

Venture for
Tomorrow

MAINBiz

WATER
OIL
PANEL-AIRCON



(주)다원
DAWON
COOLERS



www.dawoncooler.com

DAWON COOLERS

저희 (주)다원은 냉각시스템을 전문으로 하는 기업으로써 고객의 고부가가치 창출에 기여하고자 하는 냉각기 전문 기업입니다.

국내 산업기계와 반도체 장비에 고 정밀, 고 생산성이 요구되어 주변기기인 냉각기 시스템의 꾸준한 발전으로 이어졌습니다. 저희 다원의 산업장비의 특성에 맞는 전용 냉각시스템 개발과 정작에 대한 노력은 고객의 고부가가치 창출로 이어지고 있습니다. 국내외 산업기계는 고속가공, 정밀가공, 생산품의 고품질, 대량생산에 맞는 냉각시스템 요구 또한 증대 되고 있으며 다원은 고객의 요구에 최선을 다하고 있습니다.

아울러 신 재생 에너지 사업과 그린 에너지 사업, 꾸준한 R&D 사업에 역적을 두고 있습니다. 히트 펌프 시스템, 유증기 액화 회수 시스템 등 신 사업분야에 꾸준한 노력을 하고 있으며 최고의 품질과 고객 만족으로 고객의 고부가가치 창출에 항상 최선을 다하겠습니다.

다원 임직원 일동

Dawon specializes in the development and manufacture of cooling systems and has made efforts to assist its customers in creating high value.

As such qualities as high precision and high productivity have been the name of the game in domestic industrial machinery and semiconductor equipment, the same holds true for the cooling systems sector and the need for such attributes requires continuous development of high-quality chillers and coolers which are peripherals used in these industries. The company has also made endeavors to keep pace with the trend, leading to the development of cooling systems tailored to the requirements of industrial equipment and enabling its customers to produce high value. With continuing demands for cooling systems fit for high-speed and precision processing as well as high-quality mass production, the company will continue to make its best to meet the needs of its customers.

At the same time, the company is focusing more of its resources on such new and renewable energy and green energy and has increased its R&D investment, which will include such advanced systems as heat pumps and organic vapor recovery systems. It will continue to do its utmost to afford customers high quality and satisfaction and support them in generating high profits.

From all the employees of awon

연혁 | History

- 2015** 09 유증기 액화 회수장치 특허 출원
Made an application for a patent concerning a vapor recovery system
- 2014** 01 Main-BIZ 인증
Received the Main-BIZ certificate
- 02 기업부설 연구소 설립
Established its corporate research center
- 05 Clean 사업장업체 선정
Was selected as, and earned the title of, a Clean Factory
- 06 벤처기업 인증
Earned the Venture Business
- 2013** 01 첨단 산업단지 공장이전
Moved to the Gwangju Science Industrial Complex
- 2012** 01 러시아 냉각장치 수출-진공 System 냉각장치
Shipped vacuum cooling systems to Russia
- 2010** 03 ISO 9001 인증 획득
Obtained the ISO 9001 certificate
- 2009** 02 소형 냉각장치의 유량 표시 연량 산출 냉각기 System 특허출원
Filed an application for a patent for small-capacity cooling systems with a flow meter that displays heat generation rates.
- 03 축사용 냉난방 System 특허 출원
Prosecuted an application for a patent for its cooling system for livestock facilities.
- 05 (주)세화 기계 업체 등록 (금호타이어 관련 타이어 금형 생산)
Sewha Machinery was registered with Kumho Tire as a supplier of tire molds.
- 09 레이저 마킹기용 냉각장치 개발 완료
축사용 냉난방 Heat-Pump System 특허 출원 및 등록
Completed the development of cooling systems for Laser marking machines and obtained a patent for its heat pump system for livestock facilities
- 2008** 03 국내 최초 냉각기 전용 유량 표시장치 개발
Developed cooling water flow meters for the first time in Korea
- 05 역상/결상/감지 장치 개발 완료
Developed reserve-phase/ open-phase sensors
- 10 하남공단으로 공장 이전
Moved to the Hanam Industrial Park
- 2007** 07 다원 회사 설립(한동균 대표)
Established Dawon Cooler (CEO Han Dong-gyun)
- 08 Water Chiller Controller 개발 완료
Completed the development of water chiller controllers
- 10 Water Chiller 설계 및 개발 완료
Completed the design and development of water chillers
- 11 2007 GIMMA 광주국제기계 및 자동화전 참가
Attended the 2007 GIMMA (Gwangju International Mold Machinery and Factory Automation Fair)
- 11 중소기업청 주최 기술 창업 패키지 수료
Completed the technology-based business startup program sponsored by the SMBA(Small and Medium Business Administration)

적용분야 | Applications



CONTENTS

• WATER CHILLER 수 냉각장치

- 04 소형 냉각장치 Small-size coolers/chillers
- 05 중형 냉각장치 Medium-size coolers/chillers
- 06 중형 냉각장치 Medium-size coolers/chillers
- 07 대형 냉각장치 Large-size coolers/chillers

- DLC-1000, DLC-1500
- DS-1500, DS-3000, DS-4500
- DWT-005, DWT-010, DWT-015, DWT-020, DWT-030
- DWT-050, DWT-075, DWT-100, DWT-150, DWT-200

• OIL CHILLER 오일 냉각장치

- 08 일반제어 For regular control of equipment
- 09 정밀제어 For precision control of equipment

- COP-3000, DOP-4500, DOP-6000, DOP-9000
- CIL301A-C(T), CIL501A-C(T), CIL751A-C(T), CIL1101A-C(T), CIL1501A-C(T), CIL2201A-C(T)

• PANEL AIRCON(대양기전) 제어반 전용 판넬 에어컨

- 10 제어반 전용 에어컨 Cooling for Electronic Control Panel SMA 1000/2000, DCA1500/2000, DCA3000/4000, DCA6000, DCA9000/12000
- 11 제어반 팬 쿨러/HI-팬 쿨러 Cooling for Fan Cooler/HI-FAN Cooler

소형 냉각장치 | Small-size chillers

DLC-1000 / DLC-1500

적용 장비 | Applicable equipment



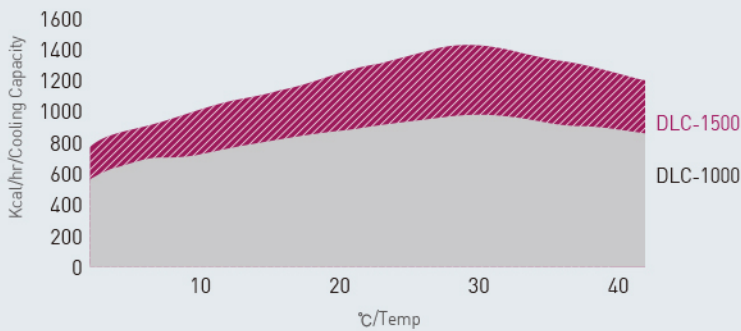
※ 기타 각종 발열원이 있는 소형 기타 장비
 ※ For small size devices that have various types of heat sources

- Digital 유량 표시기능 적용으로 냉각수 순환상태 확인
- 장비의 정확한 온도관리 / 고효율의 냉각성능
- Compact한 설계로 안정적 운전과 다양한 설치 환경에 적합

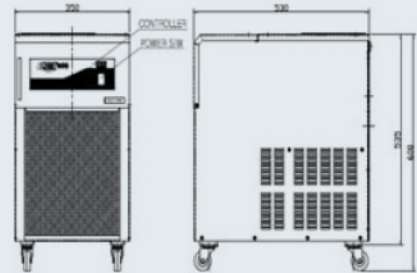
- A digital flow meter that can display flow rates is mounted to check the circulation of cooling water.
- The product achieves accurate control of the temperature of an instrument/ provides high cooling efficiency.
- The compact design gives the equipment operational stability and allows for various installation conditions.



냉각 성능 곡선도 | Cooling Capacity Graph



외형도 | Dimension



제품 사양 | Product contents

Specification		DLC-1000	DLC-1500
POWER		220V-1PH-50/60HZ	
Cooling Capacity	kcal/hr	~850	~1450
Compressor	kw	0.3	0.4
Circulation Flow	ℓ /min	~10	~27
Tank Volum	ℓ	13	15
Connection Volum	mm	10	15
Dimension	W×D×H	350×530×600	380×520×600

중형 냉각장치 (전용기용) | Medium-size chillers

DS-1500 / DS-3000 / DS-4500

적용 장비 | Applicable equipment



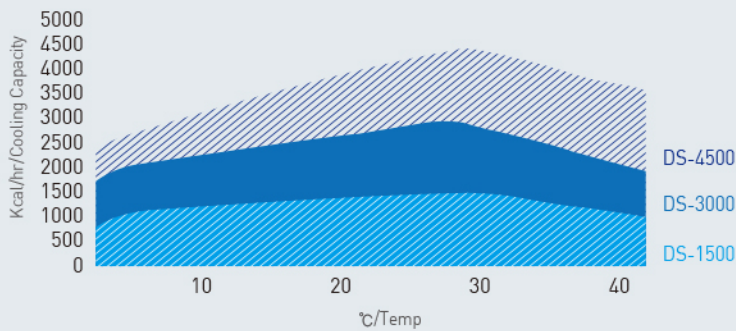
※ 기타 발열원이 있는 전용 장비
 ※ Exclusively designed for equipment that has various types of heat sources

- Digital 유량 표시기능으로 냉각열량, 상태등을 확인 할수 있음
- Pump와 Tank가 일체형으로 누수가 발생하지 않는 구조
- Compact한 설계로 안정적 운전 과 다양한 설치 환경에 적합
- 장비의 정확한 온도관리 / 고효율의 냉각성능

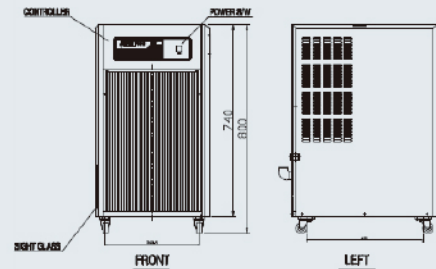
- Adoption of a digital flow meter enables checking of heat generation rates and operating condition.
- The integral structure of a pump and a tank can maintain a sealed environment tight enough to resist leakage.
- The compact design gives the equipment operational stability and allows for various installation conditions.
- The product achieves accurate control of the temperature of an instrument/ provides high cooling efficiency.



냉각 성능 곡선도 | Cooling Capacity Graph



외형도 | Dimension



제품 사양 | Product contents

Specification		DS-1500	DS-3000	DS-4500
POWER		220V-3PH-50/60HZ / 380V-3PH-50/60HZ		
Cooling Capacity	kcal/hr	~1,420	~2,850	~4,300
Compressor	kw	0.4	0.75	1.25
Circulation Flow	ℓ /min	~25	~35	~43
Tank Volum	ℓ	15	23	23
Connection Volum	mm	15	15	15
Dimension	W×D×H	380×520×600	440×560×800	440×560×800

중형 냉각장치 (범용) | Medium-size chillers (for general purpose)

DWT-005 / DWT-010 / DWT-015 / DWT-020 / DWT-030

적용 장비 | Applicable equipment

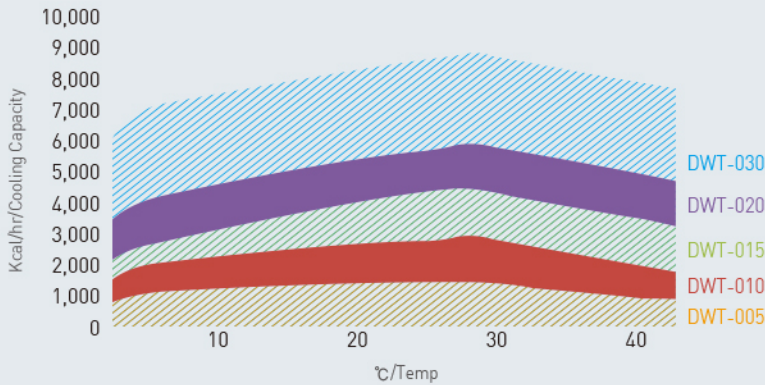


※ 기타 발열원이 있는 기계 장비
 ※ For equipment that has various types of heat sources

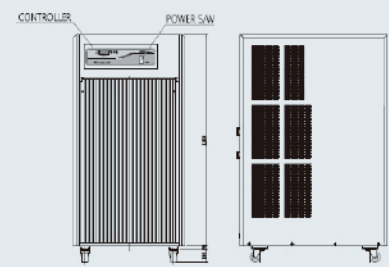
- Compact한 설계로 안정적 운전과 다양한 설치 환경에 적합
- Pump와 Tank가 일체형으로 누수가 발생하지 않는 구조
- 장비의 정확한 온도관리 / 고효율의 냉각성능
- The compact design gives the equipment operational stability and allows for various installation conditions.
- The structure that integrates a pump and a tank resists water leakage.
- The product achieves accurate control of the temperature of an instrument/ provides high cooling efficiency.



냉각 성능 곡선도 | Cooling Capacity Graph



외형도 | Dimension



제품 사양 | Product contents

Specification		DWT-005	DWT-010	DWT-015	DWT-020	DWT-030
POWER		220V-3PH-50/60HZ / 380V-3PH-50/60HZ				
Cooling Capacity	kcal/hr	~1,420	~2,850	~4,300	~5,750	~8,570
Compressor	kw	0.4	0.75	1.25	1.5	2.25
Circulation Flow	ℓ/min	~25	~35	~43	~48	~56
Tank Volum	ℓ	15	23	23	60	60
Connecter	mm	15	15	15	20	20
Dimension	W×D×H	380×520×600	440×560×800		570×750×1250	

대형 냉각장치 | Large-size chillers

DWT-050 / DWT-075 / DWT-100 / DWT-150 / DWT-200

적용 장비 | Applicable equipment



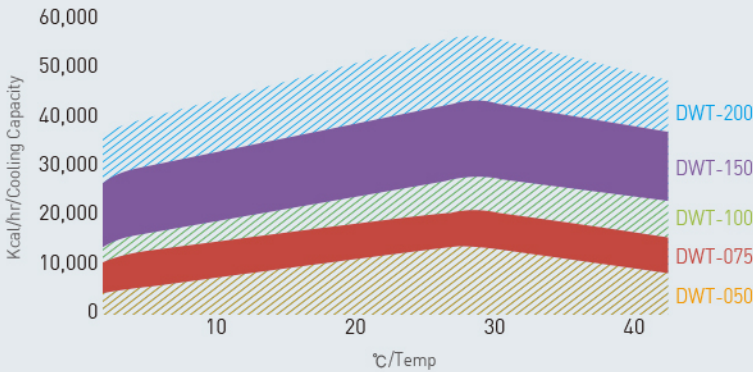
※ 기타 발열원이 있는 대형 냉각 시스템
 ※ Large-size cooling systems for the equipment that has various types of heat sources

- Compact한 설계로 안정적 운전 과 다양한 설치 환경에 적합
- 장비의 정확한 온도관리 / 고효율의 냉각성능
- 고효율 응축기를 적용하여 열악한 사용조건 극복

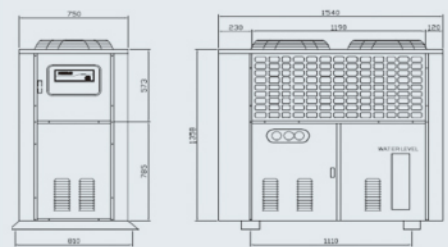
- The compact design gives the equipment operational stability and allows for various installation conditions.
- The product achieves accurate control of the temperature of an instrument/ provides high cooling efficiency.
- The adoption of a high-efficiency condenser enables the user to overcome severe service conditions.



냉각 성능 곡선도 | Cooling Capacity Graph



외형도 | Dimension



제품 사양 | Product contents

Specification		DWT-050	DWT-075	DWT-100	DWT-150	DWT-200
POWER		380V-3PH-50/60HZ / 440V-3PH-50/60HZ				
Cooling Capacity	kcal/hr	~14,300	~21,000	~28,300	~43,000	~56,000
Compressor	kw	3.75	5.6	7.5	11.2	15
Circulation Flow	ℓ /min	~53	~65	~95	~115	~130
Tank Volum	ℓ	60	80	100	250	250
Connecter	mm	25	25	32	32	32
Dimension	W×D×H	685×1230×1400	685×1,300×1,400	885×1,300×1,650	900×1,900×1,700	900×2,300×1,900

오일 냉각장치 | Oil Chiller

일반제어형 | For regular control of equipment
 DOP-3000 / DOP-4500 / DOP-6000 / DOP-9000

적용 장비 | Applicable equipment

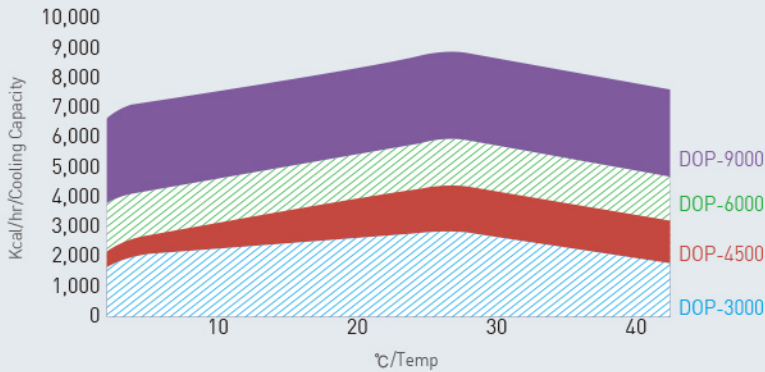


※ 기타 발열원이 있는 오일 냉각 시스템
 ※ Oil cooling systems for apparatuses that have various types of heat sources

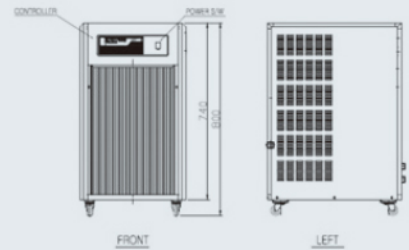
- 장비의 정확한 온도관리 / 고효율의 냉각성능
- Digital 온도 조절로 정밀함 온도제어
- Compact한 설계로 안정적 운전 과 다양한 설치 환경에 적합
- The product achieves accurate control of the temperature of an instrument/ provides high cooling efficiency.
- The cooling system is digitally controlled so that it ensures accurate temperature control.
- The compact design gives the equipment operational stability and allows for various installation conditions.



냉각 성능 곡선도 | Cooling Capacity Graph



외형도 | Dimension



제품 사양 | Product contents

Specification		DOP-3000	DOP-4500	DOP-6000	DOP-9000
POWER		220V-3PH-50/60HZ / 380V-3PH-50/60HZ			
Cooling Capacity	kcal/hr	~2,750	~4,280	~5,750	~8,600
Compressor	kw	0.75	1.25	1.5	2.25
Circulation Flow	ℓ /min	~24	~28	~36	~46
Pump Motor	Kw	0.75	0.75	0.92	0.92
Connecter	mm	15		20	
Dimension	W×D×H	440×560×800		570×750×1250	

오일 냉각장치 | Oil Chiller

정밀제어형 | For precision control of equipment

CIL301A-C(T) / CIL501A-C(T) / CIL751A-C(T) / CIL1101A-C(T) / CIL1501A-C(T) / CIL2201A-C(T)

적용 장비 | Applicable equipment

작동유 온도조절
Control of temperature of hydraulic oil

공작기계 주축 냉각
Cooling of machine tools' main shafts

윤활유 온도조절
Control of temperature of lubricant

리니어 모터 냉각
Cooling of linear motor

볼스크류
Ball screw

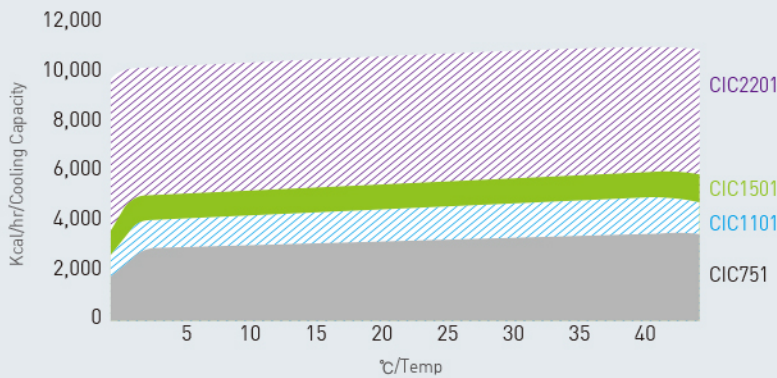
±0.1℃
정밀 온도제어

Precision control of temperatures within ±0.1℃

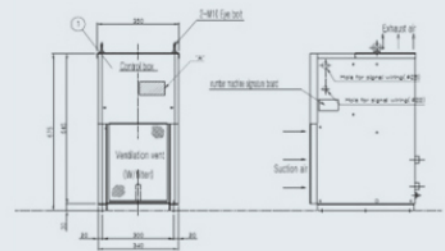


- ±0.1℃ 정밀온도 제어를 통하여 정밀 가공이 가능
- 폭넓은 구간 고정밀도 액체온도 제어 가능
- Compact한 설계로 열악한 환경에서도 고효율 운전 가능
- This product makes it possible to control temperatures within the unit of ±0.1℃ so machines can perform precision processing.
- This product enables the operator to achieve high-precision control of the temperature of a liquid across a wide section.
- The compact design permits high-performance operation in severe environments.

냉각 성능 곡선도 | Cooling Capacity Graph



외형도 | Dimension



제품 사양 | Product contents

Specification	CIL301A-C(T)	CIL501A-C(T)	CIL751A-C(T)	CIL1101A-C(T)	CIL1501A-C(T)	CIL2201A-C(T)	
POWER	220V-3PH-50/60HZ						
Cooling Capacity	kcal/hr	~1,100	~1,420	~2,756	~3,850	~4,790	~14,100
Compressor	kw	0.3	0.5	0.75	1.1	1.5	2.2
Circulation Flow	ℓ /min	~13		~26		~34	~42
Pump Motor	kw	~0.2		~0.4		~0.75	
Connecter	mm	15		20×15	20	25	
Dimension	W×D×H	345×447×675	345×447×825	380×475×935	450×510×950	566×570×1126	

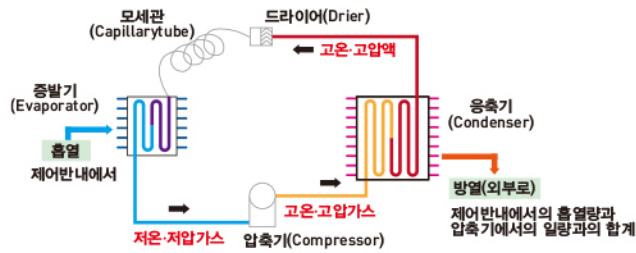
제어반 전용 에어컨 (패널 에어컨) | Cooling for Electronic Control Panel

SMA 1000/2000 / DCA1500/2000 / DCA3000/4000 / DCA6000 / DCA9000/12000

적용 장비 | Applicable equipment



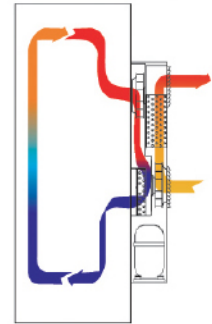
에어컨 원리 (Principle of operation)



제품 사양 | Product contents

MODEL	VOLTAGE (V)	FREQUENCY (HZ)	CAPACITY		CURRENT(A)		INPUT POWER (W)	AMB TEMP RANGE(°C)	SIZE W×H×D (MM)
			BTU/h	Kcal/h	START	RUN			
SMA1000	230	50/60	1000	250	12.0	1.8	414	20~50	339×461×185
SMA2000	230	50/60	2000	500	12.0	2.0	460	20~50	339×461×185
DCA1500SE/SI	230	50/60	1500	370	13.0	2.5	575	20~50	398×638×180
DCA2500SE/SI	230	50/60	2500	620	13.0	2.5	575	20~50	398×638×180

OPTION: DCA1500SI / DCA2500SI INTERNAL MOUNTING TYPE



MODEL	VOLTAGE (V)	FREQUENCY (HZ)	CAPACITY		CURRENT(A)		INPUT POWER (W)	AMB TEMP RANGE(°C)	RMK'S
			BTU/h	Kcal/h	START	RUN			
DCA3000SE/SI	230	50	3000	750	14.0	3.0	690	20~50	437×959×200
DCA3000SE/SI	230	60	3000	750	14.5	3.5	805	20~50	437×959×200
DCA4000SE/SI	230	50	4000	1000	14.0	3.0	690	20~50	437×959×200
DCA4000SE/SI	230	60	4000	1000	14.5	3.5	805	20~50	437×959×200
DCA6000SE/SI	230	60	6000	1500	16.0	4.0	920	20~50	437×1140×235

OPTION: ALL ITEMS INTERNAL MOUNTING TYPE, DCA6000SI 50HZ

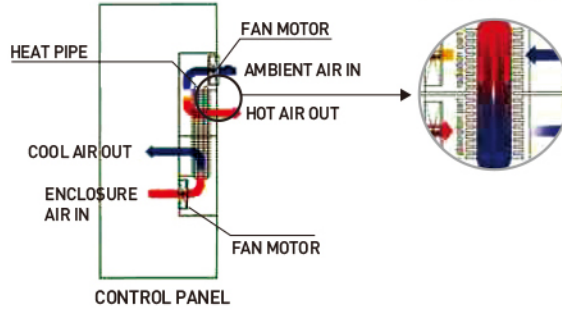
MODEL	VOLTAGE (V)	FREQUENCY (HZ)	CAPACITY		CURRENT(A)		INPUT POWER (W)	AMB TEMP RANGE(°C)	RMK'S SIZE W×H×D (MM)
			BTU/h	Kcal/h	START	RUN			
DCA9000SE	230	60	9000	2250	17.0	5.0	1150	20~50	500×1260×253
DCA12000SE	230	60	12000	3000	18.0	6.0	1380	20~50	500×1460×253
DCA2000RMS	230	50/60	2000	500	13.0	2.5	575	20~50	553×280×296
DCA3000RM	230	50	3000	750	14.0	3.8	874	20~50	572×333×384
DCA3000RM	230	60	3000	750	14.5	4.0	920	20~50	572×333×384
DCA4000RM	230	50	4000	1000	14.0	3.8	874	20~50	572×333×384
DCA4000RM	230	60	4000	1000	14.5	4.0	920	20~50	572×333×384

OPTION: DCA9000SE/SI / DCA12000SE 50HZ

제어반 팬 쿨러/HI-팬 쿨러

Cooling for Fan Cooler/Hi-FAN Cooler

적용 장비 | Applicable equipment



제품 사양 | Product contents

FAN COOLER							
MODEL	VOLTAGE	FAN	WEIGHT(kg)	CAPACITY(W/°c)	SIZE(W×H×D)		
DCF-5SI	110V-50/60HZ	2	3.4	5	200×475×75		
DCF-8SI			3.8	8	157×595×75		
DCF-10SI			3.9	10	188×650×75		
DCF-12SI			4.3	12	188×650×90		
DCF-15SI			4.9	15	270×655×75		
DCF-16SI			4.8	16	188×736×90		
DCF-17SI			5.2	18	188×801×90		
DCF-18SI			220V-50/60HZ	4	6.5	17	308×595×75
DCF-20SI					6.9	20	308×595×90
DCF-21SI					6.5	21	340×650×75
DCF-25SI	7.2	25			359×736×90		
DCF-32SI	8.4	32			359×736×90		
DCF-35SI	8.8	35			359×801×90		
DCF-45SI			10.4	45	380×960×90		

HI - COOLER					
MODEL	VOLTAGE	FAN	WEIGHT(kg)	CAPACITY(W/°c)	SIZE(W×H×D)
DCH-6S	110V-50/60HZ	2	3.3	6	162×438×85
DCH-8S		2	4.5	12	190×652×60
DCH-9S		2	4.0	9	185×438×100
DCH-16S		4	8.0	18	318×652×60
DCH-21S	220V-50/60HZ	2	6.2	21	213×710×70
DCH-28S		2	8.3	28	316×710×70
DCH-30S		2	9.4	32	240×888×90
DCH-32S		4	11.5	38	419×710×70



DAWON

COOLERS



(주)다원 DAWON COOLERS

61007 광주광역시 북구 첨단벤처소로 50(월출동 973-4)
50, Cheomdanbencheoso-ro, Buk-gu, Gwangju, 61007, Rep. of KOREA
Tel. +82-62-959-3345 | Fax. +82-62-959-3346

E-mail. han30@dawoncooler.com