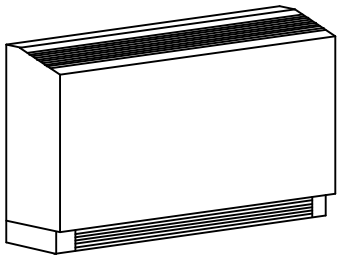
FRANCE ENERGIE & Cie



**DT 0241**
26 août 2003

# ARO 1250-7C.00.24 R

## COOLING AND HEATING PERFORMANCES

| | | COOLING Entering air : 25°C : 50 % RH | | | | | | HEATING Entering air : 19°C | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| EWT (°C) | Water Flow (l/h) | (W) total | (W) sensible | COMP (W) | THR (W) | Sensible / total | EF | TOT (W) | COMP (W) | THA (W) | COP |
| 13 | 130 | 2565 | 2050 | 695 | 3310 | 0.80 | 3.44 | | | | |
| 15 | 130 | 2515 | 2030 | 705 | 3270 | 0.81 | 3.33 | | | | |
| | 550 | | | | | | | 2145 | 655 | 1440 | 3.04 |
| | 380 | | | | | | | 2080 | 645 | 1385 | 2.99 |
| | 250 | | | | | | | 2010 | 640 | 1320 | 2.91 |
| 18 | 550 | | | | | | | 2240 | 665 | 1525 | 3.13 |
| | 380 | | | | | | | 2180 | 660 | 1470 | 3.07 |
| | 250 | | | | | | | 2115 | 650 | 1415 | 3.02 |
| 20 | 550 | 2905 | 2190 | 645 | 3600 | 0.75 | 4.18 | 2340 | 670 | 1620 | 3.25 |
| | 380 | 2845 | 2165 | 655 | 3550 | 0.76 | 4.04 | 2265 | 665 | 1550 | 3.17 |
| | 250 | 2580 | 2060 | 705 | 3335 | 0.80 | 3.42 | 2185 | 660 | 1475 | 3.08 |
| 25 | 550 | 2600 | 2070 | 690 | 3340 | 0.80 | 3.51 | 2585 | 685 | 1850 | 3.52 |
| | 380 | 2575 | 2055 | 700 | 3325 | 0.80 | 3.43 | 2495 | 680 | 1765 | 3.42 |
| | 250 | 2365 | 1970 | 725 | 3140 | 0.83 | 3.05 | 2445 | 670 | 1725 | 3.40 |
| 27 | 550 | 2465 | 2010 | 700 | 3215 | 0.82 | 3.29 | 2690 | 695 | 1945 | 3.61 |
| | 380 | 2420 | 2000 | 715 | 3185 | 0.83 | 3.16 | 2610 | 685 | 1875 | 3.55 |
| | 250 | 2280 | 1940 | 745 | 3075 | 0.85 | 2.87 | 2540 | 675 | 1815 | 3.50 |
| 31 | 550 | 2300 | 1950 | 750 | 3100 | 0.85 | 2.88 | 2905 | 700 | 2155 | 3.87 |
| | 380 | 2255 | 1930 | 755 | 3060 | 0.86 | 2.80 | 2780 | 695 | 2035 | 3.73 |
| | 250 | 2070 | 1860 | 780 | 2900 | 0.90 | 2.49 | 2690 | 680 | 1960 | 3.68 |
| 35 | 550 | 2105 | 1870 | 800 | 2955 | 0.89 | 2.48 | | | | |
| | 380 | 2015 | 1840 | 805 | 2870 | 0.91 | 2.36 | | | | |
| | 250 | 1815 | 1670 | 830 | 2695 | 0.92 | 2.06 | | | | |
| 38 | 550 | 1865 | 1680 | 820 | 2735 | 0.90 | 2.14 | | | | |
| | 380 | 1795 | 1650 | 830 | 2675 | 0.92 | 2.04 | | | | |
| | 250 | 1640 | 1525 | 850 | 2540 | 0.93 | 1.82 | | | | |
| 40 | 550 | 1745 | 1600 | 840 | 2635 | 0.92 | 1.96 | | | | |
| | 380 | 1690 | 1580 | 845 | 2585 | 0.93 | 1.89 | | | | |
| | 250 | 1575 | 1500 | 860 | 2485 | 0.95 | 1.73 | | | | |
| 43 | 550 | 1615 | 1525 | 855 | 2520 | 0.94 | 1.78 | | | | |
| | 380 | 1565 | 1495 | 870 | 2485 | 0.96 | 1.70 | | | | |
| | 250 | 1505 | 1460 | 885 | 2440 | 0.97 | 1.61 | | | | |
| 46 | 550 | 1520 | 1465 | 880 | 2450 | 0.96 | 1.63 | | | | |
| | 380 | 1370 | 1330 | 890 | 2310 | 0.97 | 1.46 | | | | |
| | 250 | 1295 | 1270 | 915 | 2260 | 0.98 | 1.34 | | | | |
| 48 | 550 | 1435 | 1390 | 895 | 2380 | 0.97 | 1.52 | | | | |
| | 380 | 1270 | 1250 | 910 | 2230 | 0.98 | 1.32 | | | | |
| | 250 | | | | | | | | | | |
| 50 | 550 | | | | | | | | | | |
| | 380 | | | | | | | | | | |
| | 250 | | | | | | | | | | |

*All performances quoted at nominal air flow [Low]*

## COOLING CORRECTION FACTORS

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| EWT °C | Entering air % RH | Total Cooling Air - : 25°C | Sensible Cooling EAT 22°C | 23°C | 24°C | 25°C | 26°C | COMP Air - : 25°C | THR Air - : 25°C |
|---|---|---|---|---|---|---|---|---|---|
| 20 | 40 | 0.935 | 0.923 | 0.959 | 0.995 | 1.031 | 1.067 | 0.993 | 0.949 |
| to | 50 | 1.000 | 0.918 | 0.933 | 0.969 | 1.000 | 1.031 | 1.000 | 1.000 |
| 35 | 60 | 1.045 | 0.877 | 0.908 | 0.938 | 0.969 | 1.005 | 1.013 | 1.037 |
| 36 | 40 | 1.000 | 0.874 | 0.908 | 0.954 | 1.000 | 1.040 | 1.000 | 1.000 |
| to | 50 | 1.000 | 0.874 | 0.908 | 0.954 | 1.000 | 1.040 | 1.000 | 1.000 |
| 48 | 60 | 1.052 | 0.845 | 0.874 | 0.919 | 0.954 | 0.988 | 1.018 | 1.039 |

## HEATING CORRECTION FACTORS *

| Entering air (°C) | 18 | 19 | 20 | 21 |
|---|---|---|---|---|
| Total Heating | 1.032 | 1.000 | 0.964 | 0.932 |

## Water Pressure Drop [Nominal in Bold]

| Flow Rate (l/h) | 250 | **380** | 550 |
|---|---|---|---|
| Δ P [kPa] | 22.54 | **36.3** | 61.74 |

## AIR FLOW **

| Speed | Low | Medium | High |
|---|---|---|---|
| Air Flow in $m^3/h$ | **500** | 550 | 600 |

*Nominal Flow in Bold*

## AIR FLOW CORRECTION FACTORS

| Speed | Low | Medium | High |
|---|---|---|---|
| Heating | 1.000 | 1.038 | 1.074 |
| Total Cooling | 1.000 | 1.039 | 1.076 |
| Sensible Cooling | 1.000 | 1.066 | 1.128 |

## ELECTRICAL

| Voltage | Phase | Fan Amps | | | Compressor Amps | | Fan Abs Power (W) | | | maxi Abs | Fuse Rating |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Low | Medium | High | F/L | Start | low | medium | high | Pwr (W) | (A) |
| 230 | 1 | 0.24 | 0.28 | 0.34 | 3.7 | 22 | 50 | 60 | 75 | 1200 | 6 |

## INSTALLATION REQUIREMENTS

| Supply Cable Size | Mains Connection |
|---|---|
| 3 Core 1,5 mm² | Fused switched spur |

* Based on Nominal water flow

** With clean filter