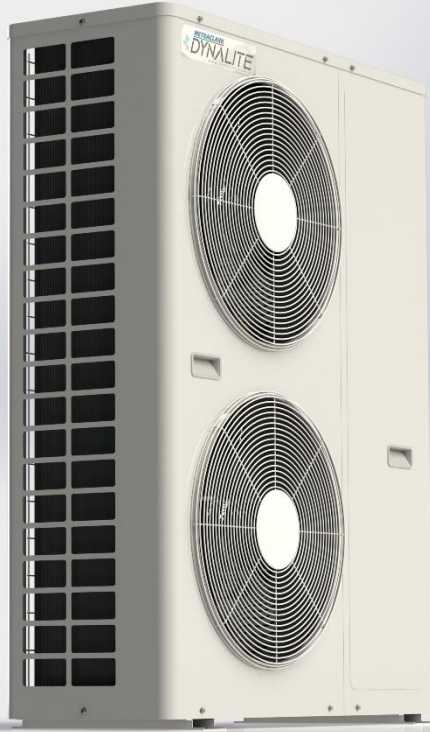




METRA CLARK

Refrigeration & Air-Conditioning Wholesale

DYNALITE HERMETIC



Catalogue

OUR MISSION AND CORE VALUES

Support our customers with friendly, skillful, and reliable expertise. Deliver refrigeration and air-conditioning products with the highest quality in the most efficient manner.

Metraclark conducts business as follows:



Devoted to honourable and ethical business practices.



Committed to customer support and service.



Dedicated to employee development.



Committed to continuous product development with the goal of reducing environmental impact.



Dedicated to building and maintain customer and supplier relationships.



Devoted to supplying cost effective food preservation and comfort cooling products available throughout Southern Africa.

QUALIFIED ENGINEERS CONTINUOUS DEVELOPMENT
EXPERIENCED QUALITY INTERNATIONAL ISO : 9001
LOCAL MANUFACTURING LATEST PRODUCTS
RELIABILITY BESPOKE
INNOVATION **DYNAMIC TECHNOLOGY**
BESPOKE ENERGY SAVING QUALIFIED ENGINEERS
TECHNOLOGY LARGEST SALES NETWORK IN AFRICA

TABLE OF CONTENTS

INTRODUCTION -1-

NOMENCLATURE -2-

COPELAND HERMETIC COMPRESSOR

MEDIUM TEMPERATURE -3-

LOW TEMPERATURE -5-

COPELAND SCROLL COMPRESSOR

LOW TEMPERATURE -5-

INSTALLATION GUIDELINE DRAWINGS -7-

DIMENSIONAL DRAWINGS -8-

COMMENTS

The DynaLite range of horizontal discharge air-cooled condensing units are compact, wall mounted outdoor refrigeration units. The DynaLite range has been designed to fit Copeland scroll, Copeland reciprocating, and Tecumseh reciprocating compressors. The range includes **16** different model variants, with one- and two fan condenser modules, suited for low- and medium temperature applications. The DynaLite was designed with three factors demanded by industry users; cost effective, ergonomic, and reliable in all southern African locations. Therefore, the DynaLite range is the most cost effective and reliable horizontal discharge condensing units for small commercial refrigeration applications, under the Metraclark Dynamic brand. The DynaLite range is manufactured under strict ISO 9001:2015 quality management and all units are pressure tested before dispatching.

DESIGN

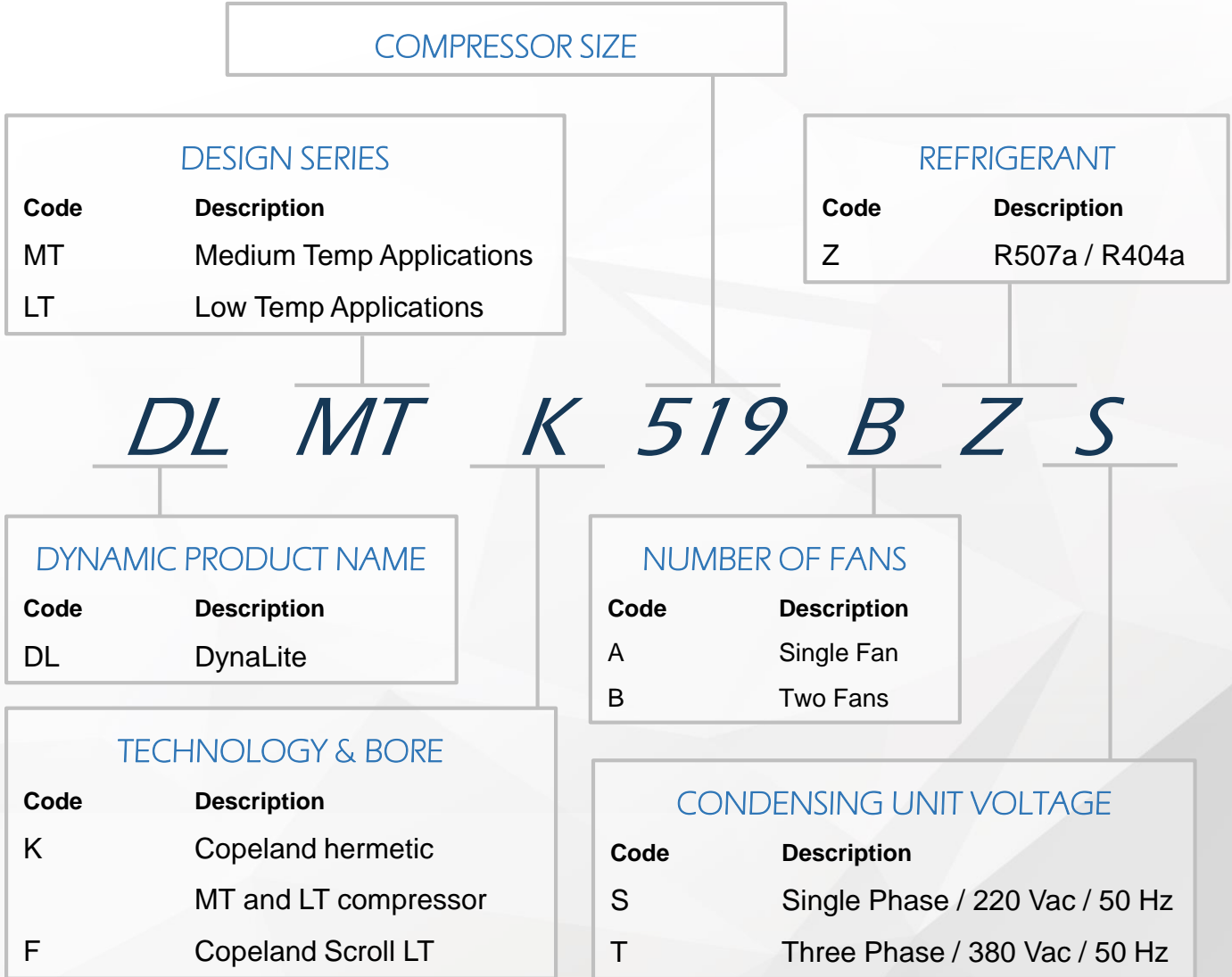
- DynaLite utilizes curved condenser block technology that allows for a compact design.
- Multi-refrigerant design options available: R404a, and R507a.
- Two condenser design configurations to suite all southern African ambient conditions.
- All sheet metal is fully powder coated for corrosion resistance.

STANDARD COMPONENTS

- Powder coated outdoor enclosure.
- Copper tube and aluminium finned condenser coil block.
- Condenser fan speed control.
- Liquid receiver with outlet isolating valve.
- Oil separator with oil return line where applicable according to refrigerant flow rate.
- Suction accumulator on low temperature units.
- Liquid line with drier and sight glass.
- Individual Danfoss HP and LP switches, and pressure gauges.
- Danfoss HP Auto pressure switches for head pressure regulation on multiple fan units.
- Service valves where applicable according to compressor type.
- Thermistor motor protection module.
- Compressor crankcase heater.
- Compressor and condenser electrics.

NOMENCLATURE

The model designation contains the following technical information about the standard DynaLite range:



FOR MORE INFORMATION PLEASE CONTACT YOUR NEAREST METRA CLARK
OUTLET OR THE METRA CLARK ENGINEERING DEPARTMENT

MEDIUM TEMPERATURE – 1PH

COOLING CAPACITY [kW]

R404A/R507

Model Reference	Ambient Temperature [°C]	Suction Temperature [°C]					
		-15	-10	-5	0	5	10
DLMTK461AZS	30	0.93	1.41	1.94	2.57	3.37	4.37
	32	0.83	1.29	1.81	2.42	3.19	4.18
	34	0.74	1.18	1.68	2.27	3.03	3.99
	36	0.65	1.07	1.55	2.13	2.86	3.81
DLMTK484AZS	30	1.39	1.85	2.36	2.97	3.75	4.73
	32	1.29	1.73	2.23	2.82	3.57	4.54
	34	1.20	1.62	2.10	2.67	3.41	4.35
	36	1.11	1.51	1.97	2.53	3.24	4.17
DLMTK511AZS	30	2.27	2.93	3.78	4.81	6.00	7.36
	32	2.16	2.79	3.61	4.60	5.76	7.09
	34	2.05	2.65	3.43	4.39	5.52	6.81
	36	1.94	2.51	3.26	4.19	5.29	6.54
DLMTK514AZS	30	2.50	3.36	4.54	5.98	7.60	9.33
	32	2.37	3.19	4.33	5.72	7.29	8.97
	34	2.25	3.02	4.11	5.45	6.98	8.62
	36	2.12	2.85	3.89	5.19	6.67	8.26
DLMTK519BZS	30	3.43	4.82	6.11	7.39	8.74	10.24
	32	3.24	4.57	5.82	7.07	8.40	9.90
	34	3.05	4.33	5.54	6.76	8.07	9.56
	36	2.87	4.09	5.26	6.45	7.74	9.22

MEDIUM TEMPERATURE – 3PH

COOLING CAPACITY [kW]

R404A/R507

Model Reference	Ambient Temperature [°C]	Suction Temperature [°C]					
		-15	-10	-5	0	5	10
DLMTK511AZT	30	1.72	2.65	3.69	4.74	5.72	6.55
	32	1.60	2.48	3.47	4.51	5.49	6.33
	34	1.50	2.31	3.27	4.28	5.26	6.11
	36	1.41	2.16	3.07	4.06	5.03	5.89
DLMTK514AZT	30	2.64	4.03	5.33	6.61	7.96	9.46
	32	2.45	3.79	5.04	6.29	7.63	9.12
	34	2.27	3.55	4.76	5.98	7.29	8.78
	36	2.08	3.31	4.48	5.67	6.96	8.44
DLMTK519BZT	30	3.65	5.04	6.33	7.61	8.96	10.46
	32	3.46	4.79	6.04	7.29	8.62	10.12
	34	3.27	4.55	5.76	6.98	8.29	9.78
	36	3.09	4.31	5.48	6.67	7.96	9.44
DLMTK522BZT	30	4.59	5.98	7.28	8.56	9.91	11.41
	32	4.40	5.74	6.99	8.24	9.58	11.07
	34	4.22	5.50	6.71	7.93	9.24	10.73
	36	4.03	5.26	6.42	7.62	8.91	10.39

DESIGN CRITERIA: Subcooling: 0 [K] / Suction superheat: 10 [K]

TECHNICAL SPECIFICATION

MODEL REFERENCE	CONDENSER MODEL	STUB CONNECTIONS		RECEIVER VOLUME [L]	DIMENSIONS			FLA [A]	STOCK CODE
		Liquid	Suction		L [m]	W [m]	H [m]		
DLMTK461AZS	JCU2	3/8"	5/8"	2	0.970	0.410	0.835	4	EPM0009
DLMTK484AZS	JCU2	3/8"	5/8"	2	0.970	0.410	0.835	6	EPM0010
DLMTK511AZS	JCU3	3/8"	5/8"	2	0.970	0.410	0.835	7	EPM0011
DLMTK514AZS	JCU3	1/2"	5/8"	2	0.970	0.410	0.835	9	EPM0012
DLMTK519BZS	JCU5	1/2"	3/4"	2	0.980	0.410	1.33	13	EPM0013

MODEL REFERENCE	CONDENSER MODEL	STUB CONNECTIONS		RECEIVER VOLUME [L]	DIMENSIONS			FLA [A]	STOCK CODE
		Liquid	Suction		L [m]	W [m]	H [m]		
DLMTK511AZT	JCU3	3/8"	5/8"	2	0.970	0.410	0.835	3	EMP1011
DLMTK514AZT	JCU3	1/2"	5/8"	2	0.970	0.410	0.835	4	EMP1012
DLMTK519BZT	JCU5	1/2"	3/4"	2	0.980	0.410	1.33	5	EMP1013
DLMTK522BZT	JCU6	1/2"	3/4"	2	0.980	0.410	1.33	6	EMP1014

ENGINEERING NOTES:

*DynaLite units are to be installed and operated outside, in a well ventilated area, with suggested minimum wall clearance.

**Anti-vibration pads are to be used under the feet of the unit.

***Contact the Metraclark Engineering department for alternative DynaLite configurations.

LOW TEMPERATURE – 1PH		COOLING CAPACITY [kW]					R404A/R507	
Model Reference	Ambient Temperature [°C]	Suction Temperature [°C]						
		-40	-35	-30	-25	-20	-15	
DLLTK475AZS	30			0.73	1.58	2.59	3.77	
	32			0.65	1.48	2.48	3.64	
	34			0.55	1.36	2.35	3.49	
	36			0.43	1.22	2.19	3.32	

LOW TEMPERATURE – 3PH		COOLING CAPACITY [kW]					R404A/R507	
Model Reference	Ambient Temperature [°C]	Suction Temperature [°C]						
		-40	-35	-30	-25	-20	-15	
DLLTK512AZT	30	0.38	0.80	1.42	2.23	3.21	4.36	
	32	0.33	0.74	1.34	2.14	3.10	4.23	
	34	0.25	0.65	1.24	2.02	2.97	4.08	
	36	0.15	0.54	1.12	1.88	2.81	3.91	
DLLTK515AZT	30	0.34	0.86	1.58	2.48	3.54	4.72	
	32	0.29	0.78	1.48	2.36	3.40	4.58	
	34	0.22	0.68	1.35	2.21	3.24	4.40	
	36	0.13	0.56	1.21	2.05	3.05	4.21	
DLLTK517BZT	30	0.45	1.25	2.07	2.98	4.07	5.39	
	32	0.37	1.15	1.96	2.87	3.94	5.25	
	34	0.26	1.03	1.83	2.72	3.78	5.06	
	36	0.15	0.90	1.68	2.55	3.59	4.85	
DLLTK520BZT	30	0.59	1.33	2.17	3.16	4.33	5.74	
	32	0.53	1.28	2.11	3.07	4.22	5.58	
	34	0.46	1.20	2.03	2.98	4.09	5.42	
	36	0.36	1.11	1.94	2.87	3.96	5.25	

DESIGN CRITERIA: Subcooling: 0 [K] / Suction superheat: 10 [K]

LOW TEMPERATURE – 3PH		COOLING CAPACITY [kW]					R404A/R507	
Model Reference	Ambient Temperature [°C]	Suction Temperature [°C]						
		-40	-35	-30	-25	-20	-15	
DLLTF018BZT	30	2.53	3.38	4.34	5.45	6.76	8.33	
	32	2.39	3.22	4.15	5.23	6.51	8.02	
	34	2.25	3.06	3.97	5.02	6.25	7.72	
	36	2.10	2.89	3.78	4.79	5.99	7.41	
DLLTF025BZT	30	3.32	4.29	5.46	6.86	8.54	10.56	
	32	3.18	4.12	5.25	6.60	8.23	10.18	
	34	3.05	3.95	5.04	6.34	7.91	9.80	
	36	2.91	3.78	4.82	6.08	7.59	9.42	

DESIGN CRITERIA: Subcooling: 0 [K] / Suction superheat: 10 [K]

© Copyright Metraclark (PTY) Ltd.

*Cooling capacities listed are estimated values.

**Cooling capacities subject to change without notice.

***Oil separator for 4HP compressors and up.

****Pipe sizing design criteria of 10m pipe runs.

TECHNICAL SPECIFICATION

MODEL REFERENCE	CONDENSER MODEL	STUB CONNECTIONS		RECEIVER VOLUME [L]	DIMENSIONS			FLA [A]	STOCK CODE
		Liquid	Suction		L [m]	W [m]	H [m]		
DLLTK475AZS	JCU2	3/8"	5/8"	2	0.970	0.410	0.835	7	EPL0001

MODEL REFERENCE	CONDENSER MODEL	STUB CONNECTIONS		RECEIVER VOLUME [L]	DIMENSIONS			FLA [A]	STOCK CODE
		Liquid	Suction		L [m]	W [m]	H [m]		
DLLTK512AZT	JCU3	3/8"	5/8"	2	0.970	0.410	0.835	4	EPL0009
DLLTK515AZT	JCU3	3/8"	5/8"	2	0.970	0.410	0.835	5	EPL0011
DLLTK517BZT	JCU5	3/8"	3/4"	2	0.980	0.410	1.33	7	EPL0013
DLLTK520BZT	JCU5	1/2"	3/4"	2	0.980	0.410	1.33	7	EPL0015

MODEL REFERENCE	CONDENSER MODEL	STUB CONNECTIONS		RECEIVER VOLUME [L]	DIMENSIONS			FLA [A]	STOCK CODE
		Liquid	Suction		L [m]	W [m]	H [m]		
DLLTF018BZT	JCU6	1/2"	3/4"	2	0.980	0.410	1.33	8	EPL0018
DLLTF025BZT	JCU6	1/2"	3/4"	2	0.980	0.410	1.33	9	EPL0025

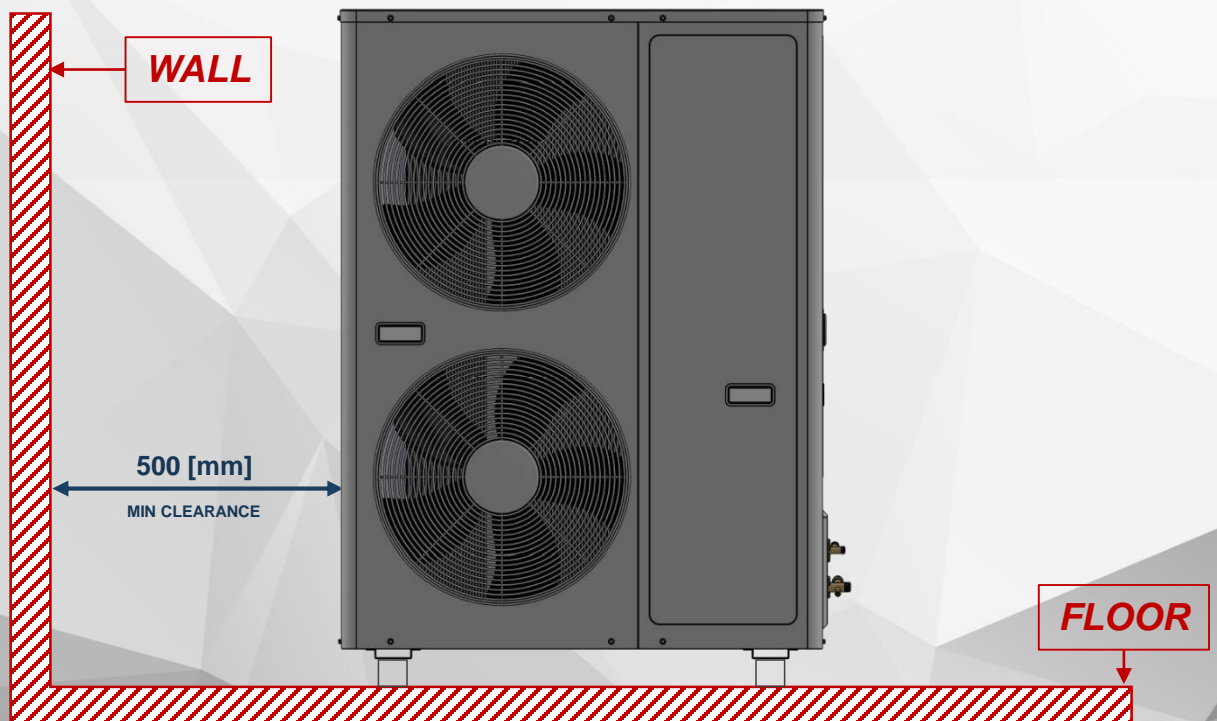
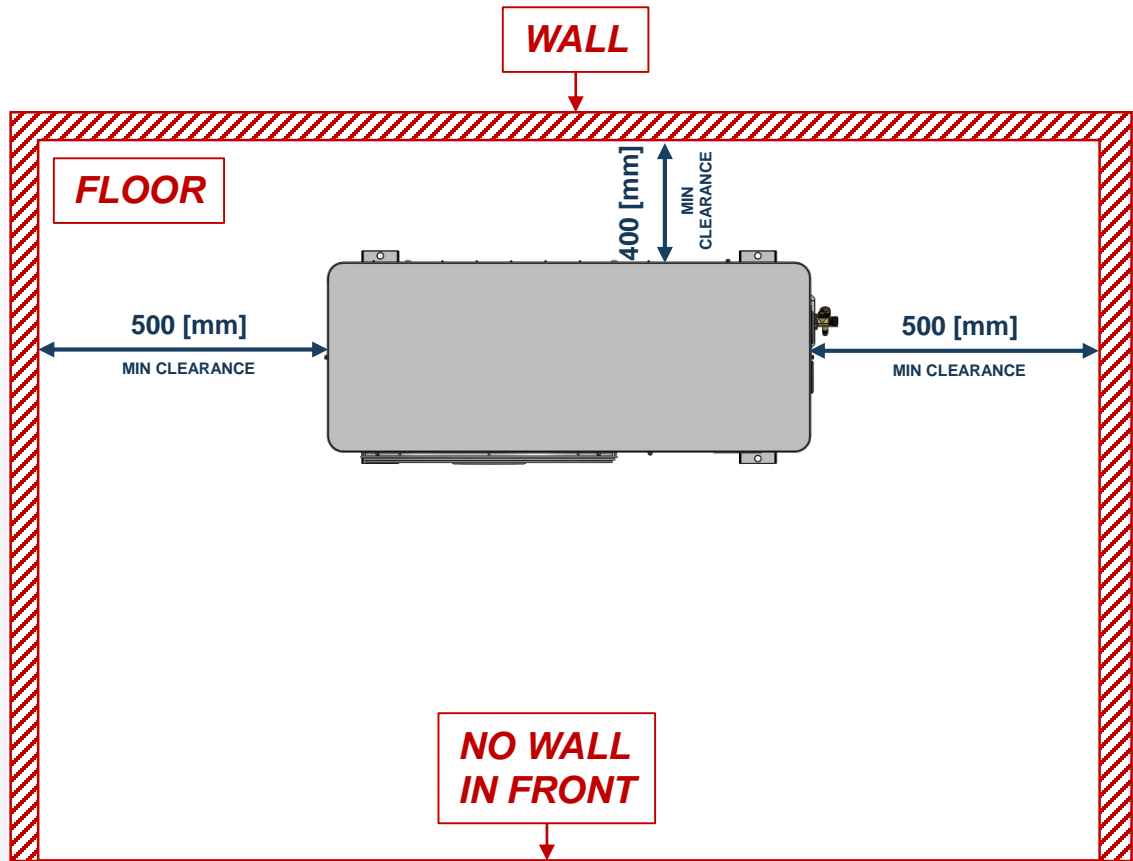
ENGINEERING NOTES:

*DynaLite units are to be installed and operated outside, in a well ventilated area, with suggested minimum wall clearance.

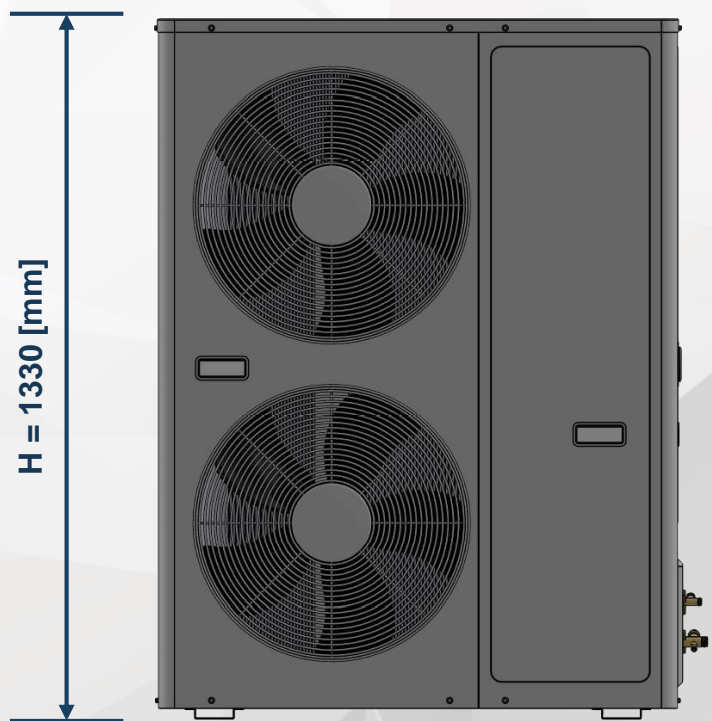
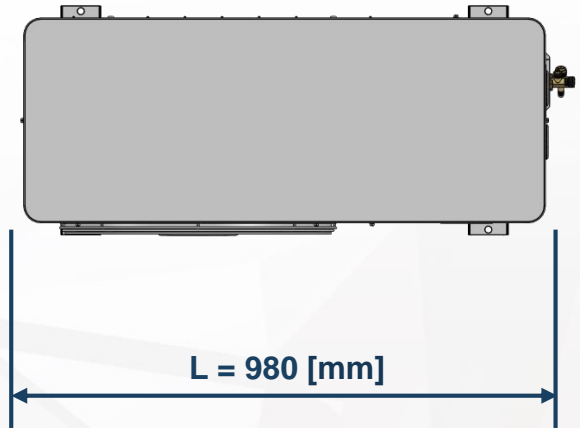
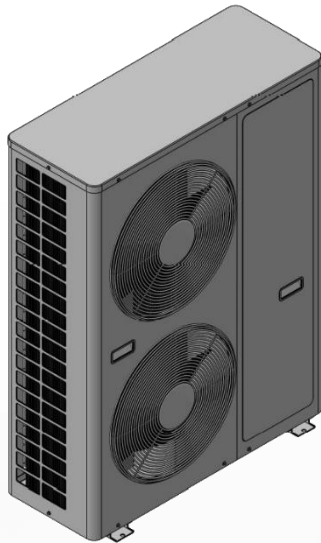
**Anti-vibration pads are to be used under the feet of the unit.

***Contact the Metraclark Engineering department for alternative DynaLite configurations.

INSTALLATION GUIDELINE DRAWINGS



DIMENSIONAL DRAWINGS



ENGINEERING NOTES:

*DynaLite unit illustrated is the DLMTK519BZS condensing unit and the dimensions are for the specified unit only, please refer to the technical specification pages with this catalogue for correct dimensions of the individual unit.



METRACLARK

Refrigeration & Air-Conditioning Wholesale