



# **METRACLARK**

Refrigeration & Air-Conditioning Wholesale

## **DYNACOLD** 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      TECHNOLOGY**

**BESPOKE      ENERGY SAVING      QUALIFIED ENGINEERS**

**TECHNOLOGY      LARGEST SALES NETWORK IN AFRICA**

**DYNAMIC**

## TABLE OF CONTENTS

INTRODUCTION -1-

NOMENCLATURE -2-

### DANFOSS HERMETIC COMPRESSOR

MEDIUM TEMPERATURE -3-

LOW TEMPERATURE -5-

### TECUMSEH HERMETIC COMPRESSOR

MEDIUM TEMPERATURE -7-

LOW TEMPERATURE -9-

INSTALLATION GUIDELINE DRAWINGS -11-

DIMENSIONAL DRAWINGS -12-

## COMMENTS

The DynaCold range of vertical discharge air-cooled condensing units are compact, wall mounted outdoor refrigeration units. The mechanical design of the outdoor enclosure allows for air to be drawn in from the bottom of the unit and discharged through the top. The DynaCold range has been adapted to fit Danfoss Reciprocating, and Tecumseh Reciprocating compressors. The range includes 44 different model variants, with one fan condenser modules up to three fan condenser modules, suited for low- and medium temperature applications. Thus, the DynaCold range is the most well-suited outdoor range of vertical discharge condensing units for small commercial refrigeration applications with space constraints, under the Metraclark Dynamic brand. The DynaCold range is manufactured under strict ISO 9001:2015 quality management and all units are pressure tested before dispatching.

## DESIGN

- DynaCold utilizes vertical discharge condensers that allows for wall mounting.
- Multi-refrigerant design options available: R134a, R404a, R507a, and R407F.
- Four condenser design configurations to suite all Southern African ambient conditions.
- All sheet metal is fully powder coated for corrosion resistance.

## OPTIONAL EXTRAS

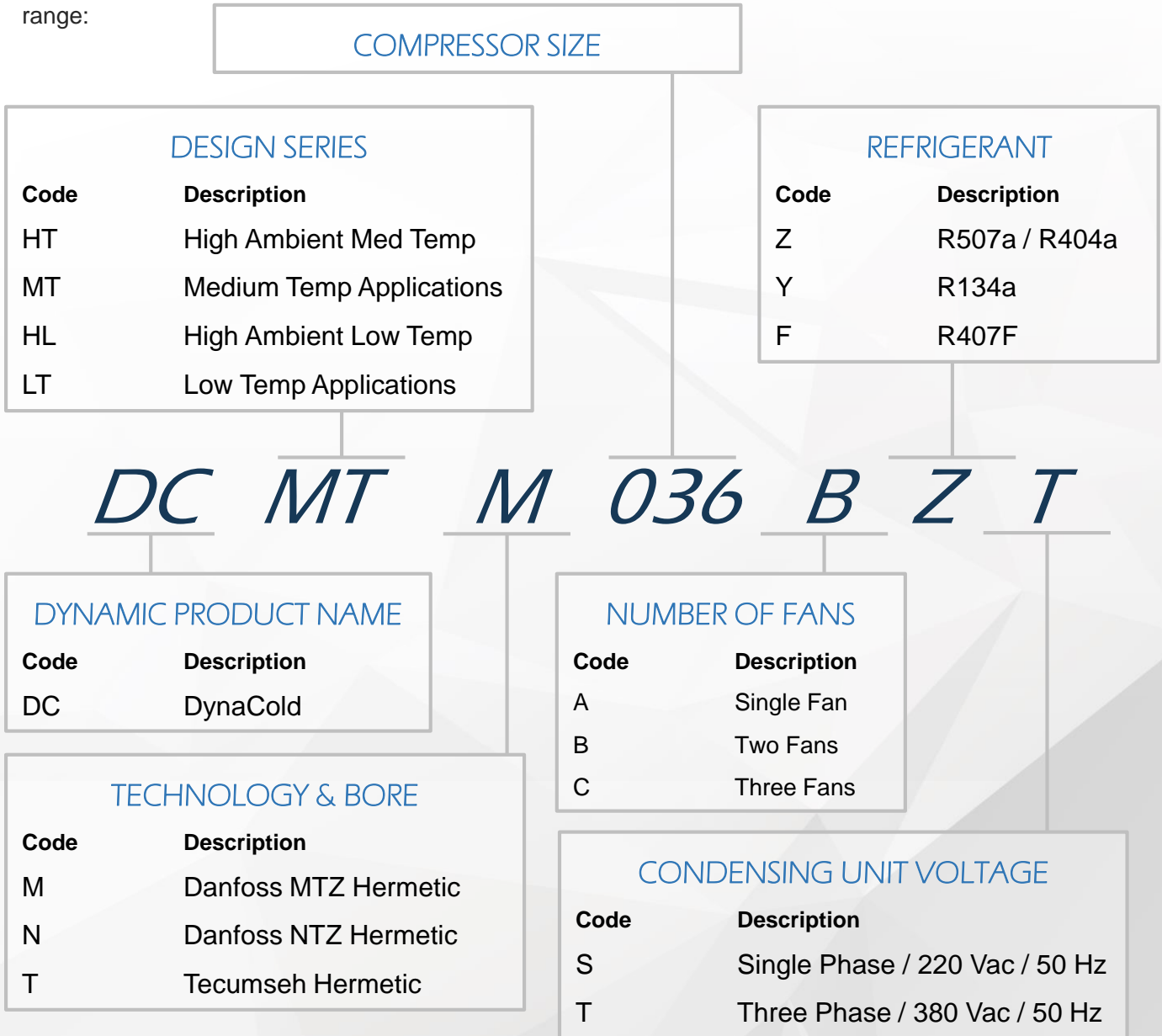
- Condenser fan speed control.
- BluChem treatment for condenser coil.
- Copper finned condenser coil.
- Stainless steel housing on request.
- Voltage free temperature alarm output.
- Fully integrated compressor, condenser, and evaporator electrics.

## STANDARD COMPONENTS

- Powder coated outdoor enclosure.
- Copper tube and aluminium finned condenser coil block.
- EBM Axial fans with protective grill.
- 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 DynaPack range:



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

MEDIUM TEMPERATURE		COOLING CAPACITY [kW]				R404A/R507	
Model Reference	Ambient Temperature	Suction Temperature [°C]					
	[°C]	-15	-10	-5	0	5	10
DCMTM018AZT	30	1.52	2.06	2.72	3.50	4.41	5.48
	32	1.44	1.96	2.58	3.33	4.21	5.24
	34	1.36	1.85	2.45	3.17	4.02	5.00
	36	1.28	1.75	2.32	3.01	3.82	4.77
DCMTM022BZT	30	2.13	2.85	3.71	4.73	5.94	7.34
	32	2.01	2.70	3.53	4.51	5.68	7.03
	34	1.90	2.55	3.35	4.30	5.42	6.72
	36	1.78	2.40	3.16	4.08	5.15	6.42
DCMTM028BZT	30	2.80	3.71	4.78	6.05	7.51	9.19
	32	2.64	3.52	4.56	5.78	7.19	8.83
	34	2.49	3.33	4.34	5.51	6.88	8.46
	36	2.34	3.15	4.11	5.25	6.57	8.09
DCMTM036BZT	30	3.88	5.02	6.35	7.91	9.70	11.76
	32	3.69	4.79	6.07	7.57	9.30	11.29
	34	3.50	4.55	5.79	7.23	8.90	10.82
	36	3.31	4.32	5.51	6.89	8.50	10.34
DCMTM044CZT	30	4.40	5.77	7.40	9.33	11.58	14.19
	32	4.18	5.50	7.08	8.94	11.12	13.65
	34	3.96	5.23	6.75	8.55	10.65	13.10
	36	3.74	4.96	6.42	8.15	10.18	12.55
DCMTM050CZT	30	5.15	6.76	8.69	10.97	13.65	16.75
	32	4.88	6.42	8.27	10.47	13.04	16.03
	34	4.62	6.09	7.86	9.97	12.44	15.33
	36	4.35	5.76	7.45	9.47	11.85	14.63
DCMTM056CZT	30	5.48	7.23	9.34	11.84	14.78	18.20
	32	5.20	6.88	8.91	11.32	14.15	17.46
	34	4.93	6.54	8.48	10.80	13.53	16.72
	36	4.65	6.20	8.06	10.29	12.92	15.99

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]		
DCMTM018AZT	SPV 1131-350	3/8"	1/2"	2.4	0.742	0.448	0.82	6	REDC20406
DCMTM022BZT	SPV 2122-350	3/8"	1/2"	2.9	1.142	0.448	0.82	7	REDC20456
DCMTM028BZT	SPV 2132-350	3/8"	5/8"	2.9	1.142	0.448	0.82	9	REDC20506
DCMTM036BZT	SPV 2152-350	3/8"	5/8"	2.9	1.142	0.448	0.82	10	REDC20556
DCMTM044CZT	SPV 3133-350	3/8"	7/8"	5.5	1.542	0.448	0.82	11	REDC20606
DCMTM050CZT	SPV 3143-350	1/2"	7/8"	5.5	1.542	0.448	0.82	13	REDC20656
DCMTM056CZT	SPV 3153-350	1/2"	7/8"	5.5	1.542	0.448	0.82	14	REDC20706

### ENGINEERING NOTES:

\*DynaCold 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 DynaCold configurations.

LOW TEMPERATURE		COOLING CAPACITY [kW]					R404A/R507	
Model Reference	Ambient Temperature	Suction Temperature [°C]						
	[°C]	-40	-35	-30	-25	-20	-15	
DCLTN048BZT	30	0.51	0.83	1.22	1.68	2.24	2.90	
	32	0.47	0.77	1.14	1.59	2.12	2.76	
	34	0.42	0.71	1.07	1.49	2.01	2.61	
	36	0.38	0.65	0.99	1.40	1.89	2.47	
DCLTN068BZT	30	1.00	1.47	2.04	2.73	3.55	4.53	
	32	0.93	1.38	1.92	2.58	3.38	4.32	
	34	0.87	1.29	1.81	2.45	3.20	4.11	
	36	0.80	1.21	1.71	2.31	3.03	3.90	
DCLTN096CZT	30	1.10	1.67	2.40	3.35	4.52	5.97	
	32	1.00	1.54	2.25	3.15	4.29	5.69	
	34	0.91	1.42	2.09	2.96	4.05	5.40	
	36	0.81	1.29	1.93	2.76	3.81	5.11	
DCLTN108CZT	30	1.35	2.06	2.94	4.03	5.34	6.91	
	32	1.23	1.91	2.76	3.81	5.07	6.58	
	34	1.12	1.77	2.58	3.58	4.79	6.24	
	36	1.01	1.63	2.41	3.36	4.52	5.91	

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]		
DCLTN048BZT	SPV 2122-350	1/4"	5/8"	2.9	1.142	0.448	0.82	6	REDC30253
DCLTN068BZT	SPV 2132-350	3/8"	5/8"	2.9	1.142	0.448	0.82	10	REDC30303
DCLTN096CZT	SPV 3133-350	3/8"	7/8"	5.5	1.542	0.448	0.82	12	REDC30353
DCLTN108CZT	SPV 3143-350	3/8"	7/8"	5.5	1.542	0.448	0.82	14	REDC30403

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MEDIUM TEMPERATURE		COOLING CAPACITY [kW]						R404A/R507
Model Reference	Ambient Temperature [°C]	Suction Temperature [°C]						
		-15	-10	-5	0	5	10	
DCMTT9480AZS	30	0.98	1.24	1.53	1.87	2.25	2.70	
	32	0.94	1.18	1.46	1.79	2.16	2.59	
	34	0.89	1.13	1.40	1.71	2.06	2.47	
	36	0.85	1.07	1.33	1.63	1.97	2.36	
DCMTT9510AZS	30	1.25	1.56	1.92	2.33	2.81	3.36	
	32	1.19	1.49	1.84	2.24	2.70	3.23	
	34	1.14	1.43	1.76	2.14	2.58	3.09	
	36	1.08	1.36	1.68	2.04	2.47	2.95	
DCMTT9513AZS	30	1.54	1.96	2.45	3.02	3.66	4.39	
	32	1.46	1.87	2.34	2.88	3.50	4.20	
	34	1.38	1.78	2.24	2.75	3.34	4.01	
	36	1.31	1.69	2.13	2.62	3.18	3.82	
DCMTT4517AZS	30	1.77	2.21	2.72	3.31	3.98	4.75	
	32	1.69	2.12	2.61	3.17	3.82	4.56	
	34	1.61	2.02	2.49	3.03	3.65	4.36	
	36	1.53	1.93	2.38	2.90	3.49	4.16	
DCMTT4519AZS	30	2.20	2.78	3.43	4.17	5.00	5.94	
	32	2.10	2.66	3.29	4.00	4.80	5.71	
	34	2.00	2.54	3.15	3.82	4.59	5.46	
	36	1.90	2.42	3.00	3.65	4.39	5.22	
DCMTT4524BZS	30	2.51	3.28	4.15	5.15	6.27	7.56	
	32	2.37	3.12	3.97	4.92	6.01	7.25	
	34	2.24	2.96	3.78	4.70	5.75	6.94	
	36	2.10	2.80	3.59	4.48	5.48	6.63	
DCMTT4531BZS	30	3.31	4.37	5.48	6.67	7.98	9.46	
	32	3.10	4.15	5.24	6.40	7.67	9.10	
	34	2.88	3.93	5.00	6.13	7.36	8.74	
	36	2.67	3.70	4.75	5.85	7.04	8.37	

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]		
DCMTT9480AZS	SPV 1121-350	1/4"	1/2"	2.4	0.742	0.448	0.82	7	REDC20053
DCMTT9510AZS	SPV 1121-350	1/4"	1/2"	2.4	0.742	0.448	0.82	9	REDC20103
DCMTT9513AZS	SPV 1121-350	3/8"	1/2"	2.4	0.742	0.448	0.82	12	REDC20153
DCMTT4517AZS	SPV 1131-350	3/8"	5/8"	2.4	0.742	0.448	0.82	13	REDC20203
DCMTT4519AZS	SPV 1141-350	3/8"	5/8"	2.4	0.742	0.448	0.82	16	REDC20253
DCMTT4524BZS	SPV 2122-350	3/8"	5/8"	2.9	1.142	0.448	0.82	19	REDC20303
DCMTT4531BZS	SPV 2132-350	3/8"	7/8"	2.9	1.142	0.448	0.82	24	REDC20353

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LOW TEMPERATURE		COOLING CAPACITY [kW]						R404A/R507
Model Reference	Ambient Temperature	Suction Temperature [°C]						
	[°C]	-40	-35	-30	-25	-20	-15	
DCLTT2446AZS	30	0.42	0.61	0.84	1.11	1.42	1.78	
	32	0.39	0.58	0.80	1.06	1.36	1.71	
	34	0.36	0.54	0.75	1.01	1.30	1.63	
	36	0.33	0.51	0.71	0.95	1.23	1.56	
DCLTT2464AZS	30	0.57	0.81	1.09	1.43	1.83	2.29	
	32	0.54	0.77	1.04	1.37	1.75	2.20	
	34	0.51	0.73	0.99	1.30	1.67	2.11	
	36	0.47	0.68	0.94	1.24	1.60	2.01	
DCLTT2480BZS	30	0.66	1.09	1.57	2.12	2.75	3.46	
	32	0.60	1.01	1.48	2.02	2.63	3.32	
	34	0.53	0.93	1.39	1.91	2.51	3.18	
	36	0.46	0.85	1.30	1.81	2.38	3.04	
DCLTT2511BZS	30	0.92	1.46	2.09	2.83	3.69	4.67	
	32	0.83	1.36	1.98	2.70	3.53	4.49	
	34	0.75	1.26	1.86	2.56	3.37	4.31	
	36	0.66	1.16	1.75	2.43	3.22	4.12	

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]		
DCLTT2446AZS	SPV 1121-350	1/4"	1/2"	2.4	0.742	0.448	0.820	9	REDC30053
DCLTT2464AZS	SPV 1121-350	1/4"	5/8"	2.4	0.742	0.448	0.820	11	REDC30103
DCLTT2480BZS	SPV 2122-350	1/4"	5/8"	2.9	1.142	0.448	0.820	17	REDC30153
DCLTT2511BZS	SPV 2132-350	3/8"	5/8"	2.9	1.142	0.448	0.820	25	REDC30203

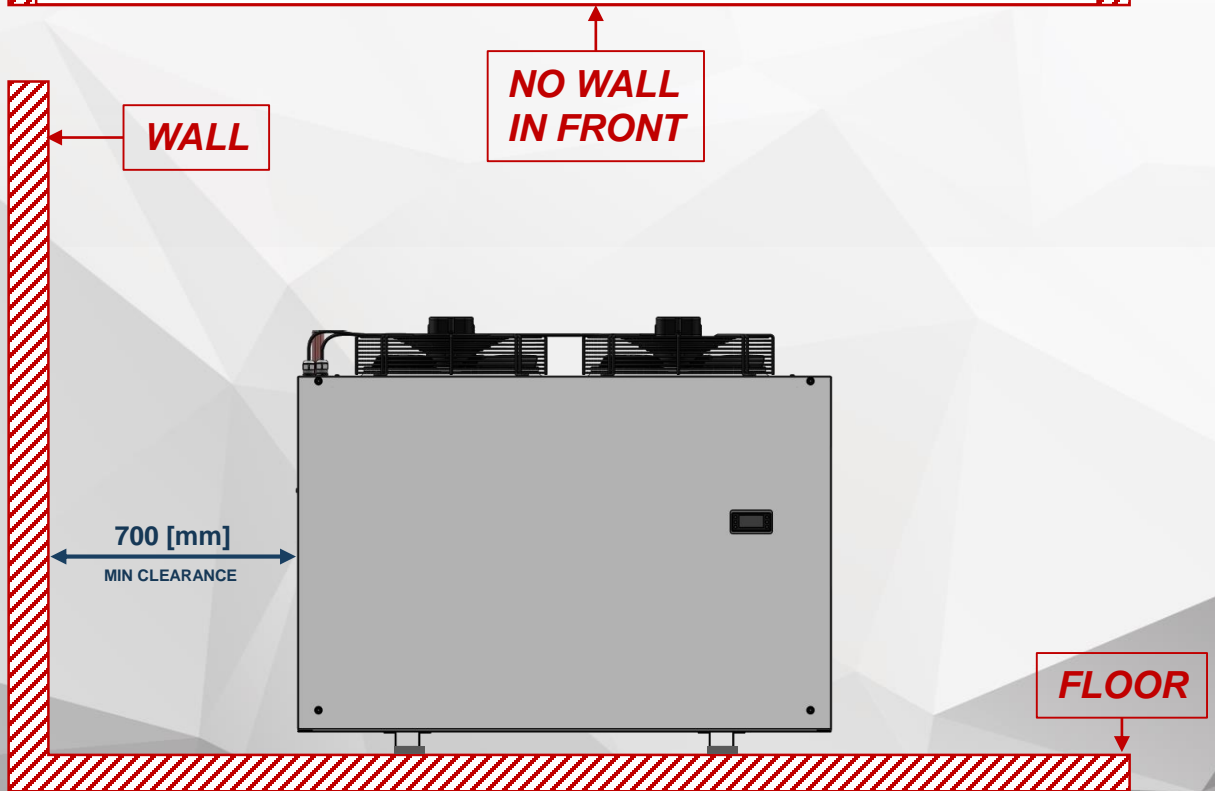
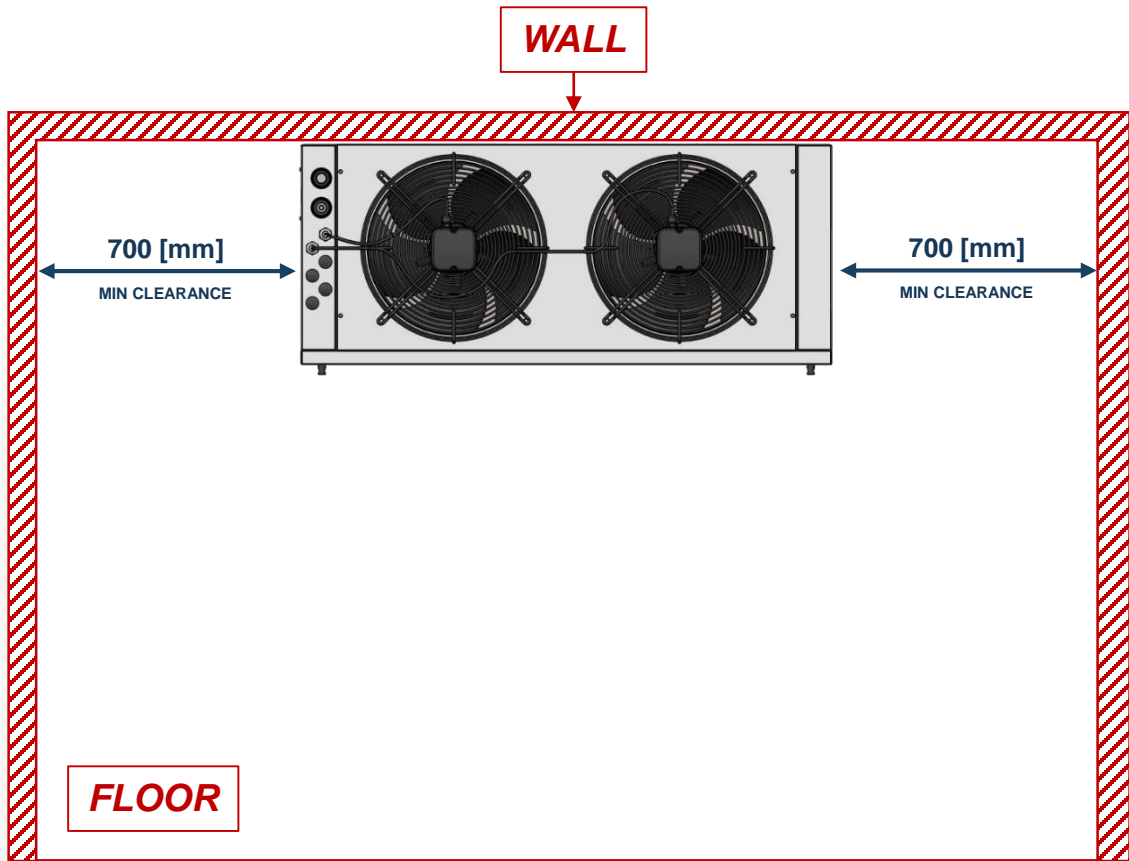
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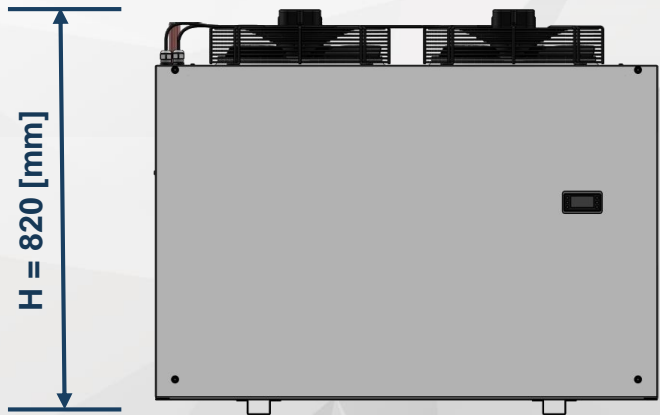
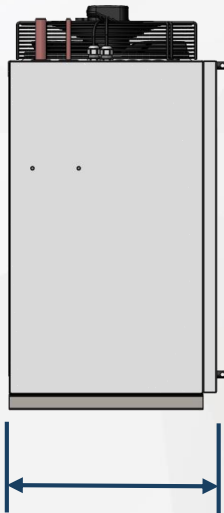
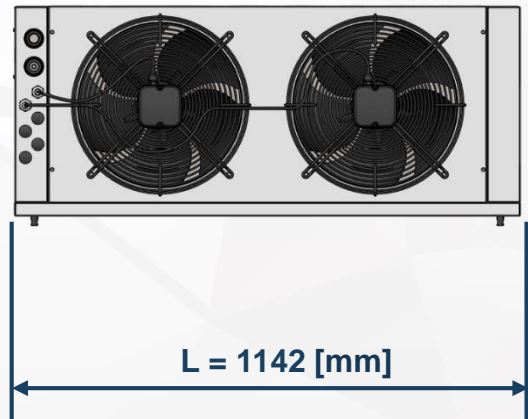
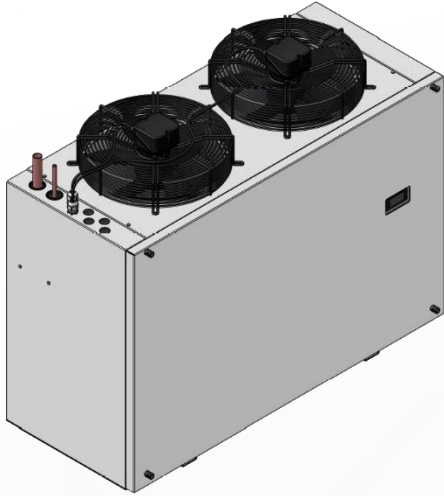
\*\*Anti-vibration pads are to be used under the feet of the unit.

\*\*\*Contact the Metraclark Engineering department for alternative DynaCold configurations.

# INSTALLATION GUIDELINE DRAWINGS



## DIMENSIONAL DRAWINGS



### ENGINEERING NOTES:

\*DynaCold unit illustrated is the DCMTM036BZT 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**

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