



## Information requirements (air-to-air air conditioners)

As by Table 11 of COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 which implements Directive 2009/125 / EC of the European Parliament and of the Council, relating to the establishment of a framework for the development of design specifications environmentally friendly of energy-related products, with regard to the ecodesign requirements of air heating products, cooling products, high temperature process chillers and fan coil units

### MODEL : AFSI ECO 120HL - AFSI ECO 120SH3

Outdoor side heat exchanger of airconditioner

Indoor side heat exchanger of air conditioner

Type: compressor driven vapour compression

Driver of compressor: electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	Prated,c	12,5	kW	Seasonal space cooling energy efficiency	ηs,c	246,0	%

#### Declared cooling capacity for part load at given outdoor temperatures Tj and indoor 27°/19 °C (dry/wet bulb)

Tj = 35°C	Pdc	12,52	kW
Tj = 30°C	Pdc	8,99	kW
Tj = 25°C	Pdc	5,69	kW
Tj = 20°C	Pdc	3,86	kW

#### Declared energy efficiency ratio for part load at given outdoor temperatures Tj

Tj = 35°C	EERd	3,73	-
Tj = 30°C	EERd	4,81	-
Tj = 25°C	EERd	7,17	-
Tj = 20°C	EERd	9,35	-

Degradation co-efficient for air conditioners(\*)

Cdc	0,25	-
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#### Power consumption in modes other than 'active mode'

Off mode	P <sub>OFF</sub>	0,003	kW	Crankcase heater mode	P <sub>CK</sub>	0,000	kW
Thermostat-off mode	P <sub>TO</sub>	0,013	kW	«stand-by» mode	P <sub>SB</sub>	0,013	kW

#### Other items

Capacity control	Variable		For air-to-air air conditioner: air flow rate, outdoor measured	L <sub>WA</sub>	5900	m <sup>3</sup> /h
Sound power level, indoor/outdoor	L <sub>WA</sub>	68/71	dB(A)	Rated brine or water flow rate, outdoor side heat exchanger	-	m <sup>3</sup> /h
If engine driven: Emissions of nitrogen oxides	NOX(**)	-	mg/kWh input GCV			
GWP of the refrigerant	GWP	675	kg CO2 eq (100 years)			

Contact details:

**Argoclima Spa - Via Alfeno Varo, 35 - 25020 Alfianello (BS) - Italy**

(\*\*) If Cdh is not determined by measurement then the default degradation coefficient of heat pumps shall be 0,25.

(\*\*\*) From 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.



## Information requirements (heat pumps)

As per Table 14 of COMMISSION REGULATION (EU) 2016/2281 of 30 November 2016 which implements Directive 2009/125 / EC of the European Parliament and of the Council, relating to the establishment of a framework for the development of design specifications environmentally friendly of energy-related products, as regards the ecodesign requirements of air heating products, cooling products, high temperature process chillers and fan coil units

### MODEL : AFSI ECO 120HL - AFSI ECO 120SH3

Scambiatore di calore esterno del condizionatore d'aria: aria

Scambiatore di calore interno del condizionatore d'aria: aria

Generatore di calore munito di un apparecchio di riscaldamento supplementare: no

Tipo di azionamento del compressore: motore elettrico

Parameters declared for average climate conditions

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	13,5	kW	Seasonal space heating energy efficiency	ηs,h	159,0	%

Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature Tj

Tj = -7°C	Pdh	8,18	kW	Tj = -7°C	COPd	2,74	
Tj = 2°C	Pdh	4,85	kW	Tj = 2°C	COPd	4,01	
Tj = 7°C	Pdh	3,20	kW	Tj = 7°C	COPd	5,13	
Tj = 12°C	Pdh	3,00	kW	Tj = 12°C	COPd	6,06	
Tbiv = bivalent temperature	Pdh	8,18	kW	Tbiv = bivalent temperature	COPd	2,74	
TOL =Operation limit temperature	Pdh	7,41	kW	TOL =Operation limit temperature	COPd	2,53	
For air/water heat pumps:Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	For air/water heat pumps:Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	

Declared coefficient of performance for part load at given outdoor temperatures Tj

Bivalent temperature	Tbiv	-7	°C	For air/water heat pumps: Operation limit temperature	TOL	-10	°C
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Degradation co-efficient heat pumps (**)	Cdc	0,25	-				
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Power consumption in modes other than 'active mode'

Supplementary heater

Off mode	P <sub>OFF</sub>	0,005	kW	Back-up heating capacity (*)	elbu	1,8	kW
Thermostat-off mode	P <sub>TO</sub>	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW	«stand-by» mode	P <sub>SB</sub>	0,018	kW

Other items

Capacity control	Variable		Per i condizionatori aria-aria: flusso d'aria, misurato all'esterno	L <sub>WA</sub>	5900	m <sup>3</sup> /h
Sound power level, indoor/outdoor	L <sub>WA</sub>	68, /75	dB(A)			
Emissions of nitrogen oxides (if applicable)	NOX(**)	-	mg/kWh input GCV	Rated brine or water flow rate, outdoor side heat exchanger		m <sup>3</sup> /h
GWP of the refrigerant	GWP	675	kg CO <sub>2</sub> eq (100 years)			

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## Information requirements (heat pumps)

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### MODEL : AFSI ECO 120HL - AFSI ECO 120SH3

Outdoor side heat exchanger of airconditioner

Indoor side heat exchanger of air conditioner

Indication if the heater is equipped with a supplementary heater: no

Driver of compressor: electric motor

Parameters declared for warmer climate conditions

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	Prated,h	13,5	kW	Seasonal space heating energy efficiency	ηs,h	201,0	%
<b>Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature Tj</b>				<b>Declared coefficient of performance for part load at given outdoor temperatures Tj</b>			
Tj = -7°C	Pdh	-	kW	Tj = -7°C	COPd	2,59	
Tj = 2°C	Pdh	11,93	kW	Tj = 2°C	COPd	4,71	
Tj = 7°C	Pdh	7,29	kW	Tj = 7°C	COPd	6,06	
Tj = 12°C	Pdh	3,00	kW	Tj = 12°C	COPd	2,59	
Tbiv = bivalent temperature	Pdh	11,93	kW	Tbiv = bivalent temperature	COPd	2,59	
TOL =Operation limit temperature	Pdh	11,93	kW	TOL =Operation limit temperature	COPd	2,73	
For air/water heat pumps:Tj = - 15 °C (if TOL < - 20 °C)	Pdh	-	kW	For air/water heat pumps:Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	
Bivalent temperature	Tbiv	2,00	°C	For air/water heat pumps: Operation limit temperature	TOL	2	°C
Degradation co-efficient heat pumps (**)	Cdc	0,25	-				

#### Power consumption in modes other than 'active mode'

#### Supplementary heater

Off mode	P <sub>OFF</sub>	0,005	kW	Back-up heating capacity (*)	e <sub>ibu</sub>	-	kW
Thermostat-off mode	P <sub>TO</sub>	0,021	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0	kW	«stand-by» mode	P <sub>SB</sub>	0,018	kW

#### Other items

Capacity control		Variable		For air-to-air heat pumps: air flow rate, outdoor measured	L <sub>WA</sub>	5900	m <sup>3</sup> /h
Sound power level, indoor/outdoor	L <sub>WA</sub>	68/75	dB(A)	Rated brine or water flow rate, outdoor side heat exchanger			
Emissions of nitrogen oxides (if applicable)	NOX(**)	-	mg/kWh input GCV				
GWP of the refrigerant	GWP	675	kg CO2 eq (100 years)				

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