

UDC

-ROOF VERTICAL DISCHARGE FAN

- Motor outside Airstream
- Metal construction
- For kitchen extract

SPECIFICATION

Sizes

400, 450, 500, 560, 630mm diameter

Fan Performance

The fan is of low noise and high static efficiency design. The impeller is designed to give excellent performance characteristic with high static pressure development without stall

Impellers

Ziehl-Abegg "C" low noise high efficiency centrifugal fan with rotating diffusers and profiled blades. The impellers are manufactured from steel material and balanced according to ISO1940.

Motors

High efficiency Induction asynchronous motors IE2 or MEPS 2 compliances. Motor enclosure to feature IP55 protection and suitable for variable frequency drive operation. Motor winding insulation is to incorporate thermal class 155 as standard. Motor bearings are to be of maintenance free ball bearing design. Thermistors are provided as standard.

Casing

The windband and base of the fans are of galvanised steel, suitable for kitchen extract application

Test Procedures

Performance Date – Established from tests in accordance with ISO5801:1997
Sound levels – Established from tests in accordance with ISO3745

Ziehl-Abegg "C" Wheel



Vertical Discharge Roof Centrifugal Units

UDC400-055



Impeller

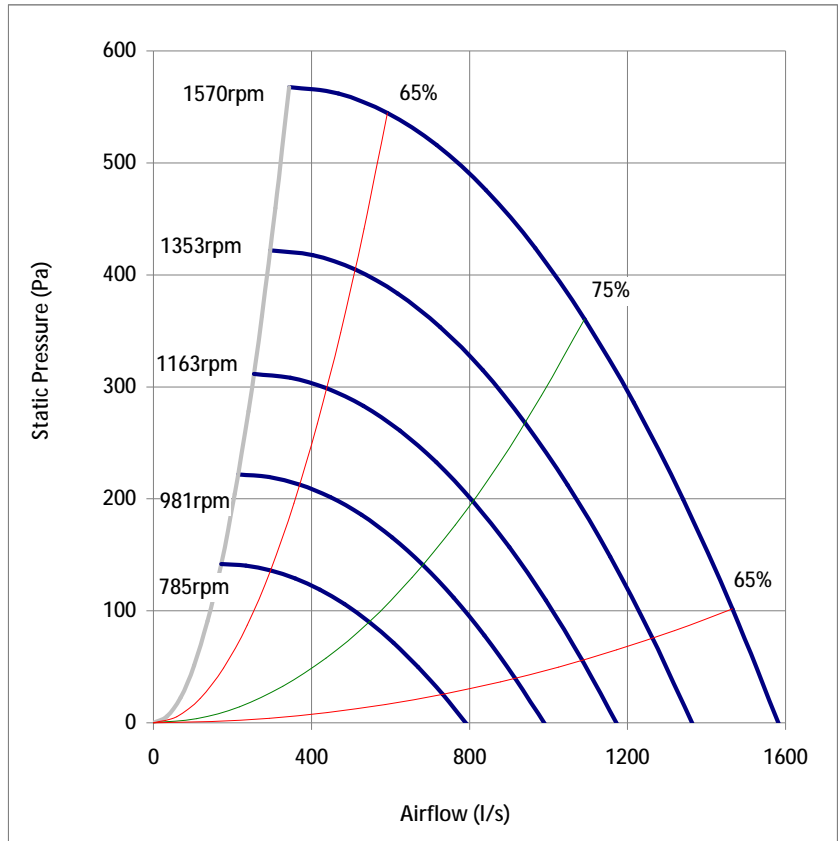
Size 400 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

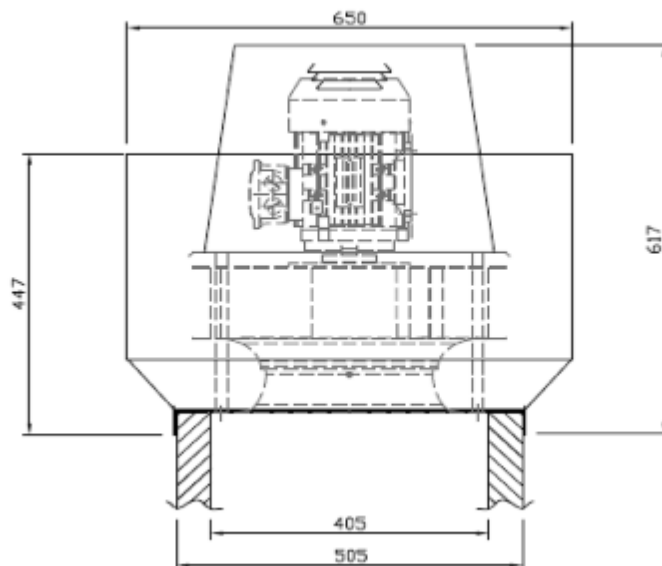
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 0.55 Kw
 Power Supply 400V/3PH/50Hz
 Speed 1410 RPM
 FLC 1.58 A
 Control Varibale Speed Drive
 Protection PTC Thermistor
 Motor Size D80

Fan

Case Galvanise Steel
 Weight 55 Kg
 Max. Temp 50 °C
 Max. Frequency 56 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | | Sound Pressure Level dB at 3 meters | |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|----|-------------------------------------|----|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | | 8k |
| 1570 | 568 | 0.55 | 56 | 60 | 68 | 67 | 64 | 61 | 60 | 57 | 52 | 47 |
| 1353 | 422 | 0.35 | 48 | 57 | 65 | 64 | 61 | 58 | 57 | 54 | 49 | 44 |
| 1163 | 311 | 0.22 | 41 | 53 | 61 | 60 | 57 | 54 | 53 | 50 | 45 | 40 |
| 981 | 222 | 0.13 | 35 | 50 | 58 | 57 | 54 | 51 | 50 | 47 | 42 | 37 |
| 785 | 142 | 0.07 | 28 | 45 | 53 | 52 | 49 | 46 | 45 | 42 | 37 | 32 |



Vertical Discharge Roof Centrifugal Units

UDC400-150



Impeller

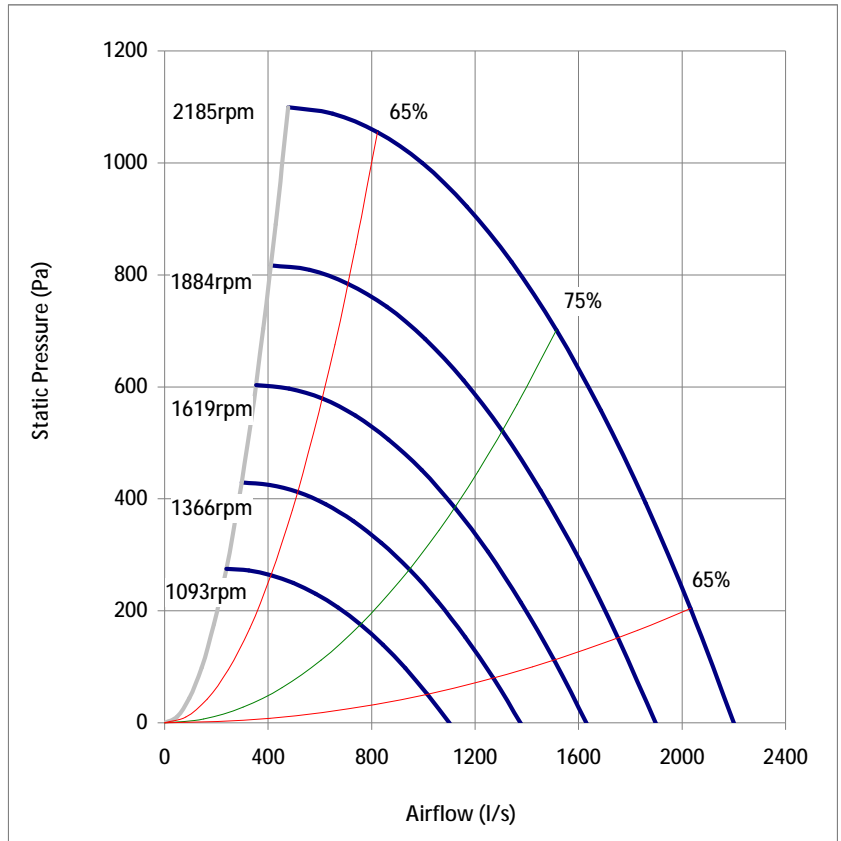
Size 400 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

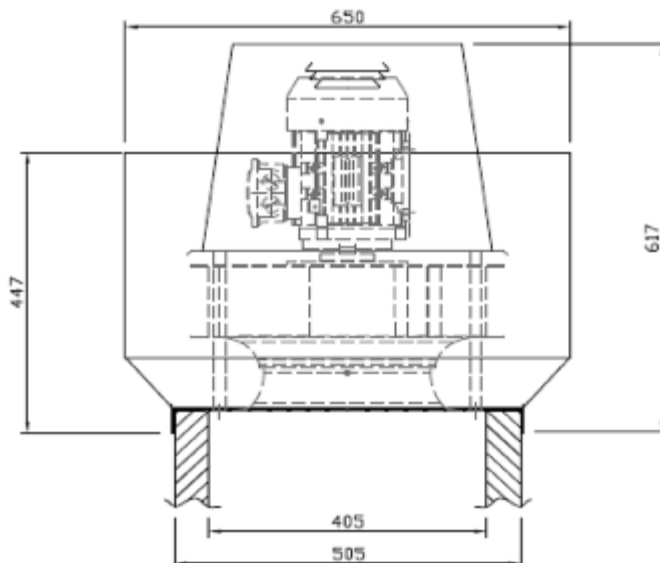
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 1.50 Kw
 Power Supply 400V/3PH/50Hz
 Speed 1420 RPM
 FLC 3.50 A
 Control Variable Speed Drive
 Protection PTC Thermistor
 Motor Size D90

Fan

Case Galvanise Steel
 Weight 58 Kg
 Max. Temp 50 °C
 Max. Frequency 78 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | Sound Pressure Level dB at 3 meters | | |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|-------------------------------------|----|----|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | | 4k | 8k |
| 2185 | 1099 | 1.50 | 78 | 67 | 75 | 74 | 71 | 68 | 67 | 64 | 59 | 54 |
| 1884 | 817 | 0.96 | 67 | 64 | 72 | 71 | 68 | 65 | 64 | 61 | 56 | 51 |
| 1619 | 603 | 0.61 | 58 | 60 | 68 | 67 | 64 | 61 | 60 | 57 | 52 | 47 |
| 1366 | 429 | 0.37 | 49 | 57 | 65 | 64 | 61 | 58 | 57 | 54 | 49 | 44 |
| 1093 | 275 | 0.19 | 39 | 52 | 60 | 59 | 56 | 53 | 52 | 49 | 44 | 39 |



Vertical Discharge Roof Centrifugal Units

UDC450-110



Impeller

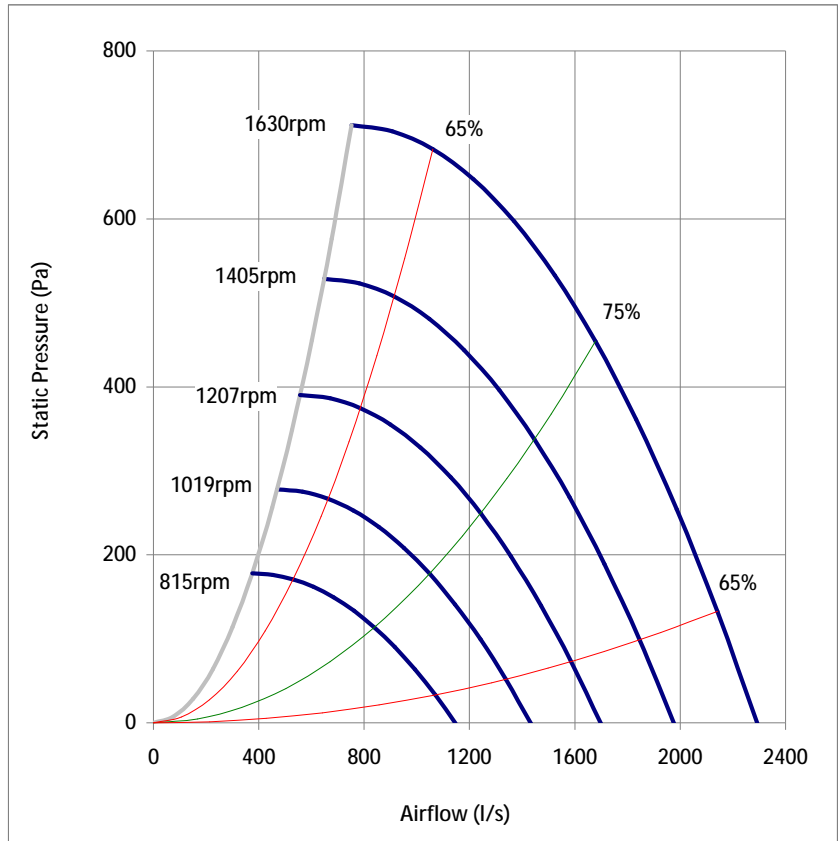
Size 450 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

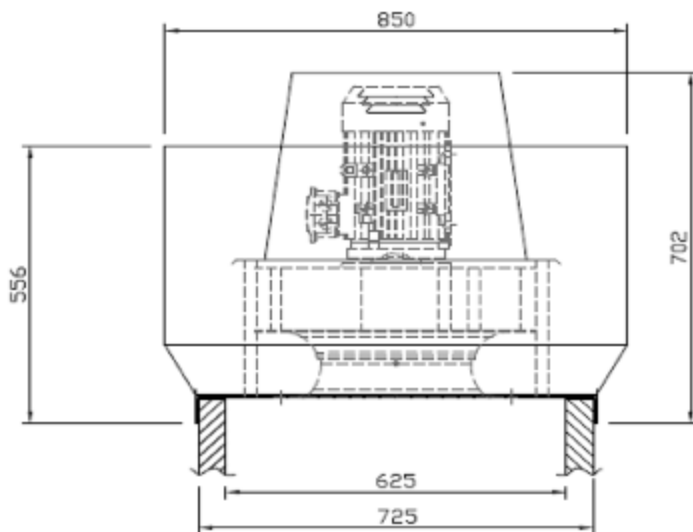
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 1.10 Kw
 Power Supply 400V/3PH/50Hz
 Speed 1410 RPM
 FLC 2.63 A
 Control Varibale Speed Drive
 Protection PTC Thermistor
 Motor Size D90

Fan

Case Galvanise Steel
 Weight 75 Kg
 Max. Temp 50 °C
 Max. Frequency 57 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | | | Sound Pressure Level dB at 3 meters |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|----|----|-------------------------------------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| 1630 | 712 | 1.10 | 57 | 62 | 67 | 72 | 69 | 69 | 63 | 60 | 58 | 53 |
| 1405 | 529 | 0.70 | 49 | 59 | 64 | 69 | 66 | 66 | 60 | 57 | 55 | 50 |
| 1207 | 390 | 0.45 | 42 | 55 | 60 | 65 | 62 | 62 | 56 | 53 | 51 | 46 |
| 1019 | 278 | 0.27 | 36 | 52 | 57 | 62 | 59 | 59 | 53 | 50 | 48 | 43 |
| 815 | 178 | 0.14 | 29 | 47 | 52 | 57 | 54 | 54 | 48 | 45 | 43 | 38 |



Vertical Discharge Roof Centrifugal Units

UDC450-220



Impeller

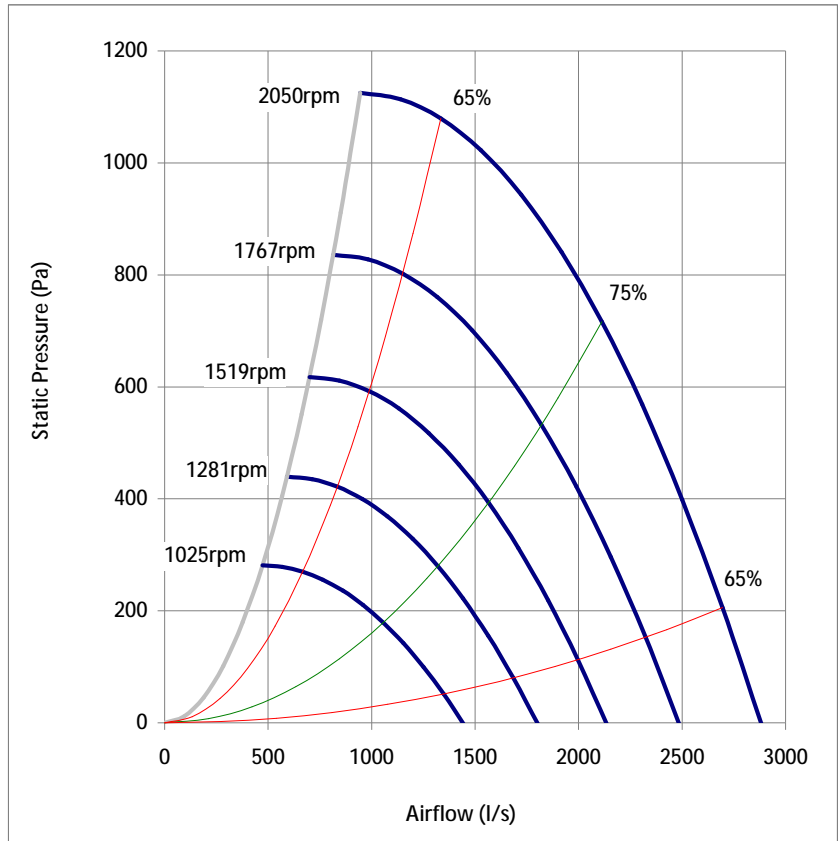
Size 450 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

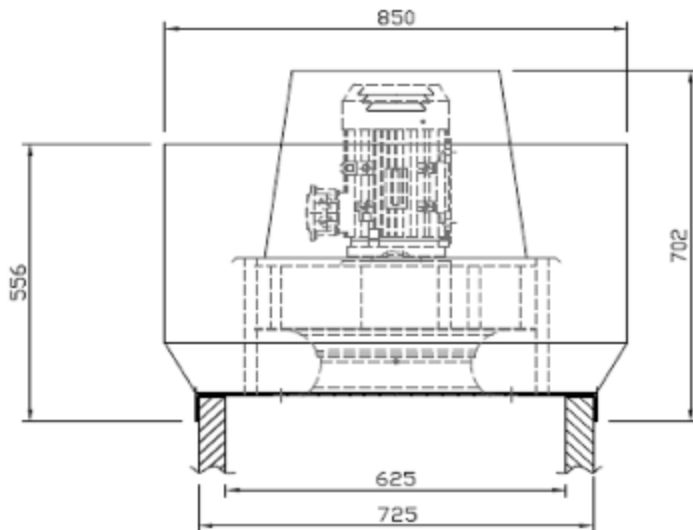
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 2.20 Kw
 Power Supply 400V/3PH/50Hz
 Speed 1415 RPM
 FLC 4.80 A
 Control Varibale Speed Drive
 Protection PTC Thermistor
 Motor Size D100

Fan

Case Galvanise Steel
 Weight 84 Kg
 Max. Temp 50 °C
 Max. Frequency 71 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | | | Sound Pressure Level dB at 3 meters |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|----|----|-------------------------------------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| 2050 | 1125 | 2.20 | 71 | 62 | 67 | 72 | 69 | 69 | 63 | 60 | 58 | 53 |
| 1767 | 836 | 1.41 | 61 | 59 | 64 | 69 | 66 | 66 | 60 | 57 | 55 | 50 |
| 1519 | 617 | 0.89 | 53 | 55 | 60 | 65 | 62 | 62 | 56 | 53 | 51 | 46 |
| 1281 | 439 | 0.54 | 44 | 52 | 57 | 62 | 59 | 59 | 53 | 50 | 48 | 43 |
| 1025 | 281 | 0.28 | 36 | 47 | 52 | 57 | 54 | 54 | 48 | 45 | 43 | 38 |



Vertical Discharge Roof Centrifugal Units

UDC500-150



Impeller

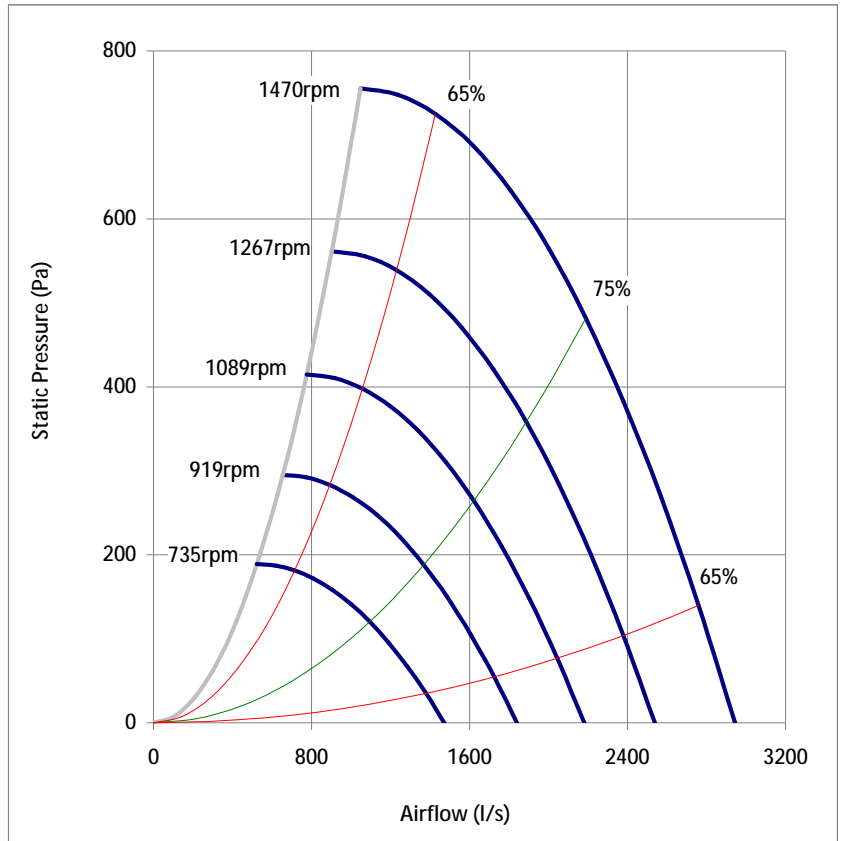
Size 500 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

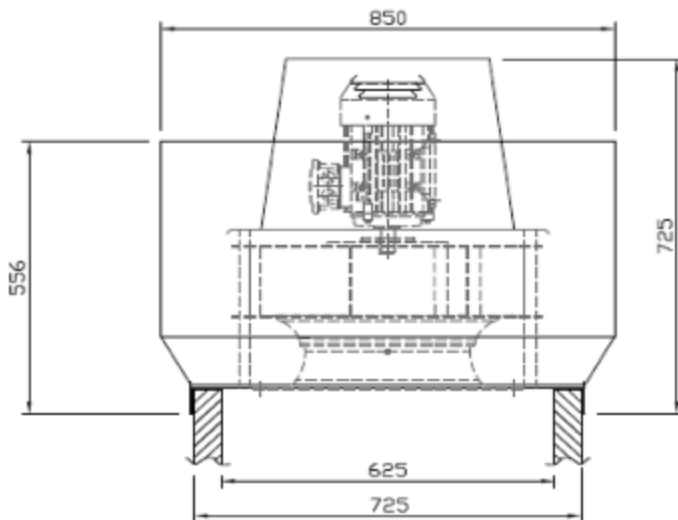
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 1.50 Kw
 Power Supply 400V/3PH/50Hz
 Speed 1410 RPM
 FLC 3.40 A
 Control Varibale Speed Drive
 Protection PTC Thermistor
 Motor Size D90

Fan

Case Galvanise Steel
 Weight 110 Kg
 Max. Temp 70 °C
 Max. Frequency 51 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | | | Sound Pressure Level dB at 3 meters |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|----|----|-------------------------------------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| 1470 | 755 | 1.50 | 51 | 65 | 79 | 77 | 70 | 67 | 66 | 64 | 62 | 55 |
| 1267 | 561 | 0.96 | 44 | 62 | 76 | 74 | 67 | 64 | 63 | 61 | 59 | 52 |
| 1089 | 415 | 0.61 | 38 | 58 | 72 | 70 | 63 | 60 | 59 | 57 | 55 | 48 |
| 919 | 295 | 0.37 | 32 | 55 | 69 | 67 | 60 | 57 | 56 | 54 | 52 | 45 |
| 735 | 189 | 0.19 | 26 | 50 | 64 | 62 | 55 | 52 | 51 | 49 | 47 | 40 |



Vertical Discharge Roof Centrifugal Units

UDC500-300



Impeller

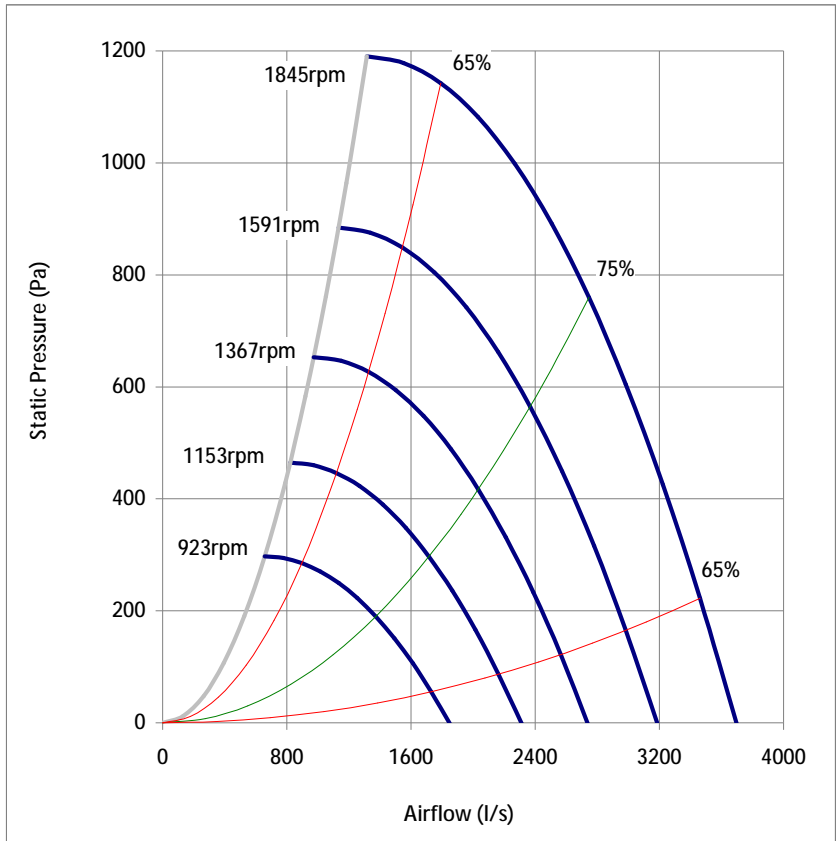
Size 500 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

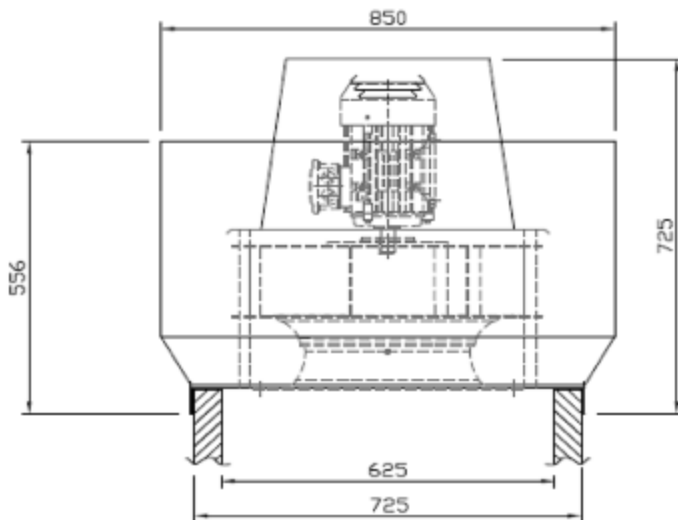
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 3.00 Kw
 Power Supply 400V/3PH/50Hz
 Speed 1415 RPM
 FLC 6.40 A
 Control Varibale Speed Drive
 Protection PTC Thermistor
 Motor Size D100

Fan

Case Galvanise Steel
 Weight 110 Kg
 Max. Temp 70 °C
 Max. Frequency 65 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | | | Sound Pressure Level dB at 3 meters |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|----|----|-------------------------------------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| 1845 | 1190 | 3.00 | 65 | 70 | 84 | 82 | 75 | 72 | 71 | 69 | 67 | 60 |
| 1591 | 884 | 1.92 | 56 | 67 | 81 | 79 | 72 | 69 | 68 | 66 | 64 | 57 |
| 1367 | 653 | 1.22 | 48 | 63 | 77 | 75 | 68 | 65 | 64 | 62 | 60 | 53 |
| 1153 | 465 | 0.73 | 41 | 60 | 74 | 72 | 65 | 62 | 61 | 59 | 57 | 50 |
| 923 | 298 | 0.38 | 33 | 55 | 69 | 67 | 60 | 57 | 56 | 54 | 52 | 45 |



Vertical Discharge Roof Centrifugal Units

UDC560-150



Impeller

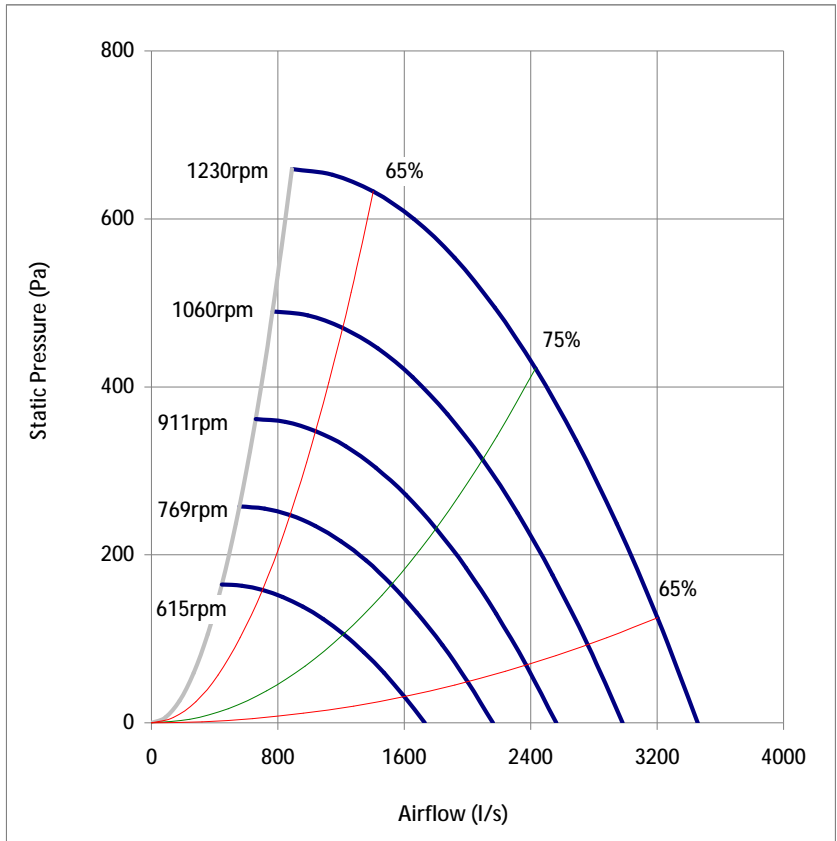
Size 560 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

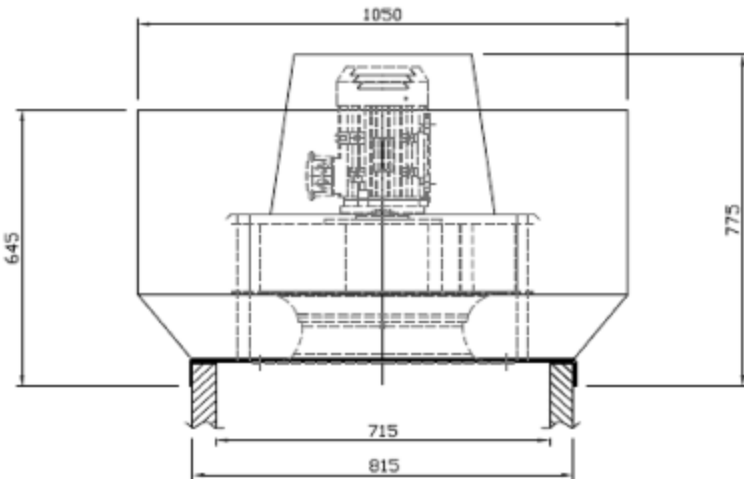
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 1.50 Kw
 Power Supply 400V/3PH/50Hz
 Speed 930 RPM
 FLC 4.30 A
 Control Varibale Speed Drive
 Protection PTC Thermistor
 Motor Size D100

Fan

Case Galvanise Steel
 Weight 136 Kg
 Max. Temp 50 °C
 Max. Frequency 65 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | | | Sound Pressure Level dB at 3 meters |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|----|----|-------------------------------------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| 1230 | 659 | 1.50 | 65 | 64 | 77 | 76 | 70 | 67 | 63 | 61 | 59 | 53 |
| 1060 | 490 | 0.96 | 56 | 61 | 74 | 73 | 67 | 64 | 60 | 58 | 56 | 50 |
| 911 | 362 | 0.61 | 48 | 57 | 70 | 69 | 63 | 60 | 56 | 54 | 52 | 46 |
| 769 | 258 | 0.37 | 41 | 54 | 67 | 66 | 60 | 57 | 53 | 51 | 49 | 43 |
| 615 | 165 | 0.19 | 33 | 49 | 62 | 61 | 55 | 52 | 48 | 46 | 44 | 38 |



Vertical Discharge Roof Centrifugal Units

UDC560-300



Impeller

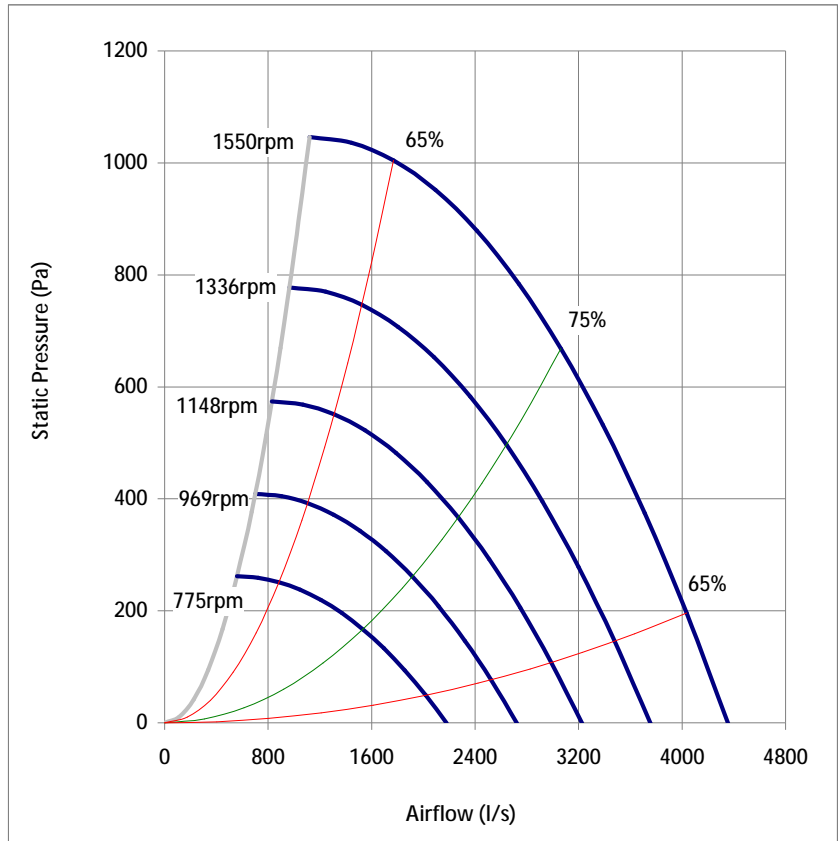
Size 560 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

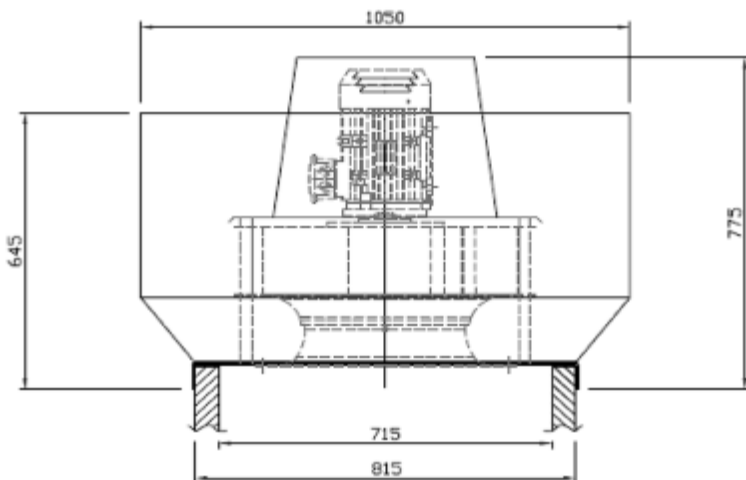
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 3.00 Kw
 Power Supply 400V/3PH/50Hz
 Speed 1415 RPM
 FLC 6.40 A
 Control Varibale Speed Drive
 Protection PTC Thermistor
 Motor Size D100

Fan

Case Galvanise Steel
 Weight 139 Kg
 Max. Temp 50 °C
 Max. Frequency 55 Hz

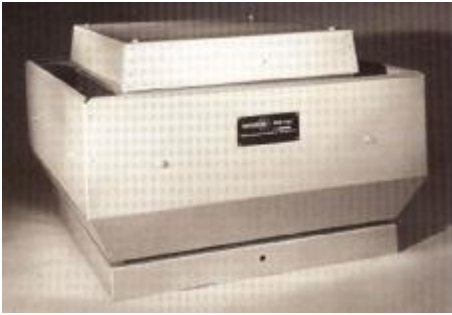


| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | | | Sound Pressure Level dB at 3 meters |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|----|----|-------------------------------------|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | 4k | 8k | |
| 1550 | 1046 | 3.00 | 55 | 69 | 82 | 81 | 75 | 72 | 68 | 66 | 64 | 58 |
| 1336 | 778 | 1.92 | 47 | 66 | 79 | 78 | 72 | 69 | 65 | 63 | 61 | 55 |
| 1148 | 574 | 1.22 | 41 | 62 | 75 | 74 | 68 | 65 | 61 | 59 | 57 | 51 |
| 969 | 409 | 0.73 | 34 | 59 | 72 | 71 | 65 | 62 | 58 | 56 | 54 | 48 |
| 775 | 262 | 0.38 | 28 | 54 | 67 | 66 | 60 | 57 | 53 | 51 | 49 | 43 |



Vertical Discharge Roof Centrifugal Units

UDC630-150



Impeller

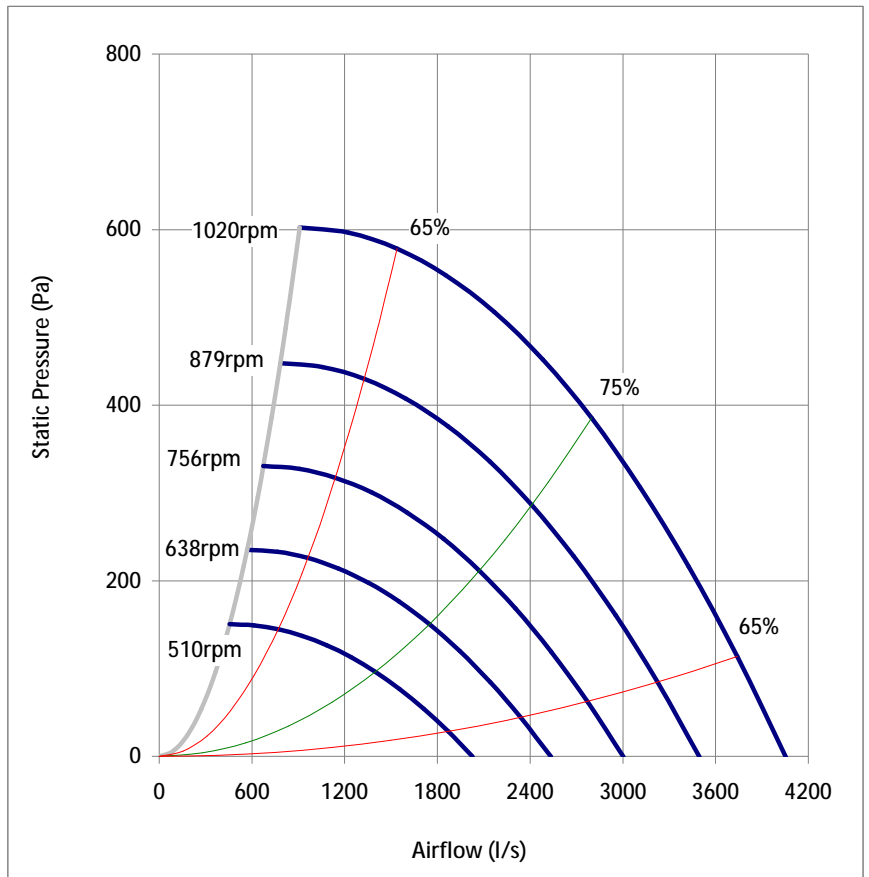
Size 630 mm
 Type Backward Arefoil Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

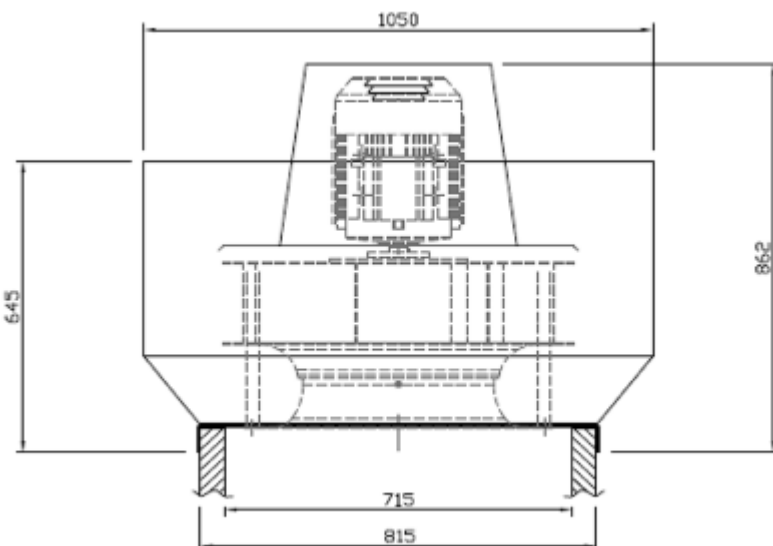
Type IE2
 IP Rating 55
 Insulation Class 155
 Power 1.50 Kw
 Power Supply 400V/3PH/50Hz
 Speed 930 RPM
 FLC 4.30 A
 Control Variable Speed Drive
 Protection PTC Thermistor
 Motor Size D100

Fan

Case Galvanise Steel
 Weight 155 Kg
 Max. Temp 50 °C
 Max. Frequency 54 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | Sound Pressure Level dB at 3 meters | | | |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|-------------------------------------|----|----|----|
| | | | | 63 | 125 | 250 | 500 | 1k | | 2k | 4k | 8k |
| 1020 | 602 | 1.50 | 54 | 64 | 70 | 68 | 70 | 66 | 64 | 58 | 59 | 52 |
| 879 | 448 | 0.96 | 47 | 61 | 67 | 65 | 67 | 63 | 61 | 55 | 56 | 49 |
| 756 | 331 | 0.61 | 40 | 57 | 63 | 61 | 63 | 59 | 57 | 51 | 52 | 45 |
| 638 | 235 | 0.37 | 34 | 54 | 60 | 58 | 60 | 56 | 54 | 48 | 49 | 42 |
| 510 | 151 | 0.19 | 27 | 49 | 55 | 53 | 55 | 51 | 49 | 43 | 44 | 37 |



Vertical Discharge Roof Centrifugal Units

UDC630-550



Impeller

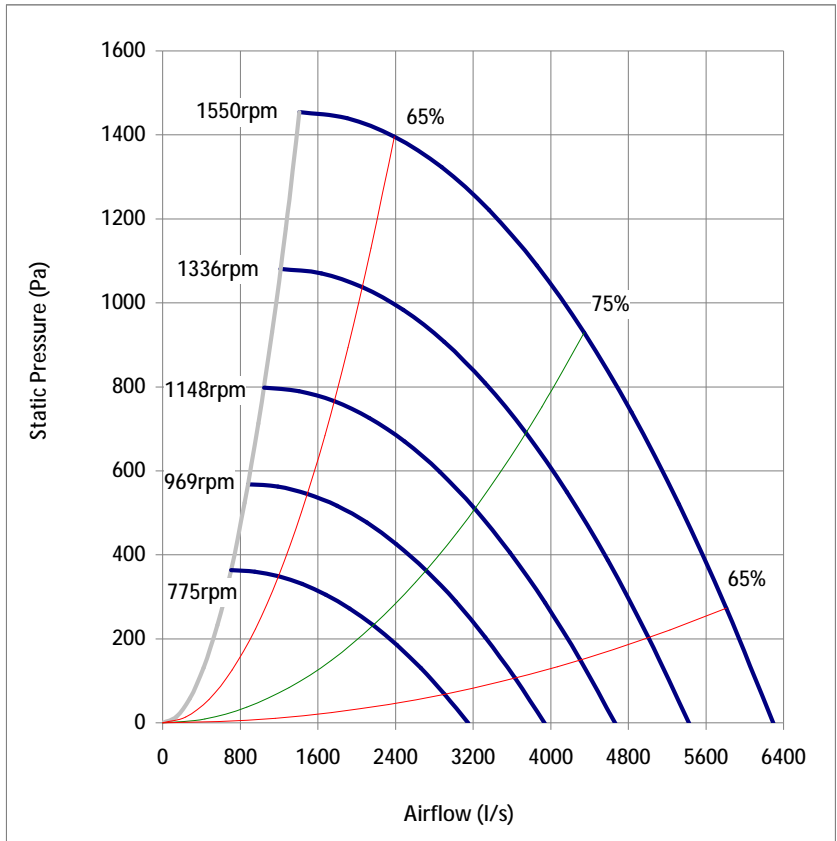
Size 630 mm
 Type Backward Curve
 Material Steel
 Finish Powder Coating RAL5002

Motor

Type IE2
 IP Rating 55
 Insulation Class 155
 Power 5.50 Kw
 Power Supply 400V/3PH/50Hz
 Speed 1450 RPM
 FLC 11.00 A
 Control Varibale Speed Drive
 Protection PTC Thermistor
 Motor Size D132

Fan

Case Galvanise Steel
 Weight 155 Kg
 Max. Temp 50 °C
 Max. Frequency 55 Hz



| Speed (rpm) | Peak Pressure (Pa) | Peak Power (kw) | Running Frequency | Sound Power Level SWL dB re 1pw | | | | | | Sound Pressure Level dB at 3 meters | | |
|-------------|--------------------|-----------------|-------------------|---------------------------------|-----|-----|-----|----|----|-------------------------------------|----|----|
| | | | | 63 | 125 | 250 | 500 | 1k | 2k | | 4k | 8k |
| 1550 | 1454 | 5.50 | 55 | 74 | 80 | 78 | 80 | 76 | 74 | 68 | 69 | 62 |
| 1336 | 1081 | 3.52 | 47 | 71 | 77 | 75 | 77 | 73 | 71 | 65 | 66 | 59 |
| 1148 | 798 | 2.24 | 41 | 67 | 73 | 71 | 73 | 69 | 67 | 61 | 62 | 55 |
| 969 | 568 | 1.34 | 34 | 64 | 70 | 68 | 70 | 66 | 64 | 58 | 59 | 52 |
| 775 | 364 | 0.69 | 28 | 59 | 65 | 63 | 65 | 61 | 59 | 53 | 54 | 47 |

