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

Model(a) ASCE 49DL ASE 491	10	(		conditioners)								
Model(s):ASGE-48BI ASF-48I	31											
Outdoor side heat exchanger of air conditioner	air											
Indoor side heat exchanger of air conditioner	air											
Туре	compressor driven vapour compression											
If applicable: driver of compressor	electric motor											
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit					
Rated cooling capacity	P <sub>rated,c</sub>	13.4	kW	Seasonal space cooling energy efficiency	η <sub>s,c</sub>	246.6	%					
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 $T_j$								
$T_j = +35 \ ^{\circ}C$	Pdc	13.40	kW	$T_j = +35 \ ^{\circ}C$	EER <sub>d</sub>	3.02	-					
$T_j = +30 \ ^{\circ}C$	Pdc	9.76	kW	$T_j = +30 \ ^{\circ}C$	EER <sub>d</sub>	4.49	-					
$T_j = +25 \ ^{\circ}C$	Pdc	6.36	kW	$T_j = + 25 \ ^\circ C$	EER <sub>d</sub>	7.03	-					
$T_j = +20 \ ^{\circ}C$	Pdc	3.00	kW	$T_j = + 20 \ ^\circ C$	EER <sub>d</sub>	10.93	-					
Degradation co-efficient for air conditioners(*)	C <sub>dc</sub>	0.25					-					
	Power of	consumpt	ion in mod	es other than 'active	e mode'							
Off mode	$\mathbf{P}_{\mathrm{OFF}}$	0.0016	kW	Crankcase heater mode	P <sub>CK</sub>	0	kW					
Thermostat-off mode	P <sub>TO</sub>	0.0108	kW	Standby mode	P <sub>SB</sub>	0.0016	kW					
			Other	items								
Capacity control		variable	•			5900	m³/h					
Sound power level, indoor/outdoor	L <sub>WA</sub>	65/70	dB	For air-to-air air								
If engine driven: Emissions of nitrogen oxides	NOx(** )	-	mg/kWh fuel input GCV	conditioner: air flow rate, outdoor measured								
GWP of the refrigerant	67	75	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., 1-4 Argyll 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)

		(neat p	·F)							
Model(s):ASGE-48BI ASF-48BI	1									
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 <sub>rated,h</sub>	15.50	kW	Seasonal space heating energy efficiency	η <sub>s,h</sub>	145.8	%			
Declared heating capacity for part load at in outdoor temperature Tj	Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>									
$T_j = -7 \ ^{\circ}C$	Pdh	10.35	kW	$T_j = -7 \ ^\circ C$	COP <sub>d</sub>	2.65	-			
$T_j = +2 \ ^{\circ}C$	Pdh	6.33	kW	$T_j = +2 \ ^{\circ}C$	COP <sub>d</sub>	3.29	-			
$T_i = +7 \ ^{\circ}C$	Pdh	4.08	kW	$T_j = +7 \ ^{\circ}C$	COP <sub>d</sub>	5.35	-			
$T_j = +7 °C$ $T_j = +12 °C$	Pdh	3.27	kW	$T_i = +12 \text{ °C}$	COP <sub>d</sub>	7.00	_			
$T_{biv} = bivalent temperature$	Pdh	10.35	kW	$T_{biv} = bivalent$ temperature	COP <sub>d</sub>	2.65	-			
$T_{OL} = operation limit$	Pdh	9.06	kW	$T_{OL} = operation limit$	COP <sub>d</sub>	2.51	-			
For air-to-water heat pumps: $Tj = -15$ °C (if TOL < $-20$ °C)	Pdh	-	kW	For water-to-air heat pumps: $Tj = -15$ °C (if TOL < $-20$ °C)	COP <sub>d</sub>	-	-			
Bivalent temperature	$\mathrm{T}_{\mathrm{biv}}$	-7.00	°C	For water-to-air heat pumps: Operation limit temperature	T <sub>ol</sub>	-	°C			
Degradation co-efficient heat pumps(**)	C <sub>dh</sub>	C <sub>dh</sub> 0.25 —								
Power consumption in modes other	Supplementary heater									
Off mode	$P_{\text{OFF}}$	0.0016	kW	Back-up heating capacity (*)	elbu	-	kW			
Thermostat-off mode	P <sub>TO</sub>	0.0170	kW	Type of energy input		-				
Crankcase heater mode	P <sub>CK</sub>	0	kW	Standby mode	$\mathbf{P}_{\mathbf{SB}}$	0.0016	kW			
		Other								
Capacity control	variable		;	For air-to-air heat			_			
Sound power level, indoor/outdoor measured	$L_{WA}$	65/72	dB	pumps: air flow rate, outdoor measured	—	5900	m <sup>3</sup> /h			
Emissions of nitrogen oxides (if	NOx(**	_	mg/kWh	For water/brine-to-air						
applicable)	*)	_	input	heat pumps: Rated			-			
GWP of the refrigerant	675		kg CO2 eq (100 years)	brine or water flow rate, outdoor side heat exchanger		-	m <sup>3</sup> /h			
Contact details: Tel: +420 541 590 140 Fax: +420 541 590 124 E-mail: info@sinclair-solutions.com				Name of manufacturer: SINCLAIR CORPORATION 1-4 Argyll St., London, UK	Ltd.,					

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(\*\*) 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.