Webasto
Feel the Drive

Marine Leisure
Air Conditioning
2024

Webasto
Feel the Drive

Contents

Which is the right air-conditioning system for your boat?

Our large product portfolio from compact air-conditioning systems up to large chiller systems leaves no wish unfulfilled. With our wide power range we provide cooling capacities from 5,000 BTU/h up to 1,500,000 BTU/h.

BlueCool self-contained units

- Perfect solution for vessels with one to three cabins
- Very compact
- Easy to retrofit
- Extremely efficient

or

BlueCool chiller systems

- Large power range to fit any size of boat or superyacht
- Best in marine A/C: Ability to provide adequate cooling wherever it is needed
- Ideal basis for our integrated BlueComfort solutions

+

BlueCool Air handlers

- Modular concept enables greatest possible flexibility
- Uses minimal space in cabins since air handlers are smaller than self-contained units
- Three construction forms Compact, Slimline and Low Profile feature an especially compact, slim and flat design of the A-Series

How to choose the right air-conditioner

Example: You own a yacht and would like to aircondition a room of 5 m (length) x 5 m (width) x 2 m (height).

Step 1: Define the category of the cabin Determine the **category of the cabin**. We give an example for a cabin with an average glass area, for example a deck saloon.	**Category 2**
Step 2: Define the net volume Determine the **net volume of the room** (5 m x 5 m x 2 m = 50 m³; subtract 20 % for furniture in the room; 50 m³ – 10 m³ = 40 m³; If you want to air condition the whole boat, please calculate the **sum of your rooms**.	**40 m³**
Step 3: Define your climate region Determine the **climate region** where you spend most of your time. For example the Mediterrean Sea is a "normal region" in the climate category.	**Normal region**
Step 4: Identify your cooling requirements Result: You need an air conditioning system with a 20,000 BTU/h **cooling capacity**.	**20,000 BTU/h**
Step 5: Decide between a self-contained and chiller system Depending on the demands you can decide on a **self-contained or chiller system** with a cooling capacity of 20,000 BTU/h.	**BlueCool S20**

Step 1

Step 2

Step 3

Step 4

	Category 1 portlights only, cabin(s) all below deck [400 BTU/m³]		
	region normal	cold	hot
Volume of the rooms	4,000	3,000	5,000
[m³]*	8,000	6,000	10,000
10	12,000	9,000	15,000
20	16,000	12,000	20,000
30	20,000	15,000	25,000
40	24,000	18,000	30,000
50	28,000	21,000	35,000
60	32,000	24,000	40,000
70	36,000	27,000	45,000
80	40,000	30,000	50,000
90	44,000	33,000	55,000
100	48,000	36,000	60,000
110	52,000	39,000	65,000
120	56,000	42,000	70,000
130	60,000	45,000	75,000
140	64,000	48,000	80,000
150	68,000	51,000	85,000
160	72,000	54,000	90,000
170	76,000	57,000	95,000
180	80,000	60,000	100,000
190			
200			

For precise BTU calculations, please use our Marine specification and calculation tool, available on the dealer portal at **http://dealers.webasto.com**

The right cooling capacity

Category 1
portlights only, cabin(s) all below deck (400 BTU/m³)

Volume of the rooms L x W x H (m³)	region: normal	cold	hot
10	4,000	3,000	5,000
20	8,000	6,000	10,000
30	12,000	9,000	15,000
40	16,000	12,000	20,000
50	20,000	15,000	25,000
60	24,000	18,000	30,000
70	28,000	21,000	35,000
80	32,000	24,000	40,000
90	36,000	27,000	45,000
100	40,000	30,000	50,000
110	44,000	33,000	55,000
120	48,000	36,000	60,000
130	52,000	39,000	65,000
140	56,000	42,000	70,000
150	60,000	45,000	75,000
160	64,000	48,000	80,000
170	68,000	51,000	85,000
180	72,000	54,000	90,000
190	76,000	57,000	95,000
200	80,000	60,000	100,000

Category 2
average glass area, cabins partly below deck (500 BTU/m³)

Volume of the rooms L x W x H (m³)	region: normal	cold	hot
10	5,000	3,750	6,250
20	10,000	7,500	12,500
30	15,000	11,250	18,750
40	20,000	15,000	25,000
50	25,000	18,750	31,250
60	30,000	22,500	37,500
70	35,000	26,250	43,750
80	40,000	30,000	50,000
90	45,000	33,750	56,250
100	50,000	37,500	62,500
110	55,000	41,250	68,750
120	60,000	45,000	75,000
130	65,000	48,750	81,250
140	70,000	52,500	87,500
150	75,000	56,250	93,750
160	80,000	60,000	100,000
170	85,000	63,750	106,250
180	90,000	67,500	112,500
190	95,000	71,250	118,750
200	100,000	75,000	125,000

Category 3
glass area above average, saloon above deck (600 BTU/m³)

Volume of the rooms L x W x H (m³)	region: normal	cold	hot
10	6,000	4,500	7,500
20	12,000	9,000	15,000
30	18,000	13,500	22,500
40	24,000	18,000	30,000
50	30,000	22,500	37,500
60	36,000	27,000	45,000
70	42,000	31,500	52,500
80	48,000	36,000	60,000
90	54,000	40,500	67,500
100	60,000	45,000	75,000
110	66,000	49,500	82,500
120	72,000	54,000	90,000
130	78,000	58,500	97,500
140	84,000	63,000	105,000
150	90,000	67,500	112,500
160	96,000	72,000	120,000
170	102,000	76,500	127,500
180	108,000	81,000	135,000
190	114,000	85,500	142,500
200	120,000	90,000	150,000

Category 4
very large glass areas, saloon and wheel house above deck (750 BTU/m³)

Volume of the rooms L x W x H (m³)	region: normal	cold	hot
10	7,500	5,625	9,375
20	15,000	11,250	18,750
30	22,500	16,875	28,125
40	30,000	22,500	37,500
50	37,500	28,125	46,875
60	45,000	33,750	56,250
70	52,500	39,375	65,625
80	60,000	45,000	75,000
90	67,500	50,625	84,375
100	75,000	56,250	93,750
110	82,500	61,875	103,125
120	90,000	67,500	112,500
130	97,500	73,125	121,875
140	105,000	78,750	131,250
150	112,500	84,375	140,625
160	120,000	90,000	150,000
170	127,500	95,625	159,375
180	135,000	101,250	168,750
190	142,500	106,875	178,125
200	150,000	112,500	187,500

For extreme climatic conditions such as the Persian Gulf with sea-water temperatures of 32 °C and air temperatures of 40 °C, you have to add 25 to 30 % onto the calculated figure. On BlueCool P-Series units it is also recommended that the condenser is increased in size.

BlueCool S-Series

Self-contained air-conditioning units

The all new “S“ Series self-contained air-conditioner is up to 15% more efficient and up to 20% smaller than its predecessor, the BlueCool Classic.

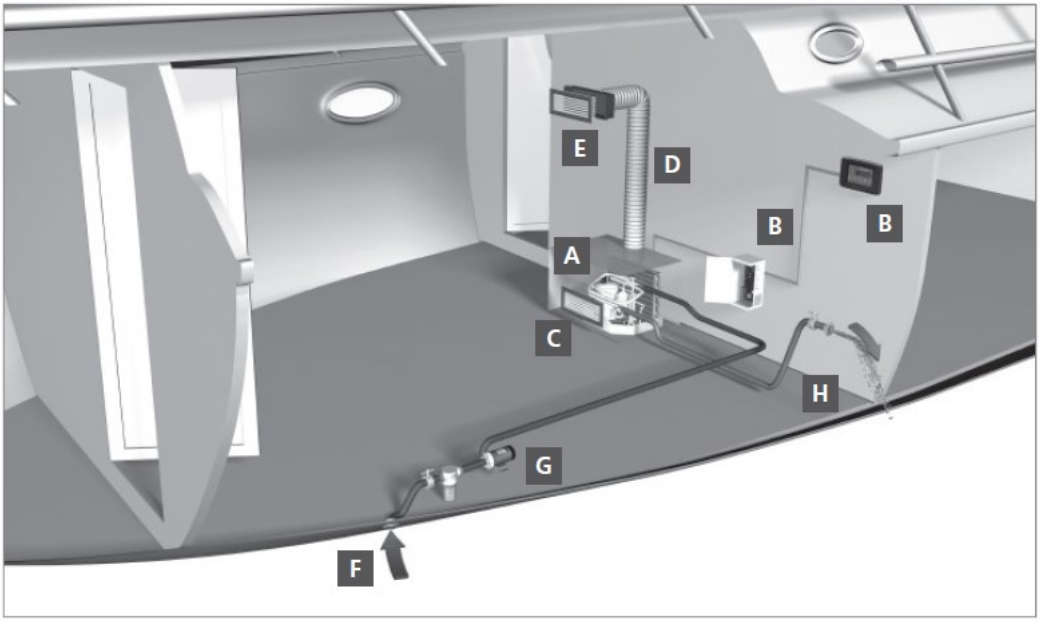
They are mounted on a solid, thermally insulated, stainless steel tray. All units are epoxy-painted for durable corrosion protection. Highly efficient compressors allow extremely low power consumption. A multi-point injection evaporator offers higher unit efficiency.

Additionally, the “S“ Series also comes with fully redesigned electrical circuitry with integrated USB port for easy programming, hours of operation and complete fault history.

Product features:

- Efficiency increased up to 15%*
- Continuous operation even under tropical conditions
- Overall size is reduced up to 20%*
- New electronics with USB diagnosis
- Quiet operation
- Robust design
- Soft start devices available as an option

* compared to BlueCool Classic



- A Air-conditioning unit
- B Air control (control unit)
- C Return air grille
- D Air ducting
- E Supply air grille
- F Sea water inlet
- G Sea water pump
- H Overboard discharge

Technical Specifications

Model	S6	S8	S10	S13	S16	S20	S27
Cooling Capacity (BTU/hr)*	6,000	8,000	10,000	13,000	16,000	20,000	27,000
Supply Voltage (V)	230	230	230	230	230	230	230
Current draw running (A)**	2.0-2.4	2.4-3.5	2.6-4.0	3.6-6.3	4.9-7.2	5.9-8.9	7.0-10.5
Cooling capacity (kW)	1.8	2.4	2.9	3.8	4.7	5.9	7.9
Blower output*	275	275	400	500	625	625	2x 550
(m³/h, cfm)	162	162	235	294	368	368	2x 324
Sea water connection (mm/")	19	19	19	19	19	19	19
	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Minimum sea water flow (l/min)	6	8	10	12	13	17	21
Dimensions (LxDxH mm)	400 x 320 x 305	400 x 320 x 305	475 x 310 x 310	500 x 350 x 320	540 x 350 x 370	590 x 340 x 370	570 x 510 x 410
Diam. Air outlet (mm/")	100	100	100	125	125	125	2x 125
	4	4	4	5	5	5	2x 5

*BTU/h are based on 7°C evaporating temperature and 38°C condensing temperature

** Amperage values depend on compressor load. Max values stated for tropical conditions at 230V/50Hz *** Free blowing

BlueCool C-Series

The BlueCool C-Series chiller units are suitable for small to medium boats, ideally with one to three cabins.

With a unit range from 16,000BTU/h up to 40,000BTU/h, they are an ideal solution for those who demand a high quality compact product.

The BlueCool C-Series hosts improved performance and up to 15% higher efficiency along with up to a 25% reduction in compressor noise compared to previous models.

The Vibration absorber and Silent block are available as an option.

Compatible with the BlueCool MyTouch display control and also CAN-bus for total optimised adaption to the boats' systems.

Technical Specifications

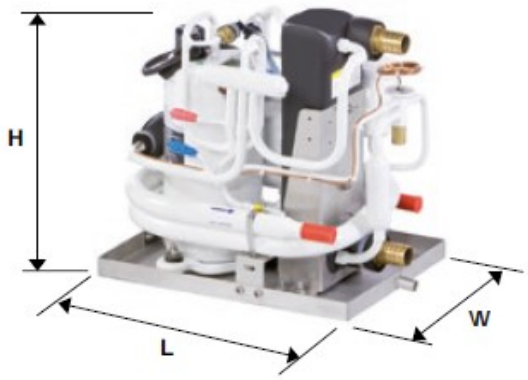
	C16 M	C20 M	C27 M	C32 T	C40 T
Cooling Capacity* (BTU/h)	16,000	20,000	27,000	32,000	40,000
Cooling Capacity* (kW)	4.7	5.9	7.9	9.4	11.7
Voltage (V)	230	230	230	230	230
Frequency †† (Hz)	50/60	50/60	50/60	50/60	50/60
Current draw running ** (A)	4.4 - 6.0	6.9 - 8.0	8.6 - 9.2	8.8 - 12.0	13.8 - 16.0
Current draw Start max. peak (A) 50Hz	54	60	87	60	68
Current draw Start max. peak with Soft Start (A) 50Hz	22	22	36	28	30
Chilled water connection (mm)	25	25	25	25	25
Recommended chilled water pump	WB500	WB500	WB1000	WB1000	WB1500
Seawater connection (mm)	19	19	19	19	25
Recommended seawater pump	WB500/ WB500G	WB500/ WB500G	WB1000	WB1000	WB1500/ WB1000G
Dimensions (L x W x H mm)	390 x 290 x 355	440 x 330 x 360	440 x 330 x 395	590 x 410 x 500	590 x 410 x 500
Weight (kg)	34	37	45	65	70

Values in the table given for 50Hz only. 60Hz data available on request

* BTU/h are based on 7°C evaporating temperature and 38°C condensing temperature

** Amperage values for core unit depend on compressor load. Max values at tropical conditions at 230V/50Hz

†† BlueCool C Series systems are tested and approved by Webasto for 50/60Hz operation



BlueCool V-Series

Variable speed Chiller Air-Conditioning

The BlueCool V-Series brings innovation to the industry with the latest technology for maximum performance in varying weather conditions. The BlueCool V-Series, includes three models: V50M, V64T & V77T. With a cooling capacity up to 77,000 BTU they are suitable for boats with three or more independent cabins.

Whenever three or more independent volumes in a boat need to be air-conditioned, it becomes worth considering a central chiller system. To distribute cooling capacity over several independently operating air handlers from one single central cooling unit, the most flexible and simple solution is to install a chilled water circulation system between the central unit and the air handlers. This mixed water / glycol circuit is maintained at approx. +4 °C. All Webasto chiller units are equipped with high efficiency multi-plate heat exchangers.

Product features:

- 3 models (V50M, V64T & V77T)
- Large power range: 8,500 - 77,000 BTU
- Variable speed BLDC compressor controlled by inverter technology
- Zero electrical starting peak
- Super quiet operation
- High system availability via dynamic control of HP/LP boundary conditions
- Adjustable amperage draw
- Preventative maintenance monitoring system
- Condensation free operation
- Easy installation and maintenance
- Low service and operation costs
- Light and compact

Technical Specifications

BlueCool V Series	V50M	V64T	V77T
Cooling Capacity* (BTU/h)	8,500 - 50,00	8,500 - 64,000	8,500 - 77,000
Cooling Capacity* (kW)	2.5 - 14.6	2.5 - 18.7	2.5 - 22.6
Voltage (V)	230	230	230
Frequency++ (Hz)	50/60	50/60	50/60
Current draw running** (A)	2.5 - 15* (max. 17)	2.5 - 23.8 (max. 25)	2.5 - 24 (max. 26.5)
Current draw Eco 1 Mode	2.5 - 8* (max. 12)	2.5 - 15* (max. 17)	2.5 - 15* (max. 17)
Current draw Eco 2 Mode	2.5 - 5* (max. 8)	2.5 - 8* (max. 12)	2.5 - 8* (max. 12)
Current draw Start (A)	2.5	2.5	2.5
Chilled water connection (mm)	25	32	32
Minimal chilled water flow (L/min)	35	45	52
Seawater connection (inch)	1" M BST	1¼" F BST	1¼" F BST
Minimal seawater flow (L/min)	38	50	57
Dimensions Unit (LxWxH mm)	567 x 340 x 510	760 x 560 x 510	760 x 560 x 510
Dimensions Unit inc. Silent blocks (LxWxH mm)	590 x 378 x 548	760 x 560 x 550	760 x 560 x 550
Dimensions Electronic box (LxWxH mm)	560 x 190 x 465	560 x 190 x 465	560 x 190 x 465
Dimensions Unit inc. Silent box and Electronic box	620 x 570 x 548	760 x 750 x 550	760 x 750 x 550
Ambient temperature limit (ºC)	60	60	60
Sound level unit (dB/A)	49.2	48.5	48.5
Refrigerant charge R410A (g)	892	892 + 770	892 + 770
Weight core unit (kg)	47	90	90
Weight Electronic box (kg)	15	15	15
Minimum seawater temperature Heating (ºC)	6	6	6
Minimum seawater temperature Cooling (ºC)	35	35	35

* BTU/h are based on 7 C evaporating temperature and 38 C condensing temperature; ** Amperage values for core unit depend on compressor load. Max values at tropical conditions at 230V/50Hz; ++ BlueCool V-Series systems are tested and approved by Webasto for 50/60Hz operation

BlueCool A-Series

Compact Air Handlers

The BlueCool A-Series air handlers are distinguished by their compact dimensions, high performance, modular concept and unique condensation management system which enable customers to create the perfect ambience by selectively heating or cooling individual cabins.

With the flexible vibration isolation mount and larger ducts for less air speed noise, the A-Series air handlers are super silent.

Further enhancing the units, the insulated air bleeder valve is standard and ensuring ease of installation the blowers can be rotated and standardised plumbing connections utilised.

The exclusive Instant Drain condensate management system means there is no standing water guaranteed up to 30° heel for the Compact and Slimline models and extra high walls on the condensate pan for the Low Profile models. The multidirectional high angle slope design of the condensate pan allows for immediate drainage.

Product features:

- 3 models - Compact, Slimline and Low Profile to suit any application
- Units from 4,000 BTU/h - 36,000 BTU/h
- New modular system with various options
- Electric heat module (EHM) and Flow Control Valve available
- Innovative Webasto Instant Drain system for smart management of condensation
- High quality stainless steel design
- High cooling capacity and air flow
- Flexible vibration isolation mounts and larger ducts to reduce air noise
- Oversized heat exchanger tested under tropical conditions
- Compatible with the BlueCool MyTouch display

Technical Specifications

	A4 Compact	A6 Compact	A9 Compact	A12 Compact	A18 Compact	A24 Compact	A36 Compact
Capacity (BTU/h) **	4,000	6,000	9,000	12,000	18,000	24,000	36,000
Capacity (kW)**	1.2	1.9	2.8	3.6	5.6	7.2	10.7
Air flow (m^3/h)*	230	380	420	560	750	1120	1550
Ø Blower connection (mm)	100 (round)	125 (round)	125 (round)	150 (oval)	150 (oval)	2x 150 (oval)	2x 150 (oval)
Weight (kg)	6	7	9	10	12	16	21
Current draw running (A)	0.6	0.5	0.6	0.7	1.0	1.3	2.1
Ø Chilled water connection	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Dimensions (H x W x L mm)	287 x 249 x 381	287 x 280 x 411	312 x 291 x 456	312 x 279 x 491	362 x 281 x 581	362 x 301 x 636	487 x 302 x 701
Dimensions with valve (H x W x L mm)	287 x 249 x 381	287 x 280 x 411	312 x 291 x 456	312 x 279 x 491	362 x 281 x 581	362 x 301 x 636	487 x 302 x 701
Min. chilled water flow (L/h)	228	406	626	568	793	1257	1883
Blowers	1	1	1	1	1	2	2
Max. ambient temp (°C)	50	50	50	50	50	50	50
Pressure loss chilled water	0.07	0.12	0.15	0.14	0.16	0.13	0.34
Condensation drains	2	2	2	2	2	2	2
Ø Condensation drain (mm)	16	16	16	16	16	16	16

* with 2m of air duct, one 90° bend, air outlet grille at 230V/50Hz ** Intake air of 32°C/47%rh, water inlet temperature of 5°C and at 230V/50Hz

BlueCool A-Series

Slimline and Low Profile Air Handlers

The BlueCool A-Series air handlers are distinguished by their compact dimensions, high performance, modular concept and unique condensation management system which enable customers to create the perfect ambience by selectively heating or cooling individual cabins.

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Further enhancing the units, the insulated air bleeder valve is standard and ensuring ease of installation the blowers can be rotated and standardised plumbing connections utilised.

The exclusive Instant Drain condensate management system means there is no standing water guaranteed up to 30˚ heel for the Compact and Slimline models and extra high walls on the condensate pan for the Low Profile models. The multidirectional high angle slope design of the condensate pan allows for immediate drainage.

Product features:

- 3 models - Compact, Slimline and Low Profile to suit any application
- Units from 4,000 BTU/h - 36,000 BTU/h
- New modular system with various options
- Electric heat module (EHM) and Flow Control Valve available
- Innovative Webasto Instant Drain system for smart management of condensation
- High quality stainless steel design
- High cooling capacity and air flow
- Flexible vibration isolation mounts and larger ducts to reduce air noise
- Oversized heat exchanger tested under tropical conditions
- Compatible with the BlueCool MyTouch display

Technical Specifications

	A6 Slimline	A9 Slimline	A12 Slimline	A18 Slimline	A6 Low Profile	A9 Low Profile	A12 Low Profile	A18 Low Profile
Capacity (BTU/h) **	6,000	9,000	12,000	18,000	6,000	9,000	12,000	18,000
Capacity (kW)**	1.9	2.8	3.6	5.6	1.9	2.8	3.6	5.6
Air flow (m^3/h)*	380	420	560	750	380	420	560	750
Ø Blower connection (mm)	125 (round)	125 (round)	150 (oval)	150 (oval)	125 (round)	125 (round)	150 (oval)	150 (oval)
Weight (kg)	7	9	10	12	10	11	13	16
Current draw running (A)	0.5	0.6	0.7	1.1	0.5	0.6	0.7	1.1
Ø Chilled water connection	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”	3/4”
Dimensions (H x W x L mm)	588 x 217 x 411	611 x 217 x 456	619 x 217 x 494	666 x 218 x 581	205 x 437 x 582	205 x 482 x 606	205 x 516 x 614	205 x 599 x 661
Dimensions with valve (H x W x L mm)	588 x 217 x 479	611 x 217 x 524	619 x 217 x 559	666 x 218 x 649	205 x 487 x 582	205 x 532 x 606	205 x 567 x 614	230 x 657 x 661
Min. chilled water flow (L/h)	406	626	568	793	406	626	568	793
Blowers	1	1	1	1	1	1	1	1
Max. ambient temp (˚C)	50	50	50	50	50	50	50	50
Pressure loss chilled water (bar)	0.12	0.15	0.14	0.16	0.12	0.15	0.14	0.16
Condensation drains	2	2	2	2	2	2	2	2
Ø Condensation drain (mm)	16	16	16	16	16	16	16	16

* with 2m of air duct, one 90˚ bend, air outlet grille at 230V/50Hz ** Intake air of 32˚C/47%rh, water inlet temperature of 5˚C and at 230V/50Hz

BlueCool Air-Conditioning

MyTouch Display

The BlueCool MyTouch display is compatible with the BlueCool Air-Conditioning series.

The display forms part of a complete electronic control system and includes the A/C controller card and connecting cables/sensors.

Simple symbols and a clearly organised control menu allows for easy operation.

The MyTouch display features a series of functions such as a timer, error messages with descriptions, display of operating values and a configuration of the standby display.

The MyTouch display is customisable with cover plate systems such as; Vimar Eikon, Vimar Eikon EVO, Vimar Plana and Btcino Axolute, which allows for adapting the display to the existing design of the vessel.

Product features:

- Full colour, high resolution, interactive touch display
- Customisable Multi Design Touch Display with 3 different user designs
- Intuitive icons and menu, in 10 languages
- 3 different menu levels
- Intuitive operation for end customer
- Advanced settings for crew member
- Complete parameter access for technician
- Compatible with BlueCool Expert

Technical Specifications

MyTouch Display Dimensions (L x W x H mm)	83 x 28 x 55
MyTouch Display with bezel Dimensions (L x W x H mm)	93 x 28 x 73

Customisable to many cover plate systems like:

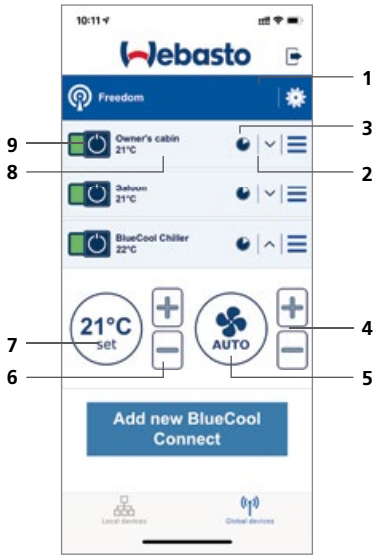
- Vimar Eikon
- Vimar Eikon EVO
- Vimar Plana
- Btcino Axolute

BlueCool Connect

One Device Gets All Connections Done

Whenever there is a demand for remote operation and servicing the BlueCool Connect will be the best choice. Checking onboard temperatures and settings, modifying system parameters or collecting a status report and sending it onshore remotely. The BlueCool Connect offers the same functions as if you would be on the spot, but with the comfort of doing it from anywhere in the world with many internet devices available.

1. Toggle for Units/Groups	Visible when one or more groups have been created
2. Expand/Collapse controls	Opens /closes cabin settings displays
3. Timer	Setting the Timer
4. Blower Control	Set blower speed or Auto setting
5. Blower Setting	See current blower setting
6. Temperature Control	Set cabin temperature
7. Temperature Setting	See temperature set value
8. Actual Cabin Temperature	See actual cabin temperature
9. On/Off for Units/Groups	One click operation of multiple BlueCool Units



Download on the App Store

GET IT ON Google Play

Key Benefits at a Glance:

- Accessible from anywhere in the world
- Use any device like Smartphone, Tablet or Computer
- Central monitoring via your Multi-Functional-Display e.g. Garmin, Raymarine, Simrad, Lowrance and B & G displays with HTML5 functionality
- Remote condition monitoring system
- NMEA 2000 interface
- Use of handheld, portable equipment to monitor A/C equipment periodically
- Collect data and send it onshore remotely

BlueCool Connect

One Device Gets All Connections Done

Technical data

	BlueCool Connect
Operating voltage range (V)	9 – 33
Power consumption (W)	13.5
Input	CAN (SAE J1939)
Output	Wi-Fi Direct Mobile (Telephone) Network NMEA 2000 LAN – Ethernet
Dimensions (L x B x H) (mm)	140 x 104.9 x 33.8
Weight (kg)	0.34
Operating Temperature (°C)	-40 to +80

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