SPECIFIC SYSTEMS
www.SPECIFICSYSTEMS.com

AIRPAK

5–20 Ton Capacity

Packaged wall mounted
industrial-grade air conditioners
for general purpose applications

6 reasons to choose Specific Systems

Durability.
Specific Systems is committed to building the best environmental control systems in the industry. Our engineering expertise and experience gained over 35 years in business enables us to design and build systems that will perform reliably in virtually any application. You can always depend on Specific Systems' equipment for durability and performance.

Engineering Excellence.
At Specific Systems, our teams of engineers stand ready to work with you in evaluating and designing an environmental system suited to your specific application. We assign a lead engineer to oversee your project and serve as liaison between you and our specialists. It is this person's responsibility to work one-on-one with you to develop the most suitable product for your application. Our engineering capabilities are something you can always depend on at Specific Systems.

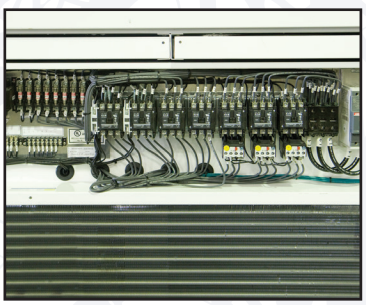
Minimal Down Time.
With Specific Systems' standard modular environmental units, you can practically eliminate costly down time. Our engineers have designed a modular product line that offers dual redundancy, fast, easy, on-site repair, and simplified parts replacement. You can depend on Specific Systems modular concept to save substantial time and money.

Flexibility.
Specific Systems is committed to meeting your needs. Our standard modular product line can be configured in horizontal, vertical, slim line or split configurations and the same standard modules are used in each configuration. We offer complete capabilities for the manufacture of customized units, designed for your particular application. Whatever your requirements, you can depend on Specific Systems to develop the best system for your unique situation.

Quality.
Specific Systems takes pride in manufacturing top quality environmental control equipment. From the initial stages of planning, throughout production, and into the final stages of assembly, our employees maintain a high standard of quality control. At Specific Systems, you can depend on our quality every step of the way.

Service.
Our goal is to work with you in a timely, professional manner to get the results you need. We'll always be available to answer your questions and provide you with the necessary technical information. Our technicians will monitor the performance of your system following installation to ensure maximum operating performance. You can depend on Specific Systems service before, during and after the installation of your system.

Contents



Commitment, Reliability, and Excellence

Since 1974, Specific Systems, LTD. has held strong to a commitment of reliability, service and design excellence in special purpose environmental air-conditioning, heating, ventilating and pressurization systems. This has been accomplished through proven engineering and design principles, combined with a dedication to continued improvements in our standard modular products. With this strong engineering focus, Specific Systems leads the industry in modular environmental control system technology. You can always depend on Specific Systems to perform to full capacity.

Applications

As wireless technology continues to proliferate through society and consumers stay plugged in, more electronics shelters and towers will be necessary to supply the bandwidth. Specific Systems AirPak units are perfectly suited to meet the cooling demands of these shelters, keeping temperatures around the highly sensitive equipment at reasonable levels.

AirPak units are equally suited for use in switchgear houses, like those located at electrical substations that distribute power to those towers. Because the AirPak units are available in up to 20 ton capacities, they are also the unit of choice for placement in electrical powerhouses at petroleum pipeline pumping stations, where variable speed drives create enormous amounts of heat that must be dissipated.

Consumers drive the need for information "from the scene", so media organizations must often drive their equipment to the scene. Media organizations rely on Specific Systems' AirPak units to withstand the rigors of attachment to the mobile electronics trailers, allowing them to provide spot media broadcasts and stay a block ahead of their competitors.

Operations houses on construction sites are often placed in extreme environments, and AirPaks easily outperform similar units and help to provide comfort and security for your employees.

Photos courtesy Shook Mobile

Features

Standard Features:

- *To-the-wall mounting*
- *Redundant refrigeration circuits*
- *16-ga powdercoated galvanized steel cabinets*
- *Expertly loomed electrical connections*
- *Capacities from 5 to 20 tons*
- *UL 508A electrical panels*
- *Freezestats*
- *Hot gas bypass*
- *Crankcase Heaters*
- *CSA / UL Approved*

Optional Features and Available Options:

- *Reverse air flow*
- *Full indoor serviceability*
- *Vertical discharge blowers*
- *Heating elements*
- *Multiplexor: Panel capable of operating up to four separate units*
- *All copper coils*
- *Custom color powdercoating*
- *Stainless steel cabinet*
- *Low ambient controls*
- *Corrosion-resistant coils*
- *Economizer*
- *Additional filtration*
- *Condenser air deflector*
- *DualPac 2-unit V plenum*

All-in-one.

Specific Systems engineered the AirPak units to be easy to install and operate. To ensure this, all AirPak units feature standard to-the-wall mounting. This requires only two small cutouts to be made or constructed into the mounting wall, minimizing the chances for air leakage. The supplied Myers® hubs on the sides of each unit allow quick connection to existing wiring and help limit electrical entry points into the building.

All standard AirPak cabinets are manufactured using 16-gauge galvanized steel that has been powdercoated for extra corrosion resistance. The same powdercoating is used on the internal 12-gauge steel components.

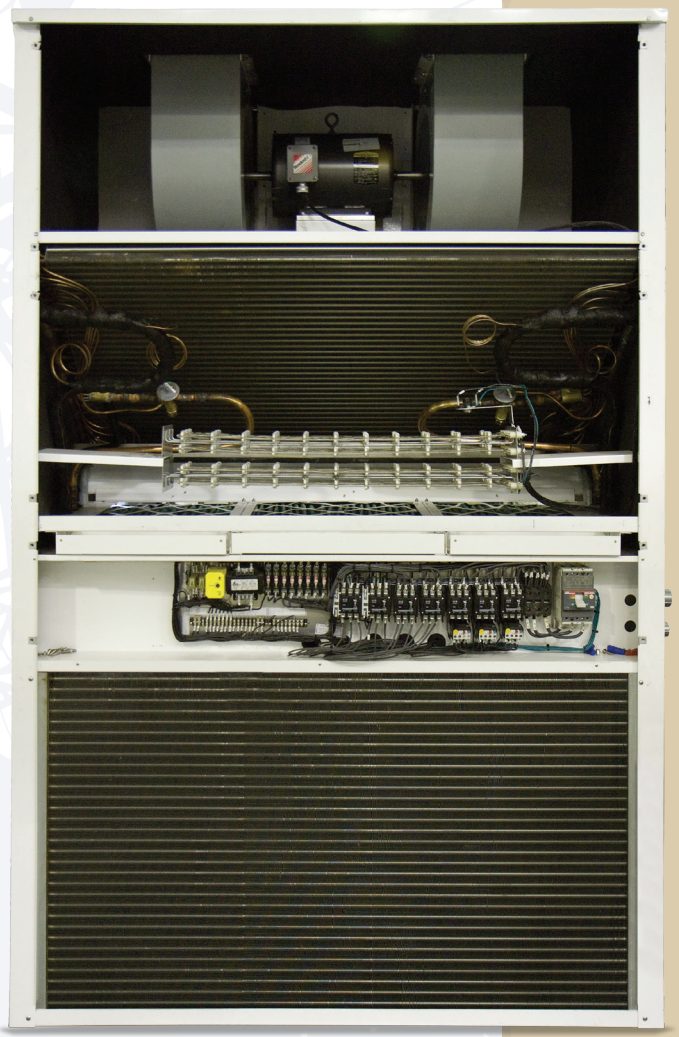
Unlike competing products which employ 'birds nest wiring', Specific Systems' employees take great care to precisely loom and label each electrical connection for ease of identification during maintenance or installation. The electrical panels are UL recognized under standard 508A and are CSA approved.

Also standard on all AirPak units are freezestats and crankcase heaters for the compressors. Freezestats help prevent coils from freezing over. Often, this is caused by decreased airflow (from dust, debris, etc) or from a low refrigerant charge. Crankcase heaters help keep the refrigerant from condensing too early and adsorbing oil. Adsorption such as this causes the oil to leave the compressor, and can cause gradual or instant failure of the compressor.

Systems range in capacities from 5 to 20 tons (60,000 to 240,000 BTUH), and have many available options and accessories.

Built-in Backup.

The most distinguishing factor of the AirPak units, when compared to competing systems, is the dual refrigeration circuit. This redundant circuit allows Specific Systems' units to provide our clients with minimal downtime, thereby increasing profits through fewer repairs.



Optional Features and Accessories.

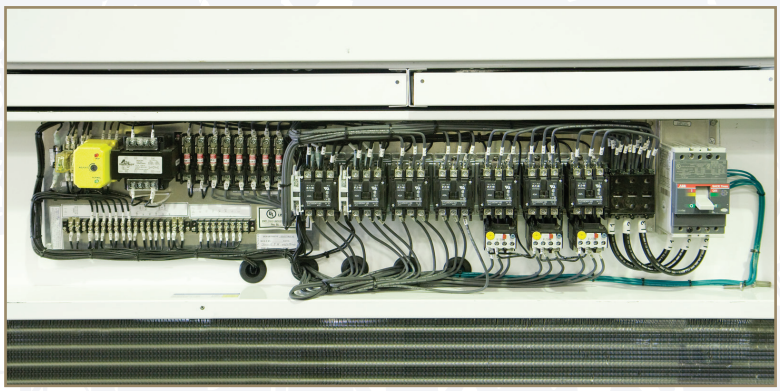
A commonly ordered option is heating, availabile from 10KW to 40KW. Additionally, coils can be coated with several types of corrosion protection including Esgard, Heresite, Thermoguard, Electrofin E-Coat, and Technicoat.

Another popular option is the alternating panel, or multiplexor. This NEMA 4 rated panel is capable of controlling up to four separate units and alternating the load between the individual units. *See pg 15.*

Along with freezestats and crankcase heaters, AirPaks are available with Low Ambient Controls. This package includes a receiver and a head pressure control valve (see notes at right).

To further prevent corrosion, all copper coils are optional, as is a stainless steel cabinet (304 or 316). Reverse air flow (drawing air through the evaporator instead of pushing it through) is especially useful in dusty applications. These options give substantial protection when used in a harsh environment. Additional filtration is available via an addon unit such as a sand or higher grade paper filter. Filters for AirPak units may be utilized to improve indoor air quality in buildings occupied by personnel.

If the unit is designed to blow into existing ductwork, AirPak units can be engineered with ductmate flanges, vertical discharge blowers, and even plenums sized to meet the specifications of your application.



Head Pressure Control Valve and Receiver:

Operate to maintain minimum compressor discharge pressure at outdoor temperatures down to -10 °F. (R-407c: 180 psi; R-410A: 295 psi). This is accomplished by metering the liquid refrigerant stored in the receiver into the condenser coil This effectively reduces the operating size of the coil, which raises the discharge pressure, allowing the system to operate at design capacity even at low ambient conditions.

APK-60

5 Ton
(60,000 BTUH)

Electric Power		230/240V 1Φ–60Hz	460/480 3Φ–60Hz	230/240 3Φ–60Hz	415V 3Φ–50Hz	380V 3Φ-50Hz	200V 3Φ–50Hz	575V 3Φ–60Hz
Evaporator Fan Motor FLA		3.5	1.67	2.85	1.6	1.6	2.9	2.4
Condensor Motor FLA		10.7	3.1	6.2	2.8	2.8	6.5	2.5
Compressor Motor RLA		15.4	6.0	11.5	6.0	6.0	11.5	4.2
Heat 20KW, Amps (Actual KW)		—	26.0 (21.6)	53.22 (21.2)	28.0 (19.4)	28.0 (19.4)	49.66 (17.2)	21.6 (21.6)
Heat 15KW, Amps (Actual KW)		—	18.52 (15.4)	37.6 (15.0)	23.8 (16.5)	23.8 (16.5)	42.4 (14.7)	15.46 (15.4)
Heat 10KW, Amps (Actual KW)		46.1 (10.0)	13.0 (10.8)	26.6 (10.6)	14.0 (9.7)	14.0 (9.7)	24.8 (8.6)	10.8 (10.8)
Total Cooling FLA		22.1	18.3	33.6	17.9	17.9	33.9	14.8
20 KW Heat	MCA	—	36.4	72.0	38.9	38.9	64.0	32.0
	MOP	—	40.0	80.0	40.0	40.0	70.0	35.0
15 KW Heat	MCA	—	27.1	52.5	33.6	33.6	58.5	24.2
	MOP	—	30.0	60.0	35.0	35.0	60.0	25.0
10 KW Heat	MCA	62.6	20.2	38.7	21.4	21.4	36.8	18.4
	MOP	100.0	25.0	45.0	25.0	25.0	45.0	20.0
Operating Range		216V–253V	432V–506V	216V–253V	373V–456V	342V–418V	180V–220V	517V–600V

Actual Capacity @ 60 Hz, 80° DB / 67° WB Entering Coil

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	48,454	14.20	73,046	21.40
85°F (29°C)	47,256	13.85	69,440	20.35
95°F (35°C)	45,262	13.26	65,482	19.19
110°F (43°C)	42,888	12.57	59,552	17.45
120°F (49°C)	41,746	12.23	55,588	16.29

Actual Capacity @ 60Hz, 80° DB / 61.8° WB Entering Evap

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	60,598	17.76	66,900	19.61
85°F (29°C)	58,996	17.29	63,526	18.62
95°F (35°C)	57,384	16.82	60,120	17.62
110°F (43°C)	53,694	15.74	54,684	16.03
120°F (49°C)	51,178	15.00	51,178	15.00

CFM @ ESP (Wet Coil, 60Hz)			
0.10	0.20	0.30	Filter Size (#)
2600	2450	2325	16 × 24 × 2 (2)

Unit Dimensions

W	D	H	Weight
42"	28"	85"	820 lbs

Full dimensions shown on page 16

APK-90

7.5 Ton
(90,000 BTUH)

Electric Power		230/240V 1Φ–60Hz	460/480 3Φ–60Hz	230/240 3Φ–60Hz	415V 3Φ–50Hz	380V 3Φ-50Hz	200V 3Φ–50Hz	575V 3Φ–60Hz
Evaporator Fan Motor FLA		3.5	3.2	5.6	3.2	3.2	5.6	2.15
Condensor Motor FLA		10.7	4.0	6.7	3.5	3.5	8.9	3.2
Compressor Motor RLA		15.4	6.3	14.5	6.3	6.3	11.5	6.0
Heat 20KW, Amps (Actual KW)		—	26.0 (21.6)	53.22 (21.2)	28.0 (19.4)	28.0 (19.4)	49.66 (17.2)	21.6 (21.6)
Heat 15KW, Amps (Actual KW)		—	18.52 (15.4)	37.6 (15.0)	23.8 (16.5)	23.8 (16.5)	42.4 (14.7)	15.46 (15.4)
Heat 10KW, Amps (Actual KW)		46.1 (10.0)	13.0 (10.8)	26.6 (10.6)	14.0 (9.7)	14.0 (9.7)	24.8 (8.6)	10.8 (10.8)
Total Cooling FLA		31.1	21.3	42.8	20.8	17.9	39.0	18.9
20 KW Heat	MCA	—	38.4	75.4	40.9	40.9	70.9	31.7
	MOP	—	40.0	80.0	45.0	45.0	80.0	35.0
15 KW Heat	MCA	—	29.0	55.9	35.6	35.6	61.9	23.9
	MOP	—	30.0	60.0	40.0	40.0	70.0	25.0
10 KW Heat	MCA	62.6	22.9	46.4	23.4	23.4	41.9	20.4
	MOP	100.0	25.0	60.0	25.0	25.0	50.0	25.0
Operating Range		216V–253V	432V–506V	216V–253V	373V–456V	342V–418V	180V–220V	517V–600V

CFM @ ESP (Wet Coil, 60Hz)			
0.10	0.20	0.30	Filter Size (#)
4000	3800	3745	24 × 20 × 2 (1)
			20 × 20 × 2 (1)

Unit Dimensions

W	D	H	Weight
48"	28"	94"	1000 lbs

Full dimensions shown on page 16

Actual Capacity @ 60 Hz, 80° DB / 67° WB Entering Coil

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	78,854	23.11	109,346	32.05
85°F (29°C)	72,790	21.33	104,004	30.48
95°F (35°C)	70,182	20.57	98,694	18.92
110°F (43°C)	67,152	19.68	89,742	26.30
120°F (49°C)	64,436	18.88	83,604	24.50

Actual Capacity @ 60Hz, 80° DB / 61.8° WB Entering Evap

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	92,940	27.24	99,792	29.25
85°F (29°C)	90,410	26.50	94,864	27.80
95°F (35°C)	87,734	25.71	90,050	26.39
110°F (43°C)	82,712	24.24	82,712	24.24
120°F (49°C)	77,904	22.83	77,904	22.83

APK-120

10 Ton
120,000 BTUH)

Electric Power		230/240V 1Φ–60Hz	460/480 3Φ–60Hz	230/240 3Φ–60Hz	415V 3Φ–50Hz	380V 3Φ-50Hz	200V 3Φ–50Hz	575V 3Φ–60Hz
Evaporator Fan Motor FLA		3.5 (7.0)	1.67 (3.34)	2.6 (5.2)	1.6 (3.2)	1.6 (3.2)	2.9 (5.8)	1.16 (2.32)
Condensor Motor FLA		12.1	4.0	6.7	3.5	3.5	8.9	3.2
Compressor Motor RLA		30.8	9.7	19.0	9.7	9.7	19.0	7.4
Heat 20KW, Amps (Actual KW)		—	26.0 (21.6)	53.22 (21.2)	28.0 (19.4)	28.0 (19.4)	49.66 (17.2)	21.6 (21.6)
Heat 15KW, Amps (Actual KW)		—	18.52 (15.4)	37.6 (15.0)	23.8 (16.5)	23.8 (16.5)	42.4 (14.7)	15.46 (15.4)
Heat 10KW, Amps (Actual KW)		46.1 (10.0)	13.0 (10.8)	26.6 (10.6)	14.0 (9.7)	14.0 (9.7)	24.8 (8.6)	10.8 (10.8)
Total Cooling FLA		47.9	28.2	51.4	27.6	27.6	54.2	21.8
20 KW Heat	MCA	—	38.5	74.9	44.1	44.1	71.2	31.9
	MOP	—	40.0	80.0	45.0	45.0	80.0	35.0
15 KW Heat	MCA	—	30.7	56.2	35.6	35.6	62.2	24.1
	MOP	—	40.0	70.0	40.0	40.0	70.0	30.0
10 KW Heat	MCA	62.6	30.7	56.2	30.0	30.0	59.0	23.7
	MOP	100.0	40.0	700	35.0	35.0	70.0	30.0
Operating Range		216V–253V	432V–506V	216V–253V	373V–456V	342V–418V	180V–220V	517V–60 0V

Actual Capacity @ 60 Hz, 80° DB / 67° WB Entering Coil

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	98,542	28.88	142,582	41.79
85°F (29°C)	95,920	28.11	135,920	39.83
95°F (35°C)	93,122	27.27	129,182	37.86
110°F (43°C)	67,152	19.68	89,792	26.32
120°F (49°C)	64,436	18.84	83,604	24.50

Actual Capacity @ 60Hz, 80° DB / 61.8° WB Entering Evap

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	121,608	35.64	130,212	38.16
85°F (29°C)	118,992	34.87	124,286	36.42
95°F (35°C)	115,858	33.95	118,460	34.72
110°F (43°C)	108,920	31.92	108,920	31.92
120°F (49°C)	103,080	30.21	103,080	30.21

CFM @ ESP (Wet Coil, 60Hz)			
0.10	0.20	0.30	Filter Size (#)
5200	4900	4650	24 × 20 × 2 (1)
			20 × 20 × 2 (1)

Unit Dimensions

W	D	H	Weight
48"	28"	94"	1000 lbs

Full dimensions shown on page 16

12.5 Ton (150,000 BTUH) APK-150

Electric Power		460/480 3Φ–60Hz	230/240 3Φ–60Hz	415V 3Φ–50Hz	380V 3Φ-50Hz	200V 3Φ–50Hz	575V 3Φ–60Hz
Evaporator Fan Motor FLA		3.7 (7.4)	5.6 (11.2)	3.5 (7.0)	3.5 (7.0)	5.6 (11.2)	2.15 (4.3)
Condensor Motor FLA		2.5	5.0	3.4	3.4	5.0	2.8
Compressor Motor RLA		12.8	23.7	12.8	12.8	23.7	9.6
Heat 20KW, Amps (Actual KW)		26.0 (21.6)	53.22 (21.2)	28.0 (19.4)	28.0 (19.4)	49.66 (17.2)	21.6 (21.6)
Heat 15KW, Amps (Actual KW)		18.52 (15.4)	37.6 (15.0)	23.8 (16.5)	23.8 (16.5)	42.4 (14.7)	15.46 (15.4)
Heat 10KW, Amps (Actual KW)		13.0 (10.8)	26.6 (10.6)	14.0 (9.7)	14.0 (9.7)	24.8 (8.6)	10.8 (10.8)
Total Cooling FLA		37.0	65.1	37.5	37.5	65.1	27.8
20 KW Heat	MCA	43.6	82.4	45.9	45.9	77.9	34.4
	MOP	50.0	90.0	50.0	50.0	90.0	35.0
15 KW Heat	MCA	40.2	71.0	40.7	40.7	71.0	30.2
	MOP	50.0	90.0	50.0	50.0	90.0	35.0
10 KW Heat	MCA	43.6	82.4	45.9	45.9	77.9	34.4
	MOP	50.0	50.0	50.0	50.0	90.0	35.0
Operating Range		434V–506V	216V–253V	373V–456V	342V–418V	180V–220V	517V–600V

CFM @ ESP (Wet Coil, 60Hz)			
0.10	0.20	0.30	Filter Size (#)
8000	7650	7400	24 × 24 × 2 (2)

Unit Dimensions

W	D	H	Weight
60"	37⅞"	94"	1150 lbs

Full dimensions shown on page 16

Actual Capacity @ 60 Hz, 80° DB / 67° WB Entering Coil

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	119,076	34.90	169,674	49.73
85°F (29°C)	115,664	33.90	161,670	47.38
95°F (35°C)	113,108	33.15	153,592	45.01
110°F (43°C)	109,968	32.23	140,968	41.31
120°F (49°C)	104,404	30.60	132,578	38.85

Actual Capacity @ 60Hz, 80° DB / 61.8° WB Entering Evap

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	147,468	43.22	155,894	45.69
85°F (29°C)	143,778	42.14	148,948	43.65
95°F (35°C)	139,622	40.92	141,754	41.54
110°F (43°C)	130,444	38.23	130,444	38.23
120°F (49°C)	123,546	26.21	123,546	36.21

APK-180

15 Ton
(180,000 BTUH)

Electric Power		460/480 3ø–60Hz	415V 3Φ–50Hz	380V 3Φ-50Hz	575V 3ø–60Hz
Evaporator Fan Motor FLA		4.65 (9.3)	4.0 (8.0)	4.0 (8.0)	3.72 (7.44)
Condensor Motor FLA		4.0	3.5	3.5	3.2
Compressor Motor RLA		14.7	14.7	14.7	12.2
Heat 40KW, Amps (Actual KW)		50.0 (41.6)	—	—	41.8 (41.6)
Heat 30KW, Amps (Actual KW)		37.0 (30.8)	43.2 (31.1)	43.2 (31.3)	31.0 (30.8)
Heat 20KW, Amps (Actual KW)		26.0 (21.6)	28.0 (19.4)	28.0 (19.4)	21.6 (21.6)
Heat 10KW, Amps (Actual KW)		13.0 (10.8)	14.0 (9.7)	14.0 (9.7)	10.8 (10.8)
Total Cooling FLA		48.2	45.9	45.9	39.7
40 KW Heat	MCA	76.0	—	—	63.4
	MOP	80.0	—	—	70.0
30 KW Heat	MCA	59.8	68.0	68.0	49.8
	MOP	60.0	70.0	70.0	50.0
10–20 KW Heat	MCA	51.9	46.6	46.6	42.8
	MOP	60.0	60.0	60.0	50.0
Operating Range		432V–506V	342V–418V	373V–456V	517V–600V

Actual Capacity @ 60 Hz, 80° DB / 67° WB Entering Coil

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	150,300	44.07	217,900	63.88
85°F (29°C)	145,900	42.76	203,500	59.66
95°F (35°C)	142,000	41.64	197,100	57.77
110°F (43°C)	135,000	39.58	180,100	52.79
120°F (49°C)	130,900	38.38	168,500	49.35

Actual Capacity @ 60Hz, 80° DB / 61.8° WB Entering Evap

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	186,200	54.57	198,800	58.27
85°F (29°C)	181,200	53.13	189,400	55.51
95°F (35°C)	176,100	51.64	180,200	52.82
110°F (43°C)	166,400	48.78	166,400	48.78
120°F (49°C)	157,300	46.11	157,300	46.11

CFM @ ESP (Wet Coil, 60Hz)			
0.10	0.20	0.30	Filter Size (#)
11000	10250	10300	18 × 24 × 2 (2)
			12 × 24 × 2 (2)

Unit Dimensions

W	D	H	Weight
72"	42"	94"	2200 lbs

Full dimensions shown on page 16

APK-240

20 Ton
(240,000 BTUH)

Electric Power		460/480 3ø–60Hz	415V 3Φ–50Hz	380V 3Φ-50Hz	575V 3ø–60Hz
Evaporator Fan Motor FLA		4.65 (9.3)	4.6 (9.2)	4.6 (9.2)	2.15 (4.3)
Condensor Motor FLA		4.0 (8.0)	3.4 (6.8)	3.4 (6.8)	3.2 (6.4)
Compressor Motor RLA		17.9	17.9	17.9	12.8
Heat 40KW, Amps (Actual KW)		50.0 (41.6)	—	—	41.8 (41.6)
Heat 30KW, Amps (Actual KW)		37.0 (30.8)	43.2 (31.1)	43.2 (31.3)	31.0 (30.8)
Heat 20KW, Amps (Actual KW)		26.0 (21.6)	28.0 (19.4)	28.0 (19.4)	21.6 (21.6)
Heat 10KW, Amps (Actual KW)		13.0 (10.8)	14.0 (9.7)	14.0 (9.7)	10.8 (10.8)
Total Cooling FLA		50.6	53.3	49.9	34.6
40 KW Heat	MCA	76.0	—	—	61.5
	MOP	80.0	—	—	70.0
30 KW Heat	MCA	59.8	69.5	69.5	45.9
	MOP	70.0	70.0	70.0	70.0
10–20 KW Heat	MCA	55.1	54.4	54.4	37.8
	MOP	70.0	70.0	70.0	50.0
Operating Range		432V–506V	342V–418V	373V–456V	517V–600V

CFM @ ESP (Wet Coil, 60Hz)			
0.10	0.20	0.30	Filter Size (#)
11000	10250	10300	18 × 24 × 2 (2)
			12 × 24 × 2 (2)

Unit Dimensions

W	D	H	Weight
72"	42"	94"	2200 lbs

Full dimensions shown on page 16

Actual Capacity @ 60 Hz, 80° DB / 67° WB Entering Coil

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	193,000	56.58	277,800	81.42
85°F (29°C)	187,500	54.96	264,000	77.39
95°F (35°C)	183,900	53.91	251,000	73.57
110°F (43°C)	174,500	51.14	229,100	67.17
120°F (49°C)	169,900	49.80	214,600	62.91

Actual Capacity @ 60Hz, 80° DB / 61.8° WB Entering Evap

	Sensible Capacity		Total Capacity	
Ambient Condition	BTUH	KW	BTUH	KW
75°F (24°C)	241,200	70.72	255,300	72.82
85°F (29°C)	235,100	68.91	242,800	71.16
95°F (35°C)	226,100	66.29	230,100	67.45
110°F (43°C)	212,000	62.14	212,000	62.14
120°F (49°C)	200,000	58.63	200,000	58.63

Options

- **Multiplexor**
- **Dehumidification (Only avail. w/heat)**
- **Low Ambient Controls**
- **Water-Cooled Condenser**
- **Chilled-Water Evaporator**
- **Economizer**
- **High Pressure Alarm**
- **Heat**
- **R-410A, R-134A, or R-407C Refrigerant**
- **Custom Color Cabinet**
- **DualPac Two Unit Plenum**

Easily Customized

Like all Specific Systems units, AirPak units are modular in construction, and can be easily adapted to suit the needs of individual app;lications. **Reverse air flow** is a common option, and by reordering the modules inside the base cabinet, this is a modification that is easily adapted without extending the lead time of your unit. Call us to discover the best options for your AirPak system.

For buildings on raised platforms or piers, we offer full indoor serviceability. This option gives service technicians a through-the-wall mounting that can be fully serviced from inside, eliminating the need for scaffolding or a man lift, thereby ncreasing safety and decreasing maintenance downtime.

Applications situated in cooler climates will certainly benefit from the **heater** option. With several heat capacities available (depending on unit size and customer specification), Specific Systems' heater option will improve the comfort level of personnel and help maintain a set humidity in the conditioned area. Additionally, a **low ambient** option is available that includes receivers and head pressure controls, along with the standard crankcase heaters.

Corrosive environments could benefit from one of the popular **coil coating options**. With choices including Esgard, Technicoat, Luvata E-Coat, Heresite, or Thermoguard, Specific Systems offers corrosion protection that is an exact fit for your application.

Powder coating is standard on all Specific Systems units, and the standard colors are shown below. **Custom colors** are also available at your request.

Alternating Control Panel

The **Multiplexor** control panel is an option provided for applications that require multiple systems to be installed in a conditioned area. This provides an additional redundancy, often desired for unattended sites, and provides several standard services.

The multiplexor is a microprocessor-based PLC control panel for controlling multiple Specific Systems units. If a failure of the main unit occurs (determined through use of multiple sensors inside each unit), the multiplexor automatically energizes another system to keep the area conditioned and provides visible local alarms (and dry contacts for remote alarms) to notify personnel of the failure. Override of the main unit can also be caused by a power-failure of the main unit or a high/low temperature alarm. All multiplexors include the ability to manually override and lockout main unit. Multiplexors are enclosed in hinged 6" deep NEMA 4 enclosures from 16"× 14" to 20" × 24". These panels are shipped ready for remote mounting and remote monitoring from another location.

- *Auto-sequencing between systems, based on 24 hr timer*
- *Manual selection of any HVAC system in the circuit*
- *Automatic dual-unit operation – High or low temperature condition*
- *High temperature alarm – Form C dry contacts*

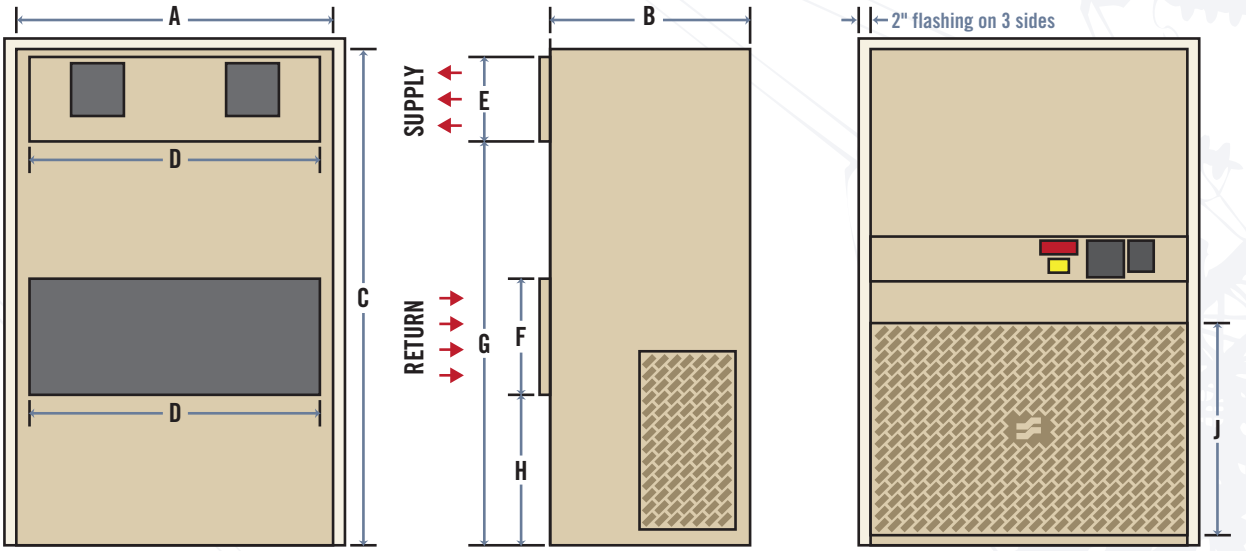
As mentioned on page six, Specific Systems AirPak units are available with many additional options. The most common are listed below:

- **Economizer** – *As the ambient air temperature falls, so falls the need for the compressors to work as much. The economizer option adds an automatic damper with controls to allow cool outside air to condition the inside space. This adds what is termed 'free cooling' to the unit, extends the life of the compressors, and conserves power – thereby saving money.*

- **Vertical discharge blowers** – *For applications with existing overhead ductwork, AirPak units can be ordered with vertical discharge supply air fans that direct the air into a plenum that can then be tied into the ductwork.*

- **Carboline coated condenser section** – *For the ultimate in corrosion protection, fan blades and labels are masked off, and the entire condenser section is sprayed with a heavy coating of Carboline. This coating is extremely resistant to the chemicals in manufacturing plants and refineries, and reduces maintenance and repairs on the units.*

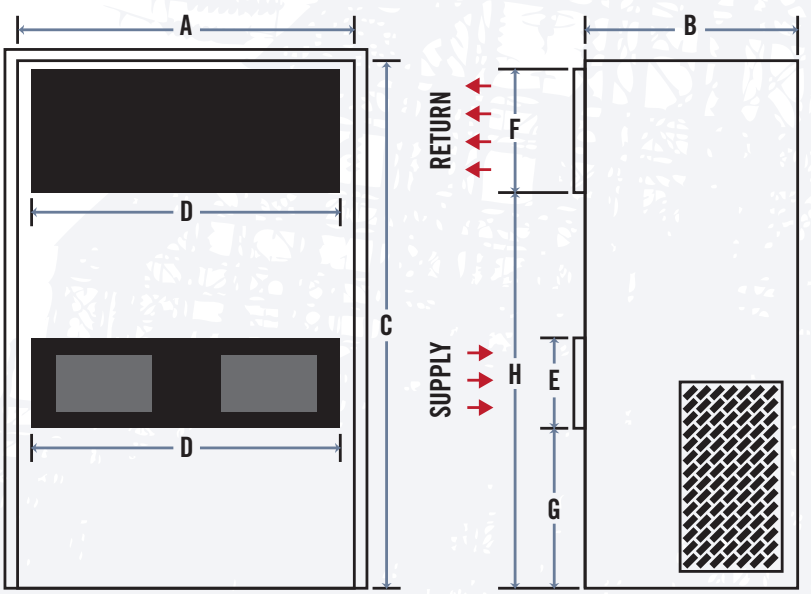
Dimensions



Dimensional data for basic model, inches (cm). Some external options may alter sizes.

Model #	A Unit Width	B Unit Depth	C Unit Height	D Supply/Return Air Width	E Supply Air Height	F Return Air Width	G Supply, Dist from bottom	H Return, Dist from bottom	J Condenser Grill Height
APK-60	42" (106.68)	28" (71.12)	85" (215.90)	30" (76.20)	10" (25.40)	16" (40.64)	72⅞" (185.10)	27" (106.68)	30"
APK-90	48" (121.92)	28" (71.12)	94" (238.76)	43" (109.22)	16" (40.64)	22" (55.88)	76½" (194.31)	28½" (121.92)	42½"
APK-120	48" (121.92)	28" (71.12)	94" (238.76)	43" (109.22)	16" (40.64)	22" (55.88)	76½" (194.31)	28½" (121.92)	42½"
APK-150	60" (152.40)	37⅛" (96.20)	94" (238.76)	55" (139.70)	16" (40.64)	22" (55.88)	76½" (194.31)	28½" (152.40)	42½"
APK-180	72" (182.88)	42" (106.68)	94" (238.76)	55" (139.70)	16" (40.64)	22" (55.88)	76½" (194.31)	26½" (182.88)	32"
APK-240	72" (182.88)	42" (106.68)	94" (238.76)	55" (139.70)	16" (40.64)	22" (55.88)	76½" (194.31)	26½" (182.88)	32"

REVERSE AIRFLOW: Top Return, Bottom Supply



Dimensional data for reverse airflow model, inches (cm). Data are the same as above except the following dimensions.

Some external options may alter sizes.

Model #	G Supply, Dist from bottom	H Return, Dist from bottom
APK-60	27" (68.58)	72⅞" (185.10)
APK-90	28" (71.12)	70½" (179.07)
APK-120	28" (71.12)	70½" (179.07)
APK-150	30¼" (76.84)	70½" (179.07)
APK-180	28½" (72.39)	70½" (179.07)
APK-240	28½" (72.39)	70½" (179.07)

HVAC Request Form

Date: _____ Project: _____

To: _____ Contractor: _____

Attn: _____ Engineer: _____

Reference: _____ Prepared by: _____

Based on the information below, we recommend the following:

Quantity: _____ Capacity (Tons): _____

Model: _____ Heating: _____

Building Description

Building Size: _____ H × _____ W × _____ L

Insulation Factor: _____ Roof _____ Walls _____ Floor

Equipment Heat Load, Sensible: _____ BTU/KW/Hr

Equipment Heat Load, Latent: _____ BTU

Lighting Heat Load: _____ BTU/KW/Hr

Number of Building Personnel: _____

Location of Building: _____

Avg. Design Temp, Outside: DB/WB: _____ Winter; _____ Summer

Avg. Design Humidity: _____ Winter; _____ Summer

Avg. Design Temp, Inside: DB/WB: _____ Winter; _____ Summer

Voltage: _____ V _____ Phase

Number of Air Changes: _____, _____ Building Pressure Requirement

Notes: _____

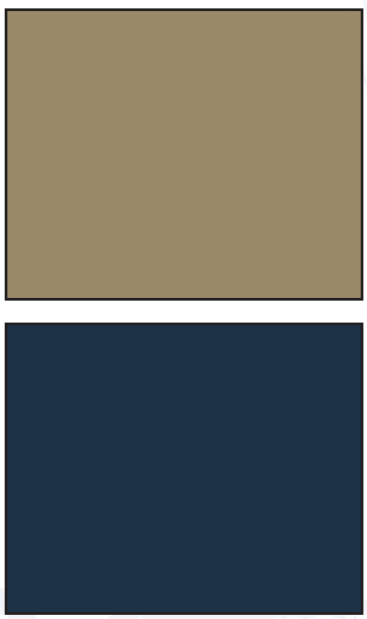
_____

Building Sketch

This form can be faxed to Specific Systems at (918) 663-5498 or folded and mailed. An electronic version is also available for download on our web site.

7355 East 41st Street, Tulsa, OK 74145-3229 :: (918) 663-9321 – 1-800-848-5126 – www.SpecificSystems.com

No



Product Nomenclature

The nomenclature shown on the opposite page is the AirPak only section of our entire product line. Using a common nomenclature allows us flexibility in design and ease of recall when service parts are ordered.

Please call us with any questions regarding the AirPak product line, or any of our other products, including our industrial and explosion proof, mobile, or military products.

menclature

APK 240 – A – WHD – X – G – B – 15 – TB1 – G61 – R410A – N – N – N – L
1 2 3 4 5 6 7 8 9 10 11 12 13 14

1 CAPACITY
60 – 5 ton
90 – 7.5 ton
120 – 10 ton
150 – 12.5 ton
180 – 15 ton
240 – 20 ton
APK designates AirPak™

2 VOLT / PHASE / Hz
A – 230–240 / 1 / 60
B – 230–240 / 3 / 60
C – 460–480 / 3 / 60
E – 415–380 / 3 / 50
F – 200 / 1 / 50
G – 200 / 3 / 50
H – 575 / 3 / 60
K – 440 / 3 / 50

3 CONFIGURATION
WHD– Wall Mount, Horiz Discharge
WUB– Wall Mount, Up Blast

4 EXTRA OPTION
X – Option Not Available

5 CABINET AND INTERIOR CONST.
G – Standard Galvanized
S – Stainless Steel (304)
S1 – Stainless Steel (316)

6 CIRCUIT BREAKER
X – No Circuit Breaker
B – Circuit Breaker

7 KW HEAT
00 – No Heat
10 – 10 KW
15 – 15 KW
20 – 20 KW
40 – 40 KW

8 COILS
X – No Coating
BB – Blygold : Both Coils
BC – Blygold : CondenserCoil
BE – Blygold: Evaporator Coil
C – Copper
EB – Esgard : Both Coils
EC – Esgard : Condenser Coil
EE – Esgard : Evaporator Coil
GB – Thermoguard : Both Coils
GC – Thermoguard : Condenser Coil
GE – Thermoguard : Evaporator Coil
HB – Heresite : Both Coils
HC – Heresite : Condenser Coil
HE – Heresite : Evaporator Coil
IB – Iridite : Both Coils
IC – Iridite : Condenser Coil
IE – Iridite : Evaporator Coil
LB – E-Coat : Both Coils
LC – E-Coat : CondenserCoil
LE – E-Coat : Evaporator Coil
TB – Technicoat : Both Coils
TC – Technicoat : Condenser Coil
TE – Technicoat : Evaporator Coil

9 COLOR OPTION
W – White : Powder Coat
G61 – Light Grey : Powder Coat
G70 – Dark Grey : Powder Coat
T – Desert Tan : Powder Coat
N – No Paint
S – SPECIAL OPTION
Note : Stainless steel cabinets are not painted as standard

10 REFRIGERANT
R134A
R407C
R410A

11 EXTRA OPTION
N – Option Not Available

12 EXTRA OPTION
N – Option Not Available

13 EXTRA OPTION
N – Option Not Available

14 OPTIONS
X – No Options
A – Alternating Panel with Dual Unit
TRI – Triplexing Panel
Q – Quadruplexor Panel
D – Dehumidification (Must Have Heat)
L – Low Ambient (Receivers and Head Pressure Control)
W – Water-Cooled Condenser
CHW – Chilled Water Evaporator
E – Economizer
HA – High Temperature Alarm
Note: Other electrical options to be detailed under Special Options

Specific Systems Modular Technology is

Number One

Since 1974, Specific Systems, LTD. has held strong to a commitment of reliability, service, and design excellence in special purpose environmental air conditioning, heating, ventilating, and pressurization systems. This has been accomplished through proven engineering and design principles, combined with a dedication to continued improvements in our standard modular products. With this strong engineering focus, Specific Systems leads the industry in modular environmental control technology.

Through the years, Specific Systems has designed and manufactured a full range of specialized products, including custom environmental control packages, filtration systems, massive mobile cooling centers, and other HVAC systems. Our custom engineering services are available on a contract basis for special design and development programs.

AirPak

The AirPak line of wall-mounted A/C units are available in capacities from 5–20 tons. The units are designed for use in heavy-duty commercial and industrial applications such as telecommunications, instrumentation, control, and electrical powerhouse shelter assemblies.

Mac

Our Military product line, available in MilSpec configuration with capacities from 1–10 tons. The Mac series is often chosen for use in highly mobile electronic shelter applications.

InPac

A broad product line of explosion proof A/C, purge & pressurization, and heating equipment for the petroleum and process industries. Available in sizes from 1–50 tons, InPacs are designed with redundant systems for use in highly corrosive and explosive atmospheres.

Trak

The Trak Series mobile air conditioning units are available in capacity ranges from 5–75 tons with local electric power supplies or on onboard diesel generator. High mobility makes the Trak Series particularly suited for emergency spot cooling needs for office buildings and manufacturing plants, as well as meeting construction requirements at refineries, airports, and shipyards.

SPECIFIC SYSTEMS™

www.SPECIFICSYSTEMS.com

7655 East 41st St., Tulsa, OK 74145 :: (918) 663-9321 :: (918) 663-5498 fax