

Solid, simple and smart:
advanced reliability in
compressed air



CAD 6 - 2000 Refrigerant dryers



USER BENEFITS

SIMPLE INSTALLATION

- Lightweight and compact design
- Easy to transport
- Easy and fast installation using the optional filter supports and bypass option (CAD 6-30)

SOLID QUALITY

- High reliability was a key driver when developing the CAD dryer range
- First-class components tested under extreme operating conditions
- Constant dewpoint under any load conditions

EASY MAINTENANCE AND ACCESSIBILITY

- Low maintenance
- Reliable components are easily accessible
- Long service intervals

COST SAVINGS

- Very little maintenance required
- Low energy consumption
- Energy savings due to low pressure drops
- No loss of compressed air due to level-controlled condensate drain



CAD REFRIGERANT DRYER

The inlet air of a compressor contains humidity and contaminants like dust, oil, etc. During compression, these contaminants reach a high concentration. This can cause wear and corrosion in your downstream equipment, with potentially costly interruptions in your production, and a reduction in the efficiency and service life of your equipment.

By cooling the compressed air, a refrigerant dryer removes most of the water content. Our CAD range ensures high-quality dry air, increasing efficiency and productivity as well as the life span of your equipment and tools.

THE BENEFITS OF REFRIGERANT DRYERS

CLEAN AND DRY AIR

- Increases your overall productivity
- Improves your final product quality
- Protects your downstream equipment against corrosion, rust and air leaks
- Avoids costly service interventions

ENVIRONMENT FRIENDLY REFRIGERANT GASES



A key objective in the design of the CAD dryer was to deliver a product that offers performance, reliability and safety with the lowest possible environmental impact.

- Environment friendly thanks to the use of R513A and R410A gas.
- No impact on the ozone layer.

- New micro condenser requires lower gas load (CAD401-2000).
- R410A benefits:
 - Low Global Warming Potential (GWP)
 - Energy savings with high-efficiency
 - refrigerant compressors

CAD 6-301

RELIABLE DRY AIR WITH THE LOWEST OPERATIONAL COSTS



As low as Class -;4; -
according to ISO 8573-
1:2010



Low pressure drop,
below 0.2 bar/2.9 psi



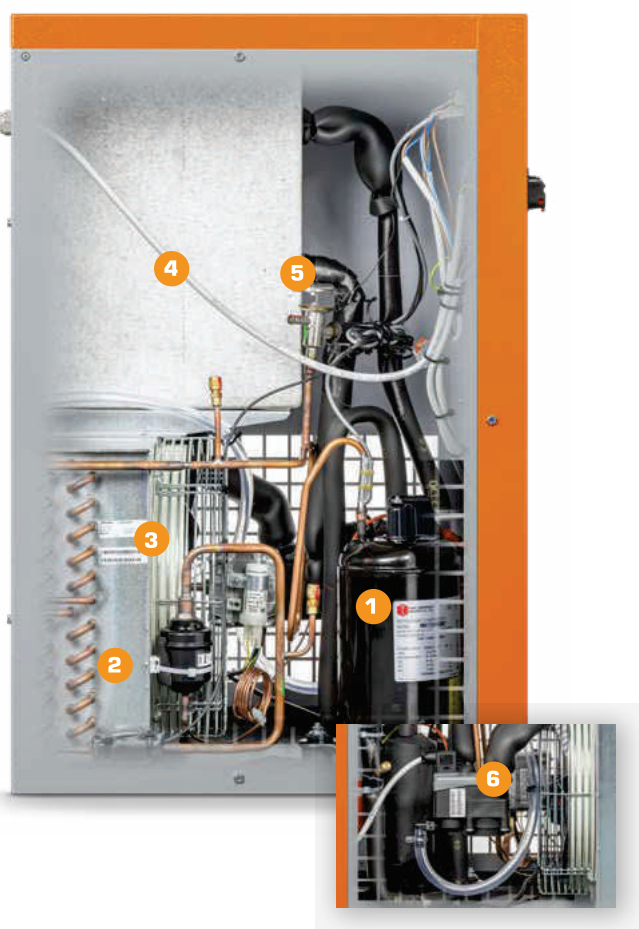
Robust design



Compact footprint
and easy installation



Very low
maintenance



SOLID PERFORMANCE

- 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 MOTOR-DRIVEN FAN** For the condenser cooling air flow.
- 4 3-in-1 HEAT EXCHANGER** With high-efficiency operation to minimize pressure drop and footprint.
- 5 HOT GAS BYPASS VALVE** Controls the refrigerant capacity under all load conditions to prevent ice formation in the system.
- 6 AUTOMATIC DISCHARGE OF CONDENSATE** Energy-saving and self-adjusting, allows only moisture to discharge and prevents waste discharge of valuable compressed air.

AVAILABLE OPTIONS CAD 6-30

BYPASS VALVE AND FILTER SUPPORT*

Continue using the filters during
maintenance or malfunction of the
dryer and avoid costly downtime.

FILTER SUPPORT*

Install two filters at the back of the
dryer to reduce your dryer's footprint.

* Filters not included.

CAD 401-2000

RELIABLE DRY AIR WITH THE LOWEST OPERATIONAL COSTS



As low as Class -;4; -
according to ISO 8573-
1:2010



Low pressure drop,
typically below
0.2 bar/2.9 psi



High-efficiency dryer
lowers CO2 emissions



New microchannel
refrigerant condenser
reduces gas charge and
therefore your carbon
footprint



Very low
maintenance



STATE-OF-THE-ART ENGINEERING

- 1 SCROLL REFRIGERANT COMPRESSOR** Scroll technology delivers a stable performance with industry-leading efficiency and COP.
- 2 AIR-AIR EXCHANGER** Designed for high thermal exchange and low load losses.
- 3 AIR/REFRIGERANT EVAPORATOR**
 - a** 1 for CAD 401-1150, 2 for CAD 1400-2000.
 - b** Up to 25% lower pressure drop.
 - c** Reduces dryer size.
- 4 HOT GAS BYPASS VALVE** Controls the refrigerant capacity under all load conditions to prevent ice formation.
- 5 CONTROL PANEL** Ensures easy, advanced control and monitoring.
- 6 FREE CONTACTS** Allow for remote start/stop, general alarm and drain alarm.
- 7 REFRIGERANT CONDENSER** Microchannel design ensures a smaller physical and environmental footprint.

TECHNICAL DATA

ACCORDING TO ISO 7183:2007 AND CAGI PNEUROP PN8NTC2

Model	MAX. WORKING PRESSURE		AIR TREATMENT CAPACITY			POWER CONSUMPTION		INLET/ OUTLET CONNECTIONS	DIMENSIONS			WEIGHT Kg.	REFRIGERANT GAS
	Bar	PSI	l/min	m3/h	cfm	W	V/Hz/Ph		A	B	C		
CAD 6	16	232	350	21	12,4	130	230/50/1	3/4" M	350	493	450	19	R513A
CAD 11	16	232	600	36	21,2	164	230/50/1	3/4" M	350	493	450	19	R513A
CAD 15	16	232	850	51	30,0	190	230/50/1	3/4" M	350	493	450	20	R513A
CAD 21	16	232	1200	72	42,4	266	230/50/1	3/4" M	350	493	450	25	R513A
CAD 30	16	232	1825	110	64,4	284	230/50/1	3/4" M	350	493	450	27	R513A
CAD 42	14	203	2350	141	83,0	674	230/50/1	1" F	370	497	764	44	R513A
CAD 53	14	203	3000	180	106	716	230/50/1	1" F	370	497	764	44	R513A
CAD 61	14	203	3600	216	127	631	230/50/1	1" 1/2 F	460	557	789	62	R410A
CAD 70	14	203	4100	246	145	705	230/50/1	1" 1/2 F	460	557	789	60	R410A
CAD 91	14	203	5200	312	184	905	230/50/1	1" 1/2 F	460	557	789	62	R410A
CAD 110	14	203	6500	390	230	969	230/50/1	1" 1/2 F	580	587	899	82	R410A
CAD 130	14	203	7700	462	272	1124	230/50/1	1" 1/2 F	580	587	899	82	R410A
CAD 170	14	203	10000	600	353	1540	400/50/3	2" F	805	1070	962	145	R410A
CAD 200	14	203	12000	720	424	1980	400/50/3	2" F	805	1070	962	158	R410A
CAD 250	14	203	15000	900	530	2010	400/50/3	2" 1/2 F	805	1070	962	165	R410A
CAD 301	14	203	18000	1080	636	2770	400/50/3	2" 1/2 F	805	1070	962	164	R410A
CAD 401	14	203	24000	1440	848	3500	400/50/3	3" M	1132	1005	1399	230	R410A
CAD 501	14	203	30000	1800	1059	3690	400/50/3	3" M	1121	1005	1596	325	R410A
CAD 585	14	203	35000	2100	1236	4550	400/50/3	3" M	1121	1005	1596	338	R410A
CAD 750	14	203	45000	2700	1589	6097	400/50/3	DN 100	1121	1005	1826	390	R410A
CAD 850	14	203	50000	3000	1766	6540	400/50/3	DN 100	1531	1005	1826	462	R410A
CAD 1040	14	203	62400	3744	2204	7100	400/50/3	DN 100	1531	1005	1826	508	R410A
CAD 1150	14	203	70000	4200	2472	7290	400/50/3	DN 100	1531	1005	1826	508	R410A
CAD 1400	14	203	84000	5040	2966	8260	400/50/3	DN 150	1455	1979	1826	810	R410A
CAD 1650	14	203	99000	5940	3496	10200	400/50/3	DN 150	1455	1979	1826	815	R410A
CAD 2000	14	203	120000	7200	4238	12180	400/50/3	DN 150	1455	1979	1833	900	R410A

NOTES:

Reference conditions:

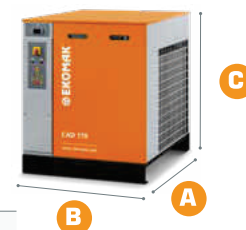
- Operating pressure: 7 bar (100 psi)
- Operating temperature: 35°C
- Room temperature: 25°C
- Pressure dewpoint: +4°C +/-1
- Available in different voltages and frequencies

Operating limit conditions:

- Max. operating pressure: 16 bar (232 psi) CAD 6-30
14 bar (203 psi) CAD 42-2000
- Max. inlet temperature: 55°C (60°C for CAD 170-2000)
- Min./Max. ambient temperature: +5°C; 43°C (+5°C; 46°C for CAD 170-2000)

Optional for CAD (6-30):

- Bypass + filter support
- Filter support



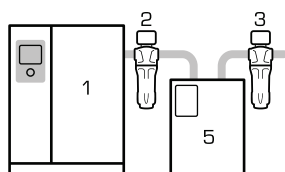
Correction factor for conditions differing from the project $K = A \times B \times C$

ROOM TEMPERATURE	°C	25	30	35	40	43	46	OPERATING TEMPERATURE	°C	25	30	35	40	46	50	55	60
	A	1	0.91	0.81	0.72	0.67	0.62		B	1.1	1.05	1	0.82	0.69	0.58	0.49	0.42
OPERATING PRESSURE	BAR	6	7	8	10	13	14	15	16								
	C	0.97	1	1.03	1.07	1.12	1.15	1.16	1.17								

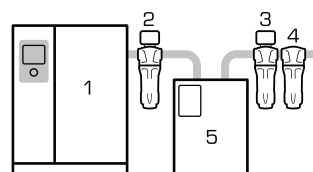
The new flow rate value can be obtained by dividing the current or real flow rate by the correction factor related to the real operational conditions.

TYPICAL INSTALLATIONS

High-quality air with reduced dewpoint (air purity to ISO 8573-1: class 1:4:2)



High-quality air with reduced dewpoint and oil concentration (air purity to ISO 8573-1: class 1:4:1)



- Compressor with aftercooler 1
- G filter 2
- C filter 3
- V filter 4
- Refrigerant dryer 5
- Vertical receiver is always suggested



GULF DYNAMIC TRADING

CONTACT OUR LOCAL REPRESENTATIVE:

GULF DYNAMIC TRADING

Address:-Office #1011, 10th Floor,
Al Hafeez Heights, Gulberg 3, Lahore, Pakistan
Contact Number: 0092-42-35750324
Mobile Number: 0092-321-4298143
Email: info@gdt.com.pk
Website: www.gdt.com.pk



Contact your local Ekomak representative now: www.ekomak.com.