



Landmark® Rooftop Packaged Units

Engineered for superior
performance and reliability



Exclusively distributed by



Landmark® Rooftop Packaged Units

Introduction & Overview

The Lennox® Landmark® Rooftop reverse cycle (heat pump) Packaged Units has been specifically engineered for superior performance and reliability. Designed with the installer in mind, Landmark® incorporates many innovative features which can save time and money on site.

Market Segments

- Retail
- Offices
- Industrial
- Education
- Civic
- Light Commercial



Features & Benefits

The Lennox® Landmark® Rooftop Packaged Unit offers:

- Reliable scroll compressor technology with isolated compressor compartment for ease of service.
- Pre-determined fan motor with slide out blower for simple, fast air flow adjustments and ease of service.
- TX valves for improved efficiency and refrigerant control.
- Independent motor mount for ease of service.
- Full perimeter base rail for structural integrity during transport. Rigging holes and forklift slots for ease of handling and transport from multiple angles.
- Removable corrosion resistant drain pan to minimize risk of water leaks.

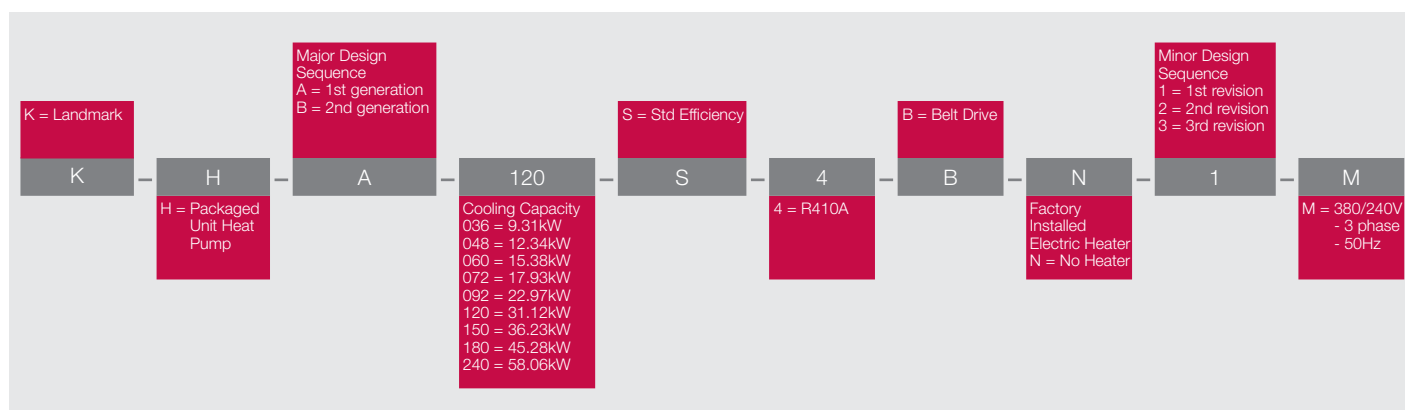
Control Options

Landmark® can be configured with the following options:

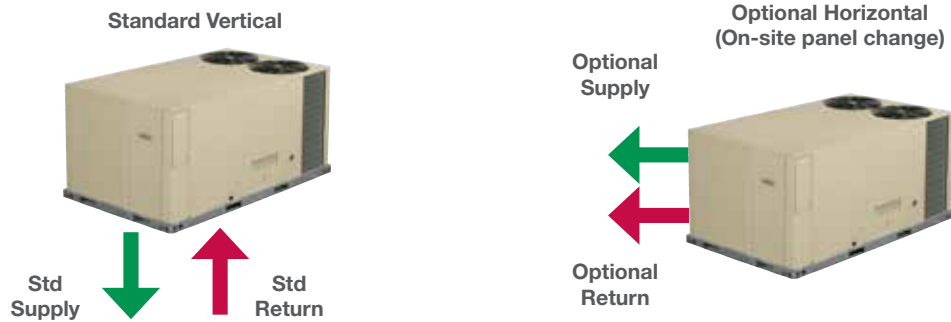
- Commercial Touchscreen Thermostat
- ComfortSense 7
- ComfortSense 3000 – Commercial
- ComfortSense 7500 – Programmable
- BMS HLI interface: BACnet, LonWorks.



Nomenclature



Flexible Handing Options



Optional Roof Curb

Designed for ease of installation, an optional roof curb can save significant time and money on site. Other benefits include improved efficiency and aesthetics compared to external ductwork, with one roof penetration. Heatcraft offers custom-made roof curbs to suit your installation. For replacement units Landmark® Rooftop Packaged Units can be connected to your existing roof curb with a custom roof curb adaptor.



Optional Accessories

MODEL NUMBER (REVERSE CYCLE)	KHA036	KHA048	KHA060	KHA072	KHA092	KHA120	KHA150	KHA180	KHA240
CONDENSATE DRAIN TRAP - PVC	X	X	X	X	X	X	X	X	X
CORROSION PROTECTION	O	O	O	O	O	O	O	O	O
LOW AMBIENT KIT	X	X	X	X	X	X	X	X	X
COIL GUARDS	X	X	X	X	X	X	X	X	X
HAIL GUARDS	X	X	X	X	X	X	X	X	X
STANDARD ECONOMIZER WITH OUTDOOR AIR HOOD	OX	OX	OX	OX	OX	OX	OX	OX	OX
ENTHALPY CONTROL	X	X	X	X	X	X	X	X	X
OUTDOOR AIR DAMPERS - MANUAL	OX	OX	OX	OX	OX	OX	OX	OX	OX
OUTDOOR AIR DAMPERS - MOTORIZED	OX	OX	OX	OX	OX	OX	OX	OX	OX
POWER EXHAUST FAN	X	X	X	X	X	X	X	X	X
BAROMETRIC RELIEF	X	X	X	X	X	X	X	X	X
CO2 SENSOR	X	X	X	X	X	X	X	X	X
SMOKE DETECTOR - SUPPLY OR RETURN	X	X	X	X	X	X	X	X	X

X = Field installed; O = Factory option must be specified at time of order. Lead-times apply; OX = Can be either Field installed or Factory Option

Field Information

MODEL NUMBER (REVERSE CYCLE)		KHA036	KHA048	KHA060	KHA072	KHA092	KHA120	KHA150	KHA180	KHA240
REFRIGERANT (R410A)	NO. OF CIRCUITS	1	1	1	1	2	2	2	2	3
	FACTORY CHARGE (kg)	5.67	5.95	7.26	9.30	5.70	6.80	10.00	9.53	11.79
						5.40	6.80	10.40	9.53	11.79
CONDENSATE DRAIN CONNECTION	SIZE/TYPE	(1) 1" NPT							(1) 1" FPT	
AIR DUCT SPIGOT (STD)	SUPPLY H x W (mm)	508 X 457 (H)	508 X 495 (H)	509 X 457 (H)	509 X 495 (H)	394 X 762 (H)	394 X 762 (H)	394 X 762 (H)	508 X 711 (2) (V)	508 X 711 (2) (V)
	RETURN H x W (mm)	737 X 279 (H)	737 X 279 (H)	737 X 279 (H)	737 X 279 (H)	762 X 394 (H)	762 X 394 (H)	762 X 394 (H)	381 X 1537 (V)	381 X 1537 (V)

H - Horizontal

V - Vertical

Landmark® Rooftop Packaged Units



Technical Data Summary

MODEL NUMBER (REVERSE CYCLE)		KHA036	KHA048	KHA060	KHA072	KHA092	KHA120	KHA150	KHA180	KHA240										
TOTAL CAPACITY AS/NZS 3823.1.2	COOLING ¹ kW	9.31	12.34	15.38	17.93	22.97	31.12	36.23	45.28	58.06										
	HEATING ² kW	9.06	12.47	15.74	17.75	22.60	30.02	35.25	43.35	54.23										
NETT CAPACITY AS/NZS 3823.1.2	COOLING ¹ kW	8.88	11.68	14.62	17.20	22.18	29.99	34.00	43.80	54.75										
	HEATING ² kW	9.49	13.13	16.49	18.48	23.39	31.13	37.49	44.83	56.65										
INPUT POWER AS/NZS 3823.1.3	COOLING kW	2.8	3.7	4.5	5.3	6.4	8.8	10.7	13.8	17.4										
	HEATING kW	2.4	3.1	3.8	4.9	5.6	7.6	10.1	11.9	14.6										
EER AS/NZS 3823.1.2	COOLING	3.23	3.15	3.25	3.27	3.49	3.41	3.19	3.17	3.15										
COP AS/NZS 3823.1.2	HEATING	3.97	4.26	4.33	3.81	4.16	4.12	3.73	3.76	3.90										
MEPS COMPLIANT		YES	YES	YES	YES	YES	YES	YES	YES	YES										
HEAT EXCHANGER	TYPE	COPPER TUBE WITH RIPPLED-EDGE ALUMINUM FINS																		
COMPRESSOR	TYPE	SCROLL																		
FANS	OUTDOOR TYPE	DIRECT DRIVE AXIAL																		
	INDOOR TYPE	BELT DRIVEN, FC DWDI CENTRIFUGAL																		
POWER SUPPLY	V / Ø / Hz	380 - 420 / 3 / 50																		
COMPRESSOR 1	RATED LOAD AMPS	5.4	6.1	7.8	9.7	6.1	7.8	9.7	12.2	16.7										
	LOCKED ROTOR AMPS	38	43	51.5	64	41	51.5	64	101	111										
COMPRESSOR 2	RATED LOAD AMPS	—	—	—	—	6.1	7.8	9.7	12.2	16.7										
	LOCKED ROTOR AMPS	—	—	—	—	41	51.5	64	101	111										
OUTDOOR FAN MOTOR	NUMBER OF FANS	1	1	1	1	2	2	3	4	4										
	FULL LOAD AMPS	1.1	1.1	1.3	1.5	1.3	1.5	1.3	1.3	1.3										
	TOTAL AMPS	1.1	1.1	1.3	1.5	2.6	3.0	3.9	5.2	5.2										
POWER EXHAUST 0.25 kW	NUMBER OF FANS	1	1	1	1	1	1	1	2	2										
	FULL LOAD AMPS	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3										
	TOTAL AMPS	1.3	1.3	1.3	1.3	1.3	1.3	1.3	2.6	2.6										
INDOOR BLOWER MOTOR	kW	1.5	1.5	1.5	1.5	1.5	2.2	3.7	1.5	2.2	3.7	2.2	3.7	5.6	3.7	5.6	7.5			
	FULL LOAD AMPS	3.6	3.6	3.6	3.6	3.6	5.3	8.2	3.6	5.3	8.2	3.6	5.3	8.2	5.3	8.2	11.7	8.2	11.7	16.3
MAXIMUM OVERCURRENT PROTECTION	UNIT ONLY	15	15	20	25	25	25	30	30	30	35	35	40	40	50	50	50	60	70	70
	WITH (1) 0.25 kW POWER EXHAUST	15	15	20	25	25	25	30	30	30	35	40	40	40	50	50	50	70	70	70
AIRFLOW (EVAPORATOR)	MAXIMUM (L/S)	708	944	1133	1369	2831	2477		2477		2477		4250		4250					
	NOMINAL (L/S)	545	755	935	970	1415	1700		1700		2124		2830		3540					
	MINIMUM (L/S)	425	566	755	897	1062	1062		1062		1062		2240		2240					
EXTERNAL STATIC PRESSURE	MAXIMUM AIRFLOW (Pa)	25	25	25	25	150	50		50		50		100		100					
	MINIMUM AIRFLOW (Pa)	400	400	400	400	600	650		650		650		650		650					
DIMENSIONS (UNIT)	HEIGHT (mm)	987	987	1191	1191	1191	1191		1191		1191		1378		1378					
	WIDTH (mm)	2165	2165	2165	2496	2572	2572		2572		3159		3369		3369					
	DEPTH (mm)	1194	1194	1194	1194	1527	1527		1527		1527		2315		2315					
NET WEIGHT	kg	243	253	303	340	477	522		522		612		885		975					
SOUND POWER LEVEL	dBA	75	75	82	83	88	88		88		88		93		93					

1. Total cooling capacity at AS/NZS 3823.1.3 rating conditions: temperature of air entering on outdoor side 35°C DB / 24°C WB and on indoor side 27°C DB / 19°C WB.

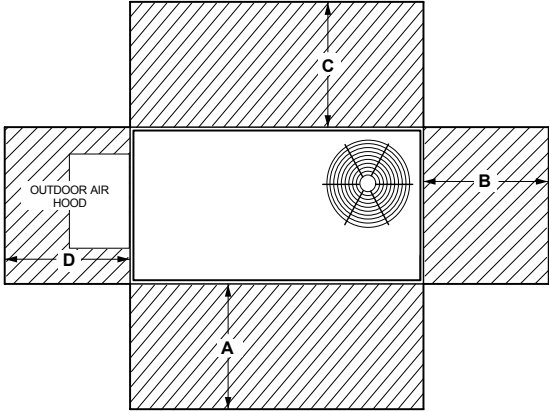
2. Total heating capacity at AS/NZS 3823.1.3 rating conditions: temperature of air entering on outdoor side 7°C DB / 6°C WB and on indoor side 20°C DB / 15°C WB.

Unit Clearances

KHA036S4 to KHA072S4

UNIT CLEARANCE ¹	A	B	C	D	TOP CLEARANCE
	mm	mm	mm	mm	
Service Clearance	914	914	914	914	Unobstructed
Minimum Operation Clearance	914	914	914	914	

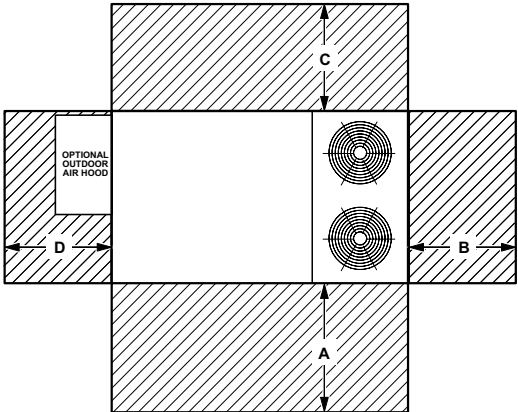
NOTE - Entire perimeter of unit base requires support when elevated above the mounting surface.
¹ Service Clearance - Required for removal of serviceable parts.
 Minimum Operation Clearance - Required clearance for proper unit operation.



KHA092S4B to KHA150S4B

UNIT CLEARANCE ¹	A	B	C	D	TOP CLEARANCE
	mm	mm	mm	mm	
Service Clearance	1524	914	914	1524	Unobstructed
Minimum Operation Clearance	914	914	914	914	

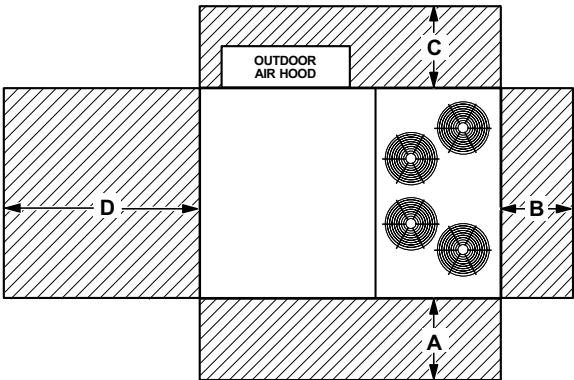
NOTE - Entire perimeter of unit base requires support when elevated above the mounting surface.
¹ Service Clearance - Required for removal of serviceable parts.
 Minimum Operation Clearance - Required clearance for proper unit operation.



KHA180S4B to KHA240S4B

UNIT CLEARANCE ¹	A	B	C	D	TOP CLEARANCE
	mm	mm	mm	mm	
Service Clearance	1524	914	914	1676	Unobstructed
Minimum Operation Clearance	1143	914	914	1041	

NOTE - Entire perimeter of unit base requires support when elevated above the mounting surface.
¹ Service Clearance - Required for removal of serviceable parts.
 Minimum Operation Clearance - Required clearance for proper unit operation.



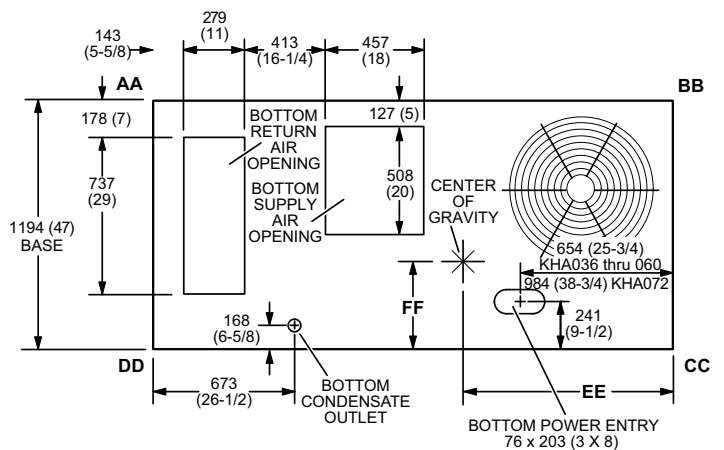
Landmark® Rooftop Packaged Units

Dimensions

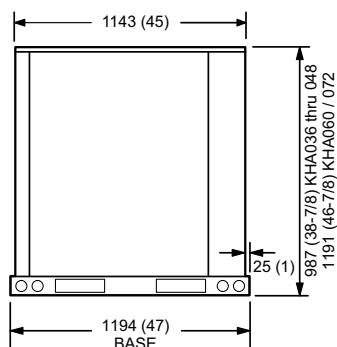
KHA036S4 to KHA072S4

MODEL NUMBER	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.
	kg	kg	kg	kg	kg	kg	kg	kg	mm	mm	mm	mm
KHA036S4	42	53	51	60	82	96	68	85	978	1016	457	457
KHA048S4	44	55	53	62	86	100	71	88	978	1016	457	457
KHA060S4	52	63	64	71	103	115	84	101	978	1016	457	457
KHA072S4	73	84	82	94	106	122	94	109	1174	1174	521	521

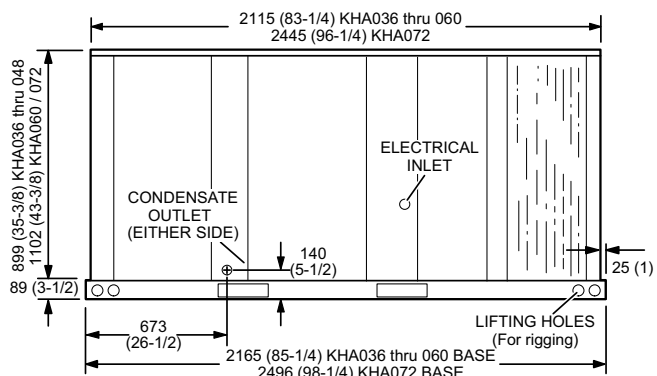
Base Unit - The unit with standard heat exchanger NO OPTIONS.
Max. Unit - The unit with ALL OPTIONS Installed (Economizer, etc.).



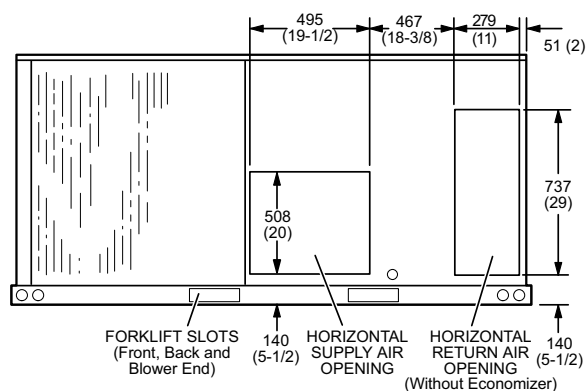
TOP VIEW (Base)



END VIEW



SIDE VIEW



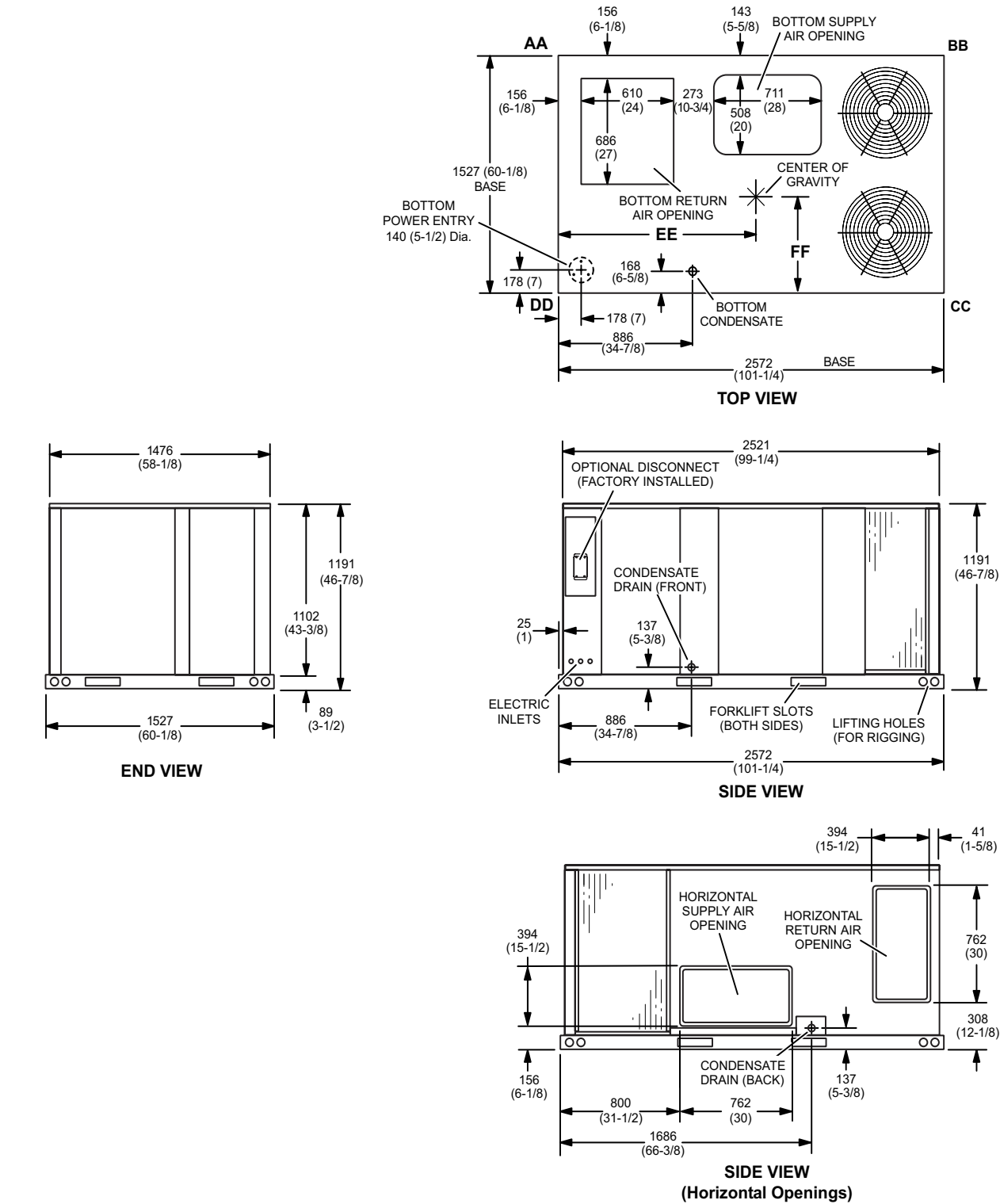
BACK VIEW

Dimensions

KHA092S4B & KHA120S4

MODEL NUMBER	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.
	kg	kg	kg	kg	kg	kg	kg	kg	mm	mm	mm	mm
KHA092S4	120	140	108	123	117	131	133	154	1181	1156	622	648
KHA120S4	129	151	120	135	131	145	143	165	1181	1156	622	648

Base Unit - The unit with NO INTERNAL OPTIONS.
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



Landmark® Rooftop Packaged Units

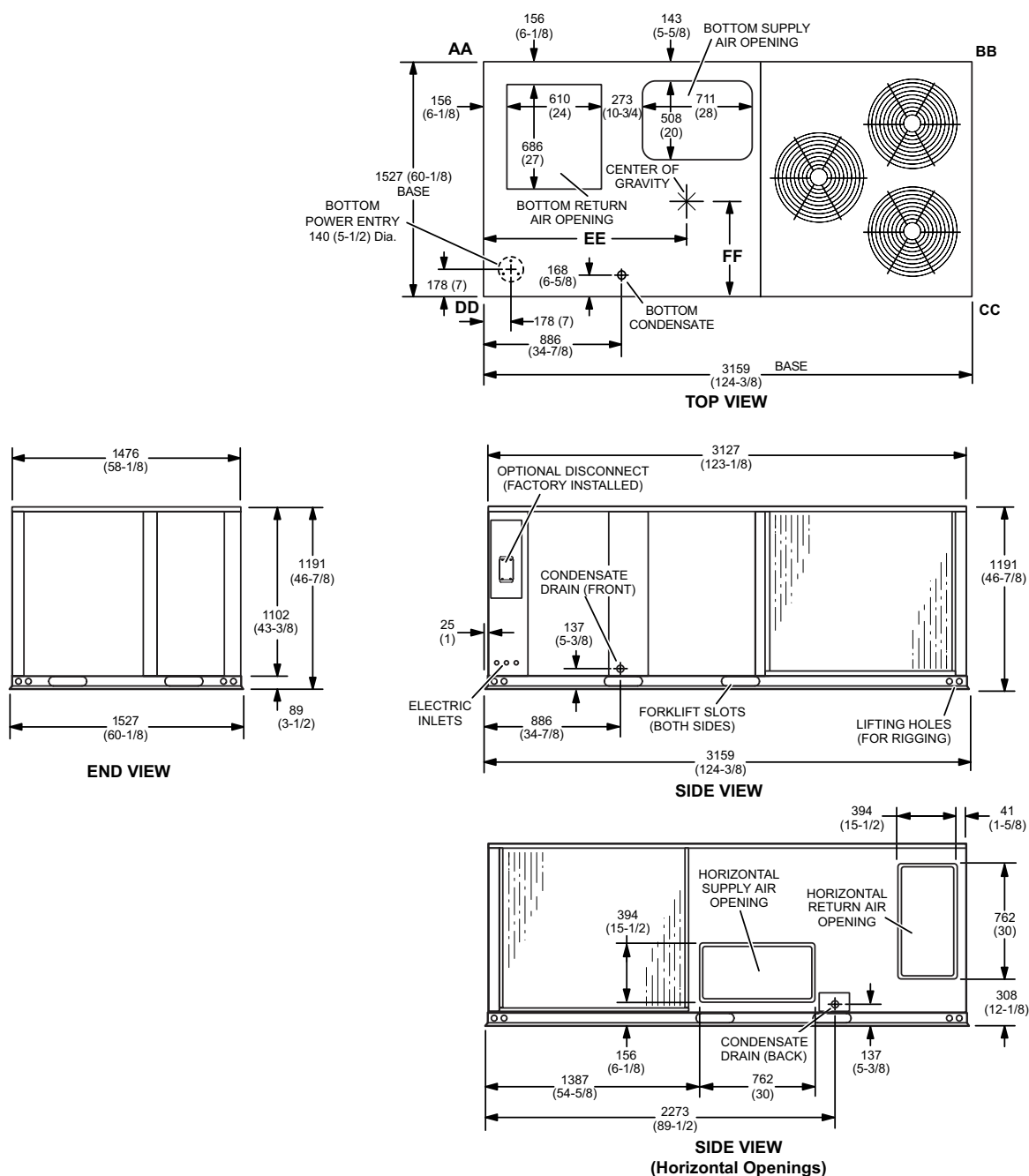
Dimensions

KHA150S4

MODEL NUMBER	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.
	kg	kg	kg	kg	kg	kg	kg	kg	mm	mm	mm	mm
KHA150S4	158	180	137	153	146	160	171	193	1181	1156	622	648

Base Unit - The unit with NO INTERNAL OPTIONS.

Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



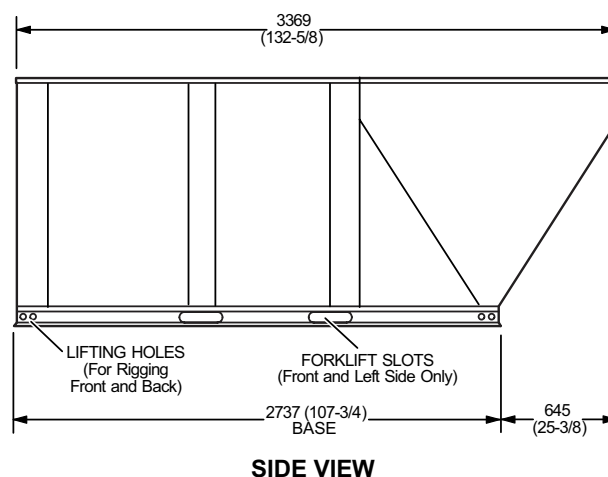
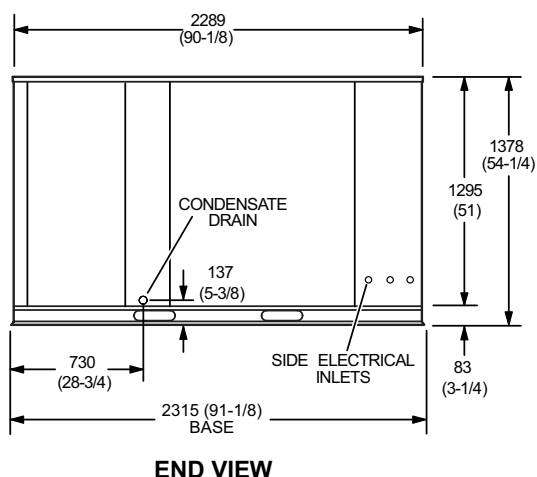
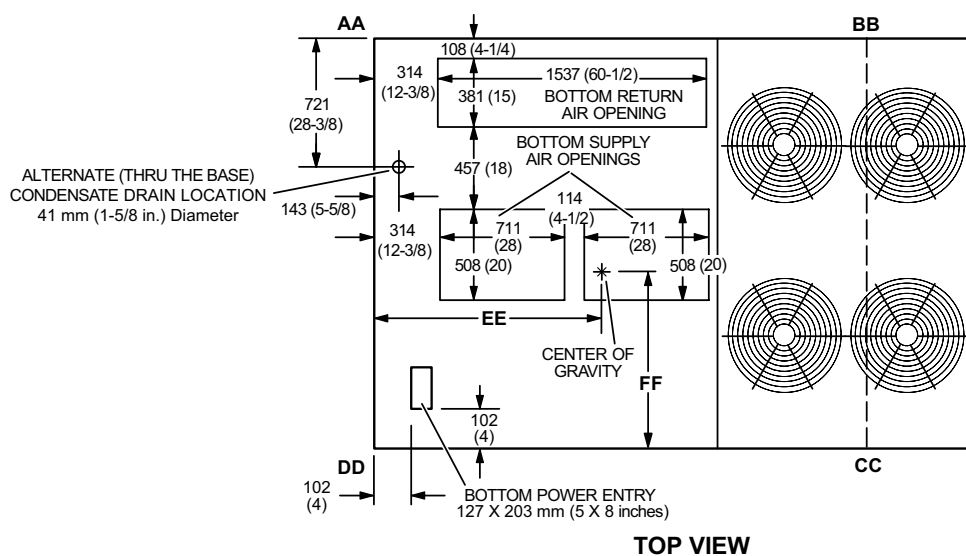
Dimensions

KHA180S4 & KHA240S4

MODEL NUMBER	CORNER WEIGHTS								CENTER OF GRAVITY			
	AA		BB		CC		DD		EE		FF	
	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.	Base	Max.
	kg	kg	kg	kg	kg	kg	kg	kg	mm	mm	mm	mm
KHA180S4	182	232	220	258	284	306	235	275	1499	1441	1010	1060
KHA240S4	199	253	235	274	314	335	267	309	1480	1422	991	1041

Base Unit - The unit with NO INTERNAL OPTIONS.

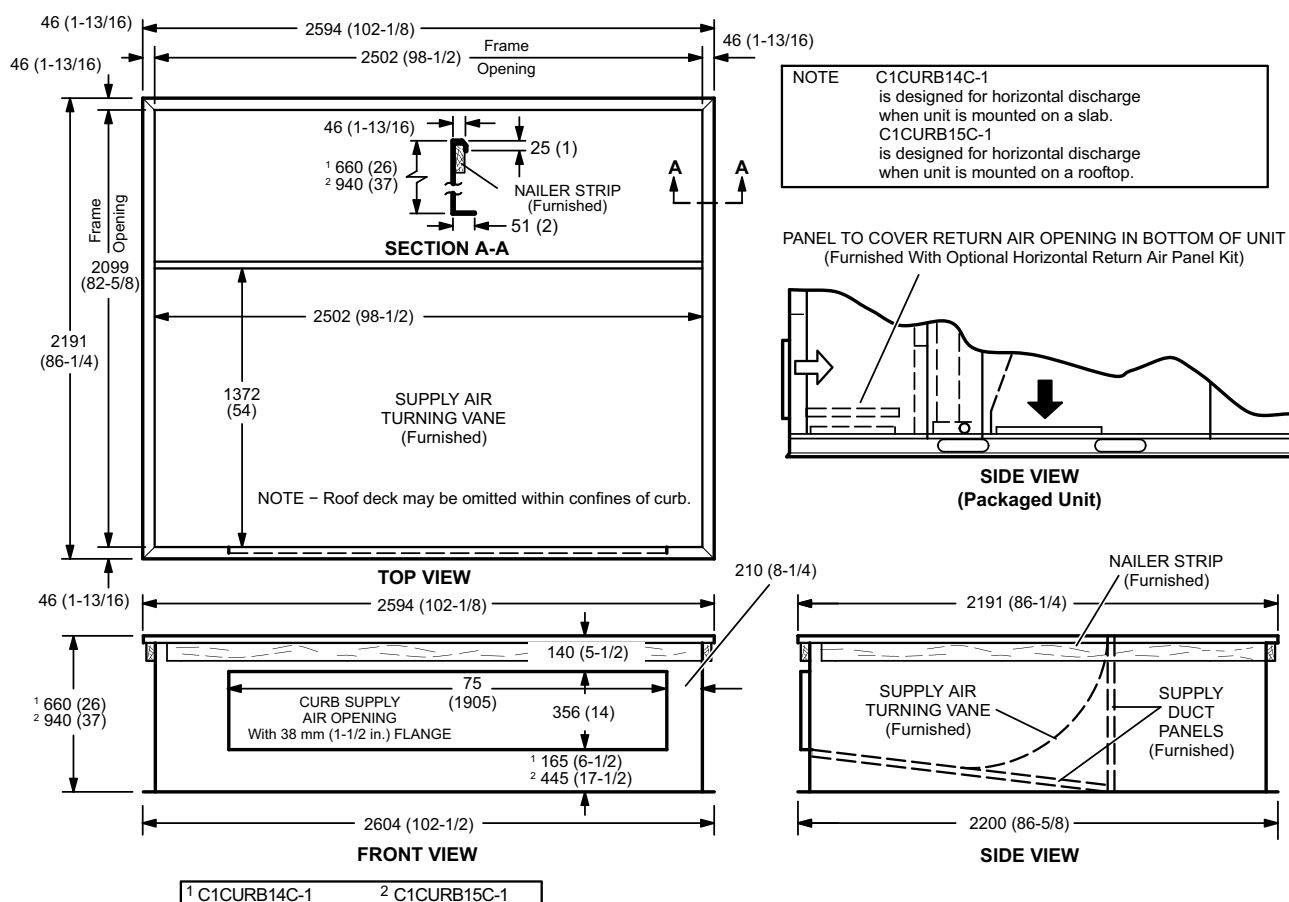
Max. Unit - The unit with ALL INTERNAL OPTIONS Installed. (Economizer, Standard Static Power Exhaust Fans, Controls, etc.). Does not include accessories external to unit or high static power exhaust.



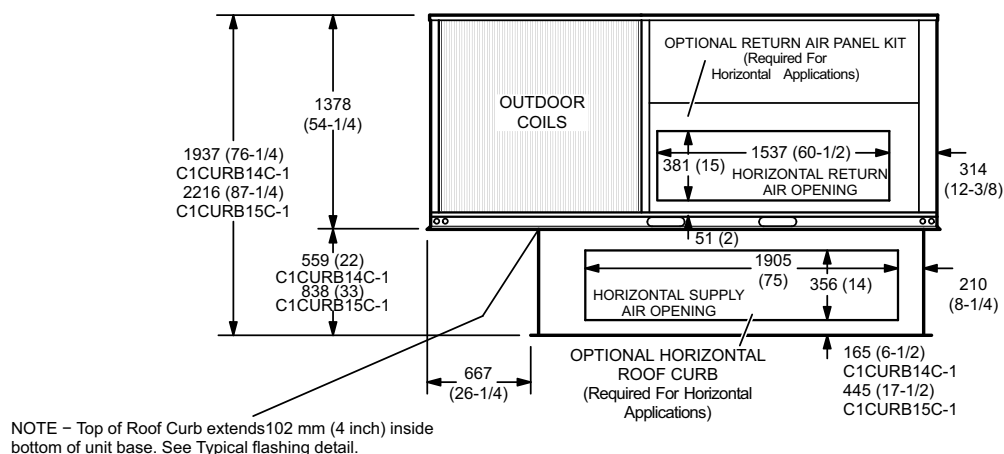
Landmark® Rooftop Packaged Units

Dimensions - Accessories - KHA180S4 & KHA240S4

Optional Horizontal Roof Curb - Requires Optional Horizontal Return Air Panel Kit



HORIZONTAL SUPPLY AND RETURN AIR OPENINGS WITH HORIZONTAL ROOF CURB



Notes



Handwriting practice area consisting of 20 horizontal lines.



The contents of this brochure are copyright protected and may not be reproduced in any form without the written consent of Heatcraft.

Recommendations and advice regarding the use of the products described in this publication are to be taken as a guide only and are given without liability on the part of the company or its employees. As Heatcraft continually improves its product range and processes, Heatcraft reserves the right to change product specifications without any prior notification. Please refer to the Heatcraft website for the latest version of this publication.

The purchaser should independently determine the suitability of the product for the intended use and application and that the product complies with relevant standards. Heatcraft accepts no responsibility for loss or damage (direct or indirect and including consequential loss, loss of profits or opportunity and economic loss) however arising which results from any errors or omissions in the information contained in this publication or arising from the use or application of the information contained herein.

LENNOXLANDMARK_1116

australia

13 23 50

lennoxaustralia.com.au

new zealand

0800 653 330

lennoxnz.co.nz

