

## Model

Designation	<b>TL4G</b>	100-115V/50Hz 1~	100-115V/60Hz 1~	Sales code:	<b>102G3460</b>
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## Compressor design

Oil type	Polyolester	Refrigerant(s)	<b>R134a, R513A, 0</b>
Oil viscosity	15cST	Displacement	3,86cm <sup>3</sup> / 0,24cu.in
Oil quantity	285cm <sup>3</sup> / 9,7fl.oz	Compressors on pallet	125
Refr. charge - tech. limit	400g / 14,1oz		
Free gas volume comp.	1600cm <sup>3</sup> / 54,1fl.oz		
Weight	7,5kg / 16,5lbs		
Motor protection	1# internal		
Winding resistance main	3,2Ω (at 25°C)		
Winding resistance aux	3,4Ω (at 25°C)		
Max. winding temp.	125°C / 257°F		
Max. discharge temp.	130°C / 266°F		



## General - Configurations with TL4G

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Motorconfiguration	CSIR	CSIR	RSIR	RSIR
Power supply (nominal)	100-115V/50Hz	115V/60Hz	100-115V/50Hz	115V/60Hz
Number of phases	1	1	1	1
Voltage range	90-127V	90-135V	90-127V	90-135V
Approvals	UL	UL	UL	UL
Starting torque	HST	HST	LST	LST
Note	- / -			

## Applications with TL4G

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Refrigerant	R134a	R134a	R134a	R134a
Application	LBP+MBP+HBP	LBP+MBP+HBP	LBP+MBP+HBP	LBP+MBP+HBP
System cooling	static	static	static	static
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

## Electrical data - Configurations with TL4G

	<b>Conf. 1</b>	<b>Conf. 2</b>	<b>Conf. 3</b>	<b>Conf. 4</b>
Starting device type	relay	relay	PTC	PTC
Run capacitor	- / -	- / -	- / -	- / -
Start capacitor	240μF	240μF	- / -	- / -
LRA (locked rotor amps / 4s/ U(N))	14,2A			
RLA (rated load amps / 1s/ U(N))	2,5A	- / A	- / A	- / A
Cut in current (U(N))	22,6A			

## Model

Designation

**TL4G**

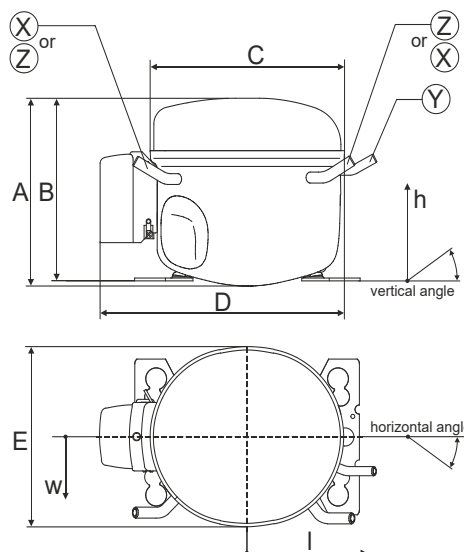
100-115V/50Hz 1~ 100-115V/60Hz 1~

Sales code:

**102G3460**

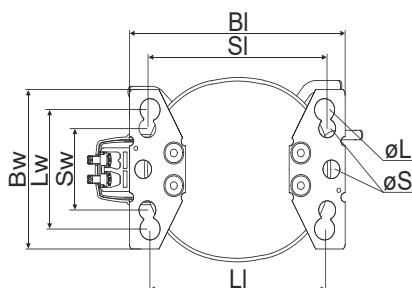
## Compressor dimensions

<b>Housing</b>	A Height	174mm / 6,85in
	B Height	168mm / 6,61in
	C Length shell	176mm / 6,93in
	D Length w. cover	222mm / 8,74in
	E Width	156mm / 6,14in



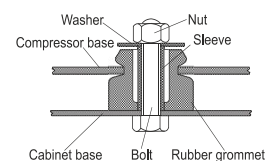
Connectors		Suction	Discharge	Process
		X	Y	Z
Diameter	[mm]	øi 6,41-6,59	øi 5,12-5,22	øi 6,41-6,59
	(i:inside, o:outside) [in]	øi 0,25-0,26	øi 0,2-0,21	øi 0,25-0,26
Material		copper	copper	copper
Horizontal angle	±2°	0°	0°	0°
Vertical angle	±2°	150°	28°	31,5°
Position l/h/w	[mm]	-102/105/66	117/108/30	95/105/71
	[in]	-4/4,1/2,6	4,6/4,3/1,2	3,7/4,1/2,8
Straight tube l.	[mm]	12	12	12
	[in]	0,5	0,5	0,5

## Compressor fixation

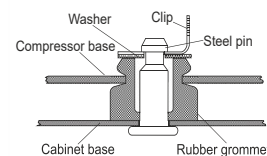


Baseplate	[mm]	[inch]
BI	204	8.03
Bw	136	5.35
Large holes		
LI	165	6.5
Lw	101.6	4
øL	ø 19	ø 0.75
Small holes		
SI	170	6.7
Sw	70	2.76
øS	ø 16	ø 0.63

### 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	
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

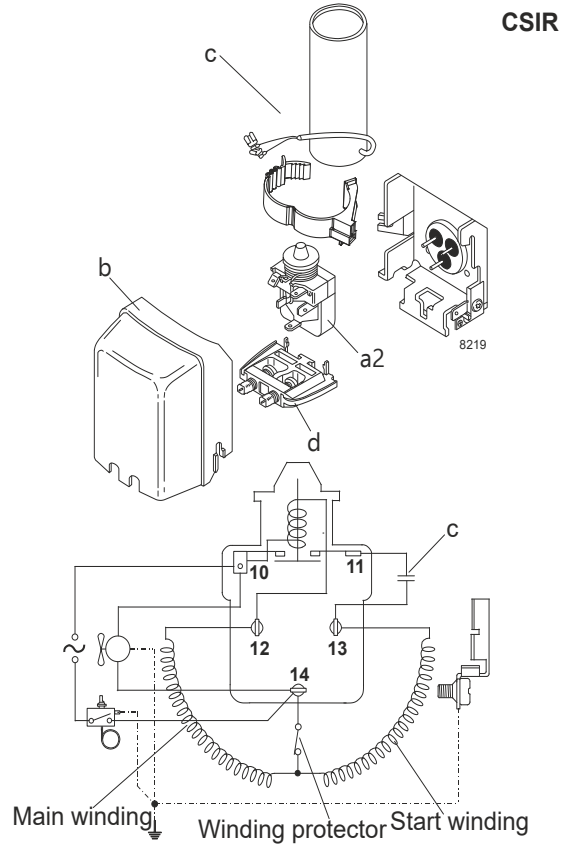
### Model

Designation	<b>TL4G</b>	<b>100-115V/50Hz</b>	Conf. 1	Sales code:	<b>102G3460</b>
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### Configuration

Motorconfiguration	CSIR
Power supply (nominal)	100-115V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	90-127V
Starting torque	HST
Approvals	UL

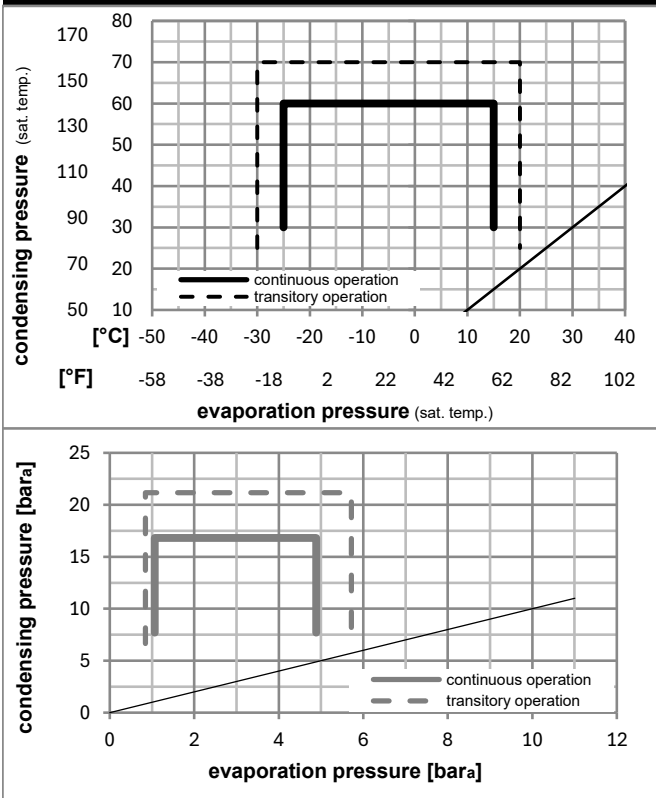
### Electrical accessories / wiring diagram



### 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:	static

### Operation pressure range



### Components

a2	assy. relay	117U6003
c	start capacitor (240µF)	117U5023
b	plastic cover	103N2011
d	cord relief	103N1010

### Model

Designation	<b>TL4G</b>	<b>100-115V/50Hz</b>	<b>Conf. 1</b>	Sales code:	<b>102G3460</b>
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### Optimization + standard conditions

R134a, 115V/50Hz, CSIR, static, UL

	Evaporating pressure (saturation temperature)				Cooling capacity			COP	EER	P1	Power consumption		ASHRAE	
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]				I	m		
	[°C]	[°C]	[°C]	[°C]				[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
	-23	54	32	32	74,6	255	64,2	0,78	2,66	0,67	95,7	1,75	1,45	ASHRAE LBP
	[°F]													
	-10	130	90	90										
	[°C]	-7	54	35	46	179,6	613	154,6	1,22	4,17	147,3	1,96	3,92	ASHRAE MBP
	[°F]	20	130	95	115									
	[°C]	7,2	54	35	46	337,4	1152	290,4	1,71	5,85	197,0	2,41	7,49	ASHRAE HBP
	[°F]	45	130	95	115									
	[°C]	-35	40	20	40	28,3	97	24,4	0,35	1,20	80,7	1,68	0,62	EN12900 LBP
	[°F]	-31	104	68	104									
	[°C]	-10	45	20	45	163,0	557	140,3	1,24	4,25	130,9	1,89	3,82	EN12900 MBP
	[°F]	14	113	68	113									
	[°C]	5	50	20	50	288,8	986	248,6	1,57	5,38	183,5	2,29	7,28	EN12900 HBP
	[°F]	41	122	68	122									

### Performance tables

R134a, 115V/50Hz, CSIR, static, UL

	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]		[Btu/Wh]	[kcal/Wh]			
[°C / °F]	-25	-13	68,1	233	58,6	0,73	2,48	0,62	93,9	1,75	1,48
cond. pressure	-23	-10	76,8	262	66,1	0,79	2,69	0,68	97,4	1,76	1,67
pc= 45/113	-9	15	173,9	594	149,6	1,31	4,48	1,13	132,5	1,90	3,81
return gas temp.	-4	25	226,3	773	194,8	1,52	5,19	1,31	148,8	2,00	4,98
RGT= 32/90	0	32	268,2	916	230,8	1,67	5,70	1,44	160,7	2,09	5,93
liquid temp	4,4	40	321,7	1099	276,8	1,84	6,30	1,59	174,5	2,22	7,16
Tliq= 45/113	15	59	474,1	1619	408,0	2,29	7,82	1,97	207,1	2,68	10,74
[°C / °F]	-25	-13	53,7	183	46,2	0,59	2,01	0,51	91,1	1,73	1,28
cond. pressure	-23	-10	60,3	206	51,9	0,63	2,16	0,54	95,4	1,75	1,44
pc= 55/131	-9	15	140,2	479	120,6	1,02	3,47	0,87	137,9	1,91	3,39
return gas temp	-4	25	185,8	635	159,9	1,18	4,03	1,02	157,3	2,03	4,52
RGT= 32/90	0	32	222,9	761	191,9	1,30	4,45	1,12	171,2	2,14	5,45
liquid temp	4,4	40	271,0	925	233,2	1,45	4,94	1,24	187,5	2,30	6,67
Tliq= 55/131	15	59	410,7	1403	353,5	1,82	6,21	1,56	225,9	2,84	10,32

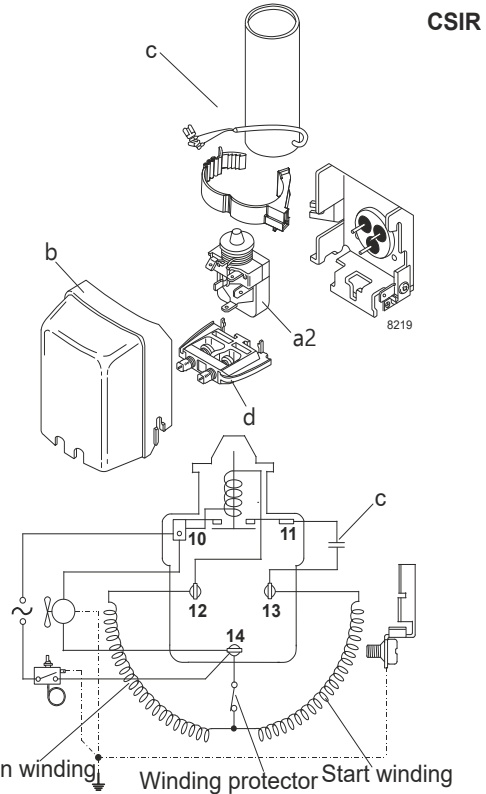
### Model

Designation	<b>TL4G</b>	<b>115V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>102G3460</b>
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### Configuration

Motorconfiguration	CSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	90-135V
Starting torque	HST
Approvals	UL

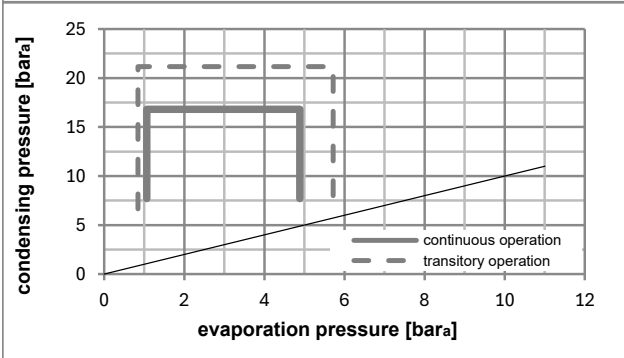
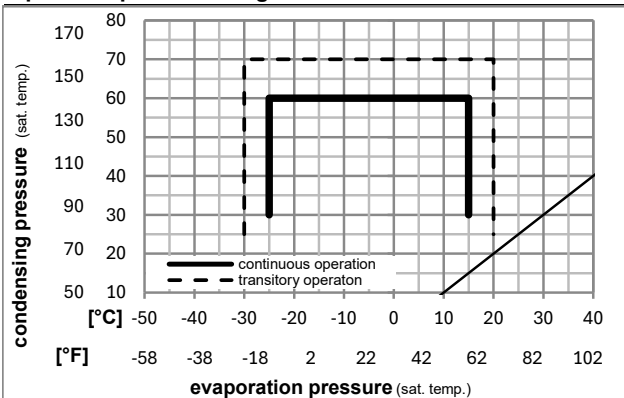
### Electrical accessories / wiring diagram



### 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:	static

### Operation pressure range



### Components

a2	assy. relay	117U6003
c	start capacitor (240μF)	117U5023
b	plastic cover	103N2011
d	cord relief	103N1010

### Model

Designation	<b>TL4G</b>	<b>115V/60Hz</b>	<b>Conf. 2</b>	Sales code:	<b>102G3460</b>
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### Optimization + standard conditions

R134a, 115V/60Hz, CSIR, static, UL

		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	m						
[°C]	[°F]	[°C]	[°F]	[°C]	[°F]							[W]	[A]	[kg/h]						
-23	-10	54	130	32	90	89,5	306	77,0	0,94	3,19	0,81	95,7	1,75	1,74						ASHRAE LBP
-7	20	54	130	35	95	215,6	736	185,5	1,46	5,00	1,26	147,3	1,96	4,70						ASHRAE MBP
7,2	45	54	130	35	95	404,9	1383	348,5	2,06	7,02	1,77	197,0	2,41	8,98						ASHRAE HBP
-35	-31	40	104	20	68	34,0	116	29,2	0,42	1,44	0,36	80,7	1,68	0,75						EN12900 LBP
-10	14	45	113	20	68	195,6	668	168,3	1,49	5,10	1,29	130,9	1,89	4,58						EN12900 MBP
5	41	50	122	20	68	346,6	1184	298,3	1,89	6,45	1,63	183,5	2,29	8,73						EN12900 HBP

### Performance tables

R134a, 115V/60Hz, CSIR, static, UL

	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]	-25	-13	81,7	279	70,3	0,87	2,97	0,75	93,9	1,75	1,77
cond. pressure	-23	-10	92,2	315	79,3	0,95	3,23	0,81	97,4	1,76	2,00
pc= 45/113	-9	15	208,7	713	179,6	1,57	5,38	1,36	132,5	1,90	4,57
return gas temp.	-4	25	271,6	928	233,7	1,82	6,23	1,57	148,8	2,00	5,98
RGT= 32/90	0	32	321,9	1099	277,0	2,00	6,84	1,72	160,7	2,09	7,12
liquid temp	4,4	40	386,0	1318	332,2	2,21	7,55	1,90	174,5	2,22	8,59
Tliq= 45/113	15	59	569,0	1943	489,7	2,75	9,38	2,36	207,1	2,68	12,89
[°C / °F]	-25	-13	64,4	220	55,4	0,71	2,41	0,61	91,1	1,73	1,54
cond. pressure	-23	-10	72,4	247	62,3	0,76	2,59	0,65	95,4	1,75	1,73
pc= 55/131	-9	15	168,2	574	144,7	1,22	4,16	1,05	137,9	1,91	4,07
return gas temp	-4	25	222,9	761	191,9	1,42	4,84	1,22	157,3	2,03	5,43
RGT= 32/90	0	32	267,5	914	230,2	1,56	5,34	1,34	171,2	2,14	6,54
liquid temp	4,4	40	325,2	1110	279,8	1,73	5,92	1,49	187,5	2,30	8,01
Tliq= 55/131	15	59	492,9	1683	424,2	2,18	7,45	1,88	225,9	2,84	12,38

## Model

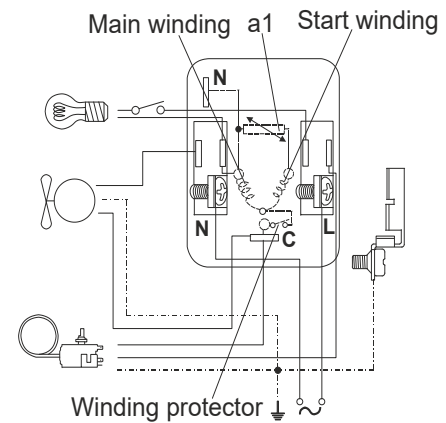
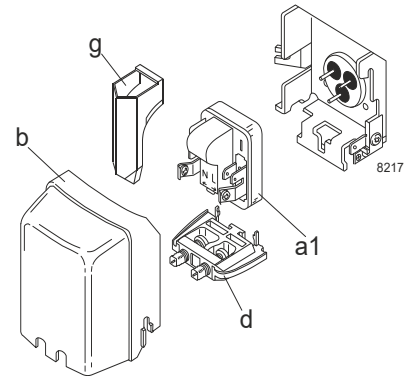
Designation	<b>TL4G</b>	<b>100-115V/50Hz</b>	<b>Conf. 3</b>	Sales code:	<b>102G3460</b>
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## Configuration

Motorconfiguration	RSIR
Power supply (nominal)	100-115V/50Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	90-127V
Starting torque	LST
Approvals	UL

## Electrical accessories / wiring diagram

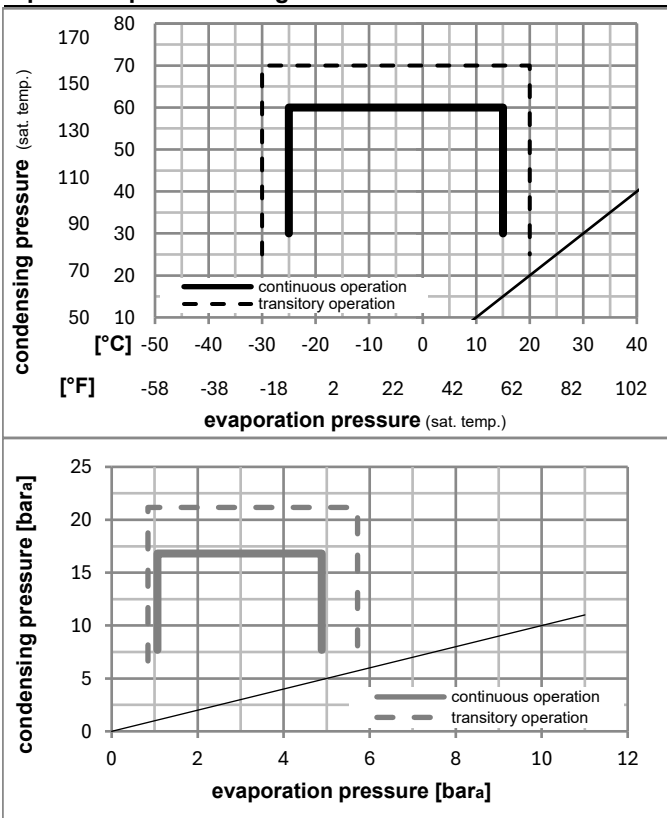
RSIR



## 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:	static

## Operation pressure range



## Components

a1	PTC starter (115V, 50hm, 6.3mm)	103N0026
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

## Alternative components

a1	PTC starter (115V, 50hm, 4.8mm)	103N0023
b	plastic cover	103N2011
d	cord relief	103N1010
g	protection screen for PTC	103N0476

## Model

Designation	<b>TL4G</b>	<b>100-115V/50Hz</b>	<b>Conf. 3</b>	Sales code:	<b>102G3460</b>
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## Optimization + standard conditions

R134a, 115V/50Hz, RSIR, static, UL

		Evaporating pressure (saturation temperature)				Condensing pressure (saturation temperature)			Return gas temp.		Liquid temp.		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	[W]	[A]	[kg/h]	ASHRAE MBP			
[°C]	[°F]	[°C]	[°C]	[°C]	[°C]																
-23	-10	54	32	32	74,6	255	64,2	0,78	2,66	0,67	95,7	1,75	1,45								
-7	20	54	35	46	179,6	613	154,6	1,22	4,17	1,05	147,3	1,96	3,92								
7,2	45	54	35	46	337,4	1152	290,4	1,71	5,85	1,47	197,0	2,41	7,49								
-35	-31	40	20	40	28,3	97	24,4	0,35	1,20	0,30	80,7	1,68	0,62								
-10	14	45	20	45	163,0	557	140,3	1,24	4,25	1,07	130,9	1,89	3,82								
5	41	50	20	50	288,8	986	248,6	1,57	5,38	1,35	183,5	2,29	7,28								

## Performance tables

R134a, 115V/50Hz, RSIR, static, UL

	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]	-25	-13	68,1	233	58,6	0,73	2,48	0,62	93,9	1,75	1,48
cond. pressure	-23	-10	76,8	262	66,1	0,79	2,69	0,68	97,4	1,76	1,67
pc= 45/113	-9	15	173,9	594	149,6	1,31	4,48	1,13	132,5	1,90	3,81
return gas temp.	-4	25	226,3	773	194,8	1,52	5,19	1,31	148,8	2,00	4,98
RGT= 32/90	0	32	268,2	916	230,8	1,67	5,70	1,44	160,7	2,09	5,93
liquid temp	4,4	40	321,7	1099	276,8	1,84	6,30	1,59	174,5	2,22	7,16
Tliq= 45/113	15	59	474,1	1619	408,0	2,29	7,82	1,97	207,1	2,68	10,74
[°C / °F]	-25	-13	53,7	183	46,2	0,59	2,01	0,51	91,1	1,73	1,28
cond. pressure	-23	-10	60,3	206	51,9	0,63	2,16	0,54	95,4	1,75	1,44
pc= 55/131	-9	15	140,2	479	120,6	1,02	3,47	0,87	137,9	1,91	3,39
return gas temp	-4	25	185,8	635	159,9	1,18	4,03	1,02	157,3	2,03	4,52
RGT= 32/90	0	32	222,9	761	191,9	1,30	4,45	1,12	171,2	2,14	5,45
liquid temp	4,4	40	271,0	925	233,2	1,45	4,94	1,24	187,5	2,30	6,67
Tliq= 55/131	15	59	410,7	1403	353,5	1,82	6,21	1,56	225,9	2,84	10,32



## Model

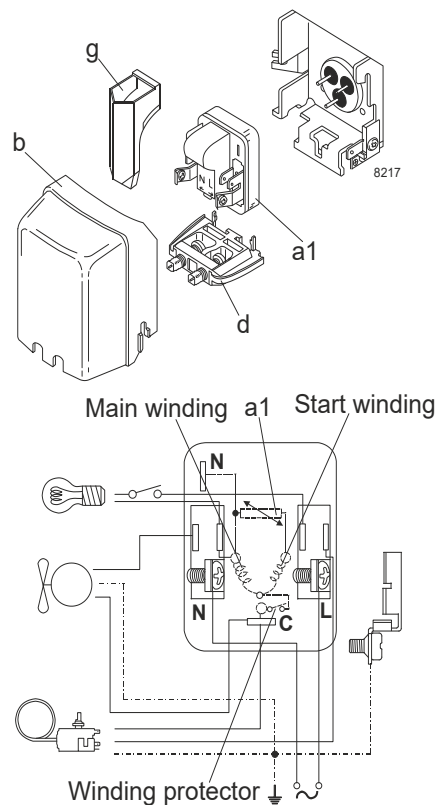
Designation	<b>TL4G</b>	<b>115V/60Hz</b>	<b>Conf. 4</b>	Sales code:	<b>102G3460</b>
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## Configuration

Motorconfiguration	RSIR
Power supply (nominal)	115V/60Hz 1~
Refrigerant	R134a
Application	LBP+MBP+HBP
Voltage range	90-135V
Starting torque	LST
Approvals	UL

## Electrical accessories / wiring diagram

RSIR



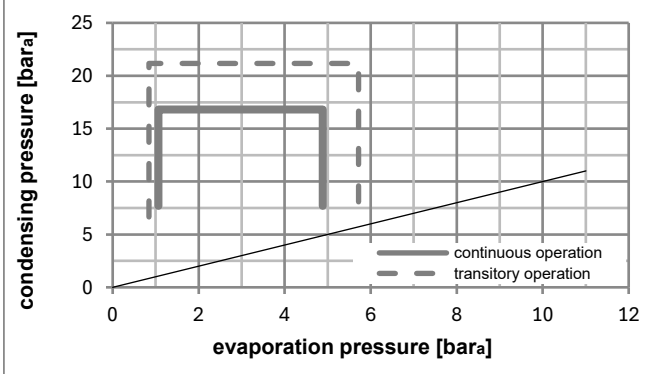
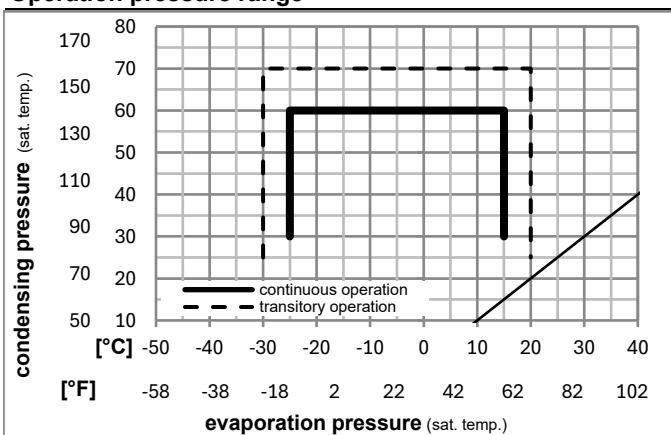
## Ambient/ machine room temperatures minimum /maximum

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

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

Compressor cooling: static

## Operation pressure range



## Components

a1	PTC starter (115V, 50hm, 6.3mm)	103N0026
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d	cord relief	103N1010
g	protection screen for PTC	103N0476

### Model

Designation	<b>TL4G</b>	<b>115V/60Hz</b>	<b>Conf. 4</b>	Sales code:	<b>102G3460</b>
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### Optimization + standard conditions

R134a, 115V/60Hz, RSIR, static, UL

		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	m							
[°C]	[°F]	[°C]	[°C]	[°C]	[°C]							[W]	[A]	[kg/h]							
-23	-10	54	32	32	89,5	306	77,0	0,94	3,19	0,81	95,7	1,75	1,74	ASHRAE LBP							
-7	20	54	35	46	215,6	736	185,5	1,46	5,00	1,26	147,3	1,96	4,70	ASHRAE MBP							
7,2	45	54	35	46	404,9	1383	348,5	2,06	7,02	1,77	197,0	2,41	8,98	ASHRAE HBP							
-35	-31	40	20	40	34,0	116	29,2	0,42	1,44	0,36	80,7	1,68	0,75	EN12900 LBP							
-10	14	45	20	45	195,6	668	168,3	1,49	5,10	1,29	130,9	1,89	4,58	EN12900 MBP							
5	41	50	20	50	346,6	1184	298,3	1,89	6,45	1,63	183,5	2,29	8,73	EN12900 HBP							

### Performance tables

R134a, 115V/60Hz, RSIR, static, UL

	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]	-25	-13	81,7	279	70,3	0,87	2,97	0,75	93,9	1,75	1,77
cond. pressure	-23	-10	92,2	315	79,3	0,95	3,23	0,81	97,4	1,76	2,00
pc= 45/113	-9	15	208,7	713	179,6	1,57	5,38	1,36	132,5	1,90	4,57
return gas temp.	-4	25	271,6	928	233,7	1,82	6,23	1,57	148,8	2,00	5,98
RGT= 32/90	0	32	321,9	1099	277,0	2,00	6,84	1,72	160,7	2,09	7,12
liquid temp	4,4	40	386,0	1318	332,2	2,21	7,55	1,90	174,5	2,22	8,59
Tliq= 45/113	15	59	569,0	1943	489,7	2,75	9,38	2,36	207,1	2,68	12,89
[°C / °F]	-25	-13	64,4	220	55,4	0,71	2,41	0,61	91,1	1,73	1,54
cond. pressure	-23	-10	72,4	247	62,3	0,76	2,59	0,65	95,4	1,75	1,73
pc= 55/131	-9	15	168,2	574	144,7	1,22	4,16	1,05	137,9	1,91	4,07
return gas temp	-4	25	222,9	761	191,9	1,42	4,84	1,22	157,3	2,03	5,43
RGT= 32/90	0	32	267,5	914	230,2	1,56	5,34	1,34	171,2	2,14	6,54
liquid temp	4,4	40	325,2	1110	279,8	1,73	5,92	1,49	187,5	2,30	8,01
Tliq= 55/131	15	59	492,9	1683	424,2	2,18	7,45	1,88	225,9	2,84	12,38