

Subtype HZKF14KSE-Q/ HZKF14KIE-Q, HZKF14KSO-Q/ HZKF14KIO-Q, HZKF16KSE-Q/ HZKF16KIE-Q, HZKF16KSO-Q/ HZKF16KIO-Q

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	HZKF14KSE-Q/ HZKF14KIE-Q, HZKF14KSO-Q/ HZKF14KIO-Q, HZKF16KSE-Q/ HZKF16KIE-Q, HZKF16KSO-Q/ HZKF16KIO-Q
Registration number	011-1W0669
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	2.7 kg
Certification Date	15.08.2023
Testing basis	HP KEYMARK certification scheme rules V12

## Model HZKF14KSE-Q/ HZKF14KIE-Q

Model name	HZKF14KSE-Q/ HZKF14KIE-Q
Application	Heating (medium 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 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	181 %	129 %
Prated	11.86 kW	11.67 kW
SCOP	4.61	3.29
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.49 kW	10.33 kW
COP Tj = -7°C	2.97	2.22
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.38 kW	6.35 kW
COP Tj = +2°C	4.40	3.04
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.20 kW	4.30 kW
COP Tj = +7°C	6.21	4.36
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.90 kW	3.75 kW
COP Tj = 12°C	7.42	6.25
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.49 kW	10.33 kW

COP $T_j = T_{biv}$	2.97	2.22
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	11.82 kW	11.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.65	1.91
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	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	0.04 kW	0.17 kW
Annual energy consumption $Q_{he}$	5322 kWh	7342 kWh

## Model HZKF14KSO-Q/ HZKF14KIO-Q

Model name	HZKF14KSO-Q/ HZKF14KIO-Q
Application	Heating (medium 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 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	66 dB(A)	66 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	181 %	129 %
Prated	11.86 kW	11.67 kW
SCOP	4.61	3.29
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	10.49 kW	10.33 kW
COP Tj = -7°C	2.96	2.23
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.38 kW	6.35 kW
COP Tj = +2°C	4.40	3.04
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.20 kW	4.30 kW
COP Tj = +7°C	6.22	4.36
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.90 kW	3.75 kW
COP Tj = 12°C	7.42	6.25
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	10.49 kW	10.33 kW

COP $T_j = T_{biv}$	2.96	2.23
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	11.82 kW	11.50 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.65	1.91
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	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	0.04 kW	0.17 kW
Annual energy consumption $Q_{he}$	5320 kWh	7332 kWh

## Model HZKF16KSE-Q/ HZKF16KIE-Q

Model name	HZKF16KSE-Q/ HZKF16KIE-Q
Application	Heating (medium 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 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	177 %	128 %
Prated	13.16 kW	12.54 kW
SCOP	4.49	3.28
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.64 kW	11.09 kW
COP Tj = -7°C	2.86	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.97 kW	6.56 kW
COP Tj = +2°C	4.23	3.06
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.66 kW	4.29 kW
COP Tj = +7°C	6.21	4.33
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.90 kW	3.75 kW
COP Tj = 12°C	7.45	5.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.64 kW	11.09 kW

COP $T_j = T_{biv}$	2.86	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	12.75 kW	12.03 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.64	1.88
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.900	0.900
WTOL	65 °C	65 °C
P <sub>off</sub>	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	0.42 kW	0.51 kW
Annual energy consumption Q <sub>he</sub>	6061 kWh	7898 kWh

## Model HZKF16KSO-Q/ HZKF16KIO-Q

Model name	HZKF16KSO-Q/ HZKF16KIO-Q
Application	Heating (medium 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 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 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	44 dB(A)	44 dB(A)
Sound power level outdoor	67 dB(A)	67 dB(A)

## EN 14825 | Average Climate

	Low temperature	Medium temperature
$\eta_s$	177 %	128 %
Prated	13.03 kW	12.54 kW
SCOP	4.49	3.28
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	11.53 kW	11.09 kW
COP Tj = -7°C	2.86	2.24
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.97 kW	6.56 kW
COP Tj = +2°C	4.23	3.07
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.66 kW	4.29 kW
COP Tj = +7°C	6.22	4.33
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	3.90 kW	3.75 kW
COP Tj = 12°C	7.45	5.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	11.53 kW	11.09 kW

COP $T_j = T_{biv}$	2.86	2.24
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	12.75 kW	12.03 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.64	1.89
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	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	0.51 kW
Annual energy consumption $Q_{he}$	5994 kWh	7889 kWh