## Cooling mode:

## Information requirements for air-to-air conditioners

Model(s):KMF-224 DN4;

Test matching indoor units form, non-duct: 4×KCIBF-56 DN4.0;

Outdoor side heat exchanger of air conditioner:air

Indoor side heat exchanger of air conditioner:air

Type:compressor driven

If applicable:driver of compressor:electric motor

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Symbol	Value	Unit		Item	Symbol	Value	Unit	
P <sub>rated,c</sub>	22.4	kW		Seasonal space cooling energy efficiency	η <sub>s,c</sub>	270.2	%	
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 <sub>j</sub>				
P <sub>dc</sub>	22.4	kW		T <sub>j</sub> =+35℃	EER <sub>d</sub>	3.31		
$P_{dc}$	16.645	kW		T <sub>j</sub> =+30℃	EER <sub>d</sub>	4.57		
P <sub>dc</sub>	10.990	kW		T <sub>j</sub> =+25℃	EER <sub>d</sub>	8.61		
P <sub>dc</sub>	6.399	kW		T <sub>j</sub> =+20°C	EER <sub>d</sub>	12.8		
C <sub>dc</sub>	0.25	_						
	F	Power consumption in	modes ot	her than "active mode"				
P <sub>OFF</sub>	0.04	kW		Crankcase heater mode	P <sub>CK</sub>	0	kW	
P <sub>TO</sub>	0	kW		Standby mode	$P_{SB}$	0.04	kW	
		C	ther item	ns				
variable				For air-to-air air conditioner:air flow rate,outdoor measured	_	9000	m³/h	
L <sub>WA</sub>	78	dB						
	2088	kg CO <sub>2 eq</sub> (100years)						
	Symbol  Prated,c  ty for part Indoor 27/19  Pdc  Pdc  Pdc  Cdc  Poff  PTO	P <sub>rated,c</sub> 22.4  ty for part load at given door 27/19°C (dry/wet to do	Symbol         Value         Unit           Prated,c         22.4         kW           ty for part load at given outdoor temperatures door 27/19°C (dry/wet bulb)         kW           Pdc         22.4         kW           Pdc         16.645         kW           Pdc         10.990         kW           Pdc         6.399         kW           Cdc         0.25         —           Power consumption in           PoFF         0.04         kW           PTO         0         kW           Consumption         Consumption         Consumption           Variable         LWA         78         dB	Symbol         Value         Unit           Prated,c         22.4         kW           ty for part load at given outdoor temperatures door 27/19°C (dry/wet bulb)         kW           Pdc         22.4         kW           Pdc         16.645         kW           Pdc         10.990         kW           Pdc         6.399         kW           Cdc         0.25         —           Power consumption in modes of kW           PoFF         0.04         kW           PTO         0         kW           Other item variable           Lwa         78         dB	Symbol   Value   Unit   Item	Symbol       Value       Unit       Item       Symbol         Prated,c       22.4       kW       Seasonal space cooling energy efficiency       n <sub>s,c</sub> by for part load at given outdoor temperatures door 27/19℃ (dry/wet bulb)       Declared energy efficiency ratio or gas utilisation energy factor for part load at given outdoor         Pdc       22.4       kW       Tj=+35℃       EERd         Pdc       16.645       kW       Tj=+30℃       EERd         Pdc       10.990       kW       Tj=+25℃       EERd         Pdc       6.399       kW       Tj=+20℃       EERd         Cdc       0.25       —       EERd         Power consumption in modes other than "active mode"         PoFF       0.04       kW       Crankcase heater mode       PCK         PTO       0       kW       Standby mode       PSB         Other items         Variable       For air-to-air air conditioner:air flow rate,outdoor measured       —	Symbol         Value         Unit         Item         Symbol         Value           Prated,c         22.4         kW         Seasonal space cooling energy efficiency         η <sub>s,c</sub> 270.2           by for part load at given outdoor temperatures door 27/19°C (dry/wet bulb)         Declared energy efficiency ratio or gas utilisation efficiency energy factor for part load at given outdoor temperature           Pdc         22.4         kW         T <sub>j</sub> =+35°C         EERd         3.31           Pdc         16.645         kW         T <sub>j</sub> =+30°C         EERd         4.57           Pdc         10.990         kW         T <sub>j</sub> =+25°C         EERd         8.61           Pdc         6.399         kW         T <sub>j</sub> =+20°C         EERd         12.8           Cdc         0.25         —         Power consumption in modes other than "active mode"         EERd         12.8           POFF         0.04         kW         Crankcase heater mode         PCK         0           PTO         0         kW         Standby mode         PSB         0.04           Other items         For air-to-air air conditioner:air flow rate,outdoor measured         —         9000	

Contact details

(\*)If C<sub>dc</sub> is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25

Where information relates to multi-split air conditioners,the test result and performance data may be obtained on the basis of performance of the outdoor unit ,with a combination of indoor unit(s) recommended by the manufacturer or importer

## **Heating mode:**

## Information requirements for heat pumps

Model(s):KMF-224 DN4;

Test matching indoor units form, non-duct : 4×KCIBF-56 DN4.0;

Outdoor side heat exchanger of air conditioner:air

Indoor side heat exchanger of air conditioner:air

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

If applicable:driver of compressor:electric motor

Parameters shall be decl	ared for the	average hea	ating season,parameters fo	or the warmer and colder heating seaso	oms are optional			
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heating capacity	P <sub>rated,h</sub>	22.4	kW	Seasonal space heating energy efficiency	η <sub>s,h</sub>	167.4	%	
Declared heating capacity for part load at indoor teperature 20°C and outdoor temperatures T <sub>j</sub>			Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T <sub>j</sub>					
T <sub>j</sub> =-7°C	P <sub>dh</sub>	12.113	kW	T <sub>j</sub> =-7°C	COP <sub>d</sub>	3.22		
T <sub>j</sub> =+2°C	P <sub>dh</sub>	7.272	kW	T <sub>j</sub> =+2℃	COP <sub>d</sub>	3.56		
T <sub>j</sub> =+7℃	P <sub>dh</sub>	5.825	kW	T <sub>j</sub> =+7℃	COP <sub>d</sub>	6.76		
T <sub>j</sub> =+12℃	P <sub>dh</sub>	3.703	kW	T <sub>j</sub> =+12°C	COP <sub>d</sub>	7.76		
T <sub>biv</sub> =bivalent temperature	P <sub>dh</sub>	12.113	kW	T <sub>biv</sub> =bivalent temperature	COP <sub>d</sub>	3.22		
T <sub>OL</sub> =operation temperature	P <sub>dh</sub>	13.74	kW	T <sub>OL</sub> =operation temperature	COP <sub>d</sub>	2.35		
Bivalent temperature	T <sub>biv</sub>	-7	°C					
Degradation co-efficient for heat pumps(**)	C <sub>dh</sub>	0.25	-					
Power consumption in modes other than "active mode"			mode"	Supplementary heater				
Off mode	P <sub>OFF</sub>	0.04	kW	Back-up heating capacity(*)	elbu	0	kW	
Thermosat-off mode	P <sub>TO</sub>	0.04	kW	Type of energy input		•		
Crankcase heater mode	P <sub>CK</sub>	0	kW	Standby mode	P <sub>SB</sub>	0.04	kW	
			Othe	er items				
Capacity control	variable		able	For air-to-air heat pump:air flow rate,outdoor measured	_	9000	m³/h	
Sound power level,outdoor	L <sub>WA</sub>	78	dB					
GWP of the refrigerant		2088	kg CO <sub>2 eq</sub> (100years)					
Contact details								
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(\*\*)If  $C_{dh}$  is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25

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