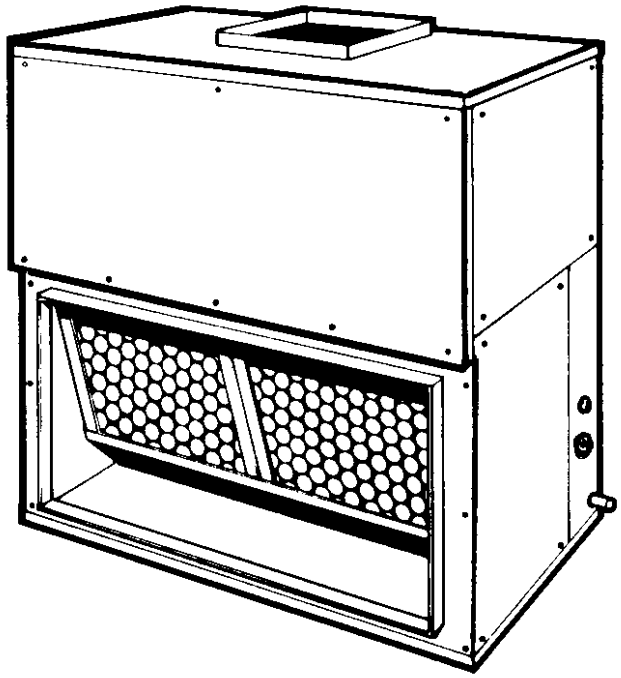


YORK®

SPLIT-SYSTEM EVAPORATOR BLOWER

K5EU090 and K4EU120 50 Hz
7.5 and 10 NOMINAL TONS

SUNLINE 2000™

(WORLD 50 HZ)

DESCRIPTION

These completely assembled units include a well-insulated cabinet, a DX coil with copper tubes and aluminum fins, an expansion valve, a distributor, throwaway filters, a centrifugal blower, a blower motor, an adjustable belt drive, a blower motor contactor and a small holding charge of refrigerant-22. The units are manufactured under ISO 9002 Quality System Certification.

The units are shipped in the vertical position ready for field installation. They can be installed for horizontal operation by reversing the position of the solid bottom panel with the return air duct flange on the front on the unit.

ACCESSORIES - FIELD INSTALLED

SUPPLY AIR PLENUMS - Fully insulated plenums are available for free standing units located within the conditioned space, are shipped knocked down for easy field assembly, are finished to match the exterior of the basic unit, and have double deflection grilles that can be adjusted to vary the throw, spread and drop of the supply air.

RETURN AIR GRILLES - Expanded metal grilles are available for free standing units located within the conditioned space. Grilles are finished to match the exterior of the basic unit and are shipped in one piece for easy installation.

BASES - Bases are available to raise vertical units above the floor. Outdoor air may be introduced through these bases by cutting an access opening to accommodate the outdoor air duct connection. These bases are finished to match the exterior of the basic unit. They may have to be insulated in the field for certain applications.

THREE-PHASE ELECTRIC HEATERS - Electric heaters are available in four capacities to provide maximum flexibility. Both the air conditioning unit and the heater can be selected to precisely match the cooling and heating requirements of the conditioned space. These heaters are designed for easy field-installation over the supply air opening of the unit. Every heater is fully protected against excessive current and temperature by fuses and two high limit thermostats.

Units with electric heat require only one power supply for both the heating elements and the supply air blower motor. The power wiring can be protected by either dual element/time delay fuses or an inverse time circuit breaker.

HOT WATER COILS _ Drainable coils have two rows of 13mm (½") copper tubes, eight aluminum fins per 25mm (1in.), a casing that is finished to match the exterior of the basic unit, but no water control valve. The coils slide out of their casings for easy field installation. They should be mounted over the return air opening.

STEAM COILS - Non-freeze coils have one row of 25mm (1in.) copper tubes, a 16mm (⅝") copper tube inside each 25mm (1in.) tube to distribute the steam evenly across the entire length of the coil, eight aluminum fins per 25mm (1in,), a casing finished to match the exterior of the basic unit, but no steam control valve. The coils slide out or their casings for easy field installation and are pitched in their casings to facilitate condensate drainage. They should be mounted over the return air opening.

SUSPENSION KIT - Suspension kit 1HH0451 is available for units installed horizontally. The accessory includes two channel iron supports and the hardware to secure them to the top of the unit. The hanger rods must be supplied by the field.

THERMOSTATS - Wall-mounted thermostats and sub-bases (24volt) with system and fan switches are available to control the operation of these split system air conditioners.

APPLICATION FLEXIBILITY

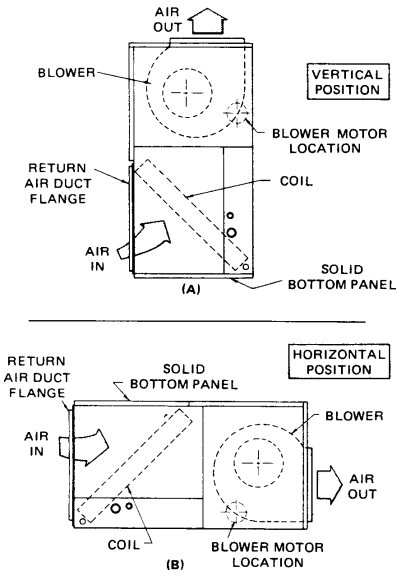
These units are built in a single cabinet with two condensate drain pans. This allows the units to be installed in either the vertical or horizontal position for maximun flexibility.

On vertical applications, the air velocity across the cooling coil keeps the condensate from dripping off the finned surface onto the filters.

On horizontal applications, the unit must be installed with the condensate drain pan under the entire cooling coil.

The Supply Air Plenum and the Return Air Grille accessories can be used on either arrangement.

The Base accessory can only be used on the vertical arrangement. Units installed horizontally are designed for ceiling suspension. Four 9.5mm (⅜"-16) weldnuts are provided in the angle supports on the front of the unit (the side with the logo). Knockouts are provided in the exterior panels for access to these weldnuts. The hanger rods must be supplied in the field.



HEATING CAPACITY - ELECTRIC HEAT ACCESSORY

Heater Model	UL Test Voltage	Ratings[1] (@415V)		Capacity[1]			
				Per Stage 1		Per Stage 2	
		kW	Mbh	kW	Mbh	kW	Mbh
2HSO4501050	415	7.5	25.6	7.5	25.6	-	-
2HSO4501650	415	12.0	40.9	7.5	25.6	4.5	15.3
2HSO4502650	415	19.4	66.5	12.0	40.9	7.5	25.6
2HSO4503650	415	26.9	91.6	12.0	40.9	15.0	51.1

[1] Capacity ratings do not include the heat generated by the supply air blower motor.

[2] For 380 volts, multiply the Mbh and kW values by $(380/415)^2$ or 0.838.

STEAM COIL CAPACITY[1], kW @ 14 kPa / Mbh @ 2 psig[2]

Steam Coil Model	Blower Model Used On	m^3/s / cfm	Dry Bulb Temperature of Air Entering Coil, °C/°F			
			-12 / 10	-1 / 30	10 / 50	21 / 70
1NF0451	KEU090	1.1 / 2400	172.2 / 588	155.5 / 531	139.1 / 475	122.4 / 418
		1.4 / 3000	191.2 / 653	172.6 / 589	154.3 / 527	136.0 / 464
		1.7 / 3600	207.5 / 708	187.1 / 640	167.4 / 572	147.4 / 503
	KEU120	1.5 / 3200	196.4 / 671	177.6 / 606	158.8 / 542	140.0 / 478
		1.9 / 4000	217.3 / 742	196.3 / 670	175.3 / 598	154.8 / 528
		2.3 / 4800	236.1 / 806	212.9 / 727	190.4 / 650	167.8 / 573

[1] These capacities do not include any blower motor heat.

[2] Multiple these capacities by the following factors to correct for higher steam pressure.

Steam pressure, kPa/psig	35 / 5	70 / 10	105 / 15	140 / 20	175 / 25
Capacity correction factor	1.06	1.12	1.19	1.25	1.30

NOTE: Steam rate kg/hr = 0.66 x kW
(lbs/hr) = 1.025 x Mbh.

CAUTION: Do NOT operate a motor above its nominal HP rating when a unit is equipped with a steam coil accessory.

HOT WATER COIL CAPACITY[1], kW / Mbh

Water Coil Model	Blower Model Used On	l/m / gpm	m^3/s / cfm	Entering Water Temperature Minus Entering Air Temperature, °C / °F				
				21 / 70	32 / 90	43 / 110	54 / 130	66 / 150
1HW0451	KEU090	57 / 15	1.1 / 2400	78.0 / 266	101.3 / 346	124.7 / 426	148.5 / 507	169.7 / 579
			1.4 / 3000	87.7 / 299	113.3 / 387	139.6 / 477	186.6 / 637	190.4 / 650
			1.7 / 3600	95.5 / 326	124.0 / 423	153.0 / 522	182.1 / 622	208.1 / 710
	KEU120	57 / 15	1.5 / 3200	90.3 / 308	117.1 / 400	144.6 / 494	172.1 / 588	196.6 / 671
			1.9 / 4000	100.2 / 342	130.2 / 445	160.7 / 549	191.3 / 653	218.6 / 746
			2.3 / 4800	108.3 / 370	140.9 / 481	174.3 / 595	207.5 / 708	237.4 / 810

[1] These capacities do not include any blower motor heat.

NOTE: Water Temperature Drop, °C = $16.71 \times \frac{kw}{l/s}$

°F = $2 \times \frac{Mbh}{GPM}$

CAUTION: Do NOT operate a motor above its nominal HP rating when a unit is equipped with a hot water coil accessory.

PRESSURE DROP VS L/M / GPM

1HW0450	l/m / gpm	38 / 10	76 / 20	114 / 30
	Pressure Drop, kPa / psig	0.7 / 0.10	2.2 / 0.32	4.7 / 0.67
1HW0451	l/m / gpm	57 / 15	114 / 30	170 / 45
	Pressure Drop, kPa/ psig	1.2 / 0.17	4.0 / 0.58	8.5 / 1.22

Meters (H2O) = 45,942 xkPa
Feet (H_2O) = 2031 x psi

CAPACITY CORRECTION VS L/M / GPM

1HW0450	l/m / gpm	76 / 20	114 / 30
	Capacity Correction	1.12	1.15
1HW0451	l/m / gpm	114 / 30	170 / 45
	Capacity Correction	1.11	1.15

BLOWER PERFORMANCE

KEU090 - SUPPLY AIR BLOWER PERFORMANCE[1] - (M^3/S)

BLOWER SPEED RPM	AIRFLOW														
	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)
	1.1 m^3/s			1.3 m^3/s			1.4 m^3/s			1.6 m^3/s			1.7 m^3/s		
600	87	0.46	0.59	64	0.52	0.66	32	0.45	0.73	-	-	-	-	-	-
650	122	0.52	0.66	102	0.58	0.72	74	0.65	0.82	17	0.72	0.90	-	-	-
700	149	0.57	0.73	131	0.63	0.80	107	0.71	0.89	72	0.79	0.99	30	0.87	1.09
800	228	0.72	0.90	211	0.79	0.99	191	0.88	1.10	161	0.97	1.21	122	1.06	1.32
850	293	0.83	1.04	275	0.92	1.16	255	1.02	1.28	226	1.12	1.38	191	1.22	1.53
900	308	0.86	1.07	293	0.95	1.19	273	1.06	1.32	243	1.15	1.43	208	1.27	1.57
1000	392	1.01	1.26	379	1.10	1.38	362	1.21	1.48	340	1.35	1.65	308	1.50	1.85

KEU090 - SUPPLY AIR BLOWER PERFORMANCE[1] - (CFM)

BLOWER SPEED RPM	AIRFLOW														
	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW)	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (KW)	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW)	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW)	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW
	2400 CFM			2700 CFM			3000 CFM			3300 CFM			3600CFM		
600	0.35	0.62	0.59	0.26	0.70	0.66	0.13	0.78	0.73	-	-	-	-	-	-
650	0.49	0.70	0.66	0.41	0.78	0.72	0.30	0.87	0.82	0.07	0.96	0.90	-	-	-
700	0.60	0.77	0.73	053	0.85	0.80	043	0.95	0.89	0.29	1.06	0.99	0.12	1.17	1.09
800	0.92	0.97	0.90	0.85	1.06	0.99	0.77	1.18	1.10	0.65	1.30	1.21	0.49	1.42	1.32
850	1.18	1.11	1.04	1.11	1.24	1.16	1.03	1.37	1.28	0.91	1.50	1.38	0.77	1.64	1.53
900	1.24	1.15	1.07	1.18	1.28	1.19	1.10	1.42	1.32	0.98	1.55	1.43	0.84-	1.70	1.57
1000	1.58	1.35	1.26	1.53	1.48	1.38	1.46	1.63	1.48	1.37	1.81	1.65	1.24	2.02	1.85

KEU120 - SUPPPLY AIR BLOWER PERFORMANCE[1] (M^3/S)

BLOWER SPEED RPM	AIRFLOW														
	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)	ESP[2] (Pa)	OUTPUT (kW)	INPUT (kW)
	1.5 m^3/s			1.7m^3/s			1.9 m^3/s			2.0 m^3/s			2.3 m^3/s		
700	122	0.75	0.94	84	0.87	1.09	35	0.99	1.24	-	-	-	-	-	-
800	208	0.93	1.16	176	1.05	1.32	131	1.19	1.48	74	1034	1.64	-	-	-
910	293	1.10	1.38	263	1.27	1.57	226	1.43	1.75	174	1.62	1.99	107	1.83	2.24
950	340	1.20	1.50	312	1.39	1.71	275	1.58	1.95	223	1.78	2.18	161	1.99	2.44
1000	387	1.30	1.62	362	1.50	1.85	327	1.71	2.10	280	1.94	2.38	216	2.16	2.65

KEU120- SUPPLY AIR BLOWER PERFORMANCE[1] (CFM)

BLOWER SPEED RPM	AIRFLOW														
	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW)	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW)	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW)	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW)	ESP[2] (IWG)	OUTPUT (BHP)	INPUT (kW)
	3200			3600			4000			4400			4800		
700	0.49	1.01	0.94	0.34	1.17	1.09	0.14	1.33	1.24	-	-	-	-	-	-
800	0.84	1.25	1.16	0.71	1.42	1.32	0.53	1.60	1.48	0.30	1.80	1.64	-	-	-
910	1.18	1.48	1.38	1.06	1.70	1.57	0.91	1.92	1.75	0.70	2.18	1.99	0.43	2.45	2.24
950	1.37	1.61	1.50	1.26	1.86	1.71	1.11	2.12	1.95	0.90	2.39	2.18	0.65	2.67	2.44
1000	1.56	1.75	1.62	1.46	2.02	1.85	1.32	2.30	2.10	1.13	2.60	2.38	0.87	2.90	2.65

[1] Unit resistance is based on a wet evaporator coil and clean filters.

[2] Available static pressure in IWG (Pa) to overcome the resistance of the duct system and any accessories added to the unit.

NOTE: Motors can be selected to operate into the service factor because they are located in the moving air stream, upstream of any heating device. Units with steam or hot water coils are the only exception. On these units the BHP must not exceed the nominal HP rating of the motor.

LEGEND:

RPM range for the standard factory-mounted drive components.

Exceeds the BHP limitation of the standard factory-mounted blower motor

STATIC RESISTANCES FOR UNIT ACCESSORIES

Static Resistances, pascal

			m^3/s				
			1.1	1.3	1.4	1.6	1.7
KEU090	Electric Heat	10 kW	2.48	2.48	2.48	4.96	4.96
		16 kW	2.48	4.96	4.96	7.44	9.92
		26 kW	7.44	9.92	12.40	14.88	17.36
		36 kW	12.40	17.36	19.84	24.80	27.28
	Supply Air Plenum		7.44	7.44	9.92	12.40	14.88
	Return Air Grille		4.96	7.44	9.92	12.40	14.88
	Hot Water Coil		27.28	34.75	42.16	49.60	57.04
	Steam Coil		24.80	29.76	34.72	39.68	47.12
			m^3/s				
			1.5	1.7	1.9	2.0	2.3
KEU120	Electric Heat	10 kW	4.96	4.96	7.44	7.44	9.92
		16 kW	7.44	9.92	12.40	14.88	17.36
		26 kW	14.88	17.36	22.32	27.28	32.24
		36 kW	27.32	27.28	34.72	42.16	49.60
	Supply Air Plenum		12.40	14.88	17.36	19.84	24.80
	Return Air Grille		12.40	14.88	17.36	19.84	24.80
	Hot Water Coil		47.12	59.52	74.40	86.80	99.20
	Steam Coil		39.68	47.12	57.04	66.96	76.88

Static Resistance, IWG

Unit Model	Accessory		CFM				
			2400	2700	3000	3300	3600
KEU090	Electric Heat	10 kW	0.01	0.01	0.01	0.02	0.02
		16 kW	0.01	0.02	0.02	0.03	0.04
		26 kW	0.03	0.04	0.05	0.06	0.07
		36 kW	0.05	0.07	0.08	0.10	0.11
	Supply Air Plenum		0.03	0.03	0.04	0.05	0.06
	Return Air Grille		0.02	0.03	0.04	0.05	0.06
	Hot Water Coil		0.11	0.14	0.17	0.20	0.23
	Steam Coil		0.10	0.12	0.14	0.16	0.19
			CFM				
			3200	3600	4000	4400	4800
KEU120	Electric Heat	10 kW	0.02	0.02	0.03	0.03	0.04
		16 kW	0.03	0.04	0.05	0.06	0.07
		26 kW	0.06	0.07	0.09	0.11	0.13
		36 kW	0.09	0.11	0.14	0.17	0.20
	Supply Air Plenum		0.05	0.06	0.07	0.08	0.10
	Return Air Grille		0.05	0.06	0.07	0.08	0.10
	Hot Water Coil		0.16	0.24	0.30	0.35	0.40
	Steam Coil		0.18	0.19	0.23	0.27	0.31

SUPPLY AIR PLENUM PERFORMANCE DATA

M^3/S

Model KEU	m^3/s	Face Velocity (MPM)	Sound Power dB (10) 12 Watts	Angle of Deflection																			
				Vertical Louvers[1] 0° Spread				Horizontal Louvers[2]		Vertical Louvers[1] 22½° Spread				Horizontal Louvers[2]		Vertical Louvers[1] 45° Spread				Horizontal Louvers[2]	
				Throw (Meters)[3]		Spread (Meters)[3]		0°	18°	Throw (Meters)[3]		Spread (Meters)[3]		0°	18°	Throw (Meters)[3]		Spread (Meters)[3]		0°	18°
				Min	Max	Min	Max	Drop (Meters)[4]		Min	Max	Min	Max	Drop (Meters)[4]		Min	Max	Min	Max	Drop (Meters)4	
	1.1	187	20	14.2	22.4	6.0	8.8	5.7	2.7	10.3	16.1	6.9	10.0	5.1	2.4	7.9	11.8	13.6	19.7	2.7	1.5
	1.3	210	21	16.1	25.2	6.6	9.7	6.0	3.0	11.8	17.9	7.6	10.9	5.4	2.7	8.8	13.6	14.5	21.5	3.0	1.5
090	1.4	234	22	17.9	27.9	7.2	10.6	6.3	3.0	12.7	20.0	8.2	12.1	5.7	2.7	9.7	15.2	15.8	23.7	3.0	1.5
	1.6	257	23	19.7	30.7	7.9	11.5	6.3	3.0	13.9	22.1	8.8	13.3	5.7	2.7	10.6	16.7	17.0	25.8	3.0	1.5
	1.7	280	24	21.5	33.4	8.5	12.4	6.6	3.3	15.2	24.0	9.7	14.2	6.0	3.0	11.5	18.2	18.4	27.6	3.3	1.8
	1.5	249	22	19.1	29.7	7.6	11.2	6.3	3.0	13.6	21.2	8.8	13.0	5.7	2.7	10.3	16.1	19.4	24.9	3.0	1.5
	1.7	280	24	21.5	33.4	8.5	12.4	6.6	3.3	15.2	24.0	9.7	14.2	6.0	3...0	11.5	18.2	18.2	27.6	3.3	1.8
120	1.9	312	26	23.7	37.3	9.1	13.6	6.6	3.3	17.0	26.7	10.6	15.2	6.0	3.0	12.7	20.0	20.3	31.0	3.3	1.8
	2.0	344	28	26.1	41.0	10.0	14.8	6.9	3.6	18.8	29.4	11.5	17.3	6.3	3.3	14.2	22.1	23.1	34.9	3.6	1.8
	2.3	374	30	28.5	44.6	10.6	16.1	6.9	3.6	20.6	32.2	12.4	18.8	6.3	3.3	15.5	24.3	25.8	38.6	3.6	1.8

[1] Adjusting the vertical louvers varies the throw, the spread and the drop.
[2] Adjusting the horizontal louvers only varies the drop.
[3] The velocity of the air is 38m/min. at the minimum distance and 18.2m/min. at the maximum distance.
[4] The velocity of the conditioned air at the bottom of the drop is 15.2m/min. Drafts occur if the drop extends into the occupied level of the conditioned space

SUPPLY AIR PLENUM PERFORMANCE DATA

CFM

Model KEU	CFM	Face Velocity (FPM)	Sound Power dB (10) 12 Watts	Angle of Deflection																			
				Vertical Louvers[1] 0° Spread				Horizontal Louvers[2]		Vertical Louvers[1] 22½° Spread				Horizontal Louvers[2]		Vertical Louvers[1] 45° Spread				Horizontal Louvers[2]	
				Throw (Feet)[3]		Spread (Feet)[3]		0°	18°	Throw (Feet)[3]		Spread (Feet)[3]		0°	18°	Throw (Feet)[3]		Spread (Feet)[3]		0°	18°
				Min	Max	Min	Max	Drop (Feet)[4]		Min	Max	Min	Max	Drop (Feet)[4]		Min	Max	Min	Max	Drop (Feet)4	
	2400	615	20	47	74	20	29	19	9	34	53	23	33	17	8	26	39	45	65	9	5
	2700	690	210	53	83	22	32	20	10	39	59	25	36	18	9	29	45	48	71	10	5
090	3000	770	220	59	92	24	35	21	10	42	66	27	40	19	9	32	50	52	78	10	5
	3300	845	23	65	101	26	38	21	10	48	73	29	44	19	9	35	55	56	85	10	5
	3600	920	24	71	110	28	41	22	11	50	79	32	47	20	10	38	60	60	91	11	6
	3200	820	22	63	98	25	37	21	10	45	70	29	43	19	9	34	53	64	82	10	5
	3600	920	24	71	110	28	41	22	11	50	79	32	47	20	10	38	60	60	91	11	6
120	4000	1025	26	78	123	30	45	22	11	56	88	35	52	20	10	42	66	67	102	11	6
	4400	1130	28	86	135	33	49	23	12	62	97	38	57	21	11	47	73	76	115	12	6
	4800	1230	30	94	147	35	53	23	12	68	106	41	62	21	11	51	80	85	127	12	6

[1] Adjusting the vertical louvers varies the throw, the spread and the drop.
[2] Adjusting the horizontal louvers only varies the drop.
[3] The velocity of the air is 125/ft/min. at the minimum distance and 60ft/min. at the maximum distance.
[4] The velocity of the conditioned air at the bottom of the drop is 50 ft/min. Drafts occur if the drop extends into the occupied level of the conditioned space

BLOWER MOTOR AND DRIVE DATA

Model	Motor (kW/HP)*	Blower Range (RPM)	Adjustable Motor Pulley		Fixed Blower Pulley		Belt	
			Pitch Dia (mm/in.)	Bore (mm/in.)	Pitch Dia. (mm/in.)	Bore (mm/in.)	Designa-tion	Pitch Lg. (mm/in.)
KEU090	1.1 / 1½	650/850	86 - 112 / 3.4 - 4.4	22.2 / ⅞	190 / 7.5	25 / 1	A37	973 / 38.3
KEU120	1.5 / 2	700/910	86 - 112 / 3.4 - 4.4	22.2 / ⅞	178 / 7.0	25 / 1	A37	973 / 38.3

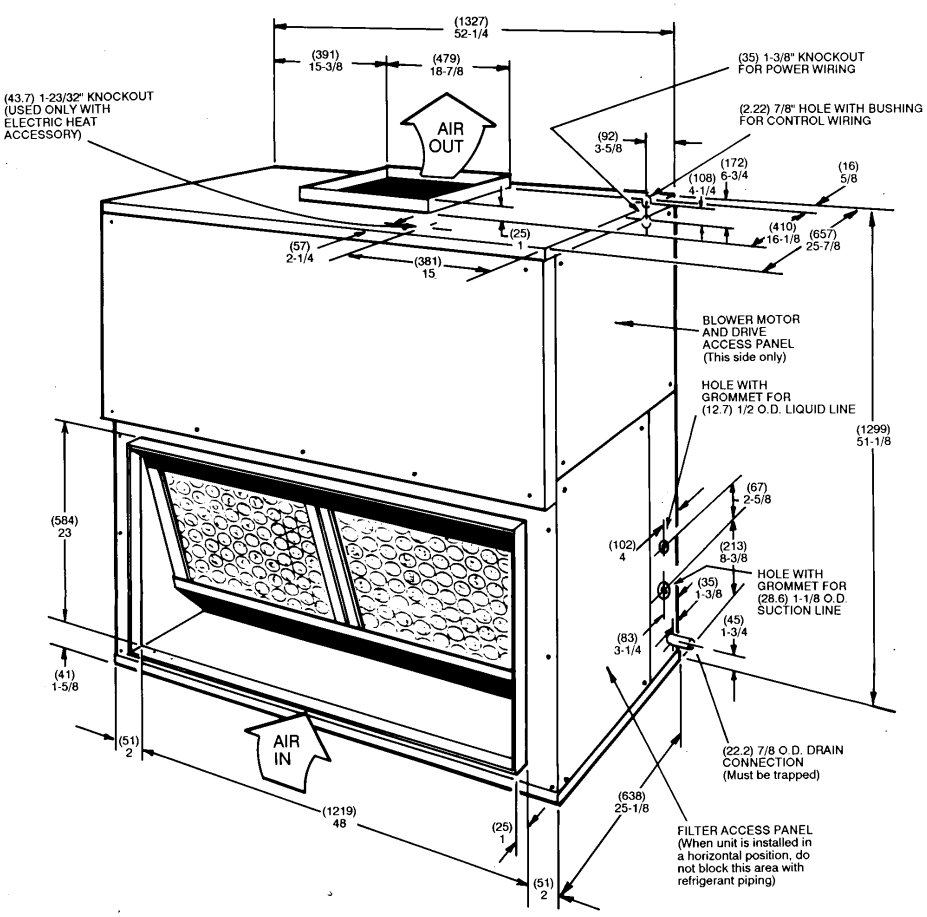
*All motors are 1450 RPM and have a 56 frame, inherent protection and permanently lubricated ball bearings The motors have a solid base and a 1.15 service factor. All 3-phase motors are wired for 380/415V power supply.

PHYSICAL DATA - UNITS AND ACCESSORIES

Description			Unit Model	
			KEU090	KEU120
Evaporator Coil	Rows Deep & Rows High		3 x 27	3 x 32
	Finned Length - mm/inches		1168 / 46	1168 / 46
	Face Area - square meters/square feet		0.80 / 8.6	0.95 / 10.2
	Tube OD - mm/inches		9.5 / ⅜	9.5 / ⅜
	Fins per 25mm (1in.)		13	13
Centrifugal Blower (Forward Curve)	Wheel Dia. x Width - mm (inches)		381 x 381 (15 x 15)	381 x 381 (15 x 15)
Motor[1]	Nominal HP Rating		1½	2
Filters (Throwaway)	Quantity per unit	406mm x 635mm x 25mm (16" x 25" x 1")	4	4
	Face area - square meters/square feet		1.03 / 11.1	1.03 / 11.1
Distributor	One per unit		5-3-10	5-3-12
Operating Weight kg/lbs	Basic Unit		145 / 320	150 / 330
	Accessories			
	Supply Plenum		46.3 / 102	
	Return Air Grille		6.8 / 15	
	Hot Water Coil		37 / 82	
	Steam Coil		38.5 / 85	
	Base		27 / 60	
	Electric Heater	10 kW	28.5/ 63	
		16 kW	29.9 / 66	
		26 kW	32.2 / 71	
		36 kW	33.5 / 74	
Hot Water Coil	Tube OD, mm/inches		12.7 / ½ (copper)	
	Rows Deep		2	
	Fins per 25mm (1in.)		8 (aluminum)	
	Face Area, square meters/square feet		0.63 / 6.8	
	Connections (supply & return)		25mm (1 in.) NPTE	
Steam Coil	Outer Tube OD, mm/inches/		25 / 1 (brass)	
	Rows Deep		1	
	Fins per 25mm (1in.)		8 (aluminum)	
	Face Ares, square meters/square feet		0.61 / 6.6	
	Connection	Inlet	38mm (1½ in.) NPTE	
		Outlet	38mm (1½ in.) NPTE	
Electric Heater	Heater Elements	% Nickel	59.2	
		% Chromium	16.0	
		Watt Density, watts/sq. in.	59.0	
	Face Area, square meters/square feet		0.28 / 3.0	
Shipping Volume - cubic meters /cubic feet(Basic Unit)			1.5 / 53	

[1] Refer to Blower Motor and Drive Data table for additional motor and drive data.
[2] Refer to the unit Installation Instruction 550.39-N4YI for the distributed weight of the evaporator blower unit.

UNIT DIMENSIONS



ACCESSORIES

•ELECTRIC HEATER
Add 381mm (15") to Unit Height when using 10, 16, 26 or 36kW Heater
•SUPPLY AIR PLENUM
Add 686mm (27") to Unit Height when used
•BASE
Add 610mm (24") to Unit Height when used

MINIMUM CLEARANCES (mm /in.)

Side with RETURN AIR opening - 610 / 24
Side with SUPPLY AIR opening - 610 / 24[1]
Side with PIPING CONNECTIONS - 1549 / 61[2]
Side opposite PIPING CONNECTIONS - 660 / 26[3]
Bottom - [4]

[1]Overall dimension of the unit will vary if an electric heater, a supply air plenum or a base is used.

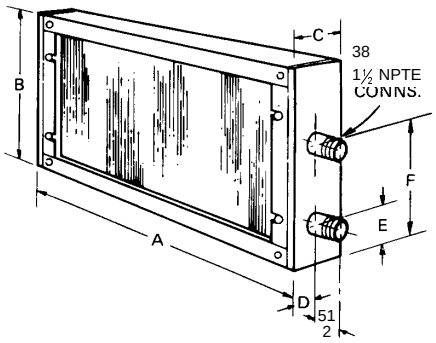
[2] This dimension is required for removal of the DX coil. Only 660mm (26") is required for normal servicing.

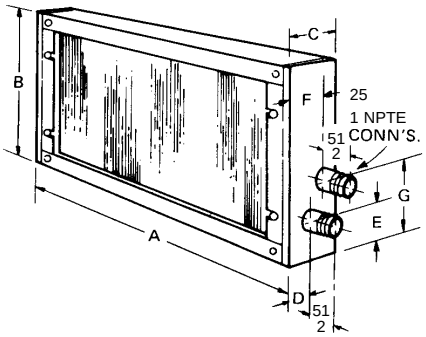
[3] If the DX coil has to be removed, this dimension is required to loosen screws that secure the coil to the unit frame. This dimension is also required for blower motor access if the piping connectiions are made on the opposite side of the unit.

[4] Allow enough clearance to trap the condensate drain line.

ACCESSORY DIMENSIONS

REFER TO THE UNIT DRAWING FOR DUCT FLANGE DIMENSIONS.

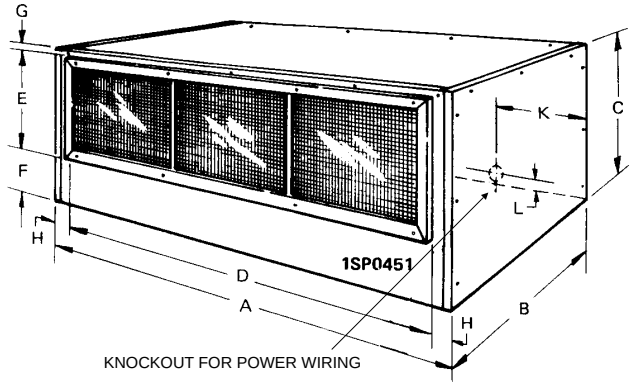




WITH ELECTRIC HEAT - Remove the 64mm (2½ in.) knockout from the rear panel of the plenum. Route the power wiring conduit through this opening and connect it to the field-supplied fitting on the electric heat accessory. Connect the power wiring to the fuse block in the heater control box.

Install the control wiring per basic unit instruction Form 550.39-N4YI. **Do not** route any field control wiring through the plenum.

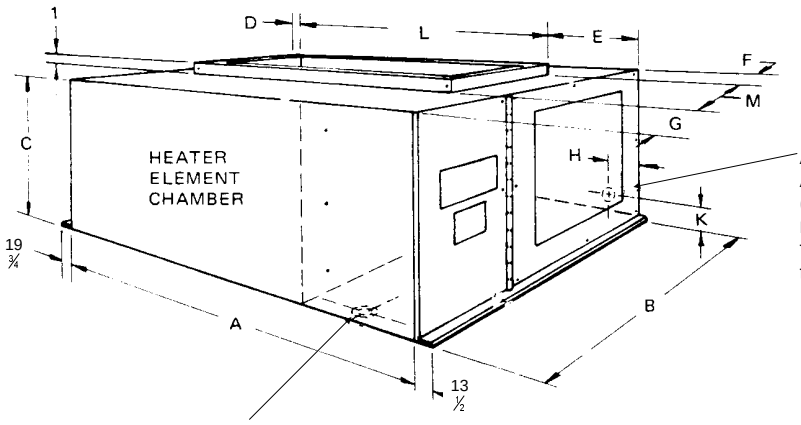
WITHOUT ELECTRIC HEAT - Install the power and the control wiring per basic unit instruction Form 550.39-N4YI. **Do not** route any wiring through the plenum and **do not** remove this knockout.



Accessory Model	Unit Model	Plenum Dimensions, mm (inches)									
		A	B	C	D	E	F	G	H	K	L
1SP0451	KEU090 KEU120	1324 (52⅛)	718 (28¼)	699 (27½)	1267 (49⅞)	454 (17⅞)	222 (8¾)	22.2 (⅞)	181 (7⅛)	387 (15¼)	44 (1¾)

ACCESSORY DIMENSIONS

ELECTRIC HEATER



ACCESS OPENING FOR POWER SUPPLY WIRING
Add a 32mm (1¼") conduit fitting to the 43.7mm (1 23/32") hole for wire sizes up through #1 AWG. Remove the knockout ring and add a 38mm (1½") conduit fiting to the 50mm (1 31/32") hole for wire sizes up through #0 AWG.

WIRING HARNESS LOCATION
This opening in the bottom of the heater control box is used for the wiring harness that connects the heater accessory to the basic unit. It is provided with a squeeze connector for securing the wiring harness. It's location corresponds to the location of the 43.7mm (1 23/32")

Accessory Model	Nom. kW	Heater Dimensions, mm (inches)										
		A	B	C	D	E	F	G	H	K	L	M
2HS04501050 2HS04501650 2HS04502650 2HS04503650	10 16 26 36	692 (27¼)	641 (25¼)	362 (14¼)	25 (1)	102 (4)	13 (½)	140 (5½)	38 (1½)	38 (1½)	565 (22¼)	489 (19¼)

ELECTRICAL DATA
COOLING ONLY UNITS

Model	Blower Motor kW/HP	Power Supply	FLA	Maximum Fuse Size* Amps	Maximum Wire Length* *m (Ft.)
KEU090	1.1 / 1½	380/415-3+N-50	3.7	5	197 (650)
KEU120	1.5 / 2	380/415-3+N-50	4.5	5	152 (500)

* Dual element, time delay fuses.
** Based on three 60° C, 14 AWG, insulated copper conductors in steel conduit and a 3% voltage drop.

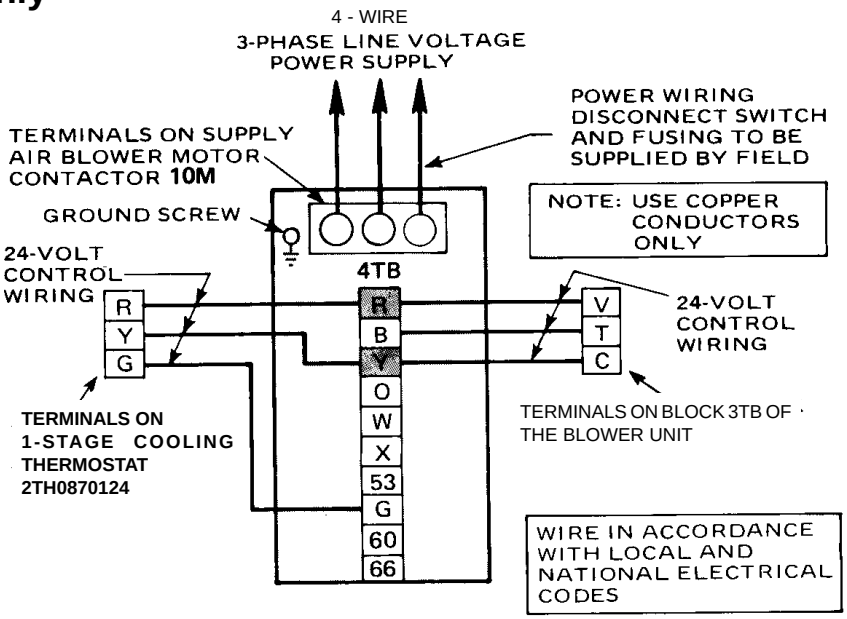
UNITS WITH ELECTRIC HEAT

Model	Nom. Heat	Volt	Heat FLA	Motor FLA	Ampacity	Maximum Fuze Size* Amps	Wire Size (AWG)	Maximum Wire Length** m (Ft.)
KEU090	7.5	415	10.4	3.7	17.6	20	12	53.2 (175)
	12.0	415	16.6	3.7	25.4	30	10	53.2 (175)
	19.4	415	27.0	3.7	38.4	40	8	60.8 (200)
	26.9	415	37.4	3.7	51.4	60	6	68.4 (225)
KEU120	7.5	415	10.4	4.5	18.6	20	12	45.6 (150)
	12.0	415	16.6	4.5	26.4	30	10	53.2 (175)
	19.4	415	27.0	4.5	39.4	40	8	60.8 (200)
	26.9	415	37.4	4.5	52.4	60	6	68.4 (225)

* Dual element, time delay fuses.
** Based on three 60° C, 14 AWG, insulated copper conductors in steel conduit and a 3% voltage drop.

FIELD WIRING

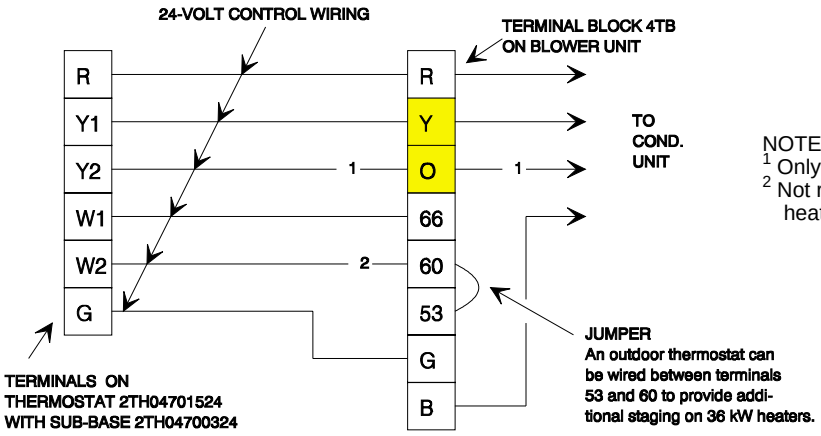
Cooling only



CONTROL WIRING

Units with steam or hot water coil accessory

Units with electric heat accessory



NOTES;
[1] Only required for 2-stage cooling.
[2] Not required on 10kw heaters (only one-stage heating).

YORK®

Heating and Air Conditioning

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