Refrigeration Cycle Air Dryers

Major characteristics:

- High reliability
- Simple operation
- Reduced maintenance
- Environmental friendly
- CDX 4-18: R134A refrigerant

CDX 24-180:R410A refrigerant,
CDX 240-700: R404A refrigerant:
- High efficiency thermal insulation
- Complies with all the principal European standards:
- Noiseless condensate discharge
- No wasting of compressed air

The compressed air produced by the compressor contains a certain amount of relative humidity that could still condense. A compressor that produces 20 m^3/1'at 8 bar, working 8 hours at 75%, taking in air at 20 °C and 70% relative humidity, sends about 80 liters of water into the line. To eliminate the damage produced by condensate without wasting compressed air, a series of CDX with dryer has been developed conforming with environmental needs to European standards. On intake, the saturated compressed air undergoes an initial cooling in the air-air exchanger by means of cold dried air.

The second cooling phase takes place inside the evaporator where the air reaches the preset dew point. All the condensate separated during the cooling phase is treated and discharged automatically by a system of level sensors. The output compressed air is adequately dried and suitable for the majority of industrial uses.

TECHNICAL DATA

Type		bar	psi	kW	l/min	m³/h	cfm	V/hz/Ph	L	W	H	gas/DN	Kg
CDX - Refrigeration cycle air dryers													
CDX 4	8102130013	16	232	0,18	350	25	15	230/50/1	550	350	484	R ¾	19
CDX 6	8102130021	16	232	0,20	600	47	28	230/50/1	550	350	484	R ¾	19
CDX 9	8102130039	16	232	0,22	850	58	34	230/50/1	550	350	484	R ¾	20
CDX 12	8102130047	16	232	0,25	1200	83	49	230/50/1	550	350	484	R ¾	25
CDX 18	8102130054	16	232	0,30	1825	108	64	230/50/1	550	350	484	R ¾	27
CDX 24	8102130062	13	188	0,50	2350	169	100	230/50/1	500	370	804	G1	44
CDX 30	8102130070	13	188	0,55	3000	216	127	230/50/1	500	370	804	G1	44
CDX 36	8102130088	13	188	0,60	3600	259	153	230/50/1	560	460	829	G1	53
CDX 41	8102130096	13	188	0,80	4100	288	169	230/50/1	560	460	829	G1	60
CDX 52	8102130104	13	188	1,00	5200	374	220	230/50/1	560	460	829	G1 ½	65
CDX 65	8102130112	13	188	1,20	6500	468	275	230/50/1	560	580	939	G1 ½	80
CDX 77	8102130120	13	188	1,30	7700	558	328	230/50/1	560	580	939	G1 ½	80
CDX 100	8102134106	13	188	1,60	10000	720	424	400/50/3	978	735	1002	G2 ½	128
CDX 120	8102134114	13	188	1,90	12000	864	508	400/50/3	978	735	1002	G2 ½	146
CDX 150	8102134122	13	188	2,10	15000	1026	604	400/50/3	978	735	1002	G2 ½	158
CDX 180	8102134130	13	188	2,40	18000	1188	699	400/50/3	978	735	1002	G2 ½	165
CDX 240	8102136812	13	188	3,90	24000	1440	848	400/50/3	1082	1020	1560	G2 ½	325
CDX 300	8102136820	13	188	4,46	30000	1800	1060	400/50/3	1082	1020	1560	G2 ½	335
CDX 350	8102136838	13	188	5,55	35000	2100	1236	400/50/3	1082	1020	1560	G2 ½	350
CDX 500	8102136846	13	188	6,80	50000	3000	1766	400/50/3	2099	1020	1560	DN 125	550
CDX 700	8102136853	13	188	10,20	70000	4200	2374	400/50/3	2099	1020	1560	DN 125	600

Notes:
1 Reference conditions:
- Operating pressure: 7 bar (100 psi)
- Operating temperature: 35 °C
- Room temperature: 25 °C

Limit conditions:
- Working pressure:
  16 bar (232 psi) CDX 4-18
  13 bar (188 psi) CDX 24-700
- Operating temperature: 55 °C
- Min/Max room temperature: +5 °C; +45 °C

Correction factor for conditions differing from the project K = A x B x C

Room temperature	°C	25	30	35	40	45	
	A	**1,00**	0,92	0,84	0,80	0,74	(CDX 4-77)
		1,00	0,91	0,81	0,72	0,62	(CDX 100-700)

Operating temperature	°C	30	35	40	45	50	55	
	B	1,24	**1,00**	0,82	0,69	0,58	0,45	(CDX 4-77)
		1,00	**1,00**	0,82	0,69	0,58	0,49	(CDX 100-700)