

Subtype HZKF10KSE-Q/ HZKF10KIE-Q, HZKF10KSO-Q/ HZKF10KIO-Q, HZKF12KSE-Q/ HZKF12KIE-Q, HZKF12KSO-Q/ HZKF12KIO-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	HZKF10KSE-Q/ HZKF10KIE-Q, HZKF10KSO-Q/ HZKF10KIO-Q, HZKF12KSE-Q/ HZKF12KIE-Q, HZKF12KSO-Q/ HZKF12KIO-Q
Registration number	011-1W0668
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.8 kg
Certification Date	15.08.2023
Testing basis	HP KEYMARK certification scheme rules V12

Model HZKF10KSE-Q/ HZKF10KIE-Q

Model name	HZKF10KSE-Q/ HZKF10KIE-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	62 dB(A)	62 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	140 %
Prated	8.52 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	4.57 kW	4.29 kW
COP Tj = +2°C	4.83	3.44
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	2.88 kW	2.89 kW
COP Tj = +7°C	6.54	4.83
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.58 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 $T_j = T_{biv}$	3.02	2.18
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.21 kW	7.91 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.79	1.73
$C_{dh} T_j = TOL$ 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	0.32 kW	0.09 kW
Annual energy consumption Q_{he}	3645 kWh	4619 kWh

Model HZKF10KSO-Q/ HZKF10KIO-Q

Model name	HZKF10KSO-Q/ HZKF10KIO-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	62 dB(A)	62 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	140 %
Prated	8.57 kW	8.02 kW
SCOP	4.83	3.58
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.58 kW	7.09 kW
COP Tj = -7°C	3.03	2.19
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	4.57 kW	4.29 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	6.55	4.84
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.58 kW	2.67 kW
COP Tj = 12°C	6.06	6.75
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	7.58 kW	7.09 kW

COP $T_j = T_{biv}$	3.03	2.19
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	8.21 kW	7.91 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.79	1.74
$C_{dh} T_j = TOL$ 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	0.37 kW	0.11 kW
Annual energy consumption Q_{he}	3666 kWh	4623 kWh

Model HZKF12KSE-Q/ HZKF12KIE-Q

Model name	HZKF12KSE-Q/ HZKF12KIE-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	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	187 %	135 %
Prated	9.53 kW	9.11 kW
SCOP	4.76	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.43 kW	8.06 kW
COP Tj = -7°C	3.15	2.11
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.11 kW	4.78 kW
COP Tj = +2°C	4.52	3.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.21 kW	3.29 kW
COP Tj = +7°C	6.44	4.89
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.51 kW	2.64 kW
COP Tj = 12°C	7.13	6.14
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	8.43 kW	8.06 kW

COP $T_j = T_{biv}$	3.15	2.11
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.07 kW	8.69 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.78	1.69
$C_{dh} T_j = TOL$ 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	0.47 kW	0.42 kW
Annual energy consumption Q_{he}	3900 kWh	5450 kWh

Model HZKF12KSO-Q/ HZKF12KIO-Q

Model name	HZKF12KSO-Q/ HZKF12KIO-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	64 dB(A)	64 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	188 %	135 %
Prated	9.50 kW	9.16 kW
SCOP	4.76	3.46
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.40 kW	8.10 kW
COP Tj = -7°C	3.16	2.12
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	5.11 kW	4.78 kW
COP Tj = +2°C	4.52	3.27
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	3.21 kW	3.29 kW
COP Tj = +7°C	6.45	4.87
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	2.51 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	8.10 kW

COP $T_j = T_{biv}$	3.16	2.12
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	9.07 kW	8.69 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.78	1.69
$C_{dh} T_j = TOL$ 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	0.43 kW	0.47 kW
Annual energy consumption Q_{he}	4121 kWh	5472 kWh