



E.D.S. International (Thailand) Co.,LTD.



CDK-SERIES

Refrigerant Air Dryer

Warranty
Compressor
Evaporator **2** years

Stainless Steel Plate
Heat Exchanger

Energy Saving/High Efficiency/ High Quality

www.edsthailand.com



CDK SA & CDK CA Refrigerated Air Dryer offers the best solutions to prevent loss, reduce corrosion level, prolong life of compressed air systems and decrease maintenance cost.

About EDS Refrigerated Air Dryer

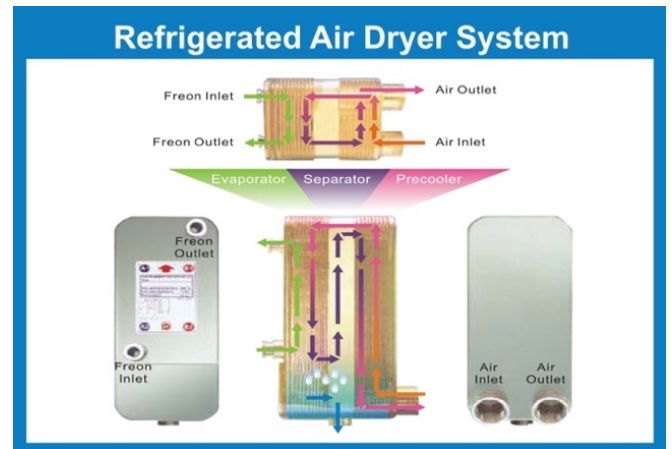
In compressed air systems, the prevention of corrosion caused by condensed water is an important issue. This is a critical factor as corrosion would minimize the performance and shorten the lifetime of compressed air systems. To prevent this problem from occurring, the air dryer is the most commonly used tool. In these kinds of equipment, the main problems which affect the performance of compressed air systems are huge volume, high pressure loss and complicated traditional types of heat exchangers which are insufficiently efficient. EDS successfully develop the Braze Heat Exchanger for air dryer systems. This technology is supported by complete research and proven test data.

The main advantage of Plate Heat Exchanger

- A 3 in 1 configuration, the air-to-air exchanger, evaporators and demister separator are combined in one module.
- This ensures a very compact, robust and energy efficient design.
- Unique patents for cross-flow design features with the condensate being separated as soon as it is created along the cooling path.
- High efficiency heat transfer performance.
- Energy saving application due to low pressure drop.
- Simple and easy maintenance.
- Dry air down to 4°C pressure dew point at outlet.



High quality refrigerant compressor
(HITACHI / MITSUBISHI / COPELAND)
Hermetic, suction of gas is cooled and protected against thermal and current overloads. The compressor is mounted on anti-vibration rubber supports to ensure quiet running of the dryer.



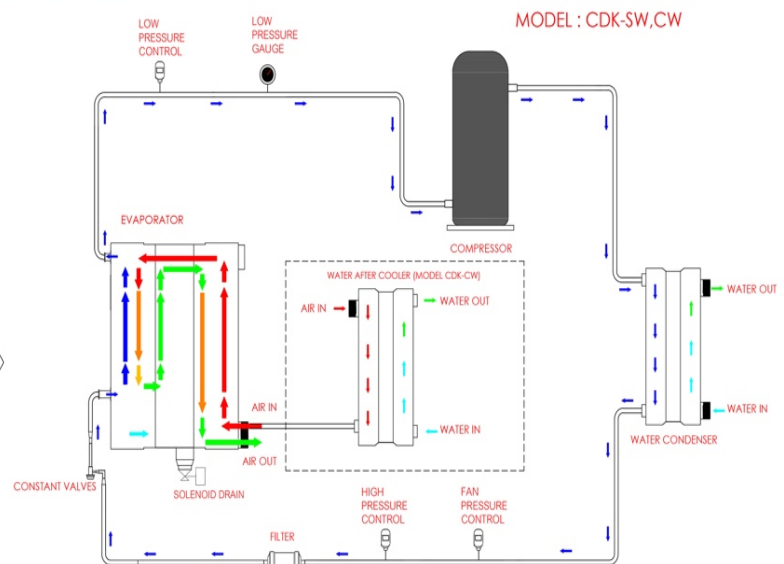
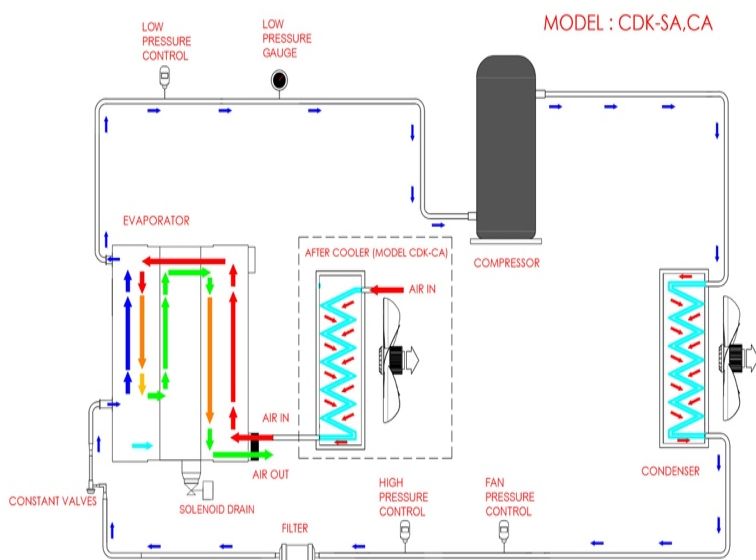
Reliable solenoid valve.
This design is standard for all models. The discharge and pause times on the solenoid are also adjustable. The flexible and adaptable operation of the valve ensures effective discharge of condensates.



UL / CE Cooling Fan
Provide qualified cooling fans with UL / CE safety certification for long using life.



Easy to operate Control Panel (CAREL)
The advance digital display allows dryer operation to be easily monitored at a glance.



Technical Specification of CDK-S/CDK-SA Series Air - Cooled Dryers

MODEL	AIR FLOW		Power Supply V / PH / Hz	Nominal Power KW	Connection inch	Dimension (mm)			Weight Kg	Refrigerant	Pressure Bar(Max.)
	(m ³ /min)	(CFM)				W.	L.	H.			
CDK-3S	0.45	16	220/1/50	0.21	1/2" PT	382	450	430	31	R134a	16
CDK-5S	0.65	23	220/1/50	0.22	1/2" PT	382	450	430	32	R134a	16
CDK-8S	0.9	32	220/1/50	0.27	1/2" PT	382	450	430	33	R134a	16
CDK-3SA	0.45	16	220/1/50	0.21	1/2" PT	382	450	430	31	R134a	16
CDK-5SA	0.65	23	220/1/50	0.22	1/2" PT	382	450	430	32	R134a	16
CDK-8SA	0.9	32	220/1/50	0.27	1/2" PT	382	450	430	33	R134a	16
CDK-10SA	1.4	49	220/1/50	0.39	1/2" PT	382	502	480	38	R134a	16
CDK-15SA	1.8	64	220/1/50	0.45	3/4" PT	382	502	480	40	R134a	16
CDK-20SA	2.7	95	220/1/50	0.64	3/4" PT	393	723	650	65	R134a	16
CDK-30SA	4.3	152	220/1/50	0.97	1" PT	393	723	650	69	R134a	16
CDK-40SA	5.5	194	220/1/50	1.2	1-1/2" PT	404	875	761	92	R134a	16
CDK-50SA	6.8	240	220/1/50	1.39	1-1/2" PT	404	875	761	101	R407c	16
CDK-60SA	8.1	286	220/1/50	1.66	1-1/2" PT	451	1190	882	115	R407c	16
CDK-75SA	11	388	220/1/50	2.25	2" PT	451	1190	882	135	R407c	16
CDK-100SA	15	530	380/3/50	2.91	2" PT	451	1190	882	145	R407c	16
CDK-125SA	18	636	380/3/50	3.32	2-1/2" PT	451	1190	882	165	R407c	16
CDK-150SA	23	812	380/3/50	3.9	2-1/2" PT	588	1204	1005	198	R407c	16
CDK-175SA	28	989	380/3/50	4.61	2-1/2" PT	588	1204	1005	208	R407c	16
CDK-200SA	30	1059	380/3/50	5.25	3" PT	588	1204	1005	225	R407c	16
CDK-250SA	36	1271	380/3/50	5.59	3" PT	588	1204	1005	256	R407c	16
CDK-300SA	43	1519	380/3/50	7.5	4" FL	1004	1560	1615	380	R407c	16
CDK-350SA	48	1695	380/3/50	8.18	4" FL	1004	1560	1615	400	R407c	16
CDK-400SA	61	2154	380/3/50	9.9	5" FL	1004	1560	1615	450	R407c	16
CDK-500SA	72	2543	380/3/50	12.48	5" FL	1004	1560	1615	510	R407c	16
CDK-600SA	89	3143	380/3/50	15.64	6" FL	1200	2200	1900	930	R407c	16
CDK-700SA	96	3390	380/3/50	16.36	6" FL	1200	2200	1900	1050	R407c	16
CDK-800SA	122	4308	380/3/50	22.36	6" FL	1200	2200	1900	1120	R407c	16
CDK-1000SA	144	5085	380/3/50	24.96	8" FL	1200	2860	1900	1260	R407c	16
CDK-1200SA	170	6004	380/3/50	31.28	8" FL	1200	2860	1900	1580	R407c	16
CDK-1500SA	185	6533	380/3/50	31.28	10" FL	1200	3200	2050	2200	R407c	16
CDK-2000SA	285	10065	380/3/50	31.28	12" FL	1200	5000	2050	2400	R407c	16
CDK-2500SA	340	12007	380/3/50	31.28	12" FL	1200	5000	2050	3100	R407c	16

Technical Specification of CDK-SW Series Water - Cooled Dryers

MODEL	AIR FLOW		Power Supply V / PH / Hz	Nominal Power KW	Connection inch	Dimension (mm)			Weight Kg	Refrigerant	Pressure Bar(Max.)
	(m ³ /min)	(CFM)				W.	L.	H.			
CDK-100SW	15	530	380/3/50	2.53	2" PT	451	1190	882	145	R407c	16
CDK-125SW	18	636	380/3/50	2.91	2-1/2" PT	451	1190	882	165	R407c	16
CDK-150SW	23	812	380/3/50	3.32	2-1/2" PT	451	1190	882	198	R407c	16
CDK-175SW	28	989	380/3/50	3.9	2-1/2" PT	451	1190	882	208	R407c	16
CDK-200SW	30	1059	380/3/50	4.61	3" PT	588	1204	1005	225	R407c	16
CDK-250SW	36	1271	380/3/50	5.25	3" PT	588	1204	1005	256	R407c	16
CDK-300SW	43	1519	380/3/50	5.59	4" FL	588	1204	1005	380	R407c	16
CDK-350SW	48	1695	380/3/50	7.5	4" FL	588	1204	1005	400	R407c	16
CDK-400SW	61	2154	380/3/50	8.18	5" FL	800	1204	1615	450	R407c	16
CDK-500SW	72	2543	380/3/50	9.9	5" FL	800	1204	1615	510	R407c	16
CDK-600SW	89	3143	380/3/50	12.48	6" FL	800	1500	1615	930	R407c	16
CDK-700SW	96	3390	380/3/50	15.64	6" FL	800	1500	1615	1050	R407c	16
CDK-800SW	122	4308	380/3/50	16.36	6" FL	800	1800	1615	1120	R407c	16
CDK-1000SW	144	5085	380/3/50	22.36	8" FL	1200	1500	1800	1260	R407c	16
CDK-1200SW	170	6004	380/3/50	24.96	8" FL	1200	1500	1800	1580	R407c	16
CDK-1500SW	185	6533	380/3/50	31.28	10" FL	1200	1800	1800	1860	R407c	16
CDK-2000SW	285	10065	380/3/50	44.72	12" FL	1200	2400	1800	2290	R407c	16
CDK-2500SW	340	12007	380/3/50	49.92	12" FL	1200	2400	1800	2400	R407c	16



Dryer maximum air flow = Dryer air flow x K1 x K2 x K3 x K4

Correction factor											
Ambient temperature °C	28	30	32	35	38	40	42	43			
Factor (K1) CDK-S/SA	1.14	1.10	1.06	1	0.94	0.91	0.88	0.86			
Air inlet temperature °C	35	40	45	50	55	60	63	65			
Factor (K2)	1.48	1.18	1	0.83	0.71	0.58	0.52	0.48			
Working pressure Kg/cm ²	4	6	7	8	9	10	13	16			
Factor (K3)	0.79	0.94	1	1.05	1.09	1.12	1.2	1.26			
Dew point temperature °C	-	3	4	5	6	7	8	10			
Factor (K4)	-	0.96	1	1.02	1.03	1.06	1.07	1.09			

Water temperature °C	25	26	28	30	32	34	36	37
Factor (K1) CDK-SW	1.14	1.10	1.06	1	0.94	0.91	0.88	0.86

1. CDK-S/CDK-SA/CDK-SW Series Air Inlet Temperature 65 °C (Max.)
2. Dew Point Temperature 3-10 °C
3. Ambient Temperature 43 °C (Max.)
4. CDK-S with Temperature Display
5. CDK-SA/CDK-SW with Digital Controller
6. CDK-S/CDK-SA/CDK-SW Series No After Cooler
7. Air In-Out Pressure Drop < 3 Psig
8. 2 Years warranty for Compressor and Evaporator

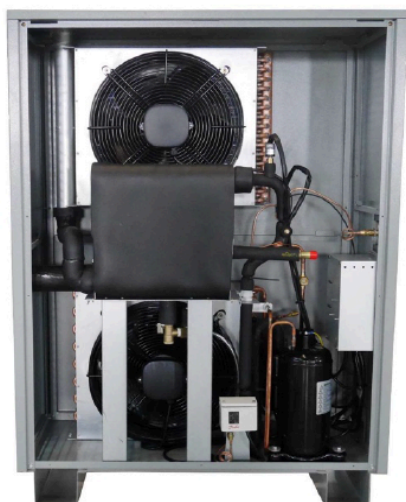


Technical Specification of CDK-CA Series Air - Cooled Dryers

MODEL	AIR FLOW		Power Supply V / PH / Hz	Nominal Power KW	Connection inch	Dimension (mm)			Weight Kg	Refrigerant	Pressure Bar(Max.)
	(m³/min)	(CFM)				W.	L.	H.			
CDK- 5CA	0.65	23	220/1/50	0.23	1/2" PT	380	500	750	60	R134a	16
CDK- 8CA	0.9	32	220/1/50	0.28	1/2" PT	380	500	750	65	R134a	16
CDK- 10CA	1.4	49	220/1/50	0.4	1" PT	388	718	880	80	R134a	16
CDK- 15CA	1.8	64	220/1/50	0.46	1" PT	388	718	880	88	R134a	16
CDK- 20CA	2.7	95	220/1/50	0.97	1" PT	388	718	880	91	R134a	16
CDK- 30CA	4.3	152	220/1/50	0.99	1-1/2" PT	388	868	1200	97	R134a	16
CDK- 40CA	5.5	194	220/1/50	1.22	1-1/2" PT	388	868	1200	113	R134a	16
CDK- 50CA	6.8	240	220/1/50	1.42	1-1/2" PT	388	868	1200	128	R407c	16
CDK- 60CA	8.1	286	220/1/50	1.69	2" PT	450	1200	1350	137	R407c	16
CDK- 75CA	11	388	220/1/50	2.3	2" PT	450	1200	1350	150	R407c	16
CDK- 100CA	15	530	380/3/50	2.97	2-1/2" PT	600	1200	1600	200	R407c	16
CDK- 125CA	18	636	380/3/50	3.39	2-1/2" PT	600	1200	1600	230	R407c	16
CDK- 150CA	23	812	380/3/50	3.98	2-1/2" PT	600	1200	1600	250	R407c	16
CDK- 175CA	28	989	380/3/50	4.7	2-1/2" PT	600	1200	1600	260	R407c	16
CDK- 200CA	30	1059	380/3/50	5.36	3" PT	1000	1500	1850	380	R407c	16
CDK- 250CA	36	1271	380/3/50	5.7	3" PT	1000	1500	1850	420	R407c	16
CDK- 300CA	43	1519	380/3/50	7.65	4" FL	1000	1800	2000	480	R407c	16
CDK- 350CA	48	1695	380/3/50	8.34	4" FL	1000	1800	2000	520	R407c	16
CDK- 400CA	61	2154	380/3/50	10.1	4" FL	1000	1800	2000	580	R407c	16

Technical Specification of CDK-CW Series Water - Cooled Dryers

MODEL	AIR FLOW		Power Supply V / PH / Hz	Nominal Power KW	Connection inch	Dimension (mm)			Weight Kg	Refrigerant	Pressure Bar(Max.)
	(m³/min)	(CFM)				W.	L.	H.			
CDK- 100CW	15	530	380/3/50	2.53	2" PT	450	1200	1350	165	R407c	16
CDK- 125CW	18	636	380/3/50	2.91	2-1/2" PT	450	1200	1350	198	R407c	16
CDK- 150CW	23	812	380/3/50	3.32	2-1/2" PT	450	1200	1350	208	R407c	16
CDK- 175CW	28	989	380/3/50	3.9	2-1/2" PT	450	1200	1350	225	R407c	16
CDK- 200CW	30	1059	380/3/50	4.61	3" PT	600	1200	1600	256	R407c	16
CDK- 250CW	36	1271	380/3/50	5.25	3" PT	600	1200	1600	380	R407c	16
CDK- 300CW	43	1519	380/3/50	5.59	4" FL	600	1200	1600	400	R407c	16
CDK- 350CW	48	1695	380/3/50	7.5	4" FL	600	1200	1600	450	R407c	16
CDK- 400CW	61	2154	380/3/50	8.18	5" FL	650	1204	1350	510	R407c	16
CDK- 500CW	72	2543	380/3/50	9.9	5" FL	650	1204	1350	930	R407c	16
CDK- 600CW	89	3143	380/3/50	12.48	6" FL	800	1500	1900	1050	R407c	16
CDK- 700CW	96	3390	380/3/50	15.64	6" FL	800	1500	1900	1120	R407c	16
CDK- 800CW	122	4308	380/3/50	16.36	6" FL	800	1800	1900	1260	R407c	16
CDK- 1000CW	144	5085	380/3/50	22.36	8" FL	1200	1500	2000	1580	R407c	16
CDK- 1200CW	170	6004	380/3/50	24.96	8" FL	1200	1500	2000	1860	R407c	16
CDK- 1500CW	185	6533	380/3/50	31.28	10" FL	1200	1800	2000	2290	R407c	16
CDK- 2000CW	285	10065	380/3/50	44.72	12" FL	1200	2400	2100	2400	R407c	16
CDK- 2500CW	340	12007	380/3/50	49.92	12" FL	1200	2400	2100	2890	R407c	16



Dryer maximum air flow = Dryer air flow x K1 x K2 x K3 x K4

Correction factor										
Ambient temperature °C	28	30	32	35	38	40	42	43		
Factor (K1) CDK-CA	1.14	1.10	1.06	1	0.94	0.91	0.88	0.86		
Air inlet temperature °C	45	50	55	60	65	70	75	80		
Factor (K2)	1.20	1.10	1	0.91	0.83	0.76	0.69	0.63		
Working pressure Kg/cm²	4	6	7	8	9	10	13	16		
Factor (K3)	0.79	0.94	1	1.05	1.09	1.12	1.20	1.26		
Dew point temperature °C	-	3	4	5	6	7	8	10		
Factor (K4)	-	0.96	1	1.02	1.03	1.06	1.07	1.09		

Water temperature °C	25	26	28	30	32	34	36	37
Factor (K1) CDK-CW	1.14	1.10	1.06	1	0.94	0.91	0.88	0.86

1. CDK-CA/CDK-CW Series Air Inlet Temperature 80 °C (Max.)
2. Dew Point Temperature 3-10 °C
3. Ambient Temperature 43 °C (Max.)
4. CDK-CA/CDK-CW Series with After Cooler
5. Air In-Out Pressure Drop < 3 Psig
6. 2 Years warranty for Compressor and Evaporator

