

## AIRPAK 90 (7.5 TON)



### PRODUCT APPLICATION

AirPAK wall-mounted air conditioning units are specifically designed for use in non-hazardous (classified) commercial/industrial applications and are available in capacities from 5 to 20 tons. While similar in configuration to other wall-mount units, the Specific Systems AirPAK line was designed for demanding use in heavy-duty commercial/industrial applications such as telecommunications, instrumentation, control, and electrical powerhouse assemblies. AirPAKs feature standard dual refrigeration circuits, hot-gas bypass and heavy duty industrial cabinetry — which are options or heavy modifications on competitive units.

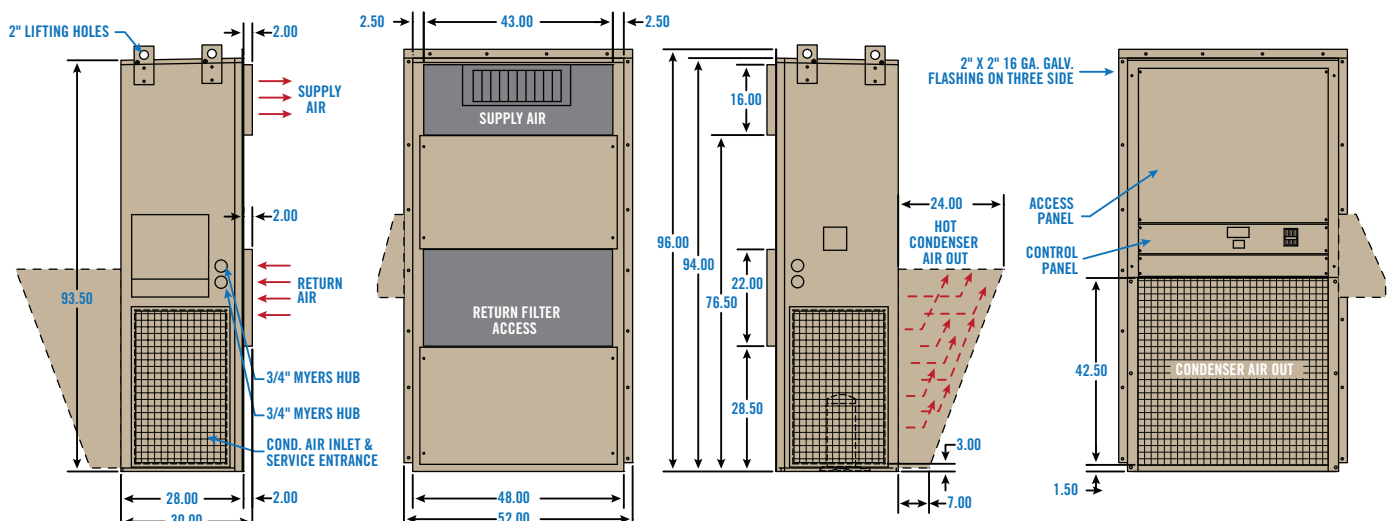
Modular design throughout the AirPAK line allows easy production modifications of the basic unit to include additional special features such as stainless steel or aluminum cabinetry, a low ambient package, or special filter and control systems designed for use in highly corrosive or explosive atmospheres.

The AirPAK's to-the-wall design allows for minimal intrusion with regards to interior wall space. Only two small holes need to be cut through the mounting wall. The sleeves are then inserted and the return and supply air grills mounted onto the sleeves.

### PRODUCT DESCRIPTION

AirPAK units feature standard:

- Heavy duty 16-gauge galvanized steel case with three-coat baked powder coat finish
- High capacity, high pressure evaporator blowers
- Dual compressor, two-stage redundant refrigeration circuits
- Industrial grade disconnecting contactors and starters
- Hermetic scroll compressors
- Direct drive condenser fans
- Enclosed, heavy duty NEMA frame motors



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### STANDARD PRODUCT SPECIFICATIONS

Specific Systems will furnish a Specific Systems AirPAK Model 90 unit. Total cooling capacity of the unit shall be not less than 90,000 BTU per hour, with \_\_\_\_\_ cfm of 80° dry bulb / 67° wet bulb temperature air entering the evaporator coil. Total airflow capacity of the system shall be not less than \_\_\_\_\_ cfm with a total external static pressure of 1.0 in./mm w.c.

All controls, contactors, and overload protection for fan motors, compressors, heaters, etc., shall be an integral part of the unit.

The unit cabinet shall have 48" width, 96" height, 28" depth. Standard unit cabinet shall be constructed of 16-gauge hot-dipped galvanized steel that has been powder coated. Powder coat shall be a TGIC polyester powder coat with a minimum of 4 mils thickness, heat cured at 375°F, providing a superior coating to corrosion, impact, and abrasion protection when compared to solvent paint. The unit cabinet shall be internally acoustically insulated with 1.0" closed cell Armaflex and provided with stainless steel access fasteners on removable doors.

Evaporator section of the unit shall be constructed of 16-gauge hot-dipped galvanized steel with a cooling coil constructed of aluminum fins mechanically joined to seamless copper tubing. The evaporator coil shall be dual-circuited with two separated refrigerant circuits. Each circuit shall be equipped with service valves, a sight glass, moisture indicator, and fully-adjustable expansion valves. A full-area stainless steel drain pan with auxiliary overflow shall be provided.

Compressor/condenser section shall be constructed of hot-dipped galvanized steel with two 3.25 ton compressors and two 3.25 ton condenser circuits complete with service valves on each circuit. The condenser coil is to be constructed of aluminum fins mechanically joined to seamless copper tubing. Condenser fans shall produce \_\_\_\_\_ cfm each and shall be driven by a \_\_\_\_\_ horsepower, \_\_\_\_\_ rpm TEFC motor designed to operate in a non-hazardous (classified) environment.

Supply air blower in the unit shall be a spark-proof horizontally-mounted backwardly-inclined fan and motor combination packaged in a 16-gauge hot-dipped galvanized assembly. The assembly shall be designed to produce \_\_\_\_\_ cfm at 1.0" static pressure and shall be driven by a \_\_\_\_\_ horsepower, \_\_\_\_\_ rpm TEFC motor designed to operate in a non-hazardous (classified) environment.

The unit shall be equipped with a unitized control system with the following features: Unit shall have two-stage cooling (and heating, if option is purchased) control with  $\pm 0.25^\circ\text{F}$  accuracy, 65°F – 95°F set point, three-point system fan switch (fan only, heat/cool cycle operation, and continuous fan cooling) and a control Power-On indicator lamp. System control thermostat shall have a digital readout of the system status, a power on/off switch, and remote/local control status indicating lamps.

The cooling system shall have high and low refrigerant pressure overloads, condenser and evaporator fan overloads with automatic reset on all overload conditions, electric heat, high temperature overload, compressor overloads, compressor short time delays, defrost cycle with control system defrost, and refrigeration system failure lights with Form C alarm contacts.

The entire unit shall be designed and constructed with all major system assemblies designed in utilized assemblies that may be easily and quickly repaired by service personnel with minimum down time in the operation of the system.

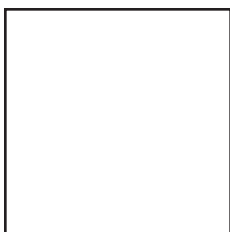
### AVAILABLE OPTIONS

Please contact Specific Systems about other available options.

- Remote Control
- Multiplexor (up to 5 units)
- Corrosion-resistant coated coils
- Carboline coating, components
- Unit-mounted disconnect
- Low Ambient Controls
- Economizer
- Humidistat
- HEPA filter
- Field start-up/commission

### AVAILABLE COLORS

WHITE



LIGHT GREY



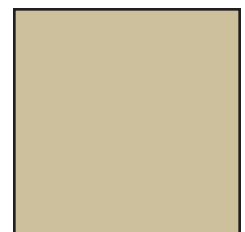
DARK GREY



NITRO BLUE



DESERT TAN



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### Electrical Specifications for Standard Units

Electric Power		230/240V 1Φ-60Hz	200V 1Φ-50Hz	460/480 3Φ-60Hz	230/240 3Φ-60Hz	415V 3Φ-50Hz	380V 3Φ-50Hz	200V 3Φ-50Hz	575V 3Φ-60Hz
Evaporator Fan Motor FLA		12.8	15.4	3.7	7.4	3.6	3.9	8.9	3.0
Condenser Motor FLA		12.1	14.5	3.5	7.0	3.4	3.7	8.4	2.8
Compressor Motor LRA		28.4 (56.8)	34.1 (68.2)	8.2 (16.4)	16.4 (32.8)	7.9 (15.8)	8.6 (17.2)	19.7 (39.4)	6.6 (13.2)
Heat 20KW, Amps (Actual KW)		92.2 (21.2)	95.5 (19.1)	26.0 (21.6)	53.2 (21.2)	29.8 (21.4)	29.7 (19.5)	55.0 (19.1)	23.3 (23.2)
Heat 15KW, Amps (Actual KW)		65.2 (15.0)	68.5 (13.7)	18.5 (15.4)	37.7 (15.0)	22.4 (16.1)	20.6 (13.5)	39.5 (13.7)	15.6 (15.5)
Heat 10KW, Amps (Actual KW)		46.1 (10.6)	40.0 (8.0)	13.0 (10.8)	26.6 (10.6)	16.0 (11.5)	14.7 (9.6)	23.1 (8.0)	—
Total Cooling FLA		81.7	98.1	23.6	47.2	22.8	24.8	56.7	19.0
20 KW Heat	MCA	131.3	138.6	37.1	75.8	41.8	42.0	79.9	32.9
	MOP	220.3	230.3	62.2	127.1	70.7	70.7	132.6	55.4
15 KW Heat	MCA	97.5	106.6	27.8	56.4	32.5	30.6	61.6	23.3
	MOP	159.5	140.7	45.3	92.2	54.0	50.3	81.3	38.1
10 KW Heat	MCA	88.8	106.6	25.7	51.3	24.8	27.0	61.6	20.7
	MOP	117.2	140.7	33.9	67.7	32.7	35.6	81.3	27.3
Unit LRA*		224	269	65	130	62	68	155	52
Operating Range		216V-253V	180V-220V	432V-506V	216V-253V	373V-456V	342V-418V	180V-220V	517V-600V

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

Ambient Condition	Sensible Capacity	Total Capacity
75°F (24°C)	86,454 BTUH	113,804 BTUH
85°F (29°C)	84,184 BTUH	108,040 BTUH
95°F (35°C)	82,506 BTUH	102,348 BTUH
110°F (43°C)	78,840 BTUH	93,264 BTUH
120°F (49°C)	68,380 BTUH	86,138 BTUH

CFM @ ESP (Wet Coil, 60Hz)			Filter Size (#)	Unit Dimensions			
0.10	0.20	0.30		Width	Depth	Height	Weight
3900	3745	3625	24 × 20 × 2 (1)	48"	28"	94"	1000 lbs
			20 × 20 × 2 (1)				

\*LRA – Lock Rotor Amps. Defined as evaporator fan, condenser fan, and compressor operating at full load and one compressor at Lock Rotor Amps.