


FreeCooling

Energy savings with FreeCooling from Air-Site



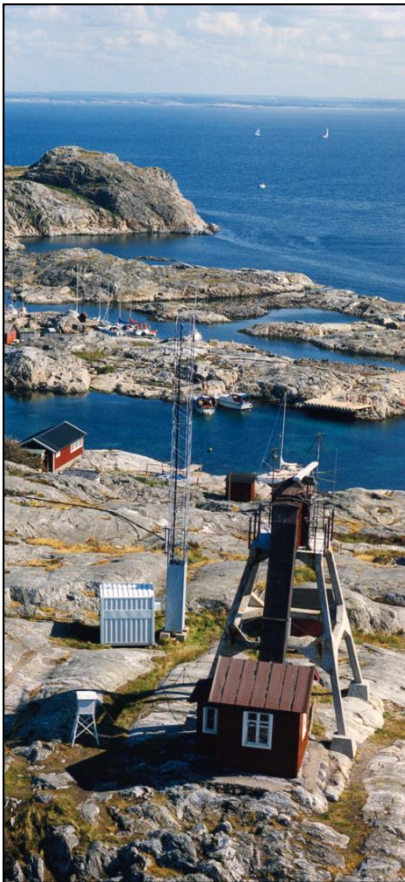
		Product catalog ENG	Page 2 of 23
		FreeCooling for Telecom sites, server rooms and other equipment rooms with 48 V or 230 V power supply.	FreeCooling
Elementvägen 1	S-437 36 Lindome		Air-Site AB
Tel +46 31 995 114	mail@air-site.se		Rev. 2015-08

Company Presentation

Air-Site AB is a company of high expertise with decades of innovations, new ideas and qualitative product development. Our head office, with our manufacturing, warehouse and marketing departments, is located south of Gothenburg, close to Landvetter airport, the railway and the E6. We also have development, support and marketing departments in the UK and representatives in many parts of Europe.

Our main expertise includes HVAC and ventilation, where our guiding principle is quality and energy savings with four key portfolios:

1. DeltaMaster – FreeCooling
2. GreenMaster – Air handling units
3. BoxMaster & SkyMaster– Exhaust air system
4. Air-Site Manager – Presentation and monitoring system



As a pioneer in Green Technology and by partnering with large Telecom companies, we have developed the most efficient energy saving solutions on the market. Many of our ideas are now taken for granted by the telecom operators; such as our FreeCooling system, DeltaMaster, which uses nature's own forces (the low impulse principle) with the lowest power consumption in the market, or our filter solutions, which offer extremely low maintenance requirements.

According to our customers, our air handling units – GreenMaster – is a market leader in terms of quality, environmental friendliness, energy performance and sound, containing features as Modbus TCP with remote monitoring.



Tomas Nilsson
CEO



DeltaMaster FreeCooling



DeltaMaster is a unique marketing solution, with a fresh air unit that pushes clean air in the room without mixing. Layering the air causes the hot air rise to the ceiling and then out through an exhaust cowl.

All our DeltaMaster models have built-in temperature sensors and automatically adjust the fan speed as needed, according to the reference values set in the control unit.

Since April 2011, we offer the DeltaManager control unit, which is packed with features! In addition to the ability to specify values for adjustment and reading, DeltaManager offers a variety of other functions, such as damper control as a standard feature, alarm log for the last 10 alarms, start signal for a cooler, more connection possibilities via analog and digital inputs as well as advanced networking features via Modbus TCP for remote control and monitoring. DeltaManager is also density rated to IP54.

We have a long list of accessories, including air heaters, intake/exhaust cowls, back draught shutters, dampers, cowls, grilles, communication products for monitoring, etc.

Our DeltaMaster unit is well suited for environments where the heat load often is a problem, for example for cooling of server rooms, telecom cabins, computer rooms, computer halls, electrical rooms, electronics rooms and other equipment rooms that require cooling. Many of our customers have completely abandoned cooling equipment and made the leap to DeltaMaster FreeCooling from Air-Site.



City sites

DeltaMaster FreeCooling is today available at a large number of so-called City sites, city located equipment rooms for telecommunications gear. Outside Sweden, Copenhagen is a good example, as Denmark is investing heavily in energy and the environment.



Equipment rooms

Equipment rooms are not all made of concrete and steel. This is a fine glass house in Asperö, where our FreeCooling will maintain a steady and pleasant temperature all year round.




Railways

We have been supplying FreeCooling to several equipment rooms for railways in Belgium and Sweden, and now more railways are starting to show interest in our innovative technology. We are convinced that the use of FreeCooling will increase significantly in the railway industry.



Metro Networks and Broadband

Our products are ideal for equipment rooms containing the urban network equipment. Many of these rooms are located below ground level and can in the majority of cases use DeltaMaster as the only cooling equipment throughout the year. In Gothenburg, we have been supplying FreeCooling to several hundred equipment rooms and more are being produced continuously.

		Product catalog ENG	Page 5 of 23
		FreeCooling for Telecom sites, server rooms and other equipment rooms with 48 V or 230 V power supply.	FreeCooling
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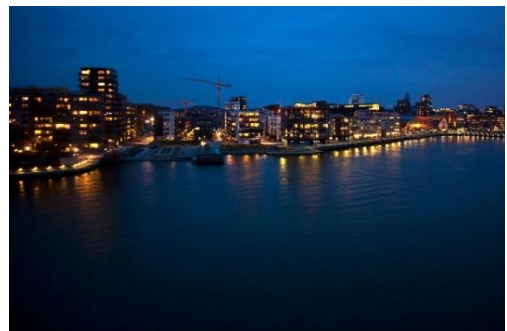
Swedbank Stadion

In April 2009, Swedbank Stadium opened in Malmö. The technology room at ground floor is climate controlled using a DeltaMaster 10.



Gothenburg harbor

Electrically connected ships radically reduce the emissions in Gothenburg harbor. In 2011, land-based electricity replaced the diesel-powered ship engines that previously generated electricity during their port stops. A revolutionary solution with our FreeCooling is being used to carry away the 135 kW high heat load generated by the rectifiers in ABB's equipment rooms.



Air handling units and Box fans

More and more companies are choosing air handling units from Air-Site, partly due to the high efficiency and integrated control system. In Gothenburg, we are now involved in several new construction and building projects where GreenMaster and BoxMaster represent a consistent ventilation solution, where the connection of remote monitoring is an integral part of the installation.



New projects

Air-Site is establishing its presence in large parts of Europe, and now a major project is taking shape in Armenia, where FreeCooling is used in the equipment rooms of various telecommunications companies. Other similar projects have also begun in Poland and the Czech Republic and more will be introduced!




		Product catalog ENG	Page 6 of 23
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Table of contents

Company presentation 2

DeltaMaster FreeCooling..... 3

References 4

Table of contents 6

Energy savings 7

Why FreeCooling 8

Air-Site dimensioning tool 9

Products..... 10

 FreeCooling units 48EC 10

 FreeCooling units 230EC 13


 Control units 15

 Accessories..... 17

 SandMaster 21



Typical telecom site with FreeCooling at Björkö, in Gothenburgs northern archipelago

		Product catalog ENG	Page 7 of 23
		FreeCooling for Telecom sites, server rooms and other equipment rooms with 48 V or 230 V power supply.	FreeCooling
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Energy savings

With DeltaMaster's FreeCooling, you can reduce the use of expensive air conditioning in your equipment rooms, improve your company finances and help the environment. Our DeltaMaster units are used in equipment rooms with heat loads up to 135 kW and can be used either alone or in addition to a traditional cooling system. DeltaMaster is flexible and adapts to your requirements. DeltaMaster is a good investment and the cost is normally recovered after 1-3 years. The system saves your company from large and unpleasant electricity bills and is also beneficial for the environment. DeltaMaster can be controlled and monitored over the internet and the facility can be optimized with free software from Air-Site, to allow for a conventional cooling system etc.

DeltaMaster FreeCooling uses cool air from outside which is led into the equipment room. The cool air forces the hot air upwards and continues out through a grid, vent or back draught shutter. When the outside temperature is too high, DeltaMaster FreeCooling automatically activates a traditional cooler, so the equipment room never overheats.

DeltaMaster FreeCooling does not require a certified installer and requires minimal service. It is available as a Plug & Play solution, all you need is a hole in the wall for the intake and another for the exhaust vent. DeltaMaster always comes with a 2 year warranty.

Benefits:

- Small investment and low operating cost
- Extremely low Delta-T
- Gentle on the environment
- Improves the indoor climate in the equipment room
- Monitoring via internet
- Ability to control the cooler
- Saves up to 90% of the energy consumption
- Investment recovered within 1-3 years
- Minimal service

DeltaMaster cleans the air effectively with the special filter bags, thereby contributing to a better indoor climate in the equipment room. Air-Site's advanced control units have numerous useful features; advanced remote management/monitoring, logging of alarms, start/stop of the cooler, dampers, external heater, etc. DeltaMaster's unique filter solution ensures that no dirt and pollen is brought into the room and that the maintenance requirements drop significantly. DeltaMaster's filter bags should only be replaced every two years in normal circumstances.



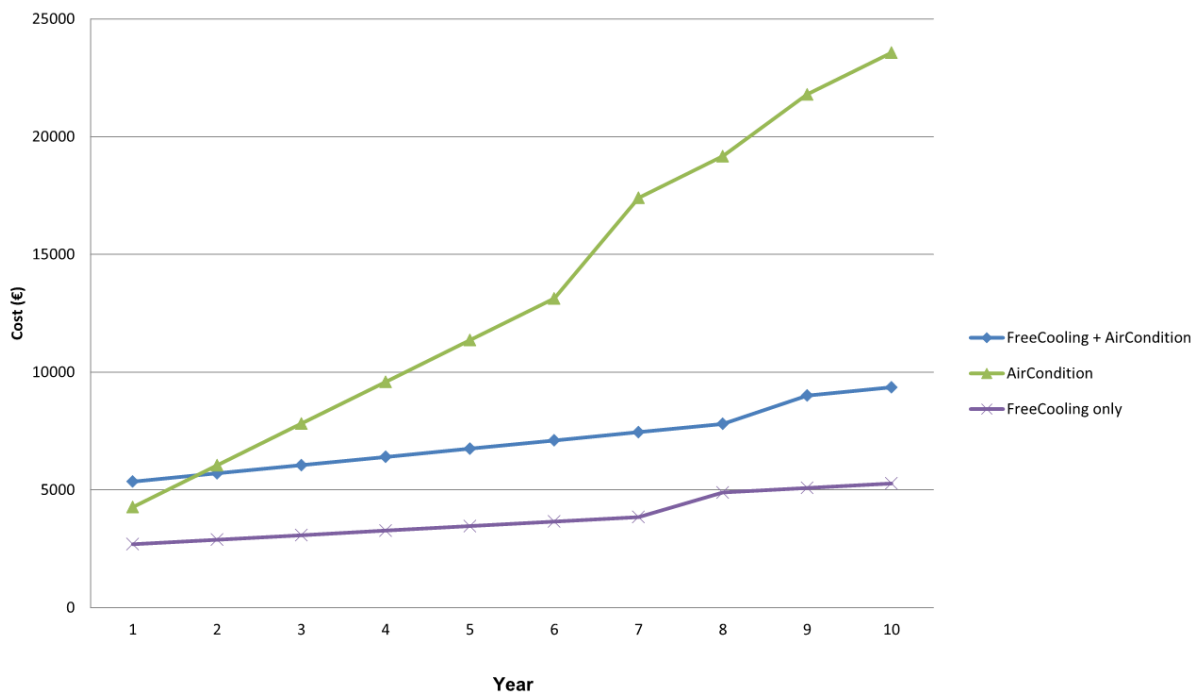
Why FreeCooling?


Regardless of the priority for indoor temperature, for much of the year it is cold enough for FreeCooling to be the right option for most equipment rooms and server rooms.

Our customers who use FreeCooling, but also have cooling equipment as a backup, tell us that these last much longer and that the number of emergency service calls are largely nonexistent, because the cooling equipment is used less than 10% of annual hours.

Equipment rooms with only cooling machines lead to costly service trips and high utility bills. See the table below for a calculation of cost of ownership between those three options over a ten year period.

TCO - Total Cost of Ownership



		Product catalog ENG	Page 9 of 23
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Air-Site Dimensioning Tool, DMCalc

With our new dimensioning tool it is now easy to choose the right DeltaMaster free cooling unit for you technical room according to your requirements.

By entering the parameters of noise, heat load and the Delta-T value you want to allow, you can get the average power consumption as well as noise level at a certain distance from the DeltaMaster unit.



Configuration

Country: Sweden

Delta-T (K): 2

Required Heat Load (kW): None (show all fans)

Quantity: Single fan

Ventilator: DeltaMaster 10 230 VAC (60%)

Noise

Silencer: No Silencer

Noise limit (dBA): 40 dBA

Noise from Intake:

Results

Heat load (kW): 6,44

Rated Fan Power (W): 159,00

Annual avg Fan Power (W): 43,73




Annual consumption (kWh): 383,03

Noise Level Diagram:




Distance (m)	Noise Level (dBA)
Air Intake	65 dBA
2 m	49 dBA
4 m	43 dBA
6 m	39 dBA
8 m	37 dBA
10 m	35 dBA
12 m	33 dBA

The tool is available on our website www.air-site.com

48V FreeCooling units

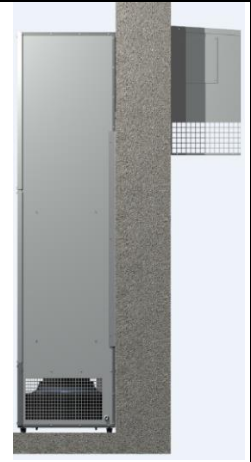
	<p>MicroMaster 48EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed Rated electrical power Rated electrical current Recommended Air flow (l/s) Weight Dimensions (WxHxD)</p>	<p>Art nr 01160</p> <p>Magnelis (C5) 50 dBA 1 pcs 1-2 kW 2-4 kW 48 VDC 2700 rpm 114 W 2,2 A 194 l/s 6 kg 298x293x209 mm</p>
	<p>DeltaMaster 2 48EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed Rated electrical power Rated electrical current Air flow (l/s) Weight Dimensions (WxHxD)</p>	<p>Art nr 01018-2</p> <p>Magnelis (C5) 50 dBA 2 pcs 2-3 kW 4-6 kW 48 VDC 2700 rpm 112 W 2,2 A 250 l/s 10 kg 362x453x183 mm</p>
	<p>DeltaMaster 4 48EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed at 8,5 V control signal Rated electrical power Rated electrical current Air flow (l/s) Weight Dimensions (WxHxD)</p>	<p>Art nr 07020c</p> <p>Magnelis (C5) 41 dBA 2 pcs 4 kW 8 kW 48 VDC 1970 rpm (2020 rpm) 250 W 5,3 A 400 l/s 16 kg 556x543x273 mm</p>



	<p>DeltaMaster 6L 48EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed Rated electrical power Rated electrical current Recommended Air flow (l/s), 85% of full speed Weight Dimensions (WxHxD)</p>	<p>Art nr 02002-2</p> <p>Magnelis (C5) 50 dBA 3 pcs 5-6 kW 10-12 kW 48 VDC 1442 rpm 375 W 7,2 A 600 l/s 23 kg 600x610x262 mm</p>
	<p>DeltaMaster 8 48EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed Rated electrical power Rated electrical current Air flow (l/s) Weight Dimensions (WxHxD)</p>	<p>Art nr 06002</p> <p>Magnelis (C5) 48 dBA 5 pcs 8 kW 16 kW 48 VDC 1650 rpm 340 W 6,3 A 850 l/s 35 kg 605x835x422 mm</p>
	<p>Outdoor unit ODU 6L 48EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-490x490x360 Cooling capacity* Voltage Speed Rated electrical power Rated electrical current Air flow Weight Dimensions (BxHxD) Dimensions with intake cowl (BxHxD)</p>	<p>Art nr 02180</p> <p>Magnelis (C5) 41 dBA 1 pcs 5-6 kW 48 VDC 1410 rpm 330 W 7,2 A 700 l/s 26 kg 500x850x500 mm 500x1142x654 mm</p>



CityMaster 48EC



CityMaster 48EC

High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Extra noise reduction thanks to sound absorbing stone wool inside of the unit. Air intake on the back side just under the ceiling. Air outlet (high-impulse) through the grille at the bottom of the unit. Electrical wiring and installation help, please ask for our installation guide (IMO)

Casing made of:

Noise**

Filter M6-490x590x360

Cooling capacity with a Δt of 5K

Voltage

Speed

Rated electrical power

Rated electrical current

Air flow (l/s)

Weight

Dimensions (WxHxD)

Art nr 01150

Magnelis (C5)

30 dBA

1pcs

5 kW

48 VDC

1650 rpm

340 W

6,3 A

764 l/s

78 kg




600x1872x496 mm

* Deviation may result from the site performance.




** Sound Pressure level Measured 10 m from intake cowl.



230V FreeCooling units

	<p>MicroMaster 230EC including Control unit X04 High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed Rated electrical power Rated electrical current Recommended Air flow (l/s), 70% of full speed. Weight Dimensions (WxHxD)</p>	<p>Art nr 01120</p> <p>Magnelis (C5) 42 dBA 1 pcs 1-2 kW 2-4 kW 230 V 2900 rpm 170 W 1,45 A 200 l/s 6 kg 298x293x209 mm</p>
	<p>DeltaMaster 2 230EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed Rated electrical power Rated electrical current Air flow (l/s) Weight Dimensions (WxHxD)</p>	<p>Art nr 01069</p> <p>Magnelis (C5) 54 dBA 2 pcs 2-3 kW 4-6 kW 230 V 2900 rpm 170 W 1,45 A 303 l/s 10 kg 362x453x183 mm</p>
	<p>DeltaMaster 4 230EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed at 8,5 V control signal (max. speed) Rated electrical power Rated electrical current Air flow (l/s) Weight Dimensions (WxHxD)</p>	<p>Art nr 07023</p> <p>Magnelis (C5) 44 dBA 2 pcs 4 kW 8 kW 230 V 1720 rpm (2010 rpm) 390 W 1,8 A 400 l/s 16 kg 556x543x273 mm</p>



	<p>DeltaMaster 6L 230EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed Rated electrical power Rated electrical current Air flow (l/s) Weight Dimensions (WxHxD)</p>	<p>Art nr 02001</p> <p>Magnelis (C5) 44 dBA 3 pcs 6 kW 12 kW 230 V 2010 rpm 390 W 1,8 A 600 l/s 23 kg 600x610x300 mm</p>
	<p>DeltaMaster 10 230EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Eco-friendly sound isolation. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-160-1500 Cooling capacity with a Δt of 2K* Cooling capacity with a Δt of 5K* Voltage Speed at 8,5 V control signal (max. speed) Rated electrical power Rated electrical current Air flow (l/s) Weight Dimensions (WxHxD)</p>	<p>Art nr 04031</p> <p>Magnelis (C5) 50 dBA 6 pcs 12 kW 24 kW 230 V 1224 rpm (1440 rpm) 750 W 3,2 A 1200 l/s 46 kg 809x809x442 mm</p>
	<p>Outdoor unit ODU 6L 230EC High efficient EC fan with Magnelis (C5) unpainted (standard) or painted housing. Is to be installed on the outside of the technical room. Electrical wiring and installation help, please ask for our installation guide (IMO) Casing made of: Noise Filter M6-490x490x360 Cooling capacity* Voltage Speed Rated electrical power Rated electrical current Air flow Weight Dimensions (BxHxD) Dimensions with intake cowl (BxHxD)</p>	<p>Art nr 02200</p> <p>Magnelis (C5) 41 dBA 1 pcs 5-6 kW 230 VDC 2010 rpm 390 W 1,8 A 700 l/s 26 kg 500x850x500 mm 500x1142x654 mm</p>

* Deviation may result from the site performance.

** Sound Pressure level Measured 10 m from intake cowl.

Control units



DeltaManager 48V

Control unit for DeltaMaster models with **48 V** feed. Also controls heater, dampers, smoke detector and Air-Condition (Air-Condition is a feature of the 01066b version only).

Easy connection through the RJ45 Ethernet port using Air-Site® DeltaManager Advanced Setup (free software). Real time clock, fire alarm functions, power failure alarm, filter alarm, fan alarm, Air-Condition alarm etc. Tacho measurement. Alarm memory with logging function. MODBUS TCP/IP compatible.

**Art nr 01066a,
01066b**



DeltaManager 230V

Control unit for DeltaMaster models with **230 V** feed. Also controls heater, dampers, smoke detector and Air-Condition. Note that DeltaManager for DeltaMaster 10 has its own article number (01066d) because it looks slightly different.

Easy connection through the RJ45 Ethernet port using Air-Site® DeltaManager Advanced Setup (free software). Real time clock, fire alarm functions, power failure alarm, filter alarm, fan alarm, Air-Condition alarm etc. Tacho measurement. Alarm memory with logging function. MODBUS TCP/IP compatible.

**Art nr 01066c,
01066d**



X04 48V

Power supply

Compatible with **48 V** DeltaMaster models.

Controller with internal indoor temperature sensor.
Mount 1,5 m above floor in accordance with the manual.

- Alarm relay
- 0-10V output for fan speed
- Start signal for heater and Air-Condition
- SIOX communication port

Art nr 01010



X04 24V

Power supply


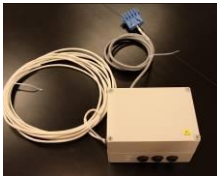
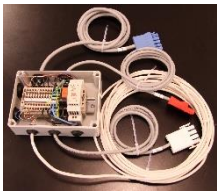

Compatible with **230 V** DeltaMaster models.

Controller with internal indoor temperature sensor.
Mount 1,5 m above floor in accordance with the manual.





- Alarm relay
- 0-10V output for fan speed
- Start signal for heater and Air-Condition
- SIOX communication port

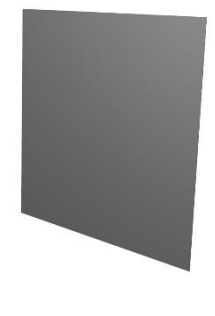




Art nr 01047


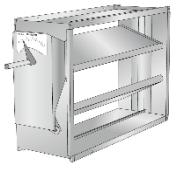





	X04 Connection Box 1R 48EC For DeltaMaster 2, 4, 6L, 8 48EC with heater. Dimensions Connection diagram and functions see separate documentation.	Art nr 01009 125x125 mm
	X04 Connection Box 2R 48EC For DeltaMaster 2, 4, 6L or 8 48EC with Air-Condition and heater, alt. heater and motorized damper. Dimensions Connection diagram and functions see separate documentation.	Art nr 01014 125x170 mm
	X04 Connection Box 1R 230EC For DeltaMaster 2, 4, & 6L 230EC with heater. Dimensions Connection diagram and functions see separate documentation.	Art nr 01039 125x170 mm
	X04 Connection Box 2R-10-230AC For DeltaMaster 10 230EC with Air-Condition and heater, alt. heater and motorized damper. Dimensions Connection diagram and functions see separate documentation.	Art nr 04014 125x170 mm

Accessories

	<p>Back draught shutter for exhaust air With wall duct and 10 mm protective mesh. The wall duct is telescopic 100-190 mm.</p> <p>For DeltaMaster 2 & 4 Cut out dimensions For DeltaMaster 6L & 8 Cut out dimensions For DeltaMaster 10 Cut out dimensions</p> <p>We also provide basic back draught shutters (without telescope). Contact Air-Site for more information.</p>	<p>Art nr 01005 300x300 mm Art nr 02004 500x400 mm Art nr 04004 600x600 mm</p>
	<p>Exhaust cowl Uninsulated Magnelis cowl, which corresponds to C5 classification according to EN ISO12944-2. Rain protection sheet is included.</p> <p>For DeltaMaster 2 & 4 Dimensions (WxH) For DeltaMaster 6L Dimensions (WxHxD)</p>	<p>Art nr 01004 465x300x275 mm Art nr 02008 500x400x360 mm</p>
	<p>Exhaust cowl Uninsulated Magnelis cowl, which corresponds to C5 classification according to EN ISO12944-2. Rain protection sheet is included.</p> <p>For DeltaMaster 8 & 10 Dimensions (WxHxD)</p>	<p>Art nr 02003 700x700x360 mm</p>
	<p>Supply intake cowl Uninsulated Magnelis cowl, which corresponds to C5 classification according to EN ISO12944-2. Rain protection sheet is included.</p> <p>For DeltaMaster 2 & 4 Dimensions (WxHxD) For DeltaMaster 6L Dimensions (WxHxD) For DeltaMaster 8 & 10 Dimensions (WxHxD)</p>	<p>Art nr 01004 465x300x275 mm Art nr 02003 700x700x360 mm Art nr 02003 700x700x360 mm</p>

	<p>Protection sheet Magnelis (C5) FZ185, which corresponds to C5 classification according to EN ISO12944-2.</p> <p>For DeltaMaster 2 & 4 Dimensions (WxH)</p> <p>For DeltaMaster 6L Dimensions (WxH)</p> <p>For DeltaMaster 8 & 10 Dimensions (WxH)</p>	<p>Art nr 01025 450x300 mm</p> <p>Art nr 02022 700x700 mm</p> <p>Art nr 02022 700x700 mm</p>
	<p>Wall transit duct Magnelis (C5) FZ185, which corresponds to C5 classification according to EN ISO12944-2.</p> <p>For DeltaMaster 2, 4 & 6L Dimensions (WxHxD)</p> <p>For DeltaMaster 2, 4 & 6L Dimensions (WxHxD)</p> <p>For DeltaMaster 6L, 8 & 10 Dimensions (WxHxD)</p>	<p>Art nr 01037 300x300x180 mm</p> <p>Art nr 01026 300x300x300 mm</p> <p>Art nr 02023 400x400x300 mm</p>
	<p>Intake grille Magnelis (C5) FZ185, which corresponds to C5 classification according to EN ISO12944-2.</p> <p>We provide the following intake grilles as standard:</p> <p>YGIG-400x400 YGIG-500x400 YGIG-600x600 YGIG-900x700</p>	<p>Art nr 02045 02068 02053 04019</p>
	<p>Intake grille with wall connection box Magnelis (C5) FZ185, which corresponds to C4 classification according to EN ISO12944-2.</p> <p>For DeltaMaster 2 Dimensions (WxHxD)</p> <p>For DeltaMaster 6L Dimensions (WxHxD)</p>	<p>Art nr 01020 400x400x120 mm</p> <p>Art nr 02007 600x600x120 mm</p>
	<p>Roof cowls Magnelis (C5) FZ185, which corresponds to C4 classification according to EN ISO12944-2.</p> <p>We provide the following roof cowls as standard:</p> <p>Roof Cowl UH 200 Roof Cowl UH 300 Roof Cowl UH 400 Roof Cowl UH 500 Roof Cowl GH 400x400x300 mm Roof Cowl GH 1000x1000x400 mm</p>	<p>Art nr 01053 02035 02028 06006 04029 04034</p>

	<p>Angular part For DeltaMaster 2 For DeltaMaster 6</p>	Art nr 01008 Art nr 02018
	<p>Spare filters M6-160-1500 Hose clamp</p>	Art nr 01006 Art nr 10026
	<p>Motorized damper 24V The LF24 motor is a 24 V powered motor with spring return. Choose between two modes: 1. Close in case of fire, 2. Open in case of power failure when 48 V batteries are operating. The motor has two wires (phase and neutral) according to the wiring diagram in the installation guide.</p> <p>Intake dampers</p> <p>For DeltaMaster 2, 4 Dimensions (WxH)</p> <p>For DeltaMaster 6L, 8 & 10 Dimensions (WxH)</p> <p>Exhaust dampers</p> <p>For DeltaMaster 2 & 4 Dimensions (WxH)</p> <p>For DeltaMaster 6L & 8 Dimensions (WxH)</p> <p>For DeltaMaster 10 Dimensions (WxH)</p>	<p>Art nr 01056b 300x300 mm</p> <p>Art nr 02050b 400x400 mm</p> <p>Art nr 01056b 300x300 mm</p> <p>Art nr 02051b 500x400 mm</p> <p>Art nr 04020b 600x600 mm</p>
	<p>Sheet metal kit for DeltaMaster 6L 48EC</p>	<p>Art nr 02021</p>
	<p>For DeltaMaster 2 & 4 48EC Plastic housing, cables and wall brackets are included Rated current Dimensions (WxHxD)</p>	<p>Art nr 01031 IP20 classification 2,5 A 65x195x35 mm</p>
	<p>For DeltaMaster 6L & 8 48EC Metal enclosure, cables and wall brackets are included Maximum power Rated current Dimensions (WxHxD) Weight</p>	<p>Art nr 02020 IP20 classification 320 W 9 A 210x230x110 mm 1,5 kg</p>
	<p>Fan heater Electrical data Power supply Rated power Rated current Dimensions (WxHxD) Weight</p>	<p>Art nr 01007 1~ 230 V 1,3 kW 5,65 A 177x221x89 mm 1,0 kg</p>

**3G modem**

We provide several different types of modems for mobile monitoring and controlling of DeltaMaster FreeCooling, dampers, heater and Air-Condition, but also external components such as rectifiers, backup power, doors, locks, etc.

**Communication kit**

This kit includes cables and a SIOX-to-PC converter. Choose between RS232 and USB on PC side. Necessary files for communication are:

- The Windows® application **Visual Viewer**
- Start file for process picture

Download these files from our homepage www.air-site.com.

First, install **Visual Viewer** and then start the communication by double clicking the start file. Follow the instructions.

Art nr 01024 (USB)
Art nr 01027 (RS232)

**Ethernet cable**

For control units named **DeltaManager**. Necessary files for communication are:

- The Windows® application **Visual Viewer**
- DeltaManager Advanced Setup start file

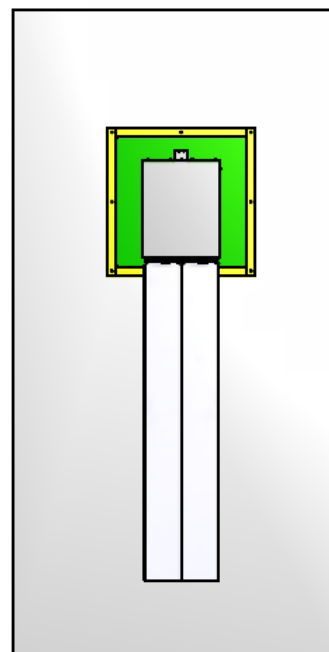
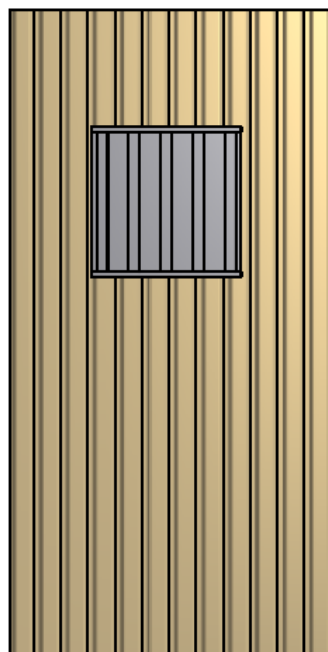
First, install **Visual Viewer** and then start the communication by double clicking the start file. Follow the instructions.



SandMaster

Air-Site SandMaster is used as a sand trap and pre-filter for our DeltaMaster units. There is a good degree of separation of sand and larger dust particles, even when the concentration of particles in the air is high. The vertical blades and the holes for draining sand in the bottom of the louvre makes it self-cleaning. The SandMaster is designed so that it separates larger particles when the air flow is low and thus reduces the risk of clogging the DeltaMasters own filters. This also means that the sand trap should not replace a conventional filter.

The SandMaster is made in five different sizes, each one adapted to work together with a specific DeltaMaster to achieve the best result. It is delivered with a connection module for fastening the DeltaMaster unit inside the technical room and to ensure an easy installation.





SandMaster

**Sand trap**

Includes wall transit/DeltaMaster installation module.

For DeltaMaster 2

Dimensions

Wall cut

For DeltaMaster 4

Dimensions

Wall cut

For DeltaMaster 6

Dimensions

Wall cut

For DeltaMaster 8

Dimensions

Wall cut

For DeltaMaster 10

Dimensions

Wall cut

Art nr 8015529

700x700 mm

610x610 mm

Art nr 8015530

900x800 mm

810x710 mm

Art nr 8015531

1000x1000 mm

910x910 mm

Art nr 8015532

1200x1200 mm

1110x1110 mm

Art nr 8015533

1400x1400 mm

1310x1310 mm



FreeCooling for Telecom sites, server rooms and other equipment rooms with 48 V or 230 V power supply.

FreeCooling

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