

# LENNOX

# CHA16 SERIES

## COOLING UNITS WITH OPTIONAL ELECTRIC HEATING

NOMINAL COOLING RANGE  
23.5 to 38.5kW

CHA16 units designed for downflow or horizontal supply and return air application offer a flexible packaged rooftop system with air distribution and control options to meet a number of application configurations.

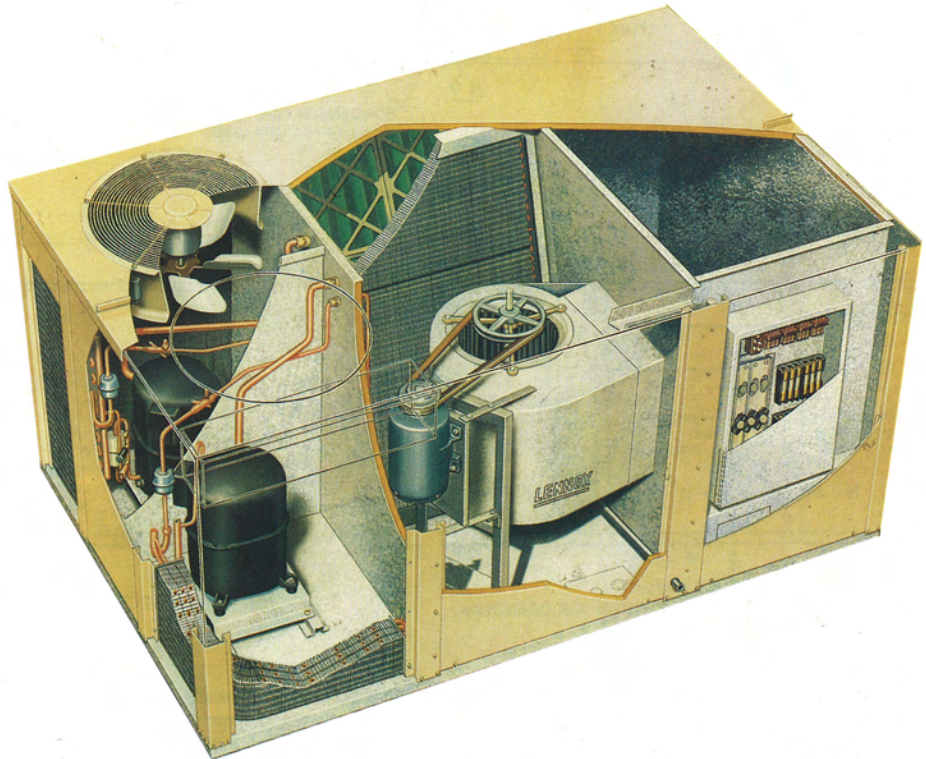
This leaflet is intended as an aid to initial equipment selection and shows nominal capacities. Refer to relevant Engineering Handbook data sheets before final specification.

### Features

- Copper tube coils.
- Dual hermetic compressors.
- Dual refrigerant coils.
- High capacity driers.
- High pressure switch.
- Low pressure switch.
- Powerful belt driven centrifugal blower with adjustable pulley.
- Air filters.
- Rugged double skinned weather resistant cabinet.

### Optional equipment

- Electric heating.
- Roof mounting frame.
- Enthalpy controlled Economiser.
- Status panels.
- Manual or automatic fresh air/exhaust dampers.
- Power exhaust.
- Night setback kit.
- Timed-off control.
- Low ambient control.
- Control systems.



## Selector

Model number	CHA16-953	CHA16-1353	CHA16-1603
Total cooling capacity (kW) (1)	23.7	32.0	38.4 (2)
Dehumidifying capacity	23%	21%	28%
Condenser air volume (m <sup>3</sup> /s)	2.15	2.90	3.55
Condensate drain size fpt (in)	3/4	3/4	3/4
Net weight basic unit (kg)	347	479	517
Optional electric heat model	ECH16-95	ECH16-135	ECH16-160
Electric heat capacity (kW)	7.7 to 30.6	11.5 to 38.3	11.5 to 38.3
Optional roof mounting frame (kg)	RMF16-95 (47)	RMF16-135/160 (54)	RMF16-135/160 (54)
Optional Economiser damper (kg)	REMD16M-95 (54)	REMD16M-135 (57)	REMD16M-160 (64)
Optional exhaust dampers (kg)	GED16-95/135/160. (2) use with REMD16M.		
Optional horizontal economiser dampers (kg)	EMDH16M-95 (54)	EMDH16M-135 (62)	EMDH16M-160 (67)
Optional horizontal exhaust dampers (kg)	GEDH16-95/135/160 (3) use with EMDH16M.		
Optional horizontal supply & return air kit (kg)	LB.55756BA (14)	LB.55756BB (16)	LB.55756BC (19)
Optional bottom power entry kit (kg)	LB.55757CA (5)	LB.55757CA (5)	LB.55757CA (5)
Optional ceiling supply and return air diffusers (kg)	Step down	RTD11-95 (40)	RTD11-135 (57)
	Flush	FD11-95 (34)	FD11-135 (43)
	Transition	SRT16-95 (13)	SRT16-135 (17)
Optional outdoor air dampers (kg)	OAD16-95 (19)	OAD16-135 (20)	OAD16-160 (20)
Optional automatic OAD16 damper kit (kg)	35G21 (3)	35G21 (3)	35G21 (3)

(1) Rated at 60 l/s evaporator air volume per kW cooling, 35°C outdoor air temperature, 27°C db and 19.4°C wb entering evaporator air  
(2) Rated at ARI standard 270.

## Blower performance

Model number	Nominal motor output		Minimum air at external static pressure		Maximum air at external static pressure	
	(kW)	(hp)	(m <sup>3</sup> /s)	(Pa)	(m <sup>3</sup> /s)	(Pa)
CHA16-953	1.5 to 1.7	2.0 to 2.3	1.25	325	1.80	100
CHA16-1353	1.5 to 1.7	2.0 to 2.3	1.70	325	2.45	150
CHA16-1603	2.2 to 2.5	3.0 to 3.45	2.00	325	2.75*	325*

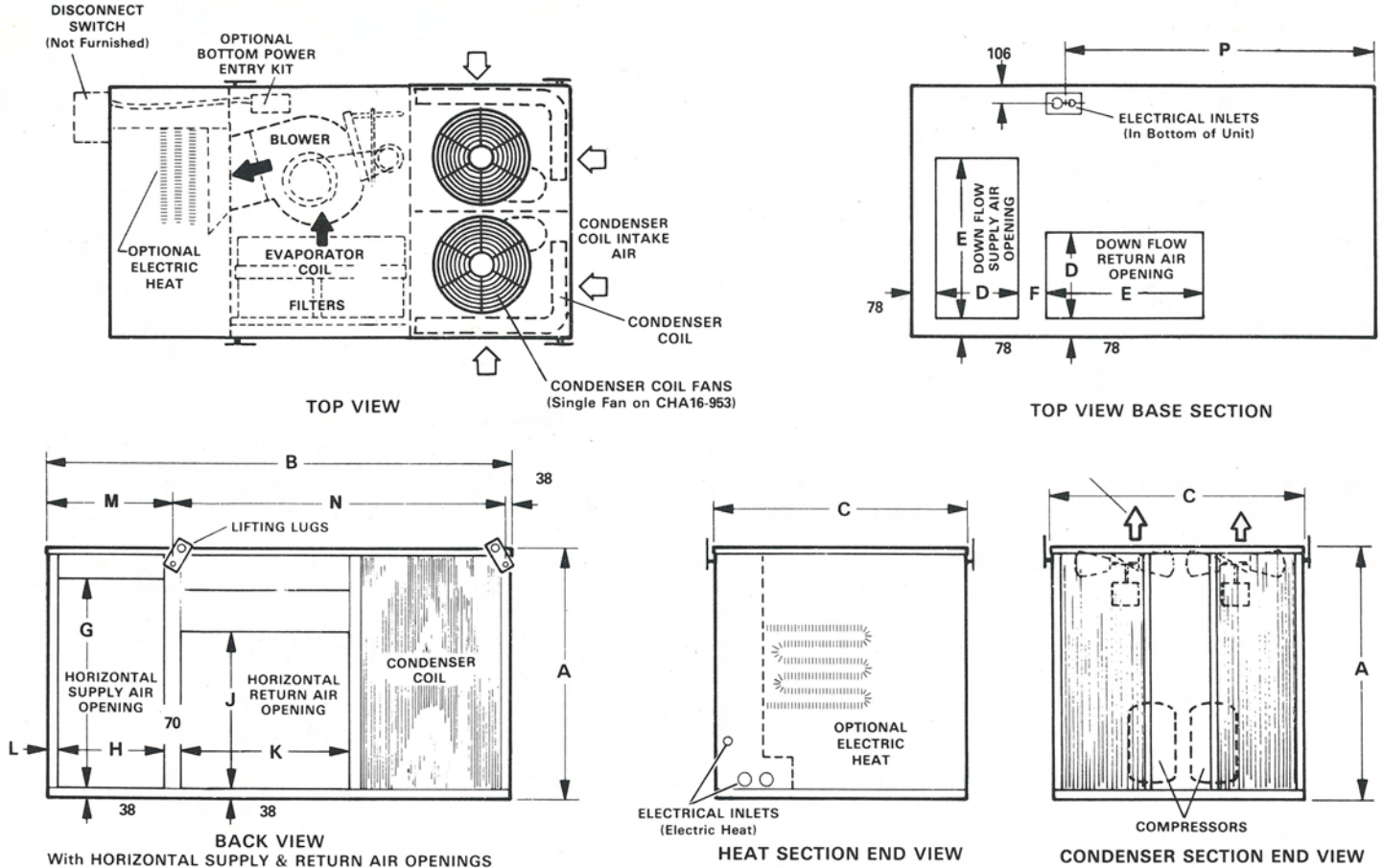
\*Field fitted drive required for external static pressure over 150 Pa.



# SINGLE PACKAGE AIR CONDITIONING

## Dimensions – mm

## CHA16 basic unit



Note: Allow a further 356mm to height for roof mounting frame if used.

Model number	A	B	C	D	E	F	G	H	J	K	L	M	N	P
CHA16-953	991	2248	1219	419	772	143	816	494	625	838	41	562	1648	1384
CHA16-1353	1168	2388	1524	610	772	113	994	641	803	838	51	724	1626	1384
CHA16-1603	1168	2591	1524	610	965	113	994	641	803	1118	51	724	1829	1588

## Installation clearances (Note. leave top unobstructed)

Model number	CHA16-953			CHA16-1353			CHA16-1603		
	Ends	Front	Rear	Ends	Front	Rear	Ends	Front	Rear
Basic unit	1219*	914	914	1219*	914	914	1219*	914	914
with EMDH16M	1219*	914	1524	1219*	914	1524	1219*	914	1524
with REMD16M	1219*	914	1524	1219*	914	1524	1219*	914	1524

\*914 required for condenser coil end.

## Electrical data

Model number	CHA16-953	CHA16-1353	CHA16-1603
Line voltage & phase 50Hz	380/420 3 Phase with neutral		
Unit maximum starting current (A)	69.7	75.8	116.4
Unit maximum running current (A)	19.0	23.7	45.2

Note. Allow 15.7 amps per element electric heat if used.

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 Printed in England 9/88/QT