

## Single Pack KLE7.7GFTX 220-240V 50Hz / 208-230V 60Hz CSIR

Single pack code number: **195B4762**

Position	Title	Code	Amount
1	Compressor KLE7.7GFTX	106G5803	1
2	Starting capacitor (80 $\mu$ F 220V, 6.3mm)	117U5001	1
3	Starting relay (QLZ-5.5A, overload protector T0377/L6)	117U7071	1
4	KL accessories	103N1060	1
5	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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## Model

Designation	<b>KLE7.7GFTX</b>	220-240V/50Hz 1~ 208-230V/60Hz 1~	Sales code:	<b>106G5803</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R134a, R513A</b>
Oil viscosity	19,2cSt	Displacement	7,7cm <sup>3</sup> / 0,47cu.in
Oil quantity	240cm <sup>3</sup> / 8,1fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	250g / 8,8oz		
Free gas volume comp.	1505cm <sup>3</sup> / 50,9fl.oz		
Weight	9,6kg / 21,2lbs		
Motor protection	external		
Winding resistance main	8,4Ω (at 25°C)		
Winding resistance aux	11,9Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		
Additional note	Good robustness against liquid intake. Ice-cube maker optimization - indirect suction intake.		



## General - Configurations with KLE7.7GFTX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	CSIR
Power supply (nominal)	220-240V/50Hz	208-230V/60Hz
Number of phases	1	1
Voltage range	187-254V	198-253V
Approvals	VDE, (UL,CB) in progress	VDE, (UL,CB) in progress
Starting torque	HST	HST
Note	- / -	

## Applications with KLE7.7GFTX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R134a	R134a
Application	LBP+MBP+HBP	LBP+MBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

## Electrical data - Configurations with KLE7.7GFTX

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	relay
Run capacitor	-/-	-/-
Start capacitor	80μF	80μF
LRA (locked rotor amps / 4s/ U(N))	13,5A	13,5A
RLA (rated load amps / 1s/ U(N))	2,1A	2,1A
Cut in current (U(N))	12,3A	12,3A

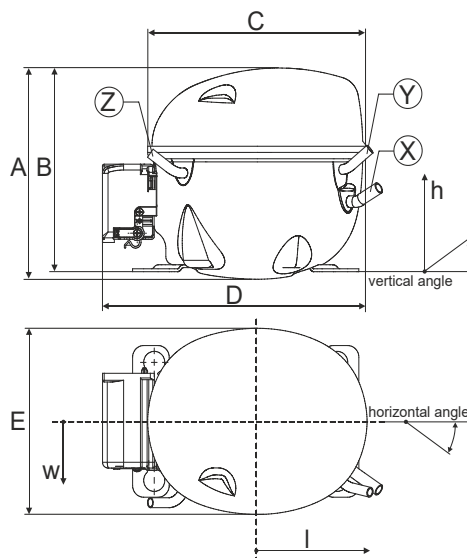
## Model

Designation **KLE7.7GFTX** 220-240V/50Hz 1~ 208-230V/60Hz 1~ Sales code: **106G5803**

## Compressor dimensions

Housing	A Height	182mm / 7,17in
	B Height	175mm / 6,89in
	C Length shell	198mm / 7,8in
	D Length w. cover	238mm / 9,37in
	E Width	160mm / 6,3in

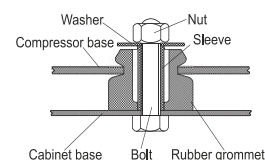
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,11-6,29	øi 6,11-6,29
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,24-0,25	øi 0,24-0,25
Material		copper	copper	copper
Horizontal angle	±2°	35°	13°	0°
Vertical angle	±2°	30°	40°	145°
Position l/h/w	[mm]	119/73/59	117/107/66	-88/101/71
	[in]	4,7/2,9/2,3	4,6/4,2/2,6	-3,5/4/2,8
Straight tube l.	[mm]	14	14	14
	[in]	0,5	0,5	0,5



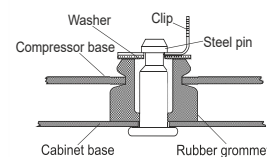
## Compressor fixation



### 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	
Bolt joint   ø1/4"   ø19mm	118-1949	
Snap-on   ø7,3   ø16mm	118-1947	118-1919

## Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor

Suctiongas connector and Process connector can be switched (minor loss of cooling capacity)

## Model

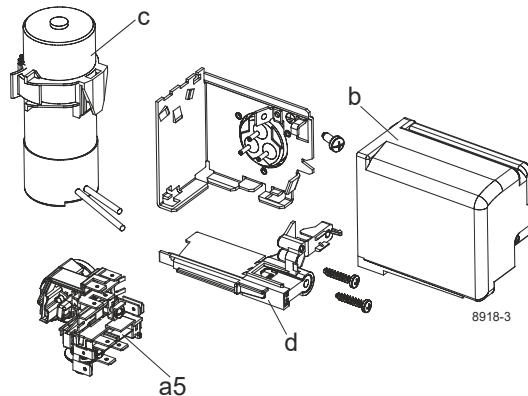
Designation **KLE7.7GFTX** **220-240V/50Hz** Conf. 1 Sales code: **106G5803**

## Configuration

Motorconfiguration CSIR  
 Power supply (nominal) 220-240V/50Hz 1~  
 Refrigerant R134a  
 Application LBP+MBP+HBP  
 Voltage range 187-254V  
 Starting torque HST  
 Approvals VDE  
 (UL,CB) in progress

## Electrical accessories / wiring diagram

CSIR

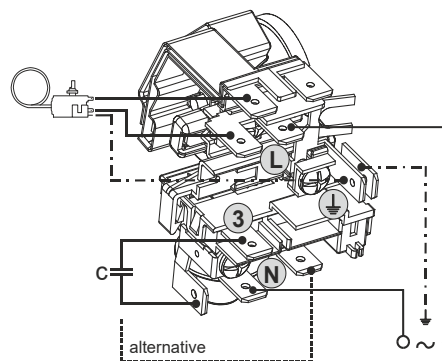


## Ambient/ machine room temperatures minimum /maximum

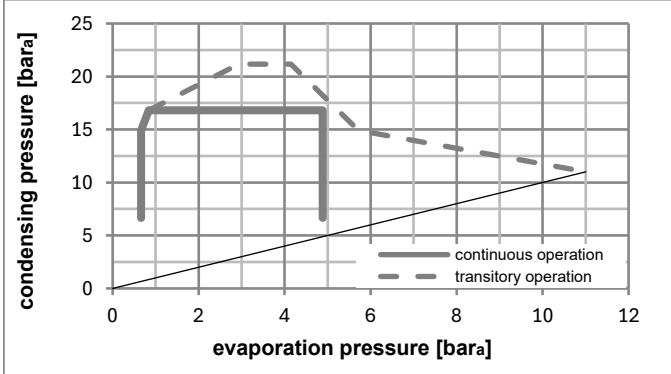
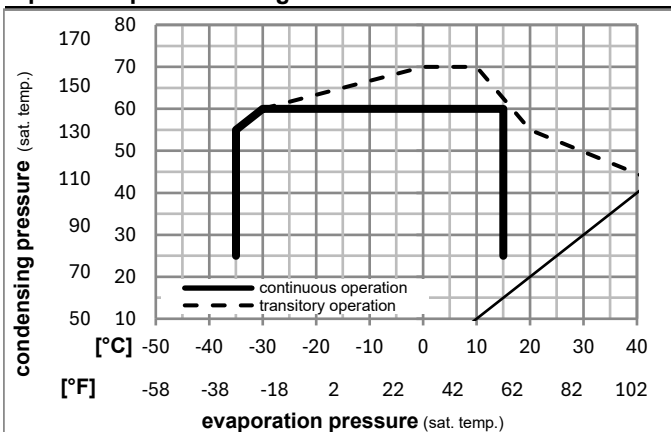
Ambient temperature range: 10 - 43°C / 50 - 110°F

Machine room temperature range: 10 - 48°C / 50 - 119°F

Compressor cooling: fan 3m/s



## Operation pressure range



## Components

a5	current relay (T0377/L6-S1)	117U7071
c	start capacitor (80µF, 6.3mm)	117U5001
b, d	cover + clamp + screws(5VA) in bag	103N1060

## Alternative components

b, d	100x cover + clamp + screws(5VA)	103N2060
b, d	cover + clamp + screws(5VA-compl.)	103N0600

### Model

Designation **KLE7.7GFTX 220-240V/50Hz** Conf. 1 Sales code: **106G5803**

### Optimization + standard conditions

R134a, 220V/50Hz, CSIR, fan 3m/s, VDE, (UL,CB) in progress

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.			Liquid temp.			Cooling capacity			COP	EER	Power consumption		
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Current consumption		Ref. mass flow						
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
ASHRAE LBP	-23	54	32	32	221,3	756	190,5	1,33	4,53	1,14	166,9	1,35	4,30		4,30						
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
ASHRAE MBP	-7	54	35	46	452,8	1547	389,7	1,82	6,20	1,56	249,5	1,65	9,88		9,88						
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
ASHRAE HBP	7,2	54	35	46	791,8	2704	681,4	2,41	8,23	2,07	328,4	1,99	17,57		17,57						
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
EN12900 LBP	-35	40	20	40	115,0	393	99,0	1,02	3,48	0,88	112,9	1,21	2,52		2,52						
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
EN12900 MBP	-10	45	20	45	394,8	1348	339,8	1,83	6,23	1,57	216,3	1,52	9,24		9,24						
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
EN12900 HBP	5	50	20	50	677,6	2314	583,1	2,26	7,72	1,95	299,8	1,86	17,07		17,07						
	[°C]	[°C]	[°C]	[°C]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						
	[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]		[kg/h]						

### Performance tables

R134a, 220V/50Hz, CSIR, fan 3m/s, VDE, (UL,CB) in progress

	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	109,3	373	94,0	0,96	3,28	0,83	113,8	1,21	2,36
cond. pressure	-25	-13	192,8	658	165,9	1,25	4,27	1,07	154,3	1,31	4,18
pc= 45/113	-15	5	323,8	1106	278,6	1,66	5,66	1,43	195,4	1,44	7,06
return gas temp.	-10	14	409,6	1399	352,5	1,89	6,47	1,63	216,3	1,52	8,97
RGT= 32/90	0	32	627,2	2142	539,8	2,42	8,27	2,08	259,0	1,69	13,87
liquid temp	5	41	761,0	2599	654,9	2,71	9,25	2,33	280,9	1,78	16,94
Tliq= 45/113	15	59	1083,6	3701	932,5	3,32	11,34	2,86	326,2	1,97	24,54
[°C / °F]	-35	-31	86,9	297	74,8	0,75	2,55	0,64	116,3	1,22	2,07
cond. pressure	-25	-13	162,7	555	140,0	1,02	3,48	0,88	159,7	1,32	3,89
pc= 55/131	-15	5	277,5	948	238,8	1,34	4,57	1,15	207,3	1,48	6,68
return gas temp	-10	14	352,1	1203	303,1	1,51	5,17	1,30	232,8	1,58	8,51
RGT= 32/90	0	32	540,9	1847	465,5	1,88	6,42	1,62	287,6	1,81	13,23
liquid temp	5	41	657,1	2244	565,5	2,07	7,08	1,78	317,0	1,94	16,19
Tliq= 55/131	15	59	938,3	3204	807,5	2,47	8,43	2,13	380,0	2,22	23,57

## Model

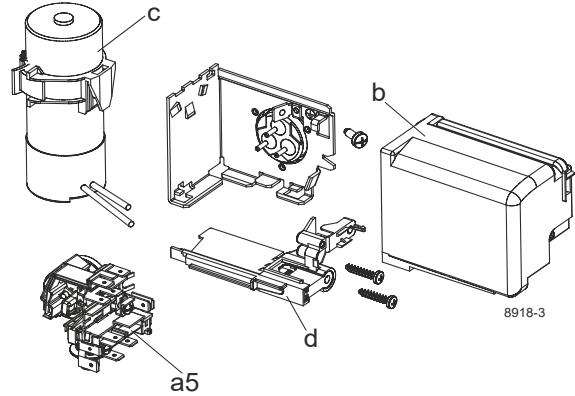
Designation	<b>KLE7.7GFTX</b>	<b>208-230V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>106G5803</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	208-230V/60Hz 1~
Refrigerant	R134a
Application	LBP+MBP
Voltage range	198-253V
Starting torque	HST
Approvals	VDE
	(UL,CB) in progress

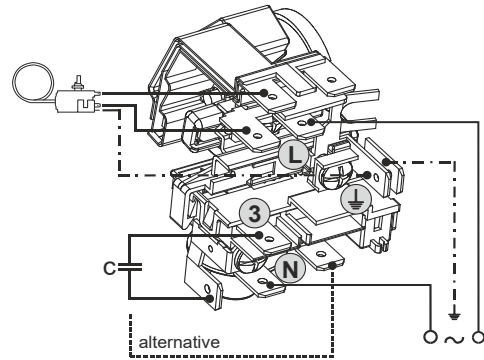
## Electrical accessories / wiring diagram

CSIR

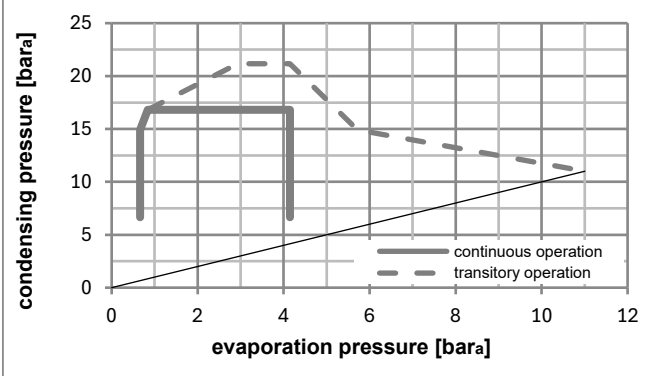
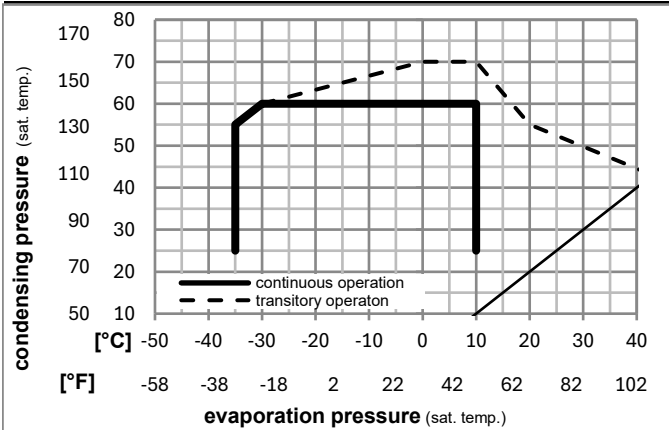


## Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 43°C / 50 - 110°F
Machine room temperature range:	10 - 48°C / 50 - 119°F
Compressor cooling:	fan 3m/s



## Operation pressure range



## Components

a5	current relay (T0377/L6-S1)	117U7071
c	start capacitor (80µF, 6.3mm)	117U5001
b, d	cover + clamp + screws(5VA) in bag	103N1060

## Alternative components

b, d	100x cover + clamp + screws(5VA)	103N2060
b, d	cover + clamp + screws(5VA-compl.)	103N0600

### Model

Designation **KLE7.7GFTX** **208-230V/60Hz** Conf. 2 Sales code: **106G5803**

### Optimization + standard conditions

R134a, 230V/60Hz, CSIR, fan 3m/s, VDE, (UL,CB) in progress

	Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.	Liquid temp.	Cooling capacity	COP	EER	Power consumption			Ref. mass flow
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]						P1	I	m	
[°C]																
[°F]																
	-23	54	32	32	265,5	907	228,5	1,39	4,74	1,19	191,3	1,31	5,16	ASHRAE LBP		
	-10	130	90	90												
	-7	54	35	46	541,2	1848	465,8	1,85	6,33	1,60	291,9	1,65	11,81	ASHRAE MBP		
	20	130	95	115												
	7,2	54	35	46	946,1	3231	814,2	2,46	8,41	2,12	384,3	2,01	20,99	ASHRAE HBP		
	45	130	95	115												
	-35	40	20	40	135,3	462	116,5	1,12	3,84	0,97	120,5	1,13	2,97	EN12900 LBP		
	-31	104	68	104												
	-10	45	20	45	471,0	1608	405,3	1,86	6,37	1,60	252,5	1,51	11,02	EN12900 MBP		
	14	113	68	113												
	5	50	20	50	809,1	2763	696,3	2,31	7,88	1,99	350,5	1,88	20,39	EN12900 HBP		
	41	122	68	122												

### Performance tables

R134a, 230V/60Hz, CSIR, fan 3m/s, VDE, (UL,CB) in progress

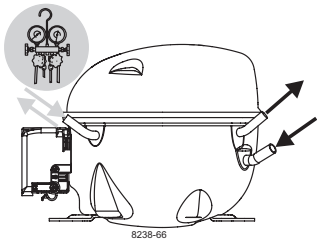
	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]				[kcal/Wh]
[°C / °F]	-35	-31	128,3	438	110,4	1,06	3,61	0,91	121,4	1,13	2,77
cond. pressure	-25	-13	230,1	786	198,0	1,30	4,45	1,12	176,4	1,27	4,98
pc= 45/113	-15	5	386,4	1320	332,6	1,70	5,80	1,46	227,6	1,43	8,42
return gas temp.	-10	14	488,6	1669	420,5	1,93	6,61	1,67	252,5	1,51	10,69
RGT= 32/90	0	32	747,9	2554	643,6	2,47	8,44	2,13	302,5	1,69	16,54
liquid temp	5	41	907,7	3100	781,2	2,77	9,45	2,38	328,0	1,79	20,21
Tliq= 45/113	15	59	1295,0	4423	1114,5	3,39	11,58	2,92	381,9	2,00	29,33
[°C / °F]	-35	-31	102,3	349	88,1	0,84	2,85	0,72	122,4	1,14	2,44
cond. pressure	-25	-13	195,1	666	167,9	1,07	3,66	0,92	181,8	1,29	4,67
pc= 55/131	-15	5	332,4	1135	286,0	1,38	4,70	1,18	241,5	1,47	8,00
return gas temp	-10	14	421,2	1438	362,5	1,55	5,29	1,33	272,1	1,58	10,18
RGT= 32/90	0	32	646,1	2207	556,0	1,92	6,56	1,65	336,5	1,82	15,80
liquid temp	5	41	785,0	2681	675,6	2,12	7,23	1,82	370,9	1,96	19,34
Tliq= 55/131	15	59	1122,7	3834	966,2	2,52	8,61	2,17	445,3	2,26	28,20



# KL Compressors



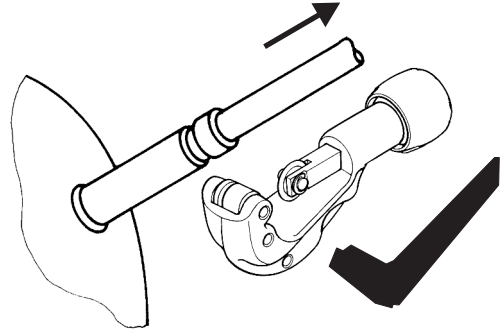
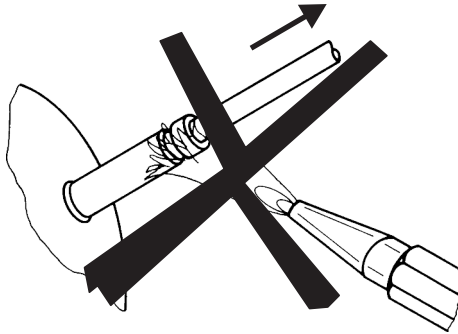




# KL Compressors



## Service/Repair – R290



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