

CUBO₂ PLUS 2

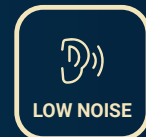
SCM FRIGO

Transcritical CO₂ Condensing Units



available with

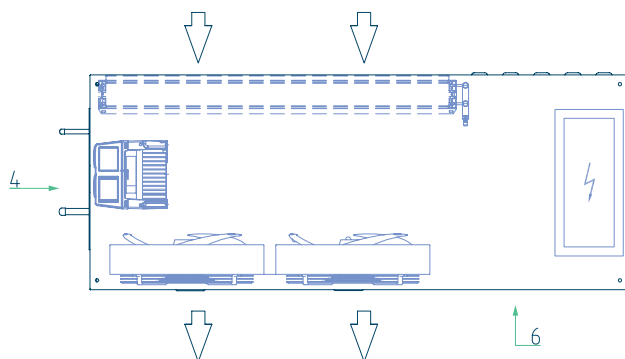
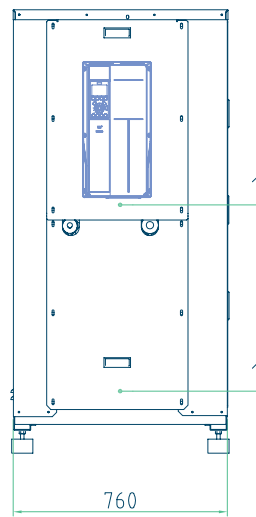
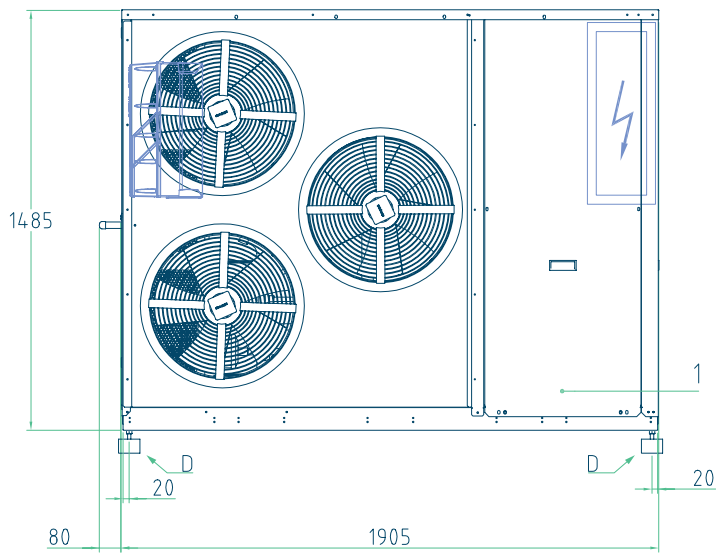
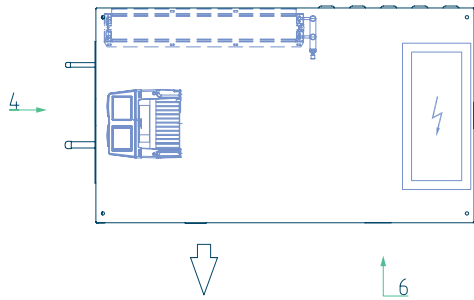
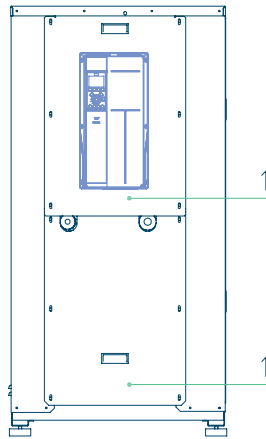
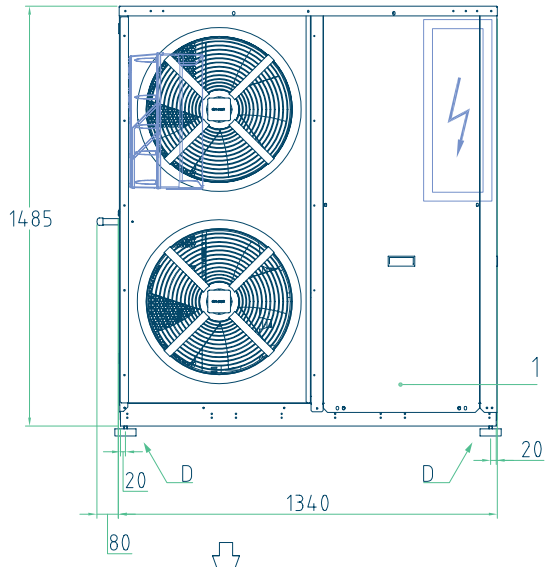
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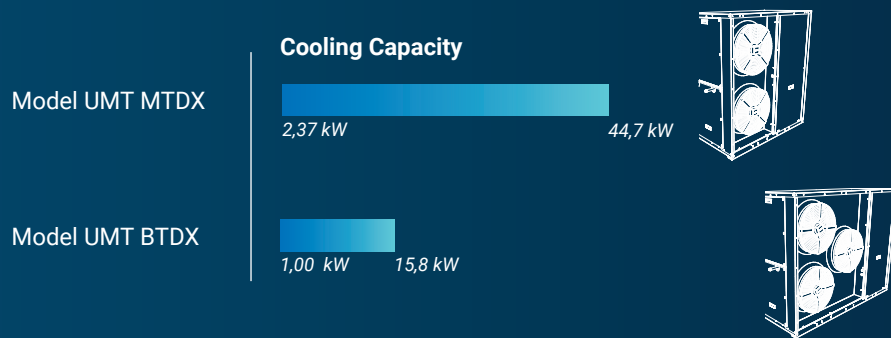
We know the art of achieving
a perfect temperature.

Dimensional data of the units



CO₂ Systems for medium and low temperature applications

Transcritical condensing units DX



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.

- Semi Hermetic reciprocating compressor
- EC fans
- K65 connections
- Liquid Receiver 15 litres
- Design pressure:
 - 120 bar (high pressure side)
 - 80 bar (liquid line)
 - 80 bar (suction)

OPTION ON REQUEST

- Frequency controlled compressor on LT line
- Adiabatic System
(suggested for ambient temperatures > +38°)
- RDM Controller
- Danfoss Controller
- WURM Controller
- Liquid Receiver 37 litres

Preliminary Data

MEDIUM TEMPERATURE

		Evaporation Temperature [°C]															
		-15			-10			-5			0			5			
		Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	
T amb [°C]	min	max		min	max		min	max		min	max		min	max			
	UMT 036 MTDX	Dorin CD 360H	40	1,96	3,93	0,89	2,46	4,92	1,07	3,03	6,05	1,27	3,65	7,30	1,49	4,33	8,65
38			2,07	4,14	0,96	2,59	5,17	1,15	3,18	6,35	1,36	3,83	7,65	1,60	4,53	9,05	1,88
32			2,44	4,88	1,20	3,03	6,06	1,44	3,69	7,39	1,73	4,43	8,85	2,06	5,22	10,44	2,44
25			2,90	5,80	1,44	3,60	7,20	1,81	4,39	8,77	2,08	5,26	10,52	2,49	6,21	12,41	2,96
15			3,65	7,29	2,03	4,41	8,81	2,75	5,40	10,80	3,03	6,43	12,86	3,70	7,54	15,08	4,54
5			4,46	8,93	2,97	5,41	10,83	4,12	6,48	12,96	4,67	7,66	15,32	5,95	8,93	17,87	7,75
MEPS			2,56 (according to Ecodesign Directive EN 2009/125/EC)														
Usage kWh			19150														
MRA/Pmax			15,9 A / 7,5 kW														
UMT 075 MTDX			Dorin CD 4 75-4.7H	40	4,10	8,20	1,06	5,01	10,02	1,25	5,99	11,97	1,45	6,98	13,97	1,65	7,96
	38	4,27		8,55	1,14	5,20	10,40	1,33	6,18	12,36	1,54	7,17	14,33	1,76	8,11	16,22	1,98
	32	4,81		9,61	1,39	5,68	11,36	1,60	6,51	13,02	1,82	7,25	14,49	2,02	7,89	15,77	2,24
	25	5,88		11,77	1,73	7,14	14,28	2,05	8,49	16,98	2,41	9,85	19,70	2,81	11,13	22,25	3,23
	15	7,12		14,23	2,43	8,41	16,83	2,88	9,57	19,15	3,34	10,43	20,86	3,77	11,50	22,99	4,41
	5	7,98		15,96	3,39	9,17	18,33	4,05	10,86	21,73	5,11	12,72	25,44	6,58	14,72	29,43	8,74
	MEPS	2,67 (according to Ecodesign Directive EN 2009/125/EC)															
		26174															
	MRA/Pmax	20,5 A / 10,4 kW															
	UMT 120 MTDX	Dorin CD4 90-6.4H		40	5,66	11,32	1,10	6,93	13,86	1,29	8,30	16,60	1,49	9,69	19,38	1,70	11,03
38			5,91	11,82	1,17	7,21	14,42	1,38	8,58	17,16	1,59	9,94	19,88	1,81	11,21	22,43	2,03
32			6,69	13,37	1,45	7,90	15,80	1,67	9,00	18,00	1,87	9,95	19,90	2,07	10,78	21,56	2,27
25			8,10	16,21	1,78	9,86	19,72	2,11	11,73	23,47	2,49	13,58	27,16	2,89	15,20	30,40	3,28
15			9,85	19,71	2,53	11,71	23,42	3,00	13,28	26,57	3,45	14,36	28,72	3,84	15,75	31,49	4,42
5			11,74	23,49	3,75	12,55	25,10	4,13	14,86	29,72	5,13	17,38	34,75	6,46	20,08	40,15	8,24
MEPS			2,75 (according to Ecodesign Directive EN 2009/125/EC)														
			35268														
MRA/Pmax			26,3 A / 13,8 kW														
UMT 150 MTDX			Dorin CD 1400H	40	8,09	16,18	1,09	9,95	19,90	1,29	12,01	24,02	1,50	14,21	28,41	1,73	16,45
	38	8,46		16,91	1,17	10,38	20,76	1,38	12,50	24,99	1,61	14,73	29,46	1,86	16,98	33,95	2,12
	32	9,72		19,45	1,47	13,61	27,22	1,61	15,10	30,21	1,77	14,13	28,26	2,02	17,77	35,54	2,55
	25	11,56		23,13	1,77	14,10	28,21	2,10	16,92	33,85	2,49	19,95	39,91	2,92	23,05	46,11	3,40
	15	14,10		28,20	2,51	17,03	34,05	3,01	20,22	40,45	3,60	23,48	46,96	4,25	26,44	52,87	4,92
	5	16,75		33,51	3,66	19,94	39,88	4,42	23,05	46,10	5,23	25,73	51,47	6,05	28,31	56,61	6,97
	MEPS	2,83 (according to Ecodesign Directive EN 2009/125/EC)															
		51217															
	MRA/Pmax	33,4 A / 18,6 kW															
	UMT 190 MTDX	Dorin CD 2000H		40	10,64	21,29	1,13	12,86	25,72	1,32	15,10	30,21	1,51	17,25	34,50	1,70	18,88
38			11,05	22,10	1,21	13,25	26,50	1,40	15,42	30,84	1,60	17,44	34,88	1,79	18,86	37,72	1,92
32			12,92	25,84	1,49	15,41	30,81	1,74	17,76	35,52	1,97	19,83	39,66	2,19	21,58	43,16	2,41
25			15,23	30,45	1,87	18,22	36,45	2,19	21,08	42,16	2,52	22,78	45,56	2,78	24,42	48,84	3,02
15			17,95	35,91	2,59	20,14	40,29	2,92	21,79	43,58	3,21	24,38	48,76	3,52	26,12	52,24	3,82
5			19,84	39,67	3,59	23,73	47,45	4,43	28,03	56,07	5,50	30,99	61,98	6,74	35,21	70,42	8,07
MEPS			2,85 (according to Ecodesign Directive EN 2009/125/EC)														
			66470														
MRA/Pmax			42,4 A / 24 kW														

Inverter modulation from 30 to 60 Hz except / cooling capacity min @30 Hz - max @ 60 Hz except ** @ 50 Hz

N° of fans / Dimensions & Weight / Noise

PEDII	2x500	2x500	2x500	3x500			
	CD360H	mm1340x760x1485 Weight 460 Kg **Noise 43 dB(A)	CD4 120-9.2H	mm1340x760x1485 Weight 560 Kg **Noise 44 dB(A)	CD4 90-6.4H	mm1340x760x1485 Weight 570 Kg **Noise 45 dB(A)	CD4 75-4.7H
	3x500						
	CD2000H	mm1895x760x1485 Weight 655 Kg **Noise 45 dB(A)					

Preliminary Data

MEDIUM TEMPERATURE

		Evaporation Temperature [°C]														
		-15			-10			-5			0			5		
		Cooling Capacity		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP
UMT 036 MTDX	Bitzer 2MTE-5K	T amb [°C]		min	max		min	max		min	max		min	max		
		40	2,85	5,70	1,09	3,48	6,95	1,17	4,19	8,38	1,37	4,98	9,97	1,58	5,91	11,82
38	2,98	5,97	1,17	3,65	7,29	1,26	4,40	8,81	1,48	5,24	10,48	1,72	6,20	12,40	2,02	
32	3,46	6,92	1,49	4,24	8,48	1,61	5,11	10,23	1,91	6,03	12,05	2,23	6,94	13,87	2,59	
25	4,09	8,18	1,79	5,04	10,08	1,94	6,15	12,31	2,33	7,45	14,90	2,81	8,87	17,75	3,39	
15	4,97	9,94	2,78	6,05	12,11	3,00	7,19	14,38	3,58	8,45	16,90	4,27	9,80	19,60	5,14	
5	5,93	11,86	3,99	7,21	14,42	4,32	8,55	17,11	5,28	10,09	20,17	6,51	11,69	23,37	8,17	
		MEPS 2,75 (according to Ecodesign Directive EN 2009/125/EC)														
		Usage kWh 18927														
		MRA/Pmax 15,9 A / 7,5 kW														
		Evaporation Temperature [°C]														
		-15			-10			-5			0			5		
		Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP
UMT 075 MTDX	Bitzer 2KTE-7K	T amb [°C]		min	max		min	max		min	max		min	max		
		40	4,11	8,22	1,04	5,05	10,09	1,23	6,13	12,26	1,44	7,35	14,69	1,68	8,65	17,30
38	4,31	8,62	1,12	5,29	10,58	1,32	6,42	12,83	1,55	7,67	15,33	1,81	8,99	17,97	2,10	
32	5,00	10,00	1,42	6,09	12,19	1,68	7,25	14,49	1,95	8,36	16,73	2,23	9,37	18,73	2,52	
25	5,96	11,92	1,72	7,33	14,65	2,05	8,89	17,78	2,44	10,64	21,28	2,90	12,50	25,00	3,45	
15	7,11	14,21	2,55	8,48	16,96	2,99	9,99	19,98	3,51	11,64	23,28	4,12	13,43	26,86	4,88	
5	8,51	17,02	3,59	10,09	20,18	4,27	11,83	23,66	5,10	13,73	27,47	6,13	15,80	31,60	7,46	
		MEPS 2,78 (according to Ecodesign Directive EN 2009/125/EC)														
		Usage kWh 26966														
		MRA/Pmax 20,5 A / 10,4 kW														
		Evaporation Temperature [°C]														
		-15			-10			-5			0			5		
		Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP
UMT 120 MTDX	Bitzer 4MTE-10K	T amb [°C]		min	max		min	max		min	max		min	max		
		40	5,39	10,79	1,04	6,70	13,40	1,22	8,13	16,26	1,41	9,64	19,29	1,64	11,18	22,37
38	5,70	11,39	1,12	7,04	14,08	1,31	8,48	16,95	1,52	9,97	19,94	1,76	11,43	22,87	2,02	
32	6,61	13,22	1,39	7,88	15,76	1,61	9,05	18,09	1,82	10,10	20,19	2,05	11,06	22,13	2,30	
25	8,02	16,04	1,70	9,86	19,71	2,04	11,86	23,72	2,44	13,89	27,79	2,89	15,72	31,45	3,36	
15	9,26	18,52	2,42	11,02	22,04	2,85	12,95	25,90	3,35	15,05	30,10	3,94	17,33	34,65	4,64	
5	11,07	22,14	3,44	13,00	26,00	4,14	15,37	30,74	4,82	17,82	35,64	5,71	20,47	40,95	6,77	
		MEPS 2,68 (according to Ecodesign Directive EN 2009/125/EC)														
		Usage kWh 36104														
		MRA/Pmax 26,3 A / 13,8 kW														
		Evaporation Temperature [°C]														
		-15			-10			-5			0			5		
		Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP
UMT 150 MTDX	Bitzer 4KTE-12K	T amb [°C]		min	max		min	max		min	max		min	max		
		40	8,18	16,35	1,08	10,13	20,27	1,28	12,24	24,48	1,50	14,44	28,88	1,73	16,64	33,29
38	8,61	17,22	1,17	10,62	21,23	1,39	12,73	25,47	1,61	14,89	29,78	1,85	16,99	33,98	2,09	
32	9,80	19,59	1,46	11,66	23,31	1,69	13,35	26,69	1,90	14,86	29,72	2,11	16,25	32,51	2,33	
25	11,96	23,92	1,80	14,73	29,47	2,17	17,70	35,41	2,57	20,66	41,33	2,99	23,29	46,58	3,43	
15	13,83	27,66	2,56	16,41	32,82	2,98	19,26	38,51	3,47	22,38	44,76	4,05	25,79	51,58	4,76	
5	16,93	33,87	3,69	19,80	39,61	4,30	23,00	45,99	5,04	26,55	53,09	5,97	30,44	60,87	7,14	
		MEPS 2,74 (according to Ecodesign Directive EN 2009/125/EC)														
		Usage kWh 52347														
		MRA/Pmax 33,4 A / 18,6 kW														
		Evaporation Temperature [°C]														
		-15			-10			-5			0			5		
		Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]		COP	Cooling Capacity [W]**		COP	Cooling Capacity [W]**		COP
UMT 190 MTDX	Bitzer 4HTE-20K	T amb [°C]		min	max		min	max		min	max		min	max		
		40	10,63	21,27	1,14	12,80	25,60	1,31	15,11	27,67	1,49	17,40	29,00	1,67	19,60	32,67
38	11,12	22,25	1,22	13,26	26,53	1,40	15,49	28,38	1,58	17,65	29,41	1,77	19,68	32,80	1,96	
32	13,13	26,25	1,52	13,73	27,46	1,61	17,29	31,67	1,93	20,14	33,56	2,19	23,11	38,51	2,46	
25	15,54	31,08	1,90	18,47	36,93	2,21	21,40	39,19	2,54	23,92	39,87	2,84	25,97	43,29	3,13	
15	17,08	34,16	2,53	20,02	40,04	2,91	23,31	42,70	3,35	26,87	44,78	3,84	30,70	51,17	4,38	
5	20,22	40,44	3,49	23,66	47,33	4,06	27,51	50,39	4,70	31,63	52,72	5,40	36,05	60,08	6,17	
		MEPS 2,71 (according to Ecodesign Directive EN 2009/125/EC)														
		Usage kWh 62283														
		MRA/Pmax 42,4 A / 24 kW														

Inverter modulation from 30 to 60 Hz except / cooling capacity min @30 Hz - max @ 60 Hz except ** @ 50 Hz

N° of fans / Dimensions & Weight / Noise

PEDII	2x500	2x500	2x500	3x500
	2MTE-5K	2KTE-7K	4MTE-10K	4KTE-12K
	mm1340x760x1485	mm1340x760x1485	mm1340x760x1485	mm1895x760x1485
	Weight 460 Kg	Weight 470 Kg	Weight 570 Kg	Weight 645 Kg
	**Noise 43 dB(A)	**Noise 44 dB(A)	**Noise 44 dB(A)	**Noise 45 dB(A)
	3x500			
	4HTE-20K			
	mm1895x760x1485			
	Weight 655 Kg			
	**Noise 45 dB(A)			

		Evaporation Temperature [°C]																
		-15			-10			-5			0			5				
UMT 075 VS MTDX	Bitzer 4PTE-7K	T amb [°C]		Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]		
		min	max	COP	min	max	COP	min	max	COP	min	max	COP	min	max	COP		
		40	0,69	6,85	1,10	0,84	8,42	1,29	1,02	10,25	1,51	1,23	12,35	1,76	1,47	14,71	2,06	
		38	0,72	7,18	1,18	0,88	8,84	1,39	1,08	10,75	1,63	1,29	12,94	1,92	1,54	15,39	2,25	
		32	0,84	8,36	1,51	1,03	10,28	1,79	1,24	12,45	2,12	1,48	14,82	2,50	1,72	17,19	2,91	
		25	0,99	9,93	1,82	1,22	12,21	2,16	1,48	14,84	2,57	1,78	17,84	3,07	2,12	21,22	3,69	
		15	1,22	12,23	2,89	1,46	14,64	3,42	1,73	17,30	4,05	2,02	20,24	4,81	2,34	23,45	5,76	
		5	1,46	14,64	4,18	1,74	17,41	5,02	2,05	20,48	6,07	2,39	23,88	7,44	2,76	27,59	9,26	
		MEPS	3,14 (according to Ecodesign Directive EN 2009/125/EC)															
			20096															
		MRA/Pmax	20,5 A / 10,4 kW															
		Evaporation Temperature [°C]																
		-15			-10			-5			0			5				
UMT 120 VS MTDX	Bitzer 4MTE-10K	T amb [°C]		Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]		
		min	max	COP	min	max	COP	min	max	COP	min	max	COP	min	max	COP		
		40	0,90	8,99	1,04	1,12	11,17	1,22	1,35	13,55	1,41	1,61	16,07	1,64	1,86	18,64	1,88	
		38	0,95	9,50	1,12	1,17	11,73	1,31	1,41	14,13	1,52	1,66	16,61	1,76	1,91	19,06	2,02	
		32	1,10	11,02	1,39	1,31	13,13	1,61	1,51	15,08	1,82	1,68	16,83	2,05	1,84	18,44	2,30	
		25	1,34	13,37	1,70	1,64	16,43	2,04	1,98	19,77	2,44	2,32	23,16	2,89	2,62	26,21	3,36	
		15	1,54	15,43	2,42	1,84	18,37	2,85	2,16	21,58	3,35	2,51	25,09	3,94	2,89	28,88	4,64	
		5	1,85	18,45	3,44	2,17	21,66	4,14	2,56	25,61	4,82	2,97	29,70	5,71	3,41	34,12	6,77	
		MEPS	2,68 (according to Ecodesign Directive EN 2009/125/EC)															
			30081															
		MRA/Pmax	26,3 A / 13,8 kW															
		Evaporation Temperature [°C]																
		-15			-10			-5			0			5				
UMT 150 VS MTDX	Bitzer 4KTE-12K	T amb [°C]		Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]		
		min	max	COP	min	max	COP	min	max	COP	min	max	COP	min	max	COP		
		40	1,36	13,63	1,08	1,69	16,89	1,28	2,04	20,40	1,50	2,89	28,88	2,07	3,33	33,29	2,35	
		38	1,43	14,35	1,17	1,77	17,69	1,39	2,12	21,22	1,61	2,98	29,78	2,22	3,40	33,98	2,51	
		32	1,63	16,33	1,46	1,94	19,43	1,69	2,22	22,25	1,90	2,97	29,72	2,53	3,25	32,51	2,80	
		25	1,99	19,93	1,80	2,46	24,56	2,17	2,95	29,51	2,57	4,13	41,33	3,59	4,66	46,58	4,11	
		15	2,31	23,05	2,56	2,74	27,35	2,98	3,21	32,09	3,47	4,48	44,76	4,86	5,16	51,58	5,71	
		5	2,82	28,22	3,69	3,30	33,01	4,30	3,83	38,33	5,04	5,31	53,09	7,16	6,09	60,87	8,56	
		MEPS	2,80 (according to Ecodesign Directive EN 2009/125/EC)															
			42608															
		MRA/Pmax	33,4 A / 18,6 kW															
		Evaporation Temperature [°C]																
		-15			-10			-5			0			5				
UMT 190 VS MTDX	Bitzer 4HTE-20K	T amb [°C]		Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]			Cooling Capacity [W]**			Cooling Capacity [W]**		
		min	max	COP	min	max	COP	min	max	COP	min	max	COP	min	max	COP		
		40	1,77	17,72	1,14	2,13	21,33	1,31	2,52	25,16	1,49	2,90	29,00	1,67	3,27	32,67	1,86	
		38	1,85	18,54	1,22	2,21	22,11	1,40	2,58	25,80	1,58	2,94	29,41	1,77	3,28	32,80	1,96	
		32	2,19	21,88	1,52	2,29	22,88	1,61	2,88	28,79	1,93	3,36	33,56	2,19	3,85	38,51	2,46	
		25	2,59	25,90	1,90	3,08	30,78	2,21	3,56	35,63	2,54	3,99	39,87	2,84	4,33	43,29	3,13	
		15	2,85	28,47	2,53	3,34	33,36	2,91	3,88	38,82	3,35	4,48	44,78	3,84	5,12	51,17	4,38	
		5	3,37	33,70	3,49	3,94	39,44	4,06	4,58	45,81	4,70	5,27	52,72	5,40	6,01	60,08	6,17	
		MEPS	2,71 (according to Ecodesign Directive EN 2009/125/EC)															
			51896															
		MRA/Pmax	42,4 A / 24 kW															

Varistep modulation from 10 to 100 % of the capacity @ 50 Hz

N° of fans / Dimensions & Weight / Noise

	2x500	2x500	3x500	3x500
PEDII	2KTE-7K	4MTE-10K	4KTE-12K	4HTE-20K
	mm1340x760x1485	mm1340x760x1485	mm1895x760x1485	mm1895x760x1485
	Weight 470 Kg	Weight 570 Kg	Weight 645 Kg	Weight 655 Kg
	**Noise 44 dB(A)	**Noise 44 dB(A)	**Noise 45 dB(A)	**Noise 45 dB(A)

Preliminary Data

LOW TEMPERATURE

UMT 030 BTDX	Dorin CD2S 300	Evaporation Temperature [°C]											
		-40			-35			-30			-25		
		Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP
T amb [°C]	min	max		min	max		min	max		min	max		
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	
MEPS	0,96 (according to Ecodesign Directive EN 2009/125/EC)												
MRA/Pmax	10,4 A / 4,2 kW												
UMT035 BTDX	Dorin CD2S 350	Evaporation Temperature [°C]											
		-40			-35			-30			-25		
		Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP
T amb [°C]	min	max		min	max		min	max		min	max		
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	
MEPS	1,01 (according to Ecodesign Directive EN 2009/125/EC)												
MRA/Pmax	11,7 A / 4,7 kW												
UMT 036 BTDX	Dorin CD2S 360	Evaporation Temperature [°C]											
		-40			-35			-30			-25		
		Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP
T amb [°C]	min	max		min	max		min	max		min	max		
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	
MEPS	1,60 (according to Ecodesign Directive EN 2009/125/EC)												
MRA/Pmax	11,9 A / 5 kW												
UMT 120 BTDX	Dorin CD2S 1200	Evaporation Temperature [°C]											
		-40			-35			-30			-25		
		Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP	Cooling Capacity [kW]		COP
T amb [°C]	min	max		min	max		min	max		min	max		
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	
MEPS	1,70 (according to Ecodesign Directive EN 2009/125/EC)												
MRA/Pmax	32,4 A / 13,2 kW												

inverter modulation from 40 to 60 Hz / cooling capacity min @ 40Hz - max @ 60 Hz

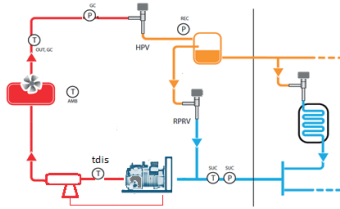
N° of fans / Dimensions & Weight / Noise

Model	Fans	Dimensions (mm)	Weight (Kg)	Noise (dB(A))
CD2S300	2x500	mm1340x760x1485	Weight 460 Kg	**Noise 48 dB(A)
CD2S350	2x500	mm1340x760x1485	Weight 465 Kg	**Noise 48 dB(A)
CD2S360	2x500	mm1340x760x1485	Weight 470 Kg	**Noise 48 dB(A)
CD2S1200	2x500	mm1340x760x1485	Weight 560 Kg	**Noise 50 dB(A)

PEDII

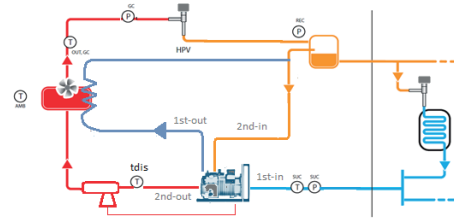
Unit Configuration

Model 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.

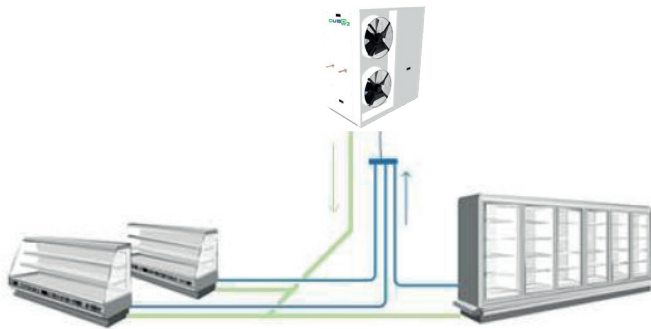
Model UMT BTDX



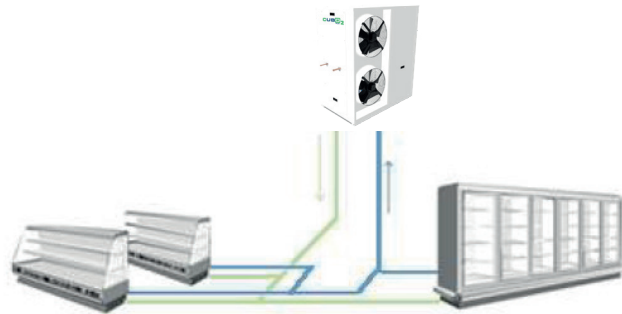
- One semihermetic compressor double stage
- Air cooled intercooler integrated in the gas cooler coil
- Oil management with: oil separator, oil reservoir, traxoil
- Receiver Pressure: variable pressure according to the operating conditions and to the model compressor (Open Flash Tank System)

Installation Design

Multi-Split



Branch



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.

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.

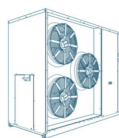
Please refer to the example reported in the pictures.

- 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).

Check the unit charge/receiver size

CUBO ₂ PLUS Refrigerant Charge Calculator V 1.1			
UNIT MODEL	UMT 150 MTDX	331 model is available just as an OPTION	
Liquid Receiver model	35 L		
Use R450 and ONLY one receiver			
Network			
COND LINE		Meters	kg
1st line (up to 120 bar ABS)			0,00
2nd line (up to 120 bar ABS)			0,00
3rd line (up to 120 bar ABS)			0,00
Sub Total Liquid			0,00
Suction Line			
Suction line 3" (120 bar ABS)			0,00
Suction line 2" (120 bar ABS)			0,00
Suction line 1" (120 bar ABS)			0,00
Sub Total Suction			0,00
EVAPORATOR CHARGE			
Evaporator		kg	
Sub Total CU/BO			5,48
Evaporator			
Evaporator volume		liters (liters)	kg
Sub Total Evaps			0,0
Total Charge	kg	5,48	ok
Pumpdown from EVAP. MUST BE 0.25kg for 25L and 0.30 for 35L			
Pumpdown from CU Liquid Outlet (25kg for 25L and 0.30 for 35L)	kg	3,00	ok
Oil to Charge post			

In our website at the following link:
www.scmfrigo.com/en/products/co2-condensing-unit/



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

Click here to download >

CO2 CHARGE CALCULATION CUBO PLUS V1.1

F.A.Q. Section

Visit **FAQ** section on the SCM Frigo website:



scmfrigo.com/en/faq/