

Single Pack KLF4.0CND 220-240V 50Hz CSIR

Single pack code number: **195B4623**

Position	Title	Code	Amount
1	Compressor KLF4.0CND	106H2401	1
2	KL accessories	103N1060	1
3	Starting capacitor (80 μ F 220V, 6.3mm)	117U5001	1
4	Starting relay (QLZ-4.6A, overload protector T1189/L6)	117U7073	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

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	KLF4.0CND	220-240V/50Hz 1~	Sales code:	106H2401
-------------	------------------	------------------	-------------	-----------------

Compressor design

Oil type	Polyolester	Refrigerant(s)	R290
Oil viscosity	10,4cSt	Displacement	4cm ³ / 0,24cu.in
Oil quantity	174cm ³ / 5,9fl.oz	Compressors on pallet	100
Refr. charge - tech. limit	200g / 7,1oz		
Free gas volume comp.	1630cm ³ / 55,1fl.oz		
Weight	8,95kg / 19,7lbs		
Motor protection	external		
Winding resistance main	13,1Ω (at 25°C)		
Winding resistance aux	25,3Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



General - Configurations with KLF4.0CND

	Conf. 1	Conf. 2
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 KLF4.0CND

	Conf. 1	Conf. 2
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 KLF4.0CND

	Conf. 1	Conf. 2
Starting device type	relay	PTC
Run capacitor	- / -	5μF
Start capacitor	80μF	- / -
LRA (locked rotor amps / 4s/ U(N))	10,2A	10,2A
RLA (rated load amps / 1s/ U(N))	1,4A	1,4A
Cut in current (U(N))	10,2A	12,65A

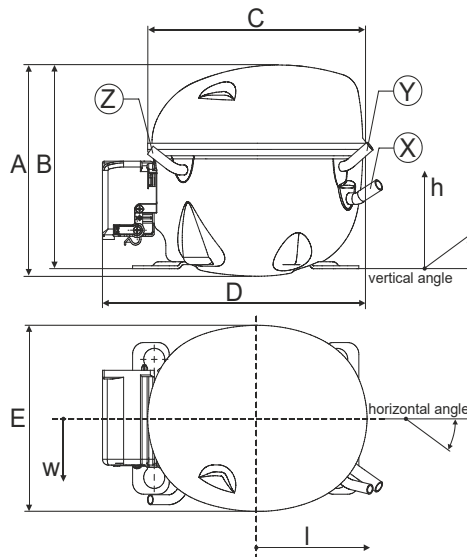
Model

Designation	KLF4.0CND	220-240V/50Hz 1~	Sales code:	106H2401
-------------	------------------	------------------	-------------	-----------------

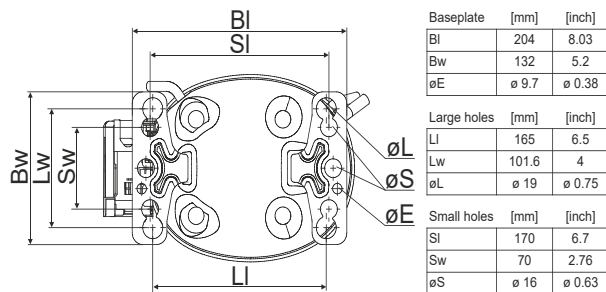
Compressor dimensions

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



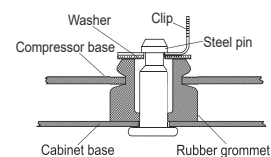
Compressor fixation



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

Model

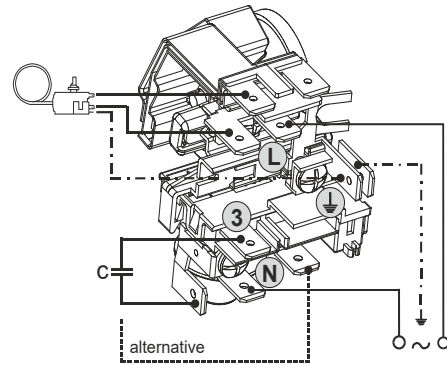
Designation	KLF4.0CND	220-240V/50Hz	Conf. 1	Sales code:	106H2401
-------------	------------------	----------------------	----------------	-------------	-----------------

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

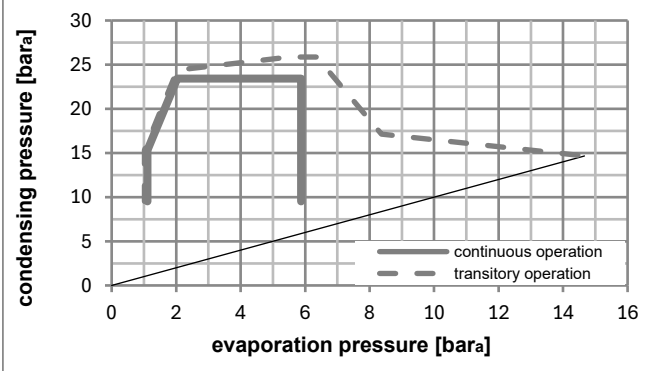
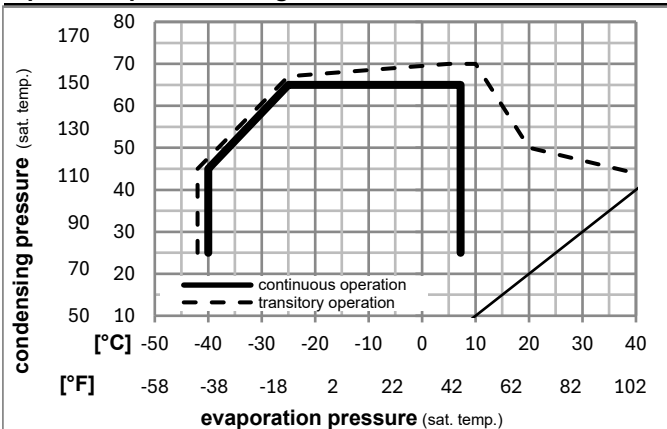
CSIR



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 (T1189/L6-S3)	117U7073
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

Noise emission

Operation pressures:	pe: -10°C / 14°F
	pc: 45°C / 113°F
Motor speed appr.:	2900rpm
Lw(A):	46dB(A)

Model

Designation **KLF4.0CND** **220-240V/50Hz** Conf. 1 Sales code: **106H2401**

Optimization + standard conditions

R290, 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		
		pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	Current consumption		Ref. mass flow				
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[A]	[kg/h]					
-23	-10	54	130	32	90	182,9	625	157,4	1,48	5,04	1,27	123,9	0,99	1,85					ASHRAE LBP	
-25	-13	55	131	32	90	135,8	464	116,9	1,13	3,85	0,97	120,6	0,99	1,69					cecomaf LBP	
-35	-31	40	104	20	68	100,2	342	86,2	1,14	3,88	0,98	88,1	0,91	1,14					EN12900 LBP	
-7	20	54	130	35	95	335,7	1146	288,9	2,08	7,10	1,79	161,5	1,10	3,83					ASHRAE MBP	
-10	14	55	131	32	90	265,2	906	228,2	1,71	5,85	1,47	154,7	1,08	3,35					cecomaf MBP	
-10	14	45	113	20	68	299,1	1021	257,4	2,14	7,31	1,84	139,7	1,03	3,67					EN12900 MBP	

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]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-40	-40	67,2	229	57,8	0,80	2,72	0,69	84,2	0,91	0,75
cond. pressure	-35	-31	95,4	326	82,1	1,03	3,52	0,89	92,4	0,92	1,07
pc= 45/113	-25	-13	163,7	559	140,9	1,48	5,04	1,27	111,0	0,96	1,85
return gas temp.	-15	5	254,8	870	219,3	1,95	6,67	1,68	130,4	1,01	2,90
RGT= 32/90	-5	23	376,5	1286	324,0	2,54	8,67	2,18	148,4	1,06	4,33
liquid temp	0	32	451,3	1541	388,4	2,89	9,88	2,49	156,0	1,08	5,24
Tliq= 45/113	7,2	45	578,1	1974	497,5	3,51	11,99	3,02	164,7	1,11	6,79
[°C / °F]	-40	-40	48,1	164	41,4	0,52	1,78	0,45	92,3	0,92	0,59
cond. pressure	-35	-31	74,4	254	64,0	0,74	2,52	0,64	100,6	0,94	0,92
pc= 55/131	-25	-13	135,8	464	116,9	1,13	3,85	0,97	120,6	0,99	1,69
return gas temp	-15	5	215,8	737	185,7	1,51	5,15	1,30	143,2	1,05	2,71
RGT= 32/90	-5	23	322,2	1100	277,3	1,94	6,63	1,67	166,0	1,11	4,10
liquid temp	0	32	387,8	1324	333,8	2,19	7,49	1,89	176,8	1,15	4,98
Tliq= 55/131	7,2	45	499,5	1706	429,9	2,62	8,95	2,25	190,7	1,20	6,51

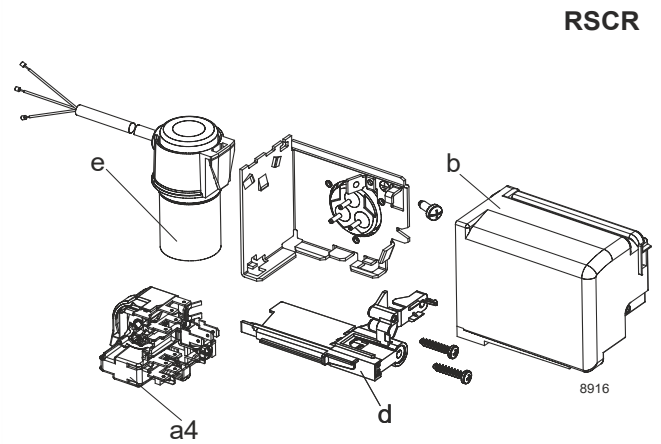
Model

Designation	KLF4.0CND	220-240V/50Hz	Conf. 2	Sales code:	106H2401
-------------	------------------	----------------------	----------------	-------------	-----------------

Configuration

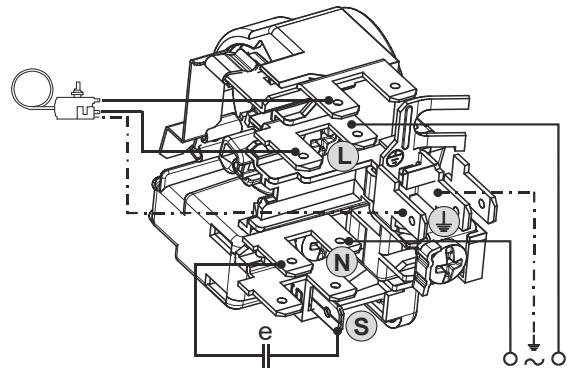
Motor configuration	RSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	198-254V
Starting torque	LST
Approvals	VDE CCC

Electrical accessories / wiring diagram

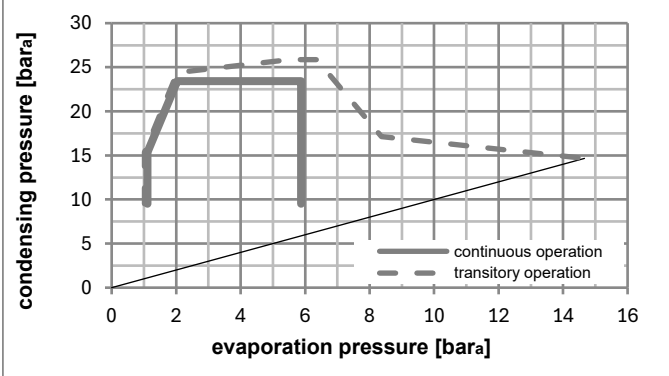
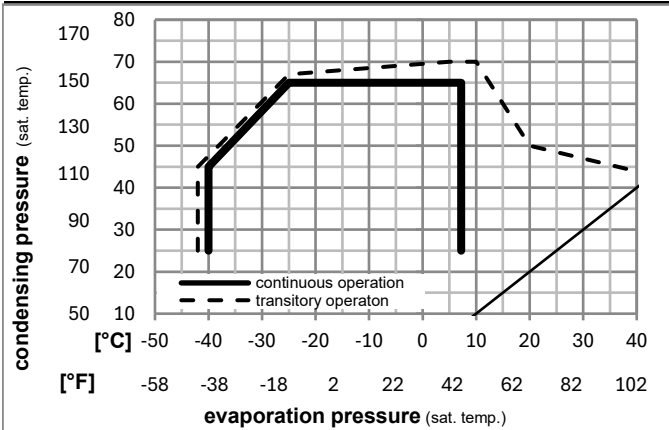


Ambient/ machine room temperatures minimum /maximum

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	DAS3 (PTC,6.3mm, T1189/L6 - S3)	103N0254
e	run capacitor (5µF, 6.3mm)	117-7191
b, d	cover + clamp + screws(5VA) in bag	103N1060

Alternative components

a4	ZAS3 (PTC,4.8mm, T1189/L6 - S3)	103N0255
e	run capacitor (5µF, 4.8mm)	117-7190

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

Noise emission

Operation pressures:	pe: -10°C / 14°F
	pc: 45°C / 113°F
Motor speed appr.:	2900rpm
Lw(A):	46dB(A)

Model

Designation **KLF4.0CND** **220-240V/50Hz** Conf. 2 Sales code: **106H2401**

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]	[°C]	[°C]	[°C]							[W]	[A]	[kg/h]		
	-23	54	32	32	183,2	626	157,7	1,50	5,13	1,29	122,1	0,68	1,86		
	[°F]														
	-10	130	90	90											
	[°C]														
	-25	55	32	55	136,1	465	117,1	1,14	3,90	0,98	119,0	0,67	1,69	cecomaf LBP	
	[°F]														
	-13	131	90	131											
	[°C]														
	-35	40	20	40	100,4	343	86,4	1,13	3,85	0,97	89,0	0,57	1,15	EN12900 LBP	
	[°F]														
	-31	104	68	104											
	[°C]														
	-7	54	35	46	336,6	1149	289,7	2,14	7,31	1,84	157,1	0,82	3,84	ASHRAE MBP	
	[°F]														
	20	130	95	115											
	[°C]														
	-10	55	32	55	265,8	908	228,8	1,76	6,02	1,52	150,8	0,79	3,36	cecomaf MBP	
	[°F]														
	14	131	90	131											
	[°C]														
	-10	45	20	45	299,7	1024	258,0	2,19	7,48	1,89	136,8	0,74	3,68	EN12900 MBP	
	[°F]														
	14	113	68	113											
	[°C]														

Performance tables

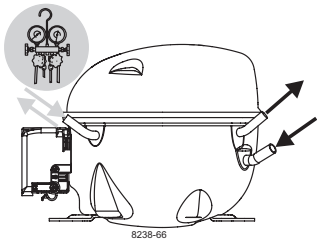
R290, 220V/50Hz, RSCR, fan 3m/s, VDE, CCC

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[W/W]	[Btu/Wh]			
[°C / °F]	-40	-40	67,3	230	57,9	0,79	2,68	0,68	85,5	0,56	0,75
cond. pressure	-35	-31	95,5	326	82,2	1,03	3,51	0,88	93,0	0,58	1,07
pc= 45/113	-25	-13	164,1	560	141,2	1,49	5,09	1,28	110,1	0,64	1,85
return gas temp.	-15	5	255,4	872	219,8	1,99	6,80	1,71	128,2	0,71	2,91
RGT= 32/90	-5	23	377,4	1289	324,8	2,61	8,90	2,24	144,9	0,77	4,35
liquid temp	0	32	452,5	1545	389,4	2,98	10,17	2,56	152,0	0,80	5,25
Tliq= 45/113	7,2	45	579,6	1979	498,8	3,62	12,37	3,12	160,0	0,83	6,81
[°C / °F]	-40	-40	48,2	165	41,5	0,52	1,77	0,45	92,9	0,58	0,59
cond. pressure	-35	-31	74,5	254	64,1	0,74	2,53	0,64	100,5	0,61	0,92
pc= 55/131	-25	-13	136,1	465	117,1	1,14	3,90	0,98	119,0	0,67	1,69
return gas temp	-15	5	216,3	739	186,1	1,54	5,27	1,33	140,1	0,75	2,72
RGT= 32/90	-5	23	323,1	1103	278,0	2,00	6,84	1,72	161,3	0,84	4,12
liquid temp	0	32	388,9	1328	334,7	2,27	7,75	1,95	171,3	0,88	5,00
Tliq= 55/131	7,2	45	501,0	1711	431,2	2,72	9,29	2,34	184,1	0,93	6,53



KL Compressors

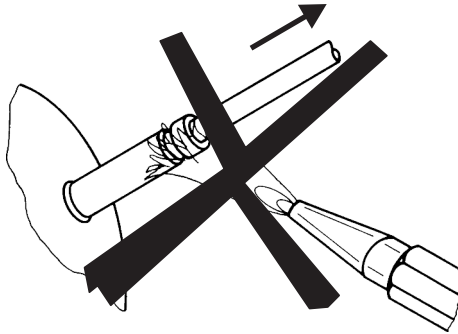




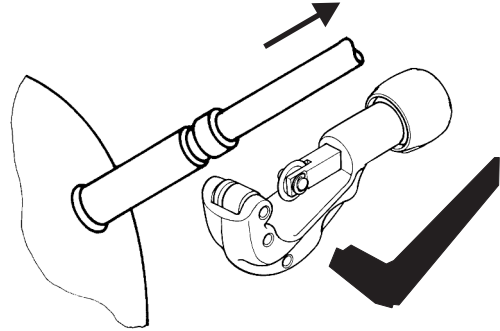
KL Compressors



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