



Insulated rectangular self-cleaning duct fan. Very low profile design. Backward curved centrifugal impeller. Casing manufactured from heavy gauge galvanised sheet steel. 50mm thickness of M0 glass fibre internal acoustic insulation. External rotor motor, speed controllable, Class F insulation. External wiring terminal box. Safety thermal overload protection.

**Motors**

Outer rotor motors. Single-phase models 230V-50Hz, IP54 or IP44 depending on models, adjustable via voltage inverter. Three-phase models 230/400V-50Hz, IP54, Class F, controllable by frequency inverter.

**Additional information**

They can be installed in any position.



**Inspection door**  
Inspection door that facilitates maintenance.



**Versatile design**  
Can be installed in any position.



**Centrifugal backward curved impeller**  
To prevent accumulation of dirtiness. Dynamically balanced.

## TECHNICAL CHARACTERISTICS

Before making any electrical connection ensure that the voltage and frequency of the mains electrical supply matches that of the fan data plate label.

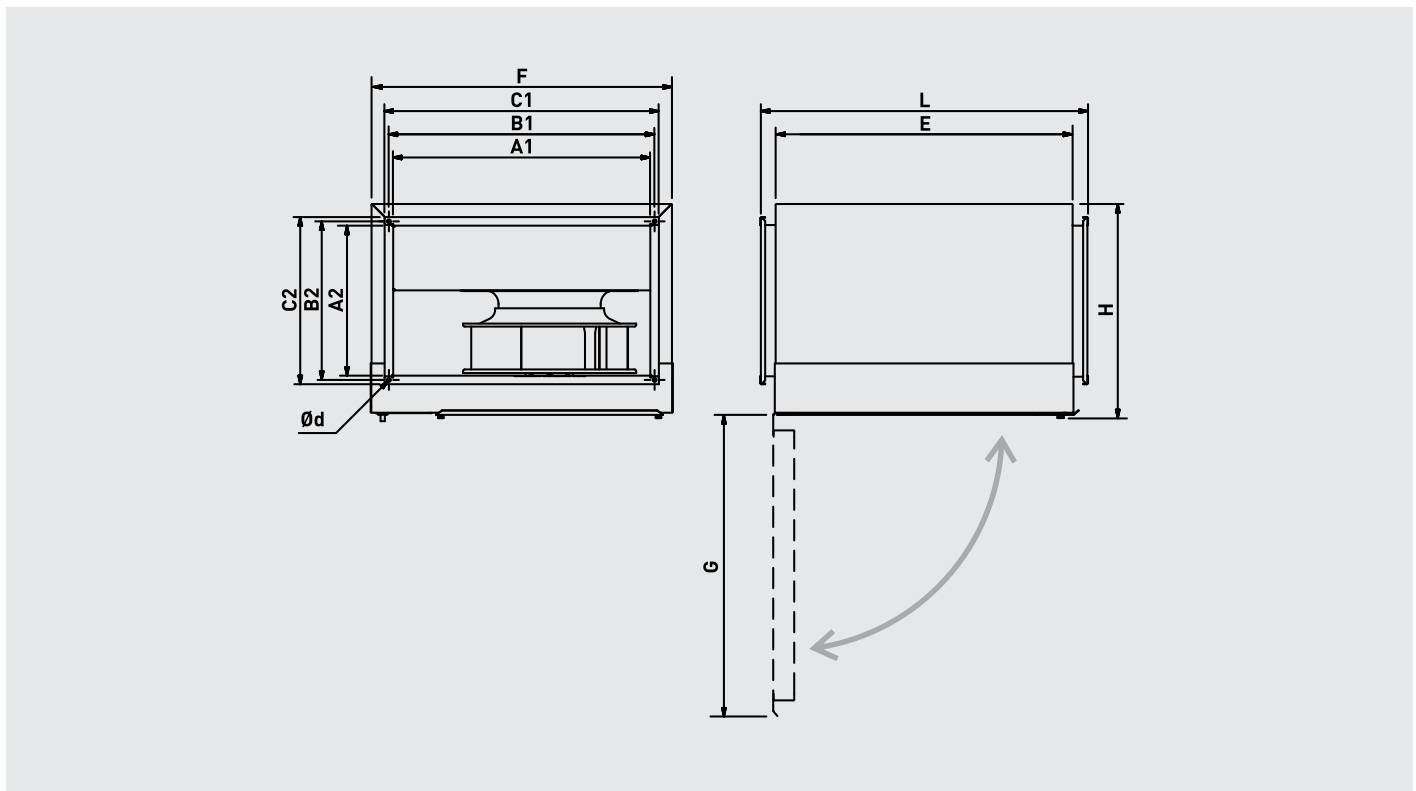
| Model          | Duct size (mm) | Speed (rpm) | Maximum absorbed power (W) | Maximum absorbed current (A) 230V | Maximum airflow (m³/h) | Sound pressure level* (dB(A)) |      |        | Max. air temp. (°C) | Weight (kg) | Speed controller RMB |
|----------------|----------------|-------------|----------------------------|-----------------------------------|------------------------|-------------------------------|------|--------|---------------------|-------------|----------------------|
|                |                |             |                            |                                   |                        | Inlet                         | Rad. | Outlet |                     |             |                      |
| IRAB/4-315 A N | 600x350        | 1397        | 278                        | 1,2                               | 2.620                  | 58                            | 48   | 66     | -40/70              | 54          | RMB-1,5              |
| IRAB/4-315 B N | 600x350        | 1388        | 569                        | 2,4                               | 3.710                  | 60                            | 50   | 70     | -40/70              | 57          | RMB-3,5              |
| IRAB/4-355 N   | 700x400        | 1402        | 845                        | 3,6                               | 5.600                  | 62                            | 51   | 74     | -40/50              | 66          | RMB-5                |

| Model          | Duct size (mm) | Speed (rpm) | Maximum absorbed power (W) | Maximum absorbed current (A) |      | Maximum airflow (m³/h) | Sound pressure level* (dB(A)) |      |        | Max. air temp. (°C) | Weight (kg) | Speed controller** RMT |
|----------------|----------------|-------------|----------------------------|------------------------------|------|------------------------|-------------------------------|------|--------|---------------------|-------------|------------------------|
|                |                |             |                            | 230V                         | 400V |                        | Inlet                         | Rad. | Outlet |                     |             |                        |
|                |                |             |                            |                              |      |                        |                               |      |        |                     |             |                        |
| IRAT/4-315 A N | 600x350        | 1400        | 244                        | 0,9                          | 0,5  | 2.550                  | 58                            | 47   | 66     | -40/50              | 52          | RMT-1,5                |
| IRAT/4-315 B N | 600x350        | 1415        | 568                        | 2,1                          | 1,2  | 3.850                  | 60                            | 50   | 69     | -40/70              | 55          | RMT-1,5                |
| IRAT/4-355 N   | 700x400        | 1400        | 813                        | 2,9                          | 1,7  | 5.560                  | 62                            | 53   | 73     | -40/60              | 64          | RMT-2,5                |
| IRAT/4-400 A N | 800x500        | 1430        | 1501                       | 5,5                          | 3,2  | 7.940                  | 64                            | 56   | 76     | -40/70              | 91          | RMT-5                  |
| IRAT/4-400 B N | 800x500        | 1395        | 2142                       | 6,9                          | 4,0  | 9.580                  | 65                            | 58   | 78     | -40/40              | 100         | RMT-5                  |
| IRAT/4-450 N   | 1000x500       | 1380        | 2379                       | 7,4                          | 4,3  | 10.720                 | 66                            | 60   | 80     | -40/40              | 125         | RMT-5                  |

\* Average sound pressure level, measured at 1,5 m in free field.

\*\* Speed regulator selection: see electric accessories section.

## DIMENSIONS (MM)

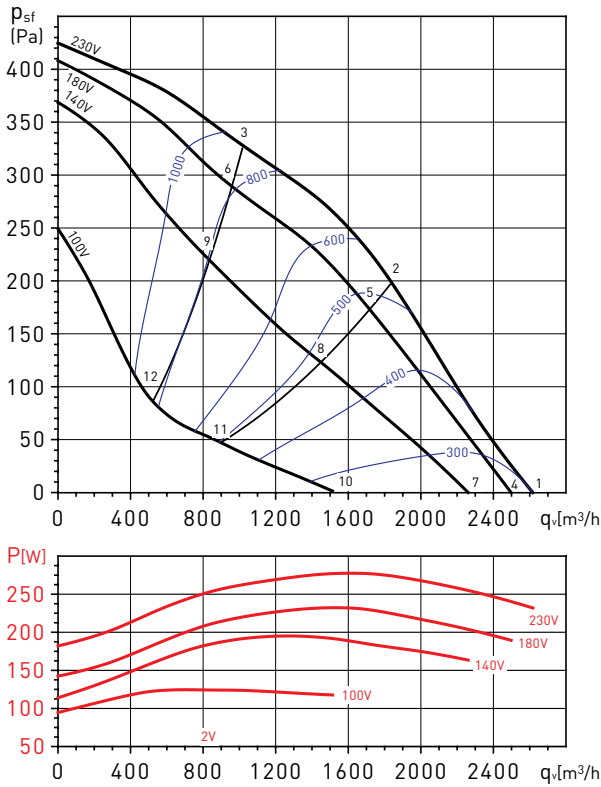


| Model | A1   | A2  | B1   | B2  | C1   | C2  | d | E    | F    | G   | H   | L    |
|-------|------|-----|------|-----|------|-----|---|------|------|-----|-----|------|
| 315   | 600  | 350 | 620  | 370 | 640  | 390 | 9 | 697  | 705  | 704 | 500 | 765  |
| 355   | 700  | 400 | 720  | 420 | 740  | 440 | 9 | 770  | 804  | 777 | 550 | 840  |
| 400   | 800  | 500 | 820  | 520 | 850  | 550 | 9 | 861  | 905  | 868 | 647 | 930  |
| 450   | 1000 | 500 | 1020 | 520 | 1050 | 550 | 9 | 1961 | 1104 | 968 | 655 | 1030 |

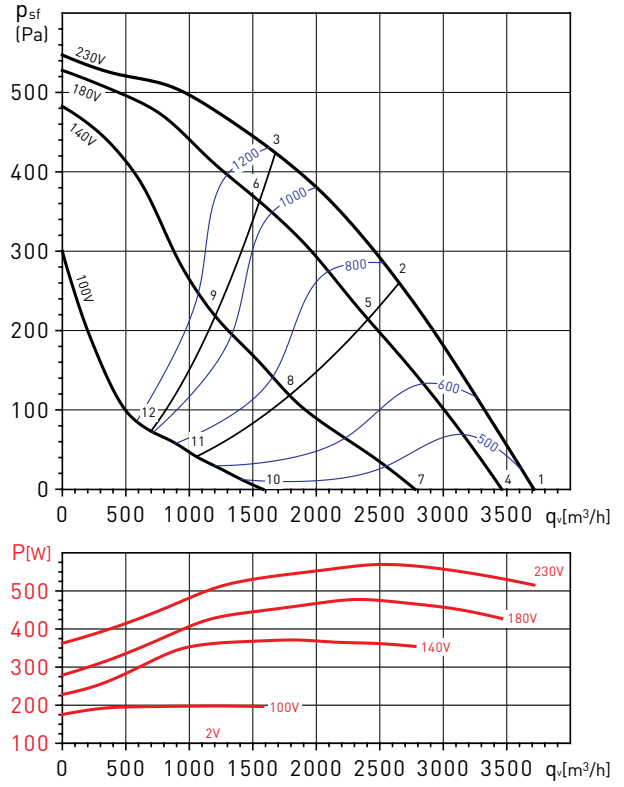
### PERFORMANCE CURVES

- $q_v$ : Airflow in  $m^3/h$  and  $m^3/s$ .
- $p_{sf}$ : Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- SFP: specific fan power in  $W/m^3/h$  (blue curves).
- P: Input power in W.

IRAB/4-315A N



IRAB/4-315B N



### Sound spectrum level in dB(A)

| Working point | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1 Inlet       | 49 | 71  | 64  | 65  | 62    | 58    | 56    | 47    | 73  |
| 1 Outlet      | 50 | 73  | 76  | 78  | 81    | 78    | 70    | 62    | 85  |
| 1 Radiated    | 45 | 58  | 54  | 52  | 53    | 50    | 49    | 37    | 62  |
| 2 Inlet       | 47 | 71  | 60  | 63  | 59    | 56    | 44    | 50    | 73  |
| 2 Outlet      | 47 | 71  | 74  | 75  | 76    | 71    | 57    | 64    | 81  |
| 2 Radiated    | 42 | 61  | 52  | 48  | 48    | 46    | 41    | 33    | 62  |
| 3 Inlet       | 52 | 65  | 59  | 61  | 59    | 56    | 44    | 51    | 68  |
| 3 Outlet      | 47 | 66  | 70  | 71  | 72    | 67    | 53    | 62    | 77  |
| 3 Radiated    | 45 | 51  | 49  | 45  | 48    | 45    | 41    | 34    | 56  |
| 4 Inlet       | 48 | 70  | 64  | 64  | 61    | 58    | 55    | 46    | 72  |
| 4 Outlet      | 50 | 72  | 75  | 77  | 80    | 77    | 69    | 61    | 84  |
| 4 Radiated    | 44 | 57  | 54  | 51  | 52    | 49    | 48    | 36    | 61  |
| 5 Inlet       | 45 | 70  | 59  | 62  | 58    | 54    | 43    | 49    | 72  |
| 5 Outlet      | 46 | 70  | 72  | 74  | 75    | 70    | 56    | 63    | 80  |
| 5 Radiated    | 41 | 60  | 51  | 46  | 47    | 45    | 40    | 32    | 61  |
| 6 Inlet       | 51 | 64  | 57  | 59  | 57    | 54    | 43    | 49    | 67  |
| 6 Outlet      | 45 | 64  | 68  | 69  | 71    | 65    | 51    | 60    | 75  |
| 6 Radiated    | 43 | 50  | 47  | 44  | 46    | 44    | 39    | 32    | 54  |
| 7 Inlet       | 46 | 67  | 61  | 62  | 59    | 55    | 53    | 44    | 70  |
| 7 Outlet      | 47 | 70  | 73  | 75  | 78    | 74    | 67    | 58    | 82  |
| 7 Radiated    | 42 | 55  | 51  | 49  | 50    | 47    | 46    | 34    | 59  |
| 8 Inlet       | 41 | 66  | 55  | 58  | 54    | 51    | 39    | 45    | 68  |
| 8 Outlet      | 42 | 66  | 69  | 70  | 71    | 66    | 52    | 59    | 76  |
| 8 Radiated    | 37 | 56  | 47  | 43  | 43    | 41    | 36    | 28    | 57  |
| 9 Inlet       | 47 | 61  | 54  | 56  | 54    | 51    | 40    | 46    | 64  |
| 9 Outlet      | 42 | 61  | 65  | 66  | 68    | 62    | 48    | 57    | 72  |
| 9 Radiated    | 40 | 46  | 44  | 41  | 43    | 41    | 36    | 29    | 51  |
| 10 Inlet      | 37 | 59  | 53  | 53  | 50    | 47    | 44    | 35    | 61  |
| 10 Outlet     | 39 | 61  | 64  | 66  | 69    | 66    | 58    | 50    | 73  |
| 10 Radiated   | 33 | 46  | 43  | 40  | 41    | 38    | 37    | 25    | 50  |
| 11 Inlet      | 31 | 56  | 45  | 48  | 44    | 40    | 29    | 34    | 57  |
| 11 Outlet     | 32 | 55  | 58  | 59  | 61    | 56    | 41    | 48    | 66  |
| 11 Radiated   | 26 | 46  | 36  | 32  | 33    | 31    | 26    | 18    | 47  |
| 12 Inlet      | 37 | 50  | 44  | 46  | 44    | 41    | 29    | 36    | 53  |
| 12 Outlet     | 32 | 51  | 55  | 56  | 57    | 52    | 38    | 47    | 62  |
| 12 Radiated   | 30 | 36  | 34  | 30  | 33    | 30    | 26    | 19    | 41  |

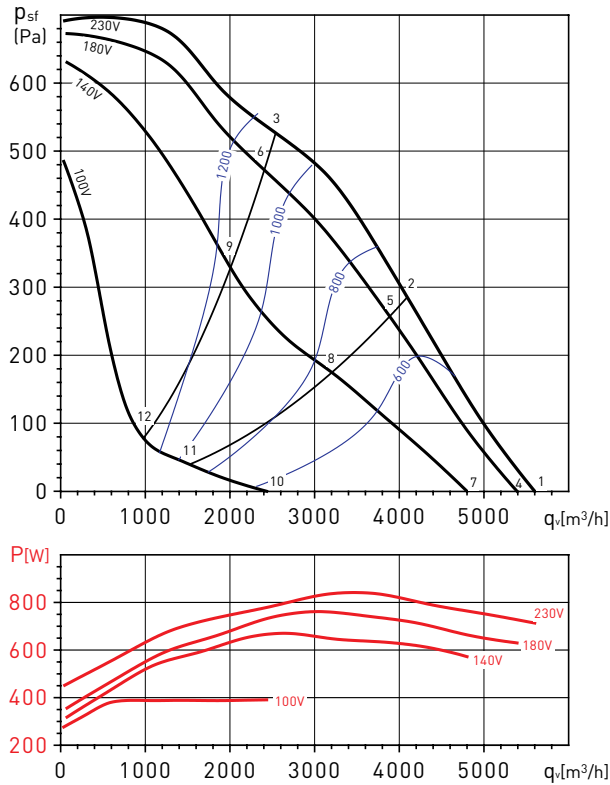
### Sound spectrum level in dB(A)

| Working point | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1 Inlet       | 54 | 73  | 68  | 69  | 64    | 62    | 59    | 53    | 76  |
| 1 Outlet      | 55 | 74  | 80  | 81  | 84    | 80    | 73    | 66    | 88  |
| 1 Radiated    | 48 | 60  | 57  | 55  | 54    | 50    | 47    | 42    | 64  |
| 2 Inlet       | 52 | 72  | 65  | 66  | 61    | 60    | 48    | 54    | 74  |
| 2 Outlet      | 53 | 71  | 77  | 78  | 80    | 74    | 60    | 67    | 84  |
| 2 Radiated    | 45 | 63  | 55  | 53  | 52    | 48    | 42    | 37    | 64  |
| 3 Inlet       | 55 | 67  | 61  | 63  | 60    | 59    | 47    | 53    | 70  |
| 3 Outlet      | 51 | 68  | 72  | 74  | 75    | 70    | 57    | 65    | 80  |
| 3 Radiated    | 46 | 56  | 52  | 50  | 52    | 47    | 42    | 37    | 60  |
| 4 Inlet       | 53 | 71  | 67  | 68  | 63    | 61    | 57    | 51    | 74  |
| 4 Outlet      | 54 | 72  | 78  | 80  | 83    | 78    | 71    | 64    | 87  |
| 4 Radiated    | 46 | 59  | 56  | 53  | 52    | 49    | 45    | 40    | 62  |
| 5 Inlet       | 50 | 71  | 63  | 64  | 60    | 58    | 46    | 52    | 73  |
| 5 Outlet      | 51 | 69  | 75  | 76  | 78    | 73    | 58    | 65    | 82  |
| 5 Radiated    | 44 | 61  | 53  | 51  | 50    | 46    | 40    | 36    | 63  |
| 6 Inlet       | 53 | 65  | 59  | 61  | 58    | 57    | 45    | 51    | 68  |
| 6 Outlet      | 49 | 66  | 70  | 72  | 73    | 68    | 55    | 63    | 78  |
| 6 Radiated    | 44 | 54  | 50  | 48  | 50    | 45    | 40    | 35    | 58  |
| 7 Inlet       | 48 | 66  | 62  | 63  | 58    | 56    | 53    | 47    | 70  |
| 7 Outlet      | 49 | 67  | 74  | 75  | 78    | 73    | 67    | 59    | 82  |
| 7 Radiated    | 42 | 54  | 51  | 49  | 48    | 44    | 40    | 36    | 58  |
| 8 Inlet       | 44 | 64  | 56  | 58  | 53    | 51    | 39    | 45    | 66  |
| 8 Outlet      | 44 | 63  | 69  | 70  | 71    | 66    | 51    | 58    | 76  |
| 8 Radiated    | 37 | 55  | 47  | 44  | 44    | 39    | 34    | 29    | 56  |
| 9 Inlet       | 47 | 60  | 54  | 55  | 53    | 52    | 40    | 46    | 63  |
| 9 Outlet      | 43 | 61  | 65  | 67  | 68    | 63    | 49    | 58    | 73  |
| 9 Radiated    | 39 | 49  | 45  | 43  | 45    | 40    | 35    | 30    | 52  |
| 10 Inlet      | 36 | 54  | 50  | 51  | 45    | 43    | 40    | 34    | 57  |
| 10 Outlet     | 37 | 55  | 61  | 63  | 66    | 61    | 54    | 47    | 69  |
| 10 Radiated   | 29 | 41  | 38  | 36  | 35    | 32    | 28    | 23    | 45  |
| 11 Inlet      | 32 | 52  | 45  | 46  | 41    | 40    | 27    | 34    | 54  |
| 11 Outlet     | 32 | 51  | 57  | 58  | 60    | 54    | 40    | 46    | 64  |
| 11 Radiated   | 25 | 43  | 35  | 33  | 32    | 28    | 22    | 17    | 44  |
| 12 Inlet      | 35 | 48  | 42  | 43  | 41    | 39    | 28    | 34    | 51  |
| 12 Outlet     | 31 | 49  | 52  | 55  | 56    | 51    | 37    | 46    | 60  |
| 12 Radiated   | 27 | 36  | 33  | 31  | 32    | 28    | 23    | 18    | 40  |

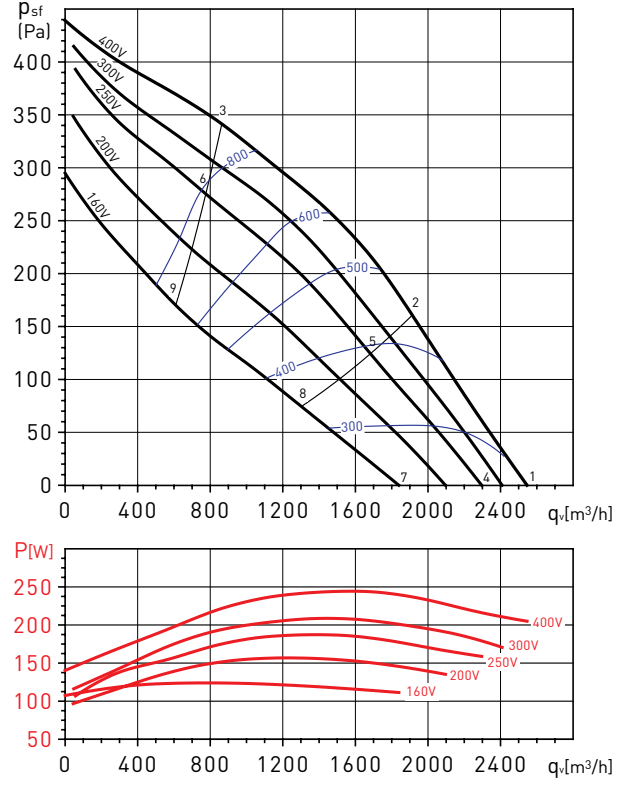
### PERFORMANCE CURVES

- $q_v$ : Airflow in  $m^3/h$  and  $m^3/s$ .
- $p_{sf}$ : Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- SFP: specific fan power in  $W/m^3/h$  (blue curves).
- P: Input power in W.

IRAB/4-355 N



IRAT/4-315A N



### Sound spectrum level in dB(A)

| Working point |          | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1             | Inlet    | 58 | 75  | 70  | 73  | 66    | 66    | 61    | 58    | 78  |
|               | Outlet   | 61 | 75  | 84  | 86  | 89    | 83    | 78    | 72    | 92  |
|               | Radiated | 54 | 65  | 63  | 61  | 57    | 53    | 49    | 50    | 69  |
| 2             | Inlet    | 57 | 74  | 68  | 68  | 63    | 63    | 50    | 55    | 76  |
|               | Outlet   | 60 | 73  | 81  | 82  | 84    | 77    | 65    | 70    | 88  |
|               | Radiated | 48 | 63  | 59  | 57  | 54    | 48    | 42    | 41    | 66  |
| 3             | Inlet    | 56 | 69  | 64  | 65  | 62    | 61    | 48    | 56    | 72  |
|               | Outlet   | 55 | 69  | 75  | 77  | 78    | 74    | 61    | 67    | 83  |
|               | Radiated | 49 | 60  | 55  | 55  | 54    | 50    | 44    | 42    | 63  |
| 4             | Inlet    | 57 | 74  | 69  | 72  | 65    | 65    | 60    | 57    | 77  |
|               | Outlet   | 61 | 74  | 83  | 85  | 88    | 82    | 77    | 71    | 91  |
|               | Radiated | 53 | 65  | 62  | 60  | 57    | 52    | 48    | 49    | 68  |
| 5             | Inlet    | 56 | 73  | 67  | 68  | 63    | 62    | 49    | 54    | 76  |
|               | Outlet   | 59 | 72  | 80  | 81  | 83    | 77    | 64    | 69    | 87  |
|               | Radiated | 48 | 62  | 58  | 56  | 54    | 48    | 42    | 40    | 65  |
| 6             | Inlet    | 55 | 68  | 62  | 63  | 60    | 60    | 47    | 54    | 71  |
|               | Outlet   | 53 | 68  | 74  | 75  | 77    | 72    | 60    | 66    | 81  |
|               | Radiated | 48 | 58  | 54  | 54  | 53    | 49    | 43    | 40    | 62  |
| 7             | Inlet    | 55 | 71  | 66  | 69  | 63    | 62    | 57    | 54    | 75  |
|               | Outlet   | 58 | 71  | 80  | 83  | 85    | 79    | 74    | 68    | 89  |
|               | Radiated | 51 | 62  | 59  | 57  | 54    | 49    | 45    | 47    | 65  |
| 8             | Inlet    | 51 | 69  | 62  | 63  | 58    | 57    | 44    | 50    | 71  |
|               | Outlet   | 55 | 67  | 76  | 76  | 79    | 72    | 59    | 65    | 82  |
|               | Radiated | 43 | 58  | 53  | 51  | 49    | 43    | 37    | 35    | 60  |
| 9             | Inlet    | 51 | 64  | 58  | 59  | 56    | 56    | 43    | 50    | 67  |
|               | Outlet   | 49 | 64  | 70  | 71  | 73    | 68    | 56    | 62    | 77  |
|               | Radiated | 44 | 54  | 50  | 50  | 49    | 45    | 39    | 36    | 58  |
| 10            | Inlet    | 40 | 57  | 52  | 55  | 48    | 48    | 43    | 40    | 60  |
|               | Outlet   | 43 | 57  | 66  | 68  | 71    | 65    | 60    | 54    | 74  |
|               | Radiated | 36 | 47  | 45  | 43  | 39    | 35    | 31    | 32    | 51  |
| 11            | Inlet    | 35 | 53  | 46  | 47  | 42    | 41    | 28    | 34    | 55  |
|               | Outlet   | 39 | 51  | 60  | 61  | 63    | 56    | 43    | 49    | 67  |
|               | Radiated | 27 | 42  | 37  | 35  | 33    | 27    | 21    | 20    | 44  |
| 12            | Inlet    | 35 | 48  | 43  | 44  | 41    | 40    | 28    | 35    | 52  |
|               | Outlet   | 34 | 48  | 55  | 56  | 58    | 53    | 40    | 47    | 62  |
|               | Radiated | 29 | 39  | 35  | 34  | 34    | 29    | 24    | 21    | 42  |

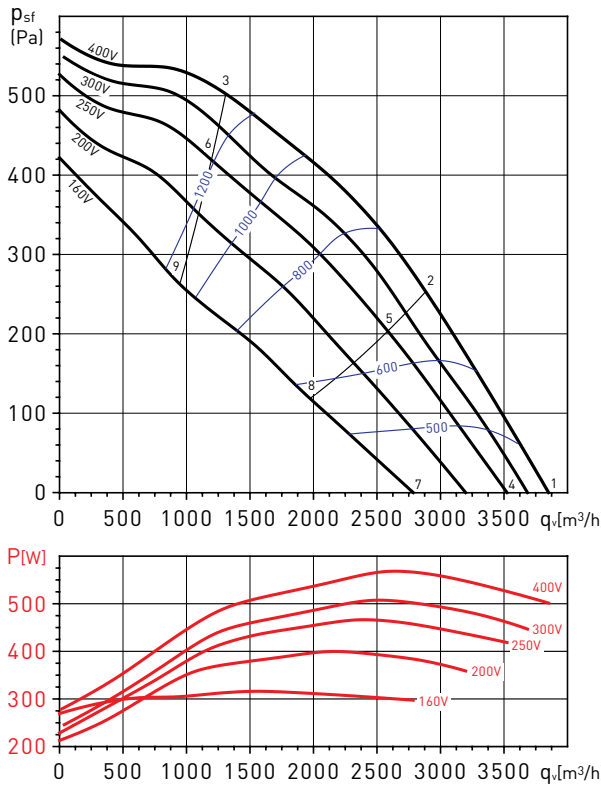
### Sound spectrum level in dB(A)

| Working point |          | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1             | Inlet    | 48 | 72  | 63  | 64  | 61    | 58    | 57    | 48    | 74  |
|               | Outlet   | 50 | 70  | 75  | 77  | 80    | 76    | 69    | 61    | 84  |
|               | Radiated | 44 | 60  | 55  | 51  | 51    | 51    | 50    | 40    | 62  |
| 2             | Inlet    | 47 | 71  | 59  | 63  | 57    | 55    | 51    | 43    | 72  |
|               | Outlet   | 47 | 67  | 73  | 74  | 76    | 71    | 64    | 55    | 80  |
|               | Radiated | 43 | 60  | 53  | 47  | 48    | 48    | 45    | 36    | 61  |
| 3             | Inlet    | 52 | 65  | 59  | 61  | 57    | 56    | 51    | 45    | 68  |
|               | Outlet   | 49 | 66  | 69  | 71  | 73    | 67    | 61    | 54    | 77  |
|               | Radiated | 48 | 52  | 50  | 46  | 47    | 47    | 43    | 36    | 57  |
| 4             | Inlet    | 46 | 70  | 61  | 62  | 58    | 56    | 55    | 46    | 71  |
|               | Outlet   | 48 | 68  | 73  | 75  | 78    | 74    | 67    | 59    | 82  |
|               | Radiated | 42 | 57  | 53  | 49  | 49    | 49    | 48    | 38    | 60  |
| 5             | Inlet    | 44 | 69  | 57  | 60  | 55    | 53    | 48    | 41    | 70  |
|               | Outlet   | 45 | 64  | 70  | 71  | 73    | 68    | 61    | 52    | 77  |
|               | Radiated | 41 | 57  | 51  | 45  | 45    | 45    | 42    | 33    | 59  |
| 6             | Inlet    | 50 | 63  | 56  | 58  | 55    | 53    | 48    | 42    | 66  |
|               | Outlet   | 47 | 63  | 67  | 69  | 70    | 65    | 59    | 52    | 75  |
|               | Radiated | 45 | 50  | 48  | 43  | 45    | 45    | 41    | 34    | 55  |
| 7             | Inlet    | 41 | 65  | 56  | 58  | 54    | 52    | 50    | 41    | 67  |
|               | Outlet   | 44 | 63  | 68  | 70  | 74    | 69    | 63    | 54    | 77  |
|               | Radiated | 38 | 53  | 48  | 44  | 44    | 44    | 44    | 33    | 56  |
| 8             | Inlet    | 38 | 63  | 51  | 54  | 49    | 47    | 43    | 35    | 64  |
|               | Outlet   | 39 | 59  | 65  | 66  | 68    | 63    | 56    | 47    | 72  |
|               | Radiated | 35 | 51  | 45  | 39  | 40    | 40    | 37    | 28    | 53  |
| 9             | Inlet    | 45 | 58  | 51  | 53  | 50    | 48    | 43    | 37    | 61  |
|               | Outlet   | 41 | 58  | 62  | 64  | 65    | 60    | 54    | 47    | 70  |
|               | Radiated | 40 | 45  | 43  | 38  | 40    | 40    | 36    | 29    | 50  |

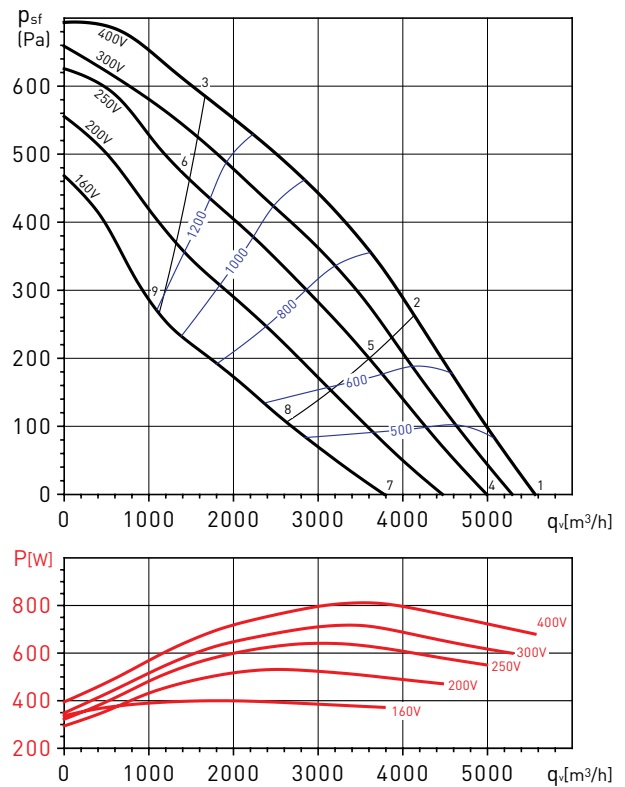
### PERFORMANCE CURVES

- $q_v$ : Airflow in  $m^3/h$  and  $m^3/s$ .
- $p_{sf}$ : Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- SFP: specific fan power in  $W/m^3/h$  (blue curves).
- P: Input power in W.

IRAT/4-315B N



IRAT/4-355 N



### Sound spectrum level in dB(A)

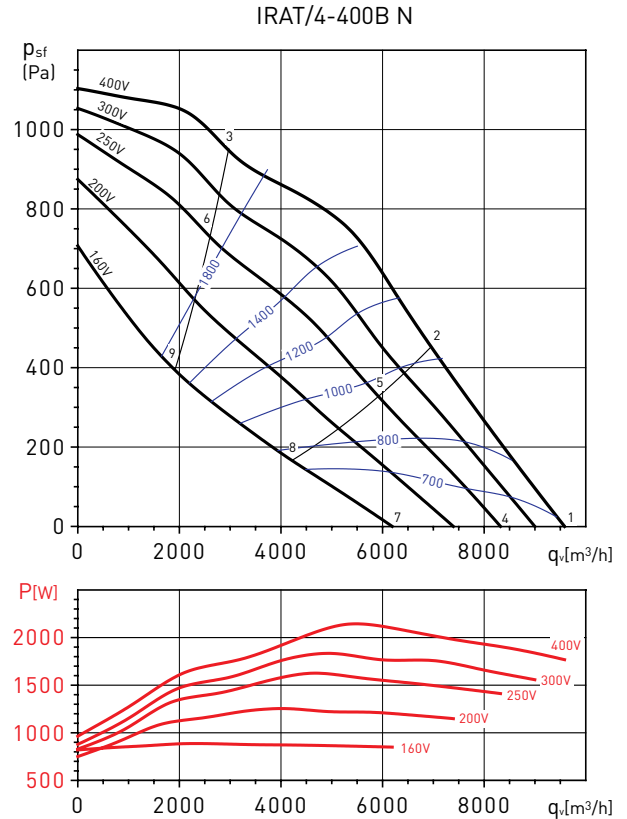
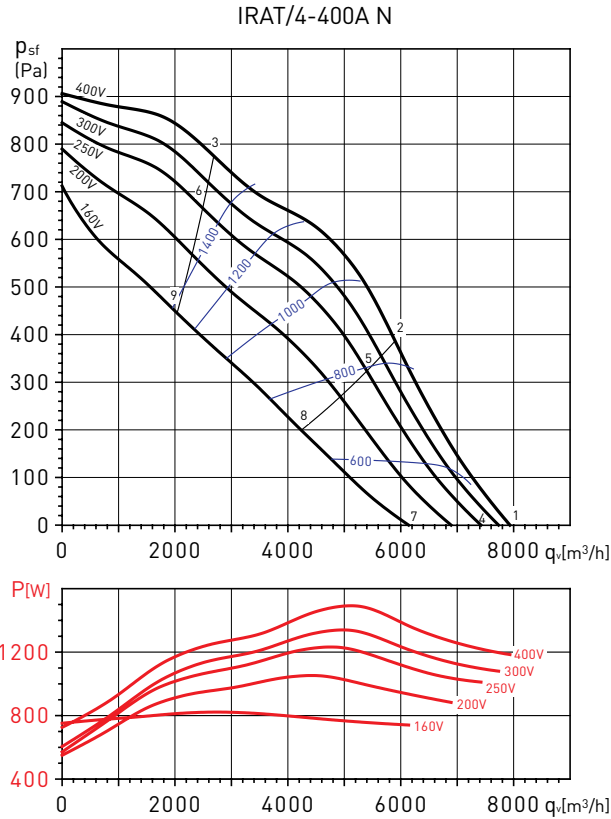
| Working point |          | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1             | Inlet    | 54 | 74  | 68  | 70  | 66    | 63    | 61    | 54    | 77  |
|               | Outlet   | 55 | 73  | 79  | 82  | 84    | 79    | 73    | 65    | 88  |
|               | Radiated | 49 | 63  | 60  | 58  | 56    | 54    | 52    | 45    | 67  |
| 2             | Inlet    | 52 | 72  | 64  | 67  | 62    | 60    | 55    | 48    | 75  |
|               | Outlet   | 52 | 70  | 76  | 78  | 80    | 74    | 68    | 59    | 84  |
|               | Radiated | 47 | 62  | 58  | 55  | 53    | 51    | 46    | 39    | 64  |
| 3             | Inlet    | 55 | 67  | 62  | 64  | 61    | 60    | 55    | 49    | 71  |
|               | Outlet   | 53 | 68  | 73  | 75  | 77    | 72    | 66    | 59    | 81  |
|               | Radiated | 50 | 56  | 55  | 53  | 53    | 51    | 46    | 41    | 61  |
| 4             | Inlet    | 52 | 72  | 66  | 68  | 64    | 62    | 59    | 52    | 75  |
|               | Outlet   | 53 | 71  | 77  | 80  | 82    | 77    | 71    | 63    | 86  |
|               | Radiated | 47 | 61  | 58  | 56  | 54    | 52    | 50    | 43    | 65  |
| 5             | Inlet    | 50 | 70  | 62  | 64  | 60    | 58    | 53    | 46    | 72  |
|               | Outlet   | 50 | 68  | 74  | 76  | 78    | 72    | 65    | 57    | 82  |
|               | Radiated | 45 | 59  | 55  | 52  | 51    | 48    | 44    | 37    | 62  |
| 6             | Inlet    | 53 | 65  | 60  | 62  | 59    | 58    | 53    | 47    | 69  |
|               | Outlet   | 51 | 67  | 71  | 73  | 75    | 70    | 64    | 57    | 79  |
|               | Radiated | 48 | 55  | 53  | 51  | 51    | 49    | 44    | 39    | 60  |
| 7             | Inlet    | 47 | 66  | 61  | 63  | 58    | 56    | 54    | 47    | 69  |
|               | Outlet   | 48 | 66  | 72  | 74  | 77    | 72    | 66    | 58    | 81  |
|               | Radiated | 42 | 56  | 53  | 51  | 49    | 47    | 44    | 37    | 59  |
| 8             | Inlet    | 44 | 64  | 56  | 59  | 54    | 52    | 47    | 40    | 66  |
|               | Outlet   | 44 | 62  | 68  | 70  | 72    | 66    | 60    | 51    | 76  |
|               | Radiated | 39 | 54  | 49  | 46  | 45    | 43    | 38    | 31    | 56  |
| 9             | Inlet    | 48 | 60  | 55  | 57  | 55    | 53    | 48    | 42    | 64  |
|               | Outlet   | 46 | 62  | 66  | 68  | 70    | 65    | 59    | 52    | 74  |
|               | Radiated | 43 | 50  | 48  | 46  | 46    | 44    | 39    | 34    | 55  |

### Sound spectrum level in dB(A)

| Working point |          | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1             | Inlet    | 58 | 73  | 71  | 73  | 68    | 66    | 63    | 57    | 78  |
|               | Outlet   | 59 | 76  | 84  | 86  | 88    | 83    | 77    | 70    | 92  |
|               | Radiated | 52 | 65  | 65  | 64  | 60    | 56    | 52    | 48    | 70  |
| 2             | Inlet    | 57 | 73  | 68  | 70  | 66    | 64    | 58    | 52    | 76  |
|               | Outlet   | 57 | 74  | 80  | 82  | 84    | 78    | 72    | 63    | 88  |
|               | Radiated | 50 | 63  | 61  | 60  | 57    | 53    | 46    | 42    | 67  |
| 3             | Inlet    | 56 | 67  | 65  | 66  | 64    | 63    | 58    | 53    | 73  |
|               | Outlet   | 55 | 70  | 76  | 78  | 80    | 75    | 69    | 63    | 84  |
|               | Radiated | 51 | 60  | 59  | 59  | 57    | 53    | 48    | 44    | 65  |
| 4             | Inlet    | 56 | 71  | 68  | 70  | 66    | 64    | 61    | 55    | 76  |
|               | Outlet   | 57 | 74  | 81  | 83  | 86    | 80    | 75    | 67    | 90  |
|               | Radiated | 50 | 62  | 62  | 62  | 58    | 54    | 50    | 46    | 68  |
| 5             | Inlet    | 53 | 70  | 65  | 67  | 63    | 61    | 55    | 49    | 73  |
|               | Outlet   | 54 | 71  | 77  | 79  | 81    | 75    | 69    | 60    | 85  |
|               | Radiated | 47 | 60  | 58  | 57  | 54    | 49    | 43    | 39    | 64  |
| 6             | Inlet    | 54 | 65  | 62  | 63  | 62    | 60    | 56    | 50    | 70  |
|               | Outlet   | 53 | 68  | 73  | 76  | 77    | 72    | 67    | 60    | 81  |
|               | Radiated | 49 | 57  | 56  | 56  | 55    | 51    | 46    | 42    | 63  |
| 7             | Inlet    | 50 | 65  | 62  | 64  | 60    | 58    | 55    | 49    | 70  |
|               | Outlet   | 51 | 68  | 75  | 77  | 80    | 74    | 69    | 61    | 84  |
|               | Radiated | 44 | 56  | 56  | 56  | 52    | 48    | 44    | 40    | 62  |
| 8             | Inlet    | 47 | 63  | 58  | 60  | 56    | 54    | 49    | 42    | 66  |
|               | Outlet   | 47 | 64  | 70  | 72  | 74    | 68    | 62    | 53    | 78  |
|               | Radiated | 40 | 53  | 51  | 50  | 47    | 43    | 37    | 32    | 57  |
| 9             | Inlet    | 48 | 59  | 57  | 57  | 56    | 54    | 50    | 44    | 64  |
|               | Outlet   | 47 | 62  | 67  | 70  | 71    | 66    | 61    | 54    | 76  |
|               | Radiated | 43 | 51  | 50  | 51  | 49    | 45    | 40    | 36    | 57  |

### PERFORMANCE CURVES

- $q_v$ : Airflow in  $m^3/h$  and  $m^3/s$ .
- $p_{sf}$ : Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- SFP: specific fan power in  $W/m^3/h$  (blue curves).
- P: Input power in W.



### Sound spectrum level in dB(A)

| Working point |          | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1             | Inlet    | 63 | 74  | 74  | 77  | 72    | 70    | 66    | 62    | 81  |
|               | Outlet   | 63 | 79  | 87  | 89  | 91    | 85    | 80    | 73    | 95  |
|               | Radiated | 56 | 67  | 69  | 70  | 65    | 59    | 53    | 52    | 74  |
| 2             | Inlet    | 61 | 73  | 72  | 73  | 70    | 67    | 61    | 55    | 79  |
|               | Outlet   | 60 | 76  | 83  | 86  | 87    | 80    | 74    | 66    | 91  |
|               | Radiated | 52 | 65  | 64  | 66  | 61    | 54    | 47    | 44    | 70  |
| 3             | Inlet    | 59 | 69  | 69  | 69  | 68    | 67    | 62    | 57    | 76  |
|               | Outlet   | 59 | 73  | 80  | 82  | 84    | 79    | 74    | 67    | 88  |
|               | Radiated | 53 | 63  | 62  | 65  | 62    | 56    | 50    | 48    | 69  |
| 4             | Inlet    | 62 | 73  | 73  | 75  | 71    | 69    | 64    | 60    | 80  |
|               | Outlet   | 61 | 77  | 85  | 88  | 89    | 84    | 78    | 71    | 93  |
|               | Radiated | 54 | 66  | 68  | 68  | 63    | 57    | 51    | 50    | 73  |
| 5             | Inlet    | 59 | 71  | 70  | 71  | 68    | 65    | 59    | 53    | 77  |
|               | Outlet   | 58 | 74  | 81  | 84  | 85    | 78    | 72    | 64    | 89  |
|               | Radiated | 50 | 63  | 62  | 64  | 59    | 52    | 45    | 42    | 68  |
| 6             | Inlet    | 57 | 67  | 67  | 67  | 67    | 65    | 61    | 55    | 74  |
|               | Outlet   | 57 | 71  | 78  | 80  | 82    | 77    | 72    | 66    | 86  |
|               | Radiated | 51 | 61  | 61  | 63  | 60    | 54    | 49    | 46    | 68  |
| 7             | Inlet    | 57 | 69  | 69  | 71  | 67    | 65    | 60    | 56    | 76  |
|               | Outlet   | 57 | 73  | 81  | 83  | 85    | 79    | 74    | 67    | 89  |
|               | Radiated | 50 | 61  | 64  | 64  | 59    | 53    | 47    | 46    | 69  |
| 8             | Inlet    | 54 | 66  | 65  | 66  | 63    | 60    | 54    | 48    | 72  |
|               | Outlet   | 53 | 69  | 76  | 79  | 80    | 73    | 67    | 59    | 84  |
|               | Radiated | 45 | 58  | 57  | 59  | 54    | 47    | 40    | 37    | 63  |
| 9             | Inlet    | 53 | 63  | 63  | 63  | 62    | 60    | 56    | 51    | 70  |
|               | Outlet   | 53 | 67  | 73  | 76  | 78    | 73    | 68    | 61    | 82  |
|               | Radiated | 46 | 57  | 56  | 59  | 56    | 50    | 44    | 42    | 63  |

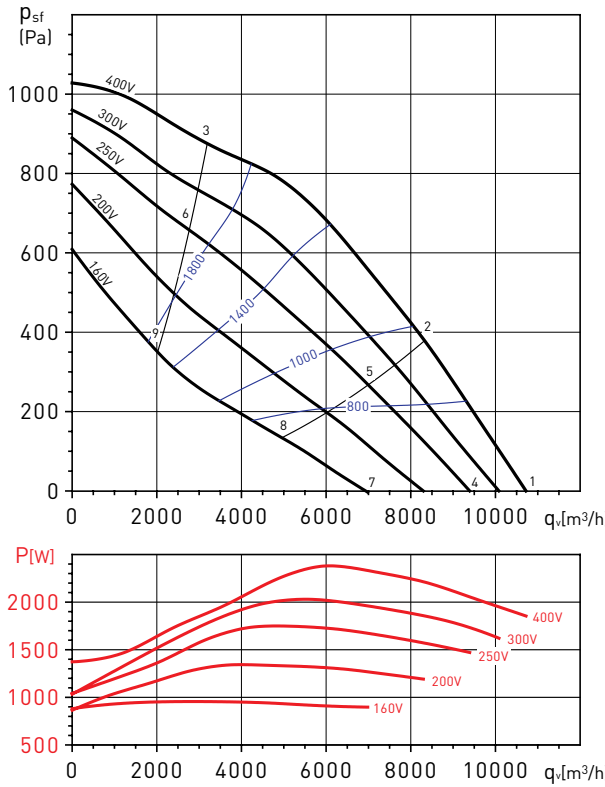
### Sound spectrum level in dB(A)

| Working point |          | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1             | Inlet    | 65 | 74  | 76  | 79  | 74    | 72    | 67    | 63    | 83  |
|               | Outlet   | 65 | 81  | 89  | 91  | 93    | 87    | 82    | 75    | 97  |
|               | Radiated | 58 | 68  | 72  | 73  | 67    | 60    | 53    | 53    | 77  |
| 2             | Inlet    | 63 | 73  | 74  | 74  | 72    | 69    | 63    | 57    | 80  |
|               | Outlet   | 63 | 78  | 85  | 88  | 89    | 82    | 76    | 68    | 93  |
|               | Radiated | 54 | 66  | 66  | 69  | 63    | 56    | 48    | 46    | 73  |
| 3             | Inlet    | 60 | 69  | 70  | 70  | 70    | 68    | 64    | 59    | 77  |
|               | Outlet   | 61 | 74  | 81  | 84  | 86    | 81    | 76    | 70    | 90  |
|               | Radiated | 53 | 64  | 64  | 68  | 64    | 57    | 51    | 50    | 72  |
| 4             | Inlet    | 62 | 71  | 73  | 76  | 71    | 69    | 64    | 60    | 80  |
|               | Outlet   | 62 | 78  | 86  | 89  | 90    | 84    | 79    | 72    | 94  |
|               | Radiated | 55 | 65  | 69  | 70  | 64    | 57    | 50    | 50    | 74  |
| 5             | Inlet    | 60 | 70  | 70  | 71  | 68    | 66    | 66    | 59    | 76  |
|               | Outlet   | 59 | 75  | 81  | 84  | 86    | 79    | 73    | 65    | 90  |
|               | Radiated | 51 | 62  | 62  | 66  | 60    | 52    | 44    | 42    | 69  |
| 6             | Inlet    | 57 | 66  | 67  | 67  | 67    | 65    | 61    | 56    | 74  |
|               | Outlet   | 58 | 72  | 78  | 81  | 83    | 78    | 73    | 67    | 87  |
|               | Radiated | 50 | 62  | 61  | 65  | 61    | 54    | 48    | 47    | 69  |
| 7             | Inlet    | 56 | 65  | 66  | 69  | 64    | 63    | 58    | 54    | 73  |
|               | Outlet   | 55 | 71  | 80  | 82  | 84    | 77    | 73    | 66    | 88  |
|               | Radiated | 48 | 59  | 62  | 63  | 57    | 50    | 44    | 44    | 67  |
| 8             | Inlet    | 52 | 62  | 63  | 63  | 61    | 58    | 52    | 46    | 69  |
|               | Outlet   | 52 | 67  | 74  | 77  | 78    | 71    | 65    | 58    | 82  |
|               | Radiated | 43 | 55  | 55  | 59  | 53    | 45    | 37    | 35    | 62  |
| 9             | Inlet    | 50 | 60  | 60  | 60  | 60    | 58    | 54    | 49    | 67  |
|               | Outlet   | 51 | 65  | 72  | 74  | 76    | 71    | 66    | 60    | 80  |
|               | Radiated | 43 | 55  | 55  | 58  | 54    | 47    | 42    | 40    | 62  |

### PERFORMANCE CURVES

- $q_v$ : Airflow in  $m^3/h$  and  $m^3/s$ .
- $p_{sf}$ : Static pressure in mmWG and Pa.
- Dry air at 20°C and 760 mmHg.
- Performance data in accordance with ISO 5801 and AMCA 210-99 Standards
- SFP: specific fan power in  $W/m^3/h$  (blue curves).
- P: Input power in W.

IRAT/4-450 N



### Sound spectrum level in dB(A)

| Working point |          | 63 | 125 | 250 | 500 | 1.000 | 2.000 | 4.000 | 8.000 | LwA |
|---------------|----------|----|-----|-----|-----|-------|-------|-------|-------|-----|
| 1             | Inlet    | 65 | 74  | 76  | 79  | 74    | 72    | 67    | 63    | 83  |
|               | Outlet   | 65 | 81  | 89  | 91  | 93    | 87    | 82    | 75    | 97  |
|               | Radiated | 58 | 68  | 72  | 73  | 67    | 60    | 53    | 53    | 77  |
| 2             | Inlet    | 63 | 73  | 74  | 74  | 72    | 69    | 63    | 57    | 80  |
|               | Outlet   | 63 | 78  | 85  | 88  | 89    | 82    | 76    | 68    | 93  |
|               | Radiated | 54 | 66  | 66  | 69  | 63    | 56    | 48    | 46    | 73  |
| 3             | Inlet    | 60 | 69  | 70  | 70  | 70    | 68    | 64    | 59    | 77  |
|               | Outlet   | 61 | 74  | 81  | 84  | 86    | 81    | 76    | 70    | 90  |
|               | Radiated | 53 | 64  | 64  | 68  | 64    | 57    | 51    | 50    | 72  |
| 4             | Inlet    | 62 | 71  | 73  | 76  | 71    | 69    | 64    | 60    | 80  |
|               | Outlet   | 62 | 78  | 86  | 89  | 90    | 84    | 79    | 72    | 94  |
|               | Radiated | 55 | 65  | 69  | 70  | 64    | 57    | 50    | 50    | 74  |
| 5             | Inlet    | 60 | 70  | 70  | 71  | 68    | 66    | 59    | 54    | 76  |
|               | Outlet   | 59 | 75  | 81  | 84  | 86    | 79    | 73    | 65    | 90  |
|               | Radiated | 51 | 62  | 62  | 66  | 60    | 52    | 44    | 42    | 69  |
| 6             | Inlet    | 57 | 66  | 67  | 67  | 67    | 65    | 61    | 56    | 74  |
|               | Outlet   | 58 | 72  | 78  | 81  | 83    | 78    | 73    | 67    | 87  |
|               | Radiated | 50 | 62  | 61  | 65  | 61    | 54    | 48    | 47    | 69  |
| 7             | Inlet    | 56 | 65  | 66  | 69  | 64    | 63    | 58    | 54    | 73  |
|               | Outlet   | 55 | 71  | 80  | 82  | 84    | 77    | 73    | 66    | 88  |
|               | Radiated | 48 | 59  | 62  | 63  | 57    | 50    | 44    | 44    | 67  |
| 8             | Inlet    | 52 | 62  | 63  | 63  | 61    | 58    | 52    | 46    | 69  |
|               | Outlet   | 52 | 67  | 74  | 77  | 78    | 71    | 65    | 58    | 82  |
|               | Radiated | 43 | 55  | 55  | 59  | 53    | 45    | 37    | 35    | 62  |
| 9             | Inlet    | 50 | 60  | 60  | 60  | 60    | 58    | 54    | 49    | 67  |
|               | Outlet   | 51 | 65  | 72  | 74  | 76    | 71    | 66    | 60    | 80  |
|               | Radiated | 43 | 55  | 55  | 58  | 54    | 47    | 42    | 40    | 62  |

## MOUNTING ACCESSORIES

| Model | Antivibration mount | Duct flange | Flexible connector | Sound attenuator | Defense guard | Damper  | Filtration box G4 |
|-------|---------------------|-------------|--------------------|------------------|---------------|---------|-------------------|
| 315   | ISA                 | IBR-315     | IAE-315            | IAA-315          | DEF-600x350   | IJK-315 | IFL-315 G4        |
| 355   | ISA                 | IBR-355     | IAE-355            | IAA-355          | DEF-700x400   | IJK-355 | IFL-355 G4        |
| 400   | ISA                 | IBR-400     | IAE-400            | IAA-400          | DEF-800x500   | IJK-400 | IFL-400 G4        |
| 450   | ISA                 | IBR-450     | IAE-450            | IAA-450          | DEF-1000x500  | IJK-450 | IFL-450 G4        |

| Model | Filtration box for F5, F6, F7 or F8 filters | Filter F5  | Filter F6  | Filter F7  | Filter F8  | Electric heater | Water coil |
|-------|---|------------|------------|------------|------------|-----------------|------------|
| 315   | IFL-315 F                                   | IFR-315 F5 | IFR-315 F6 | IFR-315 F7 | IFR-315 F8 | IBE-315/30T     | IBW-315    |
| 355   | IFL-355 F                                   | IFR-355 F5 | IFR-355 F6 | IFR-355 F7 | IFR-355 F8 | IBE-355/30T     | IBW-355    |
| 400   | IFL-400 F                                   | IFR-400 F5 | IFR-400 F6 | IFR-400 F7 | IFR-400 F8 | IBE-400/50T     | IBW-400    |
| 450   | IFL-450 F                                   | IFR-450 F5 | IFR-450 F6 | IFR-450 F7 | IFR-450 F8 | IBE-450/63T     | IBW-450    |



**IFL-F**  
Filtering boxes without filter, to mount IFR-F filters.  
**IFR-F**  
Filters to install in filtering boxes IFL-F.



**IBE**  
Electric heater.



**IBR**  
Rectangular duct flange.



**IAE**  
Rectangular flexible connector.



**DEF**  
Rectangular protection guard.



**ISA**  
Anti-vibration mounting.  
(1 ISA = 4 supports)



**IAA**  
Acoustic attenuator.



**IBW**  
Hot water coil.



**IFL G4**  
In-line duct bag filter.



**IJK**  
Damper. Supplied with standard rectangular flanges. Manufactured from galvanised sheet steel. Fitted as standard with removable handle. Shaft diameter: 10 mm. As accessory: electrical damper actuator LM230A.



## ELECTRICAL ACCESSORIES



**RMB/RMT**  
Fan speed controllers.



**VFKB IP65**  
Adjustable frequency drive for three phase motors.



**VFTM IP21**  
Adjustable frequency drive for three phase motors.

| Model          | Adjustable frequency drive  |                |                            |               |
|----------------|-----------------------------|----------------|----------------------------|---------------|
|                | Single-phase 1/230V/50-60Hz |                | Three-phase 3/400V/50-60Hz |               |
|                | VFKB                        | VFTM           | VFKB                       | VFTM          |
| IRAT/4-315 A N | VFKB-24                     | VFTM MONO 0,18 | VFKB-45                    | VFTM TRI 0,37 |
| IRAT/4-315 B N | VFKB-24                     | VFTM MONO 0,37 | VFKB-45                    | VFTM TRI 0,37 |
| IRAT/4-355 N   | VFKB-24                     | VFTM MONO 0,37 | VFKB-45                    | VFTM TRI 0,55 |
| IRAT/4-400 A N | VFKB-27                     | VFTM MONO 1,1  | VFKB-45                    | VFTM TRI 1,5  |
| IRAT/4-400 B N | -                           | VFTM MONO 1,1  | VFKB-45                    | VFTM TRI 1,5  |
| IRAT/4-450 N   | -                           | VFTM MONO 1,5  | VFKB-45                    | VFTM TRI 2,2  |



**DPS 2-30**  
**DPS 10-100**  
Differential pressure switches:  
- DPS 2-30: from 20Pa to 300Pa.  
- DPS 10-100: from 100Pa to 1000Pa.



**LM-230A**  
Electrical damper actuator.



**Electric heater controller.**  
**TTC-2000**  
**TTC-2000 + TTS-1**



**TTC-40F + TTS-4**  
Three phase electric heater controller.  
The TTC-40F needs an external temperature sensor to control the heater (TG-K300 or TG-R530).



**Sondas de temperatura**  
TG-K330 for duct  
TG-R530 for room t.



**CPFL-S / CPFL-E**  
Presence detector



**SC02-A**  
CO<sub>2</sub> and temperature sensor.  
**SC02-AD**  
CO<sub>2</sub> and temperature sensor, with display.  
**SCHT-AD**  
CO<sub>2</sub> sensor, temperature and relative humidity with display.



**TDP-S**  
Pressure sensor without display.  
**TDP-D**  
Pressure sensor with display.  
**TDP-PI**  
Pressure sensor with display