

Subtype YKF B 8 10kW with 240L tank

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 B 8 10kW with 240L tank
Registration number	041-K017-06
Heat Pump Type	Outdoor Air/Water
Refrigerant	R32
Mass of Refrigerant	1.65 kg
Certification Date	04.08.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 08
Testing laboratory	TÜV SÜD Certification and Testing Co., Ltd. Guangzhou Branch, CN

Model YKF08ANB + YKF100/240ANB

Model name	YKF08ANB + YKF100/240ANB
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a
Phase-out Date	06.05.2027

General data

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

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	XL
Efficiency η_{DHW}	137 %
COP	3.36
Heating up time	2:02 h:min
Standby power input	24.0 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	275 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.72
Heating up time	2:18 h:min
Standby power input	24.0 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	275 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	171 %
COP	4.18
Heating up time	1:51 h:min
Standby power input	22.0 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	275 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	8.30 kW	7.50 kW
El input	1.60 kW	2.36 kW
COP	5.20	3.18

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	205 %	132 %
P _{rated}	8.12 kW	6.60 kW
SCOP	5.21	3.36
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _{dh} T _j = -7°C	7.19 kW	5.84 kW
COP T _j = -7°C	3.35	2.16
C _{dh} T _j = -7 °C	0.90	0.90
P _{dh} T _j = +2°C	4.65 kW	3.76 kW
COP T _j = +2°C	5.09	3.30
C _{dh} T _j = +2 °C	0.90	0.90
P _{dh} T _j = +7°C	2.90 kW	2.43 kW
COP T _j = +7°C	6.82	4.34
C _{dh} T _j = +7 °C	0.90	0.90
P _{dh} T _j = 12°C	1.63 kW	1.40 kW
COP T _j = 12°C	8.35	5.33
C _{dh} T _j = +12 °C	0.90	0.90
P _{dh} T _j = T _{biv}	7.19 kW	5.84 kW
COP T _j = T _{biv}	3.35	2.16
P _{dh} T _j = TOL or P _{dh} T _j = T _{designh} if TOL < T _{designh}	6.45 kW	4.91 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	3.04	1.84
WTOL	65 °C	65 °C
P _{off}	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.68 kW	1.69 kW
Annual energy consumption Qhe	3223 kWh	4056 kWh
EN 12102-1 Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)
EN 14825 Colder Climate		
	Low temperature	Medium temperature
ηs	170 %	112 %
Prated	6.98 kW	5.78 kW
SCOP	4.32	2.88
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.46 kW	3.86 kW
COP Tj = -7°C	3.66	2.48
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.70 kW	2.21 kW
COP Tj = +2°C	5.20	3.35
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.66 kW	1.44 kW
COP Tj = +7°C	6.53	4.11
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.47 kW
COP Tj = 12°C	7.96	5.92
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.69 kW	4.71 kW
COP Tj = Tbiv	2.83	1.90
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.06 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.95	1.22
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.91 kW	2.99 kW
Annual energy consumption Qhe	3978 kWh	4950 kWh
Pdh Tj = -15°C (if TOL	5.69	4.71
COP Tj = -15°C (if TOL	2.83	1.90
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	59 dB(A)	59 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_S	273 %	176 %
P _{rated}	8.12 kW	7.56 kW
SCOP	6.99	4.47
T _{biv}	7 °C	7 °C
T _{OL}	2 °C	2 °C
P _{dh T_j} = +2°C	7.57 kW	7.55 kW
COP T _j = +2°C	3.98	2.59
C _{dh} T _j = +2 °C	0.900	0.900
P _{dh T_j} = +7°C	5.22 kW	4.86 kW
COP T _j = +7°C	6.26	3.92
C _{dh} T _j = +7 °C	0.900	0.900
P _{dh T_j} = 12°C	2.45 kW	2.32 kW
COP T _j = 12°C	9.02	5.55
C _{dh} T _j = +12 °C	0.900	0.900
P _{dh T_j} = T _{biv}	5.22 kW	4.86 kW
COP T _j = T _{biv}	6.26	3.92
P _{dh T_j} = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}	7.57 kW	7.55 kW
COP T _j = T _{OL} or COP T _j = T _{designh} if T _{OL} < T _{designh}	3.98	2.59
C _{dh} T _j = T _{OL} or P _{dh T_j} = T _{designh} if T _{OL} < T _{designh}		
WT _{OL}	65 °C	65 °C
P _{off}	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.55 kW	0.01 kW
Annual energy consumption Q _{he}	1569 kWh	2259 kWh

Model YKF10ANB + YKF100/240ANB

Model name	YKF10ANB + YKF100/240ANB
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
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Reversibility	Yes
Cooling mode application (optional)	n/a
Any additional heat sources	n/a
Phase-out Date	06.05.2027

General data

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

Outdoor Air/Water**EN 16147 | Average Climate**

Declared load profile	XL
Efficiency η_{DHW}	137 %
COP	3.36
Heating up time	2:02 h:min
Standby power input	24.0 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	275 l

EN 16147 | Colder Climate

Declared load profile	XL
Efficiency η_{DHW}	111 %
COP	2.72
Heating up time	2:18 h:min
Standby power input	24.0 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	275 l

EN 16147 | Warmer Climate

Declared load profile	XL
Efficiency η_{DHW}	171 %
COP	4.18
Heating up time	1:51 h:min
Standby power input	22.0 W
Reference hot water temperature	48.0 °C
Mixed water at 40°C	275 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	9.50 kW
El input	2.00 kW	3.06 kW
COP	5.00	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	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	205 %	137 %
P _{rated}	9.17 kW	7.67 kW
SCOP	5.19	3.49
T _{biv}	-7 °C	-7 °C
TOL	-10 °C	-10 °C
P _d h T _j = -7°C	8.11 kW	6.78 kW
COP T _j = -7°C	3.23	2.24
C _d h T _j = -7 °C	0.90	0.90
P _d h T _j = +2°C	5.18 kW	4.29 kW
COP T _j = +2°C	5.01	3.42
C _d h T _j = +2 °C	0.90	0.90
P _d h T _j = +7°C	3.32 kW	2.77 kW
COP T _j = +7°C	7.08	4.52
C _d h T _j = +7 °C	0.90	0.90
P _d h T _j = 12°C	1.65 kW	1.58 kW
COP T _j = 12°C	8.58	5.68
C _d h T _j = +12 °C	0.90	0.90
P _d h T _j = T _{biv}	8.11 kW	6.78 kW
COP T _j = T _{biv}	3.23	2.24
P _d h T _j = TOL or P _d h T _j = T _{designh} if TOL < T _{designh}	7.40 kW	5.39 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	2.96	1.83
WTOL	65 °C	65 °C
P _{off}	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W

Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.76 kW	2.28 kW
Annual energy consumption Qhe	3647 kWh	4539 kWh
EN 12102-1 Colder Climate		
	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)
EN 14825 Colder Climate		
	Low temperature	Medium temperature
ηs	170 %	116 %
Prated	7.75 kW	6.71 kW
SCOP	4.32	2.99
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	4.83 kW	4.27 kW
COP Tj = -7°C	3.60	2.54
Cdh Tj = -7 °C	0.90	0.90
Pdh Tj = +2°C	2.94 kW	2.57 kW
COP Tj = +2°C	5.26	3.51
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	1.92 kW	1.66 kW
COP Tj = +7°C	7.08	4.37
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	1.66 kW	1.48 kW
COP Tj = 12°C	7.96	5.96
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	6.32 kW	5.48 kW
COP Tj = Tbiv	2.64	2.00
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	4.63 kW	2.80 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	1.97	1.22
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	3.13 kW	3.91 kW
Annual energy consumption Qhe	4424 kWh	5540 kWh
Pdh Tj = -15°C (if TOL	6.32	5.48
COP Tj = -15°C (if TOL	2.64	2.00
Cdh Tj = -15 °C	0.90	0.90

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	42 dB(A)	42 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_S	279 %	180 %
Prated	8.58 kW	8.63 kW
SCOP	7.12	4.58
Tbiv	7 °C	7 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	8.44 kW	8.06 kW
COP Tj = +2°C	3.84	2.59
Cdh Tj = +2 °C	0.90	0.90
Pdh Tj = +7°C	5.52 kW	5.55 kW
COP Tj = +7°C	6.18	4.10
Cdh Tj = +7 °C	0.90	0.90
Pdh Tj = 12°C	2.62 kW	2.53 kW
COP Tj = 12°C	9.04	5.82
Cdh Tj = +12 °C	0.90	0.90
Pdh Tj = Tbiv	5.52 kW	5.55 kW
COP Tj = Tbiv	6.18	4.10
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	8.44 kW	8.16 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.84	2.61
WTOL	65 °C	65 °C
Poff	14 W	14 W
PTO	24 W	24 W
PSB	14 W	14 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.14 kW	0.48 kW
Annual energy consumption Qhe	1628 kWh	2516 kWh