02              | 520  | 8.91  | 5.66          | 973  | 24.27  | 3.12         | 268 | 4.30  | 5.21          | 448  | 7.30  | 1.96          | 84  | 2.73 | 7.64          | 328 | 5.15  |
|                                      | V4 (M)         | 3.27              | 562  | 9.94  | 6.11          | 1052 | 27.83  | 3.36         | 289 | 4.59  | 5.62          | 484  | 8.07  | 2.12          | 91  | 2.76 | 8.25          | 355 | 5.57  |
|                                      | V5 (H)         | 3.52              | 605  | 11.10 | 6.59          | 1133 | 31.86  | 3.63         | 312 | 4.90  | 6.06          | 521  | 8.94  | 2.29          | 98  | 2.79 | 8.89          | 382 | 6.05  |
| FWE14F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 3.43              | 590  | 10.85 | 6.42          | 1104 | 30.77  | 3.53         | 304 | 4.69  | 5.91          | 508  | 8.72  | 2.23          | 96  | 2.42 | 8.67          | 373 | 5.85  |
|                                      | V2 (L)         | 4.08              | 701  | 14.19 | 7.63          | 1313 | 42.06  | 4.20         | 361 | 5.64  | 7.02          | 604  | 11.23 | 2.65          | 114 | 2.54 | 10.30         | 443 | 7.24  |
|                                      | V3 (M)         | 4.66              | 801  | 17.65 | 8.72          | 1500 | 53.82  | 4.80         | 413 | 6.62  | 8.02          | 690  | 13.83 | 3.02          | 130 | 2.67 | 11.77         | 506 | 8.68  |
|                                      | V4 (H)         | 4.93              | 848  | 19.44 | 9.24          | 1588 | 59.90  | 5.08         | 437 | 7.12  | 8.50          | 730  | 15.16 | 3.20          | 138 | 2.73 | 12.47         | 536 | 9.42  |
|                                      | V5 (H1)        | 5.30              | 912  | 21.98 | 9.93          | 1707 | 68.58  | 5.46         | 470 | 7.83  | 9.13          | 785  | 17.07 | 3.44          | 148 | 2.81 | 13.40         | 576 | 10.47 |
| FWE16F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 3.49              | 600  | 11.64 | 6.54          | 1124 | 32.25  | 3.60         | 309 | 5.27  | 6.01          | 517  | 9.44  | 2.27          | 97  | 2.93 | 8.82          | 379 | 6.47  |
|                                      | V2 (L)         | 4.14              | 712  | 15.03 | 7.75          | 1332 | 43.73  | 4.26         | 367 | 6.24  | 7.13          | 613  | 11.99 | 2.69          | 115 | 3.06 | 10.45         | 449 | 7.89  |
|                                      | V3 (L1)        | 4.72              | 812  | 18.54 | 8.84          | 1519 | 55.64  | 4.86         | 418 | 7.23  | 8.13          | 699  | 14.62 | 3.06          | 132 | 3.18 | 11.93         | 513 | 9.34  |
|                                      | V4 (M)         | 4.99              | 859  | 20.35 | 9.35          | 1608 | 61.79  | 5.15         | 442 | 7.74  | 8.60          | 740  | 15.97 | 3.24          | 139 | 3.24 | 12.62         | 543 | 10.09 |
|                                      | V5 (H)         | 5.36              | 922  | 22.92 | 10.04         | 1727 | 70.57  | 5.53         | 475 | 8.45  | 9.24          | 794  | 17.90 | 3.48          | 150 | 3.33 | 13.55         | 583 | 11.15 |
| FWE20F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 4.08              | 702  | 16.27 | 7.64          | 1314 | 47.20  | 4.20         | 361 | 5.99  | 7.03          | 604  | 12.82 | 2.65          | 114 | 1.63 | 10.31         | 443 | 8.01  |
|                                      | V2 (L)         | 4.79              | 824  | 21.16 | 8.97          | 1542 | 62.86  | 4.93         | 424 | 7.52  | 8.25          | 709  | 16.55 | 3.11          | 134 | 1.88 | 12.10         | 520 | 10.18 |
|                                      | V3 (M)         | 5.72              | 983  | 28.52 | 10.71         | 1841 | 86.70  | 5.89         | 507 | 9.77  | 9.85          | 847  | 22.15 | 3.71          | 160 | 2.24 | 14.45         | 621 | 13.39 |
|                                      | V4 (H)         | 6.50              | 1118 | 35.57 | 12.17         | 2093 | 109.76 | 6.70         | 576 | 11.89 | 11.19         | 962  | 27.49 | 4.22          | 181 | 2.56 | 16.42         | 706 | 16.44 |
| FWE24F(A/B)<br>F(N/T/V)5V1-<br>(-/R) | V1 (SL)        | 4.47              | 768  | 18.86 | 8.36          | 1438 | 55.46  | 4.60         | 396 | 6.80  | 7.69          | 661  | 14.79 | 2.90          | 125 | 1.76 | 11.29         | 485 | 9.16  |
|                                      | V2 (L)         | 5.28              | 907  | 24.87 | 9.88          | 1698 | 74.84  | 5.43         | 467 | 8.66  | 9.08          | 781  | 19.38 | 3.42          | 147 | 2.06 | 13.33         | 573 | 11.80 |
|                                      | V3 (L1)        | 6.11              | 1051 | 31.95 | 11.44         | 1967 | 97.90  | 6.29         | 541 | 10.81 | 10.52         | 905  | 24.75 | 3.97          | 171 | 2.40 | 15.44         | 664 | 14.88 |
|                                      | V4 (M)         | 6.64              | 1142 | 36.93 | 12.44         | 2138 | 114.24 | 6.84         | 588 | 12.30 | 11.44         | 983  | 28.53 | 4.31          | 185 | 2.62 | 16.78         | 722 | 17.02 |
|                                      | V5 (H)         | 7.21              | 1240 | 42.65 | 13.50         | 2322 | 133.09 | 7.43         | 639 | 14.00 | 12.42         | 1068 | 32.86 | 4.68          | 201 | 2.87 | 18.22         | 783 | 19.47 |

**SYMBOLS**

Th = Total heating capacity

Wf = Water flow rate

Wpd = Water pressure drop