ALLIED Commercial

Adapters

Locke#	Model#	Description
L4475	54W96	LGA/TGA to KGA Adapter

Dampers & Hoods

Locke#	Model#	Description
L4109	16W88	Manual Damper with Hood for 3, 4, 5 ton TGA, KHA, KCA
L4404	53K04	Horizontal Relief Damper & Hood for 7½ - 12½ Ton KG, KC, KH
L4406	53W48	Manual Damper & Hood for 7½ - 12½ Ton KG, KC, KH
L4410	54W76	Manual Damper & Hood for 15 - 25 Ton KG, KC, KH

Economizers

Locke#	Model#	Description
L4105	16W86	Economizer for 3, 4, 5 ton TGA, KHA, KCA
L4403	54W55	Economizer for 7½ - 12½ Ton KG, KC, KH
L4411	54W77	Economizer & Hood for 15 - 25 Ton KG, KC, KH

Electric heat kits

Locke#	Model#	Description
L4130	73M79	Electric Heat Kit T Series for 7.5-12.5 Ton TC & TH
L4310	14W36	15 kW Heat Strip for KHA, KCA
L4311	14W37	22.5 kW Heat Strip for KHA, KCA
L4342	T3H002 5LM1Y	25 **kW** 208/230 **Volt** Heat Strips for TA Air Handlers
L4343	T3H002 5LM1G	25 **kW** 460 **Volt** Heat Strips for TA Air Handlers
L4412	56W47	Electric Heat Kit for 7½ - 12½ Ton KC & KH Units 30kW, 3 Phase, 208/230 volts
L4413	56W48	Electric Heat Kit for 7½ - 12½ Ton KC & KH Units 30kW, 3 Phase, 460 volts

Enthalpys

Locke#	Model#	Description
L4101	17W71	Dual Differential Enthalpy For 2 - 6 Ton KGA Package Units Differential
L4405	53W64	Single Control Enthalpy for KGA 7.5 - 25 Ton Pkg Units

Hail Guards

Locke#	Model#	Description
L4102	17W89	Hail Guard for 3, 4, 5 ton TGA, KHA, KCA
L4407	55W11	Hail Guard for 7½ - 12½ Ton KG & KC
L4408	55W12	Hail Guard for 7½ - 10 Ton KH

Horizontal Kits

Locke#	Model#	Description
L4110	17W45	Horizontal Conversion Kit for 3, 4, 5 ton TGA, KHA, KCA
L4116	87M00	Horizontal Conv Kit for TGA180
L4409	51W25	Horizontal Kit for 7½ - 12½ Ton KG, KC, KH

Low Ambient Kits

Locke#	Model#	Description
L4344	41W33	For 2-6 Ton KG-KC-KH Package Units
L4345	54W16	For 7.5-12.5 Ton KG-KC-KH Package Units

Roof Curbs

Locke#	Model#	Description
L4108	13W27	Downflow Curb for 3, 4, 5 ton TGA, TCA, KHA, KCA
L4141	38K53	Roof Curb
L4150	16K87	Roof Curb
L4402	54W44	Roof Curb for 7½ - 12½ Ton KG, KC, KH
L4414	54W43	14” Height Roof Curb for 7.5 - 12.5 Ton KG, KC, KH

Smoke Detectors

Locke#	Model#	Description
L4360	53W78	For 024-090 (2 - 7½ Ton) KG, KC, KH
L4361	53W80	For 092-150 (7½ - 12½ Ton) KG, KC, KH

Supply / Return Transitions

Locke#	Model#	Description
L4100	17W53	For 2-5 Ton KG-KC-KH Package Units
L4117	49K55	For 10 Ton KG-KC-KH Package Units

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ts A Air C ondit ioner s
R410A SPLIT SYSTEM UNITS 60 HZ

Locke#	Model#	Tonnage	Volt
L4352	TSA072S4S-Y	6	208/230
L4353	TSA090S4S-Y	7.5	208/230
L4354	TSA090S4S-G	7.5	460
L4355	TSA120S4S-Y	10	208/230
L4356	TSA120S4S-G	10	460

REPLACES THE R22 HS29 UNITS.

SPECIFICATIONS

Model Number		TSA072S4S-Y	TSA090S4S-Y	TSA090S4S-G	TSA120S4S-Y	TSA120S4S-G
Nominal Size - Tons		6	7.5		10	
Liquid Line (o.d.) -- in. connection (sweat)		(1) 5/8	(1) 5/8		(1) 5/8	
Suction Line (o.d.) -- in. connection (sweat)		(1) 1-1/8	(1) 1-1/8		(1) 1-3/8	
Condenser Coil	Net face area - sq. ft. Outer Coil	29.3	29.3		29.3	
	Inner Coil	---	28.4		28.4	
	Tube diameter - in. (mm) & No. of rows	3/8 -1	3/8 - 2		3/8 - 2	
	Fins per inch	20	20		20	
Condenser Fans	Diameter - in. (mm) & No. of blades	(1)24-3	(1) 24 - 4		(2) 24 - 3	
	Motor horsepower	(1) 1/3	(1)1/2		(2) 1/3	
	Cfm total air volume	5100	5600		8300	
	Rpm	1075	1075		1075	
	Watts	430	580		830	
Refrigerant Charge		11 lbs. 0 oz.	16 lbs. 0 oz.		17lbs. 0 oz.	

ELECTRICAL DATA

Model Number		TSA072S4S-Y	TSA090S4S-Y	TSA090S4S-G	TSA120S4S-Y	TSA120S4S-G
Line Voltage data - 60 hz - 3 phase		208/230V	208/230V	460V	208/230V	460V
Recommended maximum fuse or circuit breaker size (Amps)		45	50	25	70	40
Minimum circuit ampacity		27	35	17	43	24
Compressors (1)	Rated load amps	19	25	12.2	30.1	16.7
	Locked rotor amps	123	164	100	225	114
Condenser Coil Fan Motor (1 phase)	Full load amps (total)	2.4	3	1.5	2.4 (4.8)	1.3 (2.6)
	Locked rotor amps	4.7	6	3	4.7 (9.4)	2.4 (4.8)

ALLIED Commercial

KCA 092-120

R410A PACKAGED ELECTRIC/ELECTRIC

7.5-10 TON COOLING CAPACITY

ISO 9001 REGISTERED QUALITY SYSTEMS

ETL LISTED

ARI PERFORMANCE CERTIFIED ARI Standard 340/360 Unitary Large AC

ASHRAE 90.1 COMPLIANT

SPECIFICATIONS

Locke#		L4398	L4399	L4400	L4401
Model#		KCA092S4BNY	KCA092S4BNG	KCA120S4BNY	KCA120S4BNG
Tonnage		7.5	7.5	10	10
Phase		3	3	3	3
Volts		208/230	460	208/230	460
Outdoor Coil	Net face area sq. ft.	20.42	20.42	28	28
	Tube diameter in.	3/8	3/8	3/8	3/8
	Number of rows	2	2	2	2
	Fins per inch	20	20	20	20
Outdoor Fans	Motor horsepower	(2) 1/3hp	(2) 1/3hp	(2) 1/3hp	(2) 1/3hp
	Motor rpm	1075	1075	1075	1075
	Total Motor watts	670	670	670	670
	Diameter in. - no. of blades	(2) 24	(2) 24	(2) 24	(2) 24
	Total air volume - cfm	7200	7200	7800	7800
Indoor Blower & Drive	Nominal Motor HP	2 hp, 3 hp, 5 hp			
	Wheel nominal diameter x width - in.	15 x 15			
Filters	Type	Disposable			
	Number and Size - in.	(4) 20 x 25 x 2			

ELECTRICAL DATA

Model#		KCA092S4BNY	KCA092S4BNG	KCA120S4BNY	KCA120S4BNG
Line voltage data -- 60 hz		208/230v / 3ph	460v / 3ph	208/230v / 3ph	460v / 3ph
Compressor (1) and (2)	Rated load amps	13.1	6.1	16	7.8
	Locked rotor amps	83.1	41	110	52
Outdoor Fan Motors (1)	Full load amps (total)	2.4 (4.8)	1.3 (2.6)	2.4 (4.8)	1.3 (2.6)
Power Exhaust (1) .75 HP	Full load amps (total)	2.4	1.3	2.4	1.3
Service Outlet 115v GFI amps		15	15	15	15

ACCESSORIES

Locke#	Part#	
L4412	56W47	30 kw, 3 phase, 208/230 volt Electrical Heat Kits
L4413	56W48	30 kw, 3 phase, 460 volt Electrical Heat Kits
L4414	54W43	14" Roof Curb

APPROVALS

- ETL and CSA listed.
- Efficiency rating verified by GAMA
- Components bonded for grounding to meet safety standards for servicing required by UL, ULC and National Electrical Codes.
- All models are certified in accordance with the ULE certification program, which is based on AHRI Standard 340/360- 2007.
- All models are ASHRAE 90.1-2007 compliant.
- ISO 9001 Registered Manufacturing Quality System.

HEATING SYSTEM

- Optional Factory or Field Installed
- Helix wound nichrome elements
- Individual element limit controls
- Wiring harness
- Unit fuse block is furnished as standard

COOLING SYSTEM

- Designed to maximize sensible and latent cooling performance at design conditions.
- System can operate from 30°F to 125°F without any additional controls.
- R-410A Refrigerant is Non-chlorine based, ozone friendly.
- Scroll compressors on all models for high performance, reliability and quiet operation.
- Resiliently mounted on rubber grommets for quiet operation.
- Thermal Expansion Valves Assures optimal performance throughout the application range.
- High Pressure Switch Protects the compressor from overload conditions such as dirty condenser coils, blocked refrigerant flow, or loss of outdoor fan operation.
- Freezestats Protect the evaporator coil from damaging ice build-up due to conditions such as low/no airflow, or low refrigerant charge.
- Copper tube Coil construction, enhanced rippled-edge aluminum fins, flared shoulder tubing connections, silver soldered construction for improved heat transfer. Factory leak tested.
- Evaporator Coil Cross row circuiting with rifled copper tubing optimizes both sensible and latent cooling capacity.
- Single formed Condenser coil.
- Plastic Condensate Drain Pan, sloped to meet drainage requirements of ASHRAE 62.1.
- Side or bottom drain connections.
- Reversible to allow connection at back of unit.
- Outdoor Coil Fan Motors Thermal overload protected, totally enclosed, permanently lubricated ball bearings, shaft up, wire basket mount.
- Outdoor Coil Fans PVC coated fan guard furnished.

CABINET

- Heavy-gauge steel panels and full perimeter heavy-gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation.
- Base rails have rigging holes.
- Three sides of the base rail have forklift slots.
- Raised edges around duct and power entry openings in the bottom of the unit provide additional protection against water entering the building.
- Units are shipped in downflow (vertical) configuration, can be field converted to horizontal airflow with optional Horizontal Discharge Kit.
- All panels adjacent to conditioned air are fully insulated with nonhygroscopic fiberglass insulation.
- Unit base is fully insulated. The insulation also serves as an air seal to the roof curb, eliminating the need to add a seal during installation.

ALLIED Commercial

KGA 092-120

R410A PACKAGED GAS/ELECTRIC

7.5-10 TON COOLING CAPACITY

SPECIFICATIONS

Locke#		L4390	L4391	L4392	L4393
Model#		KGA092S4BMY	KGA092S4BMG	KGA120S4BHY	KGA120S4BHG
Tonnage		7.5	7.5	10	10
Phase		3	3	3	3
Volts		208/230	460	208/230	460
Outdoor Coil	Net face area sq. ft.	20.42	20.42	28	28
	Tube diameter in.	3/8	3/8	3/8	3/8
	Number of rows	2	2	2	2
	Fins per inch	20	20	20	20
Outdoor Fans	Motor horsepower	(2) 1/3hp	(2) 1/3hp	(2) 1/3hp	(2) 1/3hp
	Motor rpm	1075	1075	1075	1075
	Total Motor watts	670	670	670	670
	Diameter in. - no. of blades	(2) 24	(2) 24	(2) 24	(2) 24
	Total air volume - cfm	7200	7200	7800	7800
Indoor Blower & Drive	Nominal Motor HP	2 hp, 3 hp, 5 hp			
	Wheel nominal diameter x width - in.	15 x 15			
Filters	Type	Disposable			
	Number and Size - in.	(4) 20 x 25 x 2			

ELECTRICAL DATA

Model#		KGA092S4BMY	KGA092S4BMG	KGA120S4BHY	KGA120S4BHG
Line voltage data -- 60 hz		208/230v / 3ph	460v / 3ph	208/230v / 3ph	460v / 3ph
Compressor (1) and (2)	Rated load amps	13.7	6.1	16	7.8
	Locked rotor amps	83.1	41	110	52
Outdoor Fan Motors (1)	Full load amps (total)	2.4 (4.8)	1.3 (2.6)	2.4 (4.8)	1.3 (2.6)
Power Exhaust (1) .75 HP	Full load amps (total)	2.4	1.3	2.4	1.3
Service Outlet 115v GFI amps		15	15	15	15

ACCESSORIES

Locke #	Model#	Description
L4405	53W64	Single Control Enthalpy
L4414	54W43	14" Roof Curb

APPROVALS

- ETL and CSA listed.
- Efficiency rating verified by GAMA
- Components bonded for grounding to meet safety standards for servicing required by UL, ULC and National Electrical Codes.
- All models are certified in accordance with the ULE certification program, which is based on AHRI Standard 340/360- 2007.
- All models are ASHRAE 90.1-2007 compliant.
- ISO 9001 Registered Manufacturing Quality System.

HEATING SYSTEM

- Aluminized steel inshot burners, direct spark ignition, electronic flame sensor, combustion air inducer, redundant automatic dual stage gas valve with manual shutoff.
- Heat Exchanger Tubular construction, aluminized steel, life cycle tested. Optional Stainless Steel Heat Exchanger is required if mixed air temperature is below 45°F.
- Solid-state electronic spark igniter provides positive direct ignition of burners on each operating cycle. The system permits main gas valve to stay open only when the burners are proven to be lit. Should a loss of flame occur, the gas valve closes, shutting off the gas to the burners. Ignition module has LED to indicate status and aid in troubleshooting.
- Watchguard circuit on module automatically resets ignition controls after one hour of continuous thermostat demand after unit lockout, eliminating nuisance service calls.
- Ignition control is factory installed in the controls section.
- Factory installed, limit control with fixed temperature setting. Heat limit control protects heat exchanger and other components from overheating.
- Flame roll-out switch, flame sensor and combustion air inducer proving switch protect system operation.

COOLING SYSTEM

- Designed to maximize sensible and latent cooling performance at design conditions.
- System can operate from 30°F to 125°F without any additional controls.
- R-410A Refrigerant is Non-chlorine based, ozone friendly.
- Scroll compressors on all models for high performance, reliability and quiet operation.
- Resiliently mounted on rubber grommets for quiet operation.
- Thermal Expansion Valves Assures optimal performance throughout the application range.
- High Pressure Switch Protects the compressor from overload conditions such as dirty condenser coils, blocked refrigerant flow, or loss of outdoor fan operation.
- Freezestats Protect the evaporator coil from damaging ice build-up due to conditions such as low/no airflow, or low refrigerant charge.
- Copper tube Coil construction, enhanced rippled-edge aluminum fins, flared shoulder tubing connections, silver soldered construction for improved heat transfer. Factory leak tested.
- Evaporator Coil Cross row circuiting with rifled copper tubing optimizes both sensible and latent cooling capacity.
- Single formed Condenser coil.
- Plastic Condensate Drain Pan, sloped to meet drainage requirements of ASHRAE 62.1.
- Side or bottom drain connections.
- Reversible to allow connection at back of unit.
- Outdoor Coil Fan Motors Thermal overload protected, totally enclosed, permanently lubricated ball bearings, shaft up, wire basket mount.
- Outdoor Coil Fans PVC coated fan guard furnished.

CABINET

- Heavy-gauge steel panels and full perimeter heavy-gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation.
- Base rails have rigging holes.
- Three sides of the base rail have forklift slots.
- Raised edges around duct and power entry openings in the bottom of the unit provide additional protection against water entering the building.
- Units are shipped in downflow (vertical) configuration, can be field converted to horizontal airflow with optional Horizontal Discharge Kit.
- All panels adjacent to conditioned air are fully insulated with nonhygroscopic fiberglass insulation.
- Unit base is fully insulated. The insulation also serves as an air seal to the roof curb, eliminating the need to add a seal during installation.

ALLIED Commercial

KGA 180-240

R410A PACKAGED GAS/ELECTRIC

15-20 TON COOLING CAPACITY

ASHRAE 90.1 COMPLIANT

APPROVALS

- ETL and CSA listed.
- Efficiency rating verified by GAMA
- Components bonded for grounding to meet safety standards for servicing required by UL, ULC and National Electrical Codes.
- All models are certified in accordance with the ULE certification program, which is based on AHRI Standard 340/360- 2007.
- All models are ASHRAE 90.1-2007 compliant.
- ISO 9001 Registered Manufacturing Quality System.

HEATING SYSTEM

- Aluminized steel inshot burners, direct spark ignition, electronic flame sensor, combustion air inducer, redundant automatic dual stage gas valve with manual shutoff.
- Heat Exchanger Tubular construction, aluminized steel, life cycle tested. Optional Stainless Steel Heat Exchanger is required if mixed air temperature is below 45°F.
- Solid-state electronic spark igniter provides positive direct ignition of burners on each operating cycle. The system permits main gas valve to stay open only when the burners are proven to be lit. Should a loss of flame occur, the gas valve closes, shutting off the gas to the burners. Ignition module has LED to indicate status and aid in troubleshooting.
- Watchguard circuit on module automatically resets ignition controls after one hour of continuous thermostat demand after unit lockout, eliminating nuisance service calls.
- Ignition control is factory installed in the controls section.
- Factory installed, limit control with fixed temperature setting. Heat limit control protects heat exchanger and other components from overheating.
- Flame roll-out switch, flame sensor and combustion air inducer proving switch protect system operation.

COOLING SYSTEM

- Designed to maximize sensible and latent cooling performance at design conditions.
- System can operate from 30°F to 125°F without any additional controls.
- R-410A Refrigerant is Non-chlorine based, ozone friendly.
- Scroll compressors on all models for high performance, reliability and quiet operation.
- Resiliently mounted on rubber grommets for quiet operation.
- Thermal Expansion Valves Assures optimal performance throughout the application range.
- High Pressure Switch Protects the compressor from overload conditions such as dirty condenser coils, blocked refrigerant flow, or loss of outdoor fan operation.
- Freezestats Protect the evaporator coil from damaging ice build-up due to conditions such as low/no airflow, or low refrigerant charge.
- Copper tube Coil construction, enhanced rippled-edge aluminum fins, flared shoulder tubing connections, silver soldered construction for improved heat transfer. Factory leak tested.
- Evaporator Coil Cross row circuiting with rifled copper tubing optimizes both sensible and latent cooling capacity.
- Single formed Condenser coil.
- Plastic Condensate Drain Pan, sloped to meet drainage requirements of ASHRAE 62.1.
- Side or bottom drain connections.
- Reversible to allow connection at back of unit.
- Outdoor Coil Fan Motors Thermal overload protected, totally enclosed, permanently lubricated ball bearings, shaft up, wire basket mount.
- Outdoor Coil Fans PVC coated fan guard furnished.

CABINET

- Heavy-gauge steel panels and full perimeter heavy-gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation.
- Base rails have rigging holes.
- Three sides of the base rail have forklift slots.
- Raised edges around duct and power entry openings in the bottom of the unit provide additional protection against water entering the building.
- Units are shipped in downflow (vertical) configuration, can be field converted to horizontal airflow with optional Horizontal Discharge Kit.
- All panels adjacent to conditioned air are fully insulated with nonhygroscopic fiberglass insulation.
- Unit base is fully insulated. The insulation also serves as an air seal to the roof curb, eliminating the need to add a seal during installation.

SPECIFICATIONS

Locke#		L4394
Model#		KGA180S4BSY
Tonnage		15
Phase		3
Volts		208/230
Outdoor Coil	Net face area sq. ft.	41.4
	Tube diameter in.	3/8
	Number of rows	2
	Fins per inch	20
Outdoor Fans	Motor horsepower	(3) 1/3hp
	Motor rpm	1075
	Total Motor watts	1100
	Diameter in. - no. of blades	(3) 24
	Total air volume - cfm	12000
Indoor Blower & Drive	Nominal Motor HP	3 hp, 5 hp, 7.5 hp
	Wheel nominal diameter x width - in.	(2) 15 x 15
Filters	Type	Disposable
	Number and Size - in.	(4) 20 x 25 x 2

ELECTRICAL DATA

Model#		KGA180S4BSY
Line voltage data -- 60 hz		208/230v / 3ph
Compressor (each)	Rated load amps	25
	Locked rotor amps	164
Outdoor Fan Motors (1)	Full load amps (total)	2.4 (7.2)
Power Exhaust (1) .75 HP	Full load amps (total)	2.4 (4.8)
Service Outlet 115v GFI amps		15

ALLIED Commercial

KGA 036-060
R410A PACKAGED GAS/ELECTRIC
3-5 TON COOLING CAPACITY

ASHRAE 90.1 COMPLIANT

ISO 9001 REGISTERED QUALITY SYSTEMS

ETL LISTED

ARI PERFORMANCE CERTIFIED ARI Standard 210/240 Unitary Small AC

ARI PERFORMANCE CERTIFIED ARI Standard 340/360 Unitary Large AC

EFFICIENCY RATING CERTIFIED Gama

SPECIFICATIONS

Locke#		L4303	L4304	L4306	L4305	L4307
Model#		KGA036S4DMP	KGA048S4BMY	KGA048S4DMP	KGA060S4BHY	KGA060S4BMP
Tonnage		3	4	4	5	5
Phase		1	3	1	3	1
Volts		208/230	208/230	208/230	208/230	208/230
Outdoor Coil	Net face area sq. ft.	15.6	15.6	15.6	15.6	15.6
	Tube diameter in.	3/8	3/8	3/8	3/8	3/8
	Number of rows	1	1.5	1.5	2	2
	Fins per inch	20	20	20	20	20
Outdoor Fans	Motor horsepower	1/4	1/4	1/4	1/3	1/3
	Motor rpm	825	825	825	1075	1075
	Total Motor watts	250	250	250	370	370
	Diameter in. - no. of blades	24-3	24-3	24-3	24-3	24-3
	Total air volume - cfm	3,700	3,500	3,500	4,300	4,300
Indoor Blower & Drive	Nominal Motor HP	1.5	1.5	1.5	1.5	1.5
	Wheel nominal diameter x width - in.	10 x 10	10 x 10	10 x 10	10 x 10	10 x 10
Filters	Type	Disposable				
	Number and Size - in.	(4) 16 x 20 x 2				

ELECTRICAL DATA

Model#		KGA036S4DMP	KGA048S4BMY	KGA048S4DMP	KGA060S4BHY	KGA060S4BMP
Line voltage data -- 60 hz		208/230v / 1 ph	208/230v / 3 ph	208/230v / 1 ph	208/230v / 3 ph	208/230v / 1 ph
Compressor (1)	Rated load amps	16.7	13.7	21.8	16	26.4
	Locked rotor amps	79	83.1	117	110	134
Outdoor Fan Motors (1)	Full load amps (total)	1.7	1.7	1.7	2.4	2.4
Power Exhaust (1) .75 HP	Full load amps (total)	5	5	5	5	5
Service Outlet 115v GFI amps		15	15	15	15	15

ACCESSORIES

Locke #	Model#	Description
L4101	17W71	Dual Differential Enthalpy

APPROVALS
- ETL and CSA listed.
- Efficiency rating verified by GAMA.
- Components bonded for grounding to meet safety standards for servicing required by UL.
- Certified in accordance with the USE certification program, which is based on ARI Standard 210/240-2006.
- All models are ASHRAE 90.1 compliant.
- All models are ENERGY STAR® certified.
- ISO 9001 Registered manufacturing quality system.

Cabinet
- Heavy-gauge steel panels and full perimeter heavy-gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation.
- Base rails have rigging holes. Three sides of the base rail have fork slots. Raised edges around duct and power entry openings in the bottom of the unit provide additional protection against water entering the building.
- Units are shipped in down-flow (vertical) configuration, can be field converted to horizontal air flow configuration without the need of a kit.
- Electrical and gas lines can be brought through the unit base or through horizontal access knock-outs. Optional bottom gas entry kit is available.
- Exterior panels constructed of heavy-gauge, galvanized steel with a two-layer enamel paint finish.
- All panels adjacent to conditioned air are fully insulated with non-hygroscopic fiberglass insulation.
- Unit base is fully insulated. The insulation also serves as an air seal to the roof curb, eliminating the need to add a seal during installation.
- Access panels are provided for the economizer/filter section, heating/blower section, and the compressor/controls section.

Cooling system
- Designed to maximize sensible and latent cooling performance at design conditions.
- System can operate from 30°f to 125°f without any additional controls.
- Compressor resiliently mounted on rubber grommets for quiet operation.
- Scroll compressors for high performance, reliability and quiet operation.
- Thermal expansion valve assures optimal performance throughout the application range. Removable element head.
- High pressure switch protects the compressor from overload conditions such as dirty condenser coils, blocked refrigerant flow, or loss of outdoor fan operation.
- High capacity filter/drier protects from dirt and moisture.
- Freezestat protects the evaporator coil from damaging ice build-up due to conditions such as low/no air flow, or low refrigerant charge.
- Copper tube coil construction, enhanced rippled-edge aluminum fins, flared shoulder tubing connections, silver soldered construction for improved heat transfer. Factory leak tested.
- Evaporator coil with cross row circuiting with rifled copper tubing optimizes both sensible and latent cooling capacity.
- Two independent formed condenser coils allow separation for cleaning.
- Plastic condensate drain pan, sloped to meet drainage requirements of ASHRAE 62.1. Side or bottom drain connections. Reversible to allow connection at back of unit.
- PVC coated fan guard furnished.

HEATING SYSTEM
- Aluminized steel inshot burners, direct spark ignition, electronic flame sensor, combustion air inducer, redundant automatic single or dual stage gas valve with manual shut-off.
- Tubular construction heat exchanger, aluminized steel, life cycle tested. (Stainless steel heat exchanger is required if mixed air temperature is below 45°f.)
- Solid-state electronic spark igniter provides positive direct ignition of burners on each operating cycle. The system permits main gas valve to stay open only when the burners are proven to be lit. Should a loss of flame occur, the gas valve closes, shutting off the gas to the burners.
- Ignition module has LED to indicate status and aid in troubleshooting.
- Watchguard circuit on module automatically resets ignition controls after one hour of continuous thermostat demand after unit lockout, eliminating nuisance service calls.
- Ignition control is factory installed in the controls section.

ALLIED Commercial

PACKAGED HEAT PUMP

KH ROOFTOP UNITS / 60 HZ / 4-5 Tons / 208/230v / 3 phase

ENERGY STAR

Net Cooling Capacity
47,000 to 59,000 Btuh

Net Heating Capacity
48,000 to 60,500 Btuh

Optional Electric Heat
7.5 to 30 kW

Locke#	Model No.	Tons
L4388	KHA048S4BNY	4 Ton
L4389	KHA060S4BNY	5 Ton

COOLING / HEATING SYSTEM

Designed to maximize sensible and latent cooling performance at design conditions. System can operate from 30°F to 125°F without any additional controls.

Refrigerant
Non−chlorine, ozone friendly R−410A. Unit pre−charged with refrigerant.

Compressor
Scroll compressors resiliently mounted on rubber grommets for high performance, reliability and quiet operation.

Compressor Crankcase Heater
Protects against refrigerant migration that can occur during low ambient operation.

High Pressure Switch

Check/Thermal Expansion Valves

Reversing Valves
4-way interchange reversing valve effects a rapid change in direction of refrigerant flow resulting in quick changeover.

Defrost Control
Provides a defrost cycle, if needed, every 30 or 60 or 90 minutes (adjustable).

Filter/Drier

Freezestat
Protects the evaporator coil from damaging ice build−up.

Coil Construction
Copper tube construction, enhanced rippled−edge aluminum fins, flared shoulder tubing connections, silver soldered construction for improved heat transfer. Factory leak tested.

Indoor Coil
Cross row circuiting with rifled copper tubing.

Outdoor Coil
Two independent formed coils allow separation for cleaning.

Condensate Drain Pan
Plastic pan, sloped to meet drainage requirements of ASHRAE 62.1. Side or bottom drain connections. Reversible.

Outdoor Coil Fan Motor
Thermal overload protected, totally enclosed, shaft up, wire basket mount.

Outdoor Coil Fan
PVC coated fan guard furnished.

CABINET

Construction
Heavy−gauge galvanized steel panels with a two−layer enamel paint finish and full perimeter heavy−gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation.

Air−Flow Choice
Units are shipped in down−flow (vertical) configuration, can be field converted to horizontal air flow configuration without a kit.

Power Entry
Through the base or horizontal knock−outs.

Insulation
All panels adjacent to conditioned air are fully insulated with non−hygroscopic fiberglass insulation. Base is fully insulated.

CONTROLS

Unit Control
All control voltage is provided via a 24V (secondary) transformer with built−in circuit breaker protection.

Heat/Cool Staging − Capable of up to 2 heat / 2 cool staging with a third party DDC control system or thermostat.

Low Voltage Terminal Block − Provides screw terminal connections for thermostat or controller wiring.

Night Setback Mode − Saves energy by closing outdoor air dampers and operating supply fan on thermostat demand only.

BLOWER

A wide selection of supply air blower options are available to meet a variety of air flow requirements.

Motor
Overload protected, equipped with ball bearings (belt drive) or sleeve bearings (direct drive).
Direct drive motors are offered on 024, 030, 036 and 048 models. Belt drive motors are offered on 036, 048, 060 and 072 models and are available in several different sizes to maximize air performance.

Supply Air Blower
Forward curved blades, blower wheel is statically and dynamically balanced. All belt drive motors have adjustable pulley for speed change.

INDOOR AIR QUALITY

Disposable 2 inch air filters furnished.

Accessories For KHA / KCA Packaged Rooftop Units

L4310	14W36	15 kW Heat Strip for KHA, KCA
L4311	14W37	22.5 kW Heat Strip for KHA, KCA
L4109	16W88	Manual Damper with Hood for KHA, KCA
L4105	36W96	Economizer with Hood for KHA, KCA
L4110	17W45	Horizontal Conversion Kit for KHA, KCA
L4108	13W27	Roof Curb for KHA, KCA
L4102	17W89	Hail Guard for KHA, KCA

ALLIED Commercial

PACKAGED ELECTRIC / ELECTRIC

KC ROOFTOP UNITS / 60 HZ / 4-5 Tons / 208/230v / 3 phase

ENERGY STAR

Net Cooling Capacity
48,000 to 59,000 Btuh

Locke#	Model No.	Tons
L4386	KCA048S4BNY	4 Ton
L4387	KCA060S4BNY	5 Ton

COOLING SYSTEM

Designed to maximize sensible and latent cooling performance at design conditions. System can operate from 30°F to 125°F without any additional controls.

Compressor
Resiliently mounted on rubber grommets for quiet operation. Scroll compressors for high performance, reliability and quiet operation.

Thermal Expansion Valve
Assures optimal performance throughout the application range. Removable element head.

High Pressure Switch
Protects the compressor from overload conditions such as dirty condenser coils, blocked refrigerant flow, or loss of outdoor fan operation.

Filter/Drier
High capacity filter/drier protects the system from dirt and moisture.

Freezestat
Protects the evaporator coil from damaging ice build−up due to conditions such as low/no air flow, or low refrigerant charge.

Coil Construction
Copper tube construction, enhanced rippled−edge aluminum fins, flared shoulder tubing connections, silver soldered construction for improved heat transfer. Factory leak tested.

Evaporator Coil
Cross row circuiting with rifled copper tubing optimizes both sensible and latent cooling capacity.

Condenser Coil
Two independent formed coils allow separation for cleaning.

Condensate Drain Pan
Plastic pan, sloped to meet drainage requirements of ASHRAE 62.1. Side or bottom drain connections. Reversible to allow connection at back of unit.

Outdoor Coil Fan Motor
Thermal overload protected, totally enclosed, permanently lubricated sleeve (024, 030, 036 and 048 models) or ball bearings (060 and 072 models), shaft up, wire basket mount.

Outdoor Coil Fan
PVC coated fan guard furnished.

CABINET

Construction
Heavy−gauge steel panels and full perimeter heavy−gauge galvanized steel base rail provides structural integrity for transportation, handling, and installation. Base rails have rigging holes. Three sides of the base rail have fork slots. Raised edges around duct and power entry openings in the bottom of the unit provide additional protection against water entering the building.

Air−Flow Choice
Units are shipped in down−flow (vertical) configuration, can be field converted to horizontal air flow configuration without the need of a kit.

Power Entry
Electrical lines can be brought through the unit base or through horizontal access knock−outs.

Exterior Panels
Constructed of heavy−gauge, galvanized steel with a two−layer enamel paint finish.

Insulation
All panels adjacent to conditioned air are fully insulated with non−hygroscopic fiberglass insulation. Unit base is fully insulated. The insulation also serves as an air seal to the roof curb, eliminating the need to add a seal during installation.

CONTROLS

Unit Control
All control voltage is provided via a 24V (secondary) transformer with built−in circuit breaker protection.

Heat/Cool Staging − Capable of up to 2 heat / 2 cool staging with a third party DDC control system or thermostat.

Low Voltage Terminal Block − Provides screw terminal connections for thermostat or controller wiring.

Night Setback Mode − Saves energy by closing outdoor air dampers and operating supply fan on thermostat demand only.

BLOWER

A wide selection of supply air blower options are available to meet a variety of air flow requirements.

Motor
Overload protected, equipped with ball bearings (belt drive) or sleeve bearings (direct drive).

Supply Air Blower
Forward curved blades, blower wheel is statically and dynamically balanced. All belt drive motors have adjustable pulley for speed change.

Accessories For KHA / KCA Packaged Rooftop Units

L4310	14W36	15 kW Heat Strip for KHA, KCA
L4311	14W37	22.5 kW Heat Strip for KHA, KCA
L4109	16W88	Manual Damper with Hood for KHA, KCA
L4105	36W96	Economizer with Hood for KHA, KCA
L4110	17W45	Horizontal Conversion Kit for KHA, KCA
L4108	13W27	Roof Curb for KHA, KCA
L4102	17W89	Hail Guard for KHA, KCA

ALLIED Commercial

3 PHASE MULTI-POSITION AIR HANDLERS

Multi-Position • R410A • 3-5 Tons
Optional Electric Heat 15-20 Kw

Application
- Environmentally friendly R410A refrigerant
- 3, 4, and 5 ton nominal capacities
- Multi-position applications
- One piece design for easy installation but may be disassembled into two separate sections for ease of installation in tight applications
- Optional field installed electric heat kits, 10, 15 and 20kW
- Heat pump and air conditioner applications

Cabinet
- Foil faced insulation
- Painted, heavy-gauge galvanized cabinet
- Tool-less access to filter area for quick and easy servicing. Disposable frame type filter furnished and factory installed in rails in cabinet
- High-strength, UV and heat-resistant plastic drain pan for corrosion resistance have dual pipe drains
- Serviceable easy slide out blower assembly
- No external screw heads on sides of cabinet for tight installations preventing damage to walls or woodwork
- Removable panels provide complete service access
- Electrical inlets provided in sides and top of cabinet

Components
- Efficient multi-speed PSC blower motors
- Standard transformer and blower relay
- Built-in indoor time delay for increases efficiency
- Sleeves on distributor tubing to protect tubing
- Drain pan designed for up-flow, down-flow or horizontal applications. Deep, corrosion resistant plastic drain pans have dual pipe drains
- Factory installed R410A TXV

Accessories
- Counterflow kit
- Combustible floor kit
- Single point power kit
- Electric heat kits

Warranty
- 1 year parts warranty. See limited warranty document for details

Specifications

Locke#	Model No.	Nominal Tonnage	Volts	Connections			Refrigerant (Not Furnished)	Filter Number and size – inches
				Liquid line o.d. (sweat)	Suction/Vapor line o.d. (sweat)	Condensate drain (fpt)		
L4415	ACBX32CM-136-230-6	3	208/230	3/8"	3/4"	1" (NPT)	R−410A	20x22
L4416	ACBX32CM-148-230-6	4	208/230	3/8"	7/8"	1" (NPT)	R−410A	20x24
L4417	ACBX32CM-160-230-6	5	208/230	3/8"	1−1/8"	1" (NPT)	R−410A	20x24

Heat Strips for TA Air Handlers

Locke#	Model No.	kW	Volt
L4464	ECB29-15CBY	15	230
L4465	ECB29-20CBY	20	230

ALLIED Commercial

TA SPLIT SYSTEM AIR HANDLERS

Upflow/Horizontal - 60 Hz - R410A
Nominal Capacity 6 - 10 Tons
Optional Electric Heat 10 - 35 Kw

APPLICATIONS
Convertible upflow or horizontal design.
Each refrigerant circuit has a dedicated expansion valve.
Dual distribution system for two stage capacity control during cooling cycles.
Air handlers are shipped factory assembled ready to install. Standard static blower drive is furnished factory installed.

REFRIGERANT SYSTEM
Multi−Circuit, Copper Tube Coil
Coils on 090−120 models are face split with separate circuits, each circuit has its own expansion valve.
Coil is constructed of aluminum fins fitted to durable seamless, rifled copper tubes.
Flared tubing connections and silver soldering provide tight, leakproof joints.

Refrigerant Piping and Drain Connections
Refrigerant line inlets (knockouts) are provided on both sides of the cabinet.
Refrigerant lines require sweat connections and are made internal to the cabinet.
Condensate drain outlet extends outside the cabinet for ease of connection. Condensate drain can be relocated and repositioned.

BELT DRIVE BLOWERS
Single blower wheel.
Centrifugal belt driven blowers deliver large air volumes quietly and with low power consumption.
Heavy−duty blower wheels, with forward curved blades and double inlet are statically and dynamically balanced.
Heavy−duty bearings are permanently sealed and lubricated.

CABINET
Cabinet is constructed of heavy−gauge, galvanized steel completely lined with thick fiberglass insulation for quiet and efficient operation.

Drain Pan
Deep, corrosion resistant plastic drain pan.

Specifications

Locke#	Model No.	Nominal Tonnage	Volts	Connections			Refrigerant (Not Furnished)	Evaporator Coil					Filter Number and size − inches
				Liquid line o.d. (sweat)	Suction/ Vapor line o.d. (sweat)	Condensate drain (fpt)		Net face area − sq. ft.	Coil Split	Tube diameter	Number of rows	Fins per inch	
L4336	TAA072S4S-Y	6	208/230	(1) 5/8"	(1) 1−1/8"	1" (NPT)	R−410A	8.2		3/8"	3	14	(3) 16x25x2
L4337	TAA090S4D-Y	7.5	208/230	(2) 5/8"	(2) 7/8"	1" (NPT)	R−410A	8.2	50%	3/8"	4	14	(3) 16x25x2
L4338	TAA090S4D-G	7.5	460	(2) 5/8"	(2) 7/8"	1" (NPT)	R−410A	8.2	50%	3/8"	4	14	(3) 16x25x2
L4339	TAA120S4D-Y	10	208/230	(2) 5/8"	(2) 7/8"	1" (NPT)	R−410A	11.3	50%	3/8"	4	14	(4) 16x25x2
L4340	TAA120S4D-G	10	460	(2) 5/8"	(2) 7/8"	1" (NPT)	R−410A	11.3	50%	3/8"	4	14	(4) 16x25x2

Heat Strips for TA Air Handlers

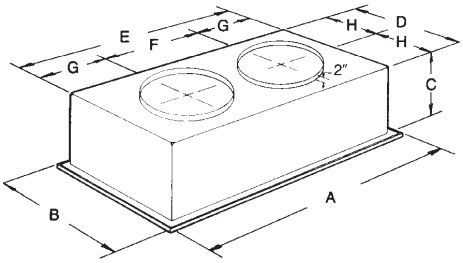
Locke#	Model No.	kW	Volt
L4342	T3H0025LM1Y	25	208/230
L4343	T3H0025LM1G	25	460

510 SERIES CONCENTRIC DIFFUSER

LIGHT COMMERCIAL
"T" BAR CEILING

RSI's 510 SERIES concentric diffuser systems are designed to provide a single point air distribution system. The systems may be used with either a "T-Bar" ceiling or a plaster ceiling.

Standard features include:
1. All Aluminum diffuser with aluminum return air egg crate.
2. Built-in Anti-Sweat gasket.
3. Molded Fiberglass Transition (through five tons).
4. Built-in hanging supports.
5. Diffuser box constructed of fiberglass duct board (through 7.5 tons) or sheet metal.



Standard benefits include:
1. Even four way airflow.
3. Factory assembled & sealed.
4. Guaranteed not to "sweat".
5. Guaranteed not to recirculate air flow (short cycle).
6. Return air egg crate is easily removed.
7. Units are fully insulated (both supply and return).

ENGINEERING DATA

Locke#	RSI Part#	CFM	Static Pressure	Throw Feet	Neck Vel.	Jet Vel.	Noise Level
L6050	01-510-16	600 800 1000 1200 1400	.09 .11 .14 .17 .20	10-14 12-18 15-20 16-22 17-24	234 313 391 469 547	417 556 694 833 972	18 20 20 25 30
L6051	01-510-18	1000 1200 1400 1600 1800 2000 2200	.14 .17 .20 .24 .30 .36 .40	15-20 16-22 17 -24 18-25 20-28 21-29 22-30	391 469 547 625 703 781 859	694 833 972 1111 1250 1389 1528	20 25 30 30 35 40 40
L6052	01-510-20	2600 2800 3000 3200 3400	.17 .20 .25 .31 .37	19-24 20-28 21-29 22-29 22-30	663 714 765 816 867	1294 1393 1492 1592 1692	0 35 35 40 40

DIMENSIONAL DATA

Locke#	Model#	A	B	C	D	E	F	G	H	Duct Size
L6050	01-510-16	47⅝"	23⅝"	13½"	21	45	22½"	11¼"	10½"	16RD
L6051	01-510-18	47⅝"	23⅝"	13½"	21	45	22½"	11¼"	10½"	18RD
L6052	01-510-20	47⅝"	29⅝"	16⅝"	27	45	22½"	11¼"	13½"	20RD

SOLER&PALAU

TXB CENTRIFUGAL ROOF UPBLAST EXHAUSTERS

(Belt Drive) Commercial Use for Restaurants

Spun Top - Easily removable for servicing.
Drives - Sized for 150% of drive HR adjustable pitch sheaves.
Disconnect Switch - Standard with single speed drip-proof and totally enclosed motors.
Bearings - Air handling type ball bearings with cast iron housing and grease fittings.
Spun Shroud - Provides maximum air performance
All Aluminum Centrifugal Wheel - Non-overloading, backward inclined tapered blades for maximum efficiency and minimum sound.
Enclosed Motor Compartment - Isolates motor and drives from exhaust air.
Oversized Vent Tube - For maximum motor cooling.
Motor - Open drip-proof construction standard. I year warranty.
Motor Base - Motor is adjustable for proper belt tension.
Neoprene Isolators - Reduce vibration and sound.
Birdscreen
Deep Spun One Piece Inlet - For optimum air and sound performance.
Stainless Steel Exterior Fasteners Standard.

Locke#	Model	HP	Size	Volts
L3690	TXB10RHULMH1S	1/4	10"	115
L3692	TXB10RHULOH3S	1/2	10"	230/460
L3693	TXB15RHULMH1S	1/4	15"	115
L3694	TXB15RHULOH1S	1/2	15"	115
L3695	TXB15RHULOH3S	1/2	15"	230/460
L3696	TXB15RHULSH1S	1	15"	115

DUCT SMOKE DETECTORS UNIVERSAL VOLTAGE MODEL

Firex duct smoke detector provide early detection of smoke and products of combustion present in air moving through HVAC duct. These devices are designed for prevention of smoke recirculation areas by the air handling systems. Fans, blower, and complete systems may be shut down in the event of smoke detection. The Universal Voltage model will operate on any one of three input voltages (115 VAC, 24 VAC, or 24 VDC).

ITEM: 0560 - 115 volt AC, 24 volt AC, or 24 volt DC ionization
0532 - Sampling tube for 6" to 2.5' duct widths
0533 - Sampling tube for 2.5' to 5.0' duct widths

POWER REQUIREMENTS: 115 volt AC operation @ 5 ma standby, 15 ma alarm 24 volt AC or DC operation @ 20 ma standby, 50 ma alarm

RELAY CONTACT RATING: Alarm contacts, two form "C" rated at 10amps @115 VAC resistive Trouble contacts, one form "C" rated at 5amps @115 VAC resistive

RADIOACTIVE ELEMENT: For model 0530 only, Americium 241; 1.0 Micro-Curies

AIR VELOCITY: 300 to 4000 feet/minute

APPROVAL: Underwriters Laboratories Listed (UL268A) California State Fire Marshall

DIMENSIONS: Cabinet 10-3/4"H x 10"W x 3-1/2"D Mounting flanges protrude 3/4" from each side

Locke#

L0651	2650-560	Ionization Duct Smoke Detector System
L0652	0532	Sampling Tube for 6" - 2.5' Duct
L0653	0533	Sampling Tube for 2.5' - 5' Duct

DUCT SMOKE DETECTORS

Hi-Temp, Low-Flow & No-Tools

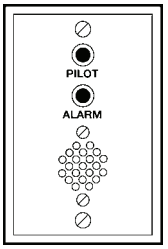
The SL-2000 Series Smoke Duct Detector is the latest innovation for early detection of smoke and products of combustion present in air moving through HVAC ducts in Commercial, Industrial, and Residential applications. The unit is designed to prevent the recirculation or spread of smoke by air handling systems, fans, and blowers. Complete systems may be shut down in the event of smoke detection. The SL-2000 is designed and built to meet all local code requirements, as well as the NFPA and ICC standards regarding HVAC supply and return duct smoke detectors. Output terminals are provided for a wide range of remote accessories such as horns, strobes, remote status indicators, and test/reset key switches or push buttons.

- Low-Flow Technology for velocities between 100-4000 ft./min
- Listed for high-temperature applications
- Operating voltages: 230VAC, 115VAC, 24VAC, 24VDC
- Interconnect up to 30 units for common functions
- Patent pending "No-Tools Required" front or rear loading and removing sampling/ exhaust tubes
- Clear cover fitted with four captive "No-Tools Required" thumbscrews
- Unit includes green pilot and red alarm visual indicators
- UL, CUL, CSFM, and MEA Listed
- Compatible with building automation and fire alarm systems
- Complete wiring details permanently attached to unit

Locke#

L6651	SL-2000	Smoke Detector Duct System
L6652	STN-2.5	2.5" Sampling Tube
L6653	STN-5.0	5" Sampling Tube

DUCT SMOKE DETECTORS REMOTE ALARM & HORN

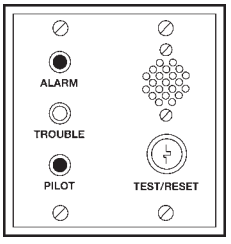


Firex Remote Accessories are designed to be used with the Firex duct smoke detectors to provide audible and visual indication

Locke#

L1383	0543	Remote Alarm Horn and LED, Stainless Steel

REMOTE HORN, LED & TEST/RESET FOR DUCT SMOKE DETECTORS

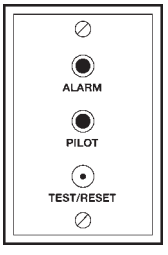


Firex Remote Accessories are designed to be used with the Firex duct smoke detectors to provide audible and visual indication as well as remote test/ reset functions.

Locke#

L1306	0544	Remote Alarm Horn and LED, Stainless Steel

DUCT SMOKE DETECTORS REMOTE LED & TEST/RESET



Designed to be used with the Firex duct smoke detectors to provide visual indication as well as remote test/reset functions. These devices are constructed of brushed stainless steel & mount on a standard single or double gang back box.

Locke#

L1347	0537	Remote Alarm LED (Red), Pilot LED (Green), &