

## Model

Designation	<b>HXD40MA</b>	<b>220-240V/50Hz 1~</b>	Sales code:	<b>CDO00083</b>
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## Compressor design

Oil type	Mineral	Refrigerant(s)	<b>R600a</b>
Oil viscosity	5cSt	Displacement	4cm <sup>3</sup> / 0,24cu.in
Oil quantity	84cm <sup>3</sup> / 2,8fl.oz	Compressors on pallet	168
Refr. charge - tech. limit	110g / 3,9oz		
Free gas volume comp.	837cm <sup>3</sup> / 28,3fl.oz		
Weight	3,8kg / 8,4lbs		
Motor protection	external		
Winding resistance main	47,8Ω (at 25°C)		
Winding resistance aux	43,7Ω (at 25°C)		
Max. winding temp.	120°C / 248°F		
Max. discharge temp.	120°C / 248°F		



## General - Configurations with HXD40MA

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	RSCR	RSIR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	187-254V	187-254V
Approvals	VDE	VDE
Starting torque	LST	LST
Note	Electrical equipment will be pre-assembled to compressor.	

## Applications with HXD40MA

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R600a	R600a
Application	LBP+MBP	LBP+MBP
System cooling	static	static
Hot gas defrost	-/-	-/-
Long interval pull down	OK	OK

## Electrical data - Configurations with HXD40MA

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	PTC	PTC
Run capacitor	2μF	-/-
Start capacitor	-/-	-/-
LRA (locked rotor amps / 4s)	2,4A	2,4A
RLA (rated load amps / 1s)	0,22A	0,22A
Cut in current	5,5A	5,5A
IP class	21	21

## Model

Designation

**HXD40MA**

220-240V/50Hz 1~

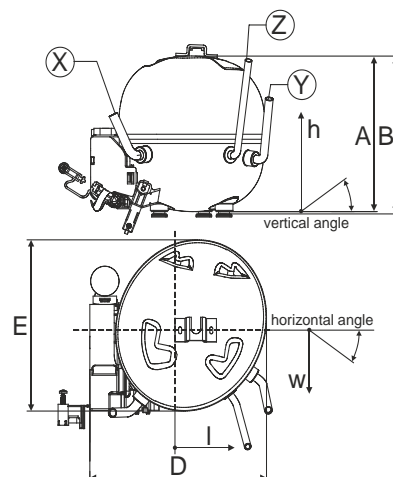
Sales code:

**CDO00083**

## Compressor dimensions

Housing	A Height	133mm / 5,24in
	B Height	134,5mm / 5,3in
	C Length shell	135mm / 5,31in
	D Length w. cover	159mm / 6,26in
	E Width	147mm / 5,79in

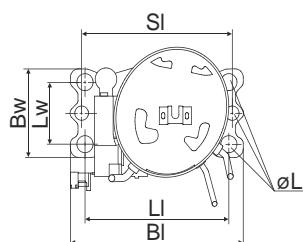
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,1-6,3	øi 4,9-5,1	øo 5,92-6,08
	(i:inside, o:outside) [in]	øi 0,24-0,25	øi 0,19-0,2	øo 0,23-0,24
Material		copper	steel/CU	copper
Horizontal angle	±2°	0°	80°	74°
Vertical angle	±2°	79°	79°	72°
Position l/h/w	[mm]	-54/83/74	87/96/72	69/130/103
	[in]	-2,1/3,3/2,9	3,4/3,8/2,8	2,7/5,1/4,1
Straight tube l.	[mm]	14	14	14
	[in]	0,5	0,5	0,5



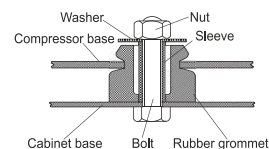
## Compressor fixation

### Adapter plate

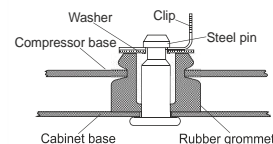
### Bolt joint



Baseplate	[mm]	[inch]
BI	204	8.03
Bw	100	3.94
Large holes	[mm]	[inch]
LI	170	6.7
Lw	70	2.76
SI	178	7
øL	ø 16	ø 0.63



### Snap-on



For standard mounting	one comp.	multi pack
Adapter plate	157008_	
Bolt joint   M6   ø16mm	118-1917	118-1918
Bolt joint   ø1/4"   ø16mm	118-1946	
Snap-on   ø7,3   ø16mm	118-1947	118-1919

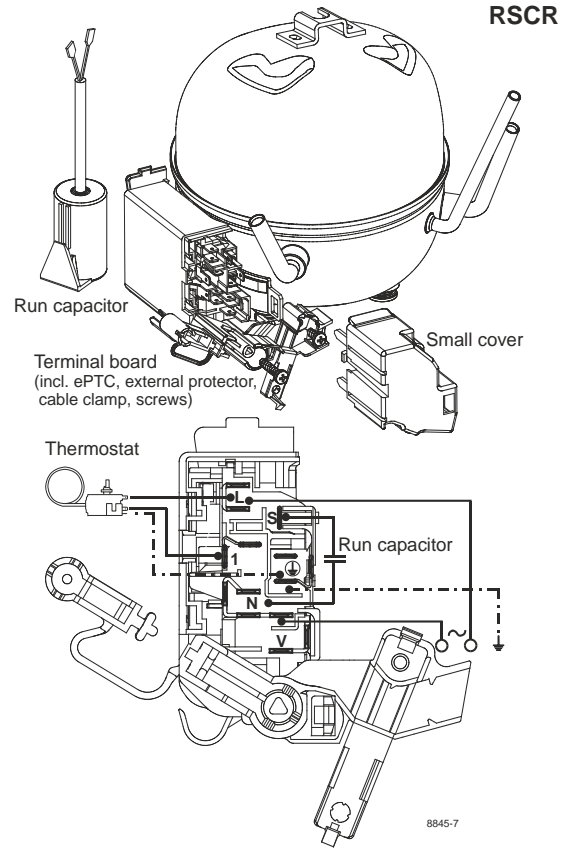
## Model

Designation **HXD40MA** **220-240V/50Hz** Conf. 1 Sales code: **CDO00083**

## Configuration

Motorconfiguration RSCR  
 Power supply (nominal) 220-240V/50Hz 1~  
 Refrigerant R600a  
 Application LBP+MBP  
 Voltage range 187-254V  
 Starting torque LST  
 Approvals VDE

## Electrical accessories / wiring diagram

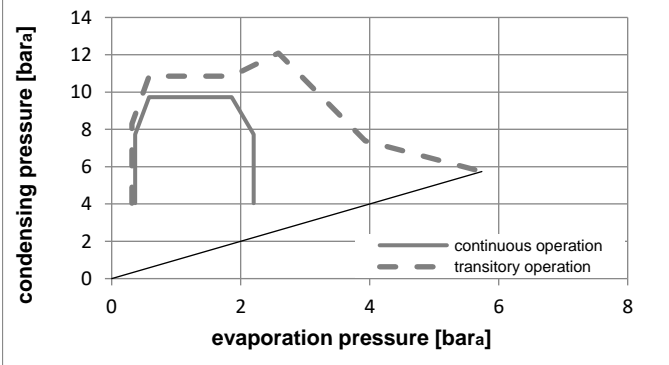
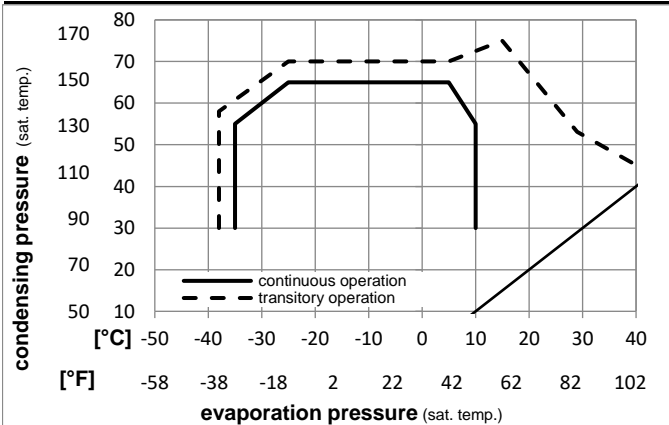


## Ambient temperatures / system cooling

Ambient temperature min.: 10°C / 50°F  
 Ambient temperature max.: 43°C / 110°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	static	n/a
38°C / 100°F	static	static	n/a
43°C / 110°F	static	static	n/a

## Operation pressure range



## Components (will be pre-assembled)

- terminal board (ePTC,4.8mm) BX E4
- motor protector BDG AE 23 FLS 17 x E4
- run capacitor (2μF, 4.8mm) cap. 2μF
- cover terminal board 160943\_

## Model

Designation **HXD40MA 220-240V/50Hz** Conf. 1 Sales code: **CDO00083**

## Optimization + standard conditions

220-240V/50Hz 1~, RSCR, static, VDE

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m	[W]	[A]	[kg/h]	Current consumption	Ref. mass flow				
[°C]	-23,3	54,4	32,2	32,2	69,4	237	59,7	1,64	5,60	1,41	42,3	0,23	0,74									
[°F]	-10	130	90	90																		
	-25	55	32	55	51,8	177	44,6	1,27	4,35	1,10	40,7	0,23	0,68								cecomaf LBP	
	-13	131	89,6	131																		
	-35	40	20	40	34,7	119	29,9	1,18	4,03	1,02	29,4	0,18	0,42								EN12900 LBP	
	-31	104	68	104																		
	-6,66	54,4	35	46,1	138,7	474	119,4	2,31	7,90	1,99	60,0	0,31	1,65								ASHRAE MBP	
	20	130	95	115																		
	-10	55	32	55	109,2	373	94,0	1,92	6,57	1,66	56,8	0,29	1,43								cecomaf MBP	
	14	131	89,6	131																		
	-10	45	20	45	121,5	415	104,5	2,32	7,92	2,00	52,4	0,28	1,56								EN12900 MBP	
	14	113	68	113																		

## Performance tables

220-240V/50Hz 1~, RSCR, static, VDE

	pe	Cooling capacity			COP			EER			P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C / °F]	-35	-31	32,9	112	28,3	1,10	3,75	0,94	30,0	0,18	0,39		
cond. pressure	-25	-13	60,5	207	52,1	1,57	5,35	1,35	38,7	0,22	0,72		
pc= 45/113	-15	5	100,6	344	86,6	2,10	7,19	1,81	47,8	0,26	1,20		
return gas temp.	-10	14	126,4	432	108,8	2,41	8,25	2,08	52,4	0,28	1,51		
RGT= 32/90	0	32	191,4	654	164,7	3,14	10,74	2,71	60,9	0,31	2,30		
liquid temp	5	41	231,4	790	199,1	3,58	12,22	3,08	64,7	0,33	2,80		
Tliq= 45/113	10	50	276,9	946	238,3	4,07	13,90	3,50	68,0	0,35	3,36		
[°C / °F]	-35	-31	26,6	91	22,9	0,86	2,95	0,74	30,8	0,18	0,35		
cond. pressure	-25	-13	51,8	177	44,6	1,27	4,35	1,10	40,7	0,23	0,68		
pc= 55/131	-15	5	86,9	297	74,8	1,69	5,78	1,46	51,3	0,27	1,14		
return gas temp	-10	14	109,2	373	94,0	1,92	6,57	1,66	56,8	0,29	1,43		
RGT= 32/90	0	32	165,3	565	142,3	2,46	8,39	2,11	67,3	0,34	2,18		
liquid temp	5	41	199,9	683	172,0	2,77	9,46	2,38	72,2	0,36	2,65		
Tliq= 55/131	10	50	239,5	818	206,1	3,12	10,66	2,69	76,7	0,38	3,19		

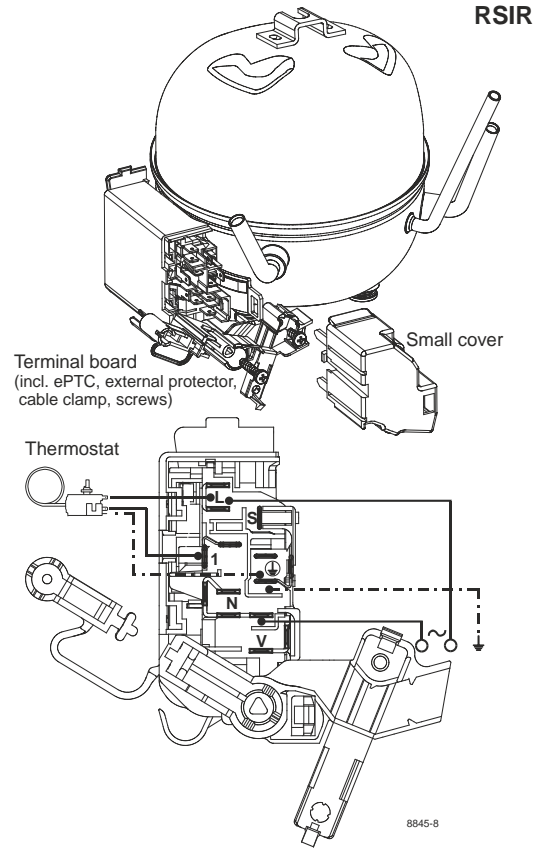
## Model

Designation **HXD40MA** **220-240V/50Hz** Conf. 2 Sales code: **CDO00083**

## Configuration

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 Refrigerant R600a  
 Application LBP+MBP  
 Voltage range 187-254V  
 Starting torque LST  
 Approvals VDE

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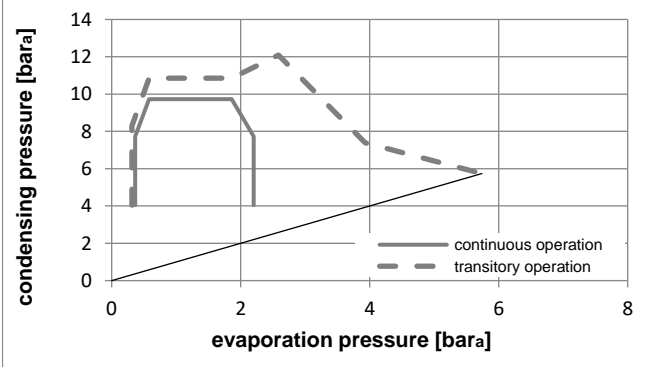
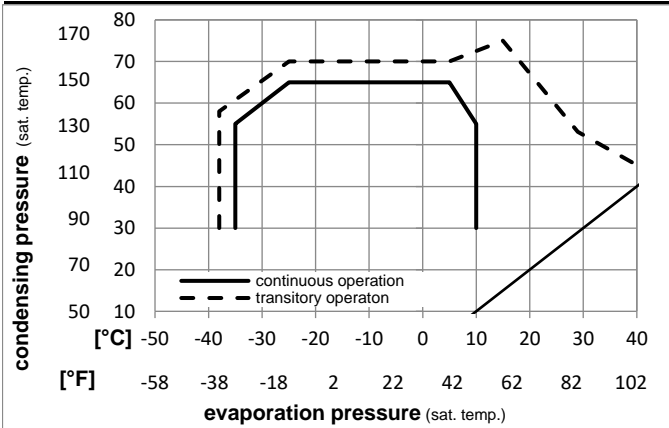


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32°C / 90°F	static	static	n/a
38°C / 100°F	static	static	n/a
43°C / 110°F	static	static	n/a

## Operation pressure range



## Components (will be pre-assembled)

- terminal board (ePTC,4.8mm) BX E4
- motor protector BDG AE 23 FLS 17 x E4
- cover terminal board 160943\_

## Model

Designation **HXD40MA 220-240V/50Hz** Conf. **2** Sales code: **CDO00083**

## Optimization + standard conditions

220-240V/50Hz 1~, RSIR, static, VDE

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			ASHRAE LBP
	pe	pc	RGT	Tliq	Cooling capacity			COP	EER		P1	I	Ref. mass flow m	
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23,3	54,4	32,2	32,2	67,3	230	57,9	1,53	5,21	1,31	44,1	0,36	0,72	ASHRAE LBP
	[°F]	-10	130	90										
	-25	55	32	55	50,2	171	43,2	1,18	4,05	1,02	42,4	0,35	0,65	cecomaf LBP
	[°F]	-13	131	89,6	131									
	-35	40	20	40	34,4	117	29,6	1,05	3,57	0,90	32,9	0,33	0,42	EN12900 LBP
	[°F]	-31	104	68	104									
	-6,66	54,4	35	46,1	138,7	474	119,4	2,18	7,44	1,88	63,7	0,42	1,65	ASHRAE MBP
	[°F]	20	130	95	115									
	-10	55	32	55	108,8	371	93,6	1,82	6,20	1,56	59,9	0,41	1,43	cecomaf MBP
	[°F]	14	131	89,6	131									
	-10	45	20	45	123,3	421	106,1	2,23	7,63	1,92	55,2	0,39	1,58	EN12900 MBP
	[°F]	14	113	68	113									

## Performance tables

220-240V/50Hz 1~, RSIR, static, VDE

	pe	Cooling capacity			COP	EER		P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-35	-31	33,9	116	29,2	1,03	3,53	0,89	32,8	0,33	0,40
cond. pressure	-25	-13	60,6	207	52,2	1,48	5,05	1,27	41,0	0,35	0,72
pc= 45/113	-15	5	102,3	350	88,1	2,03	6,94	1,75	50,3	0,38	1,22
return gas temp.	-10	14	128,3	438	110,4	2,32	7,94	2,00	55,2	0,39	1,54
RGT= 32/90	0	32	189,5	647	163,1	2,92	9,96	2,51	65,0	0,43	2,28
liquid temp	5	41	224,4	766	193,1	3,22	10,99	2,77	69,7	0,44	2,71
Tliq= 45/113	10	50	261,7	894	225,2	3,52	12,04	3,03	74,3	0,45	3,18
[°C / °F]	-35	-31	30,3	103	26,1	0,94	3,21	0,81	32,3	0,33	0,39
cond. pressure	-25	-13	50,2	171	43,2	1,18	4,05	1,02	42,4	0,35	0,65
pc= 55/131	-15	5	85,7	293	73,7	1,59	5,43	1,37	53,8	0,39	1,12
return gas temp	-10	14	108,8	371	93,6	1,82	6,20	1,56	59,9	0,41	1,43
RGT= 32/90	0	32	164,6	562	141,7	2,28	7,78	1,96	72,2	0,45	2,17
liquid temp	5	41	197,0	673	169,5	2,51	8,58	2,16	78,4	0,48	2,61
Tliq= 55/131	10	50	232,0	792	199,7	2,75	9,39	2,37	84,4	0,50	3,09