

Model

Designation	GS34MLX	220-240V/50Hz 1~	Sales code:	107B0524
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Compressor design

Oil type	Polyolester	Refrigerant(s)	R404A, R507, R452A
Oil viscosity	46cST	Displacement	33,8cm³ / 2,06cu.in
Oil quantity	906cm³ / 30,6fl.oz	Compressors on pallet	48
Refr. charge - tech. limit	2000g / 70,5oz		
Free gas volume comp.	3540cm³ / 119,7fl.oz		
Weight	22,3kg / 49,2lbs		
Motor protection	1# internal		
Winding resistance main	1,5Ω (at 25°C)		
Winding resistance aux	5,8Ω (at 25°C)		
Max. winding temp.			
Max. discharge temp.	130°C / 266°F		



General - Configurations with GS34MLX

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Motorconfiguration	CSCR	CSCR	CSCR	CSCR
Power supply (nominal)	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz	220-240V/50Hz
Number of phases	1	1	1	1
Voltage range	198-254V	198-254V	198-254V	198-254V
Approvals	VDE, EAC	VDE, EAC	VDE, EAC	VDE, EAC
Starting torque	HST	HST	HST	HST
Note	Cover, clamp, gasket: pre-assembled to compressor.			

Applications with GS34MLX

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Refrigerant	R404A	R452A	R448A	R449A
Application	MBP	MBP	MBP	MBP
System cooling	fan 3m/s	fan 3m/s	fan 3m/s	fan 3m/s
Hot gas defrost	OK	OK	OK	OK
Long interval pull down	OK	OK	OK	OK

Electrical data - Configurations with GS34MLX

	Conf. 1	Conf. 2	Conf. 3	Conf. 4
Starting device type	relay	relay	relay	relay
Run capacitor	20μF	20μF	20μF	20μF
Start capacitor	100μF	100μF	100μF	100μF
LRA (locked rotor amps / 4s)	46A	46A	46A	46A
RLA (rated load amps / 1s)	9,3A	9,3A	9,3A	9,3A
Cut in current	46A	46A	46A	46A
IP class	21	21	21	21

Model

Designation

GS34MLX

220-240V/50Hz 1~

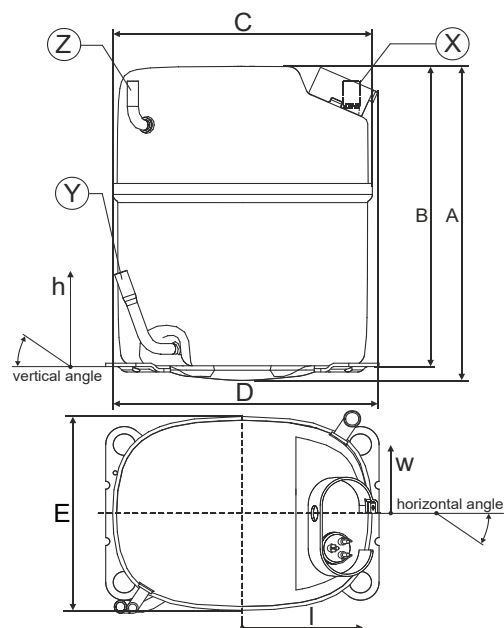
Sales code:

107B0524

Compressor dimensions

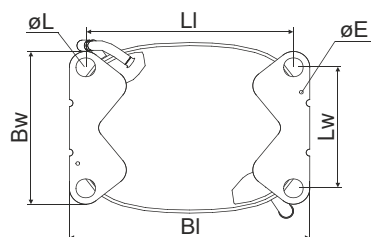
Housing	A Height	279mm / 10,98in
	B Height	267mm / 10,51in
	C Length shell	224mm / 8,82in
	D Length w. cover	232mm / 9,13in
	E Width	173mm / 6,81in

Connectors	Suction X	Discharge Y	Process Z
Diameter [mm]	øi 16,03-16,13	øi 6,45-6,55	øi 6,4-6,6
(i:inside, o:outside) [in]	øi 0,63-0,64	øi 0,25-0,26	øi 0,25-0,26
Material	copper	copper	copper
Horizontal angle	±2°	0°	0°
Vertical angle	±2°	90°	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	19	15
	[in]	0,7	0,7
			0,6



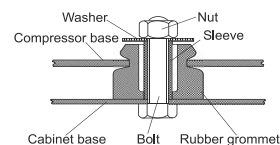
Compressor fixation

Bolt joint



Baseplate	[mm]	[inch]
BI	235	9.25
BW	154	6.06
øE	ø 3.6	ø 0.14

Large holes	[mm]	[inch]
LI	203	7.99
LW	122	4.80
øL	ø 19	ø 0.75



Mounting accessories

Bolt joint | M8 | ø19mm

one comp.

107B9150

Model

Designation

GS34MLX

220-240V/50Hz

Conf. 1

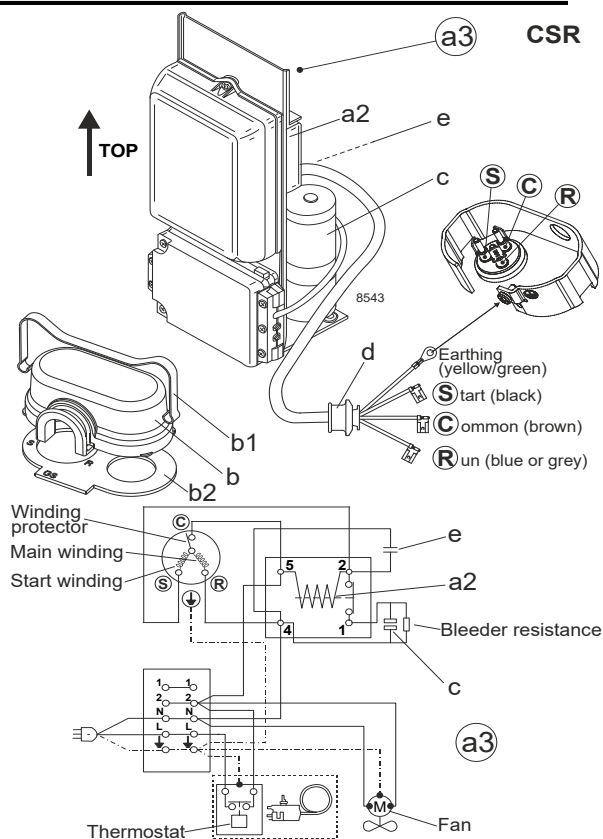
Sales code:

107B0524

Configuration

Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R404A
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	EAC

Electrical accessories / wiring diagram



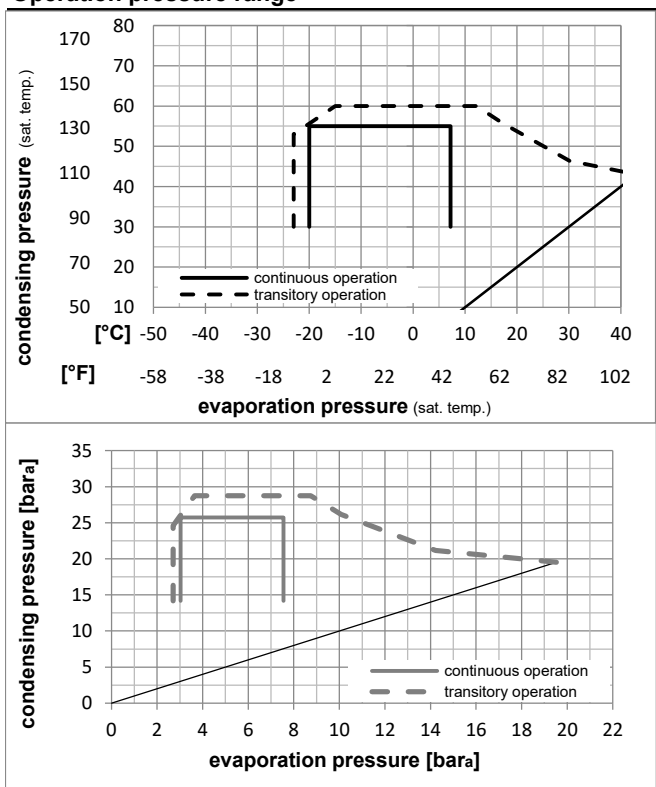
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)

T ambient	LBP	MBP	HBP
32°C / 90°F	n/a	fan 3m/s	n/a
38°C / 100°F	n/a	fan 3m/s	n/a
43°C / 110°F	n/a	fan 3m/s	n/a

Operation pressure range



Components (cover, clamp, gasket: pre assembled)

a3	GS starter kit (600mm)	117-7056
b	cover	107B9101
b2	gasket	107B9100
b1	clamp	107B9104

Model

Designation	GS34MLX	220-240V/50Hz	Conf. 1	Sales code:	107B0524
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Optimization + standard conditions

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

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)										Power consumption				
Return gas temp.										Current consumption				
Liquid temp.										Ref. mass flow				
Cooling capacity										P1				
COP										I				
EER										m				
pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]		
[°C]	[°F]												ASHRAE	
-6,66	20	54,4	35	46,1	3363,0	11485	2894,3	1,71	5,85	1,47	1962,8	10,21	92,53	MBP
[°C]	[°F]												cecomaf	
-10	14	55	32	55	2521,0	8610	2169,6	1,36	4,66	1,17	1848,1	9,74	80,70	MBP
[°C]	[°F]												EN12900	
-10	14	45	20	45	2953,1	10085	2541,5	1,71	5,85	1,47	1725,3	9,28	88,95	MBP
[°C]	[°F]												ARI540	
-6,66	20	48,9	18,3	48,9	3061,9	10457	2635,1	1,63	5,55	1,40	1883,4	9,92	100,05	MBP
[°C]	[°F]												opt	
-10	14	45	32	45	3136,9	10713	2699,7	1,82	6,21	1,56	1725,3	9,28	86,38	
[°C]	[°F]												opt	
-25	-13	45	32	45	1591,9	5437	1370,0	1,26	4,31	1,09	1260,4	7,64	42,94	

Performance tables

R404A, 220V/50Hz, CSCR, fan 3m/s, VDE, 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]	-20	-4	2041,7	6973	1757,1	1,44	4,92	1,24	1417,2	8,13	55,39
cond. pressure	-15	5	2552,7	8718	2196,9	1,63	5,55	1,40	1570,8	8,68	69,73
pc= 45/113	-10	14	3136,9	10713	2699,7	1,82	6,21	1,56	1725,3	9,28	86,38
return gas temp.	-6,7	20	3568,6	12188	3071,2	1,95	6,66	1,68	1829,8	9,72	98,87
RGT= 32/90	-5	23	3806,8	13001	3276,2	2,02	6,90	1,74	1884,8	9,95	105,83
liquid temp	0	32	4575,6	15627	3937,8	2,23	7,61	1,92	2053,2	10,67	128,64
Tliq= 45/113	7,2	45	5886,2	20102	5065,7	2,54	8,67	2,18	2319,5	11,82	168,79
[°C / °F]	-20	-4	1618,9	5529	1393,3	1,09	3,74	0,94	1479,7	8,38	50,94
cond. pressure	-15	5	2041,8	6973	1757,2	1,23	4,19	1,06	1665,1	9,03	64,75
pc= 55/131	-10	14	2521,0	8610	2169,6	1,36	4,66	1,17	1848,1	9,74	80,70
return gas temp	-6,7	20	2874,2	9816	2473,5	1,46	4,98	1,26	1969,6	10,24	92,66
RGT= 32/90	-5	23	3069,0	10481	2641,2	1,51	5,16	1,30	2032,9	10,50	99,34
liquid temp	0	32	3699,5	12634	3183,8	1,66	5,68	1,43	2223,4	11,33	121,32
Tliq= 55/131	7,2	45	4782,4	16333	4115,7	1,90	6,49	1,64	2515,9	12,62	160,50

Model

Designation

GS34MLX

220-240V/50Hz

Conf. 2

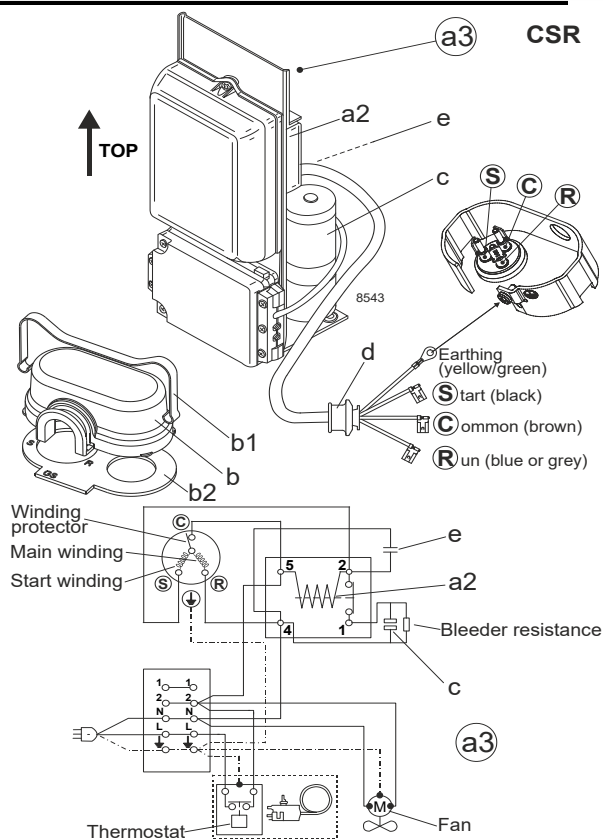
Sales code:

107B0524

Configuration

Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R452A
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	EAC

Electrical accessories / wiring diagram



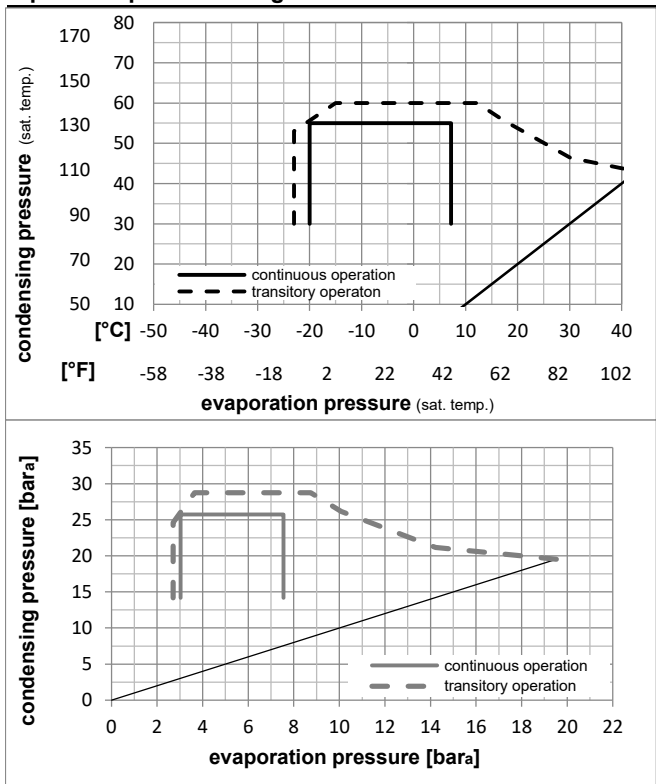
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	43°C / 110°F

System cooling (n/a: outside limits)

T ambient	LBP	MBP	HBP
32°C / 90°F	n/a	fan 3m/s	n/a
38°C / 100°F	n/a	fan 3m/s	n/a
43°C / 110°F	n/a	fan 3m/s	n/a

Operation pressure range



Components (cover, clamp, gasket: pre assembled)

a3	GS starter kit (600mm)	117-7056
b	cover	107B9101
b2	gasket	107B9100
b1	clamp	107B9104

Model

Designation

GS34MLX

220-240V/50Hz

Conf. 2

Sales code:

107B0524

Optimization + standard conditions

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

	Evaporating pressure (saturation temperature)										Power consumption			
	Condensing pressure (saturation temperature)										Current consumption			
	Return gas temp.										Ref. mass flow			
	Liquid temp.													
	Cooling capacity										COP	EER	P1	I
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,7	54,4	35	46,1	3424,6	11695	2947,2	1,85	6,31	1,59	1852,9	9,91	96,34	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	2568,4	8771	2210,4	1,48	5,05	1,27	1737,7	9,47	83,48	cecomaf MBP
[°F]	14	131	89,6	131										
[°C]	-10	45	20	45	2954,3	10089	2542,5	1,82	6,20	1,56	1626,7	9,05	90,77	EN12900 MBP
[°F]	14	113	68	113										
[°C]	-6,7	48,9	18,3	48,9	3105,5	10606	2672,6	1,74	5,96	1,50	1780,4	9,63	103,02	ARI540 MBP
[°F]	20	120	65	120										
[°C]	-10	45	32	45	3133,4	10701	2696,6	1,93	6,58	1,66	1626,7	9,05	88,29	opt
[°F]	14	113	89,6	113										
[°C]	-25	45	32	45	1546,5	5282	1330,9	1,32	4,52	1,14	1169,0	7,31	42,78	opt
[°F]	-13	113	89,6	113										

Performance tables

R452A, 220V/50Hz, CSCR, fan 3m/s, VDE, 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]	-20	-4	2003,6	6843	1724,4	1,51	5,17	1,30	1322,7		7,89	55,71
cond. pressure	-15	5	2527,7	8633	2175,4	1,72	5,86	1,48	1473,9		8,47	70,71
pc= 45/113	-10	14	3133,4	10701	2696,6	1,93	6,58	1,66	1626,7		9,05	88,29
return gas temp.	-6,7	20	3585,3	12244	3085,5	2,07	7,07	1,78	1730,7		9,45	101,57
RGT= 32/90	-5	23	3836,0	13101	3301,3	2,15	7,34	1,85	1785,7		9,65	109,00
liquid temp	0	32	4651,8	15887	4003,4	2,38	8,13	2,05	1955,1		10,30	133,51
Tliq= 45/113	7,2	45	6061,6	20701	5216,6	2,72	9,30	2,34	2226,1		11,33	177,08
[°C / °F]	-20	-4	1614,7	5514	1389,6	1,17	4,01	1,01	1374,7		8,09	51,68
cond. pressure	-15	5	2058,5	7030	1771,5	1,32	4,52	1,14	1556,5		8,78	66,35
pc= 55/131	-10	14	2568,4	8771	2210,4	1,48	5,05	1,27	1737,7		9,47	83,48
return gas temp	-6,7	20	2948,7	10070	2537,6	1,59	5,42	1,37	1859,0		9,93	96,44
RGT= 32/90	-5	23	3160,0	10792	2719,5	1,64	5,61	1,41	1922,5		10,17	103,71
liquid temp	0	32	3849,8	13148	3313,2	1,82	6,22	1,57	2115,4		10,91	127,83
Tliq= 55/131	7,2	45	5052,7	17256	4348,4	2,09	7,14	1,80	2415,9		12,05	171,25

Model

Designation

GS34MLX

220-240V/50Hz

Conf. 3

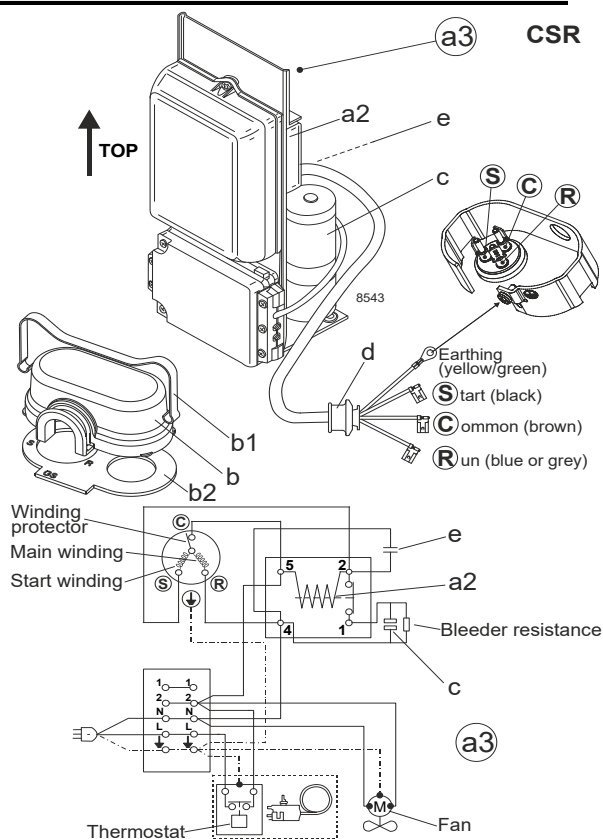
Sales code:

107B0524

Configuration

Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R448A
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE
	EAC

Electrical accessories / wiring diagram



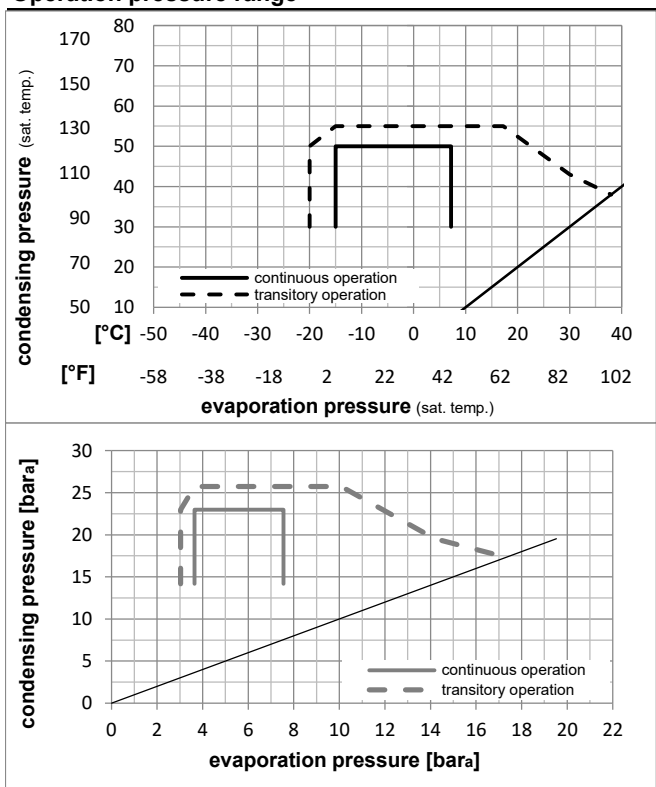
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)

T ambient	LBP	MBP	HBP
32°C / 90°F	n/a	fan 3m/s	n/a
38°C / 100°F	n/a	fan 3m/s	n/a
43°C / 110°F	n/a	n/a	n/a

Operation pressure range



Components (cover, clamp, gasket: pre assembled)

a3	GS starter kit (600mm)	117-7056
b	cover	107B9101
b2	gasket	107B9100
b1	clamp	107B9104

Model

Designation	GS34MLX	220-240V/50Hz	Conf. 3	Sales code:	107B0524
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Optimization + standard conditions

R448A, 220V/50Hz, CSCR, fan 3m/s, VDE, EAC

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)										Power consumption				
Return gas temp.										Current consumption				
Liquid temp.										Ref. mass flow				
Cooling capacity										COP				
										EER				
										P1				
										I				
										m				
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,66	54,4	35	46,1	3217,4	10988	2768,9	1,83	6,24	1,57	1760,2	9,56	70,28	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	2473,2	8446	2128,4	1,50	5,13	1,29	1646,0	9,12	60,57	cecomaf MBP
[°F]	14	131	89,6	131										
[°C]	-10	45	20	45	2832,1	9672	2437,3	1,84	6,28	1,58	1539,8	8,72	66,25	EN12900 MBP
[°F]	14	113	68	113										
[°C]	-6,66	48,9	18,3	48,9	3030,2	10349	2607,9	1,79	6,12	1,54	1690,3	9,29	75,36	ARI540 MBP
[°F]	20	120	65	120										
[°C]	-10	45	32	45	2949,7	10074	2538,5	1,92	6,54	1,65	1539,8	8,72	64,45	opt
[°F]	14	113	89,6	113										
[°C]	-25	45	32	45	1415,2	4833	1217,9	1,30	4,43	1,12	1090,2	7,01	30,43	opt
[°F]	-13	113	89,6	113										

Performance tables

R448A, 220V/50Hz, CSCR, fan 3m/s, VDE, 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]	-15	5	2359,5	8058	2030,6	1,70	5,80	1,46	1389,4	8,15	51,24
cond. pressure	-12,2	10	2678,7	9148	2305,3	1,82	6,21	1,56	1473,1	8,47	58,36
pc= 45/113	-10	14	2949,7	10074	2538,5	1,92	6,54	1,65	1539,8	8,72	64,45
return gas temp.	-6,7	20	3392,6	11586	2919,7	2,07	7,06	1,78	1642,1	9,11	74,48
RGT= 32/90	-5	23	3639,1	12428	3131,9	2,15	7,33	1,85	1696,3	9,31	80,11
liquid temp	0	32	4444,3	15178	3824,8	2,39	8,15	2,05	1863,0	9,95	98,70
Tliq= 45/113	7,2	45	5842,9	19954	5028,4	2,74	9,37	2,36	2129,5	10,96	131,79
[°C / °F]	-15	5	1963,6	6706	1689,9	1,34	4,57	1,15	1467,4	8,44	47,75
cond. pressure	-12,2	10	2239,3	7648	1927,1	1,43	4,88	1,23	1567,1	8,82	54,66
pc= 55/131	-10	14	2473,2	8446	2128,4	1,50	5,13	1,29	1646,0	9,12	60,57
return gas temp	-6,7	20	2855,7	9753	2457,6	1,62	5,52	1,39	1766,0	9,58	70,31
RGT= 32/90	-5	23	3068,9	10481	2641,2	1,68	5,73	1,44	1828,9	9,82	75,79
liquid temp	0	32	3767,5	12867	3242,3	1,86	6,37	1,60	2020,4	10,55	93,96
Tliq= 55/131	7,2	45	4990,2	17042	4294,6	2,15	7,35	1,85	2319,6	11,68	126,65

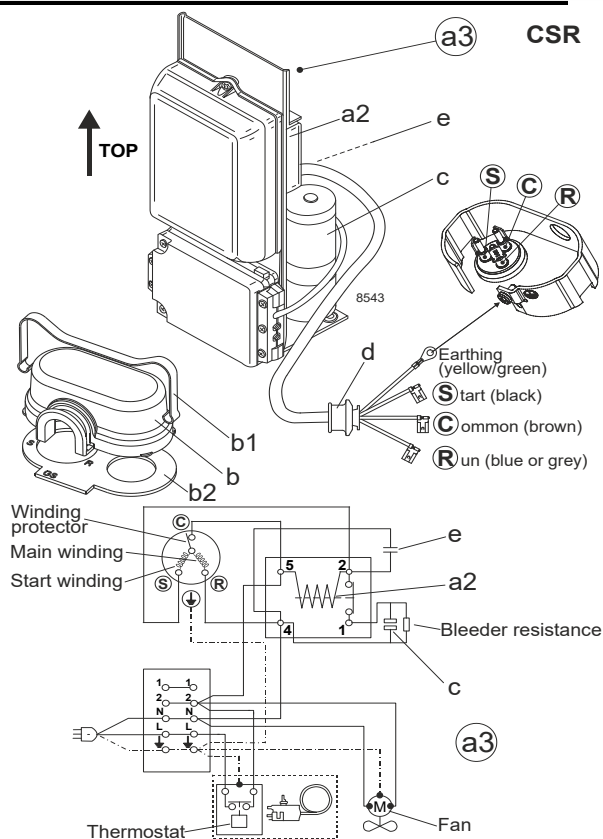
Model

Designation	GS34MLX	220-240V/50Hz	Conf. 4	Sales code:	107B0524
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Configuration

Motorconfiguration	CSCR
Power supply (nominal)	220-240V/50Hz 1~
Refrigerant	R449A
Application	MBP
Voltage range	198-254V
Starting torque	HST
Approvals	VDE EAC

Electrical accessories / wiring diagram



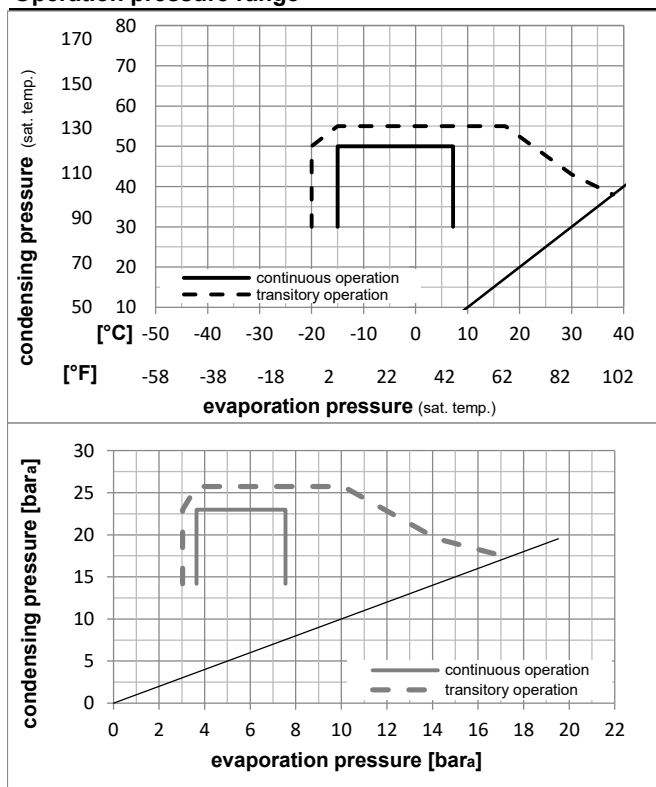
Ambient temperatures / system cooling

Ambient temperature min.:	10°C / 50°F
Ambient temperature max.:	38°C / 101°F

System cooling (n/a: outside limits)

T ambient	LBP	MBP	HBP
32°C / 90°F	n/a	fan 3m/s	n/a
38°C / 100°F	n/a	fan 3m/s	n/a
43°C / 110°F	n/a	n/a	n/a

Operation pressure range



Components (cover, clamp, gasket: pre assembled)

a3	GS starter kit (600mm)	117-7056
b	cover	107B9101
b2	gasket	107B9100
b1	clamp	107B9104

Model

Designation	GS34MLX	220-240V/50Hz	Conf. 4	Sales code:	107B0524
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Optimization + standard conditions

R449A, 220V/50Hz, CSCR, fan 3m/s, VDE, EAC

Evaporating pressure (saturation temperature)														
Condensing pressure (saturation temperature)										Power consumption				
Return gas temp.										Current consumption				
Liquid temp.										Ref. mass flow				
Cooling capacity										P1				
COP										I				
EER										m				
	pe	pc	RGT	Tliq	[W]	[Btu/h]	[kcal/h]	[W/W]	[Btu/Wh]	[kcal/Wh]	[W]	[A]	[kg/h]	
[°C]	-6,66	54,4	35	46,1	3205,3	10947	2758,5	1,83	6,26	1,58	1749,7	9,52	71,40	ASHRAE MBP
[°F]	20	130	95	115										
[°C]	-10	55	32	55	2460,8	8404	2117,8	1,50	5,13	1,29	1637,1	9,09	61,55	cecomaf MBP
[°F]	14	131	89,6	131										
[°C]	-10	45	20	45	2817,1	9621	2424,4	1,84	6,28	1,58	1532,5	8,69	67,28	EN12900 MBP
[°F]	14	113	68	113										
[°C]	-6,66	48,9	18,3	48,9	3012,0	10286	2592,1	1,79	6,12	1,54	1681,0	9,26	76,55	ARI540 MBP
[°F]	20	120	65	120										
[°C]	-10	45	32	45	2937,2	10031	2527,8	1,92	6,55	1,65	1532,5	8,69	65,45	opt
[°F]	14	113	89,6	113										
[°C]	-25	45	32	45	1411,4	4820	1214,7	1,30	4,43	1,12	1086,9	7,00	30,95	opt
[°F]	-13	113	89,6	113										

Performance tables

R449A, 220V/50Hz, CSCR, fan 3m/s, VDE, 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]	-15	5	2350,5	8027	2022,9	1,70	5,80	1,46	1383,6	8,13	52,05
cond. pressure	-12,2	10	2667,9	9111	2296,0	1,82	6,21	1,57	1466,5	8,44	59,28
pc= 45/113	-10	14	2937,2	10031	2527,8	1,92	6,55	1,65	1532,5	8,69	65,45
return gas temp.	-6,7	20	3377,6	11535	2906,8	2,07	7,06	1,78	1633,7	9,08	75,63
RGT= 32/90	-5	23	3622,7	12372	3117,7	2,15	7,33	1,85	1687,2	9,28	81,34
liquid temp	0	32	4423,2	15106	3806,6	2,39	8,16	2,06	1851,6	9,90	100,20
Tliq= 45/113	7,2	45	5813,5	19854	5003,1	2,75	9,39	2,37	2113,6	10,90	133,78
[°C / °F]	-15	5	1954,6	6675	1682,1	1,34	4,57	1,15	1460,7	8,42	48,54
cond. pressure	-12,2	10	2228,4	7611	1917,8	1,43	4,88	1,23	1559,2	8,79	55,55
pc= 55/131	-10	14	2460,8	8404	2117,8	1,50	5,13	1,29	1637,1	9,09	61,55
return gas temp	-6,7	20	2840,9	9702	2444,9	1,62	5,53	1,39	1755,4	9,54	71,44
RGT= 32/90	-5	23	3052,7	10426	2627,2	1,68	5,74	1,45	1817,4	9,77	77,00
liquid temp	0	32	3746,8	12796	3224,6	1,87	6,38	1,61	2005,6	10,49	95,45
Tliq= 55/131	7,2	45	4961,8	16946	4270,2	2,16	7,37	1,86	2298,8	11,60	128,66