



CUBO₂
PLUS

SUSTAINABLE COLD SOLUTIONS

TRANSCRITICAL CO₂NDENSING UNITS

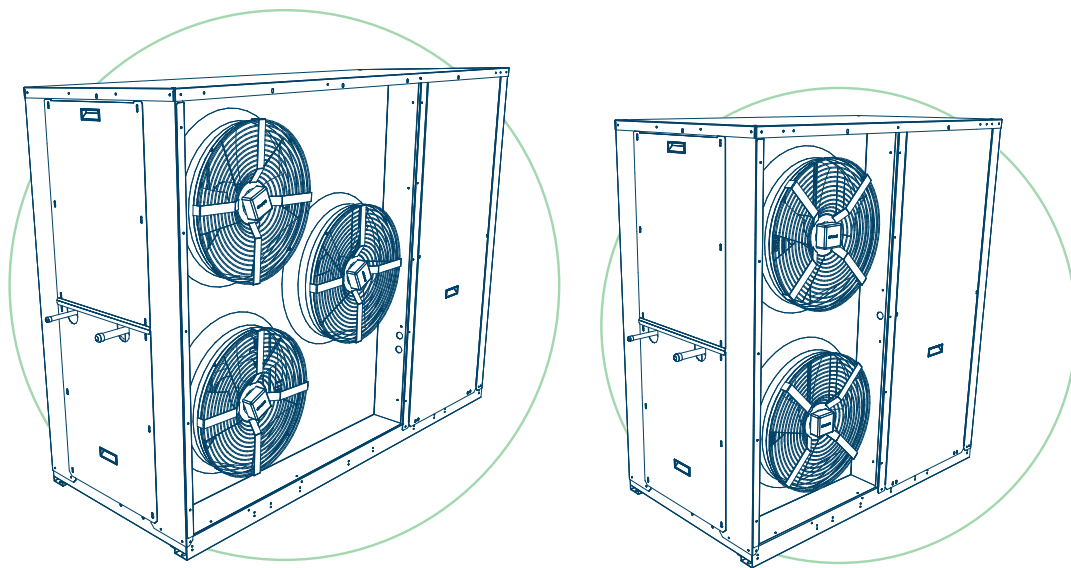


Available with
VARISTEP
CRII



We know the art of achieving
a perfect temperature

BEIJER REF



Product Description

Condensing unit for transcritical CO₂ applications equipped with BITZER/DORIN semi-hermetic piston compressors with frequency inverter or BITZER CR11, integrated air cooled gas cooler and EC fans. It is a high-efficiency solution designed for a small footprint and low noise.

MAIN ADVANTAGES



CO₂ REFRIGERANT



EFFICIENT SOLUTION



LOW NOISE



SMALL FOOTPRINT



EASY START-UP



SEMI-HERMETIC
RECIPROCATING
COMPRESSOR



GAS COOLER
EQUIPPED

Cooling Capacity

Transcritical condensing units DX

UMT MTDX

1 kW

39 kW

UMT BTDX

4 kW

29 kW

Standard Accessories

- Semihermetic reciprocating compressor
- Carel controller
- Inverter modulation for capacity control 60% - 140% or BITZER CRII for capacity modulation 10% - 100%
- Integrated gas cooler with EC fans
- Design pressure: 130 bar (high pressure side) | 80 bar (liquid line) | 80 bar (suction line)
- Power supply 400V/3+N/50Hz
- Liquid receiver 15 liters (PED III)
- K65 connections

Accessories on Request

- Liquid receiver 37 liters (PED III)
- Adiabatic kit water spray, including controller
- RDM/Danfoss/Wurm controller
- Epoxy or Electrofin gas cooler corrosion coil protection

Check the Unit CO₂ Charge

CUBO₂ PLUS



Cooling Capacity:

MT from 4,6 kW up to 34 kW
BT from 1,1 kW up to 12,5 kW

Design is compact and units are easy to install and maintain.
Units are equipped with gas cooler and electrical panel, tested and factory programmed for an easy start-up.

DOWNLOAD BROCHURE

CO₂ CHARGE CALCULATION
CUBO PLUS V9.1



1_ Enter our website www.scmfrigo.com

2_ Click on the 'Products' section at the top

3_ Click within the product group 'CO₂ Condensing Units'.

4_ Finally, click here!



English



user External

Air - CO₂ condensing units for medium temperature applications

Configuration Selection Verify

Serie: CUBO2Plus

Options:

Compressor brand: Bitzer inverter

Input data

Required Capacity: 0.00

Tolerance: 10.00

Evaporation temperature: -5.00

Ambient temperature: 35.00

<https://cubo2calculation.scmfrigo.com/#/home>

AT THE FOLLOWING LINK YOU CAN CHECK THE UNIT CHARGE.
Ask our sales department for the password

UMT 036 MTDx	Dorin CD 360H	Ambient temperature [°C]	Evaporation Temperature[°C]																				
			-15				-10				-5				0				5				
			Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP						
			min	max	kW		min	max	kW		min	max	kW		min	max	kW						
	40	1,96	3,93	4,39	0,89	2,46	4,92	4,60	1,07	3,03	6,05	4,77	1,27	3,65	7,30	4,90	1,49	4,33	8,65	4,99	1,74		
	38	2,07	4,14	4,32	0,96	2,59	5,17	4,51	1,15	3,18	6,35	4,66	1,36	3,83	7,65	4,77	1,60	4,53	9,05	4,83	1,88		
	32	2,44	4,88	4,08	1,20	3,03	6,06	4,20	1,44	3,69	7,39	4,27	1,73	4,43	8,85	4,30	2,06	5,22	10,44	4,28	2,44		
	25	2,90	5,80	4,04	1,44	3,60	7,20	3,98	1,81	4,39	8,77	4,21	2,08	5,26	10,52	4,23	2,49	6,21	12,41	4,19	2,96		
	15	3,65	7,29	3,59	2,03	4,41	8,81	3,20	2,75	5,40	10,80	3,57	3,03	6,43	12,86	3,47	3,70	7,54	15,08	3,32	4,54		
	5	4,46	8,93	3,00	2,97	5,41	10,83	2,63	4,12	6,48	12,96	2,78	4,67	7,66	15,32	2,58	5,95	8,93	17,87	2,31	7,75		
	N. of fans	2 x Ø 500 mm								MEPS ^(c)				2,56									
	Weight	460 kg								Annual Energy Consumption				19150 kWh/year									
	Sound pressure ^(b)	43 dB(A)								MRA/Pmax				15,9 A / 7,5 kW									
UMT 075 MTDx	Dorin CD 4 75-4.7 H	Ambient temperature [°C]	-15				-10				-5				0				5				
			Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP						
			min	max	kW		min	max	kW		min	max	kW		min	max	kW						
				40	4,10	8,20	7,71	1,06	5,01	10,02	8,04	1,25	5,99	11,97	8,28	1,45	6,98	13,97	8,45	1,65	7,96	15,92	8,52
			38	4,27	8,55	7,53	1,14	5,20	10,40	7,81	1,33	6,18	12,36	8,02	1,54	7,17	14,33	8,15	1,76	8,11	16,22	8,18	1,98
			32	4,81	9,61	6,91	1,39	5,68	11,36	7,08	1,60	6,51	13,02	7,17	1,82	7,25	14,49	7,16	2,02	7,89	15,77	7,05	2,24
			25	5,88	11,77	6,82	1,73	7,14	14,28	6,97	2,05	8,49	16,98	7,04	2,41	9,85	19,70	7,01	2,81	11,13	22,25	6,88	3,23
			15	7,12	14,23	5,86	2,43	8,41	16,83	5,85	2,88	9,57	19,15	5,74	3,34	10,43	20,86	5,53	3,77	11,50	22,99	5,22	4,41
			5	7,98	15,96	4,71	3,39	9,17	18,33	4,53	4,05	10,86	21,73	4,25	5,11	12,72	25,44	3,86	6,58	14,72	29,43	3,37	8,74
			N. of fans	2 x Ø 500 mm								MEPS ^(c)				2,67							
	Weight	470 kg								Annual Energy Consumption				26174 kWh/year									
	Sound pressure ^(b)	45 dB(A)								MRA/Pmax				20,5 A / 10,4 kW									
UMT 120 MTDx	Dorin CD4 90-6.4H	Ambient temperature [°C]	-15				-10				-5				0				5				
			Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP						
			min	max	kW		min	max	kW		min	max	kW		min	max	kW						
				40	5,66	11,32	10,33	1,10	6,93	13,86	10,78	1,29	8,30	16,60	11,13	1,49	9,69	19,38	11,37	1,70	11,03	22,05	11,50
			38	5,91	11,82	10,08	1,17	7,21	14,42	10,48	1,38	8,58	17,16	10,78	1,59	9,94	19,88	10,97	1,81	11,21	22,43	11,04	2,03
			32	6,69	13,37	9,24	1,45	7,90	15,80	9,48	1,67	9,00	18,00	9,61	1,87	9,95	19,90	9,63	2,07	10,78	21,56	9,52	2,27
			25	8,10	16,21	9,11	1,78	9,86	19,72	9,33	2,11	11,73	23,47	9,43	2,49	13,58	27,16	9,41	2,89	15,20	30,40	9,27	3,28
			15	9,85	19,71	7,80	2,53	11,71	23,42	7,81	3,00	13,28	26,57	7,70	3,45	14,36	28,72	7,47	3,84	15,75	31,49	7,12	4,42
			5	11,74	23,49	6,27	3,75	12,55	25,10	6,08	4,13	14,86	29,72	5,79	5,13	17,38	34,75	5,38	6,46	20,08	40,15	4,88	8,24
			N. of fans	2 x Ø 500 mm								MEPS ^(c)				2,75							
	Weight	645 kg								Annual Energy Consumption				35268 kWh/year									
	Sound pressure ^(b)	45 dB(A)								MRA/Pmax				26,3 A / 13,8 kW									
UMT 150 MTDx	Dorin CD4 120-9.2H	Ambient temperature [°C]	-15				-10				-5				0				5				
			Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP						
			min	max	kW		min	max	kW		min	max	kW		min	max	kW						
				40	8,09	16,18	14,79	1,09	9,95	19,90	15,46	1,29	12,01	24,02	16,00	1,50	14,21	28,41	16,40	1,73	16,45	32,91	16,66
			38	8,46	16,91	14,43	1,17	10,38	20,76	15,03	1,38	12,50	24,99	15,50	1,61	14,73	29,46	15,83	1,86	16,98	33,95	16,00	2,12
			32	9,72	19,45	13,24	1,47	13,61	27,22	16,92	1,61	15,10	30,21	17,08	1,77	14,13	28,26	13,98	2,02	17,77	35,54	13,94	2,55
			25	11,56	23,13	13,06	1,77	14,10	28,21	13,40	2,10	16,92	33,85	13,60	2,49	19,95	39,91	13,65	2,92	23,05	46,11	13,56	3,40
			15	14,10	28,20	11,24	2,51	17,03	34,05	11,30	3,01	20,22	40,45	11,23	3,60	23,48	46,96	11,05	4,25	26,44	52,87	10,75	4,92
			5	16,75	33,51	9,15	3,66	19,94	39,88	9,03	4,42	23,05	46,10	8,81	5,23	25,73	51,47	8,51	6,05	28,31	56,61	8,13	6,97
			N. of fans	3 x Ø 500 mm								MEPS ^(c)				2,83							
	Weight	560 kg								Annual Energy Consumption				51217 kWh/year									
	Sound pressure ^(b)	44 dB(A)								MRA/Pmax				33,4 A / 18,6 kW									
UMT 190 MTDx	Dorin CD 2000H	Ambient temperature [°C]	-15				-10				-5				0				5				
			Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP		Capacity [kW]	Pe	COP						
			min	max	kW		min	max	kW		min	max	kW		min	max	kW						
				40	10,64	21,29	18,81	1,13	12,86	25,72	19,50	1,32	15,10	30,21	20,01	1,51	17,25	28,75	16,93	1,70	18,88	31,47	17,16
			38	11,05	22,10	18,27	1,21	13,25	26,50	18,88	1,40	15,42	30,84	19,31	1,60	17,44	29,07	16,24	1,79	18,86	31,44	16,38	1,92
			32	12,92	25,84	17,29	1,49	15,41	30,81	17,76	1,74	17,76	35,52	18,03	1,97	19,83	33,05	15,08	2,19	21,58	35,97	14,95	2,41
			25	15,23	30,45	16,31	1,87	18,22	36,45	16,62	2,19	21,08	42,16	16,74	2,52	22,78	37,97	13,64	2,78	24,42	40,71	13,48	3,02
			15	17,95	35,91	13,84	2,59	20,14	40,29	13,81	2,92	21,79	43,58	13,59	3,21	26,32	43,86	11,49	3,82	36,12	60,20	11,52	5,23
			5	19,84	39,67	11,05	3,59	23,73	47,45	10,71	4,43	28,03	56,07	10,20	5,50	30,99	51,64	9,63	5,36	35,21	58,68	9,68	6,07
			N. of fans	3 x Ø 500 mm								MEPS ^(c)				2,85							
	Weight	655 kg								Annual Energy Consumption				66470 kWh/year									
	Sound pressure ^(b)	45 dB(A)								MRA/Pmax				42,4 A / 24 kW									

NOTES

(a) Inverter modulation from 30 to 60 Hz
(b) Based on free field area with semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A)
(c) Minimum Energy Performance Standards, calculated according to Ecodesign Directive EN 2009/125/EC

		Evaporation Temperature[°C]																				
		-15				-10				-5				0				5				
		Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	
Ambient temperature [°C]	min	max	kW		min	max	kW		min	max	kW		min	max	kW		min	max	kW			
UMT 036 MTDX	Bitzer 2MTE-5K	40	2,85	5,70	5,23	1,09	3,48	6,95	5,93	1,17	4,19	8,38	6,13	1,37	4,98	9,97	6,29	1,58	5,91	11,82	6,39	1,85
		38	2,98	5,97	5,09	1,17	3,65	7,29	5,77	1,26	4,40	8,81	5,96	1,48	5,24	10,48	6,09	1,72	6,20	12,40	6,15	2,02
		32	3,46	6,92	4,64	1,49	4,24	8,48	5,26	1,61	5,11	10,23	5,37	1,91	6,03	12,05	5,40	2,23	6,94	13,87	5,36	2,59
		25	4,09	8,18	4,58	1,79	5,04	10,08	5,19	1,94	6,15	12,31	5,28	2,33	7,45	14,90	5,30	2,81	8,87	17,75	5,24	3,39
		15	4,97	9,94	3,57	2,78	6,05	12,11	4,03	3,00	7,19	14,38	4,02	3,58	8,45	16,90	3,96	4,27	9,80	19,60	3,81	5,14
		5	5,93	11,86	2,97	3,99	7,21	14,42	3,34	4,32	8,55	17,11	3,24	5,28	10,09	20,17	3,10	6,51	11,69	23,37	2,86	8,17
	N. of fans	2 x Ø 500 mm									MEPS ^(a)				2,75							
	Weight	460 kg									Annual Energy Consumption				18927 kWh/year							
	Sound pressure ^(b)	43 dB(A)									MRA/Pmax				15,9 A / 7,5 kW							
		Evaporation Temperature[°C]																				
		-15				-10				-5				0				5				
		Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	
Ambient temperature [°C]	min	max	kW		min	max	kW		min	max	kW		min	max	kW		min	max	kW			
UMT 075 MTDX	Bitzer 2KTE-7K	40	4,11	8,22	7,88	1,04	5,05	10,09	8,24	1,23	6,13	12,26	8,54	1,44	7,35	14,69	8,77	1,68	8,65	17,30	8,91	1,94
		38	4,31	8,62	7,68	1,12	5,29	10,58	8,01	1,32	6,42	12,83	8,28	1,55	7,67	15,33	8,48	1,81	8,99	17,97	8,57	2,10
		32	5,00	10,00	7,04	1,42	6,09	12,19	7,27	1,68	7,25	14,49	7,42	1,95	8,36	16,73	7,49	2,23	9,37	18,73	7,43	2,52
		25	5,96	11,92	6,94	1,72	7,33	14,65	7,16	2,05	8,89	17,78	7,29	2,44	10,64	21,28	7,33	2,90	12,50	25,00	7,25	3,45
		15	7,11	14,21	5,58	2,55	8,48	16,96	5,67	2,99	9,99	19,98	5,70	3,51	11,64	23,28	5,64	4,12	13,43	26,86	5,50	4,88
		5	8,51	17,02	4,74	3,59	10,09	20,18	4,73	4,27	11,83	23,66	4,64	5,10	13,73	27,47	4,48	6,13	15,80	31,60	4,24	7,46
	N. of fans	2 x Ø 500 mm									MEPS ^(a)				2,78							
	Weight	470 kg									Annual Energy Consumption				26966 kWh/year							
	Sound pressure ^(b)	44 dB(A)									MRA/Pmax				20,5 A / 10,4 kW							
		Evaporation Temperature[°C]																				
		-15				-10				-5				0				5				
		Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	
Ambient temperature [°C]	min	max	kW		min	max	kW		min	max	kW		min	max	kW		min	max	kW			
UMT 120 MTDX	Bitzer 4MTE-10K	40	5,39	10,79	10,33	1,04	6,70	13,40	11,02	1,22	8,13	16,26	11,50	1,41	9,64	19,29	11,78	1,64	11,18	22,37	11,87	1,88
		38	5,70	11,39	10,20	1,12	7,04	14,08	10,78	1,31	8,48	16,95	11,16	1,52	9,97	19,94	11,34	1,76	11,43	22,87	11,34	2,02
		32	6,61	13,22	9,53	1,39	7,88	15,76	9,81	1,61	9,05	18,09	9,92	1,82	10,10	20,19	9,84	2,05	11,06	22,13	9,63	2,30
		25	8,02	16,04	9,41	1,70	9,86	19,71	9,65	2,04	11,86	23,72	9,72	2,44	13,89	27,79	9,62	2,89	15,72	31,45	9,36	3,36
		15	9,26	18,52	7,65	2,42	11,02	22,04	7,73	2,85	12,95	25,90	7,73	3,35	15,05	30,10	7,64	3,94	17,33	34,65	7,47	4,64
		5	11,07	22,14	6,44	3,44	13,00	26,00	6,28	4,14	15,37	30,74	6,37	4,82	17,82	35,64	6,24	5,71	20,47	40,95	6,05	6,77
	N. of fans	2 x Ø 500 mm									MEPS ^(a)				2,68							
	Weight	570 kg									Annual Energy Consumption				36104 kWh/year							
	Sound pressure ^(b)	44 dB(A)									MRA/Pmax				26,3 A / 13,8 kW							
		Evaporation Temperature[°C]																				
		-15				-10				-5				0				5				
		Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	
Ambient temperature [°C]	min	max	kW		min	max	kW		min	max	kW		min	max	kW		min	max	kW			
UMT 150 MTDX	Bitzer 4KTE-12K	40	8,18	16,35	15,20	1,08	10,13	20,27	15,80	1,28	12,24	24,48	16,32	1,50	14,44	28,88	16,72	1,73	16,64	33,29	16,96	1,96
		38	8,61	17,22	14,78	1,17	10,62	21,23	15,33	1,39	12,73	25,47	15,79	1,61	14,89	29,78	16,11	1,85	16,99	33,98	16,26	2,09
		32	9,80	19,59	13,45	1,46	11,66	23,31	13,82	1,69	13,35	26,69	14,06	1,90	14,86	29,72	14,11	2,11	16,25	32,51	13,95	2,33
		25	11,96	23,92	13,25	1,80	14,73	29,47	13,60	2,17	17,70	35,41	13,79	2,57	20,66	41,33	13,80	2,99	23,29	46,58	13,58	3,43
		15	13,83	27,66	10,80	2,56	16,41	32,82	11,01	2,98	19,26	38,51	11,10	3,47	22,38	44,76	11,06	4,05	25,79	51,58	10,85	4,76
		5	16,93	33,87	9,19	3,69	19,80	39,61	9,22	4,30	23,00	45,99	9,13	5,04	26,55	53,09	8,90	5,97	30,44	60,87	8,53	7,14
	N. of fans	3 x Ø 500 mm									MEPS ^(a)				2,74							
	Weight	645 kg									Annual Energy Consumption				52347 kWh/year							
	Sound pressure ^(b)	45 dB(A)									MRA/Pmax				33,4 A / 18,6 kW							
		Evaporation Temperature[°C]																				
		-15				-10				-5				0				5				
		Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	
Ambient temperature [°C]	min	max	kW		min	max	kW		min	max	kW		min	max	kW		min	max	kW			
UMT 190 MTDX	Bitzer 4HTE-20K	40	10,63	21,27	18,66	1,14	12,80	25,60	19,60	1,31	15,11	27,67	18,61	1,49	17,40	29,00	17,31	1,67	19,60	32,67	17,53	1,86
		38	11,12	22,25	18,20	1,22	13,26	26,53	19,01	1,40	15,49	28,38	17,96	1,58	17,65	29,41	16,62	1,77	19,68	32,80	16,75	1,96
		32	13,13	26,25	17,29	1,52	13,73	27,46	17,01	1,61	17,29	31,67	16,42	1,93	20,14	33,56	15,33	2,19	23,11	38,51	15,64	2,46
		25	15,54	31,08	16,32	1,90	18,47	36,93	16,70	2,21	21,40	39,19	15,46	2,54	23,92	39,87	14,02	2,84	25,97	43,29	13,85	3,13
		15	17,08	34,16	13,50	2,53	20,02	40,04	13,75	2,91	23,31	42,70	12,75	3,35	26,87	44,78	11,67	3,84	30,70	51,17	11,68	4,38
		5	20,22	40,44	11,58	3,49	23,66	47,33	11,65	4,06	27,51	50,39	10,72	4,70	31,63	52,72	9,76	5,40	36,05	60,08	9,74	6,17
	N. of fans	3 x Ø 500 mm									MEPS ^(a)				2,71							
	Weight	655 kg									Annual Energy Consumption				62283 kWh/year							
	Sound pressure ^(b)	45 dB(A)									MRA/Pmax				42,4 A / 24 kW							

NOTES

^(a) Inverter modulation from 30 to 60 Hz^(b) Based on free field area with semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A)^(c) Minimum Energy Performance Standards, calculated according to Ecodesign Directive EN 2009/125/EC

UMT 075 VS MTDX		Ambient temperature [°C]		Evaporation Temperature[°C]																			
				-15				-10				-5				0				5			
				Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
				min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max
		40	0,69	6,85	6,26	1,10	0,84	8,42	6,55	1,29	1,02	10,25	6,81	1,51	1,23	12,35	7,00	1,76	1,47	14,71	7,13	2,06	
		38	0,72	7,18	6,09	1,18	0,88	8,84	6,36	1,39	1,08	10,75	6,59	1,63	1,29	12,94	6,76	1,92	1,54	15,39	6,85	2,25	
		32	0,84	8,36	5,55	1,51	1,03	10,28	5,74	1,79	1,24	12,45	5,88	2,12	1,48	14,82	5,94	2,50	1,72	17,19	5,91	2,91	
		25	0,99	9,93	5,47	1,82	1,22	12,21	5,65	2,16	1,48	14,84	5,77	2,57	1,78	17,84	5,81	3,07	2,12	21,22	5,75	3,69	
		15	1,22	12,23	4,23	2,89	1,46	14,64	4,28	3,42	1,73	17,30	4,28	4,05	2,02	20,24	4,21	4,81	2,34	23,45	4,07	5,76	
		5	1,46	14,64	3,51	4,18	1,74	17,41	3,47	5,02	2,05	20,48	3,37	6,07	2,39	23,88	3,21	7,44	2,76	27,59	2,98	9,26	
		N. of fans	2 x Ø 500 mm				MEPS ^(c)				3,14												
		Weight	470 kg				Annual Energy Consumption				20096 kWh/year												
		Sound pressure ^(b)	44 dB(A)				MRA/Pmax				20,5 A / 10,4 kW												
UMT 120 VS MTDX		Ambient temperature [°C]		Evaporation Temperature[°C]																			
				-15				-10				-5				0				5			
				Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
				min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max
		40	0,90	8,99	8,61	1,04	1,12	11,17	9,18	1,22	1,35	13,55	9,59	1,41	1,61	16,07	9,82	1,64	1,86	18,64	9,89	1,88	
		38	0,95	9,50	8,50	1,12	1,17	11,73	8,98	1,31	1,41	14,13	9,30	1,52	1,66	16,61	9,45	1,76	1,91	19,06	9,45	2,02	
		32	1,10	11,02	7,94	1,39	1,31	13,13	8,18	1,61	1,51	15,08	8,26	1,82	1,68	16,83	8,20	2,05	1,84	18,44	8,02	2,30	
		25	1,34	13,37	7,84	1,70	1,64	16,43	8,04	2,04	1,98	19,77	8,10	2,44	2,32	23,16	8,01	2,89	2,62	26,21	7,80	3,36	
		15	1,54	15,43	6,37	2,42	1,84	18,37	6,44	2,85	2,16	21,58	6,44	3,35	2,51	25,09	6,37	3,94	2,89	28,88	6,23	4,64	
		5	1,85	18,45	5,37	3,44	2,17	21,66	5,23	4,14	2,56	25,61	5,31	4,82	2,97	29,70	5,20	5,71	3,41	34,12	5,04	6,77	
		N. of fans	2 x Ø 500 mm				MEPS ^(c)				2,68												
		Weight	570 kg				Annual Energy Consumption				30081 kWh/year												
		Sound pressure ^(b)	44 dB(A)				MRA/Pmax				26,3 A / 13,8 kW												
UMT 150 VS MTDX		Ambient temperature [°C]		Evaporation Temperature[°C]																			
				-15				-10				-5				0				5			
				Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
				min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max
		40	1,36	13,63	12,67	1,08	1,69	16,89	13,17	1,28	2,04	20,40	13,60	1,50	2,89	28,88	13,94	2,07	3,33	33,29	14,14	2,35	
		38	1,43	14,35	12,31	1,17	1,77	17,69	12,77	1,39	2,12	21,22	13,16	1,61	2,98	29,78	13,43	2,22	3,40	33,98	13,55	2,51	
		32	1,63	16,33	11,21	1,46	1,94	19,43	11,52	1,69	2,22	22,25	11,72	1,90	2,97	29,72	11,76	2,53	3,25	32,51	11,63	2,80	
		25	1,99	19,93	11,05	1,80	2,46	24,56	11,33	2,17	2,95	29,51	11,49	2,57	4,13	41,33	11,50	3,59	4,66	46,58	11,32	4,11	
		15	2,31	23,05	9,00	2,56	2,74	27,35	9,18	2,98	3,21	32,09	9,25	3,47	4,48	44,76	9,21	4,86	5,16	51,58	9,04	5,71	
		5	2,82	28,22	7,66	3,69	3,30	33,01	7,68	4,30	3,83	38,33	7,61	5,04	5,31	53,09	7,41	7,16	6,09	60,87	7,11	8,56	
		N. of fans	3 x Ø 500 mm				MEPS ^(c)				2,80												
		Weight	645 kg				Annual Energy Consumption				42608 kWh/year												
		Sound pressure ^(b)	45 dB(A)				MRA/Pmax				33,4 A / 18,6 kW												
UMT 190 VS MTDX		Ambient temperature [°C]		Evaporation Temperature[°C]																			
				-15				-10				-5				0				5			
				Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
				min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max	kW	min	max
		40	1,77	17,72	15,55	1,14	2,13	21,33	16,33	1,31	2,52	25,16	16,92	1,49	2,90	29,00	17,31	1,67	3,27	32,67	17,53	1,86	
		38	1,85	18,54	15,17	1,22	2,21	22,11	15,84	1,40	2,58	25,80	16,33	1,58	2,94	29,41	16,62	1,77	3,28	32,80	16,75	1,96	
		32	2,19	21,88	14,41	1,52	2,29	22,88	14,17	1,61	2,88	28,79	14,93	1,93	3,36	33,56	15,33	2,19	3,85	38,51	15,64	2,46	
		25	2,59	25,90	13,60	1,90	3,08	30,78	13,91	2,21	3,56	35,63	14,05	2,54	3,99	39,87	14,02	2,84	4,33	43,29	13,85	3,13	
		15	2,85	28,47	11,25	2,53	3,34	33,36	11,46	2,91	3,88	38,82	11,59	3,35	4,48	44,78	11,67	3,84	5,12	51,17	11,68	4,38	
		5	3,37	33,70	9,65	3,49	3,94	39,44	9,71	4,06	4,58	45,81	9,74	4,70	5,27	52,72	9,76	5,40	6,01	60,08	9,74	6,17	
		N. of fans	3 x Ø 500 mm				MEPS ^(c)				2,71												
		Weight	655 kg				Annual Energy Consumption				51896 kWh/year												
		Sound pressure ^(b)	45 dB(A)				MRA/Pmax				42,4 A / 24 kW												

NOTES

^(a) Varistep modulation from 10 to 100 % of the capacity @ 50 Hz^(b) Based on free field area with semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A)^(c) Minimum Energy Performance Standards, calculated according to Ecodesign Directive EN 2009/125/EC

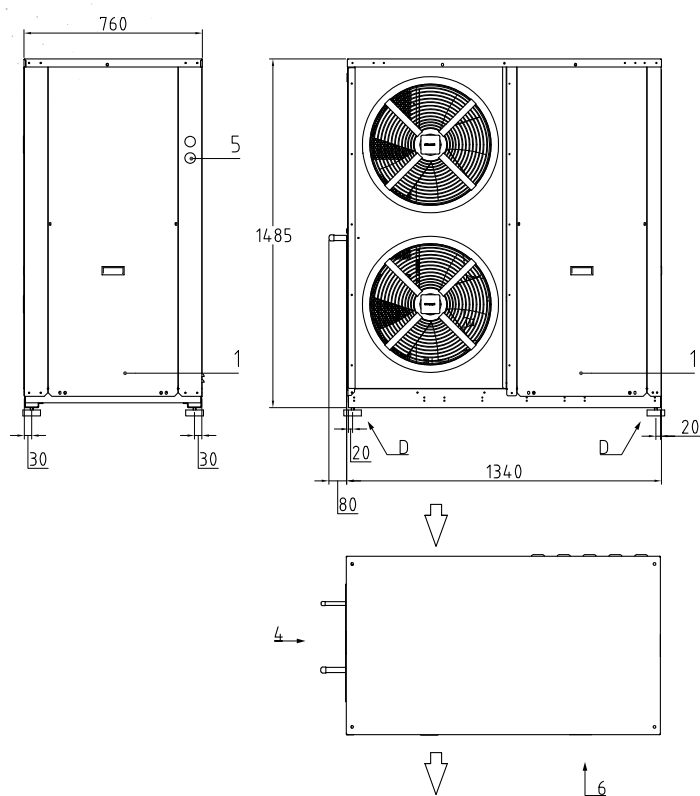
		Evaporation Temperature[°C]																			
		Ambient temperature [°C]				-40				-35				-30				-25			
						Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
		min	max	kW	min	max	kW	min		max	kW	min		max	kW						
UMT 055 BTDX Dorin CD2S 550	40	-	-	-	-	-	-	-	-	5,15	10,30	8,92	1,15	6,45	12,90	6,22	2,08				
	38	-	-	-	-	4,42	8,84	8,14	1,09	5,20	10,39	8,63	1,20	6,45	12,90	6,22	2,08				
	32	3,85	7,70	7,09	1,09	4,56	9,12	7,42	1,23	5,30	10,60	7,82	1,35	6,03	12,06	8,16	1,48				
	25	3,94	7,87	6,40	1,23	4,60	9,20	6,70	1,37	5,40	10,80	7,02	1,54	6,21	12,42	7,32	1,70				
	15	4,03	8,05	5,56	1,45	4,80	9,60	5,71	1,68	5,62	11,24	6,00	1,87	6,45	12,90	6,22	2,08				
	5	4,18	8,35	4,62	1,81	4,97	9,94	4,82	2,06	5,80	11,59	4,98	2,33	-	-	-	-				
	N. of fans	2 x Ø 500 mm				MEPS ^(a)				1,80											
	Weight	560 kg				Annual Energy Consumption				65817 kWh/year											
	Sound pressure ^(b)	48 dB(A)				FLA/MRA/Pmax				18,9 A / 67,4 A / 9,4 kW											
		Evaporation Temperature[°C]																			
		Ambient temperature [°C]				-40				-35				-30				-25			
						Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
		min	max	kW	min	max	kW	min		max	kW	min		max	kW						
UMT 075 BTDX Dorin CD2S 750	40	-	-	-	-	-	-	-	-	6,63	13,26	12,14	1,09	7,39	14,78	12,59	1,17				
	38	-	-	-	-	5,80	11,59	11,11	1,04	6,68	13,36	11,69	1,14	7,55	15,10	12,14	1,24				
	32	5,10	10,20	9,65	1,06	5,87	11,75	10,03	1,17	6,87	13,74	10,50	1,31	7,76	15,53	10,87	1,43				
	25	5,18	10,37	8,58	1,21	6,03	12,06	8,94	1,35	6,96	13,92	9,29	1,50	8,12	16,24	9,48	1,71				
	15	5,38	10,75	7,30	1,47	6,31	12,62	7,60	1,66	7,21	14,42	7,97	1,81	8,31	16,62	8,06	2,06				
	5	5,53	11,05	6,04	1,83	6,55	13,10	6,26	2,09	7,53	15,06	6,47	2,33	-	-	-	-				
	N. of fans	2 x Ø 500 mm				MEPS ^(a)				1,85											
	Weight	570 kg				Annual Energy Consumption				85345 kWh/year											
	Sound pressure ^(b)	48 dB(A)				FLA/MRA/Pmax				23,9 A / 90,4 A / 12,1 kW											
		Evaporation Temperature[°C]																			
		Ambient temperature [°C]				-40				-35				-30				-25			
						Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
		min	max	kW	min	max	kW	min		max	kW	min		max	kW						
UMT 090 BTDX Dorin CD2S 900	40	-	-	-	-	-	-	-	-	7,90	15,80	14,74	1,07	8,81	17,62	15,24	1,16				
	38	-	-	-	-	7,08	14,16	13,58	1,04	8,16	16,32	14,28	1,14	9,11	18,23	14,76	1,23				
	32	6,16	12,32	11,76	1,05	7,18	14,36	12,26	1,17	8,29	16,58	12,76	1,30	9,38	18,76	13,20	1,42				
	25	6,26	12,53	10,46	1,20	7,38	14,76	10,91	1,35	8,51	17,03	11,32	1,50	9,62	19,25	11,66	1,65				
	15	11,30	13,01	8,89	1,46	7,64	15,28	9,23	1,66	8,80	17,59	9,52	1,85	10,16	20,33	9,80	2,07				
	5	6,70	13,40	7,34	1,83	7,84	15,68	7,57	2,07	9,11	18,23	7,84	2,33	-	-	-	-				
	N. of fans	3 x Ø 500 mm				MEPS ^(a)				1,87											
	Weight	650 kg				Annual Energy Consumption				103011 kWh/year											
	Sound pressure ^(b)	48 dB(A)				FLA/MRA/Pmax				29,6 A / 98,6 A / 14,8 kW											
		Evaporation Temperature[°C]																			
		Ambient temperature [°C]				-40				-35				-30				-25			
						Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
		min	max	kW	min	max	kW	min		max	kW	min		max	kW						
UMT 200 BTDX Dorin CD2S 2000	40	-	-	-	-	-	-	-	-	9,79	19,57	16,82	1,16	11,15	22,31	17,64	1,26				
	38	-	-	-	-	8,50	17,00	15,36	1,11	9,88	19,75	16,28	1,21	11,26	22,51	17,06	1,32				
	32	7,39	14,78	13,39	1,10	8,66	17,33	14,08	1,23	10,07	20,14	14,78	1,36	11,60	23,21	15,52	1,50				
	25	7,55	15,10	12,08	1,25	8,84	17,68	12,68	1,39	10,37	20,74	13,33	1,56	11,81	23,62	13,91	1,70				
	15	7,81	15,61	10,44	1,50	9,21	18,42	10,94	1,68	10,79	21,58	11,45	1,88	12,39	24,78	11,88	2,09				
	5	8,10	16,20	8,75	1,85	9,52	19,04	9,12	2,09	11,12	22,24	9,54	2,33	-	-	-	-				
	N. of fans	3 x Ø 500 mm				MEPS ^(a)				1,89											
	Weight	655 kg				Annual Energy Consumption				125074 kWh/year											
	Sound pressure ^(b)	50 dB(A)				FLA/MRA/Pmax				44,6 A / 183,6 A / 23,7 kW											
		Evaporation Temperature[°C]																			
		Ambient temperature [°C]				-40				-35				-30				-25			
						Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP	Capacity [kW]		Pe	COP
		min	max	kW	min	max	kW	min		max	kW	min		max	kW						
UMT 250 BTDX Dorin CD2S 2500	40	-	-	-	-	-	-	-	-	12,38	24,77	21,89	1,13	14,05	28,10	22,81	1,23				
	38	-	-	-	-	10,92	21,84	20,24	1,08	12,64	25,27	21,18	1,19	14,35	28,69	22,06	1,30				
	32	9,48	18,96	17,41	1,09	11,09	22,18	18,22	1,22	12,85	25,69	19,02	1,35	14,58	29,16	19,76	1,48				
	25	9,74	19,49	15,49	1,26	11,40	22,80	16,31	1,40	13,04	26,09	16,94	1,54	14,97	29,94	17,58	1,70				
	15	10,03	20,05	13,42	1,49	11,81	23,62	13,97	1,69	13,64	27,28	14,46	1,89	15,64	31,27	14,89	2,10				
	5	10,33	20,65	11,17	1,85	12,13	24,25	11,56	2,10	14,14	28,27	11,99	2,36	-	-	-	-				
	N. of fans	3 x Ø 500 mm				MEPS ^(a)				1,90											
	Weight	660 kg				Annual Energy Consumption				159585 kWh/year											
	Sound pressure ^(b)	50 dB(A)				FLA/MRA/Pmax				51,6 A / 209,6 A / 27,6 kW											

NOTES

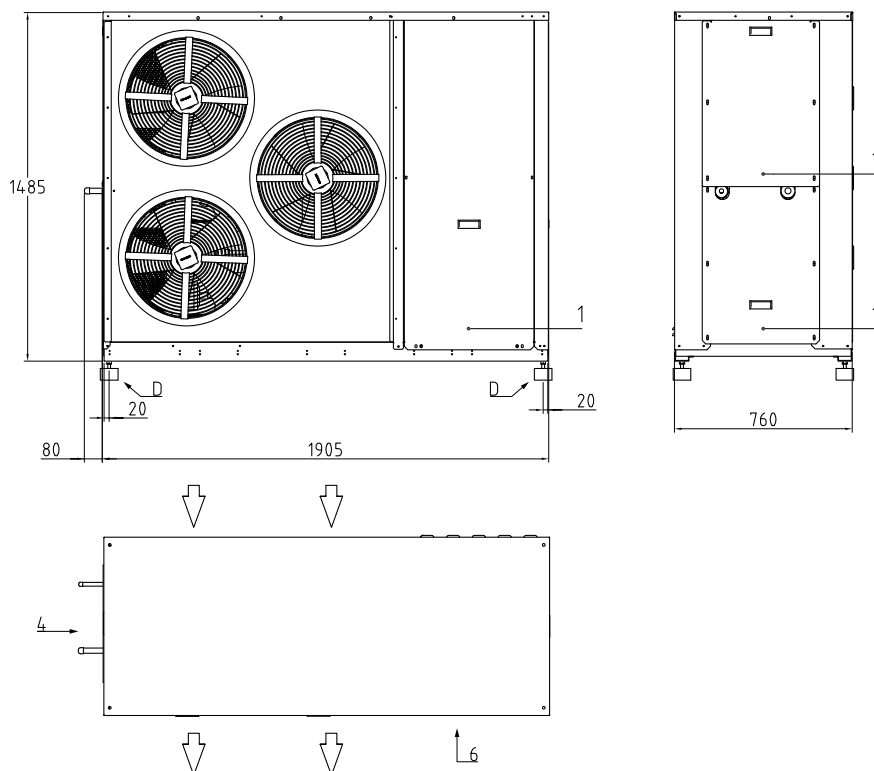
^(a) Inverter modulation from 30 to 60 Hz^(b) Based on free field area with semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A)^(c) Minimum Energy Performance Standards, calculated according to Ecodesign Directive EN 2009/125/EC

Dimensional Data

2 fans

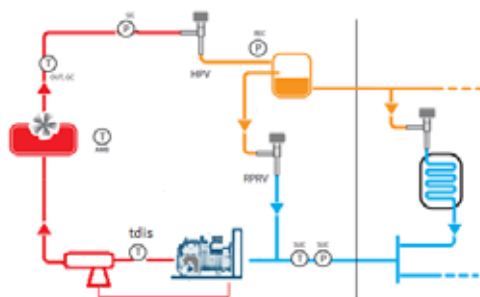


3 fans



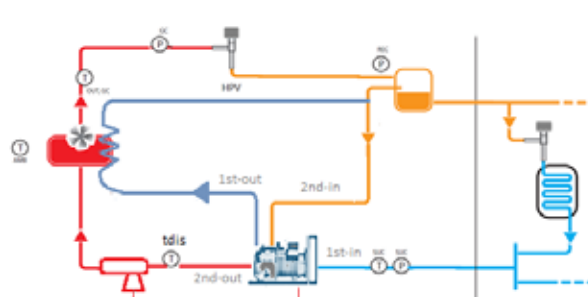
Unit Configuration

MODELE UMT MTDX



- One Semihermetic Compressor
- Oil management with: oil separator, oil reservoir, traxoil
- Receiver Pressure: Fixed SetPoint, adjustable by parameter (Factory Setting = 40 bar). Receiver pressure is managed by the flash valve.

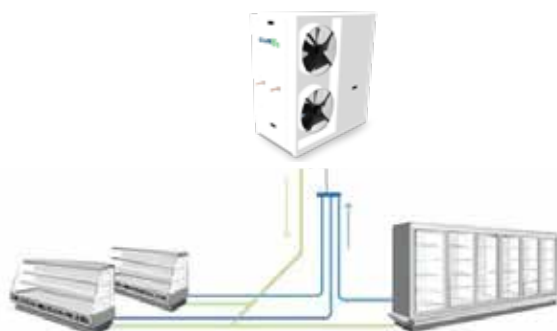
MODELE UMT BTDX



- One semihermetic compressor double stage
- Air cooled intercooler integrated in the gas cooler coil
- Oil management with: oil separator, oil reservoir, traxoil
- Receiver Pressure: variable pressure according to the operating conditions and to the model compressor (Open Flash Tank System)

Installation Design

Multi-Split

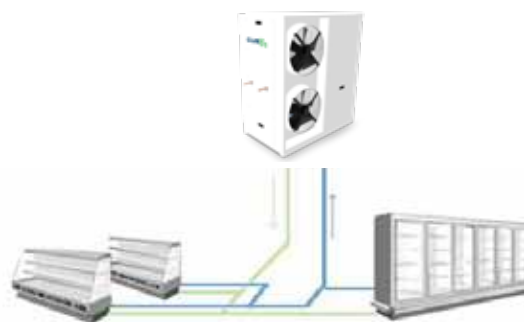


Pipe Connections (Multi-Split or Branch)

The connection between the Condensing Unit and more remote evaporators can be the same one used for Multi-Split or branch system.

The preferred one is the one is able to guarantee the highest gas velocity in the suction line (for a good oil return) with a low pressure drop.

Branch



For Multi-Split layout, the system requires a dedicated suction line for each evaporator that will be collected by a manifold installed close to the condensing unit.

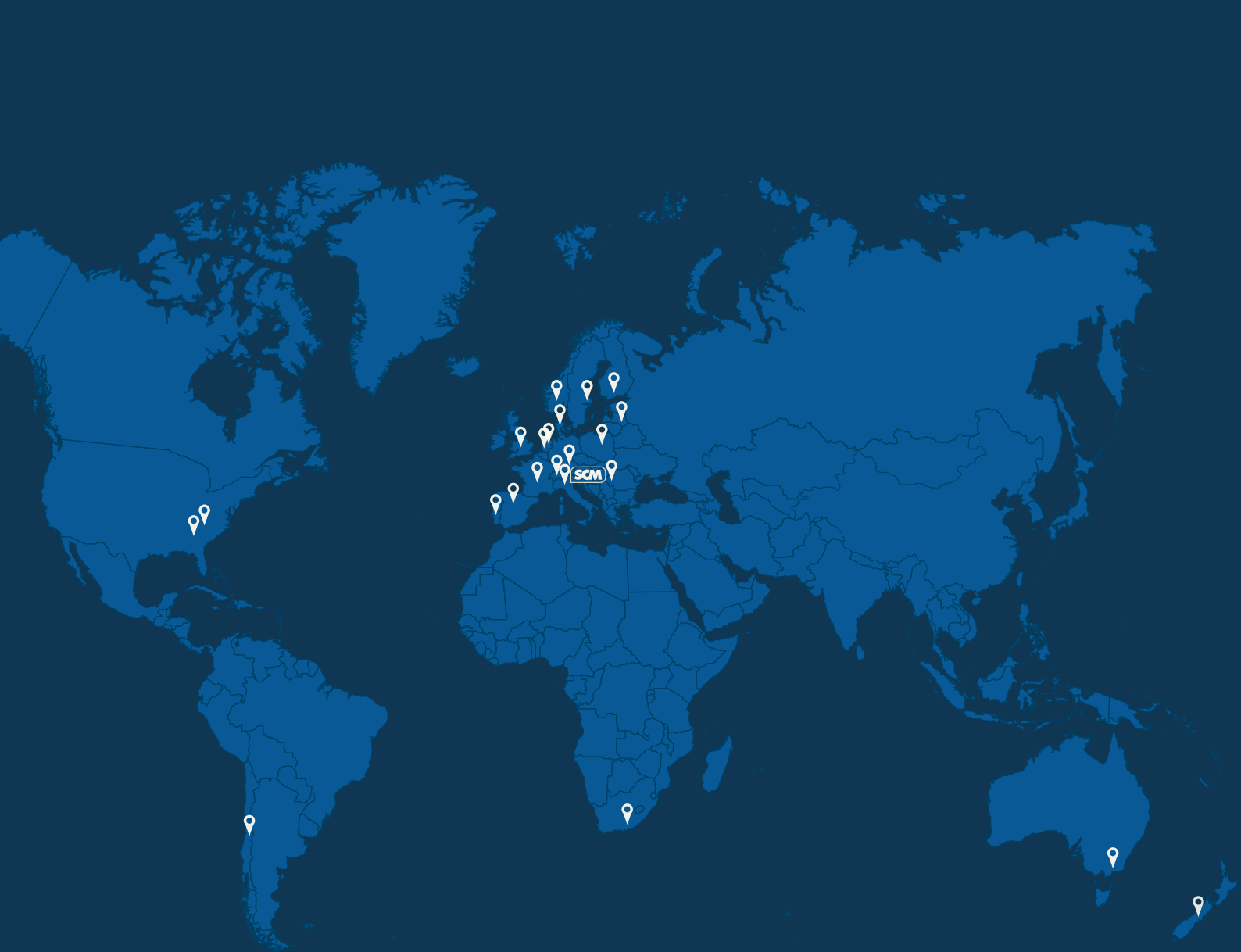
Please refer to the example reported in the pictures.

- Liquid line must be properly sized to supply the farther evaporators (liquid velocity < 1 m/s is suggested).
- Suction line must be properly sized to have a good oil return with a low pressure drop (gas velocity min 5m/s).

NOTES

[illegible]





Stay connected.

Follow our LinkedIn page to discover more stories from our team and insights into what makes SCM Frigo a leader in innovation and sustainability.



Connect with Us
on LinkedIn

 www.scmfrigo.com  +39 049 970 5000  info@scmfrigo.com



A **BEIJER REF** Company

SCM FRIGO S.p.A. - Viale Andrea Palladio, 31 35020 Sant'Angelo di Piove di Sacco

