

redge<sup>®</sup>



# ALLEGRA ALLEGRA ECM

Fan Coils Units



| ALLEGRA                                  | LSV                                                                                                                                                 | 5                                                        | 3                                            | 0                                                                                          | L                                                     |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------|
| <b>MODEL</b><br>ALLEGRA<br>ALLEGRA - ECM | <b>CASING</b><br>LSV - Vertical with Cabinet<br>LSH - Horizontal with Cabinet<br>LSB - Vertical with cabinet & intake grid<br>LSN - Without Cabinet | <b>SIZE</b><br>1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9 | <b>MAIN COIL</b><br>3 - 3 rows<br>4 - 4 rows | <b>MAIN COIL</b><br>0 - 2 pipes<br>+1 - 4 pipes + 1 row coil<br>+2 - 4 pipes + 2 rows coil | <b>HYDRAULIC CONNECTIONS</b><br>L - Left<br>R - Right |

## OUTER CASING

- # Made of galvanized and pre-painted steel casing.
  - # The plastic top grid has fixed louvres and is reversible in order to distribute the air in two different directions.
- Standard colours :
- # Top grid: **Pantone 427C (light grey)**
  - # Frontal panel : **RAL 9003 (white)**
  - # Other colours on request



## INNER CASING

- # It is made with 1 mm galvanized steel, insulated with 3 mm polyolefin (PO) foam (B-s2-d0 EN 13501-1).

## FAN ASSEMBLY

- # The fans have aluminium or plastic blades directly keyed on the motor with double aspiration and they are dynamically and statically balanced during manufacture in order to have an extremely quiet operation.

## ELECTRIC MOTOR

- # The motor is wired for single phase supply and has six speeds, three of which are connected, with capacitor. The motor is fitted on sealed for life bearings and is secured on anti-vibration and self-lubricating mountings. Internal thermal protection with automatic reset, protection IP 20, class B.
- # The speeds connected in the factory are indicated by "MIN, MED and MAX" in the following tables.

## CONDENSATE COLLECTION TRAY

- # Made of plastic (ABS UL94 HB) with a “L”-shaped plastic fitted on the inner casing.
- # In the LSH-LSB and NC model the tray is insulated with 3 mm polyolefin (PO) foam B-s2-d0 EN 13501-1.
- # The outside diameter of the condensate discharge pipe is Ø 15 mm.



## COIL

- # It is manufactured from drawn copper tube and the aluminium fins are mechanically bonded onto the tube by an expansion process.
- # The coil has two Ø 1/2 inch BSP internal connections.
- # The coil has Ø 1/8" inch BSP air vent and drain.
- # The coil is not suitable for use in corrosive atmosphere or in environments where aluminium may be subject to corrosion.
- # The hydraulic connections are on the left side facing the unit.
- # On request we can deliver the unit with the connections on the right end side. This operation can also be easily carried out on the construction site during installation.

## FILTER

- # Polypropylene cellular fabric regenerating filter.
- # The filter frame of galvanized steel is inserted into special plastic sliding guides fastened to the internal structure for easy insertion and filter removal.
- # Filter presence is highlighted by a plastic front cover featuring the same colour as the top grid.

## 3 ROW COIL - 2 PIPE UNITS

The following standard rating conditions are used:

### COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

### HEATING

Entering air temperature: + 20 °C

Water temperature: +45 °C E.W.T. +40 °C L.W.T.

| MODEL                     |       | ALLEGRA 1.3-2T |      |      |      |      |      | ALLEGRA 2.3-2T |      |      |      |      |      | ALLEGRA 3.3-2T |      |      |      |      |      |
|---------------------------|-------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    |
|                           |       | MIN            |      |      | MED  |      | MAX  | MIN            |      | MED  |      | MAX  |      |                | MIN  | MED  |      | MAX  |      |
| Air flow                  | m³/h  | 105            | 125  | 150  | 175  | 195  | 220  | 145            | 170  | 220  | 250  | 295  | 340  | 185            | 235  | 270  | 325  | 385  | 440  |
| Cooling total emission    | kW    | 0,57           | 0,66 | 0,75 | 0,84 | 0,91 | 1,00 | 0,90           | 0,99 | 1,23 | 1,35 | 1,53 | 1,70 | 1,27           | 1,55 | 1,76 | 2,04 | 2,35 | 2,61 |
| Cooling sensible emission | kW    | 0,45           | 0,53 | 0,60 | 0,69 | 0,75 | 0,83 | 0,68           | 0,76 | 0,95 | 1,06 | 1,21 | 1,36 | 0,92           | 1,13 | 1,30 | 1,51 | 1,76 | 1,97 |
| Heating emission          | kW    | 0,64           | 0,76 | 0,86 | 0,98 | 1,07 | 1,19 | 0,94           | 1,06 | 1,34 | 1,49 | 1,70 | 1,92 | 1,26           | 1,56 | 1,79 | 2,10 | 2,44 | 2,74 |
| Dp Cooling                | kPa   | 2,5            | 3,0  | 3,8  | 4,7  | 5,4  | 6,3  | 2,5            | 3,0  | 4,4  | 5,3  | 6,5  | 7,9  | 6,6            | 9,4  | 11,8 | 15,3 | 19,7 | 23,8 |
| Dp Heating                | kPa   | 0,9            | 1,1  | 1,4  | 1,8  | 2,1  | 2,5  | 2,2            | 2,8  | 4,2  | 5,0  | 6,4  | 7,9  | 5,4            | 7,8  | 10,0 | 13,2 | 17,1 | 21,0 |
| Fan                       | W     | 16,0           | 19,0 | 21,0 | 25,0 | 29,0 | 33,0 | 14,0           | 16,0 | 22,0 | 26,0 | 32,0 | 40,0 | 15,0           | 20,0 | 25,0 | 32,0 | 41,0 | 49,0 |
| Sound power (Lw)          | dB(A) | 32             | 34   | 36   | 39   | 42   | 45   | 30             | 33   | 40   | 43   | 47   | 51   | 31             | 36   | 40   | 45   | 49   | 52   |
| Sound pressure (Lp) (1)   | dB(A) | 23             | 25   | 27   | 30   | 33   | 36   | 21             | 24   | 31   | 34   | 38   | 42   | 22             | 27   | 31   | 36   | 40   | 43   |

| MODEL                     |       | ALLEGRA 4.3-2T |      |      |      |      |      | ALLEGRA 5.3-2T |      |      |      |      |      | ALLEGRA 6.3-2T |      |      |      |      |      |
|---------------------------|-------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    |
|                           |       |                | MIN  | MED  |      | MAX  |      |                | MIN  |      | MED  |      | MAX  | MIN            |      | MED  |      | MAX  |      |
| Air flow                  | m³/h  | 185            | 265  | 335  | 400  | 485  | 570  | 250            | 315  | 420  | 495  | 545  | 650  | 415            | 505  | 590  | 680  | 760  | 830  |
| Cooling total emission    | kW    | 1,25           | 1,71 | 2,11 | 2,43 | 2,83 | 3,19 | 1,66           | 2,01 | 2,55 | 2,90 | 3,13 | 3,58 | 2,50           | 2,94 | 3,32 | 3,70 | 4,01 | 4,26 |
| Cooling sensible emission | kW    | 0,91           | 1,26 | 1,57 | 1,82 | 2,15 | 2,45 | 1,22           | 1,49 | 1,91 | 2,19 | 2,38 | 2,76 | 1,87           | 2,23 | 2,54 | 2,86 | 3,12 | 3,35 |
| Heating emission          | kW    | 1,25           | 1,74 | 2,18 | 2,52 | 2,97 | 3,41 | 1,65           | 2,02 | 2,61 | 3,00 | 3,24 | 3,75 | 2,56           | 3,05 | 3,45 | 3,90 | 4,26 | 4,56 |
| Dp Cooling                | kPa   | 6,5            | 11,2 | 16,2 | 20,8 | 27,2 | 33,8 | 4,1            | 5,8  | 8,8  | 11,1 | 12,7 | 16,2 | 8,6            | 11,4 | 14,1 | 17,2 | 19,8 | 22,1 |
| Dp Heating                | kPa   | 5,3            | 9,5  | 14,0 | 18,2 | 24,3 | 30,8 | 3,4            | 4,8  | 7,5  | 9,6  | 11,0 | 14,2 | 7,3            | 9,9  | 12,3 | 15,2 | 17,8 | 20,1 |
| Fan                       | W     | 14,0           | 21,0 | 28,0 | 34,0 | 44,0 | 57,0 | 18,0           | 22,0 | 32,0 | 39,0 | 46,0 | 61,0 | 37,0           | 46,0 | 55,0 | 67,0 | 78,0 | 88,0 |
| Sound power (Lw)          | dB(A) | 27             | 33   | 39   | 43   | 47   | 52   | 26             | 31   | 37   | 41   | 43   | 48   | 37             | 42   | 46   | 49   | 52   | 54   |
| Sound pressure (Lp) (1)   | dB(A) | 18             | 24   | 30   | 34   | 38   | 43   | 17             | 22   | 28   | 32   | 34   | 39   | 28             | 33   | 37   | 40   | 43   | 45   |

| MODEL                     |       | ALLEGRA 7.3-2T |      |      |      |      |       | ALLEGRA 8.3-2T |      |      |       |       |       | ALLEGRA 9.3-2T |      |       |       |       |       |
|---------------------------|-------|----------------|------|------|------|------|-------|----------------|------|------|-------|-------|-------|----------------|------|-------|-------|-------|-------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6     | 1              | 2    | 3    | 4     | 5     | 6     | 1              | 2    | 3     | 4     | 5     | 6     |
|                           |       |                | MIN  |      | MED  |      | MAX   |                | MIN  |      | MED   |       | MAX   |                | MIN  |       | MED   |       | MAX   |
| Air flow                  | m³/h  | 445            | 535  | 630  | 735  | 840  | 925   | 510            | 655  | 815  | 1020  | 1100  | 1200  | 735            | 830  | 980   | 1210  | 1365  | 1500  |
| Cooling total emission    | kW    | 2,82           | 3,29 | 3,74 | 4,21 | 4,66 | 5,01  | 3,01           | 3,68 | 4,32 | 5,09  | 5,36  | 5,69  | 4,00           | 4,38 | 4,95  | 5,74  | 6,21  | 6,56  |
| Cooling sensible emission | kW    | 2,08           | 2,45 | 2,80 | 3,19 | 3,56 | 3,85  | 2,27           | 2,82 | 3,35 | 4,02  | 4,26  | 4,55  | 3,08           | 3,40 | 3,89  | 4,60  | 5,03  | 5,37  |
| Heating emission          | kW    | 2,83           | 3,34 | 3,83 | 4,33 | 4,83 | 5,23  | 3,22           | 4,02 | 4,78 | 5,75  | 6,11  | 6,55  | 4,42           | 4,86 | 5,58  | 6,62  | 7,26  | 7,78  |
| Dp Cooling                | kPa   | 12,3           | 16,2 | 20,3 | 25,1 | 30,1 | 34,2  | 7,2            | 10,3 | 13,8 | 18,4  | 20,2  | 22,5  | 11,8           | 13,8 | 17,3  | 22,4  | 25,9  | 28,6  |
| Dp Heating                | kPa   | 10,1           | 13,5 | 17,2 | 21,3 | 25,9 | 29,7  | 5,6            | 8,3  | 11,3 | 15,6  | 17,3  | 19,6  | 12,9           | 16,2 | 21,1  | 27,8  | 33,0  | 37,0  |
| Fan                       | W     | 44,0           | 54,0 | 66,0 | 79,0 | 92,0 | 103,0 | 47,0           | 62,0 | 81,0 | 105,0 | 116,0 | 130,0 | 78,0           | 92,0 | 108,0 | 134,0 | 152,0 | 176,0 |
| Sound power (Lw)          | dB(A) | 38             | 42   | 47   | 51   | 54   | 56    | 39             | 45   | 50   | 56    | 58    | 60    | 47             | 50   | 54    | 58    | 62    | 64    |
| Sound pressure (Lp) (1)   | dB(A) | 29             | 33   | 38   | 42   | 45   | 47    | 30             | 36   | 41   | 47    | 49    | 51    | 38             | 41   | 45    | 49    | 53    | 55    |

<sup>(1)</sup> The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.  
MIN-MED-MAX = Speeds connected in the factory

## 4 ROW COIL - 2 PIPE UNITS

The following standard rating conditions are used:

### COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

### HEATING

Entering air temperature: + 20 °C

Water temperature: +45 °C E.W.T. +40 °C L.W.T.

| MODEL                     |       | ALLEGRA 1.4-2T |      |      |      |      |      | ALLEGRA 2.4-2T |      |      |      |      |      | ALLEGRA 3.4-2T |      |      |      |      |      |
|---------------------------|-------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    |
|                           |       | MIN            |      |      | MED  |      | MAX  | MIN            |      | MED  |      | MAX  |      |                | MIN  | MED  |      | MAX  |      |
| Air flow                  | m³/h  | 105            | 125  | 150  | 175  | 195  | 220  | 145            | 170  | 220  | 250  | 295  | 340  | 185            | 235  | 270  | 325  | 385  | 440  |
| Cooling total emission    | kW    | 0,65           | 0,77 | 0,87 | 1,00 | 1,08 | 1,20 | 1,00           | 1,11 | 1,41 | 1,56 | 1,78 | 2,00 | 1,32           | 1,63 | 1,87 | 2,17 | 2,53 | 2,83 |
| Cooling sensible emission | kW    | 0,49           | 0,58 | 0,66 | 0,77 | 0,84 | 0,94 | 0,73           | 0,82 | 1,05 | 1,17 | 1,35 | 1,53 | 0,95           | 1,18 | 1,36 | 1,59 | 1,86 | 2,09 |
| Heating emission          | kW    | 0,69           | 0,80 | 0,92 | 1,07 | 1,17 | 1,31 | 0,99           | 1,11 | 1,43 | 1,60 | 1,83 | 2,08 | 1,30           | 1,62 | 1,87 | 2,19 | 2,59 | 2,88 |
| Dp Cooling                | kPa   | 1,9            | 2,5  | 3,2  | 4,0  | 4,7  | 5,6  | 4,9            | 6,1  | 9,1  | 11,0 | 13,9 | 17,2 | 3,7            | 5,3  | 6,7  | 8,8  | 11,5 | 14,1 |
| Dp Heating                | kPa   | 1,7            | 2,2  | 2,8  | 3,7  | 4,3  | 5,3  | 4,0            | 4,9  | 7,6  | 9,3  | 11,8 | 14,8 | 2,8            | 4,2  | 5,4  | 7,1  | 9,8  | 11,5 |
| Fan                       | W     | 16,0           | 19,0 | 21,0 | 25,0 | 29,0 | 33,0 | 14,0           | 16,0 | 22,0 | 26,0 | 32,0 | 40,0 | 15,0           | 20,0 | 25,0 | 32,0 | 41,0 | 49,0 |
| Sound power (Lw)          | dB(A) | 32             | 34   | 36   | 39   | 42   | 45   | 30             | 33   | 40   | 43   | 47   | 51   | 31             | 36   | 40   | 45   | 49   | 52   |
| Sound pressure (Lp) (1)   | dB(A) | 23             | 25   | 27   | 30   | 33   | 36   | 21             | 24   | 31   | 34   | 38   | 42   | 22             | 27   | 31   | 36   | 40   | 43   |

| MODEL                     |       | ALLEGRA 4.4-2T |      |      |      |      |      | ALLEGRA 5.4-2T |      |      |      |      |      | ALLEGRA 6.4-2T |      |      |      |      |      |
|---------------------------|-------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    |
|                           |       |                | MIN  |      | MED  |      | MAX  |                | MIN  |      | MED  |      | MAX  |                | MIN  |      | MED  |      | MAX  |
| Air flow                  | m³/h  | 185            | 265  | 335  | 400  | 485  | 570  | 250            | 315  | 420  | 495  | 545  | 650  | 415            | 505  | 590  | 680  | 760  | 830  |
| Cooling total emission    | kW    | 1,31           | 1,81 | 2,25 | 2,62 | 3,08 | 3,50 | 1,77           | 2,17 | 2,79 | 3,21 | 3,49 | 4,03 | 2,79           | 3,34 | 3,81 | 4,31 | 4,71 | 5,04 |
| Cooling sensible emission | kW    | 0,86           | 1,21 | 1,51 | 1,78 | 2,10 | 2,39 | 1,28           | 1,58 | 2,04 | 2,36 | 2,58 | 3,01 | 2,03           | 2,45 | 2,81 | 3,20 | 3,52 | 3,79 |
| Heating emission          | kW    | 1,28           | 1,80 | 2,27 | 2,64 | 3,14 | 3,62 | 1,71           | 2,10 | 2,74 | 3,16 | 3,46 | 4,01 | 2,82           | 3,39 | 3,90 | 4,46 | 4,92 | 5,31 |
| Dp Cooling                | kPa   | 3,4            | 6,1  | 9,0  | 11,7 | 15,5 | 19,6 | 7,3            | 10,4 | 16,3 | 20,8 | 24,2 | 31,3 | 14,4           | 19,7 | 24,8 | 30,9 | 36,2 | 40,9 |
| Dp Heating                | kPa   | 2,6            | 5,0  | 7,2  | 9,4  | 12,8 | 16,4 | 5,6            | 8,1  | 12,9 | 16,6 | 19,5 | 25,2 | 11,9           | 16,5 | 21,1 | 26,8 | 31,8 | 36,3 |
| Fan                       | W     | 14,0           | 21,0 | 28,0 | 34,0 | 44,0 | 57,0 | 18,0           | 22,0 | 32,0 | 39,0 | 46,0 | 61,0 | 37,0           | 46,0 | 55,0 | 67,0 | 78,0 | 88,0 |
| Sound power (Lw)          | dB(A) | 27             | 33   | 39   | 43   | 47   | 52   | 26             | 31   | 37   | 41   | 43   | 48   | 37             | 42   | 46   | 49   | 52   | 54   |
| Sound pressure (Lp) (1)   | dB(A) | 18             | 24   | 30   | 34   | 38   | 43   | 17             | 22   | 28   | 32   | 34   | 39   | 28             | 33   | 37   | 40   | 43   | 45   |

| MODEL                     |       | ALLEGRA 7.4-2T |      |      |      |      |       | ALLEGRA 8.4-2T |      |      |       |       |       | ALLEGRA 9.4-2T |      |       |       |       |       |
|---------------------------|-------|----------------|------|------|------|------|-------|----------------|------|------|-------|-------|-------|----------------|------|-------|-------|-------|-------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6     | 1              | 2    | 3    | 4     | 5     | 6     | 1              | 2    | 3     | 4     | 5     | 6     |
|                           |       |                | MIN  |      | MED  |      | MAX   |                | MIN  |      | MED   |       | MAX   |                | MIN  |       | MED   |       | MAX   |
| Air flow                  | m³/h  | 445            | 535  | 630  | 735  | 840  | 925   | 510            | 655  | 815  | 1020  | 1100  | 1200  | 735            | 830  | 980   | 1210  | 1365  | 1500  |
| Cooling total emission    | kW    | 2,99           | 3,51 | 4,01 | 4,56 | 5,08 | 5,48  | 3,22           | 3,97 | 4,72 | 5,63  | 5,94  | 6,34  | 4,34           | 4,79 | 5,45  | 6,41  | 6,98  | 7,42  |
| Cooling sensible emission | kW    | 2,18           | 2,57 | 2,96 | 3,39 | 3,80 | 4,13  | 2,38           | 2,98 | 3,58 | 4,33  | 4,59  | 4,93  | 3,28           | 3,63 | 4,18  | 4,98  | 5,48  | 5,87  |
| Heating emission          | kW    | 2,95           | 3,49 | 4,03 | 4,62 | 5,15 | 5,59  | 3,37           | 4,26 | 5,14 | 6,27  | 6,60  | 7,20  | 4,70           | 5,23 | 6,01  | 7,18  | 7,93  | 8,52  |
| Dp Cooling                | kPa   | 9,5            | 12,5 | 15,9 | 20,0 | 24,2 | 27,7  | 9,6            | 14,0 | 19,0 | 26,0  | 28,6  | 32,2  | 8,9            | 10,6 | 13,4  | 17,8  | 20,7  | 23,2  |
| Dp Heating                | kPa   | 7,5            | 10,1 | 13,1 | 16,6 | 20,1 | 23,2  | 8,5            | 12,8 | 17,9 | 24,9  | 27,8  | 31,7  | 8,3            | 10,0 | 12,8  | 17,6  | 20,9  | 23,7  |
| Fan                       | W     | 44,0           | 54,0 | 66,0 | 79,0 | 92,0 | 103,0 | 47,0           | 62,0 | 81,0 | 105,0 | 116,0 | 130,0 | 78,0           | 92,0 | 108,0 | 134,0 | 152,0 | 176,0 |
| Sound power (Lw)          | dB(A) | 38             | 42   | 47   | 51   | 54   | 56    | 39             | 45   | 50   | 56    | 58    | 60    | 47             | 50   | 54    | 58    | 62    | 64    |
| Sound pressure (Lp) (1)   | dB(A) | 29             | 33   | 38   | 42   | 45   | 47    | 30             | 36   | 41   | 47    | 49    | 51    | 38             | 41   | 45    | 49    | 53    | 55    |

(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.  
MIN-MED-MAX = Speeds connected in the factory

## 3+1 ROW COIL - 4 PIPE UNITS

The following standard rating conditions are used:

### COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

### HEATING

Entering air temperature: + 20 °C

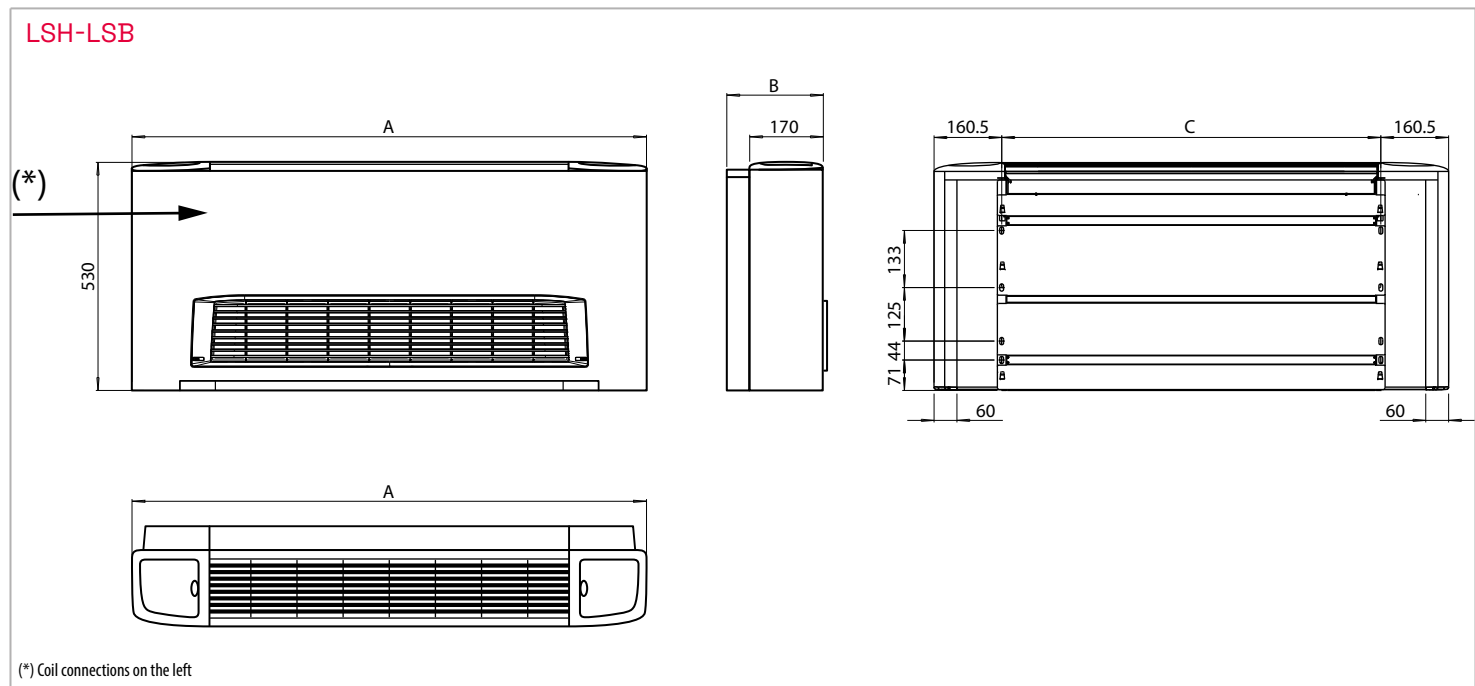
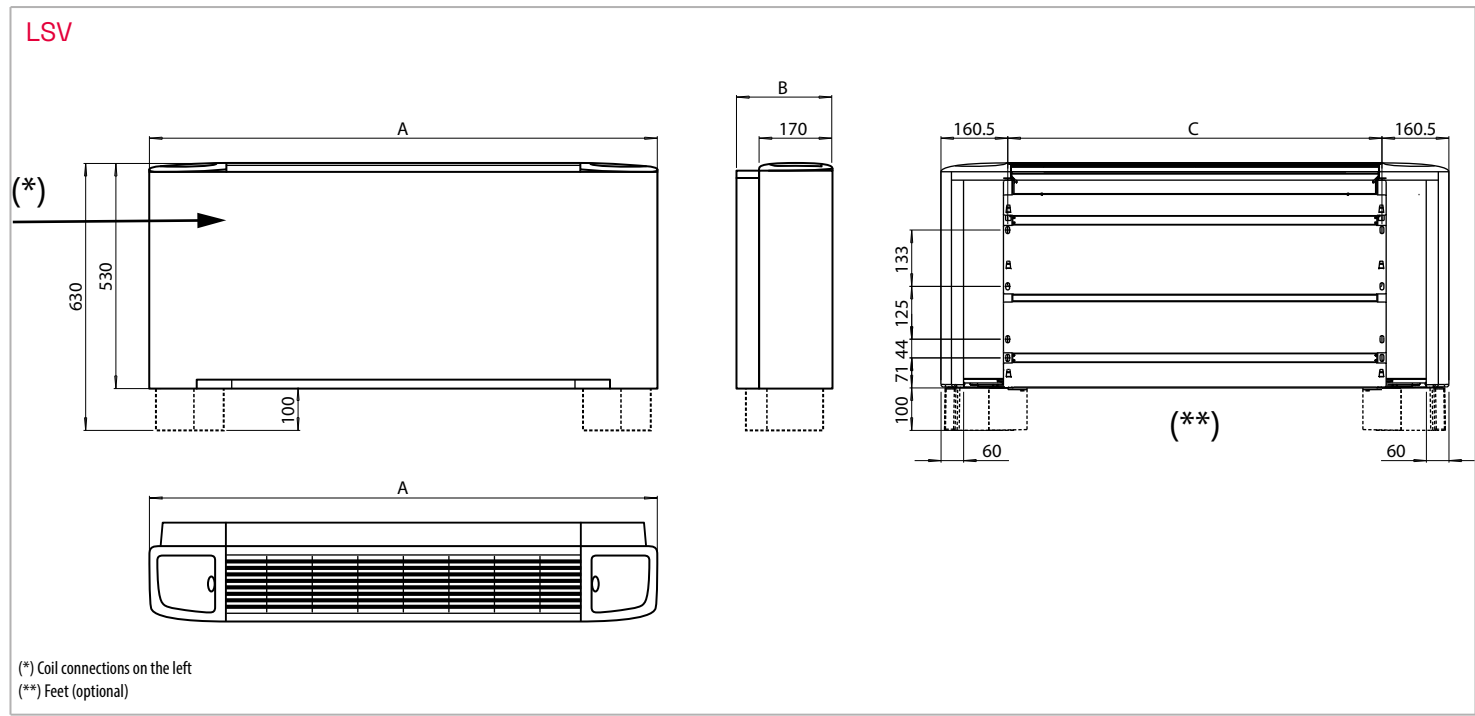
Water temperature: +65 °C E.W.T. +55 °C L.W.T.

| MODEL                     |       | ALLEGRA 1.3-4T |      |      |      |      |      | ALLEGRA 2.3-4T |      |      |      |      |      | ALLEGRA 3.3-4T |      |      |      |      |      |
|---------------------------|-------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    |
|                           |       | MIN            |      |      | MED  |      | MAX  | MIN            |      | MED  |      | MAX  |      |                | MIN  | MED  |      | MAX  |      |
| Air flow                  | m³/h  | 105            | 125  | 150  | 175  | 195  | 220  | 145            | 170  | 220  | 250  | 295  | 340  | 185            | 235  | 270  | 325  | 385  | 440  |
| Cooling total emission    | kW    | 0,57           | 0,66 | 0,75 | 0,84 | 0,91 | 1,00 | 0,90           | 0,99 | 1,23 | 1,35 | 1,53 | 1,70 | 1,27           | 1,55 | 1,76 | 2,04 | 2,35 | 2,61 |
| Cooling sensible emission | kW    | 0,45           | 0,53 | 0,60 | 0,69 | 0,75 | 0,83 | 0,68           | 0,76 | 0,95 | 1,06 | 1,21 | 1,36 | 0,92           | 1,13 | 1,30 | 1,51 | 1,76 | 1,97 |
| Heating emission          | kW    | 0,55           | 0,62 | 0,69 | 0,77 | 0,83 | 0,91 | 0,83           | 0,91 | 1,09 | 1,19 | 1,33 | 1,47 | 1,19           | 1,40 | 1,56 | 1,76 | 1,99 | 2,18 |
| Dp Cooling                | kPa   | 0,9            | 1,1  | 1,4  | 1,7  | 2,0  | 2,3  | 2,5            | 3,0  | 4,4  | 5,3  | 6,5  | 7,9  | 6,6            | 9,4  | 11,8 | 15,3 | 19,7 | 23,8 |
| Dp Heating                | kPa   | 0,5            | 0,7  | 0,8  | 1,0  | 1,1  | 1,3  | 1,3            | 1,6  | 2,2  | 2,5  | 3,1  | 3,7  | 3,2            | 4,2  | 5,1  | 6,3  | 7,8  | 9,2  |
| Fan                       | W     | 16,0           | 19,0 | 21,0 | 25,0 | 29,0 | 33,0 | 14,0           | 16,0 | 22,0 | 26,0 | 32,0 | 40,0 | 15,0           | 20,0 | 25,0 | 32,0 | 41,0 | 49,0 |
| Sound power (Lw)          | dB(A) | 32             | 34   | 36   | 39   | 42   | 45   | 30             | 33   | 40   | 43   | 47   | 51   | 31             | 36   | 40   | 45   | 49   | 52   |
| Sound pressure (Lp) (1)   | dB(A) | 23             | 25   | 27   | 30   | 33   | 36   | 21             | 24   | 31   | 34   | 38   | 42   | 22             | 27   | 31   | 36   | 40   | 43   |

| MODEL                     |       | ALLEGRA 4.3-4T |      |      |      |      |      | ALLEGRA 5.3-4T |      |      |      |      |      | ALLEGRA 6.3-4T |      |      |      |      |      |
|---------------------------|-------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|----------------|------|------|------|------|------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    | 1              | 2    | 3    | 4    | 5    | 6    |
|                           |       |                | MIN  | MED  |      | MAX  |      |                | MIN  |      | MED  |      | MAX  | MIN            |      | MED  |      | MAX  |      |
| Air flow                  | m³/h  | 185            | 265  | 335  | 400  | 485  | 570  | 250            | 315  | 420  | 495  | 545  | 650  | 415            | 505  | 590  | 680  | 760  | 830  |
| Cooling total emission    | kW    | 1,25           | 1,71 | 2,11 | 2,43 | 2,83 | 3,19 | 1,66           | 2,01 | 2,55 | 2,90 | 3,13 | 3,58 | 2,50           | 2,94 | 3,32 | 3,70 | 4,01 | 4,26 |
| Cooling sensible emission | kW    | 0,91           | 1,26 | 1,57 | 1,82 | 2,15 | 2,45 | 1,22           | 1,49 | 1,91 | 2,19 | 2,39 | 2,76 | 1,87           | 2,23 | 2,54 | 2,86 | 3,12 | 3,35 |
| Heating emission          | kW    | 1,18           | 1,52 | 1,81 | 2,04 | 2,33 | 2,60 | 1,55           | 1,84 | 2,22 | 2,50 | 2,66 | 3,00 | 2,19           | 2,51 | 2,79 | 3,09 | 3,33 | 3,53 |
| Dp Cooling                | kPa   | 6,5            | 11,2 | 16,2 | 20,8 | 27,2 | 33,8 | 5,4            | 7,6  | 11,5 | 14,6 | 16,7 | 21,1 | 8,6            | 11,4 | 14,1 | 17,2 | 19,8 | 22,1 |
| Dp Heating                | kPa   | 3,8            | 6,0  | 8,0  | 10,0 | 12,5 | 15,3 | 1,0            | 1,3  | 1,9  | 2,3  | 2,6  | 3,2  | 1,8            | 2,3  | 2,8  | 3,3  | 3,8  | 4,2  |
| Fan                       | W     | 14,0           | 21,0 | 28,0 | 34,0 | 44,0 | 57,0 | 18,0           | 22,0 | 32,0 | 39,0 | 46,0 | 61,0 | 37,0           | 46,0 | 55,0 | 67,0 | 78,0 | 88,0 |
| Sound power (Lw)          | dB(A) | 27             | 33   | 39   | 43   | 47   | 52   | 26             | 31   | 37   | 41   | 43   | 48   | 37             | 42   | 46   | 49   | 52   | 54   |
| Sound pressure (Lp) (1)   | dB(A) | 18             | 24   | 30   | 34   | 38   | 43   | 17             | 22   | 28   | 32   | 34   | 39   | 28             | 33   | 37   | 40   | 43   | 45   |

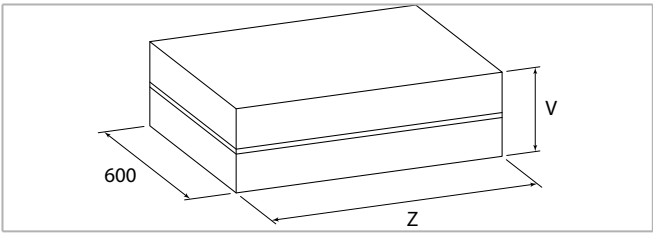
| MODEL                     |       | ALLEGRA 7.3-4T |      |      |      |      |       | ALLEGRA 8.3-4T |      |      |       |       |       | ALLEGRA 9.3-4T |      |       |       |       |       |
|---------------------------|-------|----------------|------|------|------|------|-------|----------------|------|------|-------|-------|-------|----------------|------|-------|-------|-------|-------|
| SPEED                     |       | 1              | 2    | 3    | 4    | 5    | 6     | 1              | 2    | 3    | 4     | 5     | 6     | 1              | 2    | 3     | 4     | 5     | 6     |
|                           |       |                | MIN  |      | MED  |      | MAX   |                | MIN  |      | MED   |       | MAX   |                | MIN  |       | MED   |       | MAX   |
| Air flow                  | m³/h  | 445            | 535  | 630  | 735  | 840  | 925   | 510            | 655  | 815  | 1020  | 1100  | 1200  | 735            | 830  | 980   | 1210  | 1365  | 1500  |
| Cooling total emission    | kW    | 2,82           | 3,29 | 3,74 | 4,21 | 4,66 | 5,01  | 3,01           | 3,68 | 4,32 | 5,09  | 5,36  | 5,69  | 4,00           | 4,38 | 4,95  | 5,74  | 6,21  | 6,56  |
| Cooling sensible emission | kW    | 2,08           | 2,45 | 2,80 | 3,19 | 3,56 | 3,85  | 2,27           | 2,82 | 3,35 | 4,02  | 4,26  | 4,55  | 3,08           | 3,40 | 3,89  | 4,60  | 5,03  | 5,37  |
| Heating emission          | kW    | 2,54           | 2,89 | 3,23 | 3,59 | 3,94 | 4,20  | 2,66           | 3,16 | 3,66 | 4,26  | 4,48  | 4,75  | 3,41           | 3,71 | 4,15  | 4,79  | 5,17  | 5,46  |
| Dp Cooling                | kPa   | 12,3           | 16,2 | 20,3 | 25,1 | 30,1 | 34,2  | 7,2            | 10,3 | 13,8 | 18,4  | 20,2  | 22,5  | 12,5           | 14,6 | 18,2  | 23,6  | 27,3  | 30,1  |
| Dp Heating                | kPa   | 2,8            | 3,5  | 4,2  | 5,1  | 6,0  | 6,7   | 3,0            | 4,1  | 5,3  | 6,9   | 7,5   | 8,3   | 4,7            | 5,4  | 6,6   | 8,5   | 9,7   | 10,7  |
| Fan                       | W     | 44,0           | 54,0 | 66,0 | 79,0 | 92,0 | 103,0 | 47,0           | 62,0 | 81,0 | 105,0 | 116,0 | 130,0 | 78,0           | 92,0 | 108,0 | 134,0 | 152,0 | 176,0 |
| Sound power (Lw)          | dB(A) | 38             | 42   | 47   | 51   | 54   | 56    | 39             | 45   | 50   | 56    | 58    | 60    | 47             | 50   | 54    | 58    | 62    | 64    |
| Sound pressure (Lp) (1)   | dB(A) | 29             | 33   | 38   | 42   | 45   | 47    | 30             | 36   | 41   | 47    | 49    | 51    | 38             | 41   | 45    | 49    | 53    | 55    |

<sup>(1)</sup> The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.  
MIN-MED-MAX = Speeds connected in the factory



| MODEL |    | ALLEGRA 1 | ALLEGRA 2 | ALLEGRA 3 | ALLEGRA 4 | ALLEGRA 5 | ALLEGRA 6 | ALLEGRA 7 | ALLEGRA 8 | ALLEGRA 9 |
|-------|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| A     | mm | 675       | 775       | 990       |           | 1205      |           | 1420      |           |           |
| B     | mm | 225       |           |           |           |           |           |           | 255       |           |
| C     | mm | 354       | 454       | 669       |           | 884       |           | 1099      |           |           |

PACKED UNIT



| MODEL |    | 1   | 2   | 3    | 4 | 5    | 6 | 7    | 8   | 9 |
|-------|----|-----|-----|------|---|------|---|------|-----|---|
| V     | mm | 260 |     |      |   |      |   |      | 290 |   |
| Z     | mm | 720 | 820 | 1035 |   | 1250 |   | 1465 |     |   |

WEIGHT (KG)

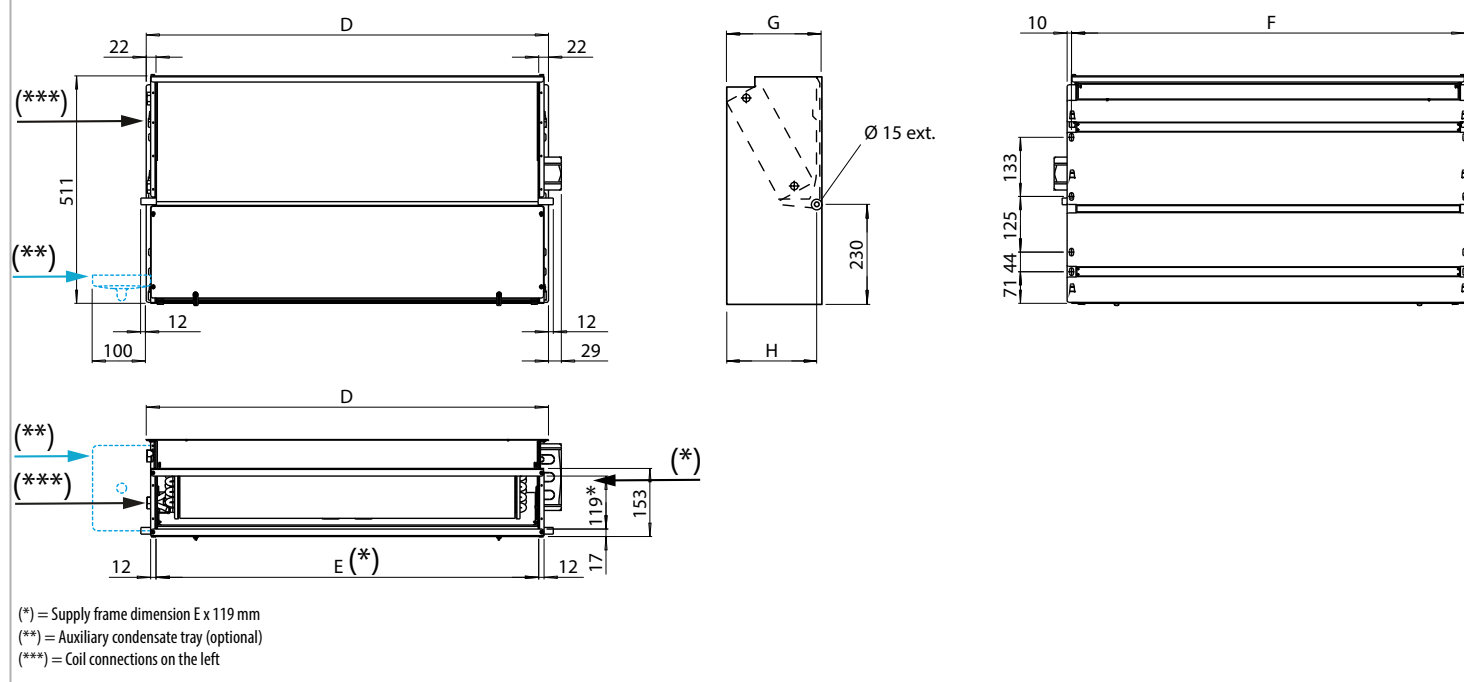
Weight with packaging

| MODEL    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|----------|------|------|------|------|------|------|------|------|------|
| 3 rows   | 15,5 | 17,2 | 21,4 | 22,5 | 26,9 | 27,7 | 32,1 | 35,7 | 35,9 |
| 3+1 rows | 16,2 | 18,0 | 22,6 | 23,7 | 28,4 | 29,2 | 33,9 | 37,5 | 37,7 |
| 3+2 rows | 16,7 | 18,6 | 23,3 | 24,4 | 29,3 | 30,1 | 35,0 | 38,6 | 38,8 |
| 4 rows   | 16,0 | 18,0 | 22,4 | 23,5 | 28,1 | 29,0 | 33,6 | 37,2 | 37,4 |
| 4+1 rows | 16,7 | 18,8 | 23,6 | 24,7 | 29,6 | 30,5 | 35,4 | 39,0 | 39,2 |

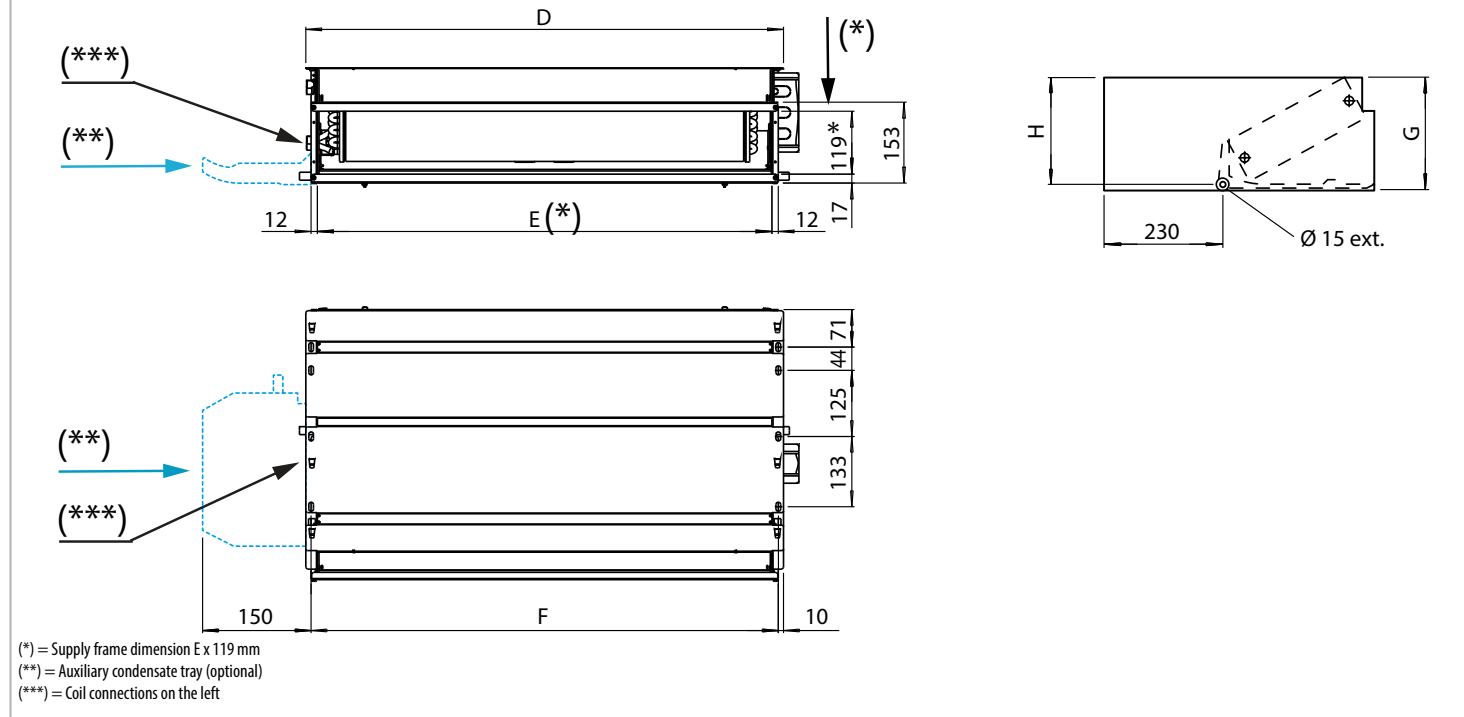
Weight without packaging

| MODEL    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|----------|------|------|------|------|------|------|------|------|------|
| 3 rows   | 13,9 | 15,4 | 19,1 | 20,2 | 24,1 | 24,9 | 28,8 | 32,0 | 32,2 |
| 3+1 rows | 14,6 | 16,2 | 20,3 | 21,4 | 25,6 | 26,4 | 30,6 | 33,8 | 34,0 |
| 3+2 rows | 15,1 | 16,8 | 21,0 | 22,1 | 26,5 | 27,3 | 31,7 | 34,9 | 35,1 |
| 4 rows   | 14,4 | 16,2 | 20,1 | 21,2 | 25,3 | 26,2 | 30,3 | 33,5 | 33,7 |
| 4+1 rows | 15,1 | 17,0 | 21,3 | 22,4 | 26,8 | 27,7 | 32,1 | 35,3 | 35,5 |

## LSN VERTICAL INSTALLATION

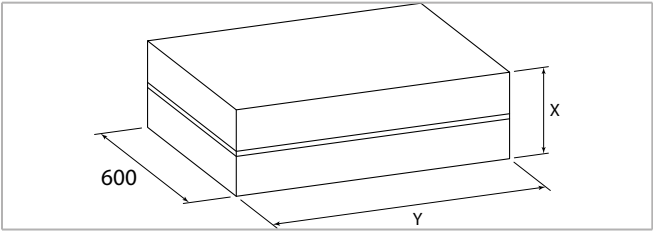


## LSN HORIZONTAL INSTALLATION



| MODEL |    | ALLEGRA 1 | ALLEGRA 2 | ALLEGRA 3 | ALLEGRA 4 | ALLEGRA 5 | ALLEGRA 6 | ALLEGRA 7 | ALLEGRA 8 | ALLEGRA 9 |
|-------|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| D     | mm | 374       | 474       | 689       |           | 904       |           | 1119      |           |           |
| E     | mm | 330       | 430       | 645       |           | 860       |           | 1075      |           |           |
| F     | mm | 354       | 454       | 669       |           | 884       |           | 1099      |           |           |

PACKED UNIT



| MODEL |    | 1   | 2   | 3 | 4 | 5    | 6 | 7    | 8   | 9 |
|-------|----|-----|-----|---|---|------|---|------|-----|---|
| X     | mm | 260 |     |   |   |      |   |      | 290 |   |
| Y     | mm | 720 | 820 |   |   | 1035 |   | 1250 |     |   |

WEIGHT (KG)

Weight with packaging

| MODEL    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|----------|------|------|------|------|------|------|------|------|------|
| 3 rows   | 12,2 | 13,6 | 17,1 | 18,1 | 21,9 | 22,8 | 27,0 | 30,2 | 30,4 |
| 3+1 rows | 12,9 | 14,4 | 18,3 | 19,3 | 23,4 | 24,3 | 28,8 | 32,0 | 32,2 |
| 3+2 rows | 13,4 | 15,0 | 19,0 | 20,0 | 24,3 | 25,2 | 29,9 | 33,1 | 33,3 |
| 4 rows   | 12,7 | 14,4 | 18,1 | 19,1 | 23,1 | 24,1 | 28,5 | 31,7 | 31,9 |
| 4+1 rows | 13,4 | 15,2 | 19,3 | 20,3 | 24,6 | 25,6 | 30,3 | 33,5 | 33,7 |

Weight without packaging

| MODEL    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    |
|----------|------|------|------|------|------|------|------|------|------|
| 3 rows   | 10,6 | 11,8 | 15,3 | 16,3 | 19,6 | 20,5 | 24,2 | 27,1 | 27,3 |
| 3+1 rows | 11,3 | 12,6 | 16,5 | 17,5 | 21,1 | 22,0 | 26,0 | 28,9 | 29,1 |
| 3+2 rows | 11,8 | 13,2 | 17,2 | 18,2 | 22,0 | 22,9 | 27,1 | 30,0 | 30,2 |
| 4 rows   | 11,1 | 12,6 | 16,3 | 17,3 | 20,8 | 21,8 | 25,7 | 28,6 | 28,8 |
| 4+1 rows | 11,8 | 13,4 | 17,5 | 18,5 | 22,3 | 23,3 | 27,5 | 30,4 | 30,6 |

## 3 ROW COIL - 2 PIPE UNITS

The following standard rating conditions are used:

### COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

### HEATING

Entering air temperature: + 20 °C

Water temperature: +45 °C E.W.T. +40 °C L.W.T.

| MODEL                       |       | ALLEGRA-ECM 2.3-2T |      |      |      |      | ALLEGRA-ECM 4.3-2T |      |      |      |      | ALLEGRA-ECM 6.3-2T |      |      |      |      |
|-----------------------------|-------|--------------------|------|------|------|------|--------------------|------|------|------|------|--------------------|------|------|------|------|
| INVERTER SPEED SIGNAL (VDC) |       | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5    | 7,5  | 10   |
|                             |       | MIN                |      | MED  |      | MAX  | MIN                |      | MED  |      | MAX  | MIN                |      | MED  |      | MAX  |
| Air flow                    | m³/h  | 120                | 170  | 220  | 270  | 330  | 210                | 280  | 350  | 430  | 515  | 305                | 395  | 495  | 610  | 735  |
| Cooling total emission      | kW    | 0,73               | 0,97 | 1,18 | 1,37 | 1,59 | 1,41               | 1,80 | 2,18 | 2,57 | 2,95 | 1,96               | 2,44 | 2,93 | 3,44 | 3,96 |
| Cooling sensible emission   | kW    | 0,55               | 0,74 | 0,92 | 1,09 | 1,28 | 1,03               | 1,33 | 1,64 | 1,95 | 2,26 | 1,46               | 1,83 | 2,22 | 2,64 | 3,08 |
| Heating emission            | kW    | 0,77               | 1,04 | 1,29 | 1,52 | 1,80 | 1,42               | 1,84 | 2,26 | 2,69 | 3,14 | 1,96               | 2,46 | 3,00 | 3,55 | 4,14 |
| Dp Cooling                  | kPa   | 2,2                | 3,6  | 5,1  | 6,7  | 8,6  | 7,9                | 12,0 | 17,0 | 22,6 | 28,9 | 5,5                | 8,0  | 11,1 | 14,8 | 19,0 |
| Dp Heating                  | kPa   | 1,6                | 2,7  | 3,9  | 5,2  | 7,0  | 6,6                | 10,4 | 14,9 | 20,4 | 26,7 | 4,5                | 6,8  | 9,6  | 12,9 | 17,0 |
| Fan                         | W     | 7,0                | 9,0  | 11,0 | 15,0 | 21,0 | 6,0                | 9,0  | 12,0 | 17,0 | 25,0 | 7,0                | 10,0 | 15,0 | 22,0 | 32,0 |
| Sound power (Lw)            | dB(A) | 30                 | 36   | 41   | 47   | 51   | 30                 | 36   | 42   | 47   | 51   | 33                 | 38   | 44   | 49   | 54   |
| Sound pressure (Lp) (1)     | dB(A) | 21                 | 27   | 32   | 38   | 42   | 21                 | 27   | 33   | 38   | 42   | 24                 | 29   | 35   | 40   | 45   |

| MODEL                       |       | ALLEGRA-ECM 7.3-2T |      |      |      |      | ALLEGRA-ECM 9.3-2T |      |      |      |      |
|-----------------------------|-------|--------------------|------|------|------|------|--------------------|------|------|------|------|
| INVERTER SPEED SIGNAL (VDC) |       | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5    | 7,5  | 10   |
|                             |       | MIN                |      | MED  |      | MAX  | MIN                |      | MED  |      | MAX  |
| Air flow                    | m³/h  | 400                | 500  | 610  | 755  | 890  | 605                | 785  | 945  | 1175 | 1395 |
| Cooling total emission      | kW    | 2,60               | 3,13 | 3,68 | 4,36 | 4,94 | 3,45               | 4,22 | 4,82 | 5,60 | 6,26 |
| Cooling sensible emission   | kW    | 1,92               | 2,33 | 2,77 | 3,32 | 3,80 | 2,63               | 3,28 | 3,79 | 4,49 | 5,10 |
| Heating emission            | kW    | 2,56               | 3,13 | 3,72 | 4,43 | 5,08 | 3,74               | 4,65 | 5,41 | 6,46 | 7,38 |
| Dp Cooling                  | kPa   | 10,5               | 14,5 | 19,4 | 26,1 | 32,6 | 8,9                | 12,7 | 16,1 | 21,1 | 25,9 |
| Dp Heating                  | kPa   | 8,5                | 12,1 | 16,4 | 22,2 | 28,3 | 7,3                | 10,7 | 14,0 | 19,1 | 24,2 |
| Fan                         | W     | 9,0                | 13,0 | 18,5 | 28,5 | 41,0 | 16,0               | 25,0 | 41,0 | 65,0 | 99,0 |
| Sound power (Lw)            | dB(A) | 37                 | 43   | 48   | 53   | 57   | 44                 | 50   | 55   | 60   | 64   |
| Sound pressure (Lp) (1)     | dB(A) | 28                 | 34   | 39   | 44   | 48   | 35                 | 41   | 46   | 51   | 55   |

(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

## 4 ROW COIL - 2 PIPE UNITS

The following standard rating conditions are used:

### COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

### HEATING

Entering air temperature: + 20 °C

Water temperature: +45 °C E.W.T. +40 °C L.W.T.

| MODEL                       |       | ALLEGRA-ECM 2.4-2T |      |      |      |      | ALLEGRA-ECM 4.4-2T |      |      |      |      | ALLEGRA-ECM 6.4-2T |      |      |      |      |
|-----------------------------|-------|--------------------|------|------|------|------|--------------------|------|------|------|------|--------------------|------|------|------|------|
| INVERTER SPEED SIGNAL (VDC) |       | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5    | 7,5  | 10   |
|                             |       | MIN                |      | MED  |      | MAX  | MIN                |      | MED  |      | MAX  | MIN                |      | MED  |      | MAX  |
| Air flow                    | m³/h  | 115                | 160  | 210  | 260  | 325  | 200                | 265  | 340  | 415  | 505  | 290                | 375  | 475  | 590  | 720  |
| Cooling total emission      | kW    | 0,77               | 1,06 | 1,32 | 1,57 | 1,86 | 1,43               | 1,83 | 2,27 | 2,71 | 3,17 | 2,05               | 2,59 | 3,19 | 3,84 | 4,51 |
| Cooling sensible emission   | kW    | 0,56               | 0,78 | 0,98 | 1,19 | 1,42 | 1,03               | 1,34 | 1,67 | 2,02 | 2,39 | 1,48               | 1,89 | 2,34 | 2,84 | 3,38 |
| Heating emission            | kW    | 0,78               | 1,08 | 1,37 | 1,65 | 1,98 | 1,42               | 1,83 | 2,30 | 2,77 | 3,32 | 2,02               | 2,59 | 3,23 | 3,93 | 4,68 |
| Dp Cooling                  | kPa   | 3,2                | 5,5  | 8,0  | 11,0 | 14,8 | 4,0                | 6,1  | 8,9  | 12,3 | 16,1 | 8,2                | 12,4 | 17,8 | 24,8 | 33,0 |
| Dp Heating                  | kPa   | 2,6                | 4,7  | 7,1  | 9,9  | 13,6 | 3,1                | 4,9  | 7,3  | 10,2 | 13,7 | 6,6                | 10,3 | 15,1 | 21,4 | 29,1 |
| Fan                         | W     | 7,0                | 8,8  | 11,0 | 14,6 | 21,0 | 6,0                | 9,0  | 12,0 | 17,0 | 25,0 | 7,0                | 10,0 | 15,0 | 22,0 | 32,0 |
| Sound power (Lw)            | dB(A) | 30                 | 36   | 41   | 47   | 51   | 30                 | 36   | 42   | 47   | 51   | 33                 | 38   | 44   | 49   | 54   |
| Sound pressure (Lp) (1)     | dB(A) | 21                 | 27   | 32   | 38   | 42   | 21                 | 27   | 33   | 38   | 42   | 24                 | 29   | 35   | 40   | 45   |

| MODEL                       |       | ALLEGRA-ECM 7.4-2T |      |      |      |      | ALLEGRA-ECM 9.4-2T |      |      |      |      |
|-----------------------------|-------|--------------------|------|------|------|------|--------------------|------|------|------|------|
| INVERTER SPEED SIGNAL (VDC) |       | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5    | 7,5  | 10   |
|                             |       | MIN                |      | MED  |      | MAX  | MIN                |      | MED  |      | MAX  |
| Air flow                    | m³/h  | 380                | 475  | 585  | 735  | 875  | 575                | 755  | 910  | 1145 | 1365 |
| Cooling total emission      | kW    | 2,61               | 3,20 | 3,82 | 4,61 | 5,30 | 3,59               | 4,49 | 5,21 | 6,18 | 7,04 |
| Cooling sensible emission   | kW    | 1,90               | 2,34 | 2,82 | 3,44 | 3,99 | 2,69               | 3,40 | 3,99 | 4,81 | 5,53 |
| Heating emission            | kW    | 2,57               | 3,17 | 3,84 | 4,66 | 5,43 | 3,76               | 4,81 | 5,63 | 6,84 | 7,93 |
| Dp Cooling                  | kPa   | 7,3                | 10,5 | 14,3 | 20,0 | 25,6 | 6,3                | 9,3  | 12,1 | 16,4 | 20,8 |
| Dp Heating                  | kPa   | 5,9                | 8,6  | 12,0 | 16,9 | 22,0 | 5,6                | 8,7  | 11,4 | 16,1 | 20,9 |
| Fan                         | W     | 9,0                | 13,0 | 18,5 | 28,5 | 41,0 | 16,0               | 25,0 | 41,0 | 65,0 | 99,0 |
| Sound power (Lw)            | dB(A) | 37                 | 43   | 48   | 53   | 57   | 44                 | 50   | 55   | 60   | 64   |
| Sound pressure (Lp) (1)     | dB(A) | 28                 | 34   | 39   | 44   | 48   | 35                 | 41   | 46   | 51   | 55   |

<sup>(1)</sup> The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

## 3+1 ROW COIL - 4 PIPE UNITS

The following standard rating conditions are used:

### COOLING

Entering air temperature: + 27 °C d.b. + 19 °C w.b.

Water temperature: +7 °C E.W.T. +12 °C L.W.T.

### HEATING

Entering air temperature: + 20 °C

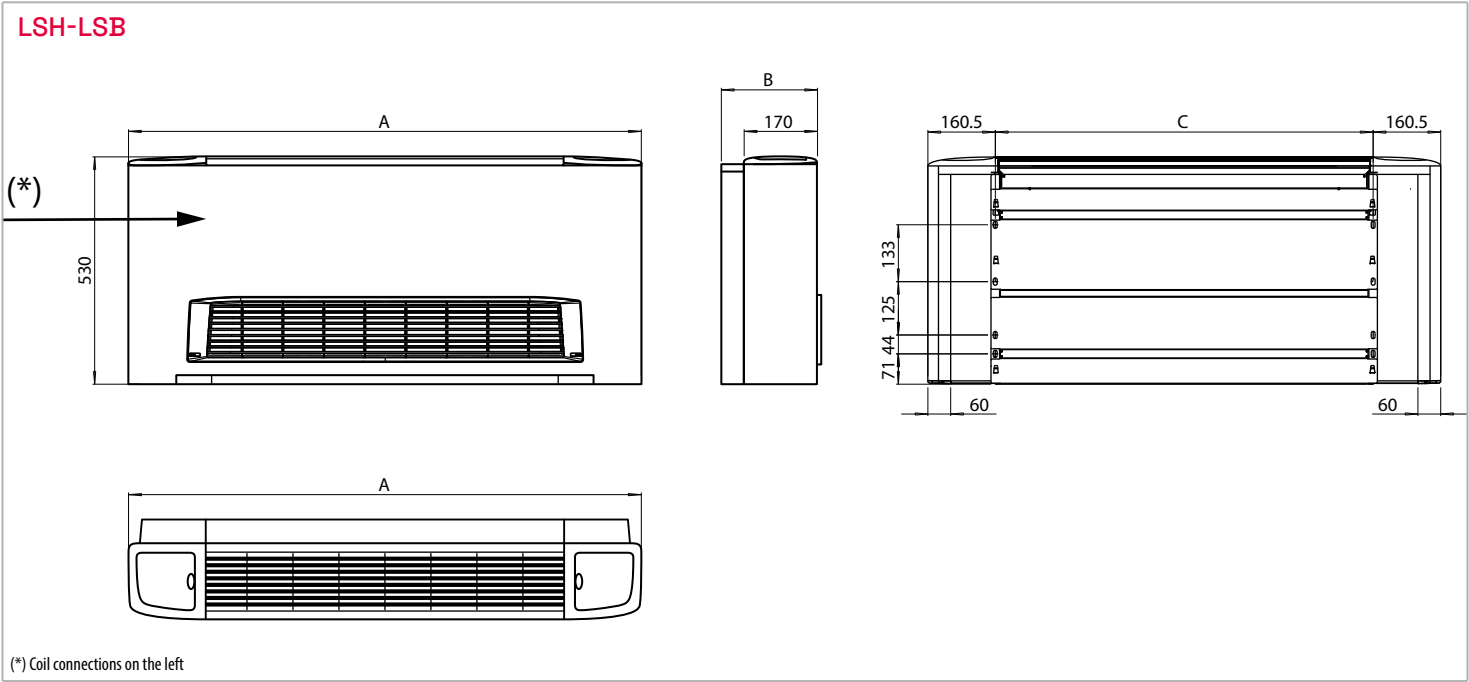
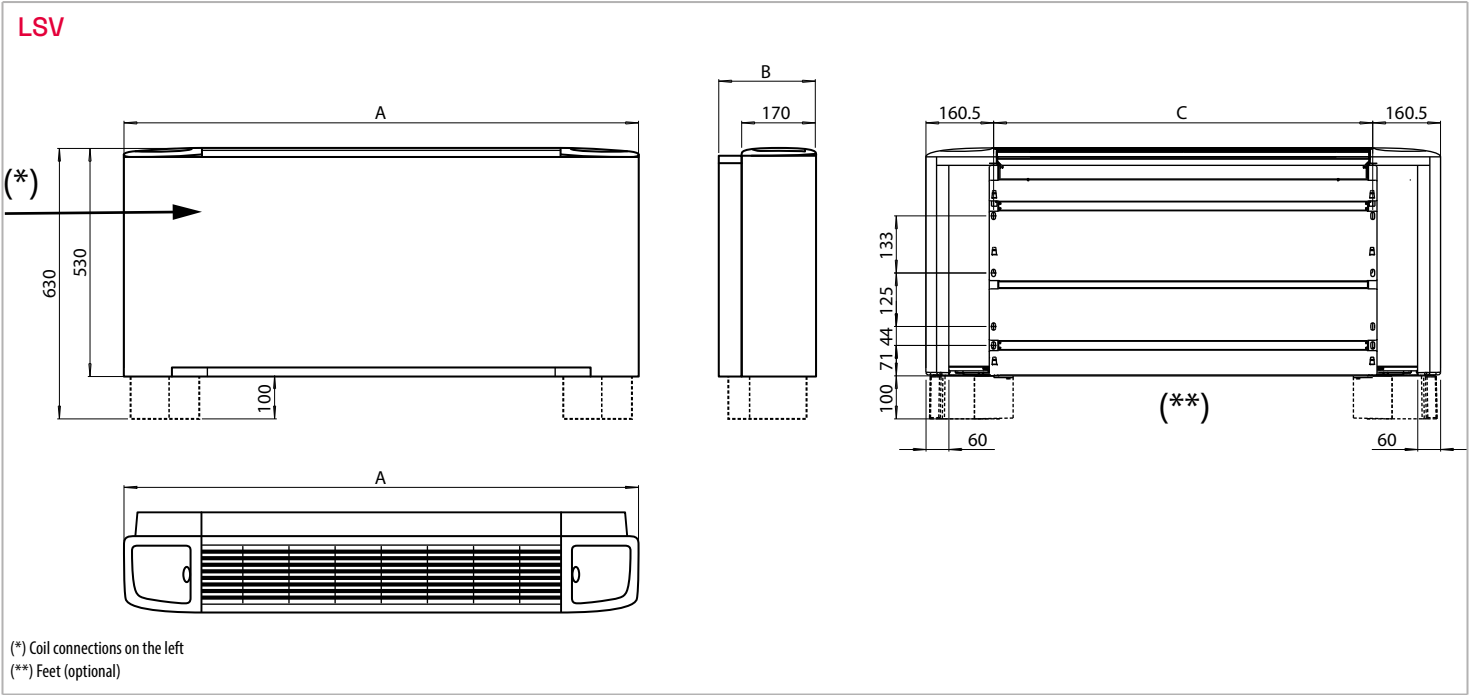
Water temperature: +65 °C E.W.T. +55 °C L.W.T.

| MODEL                       |       | ALLEGRA-ECM 2.3-4T |      |      |      |      | ALLEGRA-ECM 4.3-4T |      |      |      |      | ALLEGRA-ECM 6.3-4T |      |      |      |      |
|-----------------------------|-------|--------------------|------|------|------|------|--------------------|------|------|------|------|--------------------|------|------|------|------|
| INVERTER SPEED SIGNAL (VDC) |       | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5    | 7,5  | 10   |
|                             |       | MIN                |      | MED  |      | MAX  | MIN                |      | MED  |      | MAX  | MIN                |      | MED  |      | MAX  |
| Air flow                    | m³/h  | 120                | 170  | 220  | 270  | 330  | 210                | 280  | 350  | 430  | 515  | 305                | 395  | 495  | 610  | 735  |
| Cooling total emission      | kW    | 0,73               | 0,97 | 1,18 | 1,37 | 1,59 | 1,41               | 1,80 | 2,18 | 2,57 | 2,95 | 1,96               | 2,44 | 2,93 | 3,44 | 3,96 |
| Cooling sensible emission   | kW    | 0,55               | 0,74 | 0,92 | 1,09 | 1,28 | 1,03               | 1,33 | 1,64 | 1,95 | 2,26 | 1,46               | 1,83 | 2,22 | 2,64 | 3,08 |
| Heating emission            | kW    | 0,71               | 0,91 | 1,08 | 1,24 | 1,43 | 1,29               | 1,57 | 1,85 | 2,13 | 2,41 | 1,76               | 2,10 | 2,45 | 2,83 | 3,22 |
| Dp Cooling                  | kPa   | 2,3                | 3,8  | 5,4  | 7,2  | 9,4  | 7,3                | 11,5 | 16,0 | 21,6 | 28,1 | 6,4                | 9,6  | 13,2 | 17,7 | 23,3 |
| Dp Heating                  | kPa   | 1,0                | 1,6  | 2,1  | 2,7  | 3,5  | 3,6                | 5,2  | 6,9  | 8,8  | 11,0 | 1,2                | 1,7  | 2,2  | 2,9  | 3,6  |
| Fan                         | W     | 7,0                | 9,0  | 11,0 | 14,5 | 21,0 | 6,0                | 9,0  | 12,0 | 17,0 | 25,0 | 7,0                | 10,0 | 15,0 | 22,0 | 32,0 |
| Sound power (Lw)            | dB(A) | 30                 | 36   | 41   | 47   | 51   | 30                 | 36   | 42   | 47   | 51   | 33                 | 38   | 44   | 49   | 54   |
| Sound pressure (Lp) (1)     | dB(A) | 21                 | 27   | 32   | 38   | 42   | 21                 | 27   | 33   | 38   | 42   | 24                 | 29   | 35   | 40   | 45   |

| MODEL                       |       | ALLEGRA-ECM 7.3-4T |      |      |      |      | ALLEGRA-ECM 9.3-4T |      |          |      |          |
|-----------------------------|-------|--------------------|------|------|------|------|--------------------|------|----------|------|----------|
| INVERTER SPEED SIGNAL (VDC) |       | 1                  | 3    | 5    | 7,5  | 10   | 1                  | 3    | 5        | 7,5  | 10       |
|                             |       | MIN                |      | MED  |      | MAX  | MIN                |      | MED      |      | MAX      |
| Air flow                    | m³/h  | 400                | 500  | 610  | 755  | 890  | 605                | 785  | 945      | 1175 | 1395     |
| Cooling total emission      | kW    | 2,60               | 3,13 | 3,68 | 4,36 | 4,94 | 3,45               | 4,22 | 4,82     | 5,60 | 6,26     |
| Cooling sensible emission   | kW    | 1,92               | 2,33 | 2,77 | 3,32 | 3,80 | 2,63               | 3,28 | 3,79     | 4,49 | 5,10     |
| Heating emission            | kW    | 2,33               | 2,72 | 3,12 | 3,63 | 4,06 | 2,99               | 3,58 | 4,05     | 4,69 | 5,24     |
| Dp Cooling                  | kPa   | 9,7                | 13,8 | 18,4 | 24,8 | 31,8 | 8,9                | 12,7 | 16,1     | 21,1 | 25,9     |
| Dp Heating                  | kPa   | 2,4                | 3,1  | 4,0  | 5,2  | 6,3  | 3,7                | 5,1  | 6,3      | 8,2  | 9,9      |
| Fan                         | W     | 9,0                | 13,0 | 18,5 | 28,5 | 41,0 | 16,0 (2)           | 25,0 | 41,0 (2) | 65,0 | 99,0 (2) |
| Sound power (Lw)            | dB(A) | 37                 | 43   | 48   | 53   | 57   | 44                 | 50   | 55       | 60   | 64       |
| Sound pressure (Lp) (1)     | dB(A) | 28                 | 34   | 39   | 44   | 48   | 35                 | 41   | 46       | 51   | 55       |

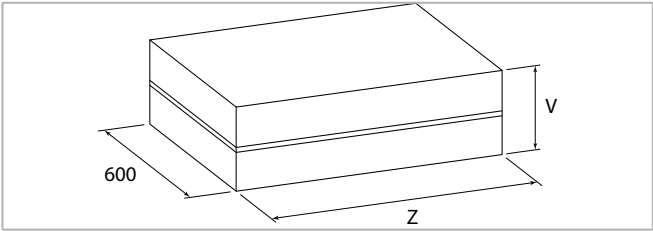
(1) The sound pressure levels are 9 dB (A) lower than the sound power levels, apply to the reverberant field of a 100 m³ room and a reverberation time of 0.5 sec.

(2) Motor absorption in Heating mode: MIN: 18 W / MED: 46 W / MAX: 111 W



| MODEL |    | ALLEGRA-ECM 2 | ALLEGRA-ECM 4 | ALLEGRA-ECM 6 | ALLEGRA-ECM 7 | ALLEGRA-ECM 9 |
|-------|----|---------------|---------------|---------------|---------------|---------------|
| A     | mm | 775           | 990           | 1205          | 1420          |               |
| B     | mm |               | 225           |               |               | 255           |
| C     | mm | 454           | 669           | 884           | 1099          |               |

PACKED UNIT



| MODEL |    | 2   | 4    | 6    | 7    | 9   |
|-------|----|-----|------|------|------|-----|
| V     | mm | 260 |      |      |      | 290 |
| Z     | mm | 820 | 1035 | 1250 | 1465 |     |

WEIGHT (KG)

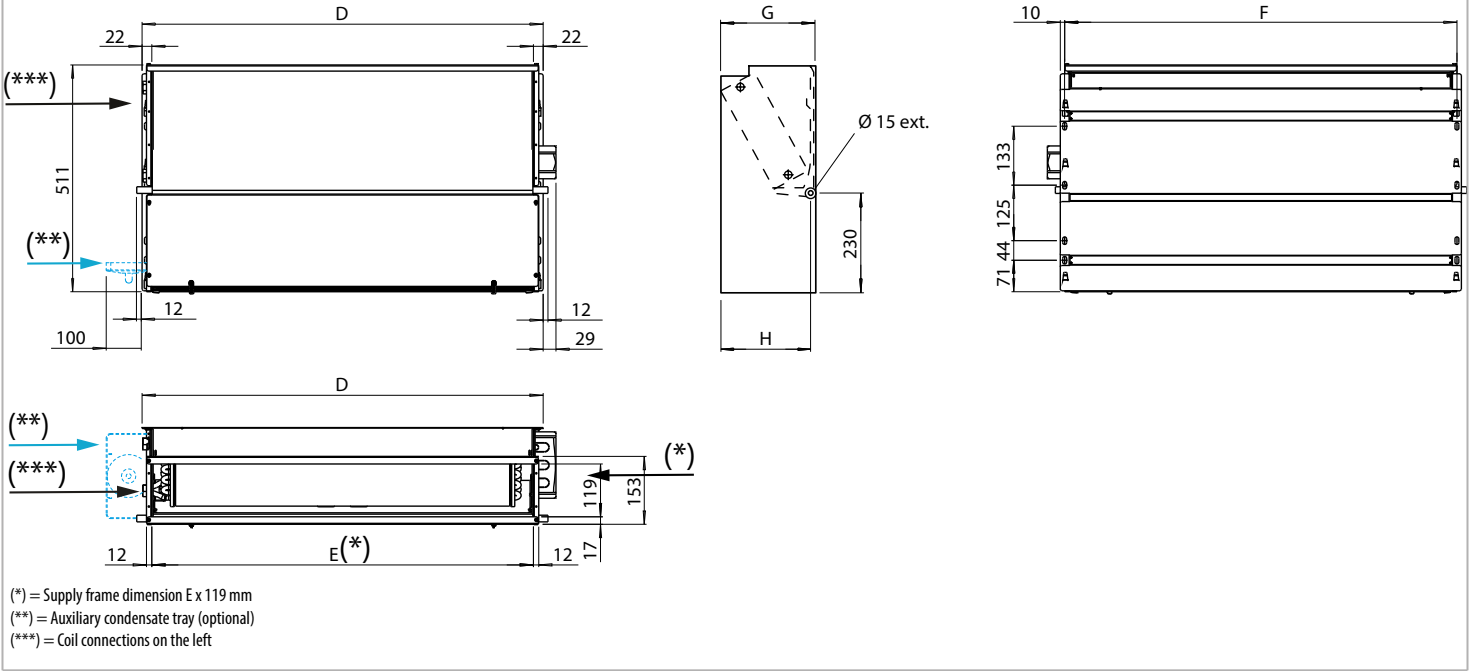
Weight with packaging

| MODEL    | 2    | 4    | 6    | 7    | 9    |
|----------|------|------|------|------|------|
| 3 rows   | 17,2 | 22,5 | 27,7 | 32,1 | 35,9 |
| 3+1 rows | 18,0 | 23,7 | 29,2 | 33,9 | 37,7 |
| 3+2 rows | 18,6 | 24,4 | 30,1 | 35,0 | 38,8 |
| 4 rows   | 18,0 | 23,5 | 29,0 | 33,6 | 37,4 |
| 4+1 rows | 18,8 | 24,7 | 30,5 | 35,4 | 39,2 |

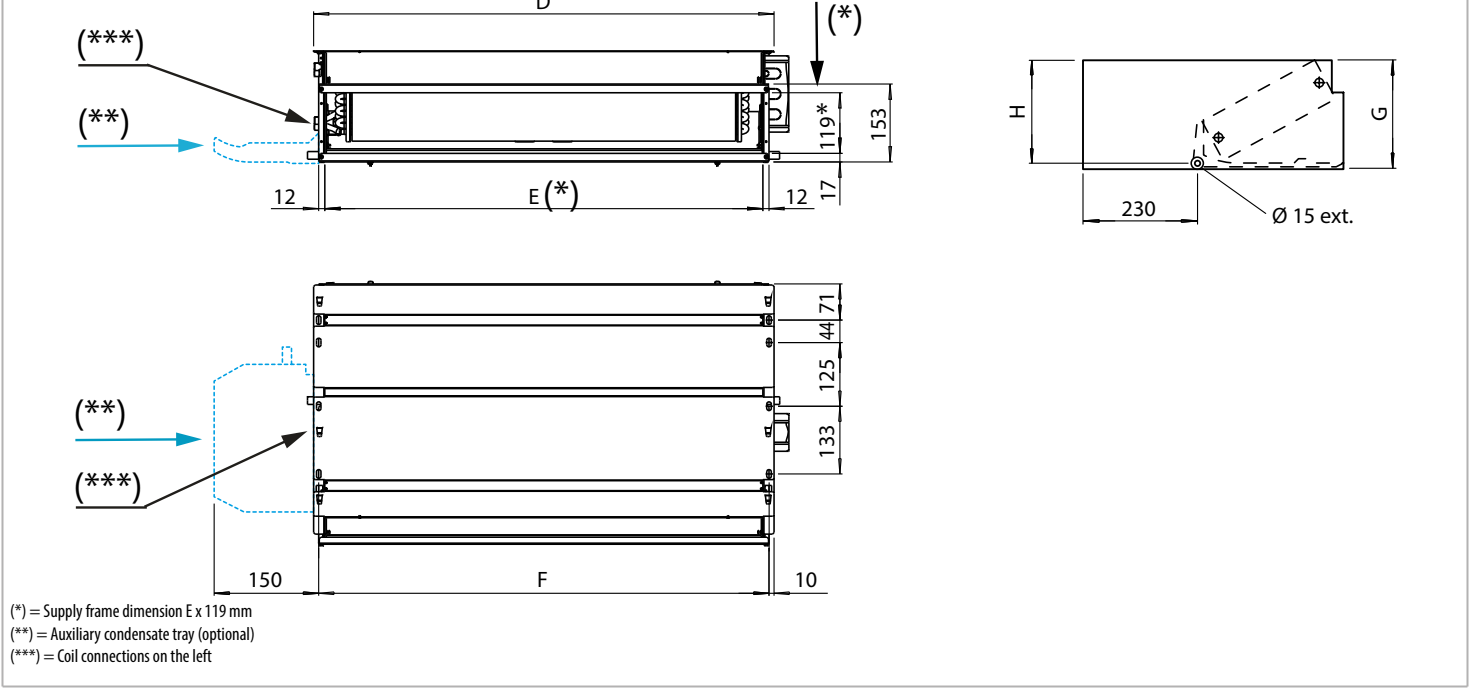
Weight without packaging

| MODEL    | 2    | 4    | 6    | 7    | 9    |
|----------|------|------|------|------|------|
| 3 rows   | 15,4 | 20,2 | 24,9 | 28,8 | 32,2 |
| 3+1 rows | 16,2 | 21,4 | 26,4 | 30,6 | 34,0 |
| 3+2 rows | 16,8 | 22,1 | 27,3 | 31,7 | 35,1 |
| 4 rows   | 16,2 | 21,2 | 26,2 | 30,3 | 33,7 |
| 4+1 rows | 17,0 | 22,4 | 27,7 | 32,1 | 35,5 |

LSN VERTICAL INSTALLATION

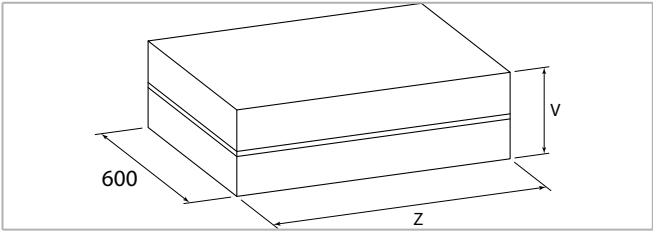


LSN HORIZONTAL INSTALLATION



| MODEL |    | ALLEGRA-ECM 2 | ALLEGRA-ECM 4 | ALLEGRA-ECM 6 | ALLEGRA-ECM 7 | ALLEGRA-ECM 9 |
|-------|----|---------------|---------------|---------------|---------------|---------------|
| D     | mm | 474           | 689           | 904           | 1119          |               |
| E     | mm | 430           | 645           | 860           | 1075          |               |
| F     | mm | 454           | 669           | 884           | 1099          |               |

PACKED UNIT



| MODEL |    | 2   | 4    | 6    | 7 | 9   |
|-------|----|-----|------|------|---|-----|
| V     | mm | 260 |      |      |   | 290 |
| Z     | mm | 820 | 1035 | 1250 |   |     |

WEIGHT (KG)

Weight with packaging

| MODEL    | 2    | 4    | 6    | 7    | 9    |
|----------|------|------|------|------|------|
| 3 rows   | 13,6 | 18,1 | 22,8 | 27,0 | 30,4 |
| 3+1 rows | 14,4 | 19,3 | 24,3 | 28,8 | 32,2 |
| 3+2 rows | 15,0 | 20,0 | 25,2 | 29,9 | 33,3 |
| 4 rows   | 14,4 | 19,1 | 24,1 | 28,5 | 31,9 |
| 4+1 rows | 15,2 | 20,3 | 25,6 | 30,3 | 33,7 |

Weight without packaging

| MODEL    | 2    | 4    | 6    | 7    | 9    |
|----------|------|------|------|------|------|
| 3 rows   | 11,8 | 16,3 | 20,5 | 24,2 | 27,3 |
| 3+1 rows | 12,6 | 17,5 | 22,0 | 26,0 | 29,1 |
| 3+2 rows | 13,2 | 18,2 | 22,9 | 27,1 | 30,2 |
| 4 rows   | 12,6 | 17,3 | 21,8 | 25,7 | 28,8 |
| 4+1 rows | 13,4 | 18,5 | 23,3 | 27,5 | 30,6 |



NEXT LEVEL  
HVAC SOLUTIONS