

# RANGE

## OUTDOOR UNITS

Energy efficiency class up to A++ in cooling mode and up to A+ in heating mode.

Intelligent adjustment of compressor frequency, accurate temperature control.

Reliable cooling and heating operation down to -20° C outdoor temperature.

Maximum length of pipe connections 75m; height difference between units up to 30m.

Minimization of the sound level thanks to the axial fan.

Rapid achievement of comfort conditions: the unit allows rapid cooling and heating and is able to quickly reach the temperature set by the user.

Intelligent defrosting technology: the unit is able to correctly evaluate the presence of frost on the outdoor unit through a temperature sensor. The goal is to "defrost only when needed", optimizing the heating effect for high environmental comfort.



AEG ECO 35PIH  
AEG ECO 50PIH  
AEG ECO 70PIH  
AEG ECO 85PIH



AEG ECO 100PIH  
AEG ECO 100PIH3  
AEG ECO 140PIH  
AEG ECO 140PIH3



AEG ECO 160PIH

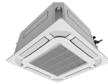
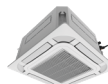
| Code      | Model           | Nominal heating capacity [kW] | Nominal cooling capacity [kW] |
|-----------|-----------------|-------------------------------|-------------------------------|
| 398000710 | AEG ECO 35PIH   | 3,50                          | 4,00                          |
| 398000711 | AEG ECO 50PIH   | 5,0                           | 5,5                           |
| 398000712 | AEG ECO 70PIH   | 7,0                           | 8,0                           |
| 398000713 | AEG ECO 85PIH   | 8,5                           | 8,8                           |
| 398000714 | AEG ECO 100PIH  | 10,00                         | 12,00                         |
| 398000716 | AEG ECO 100PIH3 | 10,00                         | 12,00                         |
| 398000715 | AEG ECO 140PIH  | 13,40                         | 15,50                         |
| 398000717 | AEG ECO 140PIH3 | 13,40                         | 15,50                         |
| 398000718 | AEG ECO 160PIH  | 14,50                         | 17,00                         |

**A++** Cooling

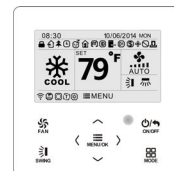
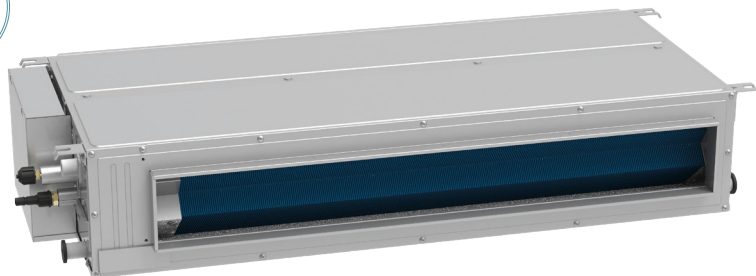
**A+** Heating

# RANGE

## INDOOR UNITS

| Type                                           | Features                                                                                                                                                     |                                                                                     | Code      | Model                 |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|-----------------------|
| COMPACT CASSETTE<br>WITH 360° AIR<br>DISCHARGE | <ul style="list-style-type: none"><li>- 8-way compact</li><li>- Integrated condensate drain pump</li><li>- Ideal for installation in false ceiling</li></ul> |    | 398000726 | ASG ECO 35PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000727 | ASG ECO 50PH          |
| GRID FOR COMPACT CASSETTE                      |                                                                                                                                                              |                                                                                     | 398100668 | GRID CASSETTE COMPACT |
| CASSETTE WITH 360°<br>AIR DISCHARGE            | <ul style="list-style-type: none"><li>- 8-way</li><li>- Wide range of flap swinging</li><li>- Integrated condensate drain pump</li></ul>                     |    | 398000728 | ASG ECO 70PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000729 | ASG ECO 85PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000730 | ASG ECO 100PH         |
|                                                |                                                                                                                                                              |                                                                                     | 398000731 | ASG ECO 140PH         |
|                                                |                                                                                                                                                              |                                                                                     | 398000732 | ASG ECO 160PH         |
| GRID FOR BIG CASSETTE                          |                                                                                                                                                              |                                                                                     | 398100677 | GRID BIG CASSETTE     |
| SLIM DUCTED                                    | <ul style="list-style-type: none"><li>- Low external static pressure</li><li>- Silence</li><li>- Integrated condensate drain pump</li></ul>                  |  | 398000719 | ADG ECO 35PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000720 | ADG ECO 50PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000721 | ADG ECO 70PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000722 | ADG ECO 85PH          |
| HIGH STATIC<br>PRESSURE DUCTED                 | <ul style="list-style-type: none"><li>- High external static pressure</li><li>- Silence</li><li>- Integrated condensate drain pump</li></ul>                 |  | 398000767 | ADG ECO 70PHB         |
|                                                |                                                                                                                                                              |                                                                                     | 398000768 | ADG ECO 85PHB         |
|                                                |                                                                                                                                                              |                                                                                     | 398000723 | ADG ECO 100PH         |
|                                                |                                                                                                                                                              |                                                                                     | 398000724 | ADG ECO 140PH         |
|                                                |                                                                                                                                                              |                                                                                     | 398000725 | ADG ECO 160PH         |
| FLOOR/CEILING                                  | <ul style="list-style-type: none"><li>- Double flap</li><li>- 11 fan speeds</li><li>- Wide range of flap swinging</li></ul>                                  |  | 398000771 | ACG ECO 35PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000733 | ACG ECO 50PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000734 | ACG ECO 70PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000735 | ACG ECO 85PH          |
|                                                |                                                                                                                                                              |                                                                                     | 398000736 | ACG ECO 100PH         |
|                                                |                                                                                                                                                              |                                                                                     | 398000737 | ACG ECO 140PH         |
|                                                |                                                                                                                                                              |                                                                                     | 398000738 | ACG ECO 160PH         |
| FLOOR STANDING                                 | <ul style="list-style-type: none"><li>- 5 modes</li><li>- Quick cooling and heating</li><li>- Autoswing</li></ul>                                            |  | 398000772 | AFSI ECO 120 HL       |

# SLIM DUCTED



(Standard)

Wired controller

- Slim ducted units for light commercial/industrial applications
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas
- Ultra-thin, these units are characterized by an air discharge design optimized to minimize the sound level and improve performance
- The height is only 200 mm for 3.5 and 5.0 kW models and 220 mm for 7 and 8.5 kW models: these units are among the thinnest on the market
- The special design of the evaporating coil (V-shape), covered by a patent, favors a more effective exchange of air
- The centrifugal fan is also characterized by a patented design and allows higher air flow and greater silence
- The external static pressure reaches 75 Pa, ensuring maximum adaptability to different types of installation
- The combination with the wired control allows to optimize the external static pressure according to the different technical installation requirements
- The condensate drain pump is integrated for a height difference of up to 1000 mm
- You can choose between rear or bottom air intake
- You can select one of the 11 fan speed available
- The DC motor ensures energy saving and high efficiency
- Double room temperature sensor for a customizable comfort: possibility to select the sensor of return air temperature on the unit or of the sensor of temperature on the wired control
- Connection to fresh air intake from outdoors is possible
- High energy efficiency, at all capacities, both in cooling and heating modes (seasonal efficiency)
- The special closing system of the refrigerant valve prevents and avoids the risk of refrigerant leaks from inappropriate maintenance



Quick cooling and heating



Intelligent sensor



Quiet mode



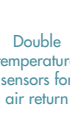
Sleep mode



iFeel



Cold air prevention



Double temperature sensors for air return



Intelligent defrosting



Auto mode



Filter cleaning reminder



360° air flow



Automatic swinging



Fixed swinging



Fan speed regulation



Automatic fan speed



Turbo fan speed



Dehumidification mode



Dehumidification 12°C



I-Demand energy saving



WiFi and app (optional)



Centralized control



Long distance control



Modbus



Dry contact



Access control



Dual wired controllers



Programmable wired controller



8°C heating



Memory



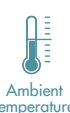
Auto diagnosis



Integrated water heat pump



Timer on/off



Ambient temperature control



System parameters inquiry



Historical errors inquiry

**A++** Cooling

**A+** Heating

# TECHNICAL DATA

| Indoor unit model                                            |                          | ADG ECO 70PH                 |         | ADG ECO 85PH                 |         |
|--------------------------------------------------------------|--------------------------|------------------------------|---------|------------------------------|---------|
| Outdoor unit model                                           |                          | AEG ECO 70PIH                |         | AEG ECO 85PIH                |         |
|                                                              | Units                    | Cooling                      | Heating | Cooling                      | Heating |
| Nominal capacity (EN14511)                                   | kW                       | 7,0                          | 8,0     | 8,5                          | 8,8     |
|                                                              | BTU/h                    | 24000                        | 27200   | 29000                        | 30000   |
| EER/COP (EN14511)                                            |                          | 3,33                         | 3,56    | 3,15                         | 3,45    |
| Design Load (Pdesign c/Pdesign h)<br>(Average) (EN14825)*    | kW                       | 7,0                          | 6,4     | 8,5                          | 7,2     |
| Seasonal efficiency ratio (SEER/SCOP<br>(Average) (EN14825)* |                          | 6,8                          | 4,0     | 6,1                          | 4,0     |
| Energy efficiency class*                                     |                          | A++                          | A+      | A++                          | A+      |
| Seasonal energy consumption (Average)*                       | kWh/annum                | 357                          | 2238    | 480                          | 2576    |
| Air flowrate Indoor (sh.-h.-m.-l.)                           | m <sup>3</sup> /h        | 1200-1160-1090-940           |         | 1500-1350-1130-950           |         |
| Dehumidification                                             | l/h                      | 2,0                          |         | 2,4                          |         |
| Fan speeds (Indoor/Outdoor)                                  | n°                       | 4/2                          |         | 4/2                          |         |
| Sound pressure Indoor (sh.-h.-m.-l.)                         | dB(A)                    | 40-39-37-36                  |         | 42-40-37-35                  |         |
| Sound pressure Outdoor (h.)                                  | dB(A)                    | 62                           |         | 65                           |         |
| Sound power Indoor (sh.-h.-m.-l.)                            | dB(A)                    | 50-49-47-46                  |         | 52-50-47-45                  |         |
| Sound power Outdoor (h.)                                     | dB(A)                    | 67                           |         | 69                           |         |
| Power supply                                                 | V/Ph/Hz                  | 220-240/1/50<br>208-230/1/60 |         | 220-240/1/50<br>208-230/1/60 |         |
| Static pressure rated                                        | Pa                       | 25                           |         | 37                           |         |
| Static pressure range                                        | Pa                       | 0-75                         |         | 0-75                         |         |
| Power input                                                  | kW                       | 2,1                          | 2,25    | 2,80                         | 2,65    |
| Compressor type                                              |                          | Rotary DC Inverter           |         | Rotary DC Inverter           |         |
| Refrigerant type/GWP                                         |                          | R32/675                      |         | R32/675                      |         |
| Refrigerant charge                                           | kg/T.CO <sub>2</sub> eq. | 1,6/1,08                     |         | 1,8/1,23                     |         |
| Liquid pipe diameter                                         | mm (")                   | 9,52 (3/8")                  |         | 9,52 (3/8")                  |         |
| Gas pipe diameter                                            | mm (")                   | 15,88 (5/8")                 |         | 15,88 (5/8")                 |         |
| Min.-max. pipe lenght with gas standard charge               | m                        | 3-5                          |         | 3-5                          |         |
| Max. pipe lenght with additional charge                      | m                        | 50                           |         | 50                           |         |
| Additional refrigerant charge                                | g/m                      | 40                           |         | 40                           |         |
| Max. height difference (Outdoor above)                       | m                        | 25                           |         | 25                           |         |
| Max. height difference (Indoor above)                        | m                        | 25                           |         | 25                           |         |
| Indoor net dimension (H./W./D.)                              | mm                       | 220/1300/450                 |         | 220/1300/450                 |         |
| Outdoor net dimension (H./W./D.)                             | mm                       | 698/892/340                  |         | 790/920/370                  |         |
| Net weight Indoor/Outdoor                                    | Kg                       | 31/53                        |         | 31/60                        |         |

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +48 °C

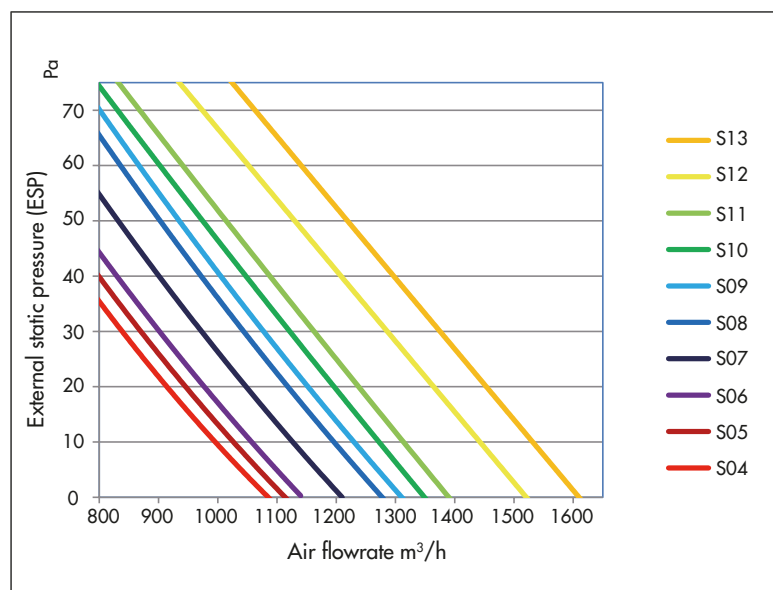
Heating mode: from -20 °C to +24 °C

RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

\*Data declared in compliance with EU Regulation no. 206/2012, as regards to Ecodesign requirements for air conditioners and comfort fans, and EU Regulation no. 626/2011, concerning the energy labelling of air conditioners, and tested according to standard EN14825.

# STATIC PRESSURE CURVES

## ADG ECO 70PH - static pressure curves

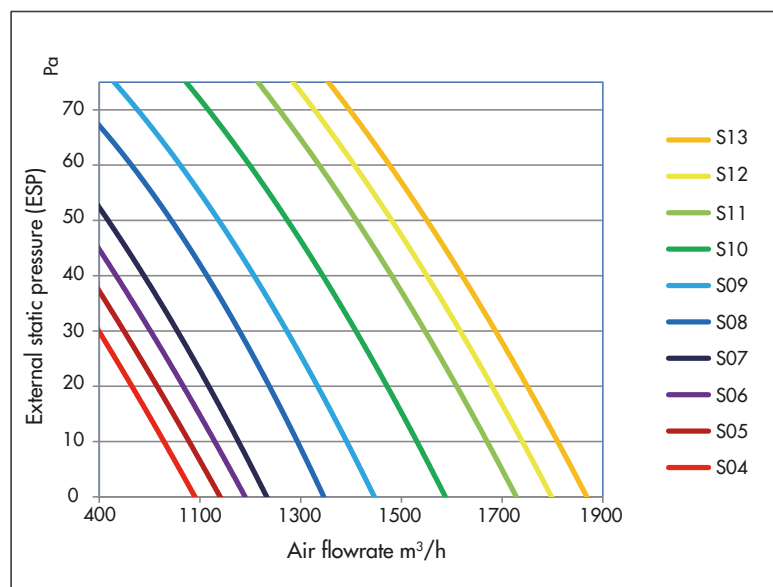


| External static pressure | Turbo speed | High       | Medium     | Low        |
|--------------------------|-------------|------------|------------|------------|
| P03                      | S09         | S08        | S06        | S04        |
| P04                      | S10         | S09        | S07        | S05        |
| <b>P05*</b>              | <b>S11</b>  | <b>S10</b> | <b>S08</b> | <b>S06</b> |
| P06                      | S12         | S11        | S09        | S07        |
| P07                      | S13         | S12        | S10        | S08        |

\* Default static pressure level

The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds.

## ADG ECO 85PH - static pressure curves



| External static pressure | Turbo speed | High       | Medium     | Low        |
|--------------------------|-------------|------------|------------|------------|
| P03                      | S09         | S08        | S06        | S04        |
| P04                      | S10         | S09        | S07        | S05        |
| <b>P05*</b>              | <b>S11</b>  | <b>S10</b> | <b>S08</b> | <b>S06</b> |
| P06                      | S12         | S11        | S09        | S07        |
| P07                      | S13         | S12        | S10        | S08        |

\* Livello di pressione statica esterna impostata di default

The wired controller can be used to change the external static pressure (ESP) to turbo, high, medium and low fan speeds.