

## Single Pack NLE9KTK 220-240V 50/60Hz RSIR

Single pack code number: **195B4563**

Position	Title	Code	Amount
1	Compressor NLE9KTK	105H6071	1
2	PTC starting device (220V, 250hm, 4.8mm)	103N0018	1
3	Cord relief	103N1010	1
4	Protection screen for PTC	103N0476	1
5	Cover	103N2010	1
6	Bolt joint for one compressor   M6   ø16mm	118-1917	1

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**Model**

Designation	<b>NLE9KTK</b>	<b>220-240V/50Hz 1~ 220-240V/60Hz 1~</b>	Sales code:	<b>105H6071</b>
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**Compressor design**

Oil type	Mineral	Refrigerant(s)	<b>R600a</b>
Oil viscosity	15cST	Displacement	8,35cm <sup>3</sup> / 0,51cu.in
Oil quantity	300cm <sup>3</sup> / 10,1fl.oz	Compressors on pallet	80
Refr. charge - tech. limit	150g / 5,3oz		
Free gas volume comp.	2360cm <sup>3</sup> / 79,8fl.oz		
Weight	10kg / 22lbs		
Motor protection	1# internal		
Winding resistance main	14,9Ω (at 25°C)		
Winding resistance aux	17,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



**General - Configurations with NLE9KTK**

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>
Motorconfiguration	RSIR	RSCR	RSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	220-240V/60Hz
Number of phases	1	1	1
Voltage range	187-254V	187-254V	198-253V
Approvals	VDE	VDE	VDE
Starting torque	LST	LST	LST
Note	- / -		

**Applications with NLE9KTK**

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>
Refrigerant	R600a	R600a	R600a
Application	LBP	LBP	LBP
System cooling	static	static	static
Hot gas defrost	- / -	- / -	- / -
Long interval pull down	- / -	- / -	- / -

**Electrical data - Configurations with NLE9KTK**

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>
Starting device type	PTC	PTC	PTC
Run capacitor	- / -	4μF	4μF
Start capacitor	- / -	- / -	- / -
LRA (locked rotor amps / 4s)	5A	5A	5A
RLA (rated load amps / 1s)	0,9A	0,9A	0,9A
Cut in current	9,4A	9,4A	9,4A

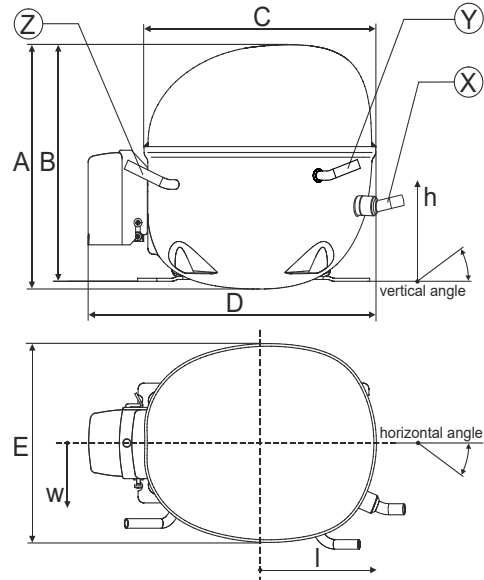
**Model**

Designation **NLE9KTK** 220-240V/50Hz 1~ 220-240V/60Hz 1~ Sales code: **105H6071**

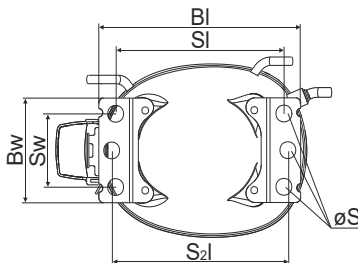
**Compressor dimensions**

<b>Housing</b>	A Height	197mm / 7,76in
	B Height	191mm / 7,52in
	C Length shell	205mm / 8,07in
	D Length w. cover	254mm / 10in
	E Width	166mm / 6,54in

<b>Connectors</b>		<b>Suction</b>	<b>Discharge</b>	<b>Process</b>
		<b>X</b>	<b>Y</b>	<b>Z</b>
Diameter	[mm]	øi 6,11-6,29	øi 5,12-5,22	øi 6,11-6,29
	(i:inside, o:outside) [in]	øi 0,24-0,25	øi 0,2-0,21	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	15°	35°	155°
Position l/h/w	[mm]	126/76/78	133/103/54	-107/94/72
	[in]	4,9/3/3,1	5,2/4/2,1	-4,2/3,7/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5



**Compressor fixation**

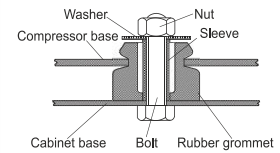


Baseplate	[mm]	[inch]
Bi	204	8.03
Bw	100	3.94

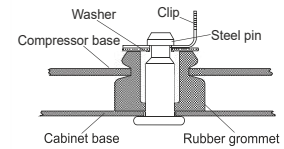
  

Small holes	[mm]	[inch]
Si	170	6.7
Sw	70	2.76
S2l	178	7
øS	ø 16	ø 0.63

**Bolt joint**



**Snap-on**



**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

**Model**

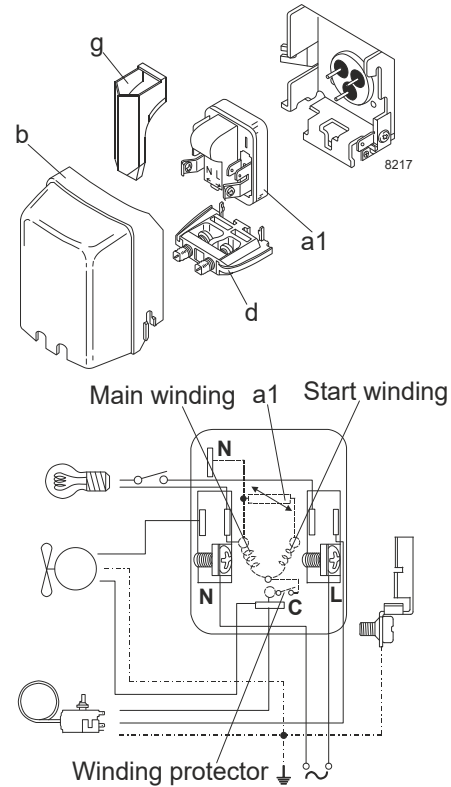
Designation	<b>NLE9KTK</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>105H6071</b>
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**Configuration**

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

**Electrical accessories / wiring diagram**

RSIR

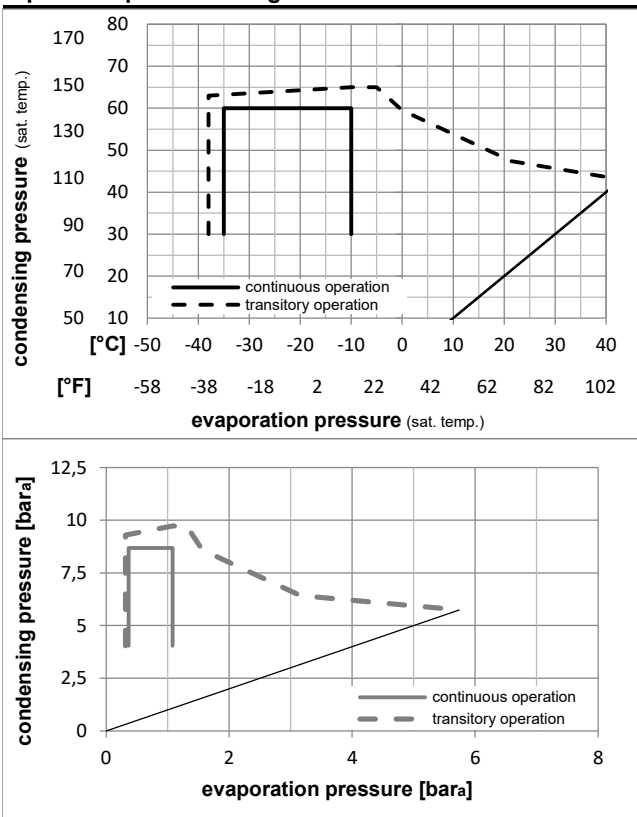


**Ambient temperatures / system cooling**

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

**Operation pressure range**



Components

a1	PTC starter (220V, 250hm, 4.8mm)	103N0018
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476

Alternative components

a1	PTC starter (220V, 250hm, 6.3mm)	103N0011
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

**Model**

Designation **NLE9KTK 220-240V/50Hz** Conf. 1 Sales code: **105H6071**

**Optimization + standard conditions**

R600a, 220V/50Hz, RSIR, static, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
		Return gas temp.				Liquid temp.						Current consumption			Ref. mass flow
		Cooling capacity				COP		EER		P1	I	m			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23,3	54,4	32,2	32,2	131,0	447	112,7	1,32	4,52	1,14	98,9	0,76	1,41	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	98,0	335	84,4	1,03	3,52	0,89	95,0	0,75	1,28	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	63,5	217	54,7	0,90	3,07	0,77	70,8	0,66	0,77	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23,3	48,9	4,44	48,9	106,5	364	91,6	1,08	3,70	0,93	98,4	0,76	1,56	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23,3	40,6	32,2	32,2	140,8	481	121,1	1,46	4,98	1,25	96,6	0,75	1,51	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	61,8	211	53,2	0,86	2,92	0,74	72,3	0,67	0,73	opt	
[°F]	-31	113	89,6	113											

**Performance tables**

R600a, 220V/50Hz, 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	61,8	211	53,2	0,86	2,92	0,74	72,3	0,67	0,73	
cond. pressure	-30	-22	84,4	288	72,6	1,03	3,51	0,88	82,2	0,70	1,00	
pc= 45/113	-25	-13	113,0	386	97,3	1,21	4,12	1,04	93,6	0,74	1,35	
return gas temp.	-23,3	-10	124,3	425	107,0	1,27	4,34	1,09	97,7	0,75	1,48	
RGT= 32/90	-20	-4	148,8	508	128,0	1,40	4,79	1,21	106,0	0,78	1,77	
liquid temp	-15	5	192,8	658	165,9	1,62	5,55	1,40	118,7	0,81	2,30	
Tliq= 45/113	-10	14	246,2	841	211,9	1,88	6,41	1,62	131,2	0,85	2,95	
[°C / °F]	-35	-31	54,3	186	46,8	0,72	2,45	0,62	75,7	0,67	0,71	
cond. pressure	-30	-22	73,8	252	63,5	0,88	2,99	0,75	84,3	0,71	0,96	
pc= 55/131	-25	-13	98,0	335	84,4	1,03	3,52	0,89	95,0	0,75	1,28	
return gas temp	-23,3	-10	107,6	368	92,6	1,09	3,71	0,93	99,1	0,76	1,40	
RGT= 32/90	-20	-4	128,3	438	110,4	1,20	4,08	1,03	107,3	0,78	1,68	
liquid temp	-15	5	165,7	566	142,6	1,37	4,69	1,18	120,6	0,82	2,17	
Tliq= 55/131	-10	14	211,2	721	181,7	1,57	5,37	1,35	134,3	0,86	2,77	

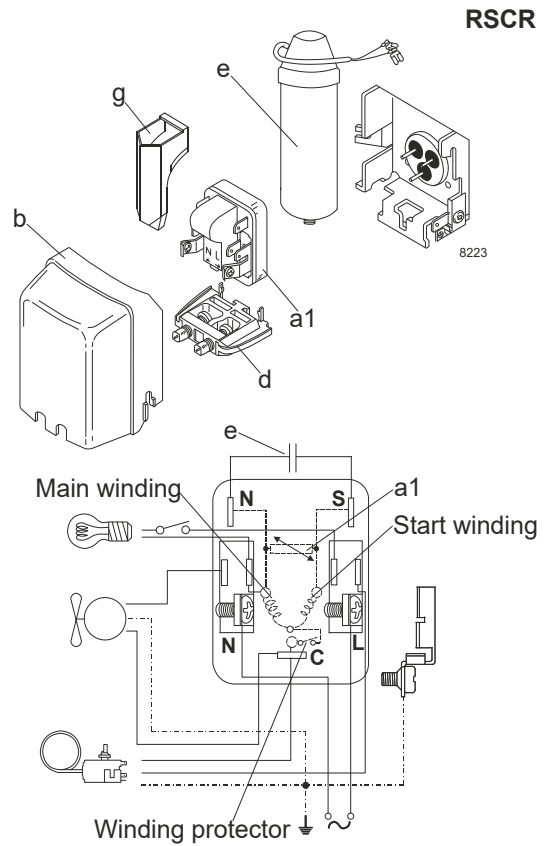
**Model**

Designation	<b>NLE9KTK</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105H6071</b>
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**Configuration**

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

**Electrical accessories / wiring diagram**

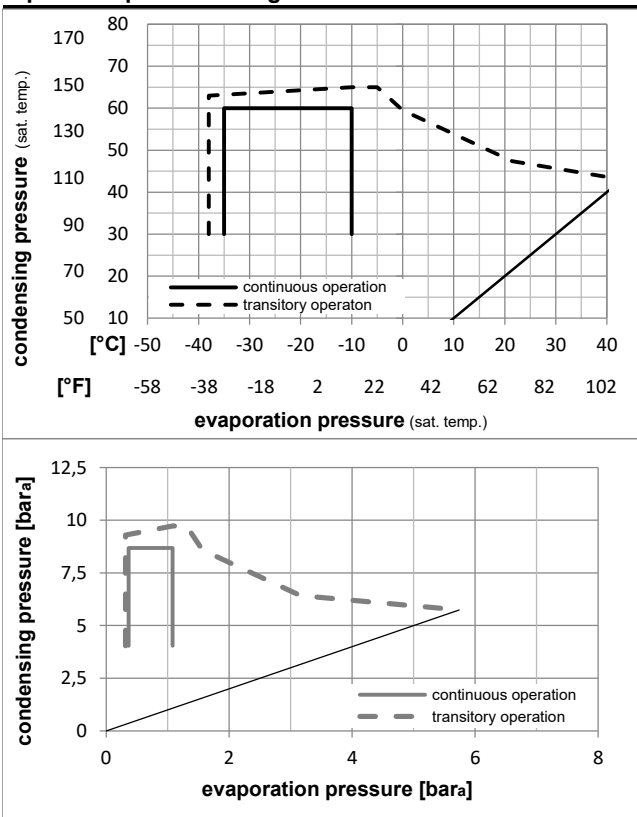


**Ambient temperatures / system cooling**

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

**Operation pressure range**



Components

a1	PTC starter (220V, 250ohm, 4.8mm)	103N0021
e	run capacitor (4µF, 4.8mm)	117-7119
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476
	bracket for run capacitor	117-0300

Alternative components

a1	PTC starter (220V, 250ohm, 6.3mm)	103N0016
e	run capacitor (4µF, 6.3mm)	117-7117
b	plastic cover	103N2011
	screw M4x8mm	117-0301

**Model**

Designation	<b>NLE9KTK</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>105H6071</b>
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**Optimization + standard conditions**

R600a, 220V/50Hz, RSCR, static, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)						Power consumption			
						Return gas temp.						Current consumption			
						Liquid temp.									
						Cooling capacity									
						COP						EER			
						P1						I			
						Ref. mass flow						m			
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23	54,4	32,2	32,2	132,3	452	113,8	1,38	4,71	1,19	96,0	0,74	1,42	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	99,0	338	85,2	1,07	3,67	0,92	92,2	0,73	1,29	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	64,2	219	55,2	0,93	3,19	0,80	68,6	0,64	0,78	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23	48,9	4,44	48,9	107,5	367	92,6	1,13	3,85	0,97	95,4	0,73	1,57	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23	40,6	32,2	32,2	142,2	486	122,4	1,52	5,18	1,31	93,7	0,73	1,53	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	62,5	213	53,8	0,89	3,04	0,77	70,2	0,65	0,74	opt	
[°F]	-31	113	89,6	113											

**Performance tables**

R600a, 220V/50Hz, 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	62,5	213	53,8	0,89	3,04	0,77	70,2	0,65	0,74		
cond. pressure	-30	-22	85,2	291	73,4	1,07	3,65	0,92	79,7	0,68	1,01		
pc= 45/113	-25	-13	114,1	390	98,2	1,26	4,29	1,08	90,8	0,72	1,36		
return gas temp.	-23	-10	125,6	429	108,1	1,32	4,52	1,14	94,8	0,73	1,50		
RGT= 32/90	-20	-4	150,3	513	129,3	1,46	4,99	1,26	102,8	0,75	1,79		
liquid temp	-15	5	194,7	665	167,6	1,69	5,78	1,46	115,2	0,79	2,33		
Tliq= 45/113	-10	14	248,7	849	214,0	1,95	6,67	1,68	127,3	0,82	2,98		
[°C / °F]	-35	-31	54,9	187	47,2	0,75	2,55	0,64	73,5	0,65	0,71		
cond. pressure	-30	-22	74,5	254	64,1	0,91	3,11	0,78	81,7	0,69	0,97		
pc= 55/131	-25	-13	99,0	338	85,2	1,07	3,67	0,92	92,2	0,73	1,29		
return gas temp	-23	-10	108,7	371	93,5	1,13	3,86	0,97	96,1	0,74	1,42		
RGT= 32/90	-20	-4	129,6	443	111,5	1,24	4,25	1,07	104,1	0,76	1,69		
liquid temp	-15	5	167,3	571	144,0	1,43	4,88	1,23	117,0	0,80	2,19		
Tliq= 55/131	-10	14	213,3	728	183,6	1,64	5,59	1,41	130,3	0,83	2,80		

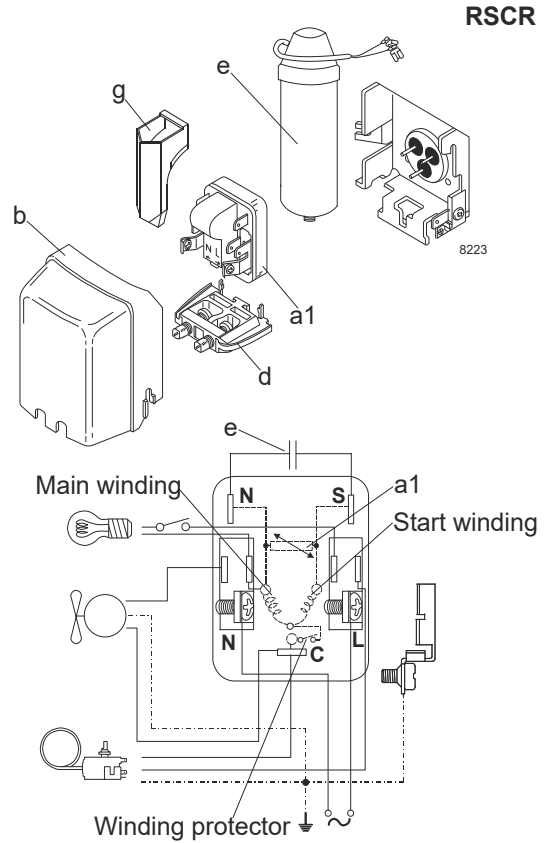
**Model**

Designation	<b>NLE9KTK</b>	<b>220-240V/60Hz</b>	<b>Conf. 3</b>	Sales code:	<b>105H6071</b>
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**Configuration**

Motorconfiguration	RSCR
Power supply (nominal)	220-240V/60Hz 1~
Refrigerant	R600a
Application	LBP
Voltage range	198-253V
Starting torque	LST
Approvals	VDE

**Electrical accessories / wiring diagram**

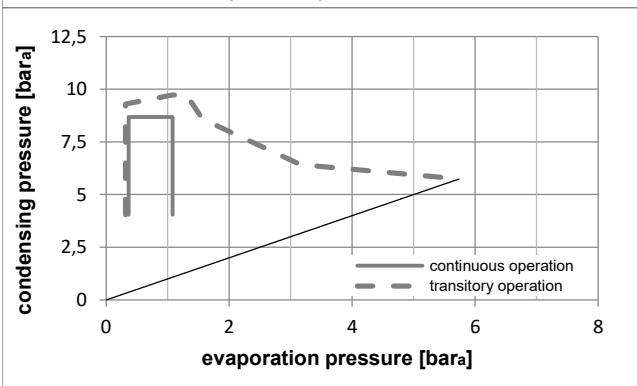
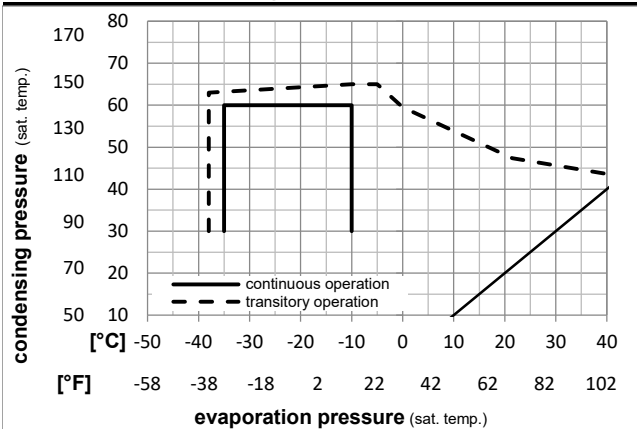


**Ambient temperatures / system cooling**

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)			
T ambient	LBP	MBP	HBP
32°C / 90°F	static	n/a	n/a
38°C / 100°F	static	n/a	n/a
43°C / 110°F	fan 1,5m/s	n/a	n/a

**Operation pressure range**



Components

a1	PTC starter (220V, 250ohm, 4.8mm)	103N0021
e	run capacitor (4µF, 4.8mm)	117-7119
b	plastic cover	103N2010
d	cord relief	103N1010
g	protection screen for PTC	103N0476
	bracket for run capacitor	117-0300

Alternative components

a1	PTC starter (220V, 250ohm, 6.3mm)	103N0016
e	run capacitor (4µF, 6.3mm)	117-7117
b	plastic cover	103N2011
	screw M4x8mm	117-0301



**Model**

Designation	<b>NLE9KTK</b>	<b>220-240V/60Hz</b>	<b>Conf. 3</b>	Sales code:	<b>105H6071</b>
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**Optimization + standard conditions**

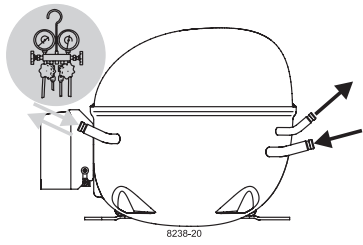
R600a, 220V/60Hz, RSCR, static, VDE

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)					Power consumption				
		Return gas temp.				Liquid temp.					Current consumption			Ref. mass flow	
		Cooling capacity				COP		EER			P1	I	m		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-23,3	54,4	32,2	32,2	151,9	519	130,7	1,29	4,41	1,11	117,7	0,90	1,63	ASHRAE LBP	
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	113,7	388	97,9	1,01	3,44	0,87	113,1	0,89	1,48	cecomaf LBP	
[°F]	-13	131	89,6	131											
[°C]	-35	40	20	40	73,7	252	63,4	0,88	2,99	0,75	84,2	0,79	0,90	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-23,3	48,9	4,44	48,9	123,5	422	106,3	1,06	3,60	0,91	117,0	0,90	1,80	ARI540 LBP	
[°F]	-10	120	40	120											
[°C]	-23,3	40,6	32,2	32,2	163,3	558	140,5	1,42	4,85	1,22	114,9	0,89	1,75	AHAM LBP	
[°F]	-10	105	90	90											
[°C]	-35	45	32	45	71,7	245	61,7	0,83	2,85	0,72	86,1	0,79	0,85	opt	
[°F]	-31	113	89,6	113											

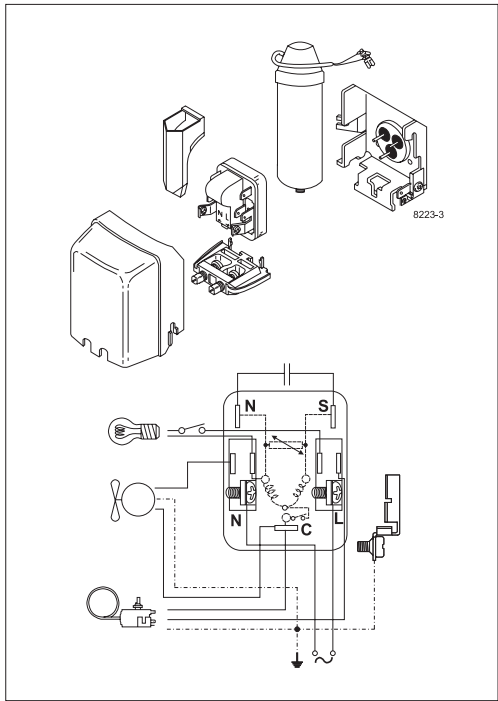
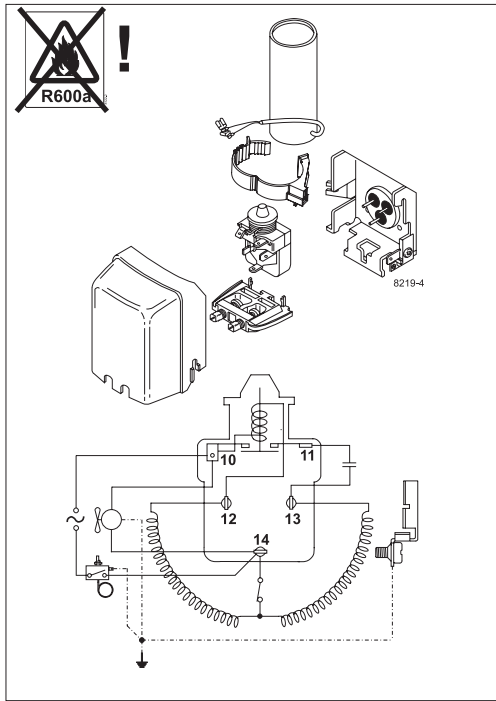
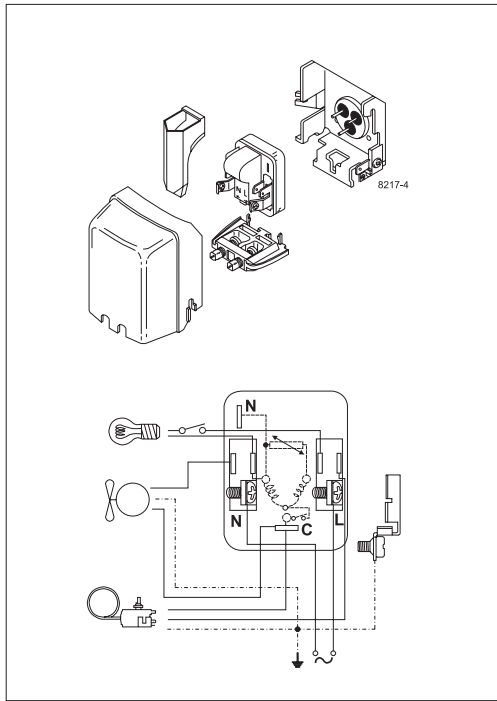
**Performance tables**

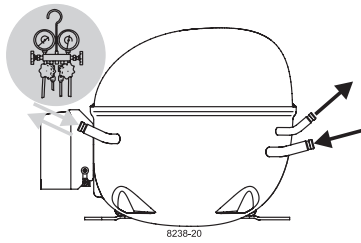
R600a, 220V/60Hz, RSCR, static, VDE

	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	71,7	245	61,7	0,83	2,85	0,72	86,1	0,79	0,85	
cond. pressure	-30	-22	97,9	334	84,3	1,00	3,42	0,86	97,8	0,84	1,16	
pc= 45/113	-25	-13	131,1	448	112,8	1,18	4,02	1,01	111,4	0,88	1,56	
return gas temp.	-23,3	-10	144,2	492	124,1	1,24	4,23	1,07	116,3	0,89	1,72	
RGT= 32/90	-20	-4	172,6	589	148,5	1,37	4,67	1,18	126,1	0,92	2,06	
liquid temp	-15	5	223,7	764	192,5	1,58	5,41	1,36	141,3	0,97	2,67	
Tliq= 45/113	-10	14	285,6	975	245,8	1,83	6,25	1,57	156,1	1,01	3,42	
[°C / °F]	-35	-31	63,0	215	54,2	0,70	2,39	0,60	90,1	0,80	0,82	
cond. pressure	-30	-22	85,6	292	73,6	0,85	2,91	0,73	100,3	0,85	1,11	
pc= 55/131	-25	-13	113,7	388	97,9	1,01	3,44	0,87	113,1	0,89	1,48	
return gas temp	-23,3	-10	124,8	426	107,4	1,06	3,62	0,91	117,9	0,90	1,63	
RGT= 32/90	-20	-4	148,8	508	128,1	1,17	3,98	1,00	127,7	0,93	1,94	
liquid temp	-15	5	192,2	656	165,4	1,34	4,57	1,15	143,6	0,98	2,52	
Tliq= 55/131	-10	14	245,0	837	210,8	1,53	5,23	1,32	159,8	1,02	3,22	

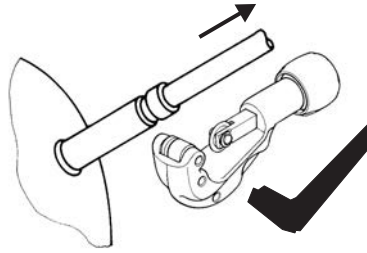
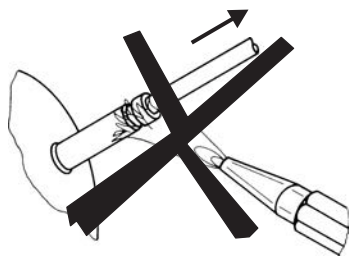


# NL Compressors





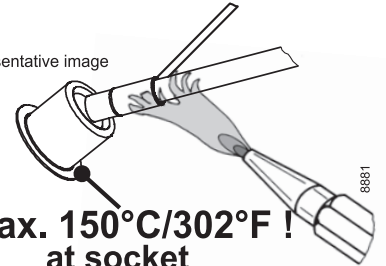
## Service/Repair – R600a, R290



8545

## Brazing on Suction Connectors (Direct Intake)

representative image



**! max. 150°C/302°F !  
at socket**  
brazing solder: phosphor (LP7) or silver

Refer to Product Bulletin:  
**Brazing on Suction Connectors  
(Compressors with Direct Suction Intake)**

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