Subtype airH2O 400 Combi 10 12	
Certificate Holder	Johnson Controls Hitachi Air-Conditioning Europe SAS
Address	Parc Aktiland II – 2, Rue de Lombardie
ZIP	69800
City	SAINT PRIEST
Country	FR
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	airH2O 400 Combi 10 12
Registration number	011-1W0847
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.8 kg
Certification Date	18.07.2024
Testing basis	HP KEYMARK certification scheme rules V14

Model HZKF10KSE-Q/HZKF10KW230E-Q	
Model name	HZKF10KSE-Q/HZKF10KW230E-Q
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	126 %
COP	3.06
Heating up time	2:26 h:min
Standby power input	36.6 W
Reference hot water temperature	48.7 °C
Mixed water at 40°C	260 l

EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating	Low temperature	Medium temperature
Heat output	10.00 kW	9.00 kW
El input	1.96 kW	2.90 kW
COP	5.10	3.10

EN 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
ηs	190 %	140 %

Prated	8.50 kW	8.00 kW
SCOP	4.83	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	7.08 kW
COP Tj = -7°C	3.02	2.18
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.58 kW	4.30 kW
COP Tj = +2°C	4.83	3.44
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.89 kW	2.89 kW
COP Tj = +7°C	6.54	4.83
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.59 kW	2.67 kW
COP Tj = 12°C	6.06	6.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.54 kW	7.08 kW
COP Tj = Tbiv	3.02	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.21 kW	7.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	1.73
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	5 W	5 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.29 kW	0.09 kW
Annual energy consumption Qhe	3645 kWh	4617 kWh

Model HZKF10KSO-Q/HZKF10KW230O-Q	
Model name	HZKF10KSO-Q/HZKF10KW230O-Q
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	124 %
COP	2.98
Heating up time	2:24 h:min
Standby power input	49.5 W
Reference hot water temperature	48.7 °C
Mixed water at 40°C	260 l

EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating	Low temperature	Medium temperature
Heat output	10.00 kW	9.00 kW
El input	1.96 kW	2.90 kW
COP	5.10	3.10

EN 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	62 dB(A)	62 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
ηs	190 %	140 %

Prated	8.50 kW	8.00 kW
SCOP	4.83	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.54 kW	7.08 kW
COP Tj = -7°C	3.02	2.18
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.58 kW	4.30 kW
COP Tj = +2°C	4.83	3.44
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.89 kW	2.89 kW
COP Tj = +7°C	6.54	4.83
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.59 kW	2.67 kW
COP Tj = 12°C	6.06	6.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.54 kW	7.08 kW
COP Tj = Tbiv	3.02	2.18
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.21 kW	7.91 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.79	1.73
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	5 W	5 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.29 kW	0.09 kW
Annual energy consumption Qhe	3645 kWh	4617 kWh

Model HZKF12KSE-Q/HZKF12KW230E-Q	
Model name	HZKF12KSE-Q/HZKF12KW230E-Q
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	126 %
COP	3.06
Heating up time	2:26 h:min
Standby power input	36.6 W
Reference hot water temperature	48.7 °C
Mixed water at 40°C	260 l

EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating	Low temperature	Medium temperature
Heat output	12.00 kW	11.20 kW
El input	2.42 kW	3.67 kW
COP	4.95	3.05

EN 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
ηs	187 %	135 %

Prated	9.50 kW	9.10 kW
SCOP	4.76	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.40 kW	8.07 kW
COP Tj = -7°C	3.16	2.11
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.12 kW	4.78 kW
COP Tj = +2°C	4.52	3.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.22 kW	3.29 kW
COP Tj = +7°C	6.44	4.89
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.52 kW	2.64 kW
COP Tj = 12°C	7.13	6.14
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.40 kW	8.07 kW
COP Tj = Tbiv	3.16	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.07 kW	8.69 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	1.69
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	5 W	5 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	0.41 kW
Annual energy consumption Qhe	4125 kWh	5448 kWh

Model HZKF12KSO-Q/HZKF12KW230O-Q	
Model name	HZKF12KSO-Q/HZKF12KW230O-Q
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	XL
Efficiency ηDHW	124 %
COP	2.98
Heating up time	2:24 h:min
Standby power input	49.5 W
Reference hot water temperature	48.7 °C
Mixed water at 40°C	260 l

EN 14511-4 | Heating	
Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating	Low temperature	Medium temperature
Heat output	12.00 kW	11.20 kW
El input	2.42 kW	3.67 kW
COP	4.95	3.05

EN 12102-1 | Average Climate	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	64 dB(A)	64 dB(A)

EN 14825 | Average Climate	Low temperature	Medium temperature
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Prated	9.50 kW	9.10 kW
SCOP	4.76	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.40 kW	8.07 kW
COP Tj = -7°C	3.16	2.11
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.12 kW	4.78 kW
COP Tj = +2°C	4.52	3.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.22 kW	3.29 kW
COP Tj = +7°C	6.44	4.89
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.52 kW	2.64 kW
COP Tj = 12°C	7.13	6.14
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.40 kW	8.07 kW
COP Tj = Tbiv	3.16	2.11
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	9.07 kW	8.69 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.78	1.69
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	65 °C	65 °C
Poff	5 W	5 W
PTO	9 W	9 W
PSB	5 W	5 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.43 kW	0.41 kW
Annual energy consumption Qhe	4125 kWh	5448 kWh