

[UCCP]

**R407H**

**R407C**

(Optional)



Large marine type air conditioner to provide comfortable air to each room.

Designed for flexible installation. Maintenance-saving and energy-saving specifications for eco-friendly air conditioning onboard.

Features

- Hermetic scroll compressor
- Eco-friendly and low noise
- Low maintenance design
- Highly durable materials

**Steam heater**  
Strong against sea breeze and well prepared for the damage by drain water.

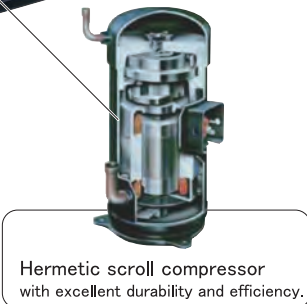
**High-performance Centrifugal fan**  
strong against salt damage and exerts high static pressure.

**Starter**  
Contributes to low maintenance onboard.



**Seawater resistant shell and fin tube condenser.**

**Flange connecting compressor**  
for easier and safer exchange on board.



**Hermetic scroll compressor**  
with excellent durability and efficiency.

**POINT 1 Eco-friendly**

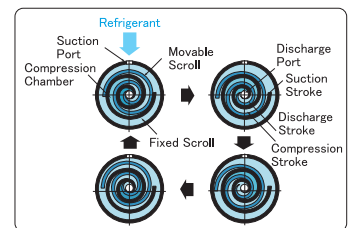
Low GWP HFC refrigerant R407H (GWP1495)

Eco-friendly refrigerant that preserves safety, stability, and efficiency required as a marine refrigerant. R407H offers high performance with low environmental impact, and is able to procure around the world.

**POINT 2 Low Noise Design**

Hermetic scroll compressor with low noise and operating vibration

Operating noise and vibration are reduced about 1/2 of conventional models. Multiple compressors operation provides accurate control, reduced maintenance, and improved comfort.



**POINT 3 Flexible Installation**

Equipped with high static pressure fan with easy deployment of long duct

By adopting high static pressure fans, long duct can be easily deployed. Less restrictions on the number and shape of outlets enables flexible design.

**POINT 4 High Durability**

Cupronickel adopted for the condenser cooling tube

Enhanced durability of the cooling pipe by using a material with strong corrosion and sea water resistance.

# DECK UNIT

Refrigerant	Compressor	Cooling Water Type	Line-ups
R407H R407C ※	Hermetic Scroll Type	Sea Water/Fresh Water	25HP/30HP/40HP/50HP

HORSEPOWER		25HP	30HP	40HP	50HP	
MODEL		UCCP85C	UCCP100C	UCCP135C	UCCP165C	
POWER	MAIN CIRCUIT	3 Phase AC 380/440V 50/60 Hz				
	CONTROL CIRCUIT	1 Phase AC 110V 50/60Hz				
PAINTING COLOR		New Light Blue (7.5 BG 7/2), Black				
DIMENSIONS	H x W x D	mm	1650 × 2000 × 1250	1650 × 2000 × 1250	1550 × 2000 × 1800	1550 × 2000 × 1800
★1 COOLING CAPACITY (50/60Hz)	kW	80/90	90/106	125/140	143/163	
★2 COOLING WATER FLOW RATE (50/60Hz)	L/min	275/300	330/360	440/480	540/600	
★3 HEATING CAPACITY	kW	106	132	170	200/212	
★4 HUMIDIFYING CAPACITY	kg/h	30	36	48	60	
HEAD LOSS (50/60Hz)	kPa	6/7	8/9	9.0/10.0	12.0/16.0	
COMPRESSOR (50/60Hz)	TYPE	Hermetic Scroll Type				
	SPEED	r/min	2900/3450			
	MOTOR POWER	kW	9.0 × 2	7.5 × 3	7.5 × 4	9.0 × 4
	RATED CURRENT	A	18.6 × 2/20.4 × 2	15.9 × 3/18.0 × 3	15.9 × 4/18.0 × 4	18.6 × 4/20.4 × 4
WATER COOLING CONDENSER	STARTING MANNER	Direct Start				
	TYPE	Water cooled shell & tube				
	MATERIAL	TUBE	Cupronickel (UNS70600)			
		SHELL	Carbon Steel Pipe for Pressure Piping (20 (GB 8163))			
TUBE PLATE		Titanium Clad (Q345R+TA2)				
EVAPORATOR	TYPE	Crossfincoil type				
	MATERIAL	TUBE	Copper Tubes			
		FIN	Aluminium Fins			
FAN (50/60Hz)	TYPE	Centrifugal Fan				
	AIR FLOW RATE	m <sup>3</sup> /min	140/140	165/165	220/220	255/270
	EXTERNAL STATIC PRESS	Pa	870/1400	870/1520	920/1700	860/1630
	MOTOR POWER	kW	7.5	7.5	11	15
	RATED CURRENT	A	9.5/10.9	10.5/12.7	14.9/18.4	17.2/21.2
	DRIVE	Belt Drive				
HEATER	TYPE	Crossfincoil type				
	MATERIAL	Copper Pipes, Aluminium Fins				
		Steam Spray Type				
HUMIDIFIER		Nylon Mesh				
AIR FILTER		Thermostatic expansion valve				
REFRIGERANT CONTROL		Thermometer(ALE-SD22-011Q23)				
TEMPERATURE CONTROL		Thermometer(ALE-SD22-011Q23)				
CAPACITY STEP	%	100-50-0	100-67-0 or 100-33-0	100-50-0	100-50-0	
PROTECTIVE DEVICES		Circuit Breaker(For Comp.& Fan Motor),Overload Protector(For Comp.&Fan Motor),Reverse Phase Protector , High Pressure Switch, Low Pressure Switch , Comp. Protection Thermostat , Freeze-up Protection Thermostat , Low Temperature Protection , Safety Valve				
THERMAL&SOUND ISOLATOR		CLASS 1 FLEX(NBR/PVC)				
PIPING CONNECTION	CHILLED WATER INLET/OUTLET	3B (80A)				
	UPPER DRAIN OUTLET	1 1/4B (32A)				
	LOWER DRAIN OUTLET	1B (25A)				
REFRIGERANT	KIND	R407H				
	INITIAL CHARGED	kg	11			
	ADDITIONAL CHARGED	kg	5	6	14	14
LUBRICANT OIL	KIND	DAPHNE FVC68D				
	CHARGED	L	2.7 × 2	2.7 × 3	2.7 × 4	2.7 × 4
MACHINE MASS	kg	1200	1270	1640	1690	
OPERATING MASS	kg	1230	1300	1680	1730	
STANDARD ACCESSORIES		Fuse(250V x 1,500V x 1),Thermometer x 2, Bottom Drain Pipe x 1, Cooling Water Inlet and Outlet Pipe For Gas Socolt x 2				

- ★1.Evaporator inlet temperature and humidity:31°C D.B., 24°C W.B.(Not include the heat generated by the electric motor.)
- ★2.Cooling water inlet temperature condition is at 32°C.
- ★3.Heater inlet conditions are when the air inlet temperature is 10°C D.B. and the inlet steam is 0.4MPa at 60Hz.
- ★4.The humidifier capacity is when steam is saturated at 0.035 MPa.
- ※Refrigerant R407C is optional.

## Contact

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