

# TN

# Air handling unit



- **Maximum installation flexibility**
- **EC fan Plug-fan**
- **Wide choice of accessories.**
- **Large range of capacities and static pressures.**
- **Versions available with water coil or with direct expansion.**



## DESCRIPTION

The TN range offers an alternative to the air treatment unit for flow rates from 2300 to 23000m<sup>3</sup>/h when the only treatment required is filtering, cooling and/or heating. Designed for domestic, commercial, industrial or hotel systems in small or medium sized contexts.

The units can be installed horizontally or vertically for greater flexibility of use.

**All the units are always supplied and shipped in the vertical configuration. The customer is responsible for any possible modification from vertical to horizontal.**

TN series are characterised by their compact size, low noise levels, and the wide choice of accessories.

The units are available with a plug fan unit with EC motor, or with a transmission centrifugal fan unit with AC motor (the latter comes in both the standard version and the boosted high head version).

## FEATURES

### Structure

The structure is made of aluminium profiles with sandwich cover paneling made of galvanised steel on the inside and pre-coated RAL 9003 galvanised steel on the outside with polyurethane insulation (density 40 kg/m<sup>3</sup>) with 25 mm thickness.

Both the panels of the base unit as well as the panels of the plenum have pre-shearing that render them compatible with the insertion of the accessories.

The fixing of the paneling using a panel block profile ensures a perfect seal between the panel and the frame and makes it extremely easy to mount and remove the panels.

The 3-way corner joint is made of glass-fibre reinforced nylon.

The condensate drip tray, in galvanised steel, has a threaded drain connection on both sides and can be used whether the unit is installed horizontally or vertically.

### Water heat exchanger coils

With copper pipes. Aluminium fins blocked via the mechanical expansion of the pipes. With 4 or 6 rows for the main one (heating or cooling) and 2,3 or 4 rows for the secondary one (heating only).

### Evaporative heat exchanger coils

#### An alternative to the main water coil.

Suitable for R410A refrigerant. With copper pipes. Aluminium fins blocked via the mechanical expansion of the pipes. With 4 or 6 rows and both RH and LH versions.

### Electric heating coil

Electric heating coil with finned, armoured elements. With twin safety thermostat (automatic and manual reset). Includes the implementation contactors (commanded with 24Volt AC voltage).

Can be used both for summer post-heating and winter heating.

The coil has two asymmetric levels (1/3, 2/3 of the total power) so it can be commanded at up to 3 levels.

### Air filter

The air is filtered through synthetic 50mm filters with an efficiency level of Coarse 55% (as per the ISO 16890 standard) on the intake points.

The filters are housed on guides in the main coil section, and can be easily removed for cleaning and maintenance; just remove the panel on the side of the water connections and then take out the filters.

With the FT7MxT accessory, filtering takes place via compact filters with an EPM1 55% efficiency level (as per the ISO 16890 standard).

## VENTILATION GROUP

The configurator allows you to choose between two different types of fan unit, to meet every possible system request.

### Ventilation group with inverter EC fan plug fun

#### Fan

The fans are of the plug-fan type with reversed blades for excellent performance with single intake.

#### Motor

The electric motors with extremely high efficiency, directly coupled to the fans, have an external EC rotor with integrated electronic control. They can be controlled continuously by a 0-10V signal. IP55 Protection rating. The motors can be powered with 380-480V / 3ph / 50-60Hz (the range is however reduced to the power supply required by the ByyExT

or ByyExTZ electric battery accessory, if required immediately or if installed at a later date).

A standard control option via the ModBus protocol.

### Fan unit with transmission

#### Fan

The fans are of the centrifugal type with twin intake, with the blades facing forwards for optimum performance.

#### Motor

The single-speed (4-pole) electric motors are of the three-phase asynchronous type, with a closed construction and external ventilation,

### ACCESSORIES

**PLxT:** Plenum composed of pre-sheared panels that can be opened on 3 sides, it can be mounted as an inlet or as an outlet; it is compatible with the accessories GAxT, GMxT, SAxT and TPPLxT. It includes mounting brackets and feet (for horizontal and vertical configurations).

**FT7MxT:** Compact filters with filtering degree ePM1 55% (according to ISO 16890), composed of a plenum that can be opened on two sides, which can be positioned on the outlet of the machine; it is compatible with the accessories GMxT, SAxT and TPPxT. It includes fixing plates and feet (for horizontal and vertical configurations).

**B2RxT:** Hot water coil with 2 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

**B3RxT:** Hot water coil with 3 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

**BR4xT:** Hot water coil with 4 rows for lines with 4 tubes. Positioned internally at the base of the equipment, downstream from the main coil, and made of copper piping and aluminium finning blocked by the mechanical expansion of the pipes.

**SAxT:** Air calibration damper with galvanised steel fins. Fin pitch 50mm; galvanised steel adjusting pin : can be installed on the equipment base or the plenum.

**GMxT:** Outlet grille with double row of fins that can be adjusted when emitting air into the room. Can be installed on the plenum.

**GAxT:** Suction grille with fins fixed at an angle of 45°; Can be installed directly on the equipment base or on the plenum accessories.

**TPVSxT:** Protective roof for Vertical installation with top outlet. Composed of a pre-coated metal sheet, fastened to the side of the unit. To be installed on the unit base. The accessory is not compatible with units equipped with EC plug fans.

**TPVFXt:** Protective roof for Vertical installation with front delivery. Composed of pre-coated diamond sheet, fastened to the side of the unit. To be installed on: PLxT, FT7MxT and vertical unit base with front outlet.

**TPLxT:** Protective roof for horizontal installation with Front outlet. Composed of pre-coated diamond sheet, fastened to the side of the unit. To be installed on unit base.

caged rotor and B3 configuration with horizontal shaft, complying with the IEC, CEI and UNEL standards. IP55 protection rating. They are powered at 400V-3ph-50Hz (standard) or 460V-3ph-60Hz (units with "Z" power supply).

#### Transmission

The pulleys (supplied with a Taperlock-type conical shrink disk) are statically and dynamically balanced, with a variable diameter for improved fan calibration.

The transmission belts may be of the SPA or SPB type.

**TPPLxT:** Protective roof for the plenum, for horizontal installation with front delivery. Made of pre-painted diamond sheet metal fixed to the sides of the unit (to be installed on PLxT and FT7MxT, from size 3 to size 8).

**TPFTLxT:** Protective roof for the bag filters, for line installation with front delivery. Made of pre-painted diamond sheet metal fixed to the sides of the unit (to be installed on FT7MxT, on sizes 1 and 2).

**P50MBT:** Corner support feet for both the horizontal and vertical version. Made of galvanised sheet: they can be fixed directly to the unit with the screws supplied. The accessory has 4 corner feet and 2 side feet.

**P50ACT:** Lateral support feet for the horizontal version. Made of galvanised sheet: they come with the accessories unit together with the bolts and screws.

**ByyExT:** Electric coil 400V/3ph/50Hz. Can be positioned inside the standard device, downstream from the main coil. Consists of a sheet metal frame, heating elements (armoured and finned), command contactors (24V AC) and two thermostats (one with automatic reset and the other manual). The electrical heating power (yy in kW) is divided over two sets of heaters 1/3+2/3 that can be controlled up to max. 3 levels. WARNING: To avoid the risk of overheating, make sure the fan is working at the correct flow rate when the coil is activated, and that there is a minimum post-ventilation time when the coil is deactivated.

**BYYExTZ:** Electric coil 460V/3ph/60Hz. Can be positioned inside the standard device, downstream from the main coil. Consists of a sheet metal frame, heating elements (armoured and finned), command contactors (24V AC) and two thermostats (one with automatic reset and the other manual). The electrical heating power (yy in kW) is divided over two sets of heaters 1/3+2/3 that can be controlled up to max. 3 levels. WARNING: To avoid the risk of overheating, make sure the fan is working at the correct flow rate when the coil is activated, and that there is a minimum post-ventilation time when the coil is deactivated.

**CPxT:** Adjustment module with sensor for volumetric flow rate (accessory for TNxxE version only).

**CPxTP:** Adjustment module with sensor for differential pressure (accessory for TNxxE version only).

**CPxTV:** Speed regulatory (accessory only for TNxxE versions).

## ACCESSORIES COMPATIBILITY

### Plenum

| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        |
|----------|----------|----------|----------|----------|----------|----------|----------|
| PL1T (1) | PL2T (1) | PL3T (1) | PL4T (1) | PL5T (1) | PL6T (1) | PL7T (1) | PL8T (1) |

(1) For horizontal and vertical configurations.

### Compact ePM1 55% filters on the fan delivery

| 1          | 2          | 3          | 4          | 5          | 6          | 7          | 8          |
|------------|------------|------------|------------|------------|------------|------------|------------|
| FT7M1T (1) | FT7M2T (1) | FT7M3T (1) | FT7M4T (1) | FT7M5T (1) | FT7M6T (1) | FT7M7T (1) | FT7M8T (1) |

(1) For horizontal and vertical configurations.

### Hot water coil with 2 rows for lines with 4 pipes

| 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|-------|-------|-------|-------|-------|-------|-------|-------|
| B2R1T | B2R2T | B2R3T | B2R4T | B2R5T | B2R6T | B2R7T | B2R8T |

### Hot water coil with 3 rows for lines with 4 pipes

| 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|-------|-------|-------|-------|-------|-------|-------|-------|
| B3R1T | B3R2T | B3R3T | B3R4T | B3R5T | B3R6T | B3R7T | B3R8T |

### Hot water coil with 4 rows for lines with 4 pipes

| 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|-------|-------|-------|-------|-------|-------|-------|-------|
| B4R1T | B4R2T | B4R3T | B4R4T | B4R5T | B4R6T | B4R7T | B4R8T |

### Suction damper

| 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|------|------|------|------|------|------|------|------|
| SA1T | SA2T | SA3T | SA4T | SA5T | SA6T | SA7T | SA8T |

### Outlet grille with adjustable fins

| 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|------|------|------|------|------|------|------|------|
| GM1T | GM2T | GM3T | GM4T | GM5T | GM6T | GM7T | GM8T |

### Intake grids

| 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|------|------|------|------|------|------|------|------|
| GA1T | GA2T | GA3T | GA4T | GA5T | GA6T | GA7T | GA8T |

### Protective roof for Vertical installation with top outlet

| 1          | 2          | 3          | 4          | 5          | 6          | 7          | 8          |
|------------|------------|------------|------------|------------|------------|------------|------------|
| TPVS1T (1) | TPVS2T (1) | TPVS3T (1) | TPVS4T (1) | TPVS5T (1) | TPVS6T (1) | TPVS7T (1) | TPVS8T (1) |

(1) The accessory is not compatible with units equipped with EC plug fans.

### Protective roof for Vertical installation with front outlet

| 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|--------|--------|--------|--------|--------|--------|--------|--------|
| TPVF1T | TPVF2T | TPVF3T | TPVF4T | TPVF5T | TPVF6T | TPVF7T | TPVF8T |

### Protective roof for horizontal installation with front outlet

| 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     |
|-------|-------|-------|-------|-------|-------|-------|-------|
| TPL1T | TPL2T | TPL3T | TPL4T | TPL5T | TPL6T | TPL7T | TPL8T |

### Protective roof for horizontal installation with Front outlet

| 1          | 2          | 3          | 4          | 5          | 6          | 7          | 8          |
|------------|------------|------------|------------|------------|------------|------------|------------|
| TPPL1T (1) | TPPL2T (1) | TPPL3T (1) | TPPL4T (1) | TPPL5T (1) | TPPL6T (1) | TPPL7T (1) | TPPL8T (1) |

(1) To be installed on PLxT and FT7MxT from size 3 to size 8.

### Roof for protecting pocket filters for installation on Line with Front outlet

| 1          | 2          | 3 | 4 | 5 | 6 | 7 | 8 |
|------------|------------|---|---|---|---|---|---|
| TPFL1T (1) | TPFL2T (1) | - | - | - | - | - | - |

(1) To be installed on FT7MxT on sizes 1 and 2.

The accessory cannot be fitted on the configurations indicated with -

### Corner support feet

| 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|--------|--------|--------|--------|--------|--------|--------|--------|
| P50MBT | P50MBT | P50MBT | P50MBT | P50MBT | P50MBT | P50MBT | P50MBT |

### Lateral support feet

| 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|--------|--------|--------|--------|--------|--------|--------|--------|
| P50ACT | P50ACT | P50ACT | P50ACT | P50ACT | P50ACT | P50ACT | P50ACT |

### Electric coil 400V~3 50Hz

| 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      |
|--------|--------|--------|--------|--------|--------|--------|--------|
| B07E1T | B10E2T | B14E3T | B18E4T | B25E5T | B30E6T | B40E7T | B50E8T |

### Electric coil 460V~3 60Hz

| 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       |
|---------|---------|---------|---------|---------|---------|---------|---------|
| B07E1TZ | B10E2TZ | B14E3TZ | B18E4TZ | B25E5TZ | B30E6TZ | B40E7TZ | B50E8TZ |

*Adjustment module with sensor for volumetric flow rate*

| 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        |
|----------|----------|----------|----------|----------|----------|----------|----------|
| CP1T (1) | CP1T (1) | CP2T (1) | CP2T (1) | CP2T (1) | CP2T (1) | CP2T (1) | CP2T (1) |

(1) Accessory only available for TNxxE versions.

*Adjustment module with sensor for differential pressure*

| 1         | 2         | 3         | 4         | 5         | 6         | 7         | 8         |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| CP1TP (1) | CP1TP (1) | CP1TP (1) | CP1TP (1) | CP1TP (1) | CP1TP (1) | CP1TP (1) | CP1TP (1) |

(1) Accessory only available for TNxxE versions.

*Speed regulatory*

| 1         | 2         | 3         | 4         | 5         | 6         | 7         | 8         |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| CP1TV (1) | CP1TV (1) | CP1TV (1) | CP1TV (1) | CP1TV (1) | CP1TV (1) | CP1TV (1) | CP1TV (1) |

(1) Accessory only available for TNxxE versions.

**CONFIGURATOR**

| Field      | Description  |
|------------|--|
| <b>1,2</b> | <b>TN</b>  |
| <b>3</b>   | <b>Size</b><br>1, 2, 3, 4, 5, 6, 7, 8  |
| <b>4</b>   | <b>Version</b>   |
| 4          | Water coil, 4 rows (LH side for connections - the connections side can be altered on site)                         |
| 6          | Water coil, 6 rows (LH side for connections - the connections side can be altered on site)                         |
| A          | R410A direct expansion coil, 4 rows (RH side for connections - the connections side cannot be altered on site) (1) |
| B          | R410A direct expansion coil, 4 rows (LH side for connections - the connections side cannot be altered on site) (2) |
| C          | R410A direct expansion coil, 6 rows (RH side for connections - the connections side cannot be altered on site) (1) |
| D          | R410A direct expansion coil, 6 rows (LH side for connections - the connections side cannot be altered on site) (2) |
| <b>5</b>   | <b>Fans (3)</b>  |
| B          | Centrifugal with AC motor (low head)   |
| E          | Plug fans with EC motor  |
| P          | Centrifugal with AC motor (high head)  |
| <b>6</b>   | <b>Power supply (4)</b>  |
| °          | 400V ~ 3 50Hz  |
| Z          | 460V ~ 3 60Hz  |

(1) With vertical configuration, the coil connections are on the opposite side to motor inspection. When transformed to horizontal configuration, the coil connections may be on the same side as motor inspection or on the opposite side, depending on the type of conversion.

(2) With vertical configuration, the coil connections and motor inspection are on the same side. When transformed to horizontal configuration, the coil connections may be on the same side as motor inspection or the opposite side, depending on the type of conversion.

\* VERSION: the definition of "RH connections side" or "LH connections side" refers to the position of the coil connections in relation to the air flow direction (convection: air flow from behind a hypothetical operator inserted in the flow).

on the opposite side, depending on the type of conversion.

(3) The unit is always supplied with fan delivery directed upwards. The delivery flow direction can be altered on site.

(4) Field to be specified only in the case of a "B" or "P" fan unit. In the case of an "E" fan unit, the permitted power supply range is 380-480V ~ 3 50-60 Hz.

\*\* All the units are always supplied and shipped in the vertical configuration. The customer is responsible for any possible modification from vertical to horizontal.

## PERFORMANCE SPECIFICATIONS

### TN 1-8 with 4-row water coil

| Size   |    | 1    | 2    | 3    | 4    | 5     | 6     | 7     | 8     |
|--|----|------|------|------|------|-------|-------|-------|-------|
| <b>Cooling performance 7 °C / 12 °C (1)</b>                                |    |      |      |      |      |       |       |       |       |
| Cooling capacity   | kW | 15,6 | 21,3 | 29,1 | 38,1 | 44,8  | 56,7  | 74,7  | 96,4  |
| Sensible cooling capacity  | kW | 10,7 | 14,7 | 20,1 | 26,2 | 33,3  | 41,7  | 55,1  | 70,9  |
| <b>Heating performance 70 °C / 60 °C (2)</b>                               |    |      |      |      |      |       |       |       |       |
| Heating capacity   | kW | 40,0 | 54,5 | 74,9 | 97,6 | 131,1 | 162,9 | 216,1 | 277,3 |
| <b>Performance in heating mode with additional coil for 4-pipe systems</b> |    |      |      |      |      |       |       |       |       |
| Heating capacity with 2 row water coil                                     | kW | 25,2 | 34,0 | 46,8 | 61,5 | 84,4  | 103,8 | 138,0 | 178,5 |
| Heating capacity with 3 row water coil                                     | kW | 33,5 | 45,6 | 62,7 | 82,0 | 110,8 | 137,3 | 182,5 | 234,4 |
| Heating capacity with 4 row water coil                                     | kW | 40,0 | 54,5 | 74,9 | 97,6 | 131,1 | 162,9 | 216,1 | 277,3 |
| <b>Heating performance 45 °C / 40 °C (3)</b>                               |    |      |      |      |      |       |       |       |       |
| Heating capacity   | kW | 23,4 | 31,9 | 43,7 | 57,0 | 76,3  | 94,8  | 125,8 | 161,4 |
| <b>Performance in heating mode with additional coil for 4-pipe systems</b> |    |      |      |      |      |       |       |       |       |
| Heating capacity with 2 row water coil                                     | kW | 14,7 | 19,8 | 27,3 | 36,0 | 49,0  | 60,3  | 80,1  | 103,8 |
| Heating capacity with 3 row water coil                                     | kW | 19,6 | 26,6 | 36,6 | 47,9 | 64,4  | 79,8  | 106,1 | 136,3 |
| Heating capacity with 4 row water coil                                     | kW | 23,4 | 31,9 | 43,7 | 57,0 | 76,3  | 94,8  | 125,8 | 161,4 |

(1) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C;

(2) Room air temperature 10 °C d.b.; Water (in/out) 70 °C/60 °C

(3) Room air temperature 10 °C d.b.; Water (in/out) 45 °C/40 °C;

### TN 1-8 with 4-row direct expansion coil

| Size  |    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|---|----|------|------|------|------|------|------|------|------|
| <b>Performance in cooling mode with incoming air at 27°C / 50% R.H. (1)</b> |    |      |      |      |      |      |      |      |      |
| Cooling capacity  | kW | 12,6 | 17,1 | 23,5 | 30,2 | 38,5 | 47,7 | 63,7 | 81,5 |
| Sensible cooling capacity   | kW | 9,9  | 13,5 | 18,5 | 24,1 | 30,4 | 38,0 | 50,7 | 65,2 |

(1) Incoming air temperature 27°C D.B. 50% R.H.; R410A refrigerant, t.at. EVAP. 10°C, up to 8K, lower transformation at 0K, vapour - liquid vapour from 0 to 1; refer to the selection software.

### TN 1-8 with 6-row water coil

| Size   |    | 1    | 2    | 3    | 4     | 5     | 6     | 7     | 8     |
|--|----|------|------|------|-------|-------|-------|-------|-------|
| <b>Cooling performance 7 °C / 12 °C (1)</b>                                |    |      |      |      |       |       |       |       |       |
| Cooling capacity   | kW | 20,0 | 27,4 | 37,7 | 49,2  | 58,3  | 74,5  | 98,9  | 127,8 |
| Sensible cooling capacity  | kW | 13,4 | 18,3 | 25,2 | 32,8  | 41,1  | 51,8  | 68,8  | 88,5  |
| <b>Heating performance 70 °C / 60 °C (2)</b>                               |    |      |      |      |       |       |       |       |       |
| Heating capacity   | kW | 48,7 | 66,6 | 91,5 | 119,2 | 157,5 | 196,8 | 260,4 | 334,1 |
| <b>Performance in heating mode with additional coil for 4-pipe systems</b> |    |      |      |      |       |       |       |       |       |
| Heating capacity with 2 row water coil                                     | kW | 25,2 | 34,0 | 46,8 | 61,5  | 84,4  | 103,8 | 138,0 | 178,5 |
| Heating capacity with 3 row water coil                                     | kW | 33,5 | 45,6 | 62,7 | 82,0  | 110,8 | 137,3 | 182,5 | 234,4 |
| Heating capacity with 4 row water coil                                     | kW | 40,0 | 54,5 | 74,9 | 97,6  | 131,1 | 162,9 | 216,1 | 277,3 |
| <b>Heating performance 45 °C / 40 °C (3)</b>                               |    |      |      |      |       |       |       |       |       |
| Heating capacity   | kW | 28,5 | 38,9 | 53,5 | 69,6  | 91,7  | 114,3 | 151,7 | 194,6 |
| <b>Performance in heating mode with additional coil for 4-pipe systems</b> |    |      |      |      |       |       |       |       |       |
| Heating capacity with 2 row water coil                                     | kW | 14,7 | 19,8 | 27,3 | 36,0  | 49,0  | 60,3  | 80,1  | 103,8 |
| Heating capacity with 3 row water coil                                     | kW | 19,6 | 26,6 | 36,6 | 47,9  | 64,4  | 79,8  | 106,1 | 136,3 |
| Heating capacity with 4 row water coil                                     | kW | 23,4 | 31,9 | 43,7 | 57,0  | 76,3  | 94,8  | 125,8 | 161,4 |

(1) Room air temperature 27 °C d.b./19 °C w.b.; Water (in/out) 7 °C/12 °C;

(2) Room air temperature 10 °C d.b.; Water (in/out) 70 °C/60 °C

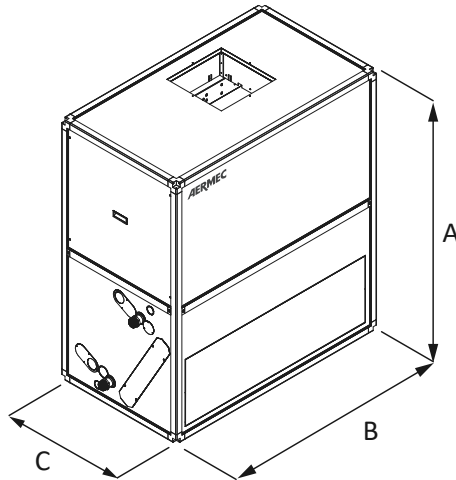
(3) Room air temperature 10 °C d.b.; Water (in/out) 45 °C/40 °C;

## GENERAL TECHNICAL DATA

### Fans

| Size  |             |                   | 1          | 2          | 3          | 4          | 5          | 6          | 7          | 8          |
|---|-------------|-------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>Fans: B</b>  |             |                   |            |            |            |            |            |            |            |            |
| <b>Fan</b>  |             |                   |            |            |            |            |            |            |            |            |
| Number  | 4,6,A,B,C,D | no.               | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |
| Nr. poles   | 4,6,A,B,C,D | no.               | 4          | 4          | 4          | 4          | 4          | 4          | 4          | 4          |
| Maximum air flow rate with cooling coil   | 4,6,A,B,C,D | m <sup>3</sup> /h | 3000       | 4100       | 5650       | 7350       | 9400       | 11700      | 15500      | 20000      |
| Maximum air flow rate with heating coil   | 4,6,A,B,C,D | m <sup>3</sup> /h | 3500       | 4700       | 6400       | 8000       | 9750       | 13400      | 17800      | 20000      |
| High static pressure - maximum  | 4,6,A,B,C,D | Pa                | 425        | 455        | 452        | 440        | 383        | 425        | 436        | 400        |
| Total fan input power   | 4,6,A,B,C,D | kW                | 0,8        | 1,1        | 1,5        | 2,2        | 2,2        | 4,0        | 4,0        | 5,5        |
| <b>Version without resistance</b>   |             |                   |            |            |            |            |            |            |            |            |
| Rated current input   | 4,6,A,B,C,D | A                 | 1,8        | 2,4        | 3,2        | 4,7        | 4,7        | 8,2        | 8,2        | 11,1       |
| Peak current  | 4,6,A,B,C,D | A                 | 5,3        | 6,2        | 6,8        | 6,4        | 6,4        | 7,0        | 7,0        | 5,9        |
| <b>Version with electric heater</b>   |             |                   |            |            |            |            |            |            |            |            |
| Rated current input   | 4,6,A,B,C,D | A                 | 11,9       | 16,9       | 15,0       | 23,4       | 30,7       | 40,8       | 51,6       | 83,4       |
| Peak current  | 4,6,A,B,C,D | A                 | 11,9       | 16,9       | 23,4       | 30,7       | 40,8       | 51,6       | 66,0       | 83,4       |
| <b>Fan</b>  |             |                   |            |            |            |            |            |            |            |            |
| Power supply  | 4,6,A,B,C,D |                   | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz |
| <b>Fans: E</b>  |             |                   |            |            |            |            |            |            |            |            |
| <b>Fan</b>  |             |                   |            |            |            |            |            |            |            |            |
| Number  | 4,6,A,B,C,D | no.               | 1          | 1          | 1          | 1          | 1          | 1          | 2          | 2          |
| Nr. poles   | 4,6,A,B,C,D | no.               | -          | -          | -          | -          | -          | -          | -          | -          |
| Maximum air flow rate with cooling coil   | 4,6,A,B,C,D | m <sup>3</sup> /h | 3000       | 4100       | 5650       | 7350       | 9400       | 11700      | 15500      | 20000      |
| Maximum air flow rate with heating coil   | 4,6,A,B,C,D | m <sup>3</sup> /h | 3500       | 4700       | 6400       | 8400       | 10500      | 13400      | 17800      | 23000      |
| High static pressure - maximum  | 4,6,A,B,C,D | Pa                | 700        | 660        | 700        | 700        | 660        | 640        | 700        | 580        |
| Total fan input power   | 4,6,A,B,C,D | kW                | 1,5        | 1,5        | 2,5        | 3,4        | 3,4        | 3,4        | 3,4        | 3,4        |
| <b>Version without resistance</b>   |             |                   |            |            |            |            |            |            |            |            |
| Rated current input   | 4,6,A,B,C,D | A                 | 2,4        | 2,4        | 4,0        | 5,4        | 5,4        | 5,4        | 2x5,4      | 2x5,4      |
| Peak current  | 4,6,A,B,C,D | A                 | -          | -          | -          | -          | -          | -          | -          | -          |
| <b>Version with electric heater</b>   |             |                   |            |            |            |            |            |            |            |            |
| Rated current input   | 4,6,A,B,C,D | A                 | 12,5       | 16,9       | 24,2       | 31,4       | 41,5       | 48,8       | 68,6       | 83,1       |
| Peak current  | 4,6,A,B,C,D | A                 | -          | -          | -          | -          | -          | -          | -          | -          |
| <b>Fan</b>  |             |                   |            |            |            |            |            |            |            |            |
| Power supply  | 4,6,A,B,C,D |                   | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz |
| <b>Fans: P</b>  |             |                   |            |            |            |            |            |            |            |            |
| <b>Fan</b>  |             |                   |            |            |            |            |            |            |            |            |
| Number  | 4,6,A,B,C,D | no.               | 1          | 1          | 1          | 1          | 1          | 1          | 1          | 1          |
| Nr. poles   | 4,6,A,B,C,D | no.               | 4          | 4          | 4          | 4          | 4          | 4          | 4          | 4          |
| Maximum air flow rate with cooling coil   | 4,6,A,B,C,D | m <sup>3</sup> /h | 3000       | 4100       | 5650       | 7350       | 9400       | 11700      | 15500      | 20000      |
| Maximum air flow rate with heating coil   | 4,6,A,B,C,D | m <sup>3</sup> /h | 3500       | 4700       | 6400       | 8400       | 10500      | 13400      | 17800      | 23000      |
| High static pressure - maximum  | 4,6,A,B,C,D | Pa                | 600        | 627        | 674        | 672        | 567        | 670        | 625        | 610        |
| Total fan input power   | 4,6,A,B,C,D | kW                | 1,1        | 1,5        | 2,2        | 3,0        | 3,0        | 5,5        | 5,5        | 7,5        |
| <b>Version without resistance</b>   |             |                   |            |            |            |            |            |            |            |            |
| Rated current input   | 4,6,A,B,C,D | A                 | 2,4        | 3,2        | 4,7        | 6,3        | 6,3        | 11,1       | 11,1       | 14,9       |
| Peak current  | 4,6,A,B,C,D | A                 | 6,2        | 6,8        | 6,4        | 7,7        | 7,7        | 5,9        | 5,9        | 5,6        |
| <b>Version with electric heater</b>   |             |                   |            |            |            |            |            |            |            |            |
| Rated current input   | 4,6,A,B,C,D | A                 | 12,5       | 17,7       | 24,9       | 32,3       | 42,4       | 54,5       | 68,9       | 87,2       |
| Peak current  | 4,6,A,B,C,D | A                 | 12,5       | 17,7       | 24,9       | 32,3       | 42,4       | 54,5       | 68,9       | 87,2       |
| <b>Fan</b>  |             |                   |            |            |            |            |            |            |            |            |
| Power supply  | 4,6,A,B,C,D |                   | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz | 400~3 50Hz |
| It is the maximum static pressure that can be supplied by the fan; it is equal to the internal pressure drops + the useful static pressure. |             |                   |            |            |            |            |            |            |            |            |
| Size  |             |                   | 1          | 2          | 3          | 4          | 5          | 6          | 7          | 8          |
| <b>Water coil</b>   |             |                   |            |            |            |            |            |            |            |            |
| H   |             | mm                | 475        | 475        | 550        | 550        | 720        | 720        | 960        | 960        |

## DIMENSIONS



| Size                          |             |    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    |
|-------------------------------|-------------|----|------|------|------|------|------|------|------|------|
| <b>Dimensions and weights</b> |             |    |      |      |      |      |      |      |      |      |
| A                             | 4,6,A,B,C,D | mm | 1334 | 1334 | 1497 | 1497 | 1822 | 1822 | 2309 | 2309 |
| B                             | 4,6,A,B,C,D | mm | 928  | 1172 | 1334 | 1659 | 1659 | 1984 | 1984 | 2472 |
| C                             | 4,6,A,B,C,D | mm | 684  | 684  | 765  | 765  | 928  | 928  | 1172 | 1172 |
| <b>Fans: B</b>                |             |    |      |      |      |      |      |      |      |      |
| <b>Dimensions and weights</b> |             |    |      |      |      |      |      |      |      |      |
| Empty weight                  | 4           | kg | 187  | 216  | 270  | 314  | 408  | 466  | 619  | 793  |
|                               | 6           | kg | 190  | 220  | 275  | 320  | 415  | 475  | 630  | 807  |
|                               | A,B         | kg | 191  | 220  | 274  | 318  | 412  | 470  | 623  | 797  |
|                               | C,D         | kg | 195  | 225  | 280  | 325  | 420  | 480  | 635  | 812  |
| <b>Fans: E</b>                |             |    |      |      |      |      |      |      |      |      |
| <b>Dimensions and weights</b> |             |    |      |      |      |      |      |      |      |      |
| Empty weight                  | 4           | kg | 175  | 199  | 249  | 304  | 388  | 466  | 611  | 769  |
|                               | 6           | kg | 178  | 203  | 254  | 310  | 395  | 475  | 622  | 783  |
|                               | A,B         | kg | 179  | 203  | 253  | 308  | 392  | 470  | 615  | 773  |
|                               | C,D         | kg | 183  | 208  | 259  | 315  | 400  | 480  | 627  | 788  |
| <b>Fans: P</b>                |             |    |      |      |      |      |      |      |      |      |
| <b>Dimensions and weights</b> |             |    |      |      |      |      |      |      |      |      |
| Empty weight                  | 4           | kg | 197  | 219  | 279  | 316  | 410  | 493  | 646  | 799  |
|                               | 6           | kg | 200  | 223  | 283  | 321  | 417  | 502  | 657  | 813  |
|                               | A,B         | kg | 201  | 223  | 283  | 320  | 414  | 497  | 650  | 803  |
|                               | C,D         | kg | 205  | 228  | 289  | 327  | 422  | 507  | 662  | 818  |

Add 50mm to the height of the unit (A), to allow for the feet.  
The vertical configuration (B/D), the connections and motor inspection are on the same side.

Aermec reserves the right to make any modifications deemed necessary.  
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