

Subtype YKF C 5 7 9kW

Certificate Holder	Johnson Controls Industries
Address	14 Rue de Bel Air
ZIP	44470
City	Carquefou
Country	FR
Certification Body	BRE Global Limited
Subtype title	YKF C 5 7 9kW
Registration number	041-K017-10
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.25 kg
Certification Date	04.08.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09

Model YKF05CNC

Model name	YKF05CNC
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
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 outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	201.8 %	140.72 %
Prated	6.52 kW	6.36 kW
SCOP	5.12	3.59
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	5.77 kW	5.62 kW
COP Tj = -7°C	3.43	2.36
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	3.74 kW	3.52 kW
COP Tj = +2°C	5.04	3.7
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	2.32 kW	2.2 kW
COP Tj = +7°C	6.06	4.21
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.31 kW
COP Tj = 12°C	9.12	4.96
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5.77 kW	5.62 kW
COP Tj = Tbiv	3.43	2.36

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	6.52 kW	6.04 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3	2.02
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0 kW	0.32 kW
Annual energy consumption Qhe	2631 kWh	3655 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	173.4 %	113.12 %
Prated	6.13 kW	5.22 kW
SCOP	4.41	2.9
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.11 kW	3.21 kW
COP Tj = -7°C	3.76	2.6
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	2.38 kW	2.03 kW
COP Tj = +2°C	5.33	3.18
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	1.66 kW	1.56 kW
COP Tj = +7°C	5.78	4.5
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.44 kW
COP Tj = 12°C	9.12	5.83
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	5 kW	4.25 kW
COP Tj = Tbiv	3.02	2
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.21 kW	3.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.12	1.32
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.92 kW	1.98 kW
Annual energy consumption Q _{he}	3425 kWh	4428 kWh
P _{dh} T _j = -15°C (if TOL	5	4.25
COP T _j = -15°C (if TOL	3.02	2
C _{dh} T _j = -15 °C	0.9	0.9

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	268.2 %	170.9 %
Prated	6.24 kW	6.17 kW
SCOP	6.78	4.35
T _{biv}	7 °C	7 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	5.69 kW	6.17 kW
COP T _j = +2°C	4.31	2.77
C _{dh} T _j = +2 °C	0.9	0.9
P _{dh} T _j = +7°C	4.01 kW	3.97 kW
COP T _j = +7°C	6.39	3.9
C _{dh} T _j = +7 °C	0.9	0.9
P _{dh} T _j = 12°C	2.07 kW	2.06 kW
COP T _j = 12°C	8.71	5.28
C _{dh} T _j = +12 °C	0.9	0.9
P _{dh} T _j = T _{biv}	4.01 kW	3.97 kW
COP T _j = T _{biv}	6.39	3.9
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	5.69 kW	6.17 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.31	2.77
WTOL	65 °C	65 °C
P _{off}	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0 kW
Annual energy consumption Q _{he}	1229 kWh	1895 kWh

Model YKF07CNC

Model name	YKF07CNC
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
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 outdoor	63 dB(A)	63 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	203.99 %	143.64 %
Prated	7.90 kW	7.25 kW
SCOP	5.17	3.67
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	6.99 kW	6.42 kW
COP Tj = -7°C	3.29	2.31
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	4.51 kW	4.03 kW
COP Tj = +2°C	4.99	3.76
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.81 kW	2.56 kW
COP Tj = +7°C	6.72	4.48
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.87 kW	1.31 kW
COP Tj = 12°C	9.12	4.96
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.99 kW	6.42 kW
COP Tj = Tbiv	3.29	2.31

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.46 kW	6.85 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	1.98
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.44 kW	0.40 kW
Annual energy consumption Qhe	3155 kWh	4088 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	174.6 %	117.73 %
Prated	7.51 kW	6.06 kW
SCOP	4.44	3.02
Tbiv	-15.00 °C	-15.00 °C
TOL	-22.00 °C	-22.00 °C
Pdh Tj = -7°C	4.42 kW	3.95 kW
COP Tj = -7°C	3.67	2.75
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.99 kW	2.25 kW
COP Tj = +2°C	5.50	3.30
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	2.03 kW	1.56 kW
COP Tj = +7°C	6.69	4.50
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.87 kW	1.44 kW
COP Tj = 12°C	9.12	5.83
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.12 kW	4.94 kW
COP Tj = Tbiv	2.70	2.08
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.78 kW	3.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.16	1.32
WTOL	65.00 °C	65.00 °C
Poff	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W

PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.72 kW	2.82 kW
Annual energy consumption Q _{he}	4166 kWh	4948 kWh
P _{dh} T _j = -15°C (if TOL	6.12	4.94
COP T _j = -15°C (if TOL	2.70	2.08
C _{dh} T _j = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	274.74 %	185.3 %
Prated	8.06 kW	8.10 kW
SCOP	6.94	4.71
T _{biv}	7 °C	7 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2°C	7.23 kW	7.80 kW
COP T _j = +2°C	4.04	2.68
C _{dh} T _j = +2 °C	0.90	0.90
P _{dh} T _j = +7°C	5.18 kW	5.22 kW
COP T _j = +7°C	6.35	4.07
C _{dh} T _j = +7 °C	0.90	0.90
P _{dh} T _j = 12°C	2.46 kW	2.36 kW
COP T _j = 12°C	9.30	6.07
C _{dh} T _j = +12 °C	0.90	0.90
P _{dh} T _j = T _{biv}	5.18 kW	5.22 kW
COP T _j = T _{biv}	6.35	4.07
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	7.23 kW	7.80 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.04	2.68
WTOL	65.00 °C	65.00 °C
P _{off}	13.00 W	13.00 W
PTO	20.00 W	20.00 W
PSB	13.00 W	13.00 W
PCK	0.00 W	0.00 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.84 kW	0.32 kW
Annual energy consumption Q _{he}	1551 kWh	2303 kWh

Model YKF09CNC

Model name	YKF09CNC
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
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 outdoor	65 dB(A)	65 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	201.91 %	145.47 %
Prated	9.06 kW	8.16 kW
SCOP	5.12	3.71
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	8.02 kW	7.21 kW
COP Tj = -7°C	3.09	2.24
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	5.06 kW	4.56 kW
COP Tj = +2°C	4.92	3.86
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	3.22 kW	2.84 kW
COP Tj = +7°C	7.03	4.58
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.31 kW
COP Tj = 12°C	9.12	4.96
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	8.02 kW	7.21 kW
COP Tj = Tbiv	3.09	2.24

Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	7.88 kW	7.01 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.87	1.97
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.18 kW	1.14 kW
Annual energy consumption Qhe	3654 kWh	4539 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	174.6 %	122.4 %
Prated	8.27 kW	7.21 kW
SCOP	4.44	3.14
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	5.42 kW	4.59 kW
COP Tj = -7°C	3.72	2.72
Cdh Tj = -7 °C	0.9	0.9
Pdh Tj = +2°C	3.14 kW	2.82 kW
COP Tj = +2°C	5.56	3.6
Cdh Tj = +2 °C	0.9	0.9
Pdh Tj = +7°C	2.16 kW	1.76 kW
COP Tj = +7°C	6.55	4.84
Cdh Tj = +7 °C	0.9	0.9
Pdh Tj = 12°C	1.87 kW	1.44 kW
COP Tj = 12°C	9.12	5.83
Cdh Tj = +12 °C	0.9	0.9
Pdh Tj = Tbiv	6.75 kW	5.88 kW
COP Tj = Tbiv	2.59	2.1
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	5.08 kW	3.24 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.01	1.32
WTOL	65 °C	65 °C
Poff	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W

PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.19 kW	3.97 kW
Annual energy consumption Q _{he}	4591 kWh	5665 kWh
P _{dh} T _j = -15 °C (if TOL	6.75	5.88
COP T _j = -15 °C (if TOL	2.59	2.1
C _{dh} T _j = -15 °C	0.9	0.9

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level outdoor	65 dB(A)	65 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η _s	279.05 %	193.4 %
Prated	9.04 kW	9.03 kW
SCOP	7.05	4.91
T _{biv}	7 °C	7 °C
TOL	2 °C	2 °C
P _{dh} T _j = +2 °C	8.29 kW	8.42 kW
COP T _j = +2 °C	3.85	2.68
C _{dh} T _j = +2 °C	0.9	0.9
P _{dh} T _j = +7 °C	5.81 kW	5.81 kW
COP T _j = +7 °C	6.24	4.16
C _{dh} T _j = +7 °C	0.9	0.9
P _{dh} T _j = 12 °C	2.67 kW	2.74 kW
COP T _j = 12 °C	9.63	6.64
C _{dh} T _j = +12 °C	0.9	0.9
P _{dh} T _j = T _{biv}	5.81 kW	5.81 kW
COP T _j = T _{biv}	6.24	4.16
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	8.29 kW	8.42 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.85	2.68
WTOL	65 °C	65 °C
P _{off}	13 W	13 W
PTO	20 W	20 W
PSB	13 W	13 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.75 kW	0.61 kW
Annual energy consumption Q _{he}	1714 kWh	2458 kWh