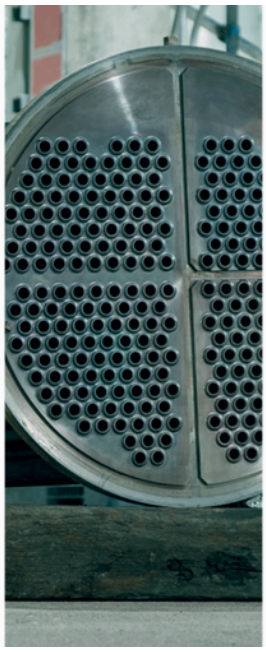
THERMAL IQ
2/8 GUNYA STREET
REGENTS PARKS NSW 2143

(02) 8710 8106

SHELL & TUBE HEAT EXCHNAGERS

Australian Engineering Expertise, Backed by Global Capability





The principles at Thermal IQ have been at the forefront of providing innovative HVAC solutions across Australia and Southeast Asia dating back to 1946, now with more than six decades of combined experience. Our family is one of the founders of the Australian HVAC manufacturing industry with our roots being in cooling for the rail industry.

While much of the HVAC and heat transfer industry has moved away from OEM manufacturing in Australia, Thermal IQ remains committed to local manufacturing and engineering excellence. By maintaining domestic manufacturing capabilities, we preserve critical industry expertise, provide reliable technical support, and respond quickly to our customers' unique requirements.

Built on a strong foundation in heat exchangers and industrial chillers, Thermal IQ is expanding its product and service offering to include:

- **Heat Pumps**
- **Thermal Storage Tanks**
- **Heat Transfer Systems**
- **Engineered Process Cooling Solutions**

This expansion positions us to support the growing electrification of industrial and commercial water heating systems, delivering efficient and sustainable thermal solutions for the future.

MADE IN AUSTRALIA

THERMAL IQ is a Thermex Solutions business

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Global Manufacturing Partnerships

Thermal IQ has partnered with Mammoth and RVG, internationally recognised HVAC manufacturers with extensive operations across the United States and China. These partnerships enable us to combine local engineering knowledge with world-class manufacturing capabilities.

With access to a global supply network, Thermal IQ delivers high-performance, engineered HVAC and heat transfer solutions that meet the demands of modern industry.

Mammoth HVAC Systems

Mammoth is a leading manufacturer of complete HVAC packaged systems, known globally for its engineering expertise, product reliability, and commitment to energy efficiency.

Every product is supported by:

- **Precision engineering**
- **Rigorous quality assurance**
- **Robust supply chain management**
- **Proven manufacturing processes**
- **More than 30 years of combined industry experience**



Heat exchanger for a dual-circuit screw chiller

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Heat Exchanger Engineering & Supply

At Thermal IQ, we recognise that no two heat exchangers are the same. Our engineering, manufacturing, and supply processes are designed to minimise lead times from initial specification through to delivery.

By integrating technical expertise with an agile supply chain, we deliver tailored heat transfer solutions quickly and efficiently.
Engineering & Technical Support Services

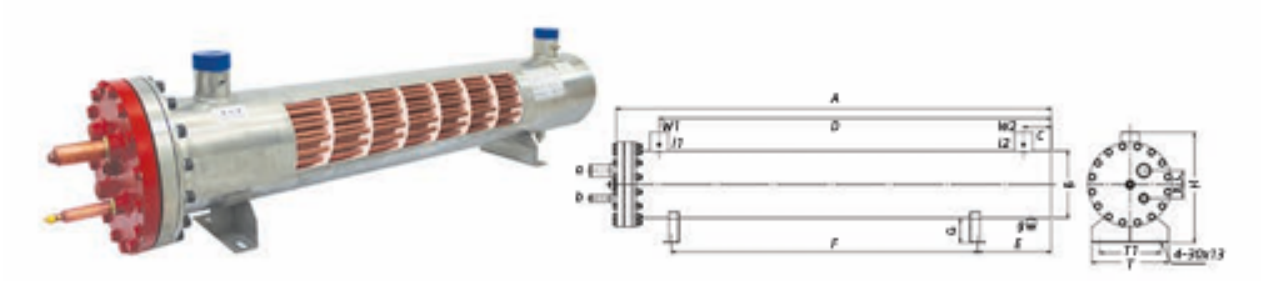
In addition to equipment supply, we offer:

- **3D and 2D CAD Design Support**
- **Heat Exchanger Selection & Software Assistance**
- **Thermal and Heat Transfer Calculations**

- **Custom Skid Packages including:**

- *Pumps*
- *Controls*
- *Thermal Storage Tanks*
- *Integrated Heat Transfer Equipment*

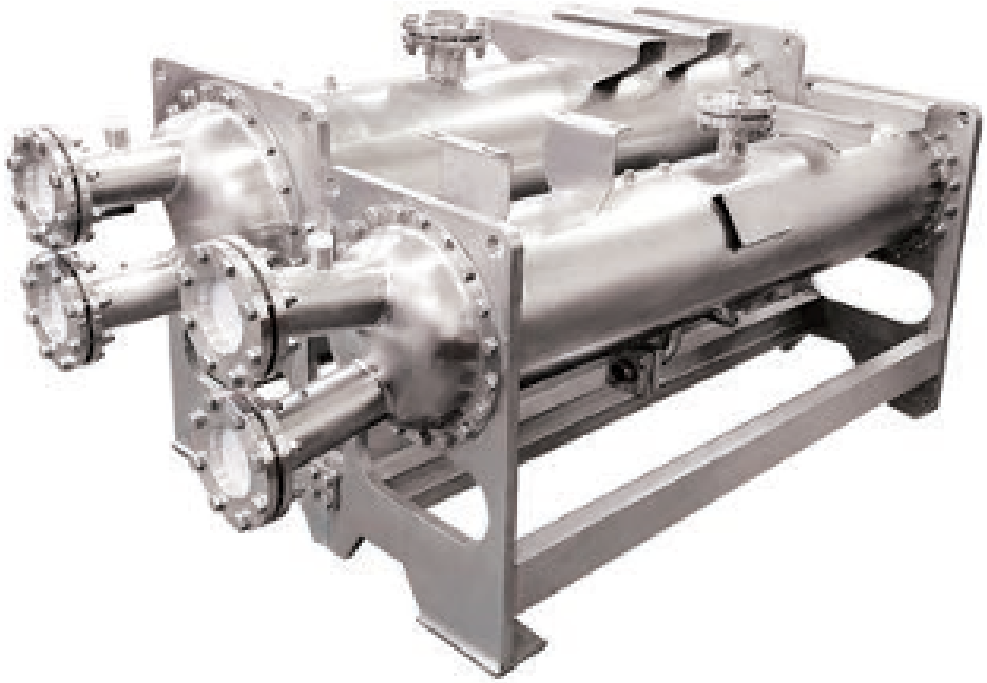
Whether supporting OEM manufacturers, contractors, consultants, or end users, Thermal IQ provides the technical expertise and engineering support required to deliver reliable, efficient, and sustainable thermal solutions.



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THERMAL IQ
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We understand that every heat exchanger is different, so we have geared our supply chain to ensure the time from specification to engineering to supply is as short as possible.

We also can supply:

- **CAD support – 3D and 2D**
- **Heat exchanger software support**
- **Heat transfer calculations**
- **Skid with pump, control, storage tanks**

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GENERAL INFORMATION

From looking at the nomenclature below, it's clear the solution we can offer

CONDENSER

RVST	*C*	*kW*	*No. Circuits*	*Cylinder Spec's*	*AL – Tube material*
Serial #	C - water cooled MC – Sea water OC – Oil cooled	350	A – single circuit B – Twin C- Three D – Four		Al – Aluminum Ni – Nickel

EVAPORATOR

RVST	*EU*	*kW*	*No. Circuits*	*Cylinder Spec's*	*AL – Tube material*
Serial #	EU- dry type FE – flooded ME – falling film	350	A – single circuit B – Twin C- Three D – Four		Al – Aluminum Ni – Nickel

WATER to WATER

RVST	*EU*	*kW*	*No. Circuits*	*Cylinder Spec's*
Serial #	RC – water to water	350	A – no phase change B – with phase change C- Three D – Four	



Flooded-Type Heat Exchanger



Heat exchanger for a dual-circuit screw chiller

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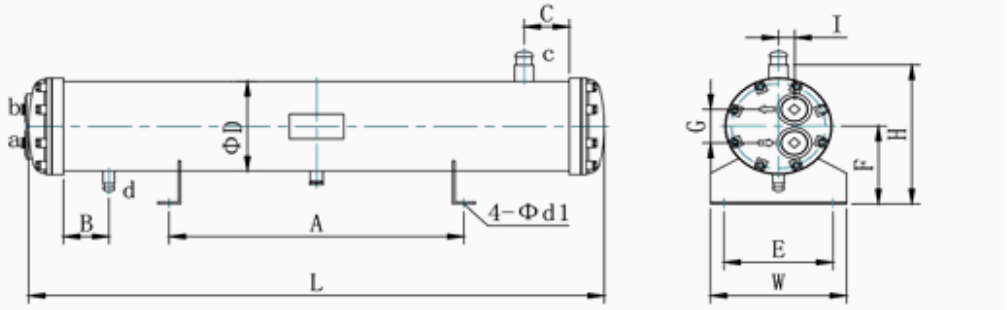
TECHNICAL DATA

SINGLE CIRCUIT CONDENSOR SERIES

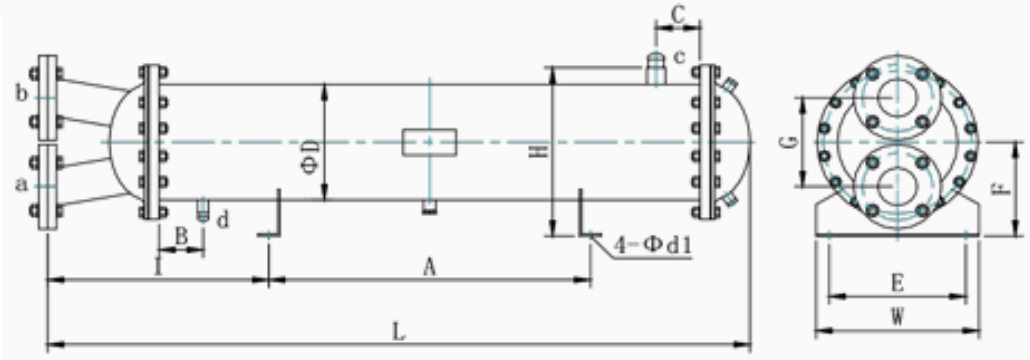
Model	Cooling Capacity		External Dimension mm												Nozzle Size		
	kW	kcal/h	L	W	H	A	B	C	D	E	F	G	I	d1	a,b	c	d
RVST-C12A	12	10320	931	170	227	690	60	60	127	110	124	46	23	13	Rc3/4	22	16
RVST-C15A	15	12900	931	170	227	690	60	60	127	110	124	46	23	13	Rc3/4	22	16
RVST-C20A	20	17200	941	210	259	690	60	60	159	150	140	60	27	13	Rc3/4	22	16
RVST-C25A	25	21500	1094	210	259	810	70	70	159	150	140	60	27	13	Rc3/4	22	16
RVST-C30A	30	25800	1124	290	319	810	70	70	219	230	170	82	35	18	Rc1	22	16
RVST-C40A	40	34400	1378	290	319	1010	85	85	219	230	170	82	35	18	Rc1	22	16
RVST-C50A	50	43000	1378	290	319	1010	85	85	219	230	170	82	35	18	Rc11/2	22	16
RVST-C60A	60	51600	1632	290	319	1210	105	105	219	230	170	82	35	18	Rc11/2	35	19
RVST-C80A	80	68800	1632	290	319	1210	105	105	219	230	170	82	35	18	Rc11/2	35	19
RVST-C100A	100	86000	1632	290	319	1210	105	105	219	230	170	82	35	18	Rc2	42	22
RVST-C120A	120	103200	1886	290	319	1420	120	120	219	230	170	82	35	18	Rc2	42	22
RVST-C150A	150	129000	1886	290	319	1420	120	120	219	230	170	82	35	18	Rc21/2	42	28
RVST-C200A	200	172000	2131	330	345	1620	140	140	245	270	183	98	47	18	Rc21/2	54	28
RVST-C250A	250	215000	2131	350	373	1620	140	140	273	290	197	101	50	18	Rc3	54	28
RVST-C300A	300	258000	2131	350	373	1620	140	140	273	290	197	101	50	18	Rc3	54	28
RVST-C400A	400	344000	2688	420	420	1820	160	160	325	340	243	250	553	18	DN100	67	35
RVST-C500A	500	430000	2688	420	420	1820	160	160	325	340	243	270	553	18	DN125	67	35
RVST-C600A	600	516000	2996	420	490	2070	180	180	325	340	243	270	582	18	DN125	80	42
RVST-C800A	800	688000	3039	490	520	2070	180	180	377	410	269	300	612	18	DN150	80	42
RVST-C1000A	1000	860000	3286	520	550	2250	195	195	406	440	283	300	647	22	DN150	108	42
RVST-C1250A	1250	1075000	3481	550	420	2400	210	210	426	470	293	380	672	22	DN200	108	42

1. (Condensing Temperature) 40°C, (Inlet Water Temperature) 30°C, (Cooling Capacity at Water Outlet Temperature of 35°C)

DIAGRAM



RVST-C12A ~ RVST-C300A



RVST-C400A ~ RVST-C1250A

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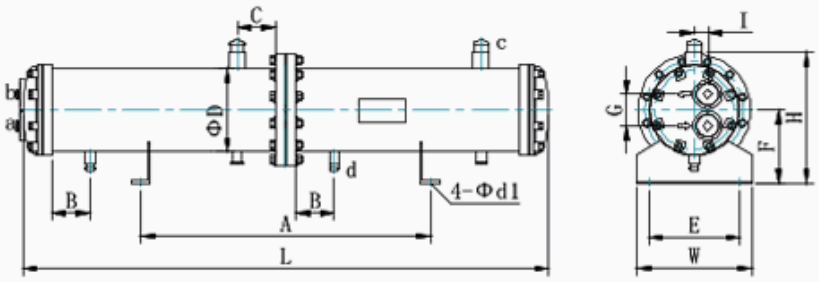
TECHNICAL DATA

TWIN CIRCUIT CONDENSER SERIES

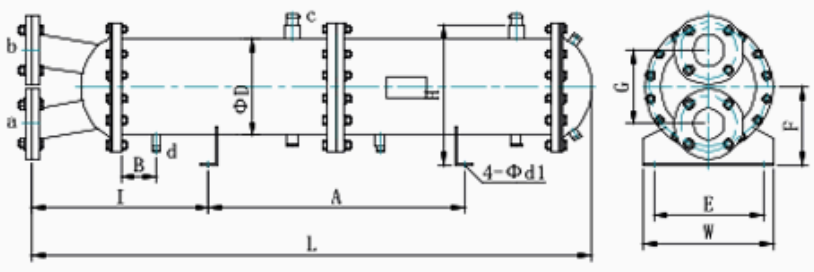
Model	Cooling Capacity		External Dimension mm												Nozzle Size		
	kW	kcal/h	L	W	H	A	B	C	D	E	F	G	I	d1	a,b	c	d
RVST-C25B	25	21500	1342	170	227	820	60	60	127	110	124	46	23	13	Rc1	22	16
RVST-C30B	30	25800	1352	210	259	820	60	60	159	150	140	60	27	13	Rc1	22	16
RVST-C40B	40	34400	1808	210	259	1120	60	60	159	150	140	60	27	13	Rc1	22	16
RVST-C50B	50	43000	1808	210	259	1120	60	60	159	150	140	60	27	13	Rc1-1.2	22	16
RVST-C60B	60	51600	1808	210	259	1120	60	60	159	150	140	60	27	13	Rc1-1.2	22	16
RVST-C80B	80	68800	1838	290	319	1120	60	60	219	230	170	82	35	18	Rc1-1.2	35	16
RVST-C100B	100	86000	2144	290	319	1320	70	70	219	230	170	82	35	18	Rc2	35	16
RVST-C120B	120	103200	2144	290	319	1320	70	70	219	230	170	82	35	18	Rc2	35	19
RVST-C150B	150	129000	2144	290	319	1320	70	70	219	230	170	82	35	18	Rc2-1.2	42	19
RVST-C200B	200	172000	2135	330	345	1320	70	70	245	270	183	98	47	18	Rc2-1.2	42	22
RVST-C250B	250	215000	2135	350	373	1320	70	70	273	290	197	101	50	18	Rc3	42	22
RVST-C300B	300	258000	3151	330	345	1980	105	105	245	270	183	98	47	18	Rc3	42	28
RVST-C400B	400	344000	3151	350	373	1980	105	105	273	290	197	250	836	18	DN100	54	28
RVST-C500B	500	430000	3052	420	445	1980	105	105	325	360	243	270	856	18	DN125	54	28
RVST-C600B	600	516000	3052	420	445	1980	105	105	325	360	243	270	856	18	DN125	54	28
RVST-C800B	800	688000	3052	460	476	1980	105	105	356	400	258	300	876	18	DN150	67	35
RVST-C1000B	1000	860000	3560	490	497	2310	120	120	377	430	269	300	975	18	DN150	67	35
RVST-C1250B	1250	1075000	3560	520	526	2310	120	120	406	460	283	380	985	22	DN200	80	42

1. (Condensing Temperature) 40°C, (Inlet Water Temperature) 30°C, (Cooling Capacity at Water Outlet Temperature of 35°C)

DIAGRAM



RVST-C25B - RVST-C300B



RVST-C400B - RVST-C1250B

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2/8 GUNYA STREET
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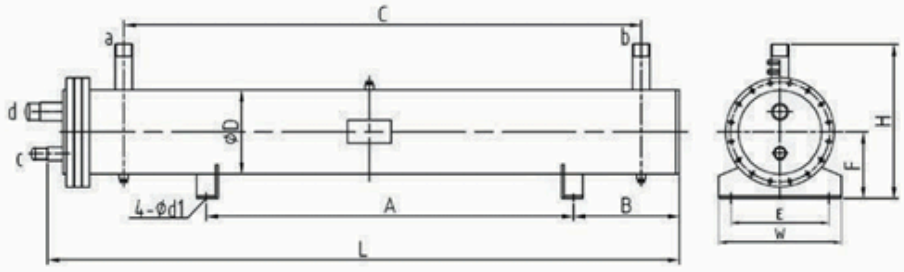
TECHNICAL DATA

SINGLE CIRCUIT U-TYPE EVAPORATOR SERIES

Model	Cooling Capacity			External Dimension mm										Nozzle Size		
	kW	RT	kcal/h	L	W	H	A	B	C	D	E	F	d1	a,b	c	d
RVST-EU10A	10	2.84	8600	1130	180	350	690	186	780	140	120	130	13	Rc 3/4	22	28
RVST-EU12.5A	12.5	3.56	10750	1130	180	350	690	186	780	140	120	130	13	Rc 3/4	22	28
RVST-EU16A	16	4.55	13760	1200	220	364	690	186	830	168	160	144	13	Rc 3/4	22	28
RVST-EU20A	20	5.69	17200	1380	220	364	810	203	1000	168	160	144	13	Rc 3/4	22	28
RVST-EU25A	25	7.11	21500	1380	220	364	810	203	1000	168	160	144	13	Rc 1	22	28
RVST-EU32A	32	9.1	27520	1630	220	364	1010	230	1250	168	160	144	13	Rc 1	22	35
RVST-EU40A	40	11.4	34400	1630	290	440	1010	230	1240	219	230	170	18	Rc 1-1/2	22	35
RVST-EU50A	50	14.2	43000	1890	290	440	1210	257	1530	219	230	170	18	Rc 1-1/2	22	35
RVST-EU63A	63	17.9	54180	1890	290	440	1210	257	1530	219	230	170	18	Rc 1-1/2	28	42
RVST-EU80A	80	22.8	68800	1840	330	463	1210	257	1520	245	270	183	18	Rc 2	28	42
RVST-EU100A	100	28.4	86000	2140	330	463	1420	279	1770	245	270	183	18	Rc 2	28	42
RVST-EU125A	125	35.6	107500	2140	350	497	1420	279	1770	273	290	197	18	Rc 2	28	54
RVST-EU160A	160	45.5	137600	2390	350	497	1620	306	1980	273	290	197	18	Rc 2-1/2	28	54
RVST-EU200A	200	56.9	172000	2390	420	563	1620	306	2170	325	360	243	18	Rc 2-1/2	28	54

1. (Evaporation Temperature) 2°C, (Ilet Water Temperature) 12°C, (Cooling Capacity at water outlet temperature of 7°C)

DIAGRAM



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2/8 GUNYA STREET
REGENTS PARKS NSW 2143

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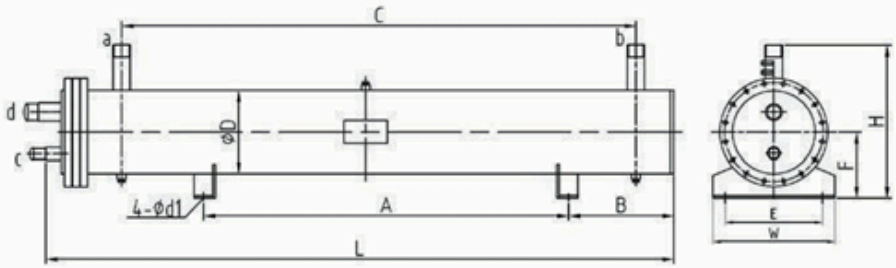
TECHNICAL DATA

SINGLE CIRCUIT U-TYPE EVAPORATOR SERIES

Model	Cooling Capacity			External Dimension mm										Nozzle Size		
	kW	RT	kcal/h	L	W	H	A	B	C	D	E	F	d1	a,b	c	d
RVST-EU10A	10	2.84	8600	1130	180	350	690	186	780	140	120	130	13	Rc 3/4	22	28
RVST-EU12.5A	12.5	3.56	10750	1130	180	350	690	186	780	140	120	130	13	Rc 3/4	22	28
RVST-EU16A	16	4.55	13760	1200	220	364	690	186	830	168	160	144	13	Rc 3/4	22	28
RVST-EU20A	20	5.69	17200	1380	220	364	810	203	1000	168	160	144	13	Rc 3/4	22	28
RVST-EU25A	25	7.11	21500	1380	220	364	810	203	1000	168	160	144	13	Rc 1	22	28
RVST-EU32A	32	9.1	27520	1630	220	364	1010	230	1250	168	160	144	13	Rc 1	22	35
RVST-EU40A	40	11.4	34400	1630	290	440	1010	230	1240	219	230	170	18	Rc 1-1/2	22	35
RVST-EU50A	50	14.2	43000	1890	290	440	1210	257	1530	219	230	170	18	Rc 1-1/2	22	35
RVST-EU63A	63	17.9	54180	1890	290	440	1210	257	1530	219	230	170	18	Rc 1-1/2	28	42
RVST-EU80A	80	22.8	68800	1840	330	463	1210	257	1520	245	270	183	18	Rc 2	28	42
RVST-EU100A	100	28.4	86000	2140	330	463	1420	279	1770	245	270	183	18	Rc 2	28	42
RVST-EU125A	125	35.6	107500	2140	350	497	1420	279	1770	273	290	197	18	Rc 2	28	54
RVST-EU160A	160	45.5	137600	2390	350	497	1620	306	1980	273	290	197	18	Rc 2-1/2	28	54
RVST-EU200A	200	56.9	172000	2390	420	563	1620	306	2170	325	360	243	18	Rc 2-1/2	28	54

1. (Evaporation Temperature) 2°C, (Ilet Water Temperature) 12°C, (Cooling Capacity at water outlet temperature of 7°C)

DIAGRAM



THERMAL IQ
2/8 GUNYA STREET
REGENTS PARKS NSW 2143

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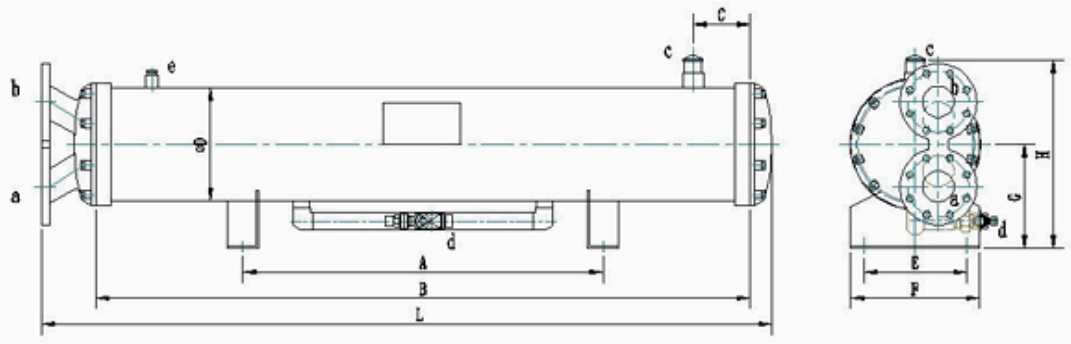
TECHNICAL DATA

SEAWATER CONDENSER SERIES

Model	Compressor KW	External Dimension mm									Nozzle Size			
		A	B	C	D	E	F	G	H	L	a/b	c	d	e
RVST-MC9.2A4AL	3P	450	630	100	127	330	270	200	410	810	DN40	3/4	3/8	NPT3/8
RVST-MC15A5AL	5P	600	860	100	159	330	270	200	410	1040	DN40	3/4	1/2	NPT3/8
RVST-MC21.5A5AL	8P	600	860	100	159	330	270	200	410	1040	DN40	1	5/8	NPT3/8
RVST-MC27.5A5AL	10P	700	940	150	159	330	270	200	410	1120	DN40	1	5/8	NPT3/8
RVST-MC41A8AL	15P	700	940	150	219	330	270	200	410	1120	DN40	1-1/8	3/4	NPT3/8
RVST-MC52A8AL	20P	700	940	150	219	330	270	200	410	1120	DN40	1-1/8	3/4	NPT3/8
RVST-MC65A8AL	25P	800	1090	180	219	330	270	200	410	1270	DN40	1-5/8	3/4	NPT3/8
RVST-MC86A10AL	30P	800	1090	180	273	330	270	230	470	1340	DN65	1-5/8	7/8	NPT3/8
RVST-MC109A10AL	40P	800	1270	200	273	330	270	230	470	1520	DN65	1-5/8	1-1/8	NPT3/8
RVST-MC136A10AL	50P	1000	1520	200	273	330	270	230	470	1770	DN65	2-1/8	1-1/8	NPT3/8
RVST-MC160A10AL	60P	1000	1780	200	273	330	270	230	470	2030	DN65	2-1/8	1-1/8	NPT3/8
RVST-MC184.5A10AL	70P	1500	2030	200	273	330	270	230	470	2280	DN65	2-1/8	1-1/8	NPT3/8
RVST-MC210A10AL	80P	1500	2280	200	273	330	270	230	470	2530	DN65	2-1/8	1-1/8	NPT3/8
RVST-MC235A10AL	90P	1800	2590	250	273	330	270	230	470	2840	DN65	2-1/8	1-1/8	NPT3/8

1. Compressor Nominal Working Condition: Condensation Temperature =40°C, Evaporation Temperature = - 5°C

DIAGRAM



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INDUSTRIES SERVED

- HVAC AND R
- POWER GENERATION
- MARINE
- PROCESS APPLICATIONS
- FOOD PREP
- RENEWABLE ENERGY
- DATA CENTRES

THERMAL IQ PRODUCTS/ SERVICES

- General engineering support and HX sizing
- Pump and transfer skids
- Buffer tanks
- CAD support
- High temperature CO2 heat pumps
- Hot water heat pumps
- Chillers
- Swimming pool heat pumps
- HX Service and repair

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CONTACT

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