QVANTUM
HEAT PUMPS FOR SUSTAINABLE CITIES

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QVANTUM LB4 – TECHNICAL DATA

Specification		Q48LB4	Q65LB4	Q81LB4	Q96LB4	Q123LB4	Q144LB4	Q162LB4	Q192LB4
Heating capacity according to EN14511									
Heating capacity A7/W35	kW	40,0	57,6	66,8	80,0	100,2	120,0	133,6	160,0
Heating capacity A7/W45	kW	40,5	57,2	67,6	81,0	101,4	121,5	135,2	162,0
Heating capacity A2/W45	kW	35,6	50,4	59,4	71,2	89,1	106,8	118,8	142,4
Heating capacity A-5/W65	kW	33,1	46,6	55,2	66,2	82,8	99,3	110,4	132,4
COP A7/W35		4,4	4,6	4,5	4,4	4,5	4,4	4,5	4,4
COP A7/W45		3,8	3,9	3,9	3,8	3,9	3,8	3,9	3,8
SCOP average climate, 35°C/55°C		4,98/4,13	5,19/4,29	5,08/4,22	-	-	-	-	-
SCOP colder climate, 35°C/55°C		4,54/3,85	4,69/3,96	4,63/3,92	-	-	-	-	-
Energy efficiency class									
Energy efficiency class, space heating, 35°C/55°C		A+++ / A+++	A+++ / A+++	A+++ / A+++	-	-	-	-	-
Condensor									
Condensor flow rate (ΔT=7K at A7/W45)	l/s	1,39	1,96	2,32	2,78	3,48	4,16	4,63	5,55
Pressure drop condensor	kPa	25,0	17,0	19,0	18,0	15,0	15,0	18,0	23,0
Max operating temperature	°C	65,0	65,0	65,0	65,0	65,0	65,0	65,0	65,0
Min outdoor temperature at +65°C flow temperature	°C	-20	-20	-20	-20	-20	-20	-20	-20
Connection size condensor	mm	Cu42.0	Cu54.0	Cu54.0	Cu54.0	Cu54.0	Cu54.0	DN65 int thread	DN65 int thread
Evaporator									
Evaporator flow rate (ΔT=4K at A7/W45)	l/s	2,50	3,60	4,20	5,00	5,42	6,44	7,20	9,20
Brine volume (fan unit including pipe 2x25 m)	liters	251	350	350	357	662	689	671	705
Connection size evaporaor	mm	Cu35.0	Cu54.0	Cu54.0	Cu54.0	DN65 int thread	DN65 int thread	DN65 int thread	DN65 int thread
Dimensions compressor unit									
Weight	kg	294	345	355	410	590	610	690	710
Length	mm	600	1 500	1 500	1 500	2 100	2 100	2 100	2 100
Width	mm	640	640	640	640	640	640	640	640
Height	mm	1 665	1 410	1 410	1 410	1 410	1 410	1 410	1 430
Dimensions fan unit									
Weight	kg	298	419	419	545	667	730	995	1098
Width (all measurements with ±15 mm tolerance)	mm	2 510	4 105	4 105	5 954	4 133	4 749	5 982	5 982
Depth (all measurements with ±15 mm tolerance)	mm	1 541	1 541	1 541	1 541	2 343	2 343	2 343	2 343
Height (all measurements with ±15 tolerance)	mm	1 396	1 342	1 342	1 342	1 534	1 534	1 534	1 534
Compressor	Fully hermetic scroll								
No. compressors	pcs	1	2	2	2	3	3	4	4
No. refrigerant circuits	pcs	1	1	1	1	1	1	2	2
Refrigerant	R-407C								
Amount of refrigerant	kg	4,6	8,9	9,5	9,9	12,2	13,0	2x7,9	2x8,3
GWP (AR5)		1 624	1 624	1 624	1 624	1 624	1 624	1 624	1 624
CO_2(e)	tons	7,47	14,45	15,43	16,08	19,81	21,11	25,66	26,96
Outdoor fan unit									
No. fans	pcs	1	2	2	3	4	4	6	6
Air volume	m^3/s	3,70	6,89	6,89	9,9	13,18	13,42	18,8	18,45
Sound levels compressor unit									
Sound power level (L_{WA}) according to EN12102	dB(A)	47	50	50	50	51	51	53	53
Sound levels fan unit									
Sound pressure level 10 m according to EN13487	dB(A)	37	35	35	36	37	37	37	37
Power supply									
Nominal voltage	V-ph-Hz	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
Nominal voltage fans	V-ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50
Electric consumption									
Maximum electric consumption	A	30,1	41,5	50,5	59,9	76,5	90,6	100,9	119,7
Recommended fuse	A	50	50	63	80	125	125	125	2x80
Appearance									
Color side plates		White	White	White	White	White	White	White	White
Color stand		Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized	Galvanized