RC-DRY SERIES

REGENERATION BY HEAT OF COMPRESSION - FULL STREAM

4 to 11 bar
operating pressure

140 to 200 °C
inlet air temperature range

-20 °C
pressure dew points

390 to 20.200 Nm³/h
flow rate

0 %
avg. comp. air consumption

DESCRIPTION

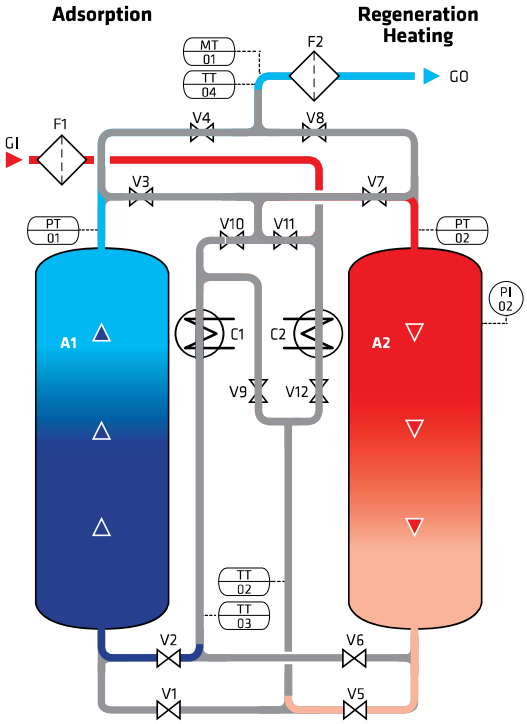
RC-DRY adsorption dryers have been designed for continuous separation of water vapour from compressed air thus reducing dew point. Operation of dryer requires two columns operated alternately. Heat of compression dryers do not need any additional source of energy to regenerate the adsorbent as they fully or partially utilise the heat generated during compression of the air in the compressor. Adsorption as well as regeneration take place under pressure meaning no compressed air is wasted for depressurisation.

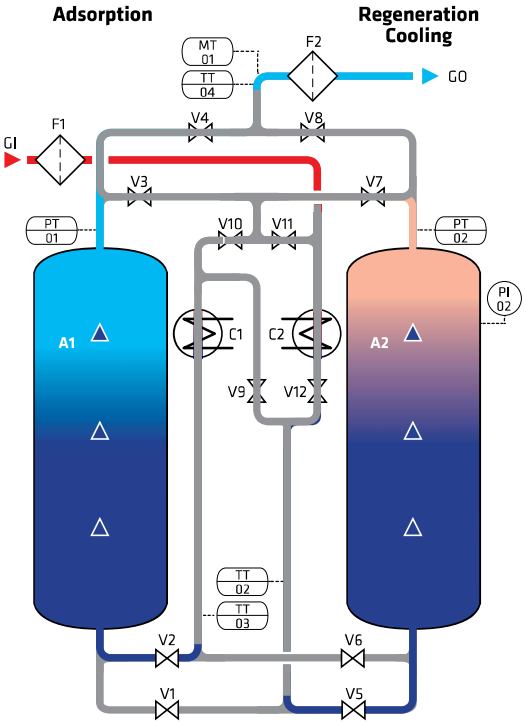
A dryer consists of two columns, filled with desiccant beads, water cooled heat exchangers, controller with LCD display, valves, manometers, and support construction. Proven robust design enables efficient and reliable operation, fast installation and simple maintenance.

APPLICATIONS

- Compressed air systems

A1-2	pressure vessel
F1	inlet filter (super fine coalescing)
F2	outlet filter (dust)
V1-6	ball valve with pneumatic actuator
V7-10	angle seated valve with pneumatic actuator
CV1-2	check valve
TT1-4	temperature transducer
PI1-2	pressure indicator
PT1-2	pressure transducer
DT1	dew point transducer
GI	air inlet
GO	air outlet
RO	regeneration air outlet
C1-2	water cooled heat exchanger

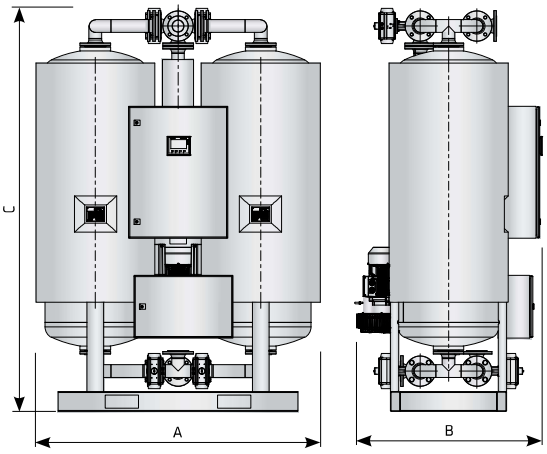








TECHNICAL DATA			
Type	Connection IN/OUT [2]	Nominal volume flow Inlet [1]	Filter type
	DN	[Nm³/h]	
RC-DRY 400	DN50	390	AF 0476
RC-DRY 600	DN50	590	AF 0706
RC-DRY 780	DN50	780	AF 0706
RC-DRY 1000	DN50	930	AF 0946
RC-DRY 1200	DN80	1.150	AF 1506
RC-DRY 1600	DN80	1.600	AF 1756
RC-DRY 2000	DN100	1.950	AF 2006
RC-DRY 2500	DN100	2.530	AF 2406
RC-DRY 3000	DN100	2.990	BF 300
RC-DRY 3600	DN100	3.680	BF 450
RC-DRY 4100	DN125	4.100	BF 450
RC-DRY 5000	DN125	4.990	BF 600
RC-DRY 6500	DN150	6.550	BF 900
RC-DRY 7700	DN150	7.700	
RC-DRY 10000	DN200	10.250	
RC-DRY 12000	DN200	11.700	
RC-DRY 14000	DN200	14.800	
RC-DRY 16000	DN250	16.000	
RC-DRY 18000	DN250	18.200	
RC-DRY 20000	DN250	20.200	



OPERATING PRESSURE - CORRECTION FACTORS - C_{OP}								
Operating pressure [bar]	4	5	6	7	8	9	10	11
Operating pressure [psi]	58	72	87	100	115	130	145	160
Correction factor C_{OP}	0,63	0,75	0,88	1	1,13	1,25	1,38	1,50

OPERATING TEMPERATURE - CORRECTION FACTORS - C_{OT}					
Operating temperature [°C]	25	30	35	40	42,5
Operating temperature [F]	77	86	95	104	108
Correction factor C_{OT}	1	1	1	0,7	0,52

Protection class	IP 54
Filter (inlet)	super fine - 0,01 µm
Filter (outlet)	dust filter; 1 µm
Column insulation	optional

[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

[2] Refers to dryer inlet and outlet connection without filters