

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

Model(s):ASF-60BI、 ASGE-60BI-3							
Outdoor side heat exchanger of air conditioner	air						
Indoor side heat exchanger of air conditioner	air						
Type	compressor driven vapour compression						
If applicable: driver of compressor	electric motor						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	16.0	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	258.7	%
Declared cooling capacity for part load at given outdoor temperatures $T_j$ and indoor 27°/19 °C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures $T_j$			
$T_j = + 35\text{ °C}$	$P_{dc}$	16.02	kW	$T_j = + 35\text{ °C}$	$EER_d$	2.97	-
$T_j = + 30\text{ °C}$	$P_{dc}$	11.37	kW	$T_j = + 30\text{ °C}$	$EER_d$	5.00	-
$T_j = + 25\text{ °C}$	$P_{dc}$	7.43	kW	$T_j = + 25\text{ °C}$	$EER_d$	7.53	-
$T_j = + 20\text{ °C}$	$P_{dc}$	4.54	kW	$T_j = + 20\text{ °C}$	$EER_d$	11.35	-
Degradation co-efficient for air conditioners(*)	$C_{dc}$	0.25	—				-
Power consumption in modes other than 'active mode'							
Off mode	$P_{OFF}$	0.0027	kW	Crankcase heater mode	$P_{CK}$	0.0000	kW
Thermostat-off mode	$P_{TO}$	0.0180	kW	Standby mode	$P_{SB}$	0.0027	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	—	6600	$m^3/h$
Sound power level, indoor/outdoor	$L_{WA}$	65.8/70.5	dB				
If engine driven: Emissions of nitrogen oxides	$NO_x(**)$	/	mg/kWh fuel input GCV				
GWP of the refrigerant	675		kg CO <sub>2</sub> eq (100 years)				
Contact details: Tel: +420 541 590 140 Fax: +420 541 590 124 E-mail: info@sinclair-solutions.com				Name of manufacturer: SINCLAIR CORPORATION Ltd., 16 Great Queen St., London, UK			
(*) If $C_{dc}$ is not determined by measurement then the default degradation coefficient air conditioners shall be 0,25. (**) From 26 September 2018. Where information relates to multi-split air conditioners, 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 pump)**

Model(s):ASF-60BI、 ASGE-60BI-3							
Outdoor side heat exchanger of heat pump	air						
Indoor side heat exchanger of heat pump	air						
Indication if the heater is equipped with a supplementary heater	no						
If applicable: driver of compressor	electric motor						
Parameters declared for	Average climate condition						
Item	symbol	value	unit	Item	symbol	value	unit
Rated heating capacity	$P_{rated,h}$	17.0	kW	Seasonal space heating energy efficiency	$\eta_{s,h}$	152.3	%
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature $T_j$				Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures $T_j$			
$T_j = -7\text{ °C}$	$P_{dh}$	11.02	kW	$T_j = -7\text{ °C}$	$COP_d$	2.48	-
$T_j = +2\text{ °C}$	$P_{dh}$	6.65	kW	$T_j = +2\text{ °C}$	$COP_d$	3.74	-
$T_j = +7\text{ °C}$	$P_{dh}$	4.44	kW	$T_j = +7\text{ °C}$	$COP_d$	5.22	-
$T_j = +12\text{ °C}$	$P_{dh}$	3.38	kW	$T_j = +12\text{ °C}$	$COP_d$	6.54	-
$T_{biv}$ = bivalent temperature	$P_{dh}$	11.02	kW	$T_{biv}$ = bivalent temperature	$COP_d$	2.48	-
$T_{OL}$ = operation limit	$P_{dh}$	10.09	kW	$T_{OL}$ = operation limit	$COP_d$	2.34	-
For air-to-water heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	$P_{dh}$	NA	kW	For water-to-air heat pumps: $T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	$COP_d$	NA	-
Bivalent temperature	$T_{biv}$	-7.00	°C	For water-to-air heat pumps: Operation limit temperature	$T_{ol}$	-10.00	°C
Degradation co-efficient heat pumps(**)	$C_{dh}$	0.25	—				
Power consumption in modes other than 'active mode'				Supplementary heater			
Off mode	$P_{OFF}$	0.0027	kW	Back-up heating capacity (*)	elbu	NA	kW
Thermostat-off mode	$P_{TO}$	0.0247	kW	Type of energy input			
Crankcase heater mode	$P_{CK}$	0.0000	kW	Standby mode	$P_{SB}$	0.0027	kW
Other items							
Capacity control	variable			For air-to-air heat pumps: air flow rate, outdoor measured	—	6600	m <sup>3</sup> /h
Sound power level, indoor/outdoor measured	$L_{WA}$	65.1/72.5	dB				
Emissions of nitrogen oxides (if applicable)	$NO_x$ (**)	/	mg/kWh input GCV	For water/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger	—	/	m <sup>3</sup> /h
GWP of the refrigerant	675		kg CO <sub>2</sub> eq (100 years)				
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(**) If $C_{dh}$ 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.							