SCM FRIGO USA

SMART BOOSTER 2.0

SUSTAINABLE COLD SOLUTIONS

CO_2 TRANSCRITICAL RACKS

SCM FRIGO We know the art of achieving *a perfect temperature*

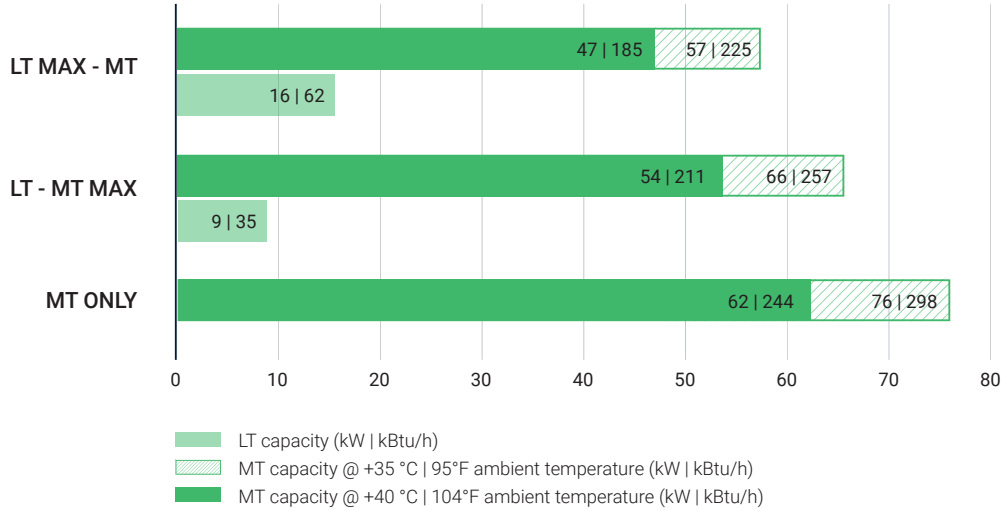
BEIJER REF

The MWS by SCM Frigo is the most compact CO2 transcritical booster system, featuring Bitzer semi-hermetic piston compressors equipped with frequency inverter or Bitzer CRII technology. Ideal for medium-temperature (MT) and low-temperature (LT) applications, it is suitable for indoor installations or can be provided within a PNCC/PNC enclosure. Combining high efficiency, minimal footprint, and low noise levels, it represents a smart, versatile refrigeration solution.

MAIN ADVANTAGES

- ECO-FRIENDLY SOLUTION
- ENHANCED CAPACITY
- COMPACT DESIGN
- MINIMAL MAINTENANCE
- ENERGY EFFICIENCY
- SCALABLE AND VERSATILE
- LOW NOISE

Capacité de refroidissement



Standard Accessories

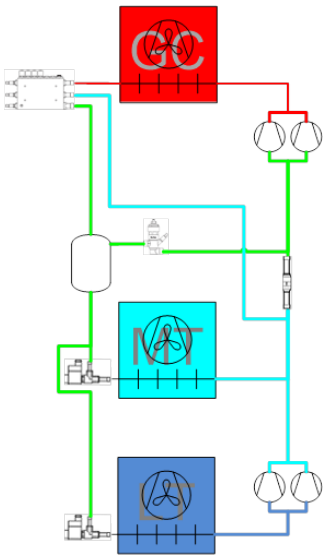
- Régulateur électronique de niveau d'huile Traxoil sur chaque compresseur
- Automate de régulation
- Filtre déshydrateur d'huile remplaçable
- Séparateur d'huile sans maintenance avec réservoir intégré
- Capteur de niveau CO_2 bas
- Échangeur de chaleur interne liquide-vapeur
- Collecteur de soupapes de sécurité
- Tests en usine et paramétrage complet
- PS 120/80/60/60 bar | 1885/1160/1160/1160 PSI

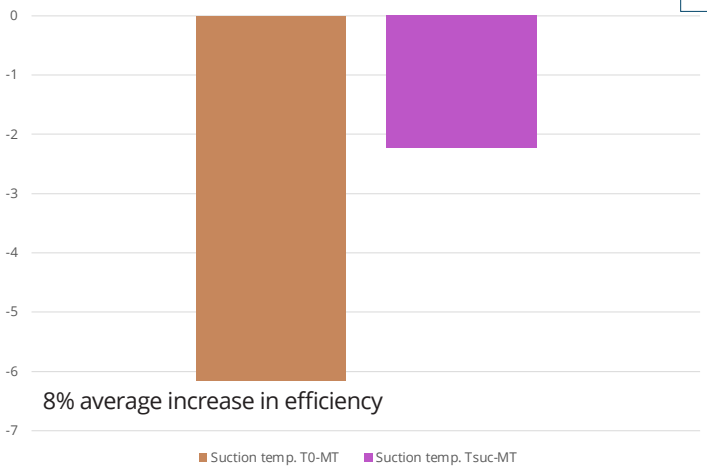
Accessories on Request

- Régulation Carel, Wurm, RDM, Danfoss
- Variateurs de fréquence pour MT & BT
- PS 120/80/80/80 bar
- Récupération de chaleur
- Compteur d'énergie
- Enceinte faible bruit et ultra-faible bruit (46 dB(A) à 10m)
- Carénage PNC avec gas cooler
- Éjecteur basse pression
- Régulation de secours
- Bypass du gas cooler
- Filtre d'aspiration pour MT & BT

High efficiency

LP Ejector



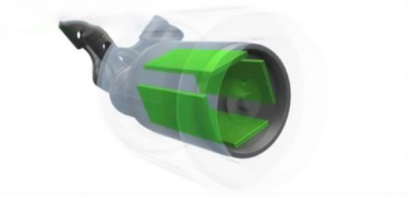


Source: CO_2 Booster with LP Ejector (Punta Cana – Dominican Republic)

DANFOSS MULTI EJECTOR LP
(low pressure)

In warm climates, the ejectors can lift all the gas from the evaporators into the receiver, witch is at a higher suction pressure than the evaporator and this is lowering the system energy consumption. In cold ambient conditions, the LP ejector serves the same functions as a coventional high-pressure valve controlling the system to perform at optimum COP.

LSPM Motor



BITZER COMPRESSORS LSPM
(line start permanent magnet)

The line-start permanent magnet (LSPM) motor technology take adavantage of the motor efficiency and low heat input into the refrigerant, estimating 14% annual savings when compared with standard compressors.

Technical data Smart Booster [a]

Unit Model [a]	Qo MT[b]		Qo LT[c]		QGC		I_{MAX}	LRA	P_{MAX}	Liquid receiver	Weight		Sound pressure @10m[d] [e]	PNC	PNC Sound pressure @10m[f]	Dim.
	kW	kBtu/h	kW	kBtu/h	kW	kBtu/h	A	A	kW	dm3	kg	lbs	dB(A)		dB(A)	Fig.
MWS 2x043 MTDX	15.7	61.7	-	-	27	106	21.6	124.4	11.8	105	535	1,180	45	YES	33	A/B/C
MWS 065+043 MTDX	20.9	82.1	-	-	34	133.5	26.8	144.6	14.5	105	540	1,191	45	YES	34	A/B/C
MWS 2x065 MTDX	26	102.1	-	-	42	164.9	32.0	164.8	17.2	105	545	1,200	45	YES	33	A/B/C
MWS 096+065 MTDX	32.3	126.8	-	-	52	204.1	38.4	179.4	21.5	105	550	1,213	46	YES	34	A/B/F
MWS 2x096 MTDX	38.6	151.5	-	-	62	243.3	44.8	194.0	25.8	105	555	1,224	46	YES	35	A/B/F
MWS 096+2x065 MTDX	45.3	177.8	-	-	73	286.5	54.4	261.8	30.1	105	690	1,521	47	YES	35	A/B/F
MWS 2x096+065 MTDX	51.6	202.5	-	-	83	325.7	60.8	276.4	34.4	105	700	1,543	47	YES	38	A/B/F
MWS 3x096 MTDX	57.9	227.2	-	-	93	365	67.2	291.0	38.7	105	710	1,565	48	YES	42	A/B/F
MWS 120+2x096 MTDX	63.9	250.8	-	-	102	400.3	71.9	326.0	42.0	150	777	1,713	52	NO	-	D/E
MWS 3x120 MTDX	75.9	297.9	-	-	120	470.9	81.3	396.0	48.6	150	911	2,009	56	NO	-	D/E
MWS 2x043 MTDX + UMCE 007 HBT	11.9	46.7	3.3	13	27	106	24.5	150.4	12.9	105	650	1,433	46	YES	34	A/B/C
MWS 065+043 MTDX + UMCE 007 HBT	17	66.8	3.3	13	35	137.4	29.7	170.6	15.6	105	655	1,444	46	YES	34	A/B/C
MWS 2x065 MTDX + UMCE 007 HBT	22.2	87.2	3.3	13	43	168.8	34.9	190.8	18.3	105	660	1,455	46	YES	33	A/B/C
MWS 2x065 MTDX + UMCE 010 HBT	19.7	77.4	5.4	21.2	43	168.8	35.7	190.8	19.1	105	662	1,460	46	YES	33	A/B/C
MWS 096+065 MTDX + UMCE 010 HBT	25.9	101.7	5.4	21.2	53	208	42.1	205.4	23.4	105	667	1,471	47	YES	35	A/B/F
MWS 2x096 MTDX + UMCE 010 HBT	32.2	126.4	5.4	21.2	63	247.3	48.5	220.0	27.7	105	670	1,477	47	YES	35	A/B/F
MWS 2x096 MTDX + UMCE 020 HBT	30.5	119.7	6.9	27.1	63	247.3	50.1	231.0	28.3	105	675	1,488	47	YES	35	A/B/F
MWS 2x096 + 065 MTDX + UMCE 020 HBT	43.5	170.7	6.9	27.1	84	329.7	66.1	313.4	36.9	105	845	1,863	48	YES	38	A/B/F
MWS 3x096 MTDX + UMCE 020 HBT	49.8	195.5	6.9	27.1	94	368.9	72.5	328.0	41.2	105	850	1,874	49	YES	42	A/B/F
MWS 2x096+065 MTDX + UMCE 030 HBT	41.2	161.7	8.9	35	84	329.7	67.0	320.4	37.5	105	853	1,881	49	YES	38	A/B/F
MWS 3x096 MTDX + UMCE 030 HBT	47.5	186.4	8.9	35	94	368.9	73.4	335.0	41.8	105	857	1,890	49	YES	42	A/B/F
MWS 3x120 MTDX + UMCE 030 HBT	65.5	257.1	8.9	35	122	478.8	87.5	440.0	51.7	105	1043	2,300	56	NO	-	D/E
MWS 096+065 MTDX + UMCE 2x007 HBT	24.6	96.6	6.5	25.6	53	208	44.2	231.4	23.7	105	805	1,775	47	YES	35	A/B/F
MWS 2x096 MTDX + UMCE 2x007 HBT	30.9	121.3	6.5	25.6	63	247.3	50.6	246.0	28.0	105	810	1,786	48	YES	35	A/B/F
MWS 2x120 MTDX + UMCE 2x007 HBT	42.9	168.4	6.5	25.6	81	317.9	60.0	316.0	34.6	105	940	2,073	54	NO	-	A/B
MWS120+2x096 MTDX+UMCE020+030HBT	45.4	178.2	15.8	62	104	408.1	83.4	407.0	47.6	150	1100	2,425	53	NO	-	D/E
MWS3x120MTDX+UMCE020+030HBT	57.4	225.3	15.8	62	122	478.8	92.8	477.0	54.2	150	1235	2,723	56	NO	-	D/E

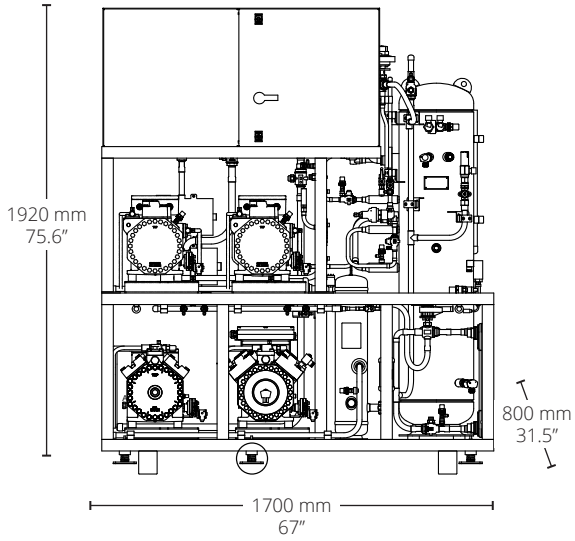
[a] Compressor models:

MT CP 043 - 4PTE-6K	LT CP 007 - 2MME-07K
MT CP 065 - 4MTE-7K	LT CP 010 - 2KME-1K
MT CP 096 - 4KTE-10K	LT CP 020 - 2JME-2K
MT CP 120 - 4HTE-15K	LT CP 030 - 2HME-3K

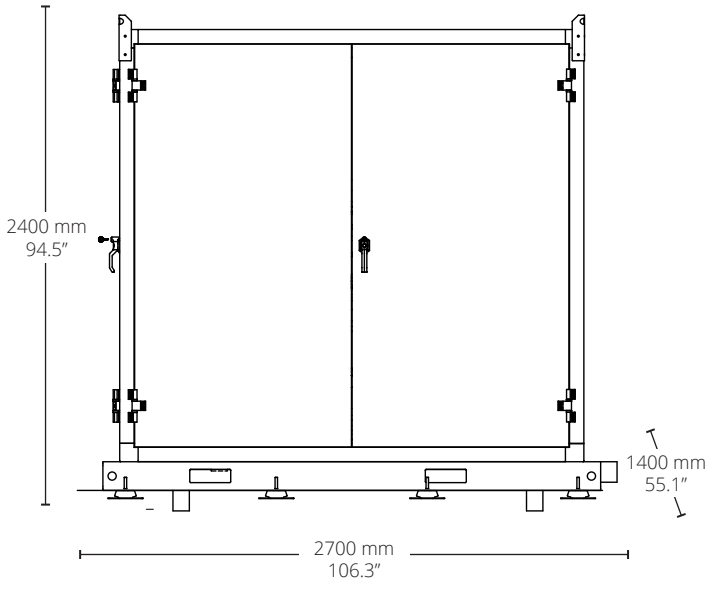
[b] Calculated at -8°C / 18 °F SST, 35°C / 95 °F ambient temperature, and 37°C / 99 °F gas cooler outlet temperature.
[c] Calculated at -30°C / -22 °F SST and condensation @ -8°C / 18 °F SST
[d] Data valid for free-field conditions with a block-shaped reference area at a distance of 10 meters (~33ft).
[e] The low-noise version of the enclosure is certified to ensure a sound level between 31-33 dB(A), based on free field area with semi-spherical sound emission in 10m (~33ft) distance.
[f] The PNC enclosure is low noise certified, based on free field area with semi-spherical sound emission in 10m (~33ft) distance.

Dimensional Data

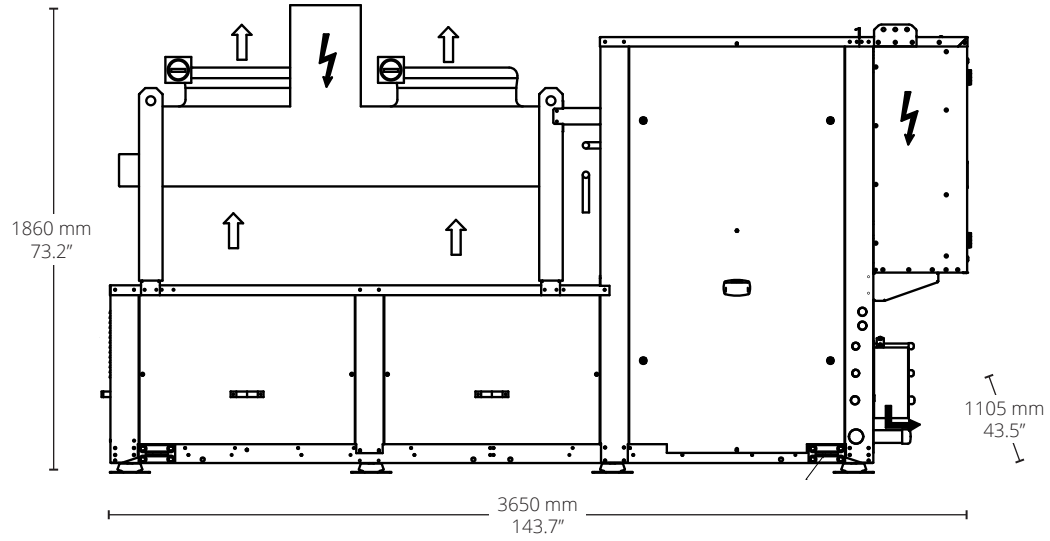
(Fig. A) Indoor Unit



(Fig. B) Outdoor Unit
Enclosed available in standard or low-noise versions

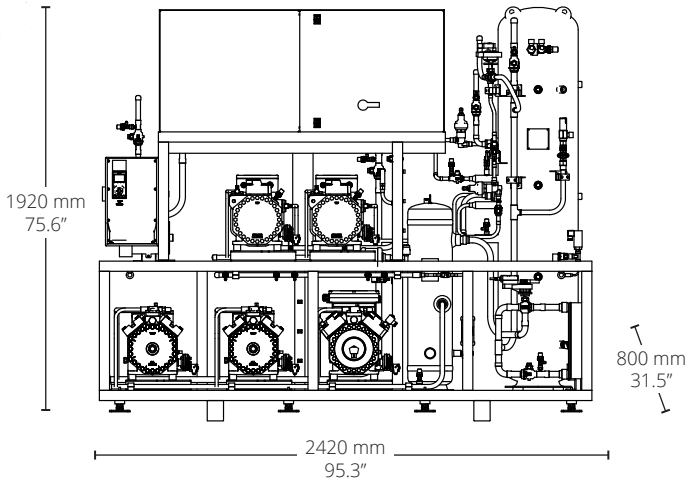


(Fig. C) PNC Version with Integrated Gas Cooler

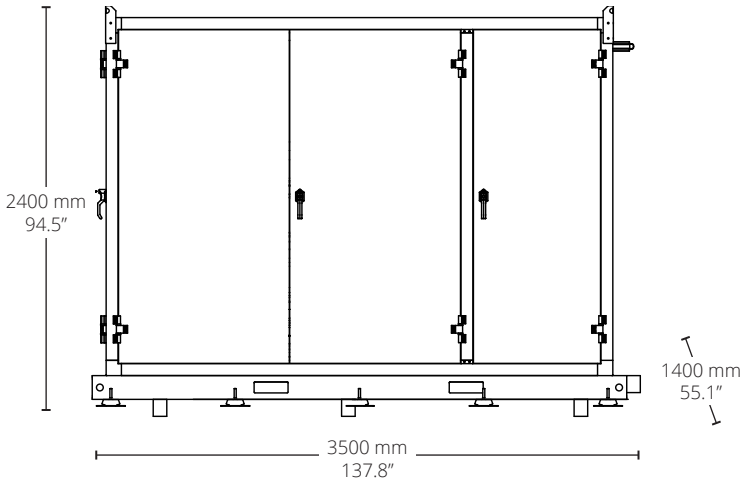


Dimensional Data

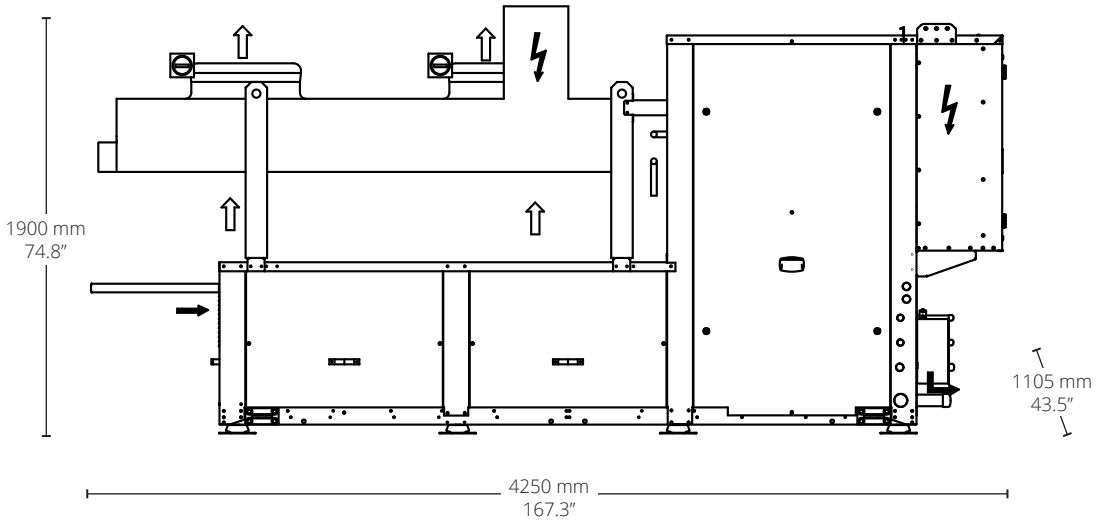
(Fig. D) Indoor Unit



(Fig. E) Outdoor Unit
Enclosed available in standard or low-noise versions



(Fig. F) PNC Version with Integrated Gas Cooler



CO_2 / R744 NATURAL REFRIGERATION CHOICE

CO2

Non-flammable

The electrical panel can be located in the same room as the refrigeration equipment. This reduces space requirements and lowers installation costs.

Non-toxic

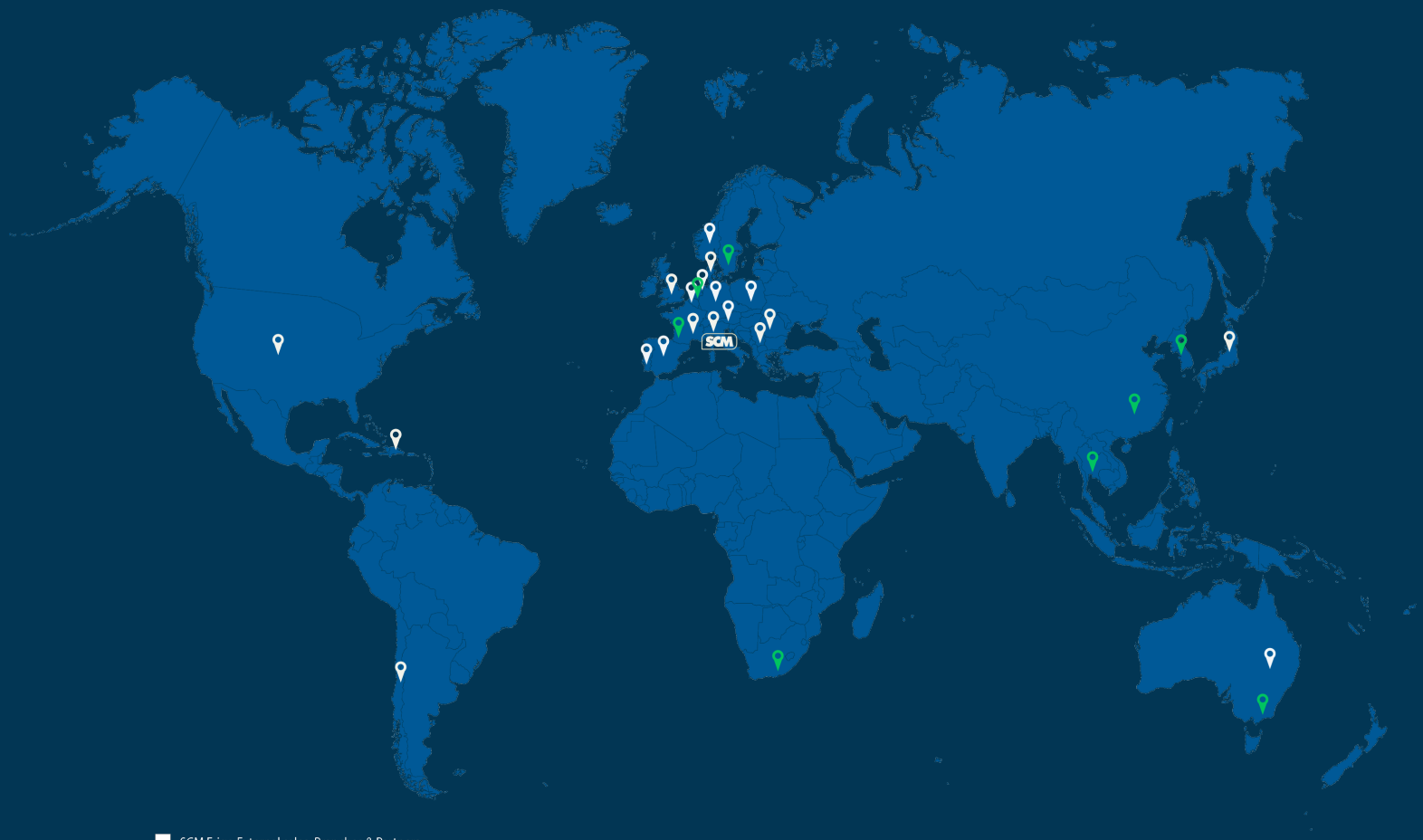
With no charge limitations or safety concerns, CO_2 can be used across a wide range of applications.

Built-in Resilience

CO_2 packs typically include multiple compressors, ensuring continued operation even if one compressor fails.
This built-in redundancy enhances reliability and reduces the risk of downtime.

Standard refrigerant option

CO_2 is now a standard refrigerant in commercial installations, making the transition to industrial applications seamless. A wider selection of companies and qualified engineers is available for installation and servicing.



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