



X3 air conditioning

residential and commercial

X3 PACKAGE

Commercial single split air conditioners DC Inverter R32

Cassette

Ducted

Floor/ceiling

Control systems

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
398000715	AEG ECO 100PIH3	10,00	12,00
398000716	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 WITH 360° AIR DISCHARGE	<ul style="list-style-type: none"> - 8-way compact - Integrated condensate drain pump - Ideal for installation in false ceiling 		398000726	ASG ECO 35PH
			398000727	ASG ECO 50PH
GRID FOR COMPACT CASSETTE			398100668	GRID CASSETTE COMPACT
CASSETTE WITH 360° AIR DISCHARGE	<ul style="list-style-type: none"> - 8-way - Wide range of flap swinging - Integrated condensate drain pump 		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"> - Low external static pressure - Silence - Integrated condensate drain pump 		398000718	ADG ECO 35PH
			398000719	ADG ECO 50PH
			398000720	ADG ECO 70PH
			398000721	ADG ECO 85PH
HIGH STATIC PRESSURE DUCTED	<ul style="list-style-type: none"> - High external static pressure - Silence - Integrated condensate drain pump 		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"> - Double flap - 11 fan speeds - Wide range of flap swinging 		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"> - 5 modes - Quick cooling and heating - Autoswing 		398000772	AFSI ECO 120 HL



CASSETTE

Compact cassette with 360° air discharge

Cassette with 360° air discharge

COMPACT CASSETTE

WITH 360° AIR DISCHARGE



(Standard)
Infrared remote controller



(Optional)
Wired controller

- 8-way cassette units for light commercial/industrial applications
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas
- Compact and attractive design
- 8-way, 360° air discharge, with range of flap oscillation between 45 and 80°, different according to the heating/cooling modes, for maximum comfort
- The dimensions 570 x 570 mm are convenient for installation in false ceilings with standard modules 600 x 600 mm
- Fan has optimized aerodynamic profiles for maximum silence
- Condensate drain pump is integrated for a height difference up to 1000 mm
- Double room temperature sensor for customizable comfort: possibility of selecting the return air temperature sensor on the unit or the temperature sensor on the wired control
- Connection to a fresh air intake is possible from outdoors
- High energy efficiency, at all the 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
- The electrical box has a special design and is made of fireproof material, for maximum protection of the electronic board from the risks of fire

FAST 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 MATCHING WITH COMPACT CASSETTE WITH 360° AIR DISCHARGE UNITS

Indoor unit model		ASG ECO 35PH		ASG ECO 50PH		
Outdoor unit model		AEG ECO 35PIH		AEG ECO 50PIH		
		Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	3,50	4,00	5,0	5,5	
	BTU/h	11900	13600	17000	18700	
EER/COP (EN14511)		3,50	3,81	3,21	3,33	
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	3,5	3,1	5,0	4,0	
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		5,9	4,0	5,9	4,0	
Energy efficiency class*		A+	A+	A+	A+	
Seasonal energy consumption (Average)*	kWh/annum	213	1069	287	1400	
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	650-580-480-400		700-580-480-400		
Dehumidification	l/h	1,4		1,8		
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2		
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	41-39-36-33		44-39-36-33		
Sound pressure Outdoor (h.)	dB(A)	50		56		
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	57-55-52-49		60-55-52-49		
Sound power Outdoor (h.)	dB(A)	64		65		
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		220-240/1/50 208-230/1/60		
Power input	kW	1,00	1,05	1,56	1,65	
Compressor type		Rotary DC Inverter		Rotary DC Inverter		
Refrigerant type/GWP		R32/675		R32/675		
Refrigerant charge	kg/T.CO ₂ eq.	0,78/0,53		1,0/0,68		
Liquid pipe diameter	mm (")	6,35 (1/4")		6,35 (1/4")		
Gas pipe diameter	mm (")	9,52 (3/8")		12,70 (1/2")		
Min.-max. pipe lenght with gas standard charge	m	5-7		7,5-9,5		
Max. pipe lenght with additional charge	m	30		35		
Additional refrigerant charge	g/m	16		16		
Max. height difference (Outdoor above)	m	15		20		
Max. height difference (Indoor above)	m	15		20		
Panel code to match		TF05		TF05		
Indoor net dimension without panel (H./W./D.)	mm	265/570/570		265/570/570		
Net dimension panel (H./W./D.)	mm	47,5/620/620		47,5/620/620		
Indoor net dimension with panel (H./W./D.)	mm	312,5/620/620		312,5/620/620		
Outdoor net dimension (H./W./D.)	mm	596/818/302		596/818/302		
Indoor unit without panel/Outdoor unit net weight	Kg	17/37		17/39		
Panel net weight	Kg	3		3		

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.

CASSETTE

WITH 360° AIR DISCHARGE



(Standard)
Infrared remote controller



(Optional)
Wired controller

- 8-way cassette units for light commercial/industrial applications
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas.
- Compact and attractive design
- 8-way, 360° air discharge, with range of flap oscillation between 45 and 80°, different according to the heating/cooling modes, for maximum comfort
- Fan has optimized aerodynamic profiles for maximum silence
- Condensate drain pump is integrated for a height difference up to 1000 mm
- Double room temperature sensor for customizable comfort: possibility of selecting the return air temperature sensor on the unit or the temperature sensor on the wired control
- Connection to a fresh air intake is possible from outdoors
- High energy efficiency, at all the 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
- The electrical box has a special design and is made of fireproof material, for maximum protection of the electronic board from the risks of fire

FAST 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 MATCHING WITH CASSETTE WITH 360° AIR DISCHARGE UNITS

Indoor unit model		ASG ECO 70PH		ASG 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	23800	27200	29000	30000
EER/COP (EN14511)		3,41	3,64	3,04	3,32
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	7,0	6,4	8,5	7,2
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		7,2	3,9	6,1	4,0
Energy efficiency class*		A++	A	A++	A+
Seasonal energy consumption (Average)*	kWh/annum	340	2297	488	2520
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1100-1050-960-870		1400-1310-1180-1040	
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)	43-42-40-39		49-41-38-36	
Sound pressure Outdoor (h.)	dB(A)	52		53	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	52-51-49-48		58-50-47-45	
Sound power Outdoor (h.)	dB(A)	67		69	
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		220-240/1/50 208-230/1/60	
Power input	kW	2,05	2,20	2,80	2,65
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ 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	5-7		5-7	
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	
Panel code to match		TF06		TF06	
Indoor net dimension without panel (H./W./D.)	mm	240/840/840		240/840/840	
Net dimension panel (H./W./D.)	mm	52/950/950		52/950/950	
Indoor net dimension with panel (H./W./D.)	mm	292/950/950		292/950/950	
Outdoor net dimension (H./W./D.)	mm	698/892/340		790/920/370	
Indoor unit without panel/Outdoor unit net weight	Kg	29/53		29/60	
Panel net weight	Kg	6		6	

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.

TECHNICAL DATA

Indoor unit model		ASG ECO 100PH		ASG ECO 100PH	
Outdoor unit model		AEG ECO 100PIH		AEG ECO 100PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	10,00	12,00	10,00	12,00
	BTU/h	34100	40900	34100	40900
EER/COP (EN14511)		3,17	3,38	3,33	3,53
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	10	9	10	9
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		6,1	4,0	6,1	4,0
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption (Average)*	kWh/annum	566	3139	566	3139
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1500-1470-1380-1220		1500-1470-1380-1220	
Dehumidification	l/h	2,8		2,8	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	50-48-46-42		50-48-46-42	
Sound pressure Outdoor (h.)	dB(A)	55		55	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	59-57-55-51		59-57-55-51	
Sound power Outdoor (h.)	dB(A)	70		70	
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		380-415/3/50-60	
Power input	kW	3,15	3,55	3,00	3,40
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2,5/1,69		2,5/1,69	
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	5-7		5-7	
Max. pipe lenght with additional charge	m	65		65	
Additional refrigerant charge	g/m	40		40	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Panel code to match		TF06		TF06	
Indoor net dimension without panel (H./W./D.)	mm	240/840/840		240/840/840	
Net dimension panel (H./W./D.)	mm	52/950/950		52/950/950	
Indoor net dimension with panel (H./W./D.)	mm	292/950/950		292/950/950	
Outdoor net dimension (H./W./D.)	mm	820/940/460		820/940/460	
Indoor unit without panel/Outdoor unit net weight	Kg	31/60		31/60	
Panel net weight	Kg	6		6	

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.

Indoor unit model		ASG ECO 140PH		ASG ECO 140PH		
Outdoor unit model		AEG ECO 140PIH		AEG ECO 140PIH3		
		Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	13,40	15,50	13,40	15,50	
	BTU/h	45700	52800	45700	52800	
EER/COP (EN14511)		2,88	3,56	2,85	3,48	
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	13,40	15,50	13,40	15,50	
Seasonal energy efficiency in cooling/heating (Average) ($\eta_{s,h}$)	%	242,4	141,6	242,4	141,6	
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1900-1690-1480-1140		1900-1690-1480-1140		
Dehumidification	l/h	3,0		3,0		
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2		
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	52-51-48-45		52-51-48-45		
Sound pressure Outdoor (h.)	dB(A)	56/57		56/57		
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	61-60-57-54		61-60-57-54		
Sound power Outdoor (h.)	dB(A)	70/72-73 (fr-ca)		70/72-73 (fr-ca)		
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		380-415/3/50-60		
Power input	Pa	4,65	4,35	4,70	4,45	
Compressor type	Pa	Rotary DC Inverter		Rotary DC Inverter		
Refrigerant type/GWP		R32/675		R32/675		
Refrigerant charge	kg/T.CO ₂ eq.	2,8/1,89		2,8/1,89		
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	7,5-9,5		7,5-9,5		
Max. pipe lenght with additional charge	m	75		75		
Additional refrigerant charge	g/m	40		40		
Max. height difference (Outdoor above)	m	30		30		
Max. height difference (Indoor above)	m	30		30		
Panel code to match		TF06		TF06		
Indoor net dimension without panel (H./W./D.)	mm	290/840/840		290/840/840		
Net dimension panel (H./W./D.)	mm	52/950/950		52/950/950		
Indoor net dimension with panel (H./W./D.)	mm	342/950/950		342/950/950		
Outdoor net dimension (H./W./D.)	mm	820/940/460		820/940/460		
Indoor unit without panel/Outdoor unit net weight	Kg	36/95		36/95		
Panel net weight	Kg	6		6		

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +48 °C

Heating mode: from -20 °C to +24 °C

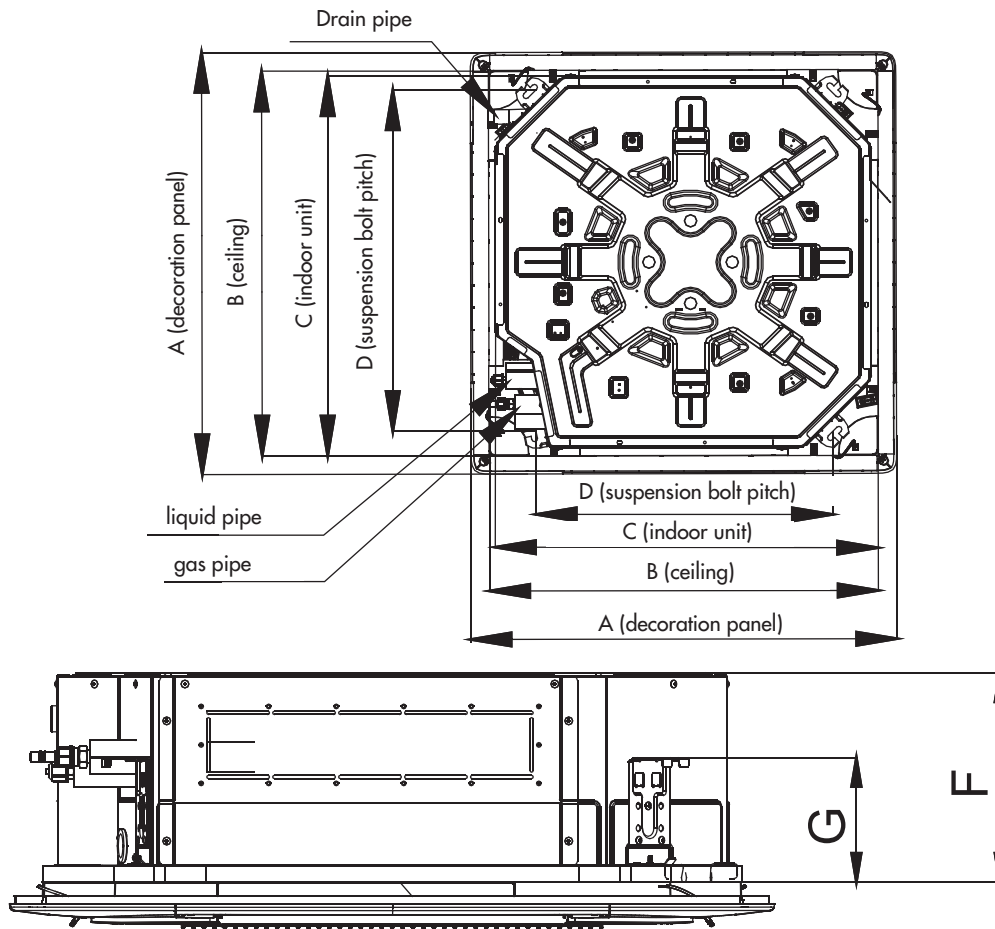
RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 30 °C.

TECHNICAL DATA

Indoor unit model		ASG ECO 160PH	
Outdoor unit model		AEG ECO 160PIH3	
	Units	Cooling	Heating
Nominal capacity (EN14511)	kW	14,50	17,00
	BTU/h	49400	58000
EER/COP (EN14511)		2,79	3,54
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	14,5	17,0
Seasonal energy efficiency in cooling/heating (Average) ($\eta_{s,h}$)	%	241,7	143,9
Air flowrate Indoor (sh.-h.-m.-l.)	kWh/annum	480	2576
Dehumidification	m ³ /h	1500-1350-1130-950	
Fan speeds (Indoor/Outdoor)	l/h	3,2	
Sound pressure Indoor (sh.-h.-m.-l.)	n°	4/2	
Sound pressure Outdoor (h.)	dB(A)	54-52-50-48	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	57	
Sound power Outdoor (h.)	dB(A)	63-61-59-46	
Power supply	dB(A)	71-73 (fr-ca)	
Power input	V/Ph/Hz	380-415/3/50-60	
Compressor type	Pa	5,20	4,80
Refrigerant type/GWP	Pa	Rotary DC Inverter	
Refrigerant charge		R32/675	
Liquid pipe diameter	kg/T.CO ₂ eq.	3,6/2,43	
Gas pipe diameter	mm (")	9,52 (3/8")	
Min.-max. pipe lenght with gas standard charge	mm (")	15,88 (5/8")	
Max. pipe lenght with additional charge	m	7,5-9,5	
Additional refrigerant charge	m	75	
Max. height difference (Outdoor above)	g/m	40	
Max. height difference (Indoor above)	m	30	
Panel code to match	m	30	
Indoor net dimension without panel (H./W./D.)		TF06	
Net dimension panel (H./W./D.)	mm	290/840/840	
Indoor net dimension with panel (H./W./D.)	mm	52/950/950	
Outdoor net dimension (H./W./D.)	mm	342//950/950	
Indoor unit without panel/Outdoor unit net weight	mm	1345/900/340	
Panel net weight	Kg	36/112	
Peso netto pannello	Kg	6	

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.

DIMENSIONAL DRAWING INDOOR UNITS



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
ASG ECO 35PH	620	580	570	520	560	265	140
ASG ECO 35PH	620	580	570	520	560	265	140
ASG ECO 50PH	620	580	570	520	560	265	140
ASG ECO 70PH	950	870	840	660	790	240	134
ASG ECO 85PH	950	870	840	660	790	240	134
ASG ECO 100PH	950	870	840	660	790	240	134
ASG ECO 140PH	950	870	840	660	790	290	134
ASG ECO 160PH	950	870	840	660	790	290	134



DUCTED

Slim ducted

High static pressure ducted

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

FAST 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 MATCHING WITH SLIM DUCTED UNITS

Indoor unit model		ADG ECO 35PH		ADG ECO 50PH		
Outdoor unit model		AEG ECO 35PIH		AEG ECO 50PIH		
		Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	3,5	4,0	5,0	5,5	
	BTU/h	12000	13600	17000	18700	
EER/COP (EN14511)		3,68	3,81	3,23	3,79	
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	3,5	3,1	5,0	4,2	
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		6,1	4,0	6,1	4,0	
Energy efficiency class*		A++	A+	A++	A+	
Seasonal energy consumption (Average)*	kWh/annum	200	1110	287	1470	
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	650-600-510-450		950-880-820-700		
Dehumidification	l/h	1,4		1,8		
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2		
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	41-38-36-34		43-42-39-36		
Sound pressure Outdoor (h.)	dB(A)	59		58		
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	51-48-46-44		53-52-49-46		
Sound power Outdoor (h.)	dB(A)	64		65		
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		220-240/1/50 208-230/1/60		
Static pressure rated	Pa	25		25		
Static pressure range	Pa	0-50		0-50		
Power input	kW	0,95	1,05	1,55	1,45	
Compressor type		Rotary DC Inverter		Rotary DC Inverter		
Refrigerant type/GWP		R32/675		R32/675		
Refrigerant charge	kg/T.CO ₂ eq.	0,78/0,53		1,0/0,68		
Liquid pipe diameter	mm (")	6,35 (1/4")		6,35 (1/4")		
Gas pipe diameter	mm (")	9,52 (3/8")		12,70 (1/2")		
Min.-max. pipe lenght with gas standard charge	m	3-5		3-5		
Max. pipe lenght with additional charge	m	30		35		
Additional refrigerant charge	g/m	16		16		
Max. height difference (Outdoor above)	m	15		20		
Max. height difference (Indoor above)	m	15		20		
Indoor net dimension (H./W./D.)	mm	200/700/450		200/1000/450		
Outdoor net dimension (H./W./D.)	mm	596/818/302		596/818/302		
Net weight Indoor/Outdoor	Kg	20/37		26/39		

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.

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) (Average) (EN14825)*	kW	7,0	6,4	8,5	7,2
Seasonal efficiency ratio (SEER/SCOP (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 ³ /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	220-240/1/50 208-230/1/60		220-240/1/50 208-230/1/60	
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 ₂ 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 length with gas standard charge	m	3-5		3-5	
Max. pipe length 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

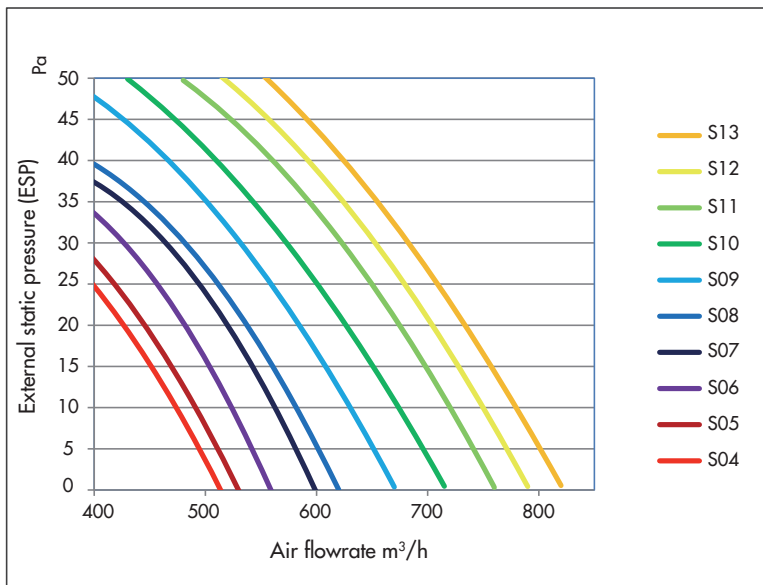
Heating mode: from -20 °C to +24 °C

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 35PH - static pressure curves

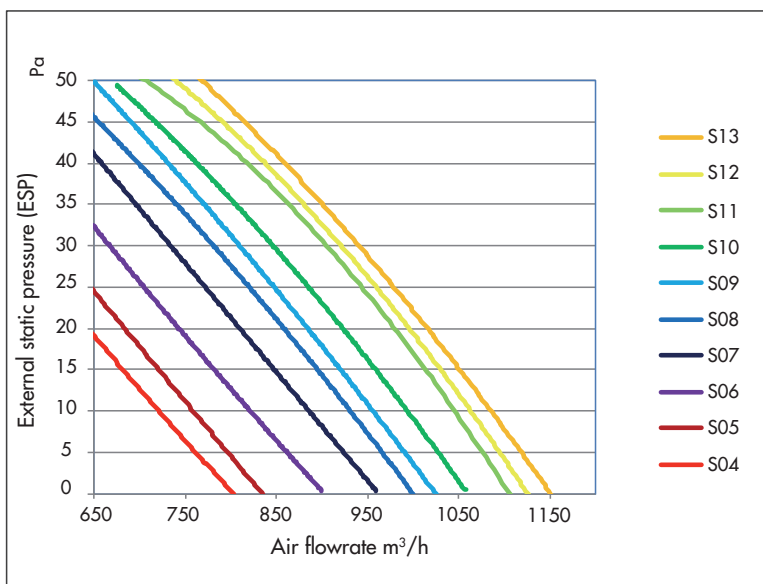


External static pressure	Turbo speed	High	Medium	Low
P03	S09	S08	S06	S04
P04	S10	S09	S07	S05
P05*	S11	S10	S08	S06
P06	S12	S11	S09	S07
P07	S13	S12	S10	S08

* 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 50PH - static pressure curves



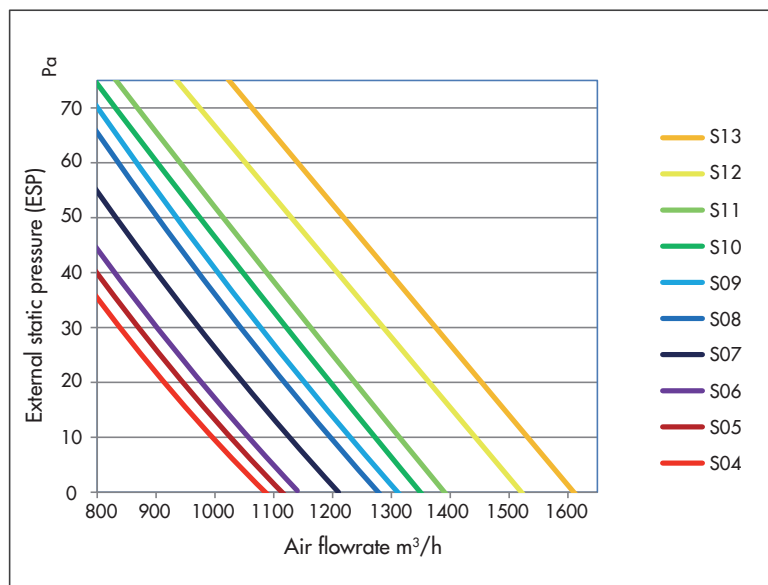
External static pressure	Turbo speed	High	Medium	Low
P03	S09	S08	S06	S04
P04	S10	S09	S07	S05
P05*	S11	S10	S08	S06
P06	S12	S11	S09	S07
P07	S13	S12	S10	S08

* 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.

STATIC PRESSURE CURVES

ADG ECO 70PH - static pressure curves

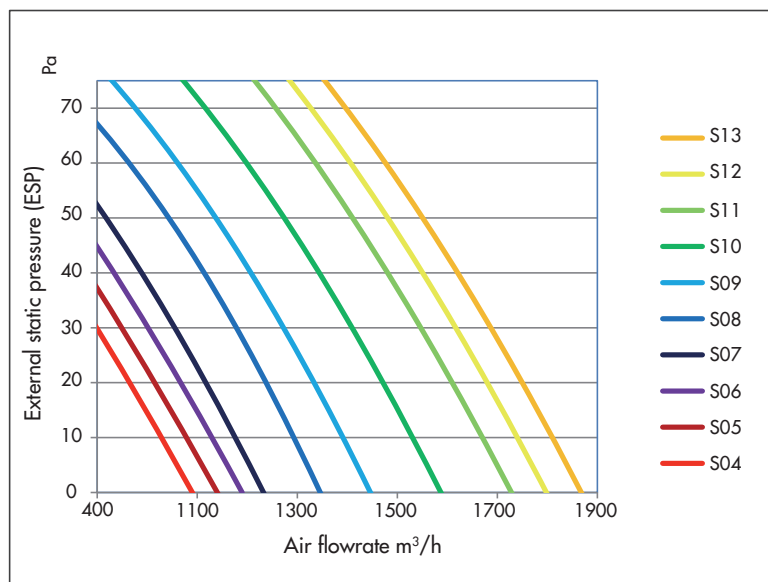


External static pressure	Turbo speed	High	Medium	Low
P03	S09	S08	S06	S04
P04	S10	S09	S07	S05
P05*	S11	S10	S08	S06
P06	S12	S11	S09	S07
P07	S13	S12	S10	S08

* 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



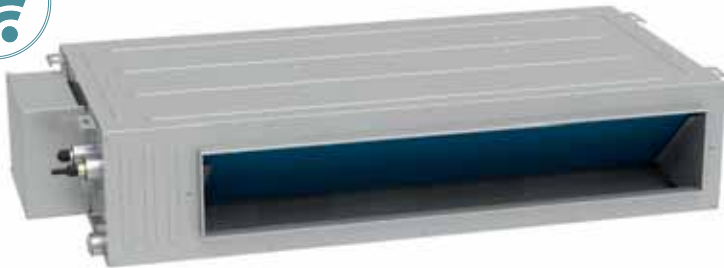
External static pressure	Turbo speed	High	Medium	Low
P03	S09	S08	S06	S04
P04	S10	S09	S07	S05
P05*	S11	S10	S08	S06
P06	S12	S11	S09	S07
P07	S13	S12	S10	S08

* 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.

DUCTED

HIGH STATIC PRESSURE



(Standard)
Wired controller

- High static pressure ducted units for light commercial/industrial applications
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas
- The centrifugal fan is also characterized by a patented design and allows a higher air flow and greater silence
- The external static pressure reaches 200 Pa, ensuring maximum adaptability to different types of installation
- The combination with the wired controller allows to optimize the external static pressure according to the different technical installation requirements
- It's possible to select 5 external static pressure levels, depending on the installation
- 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 a 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 excludes the risk of gas leaks due to inappropriate maintenance

FAST 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	Settable pressure levels			

A⁺⁺ Cooling

A⁺ Heating

TECHNICAL DATA MATCHING WITH HIGH STATIC PRESSURE DUCTED UNITS

Indoor unit model		ADG ECO 70PHB		ADG ECO 85PHB	
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) (Average) (EN14825)*	kW	7,0	6,4	8,5	7,2
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		6,8	4,0	6,1	3,9
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption (Average)*	kWh/annum	357	2238	488	2585
Seasonal energy efficiency in cooling/heating (Average) (ηs,h)		-	-	-	-
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1150-1100-1000-900		1500-1300-1100-1000	
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)	39-38-37-36		41-39-37-35	
Sound pressure Outdoor (h.)	dB(A)	62		65	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	49-48-47-46		51-49-47-45	
Sound power Outdoor (h.)	dB(A)	67		69	
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		220-240/1/50 208-230/1/60	
Static pressure rated	Pa	25		37	
Static pressure range	Pa	0-125		0-125	
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 ₂ 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	260/900/655		260/900/655	
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.

TECHNICAL DATA

Indoor unit model		ADG ECO 100PH		ADG ECO 100PH		
Outdoor unit model		AEG ECO 100PIH		AEG ECO 100PIH3		
		Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	10,00	12,00	10,00	12,00	
	BTU/h	34100	40900	34100	40900	
EER/COP (EN14511)		3,12	3,53	3,17	3,43	
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	10	9	10	9	
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		6,1	4,0	6,1	4,0	
Energy efficiency class*		A++	A+	A++	A+	
Seasonal energy consumption (Average)*	kWh/annum	577	3218	577	3218	
Seasonal energy efficiency in cooling/heating (Average) (ηs,h)		-	-	-	-	
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1059-894-812-747		1059-894-812-747		
Dehumidification	l/h	2,8		2,8		
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2		
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	46-44-42-40		46-44-42-40		
Sound pressure Outdoor (h.)	dB(A)	55		55		
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	65-63-61-57		65-63-61-57		
Sound power Outdoor (h.)	dB(A)	70		70		
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		380-415/3/50-60		
Static pressure rated	Pa	37		37		
Static pressure range	Pa	0-150		0-150		
Power input	kW	3,20	3,40	3,15	3,50	
Compressor type		Rotary DC Inverter		Rotary DC Inverter		
Refrigerant type/GWP		R32/675		R32/675		
Refrigerant charge	kg/T.CO ₂ eq.	2,5/1,69		2,5/1,69		
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	5-7		5-7		
Max. pipe lenght with additional charge	m	65		65		
Additional refrigerant charge	g/m	40		40		
Max. height difference (Outdoor above)	m	30		30		
Max. height difference (Indoor above)	m	30		30		
Indoor net dimension (H./W./D.)	mm	300/1000/700		300/1000/700		
Outdoor net dimension (H./W./D.)	mm	820/940/460		820/940/460		
Net weight Indoor / Outdoor	Kg	40/83		40/83		

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.

Indoor unit model		ADG ECO 140PH		ADG ECO 140PH		
Outdoor unit model		AEG ECO 140PIH		AEG ECO 140PIH3		
		Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	13,40	15,50	13,40	15,50	
	BTU/h	45700	52800	45700	52800	
EER/COP (EN14511)		3,01	3,37	2,85	3,48	
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	13,40	15,50	13,40	15,50	
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		-	-	-	-	
Energy efficiency class*		-	-	-	-	
Seasonal energy consumption (Average)*	kWh/annum	-	-	-	-	
Seasonal energy efficiency in cooling/heating (Average) (ηs,h)		242,40	141,6	242,40	141,6	
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	2200-2000-1730-1490		2200-2000-1730-1490		
Dehumidification	l/h	3,0		3,0		
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2		
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	43-41-40-38		43-41-40-38		
Sound pressure Outdoor (h.)	dB(A)	56		56		
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	68-66-55-53		68-66-55-53		
Sound power Outdoor (h.)	dB(A)	72		72		
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		380-415/3/50-60		
Static pressure rated	Pa	50		50		
Static pressure range	Pa	0-150		0-150		
Power input	kW	4,45	4,60	4,70	4,45	
Compressor type		Rotary DC Inverter		Rotary DC Inverter		
Refrigerant type/GWP		R32/675		R32/675		
Refrigerant charge	kg/T.CO ₂ eq.	2,8/1,89		2,8/1,89		
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	7,5-9,5		7,5-9,5		
Max. pipe lenght with additional charge	m	75		75		
Additional refrigerant charge	g/m	40		40		
Max. height difference (Outdoor above)	m	30		30		
Max. height difference (Indoor above)	m	30		30		
Indoor net dimension (H./W./D.)	mm	300/1400/700		300/1400/700		
Outdoor net dimension (H./W./D.)	mm	820/940/460		820/940/460		
Net weight Indoor / Outdoor	Kg	49/95		49/95		

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.

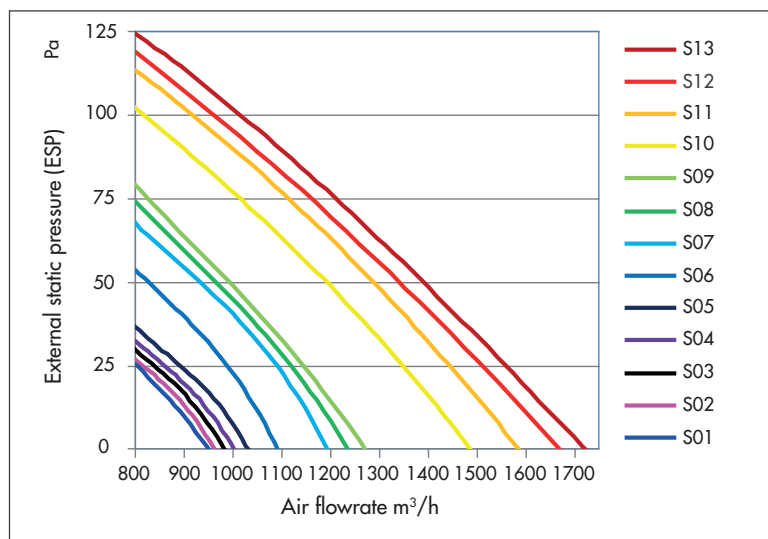
TECHNICAL DATA

Indoor unit model		ADG ECO 160PH	
Outdoor unit model		AEG ECO 160PIH3	
	Units	Cooling	Heating
Nominal capacity (EN14511)	kW	16,00	17,00
	BTU/h	54500	58000
EER/COP (EN14511)		2,94	3,40
Design Load (Pdesign c./Pdesign h) (Average) (EN14825)*	kW	14,50	7,20
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		-	-
Energy efficiency class*		-	-
Seasonal energy consumption (Average)*	kWh/annum	-	-
Seasonal energy efficiency in cooling/heating (Average) ($\eta_{s,h}$)		255,10	143,90
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	2400-1960-1670-1380	
Dehumidification	l/h	3,2	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	44-41-39-38	
Sound pressure Outdoor (h.)	dB(A)	57	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	57-54-52-51	
Sound power Outdoor (h.)	dB(A)	72	
Power supply	V/Ph/Hz	380-415/3/50-60	
Static pressure rated	Pa	50	
Static pressure range	Pa	0-200	
Power input	kW	5,45	5,00
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	3,6/2,43	
Liquid pipe diameter	mm (")	9,52 (3/8")	
Gas pipe diameter	mm (")	15,88 (5/8")	
Min.-max. pipe lenght with gas standard charge	m	7,5-9,5	
Max. pipe lenght with additional charge	m	75	
Additional refrigerant charge	g/m	40	
Max. height difference (Outdoor above)	m	30	
Max. height difference (Indoor above)	m	30	
Indoor net dimension (H./W./D.)	mm	300/1400/700	
Outdoor net dimension (H./W./D.)	mm	1345/900/340	
Net weight Indoor / Outdoor	Kg	56/112	

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.

STATIC PRESSURE CURVES

ADG ECO 70PHB - static pressure curves

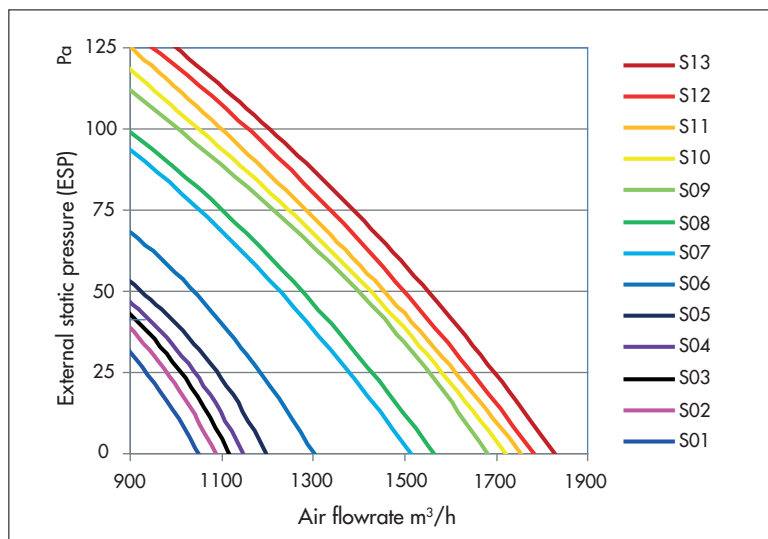


External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* 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 85PHB - static pressure curves



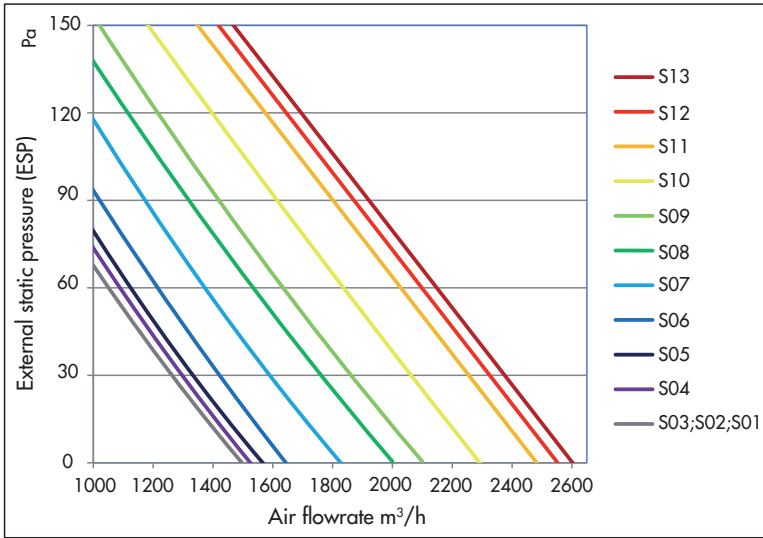
External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* 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.

STATIC PRESSURE CURVES

ADG ECO 100PH - static pressure curves

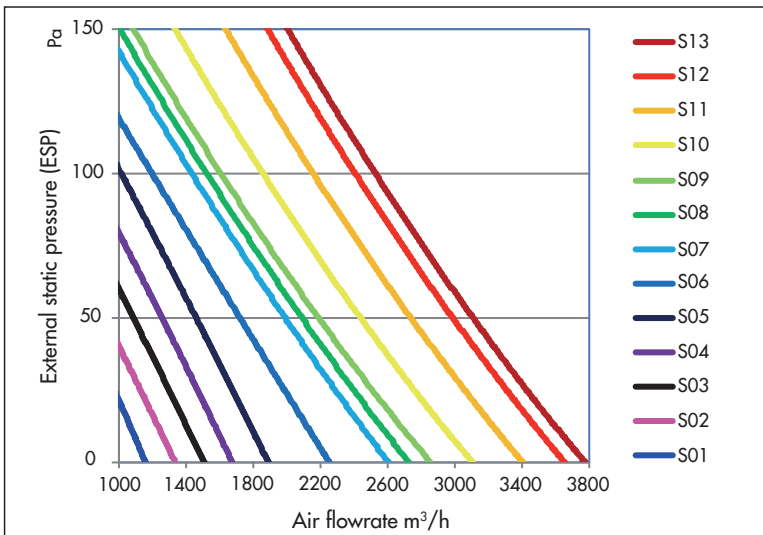


External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* 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 140PH - static pressure curves

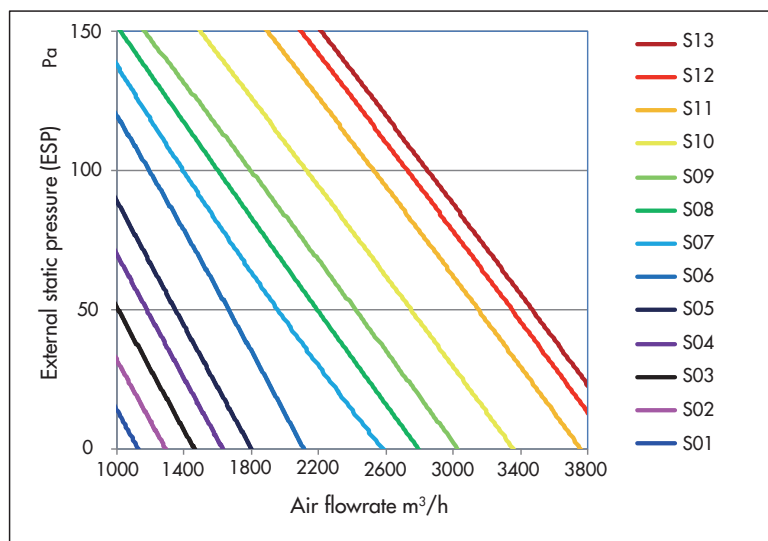


External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* 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 160PH - static pressure curves



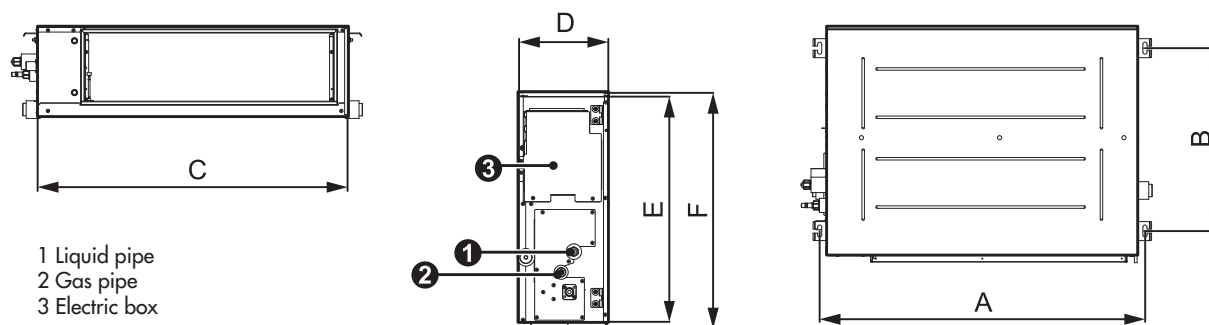
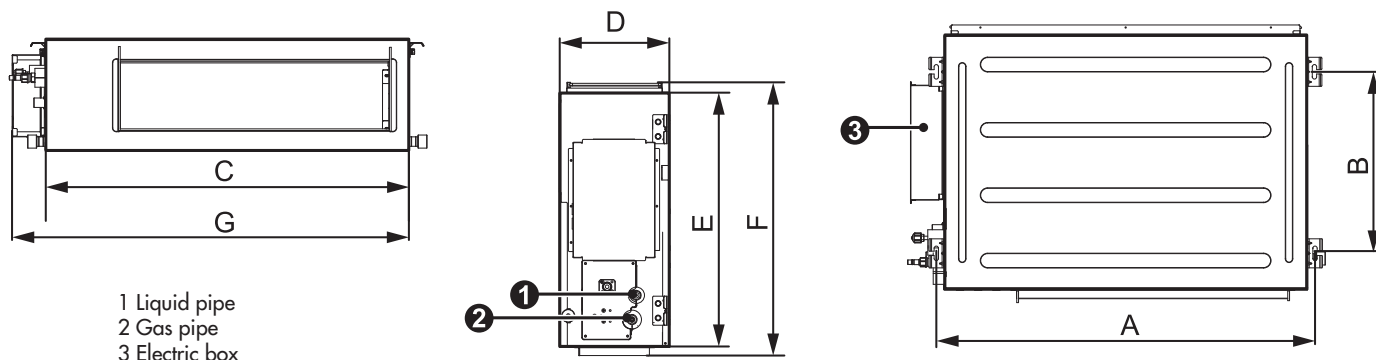
External static pressure	Turbo speed	High	Medium	Low
P1	S05	S03	S02	S01
P2	S06	S04	S03	S02
P3	S07	S05	S04	S03
P4	S08	S06	S05	S04
P5*	S09	S07	S06	S05
P6	S10	S08	S07	S06
P7	S11	S09	S08	S07
P8	S12	S10	S09	S08
P9	S13	S11	S10	S09

* 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.

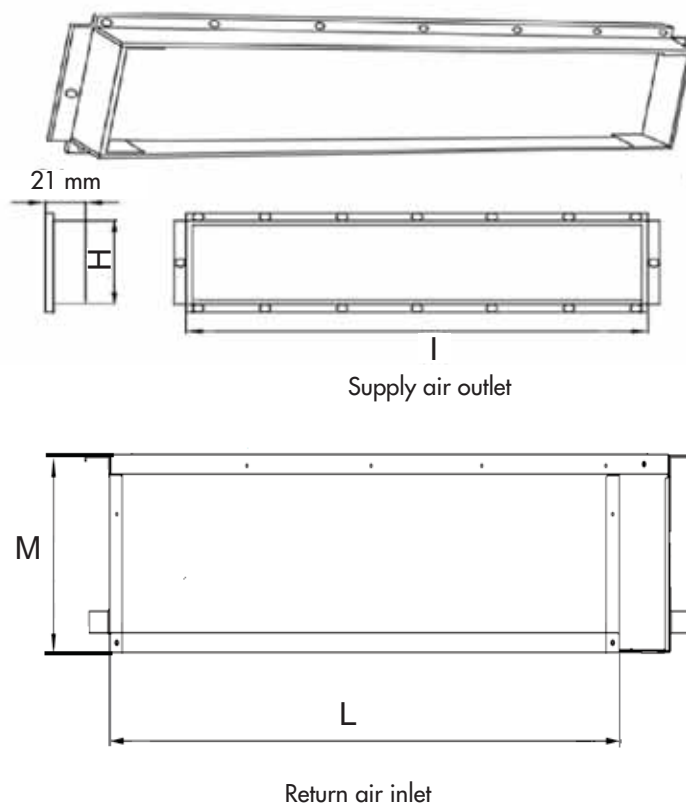
DIMENSIONAL DRAWINGS

DIMENSIONAL DRAWINGS INDOOR UNITS



MODEL	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
ADG ECO 35PH	760	415	700	200	450	474	768
ADG ECO 50PH	1060	415	1000	200	450	474	1068
ADG ECO 70PH	1360	415	1300	220	450	474	1368
ADG ECO 85PH							
ADG ECO 70PHB	942	530	900	260	655	685	-
ADG ECO 85PHB							
GUD100PHS/A-T	1040	500	1000	300	700	754	1092
GUD140PHS/A-T	1440	500	1400	300	700	754	1492
GUD160PHS/A-T							1543

DIMENSIONAL DRAWINGS SUPPLY AIR OUTLET/RETURN AIR INLET



MODEL	SUPPLY AIR OUTLET		RETURN AIR INLET	
	H	I	L	M
ADG ECO 35PH	122	585	700	200
ADG ECO 50PH	122	885	1000	200
ADG ECO 70PH	142	1185	1300	220
ADG ECO 85PH				
ADG ECO 70PHB	219	743	900	260
ADG ECO 85PHB				
GUD100PHS/A-T	195	746	960	264
GUD140PHS/A-T	195	1150	1360	264
GUD160PHS/A-T				



FLOOR/ CEILING

FLOOR/CEILING



(Standard)
Infrared remote controller



(Optional)
Wired controller

- Floor or ceiling units for light commercial/industrial applications
- Suitable for shops, offices, meeting rooms, hotels, restaurants, clubs, gyms and open space areas
- Compact structure: only 235 mm of thickness
- Double flap: when the unit is turned off, the air supply can be completely closed in order to prevent the entry of dust
- The wide oscillation angle of the flap allows the flow of horizontal air delivery (ceiling application): this excludes direct air flows on people in the environment
- You can select one of the 11 fan speeds available
- There are 3 exit options for the connecting pipes, to facilitate installation in any circumstances
- The design of the electrical box side does not affect the return of air and facilitates maintenance
- They are equipped with a double room temperature sensor for customizable comfort: possibility of selecting the return air temperature sensor on the unit or the temperature sensor on the wired control
- High energy efficiency, at all powers expressed, both in cold and in heat, especially with a view to operating 365 days a year (seasonal efficiency)
- The special closing system of the refrigerant valve prevents and excludes the risk of gas leaks due to inappropriate maintenance

FAST Quick cooling and heating	Intelligent sensor	Quiet mode	Sleep mode	iFeel	Cold air prevention	Double temperature sensors for air return	Intelligent defrosting	AUTO Auto mode	Filter cleaning reminder	360° 360° air flow	AUTO Automatic swinging	Fixed swinging
Fan speed regulation	AUTO Automatic fan speed	Turbo Turbo fan speed	Dehumidification mode	Dehumidification 12°C	I-Demand energy saving	WiFi WiFi and app (optional)	Centralized control	Long distance control	Modbus	Dry contact	Access control	Dual wired controllers
Programmable wired controller	8°C 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 MATCHING WITH FLOOR CEILING UNITS

Indoor unit model		ACG ECO 35PH		ACG ECO 50PH	
Outdoor unit model		AEG ECO 35PIH		AEG ECO 50PIH	
	Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	3,50	4,00	5,0	5,5
	BTU/h	11900	13600	17000	18700
EER/COP (EN14511)		3,89	4,21	3,21	3,33
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	3,5	3,1	5,0	4,0
Seasonal efficiency ratio (SEER/SCOP (Average)) (EN14825)*		6,7	4,0	6,1	4,0
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption (Average)*	kWh/annum	177	1040	287	1400
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	650-580-480-400		700-580-480-400	
Dehumidification	l/h	1,4		1,8	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	39-36-32-28		44-42-39-36	
Sound pressure Outdoor (h.)	dB(A)	50		51	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	51-48-44-40		57-55-52-49	
Sound power Outdoor (h.)	dB(A)	64		65	
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		220-240/1/50 208-230/1/60	
Power input	kW	0,90	0,95	1,56	1,65
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	0,78/0,53		1,0/0,68	
Liquid pipe diameter	mm (")	6,35 (1/4")		6,35 (1/4")	
Gas pipe diameter	mm (")	9,52 (3/8")		12,70 (1/2")	
Min.-max. pipe lenght with gas standard charge	m	5-7		7,5-9,5	
Max. pipe lenght with additional charge	m	30		35	
Additional refrigerant charge	g/m	16		16	
Max. height difference (Outdoor above)	m	15		20	
Max. height difference (Indoor above)	m	15		20	
Indoor net dimension (H./W./D.)	mm	235/870/665		235/870/665	
Outdoor net dimension (H./W./D.)	mm	596/818/302		596/818/302	
Net weight Indoor/Outdoor	kg	25/37		26/39	

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.

TECHNICAL DATA

Indoor unit model		ACG ECO 70PH		ACG 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	23800	27200	29000	30000
EER/COP (EN14511)		3,41	3,64	3,04	3,32
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	7,0	6,4	8,5	7,2
Seasonal efficiency ratio (SEER/SCOP (Average)) (EN14825)*		6,8	3,9	6,1	4,0
Energy efficiency class*		A++	A	A++	A+
Seasonal energy consumption (Average)*	kWh/annum	359	2295	477	2577
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1100-1050-960-870		1400-1310-1180-1040	
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)	45-44-41-38		49-47-43-39	
Sound pressure Outdoor (h.)	dB(A)	52		53	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	56-55-52-49		65-63-59-55	
Sound power Outdoor (h.)	dB(A)	67		69	
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		220-240/1/50 208-230/1/60	
Power input	kW	2,05	2,20	2,80	2,65
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ 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	5-7		5-7	
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	235/1200/665		235/1200/665	
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.

Indoor unit model		ACG ECO 100PH		ACG ECO 100PH	
Outdoor unit model		AEG ECO 100PIH		AEG ECO 100PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	10,00	12,00	10,00	12,00
	BTU/h	34100	40900	34100	40900
EER/COP (EN14511)		3,03	3,33	3,03	3,43
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	10,0	9,0	10,0	9,0
Seasonal efficiency ratio (SEER/SCOP (Average)) (EN14825)*		6,1	4,0	6,1	4,0
Energy efficiency class*		A++	A+	A++	A+
Seasonal energy consumption (Average)*	kWh/annum	573	3149	573	3149
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1500-1470-1380-1220		1500-1470-1380-1220	
Dehumidification	l/h	2,8		2,8	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	49-47-45-43		49-47-45-43	
Sound pressure Outdoor (h.)	dB(A)	55		55	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	61-59-57-55		61-59-57-55	
Sound power Outdoor (h.)	dB(A)	70		70	
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		380-415/3/50-60	
Power input	kW	3,30	3,60	3,30	3,50
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2,5/1,69		2,5/1,69	
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 length with gas standard charge	m	5-7		5-7	
Max. pipe length with additional charge	m	65		65	
Additional refrigerant charge	g/m	40		40	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Indoor net dimension (H./W./D.)	mm	235/1200/665		235/1200/665	
Outdoor net dimension (H./W./D.)	mm	820/940/460		820/940/460	
Net weight Indoor/Outdoor	kg	32/83		32/83	

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.

TECHNICAL DATA

Indoor unit model		ACG ECO 140PH		ACG ECO 140PH	
Outdoor unit model		AEG ECO 140PIH		AEG ECO 140PIH3	
	Units	Cooling	Heating	Cooling	Heating
Nominal capacity (EN14511)	kW	13,40	15,50	13,40	15,50
	BTU/h	45700	52800	45700	52800
EER/COP (EN14511)		3,05	3,56	3,12	3,52
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*		13,40	15,50	13,40	15,50
Seasonal efficiency ratio (SEER/SCOP (Average)) (EN14825)*	%	246,6	145,81	246,6	145,81
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1900-1690-1480-1140		1900-1690-1480-1140	
Dehumidification	l/h	3,0		3,0	
Fan speeds (Indoor/Outdoor)	n°	4/2		4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	52-50-48-44		52-50-48-44	
Sound pressure Outdoor (h.)	dB(A)	57		57	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	65-63-61-57		65-63-61-57	
Sound power Outdoor (h.)	dB(A)	70		70	
Power supply	V/Ph/Hz	220-240/1/50 208-230/1/60		380-415/3/50-60	
Power input	kW	4,40	4,35	4,30	4,40
Compressor type		Rotary DC Inverter		Rotary DC Inverter	
Refrigerant type/GWP		R32/675		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2,8/1,89		2,8/1,89	
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	7,5-9,5		7,5-9,5	
Max. pipe lenght with additional charge	m	75		75	
Additional refrigerant charge	g/m	40		40	
Max. height difference (Outdoor above)	m	30		30	
Max. height difference (Indoor above)	m	30		30	
Indoor net dimension (H./W./D.)	mm	235/1570/665		235/1570/665	
Outdoor net dimension (H./W./D.)	mm	820/940/460		820/940/460	
Net weight Indoor/Outdoor	Kg	42/95		42/95	

OPERATING RANGE: outdoor temperature

Cooling mode: from -20 °C to +48 °C

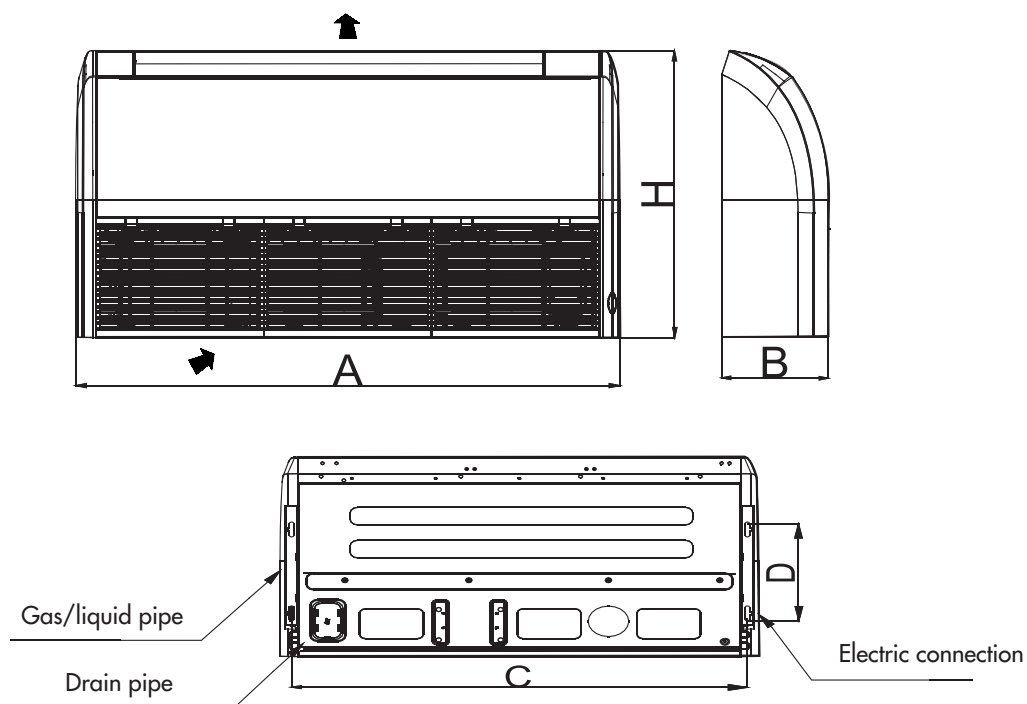
Heating mode: from -20 °C to +24 °C

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

Indoor unit model		ACG ECO 160PH	
Outdoor unit model		AEG ECO 160PIH3	
	Units	Cooling	Heating
Nominal capacity (EN14511)	kW	16,00	17,00
	BTU/h	54500	58000
EER/COP (EN14511)		2,96	3,15
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*		16,0	17,0
Seasonal efficiency ratio (SEER/SCOP (Average)) (EN14825)*	%	258,7	152,30
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	1500-1350-1130-950	
Dehumidification	l/h	3,2	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	54-53-49-45	
Sound pressure Outdoor (h.)	dB(A)	57	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	65,8-64-60-56	
Sound power Outdoor (h.)	dB(A)	70,5-72,5	
Power supply	V/Ph/Hz	380-415/3/50-60	
Power input	kW	5,40	5,40
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	3,6/2,43	
Liquid pipe diameter	mm (")	9,52 (3/8")	
Gas pipe diameter	mm (")	15,88 (5/8")	
Min.-max. pipe length with gas standard charge	m	7,5-9,5	
Max. pipe length with additional charge	m	75	
Additional refrigerant charge	g/m	40	
Max. height difference (Outdoor above)	m	30	
Max. height difference (Indoor above)	m	30	
Indoor net dimension (H./W./D.)	mm	235/1570/665	
Outdoor net dimension (H./W./D.)	mm	1345/900/340	
Net weight Indoor/Outdoor	Kg	42/112	

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.

DIMENSIONAL DRAWING INDOOR UNITS



MODEL	DIMENSIONS (mm)				
	A	B	C	D	H
ACG ECO 35PH	870	235	812	318	665
ACG ECO 50PH	870	235	812	318	665
ACG ECO 70PH	1200	235	1142	318	665
ACG ECO 85PH	1200	235	1142	318	665
ACG ECO 100PH	1200	235	1142	318	665
ACG ECO 140PH	1570	235	1512	318	665
ACG ECO 160PH	1570	235	1512	318	665



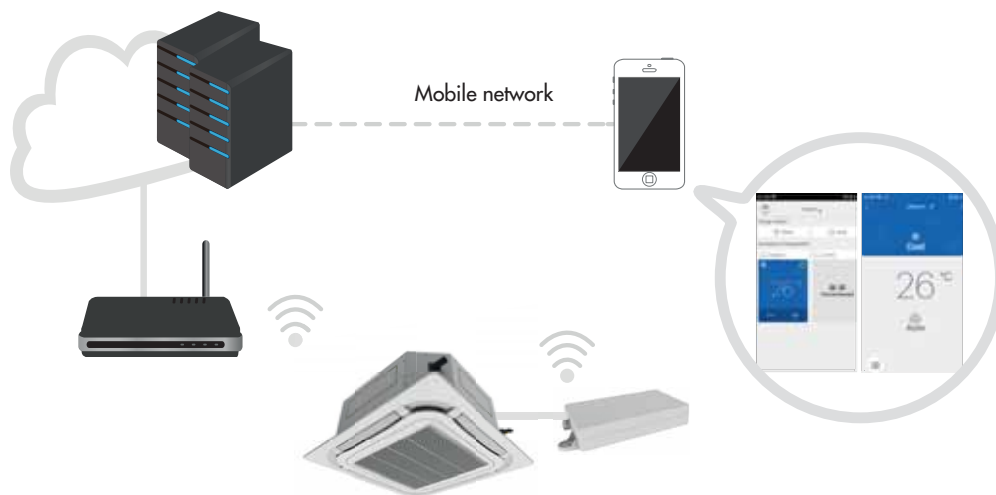
CONTROL SYSTEMS

CONTROL SYSTEMS

1 APP AND WIFI

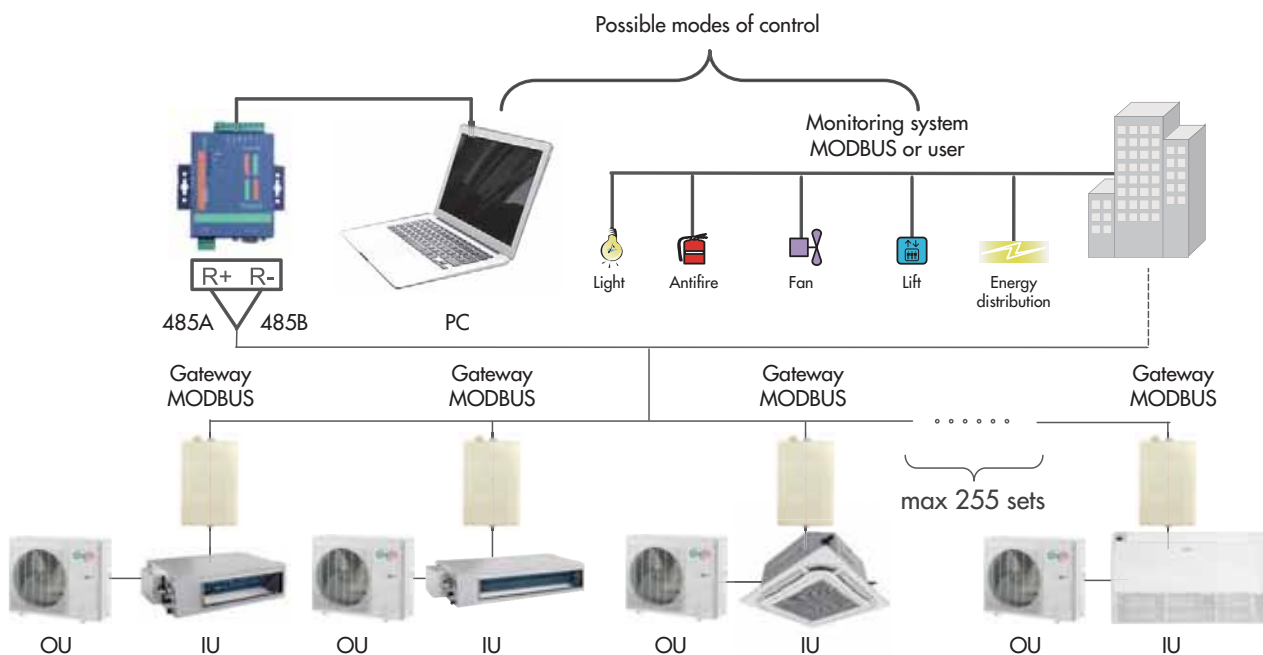
A dedicated WiFi kit can be purchased separately and integrated into the units.

The units thus equipped with WiFi kit can be controlled by remote, through an APP, easy to download from Google Play store or Apple store and it can be installed on your smartphone (compatible with both Android and iOS systems).



2 REMOTE CONTROL

All the indoor units must be equipped with MODBUS Gateway to connect the BMS. It's possible to connect up to 255 units to the same network.



3 MODBUS GATEWAY

Dimensions (HxWxD): 54 mm x 102 mm x 20 mm

MODBUS Gateway interface module to connect indoor units to centralized control FCA or to a BMS.



4 DUAL WIRED CONTROLLER

The indoor unit can be controlled by two wired controllers to facilitate management in specific applications. Applicable to all kind of indoor units.



5 DRY CONTACT BOARD

The unit can easily be controlled through the dry contact Gateway.

Input signal: on/off, operation mode (heating/cooling), force off signal in the unit;

Output signal: on status, operation mode (heating/cooling), error output; on/off cold plasma and on off ventilation;



6 DOOR CONTROL

It's applicable in hotel, etc. When the user pulls out the card or opens a window, the air conditioner turns off; insert again the card or close the window to resume previous operation status. This function is compatible with both high and low current access control interfaces.



7 PROGRAMMABLE WIRED CONTROLLER

Design: LCD with white background and black text + 9 soft touch buttons

Functions: Set temperature, On/off

MULTIPLE function mode, Set fan speed

Set flap, Daily/Weekly/Bi-weekly timer








IR receiver integrated

Standard: for all ducted units.

Optional: for all other types of indoor units.



CONTROLS

Code		Description	Cassette	Ducted	Floor ceiling
398100678		Infrared remote controller	●	●	●
398100686		Wired controller with weekly timer	●	●	●
398100680		WiFi kit for cassette/ducted units	●	●	
398100681		WiFi kit for floor ceiling units			●
398100683		Gateway MODBUS	●	●	●
398100684		Dry contact Gateway	●	●	●
398100685		Door control	●	●	●

● Standard control

● Optional control



X3 FS

Floor standing air conditioners

FLOOR STANDING



R32, ecological gas with low impact on global warming



(Standard)
Infrared remote controller

5 MODES ALLOW TO SATISFY IN A SMART WAY ALL KINDS OF REQUIREMENTS IN DIFFERENT SITUATIONS.

1. QUICK COOLING AND HEATING

Cooling/heating at maximum speed allows to reach optimal comfort in a very short time.

2. TURBO MODE

It allows to have maximum cold in a very short time.

3. ENERGY SAVING

A specific energy saving function allows to minimize consumption in cooling.

4. AUTOSWING

The automatic oscillation of both horizontal and vertical flaps guarantees maximum comfort for everyone in situations of conviviality.

5. AUTO FUNCTION

Automatically adjusts the operation of the unit based on the desired conditions.

FAST Quick cooling and heating	3D airflow	Automatic swinging	Sleep mode	Cold air prevention	Intelligent defrosting	Auto mode	Child lock	Fan speed regulation	Automatic fan speed	Turbo fan speed	
Dehumidification mode	I-Demand energy saving	Long distance control	8°C heating	Memory	Auto diagnosis	Timer on/off	Ambient temperature control				

A⁺⁺ Cooling

A⁺ Heating

Indoor unit model		AFSI ECO 120HL	
Outdoor unit model		AFSI ECO 120SH3	
	Units	Cooling	Heating
Nominal capacity (min.-max.) (EN14511)	kW	12,50 (3,60-13,50)	13,50 (2,80-14,0)
	BTU/h	42650 (12283-46062)	46062 (9554-47768)
EER/COP (EN14511)		3,63	4,09
Design Load (Pdesign c/Pdesign h) (Average) (EN14825)*	kW	12,50	9,20/11,5/-
Seasonal efficiency ratio (SEER/SCOP (Average) (EN14825)*		6,10	4,00/5,10/-
Air flowrate Indoor (sh.-h.-m.-l.)	m ³ /h	2400-2200-2000-1800	
Dehumidification	l/h	5	
Fan speeds (Indoor/Outdoor)	n°	4/2	
Sound pressure Indoor (sh.-h.-m.-l.)	dB(A)	57-55-53-51	
Sound pressure Outdoor (h.)	dB(A)	69	
Sound power Indoor (sh.-h.-m.-l.)	dB(A)	68-66-64-62	
Sound power Outdoor (h.)	dB(A)	75	
Power supply	V/Ph/Hz	380-415/3/50	
Power input	kW	3,44 (0,40-6,60)	3,30 (0,50-6,60)
Compressor type		Rotary DC Inverter	
Refrigerant type/GWP		R32/675	
Refrigerant charge	kg/T.CO ₂ eq.	2,6/1,76	
Liquid pipe diameter	mm (")	9,52 (3/8")	
Gas pipe diameter	mm (")	15,88 (5/8")	
Min.-max. pipe length with gas standard charge	m	3-5	
Max. pipe length with additional charge	m	30	
Additional refrigerant charge	g/m	40	
Max. height difference (Outdoor above)	m	20	
Max. height difference (Indoor above)	m	20	
Indoor net dimension (H./W./D.)	mm	1882/587/394	
Outdoor net dimension (H./W./D.)	mm	822/1028/530	
Net weight Indoor/Outdoor	Kg	57/94	

OPERATING RANGE: outdoor temperature

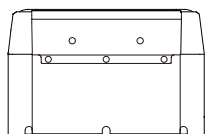
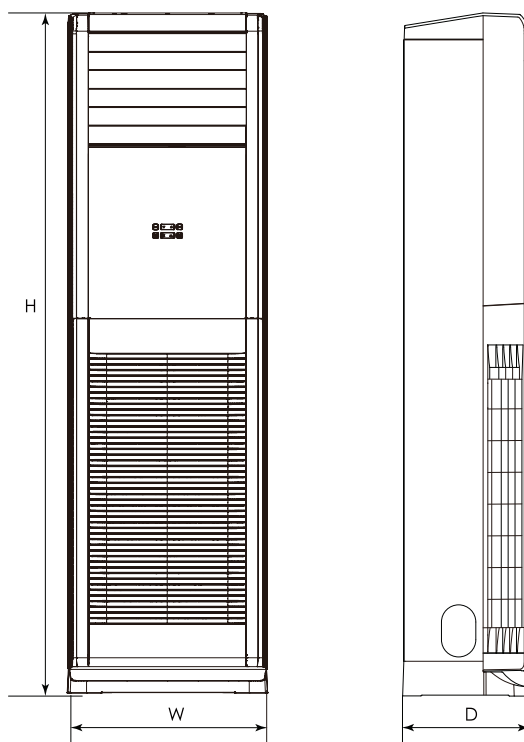
Cooling mode: from -15 °C to +43 °C

Heating mode: from -15 °C to +24 °C

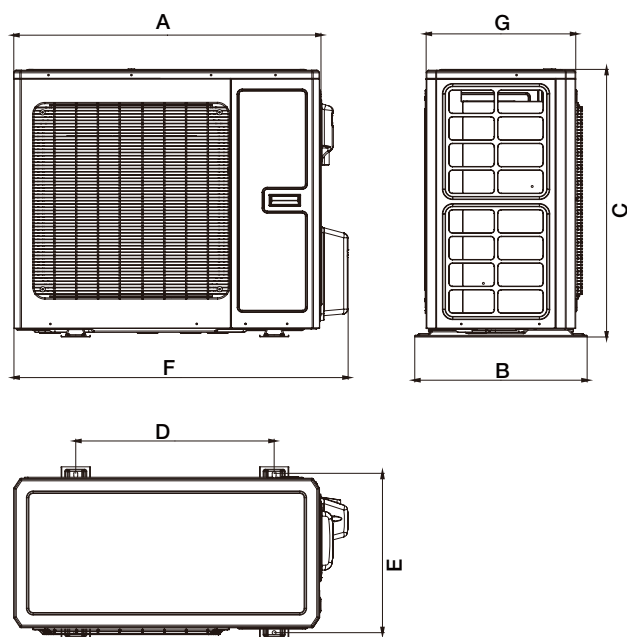
RANGE OF INDOOR TEMPERATURE ADJUSTMENT: from 16 to 32 °C.

*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

DIMENSIONAL DRAWINGS



Indoor unit model	DIMENSIONS (mm)		
	W	H	D
AFSI ECO 120HL	587	1882	394



Outdoor unit model	DIMENSIONS (mm)						
	A	B	C	D	E	F	G
AFSI ECO 120SH3	944	530	822	610	490	1028	460





improve your life

Argoclima S.p.A.
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N.B. The manufacturer assumes no responsibility for any errors or inaccuracies regarding the contents of this catalogue, and reserves the right to make any necessary changes to its products, at any time and without prior notice, for technical or commercial reasons.

Argo is a brand of argoclima S.p.A., a leading European company in air conditioning, heating and air treatment.