

## Single Pack KLF7.7CND 220-240V 50Hz CSIR

Single pack code number: **195B4597**

Position	Title	Code	Amount
1	Compressor KLF7.7CND	106H2800	1
2	KL accessories	103N1060	1
3	Starting capacitor (80 $\mu$ F 220V, 6.3mm)	117U5001	1
4	Starting relay (QLZ-5.5A, overload protector T0377/L6)	117U7071	1
5	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

Secop GmbH • Lise-Meitner-Straße 29 • 24941 Flensburg, Germany • Tel: +49 461 4941 0 • [www.secop.com](http://www.secop.com)

Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved.

## Model

Designation	<b>KLF7.7CND</b>	220-240V/50Hz 1~	Sales code:	<b>106H2800</b>
-------------	------------------	------------------	-------------	-----------------

## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	10,4cSt	Displacement	7,7cm <sup>3</sup> / 0,47cu.in
Oil quantity	174cm <sup>3</sup> / 5,9fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	200g / 7,1oz		
Free gas volume comp.	1575cm <sup>3</sup> / 53,3fl.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		



## General - Configurations with KLF7.7CND

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	RSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	VDE, CCC	VDE, CCC
Starting torque	HST	LST
Note	- / -	

## Applications with KLF7.7CND

	<b>Conf. 1</b>	<b>Conf. 2</b>
Refrigerant	R290	R290
Application	LBP+MBP	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 KLF7.7CND

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	PTC
Run capacitor	- / -	5μF
Start capacitor	80μF	- / -
LRA (locked rotor amps / 4s/ U(N))	13,2A	13,2A
RLA (rated load amps / 1s/ U(N))	2,1A	2,1A
Cut in current (U(N))	12,3A	18,1A

## Model

Designation	<b>KLF7.7CND</b>	220-240V/50Hz 1~	Sales code:	<b>106H2800</b>
-------------	------------------	------------------	-------------	-----------------

## Compressor dimensions

<b>Housing</b>	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

## Model

Designation	<b>KLF7.7CND</b>	<b>220-240V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>106H2800</b>
-------------	------------------	----------------------	----------------	-------------	-----------------

## 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

CSIR

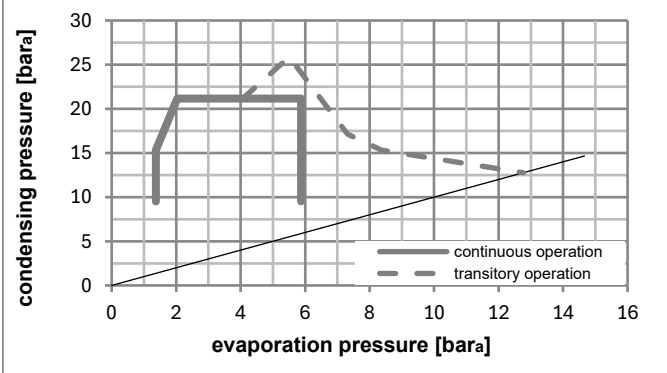
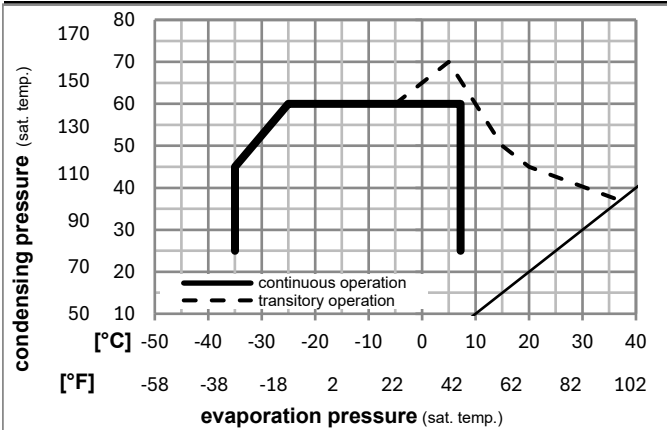


## Ambient/ machine room temperatures minimum /maximum

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 **KLF7.7CND** **220-240V/50Hz** Conf. 1 Sales code: **106H2800**

## Optimization + standard conditions

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	Power consumption			ASHRAE LBP	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]			P1	I	m		
	[°C]	[°C]	[°C]	[°C]				[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	384,5	1313	330,9	1,52	5,18	1,30	253,7	1,68	3,89	ASHRAE LBP
	[°F]													
	-10	130	90	90										
	-25	55	32	55	287,6	982	247,5	1,18	4,02	1,01	244,6	1,65	3,58	cecomaf LBP
	[°F]													
	-13	131	90	131										
	-35	40	20	40	222,6	760	191,6	1,20	4,12	1,04	184,8	1,49	2,54	EN12900 LBP
	[°F]													
	-31	104	68	104										
	-7	54	35	46	687,7	2349	591,9	2,00	6,84	1,72	343,3	1,99	7,85	ASHRAE MBP
	[°F]													
	20	130	95	115										
	-10	55	32	55	547,3	1869	471,0	1,67	5,71	1,44	327,5	1,93	6,92	cecomaf MBP
	[°F]													
	14	131	90	131										
	-10	45	20	45	608,6	2079	523,8	2,03	6,93	1,75	299,9	1,83	7,47	EN12900 MBP
	[°F]													
	14	113	68	113										

## Performance tables

R290, 220V/50Hz, CSIR, fan 3m/s, VDE, CCC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-35	-31	210,1	717	180,8	1,11	3,79	0,96	189,1	1,50	2,35
cond. pressure	-25	-13	342,0	1168	294,3	1,46	4,98	1,26	234,3	1,62	3,86
pc= 45/113	-15	5	523,0	1786	450,1	1,88	6,42	1,62	278,4	1,76	5,95
return gas temp.	-10	14	633,6	2164	545,3	2,11	7,22	1,82	299,9	1,83	7,25
RGT= 32/90	-5	23	758,6	2591	652,8	2,36	8,07	2,03	321,1	1,91	8,73
liquid temp	0	32	898,6	3069	773,3	2,63	8,97	2,26	342,0	1,99	10,42
Tliq= 45/113	7,2	45	1127,9	3852	970,7	3,04	10,37	2,61	371,3	2,10	13,25
[°C / °F]	-35	-31	170,7	583	146,9	0,92	3,13	0,79	186,0	1,49	2,11
cond. pressure	-25	-13	287,6	982	247,5	1,18	4,02	1,01	244,6	1,65	3,58
pc= 55/131	-15	5	448,6	1532	386,0	1,49	5,10	1,28	300,5	1,84	5,64
return gas temp	-10	14	547,3	1869	471,0	1,67	5,71	1,44	327,5	1,93	6,92
RGT= 32/90	-5	23	659,1	2251	567,2	1,86	6,36	1,60	353,6	2,03	8,40
liquid temp	0	32	784,6	2680	675,3	2,07	7,07	1,78	379,1	2,13	10,08
Tliq= 55/131	7,2	45	991,0	3385	852,9	2,39	8,17	2,06	414,5	2,27	12,91

### Model

Designation	<b>KLF7.7CND</b>	<b>220-240V/50Hz</b>	<b>Conf. 2</b>	Sales code:	<b>106H2800</b>
-------------	------------------	----------------------	----------------	-------------	-----------------

### 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

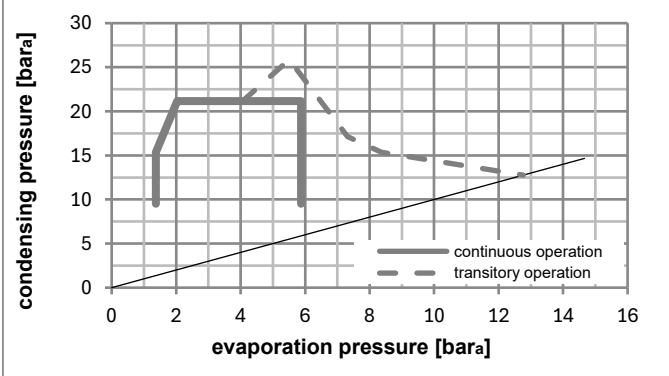
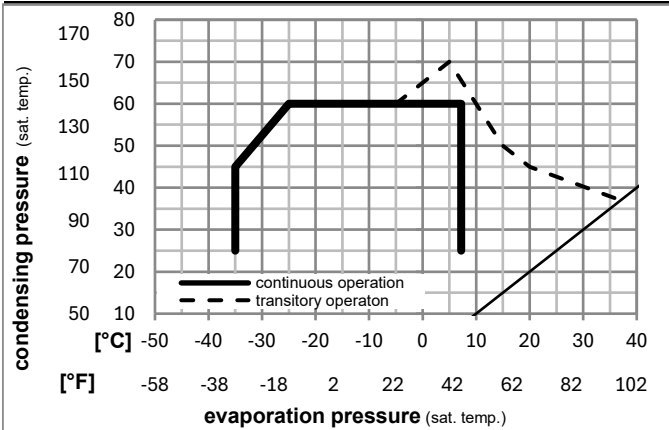


### Ambient/ machine room temperatures minimum /maximum

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

a4	DAS1 (PTC,6.3mm, T0377/L6 - S1)	103N0250
e	run capacitor (5μF, 6.3mm)	117-7191
b, d	cover + clamp + screws(5VA) in bag	103N1060

### Alternative components

a4	ZAS1 (PTC,4.8mm, T0377/L6 - S1)	103N0252
e	run capacitor (5μF, 4.8mm)	117-7190

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

### Model

Designation **KLF7.7CND** **220-240V/50Hz** Conf. 2 Sales code: **106H2800**

### Optimization + standard conditions

R290, 220V/50Hz, RSCR, fan 3m/s, VDE, CCC

	Evaporating pressure (saturation temperature)				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	
[°C]	-23	54	32	32	387,4	1323	333,4	1,60	5,46	1,38	242,2	1,36	3,92		
[°F]	-10	130	90	90											
[°C]	-25	55	32	55	289,8	990	249,4	1,24	4,24	1,07	233,6	1,33	3,61	cecomaf LBP	
[°F]	-13	131	90	131											
[°C]	-35	40	20	40	224,1	765	192,9	1,27	4,32	1,09	177,0	1,13	2,56	EN12900 LBP	
[°F]	-31	104	68	104											
[°C]	-7	54	35	46	693,9	2370	597,2	2,12	7,26	1,83	326,6	1,69	7,92	ASHRAE MBP	
[°F]	20	130	95	115											
[°C]	-10	55	32	55	552,0	1885	475,1	1,77	6,05	1,52	311,7	1,63	6,98	cecomaf MBP	
[°F]	14	131	90	131											
[°C]	-10	45	20	45	613,6	2096	528,1	2,15	7,33	1,85	285,9	1,53	7,53	EN12900 MBP	
[°F]	14	113	68	113											

### Performance tables

R290, 220V/50Hz, RSCR, fan 3m/s, VDE, CCC

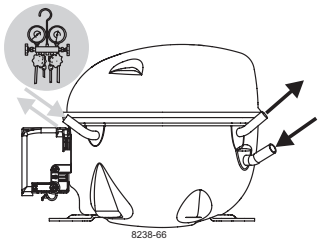
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[W/W]	[Btu/Wh]			
[°C / °F]	-35	-31	211,5	722	182,0	1,17	3,99	1,00	181,2	1,14	2,37
cond. pressure	-25	-13	344,5	1177	296,5	1,54	5,25	1,32	223,9	1,29	3,89
pc= 45/113	-15	5	527,1	1800	453,7	1,98	6,78	1,71	265,6	1,44	6,00
return gas temp.	-10	14	638,8	2182	549,8	2,23	7,63	1,92	285,9	1,53	7,31
RGT= 32/90	-5	23	765,1	2613	658,4	2,50	8,54	2,15	305,9	1,61	8,81
liquid temp	0	32	906,6	3096	780,2	2,79	9,51	2,40	325,4	1,69	10,52
Tliq= 45/113	7,2	45	1138,6	3888	979,9	3,23	11,02	2,78	352,8	1,80	13,38
[°C / °F]	-35	-31	171,9	587	147,9	0,96	3,30	0,83	178,1	1,14	2,13
cond. pressure	-25	-13	289,8	990	249,4	1,24	4,24	1,07	233,6	1,33	3,61
pc= 55/131	-15	5	452,3	1545	389,2	1,58	5,39	1,36	286,4	1,53	5,69
return gas temp	-10	14	552,0	1885	475,1	1,77	6,05	1,52	311,7	1,63	6,98
RGT= 32/90	-5	23	665,1	2271	572,4	1,98	6,75	1,70	336,3	1,73	8,47
liquid temp	0	32	792,2	2706	681,8	2,20	7,51	1,89	360,0	1,83	10,18
Tliq= 55/131	7,2	45	1001,3	3419	861,7	2,55	8,71	2,19	392,8	1,97	13,04



# KL Compressors



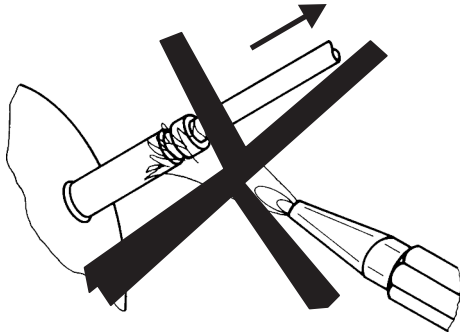




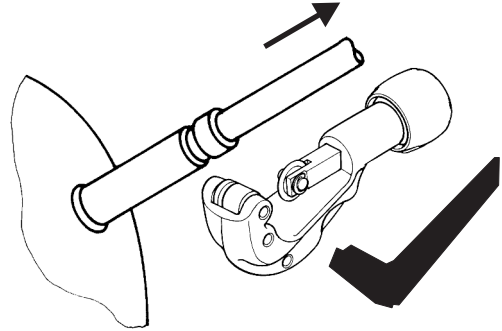
# KL Compressors



## Service/Repair – R290



8545



Secop accepts no responsibility for possible errors in catalogs, brochures, and other printed material. Secop reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary to specifications already agreed. All trademarks in this material are the property of the respective companies. Secop and the Secop logotype are trademarks of Secop GmbH. All rights reserved. [www.secop.com](http://www.secop.com)