

tABF

Air Temperature Control units for Blown Film Lines
Where Blown Film Meets Cooling Revolution

EURO CHILLER

■ Part of Atlas Copco Group



Air-Ring
Air-Ring + IBC
Single or Twin version

2.000 ~ 11.000 m³/h
Process air flow

Find out more



New Eurochiller tABF range

The new concept for Air Temperature Control

Meet **tABF**, the new Air Temperature Control units innovating the cooling on blown film line applications. Utilizing a **new refrigerant** to significantly minimize environmental impact with a **low GWP** (Global Warming Potential). Designed specifically for industrial processes, these units provide exceptional flexibility and energy efficiency without forgetting about the cooling precision. This direct expansion air chiller, featuring inverter-controlled scroll compressors, electronic expansion valves and integrated connectivity, guarantee high performance, reliability, and easy maintenance. **Designed for the purpose, tABF is your best partner in blown film production.**



Competitive Advantages

tABF is equipped with direct expansion evaporating coil, Inverter compressors technology, PID control algorithm with speed management. These features offer a lot of advantages when compared to Indirect Air coolers. They guarantee **improved mechanical properties** of the film, **increased transparency and gloss** and **increased production speed**.



Exceptional Energy Efficiency

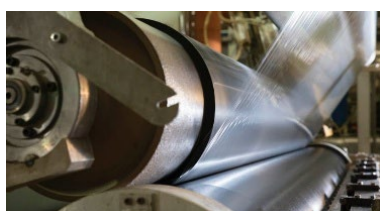
- **Standard Mode:** Mechanical cooling only (compressors).
- **Precision Mode:** Mechanical cooling + heat recovery via water/air coil integrated.
- **Energy Saving Mode:** Energy Saving through a new regulation concept.



Suitable for All Conditions

- **Ambient air temperature:** from -10°C to +50°C
- **Wide condensing water** inlet temperature range: from 12°C to 55°C.
- Compatible with any available on-site water source.
- Compressor speed regulation: from **20 Hz to 120 Hz**

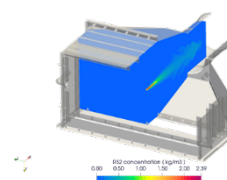
BOOST QUALITY & PRODUCTION



MONEY SAVING UNIT



DESIGNED TO LAST



New Eurochiller tABF range

The new concept for Air Temperature Control

Improved Reliability

Design of the chassis based on FEM analysis

Compliance with new F-Gas

New low-GWP Refrigerant

Enhanced operating temperature range

Last generation VSD Scroll Compressors

Increased efficiency

Heat Exchangers re-designed with CFD study



Connectivity with the Blown Film line

Multiple communication protocols

Reduced energy consumption

Energy-saving plug-&-play solution

Variable speed Scroll compressors

Advanced BLDC motor technology

Wide operational range

Flexible operational range for every location

Ready for Industry 5.0



The **PLC interface** enables seamless integration with the most widely used industrial communication protocols, including Ethernet and Profibus. This feature supports the digital transformation of manufacturing environments by ensuring full connectivity within modern factory.



Water-cooled Air Temperature Control units for Blown Film Lines

Technical Data

tABF WG 400V/50 Hz

SINGLE (Air-Ring temperature control)



TWIN (Air-Ring + IBC temperature control)



		20	30	40	55	110	20/10	30/10	40/15	55/20	75/30
Cooling Capacity ¹	[kW]	25,0	35,0	45,0	65,0	Available from 2027	25,0 / 10,0	35,0 / 10,0	45,0 / 15,0	65,0 / 25,0	Available from 2027
Nominal air flow rate	[m³/h]	2.000	3.000	4.000	5.500		2.000 / 1.000	3.000 / 1.000	4.000 / 1.500	5.500 / 2.000	
Frame	-	Small		Medium			Small + Small		Medium + Small		
Refr. circuits / air loop link	-	1 / 1					2 / 2				
Compressors / Circuits	-	1 / 1					2 / 2				
Total power input ¹	[kW]	4,8	6,1	8,8	11,6		4,8 / 2,1	6,1 / 2,1	8,8 / 3,5	11,6 / 4,8	
Min. air flow	[m³/h]	650	1.000	1.300	1.800		650 / 320	1.000 / 320	1.300 / 500	1.800 / 650	
Dimensions (L x D x H)	[mm]	1.810 x 610 x 1.870		1.810 x 1.100 x 1.870			1.810 x 1.215 x 1.870		1.810 x 1.695 x 1.870		

(1) Reference condition: Air IN 35 °C, 45 % r.h. / Air OUT 15 °C, nominal air speed. Condensing water IN/OUT: 30 / 35 °C.
Preliminary data – subject to change without notice.

Applications of tABF in the Plastic Industry

- Food Packaging Films
- Shrink Films
- Stretch Films
- Polybags
- Zipper Bags
- Greenhouse Films
- Mulch Films
- Silage Bags
- Construction Films
- Barrier Films

Eurochiller S.r.l.

Headquarter and production facilities
Via Milano, 69 – 27030 Castello d'Agogna (PV) – Italy
Tel. +39 0384.298985
Service +39 0384.298981
VAT Number: IT01482170188

