

# Fan Coil Unit



YCW Ceiling Concealed Chiller  
Water Fan Coil Unit



INTRODUCTION

YCW Ceiling Concealed Style fan coil is one of the most widely used Air Conditioner.

Being hidden in the ceiling, it facilitates no requirement floor space which thus can be used for other purpose. This system is used along with duct system to cover wider area.

Suitable for various applications that require floor level or individual level air conditioning for buildings where there are many rooms or halls, such as restaurants, concert halls and hotels. Installation is not hindered by the location of lighting fixtures or room structure, and interior renovation is made easy with the installation of various ventilation diffusers.

Light & Compact size, Quiet, Low-cost installation, Efficient operation  
Capacity ranges: 500m<sup>3</sup>/h~3600m<sup>3</sup>/h.

*Make sure the specification, dimension or others technical data are same as provided in engineering data book before you start the project.*

Low Static Pressure



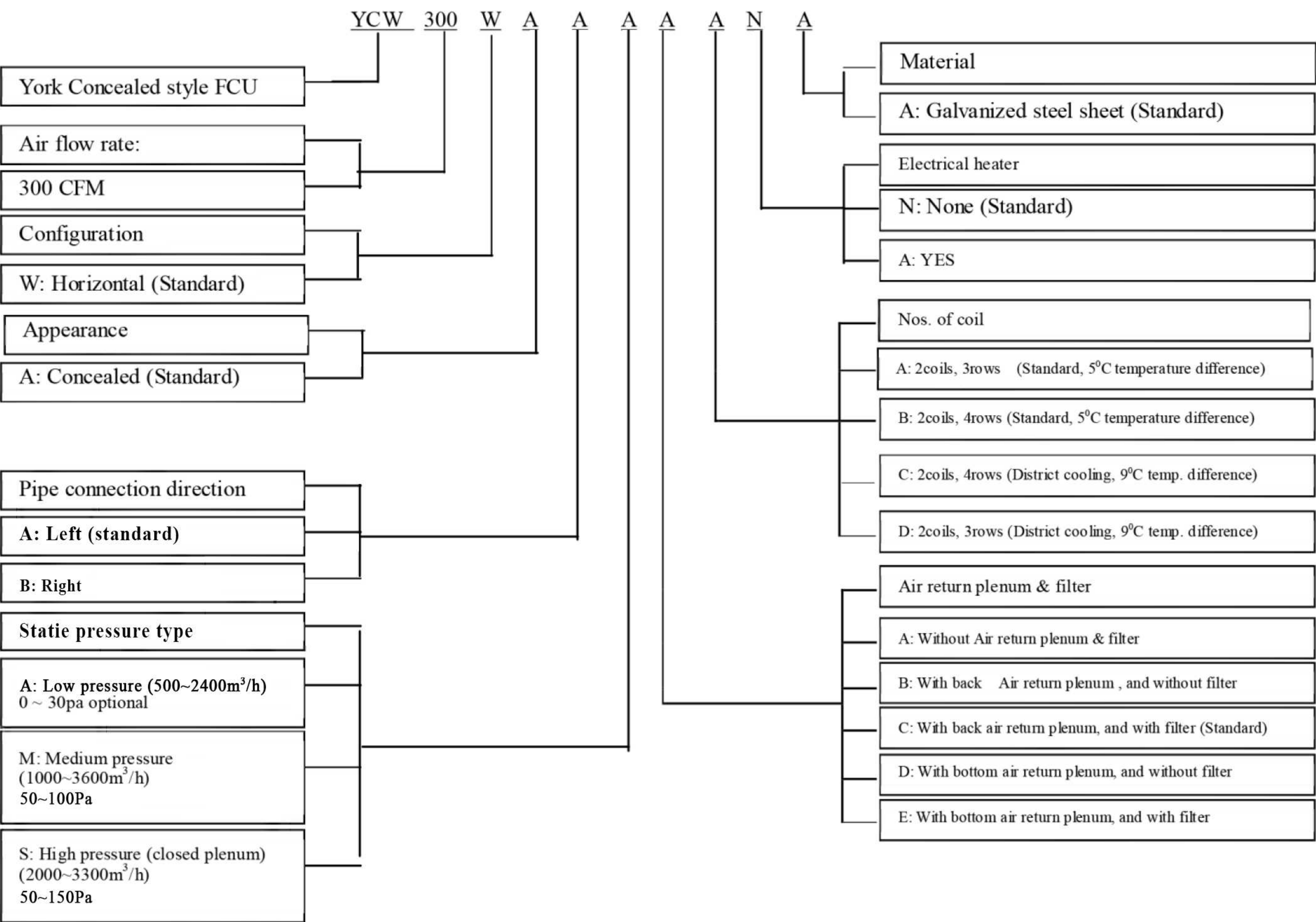
Medium Static Pressure



High Static Pressure



NOMECLATURE





## SPECIFICATIONS

### 1. LOW STATIC PRESSURE

TABLE 1-A: ST SERIES (5 DEGREES TEMP. DIFFERENCE) --- 3 ROWS, LOW STATIC PRESSURE

| Model                   |        |                   | YCW300                                  | YCW400 | YCW600 | YCW800 | YCW1000 | YCW1200 | YCW1400 |
|-------------------------|--------|-------------------|---|--------|--------|--------|---------|---------|---------|
| Performance             |        |                   |   |        |        |        |         |         |         |
| Nominal air flow        | High   | m <sup>3</sup> /h | 504                                     | 729    | 1119   | 1441   | 1676    | 2042    | 2377    |
|                         |        | CFM               | 297                                     | 429    | 659    | 848    | 986     | 1201    | 1398    |
|                         | Medium | m <sup>3</sup> /h | 429                                     | 620    | 952    | 1225   | 1425    | 1735    | 2021    |
|                         |        | CFM               | 252                                     | 365    | 560    | 721    | 838     | 1021    | 1188    |
|                         | Low    | m <sup>3</sup> /h | 383                                     | 555    | 851    | 1095   | 1274    | 1552    | 1806    |
|                         |        | CFM               | 225                                     | 326    | 501    | 644    | 750     | 913     | 1062    |
| Total capacity          | High   | kW                | 3.48                                    | 4.23   | 6.23   | 7.86   | 8.83    | 10.75   | 13.82   |
|                         |        | Btu/h             | 11882                                   | 14430  | 21248  | 26808  | 30118   | 36671   | 47162   |
|                         | Medium | kW                | 3.21                                    | 3.98   | 5.63   | 7.06   | 8.10    | 9.72    | 12.49   |
|                         |        | Btu/h             | 10955                                   | 13569  | 19196  | 24094  | 23829   | 27239   | 35909   |
|                         | Low    | kW                | 2.50                                    | 3.09   | 4.54   | 5.98   | 6.98    | 7.98    | 10.52   |
|                         |        | Btu/h             | 8539                                    | 10557  | 15489  | 20387  | 23829   | 27239   | 35909   |
| Water flow rate(High)   |        | m <sup>3</sup> /h | 0.61                                    | 0.75   | 1.11   | 1.37   | 1.55    | 1.87    | 2.43    |
|                         |        | USG.P.M           | 2.70                                    | 3.30   | 4.85   | 6.02   | 6.83    | 8.25    | 10.66   |
| Water press drop        |        | kPa               | 4.80                                    | 5.89   | 15.81  | 19.89  | 25.83   | 27.97   | 30.14   |
|                         |        | ft.wg             | 1.58                                    | 1.93   | 5.19   | 6.53   | 8.47    | 9.18    | 9.89    |
| Noise Level             |        | Low               | 32                                      | 28     | 35     | 35     | 35      | 37      | 37      |
|                         |        | Med               | 35                                      | 33     | 39     | 39     | 40      | 41      | 43      |
|                         |        | High              | 42                                      | 40     | 42     | 44     | 44      | 45      | 48      |
| Coil                    |        |                   |   |        |        |        |         |         |         |
| Face area               |        | m <sup>2</sup>    | 0.122                                   | 0.142  | 0.189  | 0.244  | 0.284   | 0.325   | 0.345   |
| Face velocity           |        | m/s               | 1.18                                    | 1.47   | 1.70   | 1.69   | 1.69    | 1.80    | 1.97    |
| Motor                   |        |                   |   |        |        |        |         |         |         |
| Type                    |        |                   | 3-Speed Permanent Split Capacitor Motor |        |        |        |         |         |         |
| No. of motor            |        | Nos.              | 1                                       | 1      | 1      | 2      | 2       | 2       | 3       |
| Class                   |        |                   | B                                       | B      | B      | B      | B       | B       | B       |
| Total Rated Power Input |        | Watt              | 60                                      | 70     | 97     | 148    | 178     | 182     | 250     |
| Fan                     |        |                   |   |        |        |        |         |         |         |
| Type                    |        |                   | Centrifugal fan(Forward Curve)          |        |        |        |         |         |         |
| No. of fans             |        | Nos.              | 2                                       | 2      | 2      | 3      | 4       | 4       | 5       |
| Water content           |        |                   |   |        |        |        |         |         |         |
| 3 Rows                  |        | Liters            | 0.887                                   | 1.036  | 1.376  | 1.775  | 2.071   | 2.366   | 2.514   |

Note: The performances are based on the following conditions:

Cooling capacity: For 3 rows coils

Entering air temperature DB: 27 WB: 19

Entering chilled water temperature=7

Leaving chilled water temperature=12

Air Flow : Fan Speed-High

220V~240V/1Ph/50Hz

Under dry coil conditions at 0pa external static pressure

Noise Level : Sound measured at 1m away from the center of the unit



TABLE 1-B: DC SERIES (9 DEGREES TEMP. DIFFERENCE) --- 4 ROWS, MEDIUM STATIC PRESSURE

| Model                   |        |           | YCW300                                  | YCW400 | YCW600 | YCW800 | YCW1000 | YCW1200 | YCW1400 |
|-------------------------|--------|-----------|---|--------|--------|--------|---------|---------|---------|
| Performance             |        |           |   |        |        |        |         |         |         |
| Nominal air flow        | High   | Cu.m/h    | 686                                     | 838    | 1055   | 1434   | 1814    | 2048    | 2344    |
|                         |        | CFM       | 404                                     | 493    | 621    | 843    | 106     | 1205    | 1379    |
|                         | Medium | Cu.m/h    | 588                                     | 719    | 905    | 1229   | 1523    | 1727    | 1969    |
|                         |        | CFM       | 345                                     | 423    | 533    | 723    | 896     | 1017    | 1159    |
|                         | Low    | Cu.m/h    | 462                                     | 565    | 711    | 965    | 1213    | 1397    | 1562    |
|                         |        | CFM       | 272                                     | 332    | 418    | 567    | 720     | 823     | 920     |
| Total capacity          | High   | kW        | 2.88                                    | 4.05   | 5.05   | 7.08   | 8.22    | 9.97    | 10.84   |
|                         |        | Btu/h     | 9826                                    | 13824  | 17250  | 24173  | 28026   | 34036   | 37006   |
|                         | Medium | kW        | 2.60                                    | 3.38   | 4.55   | 6.44   | 7.39    | 9.09    | 10.06   |
|                         |        | Btu/h     | 8870                                    | 11518  | 15489  | 27976  | 25219   | 31011   | 34222   |
|                         | Low    | kW        | 1.98                                    | 2.71   | 3.58   | 5.01   | 6.12    | 7.28    | 8.02    |
|                         |        | Btu/h     | 6751                                    | 9233   | 12212  | 17111  | 20884   | 24855   | 27370   |
| Water flow rate(High)   |        | Cu.m/h    | 0.29                                    | 0.41   | 0.50   | 0.71   | 0.81    | 0.98    | 1.07    |
|                         |        | G.P.M(US) | 1.28                                    | 1.79   | 2.20   | 3.09   | 3.54    | 4.33    | 4.69    |
| Water press drop        |        | KPa       | 3.63                                    | 7.36   | 11.19  | 11.69  | 13.50   | 17.02   | 29.42   |
|                         |        | ft.wg     | 1.19                                    | 2.42   | 3.67   | 3.83   | 4.43    | 5.58    | 9.65    |
| Noise Level             |        | Low       | 32                                      | 28     | 35     | 35     | 35      | 37      | 36      |
|                         |        | Med       | 36                                      | 34     | 40     | 40     | 40      | 41      | 43      |
|                         |        | High      | 40                                      | 40     | 43     | 44     | 44      | 45      | 48      |
| Coil                    |        |           |   |        |        |        |         |         |         |
| Face area               |        | sq.m      | 0.122                                   | 0.142  | 0.189  | 0.244  | 0.284   | 00.325  | 0.345   |
| Face velocity           |        | m/s       | 1.61                                    | 1.69   | 1.60   | 1.69   | 1.69    | 1.80    | 1.97    |
| Motor                   |        |           |   |        |        |        |         |         |         |
| Type                    |        |           | 3-Speed Permanent Split Capacitor Motor |        |        |        |         |         |         |
| No. of motor            |        | #         | 1                                       | 1      | 1      | 2      | 2       | 2       | 3       |
| Class                   |        |           | B                                       | B      | B      | B      | B       | B       | B       |
| Total Rated Power Input |        | Watt      | 67                                      | 75     | 10     | 152    | 196     | 216     | 256     |
| Fan                     |        |           |   |        |        |        |         |         |         |
| Type                    |        |           | Centrifugal fan(Forward Curve)          |        |        |        |         |         |         |
| No. of fans             |        | #         | 2                                       | 2      | 2      | 3      | 4       | 4       | 5       |
| Water content           |        |           |   |        |        |        |         |         |         |
| 4 Rows                  |        | Liters    | 1.189                                   | 1.381  | 1.834  | 2.366  | 2.761   | 3.155   | 3.352   |

Note: The performances are based on the following conditions:

Cooling capacity: For 4 rows coils

Entering air temperature DB: 24C WB: 18C

Entering chilled water temperature=5.5C

Leaving chilled water temperature=14.5C

Air Flow : Fan Speed-High

220V~240V/1Ph/50Hz/60Hz

Under dry coil conditions at 0pa external static pressure

Noise Level : Sound measured at 1m away from the center of the unit



## 2. MEDIUM STATIC PRESSURE

TABLE 2-A: ST SERIES(5 DEGREES TEMP. DIFFERNCE)--- 3 ROWS, LOW STATIC PRESSURE

| Model                   |        |                   | YCW600                                  | YCW800 | YCW1000 | YCW1200 | YCW1400 | YCW1800 | YCW2000 | YCW2200 |
|-------------------------|--------|-------------------|---|--------|---------|---------|---------|---------|---------|---------|
| Performance             |        |                   |   |        |         |         |         |         |         |         |
| air flow                | High   | m <sup>3</sup> /h | 1114                                    | 1490   | 1829    | 2266    | 2649    | 2981    | 3329    | 3659    |
|                         |        | CFM               | 656                                     | 877    | 1076    | 1333    | 1558    | 1753    | 1958    | 2152    |
|                         | Medium | m <sup>3</sup> /h | 922                                     | 1368   | 1688    | 1952    | 2342    | 2736    | 2931    | 3375    |
|                         |        | CFM               | 542                                     | 805    | 993     | 1148    | 1378    | 1609    | 1724    | 1985    |
|                         | Low    | m <sup>3</sup> /h | 868                                     | 1112   | 1435    | 1840    | 2094    | 2225    | 2501    | 2869    |
|                         |        | CFM               | 511                                     | 654    | 844     | 1082    | 1232    | 1309    | 1471    | 1687    |
| Cooling capacity        | High   | kW                | 5.62                                    | 7.23   | 9.41    | 11.24   | 13.52   | 14.46   | 16.17   | 18.82   |
|                         |        | Btu/h             | 19176                                   | 24668  | 32119   | 38352   | 46130   | 49335   | 55183   | 64207   |
|                         | Medium | kW                | 4.94                                    | 6.49   | 8.18    | 9.88    | 11.89   | 12.97   | 13.98   | 16.36   |
|                         |        | Btu/h             | 16861                                   | 22145  | 27903   | 33721   | 40579   | 44259   | 47703   | 55807   |
|                         | Low    | kW                | 4.32                                    | 5.87   | 6.99    | 8.65    | 10.41   | 11.75   | 12.07   | 13.98   |
|                         |        | Btu/h             | 14753                                   | 20037  | 23837   | 29506   | 35532   | 40074   | 41172   | 47703   |
| Water flow rate(High)   |        | m <sup>3</sup> /h | 0.97                                    | 1.24   | 1.62    | 1.93    | 2.32    | 2.49    | 2.78    | 3.24    |
|                         |        | USG.P.M           | 4.25                                    | 5.47   | 7.12    | 8.51    | 10.23   | 10.94   | 12.24   | 14.24   |
| Water press drop        |        | kPa               | 16.1                                    | 17.6   | 19.6    | 21.2    | 23.0    | 26.1    | 30.9    | 38.4    |
|                         |        | ft.wg             | 5.27                                    | 5.75   | 6.42    | 6.96    | 7.54    | 8.57    | 10.13   | 12.58   |
| Noise Lev el            |        | High              | 47                                      | 49     | 50      | 52      | 54      | 56      | 58      | 60      |
|                         |        | Med               | 46                                      | 47     | 47      | 48      | 50      | 52      | 54      | 55      |
|                         |        | Low               | 42                                      | 43     | 44      | 45      | 46      | 47      | 48      | 50      |
| Coil                    |        |                   |   |        |         |         |         |         |         |         |
| Face area               |        | m <sup>2</sup>    | 0.152                                   | 0.183  | 0.213   | 0.229   | 0.274   | 0.320   | 0.320   | 0.381   |
| Face velocity           |        | m/s               | 0.89                                    | 1.15   | 1.50    | 1.79    | 2.15    | 2.30    | 2.58    | 2.996   |
| Motor                   |        |                   |   |        |         |         |         |         |         |         |
| Type                    |        |                   | 3-Speed Permanent Split Capacitor Motor |        |         |         |         |         |         |         |
| Nos. of motor           |        | Nos.              | 1                                       | 1      | 1       | 1       | 1       | 1       | 1       | 2       |
| Class                   |        |                   | B                                       | B      | B       | B       | B       | B       | B       | B       |
| Total Rated Power Input |        | watt              | 211                                     | 234    | 273     | 316     | 354     | 433     | 476     | 499     |
| Fan                     |        |                   |   |        |         |         |         |         |         |         |
| Type                    |        |                   | Centrifugal fan(Forward Curve)          |        |         |         |         |         |         |         |
| Nos. of fans            |        | Nos.              | 1                                       | 1      | 1       | 2       | 2       | 2       | 2       | 3       |
| Water content           |        |                   |   |        |         |         |         |         |         |         |
| 3 Rows                  |        | Liters            | 1.21                                    | 1.40   | 1.68    | 1.85    | 2.14    | 2.52    | 2.52    | 3.12    |

Note: The performances are based on the following conditions:

Cooling capacity: For 3 rows coils;

Entering air conditions DB: 27°C WB: 19°C;

Entering chilled water conditions=7°C, Leaving chilled water conditions=12°C;

Power supply: 220V~240V/1Ph/50Hz;

Under dry coil conditions at 50pa external static pressure;

Noise Level: Sound measured at 1m away from the center of the unit.



TABLE 2-B: ST SERIES (5 DEGREES TEMP. DIFFERNCE)--- 4 ROWS, MEDIUM STATIC PRESSURE

| Model                   |        |   | YCW600                         | YCW800 | YCW1000 | YCW1200 | YCW1400 | YCW1800 | YCW2000 | YCW2200 |
|-------------------------|--------|---|--------------------------------|--------|---------|---------|---------|---------|---------|---------|
| Performance             |        |   |                                |        |         |         |         |         |         |         |
| air flow                | High   | m <sup>3</sup> /h                       | 1082                           | 1447   | 1776    | 2200    | 2572    | 2894    | 3232    | 3552    |
|                         |        | CFM                                     | 636                            | 851    | 1045    | 1294    | 1513    | 1702    | 1901    | 2089    |
|                         | Medium | m <sup>3</sup> /h                       | 895                            | 1328   | 1639    | 1895    | 2274    | 2656    | 2846    | 3277    |
|                         |        | CFM                                     | 526                            | 781    | 964     | 1115    | 1338    | 1562    | 1674    | 1928    |
|                         | Low    | m <sup>3</sup> /h                       | 843                            | 1080   | 1393    | 1786    | 2033    | 2160    | 2428    | 2785    |
|                         |        | CFM                                     | 496                            | 635    | 819     | 1051    | 1196    | 1271    | 1428    | 1638    |
| Cooling capacity        | High   | kW                                      | 6.46                           | 8.31   | 10.82   | 12.92   | 15.54   | 16.62   | 18.59   | 21.63   |
|                         |        | Btu/h                                   | 22042                          | 28354  | 36918   | 44083   | 53022   | 56707   | 63429   | 73802   |
|                         | Medium | kW                                      | 5.68                           | 7.46   | 9.40    | 11.36   | 13.67   | 14.91   | 16.07   | 18.80   |
|                         |        | Btu/h                                   | 19380                          | 25454  | 32073   | 38760   | 46642   | 50873   | 54831   | 64146   |
|                         | Low    | kW                                      | 4.97                           | 6.75   | 8.03    | 9.94    | 11.97   | 13.50   | 13.87   | 16.07   |
|                         |        | Btu/h                                   | 16958                          | 23031  | 27398   | 33915   | 40842   | 46062   | 47324   | 54831   |
| Water flow rate(High)   |        | m <sup>3</sup> /h                       | 1.11                           | 1.43   | 1.86    | 2.22    | 2.67    | 2.86    | 3.20    | 3.72    |
|                         |        | USG.P.M                                 | 4.89                           | 6.29   | 8.19    | 9.78    | 11.76   | 12.58   | 14.07   | 16.37   |
| Water press drop        |        | kPa                                     | 20.6                           | 22.5   | 25.1    | 27.2    | 29.5    | 33.5    | 39.6    | 49.2    |
|                         |        | ft.wg                                   | 6.76                           | 7.38   | 8.23    | 8.92    | 9.68    | 10.99   | 12.99   | 16.14   |
| Noise Lev el            |        | Low                                     | 43                             | 44     | 45      | 46      | 47      | 48      | 50      | 52      |
|                         |        | Med                                     | 47                             | 48     | 48      | 49      | 51      | 53      | 55      | 56      |
|                         |        | High                                    | 49                             | 50     | 51      | 53      | 55      | 58      | 59      | 61      |
| Coil                    |        |   |                                |        |         |         |         |         |         |         |
| Face area               |        | m <sup>2</sup>                          | 0.152                          | 0.183  | 0.213   | 0.229   | 0.274   | 0.32    | 0.32    | 0.381   |
| Face velocity           |        | m/s                                     | 1.98                           | 2.20   | 2.32    | 2.67    | 2.61    | 2.51    | 2.65    | 2.59    |
| Motor                   |        |   |                                |        |         |         |         |         |         |         |
| Type                    |        | 3-Speed Permanent Split Capacitor Motor |                                |        |         |         |         |         |         |         |
| Nos. of motor           |        | Nos.                                    | 1                              | 1      | 1       | 1       | 1       | 1       | 1       | 2       |
| Class                   |        |   | B                              | B      | B       | B       | B       | B       | B       | B       |
| Total Rated Power Input |        | Watt                                    | 270                            | 300    | 350     | 405     | 454     | 555     | 610     | 640     |
| Fan                     |        |   |                                |        |         |         |         |         |         |         |
| Type                    |        |   | Centrifugal fan(Forward Curve) |        |         |         |         |         |         |         |
| Nos. of fans            |        | Nos.                                    | 1                              | 1      | 1       | 2       | 2       | 2       | 2       | 3       |
| Water content           |        |   |                                |        |         |         |         |         |         |         |
| 4 Rows                  |        | Liters                                  | 1.616                          | 1.863  | 2.235   | 2.472   | 2.857   | 3.36    | 3.36    | 4.159   |

Note: The performances are based on the following conditions:

Cooling capacity: For 4 rows coils;

Entering air temperature DB: 27°C WB: 19°C;

Entering chilled water temperature =7°C, Leaving chilled water temperature =12°C;

Power supply: 220V~240V/1Ph/50Hz;

Under dry coil conditions at 50pa external static pressure;

Noise Level: Sound measured at 1m away from the center of the unit



### 3. HIGH STATIC PRESSURE

TABLE 3-A: ST SERIES (5 DEGREES TEMP. DIFFERENCE) --- 3 ROWS, MEDIUM STATIC PRESSURE

| Model                   |        |                   | YCW1200                                 | YCW1400 | YCW1800 | YCW2000 | YCW2200 |
|-------------------------|--------|-------------------|---|---------|---------|---------|---------|
| Performance             |        |                   |   |         |         |         |         |
| Nominal air flow        | High   | m <sup>3</sup> /h | 2043                                    | 2377    | 2629    | 2973    | 3308    |
|                         |        | CFM               | 1201                                    | 1398    | 1546    | 1749    | 1946    |
|                         | Medium | m <sup>3</sup> /h | 1735                                    | 2001    | 2313    | 2624    | 2900    |
|                         |        | CFM               | 1020                                    | 1188    | 1361    | 1543    | 1706    |
|                         | Low    | m <sup>3</sup> /h | 1552                                    | 1806    | 2086    | 2309    | 2552    |
|                         |        | CFM               | 913                                     | 1062    | 1227    | 1358    | 1502    |
| Nominal total capacity  | High   | kW                | 10.91                                   | 12.46   | 13.39   | 14.16   | 16.10   |
|                         |        | Btu/h             | 37109                                   | 42381   | 45544   | 48163   | 54940   |
|                         | Medium | kW                | 9.56                                    | 10.55   | 11.74   | 12.42   | 14.16   |
|                         |        | Btu/h             | 32517                                   | 35884   | 39932   | 42245   | 48321   |
|                         | Low    | kW                | 8.29                                    | 9.55    | 10.79   | 10.96   | 12.22   |
|                         |        | Btu/h             | 28197                                   | 32483   | 36701   | 37279   | 41701   |
| Water flow rate(High)   |        | m <sup>3</sup> /h | 1.90                                    | 2.18    | 2.36    | 2.51    | 2.86    |
|                         |        | USG.P.M           | 8.38                                    | 9.59    | 10.38   | 11.06   | 12.60   |
| Water press drop        |        | kPa               | 21.26                                   | 24.07   | 27.20   | 33.02   | 37.15   |
|                         |        | ft.wg             | 6.97                                    | 7.89    | 8.92    | 10.83   | 12.19   |
| Noise Lev el            |        | Low               | 44                                      | 46      | 47      | 49      | 51      |
|                         |        | Med               | 48                                      | 49      | 52      | 54      | 55      |
|                         |        | High              | 52                                      | 54      | 56      | 57      | 59      |
| Coil                    |        |                   |   |         |         |         |         |
| Face area               |        | m <sup>2</sup>    | 0.237                                   | 0.274   | 0.329   | 0.329   | 0.411   |
| Face velocity           |        | m/s               | 2.47                                    | 2.48    | 2.29    | 2.59    | 2.30    |
| Motor                   |        |                   |   |         |         |         |         |
| Type                    |        |                   | 3-Speed Permanent Split Capacitor Motor |         |         |         |         |
| Nos. of motor           |        | Nos.              | 2                                       | 2       | 2       | 2       | 2       |
| Class                   |        |                   | B                                       | B       | B       | B       | B       |
| Total Rated Power Input |        | watt              | 334                                     | 396     | 428     | 517     | 710     |
| Fan                     |        |                   |   |         |         |         |         |
| Type                    |        |                   | Centrifugal fan(Forward Curve)          |         |         |         |         |
| Nos. of fans            |        | Nos.              | 2                                       | 2       | 2       | 2       | 2       |
| Water content           |        |                   |   |         |         |         |         |
| 3 Rows                  |        | Liters            | 1.99                                    | 2.18    | 2.30    | 2.30    | 2.85    |

Note: The performances are based on the following conditions:

Cooling capacity: For 3 rows coils

Entering air temperature DB: 27 WB: 19

Entering chilled water temperature =7 Leaving chilled water temperature =12

Air Flow : Fan Speed-High

220V~240V/1Ph/50Hz

Under dry coil conditions at 50pa external static pressure

Noise Level : Sound measured at 1m away from the center of the unit



TABLE 3-B: ST SERIES (5 DEGREES TEMP. DIFFERNCE) --- 4 ROWS, MEDIUM STATIC PRESSURE

| Model                   |        |                   | YCW1200                                 | YCW1400 | YCW1800 | YCW2000 | YCW2200 |
|-------------------------|--------|-------------------|---|---------|---------|---------|---------|
| Performance             |        |                   |   |         |         |         |         |
| Nominal air flow        | High   | m <sup>3</sup> /h | 1979                                    | 2309    | 2629    | 2973    | 3298    |
|                         |        | CFM               | 1164                                    | 1358    | 1546    | 1749    | 1940    |
|                         | Medium | m <sup>3</sup> /h | 1682                                    | 1962    | 2313    | 2624    | 2900    |
|                         |        | CFM               | 989                                     | 1154    | 1361    | 1543    | 1706    |
|                         | Low    | m <sup>3</sup> /h | 1504                                    | 1756    | 2086    | 2309    | 2552    |
|                         |        | CFM               | 885                                     | 980     | 1227    | 1358    | 1502    |
| Nominal total capacity  | High   | kW                | 11.93                                   | 14.36   | 15.36   | 17.17   | 19.98   |
|                         |        | Btu/h             | 40709                                   | 48983   | 52392   | 58580   | 68178   |
|                         | Medium | kW                | 10.50                                   | 12.63   | 13.77   | 14.84   | 17.36   |
|                         |        | Btu/h             | 35810                                   | 43091   | 46997   | 50638   | 59243   |
|                         | Low    | kW                | 9.19                                    | 11.06   | 12.47   | 12.81   | 14.84   |
|                         |        | Btu/h             | 31343                                   | 37730   | 42562   | 43721   | 50638   |
| Water flow rate(High)   |        | m <sup>3</sup> /h | 2.14                                    | 2.52    | 2.64    | 2.95    | 3.43    |
|                         |        | G.P.M(US)         | 9.43                                    | 11.09   | 11.61   | 12.97   | 15.11   |
| Water press drop        |        | kPa               | 30.04                                   | 31.29   | 32.01   | 32.01   | 55.86   |
|                         |        | ft.wg             | 9.85                                    | 10.26   | 10.50   | 10.50   | 18.32   |
| Noise Lev el            |        | Low               | 46                                      | 47      | 48      | 50      | 52      |
|                         |        | Med               | 49                                      | 51      | 53      | 55      | 56      |
|                         |        | High              | 53                                      | 55      | 58      | 59      | 61      |
| Coil                    |        |                   |   |         |         |         |         |
| Face area               |        | m <sup>2</sup>    | 0.237                                   | 0.274   | 0.329   | 0.329   | 0.411   |
| Face velocity           |        | m/s               | 2.39                                    | 2.41    | 2.29    | 2.59    | 2.30    |
| Motor                   |        |                   |   |         |         |         |         |
| Type                    |        |                   | 3-Speed Permanent Split Capacitor Motor |         |         |         |         |
| Nos. of motor           |        | Nos.              | 2                                       | 2       | 2       | 2       | 2       |
| Class                   |        |                   | B                                       | B       | B       | B       | B       |
| Total Rated Power Input |        | watt              | 430                                     | 476     | 557     | 717     | 910     |
| Fan                     |        |                   |   |         |         |         |         |
| Type                    |        |                   | Centrifugal fan(Forward Curve)          |         |         |         |         |
| Nos. of fans            |        | Nos.              | 2                                       | 2       | 2       | 2       | 2       |
| Water content           |        |                   |   |         |         |         |         |
| 4 Rows                  |        | Liters            | 2.66                                    | 3.01    | 3.07    | 3.07    | 3.8     |

Note: The performances are based on the following conditions:

Cooling capacity: For 4 rows coils

Entering air temperature DB: 27 WB: 19

Entering chilled water temperature =7

Leaving chilled water temperature =12

Air Flow : Fan Speed-High

220V~240V/1Ph/50Hz

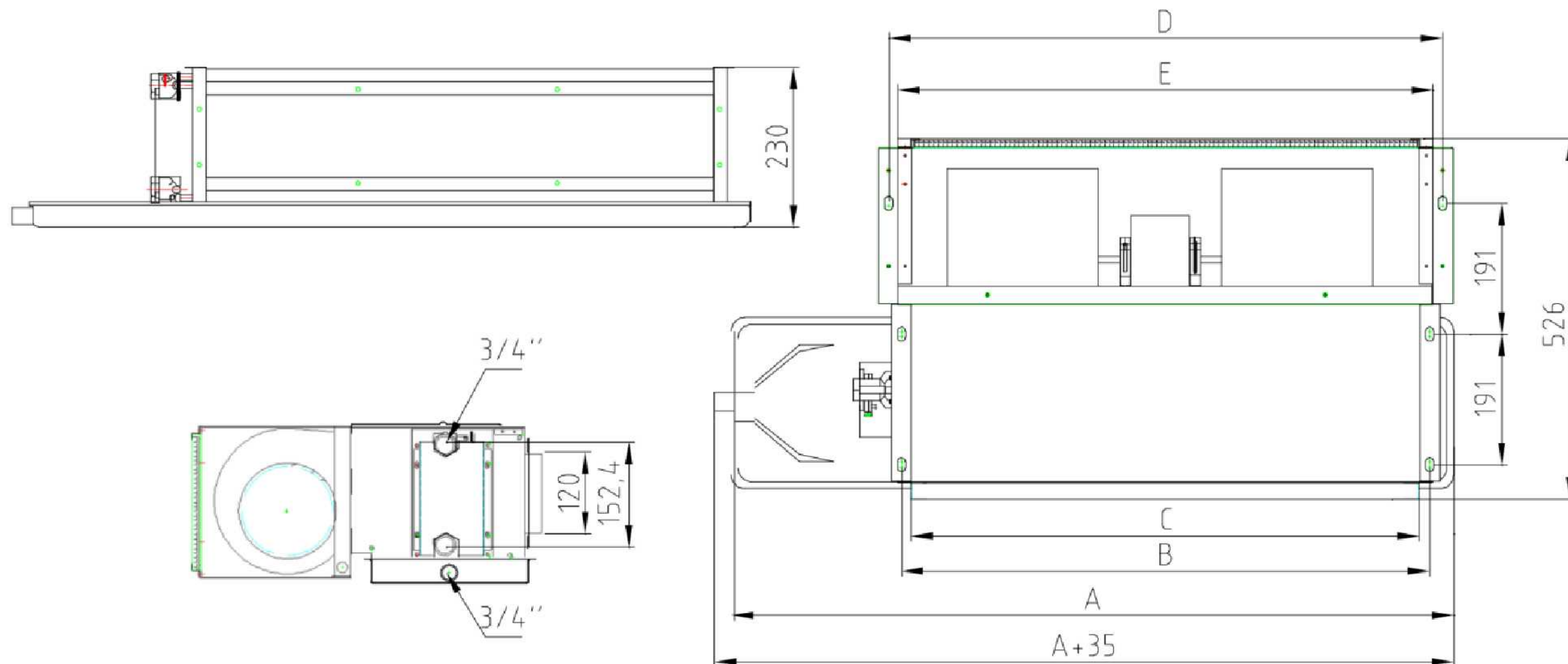
Under dry coil conditions at 50pa external static pressure

Noise Level : Sound measured at 1m away from the center of the unit



## DIMENSIONS

### 1. Low Static Pressure



#### a) 3 Rows Low Static Pressure (ST)

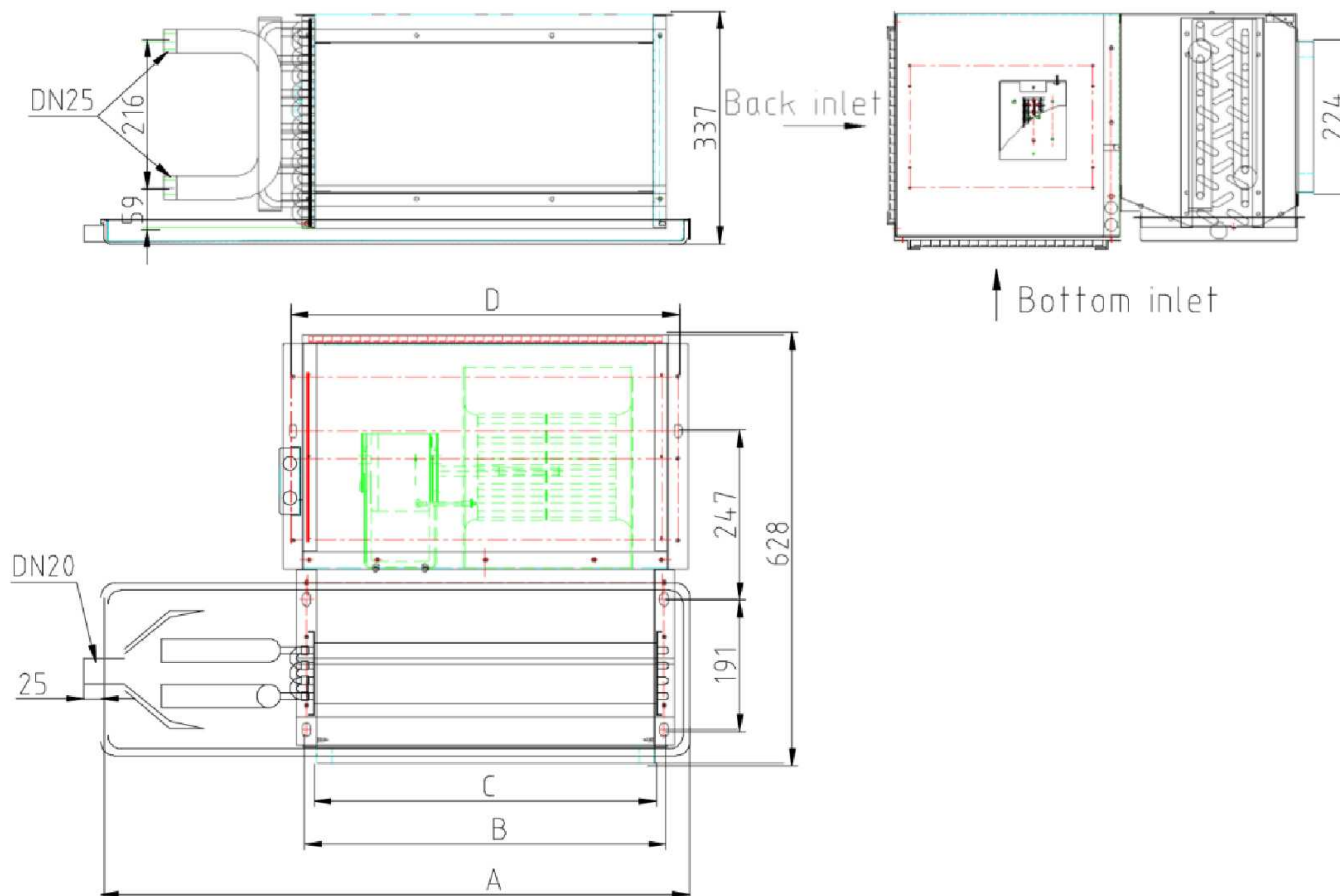
| MODEL   | A    | B    | C    | D    | E    | Width | Height | Plenum<br>Conn.dim | Filter Dim  | Weight    |
|---------|------|------|------|------|------|-------|--------|--------------------|-------------|-----------|
|         |      |      |      |      |      |       |        |                    |             | 3rows(kg) |
| YCW300  | 910  | 628  | 600  | 668  | 640  | 526   | 230    | 600*120            | 594*175*10  | 19.5      |
| YCW400  | 1060 | 728  | 700  | 768  | 740  | 526   | 230    | 700*120            | 694*175*10  | 22.1      |
| YCW600  | 1260 | 958  | 930  | 1006 | 970  | 526   | 230    | 930*120            | 924*175*10  | 26.3      |
| YCW800  | 1510 | 1228 | 1200 | 1268 | 1240 | 526   | 230    | 1200*120           | 1194*175*10 | 33.9      |
| YCW1000 | 1710 | 1428 | 1400 | 1468 | 1440 | 526   | 230    | 1400*120           | 1394*175*10 | 38.9      |
| YCW1200 | 1860 | 1628 | 1600 | 1668 | 1640 | 526   | 230    | 1600*120           | 1594*175*10 | 44.2      |
| YCW1400 | 1960 | 1728 | 1700 | 1768 | 1740 | 526   | 230    | 1700*120           | 1694*175*10 | 46.9      |

#### b) 4 Rows Medium Static Pressure(DC)

| MODEL   | A    | B    | C    | D    | E    | Width | Height | Plenum<br>Conn.dim | Filter Dim  | Weight    |
|---------|------|------|------|------|------|-------|--------|--------------------|-------------|-----------|
|         |      |      |      |      |      |       |        |                    |             | 4rows(kg) |
| YCW300  | 910  | 628  | 600  | 668  | 640  | 526   | 230    | 600*120            | 594*175*10  | 19.5      |
| YCW400  | 1060 | 728  | 700  | 768  | 740  | 526   | 230    | 700*120            | 694*175*10  | 22.1      |
| YCW600  | 1260 | 958  | 930  | 1006 | 970  | 526   | 230    | 930*120            | 924*175*10  | 26.3      |
| YCW800  | 1510 | 1228 | 1200 | 1268 | 1240 | 526   | 230    | 1200*120           | 1194*175*10 | 33.9      |
| YCW1000 | 1710 | 1428 | 1400 | 1468 | 1440 | 526   | 230    | 1400*120           | 1394*175*10 | 38.9      |
| YCW1200 | 1860 | 1628 | 1600 | 1668 | 1640 | 526   | 230    | 1600*120           | 1594*175*10 | 44.2      |
| YCW1400 | 1960 | 1728 | 1700 | 1768 | 1740 | 526   | 230    | 1700*120           | 1694*175*10 | 46.9      |



## 2. Medium Static Pressure

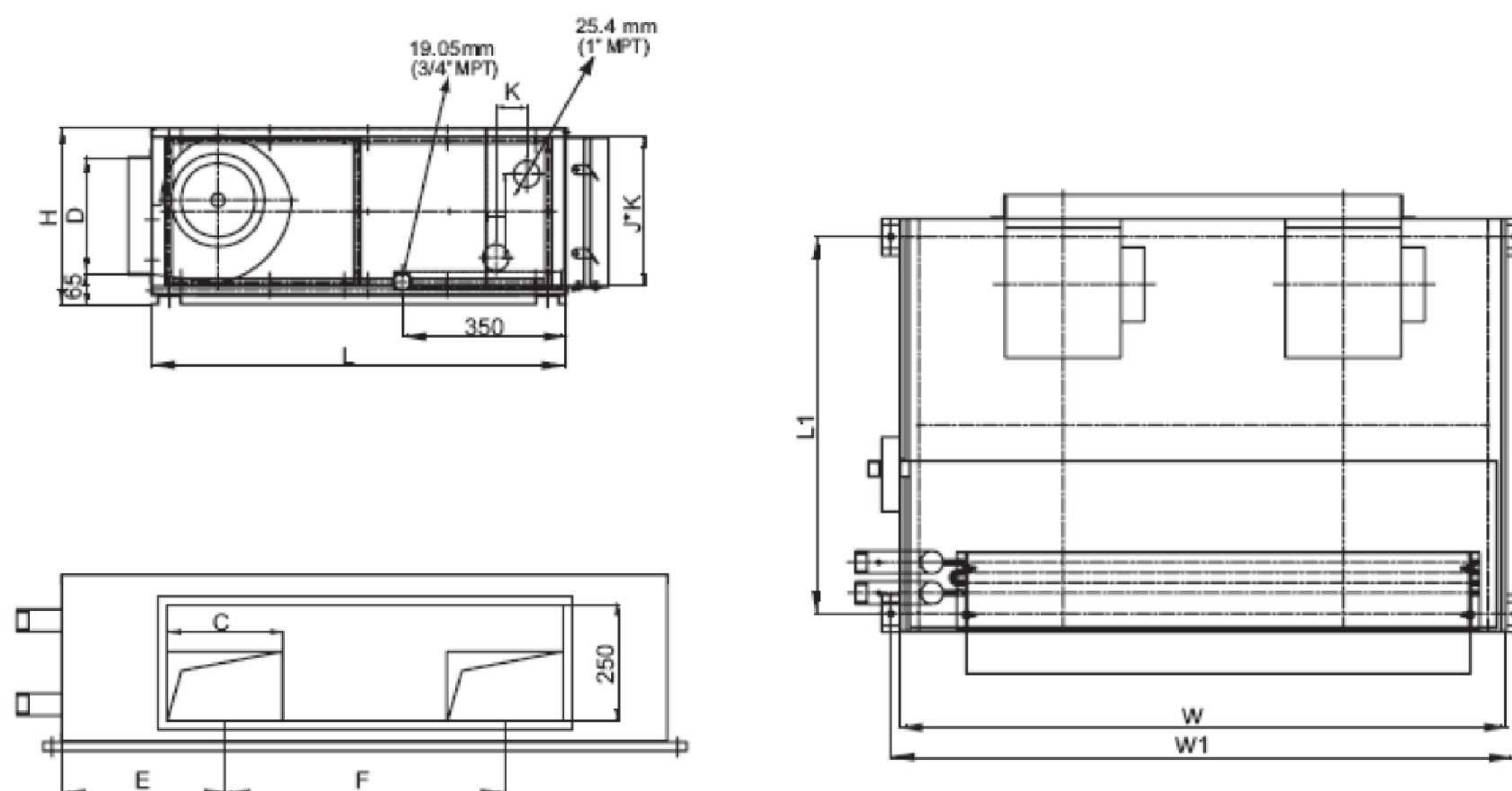


### a) 3/4 Rows, Medium static, With air return plenum and filter.

| MODEL        | Length |      |      |      | Filter Dim  | Width | Height | Plenum<br>Conn. dim | Weight (kg) |        |
|--------------|--------|------|------|------|-------------|-------|--------|---------------------|-------------|--------|
|              | A      | B    | C    | D    |             |       |        |                     | 4 rows      | 3 rows |
| YCW600       | 860    | 528  | 500  | 568  | 530×283×10  | 628   | 337    | 224×500             | 33          | 32     |
| YCW800       | 960    | 628  | 600  | 668  | 630×283×10  | 628   | 337    | 224×600             | 34          | 33     |
| YCW1000      | 1060   | 728  | 700  | 768  | 710×283×10  | 628   | 337    | 224×700             | 36          | 35     |
| YCW1200      | 1110   | 778  | 750  | 818  | 760×283×10  | 628   | 337    | 224×750             | 42          | 41     |
| YCW1400      | 1260   | 928  | 900  | 968  | 910×283×10  | 628   | 337    | 224×900             | 46          | 44     |
| YCW1800/2000 | 1410   | 1078 | 1050 | 1118 | 1060×283×10 | 628   | 337    | 224×1050            | 53          | 52     |
| YCW2200      | 1610   | 1278 | 1250 | 1318 | 1260×283×10 | 628   | 337    | 224×1250            | 63          | 61     |



### 3. High Static Pressure



**a) 3 Rows High Static Pressure (ST)**

| MODEL   | W    | L   | H   | C   | D   | E   | F   | J*K      | W1   | L1  | K  | Weight |
|---------|------|-----|-----|-----|-----|-----|-----|----------|------|-----|----|--------|
|         |      |     |     |     |     |     |     |          |      |     |    | 3rows  |
| YCW1200 | 1000 | 590 | 375 | 250 | 250 | 274 | 452 | 315*780  | 1050 | 500 | 66 | 62     |
| YCW1400 | 1130 | 590 | 375 | 250 | 250 | 314 | 502 | 315*910  | 1180 | 500 | 66 | 73     |
| YCW1800 | 1300 | 890 | 380 | 248 | 126 | 350 | 600 | 320*1080 | 1340 | 810 | 66 | 85     |
| YCW2000 | 1300 | 890 | 380 | 248 | 126 | 350 | 600 | 320*1080 | 1340 | 810 | 66 | 93     |
| YCW2200 | 1490 | 890 | 380 | 248 | 126 | 400 | 690 | 320*1270 | 1530 | 810 | 66 | 107    |

**b) 4 Rows High Static Pressure (ST)**

| MODEL   | W    | L   | H   | C   | D   | E   | F   | J*K      | W1   | L1  | K  | Weight |
|---------|------|-----|-----|-----|-----|-----|-----|----------|------|-----|----|--------|
|         |      |     |     |     |     |     |     |          |      |     |    | 4rows  |
| YCW1200 | 1000 | 590 | 375 | 250 | 250 | 274 | 452 | 315*780  | 1050 | 500 | 66 | 65     |
| YCW1400 | 1130 | 590 | 375 | 250 | 250 | 314 | 502 | 315*910  | 1180 | 500 | 66 | 76     |
| YCW1800 | 1300 | 890 | 380 | 248 | 126 | 350 | 600 | 320*1080 | 1340 | 810 | 66 | 87     |
| YCW2000 | 1300 | 890 | 380 | 248 | 126 | 350 | 600 | 320*1080 | 1340 | 810 | 66 | 95     |
| YCW2200 | 1490 | 890 | 380 | 248 | 126 | 400 | 690 | 320*1270 | 1530 | 810 | 66 | 110    |

**c) 4 Rows High Static Pressure(DC)**

| MODEL   | W    | L   | H   | C   | D   | E   | F   | J*K      | W1   | L1  | K  | Weight |
|---------|------|-----|-----|-----|-----|-----|-----|----------|------|-----|----|--------|
|         |      |     |     |     |     |     |     |          |      |     |    | 4rows  |
| YCW1200 | 1000 | 590 | 375 | 250 | 250 | 274 | 452 | 315*780  | 1050 | 500 | 66 | 65     |
| YCW1400 | 1130 | 590 | 375 | 250 | 250 | 314 | 502 | 315*910  | 1180 | 500 | 66 | 76     |
| YCW1800 | 1300 | 890 | 380 | 248 | 126 | 350 | 600 | 320*1080 | 1340 | 810 | 66 | 87     |
| YCW2000 | 1300 | 890 | 380 | 248 | 126 | 350 | 600 | 320*1080 | 1340 | 810 | 66 | 95     |
| YCW2200 | 1490 | 890 | 380 | 248 | 126 | 400 | 690 | 320*1270 | 1530 | 810 | 66 | 110    |





## **PT. MECHTRON MASTEVI INDONESIA**

### **MEDAN**

Jl. Mandor No.28, Pulo Brayan Darat I,  
Kec. Medan Timur, Kota Medan 20239

### **BANDA ACEH**

Jl. Prof. Dr. Moh Hasan No. 88  
Banda Aceh, Aceh 23245

### **JAKARTA**

Green Lake City, Rukan CBD Green Lake Blok M23, Ketapang, Cipondoh,  
Kota Jakarta Barat, Daerah Khusus Ibukota Jakarta 11750