



**SUBMITTAL DATA: AK-H02TC/NaA-T(U) AK-H03TC/NaA-T(U)
AK-H04TC/NaA-T(U) AK-H05TC/NaA-T(U)
Package Heat Pump**

Project Name:	Date:
Purchaser:	Location:
Submitted to:	Unit Designation:
Submitted by:	Schedule Reference:



Specifications for X-Series Rooftop Heat Pump

Description	Unit	2TON	3TON	4TON	5TON
Model	-	AK-H02TC/NaA-T(U)	AK-H03TC/NaA-T(U)	AK-H04TC/NaA-T(U)	AK-H05TC/NaA-T(U)
Product Code	-	EJ51100070	EJ511001381	EJ51100030	EJ51100020
Cooling Capacity	Btu/h	24000	34400	47000	56000
Cooling Capacity	ton	2	3	4	5
Heating Capacity	Btu/h	24000	36000	47000	57000
EER	(Btu/h)/W	11	11	11	10.6
COP	W/W	3.4	3.4	/	/
COP	(Btu/h)/W	11.6	11.6	11.46	10.86
SEER	-	17.8	17.8	17.8	17.0
HSPF	-	8.8	8.8	8.5	8.3
External Static Pressure	InWg	0.5	0.5	0.5	0.5
External Static Pressure Range	InWg	0-0.8	0-0.8	0-1	0-1
Sound Pressure Level (H)	dB(A)	63	63	68	68
Sound Power Level (H)	dB(A)	73	73	78	78
Rated Voltage	V	208/230	208/230	208/230	208/230
Rated Frequency	Hz	60	60	60	60
Phases	-	1	1	1	1
Fuse Current	A	40	40	45	45
Circuit Breaker	A	40	40	45	45
Max. Over Current Protection	A	40	40	45	45
Min. Current (MCA)	A	35	35	39.1	39.1
Fan Type	-	Centrifugal	Centrifugal	Centrifugal	Centrifugal
Fan Quantity	N	1	1	1	1
Fan Diameter-height	mm	/	/	/	/
Fan Diameter-height	inch	/	/	/	/
Motor Model	-	B-FGZ370C	B-FGZ370C	B-FGZ750C	B-FGZ750C
Motor Insulation Class	-	B	B	B	B
Motor Safe Class	-	IP20	IP20	IP20	IP20
Motor Full Load Amp(FLA)	A	2.7	2.7	5.4	5.4
Fan Motor Drive Type	-	Direct Drive	Direct Drive	Direct Drive	Direct Drive
Blower Motor Speed	rpm	920	920	1060	1060
Fan Motor Power Output	HP	1/2	1/2	1	1
Evaporator Material	-	Copper Tube Alum Fin	Copper Tube Alum Fin	Copper Tube Alum Fin	Copper Tube Alum Fin
Evaporator Face Area	sq.ft	4.93	4.93	6.29	6.29
Evaporator Pipe Diameter	inch	5/16	5/16	5/16	5/16
Evaporator Number of Rows	-	3	3	4	4
Evaporator Fins per Inch(FPI)	-	18	18	18	18
Evaporator Number of Circuits	-	8	8	16	16
Evaporator Length(L) ×Height(H) ×Width(W)	inch	25-3/5×28-1/4×2-1/4	25-3/5×28-1/4×2-1/4	/	/
Air Filter	-	Aluminum	Aluminum	Aluminum	Aluminum
Air Filter Size(LxW/NO.)	inch	28×9/1	28×9/1	29 5/16×13 1/4	29 5/16×13 1/4
Air Filter Size(Thickness)	inch	3/5	3/5	3/5	3/5
Drainage Connection Size(Outer Diameter×Wall Thickness)	inch	3/4"(NPT)	3/4"(NPT)	3/4	3/4
Compressor Manufacturer	-	Lingda	Lingda	Lingda	Lingda
Compressor Model	-	QXFT-F310zN450B	QXFT-F310zN450B	QXAT-F400zN450	QXAT-F400zN450
Compressor Type	-	Inverter Rotary	Inverter Rotary	Inverter Rotary	Inverter Rotary
Compressor Quantity	-	1	1	1	1
Compressor Rated Load Amp (RLA)	A	21.7	21.7	/	/
Power Input of Compressor Crankcase	W	40	40	/	/
Compressor Refrigerant Oil Type	-	FW68L	FW68L	FW68L	FW68L
Compressor Refrigerant Oil Charge Volume	L	1.5	1.5	1.5	1.5
Fan Type	-	Axial-flow	Axial-flow	Axial-flow	Axial-flow
Fan Quantity	N	1	1	1	1
Fan Diameter-height	inch	29 1/2	29 1/2	/	/
Motor Model	-	B-SWZ250S	B-SWZ250S	SWZ750B	SWZ750B
Motor Insulation Class	-	B	B	/	/
Motor Safe Class	-	IP44	IP44	/	/
Motor Full Load Amp(FLA)	A	4.9	4.9	4.9	4.9
Fan Motor Drive Type	-	Direct Drive	Direct Drive	Direct Drive	Direct Drive
Fan Motor Speed	rpm	720	720	720	720
Fan Motor Power Output	HP	1/3	1/3	/	/
Condenser Material	-	Copper Tube Alum Fin	Copper Tube Alum Fin	Copper Tube Alum Fin	Copper Tube Alum Fin
Condenser Face Area	sq.ft	13.67	13.67	20.88	20.88
Condenser Pipe Diameter	inch	0.3	0.3	5/16	5/16
Condenser Number of Rows	-	3	3	3	3
Condenser Fins per Inch(FPI)	-	16	16	16	16
Condenser Number of Circuits	-	13	13	15	15
Cooling Operation Ambient Temperature Range	°F	23~125	23~125	23~125	23~125
Heating Operation Ambient Temperature Range	°F	-22~75.2	-22~75.2	-22~75.2	-22~75.2
Defrosting Method	-	Automatic Defrosting	Automatic Defrosting	Automatic Defrosting	Automatic Defrosting
Refrigerant	-	R410A	R410A	R410A	R410A
Cooling Throttling Model	-	DPF(TS1)2.5C-19	DPF(TS1)2.5C-19	/	/
Cooling Throttling Method	-	/	/	EEV	EEV
Heating Throttling Method	-	EEV	EEV	EEV	EEV
Net Weight	LBS	523	523	628	628

2 Ton			
Outdoor Temperature DB (HD)	Indoor Temperature		
	(60 °F)	(70 °F)	(80 °F)
°F	CapacityBtu/h	CapacityBtu/h	CapacityBtu/h
-22(70%)	19200	18800	18000
-15(70%)	20800	20400	19600
-5(70%)	22800	22300	21400
5(70%)	24500	24000	23000
17(70%)	24500	24000	23000
32(75%)	24500	24000	23000
47(80%)	24500	24000	23000
60(70%)	27200	26600	25600
Outdoor Temperature DB	Indoor Temperature DB/WB		
	60°F/50°F	70°F/59°F	80°F/67°F
°F	CapacityBtu/h	CapacityBtu/h	CapacityBtu/h
50	18600	23300	26500
65	18600	23300	26500
75	18600	23300	26500
85	17700	22200	25200
95	16900	21100	24000
105	15200	19000	21600
115	14400	18100	20500

3 Ton			
Outdoor Temperature DB (HD)	Indoor Temperature		
	(60 °F)	(70 °F)	(80 °F)
°F	CapacityBtu/h	CapacityBtu/h	CapacityBtu/h
-22(70%)	19200	18800	18000
-15(70%)	22800	22300	21400
-5(70%)	26100	25600	24500
5(70%)	29400	28800	27600
17(70%)	33900	33200	31900
32(75%)	36700	36000	34600
47(80%)	36700	36000	34600
60(70%)	40800	40000	38400
Outdoor Temperature DB	Indoor Temperature DB/WB		
	60°F/50°F	70°F/59°F	80°F/67°F
°F	CapacityBtu/h	CapacityBtu/h	CapacityBtu/h
50	27200	34000	38600
65	27200	34000	38600
75	27200	34000	38600
85	25900	32400	36800
95	24200	30300	34400
105	21800	27200	31000
115	20700	25900	29400

4 Ton			
Outdoor Temperature DB (HD)	Indoor Temperature		
	(60 °F)	(70 °F)	(80 °F)
°F	CapacityBtu/h	CapacityBtu/h	CapacityBtu/h
-22(70%)	34500	33800	32500
-15(70%)	37900	37100	35600
-5(70%)	42200	41400	39700
5(70%)	45900	45000	43200
17(70%)	47900	47000	45100
32(75%)	47900	47000	45100
47(80%)	47900	47000	45100
60(70%)	53200	52200	50100
Outdoor Temperature DB	Indoor Temperature DB/WB		
	60°F/50°F	70°F/59°F	80°F/67°F
°F	CapacityBtu/h	CapacityBtu/h	CapacityBtu/h
50	35500	44400	50400
65	35500	44400	50400
75	35500	44400	50400
85	33800	42200	48000
95	33100	41400	47000
105	29800	37200	42300
115	28300	35400	40200

5 Ton			
Outdoor Temperature DB (HD)	Indoor Temperature		
	(60 °F)	(70 °F)	(80 °F)
°F	CapacityBtu/h	CapacityBtu/h	CapacityBtu/h
-22(70%)	31400	30800	29500
-15(70%)	37800	37100	35600
-5(70%)	42400	41600	39900
5(70%)	47100	46200	44300
17(70%)	58100	57000	54700
32(75%)	58100	57000	54700
47(80%)	58100	57000	54700
60(70%)	64500	63300	60700
Outdoor Temperature DB	Indoor Temperature DB/WB		
	60°F/50°F	70°F/59°F	80°F/67°F
°F	CapacityBtu/h	CapacityBtu/h	CapacityBtu/h
50	42100	52700	59900
65	42100	52700	59900
75	42100	52700	59900
85	40100	50200	57000
95	39400	49300	56000
105	35500	44400	50400
115	33700	42100	47900