



Refrigeration Dryers

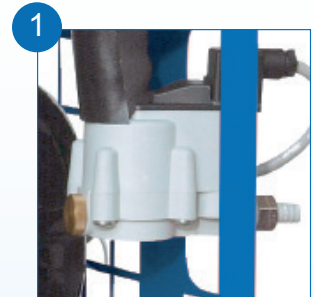
Today's compressed air production process is not only a matter of producing air, but also of confirming with defined purity criteria. As humidity is a component of atmospheric air, it can be found in the compressed air distribution systems and the machines that use the compressed air in the form of condensate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



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 (cfr. below)



PDP indicator

The operation of the DRY dryer is monitored by an electronic controller indicating all relevant information:

Technical details

- Status of the refrigerant dryer
- Status of the fan
- Dewpoint indication

Alarm display

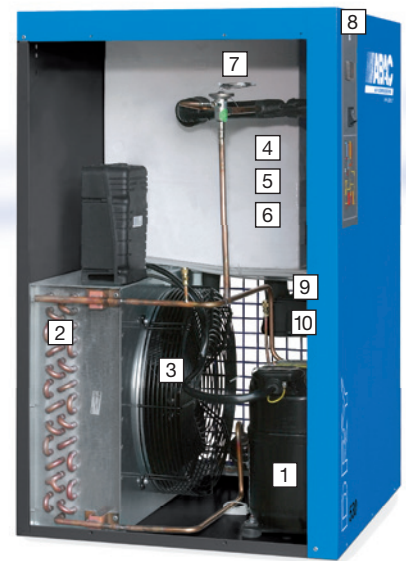
- Alarm about high or low dewpoint
- Fan probe failure (DRY 85-530)
- Service warning

Control panel with free contact (on request) for a:

- Remote PDP alarm (DRY 165-1260)
- Remote high refrigerant temperature (DRY 165-1260)
- Remote fan probe failure (DRY 165 - 530)



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. Hot gas bypass valve controls the refrigerant capacity under all load conditions preventing any formation of ice within the system.
8. Instrument panel
9. Impurity filter for collecting any impurities to protect the system
10. Automatic discharge of condensate which is ecological and capable of preventing unwanted discharge of compressed air.



Options for DRY (20 - 130)

By-pass valve + filter support

Note: the air filter is not included in the option.

Filter support

Note: the air filter is not included in the option



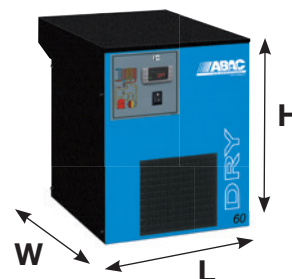
Reference conditions:

- Operating pressure : 7 bar (100 psi)
- Operating temperature: 35 °C
- Room temperature: 25°
- Pressure dew point: +5 °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

Refrigeration Dryers



Type	Code	Max press		Flow rate			Power W	Power supply V/Hz/ph	Connections gas/DIN	Dimensions mm L x W x H	Weight Kg
		bar	psi	m3/1'	m3/h	CFM					
DRY 20	4102000740	16	232	0,333	20	11,8	130	230/50/1	3/4' M	350 x 500 x 450	19
DRY 25	4102000741	16	232	0,417	25	14,7	130	230/50/1	3/4' M	350 x 500 x 450	19
DRY 45	4102000742	16	232	0,750	45	26,5	164	230/50/1	3/4' M	350 x 500 x 450	19
DRY 60	4102000743	16	232	1,000	60	35,3	190	230/50/1	3/4' M	350 x 500 x 450	20
DRY 85	4102000744	16	232	1,417	85	50	266	230/50/1	3/4' M	350 x 500 x 450	25
DRY 130	4102000745	16	232	2,167	130	76,5	284	230/50/1	3/4' M	350 x 500 x 450	27
DRY 165	4102000746	13	188	2,750	165	97,1	609	230/50/1	1" F	370 x 500 x 764	44
DRY 210	4102000747	13	188	3,500	210	124	673	230/50/1	1" F	370 x 500 x 764	44
DRY 250	4102000748	13	188	4,167	250	147	793	230/50/1	1 1/2" F	460 x 560 x 789	53
DRY 290	4102000749	13	188	4,833	290	171	870	230/50/1	1 1/2" F	460 x 560 x 789	60
DRY 360	4102000750	13	188	6,000	360	212	1072	230/50/1	1 1/2" F	460 x 560 x 789	65
DRY 460	4102000751	13	188	7,667	460	271	1190	230/50/1	1 1/2" F	580 x 590 x 899	80
DRY 530	4102000752	13	188	8,833	530	312	1446	230/50/1	1 1/2" F	580 x 590 x 899	80
DRY 690	4102001584	13	188	11,500	690	406	1319	230/50/3	2" F	735 x 898 x 962	128
DRY 830	4102001585	13	188	13,833	830	489	1631	400/50/3	2" F	735 x 898 x 962	146
DRY 1040	4102001586	13	188	17,333	1040	612	1889	400/50/3	2" F	735 x 898 x 962	158
DRY 1260	4102001587	13	188	21,000	1260	742	2110	400/50/3	2" F	735 x 898 x 962	165

Item number	Item description
4101000653	Filters support bypass DRY 20- DRY 130 1/2G
4101000652	Filters support DRY20 - DRY130 1/2G

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

Delivery correction factors for other conditions

Ambient temperature					
°C	25	30	35	40	45
A	1,00	0,92	0,84	0,80	0,74 (DRY20 - DRY530)
A	1,00	0,91	0,81	0,72	0,62 (DRY690 - DRY1260)

Working temperature						
°C	30	35	40	45	50	55
B	1,24	1,00	0,82	0,69	0,58	0,45 (DRY20 - DRY530)
B	1,00	1,00	0,82	0,69	0,58	0,49 (DRY690 - DRY1260)

Working Pressure												
bar (psi)	5 (72)	6 (87)	7 (100)	8 (116)	9 (130)	10 (145)	11 (159)	12 (174)	13 (188)	14 (203)	15 (218)	16 (232)
	0,90	0,96	1,00	1,03	1,06	1,08	1,10	1,12	1,13	1,15	1,16	1,17 (DRY20 - DRY 530)
	0,90	0,97	1,00	1,03	1,05	1,07	1,09	1,11	1,12 (DRY690 - DRY1260)			