

Model

Designation	GS34CLX	220-240V/50Hz 1~	Sales code:	107B0501
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R452A, R507
Oil viscosity	46cSt	Displacement	33,8cm ³ / 2,06cu.in
Oil quantity	906cm ³ / 30,6fl.oz	Compressors on pallet	48
Refr. charge - tech. limit	2000g / 70,5oz		
Free gas volume comp.	3350cm ³ / 113,3fl.oz		
Weight	20kg / 44,1lbs		
Motor protection	1# internal		
Winding resistance main	1,6Ω (at 25°C)		
Winding resistance aux	6,7Ω (at 25°C)		
Max. winding temp.			
Max. discharge temp.	130°C / 266°F		



General - Configurations with GS34CLX

	Conf. 1	Conf. 2
Motor configuration	CSCR	CSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1
Voltage range	198-254V	198-254V
Approvals	VDE, CCC, EAC	VDE, CCC, EAC
Starting torque	HST	HST
Note	Cover, clamp, gasket: pre-assembled to compressor.	

Applications with GS34CLX

	Conf. 1	Conf. 2
Refrigerant	R404A	R452A
Application	LBP	LBP
System cooling	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK
Long interval pull down	OK	OK

Electrical data - Configurations with GS34CLX

	Conf. 1	Conf. 2
Starting device type	relay	relay
Run capacitor	15μF	15μF
Start capacitor	100μF	100μF
LRA (locked rotor amps / 4s/ U(N))	40A	40A
RLA (rated load amps / 1s/ U(N))	5,6A	5,6A
Cut in current (U(N))	40A	40A

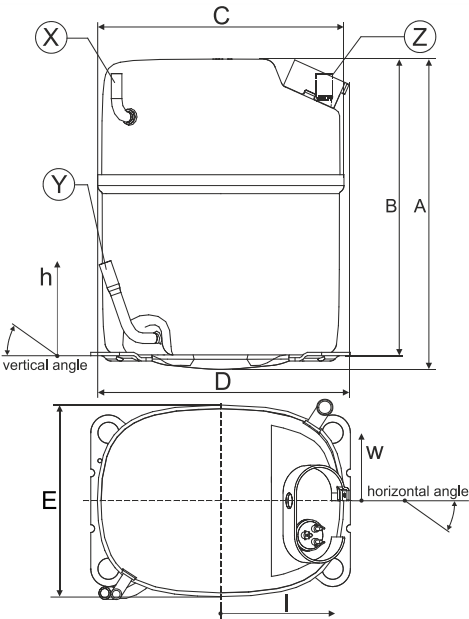
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Compressor dimensions

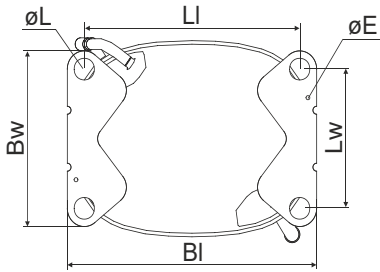
Housing	A Height	279mm / 10,98in
	B Height	267mm / 10,51in
	C Length shell	224mm / 8,82in
	D Length w. cover	232mm / 9,13in
	E Width	173mm / 6,81in

Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 12,75-13,05	øi 8,15-8,25	øi 6,4-6,6
(i:inside, o:outside) [in]	øi 0,5-0,51	øi 0,32-0,32	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle	±2° 0°	0°	0°
Vertical angle	±2° 90°	71°	90°
Position l/h/w	[mm] -95/234/-84	-105/84/-84	95/234/84
	[in] -3,7/9,2/-3,3	-4,1/3,3/-3,3	3,7/9,2/3,3
Straight tube l.	[mm] 18	23	15
	[in] 0,7	0,9	0,6

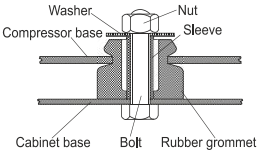


Compressor fixation

Bolt joint



Baseplate	[mm]	[inch]
BI	235	9.25
Bw	154	6.06
øE	ø 3.6	ø 0.14
Large holes		
LI	203	7.99
Lw	122	4.80
øL	ø 19	ø 0.75



Mounting accessories	one comp.
Bolt joint M8 ø19mm	107B9150

Application notes

Provision for PE Grounding is located at the PE Stamp on the compressor
Compressor dimension sketch can vary, due to switch of connectors

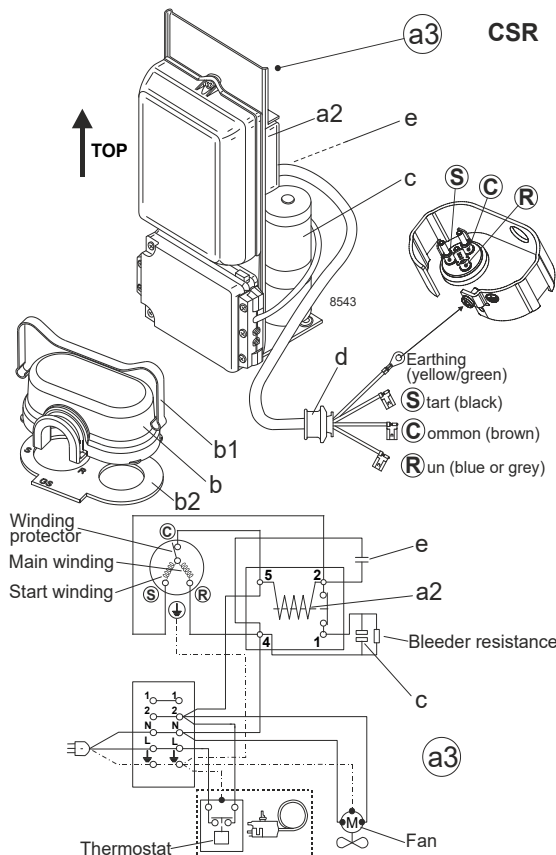
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Configuration

Motor configuration	CSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	LBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	CCC
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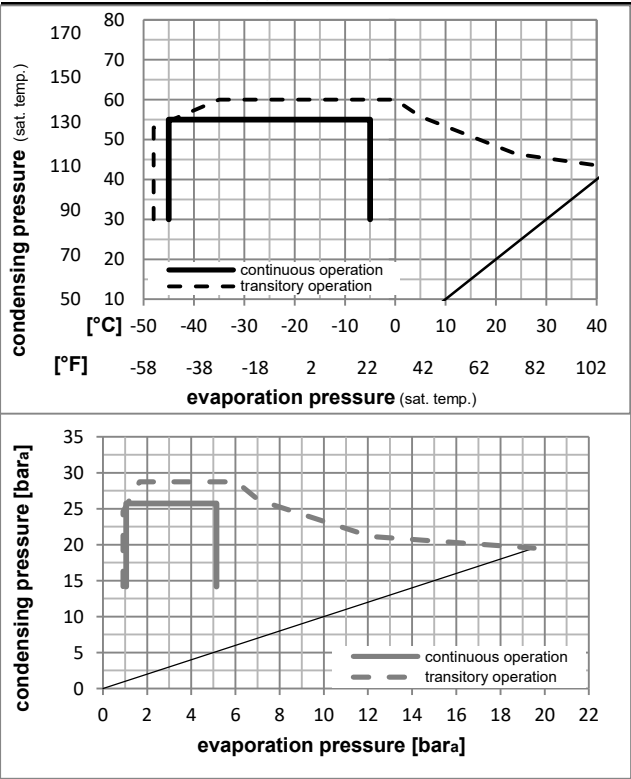
Electrical accessories / wiring diagram



Ambient/ machine room temperatures minimum /maximum

Ambient temperature range:	10 - 38°C / 50 - 101°F
Machine room temperature range:	10 - 43°C / 50 - 110°F
Compressor cooling:	fan 3m/s

Operation pressure range



Components (cover, clamp, gasket: incl. and pre assemb.)

a3	GS starter kit	117-7074
b	cover	107B9101
b2	gasket	107B9100
b1	clamp	107B9104

Model

Designation **GS34CLX** **220-240V/50Hz** Conf. 1 Sales code: **107B0501**

Optimization + standard conditions

R404A, 220V/50Hz, CSCR, fan 3m/s, VDE, CCC, EAC

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)														
Return gas temp.														
Liquid temp.														
Cooling capacity														
COP														
EER														
Power consumption														
Current consumption														
Ref. mass flow														
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	P1	I	m		
[°C]										[W]	[A]	[kg/h]		
[°C]	-23	54	32	32	1912,6	6532	1646,0	1,44	4,93	1,24	1323,9	6,83	44,56	ASHRAE LBP
[°F]	-10	130	90	90										
[°C]	-25	55	32	55	1295,8	4425	1115,2	1,03	3,51	0,88	1262,1	6,58	40,50	cecomaf LBP
[°F]	-13	131	90	131										
[°C]	-35	40	20	40	1003,5	3427	863,6	1,09	3,71	0,93	924,5	4,93	27,27	EN12900 LBP
[°F]	-31	104	68	104										
[°C]	-23	49	4,4	49	1412,2	4823	1215,4	1,08	3,69	0,93	1306,7	6,57	50,00	ARI540 LBP
[°F]	-10	120	40	120										
[°C]	-23	41	32	32	2120,8	7243	1825,2	1,70	5,79	1,46	1250,5	6,29	49,42	AHAM LBP
[°F]	-10	105	90	90										
[°C]	-35	45	32	45	935,7	3195	805,2	1,01	3,43	0,86	930,9	4,92	25,01	opt
[°F]	-31	113	90	113										

Performance tables

R404A, 220V/50Hz, CSCR, fan 3m/s, VDE, CCC, EAC

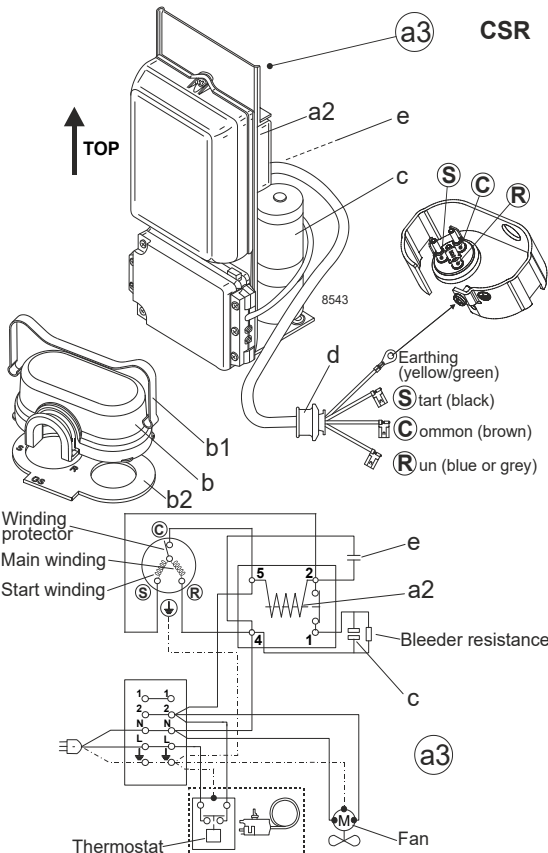
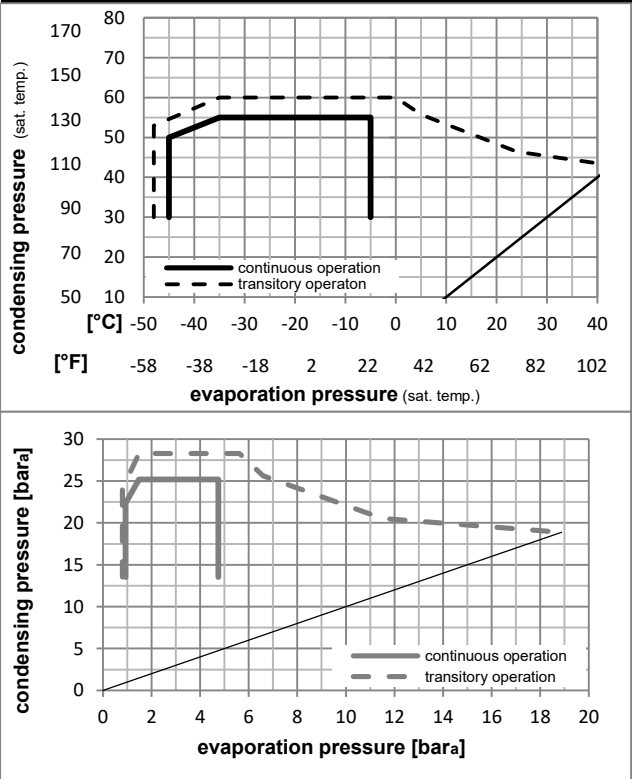
	pe		Cooling capacity			COP	EER		P1	I	m
	[°C]	[°F]	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]
[°C / °F]	-45	-49	437,8	1495	376,7	0,71	2,42	0,61	618,4	3,91	11,63
cond. pressure	-35	-31	935,7	3195	805,2	1,01	3,43	0,86	930,9	4,92	25,01
pc= 45/113	-30	-22	1257,0	4293	1081,8	1,16	3,98	1,00	1079,3	5,52	33,74
return gas temp.	-25	-13	1636,5	5589	1408,4	1,33	4,54	1,14	1231,5	6,19	44,14
RGT= 32/90	-20	-4	2081,9	7110	1791,7	1,49	5,10	1,28	1394,4	6,92	56,48
liquid temp	-15	5	2601,0	8883	2238,4	1,65	5,64	1,42	1574,8	7,72	71,05
Tliq= 45/113	-5	23	3893,8	13298	3351,0	1,93	6,60	1,66	2015,7	9,51	108,25
[°C / °F]	-45	-49	264,6	904	227,7	0,54	1,85	0,47	489,3	3,73	8,13
cond. pressure	-35	-31	696,3	2378	599,3	0,78	2,67	0,67	892,0	5,02	21,54
pc= 55/131	-30	-22	971,3	3317	835,9	0,90	3,08	0,78	1077,7	5,77	30,19
return gas temp	-25	-13	1295,8	4425	1115,2	1,03	3,51	0,88	1262,1	6,58	40,50
RGT= 32/90	-20	-4	1677,5	5729	1443,7	1,16	3,95	0,99	1452,0	7,45	52,78
liquid temp	-15	5	2124,6	7256	1828,5	1,28	4,39	1,11	1654,3	8,39	67,38
Tliq= 55/131	-5	23	3249,1	11096	2796,2	1,53	5,23	1,32	2123,4	10,46	105,17

Model				
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Motor configuration	CSCR			
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Refrigerant	R452A			
Application	LBP			
Voltage range	198-254V			
Starting torque	HST			
Approvals	VDE			
	CCC			
	EAC			

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Evaporating pressure (saturation temperature)					Condensing pressure (saturation temperature)						Power consumption																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Performance tables

R452A, 220V/50Hz, CSCR, fan 3m/s, VDE, CCC, EAC

	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]	-45	-49	447,0	1527	384,7	0,86	2,93	0,74	520,2	3,44	12,20		
cond. pressure	-35	-31	869,0	2968	747,9	1,02	3,48	0,88	852,5	4,44	23,85		
pc= 45/113	-30	-22	1186,9	4053	1021,4	1,19	4,06	1,02	999,1	4,88	32,69		
return gas temp.	-25	-13	1578,9	5392	1358,8	1,38	4,71	1,19	1144,9	5,32	43,68		
RGT= 32/90	-20	-4	2047,4	6992	1762,0	1,58	5,38	1,36	1298,9	5,78	56,93		
liquid temp	-15	5	2595,1	8863	2233,3	1,77	6,03	1,52	1470,3	6,29	72,60		
Tliq= 45/113	-5	23	3940,1	13456	3390,9	2,07	7,08	1,78	1901,7	7,59	111,96		
[°C / °F]	-45	-49	297,7	1017	256,2	0,75	2,56	0,64	397,5	3,07	9,33		
cond. pressure	-35	-31	644,0	2199	554,2	0,79	2,71	0,68	811,6	4,32	20,31		
pc= 55/131	-30	-22	916,3	3129	788,6	0,92	3,15	0,79	992,6	4,86	29,01		
return gas temp	-25	-13	1257,8	4295	1082,4	1,08	3,68	0,93	1168,3	5,39	40,02		
RGT= 32/90	-20	-4	1670,8	5706	1437,9	1,24	4,23	1,07	1347,9	5,92	53,48		
liquid temp	-15	5	2158,1	7370	1857,3	1,40	4,78	1,21	1540,4	6,50	69,57		
Tliq= 55/131	-5	23	3368,7	11505	2899,2	1,68	5,75	1,45	2001,2	7,88	110,57		