METRACLARK

Refrigeration & Air-Conditioning Wholesale

DYNAPLEX

DIGITAL SCROLL

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
COST EFFECTIVE ISO : 9001 CUSTOMER SERVICE

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COMMENTS

The DynaPlex condensing unit range has been designed utilising first order thermodynamic principles to ensure optimal component sizing and high refrigeration efficiency. Digital scroll capacity unloading technology ensures finely controlled cooling capacity that matches cooling demands, and decreases operating current with the added benefit of decreasing starting inrush current. Therefore, the DynaPlex range is the most complete and energy efficient range of outdoor condensing units suited for every commercial refrigeration application under the Metraclark Dynamic brand.

DESIGN

- Two, and three Copeland scroll ZB and ZF compressor model options with digital modulation capabilities.
- Rigid, high strength, fully welded S355JR steel frame.
- Complete inboard modular mechanical design with component layout aimed to aid serviceability and maintenance.
- Connected discharge and liquid lines.
- Electrical wiring and switchgear layout based on a modular design, and wiring done to SANS regulations.
- Mid point corner lifting lug locations.
- Centre of mass forklift channels, and corner castor wheel channels.
- Single or dual entry suction header for improved suction pressure distribution and oil return.
- Copper discharge header.
- Conventional oil separator for oil retention within the parallel compressor system.
- Low pressure oil management system with oil reservoir and oil return header, feeding into the Copeland scroll compressors via Emerson TraxOil electronic oil level management.
- Full sized horizontal liquid receiver mounted inboard with proper gravitational liquid flow.

STANDARD COMPONENTS

- Individual ***Danfoss*** discharge non-return check valve.
- Individual ***Danfoss*** suction shut-off and filter drier with replaceable solid core.
- Individual ***Danfoss*** HP and LP switches, with global HP and LP transducers, and gauges.
- Compressor discharge and suction line vibration eliminators.
- ***Henry*** conventional oil separator with ball and float.
- ***Henry*** main discharge line magnetic non-return check valve.
- Oil return line includes; hand shut-off valve, filter drier, solenoid valve, and sight glass.
- Oil return header with individual isolating valves.
- ***Emerson*** TraxOil electronic oil level regulator.
- ***Danfoss*** liquid line replaceable filter drier, sight glass, and ball valves.
- ***Dixell*** condenser fan speed control.
- Rack controller and digital compressor driver: ***Dixell*** IPRO208D and XEV02D.
- ***Gokceller*** horizontal liquid receiver manufactured and certified to European specifications, available in 80, 110 liters.
- Outdoor housing.
- ***Recam*** V-type condenser with 380Vac fans.

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NOMENCLATURE

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

NOMINAL CAPACITY

[BTU/h] @ 60 Hz and ARI Conditions

DESIGN SERIES

Code	Description
MT	Medium Temp Applications
LT	Low Temp Applications

REFRIGERANT

Code	Description
Z	R507a / R404a
F	R407F

DX MT B 228 D Z T

DYNAMIC PRODUCT NAME

Code	Description
DX	DynaPlex

LEAD COMPRESSOR CLASS

Code	Description
B	Copeland Scroll ZB
F	Copeland Scroll ZF

NUMBER OF FANS

Code	Description
B	Two Fans
C	Three Fans
D	Four Fans
F	Six Fans

CONDENSING UNIT VOLTAGE

Code	Description
T	Three Phase / 380 Vac / 50 Hz

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

MEDIUM TEMPERATURE	COOLING CAPACITY [kW]					R404A/R507	
MODEL REFERENCE	AMBIENT TEMP [°C]	SUCTION TEMPERATURE [°C]					
		-15	-10	-5	0	5	10
DXMTZB228DZT	32	40.8	48.6	58.9	72.0	88.2	107.8
	34	38.8	46.3	56.3	69.1	84.9	104.2
	36	36.8	43.9	53.6	66.0	81.6	100.5
	38	34.7	41.5	50.8	63.0	78.2	96.8
	40	32.5	39.0	48.0	59.8	74.7	93.0
DXMTZB264DZT	32	47.9	57.3	69.5	84.6	103.0	124.8
	34	45.9	55.0	66.7	81.4	99.4	120.8
	36	43.9	52.5	63.9	78.2	95.7	116.7
	38	41.9	50.1	61.0	74.9	92.0	112.6
	40	39.8	47.6	58.1	71.6	88.3	108.5
DXMTZB304DZT	32	54.8	65.7	79.6	96.9	117.8	142.7
	34	52.6	63.0	76.4	93.3	113.7	138.1
	36	50.3	60.2	73.2	89.6	109.6	133.5
	38	48.0	57.5	70.0	85.8	105.4	128.8
	40	45.7	54.6	66.7	82.1	101.1	124.1
DXMTZB334DZT	32	62.9	75.4	91.4	111.2	135.1	163.5
	34	60.4	72.3	87.8	107.0	130.4	158.3
	36	57.8	69.2	84.1	102.8	125.7	153.0
	38	55.2	66.1	80.4	98.6	120.9	147.7
	40	52.6	62.9	76.7	94.3	116.0	142.3
DXMTZB414FZT	32	75.4	90.4	109.6	133.2	161.8	195.7
	34	72.4	86.8	105.3	128.3	156.3	189.5
	36	69.4	83.1	101.0	123.4	150.6	183.2
	38	66.4	79.4	96.6	118.3	144.9	176.9
	40	63.2	75.6	92.1	113.2	139.2	170.4
DXMTZB494FZT	32	89.3	107.1	129.7	157.8	191.5	231.5
	34	85.8	102.8	124.7	152.0	185.0	224.1
	36	82.3	98.5	119.7	146.1	178.3	216.7
	38	78.7	94.2	114.5	140.2	171.6	209.2
	40	75.1	89.7	109.3	134.2	164.8	201.7
DXMTZB554FZT	32	105.4	126.5	153.3	186.3	226.1	273.1
	34	101.4	121.5	147.4	179.5	218.4	264.5
	36	97.3	116.5	141.4	172.6	210.6	255.8
	38	93.1	111.4	135.4	165.7	202.7	247.0
	40	88.9	106.2	129.3	158.6	194.7	238.1

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

*Cooling capacities are based on a V-Type condenser at 1700 [m] above sea level.

**Cooling capacities listed are estimated values.

***Cooling capacities subject to change without notice.

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TECHNICAL SPECIFICATION

MODEL REFERENCE	CONDENSER MODEL	STUB CONNECTIONS		RECEIVER VOLUME	DIMENSIONS			POWER SUPPLY	FLA
		Liquid	Suction	[L]	L [m]	W [m]	H [m]	[Vac]	[A]
DXMTZB228DZT	CVD 4F6R5s	1 1/8"	2 1/8"	80	2.120	1.743	2.454	400 V / 3Ø	79
DXMTZB264DZT	CVD 4F6R5	1 1/8"	2 1/8"	80	2.120	1.743	2.454	400 V / 3Ø	84
DXMTZB304DZT	CVD 4F3R6	1 3/8"	2 5/8"	80	2.120	2.050	2.679	400 V / 3Ø	109
DXMTZB334DZT	CVD 4F3R6	1 3/8"	2 5/8"	110	2.120	2.050	2.679	400 V / 3Ø	119
DXMTZB414FZT	CVD 6F6R5	1 3/8"	2x 2 1/8"	110	3.100	1.743	2.454	400 V / 3Ø	126
DXMTZB494FZT	CVD 6F3R6	1 5/8"	2x 2 1/8"	160	3.100	2.050	2.679	400 V / 3Ø	168
DXMTZB554FZT	CVD 6F3R6	1 5/8"	2x 2 5/8"	160	3.100	2.050	2.679	400 V / 3Ø	189

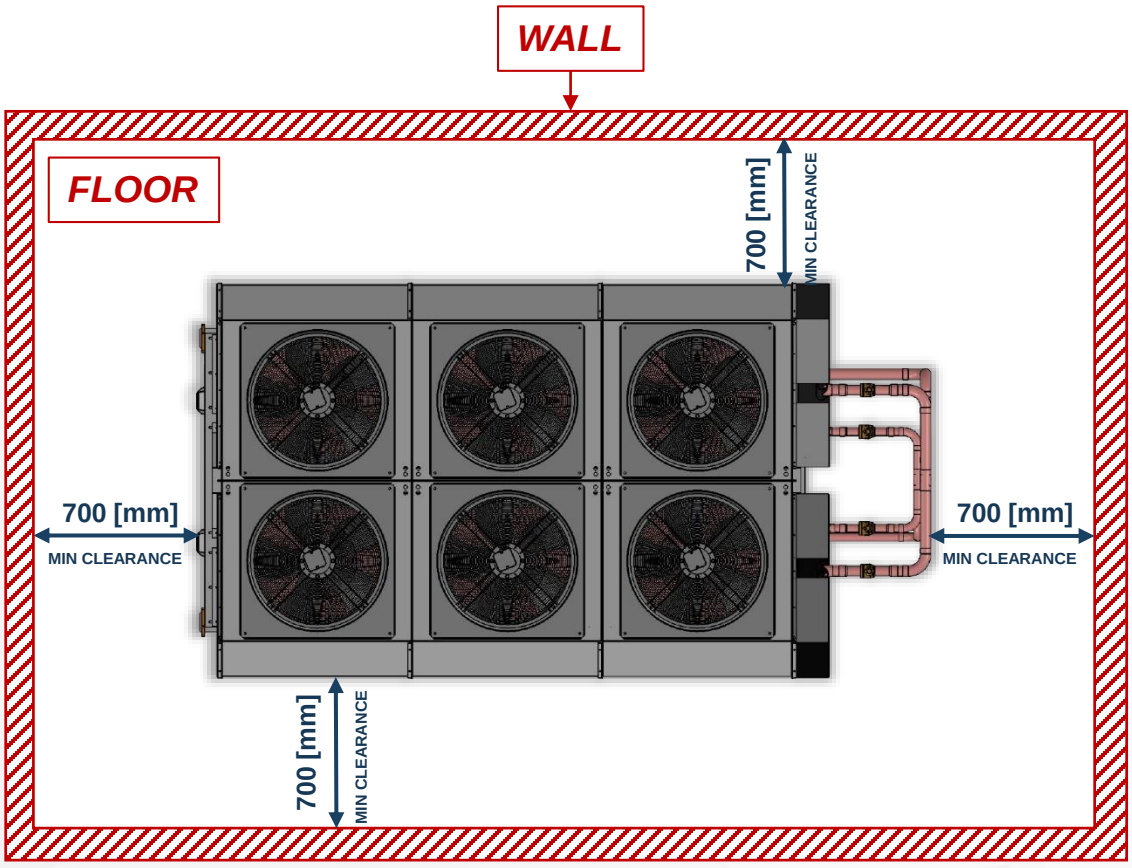
ENGINEERING NOTES:

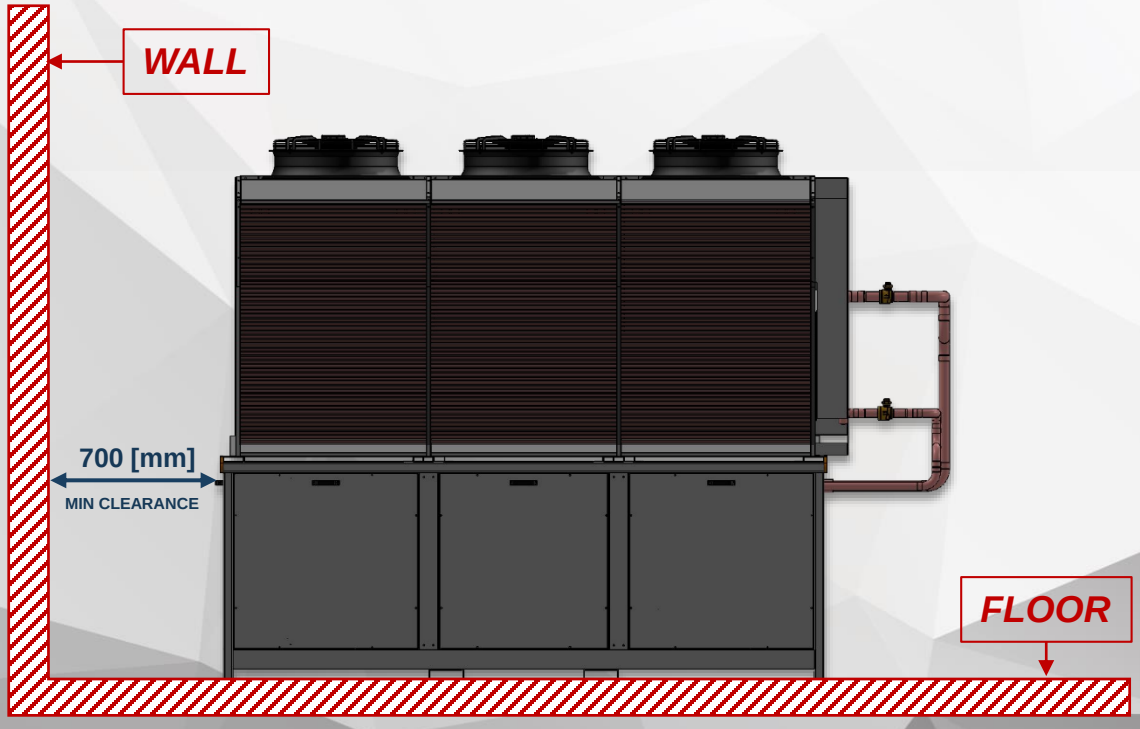
*DynaPlex units are to be installed and operated outside, in a well ventilated area, with suggested minimum wall clearance.

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

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

INSTALLATION GUIDELINE DRAWINGS





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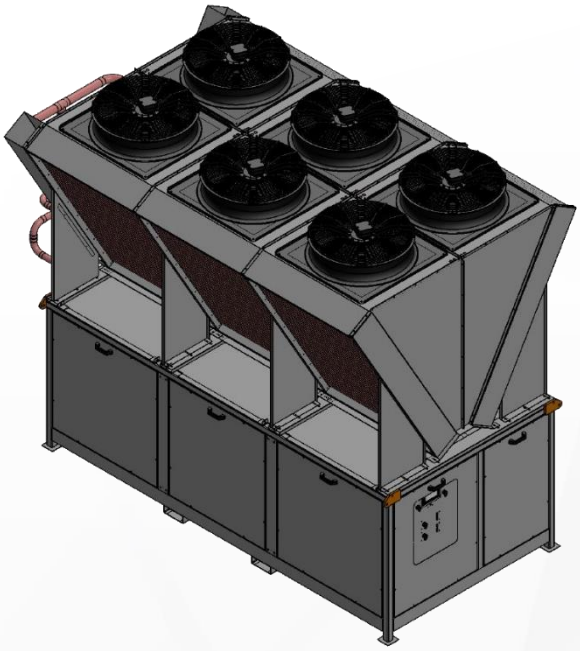
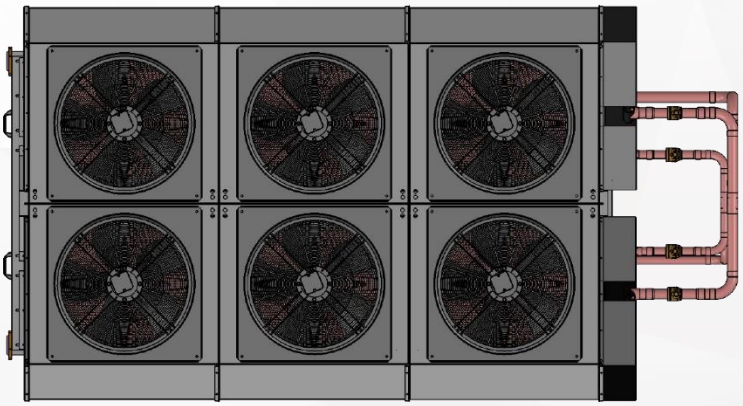
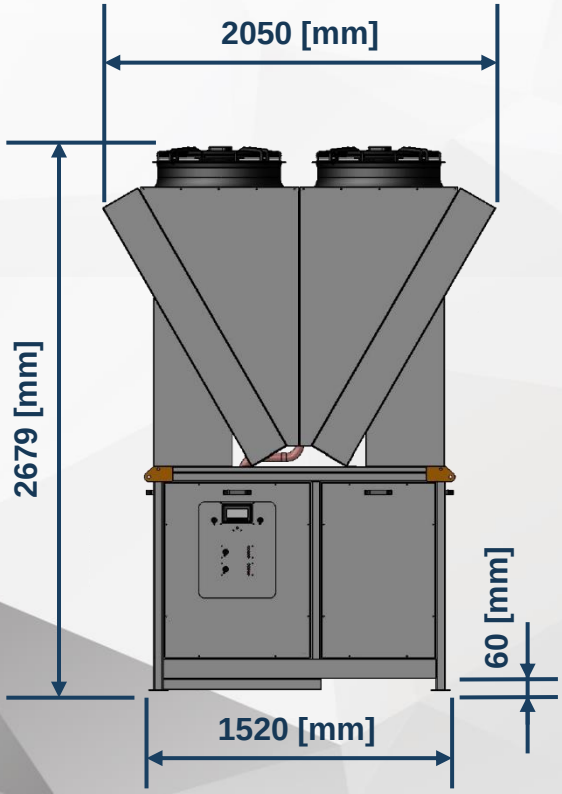
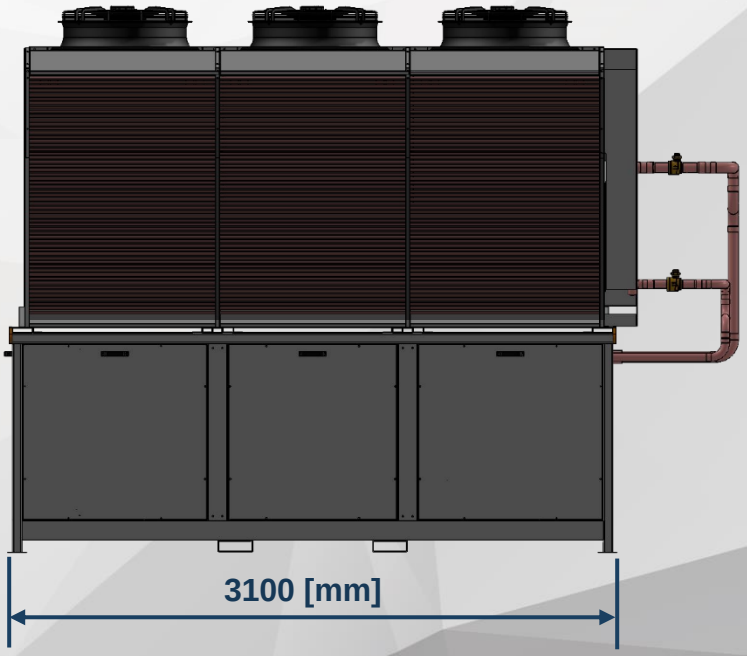
DIMENSIONAL DRAWINGS









LOW TEMPERATURE	COOLING CAPACITY [kW]	R404A/R507

MODEL REFERENCE	AMBIENT TEMP [°C]	SUCTION TEMPERATURE [°C]					
		-40	-35	-30	-25	-20	-15
DXLTZF050BZT	32	12.6	15.5	18.8	22.5	26.4	30.7
	34	12.4	15.3	18.5	22.1	26.1	30.2
	36	12.2	15.0	18.3	21.8	25.7	29.7
	38	12.0	14.8	18.0	21.5	25.3	29.2
	40	11.8	14.6	17.7	21.2	24.8	28.7
DXLTZF059BZT	32	14.8	18.1	21.9	26.2	31.0	36.3
	34	14.6	17.9	21.6	25.8	30.5	35.8
	36	14.4	17.7	21.3	25.5	30.1	35.2
	38	14.2	17.4	21.0	25.1	29.6	34.6
	40	14.0	17.2	20.7	24.7	29.1	34.0
DXLTZF066BZT	32	16.4	20.2	24.5	29.4	34.9	41.0
	34	16.2	19.9	24.2	29.0	34.4	40.5
	36	16.0	19.7	23.9	28.6	33.9	39.9
	38	15.8	19.4	23.5	28.2	33.4	39.3
	40	15.5	19.1	23.2	27.7	32.9	38.6
DXLTZF075CZT	32	18.8	23.2	28.2	33.7	39.7	46.0
	34	18.6	22.9	27.8	33.2	39.1	45.3
	36	18.3	22.6	27.4	32.7	38.5	44.6
	38	18.0	22.2	27.0	32.2	37.9	43.9
	40	17.8	21.9	26.6	31.7	37.3	43.1
DXLTZF093CZT	32	23.3	28.5	34.4	41.1	48.7	57.3
	34	23.0	28.2	34.0	40.6	48.0	56.4
	36	22.7	27.8	33.5	40.0	47.3	55.5
	38	22.4	27.4	33.1	39.4	46.6	54.6
	40	22.1	27.0	32.6	38.8	45.8	53.7
DXLTZF107CZT	32	26.6	32.7	39.6	47.5	56.5	66.8
	34	26.2	32.3	39.1	46.9	55.7	65.8
	36	25.9	31.8	38.6	46.2	55.0	64.9
	38	25.5	31.4	38.0	45.6	54.1	63.9
	40	25.2	30.9	37.5	44.9	53.3	62.9

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

*Cooling capacities are based on a V-Type condenser at 1700 [m] above sea level.

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MODEL REFERENCE	CONDENSER MODEL	STUB CONNECTIONS		RECEIVER VOLUME	DIMENSIONS			POWER SUPPLY	FLA
		Liquid	Suction	[L]	L [m]	W [m]	H [m]	[Vac]	[A]
DXLTF050BZT	CVD 2F4R5	7/8"	2 1/8"	80	2.120	1.743	2.374	400 V / 3Ø	41
DXLTF059BZT	CVD 2F4R5	7/8"	2 1/8"	80	2.120	1.743	2.374	400 V / 3Ø	50
DXLTF066BZT	CVD 2F6R5	7/8"	2 1/8"	80	2.120	1.743	2.374	400 V / 3Ø	54
DXLTF075CZT	CVD 3F4R5	7/8"	2 5/8"	80	3.100	1.743	2.374	400 V / 3Ø	59
DXLTF093CZT	CVD 3F4R5	1 1/8"	2 5/8"	80	3.100	1.743	2.374	400 V / 3Ø	77
DXLTF107CZT	CVD 3F6R5	1 1/8"	2 5/8"	80	3.100	1.743	2.374	400 V / 3Ø	85

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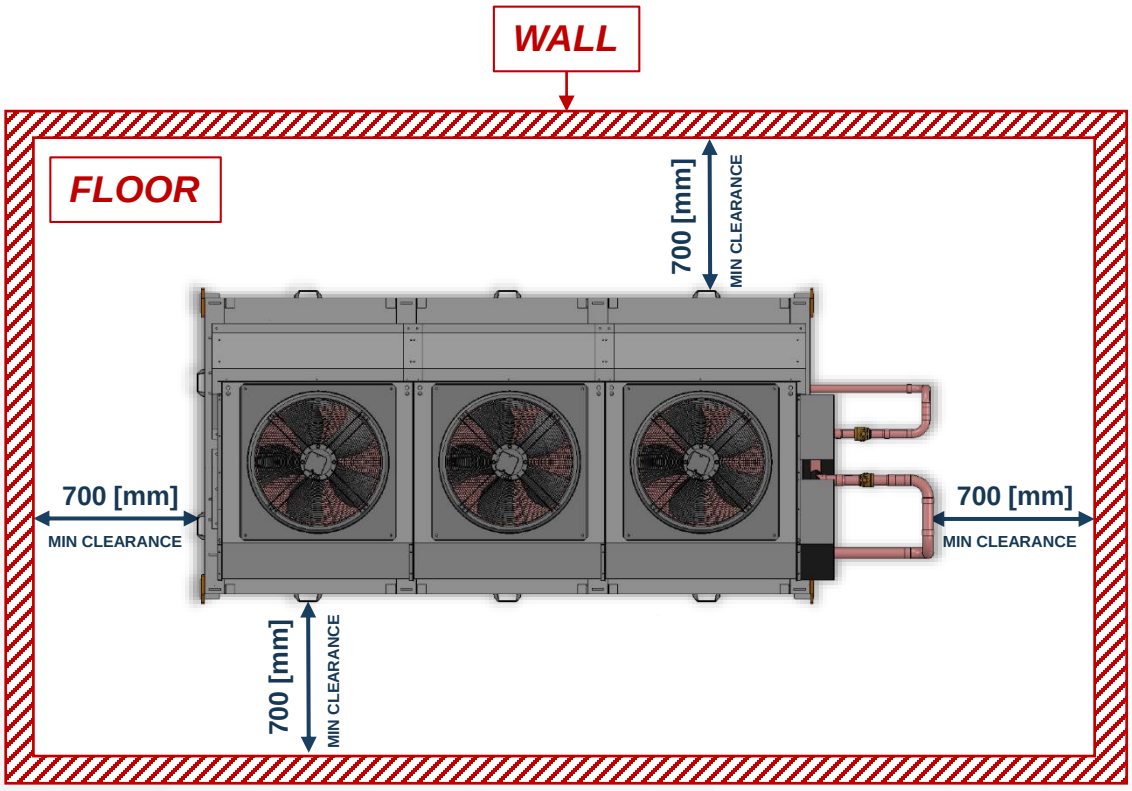

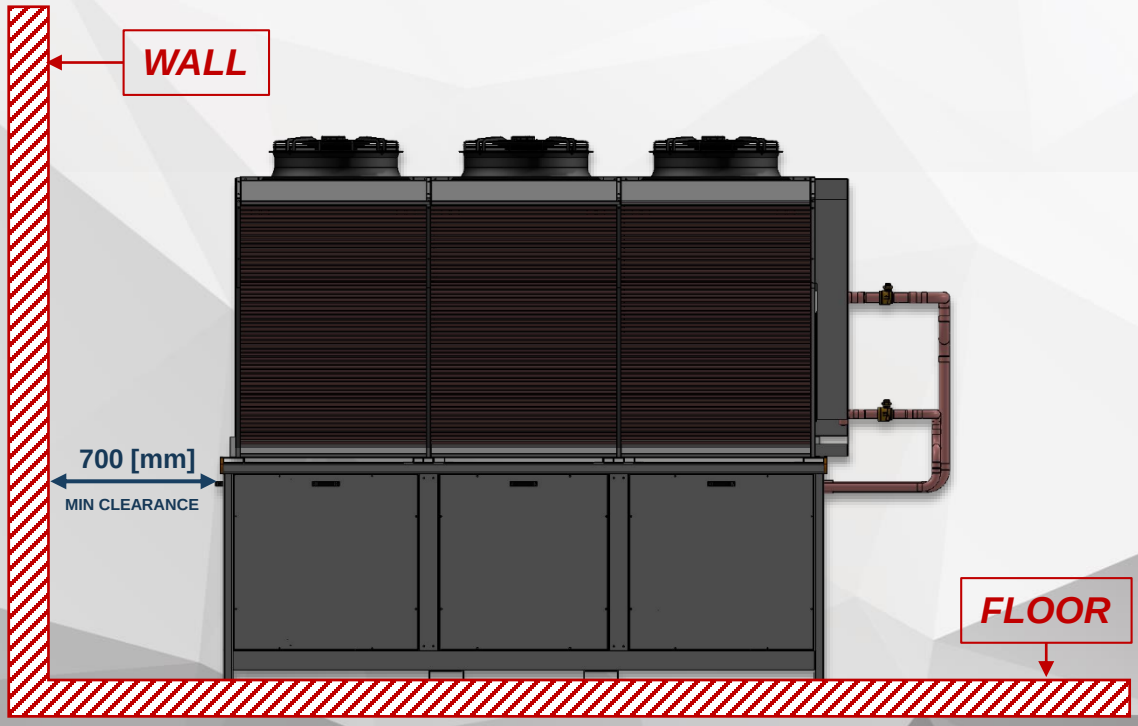

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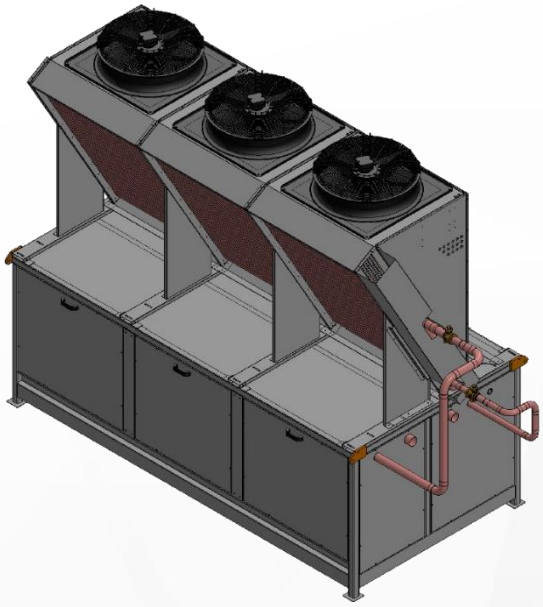

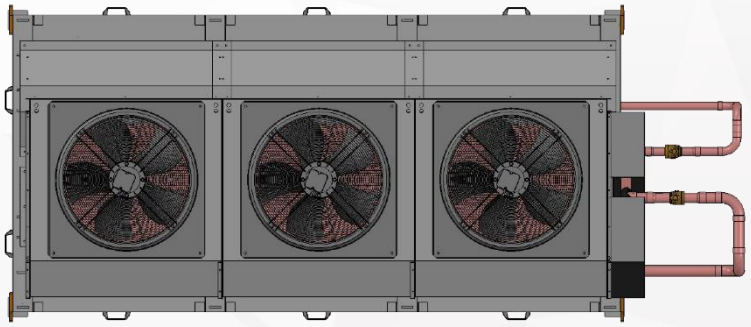

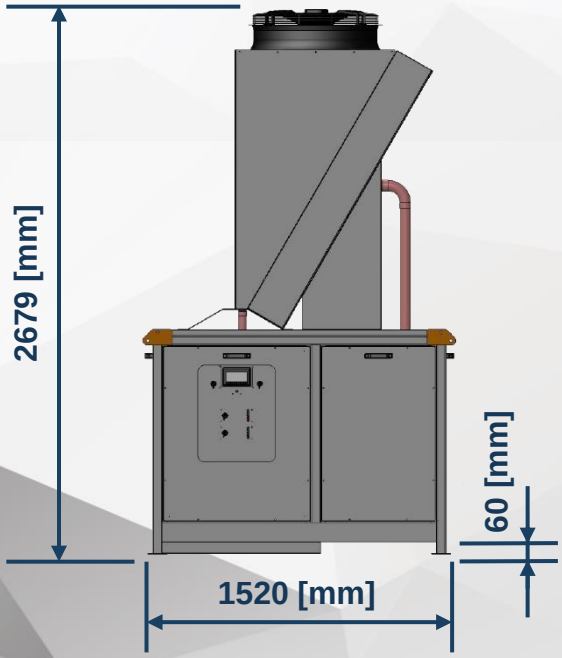

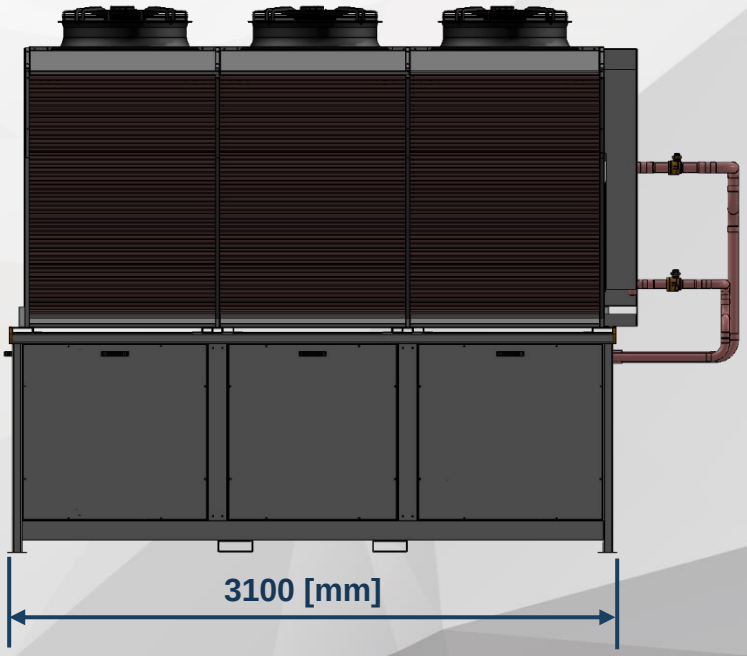

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