

AXK - T

As07 1E ↔ F069 2E



Refrigerant
R410A | GWP=2.088



Centrifugal
fan



"Tecno"
solutions

Direct expansion with water cooled condenser



Configuration

- O - Upflow
- U - Downflow

Operation

- SF - Cooling only

Solution

- T - Technological

Cooling Capacity 7,9 - 74,5 kW

Free-cooling capacity 17,9 - 51,4 kW

Housing	Base and panelling made of galvanised steel painted with epoxy powder; frame complete with service panels designed to grant proper operation during maintenance. The aesthetic panelling is internally lined to reduce the noise level.
Air heat exchanger	Air heat exchanger made of copper tubes arranged in staggered rows. The fins are made of aluminum with a special hydrophilic treatment for better drainage of the condensate and therefore better heat exchange ("V" configuration).
Compressor	HERMETIC SCROLL type, complete with thermal protection. Antivibration mountings and oil charge are standard.
Fan	Centrifugal type with two suctions, directly coupled to the motor which is of external rotor type and is fixed by vibration isolation mountings. The fans have forward curved blades.
Water cooled condenser	High efficiency plate heat exchanger made of AISI 316 stainless steel.
Refrigerant circuit	Filter dryer, moisture-liquid sight glass, HP and LP pressure switches, solenoid valve, thermostatic expansion valve with external equalizer.
Filter	Folded type, mounted on a frame, with protection grille. Filtering cells in polyester fibers. G4 efficiency according to CEN-EN 779 norm; with 90,1% ASHRAE separation degree. The filter is of selfextinguish type.
Electrical board	It is designed and wired according to IEC 204-1/EN60204-1 regulations, complete with contactor and protection for compressors and fans, main isolator.
Control panel	The microprocessor controls the unit capacity by timing the compressors and checks the operating alarms. Advanced electronic control is standard.

ACCESSORIES

- Water heating coil
- Electric heating coil
- Electronic expansion valve
- Contacts for smoke/fire alarm
- F5 efficiency air folded filter
- Special filter plenum for air outlet (from F6 to F9)
- Air supply plenum with two directions adjustable grilles
- Max and min voltage relay
- Phase sequence relay
- Crankcase electrical heater
- Clock board
- LonWorks® and ModBus® interface electronic board
- Water on the bottom alarm
- Dirty filters alarm
- Low air flow alarm
- Non return air damper
- Vibration isolation frame with bearings (H 285-400mm.)
- Remote control panel
- Modulating humidifier (water conductivity 350...750 µS/cm)
- Condensing pressure valve
- Sound absorber plenum
- Shell and tube Condenser
- CU/NI Shell and tube Condenser

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AXK Tecno		As07 1E	As09 1E	A012 1E	A014 1E	A016 1E	Bs19 1E	B020 1E	B023 1E	C026 1E
Total cooling capacity(1)	kW	7,9	10,4	12,0	12,9	16,4	18,7	22,7	25,5	28,2
Sensible cooling capacity(1)	kW	7,6	8,6	11,7	12,0	13,5	16,2	20,8	21,9	27,0
R Factor	-	0,96	0,83	0,98	0,93	0,82	0,87	0,92	0,86	0,96
Free cooling - Tot. cap./Sens. cap.(3)	kW	-	-	-	-	-	-	17,9 / 15,4	17,9 / 15,4	24,1 / 21,2
Power supply	-	400V/3+N/50Hz +T								
Number of compressors	n°	1	1	1	1	1	1	1	1	1
Number of refrigerant circuits	n°	1	1	1	1	1	1	1	1	1
Compressors total power input(1)	kW	2,4	2,7	2,7	2,8	3,6	3,7	4,4	5,1	5,7
Compressors total current(1)	A	5,0	5,4	5,4	5,5	6,8	6,8	7,9	9,4	10,6
Air flow	m3/h	2300	2300	3300	3300	3300	4200	5600	5600	8200
External static pressure	Pa	80	80	80	80	80	150	125	125	125
Fans quantity	n°	1	1	1	1	1	1	2	2	2
Fans power input	kW	0,35	0,35	0,55	0,55	0,55	0,75	1,5	1,5	1,5
Fans total current	A	3,1	3,1	4,6	4,6	4,6	3,1	6,2	6,2	6,2
Front sound pressure OVER(2)	dB(A)	47	47	48	48	48	48	51	51	53
Front sound pressure UNDER(2)	dB(A)	44	44	45	45	45	45	48	48	50
IN-OUT diameter cond. water (CITY)	"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"	¾"
IN-OUT diameter cond. water (TOWER)	"	¾"	¾"	1"	1"	1¼"	1¼"	1¼"	1¼"	1¼"

ELECTRIC COIL										
Stages of operation	n°	1	1	2	2	2	2	2	2	2
Power	kW	3,0	3,0	6,0	6,0	6,0	6,0	6,0	6,0	9,0
Absorbed current	A	4,4	4,4	8,7	8,7	8,7	8,7	8,7	8,7	13,0

HUMIDIFIER										
Capacity	kg/h	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	5 - 8
Power	kW	2,3	2,3	2,3	2,3	2,3	2,3	2,3	2,3	6,2
Absorbed current	A	3,2	3,2	3,2	3,2	3,2	3,2	3,2	3,2	8,7

DIMENSIONS AND WEIGHT										
Lenght	mm	700	700	880	880	880	880	1140	1140	1320
Depth	mm	700	700	700	700	700	700	700	700	840
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950	1950
Operating weight	Kg	210	215	230	240	250	260	320	330	420

AXK Tecno		C029 1E	C033 1E	D042 2E	D047 2E	E048 2E	E053 2E	E058 2E	F069 2E	
Total cooling capacity(1)	kW	31,7	35,6	44,2	49,4	51,9	57,5	64,4	74,5	
Sensible cooling capacity(1)	kW	28,5	30,3	39,6	41,7	50,0	52,2	55,0	63,2	
R Factor	-	0,90	0,85	0,90	0,84	0,96	0,91	0,85	0,85	
Free cooling - Tot. cap./Sens. cap.(3)	kW	24,1 / 21,2	24,1 / 21,2	31,3 / 27,6	31,3 / 27,6	44,9 / 38,7	44,9 / 38,7	44,9 / 38,7	51,4 / 44,3	
Power supply	-	400V/3+N/50Hz +T								
Number of compressors	n°	1	1	2	2	2	2	2	2	
Number of refrigerant circuits	n°	1	1	2	2	2	2	2	2	
Compressors total power input(1)	kW	6,6	7,7	8,8	10,3	10,3	11,4	13,3	15,3	
Compressors total current(1)	A	12,0	13,7	15,8	18,8	18,8	21,2	24,0	27,4	
Air flow	m3/h	8200	8200	10500	10500	14000	14000	14000	16000	
External static pressure	Pa	125	125	155	155	140	140	140	140	
Fans quantity	n°	2	2	3	3	4	4	4	4	
Fans power input	kW	1,5	1,5	2,25	2,25	3,0	3,0	3,0	3,0	
Fans total current	A	6,2	6,2	9,3	9,3	12,4	12,4	12,4	12,4	
Front sound pressure OVER(2)	dB(A)	53	53	55	55	56	56	56	57	
Front sound pressure UNDER(2)	dB(A)	50	50	52	52	53	53	53	54	
IN-OUT diameter cond. water (CITY)	"	¾"	¾"	1"	1"	1"	1"	1"	1¼"	
IN-OUT diameter cond. water (TOWER)	"	1¼"	1¼"	2"	2"	2"	2"	2"	2"	

ELECTRIC COIL										
Stages of operation	n°	2	2	2	2	2	2	2	2	
Power	kW	9,0	9,0	12,0	12,0	18,0	18,0	18,0	18,0	
Absorbed current	A	13,0	13,0	17,4	17,4	26,0	26,0	26,0	26,0	

HUMIDIFIER										
Capacity	kg/h	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	5 - 8	10 - 15	
Power	kW	6,2	6,2	6,2	6,2	6,2	6,2	6,2	11,3	
Absorbed current	A	8,7	8,7	8,7	8,7	8,7	8,7	8,7	16,2	

DIMENSIONS AND WEIGHT										
Lenght	mm	1320	1320	1760	1760	2200	2200	2200	2640	
Depth	mm	840	840	840	840	840	840	840	840	
Height	mm	1950	1950	1950	1950	1950	1950	1950	1950	
Operating weight	Kg	430	440	520	540	720	740	760	960	

Note:

- (1) Air inlet 24°C / 50% U.r. IN-OUT water condenser temperature = 30°C / 35°C
 - (2) Data measured at 1m in open field conditions
 - (3) Air inlet 24°C / 50% U.r. - Water and Ethylenic Glycol 30% 12/7°C (13/7°C from size "D")
- THE DECLARED COOLING CAPACITY ARE NOT TAKING INTO ACCOUNT THE FAN MOTOR POWER INPUT.