



Cross Reference:
**Walk-in Coolers
and Freezers**



Quick Calculations for Walk-In Coolers and Freezers -20°F Room

ROOM AREA SQ. FT.	ROOM VOLUME CU. FT.	BTUH TYPICAL LOAD	BTUH HEAVY LOAD	CONDENSING UNIT	COMPRESSOR	DACC EVAPORATOR	GBC BALL VALVES	TUAE THERMOSTATIC EXPANSION VALVE	# ORIFICE	EVR SOLENOID VALVE	AKVP ELECTRONIC EXPANSION VALVE	HEATCRAFT		KEEPRITE	RUSSELL	COPELAND
												Bohn	Larkin			
36	288	5187	7570	NA	NA	114U0011	009L7050	TUAE	7	032F1156	068F5214	BC 0022L ACZ	BC 0030L ACZ	KEZA030L8	R *F/B*O300L4S	FFAL-A17Z
48	384	6076	8510	LN YM0400	LLZ013T2A	114U0012	009L7050	TUAE	7	032F1156	068F5214	BC 0022L ACZ	BC 0035L ACZ	KEZA035L8	R *F/B*O350L4S	FFAL-A17Z
60	480	6908	9390	LN YM0400	LLZ013T2A	114U0012	009L7050	TUAE	8	032F1156	068F5214	BC 0022L ACZ	BC 0045L ACZ	KEZA035L8	R *F/B*O350L4S	FFAL-A22Z
64	512	7104	9610	LN YM0400	LLZ013T2A	114U0012	009L7050	TUAE	8	032F1156	068F5214	BC 0022L ACZ	BC 0045L ACZ	KEZA045L8	R *F/B*O400L4S	FFAL-A22Z
80	640	8066	10640	LN YM0500	LLZ015T2A	114U0013	009L7050	TUAE	8	032F1156	068F5214	BC 0045L ACZ	BC 0045L ACZ	KEZA045L8	R *F/B*O400L4S	FFAL-A26Z
96	768	12982	11620	LN YM0500	LLZ015T2A	114U0015	009L7051	TUAE	8	032F1157	068F5214	BC 0060L ACZ	BC 0055L ACZ	KEZA055L8	R *F/B*O500L4S	FFAL-A40Z
112	896	9865	12580	LN YM0600	LLZ018T2A	114U0014	009L7051	TUAE	8	032F1157	068F5214	BC 0045L ACZ	BC 0055L ACZ	KEZA055L8	R *F/B*O400L4S	FFAL-A26Z
128	1024	10720	13500	LN YM0600	LLZ018T2A	114U0014	009L7051	TUAE	9	032F1157	068F5214	BC 0055L ACZ	BC 0055L ACZ	KEZA055L8	R *F/B*O400L4S	FFAL-A30Z
144	1152	11553	14410	LR YM0600	LLZ018T2	114U0014	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	BC 0055L ACZ	KEZA060L8	R *F/B*O400L4S	FFAL-A30Z
160	1280	13031	15730	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	BC 0055L ACZ	KEZA060L8	R *F/B*O500L4S	FFAL-A40Z
176	1408	13830	16600	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	BC 0055L ACZ	KEZA060L8	R *F/B*O500L4S	FFAL-A40Z
192	2536	14617	27460	NA	NA	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	BC 0060L ACZ	KEZA130L8	R *F/B*O500L4S	FFAL-A40Z
208	1664	15392	18310	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	FFAL-A50Z
224	1792	16156	19140	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032L7110	068F5215	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	NA
240	1920	16912	19970	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032L7110	032L7110	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	NA
256	2048	17650	20790	LR YM0800	LLZ024T2A	114U0025	NA	NA	NA	NA	NA	NA	LC 0075L ACZ	KEZA085L8	R *F/B*O600L4S	NA
100	800	9152	11810	LN YM0500	LLZ015T2A	114U0014	009L7051	TUAE	8	032F1157	068F5214	BC 0045L ACZ	BC 0055L ACZ	KEZA055L8	R *F/B*O400L4S	FFAL-A26Z
120	960	10187	12940	LN YM0600	LLZ018T2A	114U0014	009L7051	TUAE	8	032F1157	068F5214	BC 0055L ACZ	BC 0055L ACZ	KEZA055L8	R *F/B*O400L4S	FFAL-A30Z
140	1120	11185	14020	LR YM0600	LLZ018T2	114U0014	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	BC 0055L ACZ	KEZA060L8	R *F/B*O400L4S	FFAL-A30Z
160	1280	12815	15520	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	BC 0055L ACZ	KEZA060L8	R *F/B*O500L4S	FFAL-A40Z
180	1440	13758	16550	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	BC 0055L ACZ	KEZA060L8	R *F/B*O500L4S	FFAL-A40Z
200	1600	14682	17560	LR YM0800	LLZ024T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	BC 0060L ACZ	KEZA075L8	R *F/B*O500L4S	FFAL-A40Z
240	1920	16480	19530	LR YM0800	LLZ024T2A	114U0015	009L7051	NA	NA	032L7110	068F5215	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	NA
280	2240	18227	21460	NA	NA	114U0025	009L7051	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA085L8	R *F/B*OS08L4S	NA
144	1152	11338	14190	LR YM0600	LLZ018T2	114U0014	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	BC 0055L ACZ	KEZA060L8	R *F/B*O400L4S	FFAL-A30Z
100	1344	13100	13050	LN YM0600	LLZ018T2A	114U0015	009L7051	TUAE	9	032F1157	068F5214	BC 0060L ACZ	BC 0055L ACZ	KEZA055L8	R *F/B*O500L4S	FFAL-A40Z
192	1536	14185	17030	LR YM0800	LLZ024T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	BC 0060L ACZ	KEZA075L8	R *F/B*O500L4S	FFAL-A40Z
216	1728	15236	18180	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	FFAL-A50Z
240	1920	16246	19300	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032F1157	068F5215	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	NA
264	2112	17274	20430	LR YM0800	LLZ024T2A	114U0025	009L7051	TUAE	9	032L7110	068F5215	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	NA
196	1568	14326	17190	LR YM0800	LLZ024T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0060L ACZ	BC 0060L ACZ	KEZA075L8	R *F/B*O500L4S	FFAL-A40Z
224	1792	15509	18490	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032L7110	068F5215	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	NA
280	2240	17795	21030	LR YM0800	LLZ024T2A	114U0025	009L7051	NA	NA	032L7110	068F5215	NA	LC 0100L BCZ	KEZA085L8	R *F/B*O600L4S	NA
336	2688	20441	23920	NA	NA	114U0031	009L7051	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA085L8	R *F/B*OS08L4S	NA
256	2048	16795	19920	LR YM0800	LLZ024T2A	114U0015	009L7051	TUAE	9	032F1157	068F5215	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O600L4S	NA
320	2560	39124	44540	NA	NA	NA	009L7052	NA	NA	032L7144	068F5217	NA	LC 0150L BCZ	KEZA170L8	NA	NA
384	3072	22129	25820	NA	NA	114U0031	009L7051	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA100L8	R *F/B*OS08L4S	NA
324	2592	19850	23270	NA	NA	114U0025	009L7051	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA085L8	R *F/B*OS08L4S	NA
360	2880	21182	24760	NA	NA	114U0031	009L7051	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA130L8	R *F/B*OS08L4S	NA
432	3456	23781	27680	NA	NA	114U0018	009L7051	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA130L8	R *F/B*OS10L4S	NA
400	3200	22611	26370	NA	NA	114U0031	009L7051	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA130L8	R *F/B*OS08L4S	NA
480	3840	26066	29950	NA	NA	114U0018	009L7051	NA	NA	032L7116	068F5216	NA	LC 0130L BCZ	KEZA130L8	R *F/B*OS10L4S	NA
560	4480	28788	33030	NA	NA	NA	009L7051	NA	NA	032L7116	068F5216	NA	LC 0130L BCZ	KEZA130L8	R *F/B*OS10L4S	NA
640	5120	31894	36490	NA	NA	NA	009L7052	NA	NA	032L7144	068F5216	NA	LC 0150L BCZ	KEZA150L8	R *F/B*OS13L4S	NA
720	5760	34516	39460	NA	NA	NA	009L7052	NA	NA	032L7144	068F5217	NA	LC 0150L BCZ	KEZA150L8	R *F/B*OS13L4S	NA
800	6400	37762	42840	NA	NA	NA	009L7052	NA	NA	032L7144	068F5217	NA	LC 0150L BCZ	KEZA170L8	R *F/B*OS15L4S	NA
960	7680	42487	48270	NA	NA	NA	009L7052	NA	NA	032L1209	068F5217	NA	NA	NA	NA	NA
1120	8960	48059	54320	NA	NA	NA	009L7053	NA	NA	032L7122	068F5217	NA	NA	NA	NA	NA
1280	10240	52973	59940	NA	NA	NA	009L7053	NA	NA	032L7149	068F5218	NA	NA	NA	NA	NA
2440	11520	58047	65490	NA	NA	NA	009L7053	NA	NA	032L7149	068F5218	NA	NA	NA	NA	NA
1600	12800	62848	71000	NA	NA	NA	009L7053	NA	NA	032L7149	068F5218	NA	NA	NA	NA	NA

Quick Calculations for Walk-In Coolers and Freezers -20°F Room

KEY

Electrical code

- N: Compressor & fan(s) 230V, 1ph, 60Hz
- Q: Compressor 208-230V, 3ph, 60Hz and Fan(s) 230V, 1ph, 60Hz
- R: Compressor 420-460V, 3ph, 60Hz and Fan(s) 460V, 1ph, 60Hz

Version

- WH: Electrical box, Receiver, Dual pressure control, Fan speed controller or Fan cycling, Defrost Timer, Outdoor enclosure, Suction Accumulator (LBP)
- WL: WH+Low Ambient Kit

GBC valves are solder connection type and include a service port.
Electronic control model ERC213 (115V), ERC214 (220V) – includes 2 NTC sensors.
TUAE expansion valves (068U3859) with threaded connection; the orifice is sold separately (sizes 0–9).
Electronic expansion valves require an installation kit (temperature sensor, pressure transducer, and AK-CC 55 Compact controller).

Orifice Product Code	0	1	2	3	4	5	6	7	8	9
	068U1030	068U1031	068U1032	068U1033	068U1034	068U1035	068U1036	068U1037	068U1038	068U1039

Danfoss Quick Calculations Tables give typical and heavy load estimates based on the conditions in each room temperature table. Conditions include construction, loading, and room surroundings. If your conditions are very different from the typical or heavy conditions, then figure a load estimate specifically for your job.

Model no.	Version	Electrical code	Code no.	Compressor model
LNYM0400	WH	Q	114N3652	LLZ013
	WL	Q	114N3594	
LNYM0500	WH	Q	114N3653	LLZ015
	WL	Q	114N3595	
LNYM0600	WH	Q	114N3654	LLZ018
	WL	Q	114N3596	
LRYM0800	WH	Q	114N3655	LLZ024
	WL	Q	114N3597	

T.E	-30 °F
T.C	95 °F
SH	14.4 °F
Refrigerant	R-448A
SC	1° F

Typical Load Conditions:
Danfoss Cold Solutions Program automatically figures typical loads. Here are the “typical” conditions:

- Product - In at -10°
- a) Specific heat of product is 0.45 BTU per pound
 - b) Product loaded in a 24 hour period
 - c) Freezing point of product is 27°.
 - d) Reduce product to -20°F in 24 hours.
 - e) Pounds of -10° product EQUALS room volume (cu. ft.)

- External Temperatures
- a) 95°F on all four walls,
 - b) 115°F on the ceiling (solar effect)
 - c) 55°F on the floor

Insulation - 4” Urethane
4” urethane on the walls, ceiling, and floor with R = 25 and k = 0.16

- Infiltration - 2 times Average
- a) 95°F air enters room through the door at 50% relative humidity.
 - b) The door openings cause TWICE the number of air changes listed in AVERAGE AIR CHANGES FOR STORAGE ROOMS’ table.

- Miscellaneous
- a) Lighting - One watt per square foot of floor area.
 - b) “People Load - charged at 1 person per 25000 cu. ft. of room volume
 - c) Motors - charged at 1 HP per 12500 cu. ft. of room volume

- Heavy Load’ Conditions:
- Same as ‘Typical’ except:
- a) Pounds of product is 3 times cu. ft.
 - b) People load is 1 person.

Safety Factor - 10%
10% safety factor is added to the product, transmission, infiltration, and miscellaneous loads described above.

Run time -18 hrs, electric defrost
18 hour condensing unit run time. The BTU load for 24 hours is divided by 18 to yield the hourly heat load reported in this table.

Quick Calculations for Walk-In Coolers and Freezers -10°F Room

ROOM AREA SQ. FT.	ROOM VOLUME CU. FT.	BTUH TYPICAL LOAD	BTUH HEAVY LOAD	CONDENSING UNIT	COMPRESSOR	DACC EVAPORATOR	GBC BALL VALVES	TUAE THERMOSTATIC EXPANSION VALVE	# ORIFICE	EVR SOLENOID VALVE	AKVP ELECTRONIC EXPANSION VALVE	HEATCRAFT		KEEPRITE	RUSSELL	COPELAND
												Bohn	Larkin			
36	288	4859	7070	NA	NA	114U0011	009L7050	TUAE	6	032F1156	068F5214	BC 0010L ACZ	LC 0010L BCZ	KEZA015L8	R *F/B*O230L4S	FFAL-A14Z
48	384	5692	7960	NA	NA	114U0011	009L7050	TUAE	7	032F1156	068F5214	BC 0010L ACZ	LC 0018L BCZ	KEZA020L8	R *F/B*O250L4S	FFAL-A14Z
60	480	8573	10890	LN YM0400	LLZ013T2	114U0013	009L7050	TUAE	8	032F1156	068F5214	BC 0025L ACZ	LC 0025L ACZ	KEZA020L8	R *F/B*O300L4S	FFAL-A15Z
64	512	6654	8990	NA	NA	114U0012	009L7050	TUAE	7	032F1156	068F5214	BC 0022L ACZ	LC 0022L BCZ	KEZA020L8	R *F/B*O250L4S	FFAL-A15Z
80	640	7555	9960	NA	NA	114U0012	009L7050	TUAE	7	032F1156	068F5214	BC 0025L ACZ	LC 0022L BCZ	KEZA025L8	R *F/B*O250L4S	NA
96	768	8413	10890	LN YM0400	LLZ013T2	114U0013	009L7050	TUAE	8	032F1156	068F5214	BC 0030L ACZ	LC 0025L ACZ	KEZA030L8	R *F/B*O300L4S	FFAL-A15Z
112	896	9239	11790	LN YM0400	LLZ013T2	114U0014	009L7051	TUAE	8	032F1157	068F5214	BC 0030L ACZ	LC 0030L BCZ	KEZA035L8	R *F/B*O350L4S	FFAL-A26Z
128	1024	10039	12660	LN YM0500	LLZ015T2A	114U0014	009L7051	TUAE	8	032F1157	068F5214	BC 0030L ACZ	LC 0030L BCZ	KEZA035L8	R *F/B*O350L4S	FFAL-A26Z
144	1152	10818	13510	LN YM0500	LLZ015T2A	114U0014	009L7051	TUAE	8	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA035L8	R *F/B*O350L4S	NA
160	1280	12225	14780	LN YM0500	LLZ015T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0045L ACZ	LC 0035L BCZ	KEZA045L8	R *F/B*O400L4S	FFAL-A30Z
176	1408	12973	15600	LN YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0045L ACZ	LC 0035L BCZ	KEZA045L8	R *F/B*O400L4S	FFAL-A30Z
192	1538	13708	16400	LN YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA045L8	R *F/B*O500L4S	FFAL-A30Z
208	1664	14432	17200	LR YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA055L8	R *F/B*O500L4S	FFAL-A30Z
224	1792	15146	17980	LR YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032L7110	068F5216	BC 0055L ACZ	LC 0045L BCZ	KEZA055L8	R *F/B*O500L4S	FFAL-A30Z
240	1920	15851	18760	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032L7110	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA055L8	R *F/B*O500L4S	FFAL-A30Z
256	2048	16549	19520	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032L7110	068F5216	BC 0055L ACZ	LC 0055L BCZ	KEZA055L8	R *F/B*O600L4S	FFAL-A40Z
100	800	8573	11070	LN YM0400	LLZ013T2	114U0013	009L7051	TUAE	8	032F1157	068F5214	BC 0025L ACZ	LC 0025L ACZ	KEZA025L8	R *F/B*O300L4S	FFAL-A15Z
120	960	9543	12130	LN YM0500	LLZ015T2A	114U0014	009L7051	TUAE	8	032F1157	068F5214	BC 0030L ACZ	LC 0030L BCZ	KEZA030L8	R *F/B*O350L4S	FFAL-A26Z
140	1120	10477	13150	LN YM0500	LLZ015T2A	114U0014	009L7051	TUAE	8	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA035L8	R *F/B*O350L4S	NA
160	1280	12028	14580	LN YM0500	LLZ015T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0045L ACZ	LC 0035L BCZ	KEZA045L8	R *F/B*O400L4S	FFAL-A30Z
180	1440	12911	15550	LN YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0045L ACZ	LC 0035L BCZ	KEZA045L8	R *F/B*O400L4S	FFAL-A30Z
200	1600	13775	16500	LN YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA045L8	R *F/B*O500L4S	FFAL-A30Z
240	1920	15457	18360	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032L7110	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA055L8	R *F/B*O500L4S	FFAL-A30Z
280	2240	17090	20170	LR YM0800	LLZ024T4A	114U0015	009L7051	NA	NA	032L7116	068F5216	BC 0055L ACZ	LC 0055L BCZ	KEZA055L8	R *F/B*O600L4S	FFAL-A40Z
144	1152	10621	13310	LN YM0500	LLZ015T2A	114U0014	009L7051	TUAE	8	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA035L8	R *F/B*O350L4S	NA
168	1344	12305	14890	LN YM0500	LLZ015T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0045L ACZ	LC 0035L BCZ	KEZA045L8	R *F/B*O400L4S	FFAL-A30Z
192	1536	13314	16010	LN YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA045L8	R *F/B*O500L4S	FFAL-A30Z
216	1728	14297	17100	LR YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA045L8	R *F/B*O500L4S	FFAL-A30Z
240	1920	15260	18160	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032L7110	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA055L8	R *F/B*O500L4S	FFAL-A30Z
264	2112	16206	19220	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032L7110	068F5216	BC 0055L ACZ	LC 0055L BCZ	KEZA055L8	R *F/B*O600L4S	FFAL-A40Z
196	1568	13446	16160	LN YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA045L8	R *F/B*O500L4S	FFAL-A30Z
224	1792	14554	17390	LR YM0600	LLZ018T2	114U0015	009L7051	TUAE	9	032F1157	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA055L8	R *F/B*O500L4S	FFAL-A30Z
280	2240	16696	19780	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032L7110	068F5216	BC 0055L ACZ	LC 0055L BCZ	KEZA055L8	R *F/B*O600L4S	FFAL-A40Z
336	2688	19202	22530	LR YM0800	LLZ024T2	114U0025	009L7051	NA	NA	032L7116	068F5216	BC 0060L ACZ	LC 0060L ACZ	KEZA060L8	R *F/B*O600L4S	FFAL-A50Z
256	2048	15761	18740	LR YM0800	LLZ024T4A	114U0015	009L7051	TUAE	9	032L7110	068F5215	BC 0055L ACZ	LC 0045L BCZ	KEZA055L8	R *F/B*O500L4S	FFAL-A30Z
320	2560	18533	21790	LR YM0800	LLZ024T2	114U0025	009L7051	NA	NA	032L7116	068F5216	BC 0060L ACZ	LC 0055L BCZ	KEZA060L8	R *F/B*O600L4S	FFAL-A40Z
384	3072	20786	24320	NA	NA	114U0031	009L7051	NA	NA	032L7116	068F5216	NA	LC 0075L ACZ	KEZA060L8	R *F/B*O508L4S	FFAL-A50Z
324	2592	18652	21930	LR YM0800	LLZ024T2	114U0025	009L7051	NA	NA	032L7116	068F5216	BC 0060L ACZ	LC 0055L BCZ	KEZA060L8	R *F/B*O600L4S	FFAL-A40Z
360	2880	19900	23330	NA	NA	114U0025	009L7051	NA	NA	032L7116	068F5216	NA	LC 0060L ACZ	KEZA060L8	R *F/B*O508L4S	FFAL-A50Z
432	3456	22336	26090	NA	NA	114U0031	009L7051	NA	NA	032L7116	068F5216	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O508L4S	NA
400	3200	21240	24850	NA	NA	114U0031	009L7051	NA	NA	032L7116	068F5216	NA	LC 0075L ACZ	KEZA075L8	R *F/B*O508L4S	NA
480	3840	24503	28260	NA	NA	114U0016	009L7051	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA075L8	R *F/B*O510L4S	NA
560	4480	27054	31160	NA	NA	114U0017	009L7052	NA	NA	032L7116	068F5216	NA	LC 0100L BCZ	KEZA085L8	R *F/B*O510L4S	NA
640	5120	29993	34450	NA	NA	114U0032	009L7052	NA	NA	032L7116	068F5217	NA	NA	KEZA100L8	R *F/B*O510L4S	NA
720	5760	32449	37280	NA	NA	114U0032	009L7052	NA	NA	032L7116	068F5217	NA	LC 0130L BCZ	KEZA100L8	R *F/B*O513L4S	NA
800	6400	35515	40470	NA	NA	114U0032	009L7052	NA	NA	032L1209	068F5217	NA	LC 0130L BCZ	KEZA130L8	R *F/B*O513L4S	NA
960	7680	40316	45980	NA	NA	114U0027	009L7053	NA	NA	032L7122	068F5217	NA	LC 0150L BCZ	KEZA130L8	R *F/B*O515L4S	NA
1120	8960	45232	51390	NA	NA	114U0028	009L7053	NA	NA	032L7149	068F5217	NA	LC 0150L BCZ	KEZA150L8	R *F/B*O515L4S	NA
1280	10240	49870	56730	NA	NA	114U0034	009L7053	NA	NA	032L7149	068F5218	NA	NA	KEZA150L8	NA	NA
1440	11520	54656	62020	NA	NA	114U0044	009L7053	NA	NA	032L7149	068F5218	NA	NA	KEZA170L8	NA	NA
1600	12800	59186	67250	NA	NA	114U0044	009L7053	NA	NA	032L1217	068F5218	NA	NA	N/A	NA	NA

Quick Calculations for Walk-In Coolers and Freezers -10°F Room

KEY

Electrical code

- N:** Compressor & fan(s) 230V, 1ph, 60Hz
Q: Compressor 208-230V, 3ph, 60Hz and Fan(s) 230V, 1ph, 60Hz
R: Compressor 420-460V, 3ph, 60Hz and Fan(s) 460V, 1ph, 60Hz

Version

- WH:** Electrical box, Receiver, Dual pressure control, Fan speed controller or Fan cycling, Defrost Timer, Outdoor enclosure, Suction Accumulator (LBP)
WL: WH+Low Ambient Kit

GBC valves are solder connection type and include a service port.
Electronic control model ERC213 (115V), ERC214 (220V) – includes 2 NTC sensors.
TUAE expansion valves (068U3859) with threaded connection; the orifice is sold separately (sizes 0–9).
Electronic expansion valves require an installation kit (temperature sensor, pressure transducer, and AK-CC 55 Compact controller).

Orifice Product Code	0	1	2	3	4	5	6	7	8	9
	068U1030	068U1031	068U1032	068U1033	068U1034	068U1035	068U1036	068U1037	068U1038	068U1039

For low evaporation temperatures (-10°F, -20°F, and -30°F), there are no fractional UC models available.

Danfoss Quick Calculations Tables give typical and heavy load estimates based on the conditions in each room temperature table. Conditions include construction, loading, and room surroundings. If your conditions are very different from the typical or heavy conditions, then figure a load estimate specifically for your job.

Model no.	Version	Electrical code	Code no.	Compressor model
LNYM0400	WH	Q	114N3652	LLZ013
	WL	Q	114N3594	
LNYM0500	WH	Q	114N3653	LLZ015
	WL	Q	114N3595	
LNYM0600	WH	Q	114N3654	LLZ018
	WL	Q	114N3596	
LRYM0800	WH	Q	114N3655	LLZ024
	WL	Q	114N3597	

T.E	-20 °F
T.C	95 °F
SH	14.4 °F
Refrigerant	R-448A
SC	1° F

Typical Load Conditions:
Danfoss Cold Solutions Program automatically figures typical loads. Here are the “typical” conditions:

- Product - In at -0°**
a) Specific heat of product is 0.45 BTU per pound
b) Product loaded in a 24 hour period
c) Freezing point of product is 27°.
d) Reduce product to -10° in 24 hours.
e) Pounds of 0° product EQUALS room volume (cu. ft.)

External Temperatures
a) 95° on all four walls,
b) 115° on the ceiling (solar effect)
c) 55° on the floor

Insulation - 4” Urethane
4” urethane on the walls, ceiling, and floor with R = 25 and k = 0.16

Infiltration - 2 times Average
a) 95° air enters room through the door at 50% relative humidity.
b) The door openings cause TWICE the number of air changes listed in AVERAGE AIR CHANGES FOR STORAGE ROOMS’ table.

Miscellaneous
a) Lighting - One watt per square foot of floor area.
b) “People Load - charged at 1 person per 25000 cu. ft. of room volume
c) Motors - charged at 1 HP per 12500 cu. ft. of room volume

Heavy Load’ Conditions:
Same as ‘Typical’ except:
a) Pounds of product is 3 times cu. ft.
b) People load is 1 person.

Safety Factor - 10%
10% safety factor is added to the product, transmission, infiltration, and miscellaneous loads described above.

Run time -18 hrs, electric defrost
18 hour condensing unit run time. The BTU load for 24 hours is divided by 18 to yield the hourly heat load reported in this table.

Quick Calculations for Walk-In Coolers and Freezers 0°F Room

BTUH HEAVY LOAD	CONDENSING UNIT	COMPRESSOR	DACC EVAPORATOR	GBC BALL VALVES	TUAЕ THERMOSTATIC EXPANSION VALVE	# ORIFICE	EVR SOLENOID VALVE	AKVP ELECTRONIC EXPANSION VALVE	HEATCRAFT		KEEPRITE	RUSSELL	COPELAND
									Bohn	Larkin			
6570	NA	NA	114U0012	009L7051	TUAЕ	6	032F1157	068F5213	BC 0010L ACZ	LC 0008L BCZ	KEZA008L8	R *F/B*O160L4S	FFAL-A13Z
7390	NA	NA	114U0012	009L7051	TUAЕ	6	032F1157	068F5214	BC 0010L ACZ	LC 0010L BCZ	KEZA010L8	R *F/B*O160L4S	FFAL-A14Z
8170	NA	NA	114U0012	009L7050	TUAЕ	6	032F1157	068F5214	BC 0010L ACZ	LC 0010L BCZ	KEZA010L8	R *F/B*O230L4S	FFAL-A15Z
8360	NA	NA	114U0012	009L7050	TUAЕ	6	032F1157	068F5214	BC 0010L ACZ	LC 0010L BCZ	KEZA015L8	R *F/B*O230L4S	FFAL-A15Z
9270	NA	NA	114U0014	009L7050	TUAЕ	7	032F1157	068F5214	BC 0010L ACZ	LC 0018L BCZ	KEZA015L8	R *F/B*O230L4S	FFAL-A15Z
10140	NA	NA	114U0012	009L7050	TUAЕ	7	032F1157	068F5214	BC 0010L ACZ	LC 0018L BCZ	KEZA020L8	R *F/B*O230L4S	FFAL-A15Z
10980	NA	NA	114U0013	009L7051	TUAЕ	7	032F1157	068F5214	BC 0022L ACZ	LC 0022L BCZ	KEZA020L8	R *F/B*O250L4S	FFAL-A17Z
11790	NA	NA	114U0013	009L7051	TUAЕ	8	032F1157	068F5214	BC 0022L ACZ	LC 0022L BCZ	KEZA020L8	R *F/B*O250L4S	FFAL-A22Z
12580	NA	NA	114U0014	009L7051	TUAЕ	8	032F1157	068F5214	BC 0025L ACZ	LC 0025L ACZ	KEZA020L8	R *F/B*O250L4S	FFAL-A26Z
13800	LN YM0400	LLZ013T2A	114U0014	009L7051	TUAЕ	8	032F1156	068F5215	BC 0025L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O300L4S	FFAL-A26Z
14570	LN YM0400	LLZ013T2	114U0014	009L7051	TUAЕ	8	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O350L4S	FFAL-A26Z
15320	LN YM0400	LLZ013T2	114U0014	009L7051	TUAЕ	9	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O350L4S	FFAL-A26Z
16060	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	8	032F1157	068F5214	BC 0030L ACZ	LC 0030L BCZ	KEZA030L8	R *F/B*O350L4S	FFAL-A26Z
16800	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	8	032F1157	068F5215	BC 0030L ACZ	LC 0035L BCZ	KEZA030L8	R *F/B*O350L4S	FFAL-A26Z
17520	LN YM0400	LLZ013T2	114U0015	009L7051	TUAЕ	9	032F1157	068F5215	BC 0035L ACZ	LC 0035L BCZ	KEZA030L8	R *F/B*O400L4S	FFAL-A30Z
18240	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	9	032L7110	068F5215	BC 0035L ACZ	LC 0035L BCZ	KEZA035L8	R *F/B*O400L4S	FFAL-A30Z
10310	NA	NA	114U0014	009L7050	TUAЕ	7	032F1157	068F5214	BC 0010L ACZ	LC 0018L BCZ	KEZA020L8	R *F/B*O230L4S	FFAL-A17Z
11300	NA	NA	114U0013	009L7051	TUAЕ	7	032F1157	068F5214	BC 0022L ACZ	LC 0022L BCZ	KEZA020L8	R *F/B*O250L4S	FFAL-A22Z
12250	NA	NA	114U0013	009L7051	TUAЕ	8	032F1157	068F5214	BC 0022L ACZ	LC 0022L BCZ	KEZA020L8	R *F/B*O250L4S	FFAL-A22Z
13630	LN YM0400	LLZ013T2A	114U0014	009L7051	TUAЕ	8	032F1156	068F5214	BC 0025L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O300L4S	FFAL-A26Z
14530	LN YM0400	LLZ013T2	114U0014	009L7051	TUAЕ	8	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O350L4S	FFAL-A26Z
15430	LN YM0400	LLZ013T2	114U0014	009L7051	TUAЕ	9	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O350L4S	FFAL-A26Z
17170	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	9	032F1157	068F5215	BC 0030L ACZ	LC 0035L BCZ	KEZA030L8	R *F/B*O400L4S	FFAL-A30Z
18860	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	9	032L7110	068F5215	BC 0035L ACZ	LC 0035L BCZ	KEZA035L8	R *F/B*O400L4S	FFAL-A30Z
12410	NA	NA	114U0013	009L7051	TUAЕ	8	032F1157	068F5214	BC 0022L ACZ	LC 0022L BCZ	KEZA020L8	R *F/B*O250L4S	FFAL-A22Z
13920	LN YM0400	LLZ013T2A	114U0014	009L7051	TUAЕ	8	032F1156	068F5215	BC 0025L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O300L4S	FFAL-A26Z
14970	LN YM0400	LLZ013T2	114U0014	009L7051	TUAЕ	8	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O350L4S	FFAL-A26Z
15990	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	9	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O350L4S	FFAL-A26Z
16990	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	8	032F1157	068F5215	BC 0030L ACZ	LC 0035L BCZ	KEZA030L8	R *F/B*O350L4S	FFAL-A26Z
17970	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	9	032F1157	068F5215	BC 0035L ACZ	LC 0035L BCZ	KEZA035L8	R *F/B*O400L4S	FFAL-A30Z
15110	LN YM0400	LLZ013T2	114U0014	009L7051	TUAЕ	9	032F1157	068F5215	BC 0030L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O350L4S	FFAL-A26Z
16260	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	8	032F1157	068F5214	BC 0030L ACZ	LC 0030L BCZ	KEZA025L8	R *F/B*O350L4S	FFAL-A26Z
17520	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	9	032F1157	068F5215	BC 0030L ACZ	LC 0035L BCZ	KEZA030L8	R *F/B*O400L4S	FFAL-A30Z
18750	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	9	032L7110	068F5215	BC 0035L ACZ	LC 0035L BCZ	KEZA035L8	R *F/B*O400L4S	FFAL-A30Z
17530	LN YM0500	LLZ015T2	114U0015	009L7051	TUAЕ	9	032F1157	068F5215	BC 0030L ACZ	LC 0035L BCZ	KEZA030L8	R *F/B*O400L4S	FFAL-A30Z
20420	LN YM0600	LLZ018T2	114U0015	009L7051	TUAЕ	9	032L7110	068F5216	BC 0035L ACZ	LC 0045L BCZ	KEZA035L8	R *F/B*O500L4S	FFAL-A40Z
22800	LRYM0600	LLZ018T2	114U0025	009L7051	TUAЕ	9	032L7116	068F5216	BC 0055L ACZ	LC 0045L BCZ	KEZA045L8	R *F/B*O500L4S	FFAL-A40Z
20550	LN YM0600	LLZ018T2	114U0015	009L7051	TUAЕ	9	032L7110	068F5216	BC 0035L ACZ	LC 0045L BCZ	KEZA035L8	R *F/B*O500L4S	FFAL-A40Z
21870	LRYM0600	LLZ018T2	114U0025	009L7051	TUAЕ	9	032L7116	068F5215	BC 0045L ACZ	LC 0045L BCZ	KEZA045L8	R *F/B*O500L4S	FFAL-A40Z
24460	LRYM0800	LLZ024T4A	114U0031	009L7051	NA	NA	032L7116	068F5216	BC 0055L ACZ	LC 0055L BCZ	KEZA045L8	R *F/B*O600L4S	FFAL-A50Z
23300	LRYM0600	LLZ018T2	114U0025	009L7051	TUAЕ	9	032L7116	068F5216	BC 0055L ACZ	LC 0045L BCZ	KEZA045L8	R *F/B*O500L4S	FFAL-A40Z
26530	LRYM0800	LLZ024T2	114U0031	009L7051	NA	NA	032L7116	068F5216	BC 0055L ACZ	LC 0055L BCZ	KEZA055L8	R *F/B*O600L4S	FFAL-A50Z
29260	NA	NA	114U0016	009L7052	NA	NA	032L7116	068F5216	BC 0055L ACZ	LC 0075L ACZ	KEZA055L8	R *F/B*OS08L4S	NA
32380	NA	NA	114U0017	009L7052	NA	NA	032L7116	068F5216	NA	LC 0065M ACZ	KEZA060L8	R *F/B*OS08L4S	NA
35020	NA	NA	114U0032	009L7052	NA	NA	032L7116	068F5217	NA	LC 0065M ACZ	KEZA060L8	R *F/B*OS08L4S	NA
38070	NA	NA	114U0032	009L7052	NA	NA	032L7116	068F5217	NA	LC 0070M ACZ	KEZA075L8	R *F/B*OS10L4S	NA
43290	NA	NA	114U0033	009L7052	NA	NA	032L1209	068F5217	NA	LC 0070M ACZ	KEZA075L8	R *F/B*OS10L4S	NA
48420	NA	NA	114U0028	009L7053	NA	NA	032L7121	068F5217	NA	LC 0141M ACZ	KEZA085L8	R *F/B*OS13L4S	NA
53490	NA	NA	114U0028	009L7053	NA	NA	032L1188	068F5217	NA	LC 0141M ACZ	KEZA100L8	R *F/B*OS13L4S	NA
58500	NA	NA	114U0034	009L7053	NA	NA	032L1188	068F5218	NA	NA	KEZA130L8	R *F/B*OS15L4S	NA
63460	NA	NA	114U0044	009L7053	NA	NA	032L1188	068F5218	NA	NA	KEZA130L8	R *F/B*OS15L4S	

Quick Calculations for Walk-In Coolers and Freezers 0°F Room

KEY

Electrical code

- N:** Compressor & fan(s) 230V, 1ph, 60Hz
- Q:** Compressor 208-230V, 3ph, 60Hz and Fan(s) 230V, 1ph, 60Hz
- R:** Compressor 420-460V, 3ph, 60Hz and Fan(s) 460V, 1ph, 60Hz

Version

- WH:** Electrical box, Receiver, Dual pressure control, Fan speed controller or Fan cycling, Defrost Timer, Outdoor enclosure, Suction Accumulator (LBP)
- WL:** WH+Low Ambient Kit

GBC valves are solder connection type and include a service port.

Electronic control model ERC213 (115V), ERC214 (220V) – includes 2 NTC sensors.

TUAE expansion valves (068U3859) with threaded connection; the orifice is sold separately (sizes 0–9).

Electronic expansion valves require an installation kit (temperature sensor, pressure transducer, and AK-CC 55 Compact controller).

T.E	-10 °F
T.C	95 °F
SH	14.4 °F
Refrigerant	R-448A
SC	1° F

2	3	4	5	6	7	8	9
068U1035	068U1033	068U1034	068U1035	068U1036	068U1037	068U1038	068U1039

For low evaporation temperatures (-10°F, -20°F, and -30°F), there are no fractional UC models available.

Danfoss Quick Calculations Tables give typical and heavy load estimates based on the conditions in each room temperature table. Conditions include construction, loading, and room surroundings. If your conditions are very different from the typical or heavy conditions, then figure a load estimate specifically for your job.

Model no.	Version	Electrical code	Code no.	Compressor model
LNYM0400	WH	Q	114N3652	LLZ013
	WL	Q	114N3594	
LNYM0500	WH	Q	114N3653	LLZ015
	WL	Q	114N3595	
LNYM0600	WH	Q	114N3654	LLZ018
	WL	Q	114N3596	
LRYM0800	WH	Q	114N3655	LLZ024
	WL	Q	114N3597	

Quick Calculations for Walk-In Coolers and Freezers 30°F Room

ROOM AREA SQ. FT.	ROOM VOLUME CU. FT.	BTUH TYPICAL LOAD	BTUH HEAVY LOAD	CONDENSING UNIT	COMPRESSOR	DACC EVAPORATOR	GBC BALL VALVES	TUAE THERMOSTATIC EXPANSION VALVE	# ORIFICE	EVR SOLENOID VALVE	AKVP ELECTRONIC EXPANSION VALVE	HEATCRAFT		KEEPRITE	RUSSELL	COPELAND
												Bohn	Larkin			
36	288	3483	5190	NA	NA	114U0000	009L7050	TUAE	4	032F1157	068F5212	NA	LC 0005MACZ	KEZA007H8	R *F/B*O060M4S	FFAM-A08Z
48	384	4095	5910	NA	NA	114U0000	009L7050	TUAE	4	032F1157	068F5213	NA	LC 0005MACZ	KEZA007H8	R *F/B*O060M4S	FFAM-A08Z
60	480	4668	6590	NA	NA	114U0000	009L7050	TUAE	5	032F1157	068F5213	BC 0005M ACZ	LC 0005MACZ	KEZA007H8	R *F/B*O060M4S	FFAM-A08Z
54	512	4812	6760	NA	NA	114U0000	009L7050	TUAE	5	032F1157	068F5213	BC 0005M ACZ	LC 0005MACZ	KEZA007H8	R *F/B*O060M4S	FFAM-A08Z
80	640	5485	7580	NA	NA	114U0001	009L7050	TUAE	5	032F1157	068F5213	NA	LC 0005MACZ	KEZA008H8	R *F/B*O060M4S	FFAM-A08Z
98	768	6126	8360	NA	NA	114U0001	009L7050	TUAE	5	032F1157	068F5214	BC 0005M ACZ	LC 0009M ACZ	KEZA008H8	R *F/B*O060M4S	FFAM-A08Z
112	896	6744	9120	NA	NA	114U0001	009L7050	TUAE	6	032F1157	068F5214	BC 0005M ACZ	LC 0005MACZ	KEZA009H8	R *F/B*O060M4S	FFAM-A10Z
128	1024	7343	9860	NA	NA	114U0001	009L7050	TUAE	6	032F1157	068F5214	BC 0008M ACZ	LC 0008M ACZ	KEZA010H8	R *F/B*O100M4S	FFAM-A10Z
144	1152	7927	10580	HJZM0150	NA	114U0001	009L7050	TUAE	6	032F1157	068F5214	BC 0008M ACZ	LC 0009M ACZ	KEZA009H8	R *F/B*O130E4S	FFAM-A12Z
160	1280	9078	11740	HJZM0150	NA	114U0002	009L7050	TUAE	6	032F1157	068F5214	BC 0015M ACZ	BC 0015M ACZ	KEZA011H8	R *F/B*O150E4S	FFAP-A15Z
176	1408	9639	12440	HJZM0150	NA	114U0002	009L7050	TUAE	6	032F1157	068F5214	BC 0015M ACZ	BC 0015M ACZ	KEZA011H8	R *F/B*O150E4S	FFAP-A17Z
192	1536	10192	13130	HJZM0150	NA	114U0004	009L7051	TUAE	7	032F1157	068F5215	BC 0015M ACZ	BC 0015M ACZ	KEZA015H8	R *F/B*O150E4S	FFAP-A17Z
208	1664	10736	13820	HNXM0200	MLZ015T2A	114U0004	009L7051	TUAE	7	032F1157	068F5214	BC 0015M ACZ	BC 0015M ACZ	KEZA020H8	R *F/B*O150E4S	FFAP-A20Z
240	1920	11560	14920	HNXM0200	MLZ015T1	114U0004	009L7051	TUAE	7	032F1157	068F5214	BC 0015M ACZ	BC 0020M ACZ	KEZA020H8	R *F/B*O180E4S	FFAP-A20Z
224	1792	11273	14490	HNXM0200	MLZ015T2A	114U0004	009L7051	TUAE	7	032F1157	068F5214	BC 0015M ACZ	BC 0020M ACZ	KEZA020H8	R *F/B*O180E4S	FFAP-A20Z
240	1920	11804	15170	HNXM0200	MLZ015T1A	114U0004	009L7051	TUAE	8	032F1156	068F5214	BC 0015M ACZ	BC 0020M ACZ	KEZA020H8	R *F/B*O180E4S	FFAP-A20Z
256	2048	12330	15830	HNXM0200	NA	114U0004	009L7051	TUAE	8	032F1156	068F5214	BC 0015M ACZ	BC 0020M ACZ	KEZA025H8	R *F/B*O180E4S	FFAP-A20Z
100	800	6252	8520	NA	NA	114U0001	009L7050	TUAE	6	032F1157	068F5214	BC 0005M ACZ	LC 0010M ACZ	KEZA009H8	R *F/B*O060M4S	FFAM-A08Z
120	960	6984	9130	HJZM0150	NA	114U0001	009L7050	TUAE	6	032F1157	068F5214	BC 0005M ACZ	LC 0009M ACZ	KEZA009H8	R *F/B*O060M4S	FFAM-A10Z
140	1120	7691	10310	HJZM0150	NA	114U0001	009L7050	TUAE	6	032F1157	068F5214	BC 0008M ACZ	LC 0010M ACZ	KEZA010H8	R *F/B*O100M4S	FFAM-A12Z
160	1280	8956	11610	HJZM0150	NA	114U0002	009L7050	TUAE	6	032F1157	068F5214	NA	BC 0015M ACZ	KEZA011H8	R *F/B*O150E4S	FFAP-A15Z
180	1440	9626	12460	HJZM0150	NA	114U0002	009L7051	TUAE	6	032F1157	068F5214	NA	BC 0015M ACZ	KEZA015H8	R *F/B*O150E4S	FFAP-A17Z
200	1600	10282	13290	HJZM0150	NA	114U0004	009L7051	TUAE	7	032F1157	068F5215	NA	BC 0015M ACZ	KEZA015H8	R *F/B*O150E4S	FFAP-A17Z
280	2240	12804	16520	HNXM0200	MLZ015T1A	114U0004	009L7051	TUAE	7	032F1157	068F5215	BC 0020M ACZ	BC 0025M ACZ	KEZA025H8	R *F/B*O200E4S	FFAP-A22Z
144	1152	7805	10460	HJZM0150	NA	114U0001	009L7050	TUAE	6	032F1157	068F5214	NA	BC 0015M ACZ	KEZA011H8	R *F/B*O100M4S	FFAM-A12Z
168	1344	9177	11910	HJZM0150	NA	114U0002	009L7051	TUAE	6	032F1157	068F5214	NA	BC 0015M ACZ	KEZA011H8	R *F/B*O150E4S	FFAP-A15Z
192	1536	9948	12890	HJZM0150	NA	114U0002	009L7051	TUAE	6	032F1157	068F5214	NA	BC 0015M ACZ	KEZA015H8	R *F/B*O150E4S	FFAP-A17Z
216	1728	10700	13850	HNXM0200	MLZ015T2A	114U0004	009L7050	TUAE	7	032F1156	068F5214	BC 0015M ACZ	BC 0020M ACZ	KEZA020H8	R *F/B*O150E4S	FFAP-A17Z
240	1920	11438	14800	HNXM0200	MLZ015T2A	114U0004	009L7050	TUAE	7	032F1156	068F5214	BC 0015M ACZ	BC 0020M ACZ	KEZA020H8	R *F/B*O180E4S	FFAP-A20Z
264	2112	12164	15740	HNXM0200	MLZ015T1A	114U0004	009L7050	TUAE	8	032F1156	068F5214	BC 0015M ACZ	BC 0025M ACZ	KEZA025H8	R *F/B*O180E4S	FFAP-A20Z
196	1568	10054	13030	HJZM0150	NA	114U0004	009L7051	TUAE	7	032F1156	068F5215	NA	BC 0020M ACZ	KEZA015H8	R *F/B*O150E4S	FFAP-A17Z
224	1792	10907	14130	HNXM0200	MLZ015T2A	114U0004	009L7050	TUAE	7	032F1156	068F5214	BC 0015M ACZ	BC 0020M ACZ	KEZA020H8	R *F/B*O150E4S	FFAP-A17Z
280	2240	12560	16270	HNXM0200	MLZ015T1A	114U0004	009L7050	TUAE	8	032F1156	068F5215	BC 0020M ACZ	BC 0025M ACZ	KEZA025H8	R *F/B*O200E4S	FFAP-A20Z
336	2688	14597	18800	HNXM0250	MLZ019T1	114U0003	009L7051	TUAE	8	032F1156	068F5215	BC 0020M ACZ	BC 0030M ACZ	KEZA025H8	R *F/B*O200E4S	FFAP-A22Z
256	2048	11842	15340	HNXM0200	MLZ015T1A	114U0004	009L7050	TUAE	8	032F1156	068F5214	BC 0015M ACZ	BC 0020M ACZ	KEZA020H8	R *F/B*O180E4S	FFAP-A22Z
320	2560	14093	18160	HNXM0250	MLZ019T1	114U0003	009L7051	TUAE	8	032F1157	068F5215	BC 0020M ACZ	BC 0030M ACZ	KEZA025H8	R *F/B*O250E4S	FFAP-A22Z
384	3072	15846	20480	HNXM0300	MLZ021T1A	114U0003	009L7051	TUAE	8	032L7110	068F5216	BC 0025M ACZ	BC 0030M ACZ	KEZA030H8	R *F/B*O250E4S	FFAP-A30Z
324	2592	14189	18290	HNXM0250	MLZ019T1	114U0003	009L7051	TUAE	8	032F1157	068F5216	BC 0020M ACZ	BC 0030M ACZ	KEZA025H8	R *F/B*O200E4S	FFAP-A22Z
360	2880	15164	19580	HNXM0250	MLZ019T1	114U0003	009L7051	TUAE	8	032L7110	068F5216	BC 0020M ACZ	BC 0030M ACZ	KEZA030H8	R *F/B*O250E4S	FFAP-A22Z
432	3456	17071	22120	HNXM0300	MLZ021T1A	114U0003	009L7051	TUAE	8	032L7110	068F5216	BC 0025M ACZ	BC 0030M ACZ	KEZA030H8	R *F/B*O280E4S	FFAP-A30Z
400	3200	16216	20990	HNXM0300	MLZ021T1A	114U0003	009L7051	TUAE	8	032L7110	068F5216	BC 0025M ACZ	BC 0030M ACZ	KEZA030H8	R *F/B*O250E4S	FFAP-A30Z
480	3840	18854	24190	HNXM0350	MLZ026T1	114U0005	009L7051	TUAE	9	032L7116	068F5216	BC 0030M ACZ	BC 0030M ACZ	KEZA030H8	R *F/B*O280E4S	FFAP-A32Z
560	4480	22108	28150	HNXM0400	MLZ030T1A	114U0005	009L7050	TUAE	9	032L7116	068F5216	BC 0030M ACZ	BC 0035M ACZ	KEZA035H8	R *F/B*O300E4S	FFAP-A32Z
640	5120	23277	30020	HNXM0400	MLZ030T1A	114U0005	009L7051	TUAE	9	032L7110	068F5216	BC 0030M ACZ	BC 0045M ACZ	KEZA040H8	R *F/B*O300E4S	FFAP-A32Z
720	5760	25219	32670	HNXM0400	MLZ030T2	114U0005	009L7051	TUAE	1	032L7116	068F5216	BC 0030M ACZ	BC 0050M ACZ	KEZA040H8	R *F/B*O350E4S	FFAP-A40Z
800	6400	27714	35730	HRXM0500	MLZ038T1A	114U0006	009L7051	TUAE	1	032L7116	068F5217	BC 0035M ACZ	BC 0055M ACZ	KEZA045H8	R *F/B*O400E4S	FFAP-A42Z
960	7680	31681	41100	HRXM0600	MLZ045T4A	114U0007	009L7051	TUAE	1	032L7116	068F5218	BC 0050M ACZ	BC 0060M ACZ	KEZA060H8	R *F/B*O450E4S	FFAP-A42Z
1120	8960	35721	46410	HRXM0500	MLZ038T1A	114U0007	009L7051	TUAE	1	032L7116	068F5218	NA	BC 0060M ACZ	KEZA060H8	R *F/B*O500E4S	FFAP-050Z
1280	10240	39570	51670	HRXM0700	MLZ048T2A	114U0008	009L7050	TUAE	2	032L7116	068F5218	BC 0060M ACZ	LC 0065M ACZ	KEZA061H8	R *F/B*O600E4S	FFAP-050Z
1440	11520	43516	56880	HRXM0750	MLZ058T4A	114U0009	009L7051	TUAE	3	032L7116	068F5218	BC 0060M ACZ	LC 0070M ACZ	KEZA070H8	R *F/B*O600E4S	FFAP-060Z
1600	12800	47289	62060	HRXM0750	MLZ058T2	114U0020	009L7051	TUAE	3	032L1188	068F5218	NA	LC 0070M ACZ	KEZA070H8	R *F/B*OS08E4S	FFAM-071Z

Quick Calculations for Walk-In Coolers and Freezers **30°F Room**

KEY

Electrical code

N: Compressor & fan(s) 230V, 1ph, 60Hz
Q: Compressor 208-230V, 3ph, 60Hz and Fan(s) 230V, 1ph, 60Hz

Version

WG: Electrical box, Receiver, Dual pressure control, Fan speed controller or Fan cycling, Defrost Timer, Outdoor enclosure (MBP)
WK: WG+Low Ambient Kit

GBC valves are solder connection type and include a service port.
Electronic control model ERC213 (115V), ERC214 (220V) – includes 2 NTC sensors.
TUAE expansion valves (068U3859) with threaded connection; the orifice is sold separately (sizes 0–9).
Electronic expansion valves require an installation kit (temperature sensor, pressure transducer, and AK-CC 55 Compact controller).

T.E	20 °F
T.C	95 °F
SH	14.4 °F
Refrigerant	R-448A
SC	1° F

Orifice Product Code	0	1	2	3	4	5	6	7	8	9
	068U1030	068U1031	068U1032	068U1033	068U1034	068U1035	068U1036	068U1037	068U1038	068U1039

For low evaporation temperatures (-10°F, -20°F, and -30°F), there are no fractional UC models available.

Danfoss Quick Calculations Tables give typical and heavy load estimates based on the conditions in each room temperature table. Conditions include construction, loading, and room surroundings. If your conditions are very different from the typical or heavy conditions, then figure a load estimate specifically for your job.

Model no.	Version	Electrical code	Code no.	Compressor model
HJZM0150	WG	N	114N3485	MTZ18
	WG	Q	114N3486	
	WK	N	114N3575	
	WK	Q	114N3576	
HNXM0200	WG	N	114N3487	MLZ15
	WG	Q	114N3488	
	WK	N	114N3577	
	WK	Q	114N3578	
HNXM0250	WG	N	114N3489	MLZ19
	WG	Q	114N3490	
	WK	N	114N3581	
	WK	Q	114N3582	
HNXM0300	WG	N	114N3491	MLZ21
	WG	Q	114N3492	
	WK	N	114N3579	
	WK	Q	114N3580	
HNXM0350	WG	N	114N3493	MLZ26
	WG	Q	114N3494	
	WK	N	114N3583	
	WK	Q	114N3584	
HNXM0400	WG	N	114N3495	MLZ30
	WG	Q	114N3496	
	WK	N	114N3585	
	WK	Q	114N3586	

Typical Load Conditions:
Danfoss Cold Solutions Program automatically figures typical loads. Here are the “typical” conditions:

- Product - In at +10°**
- a) Specific heat of product is 0.90
 - b) Product loaded in a 24 hour period
 - c) Freezing point of product is 27°.
 - d) Reduce product to 30° in 24 hours.
 - e) Pounds of +40° product EQUALS room volume (cu. ft.)

- External Temperatures**
- a) 95° on all four walls,
 - b) 115° on the ceiling (solar effect)
 - c) 55° on the floor

Insulation - 4” Urethane
4” urethane on the walls, ceiling, and floor with R = 25 and k = 0.16

- Infiltration - 2 times Average**
- a) 95° air enters room through the door at 50% relative humidity.
 - b) The door openings cause TWICE the number of air changes listed in ‘AVERAGE AIR CHANGES FOR STORAGE ROOMS’ table.

- Miscellaneous**
- a Lighting - One watt per square foot of floor area.
 - b) ‘People Load’ - charged at 1 person per 25000 cu. ft. of room volume
 - c) Motors - charged at 1 HP per 12500 cu. ft. of room volume

- ‘Heavy Load’ Conditions: Same as ‘Typical’ except:**
- a) Pounds of product is 3 times cu. ft.
 - b) People load is 1 person.

Safety Factor - 10%
10% safety factor is added to the product, transmission, infiltration, and miscellaneous loads described above.

Run time - 16 hrs.. air defrost
16 hour condensing unit run time. The BTU load for 24 hours is divided by 16 to yield the hourly heat load reported in this table.

Quick Calculations for Walk-In Coolers and Freezers **35°F Room**

ROOM AREA SQ. FT.	ROOM VOLUME CU. FT.	BTUH TYPICAL LOAD	BTUH HEAVY LOAD	CONDENSING UNIT	COMPRESSOR	DACC EVAPORATOR	GBC BALL VALVES	TUAE THERMOSTATIC EXPANSION VALVE	# ORIFICE	EVR SOLENOID VALVE	AKVP ELECTRONIC EXPANSION VALVE	HEATCRAFT		KEEPRITE	RUSSELL	COPELAND
												Bohn	Larkin			
36	288	4986	6540	NA	N/A	114U0000	009L7050	TUAE	5	032F1156	068F5213	NA	LC 0005M ACZ	KEZA007H8	R*/F/B*O060M4S	FFAM-A08Z
48	384	5884	7470	N/A	N/A	114U0001	009L7050	TUAE	5	032F1156	068F5214	NA	LC 0005M ACZ	KEZA007H8	R*/F/B*O060M4S	FFAM-A08Z
60	480	6729	8350	N/A	N/A	114U0001	009L7050	TUAE	5	032F1156	068F5214	NA	LC 0008M ACZ	KEZA007H8	R*/F/B*O060M4S	FFAM-A08Z
64	512	6939	8570	N/A	N/A	114U0001	009L7050	TUAE	5	032F1156	068F5214	NA	LC 0008M ACZ	KEZA008H8	R*/F/B*O080M4S	FFAM-A08Z
80	640	7934	9600	N/A	N/A	114U0001	009L7050	TUAE	6	032F1156	068F5214	NA	LC 0009M ACZ	KEZA008H8	R*/F/B*O100M4S	FFAM-A10Z
96	768	8887	10590	N/A	N/A	114U0002	009L7050	TUAE	6	032F1156	068F5214	NA	LC 0010M ACZ	KEZA009H8	R*/F/B*O100M4S	FFAM-A12Z
112	896	9808	11550	HJZM0150	N/A	114U0002	009L7050	TUAE	6	032F1156	068F5214	NA	LC 0010M ACZ	KEZA009H8	R*/F/B*O130E4S	FFAM-A12Z
128	1024	10626	12410	HJZM0150	N/A	114U0004	009L7051	TUAE	6	032F1156	068F5214	NA	LC 0010M ACZ	KEZA010H8	R*/F/B*O150E4S	FFAP-A15Z
144	1152	11581	13410	HJZM0150	N/A	114U0004	009L7051	TUAE	6	032F1156	068F5215	NA	LC 0012M ACZ	KEZA011H8	R*/F/B*O150E4S	FFAP-A17Z
160	1280	12588	14310	HJZM0150	N/A	114U0004	009L7051	TUAE	7	032F1156	068F5215	NA	LC 0012M ACZ	KEZA011H8	R*/F/B*O180E4S	FFAP-A20Z
176	1408	13434	15190	HNXM0200	MLZ015T2A	114U0004	009L7050	TUAE	7	032F1157	068F5216	NA	LC 0012M ACZ	KEZA011H8	R*/F/B*O180E4S	FFAP-A20Z
192	1536	14267	16060	HNXM0200	MLZ015T2A	114U0003	009L7050	TUAE	7	032F1157	068F5215	BC 0015M ACZ	LC 0015M ACZ	KEZA015H8	R*/F/B*O200E4S	FFAP-A22Z
208	1664	15585	17420	HNXM0200	MLZ015T1A	114U0003	009L7050	TUAE	7	032F1157	068F5216	BC 0015M ACZ	LC 0020M ACZ	KEZA020H8	R*/F/B*O200E4S	FFAP-A22Z
224	1792	16398	18270	HNXM0200	MLZ015T1A	114U0003	009L7050	TUAE	8	032F1157	068F5216	NA	LC 0020M ACZ	KEZA020H8	R*/F/B*O200E4S	FFAP-A22Z
240	1920	17203	19120	HNXM0200	MLZ015T1A	114U0003	009L7050	TUAE	8	032F1157	068F5216	BC 0020M ACZ	LC 0025M ACZ	KEZA025H8	R*/F/B*O250E4S	FFAP-A22Z
256	2048	18001	19960	HNXM0250	MLZ019T1A	114U0005	009L7050	TUAE	8	032L7110	068F5216	BC 0020M ACZ	LC 0025M ACZ	KEZA025H8	R*/F/B*O250E4S	FFAP-A30Z
100	800	9072	10790	HJZM0150	N/A	114U0002	009L7050	TUAE	6	032F1156	068F5214	NA	LC 0010M ACZ	KEZA009H8	R*/F/B*O130E4S	FFAM-A12Z
120	960	10164	11930	HJZM0150	N/A	114U0004	009L7050	TUAE	6	032F1156	068F5214	NA	LC 0012M ACZ	KEZA010H8	R*/F/B*O150E4S	FFAP-A15Z
140	1120	11221	13040	HJZM0150	N/A	114U0004	009L7051	TUAE	6	032F1156	068F5214	NA	LC 0012M ACZ	KEZA011H8	R*/F/B*O150E4S	FFAP-A17Z
160	1280	12398	14120	HJZM0150	N/A	114U0004	009L7051	TUAE	7	032F1156	068F5215	NA	LC 0012M ACZ	KEZA011H8	R*/F/B*O180E4S	FFAP-A17Z
180	1440	13406	15170	HNXM0200	MLZ015T2A	114U0004	009L7050	TUAE	7	032F1157	068F5216	NA	LC 0015M ACZ	KEZA015H8	R*/F/B*O180E4S	FFAP-A20Z
200	1600	14890	16710	HNXM0200	MLZ015T1A	114U0003	009L7050	TUAE	7	032F1157	068F5216	BC 0015M ACZ	LC 0020M ACZ	KEZA020H8	R*/F/B*O200E4S	FFAP-A22Z
240	1920	16823	18740	HNXM0200	MLZ015T1A	114U0003	009L7050	TUAE	8	032F1157	068F5216	NA	LC 0020M ACZ	KEZA020H8	R*/F/B*O200E4S	FFAP-A22Z
280	2240	18709	20720	HNXM0200	MLZ019T1A	114U0005	009L7050	TUAE	8	032L7110	068F5216	BC 0020M ACZ	LC 0025M ACZ	KEZA025H8	R*/F/B*O250E4S	FFAP-A30Z
144	1152	11391	13220	HJZM0150	N/A	114U0004	009L7051	TUAE	6	032F1156	068F5215	NA	LC 0012M ACZ	KEZA011H8	R*/F/B*O150E4S	FFAP-A17Z
168	1344	12728	14470	HJZM0150	N/A	114U0004	009L7051	TUAE	7	032F1156	068F5215	NA	LC 0012M ACZ	KEZA011H8	R*/F/B*O180E4S	FFAP-A20Z
192	1536	13887	15680	HNXM0200	MLZ015T2A	114U0004	009L7050	TUAE	8	032F1157	068F5216	BC 0015M ACZ	LC 0015M ACZ	KEZA015H8	R*/F/B*O200E4S	FFAP-A20Z
216	1728	15518	17370	HNXM0200	MLZ015T1	114U0003	009L7050	TUAE	8	032F1157	068F5218	BC 0015M ACZ	LC 0020M ACZ	KEZA020H8	R*/F/B*O200E4S	FFAP-A22Z
240	1920	16633	18550	HNXM0200	MLZ015T1A	114U0003	009L7050	TUAE	8	032F1157	068F5216	BC 0020M ACZ	LC 0020M ACZ	KEZA020H8	R*/F/B*O200E4S	FFAP-A22Z
264	2112	17732	19710	HNXM0250	MLZ019T1A	114U0003	009L7050	TUAE	8	032L7110	068F5215	BC 0020M ACZ	LC 0020M ACZ	KEZA025H8	R*/F/B*O250E4S	FFAP-A30Z
196	1568	14046	15850	HNXM0200	MLZ015T2A	114U0003	009L7050	TUAE	8	032F1157	068F5216	BC 0015M ACZ	LC 0015M ACZ	KEZA015H8	R*/F/B*O200E4S	FFAP-A22Z
224	1792	15828	17700	HNXM0200	MLZ015T1	114U0003	009L7050	TUAE	8	032F1157	068F5216	BC 0015M ACZ	LC 0020M ACZ	KEZA020H8	R*/F/B*O250E4S	FFAP-A22Z
280	2240	18329	20340	HNXM0250	MLZ019T1A	114U0005	009L7050	TUAE	8	032L7110	068F5216	BC 0020M ACZ	LC 0025M ACZ	KEZA020H8	R*/F/B*O250E4S	FFAP-A30Z
336	2688	20756	22910	HNXM0300	MLZ021T1A	114U0005	009L7050	TUAE	8	032L7116	068F5216	BC 0025M ACZ	LC 0027M ACZ	KEZA030H8	R*/F/B*O280E4S	FFAP-A32Z
256	2048	17240	19200	HNXM0200	MLZ015T1A	114U0003	009L7050	TUAE	8	032F1157	068F5216	BC 0020M ACZ	LC 0020M ACZ	KEZA025H8	R*/F/B*O280E4S	FFAP-A22Z
320	2560	19987	22100	HNXM0250	MLZ019T2A	114U0005	009L7050	TUAE	8	032L7110	068F5216	BC 0025M ACZ	LC 0025M ACZ	KEZA030H8	R*/F/B*O280E4S	FFAP-A32Z
384	3072	22656	24930	HNXM0300	MLZ021T1A	114U0005	009L7050	TUAE	8	032L7110	068F5216	BC 0025M ACZ	LC 0027M ACZ	KEZA030H8	R*/F/B*O280E4S	FFAP-A32Z
324	2592	20132	22260	HNXM0250	MLZ019T2A	114U0005	009L7050	TUAE	8	032L7110	068F5216	BC 0025M ACZ	LC 0027M ACZ	KEZA030H8	R*/F/B*O280E4S	FFAP-A32Z
360	2880	21615	23830	HNXM0300	MLZ021T1A	114U0005	009L7050	TUAE	8	032L7110	068F5216	BC 0025M ACZ	LC 0027M ACZ	KEZA030H8	R*/F/B*O280E4S	FFAP-A32Z
432	3456	25018	27410	HNXM0350	MLZ026T1	114U0005	009L7050	TUAE	9	032L7111	068F5217	BC 0030M ACZ	LC 0030M ACZ	KEZA030H8	R*/F/B*O300E4S	FFAP-A32Z
400	3200	23713	26030	HNXM0350	MLZ026T1	114U0005	009L7050	TUAE	9	032L7111	068F5217	BC 0030M ACZ	LC 0030M ACZ	KEZA030H8	R*/F/B*O280E4S	FFAP-A32Z
480	3840	27005	29370	HNXM0350	MLZ026T1	114U0005	009L7050	TUAE	9	032L7111	068F5216	BC 0030M ACZ	LC 0035M ACZ	KEZA035H8	R*/F/B*O350E4S	FFAP-A40Z
560	4480	30084	32650	HNXM0400	MLZ030T1	114U0006	009L7050	TUAE	1	032L7116	068F5216	BC 0030M ACZ	LC 0035M ACZ	KEZA040H8	R*/F/B*O400E4S	FFAP-A40Z
640	5120	33608	36370	HNXM0400	MLZ030T2	114U0007	009L7050	TUAE	1	032L7144	068F5217	BC 0035M ACZ	LC 0050M ACZ	KEZA040H8	R*/F/B*O400E4S	FFAP-A42Z
720	5760	36595	39550	HRXM0500	MLZ038T1A	114U0019	009L7050	TUAE	1	032L7144	068F5217	BC 0035M ACZ	LC 0055M ACZ	KEZA045H8	R*/F/B*O450E4S	FFAP-A42Z
800	6400	40190	43200	HRXM0500	MLZ038T1A	114U0019	009L7050	TUAE	1	032L7111	068F5218	BC 0050M ACZ	LC 0055M ACZ	KEZA050H8	R*/F/B*O500E4S	FFAP-050Z
960	7680	45633	49040	HRXM0600	MLZ045T2A	114U0020	009L7050	TUAE	1	032L7144	068F5218	BC 0055M ACZ	LC 0060M ACZ	KEZA060H8	R*/F/B*O600E4S	FFAP-060Z
1120	8960	51628	55280	HRXM0700	MLZ048T2A	114U0020	009L7050	TUAE	3	032L7121	068F5208	BC 0060M ACZ	LC 0065M ACZ	KEZA060H8	R*/F/B*OS08E4S	FFAM-071Z
1280	10240	57408	61460	HRXM0750	MLZ058T4A	114U0020	009L7050	TUAE	3	032L7121	068F5208	NA	LC 0070M ACZ	KEZA061H8	R*/F/B*OS08E4S	FFAM-081Z
1440	11520	63278	67580	HRXM0750	MLZ058T2A	114U0036	009L7050	TUAE	3	032L7121	068F5218	NA	LC 0070M ACZ	KEZA070H8	R*/F/B*OS09E4S	FFAM-081Z
1600	12800	68954	73650	HRXM1000	MLZ076T4A	114U0036	009L7050	TUAE	3	032L1217	068F5218	NA	LC 0075M ACZ	KEZA076H8	R*/F/B*OS09E4S	FFAM-091Z

Quick Calculations for Walk-In Coolers and Freezers 35°F Room

KEY

Electrical code

N: Compressor & fan(s) 230V, 1ph, 60Hz
Q: Compressor 208-230V, 3ph, 60Hz and Fan(s) 230V, 1ph, 60Hz

Version

WG: Electrical box, Receiver, Dual pressure control, Fan speed controller or Fan cycling, Defrost Timer, Outdoor enclosure (MBP)
WK: WG+Low Ambient Kit

GBC valves are solder connection type and include a service port. Electronic control model ERC213 (115V), ERC214 (220V) – includes 2 NTC sensors. TUAE expansion valves (068U3859) with threaded connection; the orifice is sold separately (sizes 0–9). Electronic expansion valves require an installation kit (temperature sensor, pressure transducer, and AK-CC 55 Compact controller).	T.E	25 °F
	T.C	95 °F
	SH	14.4 °F
	Refrigerant	R-448A
	SC	1° F

Orifice Product Code	0	1	2	3	4	5	6	7	8	9
	068U1030	068U1031	068U1032	068U1033	068U1034	068U1035	068U1036	068U1037	068U1038	068U1039

Danfoss Quick Calculations Tables give typical and heavy load estimates based on the conditions in each room temperature table. Conditions include construction, loading, and room surroundings. If your conditions are very different from the typical or heavy conditions, then figure a load estimate specifically for your job.

Model no.	Version	Electrical code	Code no.	Compressor model
HJZM0150	WG	N	114N3485	MTZ18
	WG	Q	114N3486	
	WK	N	114N3575	
	WK	Q	114N3576	
HNXM0200	WG	N	114N3487	MLZ15
	WG	Q	114N3488	
	WK	N	114N3577	
	WK	Q	114N3578	
HNXM0250	WG	N	114N3489	MLZ19
	WG	Q	114N3490	
	WK	N	114N3581	
	WK	Q	114N3582	
HNXM0300	WG	N	114N3491	MLZ21
	WG	Q	114N3492	
	WK	N	114N3579	
	WK	Q	114N3580	
HNXM0350	WG	N	114N3493	MLZ26
	WG	Q	114N3494	
	WK	N	114N3583	
	WK	Q	114N3584	
HNXM0400	WG	N	114N3495	MLZ30
	WG	Q	114N3496	
	WK	N	114N3585	
	WK	Q	114N3586	

Typical Load Conditions:

Danfoss Cold Solutions Program automatically figures typical loads. Here are the “typical” conditions:

Product - In at +10°

- a) Specific heat of product is 0.90 BTU per pound
- b) Product loaded in a 24 hour period
- c) Freezing point of product is 27°.
- d) Reduce product to 30° in 24 hours.
- e) Pounds of +40° product EQUALS room volume (cu. ft.)

External Temperatures

- a) 95° on all four walls,
- b) 115° on the ceiling (solar effect)
- c) 55° on the floor

Insulation - 4” Urethane

4” urethane on the walls, ceiling, and floor with R = 25 and k = 0.16

Infiltration - 2 times Average

- a) 95° air enters room through the door at 50% relative humidity.
- b) The door openings cause TWICE the number of air changes listed in ‘AVERAGE AIR CHANGES FOR STORAGE ROOMS’ table.

Miscellaneous

- a) Lighting - One watt per square foot of floor area.
- b) ‘People Load’ - charged at 1 person per 25000 cu. ft. of room volume
- c) Motors - charged at 1 HP per 12500 cu. ft. of room volume

‘Heavy Load’ Conditions: Same as ‘Typical’ except:

- a) Pounds of product is 3 times cu. ft.
- b) People load is 1 person.

Safety Factor - 10%

10% safety factor is added to the product, transmission, infiltration, and miscellaneous loads described above.

Run time - 18 hrs, electric defrost

18 hour condensing unit run time. The BTU load for 24 hours is divided by 18 to yield the hourly heat load reported in this table.

Product - In at 4.2°-

- a) Specific heat of product is 0.90 BTU per pound
- b) Product loaded in a 24 hour period
- c) Freezing point of product is 27°

- d) Reduce product to 35° in 24 hours
- e) Pounds of 40° product entering the room is two times room (cu. ft.)

External Temperatures

- a) 95° on all four walls,
- b) 115° on the ceiling (solar effect)
- c) 55° on the floor

Insulation - 4” Styrofoam

- a) 4” Styrofoam on the wall & ceiling with R = 16.7 and k =-3.24
- b) 6” concrete on the floor, - with R = 4.8 and k = 1.25

Infiltration - 2 times Average

- a) 95° air enters room through the door at 50% relative humidity.
- b) The door openings cause TWICE the number of air changes listed AVERAGE AIR CHANGES FOR STORAGE ROOMS’ table.

Miscellaneous

- a) Lighting - One watt per square foot of floor area.
- b) “People Load - charged at 1 perso per 25000 cu. ft. of room volume
- c) Motors - charged at 1 HP per 16000 cu. ft. of room volume

‘Heavy Load’ Conditions: Same as ‘Typical’ except:

- a) Pounds of product is 3 times cu. ft.
- b) People load is 1 person.

Safety Factor - 10%

10% safety factor is added to the product, transmission, infiltration, and miscellaneous loads described above.

Run time - 16 hrs.. air defrost

16 hour condensing unit run time. The BTU load for 24 hours is divided by 16 to yield the hourly heat load reported in this table.