



Available
with
VARISTEP
CRII

SUSTAINABLE COLD SOLUTIONS

CO₂ TRANSCRITICAL CO₂NDENSING UNITS

CUBO2 PLUS

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



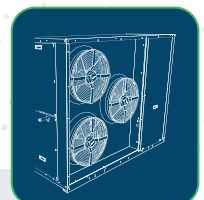
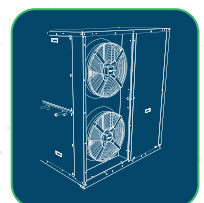
COOLING CAPACITY

Transcritical condensing units DX

MODEL UMT MTDX



MODEL UMT BTDX



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.

STANDARD ACCESSORIES

- SEMIHERMETIC RECIPROCATING COMPRESSOR
- CAREL CONTROLLER
- INVERTER MODULATION FOR CAPACITY CONTROL 60 - 140%
- INTEGRATED GAS COOLER WITH EC FANS
- DESIGN PRESSURE: 120 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

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!



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

AT THE FOLLOWING LINK YOU CAN CHECK THE UNIT CHARGE/RECEIVER SIZE.

Ask our sales department for the password

UMT 036 MTDX	Bitzer 2MTE-5K	T amb [°C]	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	
		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
		MEPS	2,75 (according Ecodesign Directive EN 2009/125/EC)																			
		Usage kWh	18927																			
		MRA/Pmax	15,9 A / 7,5 kW																			
UMT 075 MTDX	Bitzer 2KTE-7K	T amb [°C]	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	
		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
		MEPS	2,78 (according Ecodesign Directive EN 2009/125/EC)																			
		Usage kWh	26966																			
		MRA/Pmax	20,5 A / 10,4 kW																			
UMT 120 MTDX	Bitzer 4MTE-10K	T amb [°C]	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	
		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
		MEPS	2,68 (according Ecodesign Directive EN 2009/125/EC)																			
		Usage kWh	36104																			
		MRA/Pmax	26,3 A / 13,8 kW																			
UMT 150 MTDX	Bitzer 4KTE-12K	T amb [°C]	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	
		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
		MEPS	2,74 (according Ecodesign Directive EN 2009/125/EC)																			
		Usage kWh	52347																			
		MRA/Pmax	33,4 A / 18,6 kW																			
UMT 190 MTDX	Bitzer 4KTE-12K	T amb [°C]	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	
		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
		MEPS	2,71 (according 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 @30Hz - max @60Hz except** @50Hz																						

N° of fans / Dimensions & Weight / Noise
 (**based on free field area sound semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A))

CD360H	2x500 mm1340x760x1485 Weight 460 kg **Noise 43 dB(A)
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CD4 75-4.7H	2x500 mm1895x760x1485 Weight 650 kg **Noise 45 dB(A)
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CD4 90-6.4H	2x500 mm1340x760x1485 Weight 570 kg **Noise 45 dB(A)
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CD4 120-9.2H	2x500 mm1340x760x1485 Weight 560 kg **Noise 44 dB(A)
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CD2000H	3x500 mm1895x760x1485 Weight 655 kg **Noise 45 dB(A)
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UMT	Dorin CD	T amb [°C]	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		min	max	kW			
036	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			
		MEPS	2,78 (according Ecodesign Directive EN 2009/125/EC)																						
Usage kWh	19150																								
MRA/Pmax	15,9 A / 7,5 kW																								
075	475-4.7 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			
		MEPS	2,67 (according Ecodesign Directive EN 2009/125/EC)																						
Usage kWh	26174																								
MRA/Pmax	20,5 A / 10,4 kW																								
120	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			
		MEPS	2,75 (according Ecodesign Directive EN 2009/125/EC)																						
Usage kWh	35268																								
MRA/Pmax	26,3 A / 13,8 kW																								
150	1400H	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			
		MEPS	2,83 (according Ecodesign Directive EN 2009/125/EC)																						
Usage kWh	51217																								
MRA/Pmax	33,4 A / 18,6 kW																								
190	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			
		MEPS	2,85 (according Ecodesign Directive EN 2009/125/EC)																						
Usage kWh	66470																								
MRA/Pmax	42,4 A / 24 kW																								
Inverter modulation from 30 to 60 Hz except / cooling capacity min @30Hz - max @60Hz except** @50Hz																									

N° of fans / Dimensions & Weight / Noise
 (**based on free field area weed semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A))

2MTE-5K	2x500 mm1340x760x1485 Weight 460 kg **Noise 43 dB(A)	2KTE-7K	2x500 mm1340x760x1485 Weight 470 kg **Noise 44 dB(A)	4MTE-10K	2x500 mm1340x760x1485 Weight 570 kg **Noise 44 dB(A)	4KTE-12K	3x500 mm1895x760x1485 Weight 645 kg **Noise 45 dB(A)	4HTE-20K	3x500 mm1895x760x1485 Weight 1378 lb **Noise 45 dB(A)
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UMTX	Model	T amb [°C]	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	min	max	kW	min	max
UMTX	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
		MEPS	3,14 (according Ecodesign Directive EN 2009/125/EC)																			
Usage kWh	20096																					
MRA/Pmax	20,5 A / 10,4 kW																					
UMTX	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
		MEPS	2,68 (according Ecodesign Directive EN 2009/125/EC)																			
Usage kWh	30081																					
MRA/Pmax	26,3 A / 13,8 kW																					
UMTX	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
		MEPS	2,80 (according Ecodesign Directive EN 2009/125/EC)																			
Usage kWh	42608																					
MRA/Pmax	33,4 A / 18,6 kW																					
UMTX	Dorin CD 1400H	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
		MEPS	2,71 (according Ecodesign Directive EN 2009/125/EC)																			
Usage kWh	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
 (**based on free field area weed semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A))

2KTE-7K	2x500
	mm1340x760x1485 Weight 470 kg **Noise 44 dB(A)

2MTE-10K	2x500
	mm1340x760x1485 Weight 570 kg **Noise 44 dB(A)

4KTE-12K	2x500
	mm1895x760x1485 Weight 645 kg **Noise 45 dB(A)

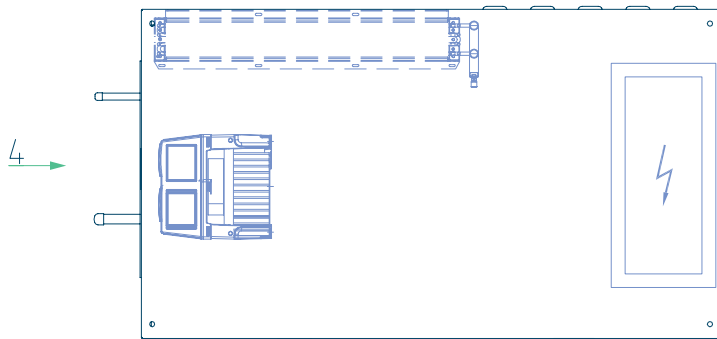
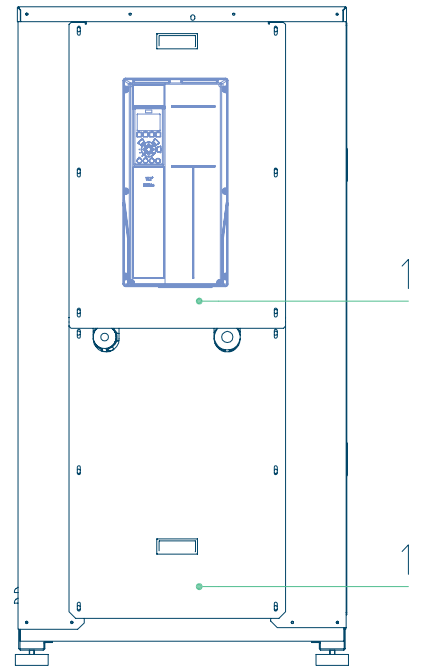
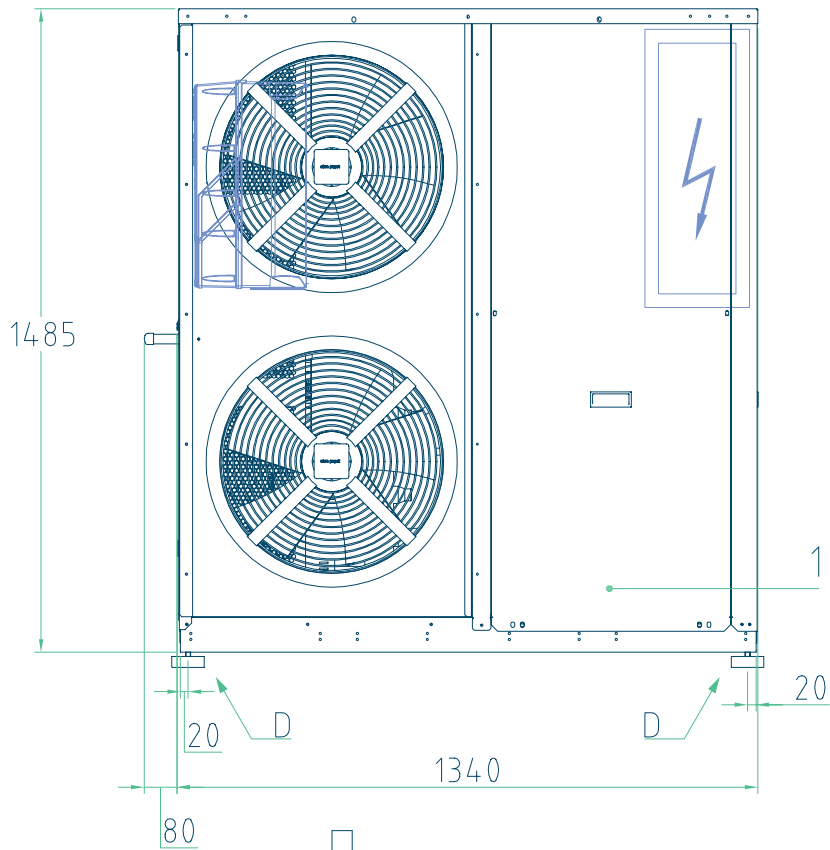
4HTE-20K	3x500
	mm1895x760x1485 Weight 655 kg **Noise 45 dB(A)

UMT 030 BTDX	Dorin CD2S 300	T amb [°C]	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	
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 Ecodesign Directive EN 2009/125/EC)													
MRA/Pmax	10,4 A / 4,2 kW													
UMT 035 BTDX	Dorin CD2S 350	T amb [°C]	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	
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 Ecodesign Directive EN 2009/125/EC)													
MRA/Pmax	11,7 A / 4,7 kW													
UMT 036 BTDX	Dorin CD2S 360	T amb [°C]	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	
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	1,01 (according Ecodesign Directive EN 2009/125/EC)													
MRA/Pmax	11,7 A / 4,7 kW													
UMT 120 BTDX	Dorin CD2S 1200	T amb [°C]	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	
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	(according Ecodesign Directive EN 2009/125/EC)													
MRA/Pmax	32,4 A / 13,2 kW													
Inverter modulation from 40 to 60 Hz / cooling capacity min @ 40 Hz - max @ 60 Hz														

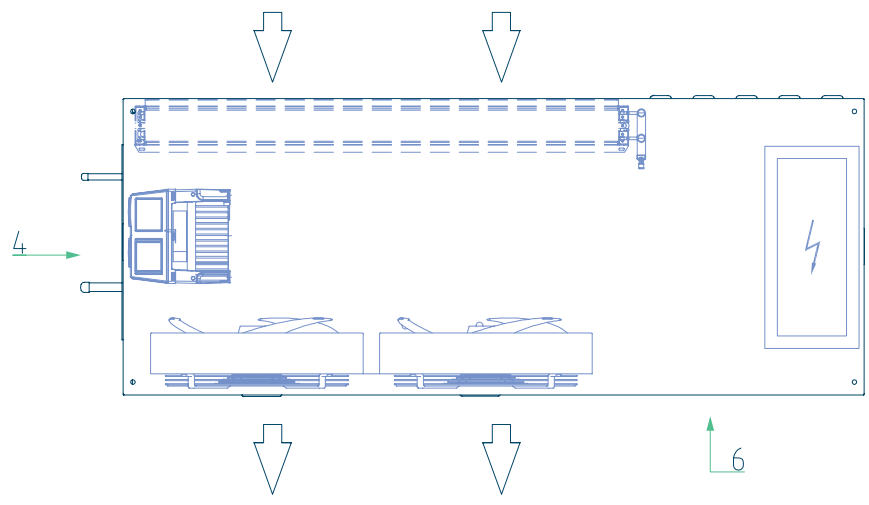
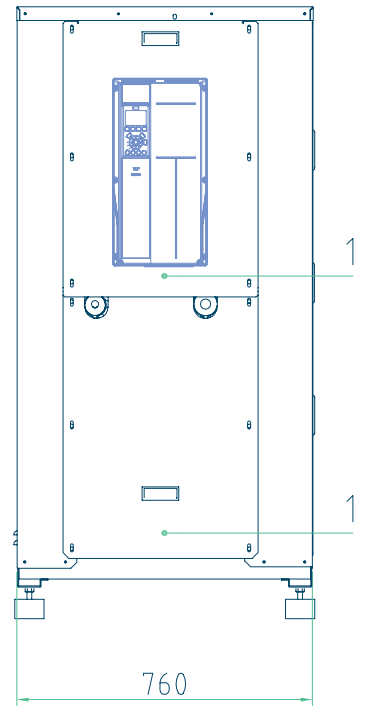
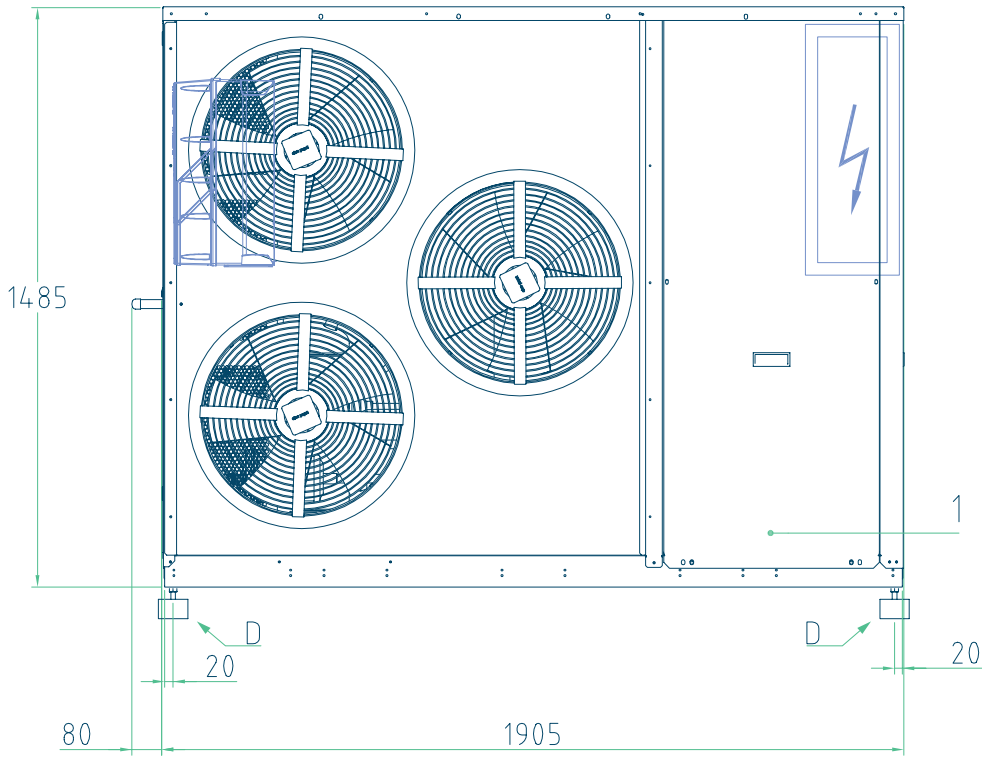
N° of fans / Dimensions & Weight / Noise
 (**based on free field area weed semi-spherical sound emission in 10m distance; tolerance ± 2 dB(A))

CD2S300	2x500 mm1340x760x1485 Weight 460 kg **Noise 48 dB(A)	CD2S350	2x500 mm1340x760x1485 Weight 465 kg **Noise 48 dB(A)	CD2S360	2x500 mm1895x760x1485 Weight 470 kg **Noise 48 dB(A)	CD2S1200	3x500 mm1895x760x1485 Weight 560 kg **Noise 50 dB(A)
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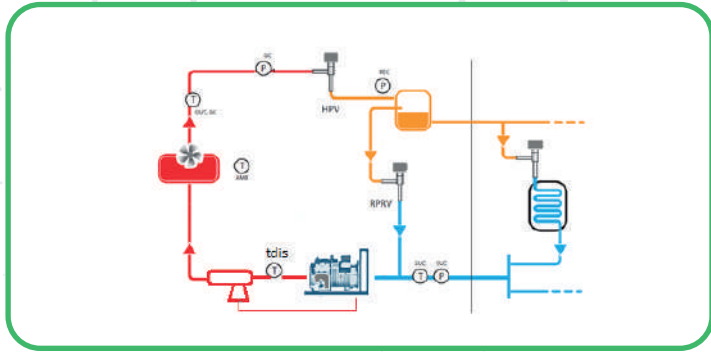
BDTX DIMENSIONAL



MDTX DIMENSIONAL

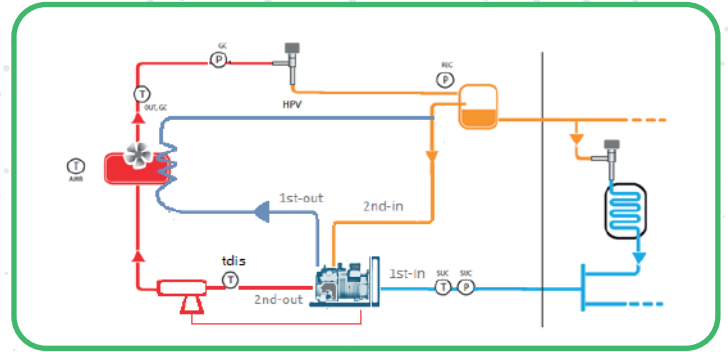


UNIT CONFIGURATION



Management of one BLDC compressor
Communication with cabinets (MPXPRO or ULTRACELLA)

- 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



Management of two BLDC compressor (LT and parallel compressors) Communication with cabinets (MPXPRO or ULTRACELLA) Floating receiver pressure (-10°C / 0°C)

- 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).

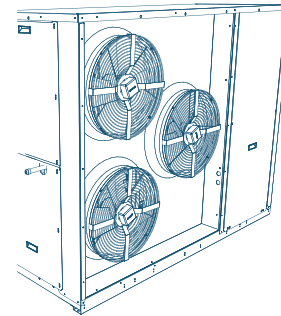
CHECK THE UNIT CHARGE/RECEIVER SIZE

In our website at the following link:

www.scmfrigo.com/en/products/co2-condensing-unit/

CUBO2 PLUS REFRIGERANT CHARGE CALCULATOR V 1.1			
UNIT MODEL	UMT 150 MTDX		
Liquid Receiver model	150L	37 Lt model is available just as an OPTION	
Use & fill out ONLY the yellow cells			
Pipework	Metres	Kg	
LIQUID LINE			
Liquid Line 3/8" (120 bar K65)		0.00	
Liquid Line 1/2" (120 bar K65)		0.00	
Liquid Line 5/8" (120 bar K65)		0.00	
Liquid Line 7/8" (120 bar K65)		0.00	
Sub Total Liquid		0.00	
SUCTION LINE			
Liquid Line 3/8" (120 bar K65)		0.00	
Liquid Line 1/2" (120 bar K65)		0.00	
Liquid Line 5/8" (120 bar K65)		0.00	
Liquid Line 7/8" (120 bar K65)		0.00	
Sub Total Liquid		0.00	
STANDING CHARGE			
Receiver		3.00	
Gas Cooler		2.48	
Sub Total CUBO		5.8	
EVAPORATORS			
Total evaporators volumedm3 (Litres)		0.0	
Sub Total Evaps		0.0	
Total Charge (minimum charge is 4kg)	kg	5.48	ok
Pumpdown from E2V MUST BE ≤ 25kg for 37L and ≤ 10 for 15L	kg	3.00	ok
Pumpdown from CU Liquid Outlet ≤ 25kg for 37L and ≤ 10 for 15L - If not fit ball valves on branch lines	kg	3.00	ok
Oil to Charge (POE)	Cubo2 Plus are precharged with Oil. Additional oil can be added according to how it is coming back from the evaporators		Oil approved: POE Reniso Fuchs C85E or Fuchs BSE 85 K

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.

[Click here to download](#)

DOWNLOAD BROCHURE

New unit and charge calculation software available upon request.

Save it on your PC before starting to use

*****Please, check always the online version to be sure you are using the most updated one*****

Notes for using this calculator:

1. Select or enter only using yellow cells
2. Using the drop down menu select the unit model
3. Using the drop down menu select the 15L or 37L receiver CUBO2 Plus condensing unit
4. Enter your system pipe lengths in meters ensuring you select the correct sizes and pressure rating
5. Use the drop down menu to enter the evaporator charge as either kg's or of dm3 / litres - use the evaporators manufacturers information
6. The calculator will give a total charge and acceptable limits


F.A.Q. SECTION

Visit FAQ section on the SCM Frigo website:

scmfrigo.com/en/faq/



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