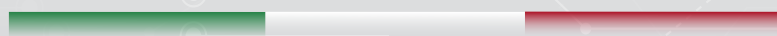


OFFICINE MARIO DORIN SINCE 1918

**DORIN**<sup>®</sup>  
INNOVATION



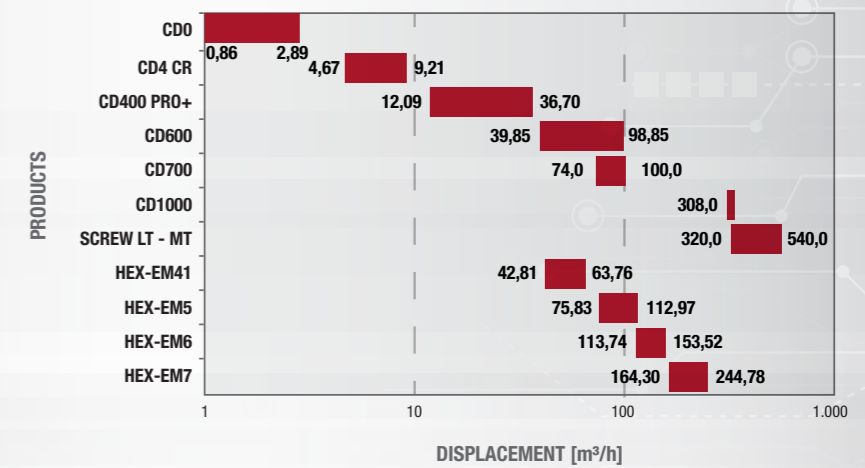
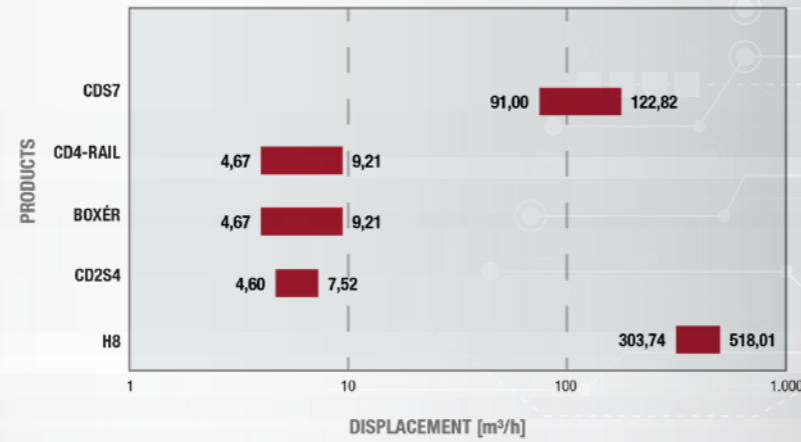
**NEWS**

**A LEGEND IN PROGRESS**



2025

# DORIN a LEGEND in PROGRESS



DORIN introduces two new CO<sub>2</sub> compressors ranges, **CD PRO** and **CD PRO+**



2016

2021

2022

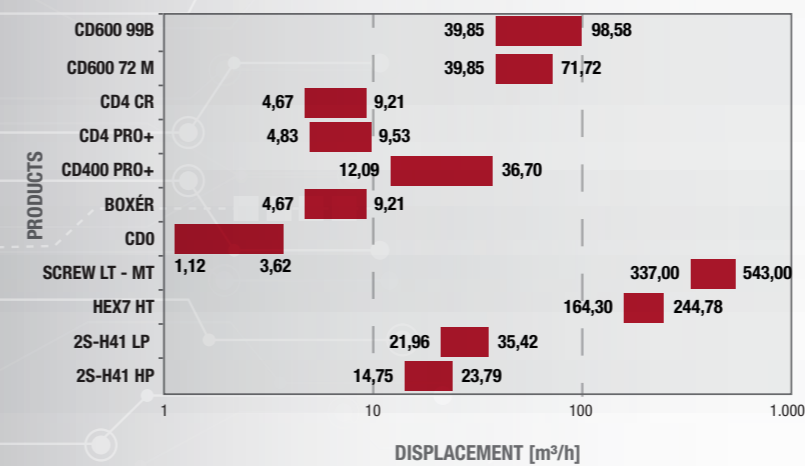
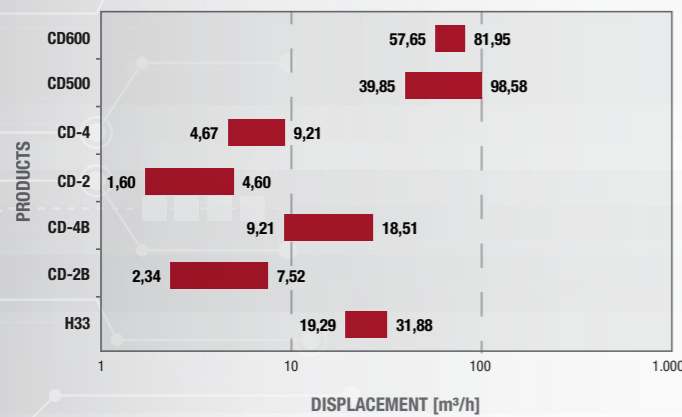
2024

DORIN celebrates **30 years** in R&D of CO<sub>2</sub> products

Introduction of the **HEX EM**, the new range of hydrocarbons compressors for high temperature heat pumps.

**CD1000** the largest CO<sub>2</sub> Trans-Critical compressor ever designed.

Dorin introduces a new **SCREW** compressors range, for operation with HFC, HFOs and their blends - over 100 years engineering precision for frictionless performance and reliability.



# CD0

THE MOST COMPACT CO<sub>2</sub> TRANSCRITICAL COMPRESSOR RANGE

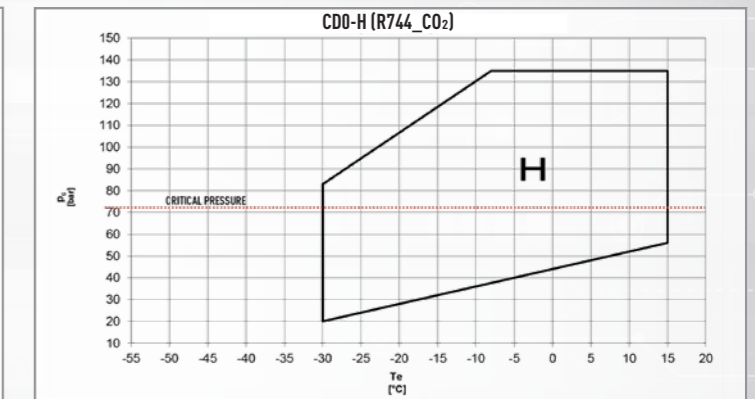
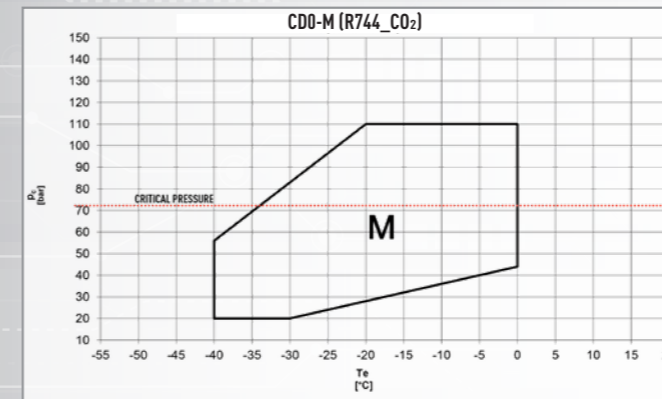


Dorin is proud to introduce its new **CD0 range**, the most **compact range** of CO<sub>2</sub> compressors, 2 cylinders, 11 models with a displacement up to 2,89 m<sup>3</sup>/h at 50 Hz and up to 3.46 m<sup>3</sup>/h at 60 Hz and capacities from 1,0 hp to 3,8 hp.

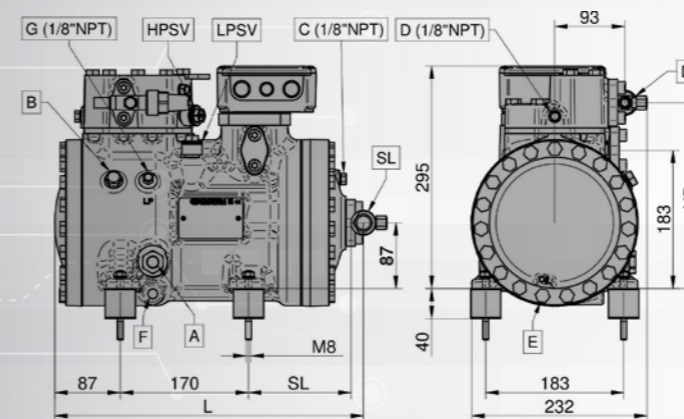
## CD-0

RANGE	MODEL	CYLINDERS	DISPLACEMENT [m <sup>3</sup> /h] @ 50 Hz	HP	RPM @ 50 Hz	SUCTION	DISCHARGE	NET WEIGHT [Kg]	OIL CHARGE [l]	MAX OPERATING CURRENT V / ph / Hz	LOCKED ROTOR CURRENT V / ph / Hz
						SOCKET WELDING [mm]	SOCKET WELDING [mm]				
CD0	CD0 10-0,8H	2	0,86	1	1450	10	10	53	0,8	2,9	13,8
	CD0 15-1,1M	2	1,12	1,5	1450	10	10	55	0,8	3,4	15,5
	CD0 18-1,1H	2	1,12	1,8	1450	10	10	56	0,8	4,4	20,0
	CD0 18-1,5M	2	1,45	1,8	1450	10	10	56	0,8	6,0	24,5
	CD0 30-1,5H	2	1,45	3	1450	10	10	57	0,8	6,0	24,5
	CD0 30-1,9M	2	1,88	3	1450	16	10	57	0,8	7,3	32,0
	CD0 35-1,9H	2	1,88	3,5	1450	16	10	58	0,8	7,3	32,0
	CD0 35-2,4M	2	2,36	3,5	1450	16	10	58	0,8	7,5	34,0
	CD0 36-2,4H	2	2,36	3,6	1450	16	10	60	0,8	7,5	34,0
	CD0 36-3,0M	2	2,89	3,6	1450	16	10	60	0,8	9,4	43,5
	CD0 38-3,0H	2	2,89	3,8	1450	16	10	63	0,8	9,4	43,5

## ENVELOPE



## OVERALL DIMENSIONS



RANGE	MODEL	L [mm]	HD [mm]
CD0	CD0 10-0,8H	423	243
	CD0 15-1,1M	423	243
	CD0 18-1,1H	423	243
	CD0 18-1,5M	423	246
	CD0 30-1,5H	423	246
	CD0 30-1,9M	423	246
	CD0 35-1,9H	423	246
	CD0 35-2,4M	441	246
	CD0 36-2,4H	441	246
	CD0 36-3,0M	441	246
	CD0 3.8-3.0H	441	246

## APPLICATIONS



RAILWAY HVAC



BUS A/C



REFRIGERATED TRANSPORT



ICE CREAM INDUSTRY



# CD4 - CAPACITY CONTROL

CO<sub>2</sub> TRANSCRITICAL COMPRESSORS  
WITH MECHANICAL CAPACITY CONTROL

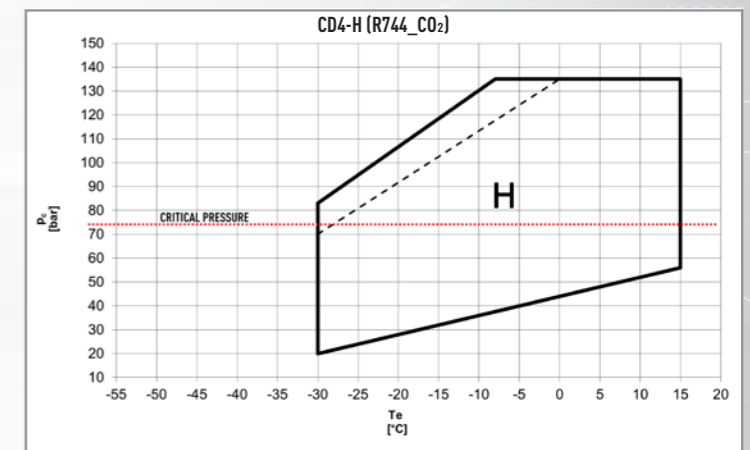
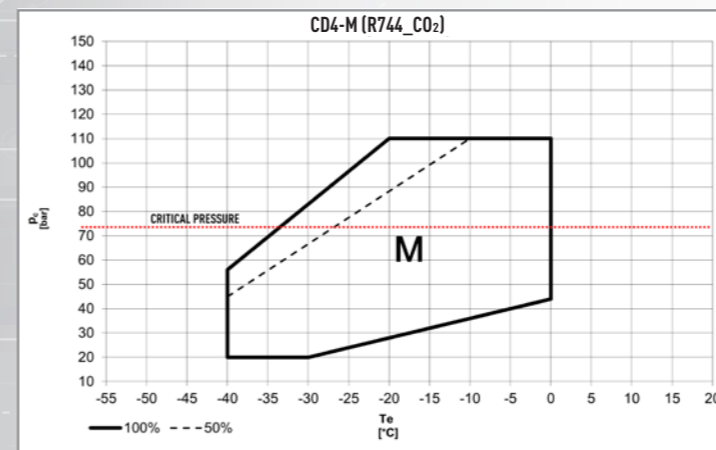


Dorin introduces a **new range of CO<sub>2</sub> transcritical compressors with mechanical capacity control**: the well known **CD4 range** is now available with this new feature, to perfectly match part load conditions in refrigeration and air-conditioning systems.

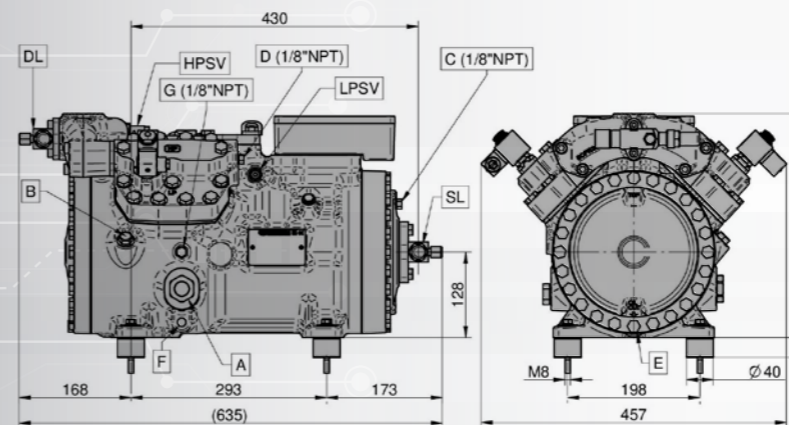
## CD-4

RANGE	MODEL	CYLINDERS	DISPL. [m <sup>3</sup> /h] @ 50 Hz	HP	RPM @ 50 Hz	SUCTION	DISCHARGE	NET WEIGHT [Kg]	OIL CHARGE [l]	MAX OPERATING CURRENT V / ph / Hz	LOCKED ROTOR CURRENT V / ph / Hz
						SL [mm]	DL [mm]			380-420 / 3 / 50 440-480 / 3 / 60 Y [A]	380-420 / 3 / 50 440-480 / 3 / 60 Y [A]
CD-4	CD4 55-4,7M	4	4,67	5,5	1450	22	18	117	1,7	14,50	63
	CD4 75-4,7H	4	4,67	7,5	1450	22	18	117	1,7	19,50	86
	CD4 75-6,4M	4	6,40	7,5	1450	22	18	117	1,7	19,50	86
	CD4 90-6,4H	4	6,40	9,0	1450	22	18	117	1,7	23,00	92
	CD4 75-7,3M	4	7,28	7,5	1450	22	18	120	1,7	19,50	86
	CD4 90-7,3H	4	7,28	9,0	1450	22	18	120	1,7	23,00	92
	CD4 90-9,2M	4	9,21	9,0	1450	22	18	120	1,7	23,00	92
	CD4 120-9,2H	4	9,21	12,0	1450	22	18	121	1,7	24,00	109

## ENVELOPE



## OVERALL DIMENSIONS



## APPLICATIONS



RAILWAY A/C



REFRIGERATION  
TRUCK AND  
TRAILER



COMMERCIAL  
REFRIGERATION



INDUSTRIAL  
REFRIGERATION



LOGISTIC  
WAREHOUSE



# CD4 PRO+ - CD400 PRO+

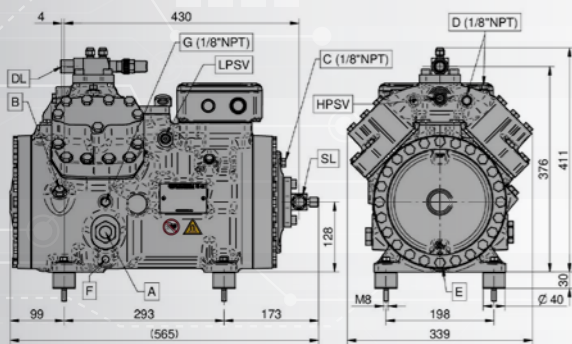
THE MOST EFFICIENT CO<sub>2</sub> COMPRESSORS RANGE



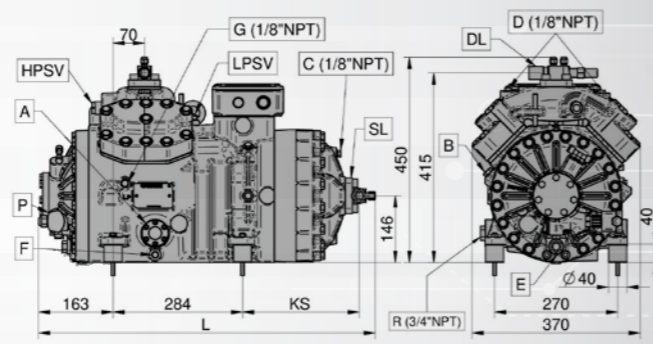
Introducing the new era of CO<sub>2</sub> compressors: the **CD PRO+** range, now available with cutting-edge permanent magnet electric motors (LSPM). **Dorin is proud to present this innovation, raising the bar in energy efficiency through groundbreaking technology.** Customer Benefits:  
 -Up to 8% increase in COP  
 -Rapid return on investment, typically less than 1 year

The **CD PRO+** compressor range marks a new benchmark in CO<sub>2</sub> technology, featuring 4-cylinder compressors with displacements from 4,83 m<sup>3</sup>/h to 36.70 m<sup>3</sup>/h and capacities ranging from 5,5 hp to 50 hp. With LSPM motors, the platform offers a substantial boost in performance, delivering unmatched reliability and efficiency. Dorin continues to lead the way in setting new standards for energy-efficient CO<sub>2</sub> solutions.

## OVERALL DIMENSIONS



CD4 PRO+



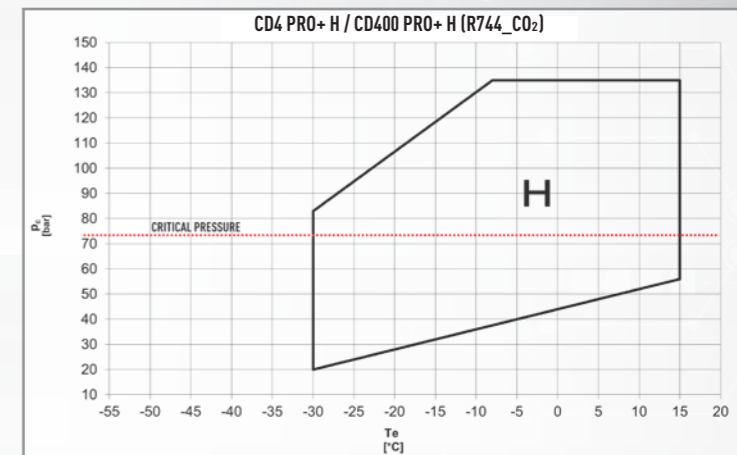
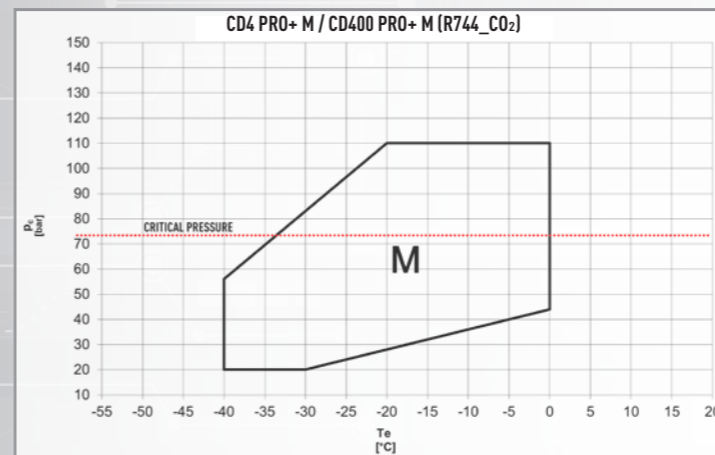
CD400 PRO+

## CD4 PRO+

## CD400 PRO+

RANGE	MODEL	CYLINDERS	DISPL. [m <sup>3</sup> /h] @ 50 Hz	RPM @ 50 Hz	SUCTION		NET WEIGHT [Kg]	OIL CHARGE [l]	MAX OPERATING CURRENT V / ph / Hz		DIMENSIONS	
					SL [mm]	DL [mm]			380-420 / 3 / 50 Y [A]	380-420 / 3 / 50 Y [A]	L [mm]	KS [mm]
CD-4 PRO+	CD4 55-4,8M PRO+	4	4,83	1500	22	18	117	1,7	12,4	54	565	173
	CD4 75-4,8H PRO+	4	4,83	1500	22	18	117	1,7	18,3	72	565	173
	CD4 75-6,6M PRO+	4	6,62	1500	22	18	117	1,7	18,3	72	565	173
	CD4 90-6,6H PRO+	4	6,62	1500	22	18	117	1,7	22,3	80	565	173
	CD4 75-7,5M PRO+	4	7,53	1500	22	18	120	1,7	18,3	72	565	173
	CD4 90-7,5H PRO+	4	7,53	1500	22	18	120	1,7	22,3	80	565	173
	CD4 90-9,5M PRO+	4	9,53	1500	22	18	120	1,7	22,3	80	565	173
CD4 120-9,5H PRO+	4	9,53	1500	22	18	121	1,7	22,6	91	565	173	
CD-400 PRO+	CD2000H PRO+	4	12,09	1500	22	22	164	2,5	35	168	740	259
	CD2000M PRO+	4	14,32	1500	22	22	164	2,5	35	168	740	259
	CD2400H PRO+	4	14,32	1500	22	22	168	2,5	35	168	740	259
	CD2500H PRO+	4	16,26	1500	22	22	168	2,5	35	168	740	259
	CD2500M PRO+	4	18,45	1500	22	22	172	2,5	35	168	740	259
	CD3000H PRO+	4	18,45	1500	22	22	178	2,5	50	175	740	259
	CD2001B PRO+	4	20,85	1500	22	22	168	2,5	35	168	740	259
	CD3001M PRO+	4	20,85	1500	22	22	178	2,5	50	175	740	259
	CD3401H PRO+	4	20,85	1500	22	22	187	2,5	68	222	740	259
	CD2501B PRO+	4	24,10	1500	22	22	172	2,5	35	168	740	259
	CD3501H PRO+	4	24,10	1500	22	22	187	2,5	68	222	740	259
	CD3001B PRO+	4	27,36	1500	22	22	178	2,5	50	175	740	259
	CD3501M PRO+	4	27,36	1500	22	22	187	2,5	68	222	740	259
	CD4501H PRO+	4	27,36	1500	22	22	199	2,5	92	306	780	300
	CD3501B PRO+	4	31,27	1500	28	22	199	2,5	68	222	780	300
	CD5001M PRO+	4	31,27	1500	28	22	202	2,5	92	306	780	300
	CD4001B PRO+	4	36,70	1500	28	22	199	2,5	75	245	780	300
CD5201M PRO+	4	36,70	1500	28	22	202	2,5	92	306	780	300	

## ENVELOPE



## APPLICATIONS



COMMERCIAL REFRIGERATION



INDUSTRIAL REFRIGERATION



LOGISTIC WAREHOUSE

# CD600

THE MILESTONE RANGE OF CO<sub>2</sub> TRANSCRITICAL COMPRESSORS FOR INDUSTRIAL APPLICATIONS



CD600 is the most used range of CO<sub>2</sub> transcritical compressors for industrial applications: this compressors lineup allows to efficiently and cost effectively match refrigeration capacity up to 5 MW.

Dorin has renewed its CD600 range with several new transcritical models with displacements from 64,49 to 71,72 m<sup>3</sup>/h and capacities from 120 to 160 hp.

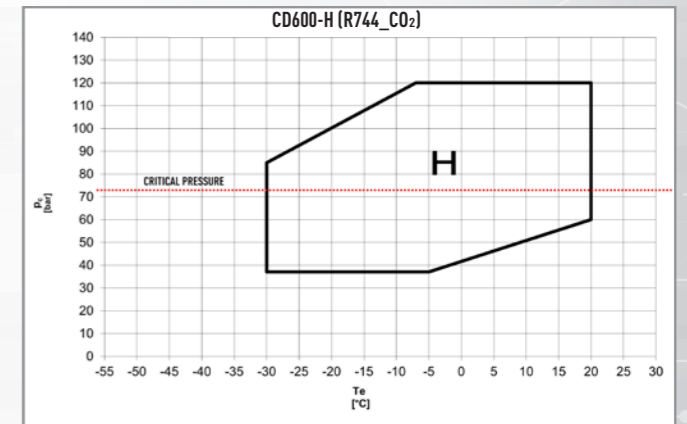
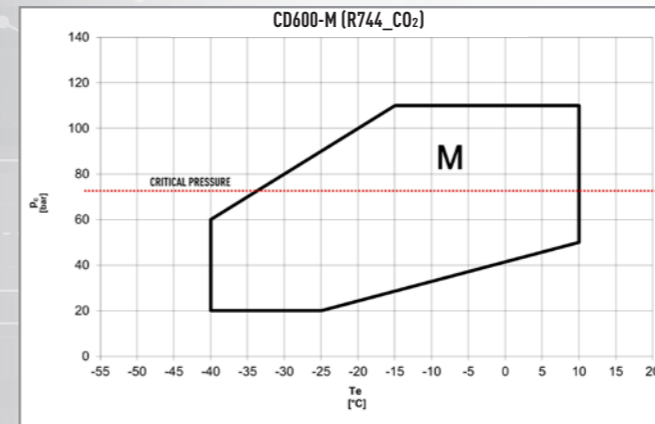
The CD600 1600-72H has been awarded the **ATMO Innovation Award North America 2024**, recognized for its outstanding performance and reliability, earning widespread appreciation from end users across America.



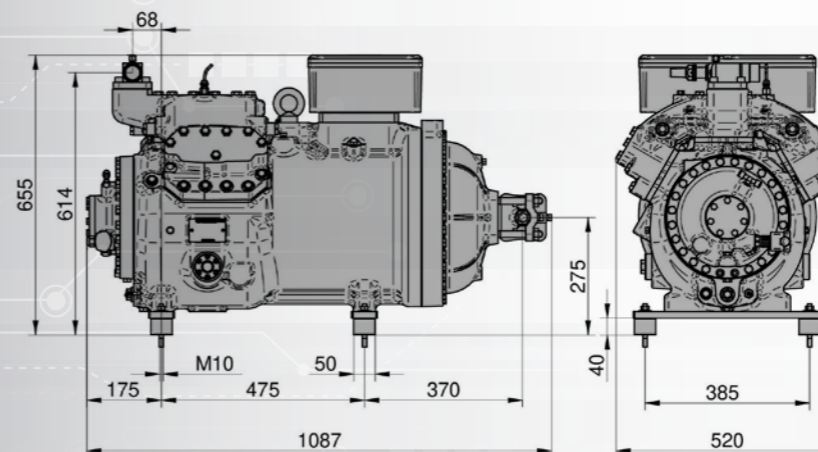
## CD600

RANGE	MODEL	CYLINDERS	DISPL. [m <sup>3</sup> /h] @ 50 Hz	HP	RPM @ 50 Hz	SUCTION		DISCHARGE		NET WEIGHT [Kg]	OIL CHARGE [l]	MAX OPERATING CURRENT V / ph / Hz 380-420 / 3 / 50 440-480 / 3 / 60 PWS [A]	LOCKED ROTOR CURRENT V / ph / Hz 380-420 / 3 / 50 440-480 / 3 / 60 PWS [A]
						SOCKET WELDING [mm]	BUTT WELDING [mm]	SOCKET WELDING [mm]	BUTT WELDING [mm]				
CD-6	CD6 601-40M	6	39,85	60	1450	42S	-	28S	-	425	4,8	105	455
	CD6 701-40H	6	39,85	70	1450	42s	-	28s	-	435	4,8	120	544
	CD6 701-45M	6	45,34	70	1450	42S	-	28S	-	435	4,8	120	544
	CD6 801-45H	6	45,34	80	1450	42s	-	28s	-	445	4,8	148	584
	CD6 801-53M	6	53,21	80	1450	42s	-	28s	-	445	4,8	148	584
	CD6 901-53H	6	53,21	90	1450	42s	-	28s	-	452	4,8	170	660
	CD6 1200-58H	6	57,65	120	1450	54s	-	35s	-	502	4,8	185	880
	CD6 901-59M	6	59,53	90	1450	42s	-	28s	-	452	4,8	170	660
	CD6 1200-65M	6	64,49	120	1450	54s	-	35s	-	502	4,8	185	880
	CD6 1400-65H	6	64,49	140	1450	54s	-	35s	-	530	4,8	210	1080
	CD6 1400-72M	6	71,72	140	1450	54s	-	35s	-	530	4,8	210	1080
	CD6 1600-72H	6	71,72	160	1450	54s	-	35s	-	562	4,8	230	1180

## ENVELOPE



## OVERALL DIMENSIONS



## APPLICATIONS



COMMERCIAL REFRIGERATION



INDUSTRIAL REFRIGERATION

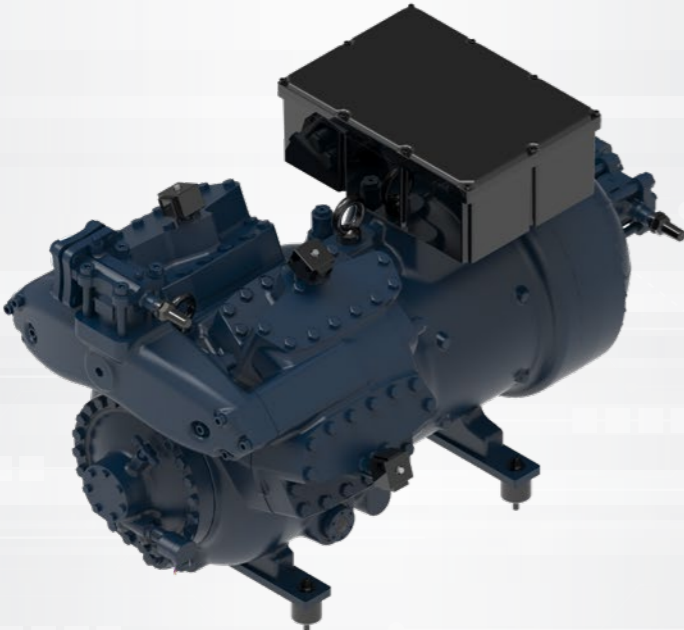


LOGISTIC WAREHOUSE



# CD700

THE FLAGSHIP MODEL OF COMPRESSORS FOR CO<sub>2</sub> TRANS-CRITICAL APPLICATION

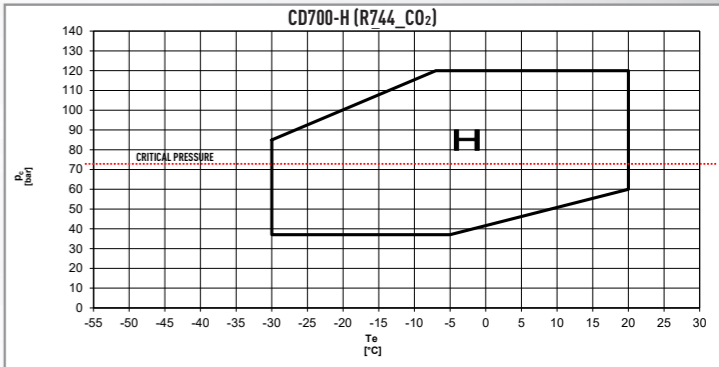
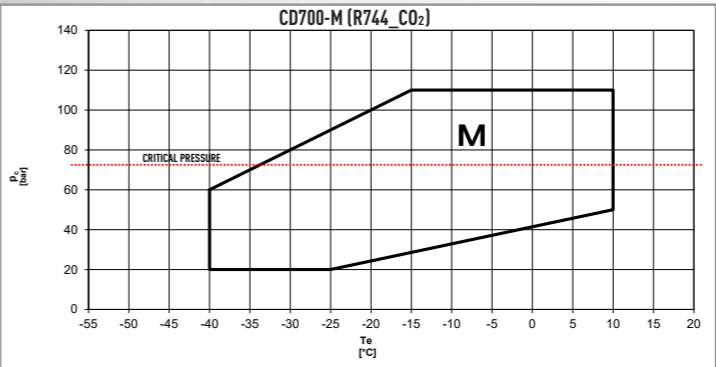


With CO<sub>2</sub> taking the lead in industrial applications, **DORIN further raises the bar**, introducing a brand new range of 8 cylinders CO<sub>2</sub> transcritical compressors, with **motor powers up to 180 hp** and **displacement up to 100 m<sup>3</sup>/h**.

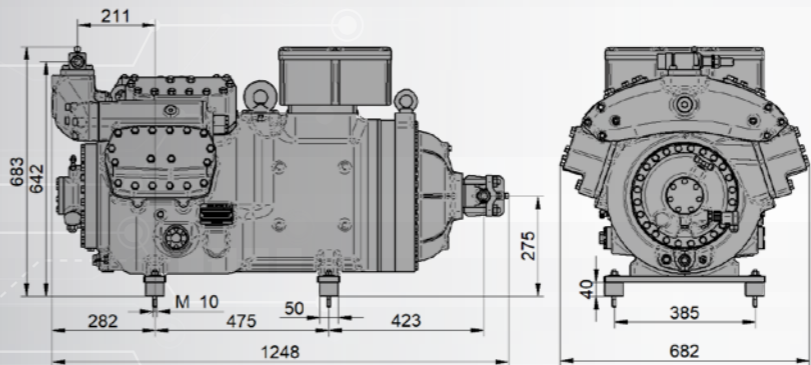
## CD700

RANGE	MODEL	CYLINDERS	DISPLACEMENT [m <sup>3</sup> /h] @ 50 Hz	HP
CD-7	CD7 1200-74M	8	74,00	120
	CD7 1400-74H	8	74,00	140
	CD7 1400-80M	8	80,00	140
	CD7 1600-80H	8	80,00	160
	CD7 1600-89M	8	89,00	160
	CD7 1800-89H	8	89,00	180
	CD7 1800-100M	8	100,00	180
	CD7 1800-100H	8	100,00	180

## ENVELOPE



## OVERALL DIMENSIONS



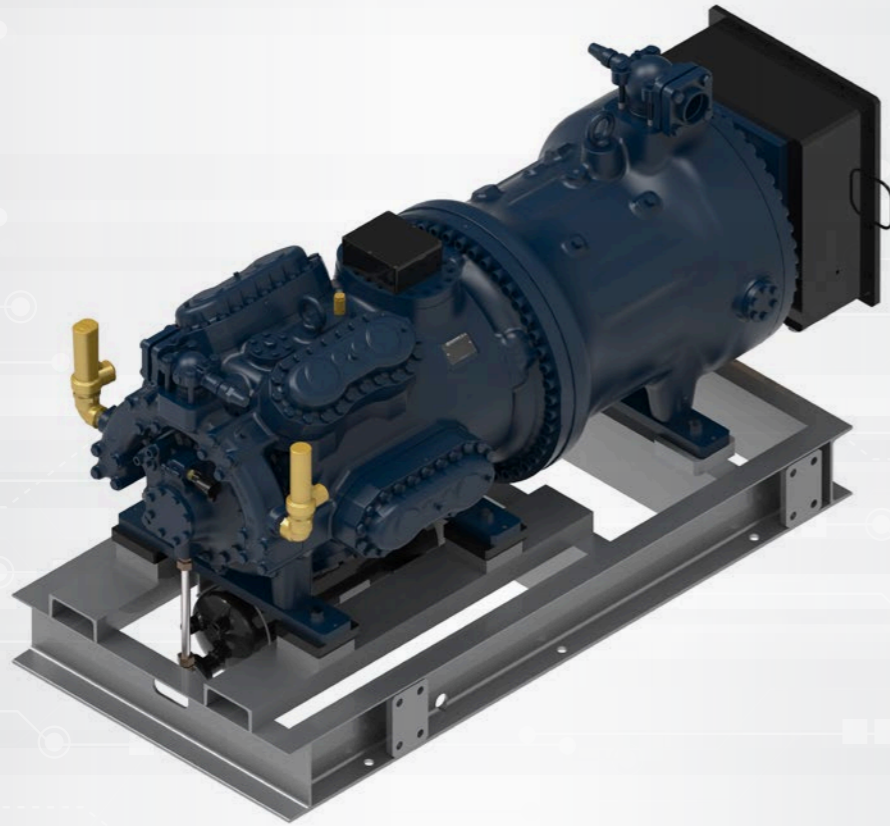
## APPLICATIONS

- REFRIGERATION WAREHOUSE
- WINTER SPORTS VENUES
- INDUSTRIAL HEAT PUMPS
- INDUSTRIAL REFRIGERATION



# CD1000

THE LARGEST CO<sub>2</sub> TRANSCRITICAL RECIPROCATING COMPRESSOR EVER BUILT

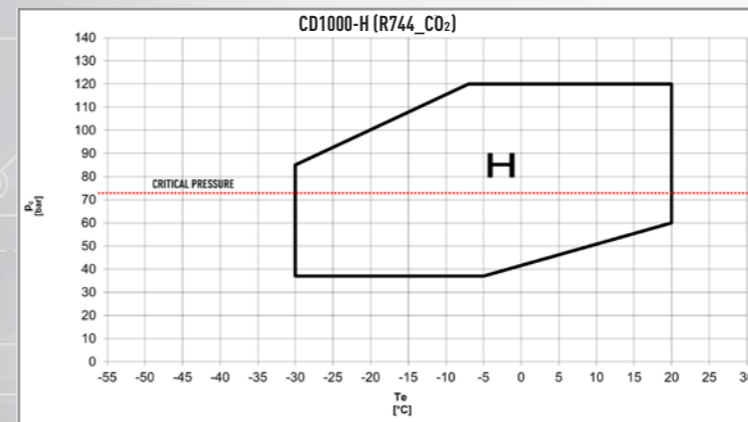


Dorin proudly presents **the biggest CO<sub>2</sub> transcritical compressor in its class**, engineered for unparalleled performance. Featuring 8 cylinders, these industry-leading compressors boast a displacement range from 205.30 m<sup>3</sup>/h to 308 m<sup>3</sup>/h, driven by electric motors ranging from 500 hp to an outstanding 750 hp. **This is power redefined, setting a new standard in CO<sub>2</sub> refrigeration and district water heat pumps.**

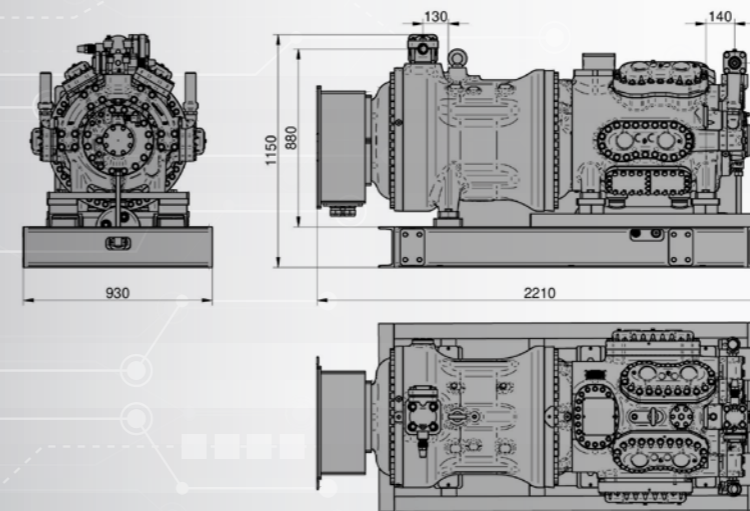
## CD1000

RANGE	MODEL	CYLINDERS	DISPLACEMENT [m <sup>3</sup> /h] @ 50 Hz	HP
CD 10	CD10 5000-205H	8	205,30	500
	CD10 6000-251H	8	243,20	600
	CD10 7500-308H	8	308,00	750

## ENVELOPE



## OVERALL DIMENSIONS



## APPLICATIONS



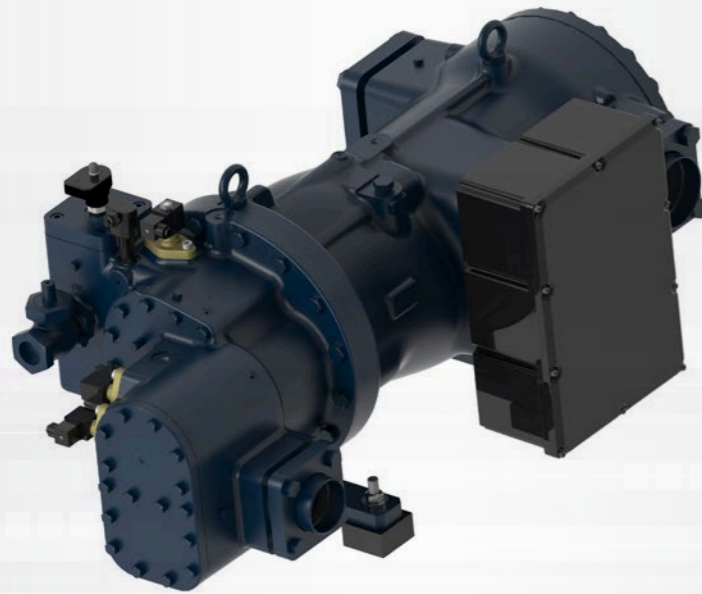
INDUSTRIAL REFRIGERATION



DISTRICT WATER HEATING

# SCREW

## THE NEWEST SCREW COMPRESSOR RANGE



Dorin introduces its first series of semi-hermetic refrigeration **screw** compressors designed for medium and low-temperature applications, compatible with **modern synthetic HFC-HFO refrigerants such as R448A, R449A, R452A, R407A, R407F, and, where permitted, R404A and R507.** These compressors offer displacements ranging from 320 m<sup>3</sup>/h to 540 m<sup>3</sup>/h and feature electric motors between 90 HP and 180 hp. Clients can benefit from over 100 years of Dorin innovation and expertise, which is embedded in the heavy-duty industrial DNA of these compressors.

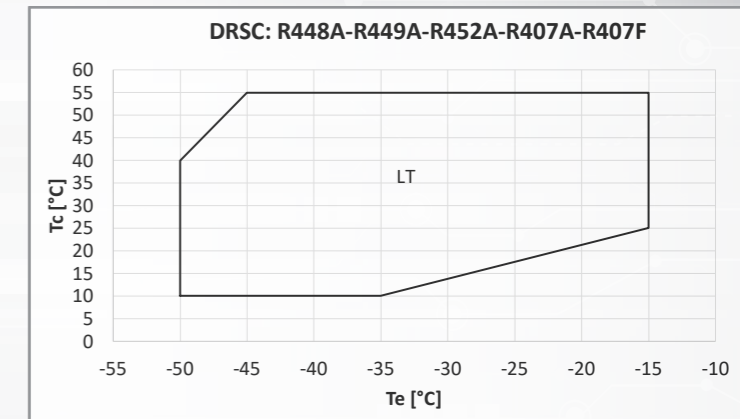
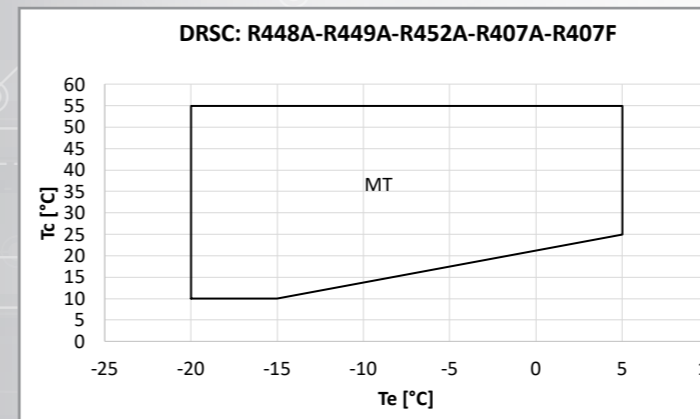
The units deliver extremely efficient performance, thanks to the **innovative 4+5 screw design**, and ensure **minimal oil carryover.** The compressors are user-friendly and easy to control, with a **specialized post-sale service** focusing on the needs of end-users. They are also compatible with the latest refrigerants and offer flexible application ranges. Their optimized design results in **very low noise levels**, providing smooth operation and an excellent user experience. **Precision engineering guarantees frictionless performance and long-term reliability.**

## SCREW

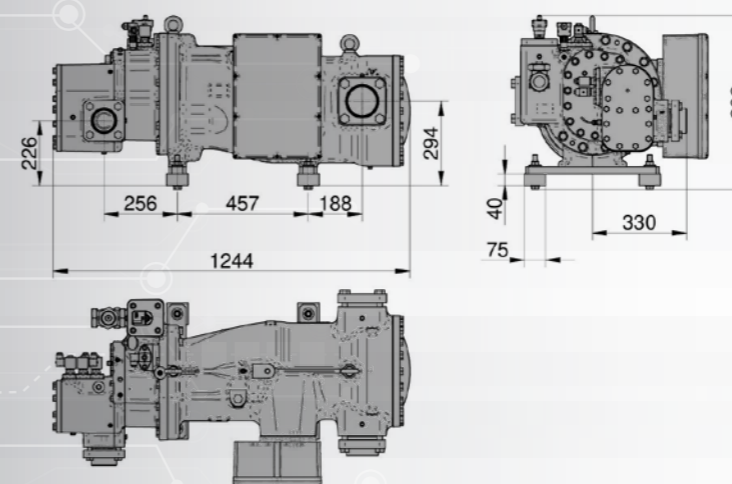
RANGE	MODEL	DISPL. [m <sup>3</sup> /h] @ 50 Hz	HP
SCREW LT	DRSC-1340-90-B	320	90
	DRSC-1370-100-B	365	100
	DRSC-1420-110-B	420	110
	DRSC-1480-130-B	480	130
	DRSC-1540-160-B	540	160

RANGE	MODEL	DISPL. [m <sup>3</sup> /h] @ 50 Hz	HP
SCREW MT	DRSC-1340-100-M	320	100
	DRSC-1370-110-M	365	110
	DRSC-1420-130-M	420	130
	DRSC-1480-160-M	480	160
	DRSC-1540-180-M	540	180

## ENVELOPE



## OVERALL DIMENSIONS



## APPLICATIONS





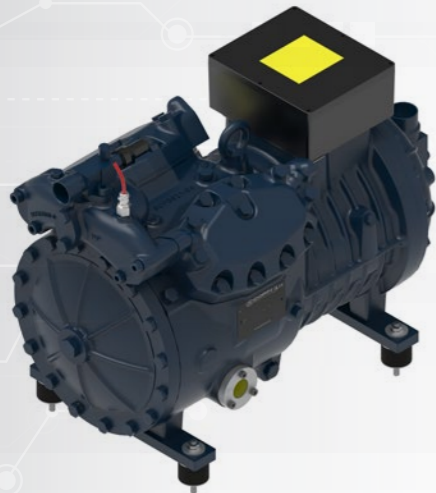
# HEX EM

## THE FIRST RANGE FOR HIGH TEMPERATURE HYDROCARBONS HEAT PUMPS

The first cutting-edge high-temperature compressor, the perfect solution for a Sustainable Future. Thanks to its innovative compression technology, Dorin's new range of compressors for heat pumps high temperature HEX EM, utilizes butane, isobutane, and propane to achieve exceptional **condensation temperatures of up to 140°C** and **evaporation temperatures up to 65°C**. Discover the best of Natural Heating. Embrace sustainability, choose Dorin.

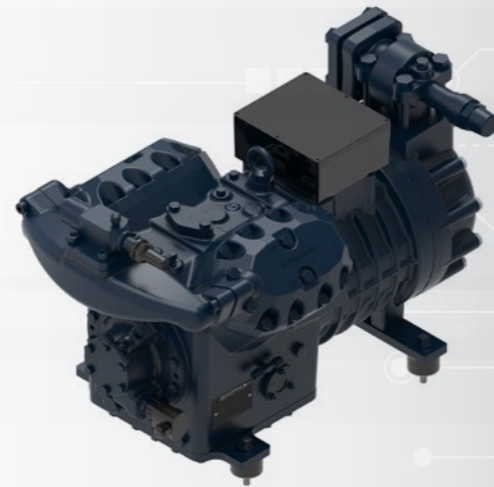
RANGE FEATURES:  
 -Displacement volume: from 42,81 to 244,78 m<sup>3</sup>/h  
 -External manifold allowing operation at discharge temperatures of up to 140°C  
 -Special components to ensure lubrication even under extreme conditions  
 -Patented oil containment system for minimal lubricant carryover.

## HEX EM41



**HEX EM41** with four cylinders, displacement from 43 to 64 m<sup>3</sup>/h and capacities from 15 to 25 hp.

## HEX EM5



**HEX EM5** with four cylinders, displacement from 76 to 102,35 m<sup>3</sup>/h and capacities from 30 to 35 hp.

### APPLICATIONS



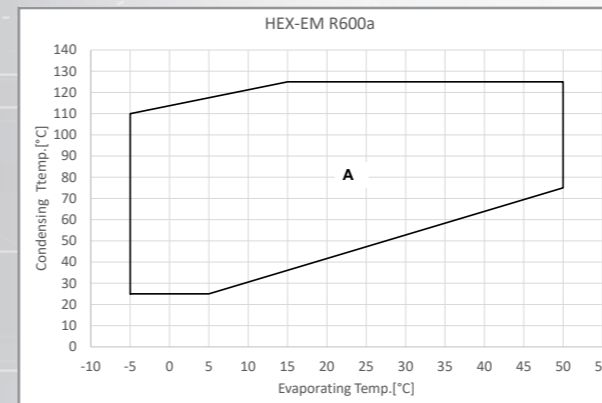
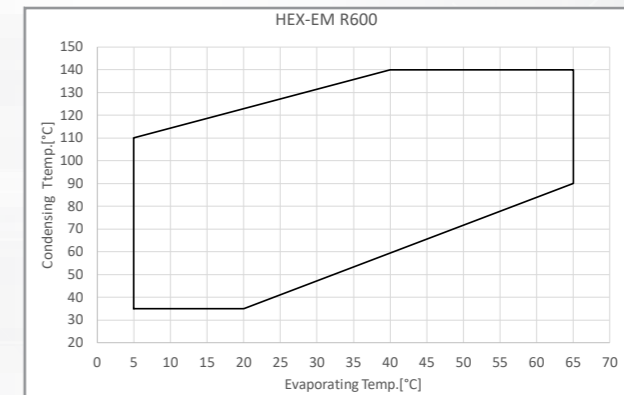
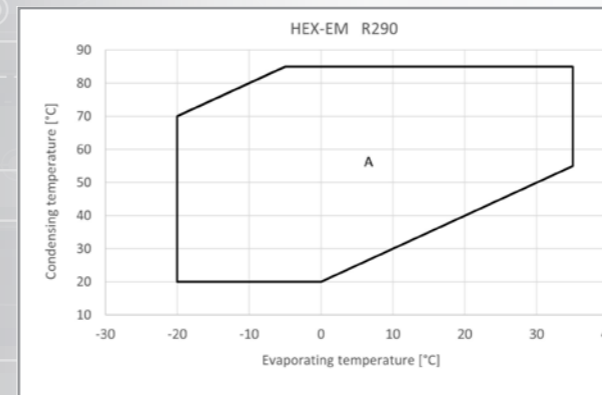
HEAT PUMP

### HEX EM41

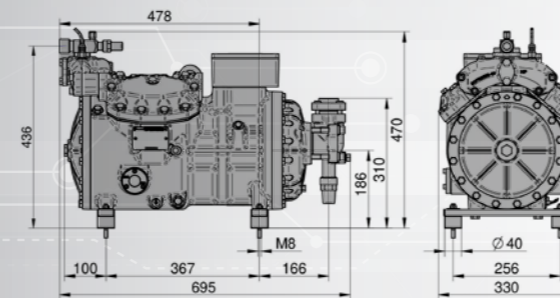
### HEX EM5

RANGE	MODEL	CYLINDERS	DISPL. [m <sup>3</sup> /h] @ 50 Hz	RPM @ 50 Hz	SUCTION	DISCHARGE	NET WEIGHT [Kg]	OIL CHARGE [l]	MAX OPERATING CURRENT V / ph / Hz	LOCKED ROTOR CURRENT V / ph / Hz
					SL [mm]	DL [mm]				
HEX EM41	HEX-EM 150-43H	4	42,81	1450	35s	28s	130	2,5	34	171
	HEX-EM 200-49H	4	48,82	1450	42s	28s	133	2,5	38	177
	HEX-EM 250-57H	4	56,87	1450	42s	28s	133	2,5	45	203
	HEX-EM 250-64H	4	63,76	1450	42S	28S	136	2,5	45	203
HEX EM5	HEX-EM 300-76H	4	75,83	1450	54S	28S	190	3,5	56	245
	HEX-EM 350-85H	4	85,01	1450	54S	28S	204	3,5	60	260
	HEX-EM 350-92H	4	92,25	1450	54S	35S	205	3,5	60	260
	HEX-EM 350-102H	4	102,35	1450	54S	35S	205	3,5	60	260

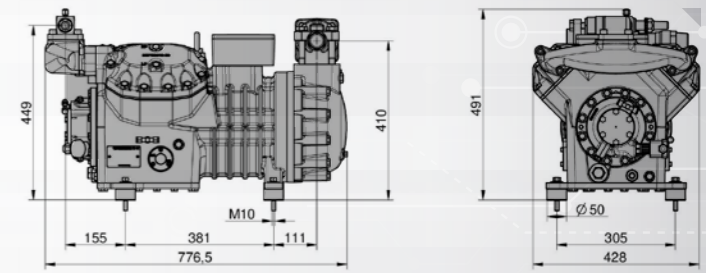
### ENVELOPE



### OVERALL DIMENSIONS



### HEX EM41



### HEX EM5



# HEX EM6



**HEX EM6** with six cylinders, displacement from 114 to 154 m<sup>3</sup>/h and capacities from 40 to 50 hp.

# HEX EM7



**HEX EM7** with eight cylinders, displacement from 164 to 245 m<sup>3</sup>/h and capacities from 70 to 90 hp.

## APPLICATIONS



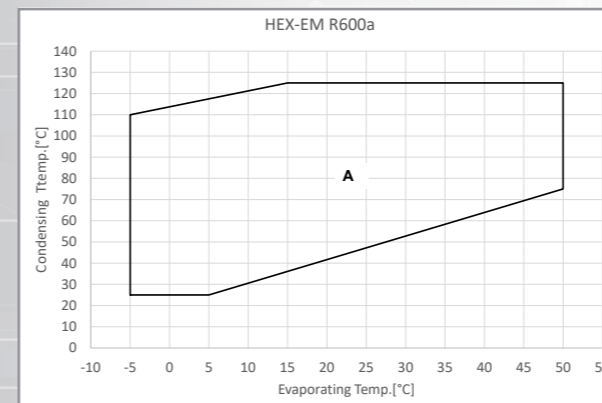
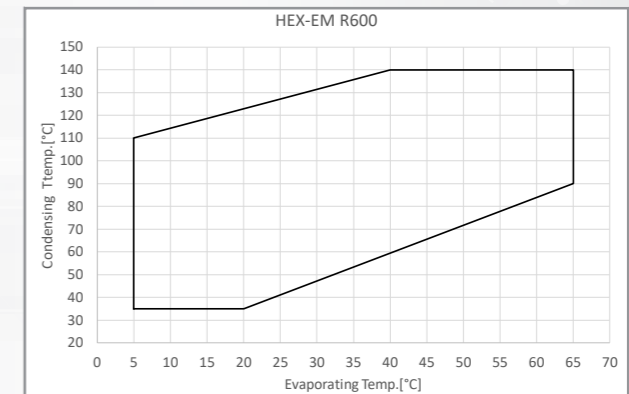
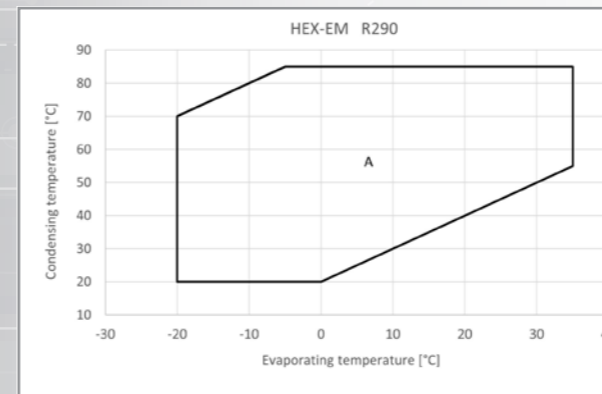
HEAT  
PUMP

## HEX EM6

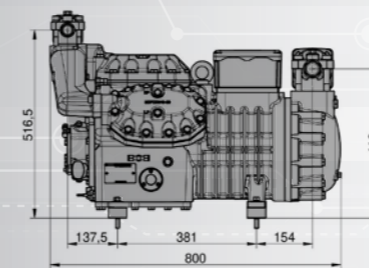
## HEX EM7

RANGE	MODEL	CYLINDERS	DISPL. [m <sup>3</sup> /h] @ 50 Hz	RPM @ 50 Hz	SUCTION	DISCHARGE	NET WEIGHT [Kg]	OIL CHARGE [l]	MAX OPERATING CURRENT V / ph / Hz 380-420 / 3 / 50 440-480 / 3 / 60 PWS [A]	LOCKED ROTOR CURRENT V / ph / Hz 380-420 / 3 / 50 440-480 / 3 / 60 PWS [A]
					SL [mm]	DL [mm]				
HEX EM6	HEX EM 400-114H	6	113,74	1450	54S	35S	251	3,5	75	290
	HEX EM 500-128H	6	127,52	1450	54S	35S	252	3,5	84	323
	HEX EM 500-138H	6	138,37	1450	54S	42S	252	3,5	93	358
	HEX EM 500-154H	6	153,52	1450	54S	42S	253	3,5	93	358
HEX EM7	HEX EM 700-164H	8	164,30	1450	66S	42S	356	8,5	120	544
	HEX EM 800-184H	8	184,19	1450	80S	42S	356	8,5	148	584
	HEX EM 800-200H	8	199,86	1450	80S	42S	357	8,5	148	584
	HEX EM 800-222H	8	221,75	1450	80S	54S	357	8,5	148	584
	HEX EM 900-245H	8	244,78	1450	80S	54S	366	8,5	148	584

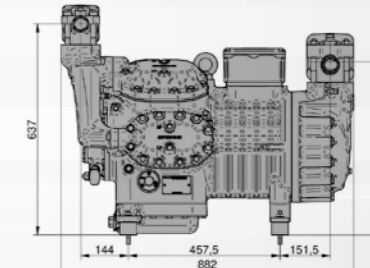
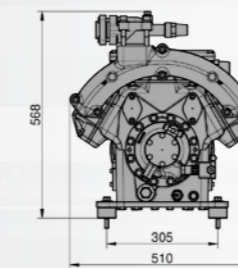
## ENVELOPE



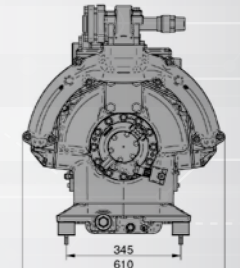
## OVERALL DIMENSIONS



## HEX EM6



## HEX EM7







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