



# UMT line

## CO<sub>2</sub> CONDENSING UNIT

BEYOND BOUNDARIES OF COLD



products of  
**BEIJER REF**  
made by  
SCM FRIGO spa

# UMT line

## CO<sub>2</sub> CONDENSING UNIT

According to SCM Natural Choice, we have developed a range of CO<sub>2</sub> transcritical condensing units with a very low carbon footprint and lower energy consumption than the traditional HFC solutions. 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 CONFIGURATION

- Semi Hermetic reciprocating compressor
- Frequency controlled compressor (MT line)
- EC fans
- K65 connections
- Design pressure: 120 bar (high pressure side) / 60 bar (liquid line) / 60 bar (suction)

### OPTIONS

- Frequency controlled compressor on LT line
- PHE for heat recovery

### Unità a CO<sub>2</sub> per applicativi

#### di Media e Bassa Temperatura

Unità condensatrici transcritiche DX

Capacità frigorifera da 2 a 30 kW.

Modello UMT MTDX: unità condensatrici

con 1 compressore di Media Temperatura.

Modello UMT BTDX: unità condensatrici

con 1 compressore di Bassa Temperatura.

### Kühlanlagen

#### für Normal- und Tiefkühlung

Transcritische Verflüssigungssätzen

für direkten Kühlung-System

Kälteleistung von 2 kW bis zu 30 kW.

UMT MTDX Serie: Verflüssigungssätzen

mit einem Verdichter für Normalkühlung.

UMT BTDX Serie: Verflüssigungssätzen

mit einem Verdichter für Tiefkühlung.

## UMT - MTDX Line R744 (CO<sub>2</sub>) Transcritical -5°C / -15°C

MODEL	COMPRESSOR Type	ELECTRICAL DATA			DIMENSIONS			
		I max comp. pack [A]	P max comp. pack [kW]	L ra comp. pack [A]	A [mm]	B [mm]	H [mm]	Weight [Kg]
UMT018MTDX	CD180H	5,8	2,8	21,4	1338	760	1484	350
UMT030MTDX	CD300H	8,4	3,36	24,76	1338	760	1484	350
UMT036MTDX	CD360H	11,8	4,16	46,96	1338	760	1484	380
UMT075MTDX	CD750H	23,4	8,22	109,4	1338	760	1484	450
UMT100MTDX	CD1000H	27,4	10,72	113,4	1338	760	1484	460
UMT120MTDX	CD1200H	29,4	12,72	113,4	1338	760	1484	465
UMT150MTDX	CD1400H	42,8	16,44	179,8	1900	760	1484	515
UMT190MTDX	CD2000H	46,8	20,44	185,8	1900	760	1484	525

## UMT - BTDX Line R744 (CO<sub>2</sub>) Transcritical -25°C / -40°C

MODEL	COMPRESSOR Type	ELECTRICAL DATA			DIMENSIONS			
		I max comp. pack [A]	P max comp. pack [kW]	L ra comp. pack [A]	A [mm]	B [mm]	H [mm]	Weight [Kg]
UMT030BTDX	CD2S300	7,4	3	25,9	1338	760	1484	350
UMT035BTDX	CD2S350	8,7	3,36	33,4	1338	760	1484	350
UMT036BTDX	CD2S360	8,9	4,16	35,4	1338	760	1484	380
UMT120BTDX	CD2S1200	29,4	12	136,4	1338	760	1484	410



## CO<sub>2</sub> Systems

### for MT and LT applications

Transcritical condensing units DX

Cooling Capacity from 2 kW up to 30 kW.

Model UMT MTDX: condensing units with 1 compressor for Medium temperature.

Model UMT BTDX: condensing units with 1 compressor for Low temperature.

### Systèmes au CO<sub>2</sub> pour application de Moyenne et Basse Température

Groupes de condensation à air carrossés monoblocs transcritiques en Détente Directe

Capacité de refroidissement de 2 à 30 kW.

Modèle UMT MTDX: unités de condensation avec 1 compresseur pour la Moyenne Température. Modèle UMT BTDX: unités de condensation avec 1 compresseur pour la Basse Température.



AMBIENT TEMPERATURE [°C]	OPERATING FREQUENCY [Hz]	Q <sub>o</sub> - COOLING CAPACITY [kW]			LIQUID RECEIVER [Lt]	REFRIGERANT CONNECTIONS		SOUND PRESSURE (see note) [dB(A)]
		Evaporating Temperature				Asp.	Liq.	
		[- 5 °C]	[- 10 °C]	[- 15 °C]		[mm]	[mmxsp.]	
30	65	3,24	2,68	2,18	15	1/2"	1/2"	43
32	65	3,11	2,55	2,07				
30	65	4,39	3,63	2,96	15	1/2"	1/2"	43
32	65	4,20	3,46	2,80				
30	65	7,58	6,24	5,07	15	1/2"	1/2"	43
32	65	7,19	5,94	4,78				
30	65	15,04	12,56	10,36	15	7/8"	5/8"	44
32	65	14,38	12,05	9,85				
30	65	18,19	15,13	12,49	15	7/8"	5/8"	44
32	65	17,41	14,50	11,83				
30	65	21,84	18,58	15,21	15	7/8"	5/8"	44
32	65	21,11	17,80	14,51				
30	65	29,95	25,13	20,79	15	7/8"	5/8"	45
32	65	28,77	24,13	19,75				
30	65	36,47	30,81	25,36	15	7/8"	5/8"	45
32	65	35,27	29,38	24,09				

**Note 1:** suction superheat 13K (usefull 8K); subcooling 0K.

**Note 2:** sound pressure and sound power analytically calculated. Sound pressure level at 10 m in free field

AMBIENT TEMPERATURE [°C]	OPERATING FREQUENCY [Hz]	Q <sub>o</sub> - COOLING CAPACITY [kW]			LIQUID RECEIVER [Lt]	REFRIGERANT CONNECTIONS		SOUND PRESSURE (see note) [dB(A)]
		Evaporating Temperature				Asp.	Liq.	
		[- 30 °C]	[- 35 °C]	[- 40 °C]		[mm]	[mmxsp.]	
30	50	1,89	1,63	1,37	15	5/8"	1/2"	48
32	50	1,87	1,60	1,36				
30	50	2,26	1,94	1,64	15	5/8"	1/2"	48
32	50	2,22	1,90	1,62				
30	50	2,89	2,48	2,11	15	5/8"	1/2"	48
32	50	2,84	2,44	2,08				
30	50	10,72	9,18	7,72	15	5/8"	1/2"	50
32	50	10,56	9,04	7,59				

**Note 1:** suction superheat 13K (usefull 8K); subcooling 0K

**Note 2:** sound pressure and sound power analytically calculated. Sound pressure level at 10 m in free field



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