



Forced air evaporator

may - 2022

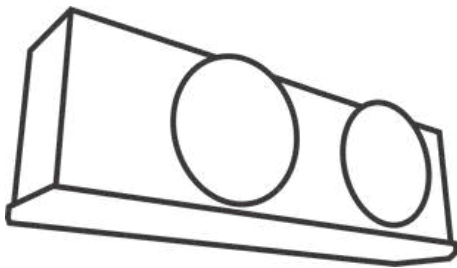


946 a 12.600 Kcal/h 1.100
a 14.644 W



946 a 12.600 Kcal/h 1.100
a 14.644 W

Low-Profile Forced Air Evaporator



For chambers up to 4m in height.

Standard Version

- 1/2" outer diameter copper tubing
- 300mm AC motor fan
- 6 mm aluminum fin spacing (4 fins per inch)
- Smooth milled aluminum casing
- Spring-loaded electrical connections
- Air defrost

Applications



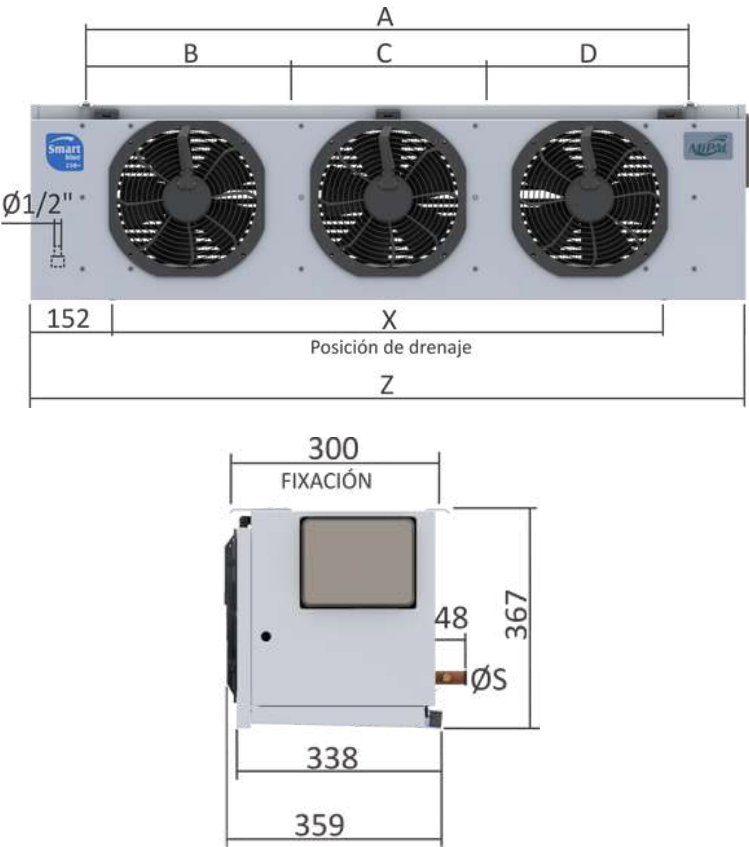
Benefits

- Higher air exchange rate per cubic meter of chamber
- Higher flow provides faster temperature stabilization in environments with greater thermal load variation
- Greater range of capacities
- Higher thermal and energy efficiency
- Rapid-response electric defrost system
- Heaters can be removed from the rear of the unit without disconnecting the drainage
- Plug & Play concept: Easy installation and operation
- 2 levels of protection against aggressive environments
- Easy access to the motor-fan assembly
- Adaptable to all refrigerant fluids
- Standardized electrical assemblies (NBR5410)

Options

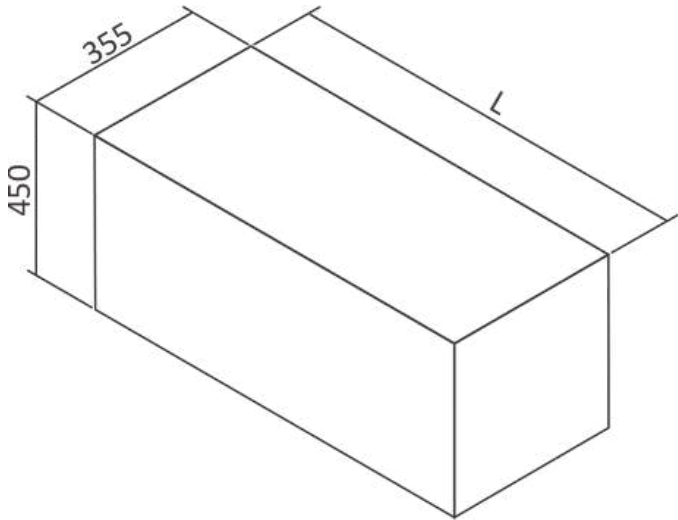
- EC Motor Fan with 300mm Diameter
- Housing with white epoxy electrostatic paint
- Stainless steel housing
- Removable tray for applications requiring a tray with double insulation
- Mcoat - Exclusive protection against aggressive environments
- Hot gas defrost in the core
- Hot gas defrost in the core and electric defrost in the tray
- Built-in thermal protector in versions with electric defrost
- Drain heater installed in versions with electric defrost
- Independent electrical boxes for motors and heaters
- Expansion valve and solenoid
- Direct expansion connection and over tray

Dimensions



		Dimensions					
Code		A	B	C	D	X	Z
SD2A010	1	400	0	0	0	305	605
SD2E010							
SD2A012	2	762	0	0	0	664	968
SD2E012							
SD2A017	2	762	0	0	0	664	968
SD2E017							
SD2A020	2	762	0	0	0	664	968
SD2E020							
SD2A026	3	1120	0	0	0	1042	1346
SD2E026							
SD2A030	3	1120	0	0	0	1042	1346
SD2E030							
SD2A035	4	1482	726	0	756	1390	1694
SD2E035							
SD2A042	4	1482	726	0	756	1390	1694
SD2E042							
SD2A053	5	1851	750	365	731	1753	2057
SD2E053							
SD2A064	6	2214	750	732	750	2066	2420
SD2E064							
SD2A074	7	2576	750	1125	750	2480	2783
SD2E074							
SD2A085	8	2940	1125	750	1125	2852	3146
SD2E085							
SD2A098	9	3303	1125	1125	1125	3205	3509
SD2E098							

Packaging



Code		L
SD2A010	1	770
SD2E010		
SD2A012	2	1133
SD2E012		
SD2A017	2	1133
SD2E017		
SD2A020	2	1133
SD2E020		
SD2A026	3	1496
SD2E026		
SD2A030	3	1496
SD2E030		
SD2A035	4	1860
SD2E035		

Code		L
SD2A042	4	1860
SD2E042		
SD2A053	5	2222
SD2E053		
SD2A064	6	2585
SD2E064		
SD2A074	6	2585
SD2E074		
SD2A085	7	2948
SD2E085		
SD2A098	9	3675
SD2E098		

The evaporators are individually packed with recyclable materials, ensuring their integrity during transport

Capabilities • AC Motor Fan																			
Code	Kcal/h									Watts									
	Evaporation Temperatures									Evaporation Temperatures									
	-31 °F -35 °C	-22 °F -30 °C	-13 °F -25 °C	-4 °F -20 °C	5 °F -15 °C	14 °F -10 °C	23 °F -5 °C	32 °F 0 °C	41 °F 5 °C	-31 °F -35 °C	-22 °F -30 °C	-13 °F -25 °C	-4 °F -20 °C	5 °F -15 °C	14 °F -10 °C	23 °F -5 °C	32 °F 0 °C	41 °F 5 °C	
SD2A010	756	904	933	962	984	1007	1094	1149	1229	879	1052	1085	1119	1145	1171	1273	1336	1430	
SD2E010																			
SD2A012	972	1162	1199	1236	1265	1294	1406	1476	1580	1130	1351	1394	1438	1471	1505	1636	1716	1837	
SD2E012																			
SD2A017	1321	1580	1630	1681	1720	1760	1913	2007	2148	1537	1838	1896	1955	2000	2047	2225	2335	2498	
SD2E017																			
SD2A020	1525	1824	1881	1940	1985	2031	2207	2317	2479	1773	2121	2188	2256	2308	2362	2567	2694	2883	
SD2E020																			
SD2A026	1975	2362	2436	2512	2570	2630	2858	3000	3210	2296	2747	2833	2922	2989	3059	3324	3489	3734	
SD2E026																			
SD2A030	2295	2745	2832	2920	2987	3057	3322	3487	3731	2669	3192	3293	3396	3474	3555	3864	4055	4340	
SD2E030																			
SD2A035	2687	3214	3315	3419	3498	3579	3890	4082	4369	3125	3738	3856	3976	4068	4162	4524	4748	5081	
SD2E035																			
SD2A042	3185	3809	3929	4052	4146	4242	4610	4838	5178	3704	4430	4570	4713	4821	4933	5362	5627	6022	
SD2E042																			
SD2A053	4449	4778	4929	5083	5200	5321	5783	6069	6495	5174	5557	5732	5912	6048	6188	6726	7058	7554	
SD2E053																			
SD2A064	5356	5752	5934	6119	6260	6406	6962	7307	7819	6229	6690	6901	7117	7281	7450	8097	8497	9094	
SD2E064																			
SD2A074	6239	6701	6912	7128	7292	7462	8110	8511	9108	7256	7793	8039	8290	8481	8678	9432	9898	10593	
SD2E074																			
SD2A085	7168	7698	7941	8190	8378	8573	9317	9778	10465	8336	8953	9236	9524	9744	9970	10836	11372	12170	
SD2E085																			
SD2A098	8196	8802	9080	9364	9579	9802	10653	11180	11965	9532	10236	10560	10890	11140	11400	12390	13002	13915	
SD2E098																			

Code	Btu/h									Capacidades (DT=10,8°F / DT1=6°K)								
	Evaporation Temperatures																	
	-31 °F -35 °C	-22 °F -30 °C	-13 °F -25 °C	-4 °F -20 °C	5 °F -15 °C	14 °F -10 °C	23 °F -5 °C	32 °F 0 °C	41 °F 5 °C									
SD2A010																		
SD2E010	2998	3586	3699	3815	3903	1171	3993,	4340	4555									
SD2A012																		
SD2E012	3853	4608	4754	4902	5015	1505	5132	5577	5853									
SD2A017																		
SD2E017	5240	6267	6465	6667	6821	2047	6980	7586	7961									
SD2A020																		
SD2E020	6047	7232	7461	7694	7871	2362	8054	8754	9187									
SD2A026																		
SD2E026	7831	9365	9661	9963	10193	3059	10430	11335	11896									
SD2A030																		
SD2E030	9102	10886	11230	11581	11847	3555	12123	13176	13827									
SD2A035																		
SD2E035	10656	12745	13148	13558	13870	4162	14193	15425	16188									
SD2A042																		
SD2E042	12630	15106	15583	16070	16440	4933	16822	18283	19187									
SD2A053																		
SD2E053	17643	18948	19547	20158	20621	6188	21101	22933	24068									
SD2A064																		
SD2E064	21241	22812	23533	24268	24826	7450	25404	27610	28975									
SD2A074																		
SD2E074	24742	26572	27412	28268	28919	8678	29592	32161	33752									
SD2A085																		
SD2E085	28426	30528	31493	32477	33225	9970	33998	36950	38777									
SD2A098																		
SD2E098	32501	34905	36008	37133	37998	11400	38871	42247	44336									

(*) Same capacities for 50Hz and 60Hz / R404A, R507A, R407A, R407C, and R-22. For other refrigerant gases, NH3 or CO2, contact Mipal's engineering department

Air range



Air flow rectifier grid (Patent Pending)

12 meters

Range of the projectile with a final velocity of 0.25 m/s. The final velocity is obtained under open-field conditions. The range of the projectile cannot be considered an absolute value because many factors influence this distance

How to buy

Model	Description	Available Options
S	Low Profile Forced Air Evaporator 300mm	
G	Fin spacing	G • 6mm
E	Defrost	A • Air E • Electric F • Electric on the tray G • Gas evaporator and tray H • Gas and electric on the tray I • Gas evaporator
0023	Model	0023 - 0027 - 0032 - 0040 - 0047 - 0054 - 0072 - 0077
C	Tubes	C • Copper
A	Connections and inbox	A • Expansion Direct M • Direct Expansion and overtray
00	Accessories	00 • Without accessories 01 • Expansion valve 02 • Solenoid valve 11 • Expansion valve and solenoid
A	Finishing	A • Aluminum cabinet B • Aluminum cabinet and N1 protection on the fins C • Aluminum cabinet and N2 protection on the fins D • Protected aluminum cabinet E • Protected aluminum cabinet and N1 protection on the fins F • Protected aluminum cabinet and N2 protection on the fins
ESM	Motor	ESM • Fan motor ESM
H	Voltage and frequency	G • 230V/1F/50Hz N • 230V/1F/60Hz
1	Packaging	1 • Wooden box 2 • Cardboard box 5 • EPE + PVC film

Electrical characteristics

Code		m³/h	Fan motor 220V - 50/60Hz		Electric resistors	
			W	A	W	A
SD2A010 SD2E010	1	1000	32	0,24	2 x 500	4,6
SD2A012 SD2E012	2	2000	64	0,48	2 x 1000	9,1
SD2A017 SD2E017	2	2000	64	0,48	2 x 1000	9,1
SD2A020 SD2E020	2	2000	64	0,48	2 x 1000	9,1
SD2A026 SD2E026	3	3000	96	0,72	2 x 1500	13,6
SD2A030 SD2E030	3	3000	96	0,72	2 x 1500	13,6
SD2A035 SD2E035	4	4000	128	0,96	2 x 2000	18,1
SD2A042 SD2E042	4	4000	128	0,96	2 x 2000	18,1
SD2A053 SD2E053	5	5000	160	1,20	2 x 2500	22,7
SD2A064 SD2E064	6	6000	192	1,44	2 x 3000	27,2
SD2A074 SD2E074	7	7000	224	1,68	2 x 3500	31,8
SD2A085 SD2E085	8	8000	256	1,92	2 x 4000	36,4
SD2A098 SD2E098	9	9000	288	2,16	2 x 4500	41,0

Temperature, vibration, and shock-resistant connector. Spring connection technology reduces electrical installation time without the need for special tools

Subtitles

C = Approximate refrigerant charge

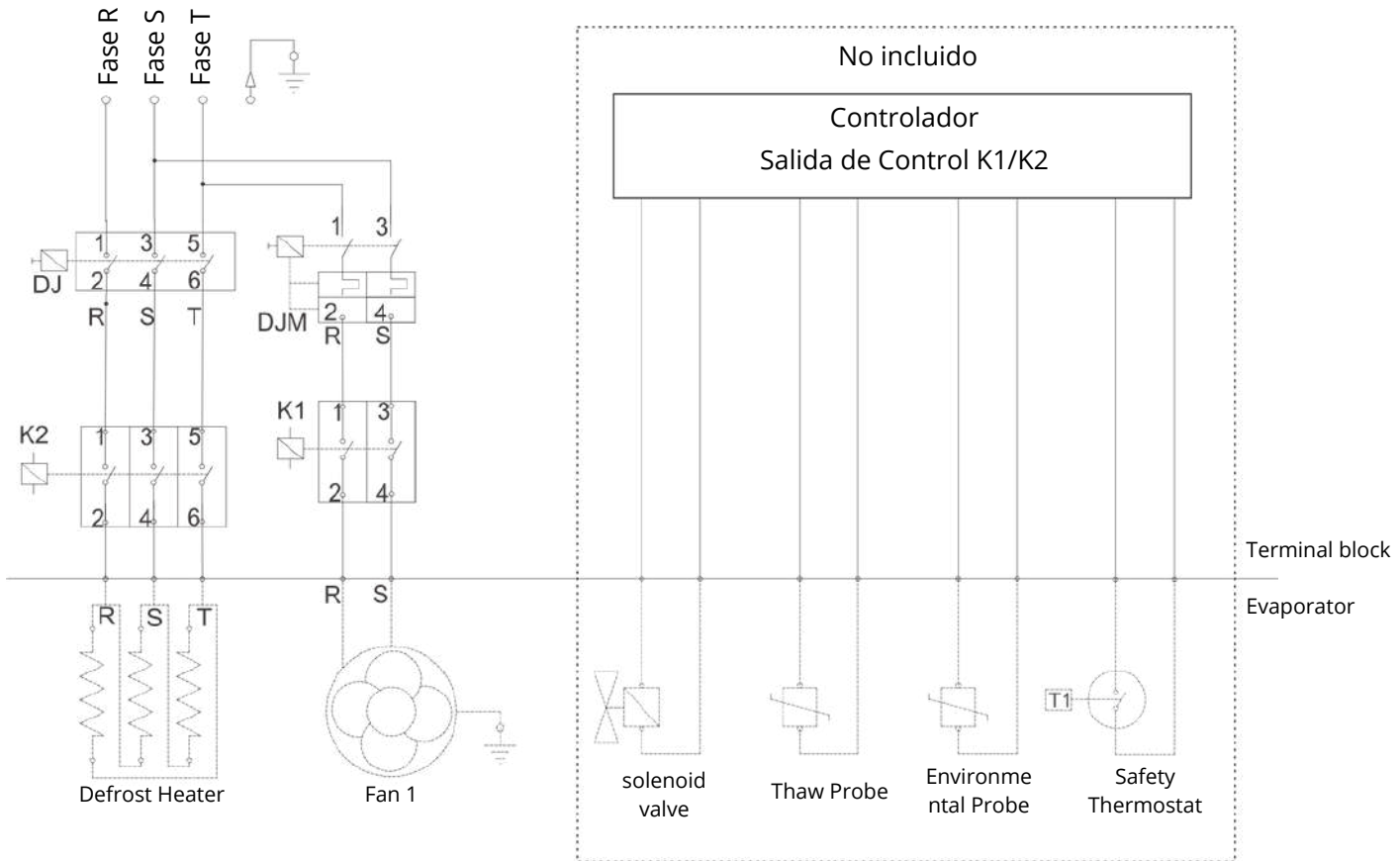
N = Noise level obtained under open field conditions at a distance of 1 meter. (Actual noise level depends on factors such as: chamber construction, type of load, and number of installed devices).

m³/h = Air flow rate measured at a density of 1.2 M³/Kg

d = Unbalanced consumption

Noise level obtained under open field conditions at a distance of 1 meter. (The actual noise level depends on factors such as: camera construction, type of load, and number of installed devices). Air range of 12m, with a final speed of 0.25 m/s. The final speed of 0.25 m/s is achieved under open field conditions. The air range cannot be considered an absolute value, as many factors influence this distance. We recommend using this model for cold rooms with a useful height of up to 4 meters.

Electrical Schematics

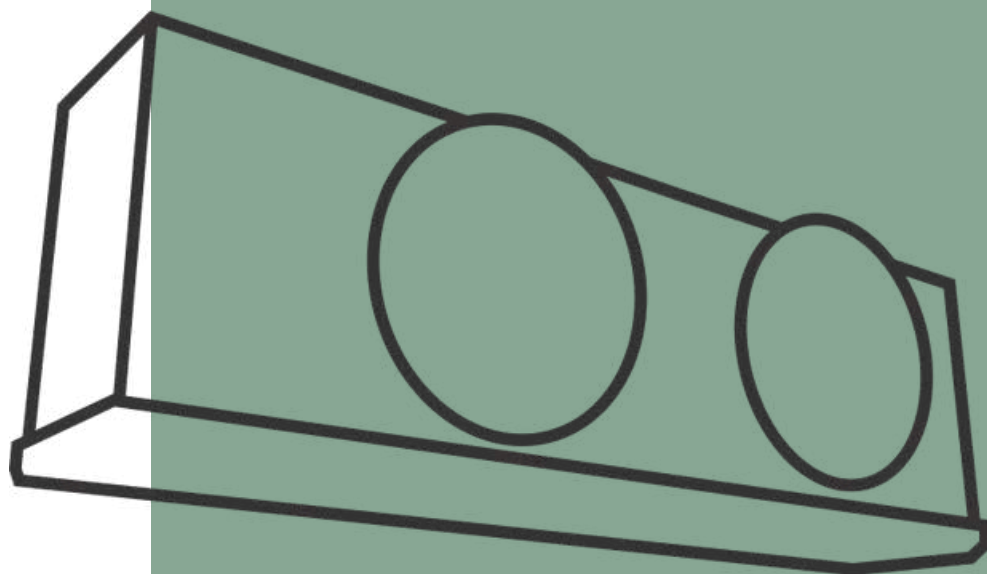


Subtitles:

- K1 = Contactor with Fans
- K2 = Contactor Resistors
- DJ = Circuit Breaker
- DJM = Motor Circuit Breaker

Attention

- To size the installation components, refer to the catalog data sheet.
- To change the factory power supply, speak with Mipal's engineering department.
- The safety thermostat prevents high temperatures. Install in the electrical panel adjusted to MAX 40 °C.
- Always use grounding cable.




 mipal.com.br/espanhol


 [mipal_evaporadores](https://www.instagram.com/mipal_evaporadores)

 [mipallatinoamerica](https://www.facebook.com/mipallatinoamerica)

 [mipal](https://www.youtube.com/mipal)

 [mipal](https://www.linkedin.com/mipal)

 +55 11 4409-0515

 11 97617-5467

Av. Engenheiro Afonso Botti, 240
Pinhal • Cabreúva • 13315-000

MIPAL
Technology and Trust

Mipal reserves the right to change the data presented in this catalog without prior notice. The photos presented in this catalog are for illustrative purposes only