

## Cooling unit - 90MA



**The selfcontained cooling units** are specially designed for marine application and are complete with compressor, condenser, evaporator and fan built together in a casing. All electrical wiring and refrigerant piping made. To be delivered with R-407c and R-404a as refrigerant. Designed as seawatercooled.

**The units** can either be delivered for duct mounting or be equipped with plenum chamber accessory.

**The compressor** is a welded type for 90MA004 and 90MA006, serviceable hermetic type for 90MA008 and 90MA012, and is equipped with suitable vibration isolators and filter drier.

**The condenser** is a tube-in-tube type with seamless cupro-nicle seawater tubes. For seawater use, the units are equipped with an automatic seawater valve for regulation of condenser pressure.

**The evaporator** coil is of direct expansion type equipped with thermostatic expansion valve. The construction is aluminium plate fins mechanically bonded to seamless copper tubes.

Further, the units are delivered with el.board containing starter for compressor and fan motor and necessary terminal blocks.

**Air filter and thermostat** are standard delivery.



Heating



Ventilation

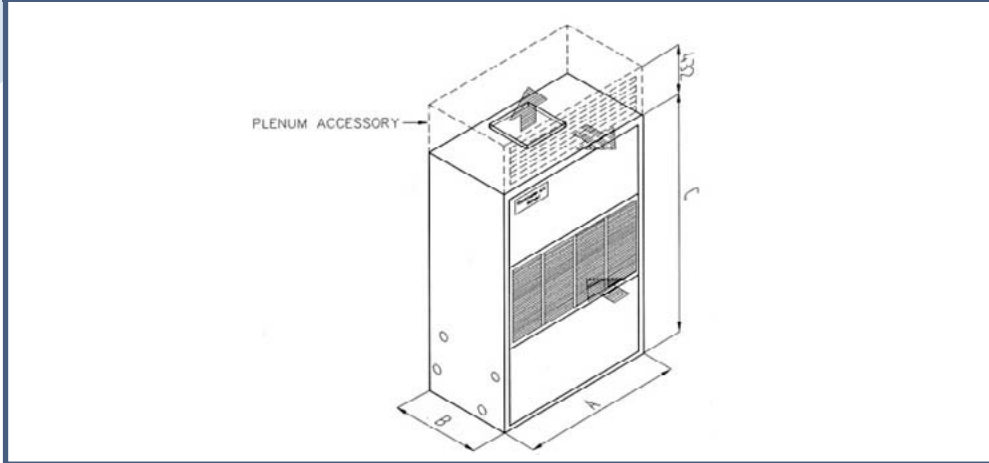


Air Conditioning



Refrigeration

## Teknotherm/Carrier Self-contained Marine Cooling Unit - type 90MA



### Reciprocating compressor models

Compressor type	90MA004		90MA006		90MA008		90MA012			
	R-404a	R-407c	R-404a	R-407c	R-404a	R-407c	R-404a	R-407c		
Nom. cooling cap.	kW		10,0	10,0	17,0	17,0	26,0	26,0	34,0	34,0
Motor power input	kW		3,17	3,33	4,92	4,83	6,82	7,04	9,71	9,86
Condenser water	m <sup>3</sup> /h		2,05	2,05	3,42	3,42	5,11	5,11	6,84	6,84
Pressure drop	kPa		69,98	69,98	65,5	65,5	29,64	29,64	30,34	30,34
Air amount	m <sup>3</sup> /h		2040	2040	3400	3400	3800	5100	6800	6800
Shipping weight unit	kg		188	188	208	208	423	423	466	466
Shipping volume unit	m <sup>3</sup>			0,85				1,8		
Shipping weigh plenum chamber	kg			23,5				36,5		
Shipping volume plenum chamber	m <sup>3</sup>			0,26				0,45		
Dimensions	mm									
A				919				1219		
B				556				752		
C				1501				1835		

The nominal cooling capacities are based on 60Hz, 32°C seawater temperature, 27°C dry bulb and 19°C wet bulb temperatures entering the coil.  
The units can be delivered for 3 x 460V-60Hz and 3 x 400V-50Hz.