

NF

Unit cooler for blast freezing and rapid cooling tunnel
Industrial range



35 - 130 kW



NF | Industrial unit cooler for blast freezing tunnel

- # High speed air circulation ensures **very rapid cooling** of foodstuffs.
- # Large exchange surface for **optimal energy efficiency**.

VENTILATION

- # Ventilation assembly delivered separately, to be positioned above the coil.
- # Motor fans Ø 710 mm, 230-400V/3/50Hz, IP 55, class F.



OPTIONS

- ECB** Wooden crate packaging.

COILS

- # Embossed aluminium fins with 9 mm spacing.
- # Combined with staggered copper tubes, the coils are very efficient and compact.
- # Versions available:
 - Multi refrigerants HFCs
 - CO2 (40 bar)
 - WCO (glycol water, coolant)



DEFROST

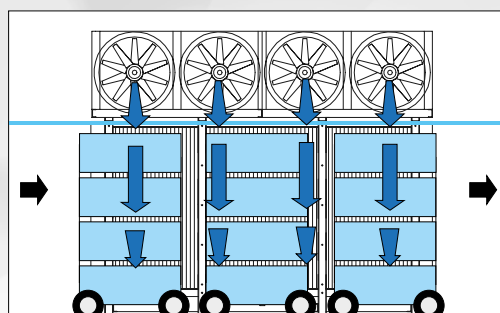
- # Drain pan under the exchanger assembly.
- # Electric defrost.

OPTIONS

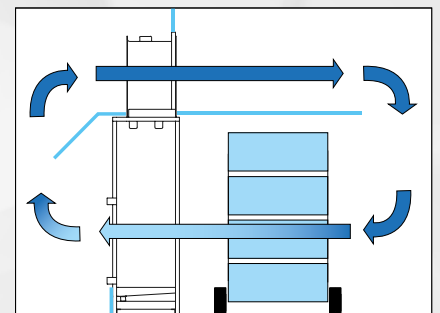
- DAE** Water defrost (spraying).

INSTALLATION | MAINTENANCE

- # Because of the height, the NF is delivered in 2 parts:
 - an assembly comprising coil, frame, drain pan and heaters,
 - a motor fan assembly.
- # Drain pan tilted towards the large drain pipe (Ø 1 1/2" G) to avoid dirt accumulation and facilitate cleaning.



**THE PRINCIPLE
OF A BLAST
FREEZING AND
RAPID COOLING
TUNNEL**



NFT^(A) 280^(B)

(A) Fin spacing: **NFT** = 9 mm
(B) Model

The NF is available with CO₂ HFCs and Glycol Water.
For more information, please consult our software.

CONDITIONS	REFRIGERANTS	NFT ...	NFT - 100 Pa ⁽¹⁾				
			280	401	507	676	802
SC3 (2)	CO ₂ - 40 bar (3)	kW	53,5	77,9	100,2	130,3	151,8
	R449A	kW	39,3	59,7	76,9	101,7	122,8
SC4 (2)	CO ₂ - 40 bar (3)	kW	42,6	62,0	79,7	103,7	120,3
	R449A	kW	29,9	45,3	58,5	77,5	93,3
Surface area		m ²	308,0	442,3	559,9	746,6	884,7
Circuit volume		dm ³	119,6	171,7	217,4	289,8	343,4
Fan*		Nb	2	3	4	5	6
Airflow		m ³ /h	31800	46500	60400	78500	94200
Air throw (4)		m	41	49	56	64	71
Electric defrost	Coil + drain pan 400 V/3/50 Hz	Nb	19+2	19+2	19+2	19+2	19+2
		W total	27300	47250	59850	79800	92400
		A total	39.6	68.5	86.7	115.7	133.9
Connections HFCs	Inlet	Ø (5)	1"3/8	2x1"1/8	2x1"3/8	2x1"3/8	2x1"3/8
	Outlet	Ø (6)	2"5/8	2x2"1/8	2x2"5/8	2x2"5/8	2x3"1/8
Net weight		kg	600	830	1060	1330	1560

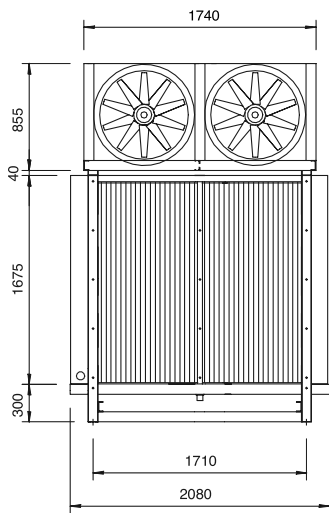
* Ø 710 mm - 1,420 rpm - 2.2 kW max - 230 V/3/50 Hz: 8.5 A max - 400V/3/50Hz: 4.9 A max. (7).

- (1) Additional available air pressure in pascals.
- (2) Standard conditions:
SC3 / -18 °C (air inlet temp.) / -25 °C (evaporating temp.) / DT1 = 7K
SC4 / -25 °C (air inlet temp.) / -31 °C (evaporating temp.) / DT1 = 6K
- (3) Operating pressure - Specific coil - Connection diameters to be defined when ordering.
- (4) Residual air speed: 0.25 m/s.
- (5) Distributor: male to solder.
- (6) Ø: male to solder.
- (7) Adjustment of overload protection.

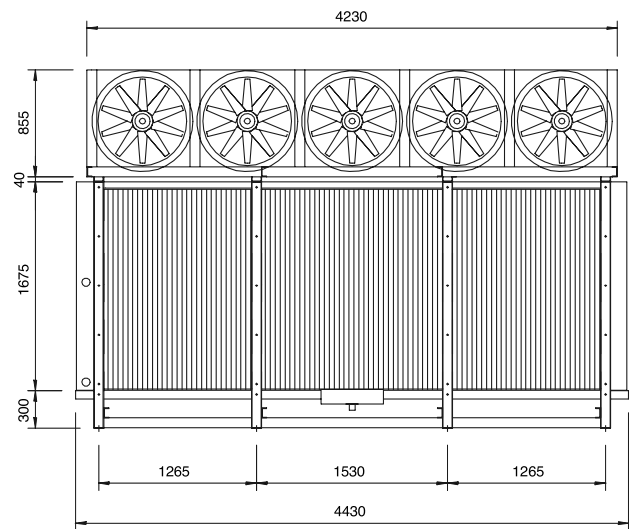
Sound power per fan Lw

	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz
Lw - dB(A)	58	78	86	91	93	90	83	72

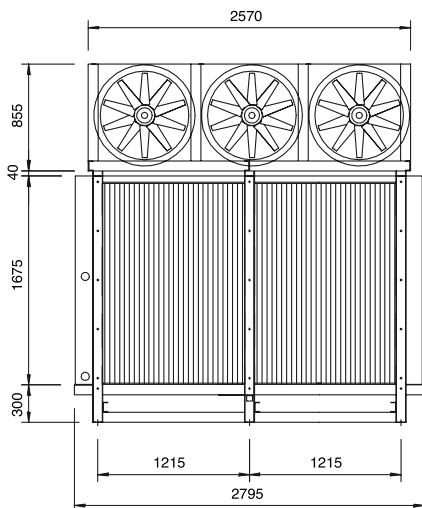
NFT 280



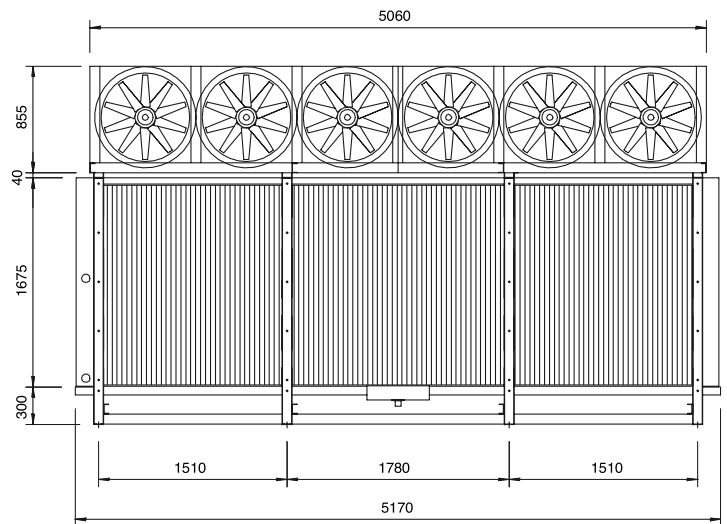
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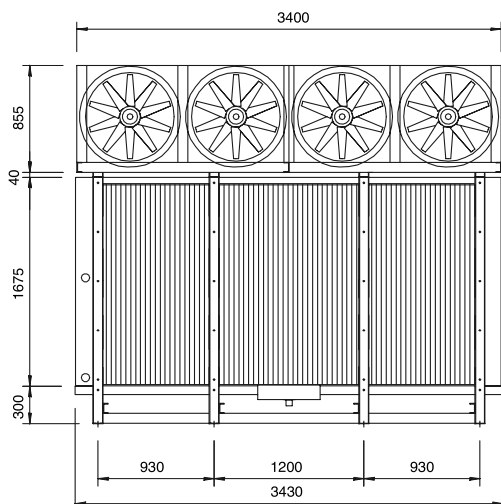
NFT 401



NFT 802



NFT 507



NFT

