

## Multiple Compressor Condensing Units



# Multiple Compressor Condensing Units



28.690 a 195.889 Kcal/h 33.360 a 227.778 Watts



28.690 a 195.889 Kcal/h 33.360 a 227.778 Watts

## Multiple Compressor **Condensing Units**



#### Standard Version

- Spacing between aluminum fins of 10 FPI
- Copper tubes with 3/8" outer diameter
- Two condenser coils arranged in a "Y" configuration
- 500mm electronic fan motors
- Independent circuit for each condenser
- Cabinet made of galvanized steel, with white electrostatic epoxy paint and a black base, corrosion-resistant

#### **Benefits**

- Longer lifespan of the fan motor assembly
- Higher thermal and energy efficiency
- Maximum efficiency throughout the entire lifespan
- Electrical assemblies standardized (NBR5410)
- Adaptable to all refrigerants
- Greater range of capacities
- Standard electronic motors
- Easy cleaning and maintenance
- Plug & Play concept: Ease of installation and operation
- Exclusive protection against harsh environments in 2 levels

#### Options

- Copper tubes and aluminum fins (Cu/Al) for CO2
- Multicircuits, two or more inlets and outlets
- Open bottom base
- Crossbars for compressor mounting
- Air inlet filter
- Mcoat Anticorrosive treatment for installations near the coastline



















### Dimensionais

In line

Double









Model	$\partial \mathcal{D}$	Dimensional	<b>MEntranco</b>	d Evit	Model	E A	Dimensional	ØEntranco	d Evit	
wouer		А	Ventrance	W EXIL	wouer		А	WEIILFAIICE		
032L	2	1760	1 1/8"(2x)	3/4"(2x)	084W	2	1760	1 1/8"(4x)	3/4"(4x)	
042L	2	1760	1 1/8"(2x)	3/4"(2x)	100W	2	1760	1 1/8"(4x)	3/4"(4x)	
050L	2	1760	1 1/8"(2x)	3/4"(2x)	108W	2	1760	15/8"(4x)	7/8"(4x)	
054L	2	1760	1 1/8"(2x)	3/4"(2x)	126W	3	2530	1 1/8"(4x)	3/4"(4x)	
063L	3	2530	1 1/8"(2x)	3/4"(2x)	148W	3	2530	1 1/8"(4x)	3/4"(4x)	
074L	3	2530	1 1/8"(2x)	3/4"(2x)	162W	3	2530	15/8"(4x)	7/8"(4x)	
081L	3	2530	1 5/8"(2x)	7/8"(2x)	168W	4	3305	2 1/8"(4x)	1 5/8"(4x)	
084L	4	3305	2 1/8"(2x)	1 5/8"(2x)	196W	4	3305	2 1/8"(4x)	1 5/8"(4x)	
098L	4	3305	2 1/8"(2x)	1 5/8"(2x)	216W	4	3305	2 1/8"(4x)	1 5/8"(4x)	
108L	4	3305	2 5/8"(2x)	1 5/8"(2x)						

## Packaging



		Measu	rements
Model		Α	В
Linha	2	1850	1080
Linha	3	2620	1080
Linha	4	3400	1080
Duplo	4	1850	2060
Duplo	6	2620	2060
Duplo	8	3400	2060

1	Modol		Keel /h	Motto	Noise	Volume of	Face	Trading	Motor Fans		Weights	
	Model		Kcal/n	vvatts	dBa	the tubes	area	area	W	А	Líquido	Bruto
	032L	2	29.551	34.369	43	13,0 I	2,15 m <sup>2</sup>	79,5 m <sup>2</sup>	1,96 kW	220V 3F	380 Kg	456 Kg
	042L	2	39.251	45.652	43	19,5 l	2,15 m <sup>2</sup>	119,3 m <sup>2</sup>	1,96 kW	5,54A	411 Kg	493 Kg
	050L	2	43.903	51.061	43	25,91	2,15 m <sup>2</sup>	159,0 m <sup>2</sup>	1,96 kW	380V 3F	452 Kg	542 Kg
	054L	2	47.963	55.753	43	32,4	2,15 m <sup>2</sup>	198,8 m²	1,96 kW	3,2A	498 Kg	598 Kg
	063L	3	57.951	67.401	45	30,1	3,32 m <sup>2</sup>	184,4 m²	2,94 kW	220V 3F	616 Kg	739 Kg
lin	074L	3	67.111	78.053	45	40,1	3,32 m <sup>2</sup>	245,9 m <sup>2</sup>	2,94 kW	3801/35	678 Kg	814 Kg
르	081L	3	73.719	85.740	45	50,1	3,32 m <sup>2</sup>	307,3 m <sup>2</sup>	2,94 kW	4,8A	747 Kg	896 Kg
	084L	4	77.598	90.252	46	40,8 1	4,50 m <sup>2</sup>	250,0 m <sup>2</sup>	3,92 kW	220V 3F	821 Kg	985 Kg
	098L	4	89.742	104.375	46	54,4	4,50 m <sup>2</sup>	333,3 m²	3,92 kW	3801/35	904 Kg	1085 Kg
	108L	4	97.945	113.916	46	68,01	4,50 m <sup>2</sup>	416,6 m <sup>2</sup>	3,92 kW	6,4A	996 Kg	1195 Kg
	084W	4	78.503	91.303	46	38,91	4,30 m <sup>2</sup>	253,7 m <sup>2</sup>	3,92 kW	220V 3F	822 Kg	986 Kg
	100W	4	87.805	102.123	46	51,9 l	4,30 m <sup>2</sup>	338,3 m <sup>2</sup>	3,92 kW	3801/35	904 Kg	1085 Kg
	108W	4	95.872	111.505	46	64,8	4,30 m <sup>2</sup>	422,9 m <sup>2</sup>	3,92 kW	6,4A	996 Kg	1195 Kg
υ	126W	6	115.903	134.803	48	60,2 l	6,64 m <sup>2</sup>	392,3 m <sup>2</sup>	5,88 kW	220V 3F	1232 Kg	1478 Kg
ldu	148W	6	134.221	156.107	48	80,21	6,64 m <sup>2</sup>	523,0 m <sup>2</sup>	5,88 kW	2001/25	1356 Kg	1627 Kg
å	162W	6	147.438	171.451	48	100,3	6,64 m <sup>2</sup>	653,8 m <sup>2</sup>	5,88 kW	6,4A	1494 Kg	1793 Kg
	168W	8	155.196	180.502	50	81,5 I	9,01 m <sup>2</sup>	531,7 m <sup>2</sup>	7,84 kW	220V 3F	1642 Kg	1970 Kg
	196W	8	179.483	208.750	50	108,7	9,01 m <sup>2</sup>	709,0 m <sup>2</sup>	7,84 kW	280V 2E	1808 Kg	2170 Kg
	216W	8	195.889	227.831	50	135,9	9,01 m <sup>2</sup>	886,2 m <sup>2</sup>	7,84 kW	9,6A	1992 Kg	2390 Kg

#### Features and Capabilities • Electronic Fan Motors

#### Features and Capabilities • AC Motor Fans

1	Medel	A	Keel /h	Matte	Noise	Volume of	Face	Trading	Motor Fans		Weights	
	Model		Kcal/n	vvatts	dBa	the tubes	area	area	W	А	Net	Gross
	032L	2	29.551	34.369	43	13,0	2,15 m <sup>2</sup>	79,5 m <sup>2</sup>	1,90 kW	220V 3F	380 Kg	456 Kg
	042L	2	39.251	45.652	43	19,5 l	2,15 m <sup>2</sup>	119,3 m <sup>2</sup>	1,90 kW	5,54A	411 Kg	493 Kg
	050L	2	43.903	51.061	43	25,91	2,15 m <sup>2</sup>	159,0 m <sup>2</sup>	1,90 kW	380V 3F	452 Kg	542 Kg
	054L	2	47.963	55.753	43	32,41	2,15 m <sup>2</sup>	198,8 m <sup>2</sup>	1,90 kW	3,2A	498 Kg	598 Kg
	063L	3	57.951	67.401	45	30,11	3,32 m <sup>2</sup>	184,4 m²	2,85 kW	220V 3F	616 Kg	739 Kg
ne	074L	3	67.111	78.053	45	40,1	3,32 m <sup>2</sup>	245,9 m <sup>2</sup>	2,85 kW	0,51A	678 Kg	814 Kg
<u> </u>	081L	3	73.719	8.574	45	50,1	3,32 m <sup>2</sup>	307,3 m <sup>2</sup>	2,85 kW	4,8A	747 Kg	896 Kg
	084L	4	77.598	90.252	46	40,8 1	4,50 m <sup>2</sup>	250,0 m <sup>2</sup>	3,80 kW	220V 3F	821 Kg	985 Kg
	098L	4	89.742	104.375	46	54,41	4,50 m <sup>2</sup>	333,3 m²	3,80 kW	200V 2E	904 Kg	1085 Kg
	108L	4	97.945	113.916	46	68,01	4,50 m <sup>2</sup>	416,6 m <sup>2</sup>	3,80 kW	6,4A	996 Kg	1195 Kg
	084W	4	78.503	91.303	46	38,9	4,30 m <sup>2</sup>	253,7 m <sup>2</sup>	3,80 kW	220V 3F	822 Kg	986 Kg
	100W	4	87.805	102.123	46	51,9 I	4,30 m <sup>2</sup>	338,3 m <sup>2</sup>	3,80 kW	2001/20	904 Kg	1085 Kg
	108W	4	95.872	111.505	46	64,81	4,30 m <sup>2</sup>	422,9 m <sup>2</sup>	3,80 kW	6,4A	996 Kg	1195 Kg
٩	126W	6	115.903	134.803	48	60,21	6,64 m <sup>2</sup>	392,3 m <sup>2</sup>	5,70 kW	220V 3F	1232 Kg	1478 Kg
qnc	148W	6	134.221	156.107	48	80,21	6,64 m <sup>2</sup>	523,0 m <sup>2</sup>	5,70 kW	11,00A	1356 Kg	1627 Kg
ă	162W	6	147.438	171.451	48	100,3 I	6,64 m <sup>2</sup>	653,8 m <sup>2</sup>	5,70 kW	6,4A	1494 Kg	1793 Kg
	168W	8	155.196	180.502	50	81,5 I	9,01 m <sup>2</sup>	531,7 m <sup>2</sup>	7,60 kW	220V 3F	1642 Kg	1970 Kg
	196W	8	179.483	208.750	50	108,7	9,01 m <sup>2</sup>	709,0 m <sup>2</sup>	7,60 kW	200V 2F	1808 Kg	2170 Kg
	216W	8	195.889	227.831	50	135,91	9,01 m <sup>2</sup>	886,2 m <sup>2</sup>	7,60 kW	9,6A	1992 Kg	2390 Kg

Connectors resistant to temperature variations, vibration, and shock. Spring connection technology reduces the time of electrical installations without the need for special tools. Standardized electrical components.

The capabilities above refer to the total heat rejected in the condenser under the following conditions:

- DT = 10°C
- Altitude = sea level Refrigerant gas = R-22
- Ambient temperature = +35°C
- Condensing temperature = +45°C
- Electric motors with a frequency of 60Hz; for AC 50Hz, multiply the capabilities by 0.92.
- The reported equipment's sound level refers only to that produced by the fans mounted on the cabinet at a distance of 10m.

## How to Buy ————

Model	Description Available Options								
CFLX	Multiple Compressor Condensing Units								
E	Spacing between fins	E • 10 app							
196W	Model	032L 054L 081L 108L 032W 032W 032W 042L 063L 084L 032W 032W 032W 050L 074L 098L 032W 032W 032W							
TN	Number of circuits	Up to 9 circuits: T1, T2, T3, T4, T5, T6, T7, T8 or T9 Above 9 circuits: 10, 11, 12							
00	Accessories	$00 \cdot$ Without accessories $26 \cdot$ Brackets for $04 \cdot$ Pressure transducercompressor attachment $05 \cdot$ Electrical panel with control $27 \cdot 26 + 04$ $06 \cdot$ Electrical panel without control $28 \cdot 26 + 05$ $07 \cdot$ Electrical box $29 \cdot 26 + 06$ $08 \cdot$ Electrical box and pressure $30 \cdot 26 + 07$ transducer $31 \cdot 26 + 04 + 06$ $09 \cdot$ Pressure transducer and electrical $32 \cdot 20 + 26$ panel without control $33 \cdot 20 + 26 + 04$ $20 \cdot$ Air intake filter $34 \cdot 20 + 26 + 04$ $21 \cdot 20 + 04$ $35 \cdot 20 + 26 + 06$ $22 \cdot 20 + 05$ $36 \cdot 20 + 26 + 07$ $23 \cdot 20 + 06$ $37 \cdot 20 + 26 + 04 + 06$ $24 \cdot 20 + 07$ $25 \cdot 20 + 04 + 06$							
J	Finish	J • Steel protected cabinet K • Steel protected cabinet with N1 protection on the fins L • Steel protected cabinet with N2 protection on the fins							
EC500	Motor	EC500 • EC 500mm Motor-driven Fan AC50A • AC 500mm 04-Pole Motor-driven Fan							
Q	Voltage and Frequency	H • Motor = 230V/3F/50Hz Q • Motor = 230V/3F/60Hz E • Motor = 380V/3F/50Hz V • Motor = 380V/3F/60Hz							
1	Voltage and Frequency	1 • Crate							

#### Power supply 220V, 380V, and 440V • 50/60Hz • 3Ø



#### Attention:

- To size the installation components, refer to the catalog data tables
- To change the factory power supply, please contact engineering.
- The safety thermostat must be connected in series with the contactor coil and controller activation.
- Always use ground wire.
- Interconnect the fan thermal protector in series with the contactor coil and controller activation (PP)..

#### **Correction of capacities**

F1	Factor related to DT(*)										
DT F1	7 1,42	8 1,25	9 1,11	10 1	11 0,91	12 0,83	13 0,77	14 0,71	15 0,67	18 0,55	20 0,5
F2	Relative factor to the refrigerant										
Refrigerante F2	R	<b>22</b> 1		R134A 1,01		R404A 0,983		R407C 0,98		R4 0,	10A ,95
F3	Relative factor concerning air inlet temperature										
Input temperature	+15 0,9	+ 0,	20 ,95	+25 0,97	+30 0,9	) 8	+35 1	+40 1,03	+4 1,0	15 08	+50 1,12
F4					ude facto	r of the i					
Height F4	0 1,00	600 1,04	) (1 1 1	800 L,06	1000 1,07	1200 1,09	1400 1,10	160 1,12	0 : 2	1800 1,14	2000 1,15
Fsom	Corr	ection of s	sound lev	vel based	on the dis	tance fror	n the conde	enser and	the desi	red locati	on
Distance Dba	1 +20	2 +14	3 +10	4 +8	5 +6	10 0	15 -4	20 -6	40 -12	60 -16	80 -20

The thermal capacities presented in the tables of this catalog correspond to standard operating conditions, which are not always those available in the project. Therefore, we present a correction method for real conditions that should be applied before referring to the equipment selection table

(\*) DT = difference between the air inlet and condensation temperatures

	Evaporation temperatures		Fcp Coefficient for Hermetic or Semi-Hermetic Compressors Condensation Temperature						Coefficient Fcp for open compressors Condensation temperature					
	°C	32	35	40	45	50	55	32	35	40	45	50	55	
	10	1,14	1,16	1,18	1,22	1,24	1,29	1,09	1,11	1,13	1,16	1,18	1,21	
	5	1,18	1,20	1,22	1,25	1,29	1,33	1,12	1,13	1,16	1,18	1,21	1,24	
	0	1,21	1,23	1,25	1,29	1,33	1,37	1,14	1,15	1,18	1,21	1,24	1,28	
9	-5	1,25	1,27	1,30	1,33	1,38	1,41	1,16	1,18	1,21	1,24	1,28	1,32	
щ	-10	1,29	1,31	1,34	1,38	1,43	1,48	1,19	1,21	1,24	1,28	1,32	1,36	
	-15	1,33	1,35	1,39	1,43	1,48	1,55	1,23	1,25	1,28	1,32	1,36	1,40	
	-20	1,38	1,41	1,44	1,48	1,55	1,62	1,26	1,28	1,32	1,36	1,40	1,45	
	-25	1,44	1,47	1,50	1,55	1,62	1,72	1,30	1,32	1,36	1,40	1,45	1,49	
	-30	1,51	1,53	1,57	1,62	1,72	1,87	1,34	1,36	1,40	1,45	1,49	1,55	
	-35	1,58	1,60	1,66	1,75	1,87	2,07	1,37	1,40	1,45	1,49	1,55	1,62	
	-40	1,66	1,70	1,76	1,87	2,03	2,27	1,39	1,45	1,50	1,55	1,62	1,67	

#### **Example of selection**

	Terminology	Data						
Qcd	Effectively rejected heat in the condenser (value for table selection input)	<b>Compressor</b> semi-hermetic	QCP capability 68.000 Kcal/h					
Qcp	Refrigeration capacity of the compressor (installation project data)	RefrigerantRoom temperature at the installR 404A+ 30°C						
Qm	Heat produced by the compressor motor	TEV evaporation - 10°C	Altitude of the installation site 800m					
Qbhp	Shaft power in open compressors (in HP)	TCD condensation + 45°C	Maximum permissible sound level 55 Dba a 20m do local					
Qkw	Power consumed by hermetic and semi- hermetic compressors	Resolution:						
F1, F2, F3, F4, Fsom e FCP	Correction factors and compressor factor	Qcd = Qcp x Fcp x F1 x F2 x F3 x F4 Qcp = $68000$ Kcal/h Fcp = $-10^{\circ}C/+45^{\circ}C = 1.38$ for semi-hermetic compressor F1 = Tcd-Ta = $45-30 = 15 = 0.67$ F2 = Gas R404A = $1.05$						
TA	Room temperature							
	Calculation formulas							
	Qm = Pbhp x 642 for open compressors	F3 = + 30°C = 0.98 F4 = Altitude = 1.06						
(for l	Qm = Qkw x 860 nermetic or semi-hermetic compressors)	Qcd = $68000 \times 1.38 \times 0.67 \times 1.05 \times 0.98 \times 1.06 = 68577$ Kcal/h · Capacity effectively rejected by the condenser under these design						
Qcd =	( <b>Q</b> cp + <b>Q</b> m) x <b>F</b> 1 x <b>F</b> 2 x <b>F</b> 3 x <b>F</b> 4	conditions. Sound level = 55dBA at 20m =	55-6 = 49dBA at 10m					
lf information consumption factors (Fcp) capacity reject formula belo	n regarding the engine and compressor is not available, we suggest practical to be used for obtaining the effective cted in the condenser, according to the w	With a defined capacity of 68577 Kcal/h and a sound level of 4 dBA, let's refer to the table and select the Vmax 083 model with capacity of 71,940 Kcal/h and 45 dBA.						

 $\mathbf{Q}$ cd =  $\mathbf{Q}$ cp x Fcp x F1 x F2 x F3 x F4

**C-Flex** 



Ä















Pinhal • Cabreúva • 13315-000

Technology and Trust