

## Single Pack KLF4.0CNH 115-127V 60Hz CSIR

Single pack code number: **195B4655**

Position	Title	Code	Amount
1	Compressor KLF4.0CNH	106H3401	1
2	KL accessories	103N1060	1
3	Starting capacitor (240 $\mu$ F 125V, 6.3mm)	117U5002	1
4	Starting relay (QLZ-7.85A, overload protector T1209/L6)	117U7074	1
5	Bolt joint for one compressor   M6   $\varnothing$ 16mm	118-1917	1

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## Model

Designation	<b>KLF4.0CNH</b>	115-127V/60Hz 1~	Sales code:	<b>106H3401</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R290</b>
Oil viscosity	10,4cSt	Displacement	4cm <sup>3</sup> / 0,24cu.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.	1630cm <sup>3</sup> / 55,1fl.oz		
Weight	8,3kg / 18,3lbs		
Motor protection	external		
Winding resistance main	3,4Ω (at 25°C)		
Winding resistance aux	8Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with KLF4.0CNH

	<b>Conf. 1</b>	<b>Conf. 2</b>
Motorconfiguration	CSIR	RSCR
Power supply (nominal)	115-127V/60Hz	115-127V/60Hz
Number of phases	1	1
Voltage range	95-140V	95-140V
Approvals	UL, CCC	UL, CCC
Starting torque	HST	LST
Note	- / -	

## Applications with KLF4.0CNH

	<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 KLF4.0CNH

	<b>Conf. 1</b>	<b>Conf. 2</b>
Starting device type	relay	PTC
Run capacitor	- / -	15μF
Start capacitor	240μF	- / -
LRA (locked rotor amps / 4s/ U(N))	21,2A	#NV
RLA (rated load amps / 1s/ U(N))	2,7A	#NV
Cut in current (U(N))	20,5A	#NV

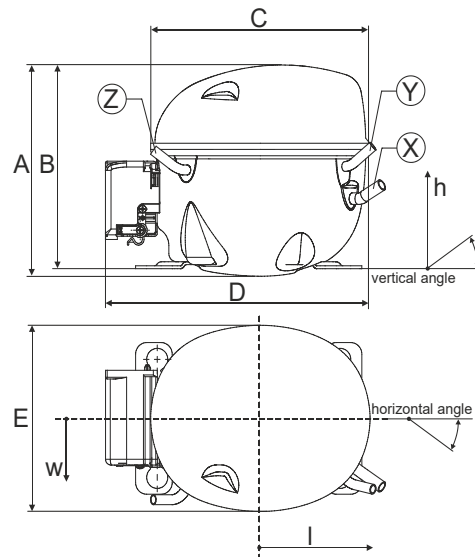
## Model

Designation	<b>KLF4.0CNH</b>	115-127V/60Hz 1~	Sales code:	<b>106H3401</b>
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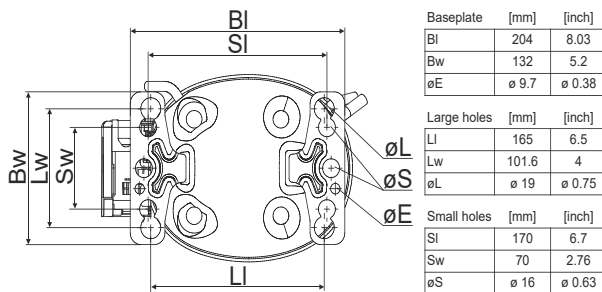
## Compressor dimensions

<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

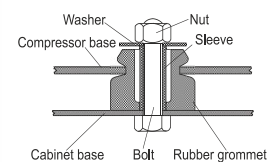
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 8,11-8,29	øi 6,41-6,59	øi 6,41-6,59
(i:inside, o:outside)	[in]	øi 0,32-0,33	øi 0,25-0,26	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	35°	13°	0°
Vertical angle	±2°	30°	40°	145°
Position l/h/w	[mm]	119/73/59	117/107/66	-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



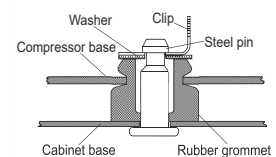
## Compressor fixation



### 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

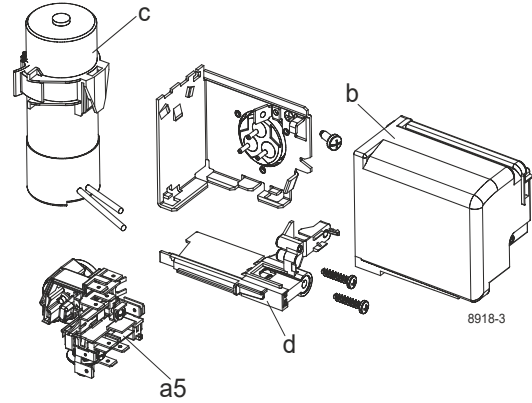
Designation	<b>KLF4.0CNH</b>	<b>115-127V/60Hz</b>	<b>Conf. 1</b>	Sales code:	<b>106H3401</b>
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## Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115-127V/60Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-140V
Starting torque	HST
Approvals	UL CCC

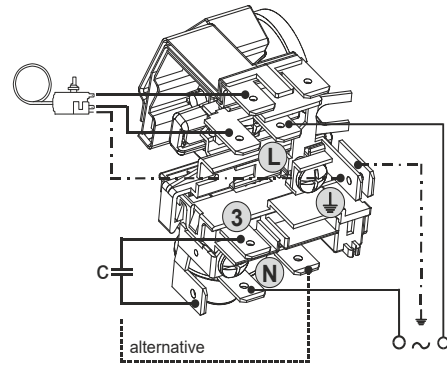
## Electrical accessories / wiring diagram

CSIR

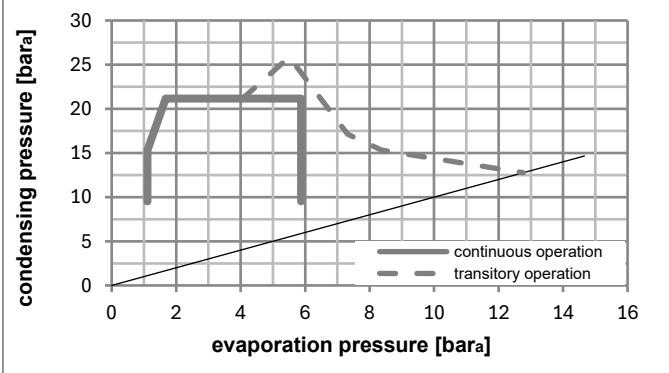
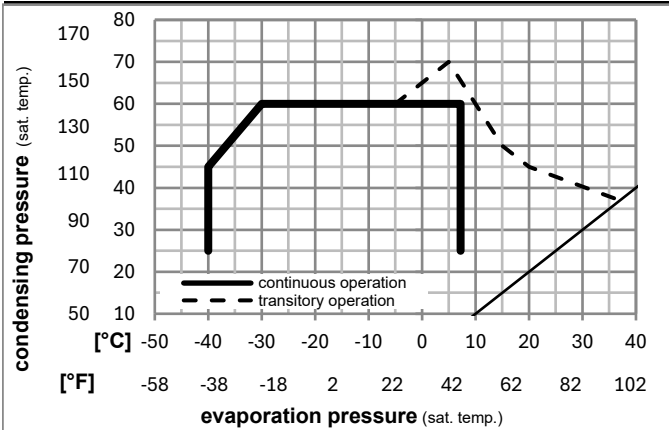


## Ambient/ machine room temperatures minimum /maximum

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 (T1209/L6-S4)	117U7074
c	start capacitor (240µF)	117U5002
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 **KLF4.0CNH** **115-127V/60Hz** Conf. 1 Sales code: **106H3401**

### Optimization + standard conditions

R290, 115V/60Hz, CSIR, fan 3m/s, UL, 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]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°F]	[°F]	[°F]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	ASHRAE LBP
-23	54	32	32	228,0	779	196,2	1,49	5,08	1,28	153,2	1,92	2,31	ASHRAE LBP
-10	130	90	90										
-25	55	32	55	169,4	579	145,8	1,14	3,89	0,98	148,7	1,89	2,11	cecomaf LBP
-13	131	90	131										
-35	40	20	40	127,2	434	109,5	1,05	3,58	0,90	121,3	1,73	1,45	EN12900 LBP
-31	104	68	104										
-7	54	35	46	418,6	1429	360,2	2,09	7,14	1,80	200,3	2,25	4,77	ASHRAE MBP
20	130	95	115										
-10	55	32	55	331,7	1133	285,5	1,72	5,88	1,48	192,8	2,20	4,20	cecomaf MBP
14	131	90	131										
-10	45	20	45	376,1	1284	323,7	2,14	7,30	1,84	175,9	2,07	4,62	EN12900 MBP
14	113	68	113										

### Performance tables

R290, 115V/60Hz, CSIR, fan 3m/s, UL, CCC

	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]						
[°C / °F]	-40	-40	81,8	279	70,4	0,71	2,43	0,61	115,1	1,71	0,91
cond. pressure	-34	-30	122,7	419	105,6	0,99	3,39	0,86	123,5	1,75	1,38
pc= 45/113	-23	-10	222,9	761	191,8	1,52	5,20	1,31	146,3	1,88	2,52
return gas temp.	-15	5	320,7	1095	276,0	1,94	6,63	1,67	165,2	2,00	3,65
RGT= 32/90	-4	25	492,6	1682	423,9	2,63	8,98	2,26	187,3	2,15	5,68
liquid temp	0	32	566,1	1933	487,2	2,93	10,02	2,52	193,0	2,20	6,57
Tliq= 45/113	7,2	45	724,3	2473	623,3	3,63	12,41	3,13	199,4	2,24	8,51
[°C / °F]	-40	-40	53,0	181	45,6	0,48	1,65	0,42	109,9	1,67	0,65
cond. pressure	-34	-30	92,9	317	80,0	0,76	2,59	0,65	122,6	1,74	1,15
pc= 55/131	-23	-10	184,6	630	158,9	1,20	4,10	1,03	153,7	1,93	2,30
return gas temp	-15	5	270,4	924	232,7	1,51	5,17	1,30	178,6	2,09	3,40
RGT= 32/90	-4	25	418,8	1430	360,4	2,01	6,87	1,73	208,3	2,31	5,34
liquid temp	0	32	482,1	1646	414,9	2,23	7,60	1,92	216,6	2,37	6,19
Tliq= 55/131	7,2	45	618,4	2112	532,2	2,72	9,27	2,34	227,7	2,46	8,06

## Model

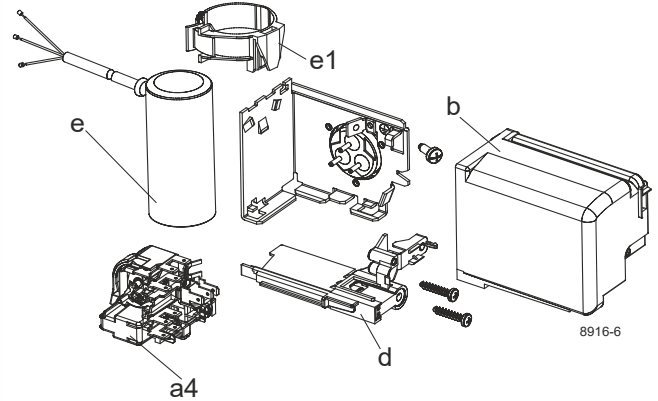
Designation	<b>KLF4.0CNH</b>	<b>115-127V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>106H3401</b>
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## Configuration

Motorconfiguration	RSCR
Power supply (nominal)	115-127V/60Hz 1~
Refrigerant	R290
Application	LBP+MBP
Voltage range	95-140V
Starting torque	LST
Approvals	UL CCC

## Electrical accessories / wiring diagram

RSCR

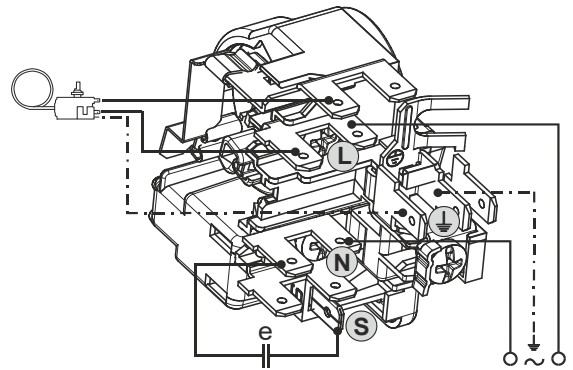


## Ambient/ machine room temperatures minimum /maximum

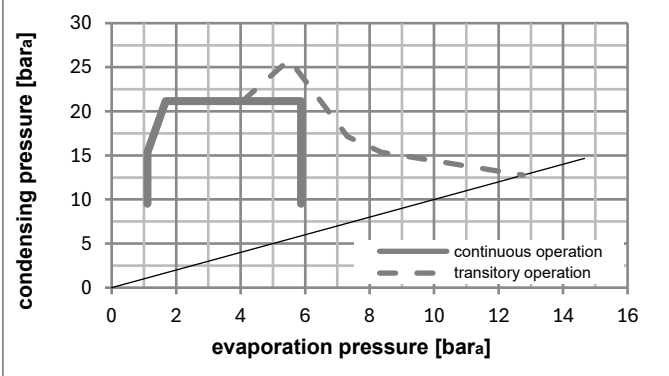
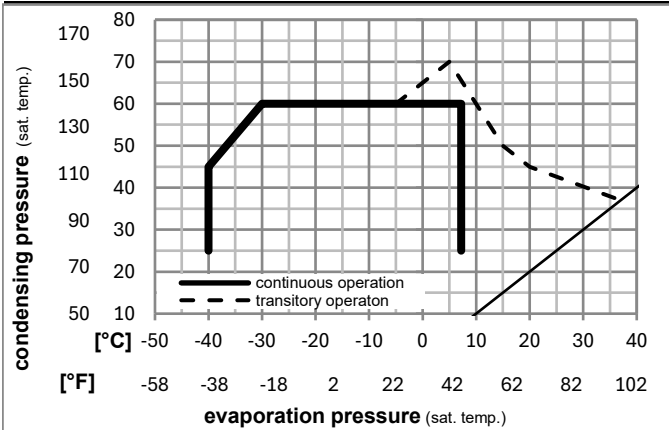
Ambient temperature range: 10 - 43°C / 50 - 110°F

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

Compressor cooling: fan 3m/s



## Operation pressure range



## Components

a4	DLS4 (PTC,6.3mm, T1209/L6 - S4)	103N0210
e	run capacitor (15μF, 6,3mm)	117-7153
b, d	cover + clamp + screws(5VA) in bag	103N1060
e1	retaining clamp	103N0535

## Alternative components

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

### Model

Designation **KLF4.0CNH** **115-127V/60Hz** Conf. 2 Sales code: **106H3401**

### Optimization + standard conditions

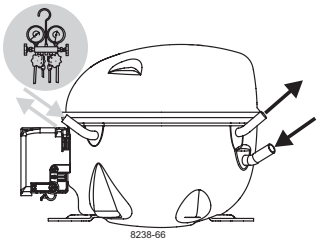
R290, 115V/60Hz, RSCR, fan 3m/s, UL, CCC

	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	230,4	787	198,3	1,57	5,35	1,35	147,0	1,36	2,33	ASHRAE LBP		
	-10	130	90	90												
	-25	55	32	55	171,1	584	147,2	1,20	4,09	1,03	142,8	1,32	2,13	cecomaf LBP		
	-13	131	90	131												
	-35	40	20	40	128,1	437	110,2	1,10	3,76	0,95	116,3	1,10	1,46	EN12900 LBP		
	-31	104	68	104												
	-7	54	35	46	423,7	1447	364,7	2,22	7,58	1,91	190,8	1,73	4,83	ASHRAE MBP		
	20	130	95	115												
	-10	55	32	55	335,8	1147	289,0	1,83	6,24	1,57	183,9	1,67	4,25	cecomaf MBP		
	14	131	90	131												
	-10	45	20	45	379,9	1298	327,0	2,26	7,72	1,94	168,1	1,53	4,66	EN12900 MBP		
	14	113	68	113												

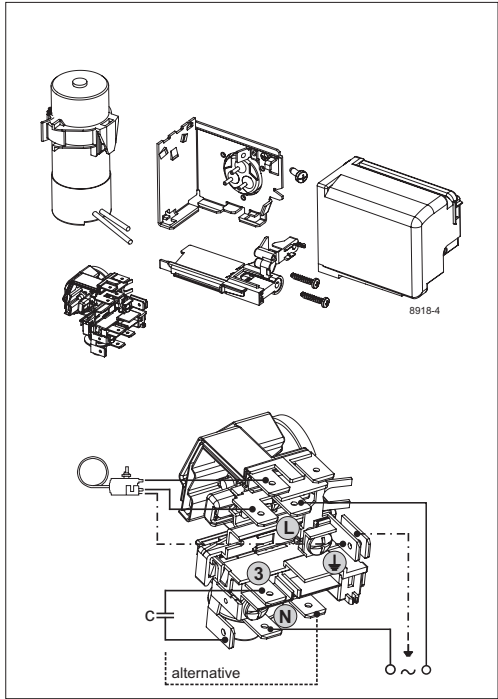
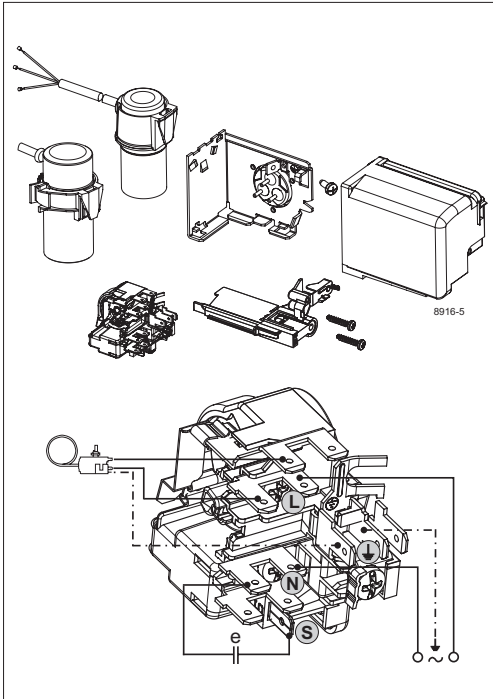
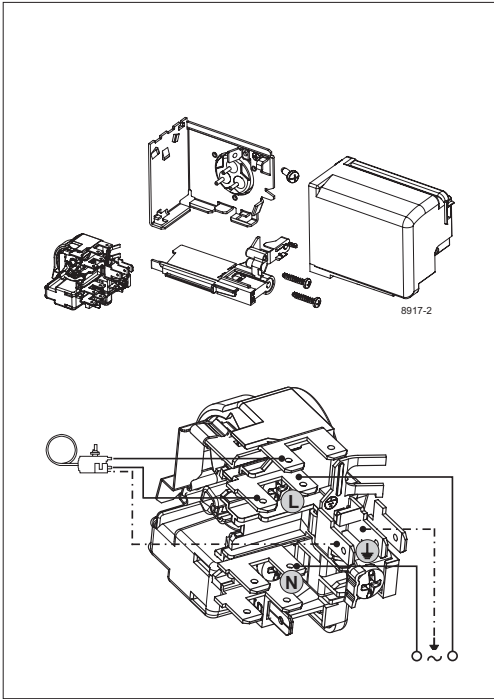
### Performance tables

R290, 115V/60Hz, RSCR, fan 3m/s, UL, CCC

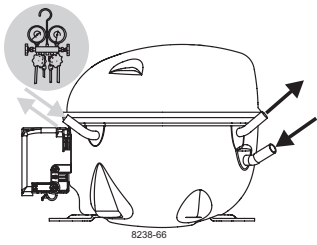
	pe		Cooling capacity			COP	EER	P1	I	m	
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]				[kcal/Wh]
[°C / °F]	-40	-40	82,7	282	71,2	0,75	2,56	0,65	110,1	1,05	0,92
cond. pressure	-34	-30	123,7	422	106,4	1,04	3,57	0,90	118,3	1,12	1,39
pc= 45/113	-23	-10	224,8	768	193,4	1,60	5,48	1,38	140,1	1,30	2,54
return gas temp.	-15	5	323,9	1106	278,7	2,05	7,00	1,76	158,0	1,45	3,68
RGT= 32/90	-4	25	497,6	1700	428,3	2,78	9,50	2,40	178,8	1,63	5,74
liquid temp	0	32	571,9	1953	492,2	3,10	10,60	2,67	184,2	1,67	6,63
Tliq= 45/113	7,2	45	731,1	2497	629,2	3,84	13,13	3,31	190,2	1,72	8,59
[°C / °F]	-40	-40	53,4	182	46,0	0,51	1,73	0,44	105,6	1,01	0,66
cond. pressure	-34	-30	93,6	320	80,5	0,79	2,71	0,68	118,0	1,11	1,16
pc= 55/131	-23	-10	186,5	637	160,5	1,26	4,32	1,09	147,5	1,36	2,33
return gas temp	-15	5	273,7	935	235,5	1,60	5,47	1,38	170,7	1,56	3,44
RGT= 32/90	-4	25	423,9	1448	364,8	2,14	7,31	1,84	198,1	1,79	5,41
liquid temp	0	32	487,8	1666	419,8	2,37	8,10	2,04	205,6	1,86	6,27
Tliq= 55/131	7,2	45	625,0	2134	537,9	2,90	9,91	2,50	215,3	1,94	8,14



# KL Compressors



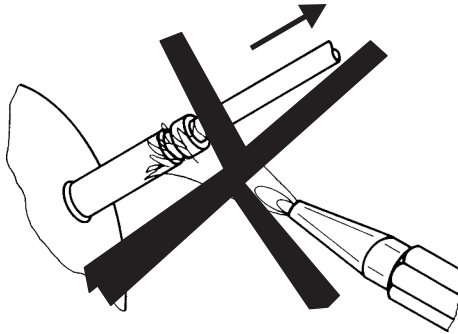




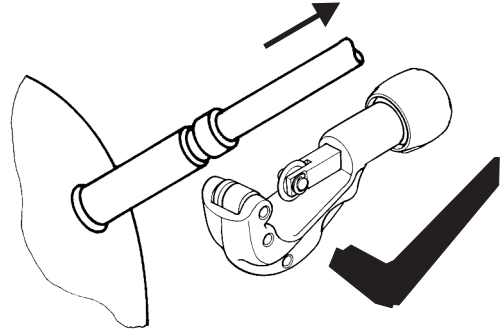
# KL Compressors



## Service/Repair – R290



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