



**DONGXU
HYDRAULICS**



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Providing solutions for fluid cooling



Dongxu Hydraulic Machinery Co., Ltd.



ISO9001



**DONGXU
HYDRAULICS**



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Foshan Nanhai Dongxu Hydraulic Machinery Co., Ltd. ("Dongxu Hydraulics"), founded in 2002, we are a pioneering company specializing in research, development, and manufacturing, with a primary focus on fluid temperature control for industrial equipment, hydraulic lubrication fluid control systems, and hydraulic components.

With a diverse portfolio of products, we serve a wide range of industries, including new energy, energy storage, semiconductor, data centers, power equipment, metallurgy, forging, construction machinery, electrical machinery, petrochemicals, machine tool industry, offshore vessels, mining machinery, papermaking machinery, industrial automation control, and intelligent manufacturing. With an unwavering commitment to quality, our market presence spans nationwide and extends to Europe, Southeast Asia, and North America, making us a strategic partner for renowned domestic and international enterprises.

At Dongxu Hydraulics, we attribute our success to our relentless pursuit of innovation and development. To achieve this, we have established a dedicated R&D team comprising exceptional technical talents from both domestic and international backgrounds. Collaborating with prestigious institutions such as Zhejiang University, South China University of Technology, Tsinghua University, Yanshan University, and Yangzhou University, we leverage practical technology, emerging technology, and service technology as the foundation for our research and development efforts. Currently, we have successfully transformed over sixty patented achievements, constantly driving our company's growth through sustained innovation.

To cater to the evolving needs of our customers, we have established production and R&D centers in Foshan, Chengdu, and Wuxi. Complemented by an extensive after-sales and service network, we ensure comprehensive coverage across both domestic and select international markets. Our commitment to excellence has been recognized through prestigious accolades, including Provincial-level Specialized, Focused, New and High-tech Enterprise, National-level High-tech Enterprise, Chairman Unit of Foshan Hydraulic and Pneumatic Industry Association, as well as Innovative Small and Medium-sized Enterprise. Furthermore, we have obtained certifications such as ISO 9001 (quality management), ISO 4001 (environmental management), ISO 10012 (measurement management), GB/T 29490-2013 (intellectual property management), and CE (EU export).

Driven by our vision to "Create a national brand for Chinese manufacturing", while placing customer satisfaction at the core of our operations, we strive to become a trusted and admired brand enterprise, continuously pushing the boundaries of innovation with our intelligence and creative spirit. Our ultimate goal is to be the preferred partner for global machinery and equipment providers.



Provincial Specialized, Focused,
New and High-tech Enterprise



Provincial High-tech
Enterprise



CE European Safety
Compliance Certificate



ISO10012 Measurement
Management System Certification

Vision

To create a national brand made in China, to become a brand enterprise trusted and loved by users, to be a high-growth enterprise with sustainable operation, and to be a company with a sense of social responsibility

Service Philosophy

Our service philosophy is to keenly grasp application trends, promptly meet customer needs, pursue excellence, provide high-quality products, prioritize customer-centricity, and exceed customer satisfaction.

Core Values

Our service philosophy is to keenly grasp application trends, promptly meet customer needs, pursue excellence, provide high-quality products, prioritize customer-centricity, and exceed customer satisfaction.

Business Philosophy

Our business philosophy is built on integrity and loyalty, placing customers first, focusing on expertise, aligning goals, emphasizing quality, and fostering continuous innovation.

Team Spirit

Our team spirit is characterized by diligence and dedication, honesty and integrity, courage and loyalty, optimism and confidence, a passion for learning, proactive advancement, innovation and contribution, a strong focus on cooperation, and an ownership mentality.



Subordinate brand



DOXUDA[®]



KAYDUN[®]

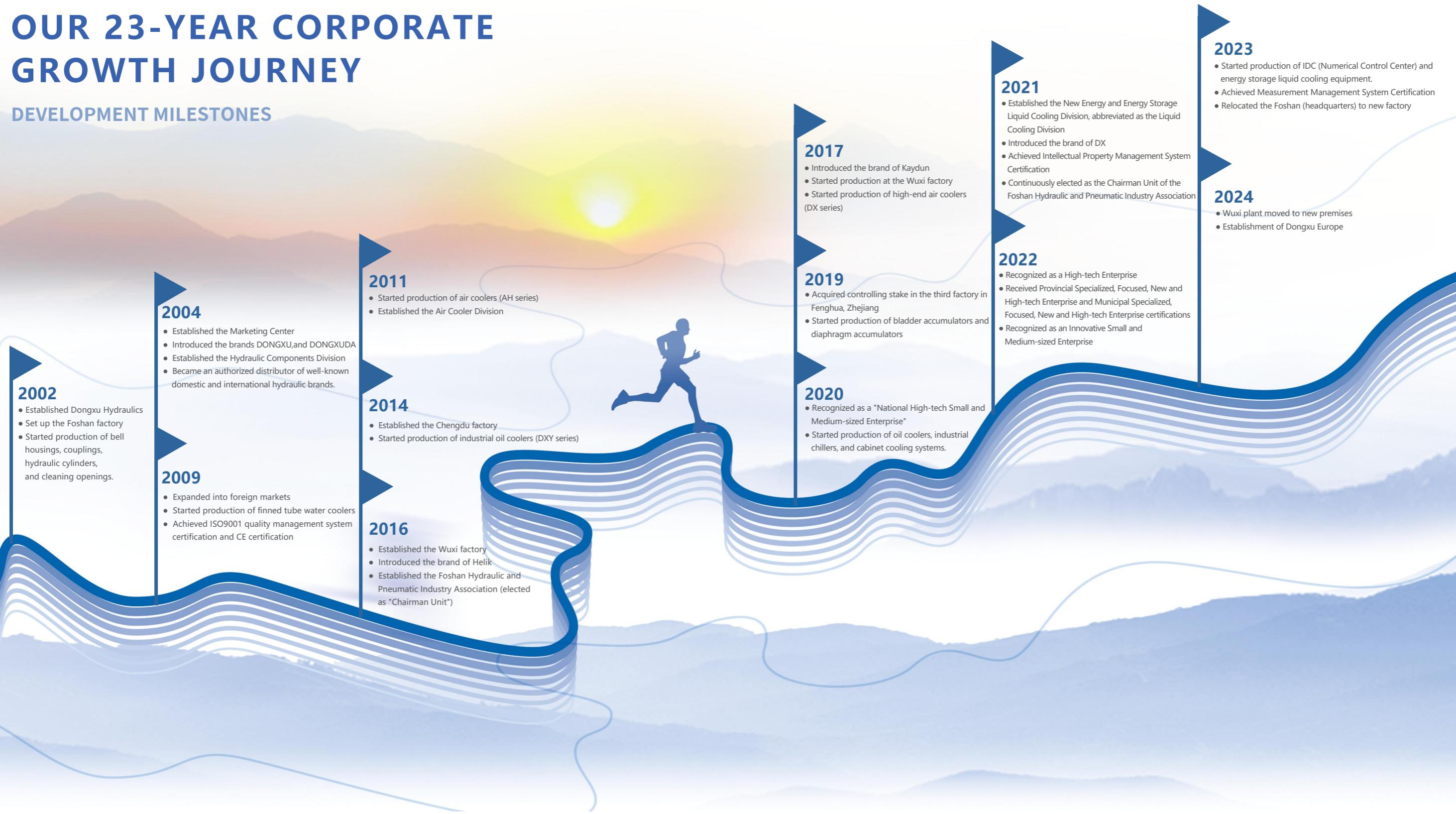


RUIYI[®]

BOKADE[®]

OUR 23-YEAR CORPORATE GROWTH JOURNEY

DEVELOPMENT MILESTONES



ENTERPRISE HONOR

The company strictly complies with the ISO9001:2015 Quality Management System and has formulated the 'ISO9001:2015 Quality Manual' to provide strict control over high-quality products.



Provincial Specialized, Focused, New and High-tech Enterprise



Provincial High-tech Enterprise



Municipal Specialized, Focused, New and High-tech Enterprise



National-level Technology-based Small and Medium-sized Enterprise



Innovative Small and Medium-sized Enterprise



Chairing unit of the Foshan Hydraulic Pneumatic Industry Association



Intellectual Property Management System Certification



ISO9001 Quality Management System Certification



ISO14001 Environmental Management System Certification



ISO10012 Measurement Management System Certification



CE European Safety Compliance Certificate



Appearance Design Patent Certificate

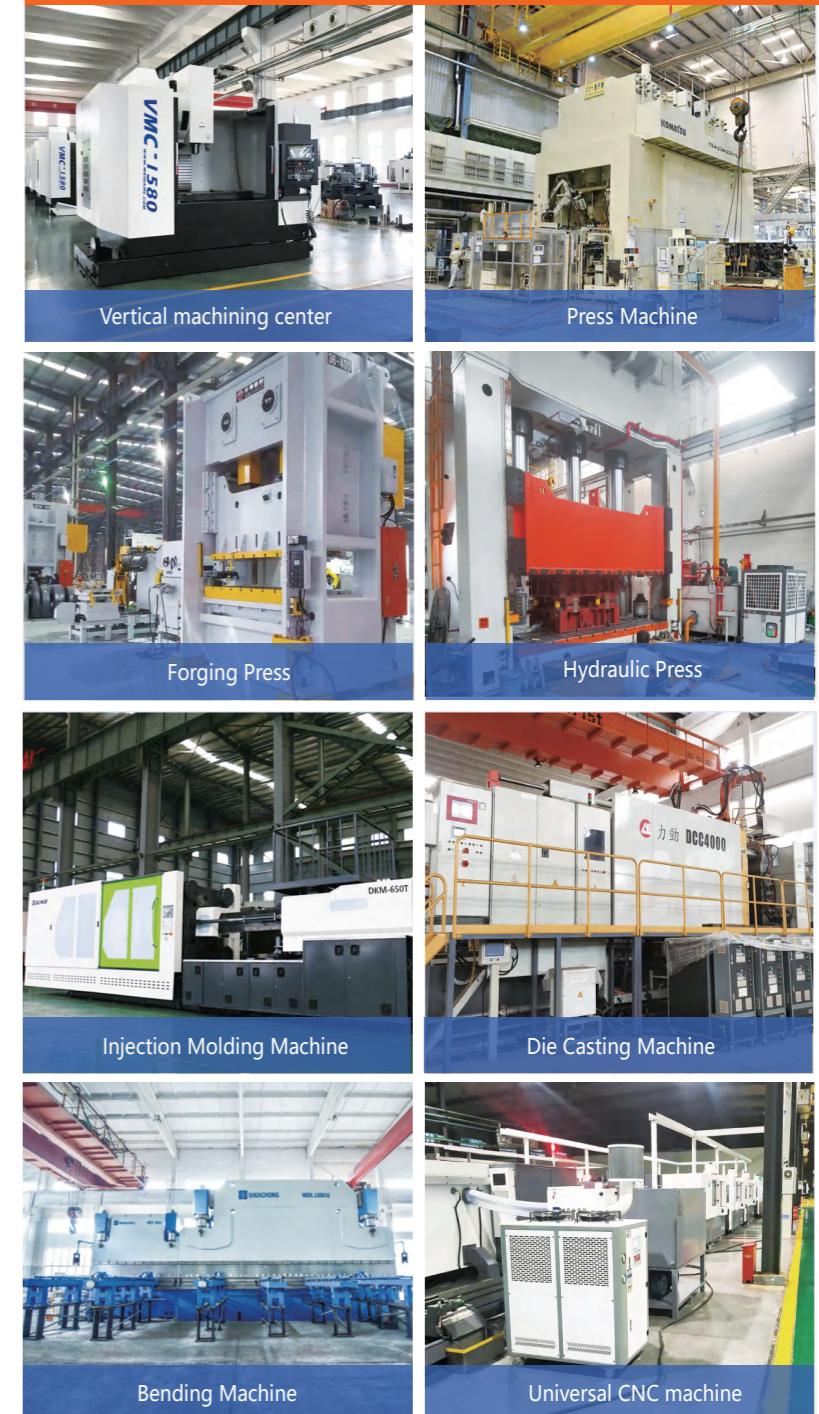


Utility Model Patent Certificate

Partners



Applications

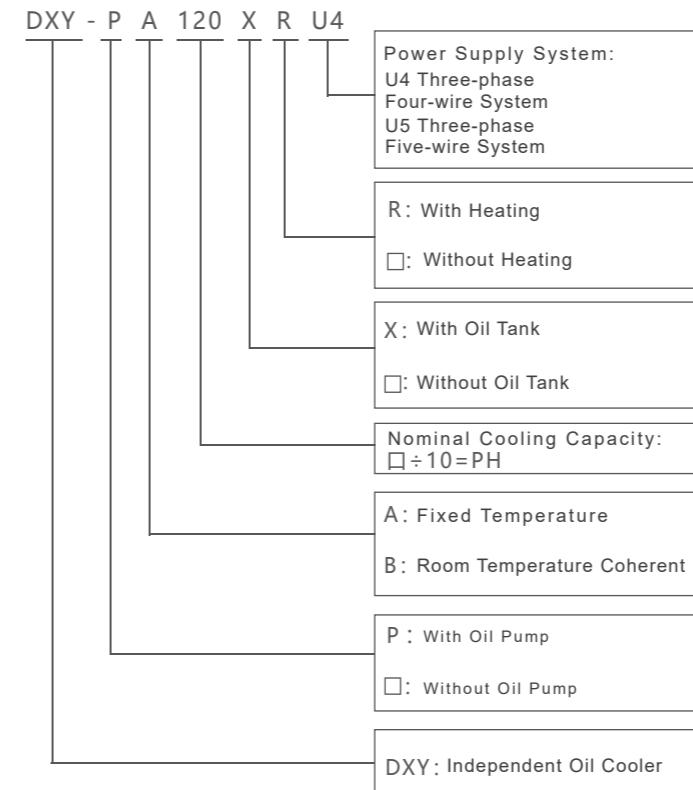




Product specification

Specification series	Refrigeration capacity		Input power (kW)		Nozzle form	Interface size	Inner diameter of outer piping (mm)
	kcal/h	W	Oil-less pump	Oil containing pump			
DXY-PA10	2500	2855	1.1	1.85	Tubular internal thread	Rc3/4"	DN20
DXY-PA15	3500	4000	1.45	2.2		Rc3/4"	DN20
DXY-PA20	4500	5200	1.95	2.7		Rc1"	DN25
DXY-PA28	7000	8100	2.75	3.5		Rc1"	DN25
DXY-PA30	8000	9200	3.25	4		Rc1"	DN25
DXY-PA40	10000	11900	4.4	5.5		Rc1"	DN25
DXY-PA50	12000	15000	5.2	6.7		Rc1-1/4"	DN32
DXY-PA60	15000	17700	6.1	7.6		Rc1-1/4"	DN32
DXY-PA80	20000	24000	7.8	10		Rc1-1/2"	DN40
DXY-PA100	24000	28500	9.8	12		Rc1-1/2"	DN40
DXY-PA120	30000	35000	12	15	Flange	Rc2"	DN50
DXY-PA150	40000	46500	16	19		Rc2.5"	DN65
DXY-PA200	50000	58000	21	25		DN65 Flange	DN65
DXY-PA250	60000	70000	24	28		DN80 Flange	DN80
DXY-PA300	80000	93000	30.5	36		DN80 Flange	DN80
DXY-PA400	100000	120000	39.5	45		DN100 Flange	DN100
DXY-PA500	120000	143000	48.5	56		DN100 Flange	DN100
DXY-PA600	160000	185000	60	71		DN125 Flange	DN125

Selection instructions



Applications

Automotive Sheet Metal Manufacturing Forging Press Cooling Applications



CNC Deep Hole Drilling Laydown Machine Cooling Application



Automotive gearbox die-casting equipment cooling applications



Thin oil lubrication station cooling applications in steel mills



SELECTION OF Chiller System

Method 1

Calculate the calorific value by the temperature rise of the oil tank

$$Q = SH \times De \times V \times DT/60$$

Q: Calorific value (kW)

SH: The specific heat of oil is 1.97kJ/kg°C

De: specific gravity of oil 0.88kg/L

De: The specific heat of water is 4.2×10^3 J/kg °C

V: oil/water capacity L (liter) including the total water capacity in the oil tank and pipeline

DT: Maximum temperature rise within one minute

Note: "/60" is used to change the temperature rise from Celsius/minute to Celsius/second; 1kW=1kJ/s;

Note: When measuring, the temperature of the fuel tank should be slightly lower than the ambient temperature; and the equipment should work under the maximum load.

Example: One oil tank volume 8000L maximum water temperature or oil temperature 0.6 degrees Celsius/minute.

$$\text{Calorific value } Q = (1.97 \times 0.88 \times 8000 \times 0.6) / 60 = 138 \text{ kW}$$

Supplementary Note: When selecting the cooling capacity of the oil cooler, it can be selected by increasing the cooling capacity by 20%-50%.

Method 2

Estimate the heating power using the hydraulic station's motor power.

Hydraulic oil serves as the transmission medium, with the majority of the system's energy loss manifesting as heat. Drawing on our practical experience, our company has deduced the following energy loss coefficients for hydraulic systems:

Hydraulic System Working Pressure	Energy Loss Factor
10Mpa	0.1~0.25
15Mpa	0.35
20Mpa	0.4~0.55
25Mpa~30Mpa	0.6~0.75
30Mpa above	0.75~1

$P_{heat} = 1.2 \times (P_{motor} \times \eta)$
 P_{motor} —power of all motors in the hydraulic station
 η —energy loss coefficient
Note: 1Kcal/h=1.163W
1kW=860Kcal/h

Method 3

Spindle Heating Power Estimation:

$$P_{calorific} = P_{motor} \times \lambda$$

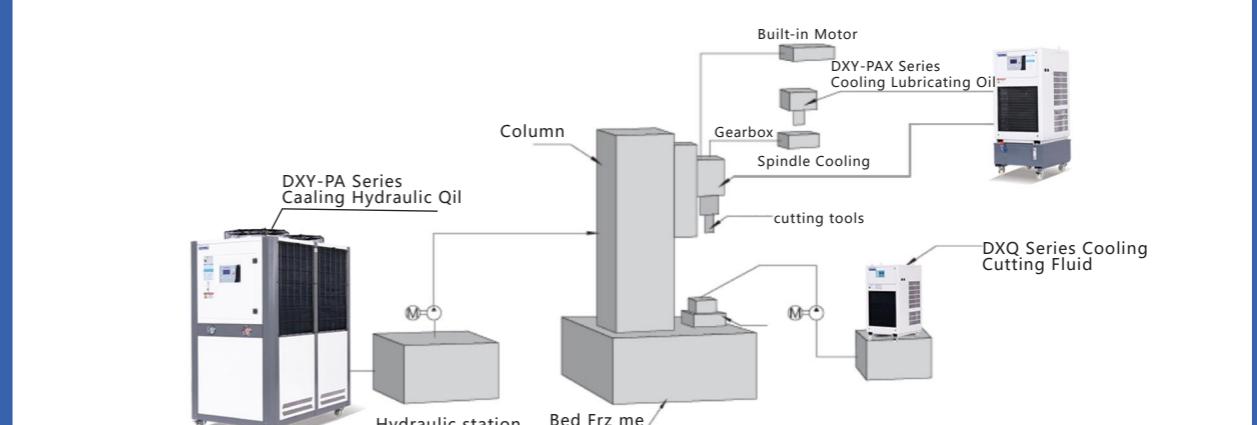
λ —Spindle heat loss efficiency

(For general mechanical spindles, it can be calculated according to heat loss $\lambda = 5\% \sim 8\%$, and for high-speed spindles according to heat loss $\lambda = 20\% \sim 30\%$ calculation.)

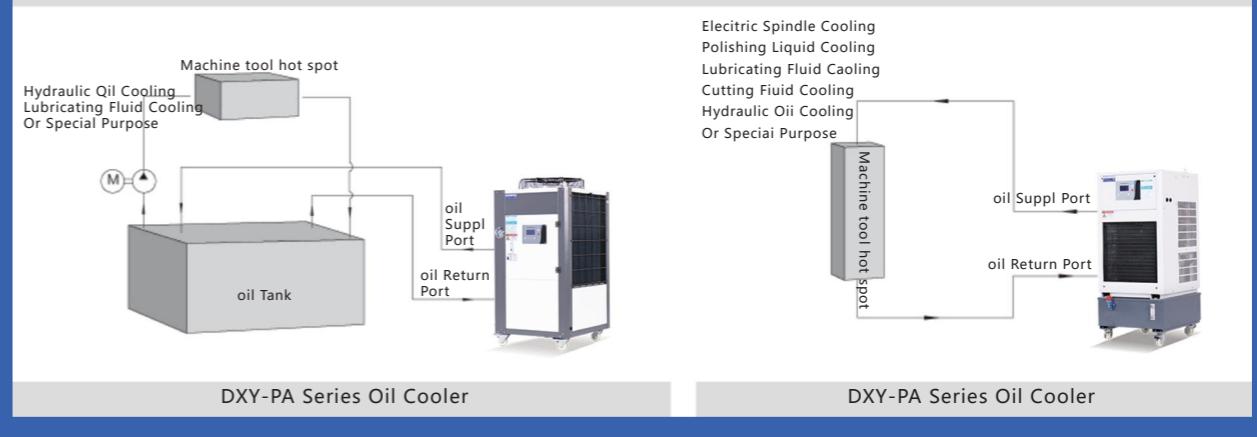
E.g. For an ordinary mechanical spindle of a machine tool, the motor power is 45kW, and the estimated calorific value is:

$$P_{calorific} = P_{motor} \times \lambda = 45 \times 8\% = 3.6 \text{ kW}$$

Application sample diagram



Comprehensive Application Diagram



Precautions for Installation and Use

[Load] It is recommended to select the model according to the calorific value*1.2 under the full load working condition.

[Wiring] The product power wiring, external control switch interface, alarm output interface, the standard configuration is a terminal block.

If you use aviation socket or rectangular socket, please specify when ordering.

[Power supply] The connected powersupply system must be consistent with the sample, and if it is inconsistent, it must be explained when designing and ordering.

[Alarm] Provide a pair of passive normally open contacts as the alarm output interface.

[Pipeline] The diameter of the external pipeline should be consistent with the diameter of the oil cooler, and the pressure of the oil pipe and joint must be $\geq 1.6\text{MPa}$.

[Resistance] When the pipeline is connected, the elbow should be minimized, and the external pipeline resistance must be $\leq 0.3\text{MPa}$.

[Oil suction] Please keep the vacuum degree of the oil inlet within 0.03MPa . When the distance is relatively long, the oil pump should be installed externally near the oil tank.

[Oil pump] If the oil pump is equipped externally, a pair of normally open passive contacts shall be provided to be interlocked with the host, and the flow rate shall be matched according to the sample.

[Valve] It is recommended to install a large-diameter gate valve or butterfly valve at the oil inlet and outlet for easy maintenance.

[Impurities] Impurities larger than $50\text{ }\mu\text{m}$ or filamentous substances are not allowed in the oil.

[Ventilation] Corresponding to each model, enough space for suction, exhaust and maintenance is reserved.

[Environment] Well-ventilated, no dust and corrosive mist: no sun and rain, no heat radiation, no vibration.

[High temperature] When the ambient temperature exceeds 35°C , the safety factor needs to be increased, and when the ambient temperature exceeds 43°C , a special design is required.

[Position] When the oil cooler is placed above the machine, the cooling capacity will decrease by about 20% in summer, please add about 20% of the design margin.

[Medium] Prohibit the use of water and water-soluble liquids, flammable liquids, and corrosive liquids.

[Oil number] Oil number: The standard design is 5#~68#oil number, if it exceeds the standard, it needs to be explained.

[Oil temperature] The best oil temperature is $30\text{~}50^\circ\text{C}$, and it is recommended to stop the oil pump when it is lower than 0°C .

[Filtration] It is recommended to add a 50~100 day steel wire filter to the oil suction port.

[Fixed] The external oil pipe needs to be fixed on the bracket to avoid putting weight on the oil cooler and causing leakage.

[Shock Absorption] The oil inlet and outlet must be connected by hoses to prevent external vibration from being transmitted to the inside of the oil cooler.

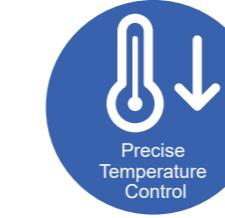
[Interface] The oil inlet of the oil cooler should be as far away from the hot oil outlet as possible, and the oil outlet should be as close as possible to the hot oil outlet.

[Note] The diameter of the external pipe (including the diameter of the joint) should be 2 the size of the oil inlet and outlet of the oil cooler itself.

The oil suction pipe should be as close as possible to the fuel tank. If the length of the oil suction pipe is 25m, the pipe diameter must be enlarged.

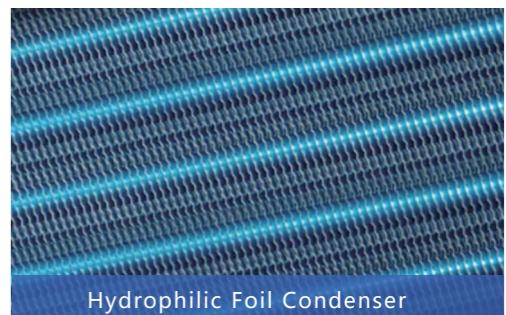
If the equipment is installed above the oil tank, please control the vertical height of the oil suction to $\leq 0.5\text{m}$. (Please contact DONGXU for special installation conditions.)

[Warning] It is forbidden to connect this device in series with the hydraulic system circuit, otherwise the oil seal of the circulating oil pump will crack and oil will leak.



Product characteristics

- There are two control modes of constant temperature and toom temperature coherence, users can choose according to actua in needs.
- Have a varley of protection functions and provide passive alarm terminals, real-time alarm or fault signals; and can also be connected to industrial equipment to provide alarm functions.
- It has the functions of real-time temperature monitoring, high oil temperature early warning, alarm, and low oil temperature alarm functions, which can maintain the viscosity characteristics of the oil and make the machine run stably.
- The main engine adopts famous brand compressors imported from Europe, America and Japan, with reliable operation, high efficiency and low noise.
- Imported high-quality oil pump with high pressure, high stability and long-lasting durability.
- Imported digital controller with high precision and wide application range.
- To avoid the influence of the precision of the machine due to the change of oil temperature during work.
- To avoid the deterioration of oil products due to high temperature, keep the oil viscosity unchanged, and make the machine work stably during work.



Hydrophilic Foil Condenser



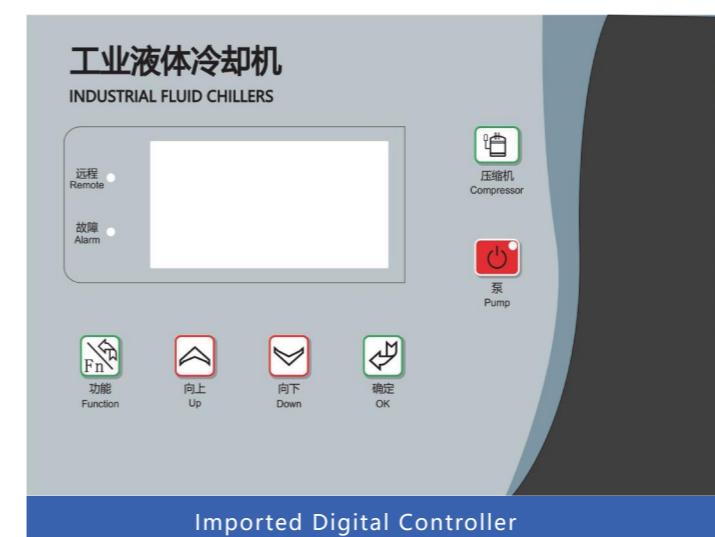
Imported Compressor



Premium Oil Pump



Plate Heat Exchangers



Imported Digital Controller



Thickened Brass Tube





Chiller System RFCS

DXY-PA10~20

PRODUCT PARAMETERS

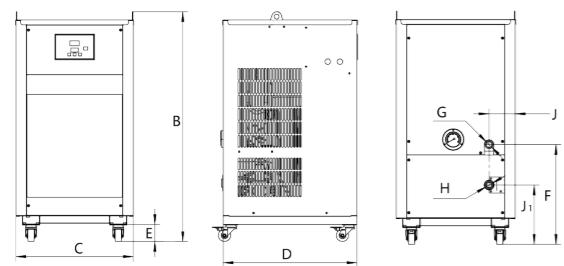
Model		DXY-PA10	DXY-PA15	DXY-PA20
Cooling Capacity	(kcal/h)	2500	3500	4500
	W	2855	4000	5200
	BTU/H	9700	13600	17000
Horsepower	HP	1HP	1.5HP	2HP
Temp. Control Range	(°C)	Thermostatic (setting range:20°C~50°C)		
Conditions	Ambient Temp.	-10°C~43°C (Well ventilated, no sun or rain, no vibration)		
	Oil Temp. (°C)	5°C~60°C		
	Oil Type	Lubricating oil, hydraulic oil, heat transfer oil, transformer oil		
	Oil Number (Cst)	5#~68# Spindle oil, hydraulic oil, lubricating oil, heat transfer oil, insulating oil, etc. For oils above 100#, consultation is required.		
Input Power	(V)	3PH+N/AC380V±10%50HZ		
Rated power	(kW)	1.85	2.2	2.7
Compressor	Supply (V)	1PH/220V50HZ		
	Power (kW)	1	1.2	1.75
Oil pump	Power (kW)	0.75	0.75	0.75
	Flow (L/min)	15	15	25
Ventilator	Power (kW)	0.075	0.075	0.13
Inlet&Outlet Oil Pipe Interface Size	(mm)	Rc3/4"	Rc3/4"	Rc1"
Dimension	Height (mm)	835	945	1020
	Width (mm)	485	485	535
	Length (mm)	530	550	585
Net Weight	(kg)	73	83	103
Oil Tank Dimension	Height (mm)	1035	1145	1204
	Width (mm)	485	485	535
	Length (mm)	530	550	585
Oil Tank Capacity	(L)	30	35	40
Full Tank Gross Weight	(kg)	85	96	120
Refrigerant		Refrigerant:R22 (R410a)		
Protective Device		★ Phase loss protection ★ Motor reverse phase sequence protection ★ Compressor overload protection ★ Oil pump overload protection ★ High and low pressure protection ★ Abnormal alarm		

Remarks:

- "Refrigeration capacity" denotes the cooling capability under specific conditions: an ambient temperature of 35°C, an inlet oil temperature of 40°C, and the use of 5#~46# hydraulic oil.
- This series includes two models for user selection: Model A with a fixed temperature setting, and Model B with an adjustable room temperature setting.
- This series also features three types: the standard type without a pump or fuel tank, Type P with a pump but no fuel tank, and Type PX equipped with both a pump and a fuel tank.
- For installation, ensure to reserve a space of less than 50cm at the air inlet, and a space of less than 100cm at the hot air outlet.

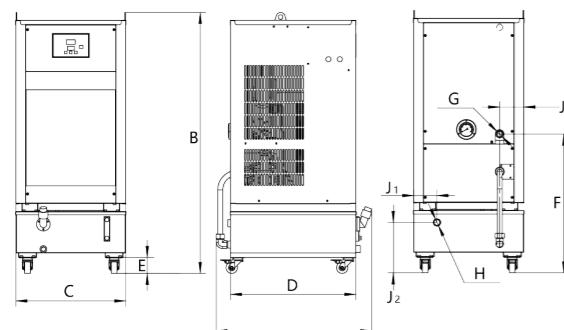
PRODUCT SPECIFICATIONS

DXY-PA10~20



SERIES	B	C	D	E	F	J	J1	G	H
DXY-PA10	835	485	530	70	399	105	240	Rc3/4" Oil outlet	Rc3/4" Fuel inlet
DXY-PA15	945	485	550	70	404	106	240	Rc3/4" Oil outlet	Rc3/4" Fuel inlet
DXY-PA20	1020	535	585	104	467	122	251	Rc1" Oil outlet	Rc1" Fuel inlet

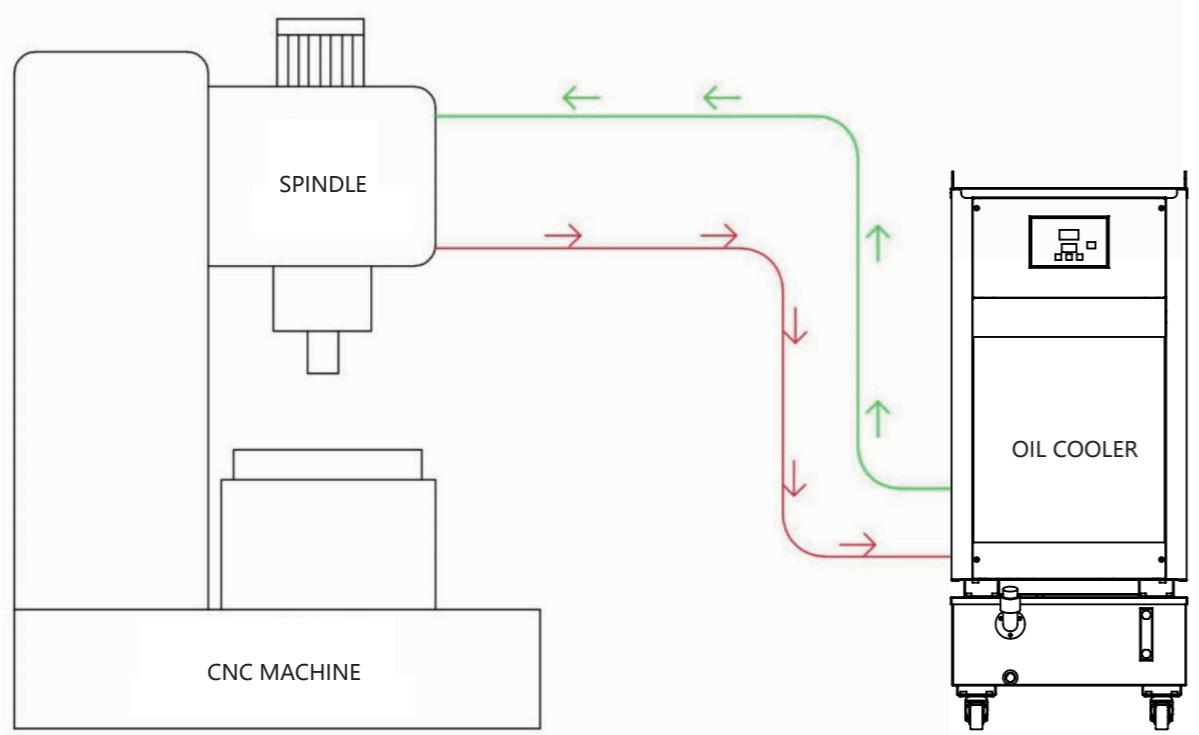
Note: The above dimensions are applicable to models without an oil tank.



SERIES	B	C	D	E	F	J	J1	J2	G	H
DXY-PA10	1035	485	530	70	601	105	102	220	Rc3/4" Oil outlet	Rc3/4" Fuel inlet
DXY-PA15	1145	485	550	70	605	106	102	220	Rc3/4" Oil outlet	Rc3/4" Fuel inlet
DXY-PA20	1204	535	585	104	689	122	104	264	Rc1" Oil outlet	Rc1" Fuel inlet

Note: The above dimensions are applicable to models without an oil tank.

CNC Machine Tool Spindle Cooler Installation Diagram



Chiller System RFCs

DXY-PA28~600

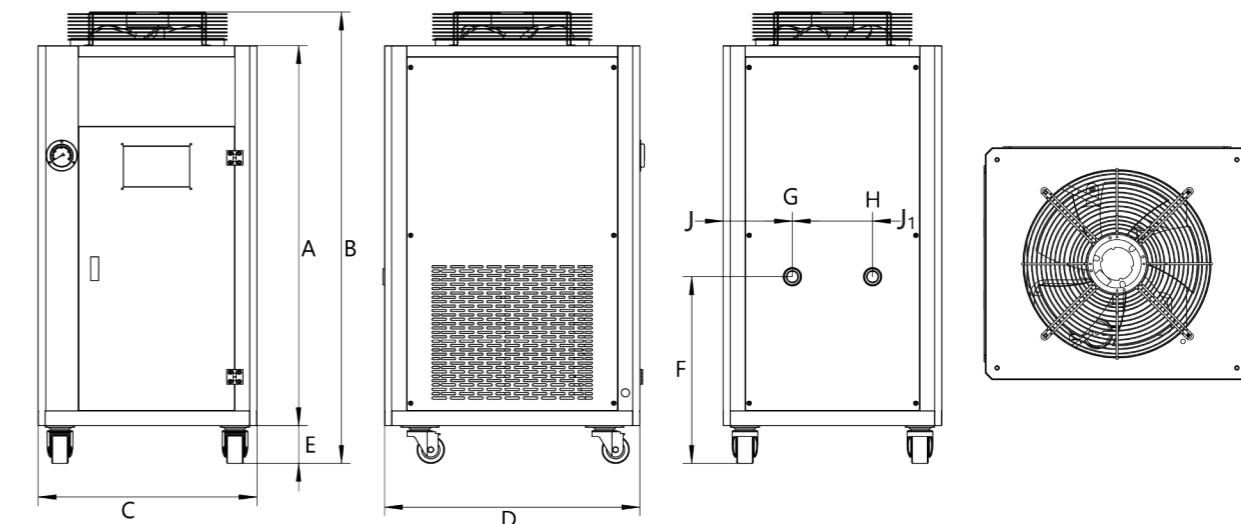
PRODUCT PARAMETERS		DXY-PA28~40		
Model		DXY-PA28	DXY-PA30	DXY-PA40
Cooling Capacity	(kcal/h)	7000	8000	10000
	W	8100	9200	11900
	BTU/H	27700	31000	40000
Horsepower	HP	2.7HP	3HP	4HP
Temp. Control Range	(°C)	Thermostatic (setting range:20°C~50°C)		
Conditions	Ambient Temp.	-10°C~43°C (Well ventilated, no sun or rain, no vibration)		
	Oil Temp. (°C)	5°C~60°C		
	Oil Type	Lubricating oil, hydraulic oil, heat transfer oil, transformer oil		
	Oil Number (Cst)	5#~68# Spindle oil, hydraulic oil, lubricating oil, heat transfer oil, insulating oil, etc. For oils above 100#, consultation is required.		
Input Power	(V)	3PH/AC380V±10%50HZ		
Rated power	(kW)	3.5	4	5.5
Compressor	Supply (V)	3PH/AC380V50HZ		
	Power (kW)	2.3	3	3.8
Oil pump	Power (kW)	0.75	0.75	1.1
	Flow (L/min)	30	35	40
Ventilator	Power (kW)	0.18	0.18	0.25
Inlet&Outlet Oil Pipe Interface Size	(mm)	Rc1"	Rc1"	Rc1"
Dimension	Height (mm)	1085	1235	1245
	Width (mm)	600	600	625
	Length (mm)	700	700	700
Net Weight	(kg)	125	128	148
Refrigerant		Refrigerant:R22 (R410a)		
Protective Device		★ Phase loss protection ★ Motor reverse phase sequence protection ★ Compressor overload protection ★ Oil pump overload protection ★ High and low pressure protection ★ Abnormal alarm		

Remarks:

- "Refrigeration capacity" denotes the cooling capability under specific conditions: an ambient temperature of 35°C, an inlet oil temperature of 40°C, and the use of 5#~46# hydraulic oil.
- This series comprises various units, including Model A, which maintains a fixed temperature.
- The series also includes units with an oil pump motor and units without an oil pump motor. The model without an oil pump motor is designed for external oil pump installation.
- During installation, make sure to reserve a space of less than 50cm at the air suction port, and a space of more than 200cm at the fan exhaust port.



PRODUCT SPECIFICATIONS



SERIES	A	B	C	D	E	F	J	J ₁	G	H
DXY-PA28	996	1085	600	700	104	502	191	220	Rc1" Oil outlet	Rc1" Fuel inlet
DXY-PA30	1041	1235	600	700	104	512	191	220	Rc1" Oil outlet	Rc1" Fuel inlet
DXY-PA40	1158	1245	625	700	104	257	157	267	Rc1" Oil outlet	Rc1" Fuel inlet

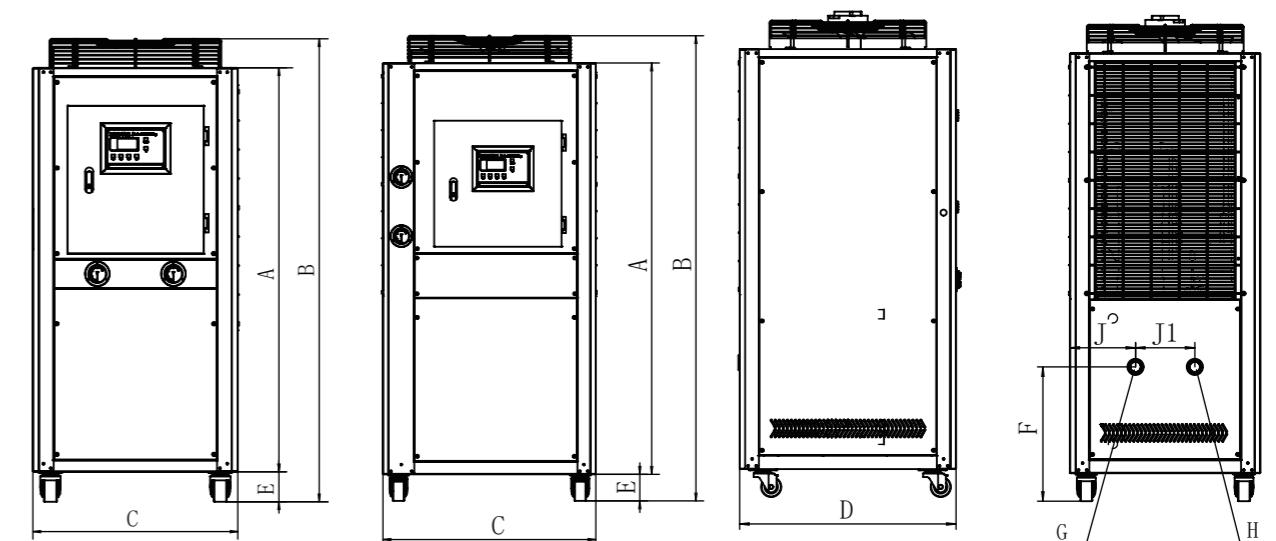
PRODUCT PARAMETERS		DXY-PA50~100			
Model		DXY-PA50	DXY-PA60	DXY-PA80	DXY-PA100
Cooling Capacity	(kcal/h)	12000	15000	20000	24000
	W	15000	17700	24000	28500
	BTU/H	50000	60000	81000	96000
Horsepower	HP	5HP	6HP	8HP	10HP
Temp. Control Range	(°C)	Thermostatic (setting range:20°C~50°C)			
Conditions	Ambient Temp.	-10°C~43°C (Well ventilated, no sun or rain, no vibration)			
	Oil Temp. (°C)	5°C~60°C			
	Oil Type	Lubricating oil, hydraulic oil, heat transfer oil, transformer oil			
	Oil Number (Cst)	5#~68# Spindle oil, hydraulic oil, lubricating oil, heat transfer oil, insulating oil, etc. For oils above 100#, consultation is required.			
Input Power	(V)	3PH/AC380V±10%50HZ			
Rated power	(kW)	6.7	7.6	10	12
Compressor	Supply (V)	3PH/AC380V50HZ			
	Power (kW)	4.66	5.5	7	9
Oil pump	Power (kW)	1.5	1.5	2.2	2.2
	Flow (L/min)	50	63	80	100
Ventilator	Power (kW)	0.6	0.6	0.78	0.78
Inlet&Outlet Oil Pipe Interface Size	(mm)	Rc1-1/4"	Rc1-1/4"	Rc1-1/2"	Rc1-1/2"
Dimension	Height (mm)	1510	1600	1800	1800
	Width (mm)	700	700	820	820
	Length (mm)	830	830	830	830
Net Weight	(kg)	183	188	263	265
Refrigerant		Refrigerant:R22 (R410a)			
Protective Device		★ Phase loss protection ★ Motor reverse phase sequence protection ★ Compressor overload protection ★ Oil pump overload protection ★ High and low pressure protection ★ Abnormal alarm			

Remarks:

- "Refrigeration capacity" denotes the cooling capability under specific conditions: an ambient temperature of 35°C, an inlet oil temperature of 40°C, and the use of 5#~46# hydraulic oil.
- This series comprises various units, including Model A, which maintains a fixed temperature.
- The series also includes units with an oil pump motor and units without an oil pump motor. The model without an oil pump motor is designed for external oil pump installation.
- During installation, make sure to reserve a space of less than 50cm at the air suction port, and a space of more than 300cm at the fan exhaust port.



PRODUCT SPECIFICATIONS



SERIES	A	B	C	D	E	F	J	J1	H	G
DXY-PA50	1304	1510	700	830	104	505	159	200	Rc1-1/4" Oil outlet	Rc1-1/4" Fuel inlet
DXY-PA60	1392	1600	700	830	104	505	159	200	Rc1-1/4" Oil outlet	Rc1-1/4" Fuel inlet
DXY-PA80	1559	1800	830	820	104	604	264	300	Rc1-1/2" Oil outlet	Rc1-1/2" Fuel inlet
DXY-PA100	1559	1800	830	820	104	604	264	300	Rc1-1/2" Oil outlet	Rc1-1/2" Fuel inlet

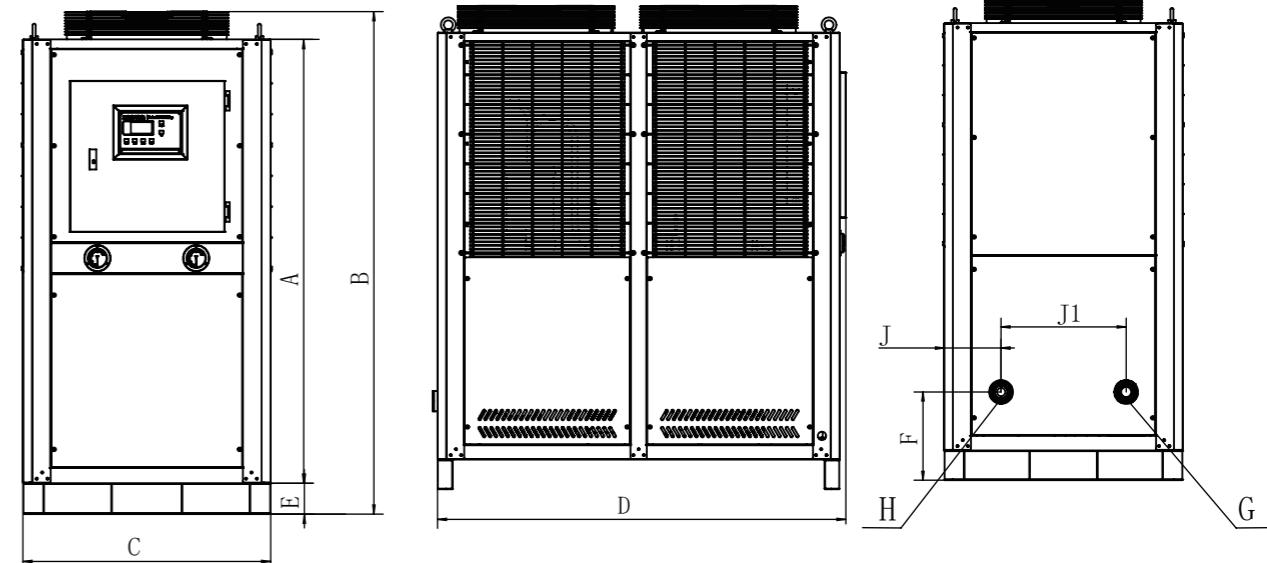
PRODUCT PARAMETERS			DXY-PA120~150	
Model		DXY-PA120		DXY-PA150
Cooling Capacity	(kcal/h)	30000		40000
	W	35000		46500
	BTU/H	119000		150000
Horsepowers	HP	12HP		15HP
Temp. Control Range	(°C)	Thermostatic (setting range:20°C~50°C)		
Conditions	Ambient Temp.	-10°C~43°C (Well ventilated, no sun or rain, no vibration)		
	Oil Temp. (°C)	5°C~60°C		
	Oil Type	Lubricating oil, hydraulic oil, heat transfer oil, transformer oil		
	Oil Number (Cst)	5#~68# Spindle oil, hydraulic oil, lubricating oil, heat transfer oil, insulating oil, etc. For oils above 100#, consultation is required.		
Input Power	(V)	3PH/AC380V±10%50HZ		
Rated power	(kW)	15		19
Compressor	Supply (V)	3PH/AC380V50HZ		
	Power (kW)	10.8		14
Oil pump	Power (kW)	3		3
	Flow (L/min)	120		160
Ventilator	Power (kW)	0.42*2		0.6*2
Inlet&Outlet Oil Pipe Interface Size	(mm)	Rc2"		Rc2.5"
Dimension	Height (mm)	1630		1760
	Width (mm)	800		900
	Length (mm)	1375		1540
Net Weight	(kg)	322		386
Refrigerant		Refrigerant:R22 (R410a)		Refrigerant:R410a
Protective Device		★ Phase loss protection ★ Motor reverse phase sequence protection ★ Compressor overload protection ★ Oil pump overload protection ★ High and low pressure protection ★ Abnormal alarm		

Remarks:

- "Refrigeration capacity" denotes the cooling capability under specific conditions: an ambient temperature of 35°C, an inlet oil temperature of 40°C, and the use of 5#~46# hydraulic oil.
- This series comprises various units, including Model A, which maintains a fixed temperature.
- The series also includes units with an oil pump motor and units without an oil pump motor. The model without an oil pump motor is designed for external oil pump installation.
- During installation, make sure to reserve a space of less than 50cm at the air suction port, and a space of more than 400cm at the fan exhaust port.



PRODUCT SPECIFICATIONS



SERIES	A	B	C	D	E	F	J	J1	G	H
DXY-PA120	1439	1630	800	1375	100	297	191	421	Rc2" Oil outlet	Rc2" Fuel inlet
DXY-PA150	1686	1760	900	1540	100	313	276	380	Rc2.5" Oil outlet	Rc2.5" Fuel inlet

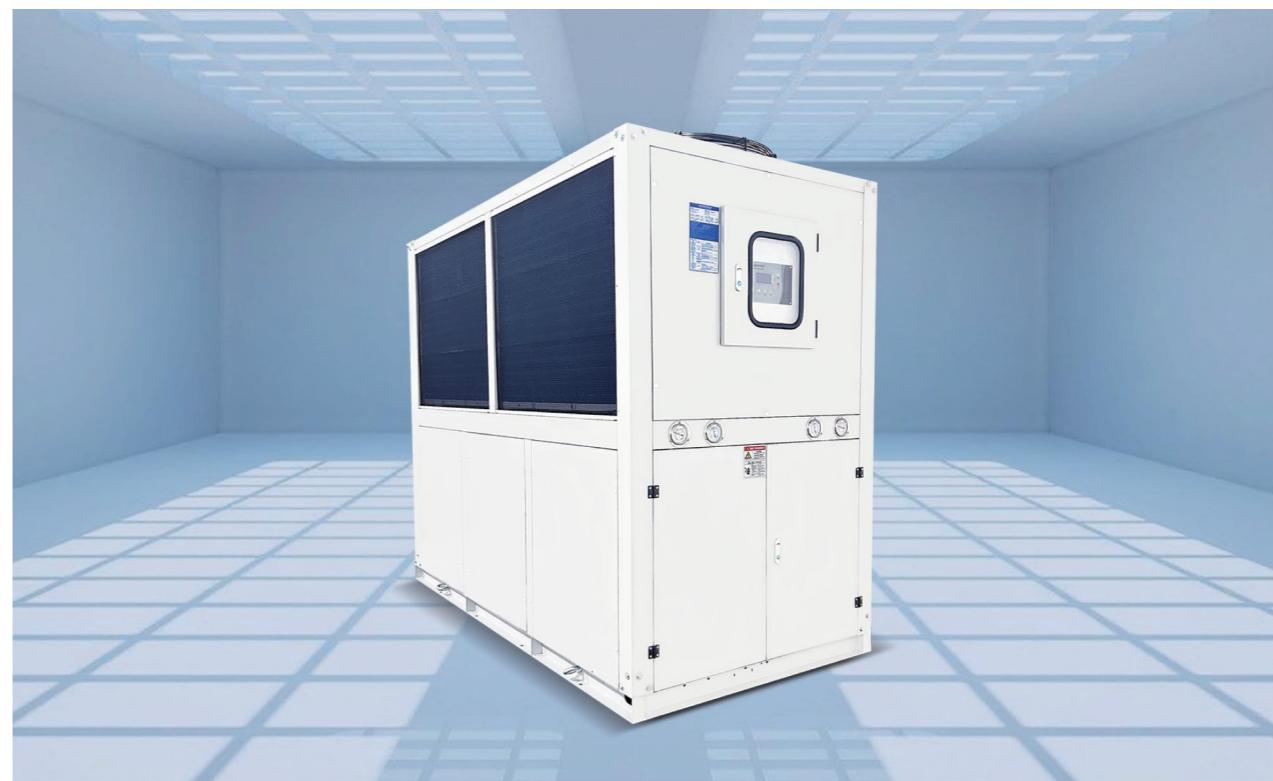
PRODUCT PARAMETERS

DXY-PA200~300

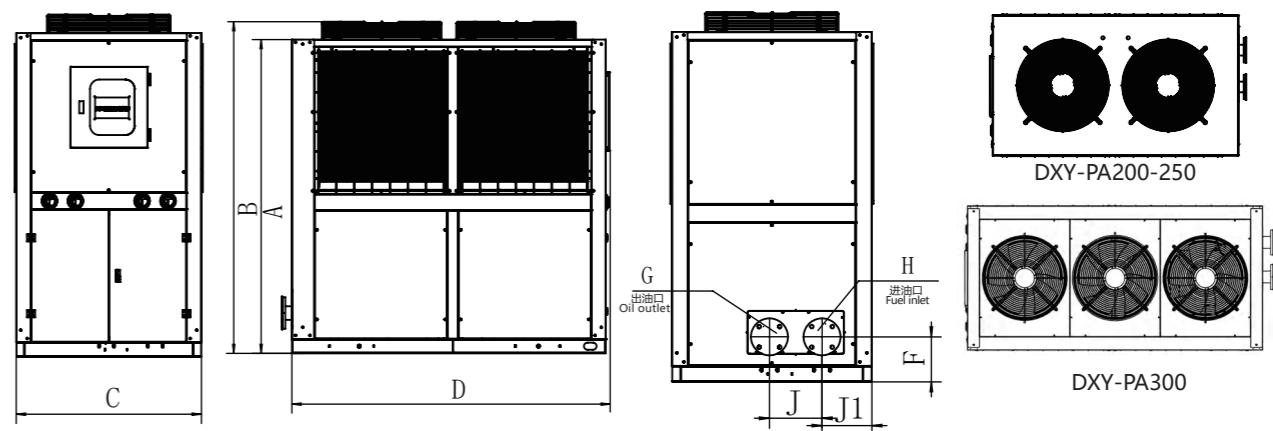
Model		DXY-PA200	DXY-PA250	DXY-PA300
Cooling Capacity	(kcal/h)	50000	60000	80000
	W	58000	70000	93000
	BTU/H	197000	240000	310000
Horsepower	HP	20HP	25HP	30HP
Temp. Control Range	(°C)	Thermostatic (setting range:20°C~50°C)		
Conditions	Ambient Temp.	-10°C~43°C (Well ventilated, no sun or rain, no vibration)		
	Oil Temp. (°C)	5°C~60°C		
	Oil Type	Lubricating oil, hydraulic oil, heat transfer oil, transformer oil		
	Oil Number (Cst)	5#~68# Spindle oil, hydraulic oil, lubricating oil, heat transfer oil, insulating oil, etc. For oils above 100#, consultation is required.		
Input Power	(V)	3PH/AC380V±10%50HZ		
Rated power	(kW)	25	28	36
Compressor	Supply (V)	3PH/AC380V50HZ		
	Power (kW)	9*2	11*2	14*2
Oil pump	Power (kW)	4	4	5.5
	Flow (L/min)	200	250	300
Ventilator	Power (kW)	0.8*2	0.8*2	0.78*3
Inlet&Outlet Oil Pipe Interface Size	(mm)	DN65	DN80	DN80
Dimension	Height (mm)	1850	1900	1900
	Width (mm)	1000	1000	1110
	Length (mm)	1770	1970	2270
Net Weight	(kg)	550	607	700
Refrigerant		Refrigerant:R410a		
Protective Device		★ Phase loss protection ★ Motor reverse phase sequence protection ★ Compressor overload protection ★ Oil pump overload protection ★ High and low pressure protection ★ Abnormal alarm		

Remarks:

- "Refrigeration capacity" denotes the cooling capability under specific conditions: an ambient temperature of 35°C, an inlet oil temperature of 40°C, and the use of 5#~46# hydraulic oil.
- This series comprises various units, including Model A, which maintains a fixed temperature.
- The series also includes units with an oil pump motor and units without an oil pump motor. The model without an oil pump motor is designed for external oil pump installation.
- During installation, make sure to reserve a space of less than 50cm at the air suction port, and a space of more than 500cm at the fan exhaust port.



PRODUCT SPECIFICATIONS



SERIES	A	B	C	D	F	J	J1	G	H
DXY-PA200	1750	1850	1000	1770	225	263	249	DN65 Flange	DN65 Flange
DXY-PA250	1800	1900	1000	1970	215	262	249	DN80 Flange	DN80 Flange
DXY-PA300	1800	1900	1110	2270	215	263	279	DN80 Flange	DN80 Flange

PRODUCT PARAMETERS

DXY-PA400~500

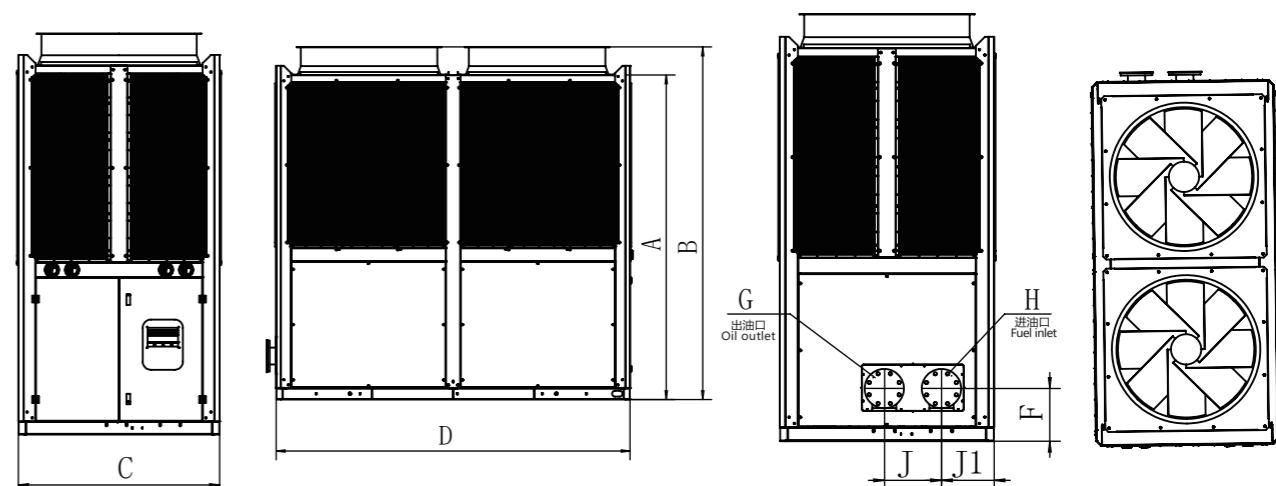
Model		DXY-PA400		DXY-PA500			
Cooling Capacity	(kcal/h)	100000		120000			
	W	120000		143000			
	BTU/H	395000		480000			
Horsepower	HP	40HP		50HP			
Temp. Control Range	(°C)	Thermostatic (setting range:20°C~50°C)					
Conditions	Ambient Temp.		-10°C~43°C (Well ventilated, no sun or rain, no vibration)				
	Oil Temp.	(°C)	10°C~60°C				
	Oil Type		Lubricating oil, hydraulic oil, heat transfer oil, transformer oil				
	Oil Number	(Cst)	5#~68# Spindle oil, hydraulic oil, lubricating oil, heat transfer oil, insulating oil, etc. For oils above 100#, consultation is required.				
Input Power	(V)	3PH/AC380V±10%50HZ					
Rated power	(kW)	45		56			
Compressor	Supply	(V)	3PH/AC380V50HZ				
	Power	(kW)	17.8*2		21.2*2		
Oil pump	Power	(kW)	5.5		7.5		
	Flow	(L/min)	400		500		
Ventilator	Power	(kW)	1.9*2		1.9*2		
Inlet&Outlet Oil Pipe Interface Size	(mm)	DN100		DN100			
Dimension	Height	(mm)	2430		2430		
	Width	(mm)	1200		1200		
	Length	(mm)	2400		2400		
Net Weight	(kg)	970		1100			
Refrigerant		Refrigerant:R410a					
Protective Device		★ Phase loss protection ★ Motor reverse phase sequence protection ★ Compressor overload protection ★ Oil pump overload protection ★ High and low pressure protection ★ Abnormal alarm					

Remarks:

- "Refrigeration capacity" denotes the cooling capability under specific conditions: an ambient temperature of 35°C, an inlet oil temperature of 40°C, and the use of 46# hydraulic oil.
- This series comprises various units, including Model A, which maintains a fixed temperature.
- The series also includes units with an oil pump motor and units without an oil pump motor. The model without an oil pump motor is designed for external oil pump installation.
- During installation, make sure to reserve a space of less than 50cm at the air suction port, and a space of more than 500cm at the fan exhaust port.



PRODUCT SPECIFICATIONS



Series	A	B	C	D	F	J	J ₁	G	H
DXY-PA400	2203	2430	1200	2400	296	319	295	DN100 Flange	DN100 Flange
DXY-PA500	2203	2430	1200	2400	296	319	295	DN100 Flange	DN100 Flange

PRODUCT PARAMETERS

DXY-PA600

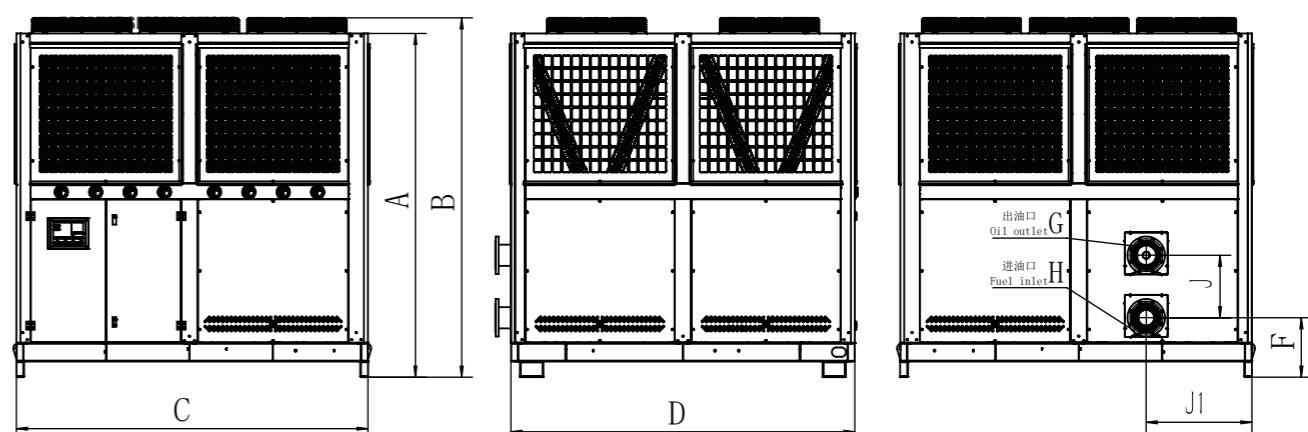
Model		DXY-PA600
Cooling Capacity	(kcal/h)	160000
	W	185000
	BTU/H	630000
Horserpower	HP	60HP
Temp. Control Range	(°C)	Thermostatic (setting range:20~50°C)
Conditions	Ambient Temp.	-10°C~43°C (Well ventilated, no sun or rain, no vibration)
	Oil Temp. (°C)	5°C~60°C
	Oil Type	Lubricating oil, hydraulic oil, heat transfer oil, transformer oil
	Oil Number (Cst)	5#~68# Spindle oil, hydraulic oil, lubricating oil, heat transfer oil, insulating oil, etc.
Input Power	(V)	3PH/AC380V±10%50HZ
Rated power	(kW)	71
Compressor	Supply (V)	3PH/AC380V50HZ
	Power (kW)	13.8*4
Oil pump	Power (kW)	11
	Flow (L/min)	600
Ventilator	Power (kW)	0.78*6
Inlet&Outlet Oil Pipe Interface Size	(mm)	DN125
Dimension	Height (mm)	2300
	Width (mm)	2250
	Length (mm)	2200
Net Weight	(kg)	1450
Refrigerant	Refrigerant:R410a	
Protective Device	★ Phase loss protection ★ Motor reverse phase sequence protection ★ Compressor overload protection ★ Oil pump overload protection ★ High and low pressure protection ★ Abnormal alarm	

Remarks:

- "Refrigeration capacity" denotes the cooling capability under specific conditions: an ambient temperature of 35°C, an inlet oil temperature of 40°C, and the use of 5#~46# hydraulic oil.
- This series comprises various units, including Model A, which maintains a fixed temperature.
- The series also includes units with an oil pump motor and units without an oil pump motor. The model without an oil pump motor is designed for external oil pump installation.
- During installation, make sure to reserve a space of less than 50cm at the air suction port, and a space of more than 200cm at the fan exhaust port.



PRODUCT SPECIFICATIONS



SERIES	A	B	C	D	F	J	J ₁	G	H
DXY-PA600	2100	2300	2250	2200	380	400	676	DN125 Flange	DN125 Flange



Special High-Temperature Chiller System

DXY-GPA30~100



Provincial Specialized,
Focused,
New and High-tech Enterprise



Provincial High-tech
Enterprise



CE European Safety
Compliance Certificate



ISO10012 Measurement
Management System Certification

Special High-Temperature Chiller System

Product Description:

The high-temperature oil cooler is a specially designed cooler that operates normally in high ambient temperatures, offering stable and reliable performance.

Features&Functions

- **High-Efficiency Heat Dissipation:** Equipped with large-sized radiators and high-performance cooling fans to increase heat dissipation area and enhance cooling efficiency.
- **High-Temperature-Resistant Components:** Key components such as compressors, motors, controllers, etc., are made from high-temperature-resistant materials or undergo special high-temperature treatment to ensure reliability.
- **High Cooling Capacity:** Designed to deliver sufficient cooling power even in high-temperature environments, ensuring high refrigeration capacity and powerful cooling performance.
- **Intelligent Control System:** Features an advanced intelligent control system for precise temperature regulation. It includes fault diagnostics, alarms, and protection functions to promptly detect and resolve operational issues, guaranteeing safe and reliable operation.
- **High-Quality Refrigerant:** Uses R134A, an eco-friendly refrigerant with a high boiling point and low freezing point, maintaining excellent cooling performance even at elevated temperatures. Its chemical stability ensures long-term operation without decomposition or degradation, delivering consistent cooling efficiency.

Application conditions

- Suitable for environments with ambient temperatures ranging from 40°C to 60°C.
- Commonly used in forging workshops, casting workshops, heat treatment workshops, and other high ambient temperature environments.



DXY-GPA Special High-Temperature Chiller System

PRODUCT PARAMETERS

DXY-GPA30~100

Model	DXY-GPA30	DXY-GPA50	DXY-GPA60	DXY-GPA80	DXY-GPA100	
Input Power	3PH/AC380±10%50Hz					
Rated power	5.8	7	9	11	13	
Cooling Capacity	Kcal/h	7000	12000	15000	20000	
	kW	8.2	15	17.5	24	
Temp. Control Range (°C)	30~58°C					
Conditions	Ambient Temp.	Below 55°C, well ventilated, no corrosive aerosol, no strong vibration source				
	Applicable liquids (°C)	5~60				
	Type of oil	Hydraulic oil, lubricating oil, heat transfer oil				
	Oil Number (Cst)	5~68#(Viscosity value over 100 needs special customisation)				
Dimension	Height B(mm)	1510	1800	1800	1630	1760
	Width C(mm)	710	820	820	800	900
	Length D(mm)	830	830	830	1375	1540
Inlet&Outlet Oil Pipe Interface Size	DN32	DN40	DN40	DN50	DN50	
Refrigerant	R134a					
Protective Device	High and low refrigerant pressure protection Compressor and pump overload and short-circuit protection Compressor pump and fan start delay protection Power phase loss and voltage protection (over-voltage and under-voltage) Insufficient liquid flow protection Other related safety devices					

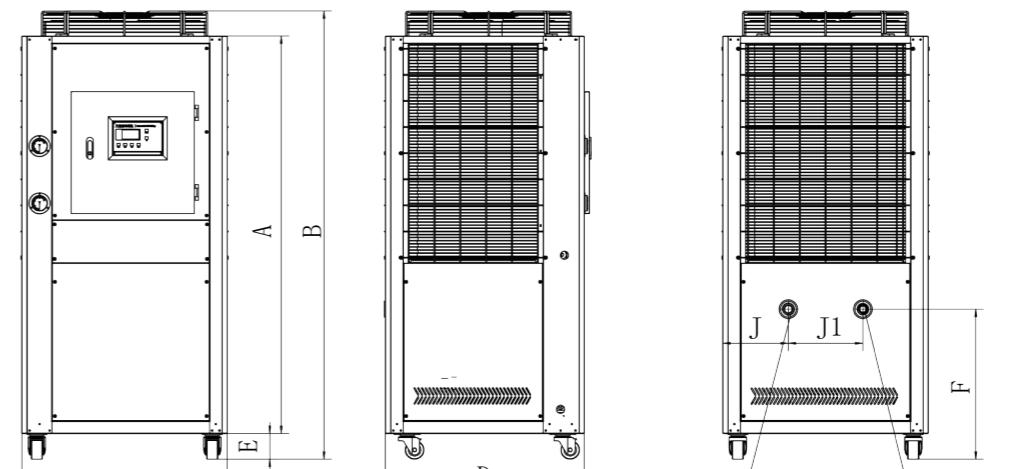
Note:
1.The parameter table includes common specifications; for detailed dimensions, please refer to the DXY-GPA series. Special non-standard customization is also available upon request.

2.As part of our continuous improvement policy, product design and specifications are subject to change without prior notice.

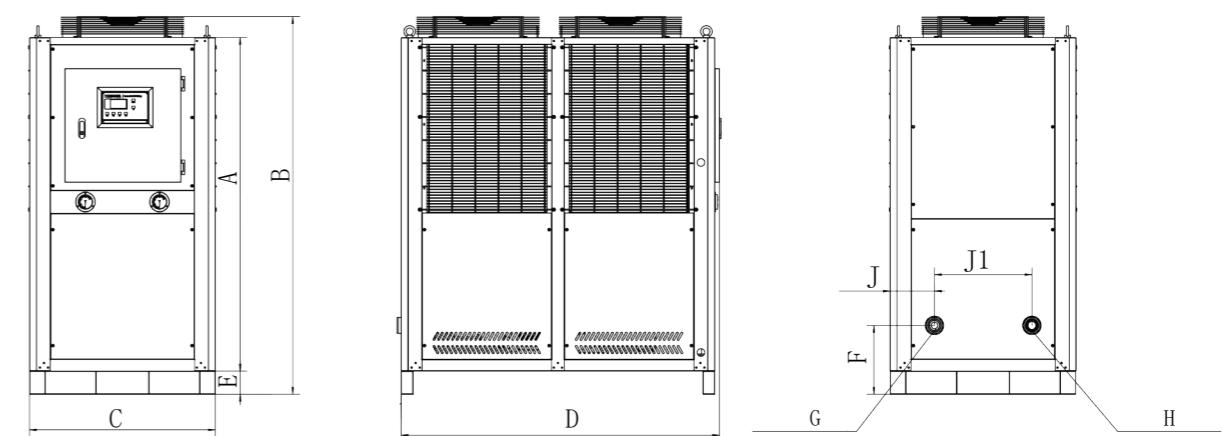
PRODUCT SPECIFICATIONS

DXY-PA10~20

PRODUCT SPECIFICATIONS



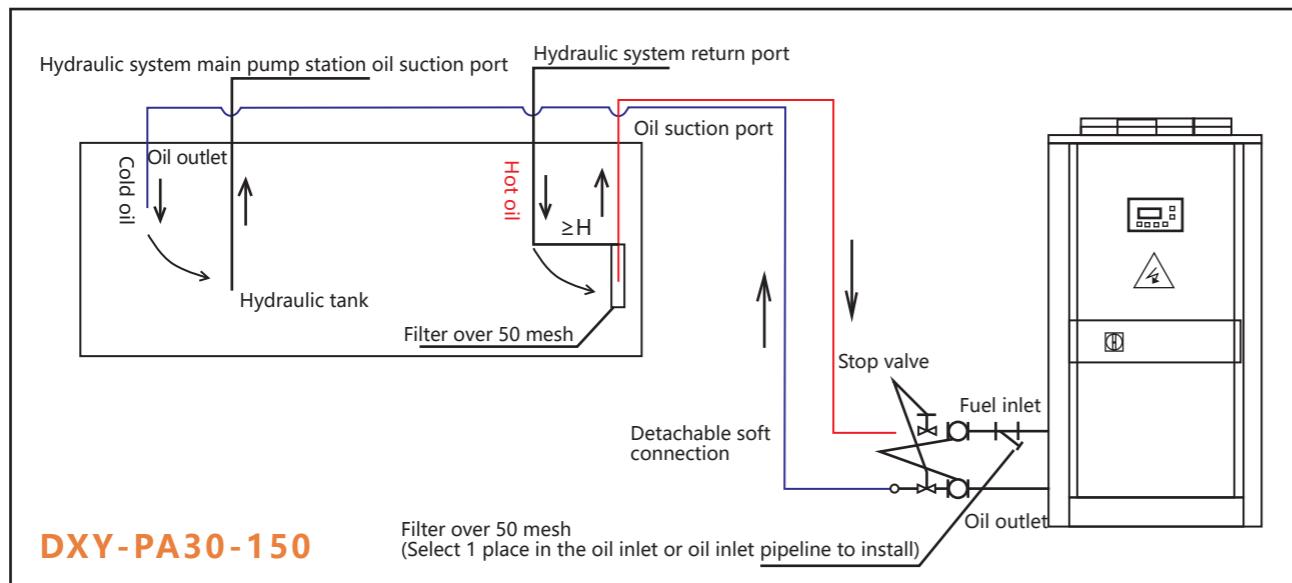
DXY-GPA30-60



DXY-GPA80~100

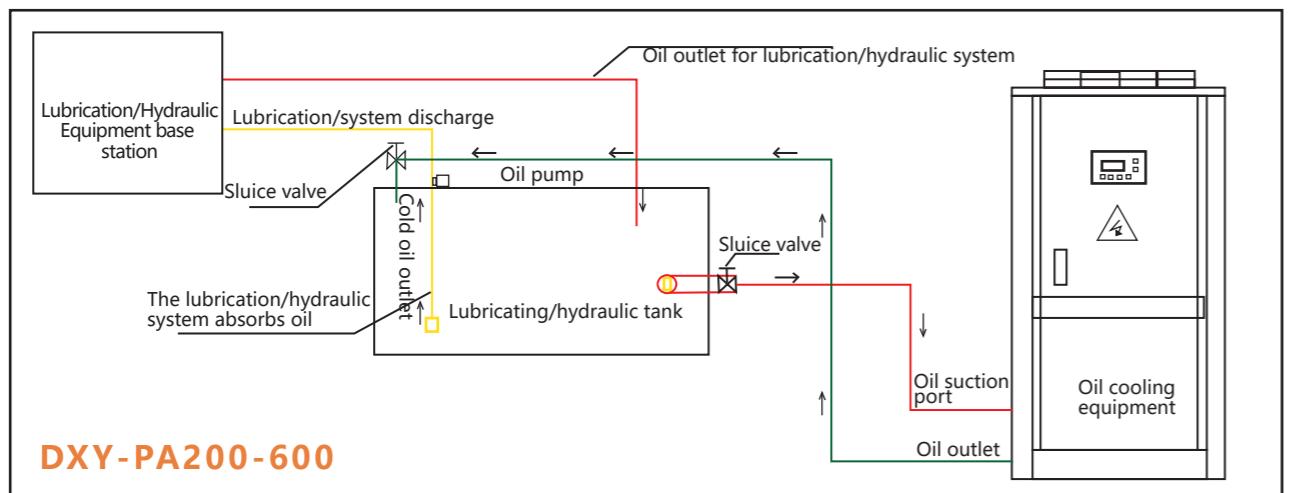
SERIES	A	B	C	D	E	F	J	J1	G	H
DXY-GPA30	1304	1510	710	830	104	505	219	120	DN32 Fuel inlet	DN32 Oil outlet
DXY-GPA50	1599	1800	820	830	104	604	264	300	DN40 Fuel inlet	DN40 Oil outlet
DXY-GPA60	1599	1800	820	830	104	604	264	300	DN40 Fuel inlet	DN40 Oil outlet
DXY-GPA80	1439	1630	800	1375	100	297	191	421	DN50 Oil outlet	DN50 Fuel inlet
DXY-GPA100	1555	1760	900	1540	100	313	276	381	DN50 Oil outlet	DN50 Fuel inlet

CNC Machine Tool Spindle Cooler Installation Diagram



1. To maintain uniform oil tank temperature, ensure an adequate distance between the oil suction port and the oil cooler's outlet. The oil suction port should be positioned near the hydraulic system's oil return area while still maintaining some separation. It is recommended that this distance (H) be at least 200mm to prevent thermal shock and interference with the refrigeration system.

2. When feasible, install insulation materials on the oil cooler's inlet and outlet to minimize energy loss.



1. To install the oil cooler's connecting pipe, the oil suction pipe should be affixed to the mid to lower portion of the oil tank's side. A gate valve must be attached to the welded joint. Connection to the machine port can be achieved with either a wired hose or a hard tube. If a hard tube is used for the connection, ensure the machine's oil inlet and outlet are connected with a hose to prevent internal machine pipe damage due to vibration.

2. The pipeline length connecting the oil cooler to the oil tank should not exceed 3 meters. Install a large filter within the oil tank at the oil suction port. In special cases where the connecting pipe needs to be extended, the pipe's diameter should be increased, and insulation should be applied externally.

3. The oil cooler's connecting pipe should have a diameter that is equal to or larger than the machine's standard pipe diameter.

4. Please adhere strictly to the above instructions when installing the oil cooler's oil inlet and outlet.



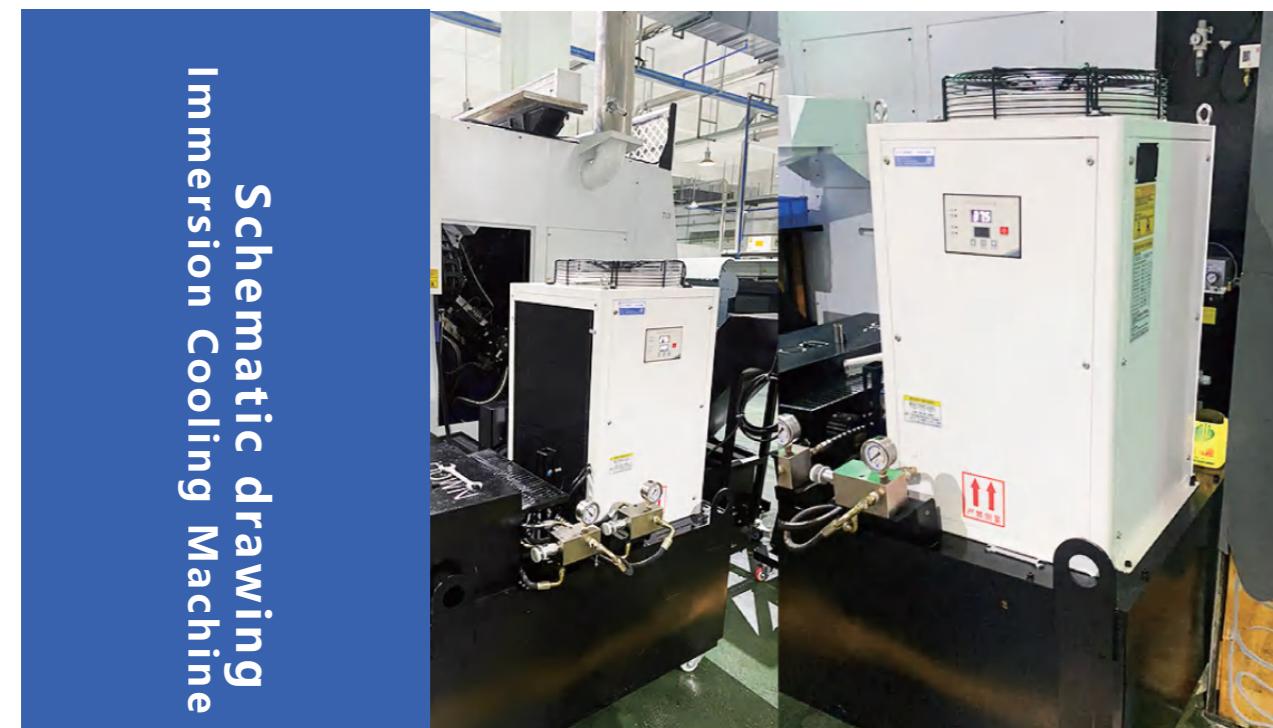
Specialized Immersion Cooling Machine for Cutting Fluid Series

Features&Functions

- Designed for immersion, allowing for easy installation, simple cleaning, and low maintenance.
- Eliminates the need for water or oil pumps, ensuring uninterrupted operation without being affected by impurities, grime, or metal shavings.
- The evaporator uses stainless steel or titanium tubes, extending the lifespan of the cooling machine.
- Features a bottom-mounted agitator motor for quick and uniform cooling of the liquid.
- Employs a tri-state dual-position temperature controller with an accuracy of $\pm 0.1^{\circ}\text{C}$.
- Includes multiple fault alarms and passive signal outputs .

Features&Functions

- CNC High-Speed Lathes
- CNC Precision Grinders
- CNC Horizontal Machining Centers
- CNC Gantry Grinding and Milling Machines
- Cooling of Cutting Fluids in Various Precision Machining Processes



Immersion Cooling Machine Schematic drawing

Specialized Immersion Cooling Machine for Cutting Fluid Series



PRODUCT PARAMETERS

DXY-15AQ~75AQ

Model	Rated Input Voltage	Input Power	Rated Input Current	Rated Cooling Capacity	Set Temperature	Working Temperature	Motor power	Refrigerant	Net Weight	Dimensions
DX-15AQ	AC220V 50Hz	580W	2.6A	1500W	3°C~55°C	-10°C~65°C	20W	R410A	38kg	420mm 420mm 800mm
DX-25AQ	AC220V 50Hz	860W	4A	2500W	3°C~55°C	-10°C~65°C	20W	R410A	45kg	480mm 480mm 950mm
DX-35AQ	AC220V 50Hz	1150W	5.3A	3500W	3°C~55°C	-10°C~65°C	20W	R410A	50kg	480mm 480mm 950mm
DX-50AQ	AC220V 50Hz	1640W	7.5A	5000W	3°C~55°C	-10°C~65°C	35W	R410A	65kg	520mm 520mm 1280mm
DX-75AQ	AC220V 50Hz	2680W	12.2A	7500W	3°C~55°C	-10°C~65°C	36W	R410A	74kg	520mm 520mm 1280mm

Model description :DX- □AQ(DX Abbreviation of representative company, □Representative specification, AQ sRepresentative immersion)

Note: Product specifications can be customized according to customer needs. Due to ongoing product updates, the above parameters are subject to change. Please refer to the product nameplate for the most accurate information.



Cabinet Cooler

DX-GA300~4000
DX-DA400~2000
DX-HA400~1500

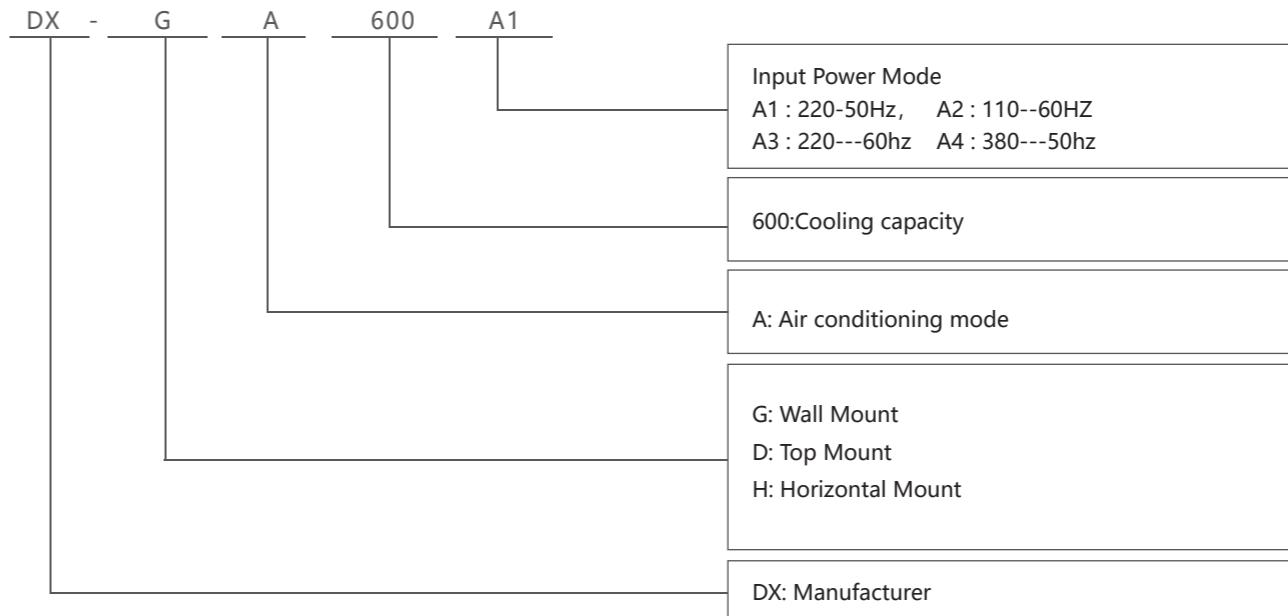
互精特新
Provincial Specialized, Focused, New and High-tech Enterprise

CP
Provincial High-tech Enterprise

CE
CE European Safety Compliance Certificate

ISO 9001
ISO10012 Measurement Management System Certification

Cabinet cooler Selection Instructions



Cabinet Air Conditioning Selection Notes:

Cabinet coolers are precision electrical appliances. When selecting a model, the following issues must be considered:

- ▲ First confirm whether you need the product for outdoor or indoor use.
- ▲ Ensure that the total heat generation of the cabinet is not greater than the available cooling capacity of the cooler(we can help customers calculate the heat generation of the cabinet and configure the appropriate cooler free of charge. Customers only need to fill in the 'Cooler Selection Parameter Table' on the last page and provide it to us), if the cooling capacity is not sufficient, it will lead to the cooler working all the time and affecting the life of the air conditioner.
- ▲ For larger cabinets, we recommend using multiple coolers for cooling to ensure even distribution of cool air inside the cabinet.
- ▲ If the ambient temperature is higher than 40°C, the degradation of air-conditioning performance must also be considered. The standard cooling capacity of all coolers is measured at 35°C, and If the ambient temperature reaches 50°C, the cooling capacity of the air conditioner will be only about 70% of its original design.

DX-GA Series Indoor AC Air Conditioner

The DX-GA series indoor AC air conditioner adopts lengthened air duct technology to make the temperature inside the electrical box uniform and better solve the heating problem of the electrical box.

Features

1. Installation: flexible and convenient
2. Performance: low noise, high energy efficiency, corrosion resistance
3. Reliable: adopting industrial-grade parts of famous brands
4. Dustproof: Effective dust filtration design
5. Anti-condensation: large air volume, small enthalpy difference design
6. Environmental protection: refrigerant R134a
7. Working environment range: -40~+55°C
8. With multi-function alarm output, and RS485 communication function

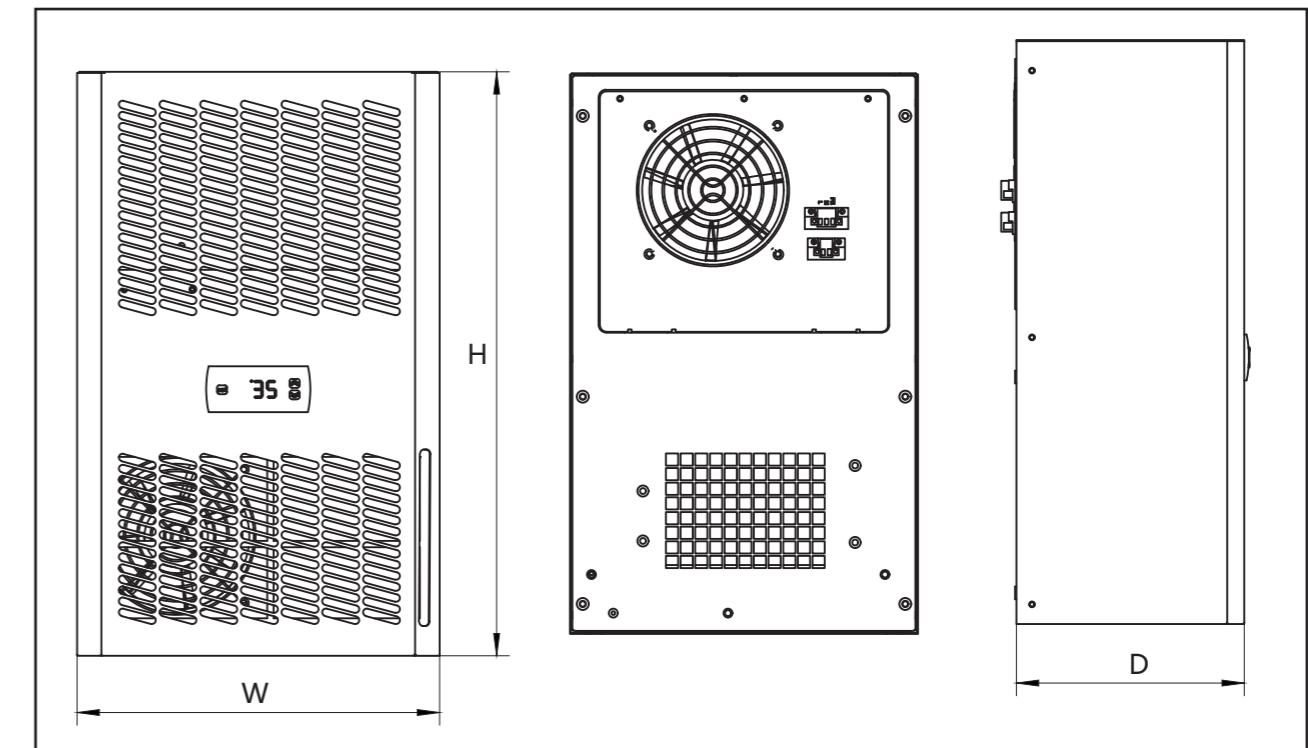


PRODUCT PARAMETERS

DX-GA300~4000

Model	Operating voltage	Overall dimensions (H*W*D) (mm)	Operating environment	Cooling capacity (w)	Calorisation	Power (w)	Noise (dB/A)	Weight (kg)
DX-GA300	220V/50HZ	459*285*179	Indoor	300	300	245	54	12
DX-GA400	220V/50HZ	552*320*186	Indoor	400	300	265	54	17
DX-GA600	220V/50HZ	552*320*186	Indoor	600	500	285	54	17
DX-GA1000	220V/50HZ	727*370*187	Indoor	1000	1000	350	61	20
DX-GA1500	220V/50HZ	1108*406*212	Indoor	1500	1000	610	65	35
DX-GA2000	220V/50HZ	1108*406*212	Indoor	2000	1000	1000	65	40
DX-GA2500	220V/50HZ	1408*406*198	Indoor	2500	1000	1080	65	48
DX-GA3200	220V/50HZ	1275*487*248	Indoor	3200	1000	1240	65	57
DX-GA4000	220V/50HZ	1275*487*248	Indoor	4000	1000	1950	70	60.5

PRODUCT SPECIFICATIONS



DX-DA Series Indoor AC Cooler

The DX-DA series indoor air conditioning units are designed to be installed on the top of electrical cabinets. They achieve temperature control within the cabinet through refrigeration and air circulation.

Features

1. Installation: flexible and convenient
2. Performance: low noise, high energy efficiency, corrosion resistance
3. Reliable: adopting industrial-grade parts of famous brands
4. Anti-condensation: large air volume, small enthalpy difference design
5. Environmental protection: refrigerant R134a
6. Working environment range: -40~+55°C
7. With multi-function alarm output, and RS485 communication function

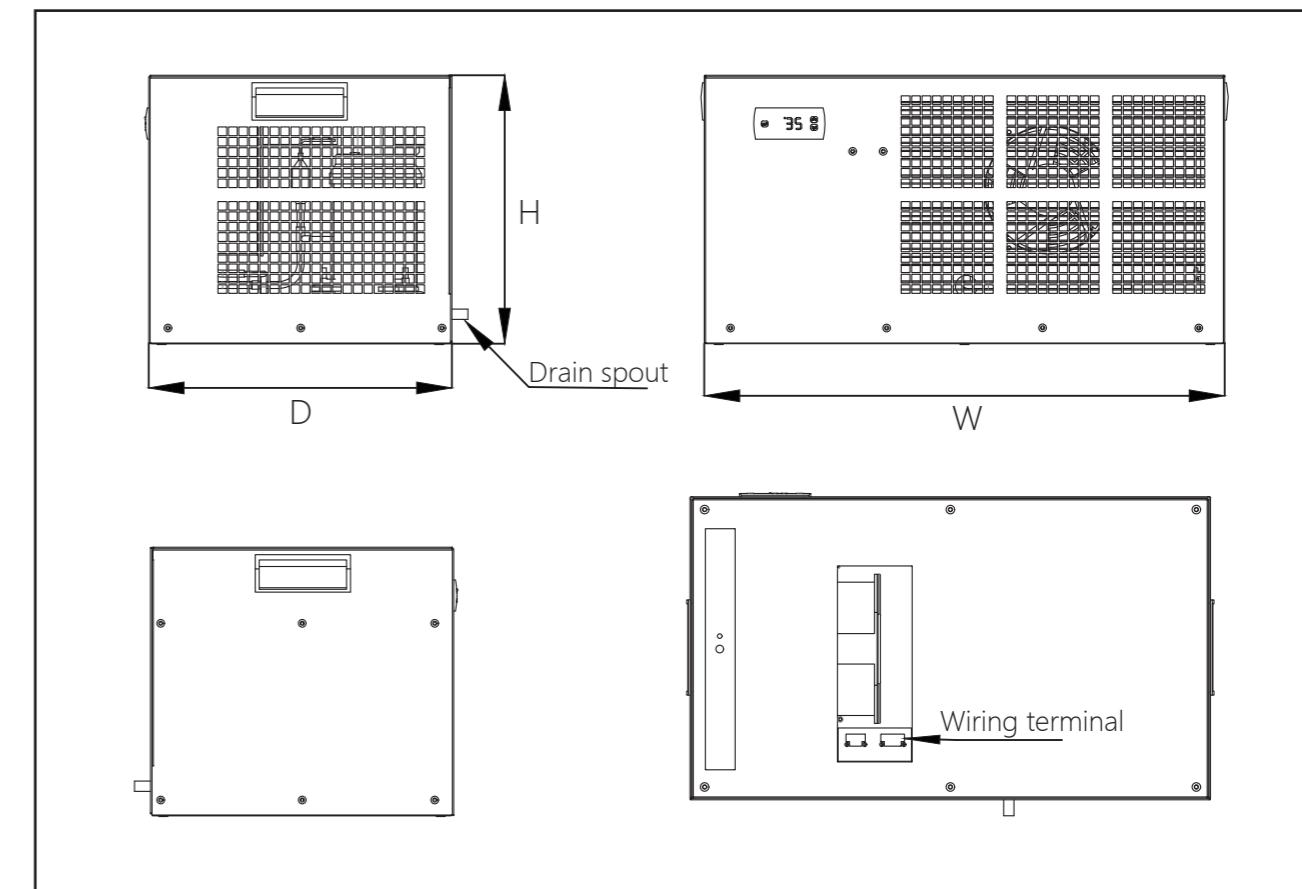


PRODUCT PARAMETERS

DX-DA400~2000

Model	Operating voltage	Overall dimensions (H*W*D) (mm)	Cooling capacity (w)	Power (w)	Noise (dB/A)	Weight (kg)
DX-DA400	220V/50HZ	310*600*350	400	330	54	20
DX-DA600	220V/50HZ	310*600*350	600	330	54	20
DX-DA1000	220V/50HZ	338*600*400	1000	400	65	26
DX-DA1500	220V/50HZ	338*600*400	1500	610	65	27
DX-DA2000	220V/50HZ	338*600*400	2000	830	65	30

PRODUCT SPECIFICATIONS



DX-HA series Horizontal Cooler

The DX-HA series horizontal air conditioning units are designed for installation on the side of cabinets to provide effective air cooling while expelling internal heat to protect temperature-sensitive components. High reliability, easy installation, and ready to work upon power connection.

Features

1. Performance: low noise, high energy efficiency, corrosion resistance
2. Reliable: adopting industrial-grade parts of well-known brands
3. Working environment range: -40~+55°C
4. With multi-functional alarm output, and RS485 communication function
5. Environmentally friendly: R134a refrigerant is used



PRODUCT PARAMETERS

DX-HA400~1500

Model	Operating voltage	Overall dimensions (H*W*D) (mm)	Overall dimensions (H*W*D) (mm)	Cooling capacity (w)	Calorific value (w)	Power (w)	Noise (dB/A)	Weight (kg)
DX-HA400	220V/50HZ	316*546*170	352*582*170	400	500	285	65	12.5
DX-HA600	220V/50HZ	316*546*170	352*582*170	600	500	330	65	17
DX-HA800	220V/50HZ	432*656*192	432*656*192	800	500	385	65	22
DX-HA1000	220V/50HZ	375*650*223	421*696*223	1000	1000	380	65	23
DX-HA1500	220V/50HZ	432*650*223	421*696*223	1500	1000	580	65	24

PRODUCT SPECIFICATIONS

