COM-DRY SERIES

REFRIGERANT + ADSORPTION COMPRESSED AIR DRYERS

4 to 14 bar
operating pressure

1,5 to 55 °C
operating temperature range

down to -40 °C
pressure dew points

6 to 6.500 Nm³/h
flow rate

4,6 %
avg. comp. air consumption

DESCRIPTION

COM-Dry dryers have been designed for continuous separation of water vapour from compressed air thus reducing dew point. Drying consist of two steps.

Refrigerant dryer first eliminates large majority of water and reduces dew point down to PDP +3°C.

Further reduction of dew point is carried out by adsorption dryer. Operation of dryer is more simple compared to conventional heat regenerated adsorption dryer while average compressed air losses present only up to 4,6%.

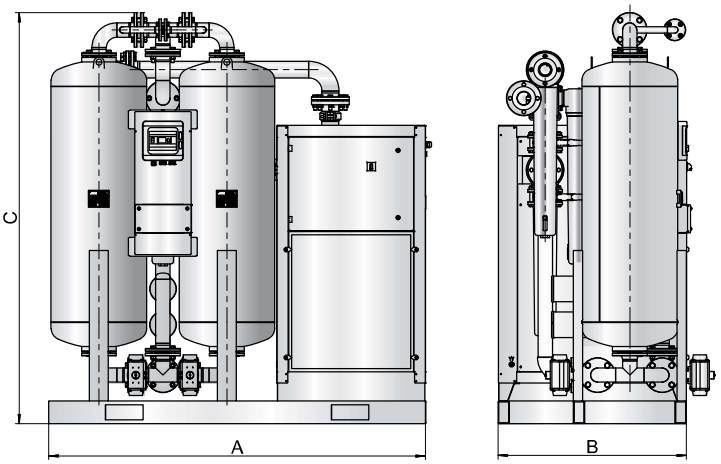
APPLICATIONS

- Compressed air systems

TECHNICAL DATA						
Type	Connection IN/OUT [2]	Nominal volume flow Inlet [1]	Adsorption dryer	Refrigeration dryer	Power	Volume
	DN	[Nm³/h]			kW	l
COM-DRY 06	G 3/8"	6	A-DRY 06	RDP 20	0,15	2,6
COM-DRY 12	G 3/8"	12	A-DRY 12	RDP 20	0,15	4,3
COM-DRY 24	G 3/8"	24	A-DRY 24	RDP 35	0,16	7,8
COM-DRY 36	G 3/8"	36	A-DRY 36	RDP 35	0,16	11,2
COM-DRY 60	G 1/2"	60	A-DRY 60	RDP 75	0,21	19,9
COM-DRY 75	G 1/2"	75	A-DRY 75	RDP 100	0,29	24,3
COM-DRY 110	G 3/4"	110	B-DRY 110	RDP 140	0,39	20
COM-DRY 150	G 1"	150	B-DRY 150	RDP 180	0,48	25
COM-DRY 200	G 1"	200	B-DRY 200	RDP 235	0,71	36
COM-DRY 250	G 1"	260	B-DRY 250	RDP 300	0,79	45
COM-DRY 300	G 1"	320	B-DRY 300	RDP 380	0,82	57
COM-DRY 400	G 1 1/2"	410	B-DRY 400	RDP 480	0,71	70
COM-DRY 600	G 1 1/2"	590	B-DRY 600	RDP 750	1,4	102
COM-DRY 800	G 2"	770	B-DRY 800	RDP 950	1,5	134
COM-DRY 1000	G 2"	1000	B-DRY 1000	RDP 1150	2,1	164
COM-DRY 1200	DN50	1200	F-DRY 1200	RDP 1300	2,3	225
COM-DRY 1500	DN65	1500	F-DRY 1500	RDP 1900	3,6	280
COM-DRY 2000	DN65	2000	F-DRY 2000	RDP 2600	3,9	295
COM-DRY 2500	DN80	2500	F-DRY 2500	RDP 2600	5,2	470
COM-DRY 3000	DN80	3000	F-DRY 3000	RDP 3400	5,9	570
COM-DRY 3750	DN100	3750	F-DRY 3750	RDP 4400	7,1	660
COM-DRY 5000	DN100	5000	F-DRY 5000	RDP 5400	10,8	980
COM-DRY 6500	DN125	6500	F-DRY 6500	RDP 6600	11,3	1200

[1] Refers to 1 bar(a) and 20 °C at 7 bar operating pressure, inlet temperature 35 °C and pressure dew point at outlet -40 °C.
Outlet flow refers to typical assumption during regeneration phase for operating at nominal inlet flow conditions. Outlet flow includes average air losses of approximately 4,6%. Maximum purge air flow during regeneration phase is up to 5,7% of nominal inlet conditions.

[2] Reffers to inlet and outlet filter housing.



CORRECTION FACTORS

To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).
CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C_{OP} x C_{IT} x C_{AT} x C_{D}

OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}											
Operating pressure [bar]	4	5	6	7	8	9	10	11	12	13	14
Operating pressure [psi]	58	72	87	100	115	130	145	160	174	189	203
Correction factor C_{OP}	0,63	0,75	0,88	1	1,05	1,09	1,14	1,18	1,21	1,24	1,27

INLET TEMPERATURE - CORRECTION FACTORS - C_{IT}							
Inlet temperature [°C]	25	30	35	40	45	50	55
Inlet temperature [F]	77	86	95	104	113	122	131
Correction factor C_{IT}	*	*	1	0,81	0,67	0,55	0,45

AMBIENT TEMPERATURE - CORRECTION FACTORS - C_{AT}					
Ambient temp. [°C]	<25	30	35	40	45
Ambient temp. [F]		86	95	104	113
Correction factor C_{IT}	1	0,95	0,88	0,79	0,68

DEW POINT - CORRECTION FACTORS - C_{D}			
Ambient temp. [°C]	-25	-40	-70
Ambient temp. [F]	-13	-40	94
Correction factor C_{D}	*	1	*

*Contact manufacturer.