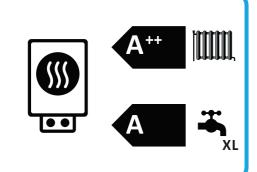




## ENERG Y UA ehepгия · ενεργεια III IIA



METROAIR I 12 + METROAIR 330

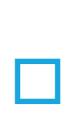




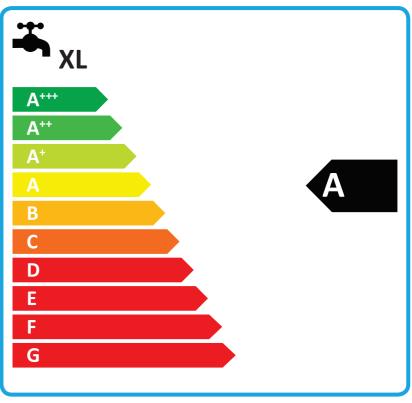












| Supplier's name:  | METRO T       |          |        |  |
|---|---------------|----------|--------|--|
| Model:  | Metroair I 12 |          |        |  |
| Temperature application                                   | 35            | 55       | ℃      |  |
| Declared load profile for water                           | >             | XL       |        |  |
| heating   |               | <u> </u> |        |  |
| Seasonal space heating energy                             | A+++          | A++      |        |  |
| efficiency class, average climate:                        | A···          | <b>A</b> |        |  |
| Water heating energy efficiency                           |               | Α        |        |  |
| class, average climate:                                   | •             |          |        |  |
| Rated heat output, average climate:                       | 8             | 8,3      | kW     |  |
| Annual energy consumption for                             | 0.400         | 4500     | 1.34/1 |  |
| space heating, average climate                            | 3409          | 4529     | kWh    |  |
| Annual electricity consumption for                        | 1661          |          | kWh    |  |
| water heating, average climate                            | 10            | 001      | KVVII  |  |
| Seasonal space heating energy                             | 100           | 1.10     | 21     |  |
| efficiency, average climate:                              | 190           | 148      | %      |  |
| Water heating energy efficiency,                          | 101           |          | %      |  |
| average climate:  | 101           |          |        |  |
| Sound power level LWA indoors                             | 35            |          | dB     |  |
| Rated heat output, cold climate:                          | 9,3           | 9,8      | kW     |  |
| Rated heat output, warm climate:                          | 9,2           | 9,2      | kW     |  |
| Annual energy consumption for                             | 5666          | 7239     | kWh    |  |
| space heating, cold climate                               | 3000          | 7209     | KVVII  |  |
| Annual electricity consumption for                        | 1895          |          | kWh    |  |
| water heating, cold climate                               | 1000          |          | KVVII  |  |
| Annual energy consumption for                             | 2241          | 2741     | kWh    |  |
| space heating, warm climate                               |               |          |        |  |
| Annual electricity consumption for                        | 1473          |          | kWh    |  |
| water heating, warm climate Seasonal space heating energy |               |          |        |  |
| efficiency, cold climate:                                 | 159           | 130      | %      |  |
| Water heating energy efficiency,                          |               |          |        |  |
| cold climate:   | 88            |          | %      |  |
| Seasonal space heating energy                             | 0.10          | 470      |        |  |
| efficiency, warm climate:                                 | 216           | 176      | %      |  |
| Water heating energy efficiency,                          | 114           |          | 0/     |  |
| warm climate:   | 114           |          | %      |  |
| Sound power level LWA outdoors                            | 53            |          | dB     |  |

## Data for package fiche

| Controller class   | V    |      |   |
|--|------|------|---|
| Controler contribution to efficiency   | 4,0  |      | % |
| Seasonal space heating energy efficiency of package, average climate:        | 194  | 152  | % |
| Seasonal space heating energy efficiency class for package, average climate: | A+++ | A+++ | % |
| Seasonal space heating energy efficiency of package, cold climate:           | 163  | 134  | % |
| Seasonal space heating energy efficiency of package, warm climate:           | 220  | 180  | % |

| Model(s):                           | Metroair I 12 + Metroair 330 |  |  |  |
|-------------------------------------|------------------------------|--|--|--|
| Type of heat source/sink:           | Air-to-water                 |  |  |  |
| Low-temperature heat pump:          | No                           |  |  |  |
| Equipped with supplementary heater: | Yes                          |  |  |  |
| Heat pump combination heater:       | Yes                          |  |  |  |
| Climate condition:                  | Average                      |  |  |  |
| Temperature application:            | Medium temperature (55 °C)   |  |  |  |
|                                     |                              |  |  |  |

Approved by:

**Contact details** 



| near pump combination neater.                   |                   |          |                 | res  | RACT               | RO TE             | JEDRA     |      |
|---|-------------------|----------|-----------------|--|--------------------|-------------------|-----------|------|
| Climate condition:                              |                   |          | Average         |  | IVIEI              | NO II             | 1 E K IVI |      |
| Temperature application:                        |                   | Med      | dium ten        | nperature (55 °C)  |                    |                   |           |      |
| Applied standards: EN14825 and EN16147          |                   |          |                 |  |                    |                   |           |      |
|   |                   |          |                 | Seasonal space h   | eating energy      |                   |           |      |
| Rated heat output                               | Prated            | 8,3      | kW              | efficiency   |                    | $\eta_{s}$        | 148       | %    |
|   |                   |          |                 |  |                    |                   |           |      |
| Declared capacity for part load at outdoor temp | 1                 |          | 1144            | Declared coefficient of performance for part load at outdoor temperature |                    |                   | ure Tj    |      |
| Tj = -7 ℃                                       | Pdh               | 7,3      | kW              | Tj = -7 ℃  |                    | COPd              | 2,39      | -    |
| Tj = +2 ℃                                       | Pdh               | 4,7      | kW              | Tj = +2 ℃  |                    | COPd              | 3,85      | -    |
| Tj = +7 ℃                                       | Pdh               | 2,9      | kW              | Tj = +7 ℃  |                    | COPd              | 4,48      | -    |
| Tj = +12 ℃                                      | Pdh               | 3,3      | kW              | Tj = +12 ℃   |                    | COPd              | 5,30      | -    |
| Tj = biv  | Pdh               | 7,3      | kW              | Tj = biv   |                    | COPd              | 2,39      | -    |
| Tj = TOL  | Pdh               | 7,8      | kW              | Tj = TOL   |                    | COPd              | 2,28      | -    |
| Tj = -15 ℃ (if TOL < -20 ℃)                     | Pdh               |          | kW              | Tj = -15 °C (if TOL  | . < -20 °C)        | COPd              |           | -    |
| Bivalent temperature                            | T <sub>biv</sub>  | -7       | °C              | Operation limit temperature  |                    | TOL               | -10       | °C   |
| Cycling interval capacity for heating           | Pcych             |          | kW              | Cycling interval efficiency  |                    | COPcvc            |           | -    |
| Degradation co-efficient                        | Cdh               | 0,99     | -               | Heating water operating limit  |                    | WTOL              | 65        | °C   |
| Power consumption in modes other than active    | mode              |          |                 | Supplementary heat   | er                 |                   |           |      |
| Off mode  | P <sub>OFF</sub>  | 0,025    | kW              | Rated heat outpu   |                    | Psup              | 0,5       | kW   |
| Thermostat-off mode                             | P <sub>TO</sub>   | 0,007    | kW              |  |                    |                   |           |      |
| Standby mode                                    | P <sub>SB</sub>   | 0,025    | kW              | Type of energy input Electric  |                    | Electric          |           |      |
| Crankcase heater mode                           | P <sub>CK</sub>   | 0,037    | kW              |  |                    |                   |           |      |
| Other items                                     |                   |          |                 |  |                    |                   |           |      |
| Capacity control                                |                   | variable |                 | Rated air flow rat   | te, outdoors       |                   | 3400      | m³/h |
|   |                   |          |                 | Rated water flow   | rate, indoor heat  |                   |           |      |
| Sound power level, indoors/outdoors             | $L_{WA}$          | 35/53    | dB              | exchanger  |                    |                   | variable  | m³/h |
|   |                   |          |                 | Rated brine or wa  | ater flow rate,    |                   |           |      |
| Annual energy consumption                       | $Q_{HE}$          | 4529     | kWh             | outdoor heat exc   | hanger             |                   |           | m³/h |
| For heat pump combination heater:               |                   |          |                 |  |                    |                   |           |      |
| Declared load profile                           | XL                |          | Water heating e | nergy efficiency   | $\eta_{\text{wh}}$ | 101               | %         |      |
| Dath, all addictions and the                    | Ι ο               | 7.50     | 1340            | Deile C. J.  |                    | 1 0               | I         | 1340 |
| Daily electricity consumption                   | Q <sub>elec</sub> | 7,56     | kWh             | Daily fuel consun  | •                  | Q <sub>fuel</sub> |           | kWh  |
| Annual electricity consumption                  | AEC               | 1661     | kWh             | Annual fuel cons   | umption            | AFC               | l         | GJ   |

METRO THERM A/S Rundinsvej 55 DK-3200 Helsinge www.metrotherm.dk