



CUBO₂
PLUS

SUSTAINABLE COLD SOLUTIONS

TRANSCRITICAL CO₂ CONDENSING UNITS

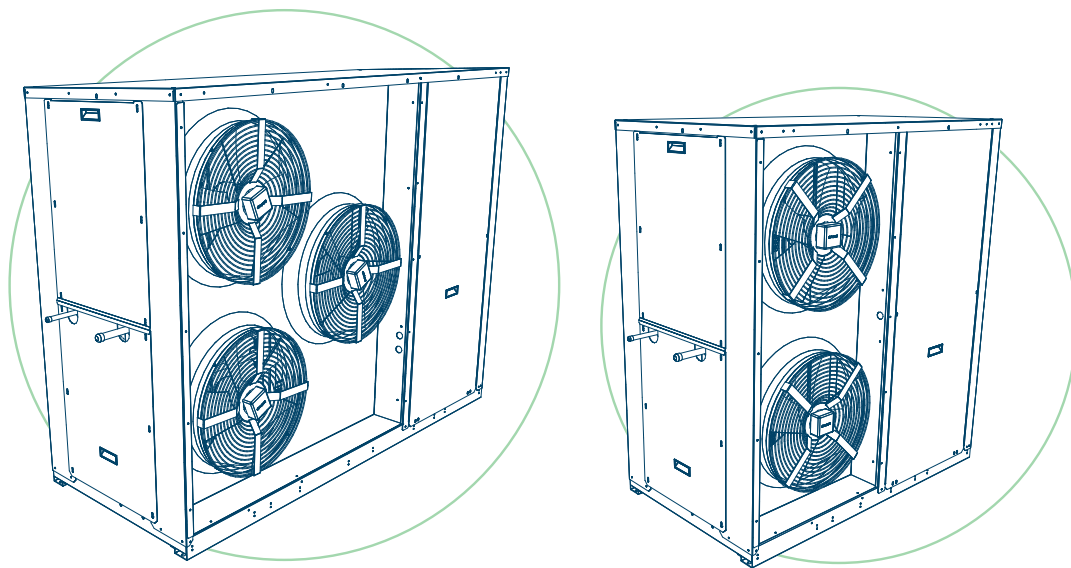


Available with
VARISTEP
CRII



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



COMPACT DESIGN



EASY START-UP



EASY TO INSTALL
AND MAINTAIN



TESTED AND FACTORY
PROGRAMMED



EFFICIENCY UP IN ALL
CLIMATE THANKS TO
EJECTOR

Cooling Capacity

Transcritical condensing units DX

UMT MTDX

2,37 kW

44,7 kW

UMT BTDX

1,00 kW

15,8 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 / Receiver Size




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](#)

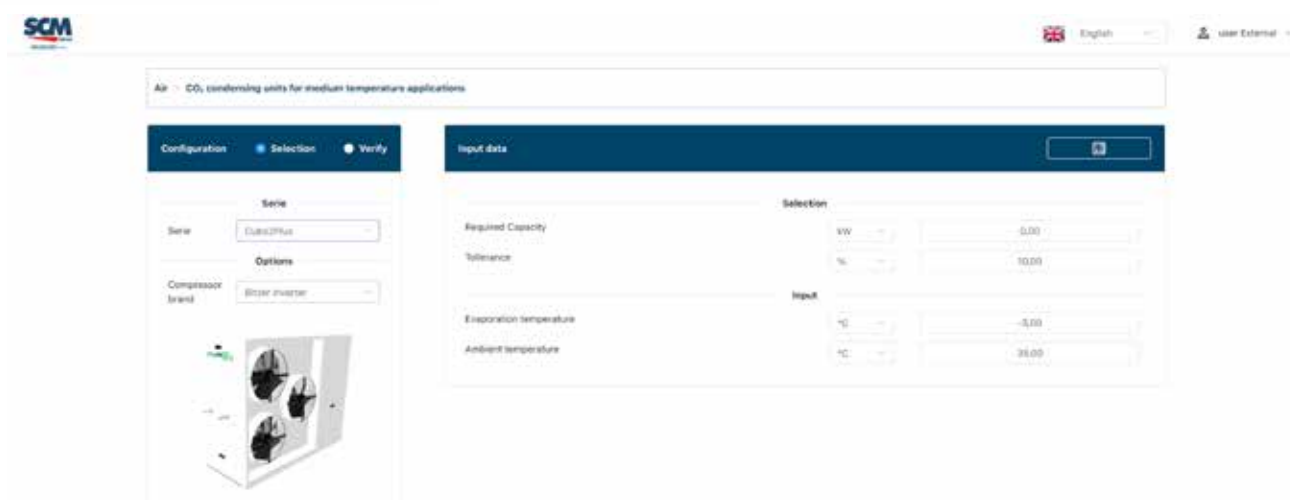
[CO₂ CHARGE CALCULATION CUBO PLUS V1.1](#)

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! 



The screenshot shows the 'CUBO2 calculation' website interface. The top navigation bar includes the SCM logo, a language dropdown set to 'English', and a user profile dropdown labeled 'user External'. The main content area is titled 'Air - CO₂ condensing units for medium temperature applications'. It features a 'Configuration' tab with sub-tabs 'Selection' and 'Verify'. The 'Selection' sub-tab is active, showing a 'Serie' dropdown set to 'Cubo2Plus' and an 'Options' section with a 'Compressor brand' dropdown set to 'Bitzer inverter'. Below this is an image of the unit. The 'Input data' section on the right contains a 'Required Capacity' field, a 'Tolerance' dropdown set to '10.00', and an 'Input' section with 'Evaporation temperature' set to '-3.00' and 'Ambient temperature' set to '36.00'.

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

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

		Evaporation Temperature[°C]																	
		-15						-10						-5					
T amb [°C]		Cooling Capacity [kW]		Pe	COP	Cooling Capacity [kW]		Pe	COP	Cooling Capacity [kW]		Pe	COP	Cooling Capacity [kW]		Pe	COP	Cooling Capacity [kW]	
		min	max			min	max			min	max			min	max			min	max
				kW				kW				kW				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
	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
	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
	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
	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
	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
	N. of fans 2x500																		
	Weight 460 kg																		
	Sound pressure 43 dB(A)*																		
	Minimum Energy Performance Standards 2,75 (according Ecodesign Directive EN 2009/125/EC)																		
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
	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
	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
	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
	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	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
	N. of fans 2x500																		
	Weight 470 kg																		
	Sound pressure 44 dB(A)*																		
	Minimum Energy Performance Standards 2,78 (according Ecodesign Directive EN 2009/125/EC)																		
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
	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
	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
	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
	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
	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
	N. of fans 2x500																		
	Weight 570 kg																		
	Sound pressure 44 dB(A)*																		
	Minimum Energy Performance Standards 2,68 (according Ecodesign Directive EN 2009/125/EC)																		
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
	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
	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
	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
	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
	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
	N. of fans 3x500																		
	Weight 645 kg																		
	Sound pressure 45 dB(A)*																		
	Minimum Energy Performance Standards 2,74 (according Ecodesign Directive EN 2009/125/EC)																		
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
	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
	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
	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
	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
	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
	N. of fans 3x500																		
	Weight 655 kg																		
	Sound pressure 45 dB(A)*																		
	Minimum Energy Performance Standards 2,71 (according Ecodesign Directive EN 2009/125/EC)																		

NOTE: Inverter modulation from 30 to 60 Hz except / cooling capacity min @30Hz - @60Hz except** @50Hz
 (*based on free field area weed semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A))

		Evaporation Temperature[°C]																															
		T amb [°C]		-15						-10						-5						0						5					
				Cooling Capacity [kW]		Pe kW	COP	Cooling Capacity [kW]		Pe kW	COP	Cooling Capacity [kW]		Pe kW	COP	Cooling Capacity [kW]		Pe kW	COP	Cooling Capacity [kW]		Pe kW	COP										
				min	max			min	max			min	max			min	max			min	max			min	max								
UMT 036 MTDX	Dorin CD 360H	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 2x500																															
		Weight 460 kg																															
		Sound pressure 43 dB(A)*																															
		Minimum Energy Performance Standards 2,56 (according Ecodesign Directive EN 2009/125/EC)																															
Annual Energy Consumption 19150 kWh/year																																	
MRA/Pmax 15,9 A / 7,5 kW																																	
UMT 075 MTDX	Dorin CD 4 75-4-7 H	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	1,87											
		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 2x500																															
		Weight 650 kg																															
		Sound pressure 45 dB(A)*																															
		Minimum Energy Performance Standards 2,67 (according Ecodesign Directive EN 2009/125/EC)																															
Annual Energy Consumption 26174 kWh/year																																	
MRA/Pmax 20,5 A / 10,4 kW																																	
UMT 120 MTDX	Dorin CD4 90-6-4H	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	1,92											
		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 2x500																															
		Weight 570 kg																															
		Sound pressure 45 dB(A)*																															
		Minimum Energy Performance Standards 2,75 (according Ecodesign Directive EN 2009/125/EC)																															
Annual Energy Consumption 35268 kWh/year																																	
MRA/Pmax 26,3 A / 13,8 kW																																	
UMT 150 MTDX	CD4 120-9-2H	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	1,98											
		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 3x500																															
		Weight 560 kg																															
		Sound pressure 44 dB(A)*																															
		Minimum Energy Performance Standards 2,83 (according Ecodesign Directive EN 2009/125/EC)																															
Annual Energy Consumption 51217 kWh/year																																	
MRA/Pmax 33,4 A / 18,6 kW																																	
UMT 190 MTDX	Dorin CD 2000H	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	1,83											
		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 3x500																															
		Weight 655 kg																															
		Sound pressure 45 dB(A)*																															
		Minimum Energy Performance Standards 2,85 (according Ecodesign Directive EN 2009/125/EC)																															
Annual Energy Consumption 66470 kWh/year																																	
MRA/Pmax 42,4 A / 24 kW																																	

		Evaporation Temperature[°C]																			
		-15				-10				-5				0				5			
		Cooling Capacity [kW]		Pe	COP	Cooling Capacity [kW]		Pe	COP	Cooling Capacity [kW]		Pe	COP	Cooling Capacity [kW]		Pe	COP	Cooling Capacity [kW]		Pe	COP
		min	max	kW		min	max	kW		min	max	kW		min	max	kW		min	max	kW	
UMT 075 VS MTDX Bitzer 4PTE-7K	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 2x500																				
	Weight 470 kg																				
	Sound pressure 44 dB(A)*																				
	Minimum Energy Performance Standards 3,14 (according Ecodesign Directive EN 2009/125/EC)																				
	Annual Energy Consumption 20096 kWh/year																				
	MRA/Pmax 20,5 A / 10,4 kW																				
UMT 120 VS MTDX Bitzer 4MTE-10K	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 2x500																				
	Weight 570 kg																				
	Sound pressure 44 dB(A)*																				
	Minimum Energy Performance Standards 2,68 (according Ecodesign Directive EN 2009/125/EC)																				
	Annual Energy Consumption 30081 kWh/year																				
	MRA/Pmax 26,3 A / 13,8 kW																				
UMT 150 VS MTDX Bitzer 4KTE-12K	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 3x500																				
	Weight 645 kg																				
	Sound pressure 45 dB(A)*																				
	Minimum Energy Performance Standards 2,80 (according Ecodesign Directive EN 2009/125/EC)																				
	Annual Energy Consumption 42608 kWh/year																				
	MRA/Pmax 33,4 A / 18,6 kW																				
UMT 190 MTDX Bitzer 4HTE-20K	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 3x500																				
	Weight 655 kg																				
	Sound pressure 45 dB(A)*																				
	Minimum Energy Performance Standards 2,71 (according Ecodesign Directive EN 2009/125/EC)																				
	Annual Energy Consumption 51896 kWh/year																				
	MRA/Pmax 42,4 A / 24 kW																				

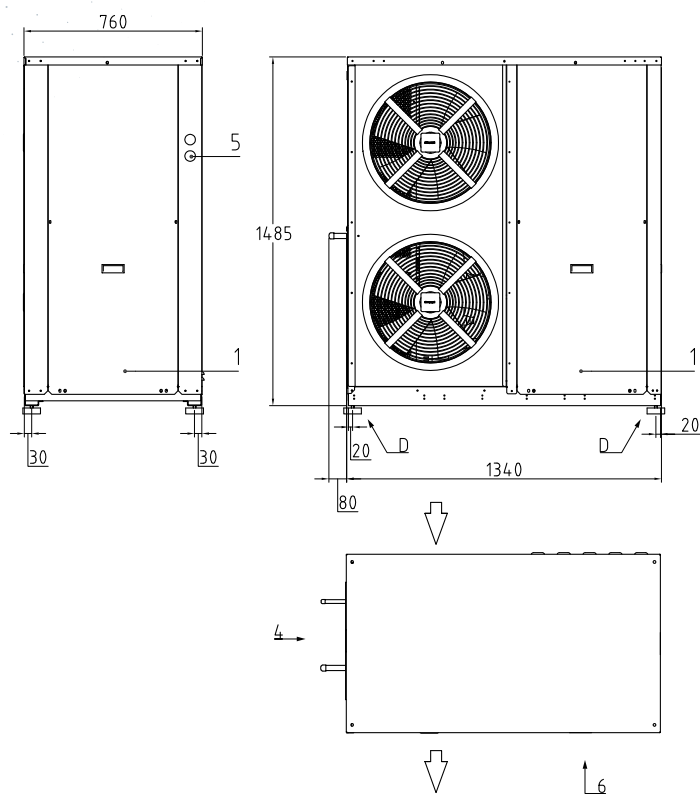
NOTE: Inverter modulation from 30 to 60 Hz except / cooling capacity min @30Hz - @60Hz except** @50Hz
 Varistep modulation from 10 to 100 % of the capacity @ 50 Hz
 (*based on free field area weed semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A))

		Evaporation Temperature[°C]												
		-40			-35			-30			-25			
		Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	
		min	max		min	max		min	max		min	max		
UMT 030 BTDX	Dorin CD2S 300	40	-	-	-	-	-	1,38	2,11	0,97	1,58	2,38	1,05	
		38	-	-	-	1,22	1,84	0,94	1,42	2,14	1,02	1,64	2,46	1,11
		32	1,08	1,62	0,94	1,26	1,90	1,04	1,53	2,29	1,12	1,73	2,59	1,31
		20	1,17	1,75	1,25	1,37	2,05	1,39	1,66	2,48	1,60	1,90	2,86	1,77
		N. of fans 2x500												
		Weight 460 kg												
		Sound pressure 48 dB(A)*												
		Minimum Energy Performance Standards 0,96 (according Ecodesign Directive EN 2009/125/EC)												
MRA/Pmax 10,4 A / 4,2 kW														
UMT 035 BTDX	Dorin CD2S 350	40	-	-	-	-	-	1,62	2,42	0,99	1,88	2,82	1,08	
		38	-	-	-	1,46	2,18	0,97	1,67	2,51	1,05	1,94	2,92	1,15
		32	1,30	1,96	1,03	1,54	2,30	1,14	1,78	2,68	1,12	2,06	3,10	1,36
		20	1,44	2,16	1,35	1,69	2,53	1,49	1,98	2,98	1,66	2,31	3,47	1,84
		N. of fans 2x500												
		Weight 465 kg												
		Sound pressure 48 dB(A)*												
		Minimum Energy Performance Standards 1,01 (according Ecodesign Directive EN 2009/125/EC)												
MRA/Pmax 11,7 A / 4,7 kW														
UMT 036 BTDX	Dorin CD2S 360	40	-	-	-	-	-	2,09	3,13	0,99	2,44	3,66	1,09	
		38	-	-	-	1,86	2,80	0,97	2,16	3,24	1,05	2,50	3,76	1,14
		32	1,67	2,51	1,03	1,97	2,95	1,13	2,29	3,43	1,23	2,68	4,02	1,36
		20	1,86	2,78	1,34	2,19	3,29	1,50	2,55	3,83	1,64	2,97	4,45	1,81
		N. of fans 2x500												
		Weight 470 kg												
		Sound pressure 48 dB(A)*												
		Minimum Energy Performance Standards 1,60 (according Ecodesign Directive EN 2009/125/EC)												
MRA/Pmax 11,7 A / 4,7 kW														
UMT 120 BTDX	Dorin CD2S 1200	40	-	-	-	-	-	8,05	12,07	1,01	9,24	13,86	1,09	
		38	-	-	-	7,07	10,61	0,98	8,28	12,42	1,07	9,51	14,27	1,15
		32	6,16	9,24	1,01	7,35	11,03	1,13	8,58	12,86	1,23	9,96	14,94	1,34
		20	6,56	9,84	1,29	7,78	11,68	1,45	9,14	13,72	1,59	10,57	15,85	1,73
		N. of fans 3x500												
		Weight 560 kg												
		Sound pressure 50 dB(A)*												
		Minimum Energy Performance Standards 1,70 (according Ecodesign Directive EN 2009/125/EC)												
MRA/Pmax 32,4 A / 13,2 kW														

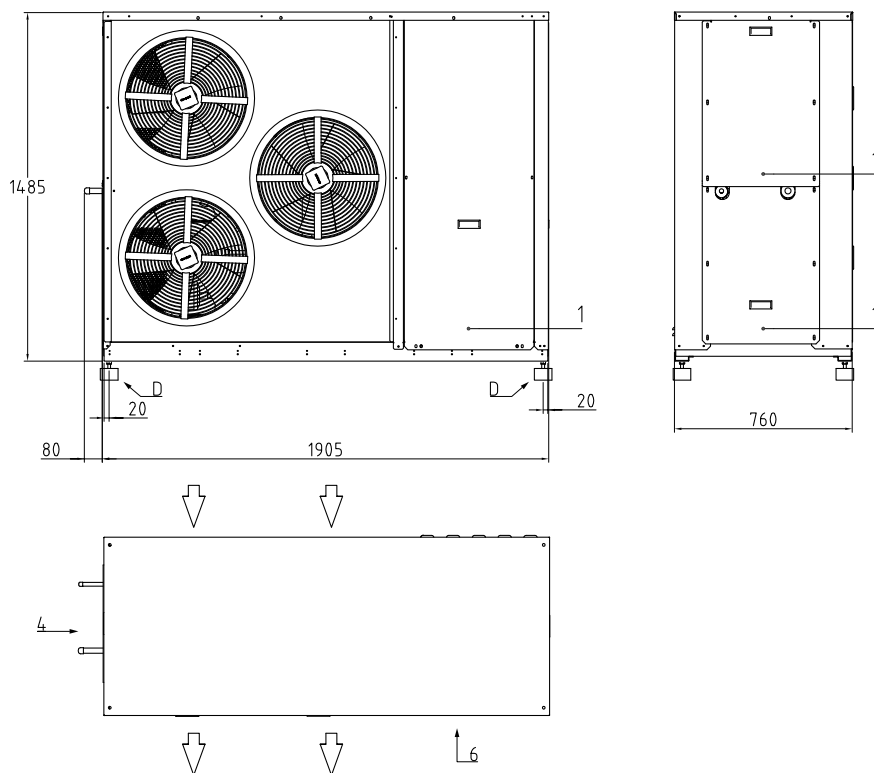
NOTE: Inverter modulation from 40 to 60 Hz / cooling capacity min @ 40 Hz - max @ 60 Hz
 (*based on free field area weed semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A))

Dimensional Data

MTDX - 2 fans

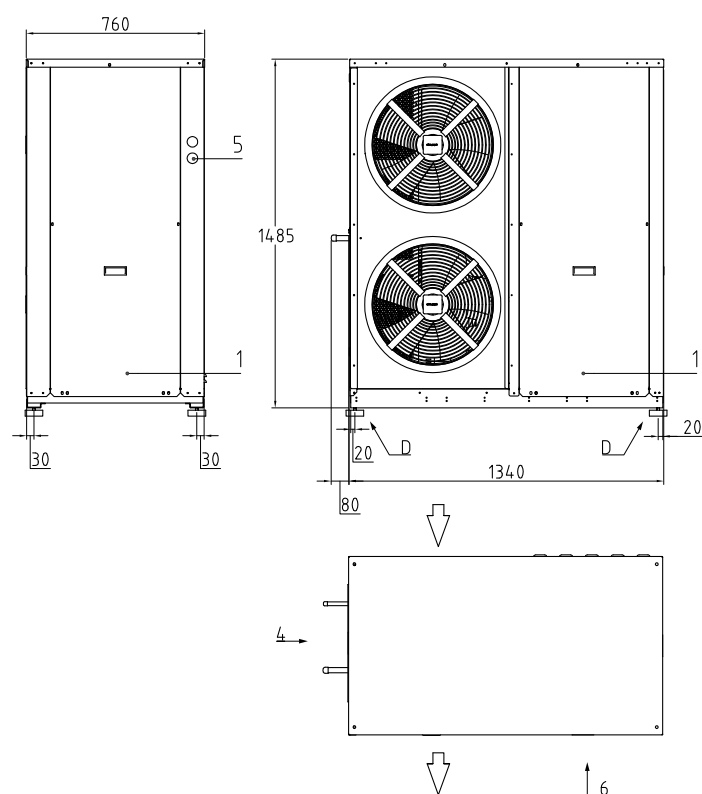


MTDX - 3 fans



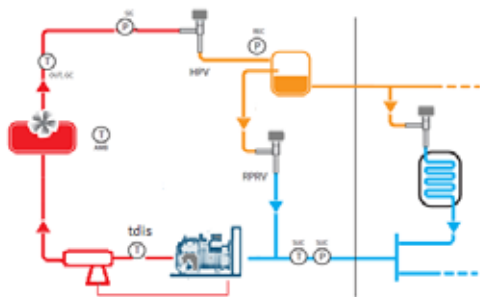
Dimensional Data

BTDX - 2 fans



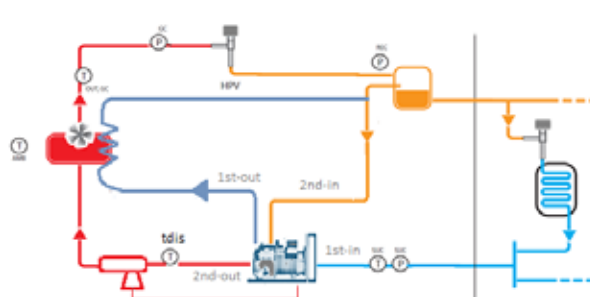
Unit Configuration

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.

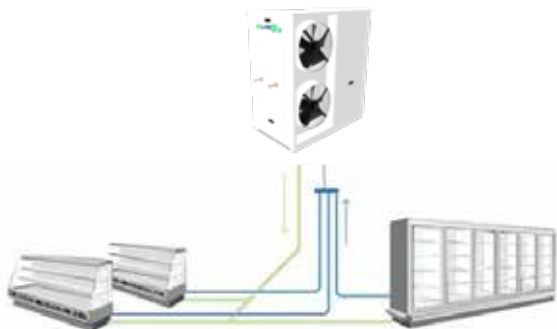
MODELE UMT BTDX



- 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

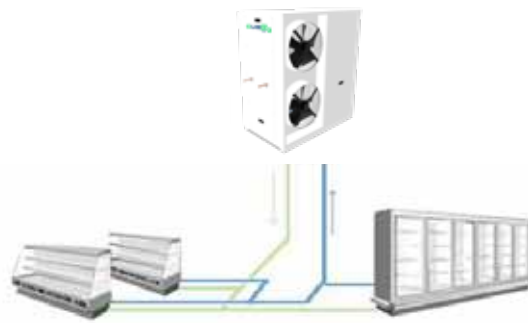


Pipe Connections (Multi-Split or Branch)

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).

CO₂ INDUSTRIAL NATURAL REFRIGERATION CHOICE



Non-flammable

which means the electrical panel can be in same room as the plant, saving on plant saving on plantroom and installation costs.

Non-toxic

has no charge limitation/concerns and can be used across a wide platform.

CO₂ packs will have multiple compressors

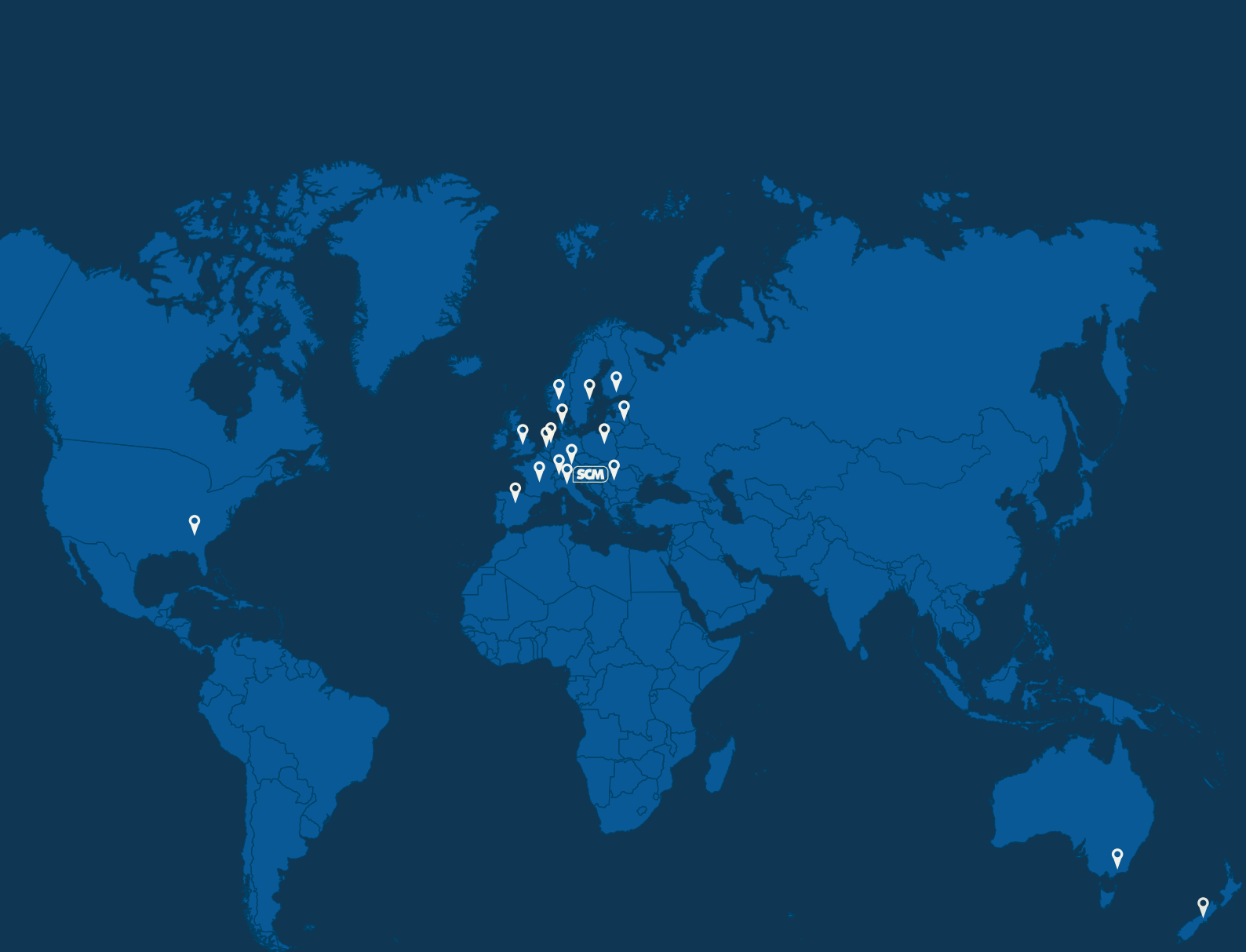
providing built-in resilience in case a compressor fails.

Does not require regular compressor overhauls

saving on maintenance costs.

Is now standard refrigerant in commercial installations

making it easily transferable to industrial settings. There is a larger pool of companies and engineers available to provide installation and service



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