CLIMAVENETA

TWM-TR Series

Water-cooled Magnetic Levitation Variable Speed Centrifugal Chiller

1231~6331kW(350-1800RT)

CENTRIFUGAL

HFC R-134a

HFO R-1234ze

AHRI CERTIFIED®
www.ahridirectory.org
Water-Cooled Water Chilling and Heat Pump Water-Heating Packages
AHRI Standards 550/590 and 551/591

Features and Benefits

- **Advanced Compressor Technology:** Features a large cooling capacity magnetic levitation variable speed compressor, offering oil-free operation, high efficiency, and a broad range of cooling capacity adjustments.
- **Intelligent Control:** Utilizes Danfoss' inverter-driven compressor for intelligent and efficient operation under all conditions.
- **Exceptional Cooling Performance:** Provides a cooling capacity range of 400-1800RT, surpassing first-class energy efficiency standards set by GB 19577-2015.
- **Enhanced Heat Exchanger Design:** Incorporates a larger heat exchanger surface through evaporator series connection and counter flow design, significantly improving energy efficiency.
- **Efficient Configuration:** Equipped with a high-efficiency flooded evaporator, specially designed condenser, flash tank (economizer), orifice plate, and electronic expansion valve, resulting in high performance and compact structure.
- **Responsive Liquid Level Sensor:** Quickly and accurately responds to load changes across various working conditions.
- Intelligent Load Control: Ensures efficient and stable operation through precise control and pre-protection functions.
- **Ideal for Critical Applications:** Optimal for data centers and process sites, achieving low cooling water conditions.
- **Environmentally Friendly Refrigerant:** Offers the option of R1234ze refrigerant with ODP=0 and GWP<1.
- **Certified Performance:** All units are AHRI certified.

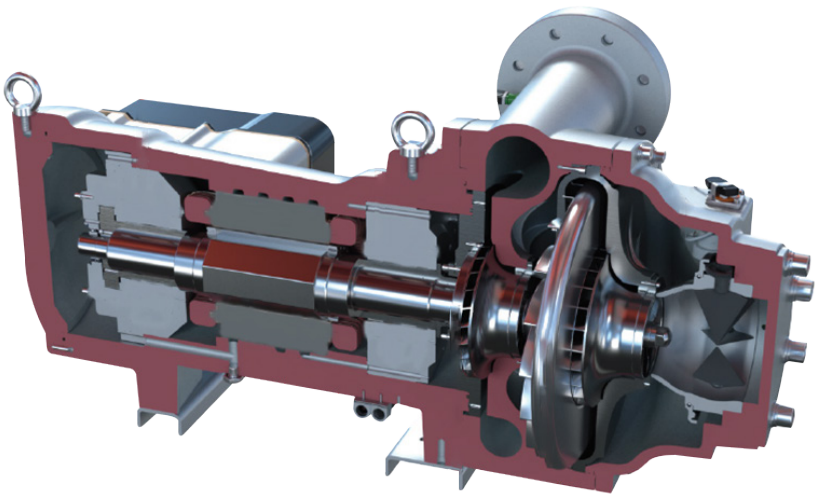
High Efficiency Compressor

Magnetic levitation and oil free:
High efficiency and easy maintenance

Two-stage centrifugal and centre supplement gas:
Increase cooling capacity, reduce power input and improve energy efficiency

Power backup function:
The shaft remains suspended for up to 5 seconds after power failure, and its speed can be accelerated once power is restored.

Quick start function:
The unit can swiftly return to its previous operational state once power is restored.



Large cooling capacity of single compressor:
The cooling capacity of a single compressor can reach 450RT (R134a refrigerant), so that chiller structure can be more compact.

Intelligent control:
Compressor frequency/guide vane is adjusted under optimized operating curve, ensuring that the compressor remains constantly in optimal and safe condition. Meanwhile, the self-protection functions guarantee compressor stability in all aspects.

Permanent magnet synchronous motor:
Extremely high motor efficiency and improved compressor energy efficiency.

Cooling Capacity Range

350RT-1800RT(1-4Com.)

COP Range

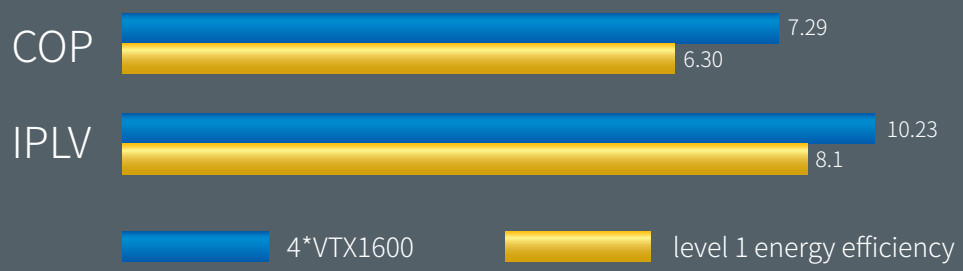
6.7-7.38

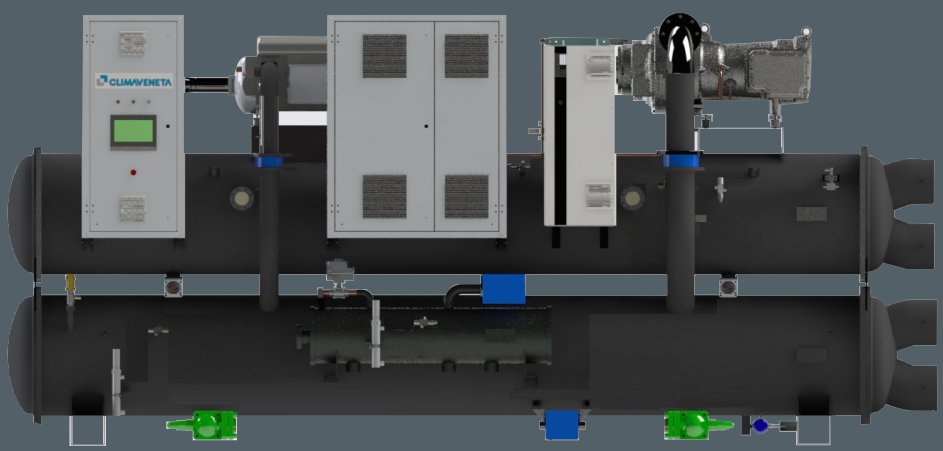
Performance Advantage

All Series **The COP(GB) is above 6.6** Higher than GB level 1 energy efficiency	All Series **The IPLV(GB) is above 9.5** Higher than GB level 1 energy efficiency	All Series **The IPLV(AHRI) is above 11.1** Excellent part-load performance

Example:

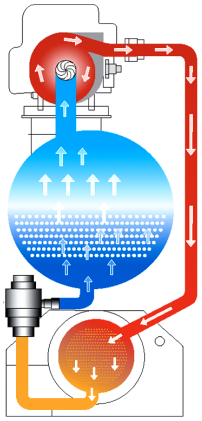
TWM-TR4 model,the cooling capacity under GB condition is 6329kW,COP7.29,IPLV10.23





■ The 550~850RT cooling section adopts the design of "VTX+TT", which uses a large VTX compressor with a small TT compressor, and the energy efficiency is COP≥6.4 and IPLV≥9.5.

Flooded Type Evaporator



High heat transfer coefficient: Higher evaporation temperature;
Low vessel pressure drops: Reduce water pump energy consumption;
Compact structure: Smaller footprint;

Flooded high-efficiency evaporator and enhanced copper tube with external and internal thread: The evaporation tube is immersed in boiling liquid refrigerant, the external thread greatly improves the boiling heat exchange and reduces the heat transfer temperature difference between the tube inside and outside significantly. The internal thread strengthens the heat transfer of the water disturbanceand turbulent heat transfer inside the tube, improving the cooling capacity and energy efficiency effectively. The chilled water flows inside the tube, facilitating easy cleaning and maintenance.

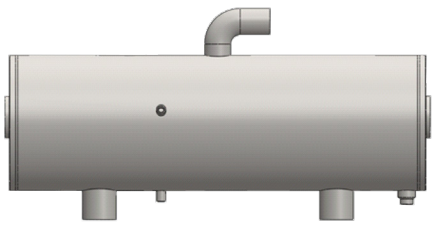
Specially Designed Condenser

Enhanced copper tube with external and internal thread and specially designed internal structure: It offers high heat transfer coefficient, low condensing temperature and low water pressure drop.

High-quality Economizer

Flash tank economizer: Compared with traditional plate heat exchangers, flash tank has a more compact structure, lower pressure drop, and higher heat exchanger efficiency.

Two-way inlet and outlet: The economizer is provided with two inlet and two outlet, making liquid distribution more uniform and resulting in higher performance.



Liquid level control: Monitors the economizer's liquid level via a sensor, enabling precise and rapid flow control.

Throttling Device

Orifice plate and electronic expansion valve: The structure of the orifice throttling is simple and reliable, with rapid response to the electronic expansion valve condition. It realizes accurate and rapid adjustment of the flow rate under all working conditions to ensure the efficient and stable operation.

Liquid level control: The unit adopts liquid level sensor to monitor the liquid level of condenser and economizer. It overcomes the shortcomings of conventional control by superheat which is lagging and fluctuant. It will respond to the flow quickly and accurately.

Intelligent control technology

- Precise and efficient control of unit loads
- The pre-protection function ensures safe operation of the unit.
- Intelligent load distribution for multiple compressors to ensure optimal operation at all times (intelligent control through logic algorithm, intelligent allocation / judgment of each compressor load)
- Maintenance reminder function to alert users before critical components such as vessels and compressors need maintenance
- 10" touch screen, friendly human-machine interface

Suitable for low cooling water temperature applications

The compressor's own operating range covers the lower cooling water temperature (10 °C condenser inlet water temperature), that is, under the lower cooling water temperature conditions in transition season and winter, without increasing the waterway bypass and additional refrigerant pump, the unit can operate normally and stably, which greatly reduces the operating power consumption and the running cost.

Suitable for low cooling water temperature applications such as data centers and process sites.

AHRI certification

All series of units are certified by AHRI

AHRI CERTIFIED®
www.ahridirectory.org
Water-Cooled Water Chilling and Heat Pump Water-Heating Packages
AHRI Standards 550/590 and 551/591

Optional R1234ze

R1234ze environmental refrigerant can be selected, and the GWP value is much smaller than R134a

	R1234ze	R134a
ODP	0	0
GWP	＜1	1300

Nomenclature

TWM-4-TR1-EF30BQ2-CF30BQ2-2-E

- Economizer number: Default is without economizer; E: with economizer
- Power Supply: Default is 380V/3Ph/50Hz
  - 1-380V/3Ph/60Hz
  - 2-400V/3Ph/50Hz
  - 3-400V/3Ph/60Hz
  - 4-460V/3Ph/60Hz
- Condenser Number
- Evaporator Number
- Number of compressors
- Compressor Number
- Refrigerant Number: R134a is the default; 4: R1234ze
- Water-cooled Magnetic Levitation Variable Speed Centrifugal Chiller

Microprocessor Control Features

Microprocessor	Touch	Microprocessor	Touch
Remote on/off with external volt-free contact	√	Energy limit function	OPT
Multi-language menu	√	Manual control	√
Phase sequence relay	√	ModBus communication protocol	OPT
Cumulative fault alarm	√	BACnet communication protocol	OPT
Alarms code function	√	Pump control	OPT
“BLACK BOX” alarm events record	√	Backup pump control	OPT
Self-test when power on	√	Water temp. regulation by external signal (4-20mA)	OPT
Daily/weekly programming control	Par.	Remote relay control	OPT
Evaporator inlet/outlet water temp. display	√	Local/remote network monitor (FWS)	OPT
Compressor/unit alarms display	√	Remote secondary temp. control	OPT
General unit alarms display	√	Set-point regulation from external signal (0-5V)	OPT
Entering water temp. ratio control	√	Compressor run-timer, time balance & FIFO	√
Start/stop operating timer	Par.	Compressor working time management	√
“Pump-Down” when stopped	√		

√ Standard **OPT** available on request **Par.** available by modifying a value of the configuration paramenters

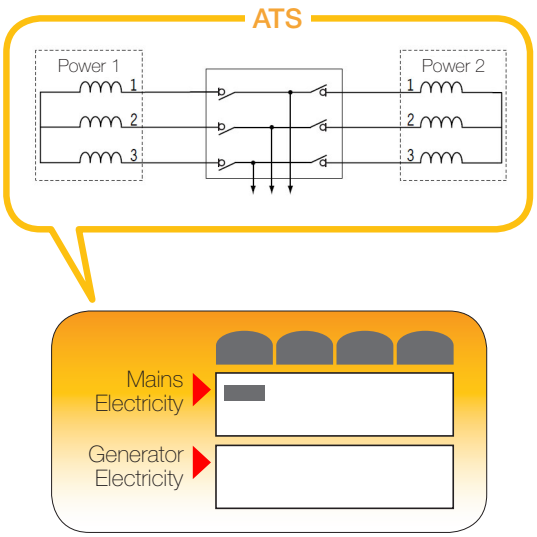
Options

Fast Restart

The management of fast restart allows to minimize downtime in case of power failure, through accelerating software selfdiagnose time, water pump start delay, pre-condensing time and compressor start time, meanwhile keeping all the necessary unit safety.
This option requires an external UPS power supply provided by customer.

Dual Power Supply

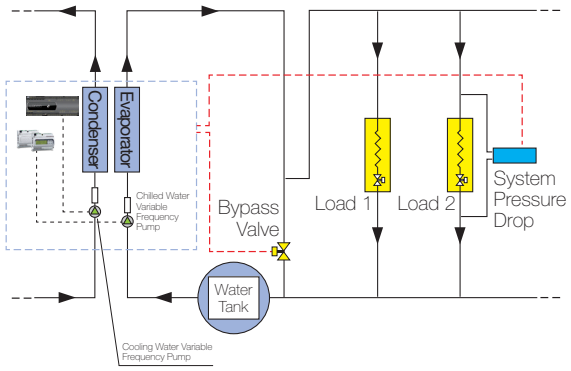
This accessory involves replacing two individual power supplies with an Automatic Transfer Switch (ATS).

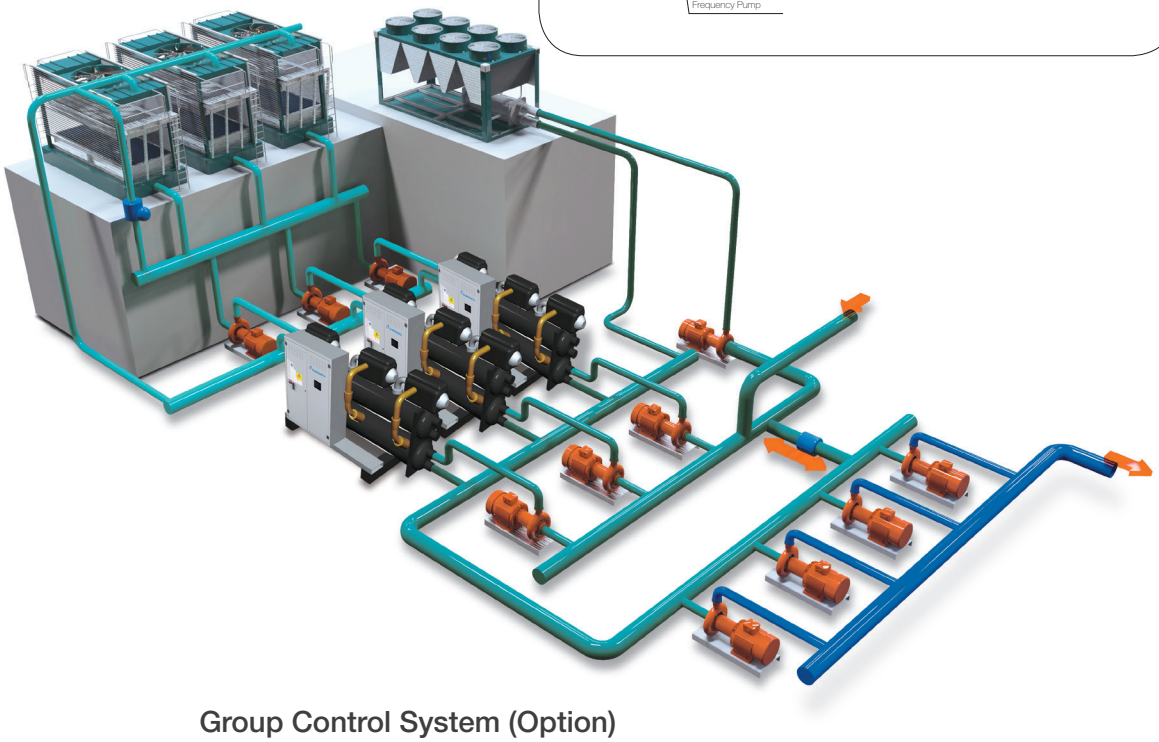


Chilled Water Variable Flow Control

Extended module of variable flow control function enables chilled water variable frequency pump and pipe valve on-off control.
The control of chilled water side variable frequency pump, according to terminal side load, ensures lowest pump consumption.

VPF Variable Primary Flow





Group Control System (Option)

Technical Parameters

TWM-T	Cooling capacity	Power input	COP	IPLV.IP	Chilled water		Cooling water		Circuit	Load range	Operating weight	Ref.	Length	Width	Height
					Flow	Pressure drop	Flow	Pressure drop							
	kW	kW	W/W	W/W	m^3/h	kPa	m^3/h	kPa	n	%	kg	\	mm	mm	mm
R1-EH30BQ2-CH30BQ2-E	1231	180.6	6.81	10.63	190.6	18.50	235.0	22.50	1	30~100	4955	R134a	3590	1260	2380
R1-EH35AQ2-CH35AQ2-E	1319	191.4	6.89	10.85	204.2	23.00	251.4	27.80	1	30~100	5415	R134a	4090	1260	2380
R1-EH40AQ2-CH40AQ2-E	1319	189.9	6.94	10.93	204.2	24.50	251.1	29.70	1	30~100	5880	R134a	4590	1260	2380
R1-EH40AQ2-CI40AQ2-E	1407	202.4	6.95	11.09	217.8	27.90	267.8	22.20	1	30~100	6190	R134a	4520	1285	2480
R1-EI35AQ2-CH35AQ2-E	1407	203.8	6.90	11.02	217.8	16.80	268.1	31.70	1	30~100	5700	R134a	4020	1285	2480
R1-EI35AQ2-CI35AQ2-E	1407	202.6	6.94	11.07	217.8	16.80	267.9	19.40	1	30~100	5970	R134a	4020	1285	2480
R1-EI35AQ2-CL35AQ2-E	1495	216.5	6.90	11.18	231.4	19.00	284.8	19.10	1	30~100	6195	R134a	4050	1315	2480
R1-EI40AQ2-CH40AQ2-E	1495	216.8	6.89	11.17	231.4	21.70	284.9	38.20	1	30~100	6190	R134a	4520	1285	2480
R1-EI40AQ2-CI40AQ2-E	1495	215.7	6.93	11.22	231.4	21.70	284.7	25.10	1	30~100	6505	R134a	4520	1285	2480
R1-EL35AQ2-CI35AQ2-E	1495	216.4	6.91	11.18	231.4	16.50	284.8	22.00	1	30~100	6165	R134a	4050	1315	2480
R1-EL35AQ2-CL35AQ2-E	1583	231.5	6.84	11.27	245.0	18.50	302.0	21.50	1	30~100	6390	R134a	4050	1315	2480
R1A1-EI40AT2-CI40AT2-E	1934	302.2	6.40	9.58	332.6	40.23	415.8	37.36	1	10~100	6730	R134a	4630	1420	2510
R1C1-EI40BT2-CI40BT2-E	2110	326.6	6.46	9.65	362.9	40.21	453.7	37.37	1	10~100	7020	R134a	4630	1420	2510
R1E1-EL40AT2-CL40AT2-E	2285	350.5	6.52	9.63	393.0	36.73	491.3	34.63	1	10~100	7730	R134a	4630	1450	2540
R1C2-EI48AT2-CI48AT2-E	2461	382.1	6.44	9.62	423.3	65.64	529.1	61.01	1	10~100	8250	R134a	5470	1420	2510
R1C1E1-EL48AT2-CL48AT2-E	2637	408.2	6.46	9.52	453.6	58.71	567.0	55.35	1	10~100	9070	R134a	5470	1450	2540
R1C1E1-EH30BQ1-CH30BQ1-E	2813	435.4	6.46	9.51	483.8	41.79	604.8	46.53	2	10~100	9890	R134a	4150	2340	2380
R1E2-EH30BQ1-CH30BQ1-E	2989	459.1	6.51	9.55	514.1	47.18	642.6	52.53	2	10~100	9940	R134a	4150	2340	2380

Remarks:

1.Standard Cooling Condition: Chilled water (in/out)=12.2/6.7°C; Condenser water (in/out)=29.4/34.6°C;

2.IPLV.IP is measured according to AHRI Standard 550/590;

3.Standard water side pressure of evaporator and condenser is 1.0MPa. 1.6MPa or 2.0MPa is optional.

Based on the user's different demands for cooling capacity and cooling efficiency, Climaveneta can meet variable cooling capacities with the same model by optimizing heat exchanger combination and controlling the compressor speed. Please consult with the Climaveneta office for more details.

Technical Parameters

TWM-T	Cooling capacity	Power input	COP	IPLV.IP	Chilled water		Cooling water		Circuit	Load range	Operating weight	Ref.	Length	Width	Height
					Flow	Pressure drop	Flow	Pressure drop							
	kW	kW	W/W	W/W	m^3/h	kPa	m^3/h	kPa	n	%	kg	\	mm	mm	mm
R2-EH30BQ1-CH30BQ1-E	2110	296.0	7.13	10.96	326.7	19.00	400.5	20.60	2	15~100	10240	R134a	4150	2300	2380
R2-EH35AQ1-CH35AQ1-E	2462	336.7	7.31	11.40	381.1	28.00	465.8	30.10	2	15~100	10880	R134a	4650	2300	2380
R2-EH35AQ1-CI35AQ1-E	2813	385.7	7.29	11.63	435.5	36.60	532.5	25.20	2	15~100	11420	R134a	4650	2400	2480
R2-EH40AQ1-CH40AQ1-E	2989	413.2	7.23	11.70	462.8	44.10	566.4	47.60	2	15~100	11800	R134a	5150	2300	2380
R2-EH40AQ1-CI40AQ1-E	3165	441.3	7.17	11.78	490.0	49.50	600.3	36.40	2	15~100	12430	R134a	5150	2400	2480
R2-EI35AQ1-CH35AQ1-E	3165	446.6	7.09	11.65	490.0	30.50	601.2	50.20	2	15~100	11440	R134a	4650	2400	2480
R2-EI35AQ1-CI35AQ1-E	3165	442.1	7.16	11.76	490.0	30.50	600.5	32.10	2	15~100	11980	R134a	4650	2400	2480
R2-EI35AQ1-CL35AQ1-E	3165	439.7	7.20	11.82	490.0	30.50	600.0	25.00	2	15~100	12460	R134a	4670	2500	2580
R2-EI40AQ1-CH40AQ1-E	3165	440.4	7.19	11.79	490.0	35.10	600.2	53.50	2	15~100	12425	R134a	5150	2400	2480
R2-EI40AQ1-CI40AQ1-E	3341	470.5	7.10	11.85	517.2	39.10	634.5	40.70	2	15~100	13055	R134a	5150	2400	2480
R2-EL35AQ1-CI35AQ1-E	3341	473.2	7.06	11.79	517.2	26.30	634. .89	35.90	2	15~100	12400	R134a	4670	2500	2580
R2-EL35AQ1-CL35AQ1-E	3341	470.5	7.10	11.85	517.2	26.30	634. ,45	27.90	2	15~100	12875	R134a	4670	2500	2580
R3-EL30AT1-CL30AT1-E	3341	457.5	7.30	11.27	517.2	28.30	632.3	29.10	3	10~100	16365	R134a	7320	2880	2580
R3-EL30AT1-CM30AT1-E	3517	477.7	7.36	11.37	544.4	31.30	664.9	25.20	3	10~100	17280	R134a	7270	3070	2700
R3-EM27AT1-CM27AT1-E	3693	505.6	7.30	11.34	571.6	24.60	698.8	25.50	3	10~100	17520	R134a	6685	3070	2700
R3-EM30AT1-CL30AT1-E	3869	527.6	7.33	11.44	598.9	29.40	731.8	39.00	3	10~100	17335	R134a	7270	3070	2700
R3-EM30AT1-CM30AT1-E	4044	550.6	7.35	11.55	626.1	32.10	764.9	33.30	3	10~100	18245	R134a	7270	3070	2700
R3-EM30AT1-CN30AT1-E	4220	572.6	7.37	11.69	653.3	34.90	797.8	22.60	3	10~100	20270	R134a	7270	3100	2810
R3-EN30AT1-CM30AT1-E	4396	601.1	7.31	11.70	680.5	26.30	831.8	39.40	3	10~100	19865	R134a	7270	3100	2810
R3-EN30AT1-CN30AT1-E	4572	625.0	7.31	11.82	707.7	28.50	865.1	26.60	3	10~100	21890	R134a	7270	3100	2810

Remarks:

1.Standard Cooling Condition: Chilled water (in/out)=12.2/6.7°C; Condenser water (in/out)=29.4/34.6°C;

2.IPLV.IP is measured according to AHRI Standard 550/590;

3.Standard water side pressure of evaporator and condenser is 1.0MPa. 1.6MPa or 2.0MPa is optional.

Based on the user's different demands for cooling capacity and cooling efficiency, Climaveneta can meet variable cooling capacities with the same model by optimizing heat exchanger combination and controlling the compressor speed. Please consult with the Climaveneta office for more details.

TWM-T	Cooling capacity	Power input	COP	IPLV.IP	Chilled water		Cooling water		Circuit	Load range	Operating weight	Ref.	Length	Width	Height
					Flow	Pressure drop	Flow	Pressure drop							
	kW	kW	W/W	W/W	m^3/h	kPa	m^3/h	kPa	n	%	kg	\	mm	mm	mm
R4-EM54AT1-CM54AT1-E	4924	670.7	7.34	11.41	762.2	55.20	931.2	57.40	4	7.5~100	22650	R134a	6680	3070	2690
R4-EM54AT1-CN54AT1-E	5275	714.4	7.38	11.59	816.6	63.40	997.0	41.10	4	7.5~100	24650	R134a	6720	3120	2800
R4-EN48AT1-CN48AT1-E	5451	744.3	7.32	11.57	843.8	41.70	1031.3	39.00	4	7.5~100	24320	R134a	6120	3120	2800
R4-EN54AT1-CM54AT1-E	5627	770.0	7.31	11.62	871.1	50.00	1064.8	75.10	4	7.5~100	24170	R134a	6720	3120	2800
R4-EN54AT1-CN54AT1-E	5979	820.0	7.29	11.75	925.5	56.40	1131.7	52.90	4	7.5~100	26165	R134a	6720	3120	2800
R4-EN60AT1-CN60AT1-E	6330	872.3	7.26	11.86	980.0	70.30	1198.9	66.00	4	7.5~100	27810	R134a	7320	3120	2800

TWM-4-T	Cooling capacity	Power input	COP	IPLV.IP	Chilled water		Cooling water		Circuit	Load range	Operating weight	Ref.	Length	Width	Height
					Flow	Pressure drop	Flow	Pressure drop							
	kW	kW	W/W	W/W	m^3/h	kPa	m^3/h	kPa	n	%	kg	\	mm	mm	mm
R2-EH30BQ1-CH30BQ1-2-E	1934	270.7	7.14	10.88	299.4	16.00	367.0	17.30	2	15~100	10165	R1234ze	4150	2300	2380
R3-EL30AT1-CL30AT1-2-E	3165	440.2	7.19	11.09	490.0	25.40	600.1	26.30	3	10~100	16180	R1234ze	7320	2880	2580
R4-EM54AT1-CM54AT1-2-E	3869	527.7	7.33	11.19	598.9	34.10	731.8	35.40	4	7.5~100	22425	R1234ze	6680	3070	2690

Remarks:

1.Standard Cooling Condition: Chilled water (in/out)=12.2/6.7°C; Condenser water (in/out)=29.4/34.6°C;

2.IPLV.IP is measured according to AHRI Standard 550/590;

3.Standard water side pressure of evaporator and condenser is 1.0MPa. 1.6MPa or 2.0MPa is optional.

Based on the user's different demands for cooling capacity and cooling efficiency, Climaveneta can meet variable cooling capacities with the same model by optimizing heat exchanger combination and controlling the compressor speed. Please consult with the Climaveneta office for more details.

Electric Parameters

TWM-T	Maximum			
	Compressor		Unit	
	F.L.I (kW)	F.L.A (A)	F.L.I (kW)	F.L.A (A)
R1	240	394	240	394
R1A1	85/240	140/394	325	534
R1C1	100/240	170/394	340	564
R1E1	124/240	206/394	364	600
R1C2	100x2/240	170x2/394	440	734
R1C1E1	100+124/240	170+206/394	464	770
R1E2	124x2/240	206x2/394	488	806
R2	240	394	480	788
R3	240	394	720	1182
R4	240	394	960	1576

F.L.I: Full load power input at max admissible condition

F.L.A: Full load current ampere at max admissible condition

Supply power 400V-3Ph-50Hz(60Hz)or 380V-3Ph-50Hz

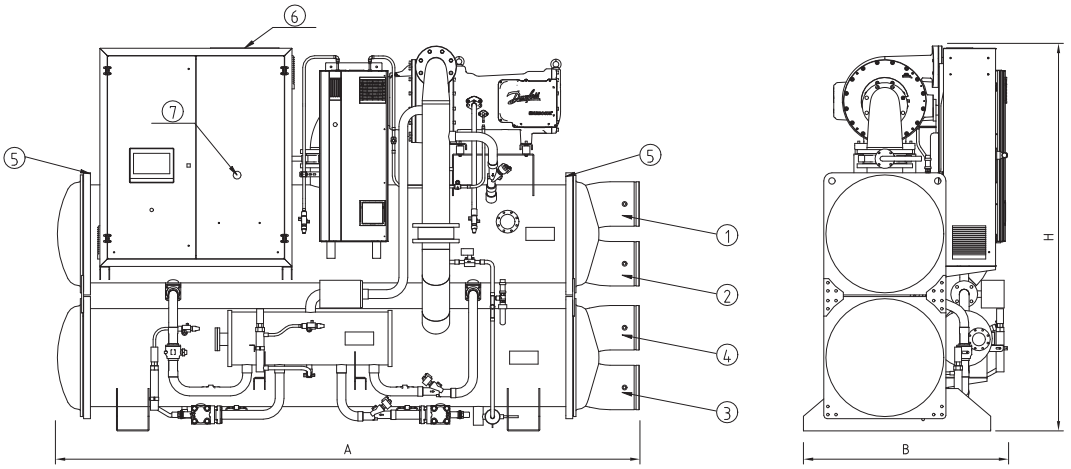
Range of voltage fluctuation: 10%

Range of voltage unbalance: 3%

The rated power and current are based on the rated working condition. The maximum data is the theoretical limit value. When making wiring and power distribution, the data in the table are as reference. The energy limit function shall be selected as option while the power supply is insufficient.

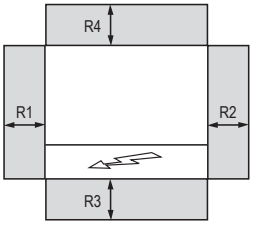
Dimension Drawing

TWM-TR1(350~450RT)



①Evaporator Inlet ②Evaporator Outlet ③Condenser Inlet ④Condenser Outlet
⑤Lifting Points ⑥Power Inlet ⑦Control cabinet

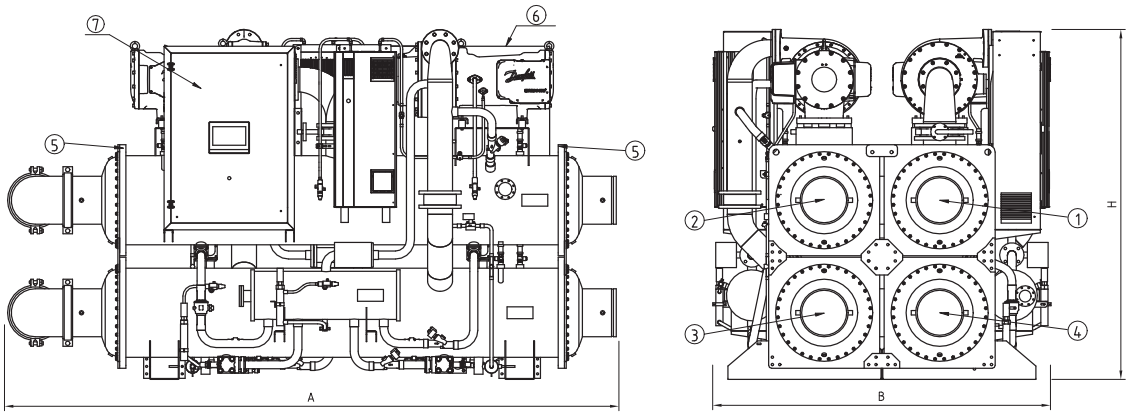
Please consult with Climaveneta office for detail drawing.



Minimum Clearance

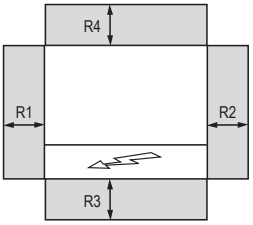
TWM-	A	B	H	Pipe Size		Minimum Clearance			
	(mm)	B(mm)	H(mm)	①/②	③/④	R1(mm)	R2(mm)	R3(mm)	R4(mm)
TR1-EH30BQ2-CH30BQ2-E	3590	1260	2380	10"	10"	2900	1000	900	500
TR1-EH35AQ2-CH35AQ2-E	3590	1260	2380	10"	10"	3000	1000	900	900
TR1-EH40AQ2-CH40AQ2-E	4090	1260	2380	10"	10"	3500	1000	900	900
TR1-EH40AQ2-CI40AQ2-E	4590	1260	2380	10"	10"	4000	1000	900	900
TR1-EI35AQ2-CH35AQ2-E	4520	1285	2480	10"	10"	4000	1000	900	900
TR1-EI35AQ2- CI35AQ2-E	4020	1285	2480	10"	10"	3500	1000	900	900
TR1-EI35AQ2-CL35AQ2-E	4020	1285	2480	10"	10"	3500	1000	900	900
TR1-EI40AQ2-CH40AQ2-E	4050	1315	2480	10"	10"	3500	1000	900	900
TR1-EI40AQ2-CI40AQ2-E	4520	1285	2480	10"	10"	4000	1000	900	900
TR1-EL35AQ2-CI35AQ2-E	4520	1285	2480	10"	10"	4000	1000	900	900
TR1-EL35AQ2-CL35AQ2-E	4050	1315	2480	10"	10"	3500	1000	900	900

TWM-TR2(600~950RT)



①Evaporator Inlet ②Evaporator Outlet ③Condenser Inlet ④Condenser Outlet
⑤Lifting Points ⑥Power Inlet ⑦Control cabinet

Please consult with Climaveneta office for detail drawing.

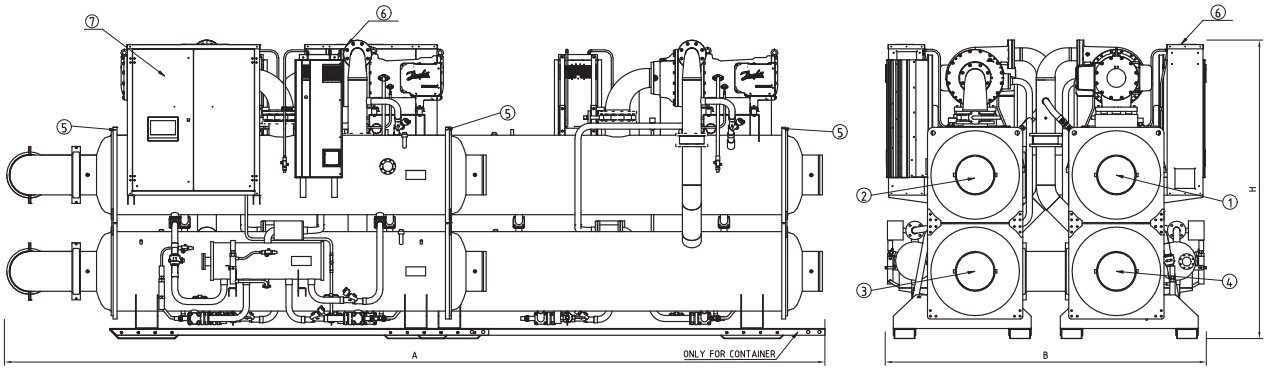


Minimum Clearance

TWM-	A	B	H	Pipe Size		Minimum Clearance			
	(mm)	B(mm)	H(mm)	①/②	③/④	R1(mm)	R2(mm)	R3(mm)	R4(mm)
TR2-EH30BQ1-CH30BQ1-E	4150	2300	2380	12"	12"	3000	1000	900	900
TR2-EH35AQ1-CH35AQ1-E	4650	2300	2380	12"	12"	3500	1000	900	900
TR2-EH35AQ1-CI35AQ1-E	4650	2400	2480	12"	12"	3500	1000	900	900
TR2-EH40AQ1-CH40AQ1-E	5150	2300	2380	12"	12"	4000	1000	900	900
TR2-EH40AQ1-CI40AQ1-E	5150	2400	2480	12"	12"	4000	1000	900	900
TR2-EI35AQ1-CH35AQ1-E	4650	2400	2480	12"	12"	3500	1000	900	900
TR2-EI35AQ1-CI35AQ1-E	4650	2400	2480	12"	12"	3500	1000	900	900
TR2-EI35AQ1-CL35AQ1-E	4670	2500	2580	12"	12"	3500	1000	900	900
TR2-EI40AQ1-CH40AQ1-E	5150	2400	2480	12"	12"	4000	1000	900	900
TR2-EI40AQ1-CI40AQ1-E	5150	2400	2480	12"	12"	4000	1000	900	900
TR2-EL35AQ1-CI35AQ1-E	4670	2500	2580	12"	12"	3500	1000	900	900
TR2-EL35AQ1-CL35AQ1-E	4670	2500	2580	12"	12"	3500	1000	900	900
4-TR2-EH30BQ1-CH30BQ1-2-E	4150	2300	2380	12"	12"	3000	1000	900	900

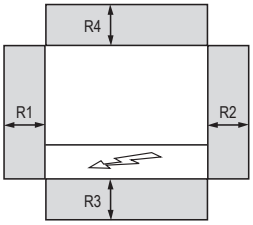
Dimension Drawing

TWM-TR3(950~1300RT)



①Evaporator Inlet ②Evaporator Outlet ③Condenser Inlet ④Condenser Outlet
⑤Lifting Points ⑥Power Inlet ⑦Control cabinet

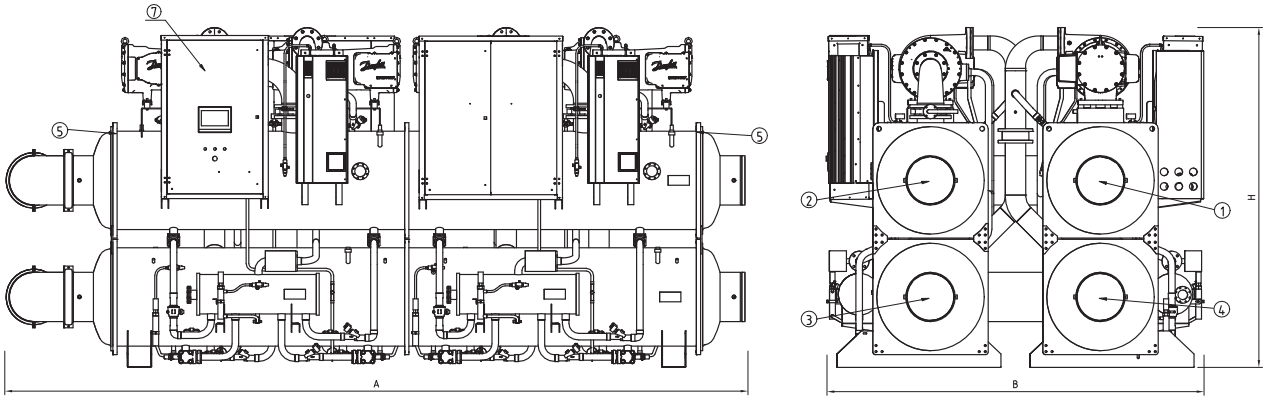
Please consult with Climaveneta office for detail drawing.



Minimum Clearance

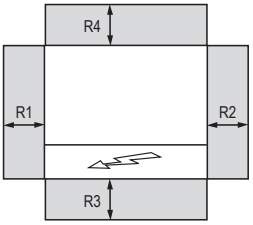
TWM-	A	B	H	Pipe Size		Minimum Clearance			
	(mm)	B(mm)	H(mm)	①/②	③/④	R1(mm)	R2(mm)	R3(mm)	R4(mm)
TR3-EL30AT1-CL30AT1-E	7320	2880	2580	14"	14"	6000	1000	900	900
TR3-EL30AT1-CM30AT1-E	7270	3070	2700	14"	16"	6000	1000	900	900
TR3-EM27AT1-CM27AT1-E	6685	3070	2700	16"	16"	5400	1000	900	900
TR3-EM30AT1-CL30AT1-E	7270	3070	2700	16"	14"	6000	1000	900	900
TR3-EM30AT1-CM30AT1-E	7270	3070	2700	16"	16"	6000	1000	900	900
TR3-EM30AT1-CN30AT1-E	7270	3100	2810	16"	16"	6000	1000	900	900
TR3-EN30AT1-CM30AT1-E	7270	3100	2810	16"	16"	6000	1000	900	900
TR3-EN30AT1-CN30AT1-E	7270	3100	2810	16"	16"	6000	1000	900	900
4-TR3-EL30AT1-CL30AT1-2-E	7320	2880	2580	14"	14"	6000	1000	900	900

TWM-TR4(1400~1800RT)



①Evaporator Inlet ②Evaporator Outlet ③Condenser Inlet ④Condenser Outlet
⑤Lifting Points ⑥Power Inlet ⑦Control cabinet

Please consult with Climaveneta office for detail drawing.

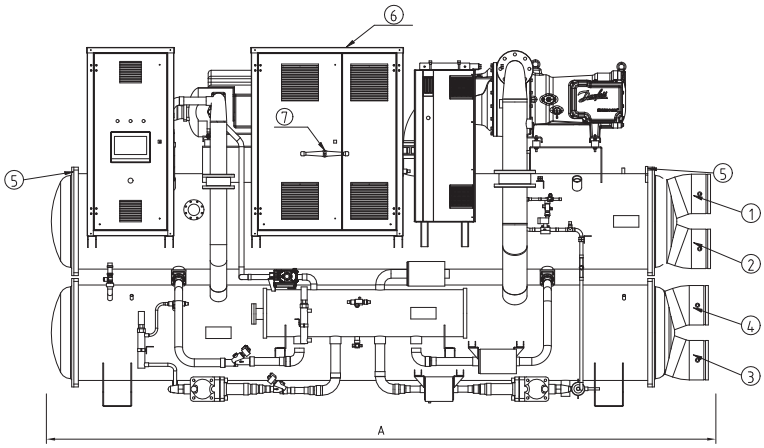


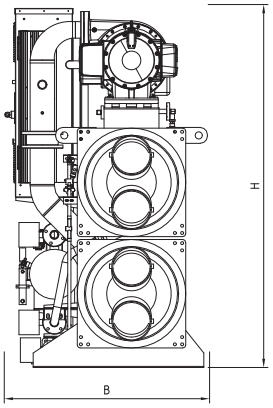
Minimum Clearance

TWM	A	B	H	Pipe Size		Minimum Clearance			
	(mm)	B(mm)	H(mm)	①/②	③/④	R1(mm)	R2(mm)	R3(mm)	R4(mm)
TR4-EM54AT1-CM54AT1-E	6680	3070	2690	16"	16"	5400	1000	900	900
TR4-EM54AT1-CN54AT1-E	6720	3120	2800	16"	16"	5400	1000	900	900
TR4-EN48AT1-CN48AT1-E	6120	3120	2800	16"	16"	4800	1000	900	900
TR4-EN54AT1-CM54AT1-E	6720	3120	2800	16"	16"	5400	1000	900	900
TR4-EN54AT1-CN54AT1-E	6720	3120	2800	16"	16"	5400	1000	900	900
TR4-EN60AT1-CN6OAT1-E	7320	3120	2800	16"	16"	6000	1000	900	900
4-TR4-EM54AT1-CM54AT1-2-E	6680	3070	2690	16"	16"	5400	1000	900	900

Dimension Drawing

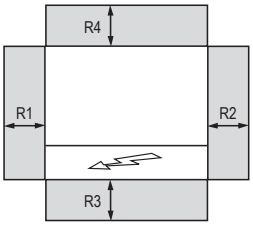
TWM-TR1X1(550～650RT)





①Evaporator Inlet ②Evaporator Outlet ③Condenser Inlet ④Condenser Outlet
⑤Lifting Points ⑥Power Inlet ⑦Control cabinet

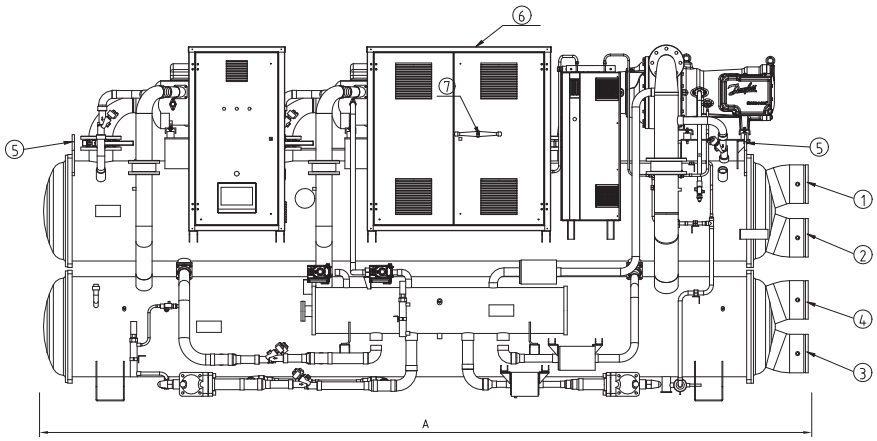
Please consult with Climaveneta office for detail drawing.

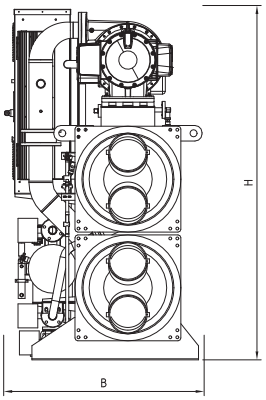


Minimum Clearance

TWM	A	B	H	Pipe Size		Minimum Clearance			
	(mm)	B(mm)	H(mm)	①/②	③/④	R1(mm)	R2(mm)	R3(mm)	R4(mm)
TR1A1-EI40AT2-CI40AT2-E	4630	1420	2510	10 "	10 "	4000	1000	900	500
TR1C1-EI40BT2-CI40BT2-E	4630	1420	2510	10 "	10 "	4000	1000	900	500
TR1E1-EL40AT2-CL40AT2-E	4630	1450	2540	10 "	10 "	4000	1000	900	500

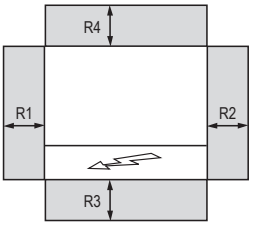
TWM-TR1C2(700RT)
TWM-TR1C1E1-EL48AT2-CL48AT2-E(750RT)





①Evaporator Inlet ②Evaporator Outlet ③Condenser Inlet ④Condenser Outlet
⑤Lifting Points ⑥Power Inlet ⑦Control cabinet

Please consult with Climaveneta office for detail drawing.

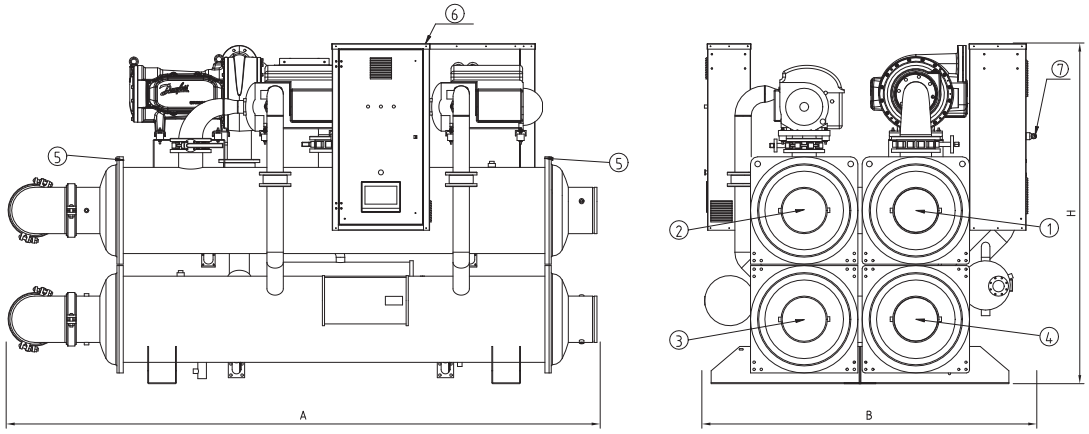


Minimum Clearance

TWM	A	B	H	Pipe Size		Minimum Clearance			
	(mm)	B(mm)	H(mm)	①/②	③/④	R1(mm)	R2(mm)	R3(mm)	R4(mm)
TR1C2-EI48BT2-CI48BT2-E	5470	1420	2510	10 "	10 "	4800	1000	900	500
TR1C1E1-EL48AT2-CL48AT2-E	5470	1450	2540	12 "	12 "	4800	1000	900	500

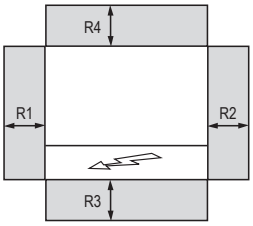
Dimension Drawing

TWM-TR1C1E1-EH30BQ1-CH30BQ1-E(800RT)
TWM-TR1E2(850TR)



①Evaporator Inlet ②Evaporator Outlet ③Condenser Inlet ④Condenser Outlet
⑤Lifting Points ⑥Power Inlet ⑦Control cabinet

Please consult with Climaveneta office for detail drawing.



Minimum Clearance

TWM	A	B	H	Pipe Size		Minimum Clearance			
	(mm)	B(mm)	H(mm)	①/②	③/④	R1(mm)	R2(mm)	R3(mm)	R4(mm)
TR1C1E1-EH30BQ1-CH30BQ1-E	4150	2340	2380	12 "	12 "	3000	1000	900	900
TR1E2-EH30BQ1-CH30BQ1-E	4150	2340	2380	12 "	12 "	3000	1000	900	900

CLIMAVENETA

Global Headquarter
Mitsubishi Electric Hydronics & IT Cooling Systems S.p.A.
36061 BASSANO DEL GRAPPA (VICENZA) ITALIA - VIA SARSON 57/C
TEL: +39 / 0424 509 500 (r.a.) FAX: +39 / 0424 509 509
E-mail: https://www.melcohit.com

Asia Pacific Headquarter
Climaveneta Chat Union Refrigeration Equipment (Shanghai) CO., LTD
NO. 88 BAIYUN ROAD XINGHUO DEVELOPING ZONE, SHANGHAI, CHINA
TEL: +86-21-57505566 FAX: +86-21-57505797
E-mail: http://www.climaveneta.com.cn

Hongkong Branch
ROOM 2003, CCT TELECOM BUILDING, 11 WO SHING STREET, FOTAN, SHATIN, N.T., HONGKONG
TEL: +852-26871755 FAX: +85-2-26873078
Website: https://www.jinchat.com

Vietnam Branch
6th floor, Room 6.6B, Etown 2, 364 Cong Hoa, Ward 13, Tan Binh Dist, Ho Chi Minh, Vietnam
TEL: 08-6262-9966 Fax: 08-6262-9977
Website: https://www.climaveneta.com.cn

Malaysia Branch
A-4-3, GARDEN SHOPPE ONE CITY, JALAN USJ 25/1, 47650 SUBANG JAYA, SELANGOR DARUL EHSAN
TEL: +603 8081 8558 FAX: +603 8081 9558
Website: https://www.jinchat.com

Myanmar Branch
ROOM 501, 5TH FLOOR, SALOMON BUSINESS CENTER, NO 244/A, U WISARA ROAD, BAHAN TOWNSHIP, YANGON
Tel: +951535098 Ext: 501
Website: https://www.climaveneta.com.cn

All specification and data are subject to change without notice

B254 CCU/01-12-2024EN-SH