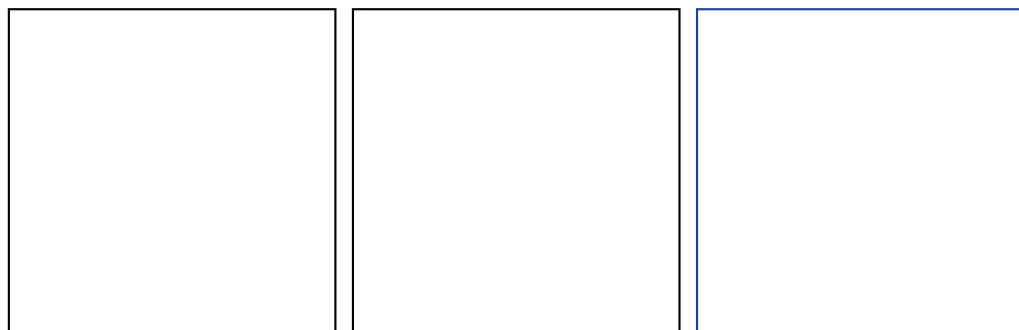
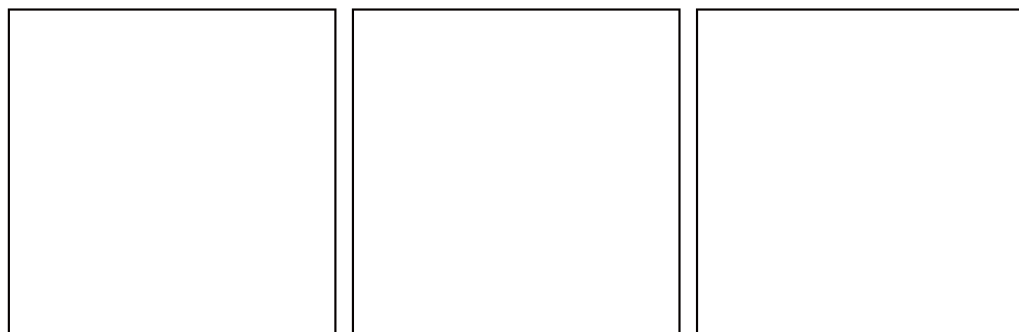




EP

RANGE

ECOPREMIUM

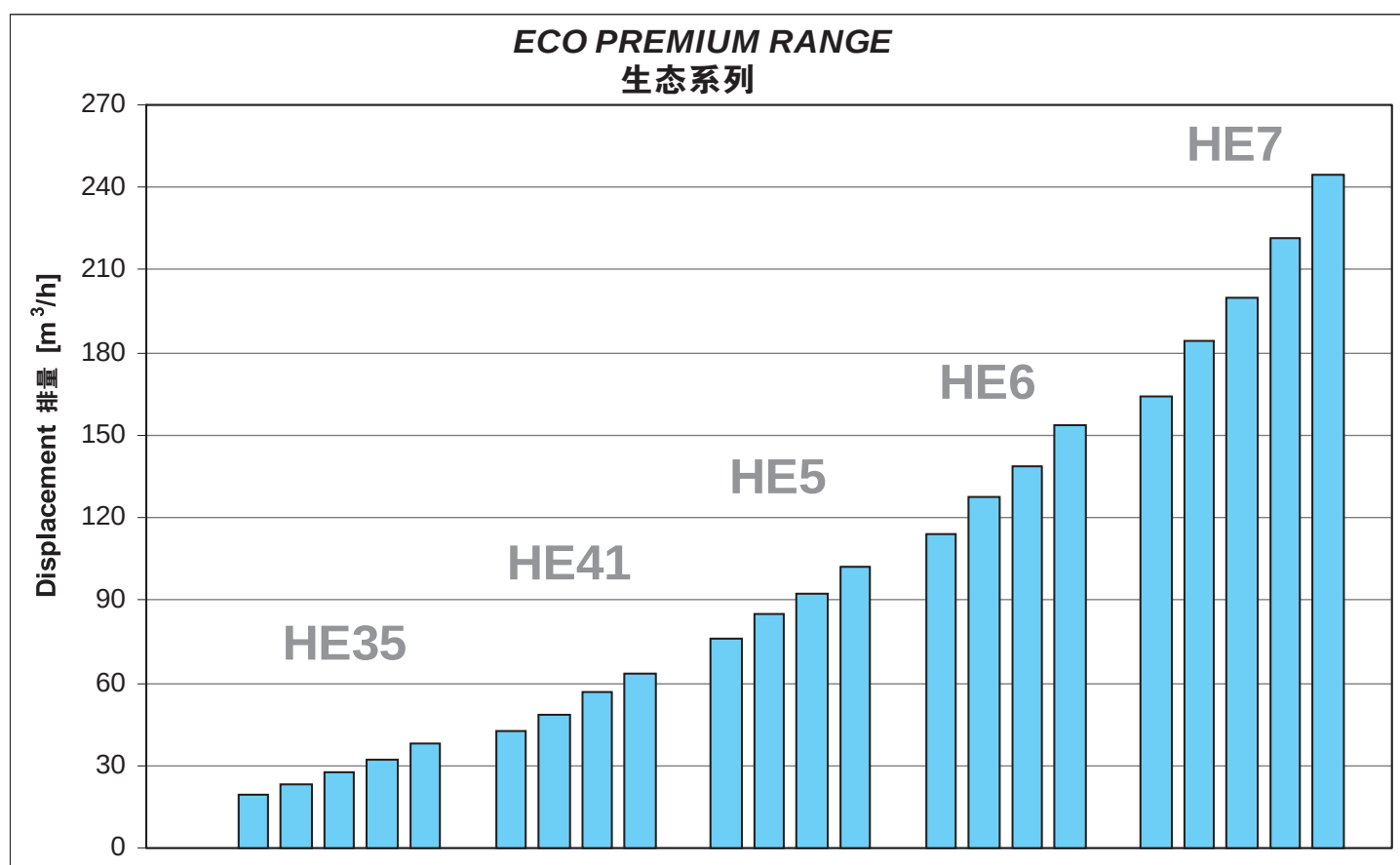
R134a

生态系列

2012

意大利都凌生态压缩机系列(R134a)
SEMI-HERMETIC MOTOR-COMPRESSORS
ECO PREMIUM

■ Introduction / 介绍	3
■ Complete range / 完整系列	4
■ Accessories / 附件	5
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R134a Range – ECO PREMIUM

DORIN broadens its semihermetic compressors series showcasing “ECO PREMIUM” range, specifically designed for R134a applications.

These new compressors feature important energy efficiency increase, thanks to:

- remarkable increase in compressor efficiency with low condensing temperatures (down to 10°C);
- appropriate selection of high efficiency electric motor;
- proper valve plate dimensioning;
- fluid-dynamic analysis of the internal flows, allowing for pressure drops decrease;
- inverter drive operation with huge frequency range (up to 90 Hz for certain models).

R404A system comparison

This new range is particularly indicated for medium temperature commercial refrigeration application, being a very interesting alternative to the traditional R404A systems. In fact, compared with the modest initial investment linked to the use of machines greater in size, the use of Dorin “ECO PREMIUM” range compressors leads to several benefits, such as:

- operating pressure decrease, assuring higher safety margin especially for hot ambient installations;
- cycle COP increase;
- pressure pulses reduction;
- noise level reduction;
- maintenance cost reduction;
- lower GWP.

Thanks to the aforementioned aspects, short payback period of such system are given, thus providing excellent annual running cost reduction.

R134a 生态系列

都凌又一次扩大其半封闭压缩机系列，专门设计了环保高效的 R134a 系列压缩机。

该系列的压缩机具有重要的特点是能效的提高：

- 压缩机效率显著提高，而冷凝温度低（同比低 10°C）。
- 精选高效电机
- 尺寸恰当的阀板
- 精确的流体动态分析减少内部通道的压降
- 极大的变频范围（有些型号变频范围高达 90Hz）

对比R404A系统

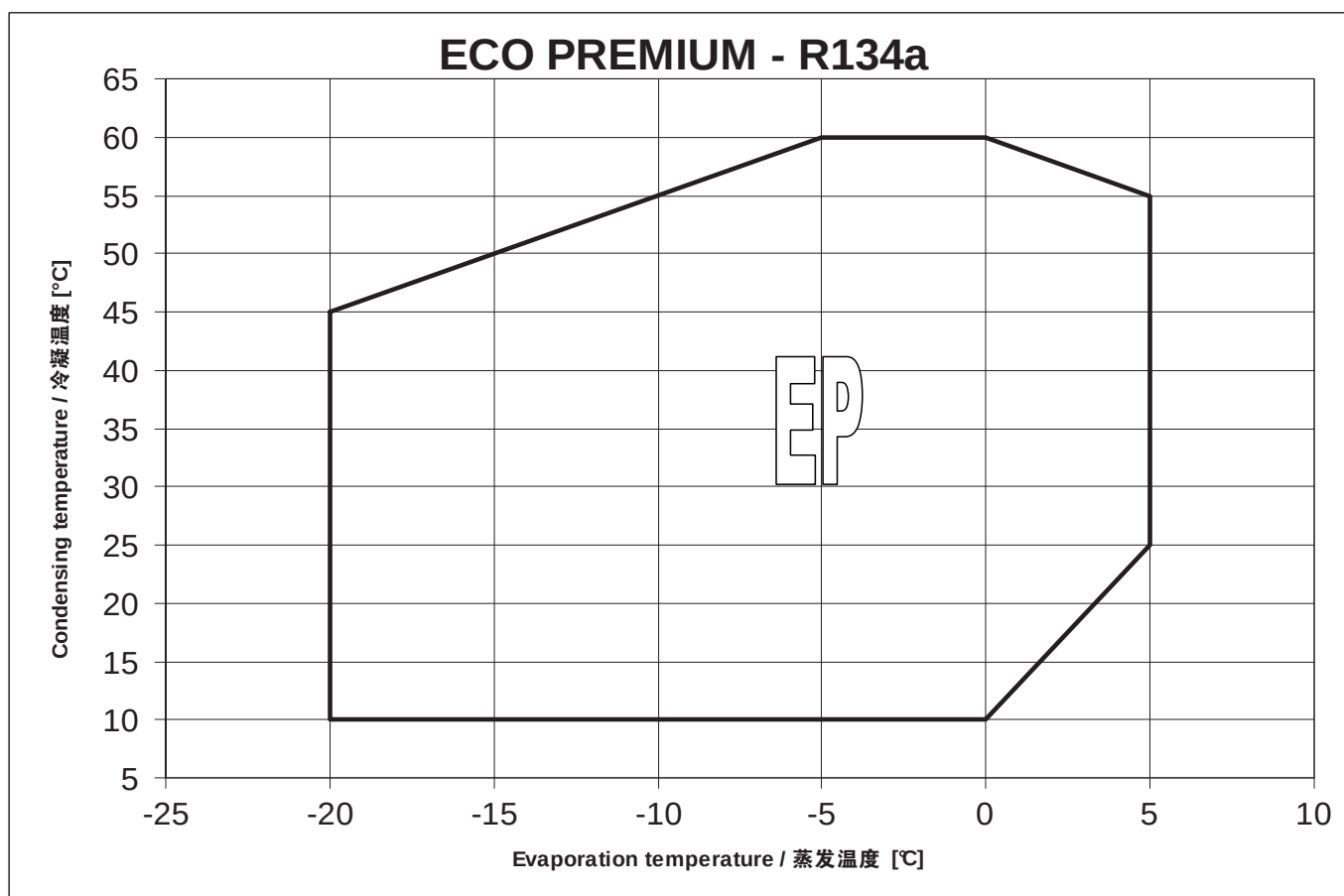
这一新系列特别适用于中温系统是传统的 R404A 系统的非常受益的替代。事实上相对初始投资较高，选用较大的都凌“环保系”压缩机系列，可获得不少利益，比如：

- 工作压力降低，确保安全运行，尤其系统安装在环境温度很高的的地方。
- COP 值增加
- 压力脉冲低
- 噪声低
- 维护成本低
- 降低 GWP（全球升温潜能值）

系统使用 R134a 生态环保系列压缩机，除了上述几方面的得益，同时缩短了投资回收期 and 降低年度的运行成本。

都凌CC型号均可应用于-40°C蒸发温度

Range 系列	Model 型号	Displacement 排气量	Max operating current 最大工作电流 FLA	Locked rotor current 锁定转子电流 LRA	Oil charge 注油量	Suction 吸气阀	Discharge 排气阀	Net weight 净重
		[m³/h]	380-420 / 3 / 50 440-480 / 3 / 60 PWS	380-420 / 3 / 50 440-480 / 3 / 60 PWS *	[kg]	SL [mm]	DL [mm]	[kg]
HE35	H400EP	19,29	18,1 / 10,5	92 / 53,2	2,0	22s	18s	89
	H450EP	23,13	18,1 / 10,5	92 / 53,2	2,0	28s	18s	89
	H500EP	27,33	18,1 / 10,5	92 / 53,2	2,0	28s	22s	90
	H550EP	31,88	18,1 / 10,5	92 / 53,2	2,0	28s	22s	90
	H600EP	38,06	22,3 / 12,9	109,2 / 63,1	2,0	35s	22s	91
HE41	H700EP	42,81	19,1	104,6	2,5	35s	28s	100
	H800EP	48,82	19,1	104,6	2,5	35s	28s	111
	H1200EP	56,87	23,0	109,0	2,5	35s	28s	125
	H1300EP	63,76	23,0	109,0	2,5	42s	28s	127
HE5	H1400EP	75,83	23,3	135,0	3,5	42s	28s	171
	H1500EP	85,01	24,3	135,0	3,5	54s	28s	182
	H1600EP	92,25	34,0	170,5	3,5	54s	35s	182
	H1700EP	102,35	34,0	170,5	3,5	54s	35s	185
HE6	H2000EP	113,74	38,0	177,0	3,5	54s	35s	212
	H2400EP	127,52	48,0	203,0	3,5	54s	35s	220
	H2600EP	138,37	48,0	203,0	3,5	54s	42s	219
	H3000EP	153,52	56,0	224,0	3,5	54s	42s	234
HE7	H4000EP	164,30	75,0	367,0	8,5	66s	42s	350
	H4500EP	184,19	75,0	367,0	8,5	80s	42s	350
	H5000EP	199,86	75,0	367,0	8,5	80s	42s	355
	H6000EP	221,75	100,0	465,0	8,5	80s	54s	355
	H7000EP	244,78	100,0	465,0	8,5	80s	54s	360



MT Motor protection 电机保护	REL Motor protection electronic module 电子保护模块	ODPS Oil differential pressure switch 油压差保护开关
CH Crankcase heater 曲轴箱加热器	ALL Optical oil level sensor 油位报警	CR Capacity control 制冷量控制系统
	US Unloaded start 卸载启动	

Range 系列	Model 型号	MT	REL	ODPS	CH	ALL	CR	US
HE35	H400EP	TE	A		B	B	B	B
	H450EP	TE	A		B	B	B	B
	H500EP	TE	A		B	B	B	B
	H550EP	TE	A		B	B	B	B
	H600EP	TE	A		B	B	B	B
HE41	H700EP	TE	A		B	B	B	B
	H800EP	TE	A		B	B	B	B
	H1200EP	TE	A		B	B	B	B
	H1300EP	TE	A		B	B	B	B
HE5	H1400EP	TE	A	A	B		B	B
	H1500EP	TE	A	A	B		B	B
	H1600EP	TE	A	A	B		B	B
	H1700EP	TE	A	A	B		B	B
HE6	H2000EP	TE	A	A	B		B	B
	H2400EP	TE	A	A	B		B	B
	H2600EP	TE	A	A	B		B	B
	H3000EP	TE	A	A	B		B	B
HE7	H4000EP	TE	A	A	B		B	B
	H4500EP	TE	A	A	B		B	B
	H5000EP	TE	A	A	B		B	B
	H6000EP	TE	A	A	B		B	B
	H7000EP	TE	A	A	B		B	B

A Standard supply / 标准配置

B Optional accessories / 任选附件

TK Termik / 双金属热敏电偶保护

TE PTC / PTC保护

R134a

Range 系列	Model 型号	Cond. Temp. 冷凝温度		Q [W]	Refrigerating capacity 制冷量		P [kW]	Power input 输入功率	
				Evaporating temperature / 蒸发温度 [°C]					
		[°C]		+5	0	-5	-10	-15	-20
HE35	H400EP	20	Q		11870	9610	7680	6040	4680
			P		1,85	1,78	1,69	1,57	1,42
		30	Q	12870	10500	8460	6720	5250	4010
			P	2,32	2,23	2,11	1,96	1,79	1,60
		40	Q	11300	9190	7370	5820	4510	3400
			P	2,69	2,54	2,37	2,18	1,96	1,71
	H450EP	20	Q		14270	11540	9220	7270	5670
			P		2,41	2,39	2,33	2,21	2,06
		30	Q	15510	12660	10210	8130	6390	4940
			P	2,95	2,90	2,80	2,65	2,46	2,23
		40	Q	13590	11060	8890	7040	5490	4190
			P	3,49	3,35	3,16	2,92	2,63	2,32
	H500EP	20	Q		17290	14030	11250	8890	6920
			P		2,76	2,64	2,50	2,33	2,13
		30	Q	18700	15300	12360	9860	7740	5970
			P	3,50	3,34	3,15	2,93	2,68	2,40
		40	Q	16420	13380	10770	8550	6670	5080
			P	4,11	3,88	3,61	3,31	2,98	2,62
	H550EP	20	Q		20270	16450	13190	10440	8150
			P		3,15	3,00	2,82	2,61	2,37
		30	Q	21940	17960	14530	11600	9130	7060
			P	4,09	3,88	3,63	3,34	3,03	2,69
		40	Q	19250	15710	12660	10070	7880	6030
			P	4,83	4,52	4,17	3,78	3,37	2,93
	H600EP	20	Q		23720	19250	15440	12220	9530
			P		3,74	3,57	3,35	3,10	2,81
		30	Q	25670	21010	17000	13570	10680	8260
			P	4,86	4,60	4,31	3,97	3,60	3,20
		40	Q	22530	18380	14820	11780	9210	7050
			P	5,74	5,37	4,95	4,50	4,01	3,49
HE41	H700EP	20	Q		28300	22710	17930	13900	10540
			P		3,95	3,89	3,73	3,49	3,18
		30	Q	30780	24930	19900	15630	12020	9010
			P	5,05	4,90	4,65	4,31	3,91	3,45
		40	Q	26810	21600	17140	13340	10150	7470
			P	6,05	5,70	5,26	4,75	4,19	3,59
	H800EP	20	Q		32430	25940	20420	15770	11900
			P		4,50	4,43	4,24	3,94	3,57
		30	Q	35290	28530	22730	17800	13650	10200
			P	5,74	5,57	5,28	4,89	4,41	3,87
		40	Q	30700	24710	19580	15230	11580	8520
			P	6,86	6,47	5,97	5,38	4,73	4,04
	H1200EP	20	Q		37830	30220	23740	18300	13790
			P		5,25	5,17	4,93	4,56	4,10
		30	Q	41160	33230	26450	20690	15860	11850
			P	6,67	6,49	6,15	5,68	5,11	4,45
		40	Q	35750	28740	22770	17710	13460	9930
			P	7,97	7,53	6,95	6,26	5,48	4,65

- Frequency rate 50 Hz
- For 60 Hz operation, data to be multiplied by 1,18
- Performance data are based on European Standard EN12900
- Never mix ester oils with different oils
- 此表是50Hz时的数据
- 在60Hz时，所有数据乘以1.18
- 按照欧标EN12900测试数据
- 不同油类不能混合

R134a

Range 系列	Model 型号	Cond. Temp. 冷凝温度		Q [W]	Refrigerating capacity 制冷量		P [kW]	Power input 输入功率	
				Evaporating temperature / 蒸发温度 [℃]					
		[℃]		+5	0	-5	-10	-15	-20
HE41	H1300EP	20	Q		42840	34210	26880	20720	15610
			P		5,89	5,79	5,52	5,12	4,60
		30	Q	46610	37630	29940	23430	17960	13410
			P	7,48	7,28	6,90	6,37	5,73	4,99
		40	Q	40480	32550	25780	20050	15240	11240
			P	8,94	8,44	7,79	7,02	6,15	5,21
HE5	H1400EP	20	Q		51210	41320	32860	25710	19730
			P		7,85	7,41	6,83	6,16	5,45
		30	Q	55950	45520	36520	28840	22330	16850
			P	9,45	8,96	8,33	7,60	6,83	6,05
		40	Q	49360	39950	31850	24930	19060	14090
			P	10,67	10,03	9,28	8,49	7,68	6,92
	H1500EP	20	Q		57180	46500	37380	29650	23190
			P		8,97	8,45	7,79	7,03	6,23
		30	Q	62280	51060	41390	33130	26130	20250
			P	10,79	10,22	9,50	8,67	7,80	6,93
		40	Q	55130	45060	36400	29000	22710	17400
			P	12,18	11,45	10,61	9,71	8,81	7,96
	H1600EP	20	Q		61900	50040	39910	31340	24170
			P		9,23	8,75	8,09	7,31	6,46
		30	Q	67830	55240	44390	35120	27260	20650
			P	11,16	10,61	9,88	9,01	8,08	7,14
		40	Q	59910	48480	38640	30240	23100	17070
			P	12,65	11,89	10,99	10,02	9,03	8,10
	H1700EP	20	Q		69220	56140	44950	35490	27580
			P		10,70	10,27	9,57	8,69	7,70
		30	Q	75510	61680	49760	39570	30940	23690
			P	12,89	12,36	11,55	10,55	9,45	8,32
		40	Q	66560	54060	43310	34120	26320	19730
			P	14,58	13,72	12,66	11,48	10,29	9,15
HE6	H2000EP	20	Q		76930	62390	49960	39450	30660
			P		12,21	11,66	10,81	9,75	8,57
		30	Q	83930	68550	55310	43990	34390	26330
			P	14,44	13,84	12,92	11,77	10,49	9,17
		40	Q	73970	60080	48130	37920	29250	21920
			P	16,25	15,31	14,13	12,79	11,41	10,06
	H2400EP	20	Q		86620	70290	56330	44520	34630
			P		14,00	13,18	12,17	11,02	9,82
		30	Q	94220	77110	62370	49770	39100	30130
			P	16,66	15,80	14,72	13,49	12,19	10,86
		40	Q	83280	67970	54800	43550	34000	25930
			P	18,72	17,63	16,38	15,02	13,64	12,28
	H2600EP	20	Q		93980	76260	61120	48300	37580
			P		15,28	14,52	13,47	12,21	10,84
		30	Q	102230	83660	67670	54000	42430	32690
			P	18,24	17,39	16,23	14,86	13,36	11,83
		40	Q	90370	73750	59460	47260	36900	28140
			P	20,54	19,34	17,91	16,33	14,71	13,14

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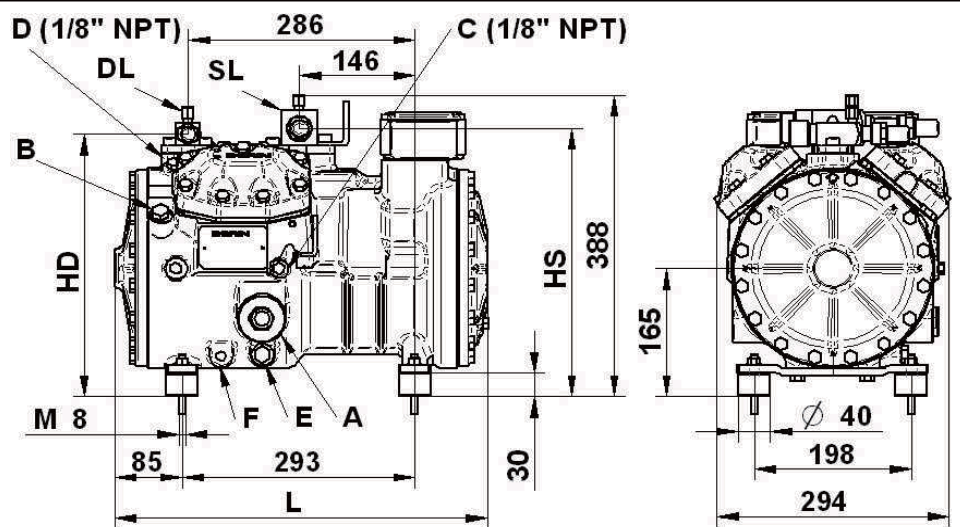
R134a

Range 系列	Model 型号	Cond. Temp. 冷凝温度		Q [W]	Refrigerating capacity 制冷量		P [kW]	Power input 输入功率	
				Evaporating temperature / 蒸发温度 [°C]					
		[°C]		+5	0	-5	-10	-15	-20
HE6	H3000EP	20	Q		104850	84910	67870	53450	41380
			P		15,81	15,18	14,32	13,24	11,95
		30	Q	113820	92970	75000	59650	46640	35700
			P	19,83	18,95	17,83	16,46	14,87	13,05
		40	Q	100240	81600	65570	51880	40250	30420
			P	22,98	21,63	20,03	18,18	16,10	13,78
HE7	H4000EP	20	Q		112210	90880	72640	57210	44290
			P		17,63	17,03	16,19	15,09	13,74
		30	Q	121810	99490	80260	63830	49910	38210
			P	21,66	20,76	19,62	18,22	16,55	14,62
		40	Q	107270	87330	70170	55520	43080	32560
			P	24,53	23,14	21,49	19,57	17,38	14,90
	H4500EP	20	Q		114830	93380	75050	59540	46570
			P		19,98	19,27	18,25	16,95	15,43
		30	Q	125170	102530	83020	66340	52220	40340
			P	24,83	23,78	22,40	20,73	18,80	16,66
		40	Q	110530	90110	72540	57530	44780	34010
			P	28,46	26,74	24,71	22,41	19,86	17,12
	H5000EP	20	Q		125590	102210	82230	65330	51190
			P		21,45	20,69	19,56	18,14	16,46
		30	Q	136770	112100	90850	72690	57310	44370
			P	26,89	25,76	24,25	22,41	20,29	17,96
		40	Q	120690	98470	79350	63010	49140	37410
			P	31,13	29,24	27,00	24,46	21,68	18,71
	H6000EP	20	Q		136380	111060	89420	71120	55800
			P		23,10	22,29	21,08	19,54	17,73
		30	Q	148370	121680	98690	79040	62390	48400
			P	29,06	27,86	26,23	24,23	21,94	19,43
		40	Q	130850	106820	86150	68490	53490	40820
			P	33,79	31,75	29,31	26,56	23,55	20,35
	H7000EP	20	Q		147550	120020	96500	76600	59950
			P		25,11	24,24	22,92	21,25	19,28
		30	Q	160590	131570	106570	85210	67110	51890
			P	31,60	30,30	28,52	26,35	23,86	21,12
		40	Q	141540	115420	92940	73740	57440	43650
			P	36,74	34,52	31,87	28,87	25,60	22,13

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- For 60 Hz operation, data to be multiplied by 1,18
- Performance data are based on European Standard EN12900
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Figure / 机型 I

HE35

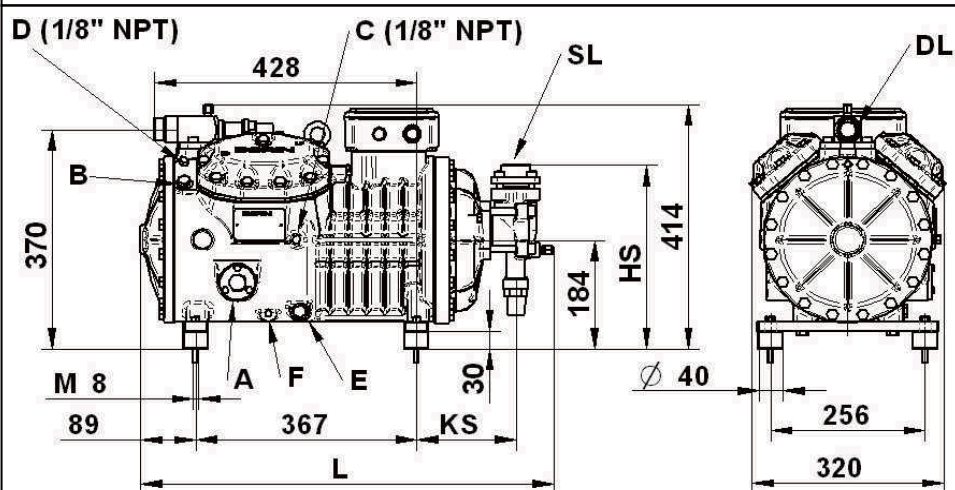


HE35 17-02-12

Range 系列	Model 型号	Figure 机型	L	HS	HD
			[mm]	[mm]	[mm]
HE35	H400EP	I	470	344	340
	H450EP	I	470	347	336
	H500EP	I	470	347	340
	H550EP	I	470	347	340
	H600EP	I	520	347	340

Figure / 机型 II

HE41



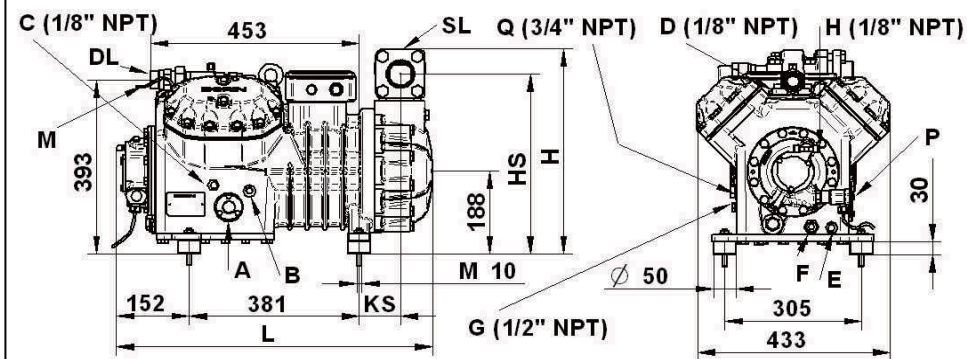
HE41 17-02-12

Range 系列	Model 型号	Figure 机型	L	HS	KS
			[mm]	[mm]	[mm]
HE41	H700EP	II	640	254	143
	H800EP	II	640	254	143
	H1200EP	II	640	254	143
	H1300EP	II	685	313	166

- | | |
|------------------------------|------------|
| A - Oil sight | A - 视镜 |
| B - Oil charge plug | B - 注油塞 |
| C - Low pressure tap | C - 低压旋塞 |
| D - High pressure tap | D - 高压旋塞 |
| E - Oil drain plug | E - 排油塞 |
| F - Crankcase heater | F - 曲轴箱加热器 |
| DL - Discharge service valve | DL - 排气阀 |
| SL - Suction service valve | SL - 吸气阀 |

Figure / 机型 III

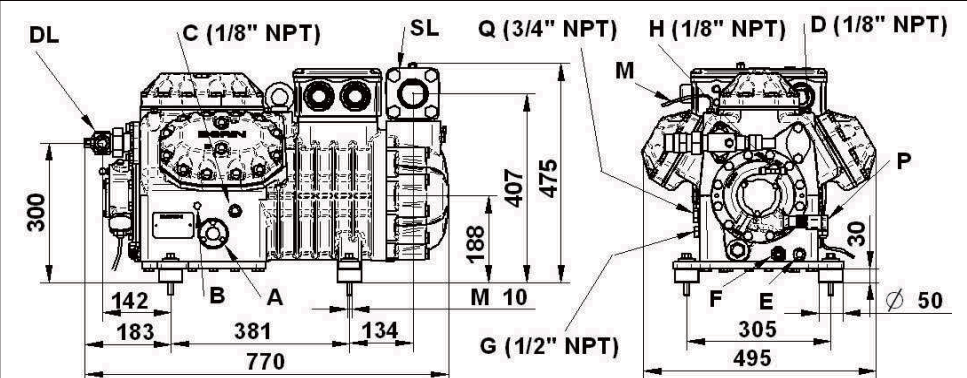
HE5



Range 系列	Model 型号	Figure 机型	L [mm]	H [mm]	HS [mm]	KS [mm]
HE5	H1400EP	III	695	445	391	84
	H1500EP	III	700	470	409	92
	H1600EP	III	700	470	409	92
	H1700EP	III	700	470	409	92

Figure / 机型 IV

HE6

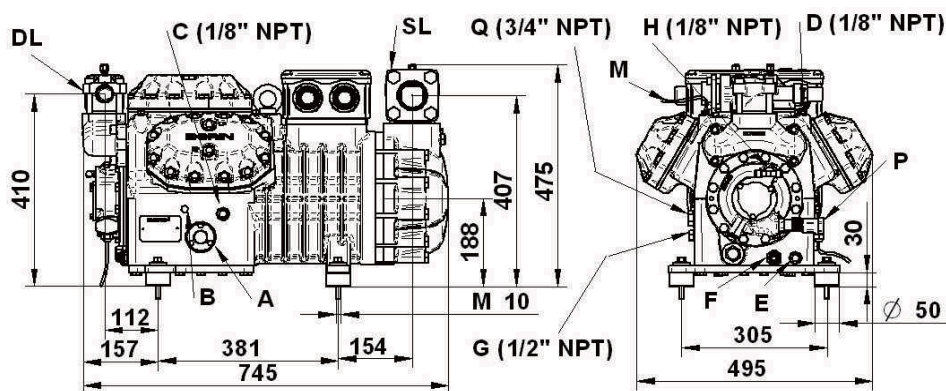


Range 系列	Model 型号	Figure 机型
HE6	H2000EP	IV
	H2400EP	IV

- | | |
|-------------------------------|---------------|
| A - Oil sight | A - 视镜 |
| B - Oil charge plug | B - 注油塞 |
| C - Low pressure tap | C - 低压旋塞 |
| D - High pressure tap | D - 高压旋塞 |
| E - Oil drain plug | E - 排油塞 |
| F - Crankcase heater | F - 曲轴箱加热器 |
| G - Oil return | G - 回油 |
| H - Oil pressure tap | H - 油压旋塞 |
| M - Max disch. temp. sensor | M - 最大排气温度传感器 |
| P - Oil diff. pressure switch | P - 油压差开关 |
| Q - Gas equalisation | Q - 气体平衡 |
| DL - Discharge service valve | DL - 排气阀 |
| SL - Suction service valve | SL - 吸气阀 |

Figure / 机型 V

HE6

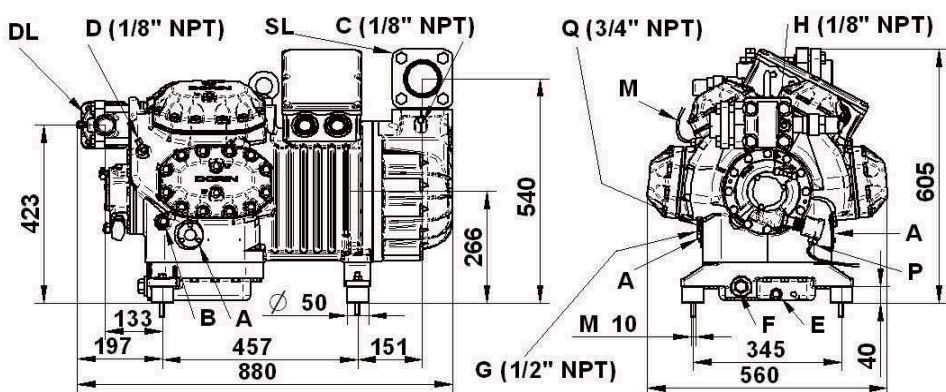


HE6C 17-02-12

Range 系列	Model 型号	Figure 机型
HE6	H2600EP	V
	H3000EP	V

Figure / 机型 VI

HE7



HE7 17-02-12

Range 系列	Model 型号	Figure 机型
HE7	H4000EP	VI
	H4500EP	VI
	H5000EP	VI
	H6000EP	VI
	H7000EP	VI

- | | |
|-------------------------------|---------------|
| A - Oil sight | A - 视镜 |
| B - Oil charge plug | B - 注油塞 |
| C - Low pressure tap | C - 低压旋塞 |
| D - High pressure tap | D - 高压旋塞 |
| E - Oil drain plug | E - 排油塞 |
| F - Crankcase heater | F - 曲轴箱加热器 |
| G - Oil return | G - 回油 |
| H - Oil pressure tap | H - 油压旋塞 |
| M - Max disch. temp. sensor | M - 最大排气温度传感器 |
| P - Oil diff. pressure switch | P - 油压差开关 |
| Q - Gas equalisation | Q - 气体平衡 |
| DL - Discharge service valve | DL - 排气阀 |
| SL - Suction service valve | SL - 吸气阀 |



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