

KoolKart[®]

Industrial Mobile Air Conditioners



Cooling ... Heating

Where You Need It ...When You Need It !!



**SCIENTIFIC
SYSTEMS
LLC**



KoolKart® ...the Mobile Air Conditioner for Industry!!

DESCRIPTION

Heavy Duty Design. KoolKarts® are heavy-duty, mobile air conditioners especially engineered for ruggedness and reliability. Every effort has been made to combine simplicity of operation with the versatility necessary to meet all types of industrial or other demanding applications. Industrial grade compressors, coils, motors and related components are housed inside a continuously welded, formed steel frame. The results: unusual versatility, exceptional ruggedness, excellent reliability, and very minimal need for maintenance.

Versatile & Flexible. Air or water-cooled and fully self-contained, KoolKarts® are offered in both standard and in high ambient temperature models. They are engineered for the most demanding applications including use in dirty, dusty, and corrosive environments. Explosion proof models for use in hazardous locations are classified under NEC Class I, Groups B, C and D and for Class II, Groups F and G in Divisions 1 and 2.

Applications Engineered. High volumes of clean and dehumidified air are delivered by means of belt driven, speed adjustable blowers through one or more flexible ducts. Up to four air streams can be directed over distances in excess of 100 feet. An optional Air Diffuser cools personnel with very low velocity air streams, minimizing draft and associated discomfort. The easily serviced, 4" thick industrial grade air filter provides excellent dust protection. Also available are high dust loading, gas phase (carbon), chemical, and HEPA (99+%) filter modules for dust and odor removal and for corrosion control.

Easily Transported. Equipped with fully pneumatic tires and a removable tow handles, KoolKarts® are readily moved to different plant and construction site locations. The exceptionally compact models ranging from 2 to 7.5 tons pass through 34" wide door openings; the 10 and 15 HP units are only slightly larger. All models are also offered with optional I-beam skid mounts for more permanent installations.

Models to 60 Tons. For cooling demands in excess of 15 tons, higher capacity **KoolKart® Magnum** models are available up to 60 tons.

APPLICATIONS

- Emergency and Temporary Air Conditioning for Power Plants, Computer and Telephone Centers, and Construction Sites and Industrial Installations.
- While Working inside Process Tanks and Reactors
- For Humidity and Temperature Control while Painting
- For Comfort Conditioning Athletes during Sport Events
- For Manufacturing, Processing, or Storage Buildings in Refineries, Pharmaceutical & Chemical Plants
- People and Equipment Cooling in Mills and Foundries
- During Construction and Turnarounds
- During Servicing and Maintenance of Aircraft, Ships and Offshore Installations

FEATURES

- Engineered for Industrial Environments
- Cooling Capacities from 2 to 15 tons
- Models for 60 or 50 Hertz service and for High Temperature Ambients
- Easily Moved By One Person; totally self-contained
- Adjustable Blower Speeds and Pressures
- Efficient 4" thick U.L. Class 2 Disposable Air Filters
- High Dust Loading, Vapor Removal and HEPA Filters*
- Built in Thermostat
- Built - In Phase Indicator on all Three Phase Models
- Large Full Pneumatic Swivel Wheels or Skid Mounted
- Explosion-proof Models for NEC Class I, Groups B, C & D, and for Class II, Groups F, & G, Div. 1 and 2*
- SaveCoil 101 Corrosion Resistant Coil Coatings*
- Air Diffuser Wall for Horizontal or Vertical Air Flow*
- Accessory Electric Heaters*
- Epoxy Primed with Attractive Blue Urethane Finish
- Wide Range of Accessories and Options

* Optional Feature



MOBILE INDUSTRIAL AIR CONDITIONERS

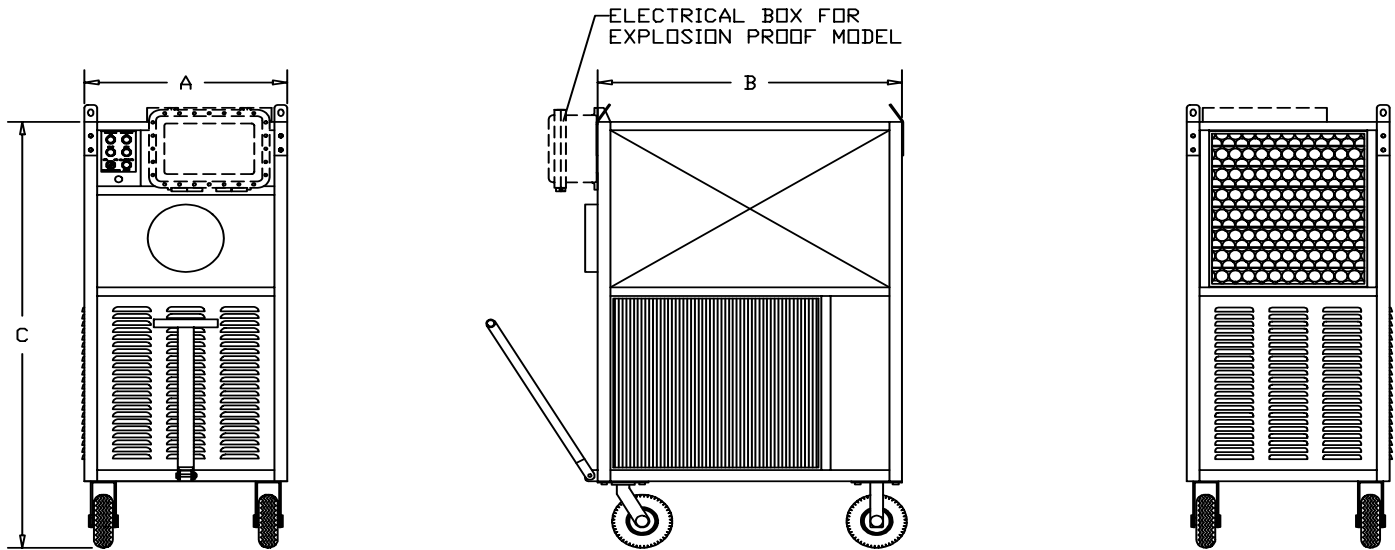


Figure 1: **KoolKart® on Wheels, 2 to 7.5 hp**

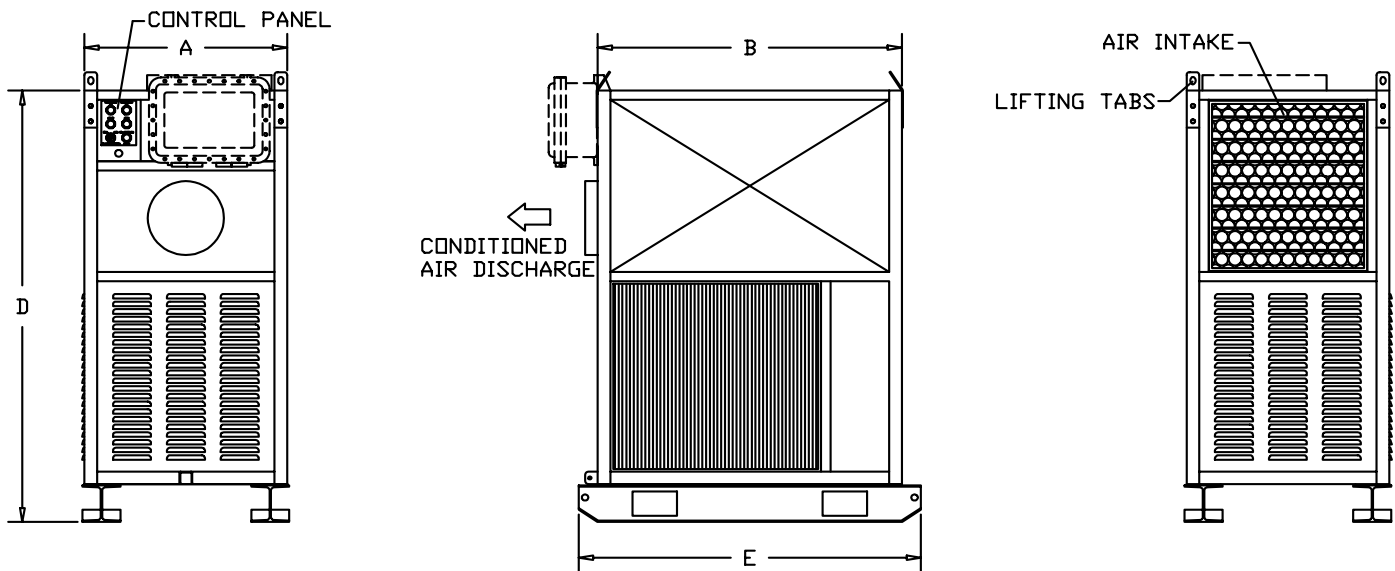


Figure 2: **KoolKart® on Skids, 2 to 7.5 hp**

DIMENSIONS(*)						
MODEL	A	B	C	D	E	Net Wt lbs (kg)
	-----Inches (mm) -----					
KK 24 and KK 35	32.0 (813)	48. (1219)	75.0 (1905)	70.3 (1786)	54.5 (1372)	1100/1200 (499/544)
KK 50 and KK 75	32.0 (813)	48. (1219)	77.0 (1956)	70.3 (1786)	54.5 (1372)	1260/1400 (572/635)

(*) General Information Only. Request Engineering Data Sheet to Verify Critical Dimensions.



MOBILE INDUSTRIAL AIR CONDITIONERS

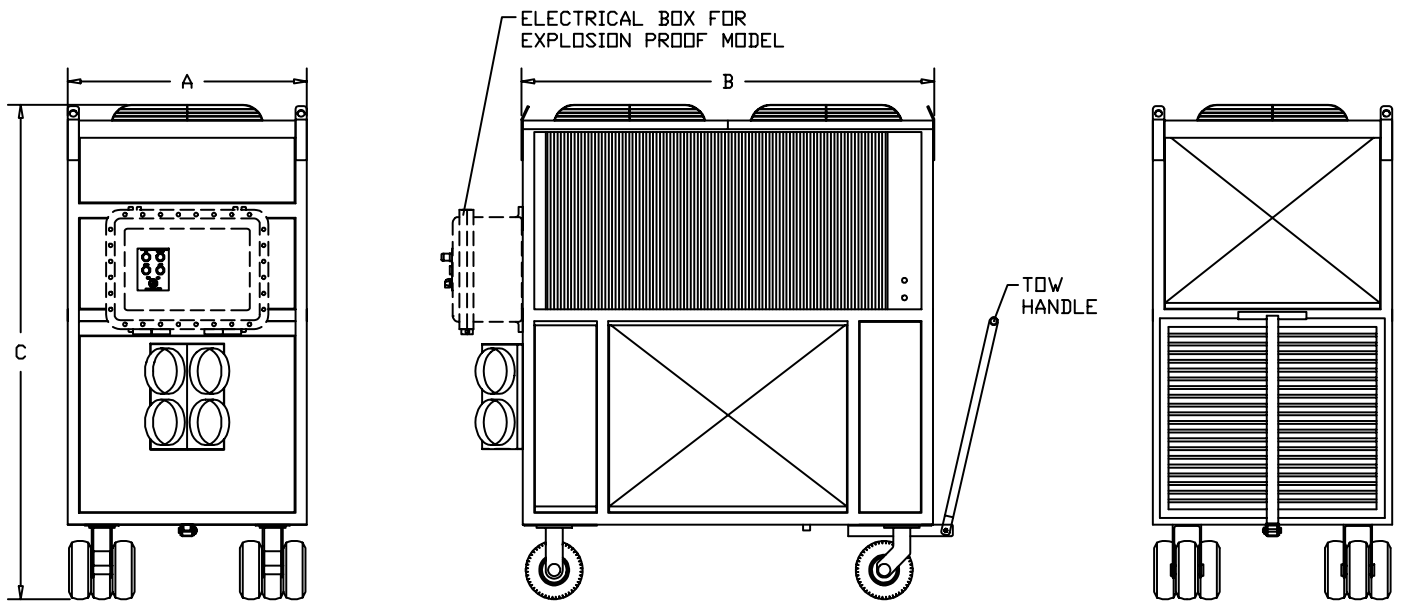


Figure 3: *KoolKart® on Wheels, 10 or 15 hp*

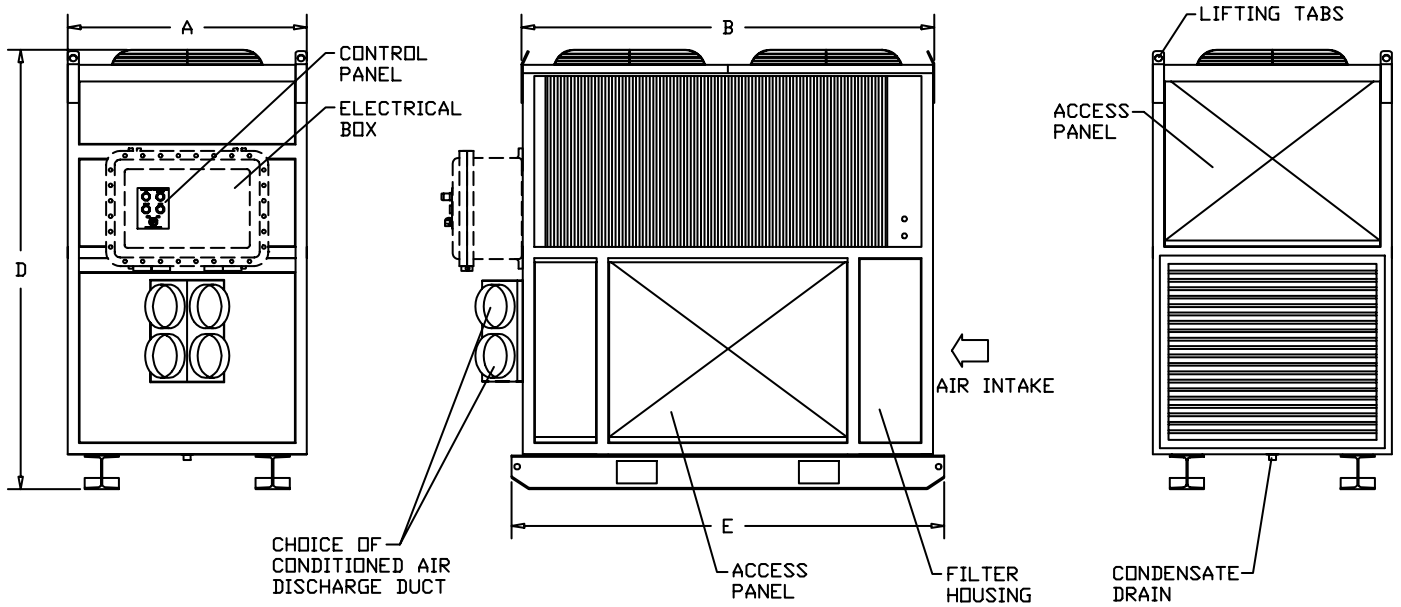


Figure 4: *KoolKart® on Skids, 10 or 15 hp*

MODEL	DIMENSIONS ^(*)					Net Wt lbs (kg)
	A	B	C	D	E	
	-----Inches (mm) -----					
KK 10	42.0 (1067)	72.0 (1829)	85.5 (2172)	78.8 (2002)	76.0 (1930)	1750 (794)
KK 15	42.0 (1067)	72.0 (1829)	85.0 (2159)	78.4 (1991)	76.0 (1930)	1950 (885)

(*) General Information Only. Request Engineering Data Sheet to Verify Critical Dimensions.



MOBILE INDUSTRIAL AIR CONDITIONERS

Schedule 'A'

KoolKart® Specifications and Prices 60 Hertz Models

SPECIFICATIONS

The Mobile Air Conditioner shall be of the heavy duty, compact industrial type. The compressor type shall be (See below, e.g. semi-hermetic). All necessary components shall be installed inside a continuously welded, formed steel frame. Side and end openings shall be covered with minimum 16 gauge flush fitting galvanized steel pans attached with quick access latches or machine thread fasteners. Frame and housing shall have medium blue, textured urethane paint finish applied over a two-part epoxy primer. Carts shall have pneumatic, 10" minimum diameter swivel wheels (8" O.D. for KK-24 and KK-35) with pneumatic tires and a removable tow bar. Overall dimensions shall not exceed (See Figures 1 to 4). (*Alternate*: Equipment shall be mounted on a 6" I-beam skid with sled-type ends and integral openings for fork lift tongues). A belt driven centrifugal blower with pillow block bearings and adjustable speed pulley shall provide discharge air no less than (see Table below) CFM with static pressure no less than 1.25" wg (*Optional*: to 5" wg) from a 12" O.D. (standard, see options) duct collar. Return air flow shall be through a 4" minimum thickness, pleated air filter rated U.L. Class 2. An air-cooled (*Alternate*: water-cooled) condensing unit and a matched evaporator with a maximum of 10 fins per inch shall provide a cooling capacity no less than (see Table below) BTUH at 90°F DB/77°F WB and at 105°F (*Optional*: 115°F⁽⁵⁾) entering condenser air temperature. Condenser and evaporator coils shall be copper tubes with aluminum fins (*Optional*: covered with SaveCoil 101 coil coating flood applied and oven baked). The air conditioner shall meet the requirements of NEMA 3R. (*Alternate*:"meet the requirements of NEMA 7 and NEMA 4 for use in hazardous areas classified under Article 500 of the National Electric Code Class (specify), Group (specify), Division (specify)"). The control panel shall have industrial grade watertight and oil tight pilot lights and push buttons rated NEMA 4/13. Three phase models shall have integral phase indicator.

HOW TO ORDER

KoolKart® Mobile Air Conditioners designated as "SH" models are supplied with Copeland accessible (semi) hermetic compressors; those listed as "H Line" units are shipped with 100% gas-cooled or scroll compressors.

To specify from the table below, select the Model Number from the first column followed by the appropriate detail number shown at the top of the last two columns and identifying the "-SH" or "-H" type of compressor. For example, to order a 63,250 BTUH capacity, 460 Volt, 3-phase, hermetic compressor **KoolKart®**, the order code is: *KK-50-D-H*. Options and Accessories should be ordered from the listing on the back page of this bulletin. For example, the above model in an *explosion-proof* NEC Class I, Group D, Division 2 version should be specified as: *KK-50-D-H-XPID2*.

Model ⁽⁵⁾ Number	Air Flow CFM	-SH	-H	Volts ⁽¹⁾ 60 Hz	Fuse Size ⁽²⁾ Amperes	Wire Size ⁽³⁾ (Up to 50 ft)	-SH	-H
		Cooling ⁽⁶⁾ BTUH	Cooling ⁽⁶⁾ BTUH				Compressor ⁽⁴⁾ US \$	Compressor ⁽⁴⁾ US \$
KK-24-B	800	N/A	21,440	208/230/1	25	# 8	N/A	
KK-24-C	800	N/A	21,440	208/230/3	15	# 12	N/A	
KK-24-D	800	N/A	21,440	460/3	10	# 12	N/A	
KK-35-B	1200	35,900	37,070	230/1	40/35	# 6/8		
KK-35-C	1200	35,200	41,880	208/230/3	25/35	# 8/8		
KK-35-D	1200	35,200	44,130	460/3	15/15	#12/12		
KK-50-B	1800	55,700	63,250	230/1	55/70	# 4/2		
KK-50-C	1800	55,700	63,250	208/230/3	35/40	# 8/6		
KK-50-D	1800	58,100	63,250	460/3	20/20	#10/10		
KK-75-C	2800	94,900	93,570	208/230/3	55/60	# 4/2		
KK-75-D	2800	94,900	93,570	460/3	30/30	# 8/8		
KK-100-D	4000	N/A	125,000	460/3	35	# 6	N/A	
KK-150-D	6000	N/A	187,500	460/3	55	# 2	N/A	

(1) Fifty (50) Hertz models rated for 220/1 and 400/3 Volts (± 10%) are described in Bulletin KOMO5PRL.

(2) Delay Type. First number is for semi-hermetic models, second number for hermetic.

(3) For power cables longer than 50' select next lower wire size number.

(4) SH=semi-hermetic; GCH=100% gas cooled hermetic; SCR=Scroll hermetic

(5) For *High Ambient* models add "/HT" to model number.

(6) Rated at 105°F (40°C). High ambient temperature models rated at 115°F (36°C) have approximately 10% less capacity. See *High Ambient Engineering Data Sheet*.

See Other Side for Options and Accessories



MOBILE INDUSTRIAL AIR CONDITIONERS

Schedule 'A'

ACCESSORIES and OPTIONS

ORDER CODE	DESCRIPTION	US \$
-DWAL-1	Diffuser Wall, Aluminum, free standing for horizontal air discharge or may be suspended from ceiling for downward air flow	
-Y-8-8	"Y" Adapter, for use with two (2) 8" I.D. flexible ducts	
-Y-8-8-8-8	"Y" Adapter, for use with four (4) 8" I.D. flexible ducts	
-Y-10-10	"Y" Adapter, for use with two (2) 10" I.D. flexible ducts	
-Y-12-12	"Y" Adapter, for use with two (2) 12" I.D. flexible ducts	
-FDS-8	Flexible Duct, 8" I.D., Neoprene polyester with wear strip	per 10' length ⁽³⁾
-FDS-10	Flexible Duct, 10" I.D., Neoprene polyester with wear strip	per 10' length ⁽³⁾
-FDS-12	Flexible Duct, 12" I.D., Neoprene polyester with wear strip	per 10' length ⁽³⁾
-FDI-8	Flexible Duct, Insulated, 8" I.D., Neoprene polyester with wear strip	per 10' length ⁽³⁾
-FDI-10	Flexible Duct, Insulated, 10" I.D., Neoprene polyester with wear strip	per 10' length ⁽³⁾
-FDI-12	Flexible Duct, Insulated, 12" I.D., Neoprene polyester with wear strip	per 10' length ⁽³⁾
-101	Corrosion Resistant Coil Finish, SaveCoil 101 baked phenoxy	
-PC-12	Power Cable, Type SO or SJ, # 12, 10 ft. length installed	\$ ____ plus ____/ft.
-PC-10	Power Cable, Type SO or SJ, # 10, installed, 10 ft. installed	\$ ____ plus ____/ft.
-PC-8	Power Cable, Type SO or SJ, # 8, installed, 10 ft. installed	\$ ____ plus ____/ft.
-PC-6	Power Cable, Type SO or SJ, # 6, installed, 10 ft. installed	\$ ____ plus ____/ft.
-PC-4	Power Cable, Type SO or SJ, # 4, installed, 10 ft. installed	\$ ____ plus ____/ft.
-PC-2	Power Cable, Type SO or SJ, # 2, installed, 10 ft. installed	\$ ____ plus ____/ft.
-EH-1	Electric Heaters ⁽¹⁾ , 5 kw (16 kw), with Heat/Cool Thermostat	installed
-EH-2	Electric Heaters ⁽¹⁾ , 10 kw (33 kw), with Heat/Cool Thermostat	installed
-EH-3	Electric Heaters ⁽¹⁾ , 15 kw (50 kw), with Heat/Cool Thermostat	installed
-WC	Water-Cooled Condenser substituted for air-cooled	
-CD	Condenser air discharge duct, shipped separately	
-LT	Lifting Tabs, for KK-24 to KK-75, (Standard on KK-100 and 150)	
-PF	Prefilter, washable, for use in extremely dusty environments, attaches to and protects main pleated filter	installed
-CP	Condensate Pump ⁽¹⁾ , for use where gravity drainage is not possible	installed
-FR	Air Filters, Replacement, 23-7/8" x 23-7/8" x 4"	Box of 3
-FH	HEPA Filter Housing, with transition, less filters	shipped separately
-FRHEPA	Filters, HEPA, 99.97% Efficient; Industrial Grade	Set of 3
-DH	Dehumidification Model KoolKart [®]	
-SM	Skid Mounted, 6" I-Beam Skid Support w/cut-outs for lift forks	
-XP2	Explosion-Proof, NEC Cl. I, Groups C+D, Division 2	
-XP1-SM	Explosion-Proof, NEC Cl. I and II, Groupss C, D, F and G, Division 1 ⁽²⁾	
/EXP	Export Crating, for sea shipment and rough handling,	KK 25 to KK 75 KK 100 to KK 150

(1) Number in parenthesis for KK 100 and 150. Heaters are not available in explosion-proof models.

(2) Explosion proof models rated for Division 1 are not offered with installed power cords due to code restrictions. Units are skid mounted unless otherwise specified. If wheel equipped option is required, omit "-SM" from order code.

(3) Price includes connector and stainless screw clamp

Your Representative is: