

US

Low noise Condensing Units



**MT:** Capacity from 1,0 to 45K Watt  
**LT:** Capacity from 0,9 to 40K Watt  
 From 1 to 4 compressors  
 Hermetic, Scroll , Scroll Digital , Scroll EVI , Semihermetic

UF

Housed Condensing units



**MT:** Capacity from 1,0 to 60K Watt  
**LT:** Capacity from 0,9 to 47K Watt  
 From 1 to 4 compressors  
 Hermetic, Scroll , Scroll Digital , Scroll EVI , Semihermetic

UR

Condensing Units with centrifugal fans



**MT:** Capacity from 10 to 45K Watt  
**LT:** Capacity from 6,0 to 35K Watt  
 From 2 to 4 compressors  
 Scroll , Scroll Digital , Scroll EVI

OCU

Standard condensing units



**MT:** Capacity from 1,0 to 60K Watt  
**LT:** Capacity from 0,9 to 30K Watt  
 Scroll , Scroll Digital , Hermetic and Semi-hermetic



CTE

Compact Multicompressor pack with remote condenser



**MT:** Capacity from 40 to 100K Watt  
**LT:** Capacity from 10 to 60K Watt  
 From 4 to 10 compressors  
 Scroll , Scroll Digital , Scroll EVI

CE

Multicompressor pack with remote condenser



**MT:** Capacity from 10 to 400K Watt  
**LT:** Capacity from 5,0 to 120K Watt  
 From 3 to 4 compressors  
 Hermetic, Scroll , Scroll Digital , Scroll EVI , Semihermetic

CP

Customized Products





## A QUICK GUIDE

## TO GET OUR SOLUTIONS

## USEFUL TABLE

RECCOMENDED DIAMETERS FOR REFRIGERANT PIPES (R407A/R407F)																		
Line Size Copper OD, mm x mm	SUCTION LINE (1)						DISCHARGE LINE (2)						LIQUID LINE (3)					
	Saturated suction temperature °C						Saturated suction temperature °C						Saturated suction temperature °C					
	-50	-40	-30	-20	-10	0	-50	-40	-30	-20	-10	0	-50	-40	-30	-20	-10	0
	Capacity (Kw)						Capacity (Kw)						Capacity (Kw)					
16 x 1,0	0,5	0,9	1,3	2	3,2	4,5	6,9	7,4	7,9	8,4	8,8	9,3	20	21	22	23	24	25
22 x 1,0	1,3	2,2	3,5	5,5	7,9	11	17,5	18,5	20	21	22,5	23,5	42	44	45	47	49	51
28 x 1,5	2,4	4	6,5	10	14,5	20	31	33,5	35,5	38	40	42	64	68	72	74	77	79
35 x 1,5	4	6,6	11	17,5	27	39	59	63,5	67,5	71,5	75	80	105	110	118	122	128	133
42 x 1,5	6	10	16,5	26,5	40	59	98,0	106	113	120	127	133	156	165	170	180	188	195
54 x 2,0	10	17,5	28	45	69	100	185	200	210	225	240	250	260	280	290	300	310	325
67 x 2,0	15,5	27	43,5	68	105	150	340	365	390	415	440	460	420	450	480	500	540	550
76 x 2,0	20	35	57	90	135	200	483	515	552	582	620	653	540	560	600	630	650	670

[1] Calculated for max pressure drop 1K anf for 20m equivalent length of line and max flow velocity 15m/s

[2]Calculated for max pressure drop 0,5 K and for 20m equivalent lenght of line drop 0,5 K and for 20m equivalent lenght of line

[3] Calculated for max liquid velocity 1m/s.

The values on the table are based on 40°C liquid temperature.

Multiply tables capacities by the following factors for the other liquid temperatures

Liq.Temp. °C	Suction Line	Discharge Line	Liquid Line
20	1,20	0,73	1,31
30	1,10	0,87	1,16
40	1,00	1,00	1,00
50	0,90	1,10	0,85

THERMAL HEAT LOAD OF THE COLD ROOM (approximate)				
Volume	COLD ROOM TEMPERATURE			
	12°C	0°C	-18°C	-25°C
m3	cal/h Kcal/std.	cal/h Kcal/std.	cal/h Kcal/std.	cal/h Kcal/std.
10	60	120	60	60
20	60	100	60	50
30	50	80	60	40
40	50	80	50	40
50	40	60	50	35
60	40	60	40	35
80	38	50	30	35
100	38	48	30	30
120	37	46	30	28
140	36	46	30	28
160	36	45	30	26
180	36	45	30	26
200	35	45	30	25
250	35	44	30	25
300	35	43	29	25
350	32	43	29	24
400	30	42	28	24
500	30	42	28	24
600	30	42	28	24
700	29	42	26	23
800	29	41	26	23
900	28	41	25	22
1.000	28	41	25	22
1.400	27	41	25	20
1.700	27	40	24	18
2.000	27	40	22	18
2.500	27	39	20	18
3.000	25	38	20	15

Kw=Kcal/h:860

Kw=Kcal/h:860

This table allows to determinate the thermal heat load (expressed in kCal/h/m3) in function of the internal temperature and the volume of the cold room. This data are only orientative and are considering a daily product movement 10% day of the stocked quantity, with goods entering at +15°C in medium temperature rooms, and at -15°C in low temperature rooms.



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