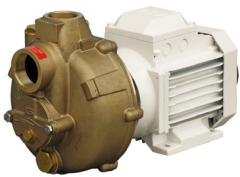
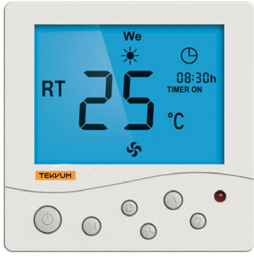


TEKVUM

Marine HVAC Solutions Catalog

2018



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Klemsan

GIANNESCHI
pumps and blowers

MENNEKES
Plugs for the world

WATTS
WATER TECHNOLOGIES

NICOTRA | Gebhardt

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ONURFIX

About Us

TEKVUM is a technology company which was founded in 2016 in İzmir / Bornova to operate in HVAC, working on cooling and ventilation areas. We have 25 years of experience in working areas.

With innovation and R & D,

With its modern, technological and harmless products,

With an understanding of open quality in development and continuous improvement,

It is our goal to pass on a life to an organization that is a solution partner in special projects.

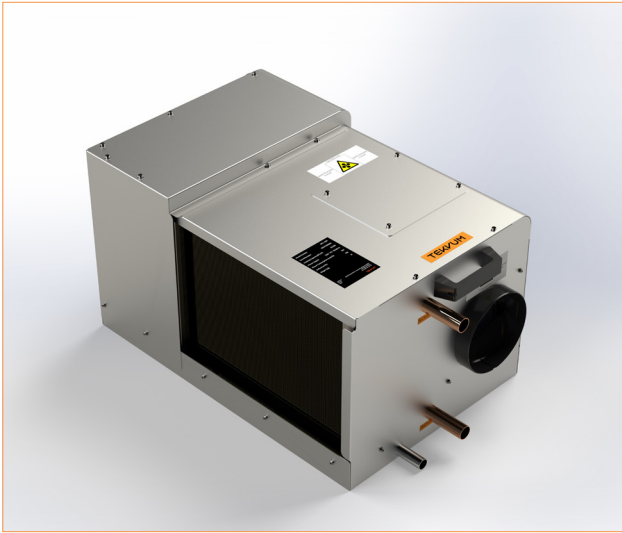
With entrepreneurship within us, we value dynamism, innovation and creativity in all our business processes.

Human; our the most important capital.

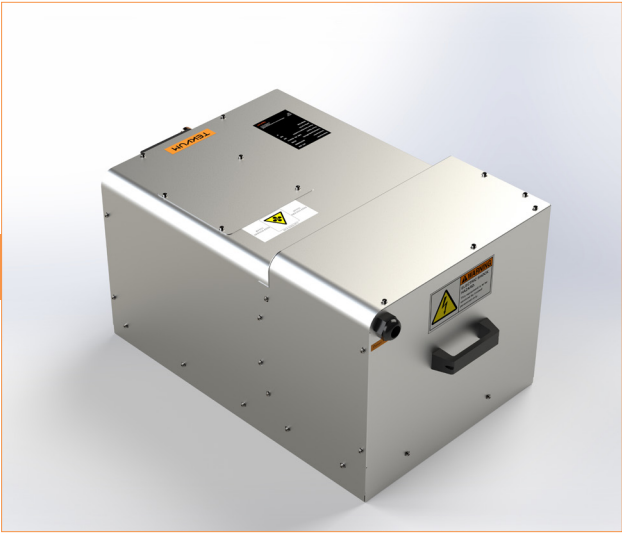
We realize that our employees are the biggest guarantees of our quality of products and services when we reach our targets.

We continue to pioneer innovative research and development on:

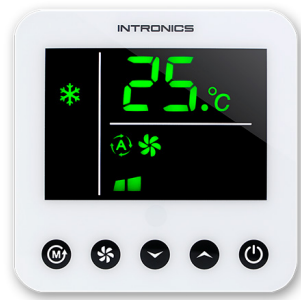
- Self Contained small area A/C (SCM series)
- Integrated Self Contained fresh air A/C (ICU series)
- Integrated Self contained central A/C unit (IDU series)
- Air handler unit (MFC-Q series)
- Air handler unit, vertical and hrizontel (MFC-ST series)
- Chillers (MCU series)
- Custom chillers that meet shock, noise and EMI (Electro-Magnetic Interference) standards
- Shock-resistant and vibration-compliant systems
- Reverse cycle “Heat Pump”
- Refrigeration Condensing Units (Split Unit)
- Refrigeration Installations
- Radar Cooling Units and Central Station Units
- Electronic equipment cooling systems
- Mobile tent A/C units



SCM-20



- SCM series are designed for marine as a self-contained unit.
- Cu/Al gold epoxy coil to resist the saline air.
- The unit has a stainless steel slop drip tray with extra depth.
- Quiet operation.
- Duct or plenum connections.
- The fan housing designed to rotate between 0-90 degrees.
- High quality finished stainless steel material.
- Fully enclosed cabinets.
- R410 A and R134A refrigerant.
- Washable flat filter.
- Custom design and production©



Control Unit



Sea Water Pump



Sea Water Pump

Model		SCM Marine Self Contained Air Conditioning System Technical Details						
Model Number		SCM-04	SCM-08	SCM-10	SCM-12	SCM-16	SCM-20	SCM-24
Cooling Capacity (Btu/h)		3600	7500	9500	12800	16200	19800	24500
Heating Capacity (Btu/h)		4000	7600	9700	13500	17200	21000	27000
Power Consumption (Watt)		506	638	836	1034	1430	1804	2310
Working Current (A)		2.3	2.9	3.8	4.7	6.5	8.2	10.5
Air Duct Size (mm)		100	125	125	150	150	185	205
Refrigerant		134A-410A						
Dimensions (mm)	Height	235	290	290	313	345	345	395
	Length	450	500	500	550	600	620	700
	Width	250	318	318	318	350	420	420
Weigth (kg)		22	27	29	30	38	48	50
Air Flow (m³/h)		200	270	380	450	600	850	1050
Water Flow (lt/min)		8	10	11	13	15	19	22
Cooling		19.5 °C / 27 °C (WT-DT) external conditions: 30 °C						
Heating		16 °C / 22 °C (WT-DT) external conditions: 8 °C						



SCM-04



SCM-12

•All technic values have given according to 50 Hz

- ICU series are self-contained marine designed air conditioners.
- High-quality finished, shock-resistant and vibration-compliant.
- Cooling capacity range from 15.600 Btu/h to 48.000 Btu/h
- Standard refrigerant R134A or R410A
- Duct or Plenum connections.
- Danfoss programable air temperature controller.
- A standard range of units for 3 x 400V / 50 Hz or 3 x 440V/ 60Hz for seawater.
- HP / LP manometers.
- Cleanable coaxial condenser with Cu/Ni tubes for seawater.
- Cu/Al gold epoxy coil to resist the saline air is standard.
- A washable flat filter is located in front of the air coil.
- The unit has a stainless steel slop drip tray with extra depth.
- The unit has a centrifugal fan with an IP55 motor. Resiliently mounted fans with low static pressure are used to ensure an extra-low noise level when a plenum is fitted.
- For duct connections, a high-pressure fan is used.
- Fan motor blower are mounted on a common frame.
- Custom design and production©

General Using Areas:

- Radar Cooling Units and as a Central Station Unit (CSU)
- Electronic equipment cooling



ICU-30



Sea Water Pump



Sea Water Pump



Control Unit

Model		ICU Integrated Self Contained Marine Air Conditioning System								
Model Number		ICU-16	ICU-20	ICU-24	ICU-27	ICU-30	ICU-33	ICU-36	ICU-40	ICU-50
Cooling Capacity (Btu/h)		15600	19700	22500	26500	29000	32500	36000	42000	48000
Power Consumption(Watt)		1500	1780	1900	2100	2360	3200	3350	3700	4300
Power Supply		230 V - 1 Ph - 50/60 Hz				380-440 V - 3 Ph - 50/60 Hz				
Air Flow (m³/h)		600	800	1000	1250	1650	2250	3000	3200	3700
Air Outlet Diameter (mm)		232x100	276x100	185	185	185	185	2x185	2x185	2x185
Static Pressure (pascal)		400	400	450	450	500	500	700	700	700
Sea Water Flow (m³/h)		1.20	1.50	1.80	1.92	2.4	2.4	2.56	3	3
Refrigerant		134A - 407C								
Dimensions (mm)	Height	900	900	990	1100	1300	1300	1470	1470	1470
	Length	400	400	400	400	500	500	500	600	600
	Width	375	375	375	375	425	425	475	475	475
Weight (kg)		76	80	94	97	113	119	134	145	158
Cooling		19.5 °C / 27 °C (WT-DT) external conditions: 35 °C								

- All technic values have given according to 50 Hz

- IDU series are self-contained air conditioners that designed for marine.
- High-quality finished, shock-resistant and vibration-compliant equipment.
- Cooling capacity ranging from 36000 Btu/h to 180.000 Btu/h.
- Standard refrigerant R134A or R407C
- Duct or Plenum connections.
- Danfoss programable air temperature controller.
- The standard range of units 3x400/440V - 50/60 Hz for seawater.
- HP/LP manometers.
- Cleanable shell & tube condenser with Cu/Ni tubes for seawater.
- Cu/Al gold epoxy coils to resist the saline air as standard.
- A washable flat filter is located in front of the air coil.
- The unit has a stainless steel slop drip tray with extra depth.
- The unit has a centrifugal fan with an IP55 motor.
- For duct connections, a high-pressure fan was used.
- Fan motor blower is mounted on a common frame.
- Custom design and production©



IDU-20



Sea Water Pump



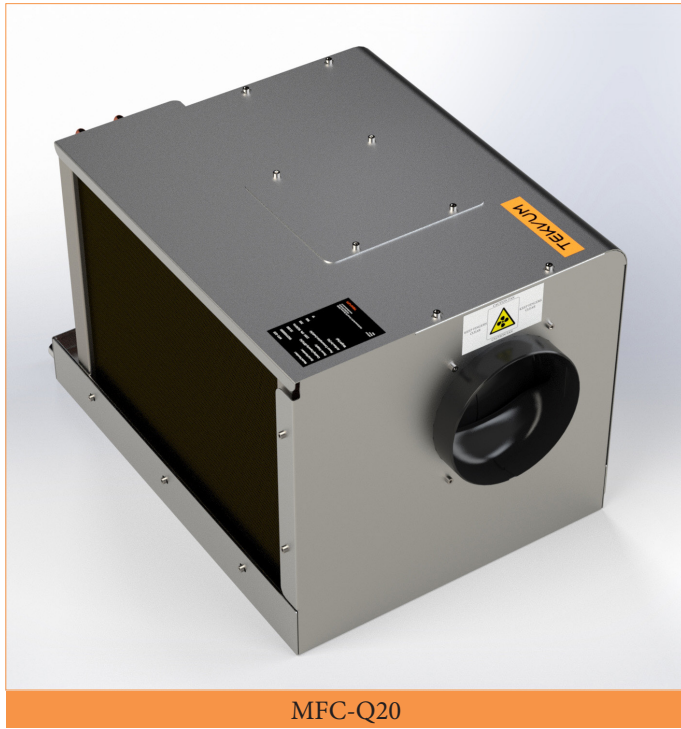
Fresh Air Damper



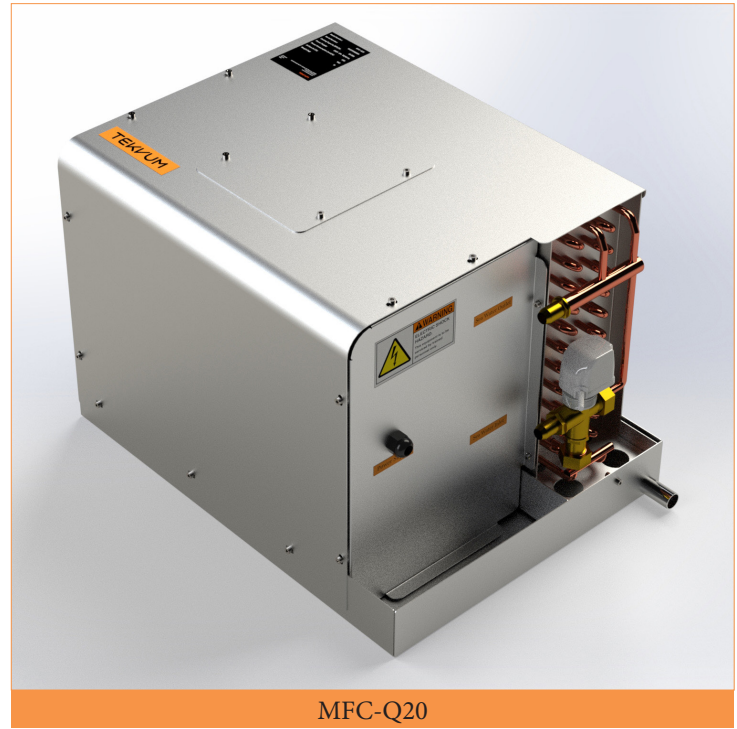
Control Unit

Model		IDU Self Contained Marine Air Conditioned System							
Model Number		IDU-36	IDU-50	IDU-60	IDU-80	IDU-100	IDU-120	IDU-160	IDU-180
Cooling Capacity (Btu/h)		36000	48000	60000	80000	100000	120000	160000	180000
Power Consumption (Watt)		3350	4300	5630	6250	6400	7750	9300	10800
Power Supply		380-440 V - 3 Ph - 50/60 Hz							
Air Flow (m³/h)		2400	2700	3200	4000	4500	6000	7200	8000
Air Outlet Diameter (mm)		2x160	2x160	3x160	3x160	3x200	4x160	4x200	4x200
Static Pressure (Pascal)		400	400	400	700	700	700	700	700
Sea Water Flow (m³/h)		2.56	3	3.6	5	6.3	7.5	10.4	12.5
Refrigerant		134 A - 407 C							
Dimensions (mm)	Height	450	700	700	900	1000	1000	1250	1250
	Length	700	900	900	1200	1600	1600	2000	2000
	Width	500	600	600	600	800	800	1000	1000
Weight (kg)		134	158	195	235	340	360	435	470
Cooling		19.5 °C / 27 °C (WT-DT) external conditions: 35 °C							

•All technic values have given according to 50 Hz



MFC-Q20



MFC-Q20

- Quiet design that optimizes air flow.
- Stainless Steel and fully enclosed cabinets.
- Stainless steel slop drip tray with extra depth.
- Custom design and production®
- Touch screen control.
- The fan housing is able to rotate 0 - 90 degrees.
- Hydrophilic coated coil.
- Washable flat filter.
- Three-way valve.

Model		Qubic Serial Fan Coil Unit Technic Details						
Model Number		MFC-Q04	MFC-Q08	MFC-Q10	MFC-Q12	MFC-Q16	MFC-Q20	MFC-Q24
Capacity (Btu/h)		4000	8000	10000	12000	16000	20000	24000
Air Flow (m³/h)		160	250	320	450	650	800	1100
Power Input (Watt)		80	105	105	240	280	355	355
Current (A)		0.3	0,45	0,45	1,05	1,2	1,55	1,55
Power Supply		230 V - 1 Ph - 50/60 Hz						
Control		DIGITAL / MANUEL						
Air Duck Diameter (mm)		100	125	125	125	150	185	185
Water Pipe Diameter (mm)		16	16	16	20	20	20	20
Drain Pipe Diameter (mm)		16						
Materials		STAINLESS STEEL 304						
Dimension (mm)	Length	300	350	350	420	460	490	520
	Height	250	265	265	265	345	345	395
	Width	250	295	295	320	320	370	370
Weight (kg)		11	12	12	16	20	21	23
Cooling		19.5 °C / 27 °C (WT-DT) external conditions: 35 °C						
Heating		16 °C / 22 °C (WT-DT) external conditions: 8 °C						

•All technic values have given according to 50 Hz



Centrifugal Fan



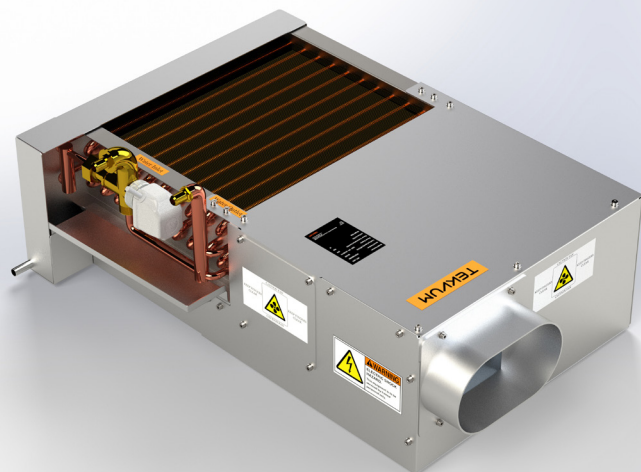
LCD Control Unit



Manuel Control Unit



Slim Type Vertical Serial Fan Coil Unit



Slim Type Horizontal Serial Fan Coil Unit

- Able to used both horizontal and vertical.
- Quiet design that optimizes air flow.
- Stainless steel and fully enclosed cabinets.
- Hydrophilic coated coil.

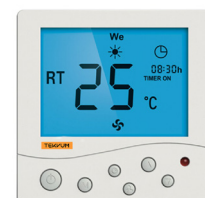
- Stainless steel dripping tray with extra slope and extra depth
- Touch screen control, three-way valve
- The fan housing designed to rotate 0-90-180 degrees
- Custom design and production©

Model		Slim Type Vertical / Horizontal Serial Fan Coil Technic Details					
Model Number		MFC-ST04	MFC-ST06	MFC-ST08	MFC-ST10	MFC-ST12	MFC-ST16
Capacity (Btu/h)		4000	6000	8000	10000	12000	16000
Air Flow (m³/h)		160	200	250	320	450	650
Power Input (Watt)		80	80	105	105	240	280
Current (A)		0.32	0.32	0.45	0.45	1.05	1.2
Power Supply		230 V / 1 Ph / 50 Hz					
Control		Digital / Manuel					
Air Duck Diameter (mm)		100	100	125	125	125	150
Water Pipe Diameter (mm)		16	16	16	16	20	20
Material		STAINLESS STEEL 304					
Dimensions (mm)	Length	300	300	350	350	420	460
	Heigth	130	130	175	175	175	175
	Width	450	500	600	600	620	650
Weigth (kg)		11	12	14	15	17	18
Cooling		19.5 °C / 27 °C (WT-DT) external conditions: 35 °C					
Heating		16 °C / 22 °C (WT-DT) external conditions: 8 °C					

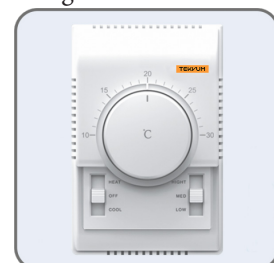
•All technic values have given according to 50 Hz



3 Way Valve



Digital Control Unit



Manual Control Unit



Integrated Mono Chiller Unit MCU-M24

MCU Series are Tekvum's Chiller Series.

- Designed for ships, yachts, commercial boats, and navy.
- Has a large range of cooling performance from 30,000 up to 480 000 BTU/h.
- Equipped with compatible scroll compressors. Able to use up to four compressors.
- Danfoss MCX series have programmable control, MMI remote interface.

The MCU Series are:

- Highly customizable with many options such as soft start, frequency converter etc.
- Enlarged condenser for operating under gulf conditions.



Programmable Control

- Single phase or three phase compressors.
- HP/LP manometers.
- Cleanable coaxial condenser with Cu/Ni tubes for seawater.
- Custom design and production®

Note: Mono chiller units work on 230 V - 1 Ph - 50/60 Hz



Sea Water Pump

Model		MCU Mono							
Model Number		MCU-M16	MCU-M20	MCU-M24	MCU-M27	MCU-M32	MCU-M40	MCU-M48	MCU-M54
Cooling Capacity (Btu/h)		16000	20000	24000	27000	32000	40000	48000	54000
Power Consumption (kW)		1.5	1.95	2.41	2.76	3	3.9	4.82	5.6
Power Supply		230V - 1 Ph - 50/60 Hz							
Refrigerant		R-410A							
Number of Compressor(s)		1	1	1	1	2	2	2	2
Chiller Water Flow (m³/h)		0.90	1.20	1.55	1.75	1.8	2.4	3.1	3.5
Sea Water Flow (m³/h)		1.20	1.50	1.80	1.92	2.4	3	3.6	3.85
Dimensions (mm)	Heigth	350	350	400	420	350	350	400	420
	Length	300	325	325	375	600	650	650	750
	Width	375	375	375	375	425	425	450	450
Weigth (kg)		36	38	42	46	68	72	80	90
Cooling		7 °C / 12 °C (WT) external conditions: 35 °C							

•All technic values have given according to 50 Hz



Programmable Control



Remote Control

Model	MCU-T Integrated Chiller Unit Technic Details							
Model Number	MCU-1T30	MCU-1T36	MCU-1T48	MCU-1T60	MCU-1T72	MCU-1T80	MCU-1T100	MCU-1T120
Cooling Capacity (Btu/h)	30000	36000	48000	60000	72000	80000	100000	120000
Current (A)	3	3.6	5.3	6.2	7.1	8.8	10.5	12.5
F.L.A. (A)	5.6	7	8.5	10	11.4	13.2	16.3	18.5
Power Supply (kW)	380 / 440 V - 3 Ph - 50/60 Hz							
Refrigerant	407 C - 134 A							
Number of Compressor(s)	1	1	1	1	1	1	1	1
Chiller Water Flow (m³/h)	1.5	1.8	2.3	3	3.96	4.5	5.4	6.3
Sea Water Flow (m³/h)	2.2	2.6	3.5	4.4	5.2	5.76	7.2	8.7
Dimensions (mm)	Height	425	425	500	500	500	600	600
	Length	500	500	550	550	550	725	725
	Width	525	525	600	600	600	775	775
Weight (kg)	66	70	76	84	92	98	104	112
Cooling	7 °C / 12 °C (WT) external conditions: 35 °C							

Model	MCU-2T Integrated Chiller Unit Technic Details					
Model Number	MCU-2T60	MCU-2T72	MCU-2T96	MCU-2T120	MCU-2T144	MCU-2T160
Cooling Capacity (Btu/h)	60000	72000	96000	120000	144000	160000
Current (A)	2x3	2x3.6	2x5.3	2x6.2	2x7.1	2x8.8
F.L.A. (A)	2x5.6	2x7	2x8.5	2x10	2x11.4	2x13.2
Power Supply	380 / 440 V - 3 Ph - 50/60 Hz					
Refrigerant	407 C - 134 A					
Number of Compressors	2	2	2	2	2	2
Chiller Water Flow (m³/h)	3	3.6	4.6	7	8	9
Sea Water Flow (m³/h)	4.4	5.2	7	8.8	10.4	11.5
Dimensions (mm)	Height	425	425	500	500	500
	Length	800	800	1100	1100	1250
	Width	525	525	600	600	600
Weight (kg)	90	95	130	160	210	245
Cooling	7 °C / 12 °C (WT) external conditions: 35 °C					



Sea Water Pump



Sea Water Pump

•All technic values have given according to 50 Hz

Our custom designed© and produced MCU series Chiller systems are carefully thought out to meet your customized requirements all with superior client service.

- The standard range of units is 3x400V/50Hz or 3x440V/ 60Hz for seawater.
- Tekvum MCU series Chiller solutions are cost-effective and easy maintainability.
- Our product innovation means that we are able to deliver efficient systems that offer greater flexibility and adaptability.
- HP/LP manometers.
- Cleanable coaxial condenser with Cu/Ni tubes for seawater.

Model		MCU-3T Integrated Chiller Unit Technic Details					
Model Number		MCU-3T90	MCU-3T108	MCU-144	MCU-3T180	MCU-3T216	MCU-3T240
Cooling Capacity (Btu/h)		90000	108000	144000	180000	216000	240000
Current (A)		3x3.0	3x3.6	3x5.3	3x6.2	3x7.1	3x8.8
F.L.A. (A)		3x5.6	3x7	3x8.5	3x10	3x11.4	3x13.2
Power Supply		380 / 440V - 3 Ph - 50/60 Hz					
Refrigerant		407 C - 134 A					
Number of Compressors		3	3	3	3	3	3
Chiller Water Flow (m³/h)		4.5	5.4	7	10.5	12	13.5
Sea Water Flow (m³/h)		6.6	7.9	10.5	13.2	15.6	17
Dimensions (mm)	Height	425	425	500	500	500	600
	Length	1200	1200	1600	1600	1800	2000
	Width	525	525	600	600	600	775
Weight (kg)		135	145	220	245	280	320
Cooling		7 °C / 12 °C (WT) external conditions: 35 °C					



A/C Scroll Compressor



Sea Water Pump

Model		MCU-4T Integrated Chiller Unit Technic Details					
Model Number		MCU-4T120	MCU-4T144	MCU-4T192	MCU-4T240	MCU-4T288	MCU-4T320
Cooling Capacity (Btu/h)		120000	144000	192000	240000	288000	320000
Current (A)		4x3	4x3.6	4x5.3	4x6.2	4x7.1	4x8.8
F.L.A. (A)		4x5.6	4x7	4x8.5	4x10	4x11.4	4x13.2
Power Supply		380 / 440V - 3 Ph - 50/60 Hz					
Refrigerant		407 C - 134 A					
Number of Compressors		4	4	4	4	4	4
Chiller Water Flow (m³/h)		6	7.2	9.4	14	16	18
Sea Water Flow (m³/h)		8.7	10.5	14	17.6	21	22.5
Dimensions (mm)	Height	425	425	500	500	500	600
	Length	1600	1600	2000	2000	2250	2400
	Width	525	525	600	600	600	775
Weight (kg)		180	200	260	285	325	384
Cooling		7 °C / 12 °C (WT) external conditions: 35 °C					



Sea Water Pump



TEKVUM

Marine HVAC Solutions

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