



Quality Air

The right air quality
for any application

A compressor takes humidity and contamination from the intake air, during the compression process these particles combine with the oil used in the compressor.

All these impurities can cause wear and corrosion to the downstream equipment, with potential costly interruption to production, and reduction in the efficiency and service life of the equipment used. To reduce this negative impact, ABAC has developed a whole range of products to ensure air quality, increase efficiency and productivity and lengthen the life span of your equipment and tools.



Refrigeration Dryers

Today's compressed air production process is not only a matter of producing air, but also of confirming with defined purity criteria. As humidity is a component of atmospheric air, it can be found in the compressed air distribution systems and the machines that use the compressed air in the form of condensate and/or vapour.

ABAC provides refrigeration dryers to remove condensate and vapour so that dry compressed air is achieved and a continuous efficiency is preserved.



Applications

- Pneumatic tools and equipment
- Pneumatic control systems
- Painting application
- Packaging
- Injection molding
- Car shop
- Tire inflation

Main Benefits

- More economical distribution network
- Longer life span of your equipment and distribution network due to less wear
- Greater productivity and lower maintenance costs thanks to less breakdowns
- Intelligent discharge silently getting rid of water **(1)**
- Higher final product quality
- Increased reliability of your final tools/equipment
- Energy savings with lower pressure drops
- Easy dew point indicator reading **(2)**

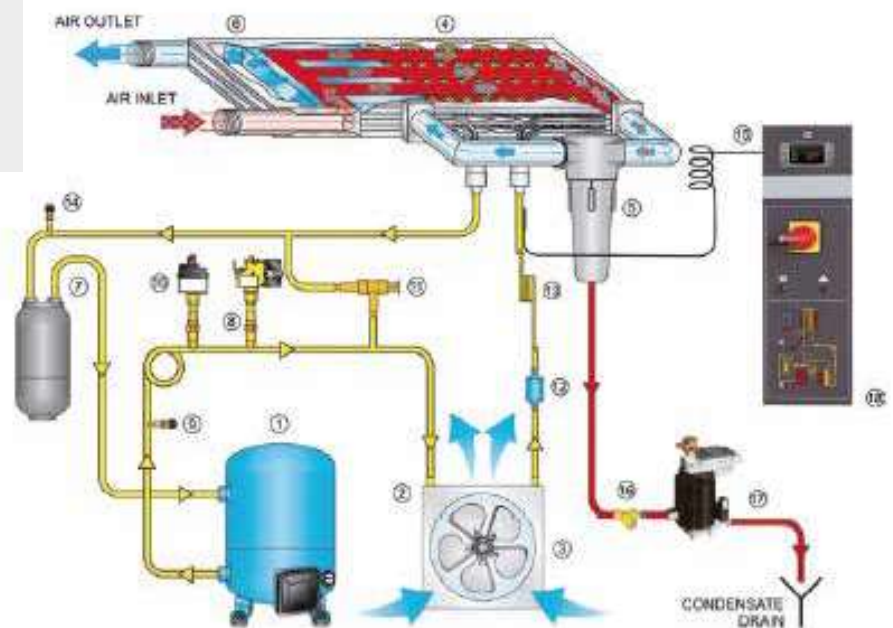
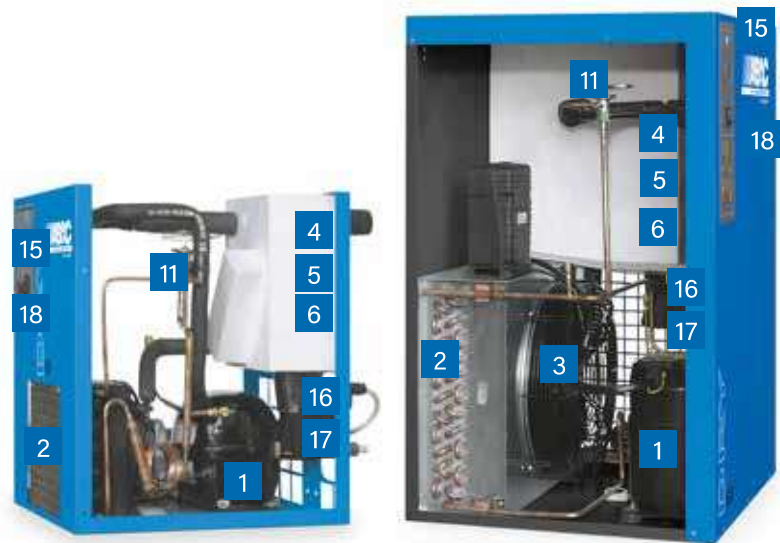
1



2



1. Refrigerant compressor driven by an electric motor, cooled using refrigerant fluid and protected against thermal overload.
2. Refrigerant condenser air-cooled and with a large exchange surface for high thermal exchange.
3. IP 54 motor-driven ventilator for the condenser cooling air flow.
4. Air/refrigerant evaporator with high thermal exchange and low leakage rates.
5. Condensate separator High-efficiency
6. Air - air heat exchanger with high thermal exchange and low load losses
7. Refrigerant fluid separator
8. Maximum pressure switch
9. Service valve
10. Pressure switch, fan control
11. Hot gas bypass valve controls the refrigerant capacity under all load conditions preventing any formation of ice within the system.
12. Refrigerant fluid filter
13. Capillary tube
14. Service valve
15. Instrument panel
16. Impurity filter for collecting any impurities to protect the system
17. Automatic discharge of condensate which is ecological and capable of preventing unwanted discharge of compressed air.



Options

Available from dry 20 up to 130: By-pass valve + filter support
 Note: the air filter is not included in the option.

Available from dry 20 up to 130: Filter support
 Note: the air filter is not included in the option

Reference conditions:

- Operating pressure : 7 bar (100 psi)
- Operating temperature: 35 °C
- Room temperature: 25°

- Pressure dew point: +3 °C +/- 1
- Available in different voltages and frequencies

Limit conditions:

- Working pressure: 16 bar (232 psi) DRY 20-130 13 bar (188 psi) DRY 165-1260
- Operating temperature: 55 °C
- Min/Max room temperature: +5 °C; +45 °C

Optional for DRY (20-130):

- Bypass + filter support
- Filter support



Oil Injected Screw

Refrigeration Dryers

DRY

Model	Part number	Max pressure Bar	Flow rate 3 DRY 5			Flow rate 5 DRY 3			Electrical power W	Volts	dB(A)	Connections	LxWxH (mm)	kg
			l/min	m³/h	cfm	l/min	m³/h	cfm						
DRY 20	4102005869	16	333	20	11,8	267	16	9,4	130	230/1/50	3/4" M	350 x 493 x 450		
DRY 25	4102005870	16	417	25	14,7	350	21	12,4	130	230/1/50	3/4" M	350 x 493 x 450		
DRY 45C	4102005871	16	750	45	26,5	600	36	21,2	164	230/1/50	3/4" M	350 x 493 x 450		
DRY 60	4102005872	16	1000	60	35,3	850	51	30,0	190	230/1/50	3/4" M	350 x 493 x 450		
DRY 85	4102005873	16	1417	85	50,0	1200	72	42,4	266	230/1/50	3/4" M	350 x 493 x 450		
DRY 130	4102005874	16	2167	130	76,5	1825	110	64,4	284	230/1/50	3/4" M	350 x 493 x 450		
DRY 165	4102005884	14	2750	165	97,1	2350	141	83,0	674	230/1/50	58	1"	370 x 498 x 764	
DRY 210	4102005885	14	3500	210	123,6	3000	180	106,0	716	230/1/50	58	1"	370 x 498 x 764	
DRY 250	4102005405	14	4167	250	147,2	3600	216	127,0	659	230/1/50	58	1 1/2"	460 x 558 x 789	
DRY 290	4102005406	14	4833	290	170,7	4100	246	145,0	663	230/1/50	58	1 1/2"	460 x 558 x 789	
DRY 360	4102005407	14	6000	360	211,9	5200	312	184,0	835	230/1/50	58	1 1/2"	460 x 558 x 789	
DRY 460	4102005408	14	7667	460	270,8	6500	390	230,0	1016	230/1/50	59	1 1/2"	580 x 588 x 899	
DRY 530	4102005409	14	8833	530	311,9	7700	462	272,0	1098	230/1/50	59	1 1/2"	580 x 588 x 899	
DRY 690	4102005596	14	11500	690	406,1	10000	600	353,0	1319	400/3/50	60	2"	735 x 898 x 962	
DRY 830	4102005597	14	13833	830	488,5	12000	720	424,0	1631	400/3/50	67	2"	735 x 898 x 962	
DRY 1040	4102005598	14	17333	1040	612,1	15000	900	530,0	1889	400/3/50	67	2"	735 x 898 x 962	
DRY 1260	4102005599	14	21000	1260	741,6	18000	1080	636,0	2110	400/3/50	68	2"	735 x 898 x 962	

Version available: 230V/60Hz/3 - 460V/60Hz/3

Model	Part number
Filters Support A0-A4 1/2g	4101000652
Filters Supp Bypass A0-A4 1/2g	4101000653

Model	Part number
Wooden Cr.a0-4/C0-6 Pad	0000050753
Wooden Crate E5-6/B6 Pad	0000050758
Wooden Crate E7-E8 Pad	0000050763

Model	Part number
Wooden Crate E9-E10 Pad	0000050768
Wooden Crate E11-E14 Pad	0000050773
Wooden Crate Dryer C7-C10 Pad	0000050778

COOL DRY

Model	Part number	Max pressure Bar	Flow rate 3 DRY 5			Electrical power W	Volts	dB(A)	Connections	LxWxH (mm)	kg
			l/min	m³/h	cfm						
COOL21(C0)	4102003602	16	350	21	12,4	130	230/1/50	50	1/2"	233x560x560	19
COOL36(C1)	4102003603	16	600	36	21,2	135	230/1/50	50	1/2"	233x560x560	19
COOL51(C2)	4102003604	16	850	51	30,0	167	230/1/50	50	1/2"	233x560x560	19
COOL72(C3)	4102003605	16	1200	72	42,4	286	230/1/50	47	1/2"	233x560x560	20
COOL110(C4)	4102003606	16	1825	110	64,4	323	230/1/50	53	1/2"	233x560x560	25
COOL129(C5)	4102003607	16	2150	129	75,9	297	230/1/50	53	3/4"	233x560x560	27
COOL 180 (C6)	4102001849	16	3000	180	105,9	419	230/1/50	53	1"	233x560x560	30
COOL216(C7)	4102005075	13	3600	216	127,1	675	230/1/50	58	1"	310x706x994	61
COOL246(C7,5)	4102005076	13	4100	246	144,8	735	230/1/50	58	1 1/2"	310x706x994	66
COOL312(C8)	4102005077	13	5200	312	183,6	702	230/1/50	59	1 1/2"	310x706x994	69
COOL390(C9)	4102005078	13	6500	390	229,5	746	230/1/50	59	1 1/2"	310x706x994	73
COOL462(C10)	4102005079	13	7700	462	271,9	954	230/1/50	59	1 1/2"	310x706x994	73

Correction factor Formula for determining the correction factor: $K = A \times B \times C$

Flow rate correction factors for different conditions than those indicated as reference

°C	Ambient temperature					
	25	30	35	40	43	46
A	1.00	0.92	0.84	0.80	0.79	/ (DRY 20-530)
A	1.00	0.91	0.81	0.72	/	0.62 (DRY 690-1260)

°C	Operating temperature						
	30	35	40	45	50	55	60
B	1.24	1.00	0.82	0.69	0.58	0.45	/ (DRY 20-530)
B	1.00	1.00	0.82	0.69	0.58	0.49	0.42 (DRY 690-1260)

bars	Operating pressure												
	5	6	7	8	9	10	11	12	13	14	15	16	
C	0.90	0.96	1.00	1.03	1.06	1.08	1.10	1.12	1.13	1.15	1.16	1.17	(DRY 20-530)
C	0.90	0.97	1.00	1.03	1.05	1.07	1.09	1.11	1.12	1.15	/	/	(DRY 690-1260)