



RADIATOR

散热器

能源与工艺冷却

VRCOOLER

常州维琪库勒制冷设备有限公司
Changzhou Vrcoolertech Refrigeration Co., Ltd

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www.vrcooler.com

SMART

灵 动 系 列

- 定制化 + 模块化 + 高效 + 节能

Customized Modular high efficient energy saving

The Heat transfer innovators

The perfect combination of German fans and Italian design software

传热的创新者

德国与意大利技术的完美结合



我们的优势

Our Advantage

专业系统集成

- 定制化的尺寸
- 专业的热力学计算
- 权威的抗震设计

Professional system integration

- Customized size
- Professional thermodynamic calculation
- Authoritative seismic design

框架

- 镀锌板喷塑(RAL 9010)
- 热浸锌板
- 不锈钢板
- 镀锌板

Frame

- Galvanized sheet plastic spraying (RAL 9010)
- Hot dip galvanized plate
- Stainless steel plate
- Galvanized sheet

AC/EC风扇

- 防护等级IP55
- 低能耗
- 变频器控制
- 耐高温风机
- 防爆风机
- 多种直径风机可选
- 800 (1-14pcs) 910(1-14pcs)
- 1250 (1-7pcs) 1800 (1-5pcs)

AC / EC fan

- Protection class IP55
- Low energy consumption
- Inverter control
- High temperature resistant fan
- Explosion proof fan
- Various diameter fans are optional
- 800 (1-14pcs) 910(1-14pcs)
- 1250 (1-7pcs) 1800 (1-5pcs)

不同的连接选择

- 法兰连接
- 螺纹连接
- 焊接

Different connection options

- Flange connection
- Threaded connection
- Welding

管材

- 铜
- 铜镍合金
- 不锈钢
- 钛

Pipe

- Copper
- Copper nickel alloy
- Stainless steel
- Titanium

翅片

- 铝
- 环氧树脂涂层
- 铜
- 镀锡铜箔
- Blygold涂层
- 不锈钢
- 钛

Fins

- Aluminum
- Epoxy coating
- Copper
- Tinned copper foil
- Blygold coating
- Stainless steel
- Titanium

检修和清洁

- 易于清洁
- 可选的检修门或铰接的风扇版
- 便于清洁的翅片形式
- 高机械强度的的坚固材料
- 易于维护

Maintenance and cleaning

- Easy to clean
- Optional access door] or hinged fan version
- Easy to clean fin form
- Strong material with high mechanical strength
- Easy to maintain

便利的运输、安装和维护

便于运输

- 模块化设计——便于组合安装
- 标准化设计——便于标准集装箱海运和标准卡车陆运

Easy to transport

- Modular design - easy to assemble and install
- Standardized design - easy for standard container shipping and standard trucks for land transportation



可靠性和防泄漏性能

- 经过验证的浮动盘管设计(换热管与框架无任何接触)
- 在起重机或叉车运输过程中, 整体结构的侧板, 确保足够的扭转刚度静态考虑雪/风荷载

Reliability and leak resistance

- Proven floating coil design (no contact between heat exchange tube and frame)
- In the process of transportation by crane or truck, the side plate of the whole structure shall ensure sufficient torsional rigidity and static consideration of snow / wind load



Convenient installation and maintenance

高附加值控制系统

- 能量调节功能
- 连续冷却控制信号失效时的互通功能

High added value control system

- Energy regulation function
- Interworking function in case of failure of continuous cooling control signal

简单安装

- 坚固的起重吊耳, 便于运输
- 合理支撑腿数量, 以实现较少的支撑撑腿数量和附件
- 工厂预安装组件

Simple installation

- Strong lifting lugs for easy transportation
- Reasonable number of support legs to achieve less number of support legs and accessories
- Factory pre installed components



作为一个用心的合作伙伴,我们不仅可以提供专业的设计和安装指导以及可靠的设备,还可以为您提供如:射流器,钢结构,扶手,爬梯,膨胀罐.....一切您所需的配件。

As a dedicated partner, we can not only provide professional design and installation guidance and reliable equipment, but also provide you with: fluidizer, steel structure, handrail, ladder, expansion tank All the accessories you need.

射流器

- 散热器的多组合安装,靠近遮挡物,或置于地下室时,确保热风不回流

Fluidizer

- Multiple combination installation of radiator, close to shelter or underground Ensure that the hot air does not return to the room



膨胀罐

- 缓冲系统中压力波动,及时的补充、吸收因工作介质温度变化减少或增加的部分体积

Expansion tank

- Pressure fluctuation in buffer system, timely supplement and absorb the volume reduced or increased due to the change of working medium temperature

扶手、爬梯

- 保证操作保养人员工作时的安全

Handrail, ladder

- Ensure the safety of operation and maintenance personnel



钢结构

- 确保足够的进风空间及进风量,保证设备的高效运行

steel structure

- Ensure enough air inlet space and air volume to ensure efficient operation of the equipment



优质制造, 服务全球

Quality Manufacturing, Serving the all of the World

我们的产品销往世界各地多个国家, 赢得了广大客户的肯定和好评, 建立了良好的企业信誉。我们基于稳定的技术研发专员、严格的质量管理体系、竞争力强的价格、专业的营销团队和优质的销售服务等优势条件, 在不断地迅速发展与壮大。我们将与时俱进, 不断完善、创新, 愿与海内外客户携手并进, 共创双赢。

Our products have been sold to many countries all over the world, won the affirmation and praise of our customers, and established a good corporate reputation. Based on stable technical R & D Specialist, strict quality management system, competitive price, professional marketing team and high-quality sales service, we are developing and growing rapidly. We will keep pace with the times, constantly improve and innovate. We are willing to work hand in hand with customers at home and abroad to create a win-win situation.

Energy Management

HEM 提供接口支持数据推送, 可集成到第三方总控制平台

Hem provides interface support for data push, which can be integrated into the third-party general control platform

EC Fan

Stepless speed regulation, stable operation under low operating conditions. Read the current operating current, power, and operating temperature status of the fan, alarm and warning signals

EC Fan

无极调速, 稳定低工况运行. 读取风机当前运行电流、功率, 以及运行的温度状态; 报警和警告信号

AC Fan

均衡风机的运行寿命
Operation life of equalizing fan

Chillboost

Pre-cooling PAD



太阳能系统 Solar system

西藏 Tibet

西藏太阳能储能系统中, 使用了3台16个风机的VRCOOLER高温的空气冷却器, 海拔高度4500米。

In Tibet's solar energy storage system, the high temperature air coolers of the VRCOOLER with three 16 fans are used, with an altitude of 4500m.



LCD-TFT面板切割(panel cutting)

湖北 Hubei

湖北光电科技, 为了给LCD-TFT面板切割生产设备降温, 选择了VRCOOLER空气冷却器取代了传统的直排水冷却, 节约了水资源。

In order to cool down the LCD-TFT panel cutting equipment, Hubei photoelectric technology chose Vrcooler's air cooler to replace the traditional direct drainage cooling, saving water resources.



发电机组 Generator Set

连云港 Lianyungang

江苏连云港6MW的燃气发电机组, 安装了Vrcooler的空气冷却器, 来实现发电机组的冷却。

The 6MW gas generator set in Lianyungang, Jiangsu Province, is equipped with Vrcooler's air cooler to realize the cooling of the generator set.



工艺冷却 Process cooling

江苏 Jiangsu

生产设备降温, 选择了空气冷却器取代了传统的直排水冷却, 节约了水资源。

In order to reduce the temperature of production equipment, Vrcooler air cooler is selected to replace the traditional direct drainage cooling, which saves water resources.



燃气发电机 Gas generator

泰国 Thailand

泰国燃气发电机, 安装了VRCOOLER的空气冷却器, 来实现发电机组的冷却。

Thailand gas generator, installed Vrcooler's air cooler to achieve the cooling of the generator set.



空调系统冷却 Air conditioner system cooling

俄罗斯 Russia

俄罗斯空调系统中选择了Vrcooler空气冷却器, 为了应对夏季的高温环境, 我们给客户推荐了我们的 HHM spray.

In order to cope with the high temperature environment in summer, we recommend our HHM spray



分布式能源

印度尼西亚

印度尼西亚燃气发电机组, 安装了VRCOOLER设计的高温散热器, 用常温风扇冷却高温液体, 来实现发电机组的冷却。



空调系统冷却 Air conditioner system cooling

秘鲁 Peru

秘鲁工厂的空调系统中选择了Vrcooler空气冷却器, 为了应对夏季的高温环境, 我们给客户推荐了我们的 Precooling pad.

In the air conditioning system of Peruvian factory, Vrcooler air cooler is selected. In order to cope with the high temperature environment in summer, we recommend our precooling pad to customers



污水处理 sewage disposal

新加坡 Singapore

位于新加坡的污水处理厂,给污水处理设备进行降温,4台并排放置的Vrcooler冷却器。

The sewage treatment plant in Singapore cools down the sewage treatment equipment, with Vrcooler Dry coolers arranged side by side.



空调系统冷却 Air conditioner system cooling

俄罗斯 Russia

俄罗斯空调系统中选择了Vrcooler的不锈钢管材的空气冷却器。

In Russian air conditioning system, Vrcooler's stainless steel pipe air cooler is selected.



燃气站 Gas station

新加坡 Singapore

位于新加坡的燃气站,对于产品的防爆要求极高,我们为他们提供了防爆空气冷却器。

The gas station in Singapore has very high explosion-proof requirements for its products. We provide them with explosion-proof air coolers.



河北蒙牛发电 Hebei Mengniu Power Generation

河北 Hebei

高低温分体干冷器,分别用于MWM TCG2020V16C内燃机中冷水和缸套水的冷却。

The high and low temperature split dry cooler is used for cooling the cold water in MWM tCG2020v16c internal combustion engine and cylinder liner water respectively.

散热器选择项目

Dry cooler optional

外壳 Frame	翅片 Fin	换热管 Heat-exchange Tube	风机 Fan	电气控制 Electric Control	其他 Other
热浸锌钢板 Hot dip galvanized steel	亲水铝翅片 Hydrophilic Fin	不锈钢304 Stainless steel 304	EC 风机 EC Fan	接线盒 Junction Box	高、低温双换热器 HTAT Dose le-Bank Heat-exchang
不锈钢304 Stainless steel304	铝镁翅片 Almg 25	不锈钢316 Stainless steel316	防爆风机 Explosion-proct fan moton	控制箱 Control Box	等焓喷水系统 Aduabatic witer grning system
锈钢316 Stainless steel1316	铜翅片 Copper Fin	铜镍合金 810	船用风机 Marine Fan Hotor	变频控制箱 VWD Control Box	钢结构和维修附件 Stenl Structare and safe acos for survioe
铝 Alumirun	环氧树脂预涂层翅片 Pre-coated Epyry Fin	铜镍合金 830	不锈钢网罩 Stainless Steel Guards	温度/压力控制箱 TesparaturaPressre Cotrol Sox	空气过滤网 Alr filter
	镀锡铜翅片 Copper Tinned Fin	钛 Titanlum			
	喷涂翅片 Heresite/Blygod/Epxoy Coated Fin				

干冷器的优势

The advantage of dry Cooler

设计软件 Design software	引进欧洲成熟的设计软件,根据EN1048和实际需求精确设计换热器,可以满足特殊的低温载冷剂等品的设计需求。	using the mature European design software,according to the EN1048 and actial demand accurate design of heat exchanger. can oesign the special low temperature cold agont etc.
换热器结构 Heat exchange structure	采用“平板支撑”浮动盘管系统避免接触换热管和支持端板接触确保换热器的寿命长无泄漏。每个风机的腔体是分离和独立。标准翅片间距是2.1毫米,片距可大到12mm。	Supported to the casing by means of a'hating-bed'systen thit avolas any kind of contact between the heat-exchange tubes and the supporting end plates,assuringalong life for the heat-exchange without eaks. Heat-exchange sections separated and independent for each fan. The standard fin spacing ts 2.1.fin pitch up to 12m for low air pressure drop.
干冷器结构 Condenser structure	干冷器形状有平板、W形、V形结构,风机气流方向有吹风和吸风等; 换热器长度到12米,宽度到2.7米。	Supe with flexible and changeable,flat-bed,W-Bank,V-Bank Fan direction--blowing and sucking Finned length uo to 12n,Ftrned height up to 2.7n
换热管 Heat Exchange Tube	采用含铜率超过99.9%的铜管,可以选择9.52、12.7、15.88等直径的铜管。提高效率 and 降低压力损失。	Using cooper content nore than 99.91 piping three type copper tibe 38.1/2.58 Increased the thermal efficiency ed low futd pressure drep.
外壳 Casing	采用电镀锌板外壳,喷涂户外型粉末涂料,并经过高温固化,强度高耐腐蚀性强,标准为RAL9003	using galvanized sheet case,spraying outacor powder coatings and after high temperature curing,high strength of corrosion resistance is strong,the standard color for RAL9003.
风扇 Fans	低噪音风扇,免维护轴流风机,防护等级为IP54,内部电动机热保护。结合精请设计,成型模具加工的导风罩,风量更大,效率更高。	Low noise axial fanswith maintainance free motors in protection class IP 54.Internal notor protection with thermo contacts. With precise design forming mould processing, atr volume is larger and nore efficient.

VRDL 系列干式冷却器

H Type Dry Cooler

VRDL Dry Cooler

片距2.1mm 工况: 环境温度35°C 进水温度40°C 出水温度45°C
 Finned height/2.1mm Operating condition: Environmental temperature 35°C
 Water inlet temperature40°C Outlet water temperature45°C

型号 Model	换热量 Capacity		水流量 Water flow rate	风量 Air Flow	风扇参数 Fan Motor				噪音 Sound Pressure Level	进管 Inlet	出管 Outlet
	水 water	30%乙二醇 ET.glycol			功率 Power	电流 current	数量 Quantity	风扇 Fan			
	kW		m³/h	m³/h	kW	A	PCS	φmm	dB/10m	φmm	φmm
VRDL-005-1X350Z	5.1	4.7	0.9	3205	0.19	0.4	1	350	53	12.7	12.7
VRDL-006-1X350Z	5.9	5.5	1	3041	0.19	0.4	1	350	53	12.7	12.7
VRDL-010-2X350Z	10.2	9.5	1.8	6411	0.38	0.8	2	350	53	DN25	DN25
VRDL-012-2X350Z	11.7	10.9	2	6083	0.38	0.8	2	350	53	DN25	DN25
VRDL-009-1X450Z	9.2	8.4	1.6	6476	0.54	1.1	1	450	53	DN25	DN25
VRDL-011-1X450Z	10.9	9.9	1.9	6182	0.54	1.1	1	450	53	DN25	DN25
VRDL-012-1X450Z	11.9	10.8	2.1	5900	0.54	1.1	1	450	53	DN25	DN25
VRDL-019-2X450Z	18.5	16.8	3.2	12951	1.08	2.2	2	450	53	DN32	DN32
VRDL-022-2X450Z	22.2	20.8	3.9	12369	1.08	2.2	2	450	53	DN32	DN32
VRDL-024-2X450Z	24.4	22.9	4.2	11806	1.08	2.2	2	450	53	DN32	DN32
VRDL-014-1X500Z	14.1	13.1	2.5	9119	0.84	1.45	1	500	58	DN25	DN25
VRDL-017-1X500Z	16.8	15.9	2.9	8856	0.84	1.45	1	500	58	DN32	DN32
VRDL-019-1X500Z	18.7	17.8	3.3	8608	0.84	1.45	1	500	58	DN32	DN32
VRDL-028-2X500Z	28.2	26.3	4.9	18238	1.68	2.9	2	500	58	DN40	DN40
VRDL-034-2X500Z	33.9	32.3	5.9	17716	1.68	2.9	2	500	58	DN40	DN40
VRDL-037-2X500Z	37.3	35.6	6.5	17216	1.68	2.9	2	500	58	DN50	DN50
VRDL-042-3X500Z	42.3	39.4	7.4	27358	2.52	4.35	3	500	59	DN50	DN50
VRDL-050-3X500Z	49.9	46.5	8.8	26565	2.52	4.35	3	500	59	DN50	DN50
VRDL-055-3X500Z	54.7	51.1	9.5	25813	2.52	4.35	3	500	59	DN50	DN50
VRDL-027-1X630Z	26.8	24.6	4.7	19447	2.6	5	1	630	63	DN40	DN40
VRDL-033-1X630Z	32.8	30.8	5.7	18980	2.6	5	1	630	63	DN40	DN40
VRDL-037-1X630Z	36.7	34.5	6.4	18168	2.6	5	1	630	63	DN40	DN40
VRDL-054-2X630Z	53.7	49.3	9.3	38893	5.2	10	2	630	63	DN50	DN50
VRDL-064-2X630Z	64.3	59.2	11.2	37949	5.2	10	2	630	63	DN65	DN65
VRDL-072-2X630Z	71.8	66.1	12.5	37061	5.2	10	2	630	63	DN65	DN65
VRDL-083-3X630Z	83.2	78.9	14.5	58365	7.8	15	3	630	64	DN65	DN65
VRDL-100-3X630Z	99.6	94.6	17.3	56953	7.8	15	3	630	64	DN65	DN65
VRDL-111-3X630Z	111.1	105.6	19.3	55623	7.8	15	3	630	64	DN65	DN65
VRDL-107-4X630Z	107.3	98.6	18.7	77786	10.4	20	4	630	64	DN65	DN65
VRDL-129-4X630Z	128.7	118.3	22.4	75898	10.4	20	4	630	64	DN80	DN80
VRDL-149-4X630Z	148.7	141.4	25.9	74169	10.4	20	4	630	64	DN80	DN80
VRDL-166-6X630Z	166.4	157.7	28.9	116731	15.6	30	6	630	65	DN80	DN80
VRDL-199-6X630Z	199.2	189.1	34.6	113905	15.6	30	6	630	65	DN100	DN100
VRDL-222-6X630Z	222.1	211.2	38.6	111246	15.6	30	6	630	65	DN100	DN100
VRDL-212-8X630Z	212	194.7	36.9	155547	20.8	40	8	630	65	DN100	DN100
VRDL-269-8X630Z	268.9	255.4	46.8	150162	20.8	40	8	630	65	DN125	DN125
VRDL-298-8X630Z	298.3	283.8	51.9	146305	20.8	40	8	630	65	DN125	DN125
VRDL-337-10X630Z	336.8	319.9	58.6	185960	26	50	10	630	66	DN125	DN125
VRDL-373-10X630Z	372.5	354.6	64.8	180796	26	50	10	630	66	DN125	DN125
VRDL-321-12X630Z	321.1	292.7	55.8	229356	31.2	60	12	630	66	DN125	DN125
VRDL-409-12X630Z	408.7	391.6	71.1	223195	31.2	60	12	630	66	2XDN100	2XDN100
VRDL-452-12X630Z	451.8	433.8	78.5	216998	31.2	60	12	630	66	2XDN100	2XDN100
VRDL-448-14X630Z	447.7	415.1	77.8	260121	36.4	70	14	630	66	2XDN100	2XDN100
VRDL-518-14X630Z	517.6	485	90	297337	41.6	80	16	630	66	2XDN100	2XDN100

VRDV 系列干式冷却器

V Type Dry Cooler

VRDV Dry Cooler

片距2.1mm 工况: 环境温度35°C 进水温度40°C 出水温度45°C
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	水 water	30%乙二醇 ET.glycol			功率 Power	电流 current	数量 Quantity	风扇 Fan			
	kW		m³/h	m³/h	kW	A	PCS	φmm	dB/10m	φmm	φmm
VRDV-116-4X630Z	116.4	108.4	20.2	79928	10.4	20	4	630	64	DN50	DN50
VRDV-140-4X630Z	140.2	133.4	24.4	78447	10.4	20	4	630	64	DN65	DN65
VRDV-155-4X630Z	155.2	148.1	27	77024	10.4	20	4	630	64	DN65	DN65
VRDV-175-6X630Z	174.9	163	30.4	119895	15.6	30	6	630	65	DN65	DN65
VRDV-212-6X630Z	211.8	197.5	36.8	117686	15.6	30	6	630	65	DN65	DN65
VRDV-234-6X630Z	234.3	234.3	40.7	115551	15.6	30	6	630	65	DN80	DN80
VRDV-238-8X630Z	238.1	226.3	41.4	159907	20.8	40	8	630	65	DN80	DN80
VRDV-228-8X630Z	288.2	274.1	50.1	156969	20.8	40	8	630	65	DN80	DN80
VRDV-321-8X630Z	320.6	305.5	55.7	154146	20.8	40	8	630	65	DN100	DN100
VRDV-287-10X630Z	286.9	262.3	49.9	199780	26	50	10	630	66	DN80	DN80
VRDV-365-10X630Z	365.1	346.1	63.5	194697	26	50	10	630	66	DN100	DN100
VRDV-404-10X630Z	404.3	384.3	70.3	190948	26	50	10	630	66	DN100	DN100
VRDV-348-12X630Z	347.8	314.8	60.5	238201	31.2	60	12	630	66	DN100	DN100
VRDV-443-12X630Z	443	424	77	233683	31.2	60	12	630	66	DN100	DN100
VRDV-490-12X630Z	490.3	470.3	85.2	229185	31.2	60	12	630	66	DN100	DN100
VRDV-412-14X630Z	412.4	379.8	71.7	277964	36.4	70	14	630	66	DN100	DN100
VRDV-485-14X630Z	484.7	447.4	84.3	272323	36.4	70	14	630	66	DN100	DN100
VRDV-576-14X630Z	576.3	556.3	100.2	267423	36.4	70	14	630	66	DN125	DN125
VRDV-477-16X630Z	477	444.6	82.9	317729	41.6	80	16	630	66	DN100	DN100
VRDV-560-16X630Z	560.3	523.5	97.4	311287	41.6	80	16	630	66	DN125	DN125
VRDV-654-16X630Z	653.8	628.9	113.7	302362	41.6	80	16	630	66	DN125	DN125
VRDV-542-18X630Z	541.7	509.4	94.2	357494	46.8	90	18	630	67	DN125	DN125
VRDV-636-18X630Z	636.1	599.4	110.6	350253	46.8	90	18	630	67	DN125	DN125
VRDV-740-18X630Z	739.7	714.7	128.6	340196	46.8	90	18	630	67	DN125	DN125
VRDV-712-20X630Z	711.8	675.3	123.8	389218	52	100	20	630	67	DN125	DN125
VRDV-826-20X630Z	825.6	800.5	143.5	378031	52	100	20	630	67	DN150	DN150