

## Model

Designation	<b>DLE4.8CN</b>	<b>220-240V/50Hz 1~</b>	Sales code:	<b>102H5501</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	32cSt	Displacement	4,8cm <sup>3</sup> / 0,29cu.in
Oil quantity	221cm <sup>3</sup> / 7,5fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	1390cm <sup>3</sup> / 47fl.oz		
Weight	8,15kg / 18lbs		
Motor protection	1# internal		
Winding resistance main	17,3Ω (at 25°C)		
Winding resistance aux	18,76Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with DLE4.8CN

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Motorconfiguration	CSIR	RSIR	RSCR	RSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1	1	1
Voltage range	198-254V	198-254V	198-254V	198-254V
Approvals	VDE, CCC	VDE, CCC	VDE, CCC	VDE, CCC
Starting torque	HST	LST	LST	LST
Note	Housing with dip-tray fixture (omega bracket).			

## Applications with DLE4.8CN

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Refrigerant	R290	R290	R290	R290
Application	LBP+MBP	LBP+MBP	LBP+MBP	LBP+MBP
System cooling	fan 3m/s	fan 3m/s	fan 3m/s	static
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

## Electrical data - Configurations with DLE4.8CN

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Starting device type	relay	PTC	PTC	PTC
Run capacitor	-/-	-/-	5μF	5μF
Start capacitor	60μF	-/-	-/-	-/-
LRA (locked rotor amps / 4s)	6,54A	5,81A	5,81A	5,81A
RLA (rated load amps / 1s)	1,25A	1,25A	1,05A	1,05A
Cut in current	6,54A	9,88A	9,88A	9,88A
IP class	21	21	21	21

## Model

Designation

**DLE4.8CN**

220-240V/50Hz 1~

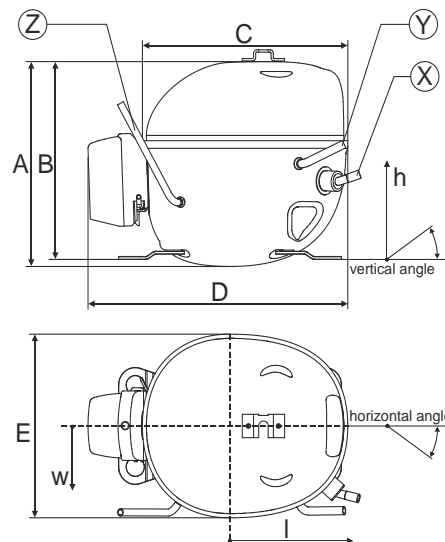
Sales code:

**102H5501**

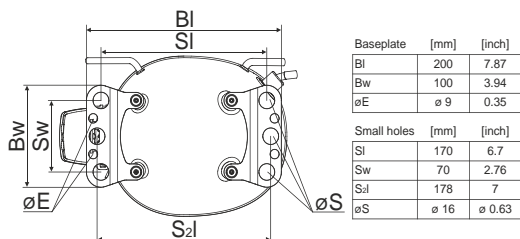
## Compressor dimensions

Housing	A Height	174mm / 6,85in
	B Height	168mm / 6,61in
	C Length shell	183mm / 7,2in
	D Length w. cover	232mm / 9,13in
	E Width	156mm / 6,14in

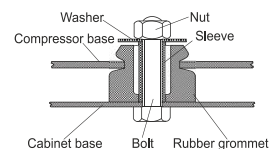
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,1-6,3
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	10°	0°	0°
Vertical angle	±2°	18°	25°	119°
Position l/h/w	[mm]	135/77/67	98/96/72	-98/133/73
	[in]	5,3/3/2,6	3,8/3,8/2,8	-3,9/5,2/2,9
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



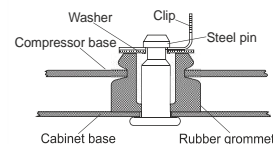
## Compressor fixation



### Bolt joint



### Snap-on



## Mounting accessories

Mounting accessories	one comp.	multi pack
Bolt joint   M6   ø16mm	118-1917	118-1918
Bolt joint   ø1/4"   ø16mm	118-1946	
Snap-on   ø7,3   ø16mm	118-1947	118-1919

## Application notes

Housing with dip-tray fixture (omega bracket).

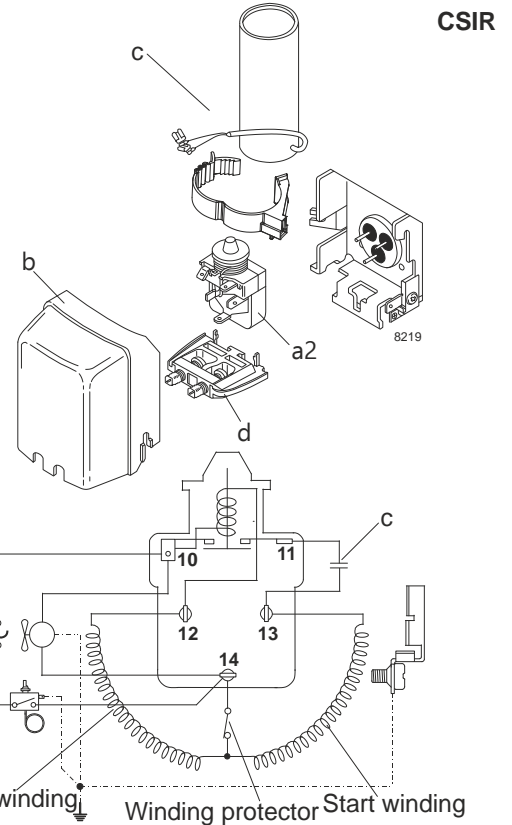
### Model

Designation	<b>DLE4.8CN</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>102H5501</b>
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### Configuration

Motorconfiguration	CSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC

### Electrical accessories / wiring diagram

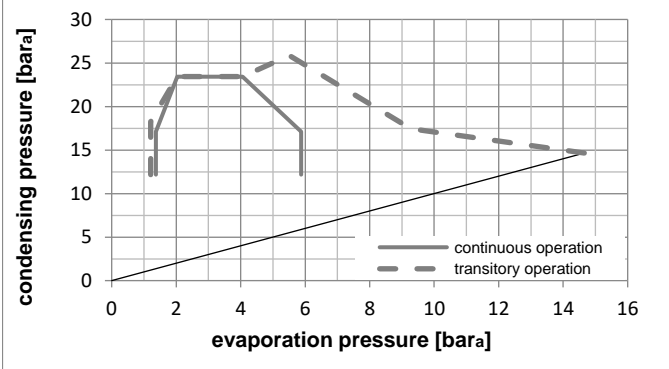
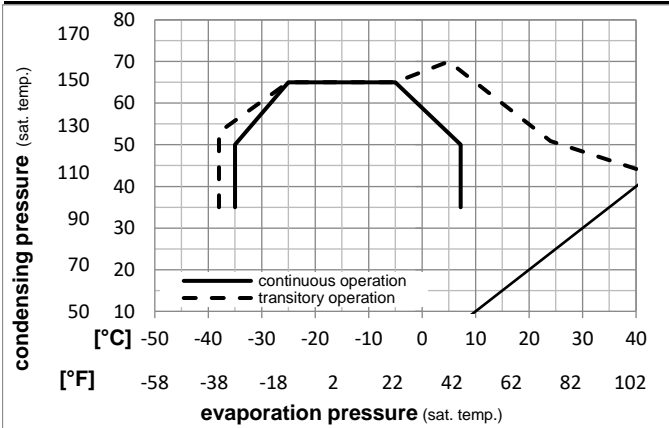


### Ambient temperatures / system cooling

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	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

### Operation pressure range



### Components

a2	current relay	117U7001
c	start capacitor (60µF)	117U5014
b	plastic cover	103N0491
d	cord relief	103N1010

## Model

Designation **DLE4.8CN 220-240V/50Hz** Conf. 1 Sales code: **102H5501**

## Optimization + standard conditions

220V/50Hz, CSIR, fan 3m/s, VDE, CCC

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity														
COP														
EER														
Power consumption														
Current consumption														
Ref. mass flow														
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1 [W]	I [A]	m [kg/h]	
[°C]	-23,3	54,4	32,2	32,2	242,1	827	208,3	1,56	5,32	1,34	155,3	1,01	2,45	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	182,3	623	156,9	1,21	4,14	1,04	150,2	0,99	2,27	cecomaf LBP
[°F]	-13	131	89,6	131										
[°C]	-35	40	20	40	114,0	389	98,1	0,99	3,37	0,85	115,6	0,86	1,30	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-6,66	54,4	35	46,1	415,7	1420	357,8	1,98	6,75	1,70	210,4	1,20	4,74	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	330,8	1130	284,6	1,65	5,62	1,42	200,9	1,17	4,18	cecomaf MBP
[°F]	14	131	89,6	131										
[°C]	-10	45	20	45	362,5	1238	312,0	2,00	6,81	1,72	181,7	1,09	4,45	EN12900 MBP
[°F]	14	113	68	113										

## Performance tables

220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	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	107,0	365	92,1	0,91	3,10	0,78	117,9	0,87	1,20		
cond. pressure	-25	-13	200,9	686	172,9	1,40	4,80	1,21	143,0	0,96	2,27		
pc= 45/113	-15	5	310,5	1061	267,3	1,83	6,26	1,58	169,4	1,05	3,53		
return gas temp.	-10	14	377,4	1289	324,8	2,08	7,09	1,79	181,7	1,09	4,32		
RGT= 32/90	-5	23	455,5	1556	392,0	2,36	8,07	2,03	192,8	1,13	5,24		
liquid temp	0	32	547,4	1869	471,1	2,71	9,25	2,33	202,2	1,17	6,35		
Tliq= 45/113	7,2	45	708,6	2420	609,8	3,35	11,44	2,88	211,6	1,21	8,33		
[°C / °F]	-35	-31	103,9	355	89,5	0,87	2,99	0,75	118,9	0,89	1,29		
cond. pressure	-25	-13	182,3	623	156,9	1,21	4,14	1,04	150,2	0,99	2,27		
pc= 55/131	-15	5	273,9	935	235,7	1,49	5,08	1,28	184,2	1,11	3,44		
return gas temp	-10	14	330,8	1130	284,6	1,65	5,62	1,42	200,9	1,17	4,18		
RGT= 32/90	-5	23	398,2	1360	342,7	1,84	6,27	1,58	216,9	1,23	5,07		
liquid temp	0	32	478,8	1635	412,1	2,07	7,07	1,78	231,4	1,29	6,15		
Tliq= 55/131	7,2	45	622,7	2127	535,9	2,50	8,54	2,15	249,0	1,37	8,11		

## Model

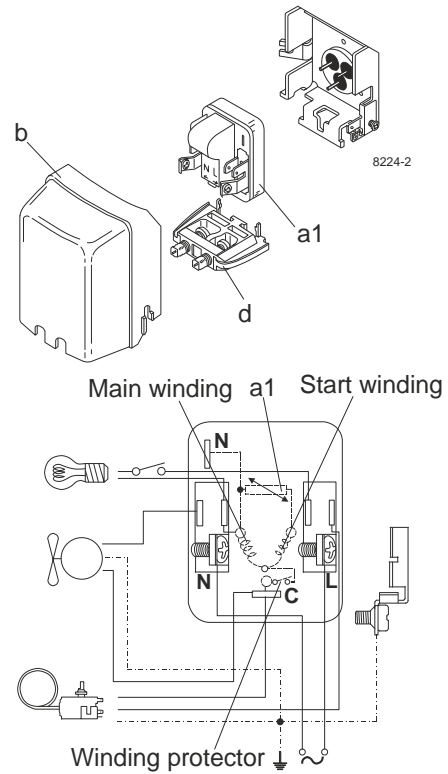
Designation	<b>DLE4.8CN</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>102H5501</b>
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## Configuration

Motorconfiguration	RSIR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE
	CCC

## Electrical accessories / wiring diagram

RSIR

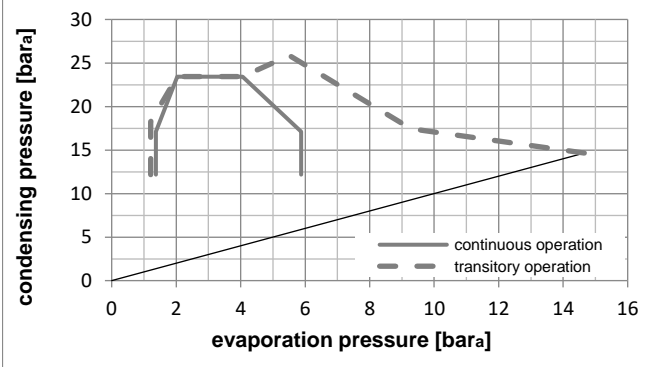
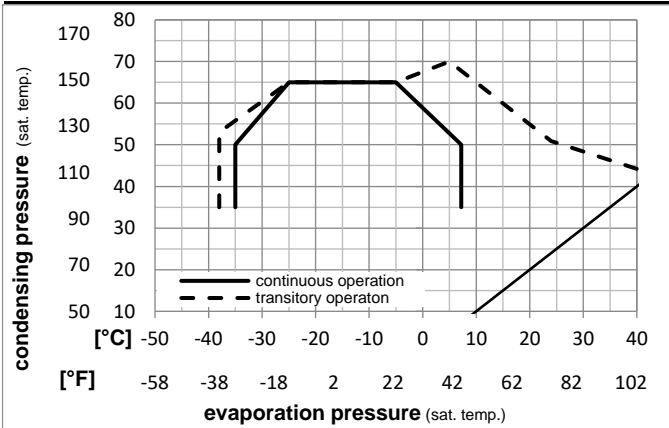


## Ambient temperatures / system cooling

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	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

## Operation pressure range



## Components

a1	e-PTC starter (220V, 250hm, 4.8mm)	103N0050
b	plastic cover	103N0491
d	cord relief	103N1010

## Model

Designation **DLE4.8CN 220-240V/50Hz** Conf. **2** Sales code: **102H5501**

## Optimization + standard conditions

220V/50Hz, RSIR, fan 3m/s, VDE, CCC

	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]	[°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	242,1	827	208,3	1,56	5,32	1,34	155,3	1,01	2,45	ASHRAE LBP
	[-10]	130	90	90										
	-25	55	32	55	182,3	623	156,9	1,21	4,14	1,04	150,2	0,99	2,27	cecomaf LBP
	[-13]	131	89,6	131										
	-35	40	20	40	114,0	389	98,1	0,99	3,37	0,85	115,6	0,86	1,30	EN12900 LBP
	[-31]	104	68	104										
	-6,66	54,4	35	46,1	415,7	1420	357,8	1,98	6,75	1,70	210,4	1,20	4,74	ASHRAE MBP
	[20]	130	95	115										
	-10	55	32	55	330,8	1130	284,6	1,65	5,62	1,42	200,9	1,17	4,18	cecomaf MBP
	[14]	131	89,6	131										
	-10	45	20	45	362,5	1238	312,0	2,00	6,81	1,72	181,7	1,09	4,45	EN12900 MBP
	[14]	113	68	113										

## Performance tables

220V/50Hz, RSIR, fan 3m/s, VDE, CCC

	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	107,0	365	92,1	0,91	3,10	0,78	117,9	0,87	1,20		
cond. pressure	-25	-13	200,9	686	172,9	1,40	4,80	1,21	143,0	0,96	2,27		
pc= 45/113	-15	5	310,5	1061	267,3	1,83	6,26	1,58	169,4	1,05	3,53		
return gas temp.	-10	14	377,4	1289	324,8	2,08	7,09	1,79	181,7	1,09	4,32		
RGT= 32/90	-5	23	455,5	1556	392,0	2,36	8,07	2,03	192,8	1,13	5,24		
liquid temp	0	32	547,4	1869	471,1	2,71	9,25	2,33	202,2	1,17	6,35		
Tliq= 45/113	7,2	45	708,6	2420	609,8	3,35	11,44	2,88	211,6	1,21	8,33		
[°C / °F]	-35	-31	103,9	355	89,5	0,87	2,99	0,75	118,9	0,89	1,29		
cond. pressure	-25	-13	182,3	623	156,9	1,21	4,14	1,04	150,2	0,99	2,27		
pc= 55/131	-15	5	273,9	935	235,7	1,49	5,08	1,28	184,2	1,11	3,44		
return gas temp	-10	14	330,8	1130	284,6	1,65	5,62	1,42	200,9	1,17	4,18		
RGT= 32/90	-5	23	398,2	1360	342,7	1,84	6,27	1,58	216,9	1,23	5,07		
liquid temp	0	32	478,8	1635	412,1	2,07	7,07	1,78	231,4	1,29	6,15		
Tliq= 55/131	7,2	45	622,7	2127	535,9	2,50	8,54	2,15	249,0	1,37	8,11		

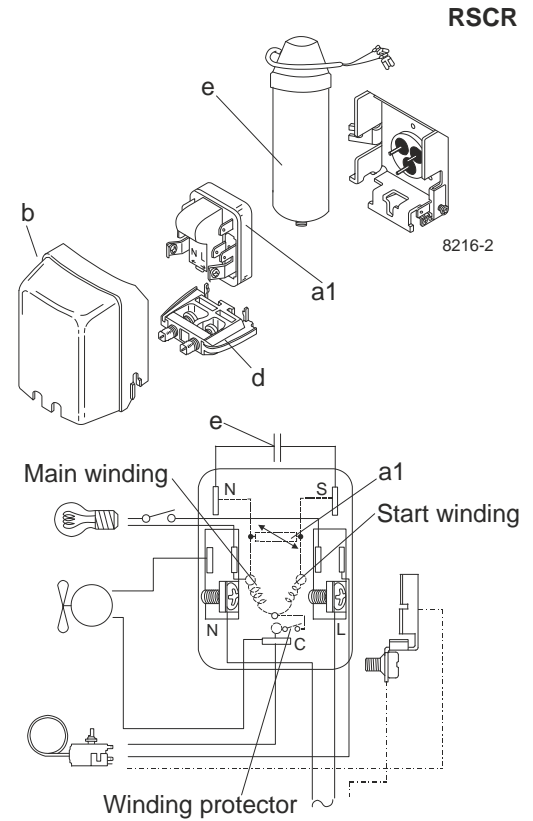
## Model

Designation	<b>DLE4.8CN</b>	<b>220-240V/50Hz</b>	<b>Conf. 3</b>	Sales code:	<b>102H5501</b>
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## Configuration

Motorconfiguration	RSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE
	CCC

## Electrical accessories / wiring diagram

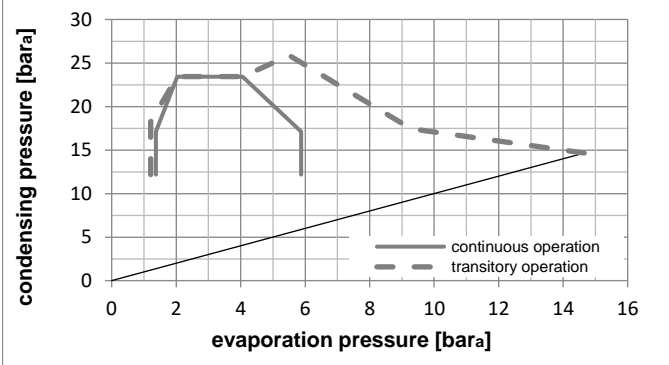
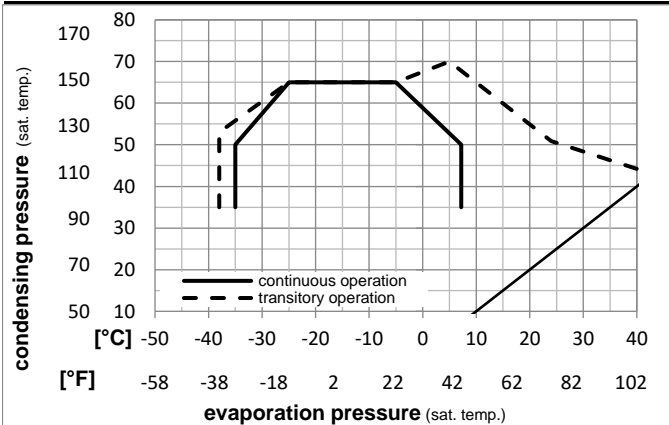


## Ambient temperatures / system cooling

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	fan 3m/s	fan 3m/s	n/a
38°C / 100°F	fan 3m/s	fan 3m/s	n/a
43°C / 110°F	fan 3m/s	fan 3m/s	n/a

## Operation pressure range



## Components

a1	e-PTC starter (220V, 250hm, 4.8mm)	103N0050
e	run capacitor (5μF, 4.8mm)	117-7129
b	plastic cover	103N0491
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

## Model

Designation **DLE4.8CN 220-240V/50Hz** Conf. **3** Sales code: **102H5501**

## Optimization + standard conditions

220V/50Hz, RSCR, fan 3m/s, VDE, CCC

	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	241,1	824	207,5	1,65	5,62	1,42	146,5	0,91	2,44	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	181,3	619	156,1	1,28	4,36	1,10	141,9	0,90	2,26	cecomaf LBP
	-13	131	89,6	131										
	-35	40	20	40	123,1	420	106,0	1,11	3,80	0,96	110,5	0,79	1,41	EN12900 LBP
	-31	104	68	104										
	-6,66	54,4	35	46,1	420,5	1436	361,9	2,15	7,36	1,85	195,2	1,13	4,80	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	334,3	1142	287,7	1,79	6,11	1,54	186,8	1,09	4,23	cecomaf MBP
	14	131	89,6	131										
	-10	45	20	45	367,1	1254	316,0	2,17	7,41	1,87	169,2	0,99	4,51	EN12900 MBP
	14	113	68	113										

## Performance tables

220V/50Hz, RSCR, fan 3m/s, VDE, CCC

	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	116,0	396	99,8	1,03	3,51	0,88	112,8	0,80	1,30
cond. pressure	-25	-13	203,7	696	175,3	1,51	5,15	1,30	135,2	0,83	2,30
pc= 45/113	-15	5	313,9	1072	270,2	1,98	6,77	1,71	158,3	0,93	3,57
return gas temp.	-10	14	382,2	1305	328,9	2,26	7,72	1,94	169,2	0,99	4,37
RGT= 32/90	-5	23	461,8	1577	397,4	2,58	8,81	2,22	179,1	1,04	5,32
liquid temp	0	32	554,6	1894	477,3	2,95	10,09	2,54	187,7	1,09	6,43
Tliq= 45/113	7,2	45	715,3	2443	615,6	3,63	12,40	3,13	197,0	1,11	8,40
[°C / °F]	-35	-31	104,9	358	90,3	0,92	3,14	0,79	114,0	0,85	1,30
cond. pressure	-25	-13	181,3	619	156,1	1,28	4,36	1,10	141,9	0,90	2,26
pc= 55/131	-15	5	275,7	942	237,3	1,60	5,48	1,38	171,9	1,02	3,47
return gas temp	-10	14	334,3	1142	287,7	1,79	6,11	1,54	186,8	1,09	4,23
RGT= 32/90	-5	23	403,2	1377	347,0	2,01	6,85	1,73	201,0	1,16	5,14
liquid temp	0	32	484,1	1653	416,7	2,26	7,72	1,94	214,3	1,22	6,22
Tliq= 55/131	7,2	45	625,8	2137	538,6	2,71	9,26	2,33	230,8	1,26	8,15



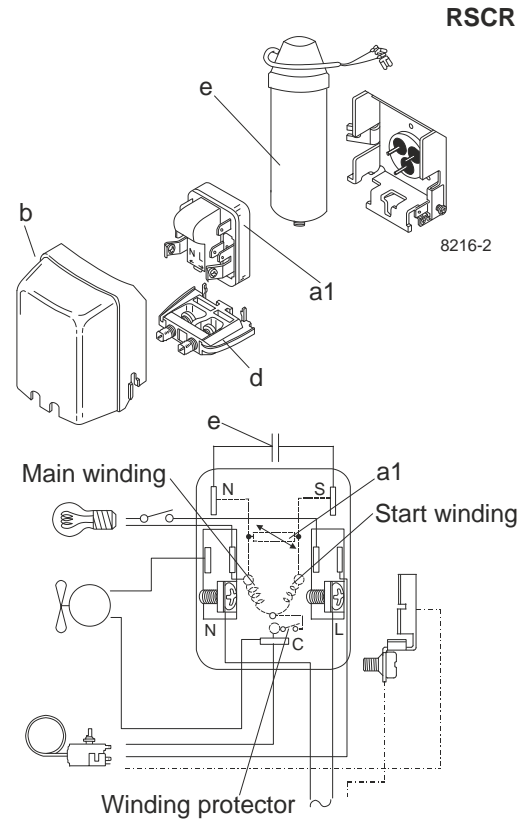
## Model

Designation	<b>DLE4.8CN</b>	<b>220-240V/50Hz</b>	<b>Conf. 4</b>	Sales code:	<b>102H5501</b>
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## Configuration

Motorconfiguration	RSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE
	CCC

## Electrical accessories / wiring diagram

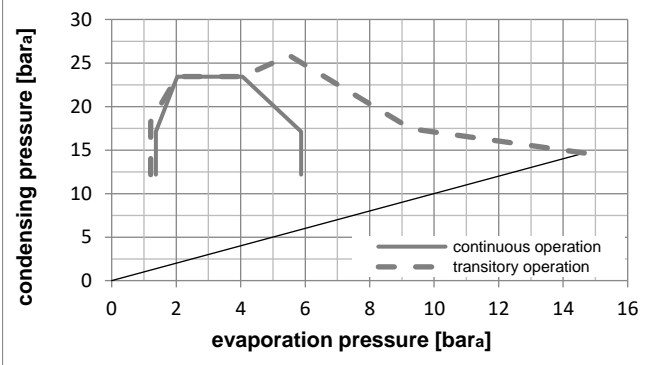
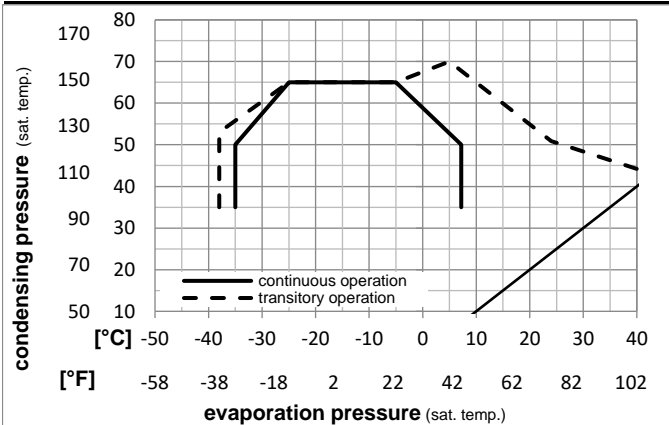


## Ambient temperatures / system cooling

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

a1	e-PTC starter (220V, 250hm, 4.8mm)	103N0050
e	run capacitor (5μF, 4.8mm)	117-7129
b	plastic cover	103N0491
d	cord relief	103N1010
	bracket for run capacitor	117-0300
	screw M4x8mm	117-0301

## Model

Designation **DLE4.8CN 220-240V/50Hz** Conf. 4 Sales code: **102H5501**

## Optimization + standard conditions

220V/50Hz, RSCR, static, VDE, CCC

	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	235,8	805	202,9	1,62	5,54	1,40	145,3	0,90	2,39	ASHRAE LBP
	-10	130	90	90										
	-25	55	32	55	177,6	606	152,8	1,26	4,32	1,09	140,4	0,89	2,21	cecomaf LBP
	-13	131	89,6	131										
	-35	40	20	40	130,2	445	112,0	1,22	4,17	1,05	106,6	0,76	1,49	EN12900 LBP
	-31	104	68	104										
	-6,66	54,4	35	46,1	413,6	1413	356,0	2,11	7,22	1,82	195,6	1,13	4,72	ASHRAE MBP
	20	130	95	115										
	-10	55	32	55	328,7	1123	282,9	1,76	6,00	1,51	187,1	1,09	4,16	cecomaf MBP
	14	131	89,6	131										
	-10	45	20	45	360,5	1231	310,3	2,13	7,26	1,83	169,5	0,99	4,43	EN12900 MBP
	14	113	68	113										

## Performance tables

220V/50Hz, RSCR, static, VDE, CCC

	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	122,7	419	105,6	1,13	3,85	0,97	108,8	0,78	1,38
cond. pressure	-25	-13	200,0	683	172,1	1,50	5,11	1,29	133,7	0,82	2,26
pc= 45/113	-15	5	307,6	1051	264,8	1,94	6,64	1,67	158,2	0,93	3,50
return gas temp.	-10	14	375,3	1282	323,0	2,21	7,56	1,91	169,5	0,99	4,29
RGT= 32/90	-5	23	453,6	1549	390,4	2,53	8,63	2,17	179,6	1,05	5,22
liquid temp	0	32	543,5	1856	467,7	2,89	9,87	2,49	188,1	1,09	6,30
Tliq= 45/113	7,2	45	695,3	2375	598,4	3,53	12,05	3,04	197,0	1,11	8,17
[°C / °F]	-35	-31	110,6	378	95,2	1,01	3,43	0,87	109,9	0,82	1,37
cond. pressure	-25	-13	177,6	606	152,8	1,26	4,32	1,09	140,4	0,89	2,21
pc= 55/131	-15	5	270,2	923	232,6	1,57	5,37	1,35	171,9	1,02	3,40
return gas temp	-10	14	328,7	1123	282,9	1,76	6,00	1,51	187,1	1,09	4,16
RGT= 32/90	-5	23	396,6	1354	341,3	1,97	6,72	1,69	201,5	1,16	5,05
liquid temp	0	32	474,9	1622	408,7	2,21	7,55	1,90	214,7	1,22	6,10
Tliq= 55/131	7,2	45	608,0	2076	523,2	2,63	8,99	2,27	230,9	1,26	7,92