

Model

Designation	HXD45MA	220-240V/50Hz 1~	Sales code:	CDO00084
-------------	----------------	-------------------------	-------------	-----------------

Compressor design

Oil type	Mineral	Refrigerant(s)	R600a
Oil viscosity	5cSt	Displacement	4,8cm ³ / 0,29cu.in
Oil quantity	84cm ³ / 2,8fl.oz	Compressors on pallet	168
Refr. charge - tech. limit	110g / 3,9oz		
Free gas volume comp.	837cm ³ / 28,3fl.oz		
Weight	3,8kg / 8,4lbs		
Motor protection	external		
Winding resistance main	38,9Ω (at 25°C)		
Winding resistance aux	50,8Ω (at 25°C)		
Max. winding temp.	120°C / 248°F		
Max. discharge temp.	120°C / 248°F		



General - Configurations with HXD45MA

	Conf. 1	Conf. 2
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 HXD45MA

	Conf. 1	Conf. 2
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 HXD45MA

	Conf. 1	Conf. 2
Starting device type	PTC	PTC
Run capacitor	2μF	-/-
Start capacitor	-/-	-/-
LRA (locked rotor amps / 4s)	2,3A	2,3A
RLA (rated load amps / 1s)	0,26A	0,26A
Cut in current	5,6A	5,6A
IP class	21	21

Model

Designation

HXD45MA

220-240V/50Hz 1~

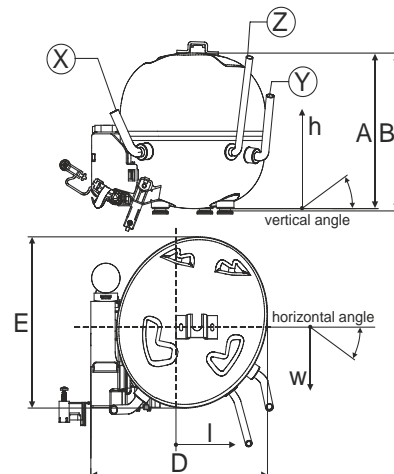
Sales code:

CDO00084

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

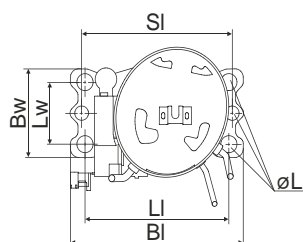
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,1-6,3	øi 4,9-5,1	øo 5,92-6,08
	(i:inside, o:outside) [in]	øi 0,24-0,25	øi 0,19-0,2	øo 0,23-0,24
Material		copper	steel/CU	copper
Horizontal angle	±2°	0°	80°	74°
Vertical angle	±2°	79°	79°	72°
Position l/h/w	[mm]	-54/83/74	87/96/72	69/130/103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



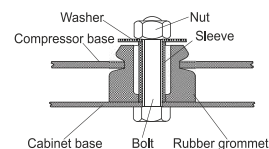
Compressor fixation

Adapter plate

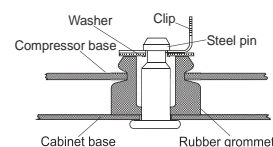
Bolt joint



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

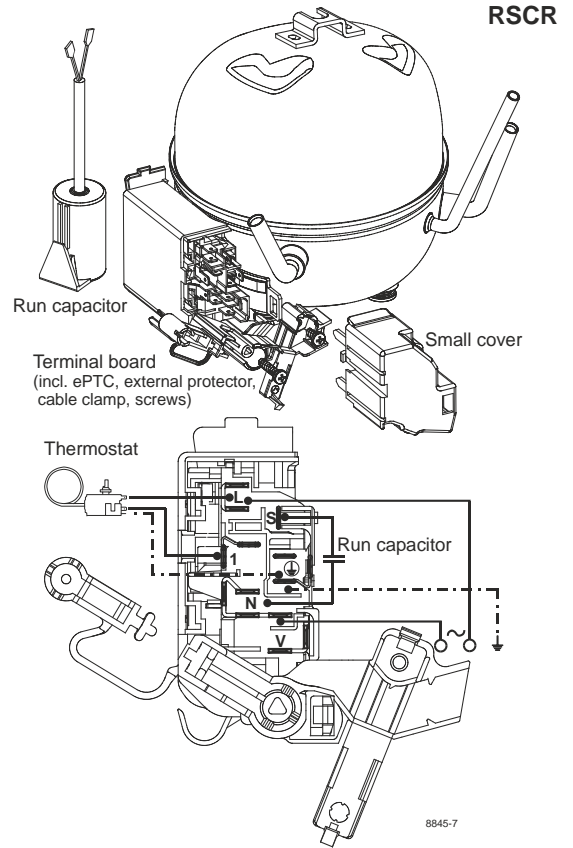
Model

Designation **HXD45MA** **220-240V/50Hz** Conf. 1 Sales code: **CDO00084**

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

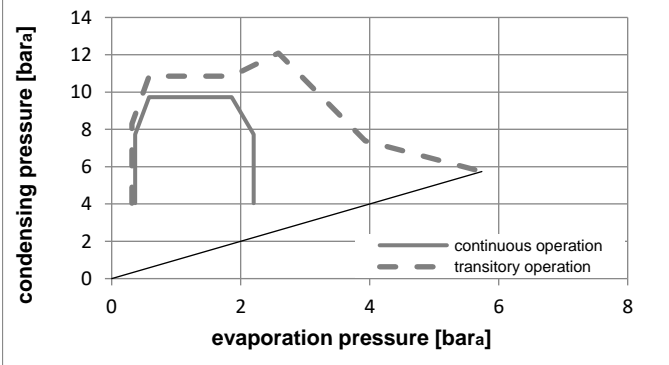
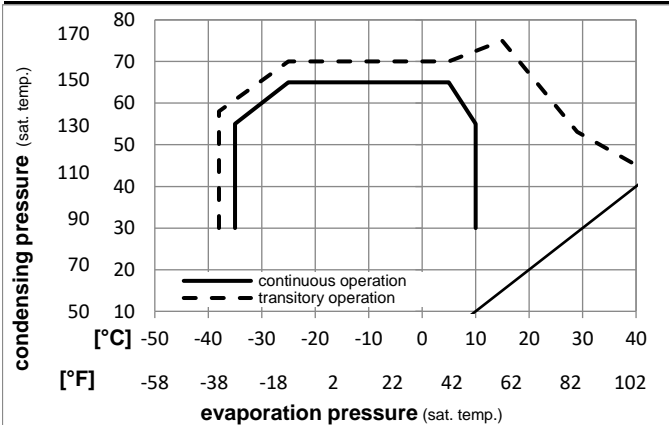


Ambient temperatures / system cooling

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 **HXD45MA 220-240V/50Hz** Conf. 1 Sales code: **CDO00084**

Optimization + standard conditions

220-240V/50Hz 1~, RSCR, 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	
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23,3	54,4	32,2	32,2	81,7	279	70,3	1,62	5,52	1,39	50,5	0,27	0,88	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	60,9	208	52,4	1,25	4,28	1,08	48,5	0,26	0,79	cecomaf LBP
	-13	131	89,6	131										
	-35	40	20	40	42,5	145	36,5	1,14	3,88	0,98	37,4	0,22	0,52	EN12900 LBP
	-31	104	68	104										
	-6,66	54,4	35	46,1	164,6	562	141,6	2,28	7,79	1,96	72,1	0,36	1,96	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	129,7	443	111,6	1,90	6,51	1,64	68,1	0,34	1,70	cecomaf MBP
	14	131	89,6	131										
	-10	45	20	45	141,9	485	122,1	2,26	7,73	1,95	62,7	0,32	1,82	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	39,4	135	33,9	1,07	3,64	0,92	37,0	0,22	0,47
cond. pressure	-25	-13	70,9	242	61,0	1,53	5,21	1,31	46,5	0,25	0,84
pc= 45/113	-15	5	117,6	402	101,2	2,06	7,03	1,77	57,1	0,30	1,41
return gas temp.	-10	14	147,7	504	127,1	2,35	8,04	2,03	62,7	0,32	1,77
RGT= 32/90	0	32	223,4	763	192,2	3,01	10,28	2,59	74,2	0,37	2,69
liquid temp	5	41	269,7	921	232,1	3,37	11,52	2,90	80,0	0,40	3,26
Tliq= 45/113	10	50	322,4	1101	277,5	3,76	12,85	3,24	85,7	0,43	3,91
[°C / °F]	-35	-31	30,2	103	26,0	0,84	2,85	0,72	36,1	0,22	0,39
cond. pressure	-25	-13	60,9	208	52,4	1,25	4,28	1,08	48,5	0,26	0,79
pc= 55/131	-15	5	103,2	352	88,8	1,68	5,73	1,44	61,5	0,31	1,35
return gas temp	-10	14	129,7	443	111,6	1,90	6,51	1,64	68,1	0,34	1,70
RGT= 32/90	0	32	195,6	668	168,3	2,41	8,24	2,08	81,1	0,40	2,58
liquid temp	5	41	235,8	805	202,9	2,70	9,21	2,32	87,4	0,43	3,13
Tliq= 55/131	10	50	281,3	961	242,1	3,01	10,27	2,59	93,5	0,46	3,75

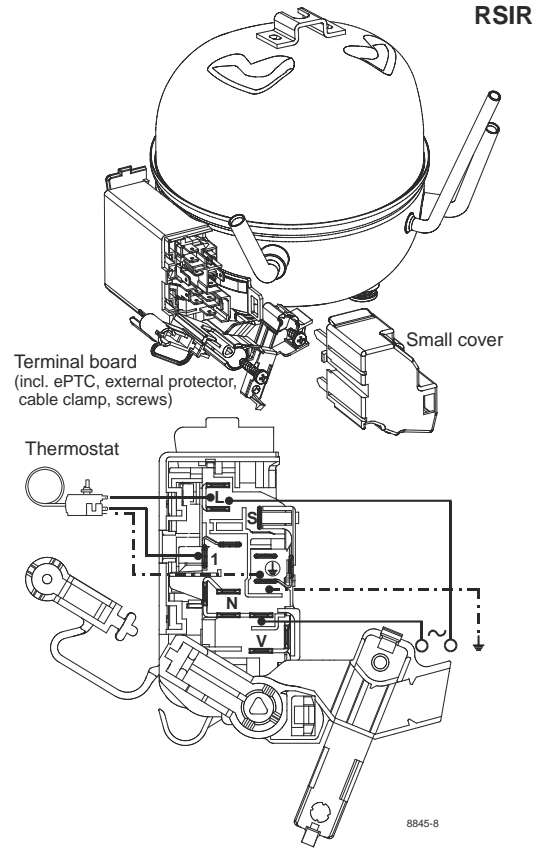
Model

Designation **HXD45MA** **220-240V/50Hz** Conf. 2 Sales code: **CDO00084**

Configuration

Motorconfiguration RSIR
 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

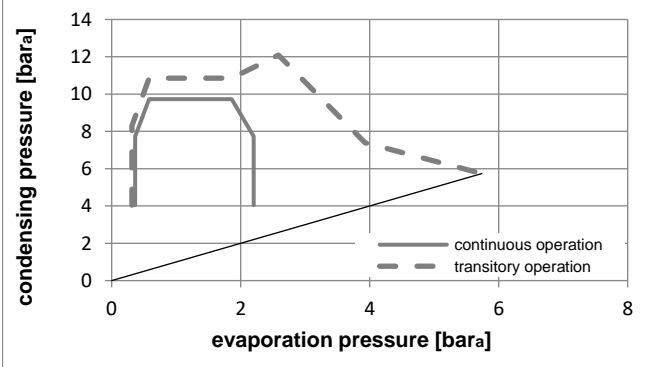
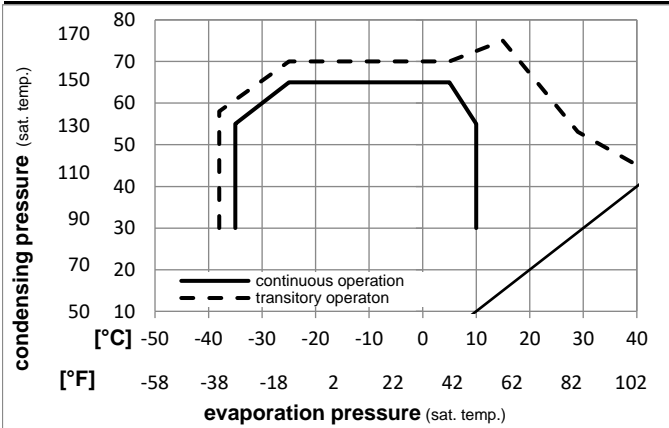


Ambient temperatures / system cooling

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
- cover terminal board 160943_

Model

Designation **HXD45MA 220-240V/50Hz** Conf. **2** Sales code: **CDO00084**

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	
	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23,3	54,4	32,2	32,2	81,3	278	70,0	1,54	5,25	1,32	52,9	0,40	0,87	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	60,6	207	52,2	1,19	4,08	1,03	50,8	0,39	0,79	cecomaf LBP
	-13	131	89,6	131										
	-35	40	20	40	39,9	136	34,3	1,07	3,64	0,92	37,4	0,36	0,49	EN12900 LBP
	-31	104	68	104										
	-6,66	54,4	35	46,1	162,6	555	139,9	2,13	7,26	1,83	76,5	0,47	1,94	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	128,1	437	110,2	1,78	6,07	1,53	72,0	0,46	1,68	cecomaf MBP
	14	131	89,6	131										
	-10	45	20	45	141,9	485	122,2	2,12	7,25	1,83	66,8	0,44	1,82	EN12900 MBP
	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	37,3	128	32,1	1,00	3,40	0,86	37,5	0,36	0,44	
cond. pressure	-25	-13	71,1	243	61,2	1,45	4,96	1,25	48,9	0,38	0,85	
pc= 45/113	-15	5	118,0	403	101,5	1,94	6,63	1,67	60,8	0,42	1,41	
return gas temp.	-10	14	147,7	505	127,1	2,21	7,55	1,90	66,8	0,44	1,77	
RGT= 32/90	0	32	222,6	760	191,5	2,83	9,66	2,43	78,7	0,48	2,68	
liquid temp	5	41	268,7	918	231,3	3,18	10,87	2,74	84,4	0,50	3,25	
Tliq= 45/113	10	50	321,4	1098	276,6	3,57	12,21	3,08	89,9	0,53	3,90	
[°C / °F]	-35	-31	29,7	102	25,6	0,79	2,70	0,68	37,6	0,36	0,39	
cond. pressure	-25	-13	60,6	207	52,2	1,19	4,08	1,03	50,8	0,39	0,79	
pc= 55/131	-15	5	102,1	349	87,8	1,57	5,38	1,36	64,8	0,43	1,34	
return gas temp	-10	14	128,1	437	110,2	1,78	6,07	1,53	72,0	0,46	1,68	
RGT= 32/90	0	32	193,5	661	166,5	2,24	7,64	1,92	86,5	0,51	2,56	
liquid temp	5	41	233,9	799	201,3	2,50	8,53	2,15	93,7	0,54	3,10	
Tliq= 55/131	10	50	280,2	957	241,1	2,78	9,50	2,40	100,7	0,57	3,73	