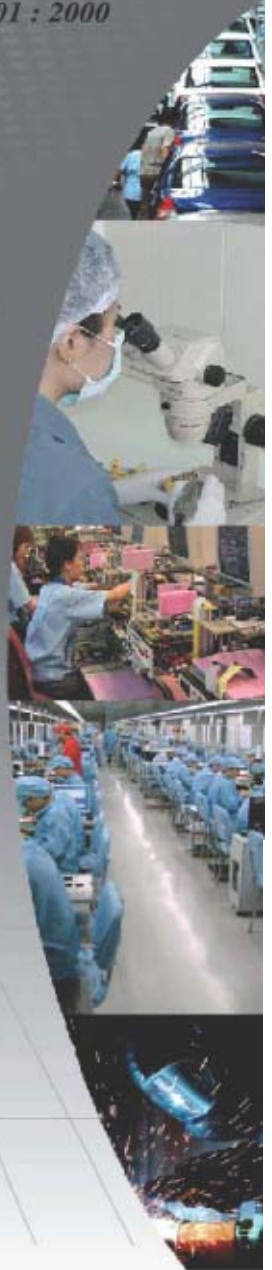




ISO9001 : 2000

AIR DRYER CDT-TN Series



YOUR SOLUTION

Air Dryer ; CDT -TN / TWN / WWN Series

Air Side

Designed to economically produce consistent dew point with low pressure drop in a compact size exchanger - evaporator - separator

Feature:

Heat Exchangers

DIT engineered and manufactured shell and radial finned tube design ensures sufficient cooling...minimizes pressure drop...resists fouling

- "Balanced" design maximizes the heat transfer rate while minimizing pressure drop
- Wide tube spacing, baffling, and right angle flow patterns make heat exchangers resistant to fouling adding years of useful service life

Air-to-Air Heat Exchangers

- Large air-to-air heat exchangers remove over half of the heat load from the incoming air stream - minimizing refrigeration system size and power requirements
- DIT design balances the high heat transfer coefficient inside the tubes (caused by vapor condensation and low profile swirl generators) with the greater surface area on the outside of the tubes...allows for a compact design, high heat transfer rate and low pressure drop
- Tube surfaces resist fouling.. wet dirty air is exposed to smooth tube walls and removable free floating swirl generators

Air-to-Refrigerant Heat Exchanger

- Large surface area permits the compressed air stream to be consistently cooled to the dew point temperature
- A multi-pass refrigerant design allows maximum use of available refrigeration capacity

Refrigerant velocity controlled by varying the cross-sectional flow area (less cross-sectional area the early passes where refrigerant is mostly a liquid; larger cross-section area in the later passes where it is mostly a gas).... ensure quick response to changes in load.

Swirl generators in the later passed enhance refrigerant droplet evaporation

Separator-highly efficient separation prevents liquid carryover

separator removes 99% of condensed moisture and maintains this high efficiency across a wide range of flows

- Maintains high efficiency at varying load conditions
- Removes smaller droplets (100% of all droplets 3 microns and larger)
- prevents liquid re-entrainment
- Filters out all solid contaminants 3 microns and larger
- 5 ppm w/w of oil aerosols remaining

CDT dryers are equipped with hot gas bypass valve to adjust the compressor capacity to the actual evaporator capacity in a refrigerating plant (30 up).

Automatic drain with manual valve and reliable discharge collected condensate

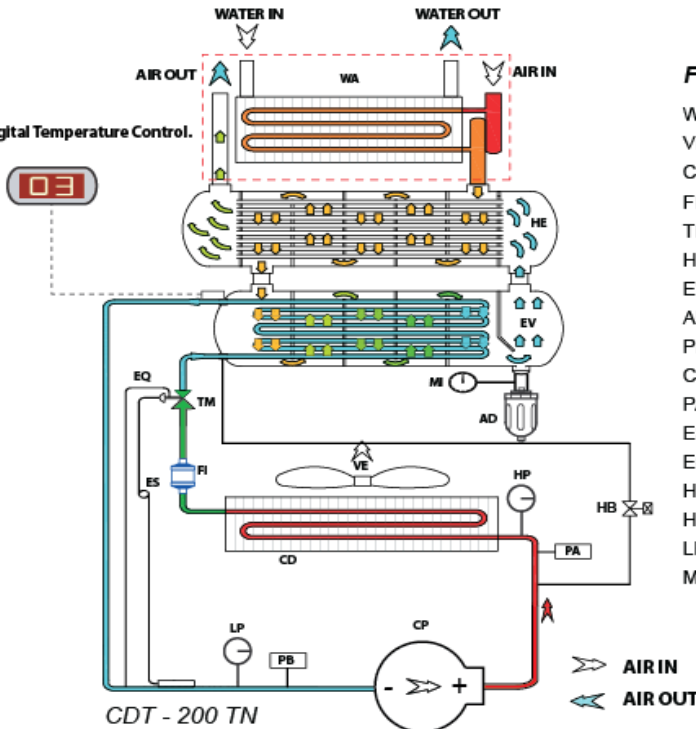
- Compact size
- Easily discharging drainage from pneumatic circuit
- Easy cleaning

* - For dryers with water after cooler (optional) please contact your representative for further information

- For PC control card system (optional) please make inquiry



Dew Point - Digital Temperature Control.
For Optional



FLOW DIAGRAM

- WA WATER COOLED - AFTERCOOLER (Optional)
- VE CONDENSER FAN
- CD CONDENSER COIL
- FI FILTER DRIER
- TM THERMOSTATIC EXPANSION VALVE (For CDT-100TN up)
- HE HEAT EXCHANGE
- EV EVAPORATOR
- AD AUTO DRAIN
- PB LOW PRESSURE CONTROL
- CP COMPRESSOR
- PA HIGH PRESSURE CONTROL
- ES TEV CONTROL BULB
- EQ EQUALIZATION LINE
- HB HOT GAS BY PASS (For CDT-30TN up)
- HP HIGH PRESSURE GAUGE (For CDT-30TN up)
- LP LOW PRESSURE GAUGE / DEW POINT (For CDT-100TN up)
- MI AIR PRESSURE GAUGE

** This is a draft flow diagram.
It will change according to the spec of each machine.

TECHNICAL DATA OF "CDT: 3TN ~ 3000TWN" LOW-TEMPERATURE SERIES AIR / WATER COOLER DRYERS SPECIFICATIONS (Air Inlet Temp MAX. 65°C)

TECHNICAL DATA OF "CDT: 100WWN ~ 3000WWN" HIGH-TEMPERATURE SERIES AIR / WATER COOLER DRYERS SPECIFICATIONS (Air Inlet Temp MAX. 80°C)

MODEL	CDT	3 TN	5 TN	8 TN	10 TN	15 TN	20 TN	30 TN	40 TN	50 TN	60 TN
AIR FLOW	M ³ /hr	27	39	54	84	108	162	258	330	408	486
	M ³ /min	0,45	0,65	0,9	1,4	1,8	2,7	4,3	5,5	6,8	8,1
	CFM	16	23	32	50	64	95	152	194	240	286
CONNECTION		1/2"PT				1"PT		1 - 1/2"PT			2"PT
REFRIGERANT		R134a					R 22				
POWER SUPPLY		1PH / 220 - 240					3PH / 380V - 440V				
REFRIGERANT COMPRESSOR	HP	0,2	0,2	0,3	0,4	0,5	0,75	1,0	1,2	1,5	1,7
CONDENSATION	AIR	S	S	S	S	S	S	S	S	S	S
	WATER	-	-	-	-	-	-	-	-	-	-
DIMENSION (mm.)	W	380	380	380	388	388	388	388	388	388	450
	D	500	500	500	718	718	718	868	868	868	1200
	H	490	490	490	600	600	600	740	740	740	875
WEIGHT	Kg.	34	36	50	73	76	82	93	103	112	155

MODEL	CDT	75 TN	100 TN	125 TN	150 TN	175 TN	200 TN	250 TN	300 TN	350 TN	400 TN
AIR FLOW	M ³ /hr	660	900	1080	1380	1680	1800	2160	2580	2880	3660
	M ³ /min	11	15	18	23	28	30	36	43	48	61
	CFM	389	530	636	813	990	1060	1272	1519	1696	2155
CONNECTION		2"PT	2 - 1/2"PT				3"PT		4"FL		
REFRIGERANT		R 22					R 22				
POWER SUPPLY		1 PH / 220 - 240					3PH / 380V - 440V				
REFRIGERANT COMPRESSOR	HP	2,0	3,0	3,4	4,0	4,5	5,0	6,0	7,5	8,0	9,0
CONDENSATION	AIR	S	S	S	S	S	S	S	S	S	S
	WATER	O	O	O	O	O	O	O	O	O	O
WATER CONDENSER FLOW RATE	l/min	26	28	30	33	36	44	65	70	75	75
WATER AFTER COOLER FLOW RATE	l/min	-	35	40	48	53	68	79	85	100	115
DIMENSION (mm.)	W	450	600	600	600	600	600	600	600	600	800
	D	1200	1200	1200	1200	1200	1500	1500	1500	1500	1600
	H	875	880	880	880	880	1150	1150	1150	1150	1580
	H1 (WWN)	-	1000	1000	1000	1000	1300	1300	1300	1300	1800
WEIGHT	Kg.	165	180	190	230	240	300	350	380	400	650
	Kg1. (WWN)	-	198	209	253	264	330	385	418	440	715

MODEL	CDT	500 TN	600 TN	700 TN	800 TN	900 TN	1000 TN	1250 TN	1500 TN	2000 TN	3000 TN
AIR FLOW	M ³ /hr	4320	4740	4860	5760	6480	7680	8640	9600	11520	19200
	M ³ /min	72	79	81	96	108	128	144	160	192	320
	CFM	2544	2791	2862	3392	3816	4523	5088	5654	6784	11307
CONNECTION		4"FL	5"FL			6"FL			8"FL	12"FL	
REFRIGERANT		R 22					R 22				
POWER SUPPLY		3PH / 380V - 440V									
REFRIGERANT COMPRESSOR	HP	10,0	12,5	15,0	16,0	18,0	20,0	25,0	30,0	40,0	60,0
CONDENSATION	AIR	O	O	O	O	O	O	O	O	O	O
	WATER	S	S	S	S	S	S	S	S	S	S
WATER CONDENSER FLOW RATE	l/min	80	80	90	90	100	120	140	150	180	250
WATER AFTER COOLER FLOW RATE	l/min	150	167	200	250	270	300	320	400	500	700
DIMENSION (mm.)	W	800	800	1300	1300	1300	1300	1300	1500	1500	1800
	D	1600	1600	1500	1500	1930	1930	1930	2580	2580	2900
	H	1580	1580	1500	1500	1500	1500	1500	1600	1600	1800
	H1 (WWN)	1800	1800	1800	1800	1800	1800	1800	1800	1800	2000
WEIGHT	Kg.	730	800	950	1050	1200	1300	1500	1800	2100	2500
	Kg1. (WWN)	803	880	1045	1155	1320	1430	1650	1980	2310	2750

* R407c REFRIGERANT IS OPTIONAL
S = STANDARD O = OPTION - = NOT AVAILABLE

DEW POINT TEMPERATURE	°C	2	3	4	5	6	7	8	10
	K4	0,96	1,00	1,04	1,06	1,08	1,10	1,14	1,16

ENVIRONMENT TEMPERATURE	°C	25	30	32	35	38	40	43
	K3	1,16	1,11	1,08	1,00	0,94	0,89	0,78

AIR INLET TEMPERATURE	LOW - TEMPERATURE (MAX. 65°C); TN / TWN Series								HIGH - TEMPERATURE (MAX. 80°C); WWN Series						
	°C	30	35	40	45	50	55	60	65	°C	55	65	70	75	80
	K2	1,15	1,12	1,00	0,88	0,82	0,78	0,72	0,68	K2	1,15	1,00	0,82	0,78	0,74

WORKING PRESSURE	kg / cm ²	2	4	5	6	7	8	9	10	11	12	13
	K1	0,62	0,82	0,86	0,92	1,00	1,04	1,07	1,10	1,12	1,13	1,15

** Max. working pressure of Auto drain (Standard) = 10 kg / cm² ; More than 10 kg / cm² is "Optional"

CORRECT AIR FLOW = $\frac{\text{AIR INLET FLOW}}{K1 \times K2 \times K3 \times K4}$ CHOOSE MODEL =

CDT - 100T : AIR CONDENSATION ; Dew Point - Digital Temperature Control (Optional Model)
 CDT - 100TN : AIR CONDENSATION; Dew Point - Gauge (Standard Model)
 CDT - 100TWN : WATER CONDENSATION (Optional Model)
 CDT - 100WWN (HIGH - TEMP. MAX. 80°C) : WATER COOLED - AFTER COOLER / WATER CONDENSATION (Optional Model)

YOUR SOLUTION



Water chiller - IPT Series



Water chiller - LT Series



Water chiller -
SLT, PST Series



Water chiller - OLT Series



Air dryer - CDT Series



Air dryer - Mast Series



Air cooled - After cooler
Water cooled - After cooler



Compressed air filter

Distributor :