

Performance Data for Centrifugal Water Chillers

(650-750RT)

Chiller Model		Unit	DCT195-P	DCT210-P	DCT225-P
Cooling Capacity		RT	650	700	750
		kW	2285	2461	2637
		10 ³ kcal/h	196	211	226
Evaporator	Chilled Water Flow Rate	m ³ /h	393	424	454
	Nozzle Diameter		DN250	DN250	DN250
	Pass Number		3	2	2
	Pressure Drop	kPa	115	95	95
Condenser	Cooling Water Flow Rate	m ³ /h	490	529	567
	Nozzle Diameter		DN250	DN250	DN250
	Pass Number		3	2	2
	Pressure Drop	kPa	78	65	65
Motor Rated Power		kW	402	432	465
Dimension	长(A) Length	mm	4390	5638	5638
	宽(B) Width	mm	1965	1970	1970
	高(C) Height	mm	2666	2646	2646
Pedestal	D	mm	3340	4740	4740
	E	mm	1730	1690	1690
Nozzle Arrangement and size	F	mm	585	495	495
	G	mm	540	540	540
	H	mm	620	440	440
	J	mm	940	920	920
	L	mm	877	860	860
	L	mm	1277	1280	1280

Note: 1. Entering/Leaving chilled water temperature: 12/7℃;
Entering/leaving cooling water temperature: 32/37℃;
Fouling factor: 0.086m²℃/kW; Designed pressure (waterside): 1.0MPa
2. The above data may be changed, subject to drawing provided.
3. Voltage ; 380V/6000V/10000V-3P-50Hz
4. Refrigerant: R134a
5. Our company can provide special centrifugla chiller according to your requirements.

Performance Data for Centrifugal Water Chillers

(800-900RT)

Chiller Model		Unit	DCT240-P	DCT255-P	DCT270-P
Cooling Capacity		RT	800	850	900
		kW	2813	2988	3164
		10 ³ kcal/h	242	257	272
Evaporator	Chilled Water Flow Rate	m ³ /h	484	514	544
	Nozzle Diameter		DN250	DN300	DN300
	Pass Number		2	2	2
	Pressure Drop	kPa	95	110	110
Condenser	Cooling Water Flow Rate	m ³ /h	604	627	658
	Nozzle Diameter		DN250	DN300	DN300
	Pass Number		2	2	2
	Pressure Drop	kPa	70	85	85
Motor Rated Power		kW	496	526	555
Dimension	(A) Length	mm	5638	6013	6013
	(B) Width	mm	1970	2020	2020
	(C) Height	mm	2646	2830	2830
Pedestal	D	mm	4740	5040	5040
	E	mm	1690	1820	1820
Nozzle Arrangement and size	F	mm	495	610	610
	G	mm	540	590	590
	H	mm	440	510	510
	J	mm	920	980	980
	L	mm	860	992	992
	L	mm	1280	1448	1448

Note: 1. Entering/Leaving chilled water temperature: 12/7℃;
Entering/leaving cooling water temperature: 32/37℃;
Fouling factor: 0.086m²℃/kW; Designed pressure (waterside): 1.0MPa
2. The above data may be changed, subject to drawing provided.
3. Voltage ; 380V/6000V/10000V-3P-50Hz
4. Refrigerant: R134a
5. Our company can provide special centrifugal chiller according to your requirements.

Performance Data for Centrifugal Water Chillers

(950-1100RT)

Chiller Model		Unit	DCT285-P	DCT300-P	DCT330-P
Cooling Capacity		RT	950	1000	1100
		kW	3340	3516	3860
		10 ³ kcal/h	287	302	332
Evaporator	Chilled Water Flow Rate	m ³ /h	574	605	664
	Nozzle Diameter		DN300	DN300	DN300
	Pass Number		2	2	2
	Pressure Drop	kPa	105	90	100
Condenser	Cooling Water Flow Rate	m ³ /h	696	735	830
	Nozzle Diameter		DN300	DN300	DN300
	Pass Number		2	2	2
	Pressure Drop	kPa	85	83	85
Motor Rated Power		kW	584	614	676
Dimension	(A) Length	mm	6013	6013	6013
	(B) Width	mm	2020	2020	2180
	(C) Height	mm	2830	2830	2830
Pedestal	D	mm	5040	5040	5040
	E	mm	1820	1820	1820
Nozzle Arrangement and size	F	mm	610	610	610
	G	mm	590	590	590
	H	mm	510	510	510
	J	mm	980	980	1050
	L	mm	992	992	935
	L	mm	1448	1448	1405

Note: 1. Entering/Leaving chilled water temperature: 12/7 °C;
Entering/leaving cooling water temperature: 32/37 °C;
Fouling factor: 0.086m²/kW; Designed pressure (water side): 1.0MPa
2. The above data may be changed, subject to drawing provided.
3. Voltage ; 380V/6000V/10000V-3P-50Hz
4. Refrigerant: R134a
5. Our company can provide special centrifugal chiller according to your requirements.

Performance Data for Centrifugal Water Chillers

(1650-2000RT)

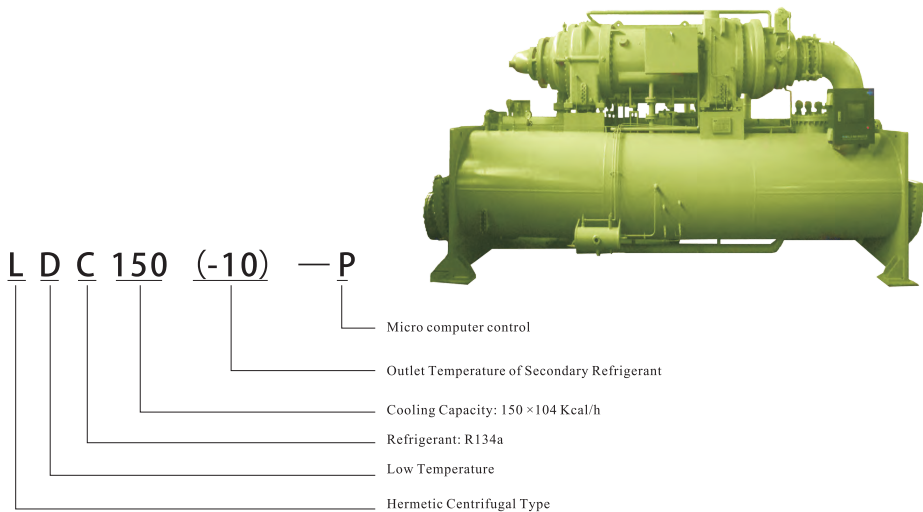
Chiller Model		Unit	DCTS500-P	DCTS550-P	DCTS600-P
Cooling Capacity		RT	1650	1800	2000
		kW	5802	6329	7032
		10 ³ kcal/h	500	544	605
Evaporator	Chilled Water Flow Rate	m ³ /h	998	1088	1210
	Nozzle Diameter		DN400	DN400	DN400
	Pass Number		2	2	2
	Pressure Drop	kPa	115	90	110
Condenser	Cooling Water Flow Rate	m ³ /h	1208	1320	1465
	Nozzle Diameter		DN400	DN400	DN400
	Pass Number		2	2	2
	Pressure Drop	kPa	75	70	85
Motor Rated Power		kW	1014	1108	1228
Dimension	(A) Length	mm	6150	6150	6150
	(B) Width	mm	3160	3200	3200
	(C) Height	mm	3120	3270	3270
Pedestal	D	mm	5040	5040	5040
	E	mm	2460	2560	2560
Nozzle Arrangement and size	F	mm	750	820	820
	G	mm	715	765	765
	H	mm	600	650	650
	J	mm	1330	1380	1380
	L	mm	1160	1260	1260
	L	mm	1740	1840	1840

Note: 1. Entering/Leaving chilled water temperature: 12/7 °C;
Entering/leaving cooling water temperature: 32/37 °C;
Fouling factor: 0.086m²/kW; Designed pressure (water side): 1.0MPa
2. The above data may be changed, subject to drawing provided.
3. Voltage ; 380V/6000V/10000V-3P-50Hz
4. Refrigerant: R134a
5. Our company can provide special centrifugal chiller according to your requirements.

LDC/LDCS Series

Low Temperature Centrifugal Refrigeration Machine

Cooling Capacity:1046~3198kw
Leaving Temperature of Coolant : -10~-35℃



L D C 150 (-10) — P

- Micro computer control
- Outlet Temperature of Secondary Refrigerant
- Cooling Capacity: 150 ×104 Kcal/h
- Refrigerant: R134a
- Low Temperature
- Hermetic Centrifugal Type

L D C S 130 (-25) — P

- Micro computer control
- Outlet Temperature of Secondary Refrigerant
- Cooling Capacity: 130 ×104 Kcal/h
- Dual compressors driven by one motor
- Refrigerant: R134a or R22
- Low Temperature
- Hermetic Centrifugal Type

Advantages

Large cooling capacity, small dimension ,small occupied area and small weight. Compared with screw chillers of the same capacity, there is no bulky oil separator especially for large cooling capacity.

No friction between the impeller and the compressor casing ,compact structure ,long term reliable operation and low cost for maintenance.

Slight inertia force ensures stable operation. Besides, the centrifugal compressor has been mounted directly on the horizontal shell and tube type heat exchanger without other design basis.

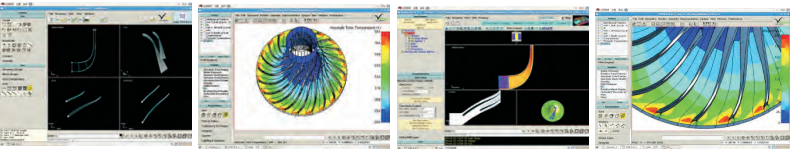
The chiller features with multi-stage compression and multi evaporating temperatures ,and the specifically designed economizer ensures less power consumption and cools the liquid refrigerant again to achieve higher cooling efficiency.

Cooling capacity with automatic step-less control by the inlet guide vane ranges from 20% to 100% with the help of anti-surge backflow regulation device.

Less lubricating oil will be mixed into the chiller unit ,imposing slight influence on the coefficient of the heat exchangers.

Advanced design and manufacture

Optimum aerodynamic design of the impeller is done by the centrifugal compressor software from CONCEPT NREC (USA) , CFD (computational fluid dynamics) software from NUMECA FINE/TURBO and AxCent .Strength analysis, rotor dynamics and bearing analysis have been done by ANSYS, DYROBES software, improving the performance to a maximum.



Advanced microprocessor control system

Advanced micro compressor control system can optimize logic control, improve efficiency of operation and reliability .

Operation and reliability Simple and visual tactile screen.

Operation data and status can be displayed on the screen including fault cause so as to monitor at any time.

The electric control cabinet has more than 30 control and safety functions and records failure data of the last 10 shutdowns.

Imported key parts with interference free can make sure safety and reliable operation.

With built-in RS422 interface, it can not only realize multi-unit control but also connect with building automation system (BASO) to ensure remote control start/stop of chiller.



LDCS – P series performance data

(Secondary refrigerant leaving temp: -10°C refrigerant: R134a)

Model		LDC90 (-10) -P	LDC100 (-10) -P	LDC125 (-10) -P	LDC150 (-10) -P	LDC175 (-10) -P
Cooling capacity	10°K cal/h	90	100	125	150	175
	RT	297	330	413	496	579
	KW	1046	1163	1454	1744	2035
Secondary refrigerant entering / leaving temp		°C -5/-10				
Cooling water entering / leaving temp		°C 32/37				
Evaporator	Flow rate	m³/h 210	233	292	350	408
	Pressure drop	Kpa 140	140	152	158	152
	Pass number	4	4	4	4	4
	Nozzle diameter	mm 200	200	200	200	250
Condenser	Water Flow rate	m³/h 258	285	355	426	498
	Pressure drop	Kpa 87	87	86	86	84
	Pass number	2	2	2	2	2
	Nozzle diameter	mm 200	200	250	250	300
motor	Power	KW 398	442	553	661	773
	Power supply	V-ph- 380/6000-3-50 HZ			6000-3-50	
	Cooling method	Refrigerant injection cooling				
weight	Net weight	Kg 14020	14107	15670	15882	17050
	Operation weight	Kg 16120	16200	17880	18250	19680

LDCS – P series performance data

(secondary refrigerant leaving temp: -10°C refrigerant: R134a)

Model			LDC200 (-10) -P	LDC225 (-10) -P	LDC250 (-10) -P	LDC275 (-10) -P
Cooling capacity	10°K cal/h		200	225	250	275
	RT		661	744	827	909
	KW		2325	2616	2907	3198
Secondary refrigerant entering / leaving temp		℃	-5/-10			
Cooling water entering / leaving temp		℃	32/37			
Evaporator	Flow rate	m³/h	466	525	583	642
	Pressure drop		159	155	158	154
	Pass number		4	3	3	3
	Nozzle diameter	mm	250	250	250	300
Condenser	Cooling waterflow rate	m³/h	568	641	711	782
	Pressure drop	Kpa	89	84	86	86
	Pass number		2	2	2	2
	Nozzle diameter	mm	300	300	300	300
motor	Power	KW	884	1001	1105	1216
	Power supply	V-ph- HZ	6000-3-50			
	Cooling method		Refrigerant injection cooling			
weight	Net weight	Kg	17250	19105	19180	20500
	Operation weight	Kg	19950	22040	22750	24170

Note:

1. The water side fouling factor is designed as 0.086m²°C/KW, and water side designed pressure as 1.0Mpa.
2. There may be some change in the above data, the user should be based on the products drawing.
3. We can design and manufacture chiller unit according to user's requirements of temperature and cooling capacity.

LDCS – P series performance data (One)

(secondary refrigerant leaving temp: -20℃ refrigerant: R134a)

Model			LDCS100 (-20)-P	LDCS125 (-20)-P	LDCS150 (-20)-P	LDCS175 (-20)-P	LDCS200 (-20)-P
Cooling capacity		10°K cal/h	100	125	150	175	200
		RT	300	413	496	579	661
		KW	1163	1454	1744	2035	2326
Secondary refrigerant entering / leaving temp		℃	-15/-20				
Cooling water entering / leaving temp		℃	32/37				
Evaporator	Flow rate	m³/h	234	297	356	414	473
	Pressure drop	Kpa	150	152	150	150	152
	Pass number		3	3	3	3	3
	Nozzle diameter	mm	250	250	250	300	300
Condenser	Cooling waterflow rate	m³/h	315	392	471	549	629
	Pressure drop	Kpa	96	97	98	96	98
	Pass number		2	2	2	2	2
	Nozzle diameter	mm	250	250	250	300	300
motor	Power	KW	630	780	935	1090	1250
	Power supply	V-ph- HZ	6000-3-50				
	Cooling method		Refrigerant injection cooling				
weight	Length	mm	6800				
	Net weight	mm	2760	2760	2850	2850	2950
	Operation weight	mm	3100	3100	3200	3200	3340

LDCS – P series performance data (Two)

(secondary refrigerant leaving temp: -25℃ refrigerant: R134a)

Model			LDCS130 (-25)-P	LDCS150 (-25)-P	LDCS175 (-25)-P	LDCS175 (-20)-P
Cooling capacity		10°K cal/h	130	150	175	200
		RT	430	496	579	661
		KW	1512	1744	2035	2326
Secondary refrigerant entering / leaving temp		℃	-20/-25			
Cooling water entering / leaving temp		℃	32/37			
Evaporator	Flow rate	m³/h	313	361	421	481
	Pressure drop	Kpa	150	152	150	150
	Pass number		3	3	3	3
	Nozzle diameter	mm	250	250	300	300
Condenser	Cooling waterflow rate	m³/h	425	488	571	633
	Pressure drop	Kpa	96	97	97	98
	Pass number		3	3	3	3
	Nozzle diameter	mm	250	250	300	300
motor	Power	KW	900	1030	1200	1370
	Power supply	V-ph- HZ	6000-3-50			
	Cooling method		Refrigerant injection cooling			
weight	Length	mm	6800			
	Net weight	mm	2760	2760	2850	2850
	Operation weight	mm	3100	3100	3200	3200

LDCS – P series performance data (Three)

(secondary refrigerant leaving temp: -35°C refrigerant: R22)

Model			LDCS150 (-35)-P	LDCS175 (-35)-P	LDCS200 (-35)-P
Cooling capacity	10°K cal/h		150	175	200
	RT		496	579	661
	KW		1744	2035	2326
Secondary refrigerant entering / leaving temp		°C	-30/-35		
Cooling water entering / leaving temp		°C	32/37		
Evaporator	Flow rate	m³/h	364	427	486
	Pressure drop	Kpa	150	152	150
	Pass number		3	3	3
Condenser	Cooling waterflow rate	m³/h	425	488	571
	Pressure drop	Kpa	96	97	97
	Pass number		3	3	3
motor	Power	KW	1285	1500	1715
	Power supply	V-ph- HZ	6000-3-50		
	Cooling method		Refrigerant injection cooling		
weight	Length	mm	6800	6800	6850
	Net weight	mm	2875	2950	3100
	Operation weight	mm	3100	3200	3340

Note:

- 1、The water side fouling factor is designed as 0.086m °C/KW, and water side designed pressure as 1.0Mpa.
- 2、There may be some change in the above data, the user should be based on the products drawing.
- 3、We can design and manufacture chiller unit according to user's requirement s of temperature and cooling capacity.

LDCS – P series performance data (Four)

(Chilled leaving water temperature : -35°C Work medium: R22)

Model			LDCS150 (-35)-P	LDCS175 (-35)-P	LDCS200 (-35)-P
Cooling capacity	10°K cal/h		150	175	200
	RT		496	579	661
	KW		1744	2035	2326
Secondary refrigerant entering / leaving temp		°C	-30/-35		
Cooling water entering / leaving temp		°C	32/37		
Evaporator	Flow rate	m³/h	364	427	486
	Pressure drop	Kpa	150	152	150
	Pass number		3	3	3
Condenser	Cooling waterflow rate	m³/h	535	625	714
	Pressure drop	Kpa	96	97	97
	Pass number		3	3	3
motor	Power	KW	1285	1500	1715
	Power supply	V-ph- HZ	6000-3-50		
	Cooling method		Refrigerant injection cooling		
weight	Length	mm	6800	6800	6850
	Net weight	mm	2875	2950	3100
	Operation weight	mm	3100	3200	3340

Remarks :

- 1, Above table is set under operation conditions of fouling factor : 0.086m2 °C/KW and water side pressure : 1.0Mp .
- 2, Data listed in sample may be changed .
Please take the drawing provided as standard .
- 3, It is likely to specially customize units according to customer' s technical specifications .

Typical Customers (nuclear power station)



Daya Bay Nuclear Power Station
(Centrifugal Chiller)



Lingao Nuclear Power Station(Centrifugal Chiller)



Fuqing Nuclear Power Station(Centrifugal Chiller)



Wanjiashan Nuclear Power Station(Centrifugal Chiller)

Typical Customers (Chemical Industry)



Sichuan Meifeng Chemical Industry Group (Fans)



Qinghai Golmud Petroleum Refinery (fans)

Typical Customer (Iron&Steel Industry)



Shanghai Baoshan Iron&Steel Group
(Silicon steel production line etc./fans)



Capital Iron&Steel Group
(2.4 million tons pellet project per year /fans)

Typical Customers (Commercial Industry)



Beijing Parkson Mall (Centrifugal
Chiller)



Guangdong Xiongfeng Mall (Centrifugal Chiller)

Typical Customers (Cement Industry)



Gansu Qilianshan Cement Group
(2500 tons of cement production line /fans)



Guangxi Huarun Cement Group
(2500 tons of cement production line /fans)