



Air Conditioners

# Heating & Cooling

**R-410A**

- » **'Plug-and-play'**  
for easy installation
- » **High efficiency**
- » **Wide operating range**
- » **Compact unit**
- » **Economiser option**  
for 'free cooling'  
and greater energy  
efficiency

Rooftop



[www.daikin.eu](http://www.daikin.eu)



UATYQ-CY1



## Rooftops R-410A: Features

- › Flexible air supply: Since all the units utilize an adjustable belt/ pulley driven supply air fan as standard, the units are able to meet a wide range of supply air volumes and external static pressures. Furthermore, the supply air fan motors, pulleys and belts (field supplied) can be easily changed on site to meet exact air flow and ESP requirement if required.
- › Refrigerant is pre-factory charged to ensure **clean and efficient operation**
- › **Electric heater connection**
- › Coil with **anti-corrosion treatment** (gold fin)
- › **Electronic expansion valve** for better control of the refrigerant flow
- › **Cut-off switch** for emergency power cut-off

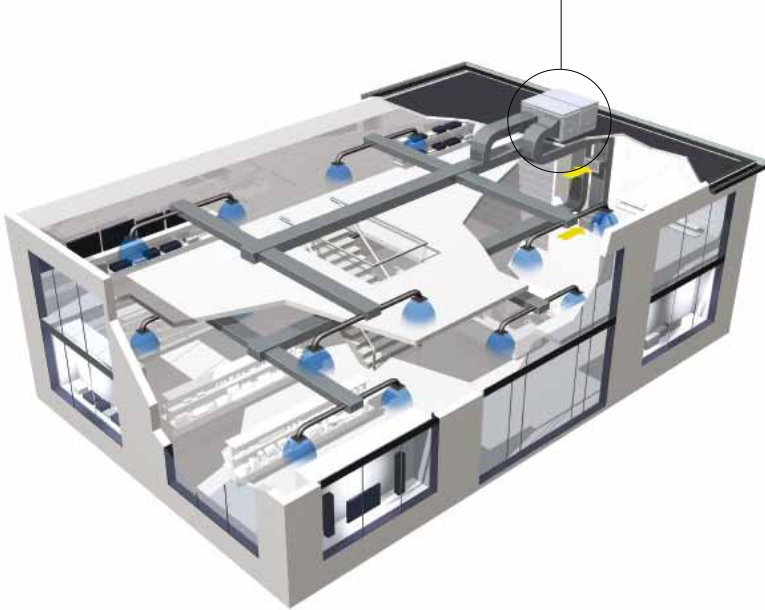
Control :

- › **Control panel** offered as standard
- › **Extended control length** up to 100m
- › Connectable to **Daikin control systems** (via option)

 Intelligent **Controller**

 Intelligent **Manager**

### PLUG AND PLAY INSTALLATION



#### > **Plug and play installation**

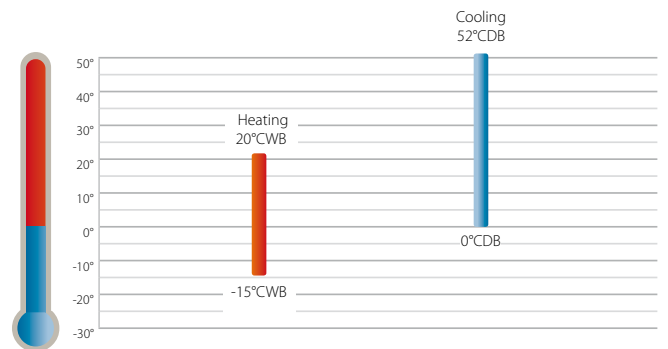
The single unit configuration requires no additional piping work as both the indoor and outdoor sides are pre-connected. Once the ductwork is installed, the only thing left to do is connect the unit.

#### > **High efficiency**

An EER up to 3.43 thanks to the combination of high efficient and reliable scroll compressors and R-410A refrigerant.

#### > **Wide operation range**

The UATYQ-CY1 series operate from 52°CDB down to 0°CDB in cooling and from 20°CWB down to -15°CWB in heating.

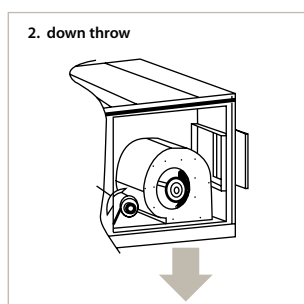
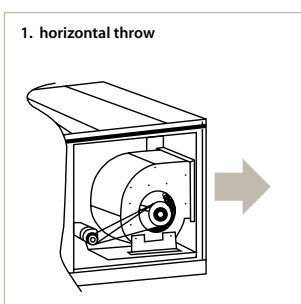


#### > **Compact unit**

The flat top design of the unit allows for maximum utilization of warehouse and container space

#### > **Field convertible return and supply air:**

Fan can be mounted in two directions



#### > **Cost-effective climate control with 'economiser' option**

The economizer option enables 'free cooling' and introduction of fresh air.

Free cooling takes place when the outside temperature is lower than the interior temperature. The outdoor air is there used as 'free' source of cooling.

Fresh air application is also possible. It allows to maintain a high-quality indoor environment. The connection to field supplied CO<sub>2</sub> sensors, that monitor the indoor air quality, regulates the amount of incoming fresh air.



# Heating & Cooling

| INDOOR UNIT                   |                          |         |                     | UATYQ250CY1   | UATYQ350CY1       | UATYQ450CY1       | UATYQ550CY1       | UATYQ600CY1       | UATYQ700CY1       |                   |
|-------------------------------|--------------------------|---------|---------------------|---------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Cooling capacity              | Nom.                     |         | kW                  | 27.340 (3)    | 35.580 (3)        | 44.720 (3)        | 55.690.000 (3)    | 66.820 (3)        | 72.600 (3)        |                   |
| Heating capacity              | Nom.                     |         | kW                  | 24.910 (3)    | 34.790 (3)        | 41.790 (3)        | 53.930 (3)        | 61.690 (3)        | 69.610 (3)        |                   |
| Power input                   | Cooling                  | Nom.    | kW                  | 8.140         | 10.780            | 13.040            | 16.740            | 19.650            | 21.610            |                   |
|                               | Heating                  | Nom.    | kW                  | 7.330         | 10.840            | 12.860            | 15.540            | 18.580            | 21.420            |                   |
| EER                           |                          |         |                     | 3.36          | 3.30              | 3.43              | 3.33              | 3.40              | 3.36              |                   |
| COP                           |                          |         |                     | 3.40          | 3.21              | 3.25              | 3.47              | 3.32              | 3.25              |                   |
| Evaporator                    | Air flow rate            | Cooling | m <sup>3</sup> /min | 93.6          | 121.8             | 160.2             | 189.6             | 206.7             | 235.02            |                   |
|                               | External static pressure |         | Pa                  |               |                   |                   | 147               |                   |                   |                   |
| Evaporator piping connections | Condensation drain size  |         | OD                  |               |                   |                   | 25.4              |                   |                   |                   |
|                               | Dimensions               | Unit    | HxWxD               | mm            | 1,150x1,638x2,063 | 1,028x2,209x2,113 | 1,130x2,209x2,113 | 1,048x2,209x2,670 | 1,302x2,209x2,670 | 1,454x2,209x2,670 |
| Condenser                     | Weight                   | Unit    |                     | kg            | 445               | 580               | 610               | 830               | 880               | 1,020             |
|                               | Casing                   | Colour  |                     | Light grey    |                   |                   |                   |                   |                   |                   |
|                               | Air flow rate            | Cooling | cfm                 | 8,230         | 12,000            | 12,100            | 12,900            | 20,200            | 21,200            |                   |
|                               | Operation range          | Cooling | Min.-Max.           | °CDB          | 0~52              |                   |                   |                   |                   |                   |
|                               |                          | Heating | Min.-Max.           | °CWB          | -15~-18           |                   |                   |                   |                   |                   |
|                               | Sound power level        | Nom.    |                     | dBA           | 82                | 83                | 87                | 90                |                   |                   |
| Refrigerant                   | Type                     |         | R-410A              |               |                   |                   |                   |                   |                   |                   |
| Power supply                  | Phase/Frequency/Voltage  |         | Hz/V                | 3~/50/380-415 |                   |                   |                   |                   |                   |                   |

(1) All specifications are subjected to change by the manufacturer without prior notice. (2) All units are being tested and comply to ISO5151. (3) Cooling: indoor temp. 27°CDB, 19°CWB; outdoor temp. 35°CDB, 24°CWB (4) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB (5) Sound pressure levels are measured according to JIS B 8616 standard (6) All performance calculations are strictly according to Eurovent standard

| ECONOMISER OPTION |               |         |      | ECONO250AY1 | ECONO350AY1 | ECONO450AY1 | ECONO550AY1 | ECONO600AY1 | ECONO700AY1 |       |
|-------------------|---------------|---------|------|-------------|-------------|-------------|-------------|-------------|-------------|-------|
| Dimensions        | Packed unit   | Height  | mm   | 534         |             |             |             |             |             |       |
|                   |               | Width   | mm   | 1,440       | 1,430       |             |             | 1,458       |             |       |
|                   |               | Depth   | mm   | 1,144       | 1,124       |             |             | 1,564       |             |       |
| Weight            | Unit          |         | kg   | 51          | 42          | 43          | 53          | 54          | 69          |       |
| Packing           | Weight        |         | kg   | 152         | 140         | 141         | 165         | 166         | 181         |       |
| Fan               | Air flow rate | Cooling | Nom. | l/s         | 1,560       | 2,030       | 2,670       | 3,160       | 3,445       | 3,917 |
|                   |               |         |      | cfm         | 3,300       | 4,300       | 5,650       | 6,700       | 7,300       | 8,300 |
| Option for        |               |         |      | UATYQ250CY1 | UATYQ350CY1 | UATYQ450CY1 | UATYQ550CY1 | UATYQ600CY1 | UATYQ700CY1 |       |



Remote control as standard



Outdoor unit UATYQ-CY1



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



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