## **Technical parameters**

Model(s):	Outdoor	unit: HZK	F12KSI	E(O)-Q			
	Indoor u	nit: HZK	F12KIE	(O)-Q			
Air-to-water heat pump:		yes					
Water-to-water heat pump:		no					
Brine-to-water heat pump:		no					
Low-temperature heat pump:		no					
Equipped with a supplementary heater	:	yes					
Heat pump combination heater:		no					
Parameters shall be declared for		Low temp	erature	application.			
Parameters shall be declared for		average of	climate	conditions.			
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	9.5	kW	Seasonal space heating energy efficiency		189	%
Declared capacity for heating for part le	oad at indoor to	e 20°C	Declared coefficient of performance or primary energy ratio for				
and outdoor temperature Tj				part load at indoor temperature 20 °C and outdoor temperature Tj			
Tj = - 7 °C	Pdh	8.40	kW	Tj = - 7 °C	COPd	3.16	-
Tj = +2 °C	Pdh	5.12	kW	Tj = +2 °C	COPd	4.52	-
Tj = +7 °C	Pdh	3.22	kW	Tj = +7 °C	COPd	6.45	-
Tj = +12 °C	Pdh	2.73	kW	Tj = +12 °C	COPd	7.91	-
Tj =bivalent temperature	Pdh	8.40	kW	Tj =bivalent temperature	COPd	3.16	-
Tj = operation limit temperature	Pdh	9.07	kW	Tj = operation limit temperature	COPd	2.78	-
Tj = $-15$ °C (if TOL < $-20$ °C)	Pdh	-	kW	Tj = -15 °C (if TOL < -20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient (**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	-	°C
				,			
Power consumption in modes other				Supplementary heater			
than active mode	1		134/		L D	0.4	T
Off mode	POFF	0.005	kW	Rated heat output (*)	Psup	0.4	kW
Thermostat-off mode	PTO	0.002	kW	  -			├
Standby mode	PSB	0.005	kW	Type of energy input		Electric	├
Crankcase heater mode	PCK	0	kW				
Other items							
Capacity control		variable		Rated air flow rate, outdoors		3900	m³/h
Sound power level, indoors/outdoors	11878	44/64	dB	Inaled all HOW Fale, OULGOORS		3800	1111/11
Annual energy consumption	LWA	44/64	kWh				
Contact details	QHE	4097	KVVII	<u> </u>			
Contact details							

JOHNSON CONTROLS HITACHI AIR CONDITIONING EUROPE SAS

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<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Tochnical	parameters

Outdoor unit: HZKF12KSE(O)-Q

HZKF12KIE(O)-Q

Indoor unit:

	indoor unit:	<u>HZNF IZN</u>	コト(の)-6	2			
Air-to-water heat pump:		yes					
Water-to-water heat pump:		no					
Brine-to-water heat pump:		no					
Low-temperature heat pump:		no					
Equipped with a supplementary heate	r:	yes					
Heat pump combination heater:		no					
Parameters shall be declared for		Medium t	tempera	ature application.			
Parameters shall be declared for		average	climate	conditions.			
Itom	Cumbal	Value	Unit	Item	Cymbol	Value	Unit
Item	Symbol Prated				Symbol		
Rated heat output (*)	1	9.2	kW	Seasonal space heating energy efficiency		136	%
Declared capacity for heating for part load at indoor temperature 20°C				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
and outdoor temperature Tj Ti = - 7 °C	Pdh	8.11	kW	Ti = -7 °C		2.12	
Ti = +2 °C	Pdh	4.78		Ti = +2 °C	COPd		-
	· · · · · · · · · · · · · · · · ·		kW	, -	COPd	3.27	-
Tj = +7 °C	Pdh	3.30	kW	Tj = +7 °C	COPd	4.87	-
Tj = +12 °C	Pdh	2.88	kW	Tj = +12 °C	COPd	6.82	-
Tj =bivalent temperature	Pdh	8.11	kW	Tj =bivalent temperature	COPd	2.12	-
Tj = operation limit temperature	Pdh	8.69	kW	Tj = operation limit temperature	COPd	1.69	-
Tj = -15 °C (if TOL < -20 °C)	Pdh	-	kW	Tj = - 15 °C (if TOL < - 20 °C)	COPd	-	-
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	Pcych	-	kW	Cycling interval efficiency	COPcyc	-	-
Degradation co-efficient (**)	Cdh	0.9		Heating water operating limit temperature	WTOL	-	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	POFF	0.005	kW	Rated heat output (*)	Psup	0.5	kW
Thermostat-off mode	РТО	0.002	kW				
Standby mode	PSB	0.005	kW	Type of energy input		Electric	
Crankcase heater mode	PCK	0	kW				
Other items							
Capacity control		variable	Ì	Rated air flow rate, outdoors	,	3900	m³/h
Capacity Control		Variable		Trated all 110W rate, outdoors		3900	111 /11

Contact details

Sound power level, indoors/outdoors

Annual energy consumption

Model(s):

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LWA

QHE

dΒ

kWh

44/64

5444

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.