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### Care

Care is what service is all about: professional service by knowledgeable people, using high-quality original parts.

### Trust

Trust is earned by delivering on our promises of reliable, uninterrupted performance and long equipment lifetime.

### Efficiency

Equipment efficiency is ensured by regular maintenance. Efficiency of the service organization is how Original Parts and Service make the difference.



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**ALUP**  
Kompressoren

BECAUSE  
IMPROVEMENT  
NEVER  
STOPS



ADQ 21-3640 ES  
CYCLING DRYERS

What are the two most important criteria when selecting a compressed air dryer? It's air quality and operational costs. ALUP's ADQ ES cycling dryer delivers on both. With a stable pressure dew point as low as 3°C, it gives you a reliable supply of premium, dry air. At the same time, the ADQ ES keeps your energy use and costs in check with its advanced efficiency features. With 18 sizes to choose from, you can be sure there is an ADQ ES to meet your requirements.



### AIR QUALITY YOU CAN COUNT ON...

- Stable pressure dew point as low as +3°C.
- Constant purity class -;4 - according ISO 8573-1:2010.
- Hot gas bypass valve stabilizes pressure dew point and prevents freezing at lower loads.
- Fan switch optimizes the pressure dew point at very low temperatures.



### ... AT A LOW OPERATIONAL COST

- Low pressure drop, typically below 0.2 bar/2.9 psi.
- Cycling technology cuts energy consumption during intermittent use.
- Heat exchanger designed for optimal pre-cooling and minimal pressure drop.
- Electronic condensate drain prevents compressed air waste by opening only when needed.

## AIRLOGIC<sup>2</sup> CONTROLLER & CONNECTIVITY

The Airlogic<sup>2</sup> Graphic controller helps you monitor and manage your ADQ ES' performance:

- **USER-FRIENDLY** graphic screens, data logging and storage.
- **ENERGY SAVINGS** with dual pressure band time scheduling and start/stop timers.
- **INCREASE RELIABILITY** with planned service interventions.
- **MINIMIZE THE RISK OF DOWNTIME** with the Airlogic<sup>2</sup>'s service alerts and shutdown alarms.



## ZERO DEPLETION

Meeting emission and sustainability standards has become a mandatory requirement. The ADQ ES was designed to minimize your environmental impact. Aside from its energy efficiency, both refrigerants (R513 A and R410A) used are CFC-free and have an ozone depletion potential (ODP) of zero.

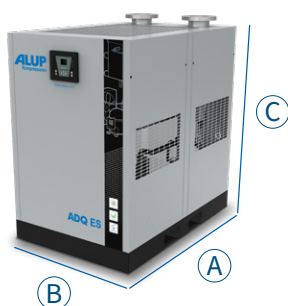
## DO I REALLY NEED A COMPRESSED AIR DRYER?

The short answer: yes, you really do. The air that surrounds us naturally contains water vapors. When that air is compressed, the concentration of these water vapors increases. For example, a 15kW compressor can generate 1.3 liters per hour of excess water and moisture. If this moisture is not removed, it can compromise your entire air system. A dryer protects your air network and equipment, as well as your final products from corrosion and contamination.

## TECHNICAL SPECIFICATIONS

Model	Max. working pressure		Air treatment capacity			Power consumption		Inlet/outlet connections	Dimensions			Weight	Refrigerant gas
	bar	psi	l/min	m <sup>3</sup> /h	cfm	W	V/Ph/Hz		A mm	B mm	C mm		
ADQ 21 ES	16	232	360	21.6	12.7	200	230/1/50	3/4" M	393	525	521	27	R513 A
ADQ 36 ES	16	232	600	36	21.2	200	230/1/50	3/4" M	393	525	521	27	R513 A
ADQ 54 ES	16	232	900	54	31.8	330	230/1/50	3/4" M	393	525	521	32	R513 A
ADQ 72 ES	16	232	1200	72	42.4	410	230/1/50	3/4" M	393	525	521	34	R513 A
ADQ 90 ES	16	232	1500	90	53	410	230/1/50	3/4" M	393	525	521	34	R513 A
ADQ 110 ES	16	232	1800	108	64	410	230/1/50	3/4" M	393	525	521	34	R513 A
ADQ 144 ES	16	232	2400	144	85	570	230/1/50	1" M	393	716	675	56	R513 A
ADQ 180 ES	16	232	3000	180	106	540	230/1/50	1" M	393	716	675	57	R513 A
ADQ 216 ES	14	203	3600	216	127	700	230/1/50	1" M	792	500	680	80	R410 A
ADQ 252 ES	14	203	4200	252	148	700	230/1/50	1" M	792	500	680	80	R410 A
ADQ 342 ES	14	203	5700	342	201	890	230/1/50	1" M	792	500	680	107	R410 A
ADQ 1110 ES	14	203	18600	1116	657	2800	400/3/50	3" M	1330	850	1190	220	R410 A
ADQ 1480 ES	14	203	24600	1476	869	4600	400/3/50	3" M	1330	850	1374	245	R410 A
ADQ 1840 ES	14	203	30600	1836	1081	6400	400/3/50	3" M	1605	850	1375	315	R410 A
ADQ 2200 ES	14	203	36600	2196	1292	4800	400/3/50	DN 100	1054	1060	1660	325	R410 A
ADQ 2740 ES	14	203	45600	2736	1610	5300	400/3/50	DN 100	1256	1060	1685	390	R410 A
ADQ 3130 ES	14	203	52200	3132	1843	6600	400/3/50	DN 150	1258	1060	1685	410	R410 A
ADQ 3640 ES	14	203	60600	3636	2140	7400	400/3/50	DN 150	1594	1060	1660	460	R410 A

Tested according to ISO 7183:2007 and Cagi Pneurop PN8NTC2. Data refers to 50Hz air-cooled version. For water-cooled and 20-bar versions, refer to the data sheet.



### REFERENCE CONDITIONS FOR ADQ 21-3640 ES

Operating pressure: 7 bar.  
Operating temperature: 35°C.  
Ambient temperature: 25°C.  
Pressure dew point: 3°C +/1°C.

### OPERATING LIMIT CONDITIONS FOR ADQ 21-342 ES

Max. operating pressure: 16 bar (ADQ 21-180 ES);  
14 bar (ADQ 216-342 ES).  
Max. inlet temperature: 60°C.  
Min./max. ambient temperature: 1°C/50°C.

### OPERATING LIMIT CONDITIONS FOR ADQ 1110-1840 ES

Max. operating pressure: 14 bar.  
Max. inlet temperature: 56°C.  
Min./max. ambient temperature: 1°C/46°C.

### OPERATING LIMIT CONDITIONS FOR ADQ 2200-3640 ES

Max. operating pressure: 14 bar.  
Max. inlet temperature: 50°C.  
Min./max. ambient temperature: 1°C/40°C.

## CORRECTION FACTORS FOR CONDITIONS DIFFERING FROM THE REFERENCE CONDITIONS

Correction factors for different ambient temperatures											
Ambient temperature °C	25	30	35	40	45	50					
Multiplication factor	1	0.95	0.88	0.81	0.74	0.67					
Correction factors for different inlet temperatures											
Inlet temperature °C	25	30	35	40	45	50	55	60			
Multiplication factor	1.2	1.1	1	0.85	0.72	0.6	0.49	0.37			
Correction factors for different inlet pressures											
Inlet pressure (bar)	2	3	4	5	6	7	8	10	12	14	16
Multiplication factor	0.5	0.63	0.74	0.84	0.92	1	1.05	1.15	1.25	1.31	1.4

