

# AD 15 - 4200 - Non-cycling refrigeration dryers

## General specifications

- ▶ Non-cycling refrigeration dryers
- ▶ Operating Pressure:
  - AD 15 - 65: 4-16 barg/60-232 psig
  - AD 85 - 4200: 4-14 barg/60-203 psig
- ▶ Max. inlet temperature: 55°C/113°F
- ▶ Flow rate: 21 - 7200 m<sup>3</sup>/hr/  
12 - 4238 cfm<sup>(1)</sup>
- ▶ Pressure dew point: up to +3°C/37°F
- ▶ Power supply:
  - AD 15 - 270: 230V AC 50/60 Hz
  - AD 355 - 4200: 400V/50Hz; 380V/60Hz; 460V/60Hz
- ▶ Refrigerant: R513A (AD 15 - 105); R410A (AD 125 - 4200);

## Refrigeration Dryers: AD Series (15-4200) Non cycling

AD 15-65	AD 85-105
	
Features & Benefits	Features & Benefits
<ul style="list-style-type: none"> <li>• Stable performance and guaranteed dew point up to 3°C/37°F</li> <li>• Ingeniously designed components to ensure maximum performance                             <ul style="list-style-type: none"> <li>• Hot gas bypass valve to prevent freezing at lower loads</li> <li>• Zero-loss electronic drain to prevent loss of valuable compressed air</li> <li>• Brazed plate heat exchanger with integrated water separator and air-to-air heat exchange</li> </ul> </li> <li>• R513A refrigerant gas: low global warming impact, zero ozone depletion</li> <li>• Digital display with real-time PDP monitoring</li> <li>• Easy plug-and-play installation</li> </ul>	<ul style="list-style-type: none"> <li>• Stable performance and guaranteed dew point up to 3°C/37°F</li> <li>• Ingeniously designed components to ensure maximum performance                             <ul style="list-style-type: none"> <li>• Hot gas bypass valve to prevent freezing at lower loads</li> <li>• Zero-loss electronic drain to prevent loss of valuable compressed air</li> <li>• Aluminium block heat exchanger with integrated water separator and air-to-air heat exchange</li> </ul> </li> <li>• Environmental safe refrigerant gases R513A</li> <li>• Digital display with real-time PDP monitoring</li> <li>• Easy plug-and-play installation</li> </ul>

## Options



Filter support



Bypass valve

Pneumatech's AD 15-4200 non-cycling refrigeration dryers are designed to protect your compressed air system by lowering the presence of moisture in the compressed air. Thanks to the new controller with digital display, real time PDP monitoring is possible. The zero-loss electronic drains avoid compressed air losses. The well-designed heat exchangers ensure maximum cooling efficiency, making the AD dryers a genuine air drying solution in industrial applications. The AD15-105 is introducing the efficient and environmental friendly R513A refrigerant, reducing the global warming potential largely.

The AD125-4200 range is equipped with the winning combination: rotary compressors and R410A refrigerant. This combination is up to 30% more energy efficient, requires 20% less refrigerant gas and is 100% compliant with European regulation EU No 517/2014, hereby significantly reducing the ecological footprint of these dryers. Rotary compressors are moreover very reliable thanks to the low vibration levels and limited mechanical load. R410A guarantees stable evaporation, which makes the pressure dew point of up to 3°C/37°F achievable.

AD 125-270	AD 355-635	AD 750-4200
		
Features & Benefits	Features & Benefits	Features & Benefits
<ul style="list-style-type: none"> <li>• Stable performance and guaranteed dew point up to 3°C/37°F</li> <li>• Rotary compressors and R410A refrigerant: the winning combination               <ul style="list-style-type: none"> <li>• 30% more energy efficient</li> <li>• Requires 19% less refrigerant gas</li> </ul> </li> <li>• Extremely reliable: low vibration levels and limited mechanical load</li> <li>• Ingeniously designed components to ensure maximum performance               <ul style="list-style-type: none"> <li>• Hot gas bypass valve to prevent freezing at lower loads</li> <li>• Zero-loss electronic drain to prevent loss of valuable compressed air</li> <li>• Aluminium block heat exchanger with integrated water separator and air-to-air heat exchange</li> </ul> </li> <li>• Digital display with real-time PDP monitoring and voltage-free contact for remote alarm</li> <li>• Easy plug-and-play installation</li> </ul>	<ul style="list-style-type: none"> <li>• Stable performance and guaranteed dew point up to 3°C/37°F</li> <li>• Rotary compressors and R410A refrigerant: the winning combination               <ul style="list-style-type: none"> <li>• 30% more energy efficient</li> <li>• Requires 19% less refrigerant gas</li> </ul> </li> <li>• Extremely reliable: low vibration levels and limited mechanical load</li> <li>• Ingeniously designed components to ensure maximum performance               <ul style="list-style-type: none"> <li>• Hot gas bypass valve to prevent freezing at lower loads</li> <li>• Zero-loss electronic drain to prevent loss of valuable compressed air</li> <li>• Aluminium block heat exchanger with integrated water separator and air-to-air heat exchange</li> </ul> </li> <li>• Advanced controlling and monitoring thanks to the controller installed               <ul style="list-style-type: none"> <li>• Digital PDP display</li> <li>• Remote start/stop</li> <li>• Voltage-free contact for general alarm</li> </ul> </li> <li>• Easy plug-and-play installation</li> </ul>	<ul style="list-style-type: none"> <li>• Stable performance and guaranteed dew point of 3°C/37°F.</li> <li>• Rotary compressors and R410A refrigerant: The winning combination               <ul style="list-style-type: none"> <li>• 30% more energy efficient</li> <li>• 20% lower gas load</li> <li>• Extremely reliable: Less moving parts, low vibration levels and limited mechanical load</li> </ul> </li> <li>• Ingeniously new designed components to ensure maximum performance               <ul style="list-style-type: none"> <li>• Ultra-efficient micro-channel condenser providing up to 40% more heat rejection, durable and easy maintenance</li> <li>• Hot gas bypass valve to prevent freezing at lower loads</li> <li>• Zero-loss electronic drain to prevent loss of valuable compressed air</li> <li>• New aluminium heat exchanger designed for maximum heat transfer and optimized air recovery (max. 2°C dT from inlet to outlet)</li> </ul> </li> <li>• Advanced controlling and monitoring               <ul style="list-style-type: none"> <li>• Digital PDP display</li> <li>• Remote start/stop</li> <li>• Voltage-free contact for general alarm</li> </ul> </li> <li>• Easy plug-and-play installation</li> </ul>

<sup>1</sup> Flow is measured at reference conditions: ambient pressure of 1 bara and 25°C at operating pressure of 7 barg, inlet temperature 35°C .

# AD 15 - 4200 - Non-cycling refrigeration dryers

Technical specifications for AD 15-425 50Hz

Pneumatech Variants →	Units	AD 15	AD 20	AD 30	AD 40	AD 65	AD 85	AD 105	AD 125	AD 145	AD 185	AD 230	AD 270	AD 355	AD 425
Specifications ↓															
Max Operating Pressure	bar	16	16	16	16	16	14	14	14	14	14	14	14	14	14
Flow	l/s	6	10	14	20	30	39	50	60	68	87	108	128	167	200
	m³/hr	22	36	50	72	108	140	180	216	245	313	389	461	601	720
Power	kW	0.13	0.17	0.19	0.27	0.29	0.67	0.71	0.63	0.7	0.9	0.97	1.12	1.54	1.98
Connection	inch/DIN	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	2"	2"
Power Supply	V/Ph/Hz	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	230/1/50	400/3/50	400/3/50
Weight	kgs	19	19	20	25	27	44	44	62	60	62	82	82	145	158
Dimensions	L (mm)	493	493	493	493	493	497	497	557	557	557	587	587	1070	1070
	W (mm)	350	350	350	350	350	370	370	460	460	460	580	580	805	805
	H (mm)	450	450	450	450	450	764	764	789	789	789	899	899	962	962

Technical specifications for AD 530-4200 50Hz

Pneumatech Variants →	Units	AD 530	AD 635	AD 750	AD 1000	AD 1250	AD 1600	AD 1800	AD 2200	AD 2500	AD 3000	AD 3500	AD 4200
Specifications ↓													
Max Operating Pressure	bar	14	14	14	14	14	14	14	14	14	14	14	14
Flow	l/s	250	300	400	500	583.3	750	833.3	1040	1166.7	1400	1650	2000
	m³/hr	900	1080	1440	1800	2100	2700	3000	3744	4200	5040	5940	7200
Power	kW	2.01	2.77	3.5	3.69	4.55	6.09	6.54	7.1	7.3	8.26	10.2	12.18
Connection	inch/DIN	2 1/2"	2 1/2"	3"	3"	3"	DN 100	DN 100	DN 100	DN 100	DN 150	DN 150	DN 150
Power Supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
Weight	kgs	165	164	230	325	338	390	462	508	508	810	815	900
Dimensions	L (mm)	1070	1070	1005	1005	1005	1005	1005	1005	1005	1455	1455	1455
	W (mm)	805	805	1132	1121	1121	1121	1531	1531	1531	1979	1979	1979
	H (mm)	962	962	1399	1596	1596	1826	1826	1826	1826	1826	1826	1833

**Correction factors for ambient temperature**

Room temperature	°C	25	30	35	40	43	46
	A	AD 15-270	1	0.92	0.84	0.8	0.79
	AD 355-4200	1	0.91	0.81	0.72	0.67	0.62

Operating temperature	°C	30	35	40	45	50	55	60
	B	AD 15-270	1.24	1	0.82	0.69	0.58	0.45
	AD 355-4200	1	1	0.82	0.69	0.58	0.49	0.42

Operating temperature	bar	5	6	7	8	9	10	11	12	13	14	15	16
	C	AD 15-270	0.9	0.96	1	1.03	1.06	1.08	1.1	1.12	1.13	1.15	1.16
	AD 355-4200	0.9	0.97	1	1.03	1.05	1.07	1.09	1.11	1.12	1.15	-	-