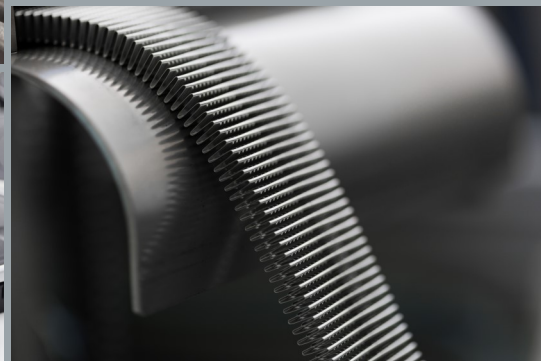




Product Catalog 2022



VALUES-FUELED APPROACH

THE GENESIS OF EVERYTHING WE DO AT AURORA

Mission

- Continuously redefine the integration of thermal solutions in vehicles which ensure safety and
- Comfort for every user – leveraging a harmony between accurate control, human-machine-interface, reliable performance, and activate an effective interplay between components.

Vision

- Share our Passion for Comfort, Focus on Users Globally, Think Differently and
- Innovatively, Provide Solutions with Purpose, and Maximize Efficiency – Always.

Values

A daptive

- We ensure every system and component matches the application and the desires of our partners.

R eliable

- We serve our stakeholders from inception through production to after-sales support.

E fficient

- We design and produce cleaner, greener solutions, specially those for electric mobility.

A ware

- We expand expertise that harnesses innovation to meet changing needs.

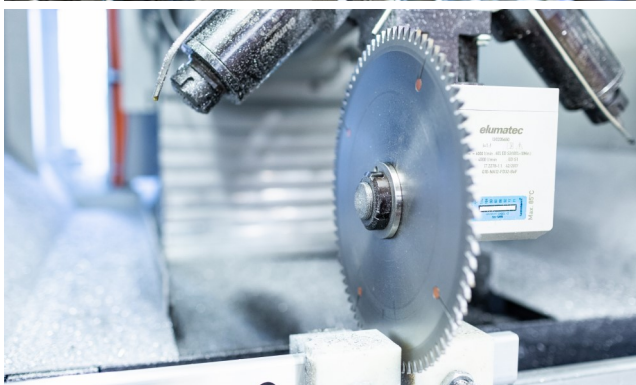
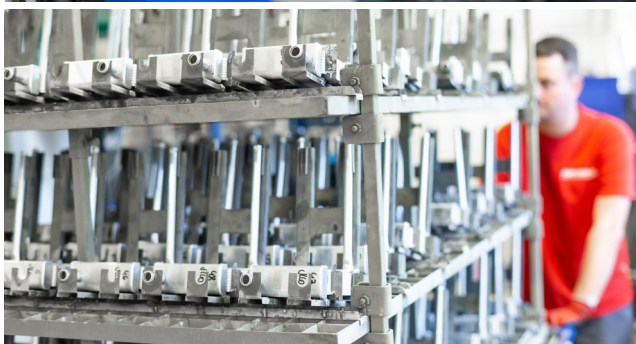
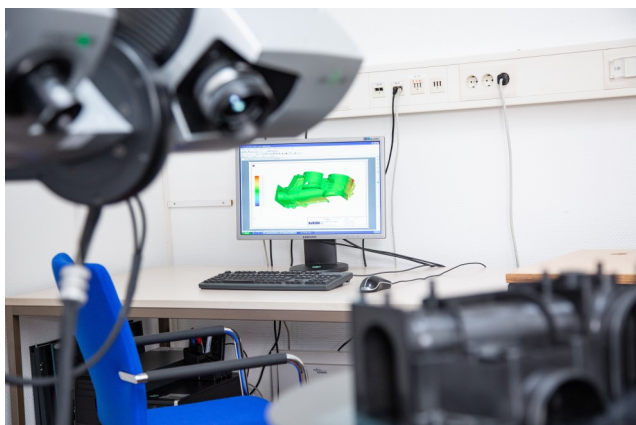
S tabile

- We are invested in continuous improvement and growth to promise corporate sustainability.



TAILORING THERMODYNAMICS

THANKS TO CUSTOM-MADE H.V.A.C. SOLUTIONS

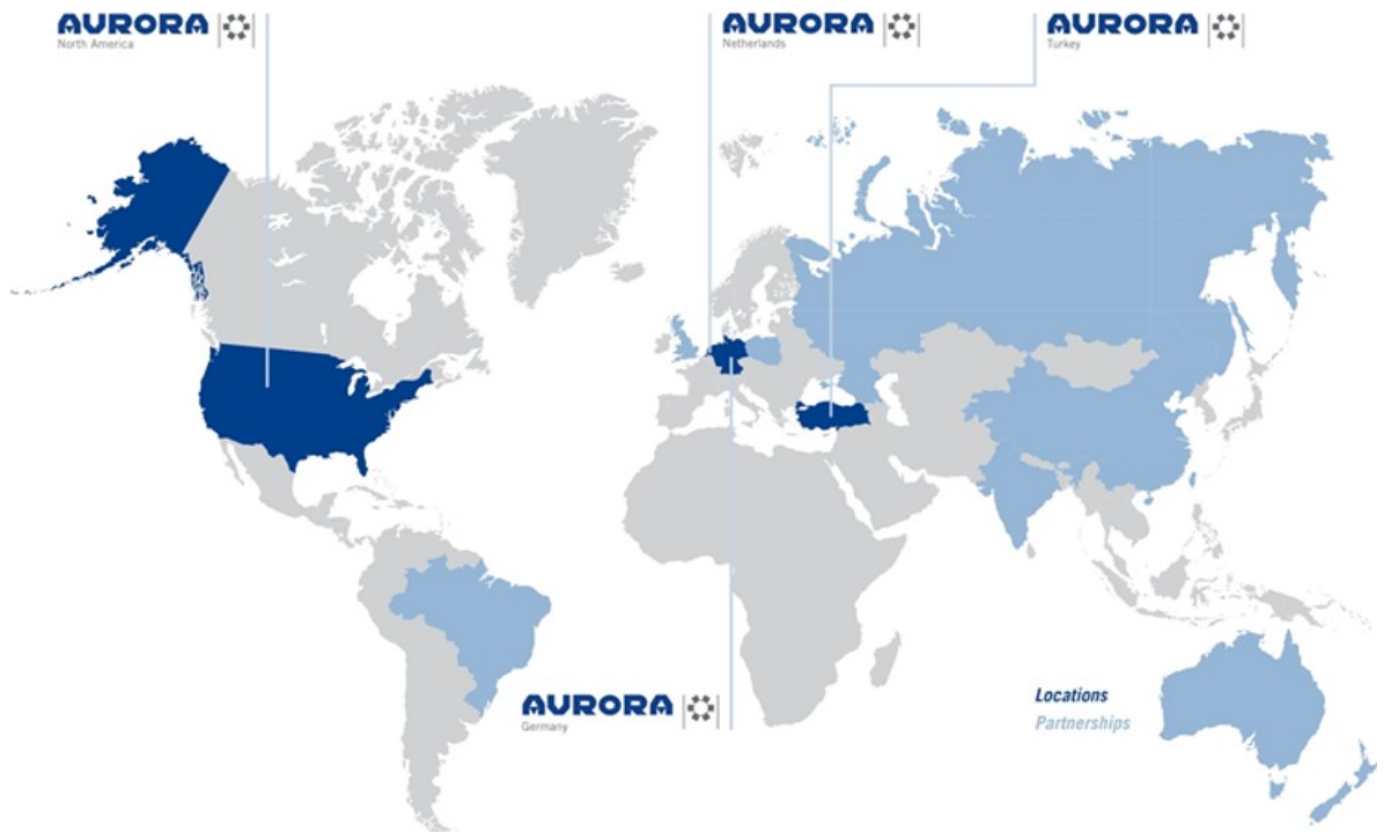


GLOBALIZED & INVESTED

IN OUR ABILITY TO SUPPORT YOU ANYWHERE

Present across five Group locations worldwide as well as an expansive support network, AURORA is prepared to provide service to OEMs, Dealerships, and End-Users alike.

Support that is multilingual, interculturally-aware, and active to understand needs and accommodate to the best of our capabilities.



WE LOOK FORWARD
TO SERVING YOU



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Velimese OSB Mah 241.Sok No:6/1
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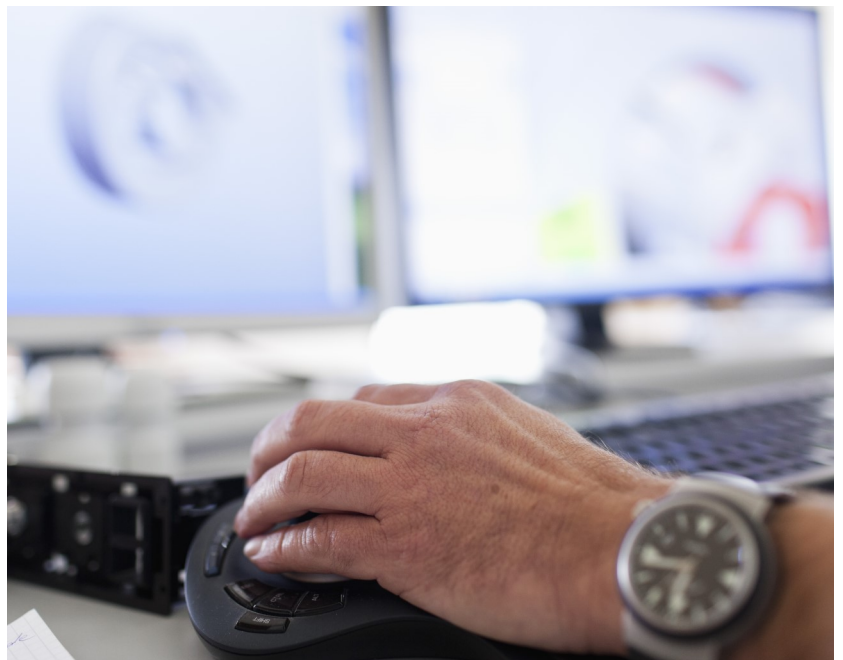
INNOVATIVELY ADAPTIVE

THINKING DIFFERENTLY FOR EACH OEM & END-USER ALIKE

In collaboration together with our Customers, we design, develop and manufacture Heating, Ventilation, and Air-Conditioning Systems & Components. Drawing upon our near century of expertise, we understand unique expectations that exist within each industry, each application. Our solutions continue to accomodate most every cabin space and performance demand.



Aligning a dedicated team of thermal management specialists supported by our professional simulation & test facilities enables AURORA altogether to design thermal management Solutions to serve specific customer expectations, then to optimize the integration into various vehicle classifications. Our vertically integrated production with enormous capacity enables us to design custom-fit system solutions specially for every cabin — all this delivered through setting in motion a demand-driven supply-chain.



UNRIVAELD COMFORT

ALREADY TO SERVE THOSE ABROAD ANY CABIN, ANY ENVIRONMENT

Overall, at AURORA, the user-driven **versatility** of our product line enables us to accommodate **various levels of Comfort**. In achieving this effect, we support our Customers throughout selecting and dimensioning of our solutions to make certain we fulfill desires of both OEMs and end-users alike. Our most innovative designs feature **automatic temperature control**, whereby the control system is able to determine **individualized levels of comfort** - every time, **throughout most every environment**. Together with our Customers, we strive tirelessly to raise comfort standards in real terms of not only performance, but also value.



CUSTOMIZABLE SYSTEM FEATURES

IDEALLY YOUR SYSTEM, PRECISELY YOUR WAY

FEATURES & BENEFITS

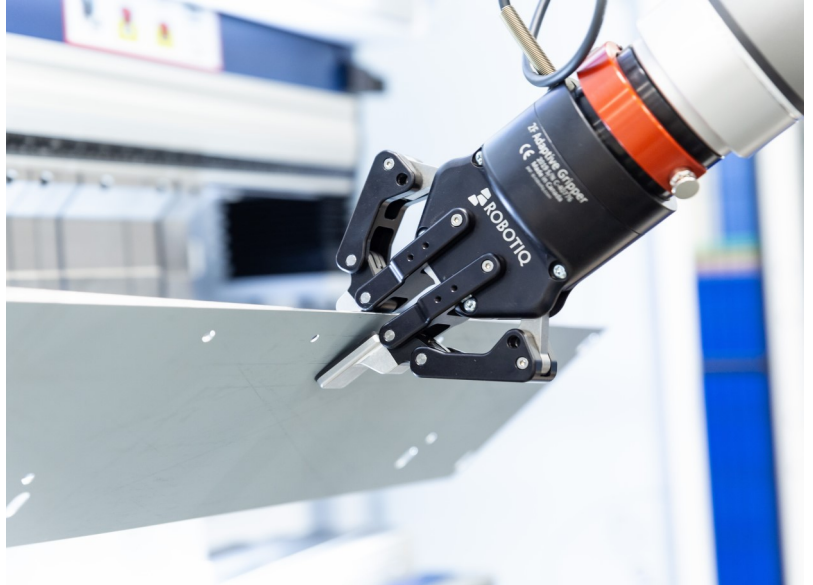
- Aluminum or Plastic Housings
- Heating & Cooling Performances from 2kW to 50kW
- Flexible Cut Surfaces
- Various Blowers Synchronized
- Range from Two-Step to Stepless Function
- Filtration Classification Match
- Fully-Automatic Control
- CFD Simulations to Maximize Component Efficiency on Airflow Side
- DIN EN45545 certified components





E-MOBILITY SOLUTIONS

AS OUR FUTURE ELECTRIFIES



INTO EVEN THE FINEST
THOUGHTFUL
CONSIDERATION



E-MOBILITY SOLUTIONS

AS OUR FUTURE ELECTRIFIES



PRECISION DESIGN

THROUGHOUT EACH &
EVERY COMPONENT

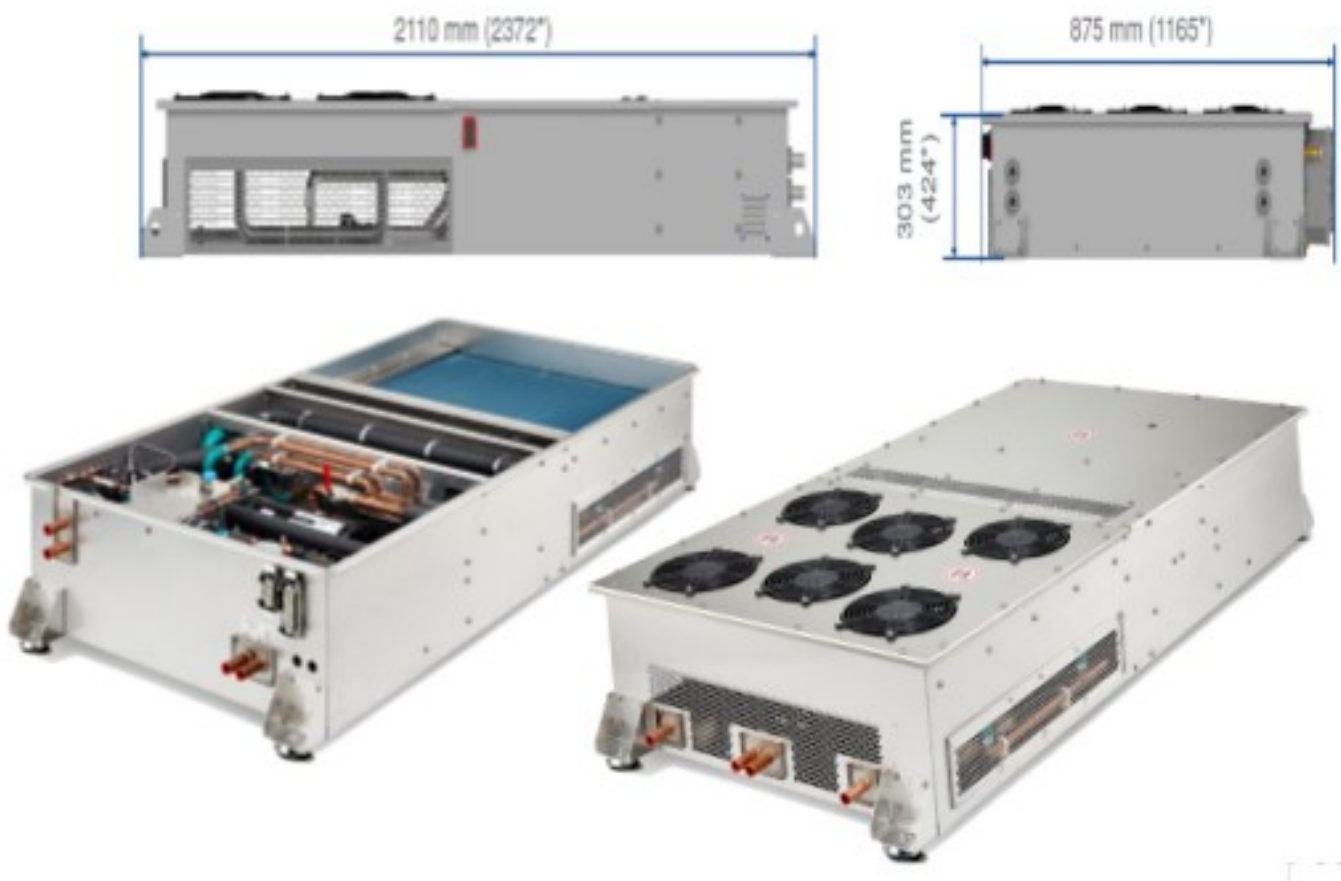


BOREALIS

FOR A E-BUS

FEATURES

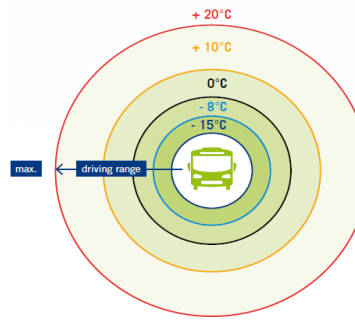
- Borealis to serve as a heat-pump unlike any other
- RIGA to compliment the rooftop heat transfer with an aerodynamically formed body and supreme airflow
- Teddy 2000 provides a strong heat source from both the driver space / anterior as well as posterior of the bus
- Puma spreads a wide-distribution of convection heat along the sidewall
- Front Box ensures the front windshield is quickly freed of fog and even ice accumulation.
- Aranea features AURORA's specialty Automatic-Temperature Control to serve end-user desires promptly
- BOREAS - E (see pages 20 - 21) *optional*



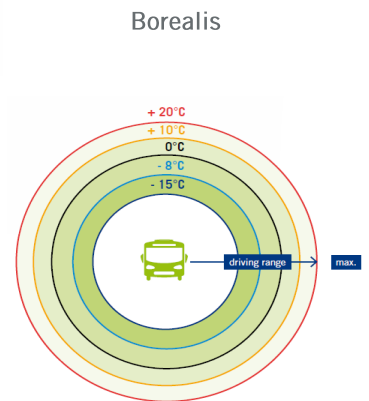
BOREALIS FOR A E-BUS

BENEFITS

- High Energy Efficiency with Fully-Electric Function
- Flexible, Modular Design to Accommodate Most Any Vehicle
- Harmonized Performance, Interplay between Components
- Emissions-Free
- Blowers Synchronized
- Two-Step to Stepless Function
- Filtration Classification Match
- CFD Simulations Maximize Component Efficiency on the Airflow Side
- DIN EN45545 on request
- Capable of operation in -15°C to $+45^{\circ}\text{C}$ with an additional refrigerant option for 0°C - 55°C



Conventional Heat

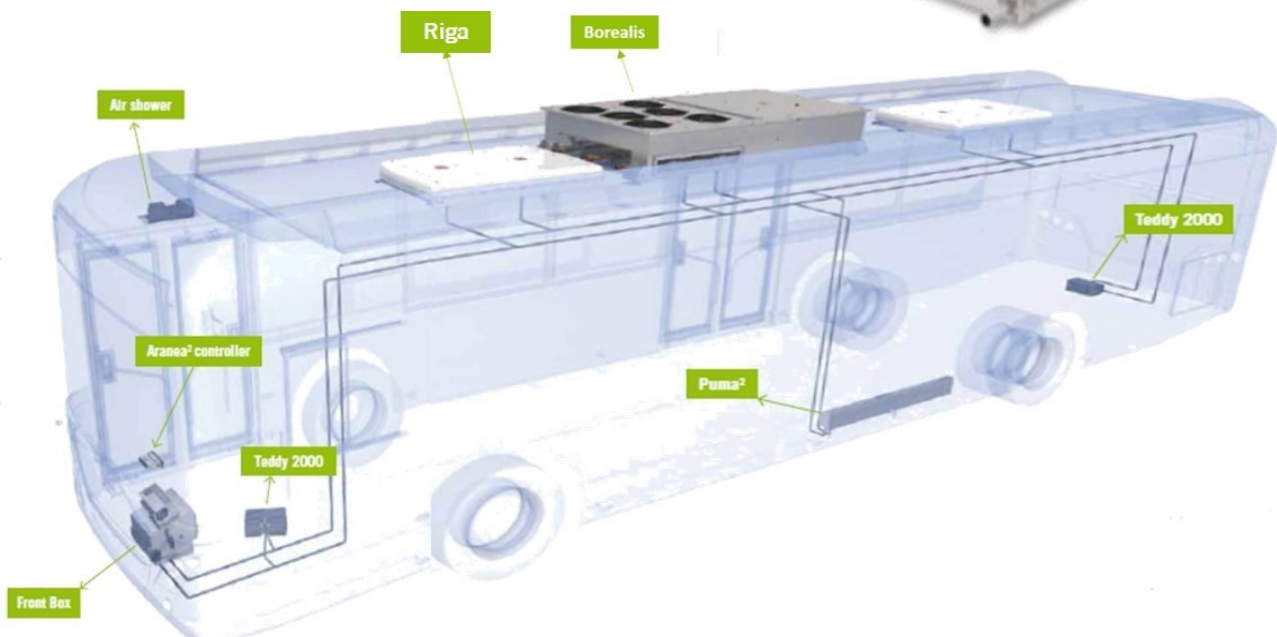


Borealis

AC-MODE	
COP	2,5
Cooling Capacity	22 kW
Cooling fluid interior	4°C
Ambient	35°C / 70% r.h.

HEAT-MODE (vehicle waste heat)	
COP	3,5
Cooling Capacity	18 kW
Cooling fluid interior	45°C
Cooling fluid waste	20°C

HEAT-MODE (ambient air)	
COP	2,6
Heating Capacity	11 kW
Cooling fluid interior	40°C
Ambient	-15°C / 30% r.h.



ELECTROMOBILITY SOLUTIONS

BATTERY COOLER & HEATER

FEATURES & BENEFITS

- Unison of performance of batteries, this device regulates to maintain the battery's temperature within an optimal range under most all conditions.
- Easy-to-Install thanks to modularity of design
- Long-lasting componentry for minimized aftermarket maintenance and thereby lower cost of ownership
- Height of only 415mm: the roof-mountable symmetry of this Unit makes for an absolutely ideal application underneath any aerodynamically-curved bus rooftop.
- Diagnostics available from UDS: enabling monitoring of system performance & variables.
- Integrated Automatic Coolant De-Airation System designed for smooth, uninterrupted function whenever in use

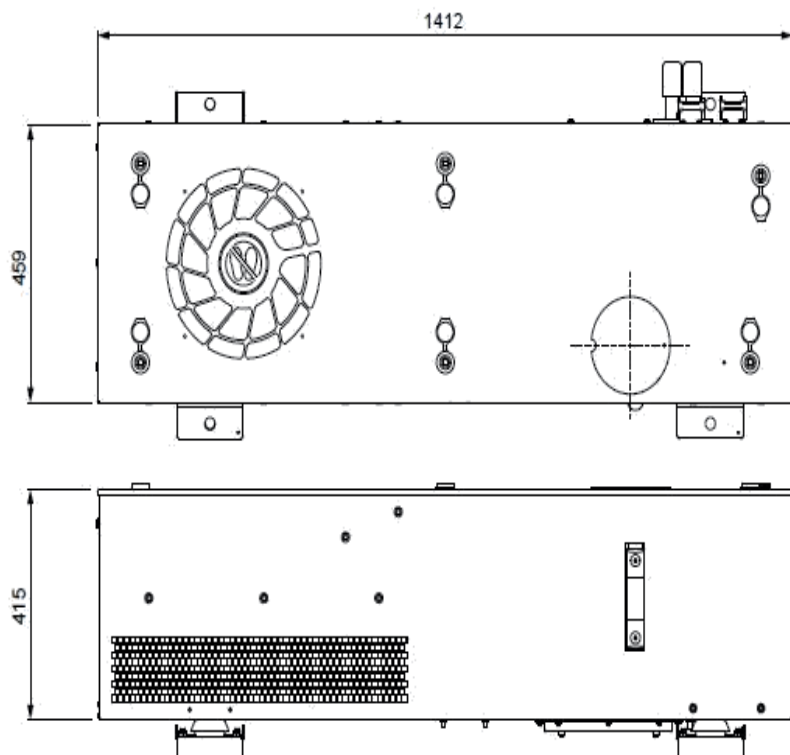
Performance		
	VS02 - 4 kW	VS03 - 7 kW
Cooling Capacity ⁽¹⁾	4.2 kW	6.9 kW
Heating Capacity	1.2 kW @ 230 V	1.2 kW @ 230 V
Maximum Current Draw 26 V	17 A	17 A
Dimensions W x L x H	460 x 1412 x 455	804 x 1757 x 377
Weight	84 kg	98 kg.
Refrigerant	R134a	R134a
Compressor	Scroll	Scroll
Voltage	400 V - 3 phase	400 V - 3 phase
Maximum Current Draw 400 V AC (Refrigerant Circuit)	5.1 A	9.0 A
Water Pump	Max 6000 L / h at 0.4 bar	Max 6000 L / h at 0.4 bar

1 R134a evaporating 5° C condensing 50 ° C



ELECTROMOBILITY SOLUTIONS

BATTERY COOLER & HEATER



ELECTROMOBILITY SOLUTIONS

ELECTRIC, HIGH VOLTAGE HEATER

FEATURES & BENEFITS

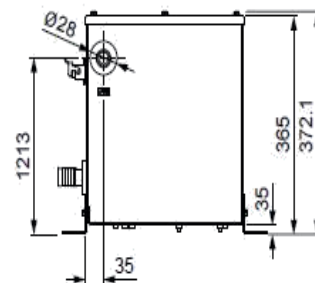
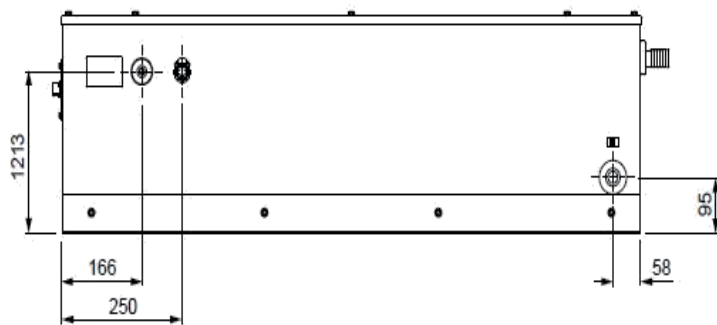
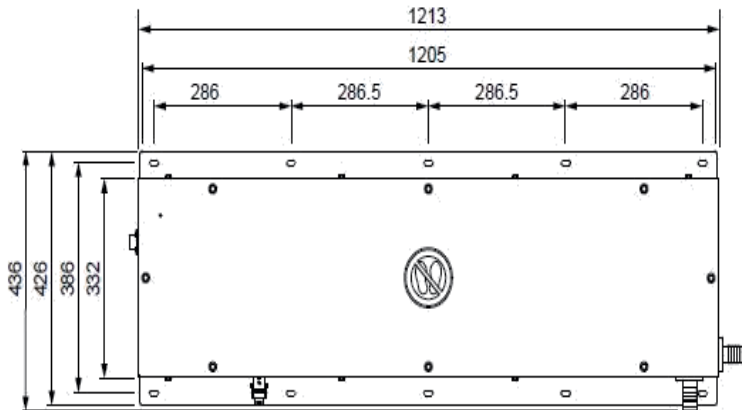
Powerful similar to its namesake, this **high-voltage** heater is specialized for electric vehicles. By converting electrical energy of the battery with DC voltages, ranging from 300 to 850, into abundant heat, this device provides efficient, zero-emission warming — all throughout the interior of the vehicle.

Performance		
	HV9	HV13
Heating Capacity	8.5 kW	13 kW
Range of supply voltage DC	300 - 850 V DC	300 - 850 V DC
Current Draw	300 V = 4.6 A	300 V = 8 A
	800 V = 12.5 A	800 V = 19 A
Dimensions W x L x H	436 x 1269 x 372	436 x 1269 x 372
Weight	42 kg	42 kg
Volume Flow L/h	> 1500	> 1500
Current Draw water pump 26V	10 A	10 A
Operating Pressure (bar)	Max. 2.0	Max 2.0



ELECTROMOBILITY SOLUTIONS

ELECTRIC, HIGH VOLTAGE HEATER



ELECTROMOBILITY SOLUTIONS

BORA HV 20

FEATURES & BENEFITS

Electrical rooftop air-conditioner, which is designed specifically to provide constant capacity for both hybrid as well as electric buses.

Performance	
Maximum Cooling Capacity ⁽¹⁾	5.7 kW
Nominal Cooling Capacity ⁽¹⁾	4.6 kW
Heating Capacity ⁽²⁾	-
Airflow ⁽³⁾	800 m³ / h
Maximum Current Draw 540 DC	7 A
Maximum Current Draw 26 DC	8 A
Dimensions L X W X H	2040 x 2585 x 340
Weight	38 kg
Refrigerant	R134a
Compressor	Scroll
Range of supply voltage DC	400 - 750 V DC

1 AHRI standard: Max: Ti 40°C, Te 35°C, r.h. 46%. Nom: Ti 27°C, Te 35°C, r.h. 46%

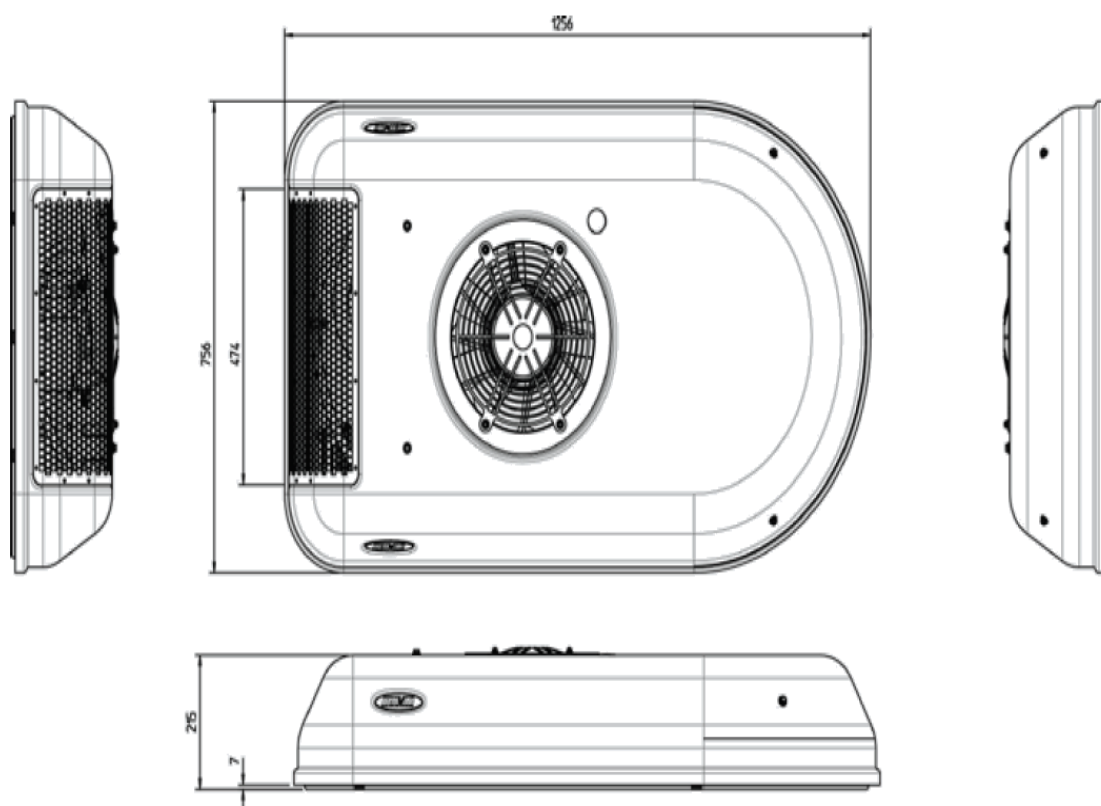
2 80°C coolant, 0°C air

3 Free blowing at standard conditions 20°C and 1,01325 Bara



ELECTROMOBILITY SOLUTIONS

BORA HV 20



ELECTROMOBILITY SOLUTIONS

BOREAS - E

FEATURES & BENEFITS

- **Steady Airflow** - Constant Cooling Capacity
- **Fresh Air** - 100% Fresh Air Supply
- **Applied Engineering** - Roof-Mounted System
- **Quiet Function** - Brushless Blowers
- **Modular** - Easy-Installation
- **Sustainable** - Lightweight & 100 Recyclable
- **No Refrigerant Pipes Installation** thanks to an integrated compressor
- **Low Cost of Operation** with Durable, Long-Lasting Components

Performance	
Maximum Cooling Capacity ⁽¹⁾	18 / 24 kW; 50 / 75 Hz
Nominal Cooling Capacity ⁽¹⁾	11 / 15 kW; 50 / 75 Hz
Heating Capacity ⁽²⁾	38 kW @ Q80
Airflow ⁽³⁾	3800 m³ / h
Fresh air	0% — 100%
Maximum Current Draw 24 DC	63 A
Dimensions ⁽⁴⁾ W X L X H	2040 x 2585 x 340
Weight	185 kg
Refrigerant	R134a
Compressor	Scroll
Maximum Current Draw 600 V DC	22 A
Inverter	External
Filter dUdt	optional

1 AHRI standard: Max: Ti 40°C, Te 35°C, r.h. 46%. Nom: Ti 27°C, Te 35°C, r.h. 46%

2 80°C coolant, 0°C air

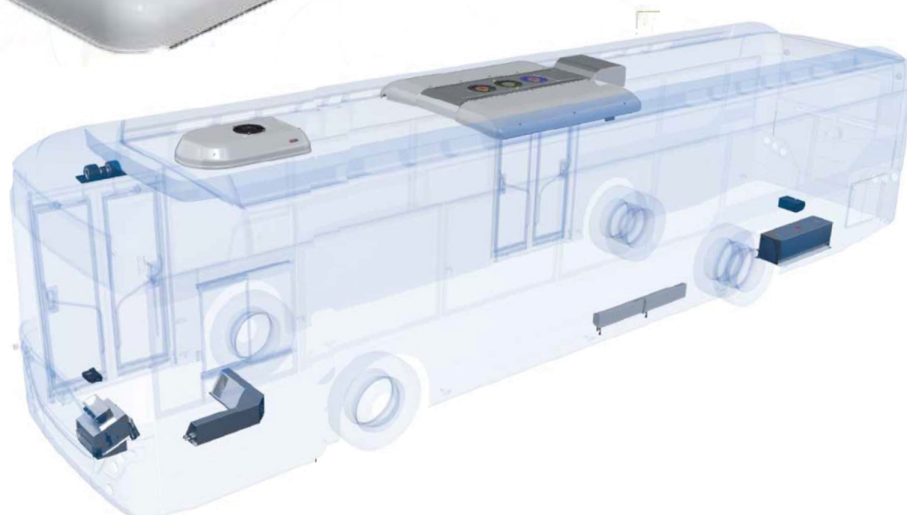
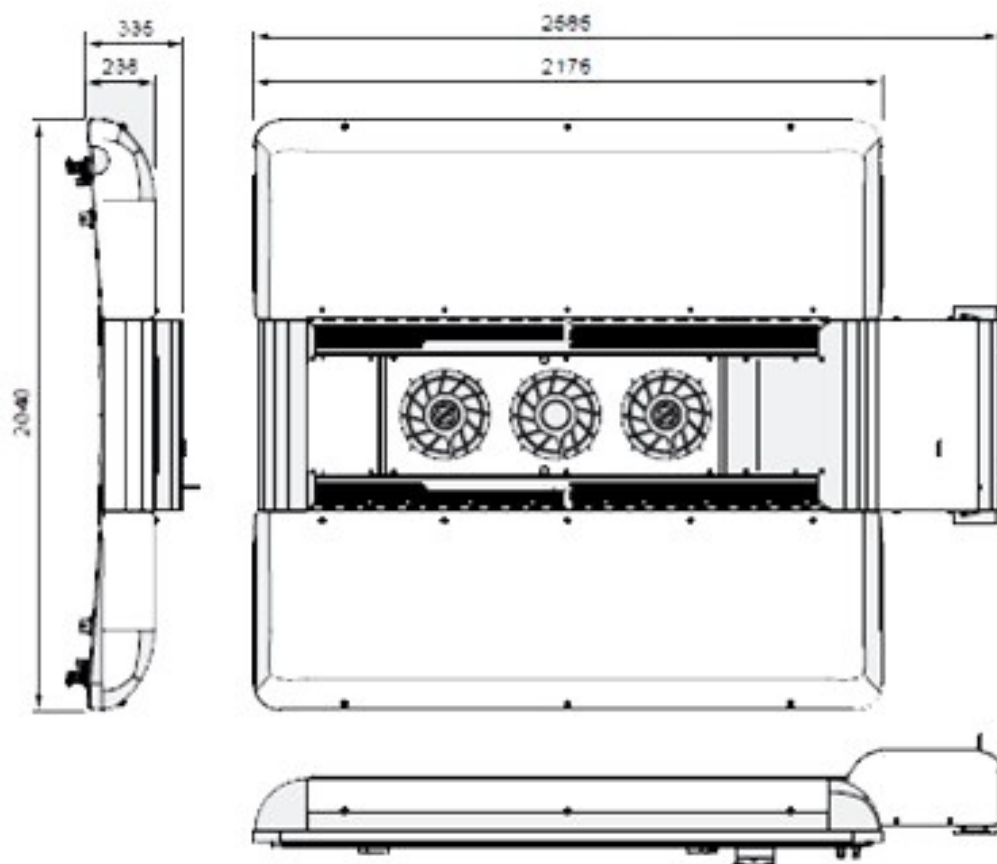
3 Free blowing at standard conditions 20°C and 1,01325 Bara

4 Custom width on customer demand



ELECTROMOBILITY SOLUTIONS

BOREAS - E



AURORA

Advanced HVAC Solutions



ROOFTOP-MOUNTABLE



COMPACT VERSATILITY FOR HIGHLY-EFFICIENT, ALL-ELECTRIC PERFORMANCE

ROOFTOP MOUNTABLE UNITS

BORA EL10

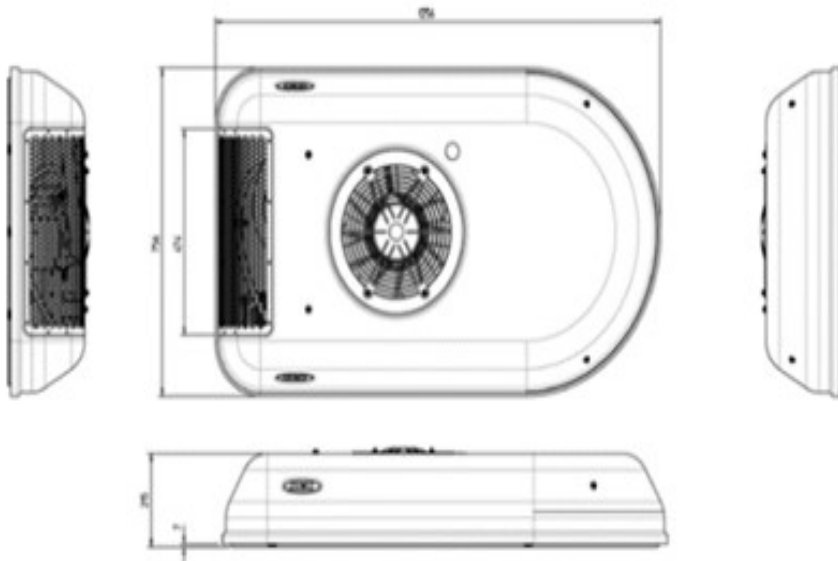
Uniquely designed to deliver air-conditioning to a driver in constant capacity, full-electric functionality, and after an easy installation, this Unit is compatible with the *Aranea* control system and comes prefilled with refrigerant, requiring no refrigerant pipes leading to the vehicle's engine — completely standalone when the topic is refrigerant. Most ideal for implementation in roof-mounted applications.

Performance	
Maximum Cooling Capacity	3 kW
Nominal Cooling Capacity	2.6 kW
Heating Capacity	-
Airflow AC	800 m ³ / h
Fresh air AC	0%
Maximum Current Draw	40 A
Dimensions	1256 x 756 x 215
Weight	42 kg



ROOFTOP MOUNTABLE UNITS

BORA EL10



ROOFTOP MOUNTABLE UNITS

SON 50

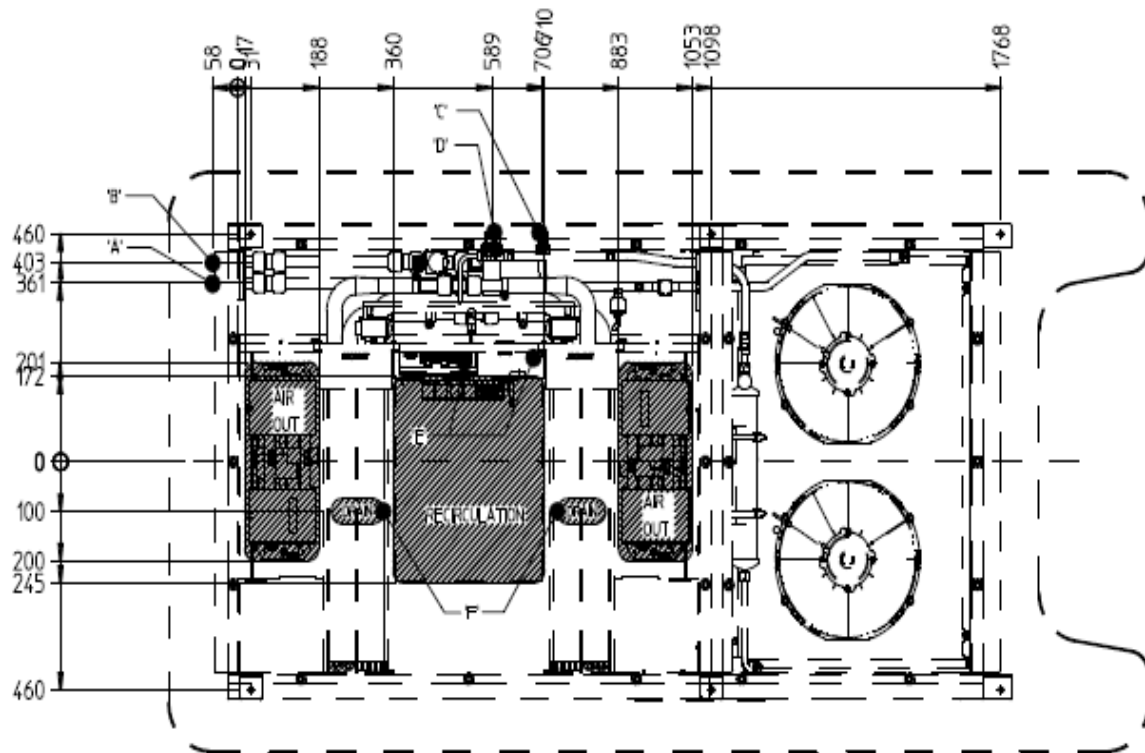
Featuring an aerodynamically shaped body to enhance overall vehicle travel efficiencies, this particular device can unleash power and performance unlike most any roof-mounted units before, especially at this level. *SON* features the duality of both heating, and cooling packed into one slim, high-performance unit. Loaded with awesome features: brushless evaporator blowers, a central duct, controller intergrade in unit or dashboard — all lightweight and ready for plug & play function. Best mounted on cabin sizes like a mid-sized bus.

Performance	
Maximum Cooling Capacity	14 kW
Nominal Cooling Capacity	2.6 kW
Heating Capacity	30 kW
Airflow AC	2000 m ³ / h
Fresh air AC	0% — 100%
Maximum Current Draw	39 A
Dimensions	2270 x 1175 x 190
Weight	63 kg
Options	Cool-Only; Cool / Heat; Cool-Only with Fresh-Air; Cool / Heat with Fresh-Air



ROOFTOP MOUNTABLE UNITS

SON 50



ROOFTOP MOUNTABLE UNITS

SON 70

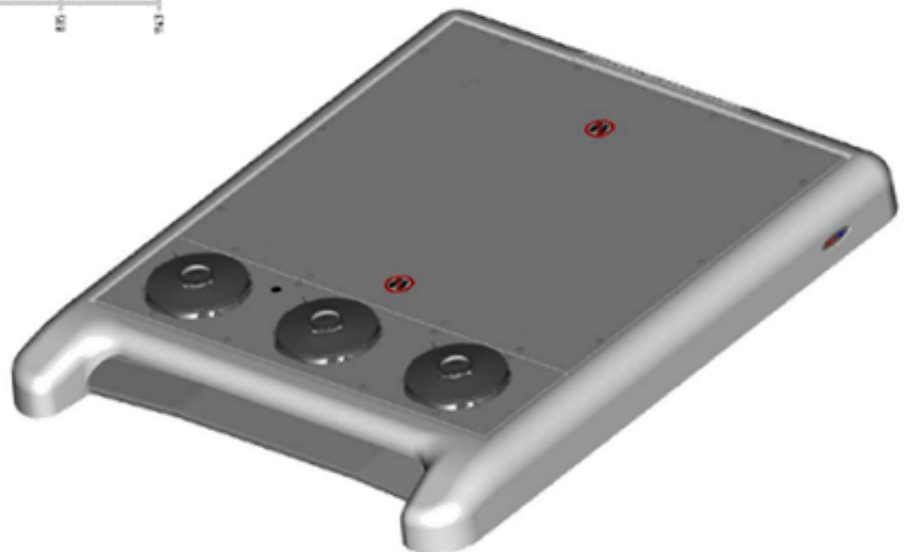
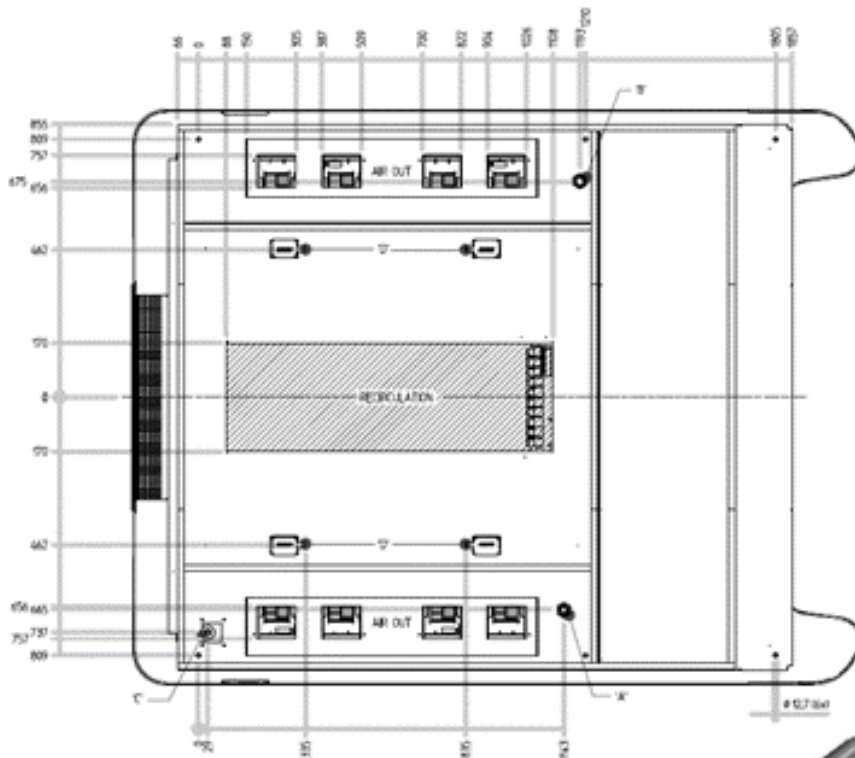
AURORA’s Electric, Compact Rooftop Units are versatile and ready to serve at the forefront of the next generation of HVAC. SON is engineered with mid-size busses in mind and comes complete with brushless evaporator blowers, a central duct, integrated controller either in-unit or on-dashboard, efficient heating performance, is both lightweight + plug-and-play.

Performance	
Maximum Cooling Capacity	24 kW
Nominal Cooling Capacity	18 kW
Heating Capacity	34 kW
Airflow AC	4800 m³ / h
Fresh air AC	0% — 100%
Maximum Current Draw	70 A
Dimensions	2270 x 1800 x 290
Weight	113 kg



ROOFTOP MOUNTABLE UNITS

SON 70



ROOFTOP MOUNTABLE UNITS

BOREAS

AURORA's Electric, Compact Rooftop Units are versatile and ready to serve at the forefront of the next generation of HVAC.

Every *Boreas* is recyclable as well as lightweight to empower sustainability in transportation for generations to come, these factors among others such as a wide-variety of power options make Boreas another perfect solution for bus drivers on-board city and intercity buses.

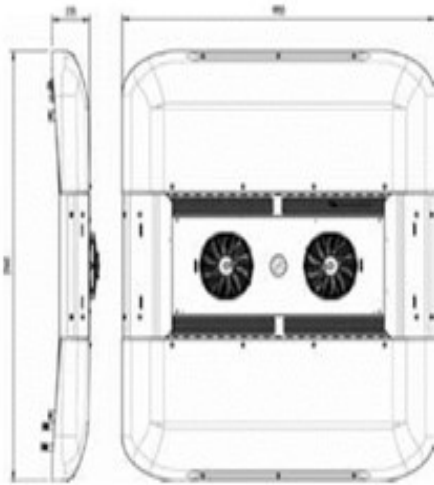
Performance			
	Boreas 18	Boreas 24	Boreas 40
Maximum Cooling Capacity	18 kW	24 kW	39 kW
Nominal Cooling Capacity	11 kW	16 kW	29 kW
Heating Capacity	38 kW at Q80	38 kW at Q80	42 kW at Q80
Airflow AC	3800 m ³ / h	3800 m ³ / h	6000 m ³ / h
Fresh air AC	0 – 100 %	0 – 100 %	0 – 100 %
Maximum Current Draw AC	60 A	70 A	115 A
Dimensions	2040 x 2180 x 240	2040 x 2180 x 240	2040 x 2180 x 240
Weight	120 kg	124 kg	128 kg
Refrigerant	R-134 a	R-134 a	R-134 a
Compressor	TM-31	TM-43	TM-65



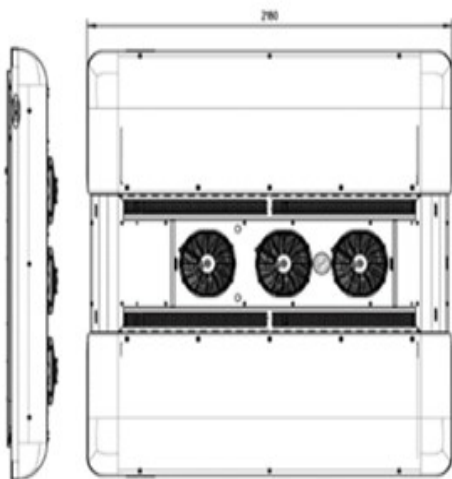
ROOFTOP MOUNTABLE UNITS

BOREAS

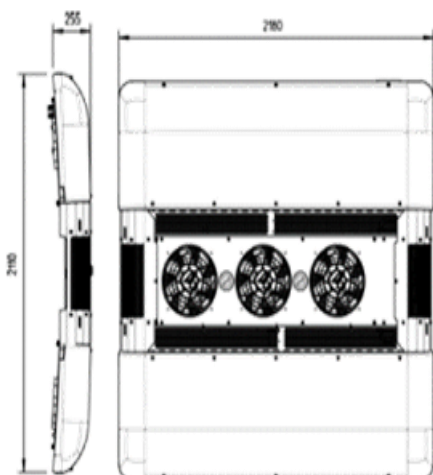
Model 18



Model 24



Model 40



ROOFTOP MOUNTABLE UNITS

EOS SERIES

AURORA's Electric, Compact Rooftop Units are versatile and ready to serve at the forefront of the next generation of HVAC. EOS is simply compact, yet tremendously powerful.

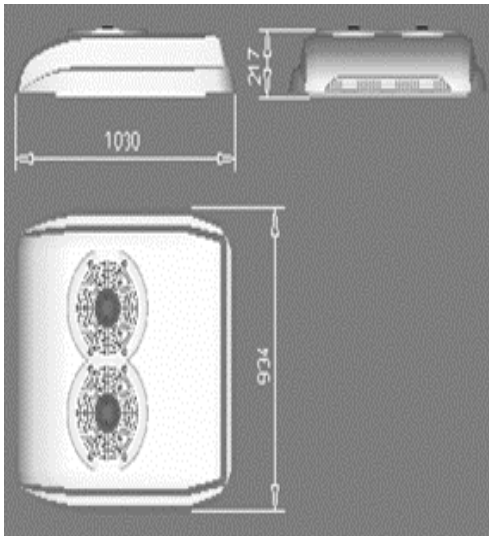
	Performance	
	EOS 85	EOS 100
Cooling Capacity	8.5 kW / 29,000 BTU	10 kW / 34,200 BTU
Heating Capacity	10 kW / 34,100 BTU	14 kW / 47,800 BTU
Evaporator Airflow (Free-blowing)	1,650 m ³ / h	2,300 m ³ / h
Weight	30 kg	50 kg
Nominal Voltage	12V / 24V	12V / 24V
Maximum Current Draw	54 A / 27 A	65 A / 33 A
Control System	on request	on request
Options	Heating; Fresh/Recirculation Air; Compressor and Bracket; Brushless Motor;	Heating; Fresh/Recirculation Air; Compressor and Bracket; Brushless Motor;



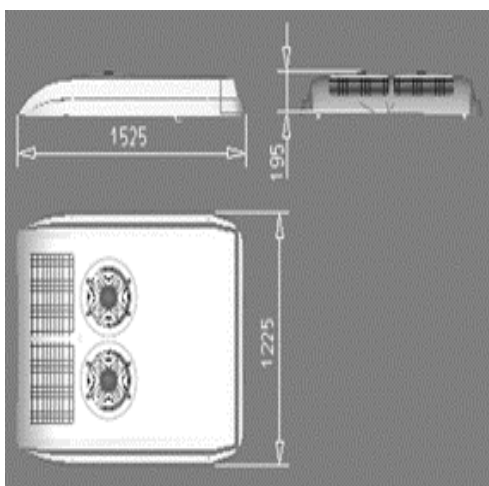
ROOFTOP MOUNTABLE UNITS

EOS SERIES

Model 85



Model 100



STANDARD HEATERS

LOW-NOISE, FIELD-PROVEN DURABILITY,
EASY SERVICABILITY



AURORA

Advanced HVAC Solutions



STANDARD HEATERS

CALEA

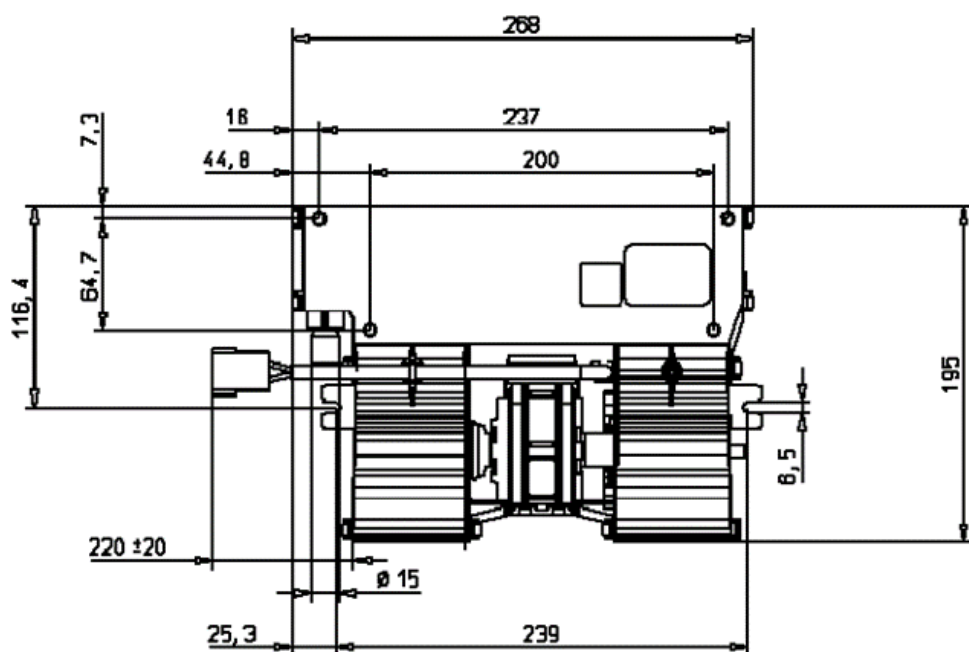
Universally, *Calea* can be utilized for heating in all varieties of commercial vehicles. Available in both 12 and 24 Voltages, its compact and lightweight design is perfect for any operator cabin. Aluminum flat tube heat exchanger technology increases performances while accommodating weight sensitive applications.

Specifications			
Plastic Polyamide PA6 glass reinforced housing Fan unit with DC motor in 12V Flat tube heat exchanger with Ø 16 mm connection Versions available with sockets or nozzles at air outlet area.			
Technical Information			
912-100-0974			
Variations			
Part Number		Description	
151-751-0201		Calea 12V	
151-752-0201		Calea 24V	
Performance			
Blower Speed Heat Power Vol. Air Flow Power Consumption Weight Nom. Voltage	1	2	3
	4.4 kW	5.1 kW	5.7 kW
	176 m³/h	215 m³/h	252 m³/h
	52 W	67 W	83 W
	1.95 kg (4.3 lbs.)		
	12 and 24V		



STANDARD HEATERS

CALEA



STANDARD HEATERS

EHU-K-11500

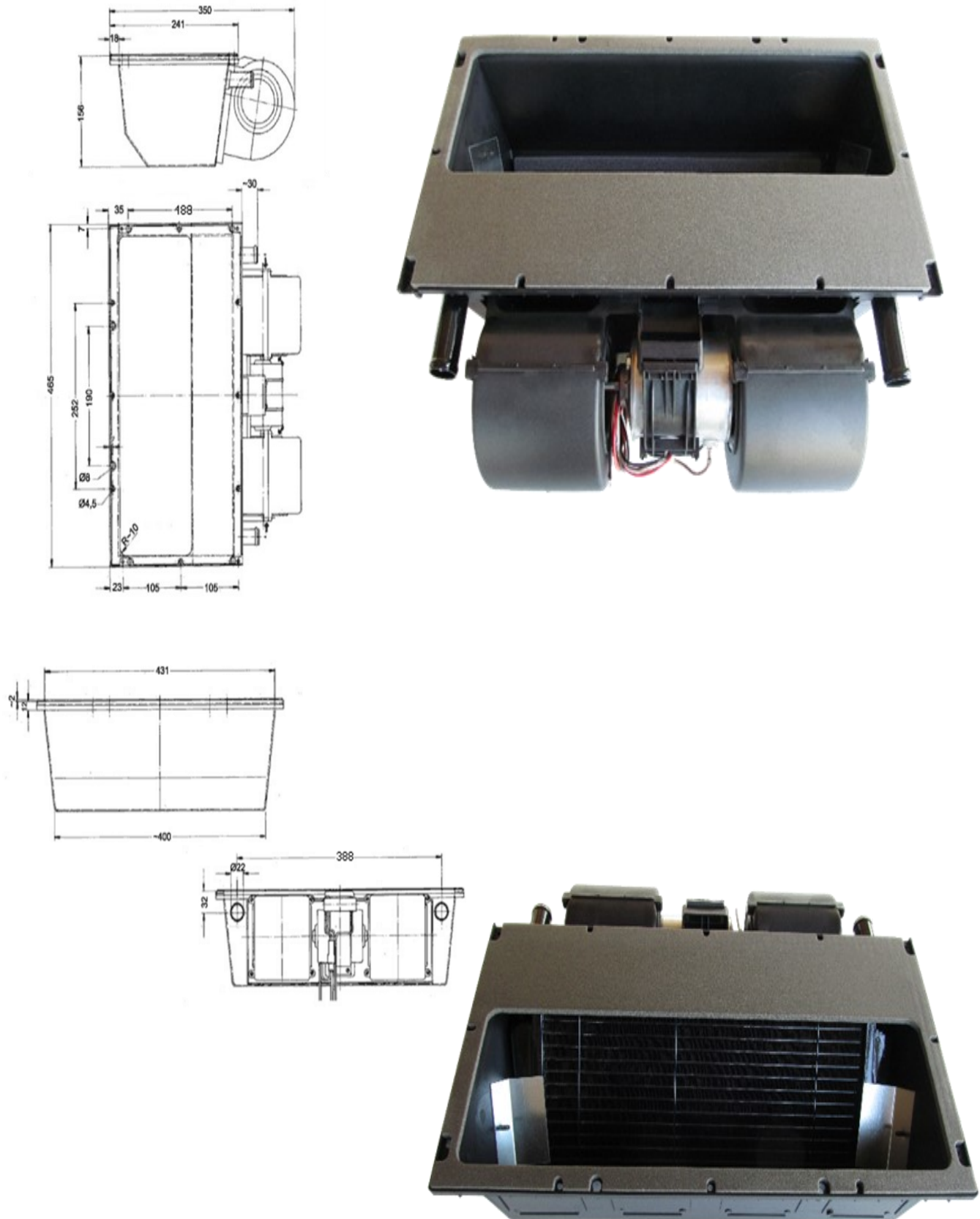
AURORA’s *EHU-K* Heater can be utilized as a built-in model for the heating and ventilation of buses. Operational with either external or recirculating air, *EHU*’s recirculated air option is especially advantageous for dehumidifying the inside air during cooling. *EHU-K* also uses aluminum flat-tube heat exchanger technology to boost performance and reduce weight.

Specifications	
Housing: plastic PA6 Twin Radial Blower DRG 730 Powerful electric motor with long life cycle	
Technical Information	
152-562-0242	
Variations	
Part Number	Description
151-562-0000	11500 24V 3-Speed
151-562-0010	11500 24V 3-Speed
EHU 11.500	
Heat Power	17 kW
Vol. Air Flow	884 m³/h
Weight	5.5 kg (11.25 lbs.)



STANDARD HEATERS

EHU-K-11500



STANDARD HEATERS

MINI H410

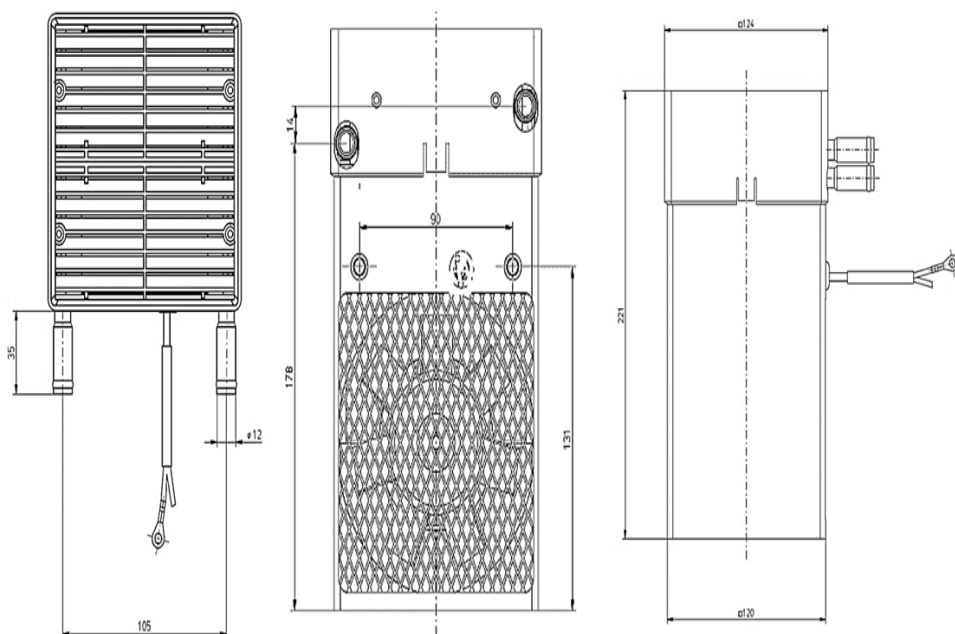
The AURORA *Mini* heater is perfectly designed to outfit cabins of nearly all applications. The 221 mm by 124 mm *Mini* is ideal for providing efficient heat to passengers and operators in areas where installation space is scarce. The *Mini* is also suited for a number of heating functions. Regardless whether installed under the seat, mounted to a side wall, driver's space, door entries, sleeping cabins, on-board kitchens, or simply used as a defroster, *Mini* is the Unit for the job at hand.

Specifications	
Air Flow: 114 m³/h Heating Power: 2.1 kW Power Consumption: Pel = 29 W Noise Emission: 64 dB(A)	
Technical Information	
912-100-0958	
Variations	
Part Number	Description
151-301-0200	Mini H410 12V
151-302-0200	Mini H410 24V
151-302-0242	Mini H410 24V



STANDARD HEATERS

MINI H410



STANDARD HEATERS

OSCAR 7000 & 8000

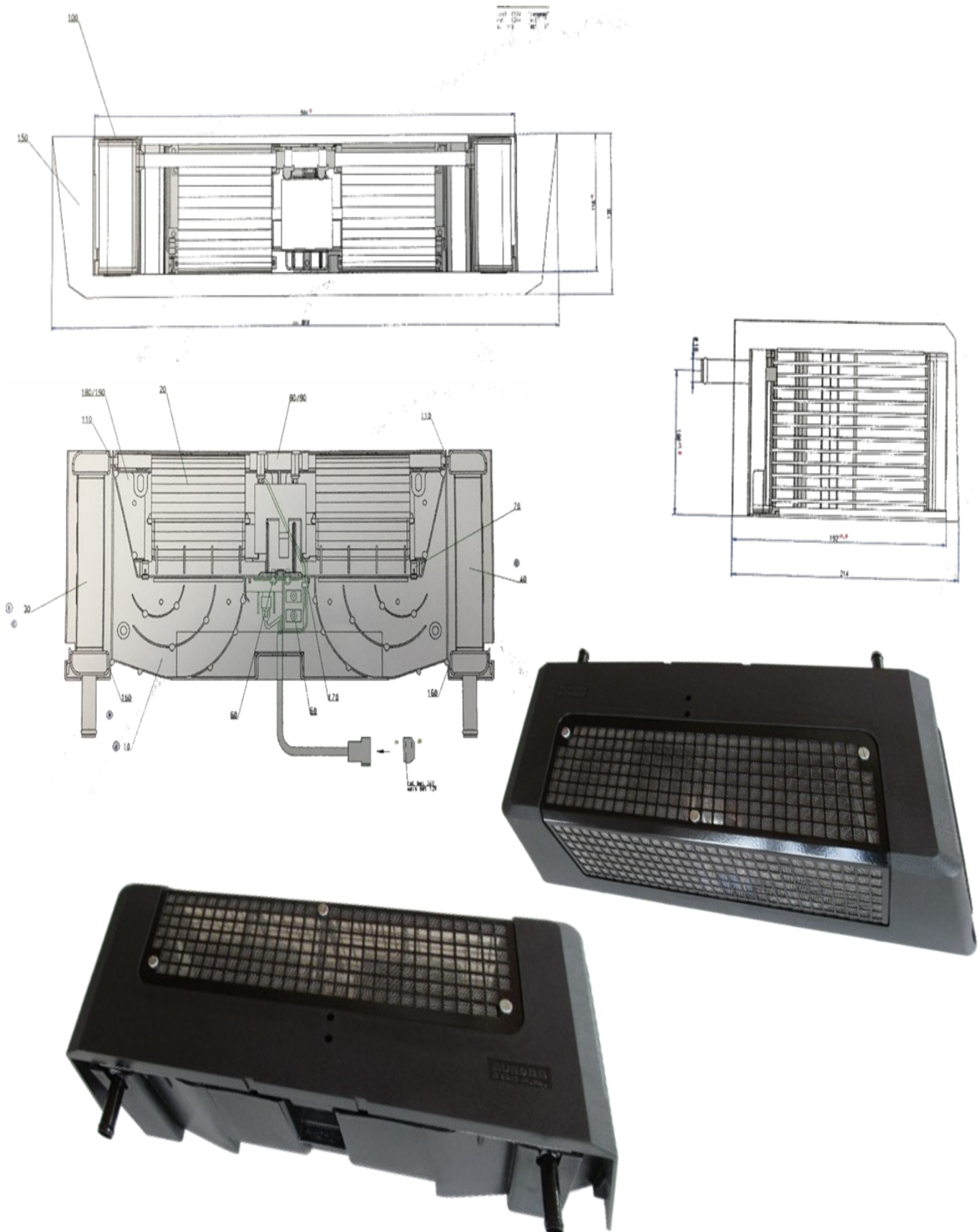
AURORA's *Oscar* heater is the ultimate solution for side wall heating in buses and cabs. The 8000 is AURORA's most powerful unit in the *Oscar* family. It was developed for usage in operator spaces and for mounting on the side walls of passenger cabins. This 8000 sports dual aluminum flat tube heat exchangers and a twin radial blower for maximum efficiency. For Bus and Passenger Transit heating, we recommend using 3 - 4 units in a full sized bus depending on the surrounding climate. Depending on the operating environment, air filtration is also a possible addition with the *Oscar* series.

Specifications			
Polyamide PA6 glass fiber reinforced housing Dual Aluminum Flat-tube Heat Exchangers Twin Radial Blower			
Technical Information			
912-100-0959			
Variations			
Part Number	Description		
151-681-0201	Oscar 8000 12V 2-speed w/ hood		
151-682-0201	Oscar 8000 24V 2-speed w/ hood		
151-682-0216	Oscar 7000 24V 2-speed without hood		
151-682-0219	Oscar 7000 24V 2-speed without hood		
Performance			
Blower Speed	1	2	
	Heat Power	4.6 kW	7.2 kW
	Vol. Air Flow	185 m³/h	350 m³/h
	Weight	3.8 Kg (8.4 lbs.)	



STANDARD HEATERS

OSCAR 7000 & 8000



STANDARD HEATERS

KKH HEATER TRADITIONAL

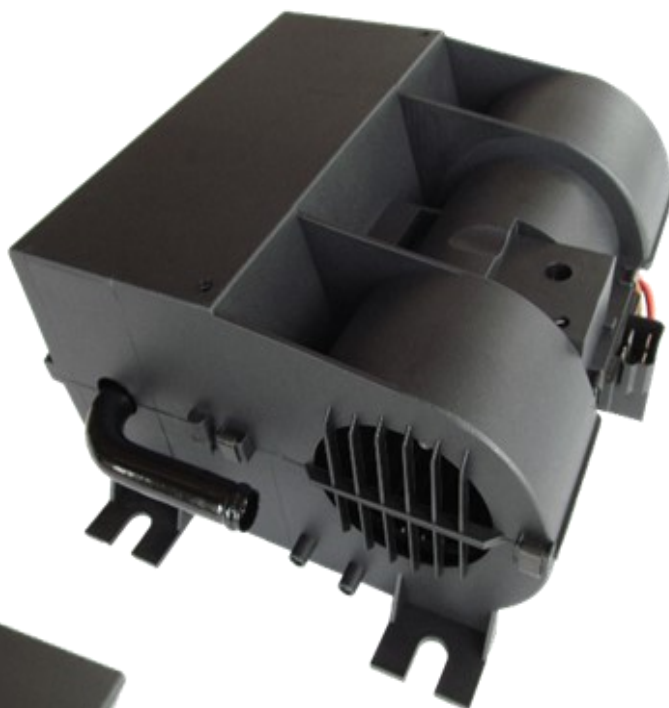
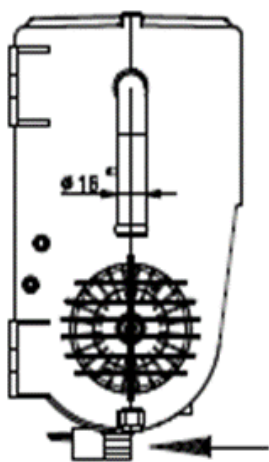
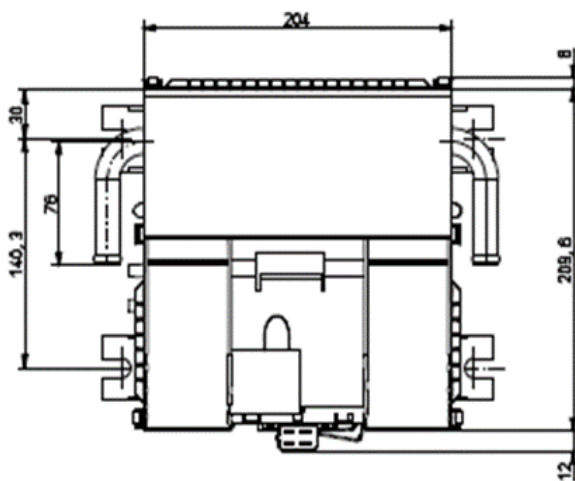
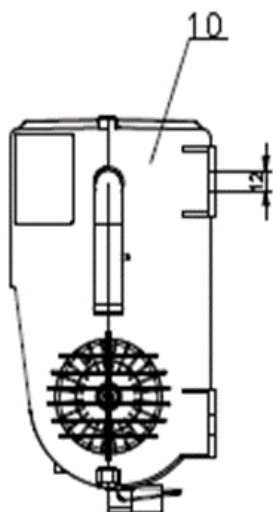
AURORA's KKH Heater is an ideal and powerful solution for small cabins. Its universal nature allows the KKH to maintain a 3.6 kW output in various applications and installation options as either a main or supplementary unit. The unit comes in 12 and 24 volt options, as well as different louver and grill packages suitable to for installations in any of the following locations: under seats, instrument dashboard, side wall, operator / driver space, door entries, sleeping cabins, on-board kitchens, or as a defroster unit. Connections on both sides come standard at 15 mm in diameter.

Specifications				
Housing: Glass-fiber reinforced polyamide PA6, black Aluminum Flat-tube heat exchanger system Powerful electric long-life motor. Blower speeds defined by series resistors with ceramic heat sink and micro-temperature fuses.				
Technical Information				
912-100-0973				
Variations				
Part Number		Description		
151-801-0203		12V 3-speed w/ output grill		
151-802-0203		24V 3-speed w/ output grill		
151-801-0237		12V 3-speed		
151-801-0240		12V 3-speed		
Performance				
Blower Speed	1	2	3	
	Heat Power	1.9 kW	2.7 kW	3.8 kW
	Vol. Air Flow	62 m³/h	103 m³/h	163 m³/h
	Power Consumption	16 W	26 W	45 W
	Weight	1.55 kg (3.4 lbs.)		



STANDARD HEATERS

KKH HEATER TRADITIONAL



STANDARD HEATERS

KKH HEATER ALL ELECTRIC

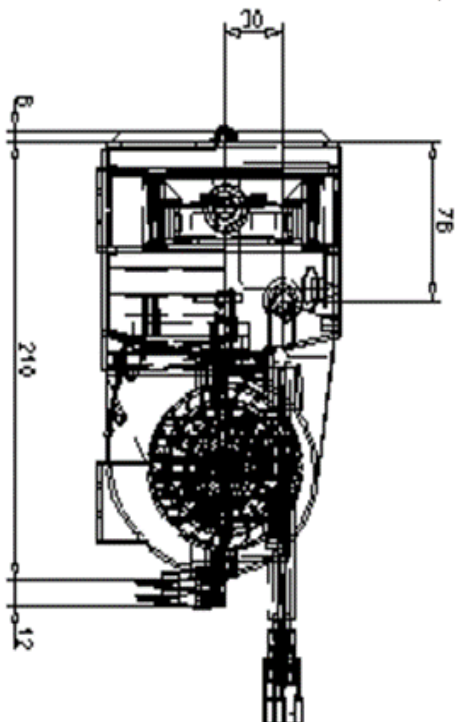
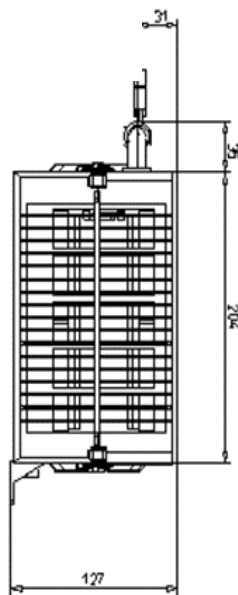
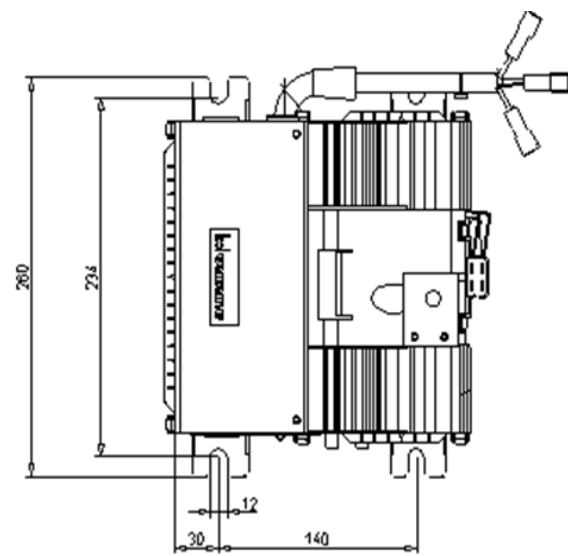
AURORA's KKH Heater features PTC technology making this an all-electric heater, which is an ideal and powerful solution for small cabins. Its universal nature allows the KKH the versatility necessary for various applications and installation options as either a main or supplementary unit. The unit comes in 12 and 24-volt options, as well as different louver and grill packages suitable to for installations in any of the following locations: under seats, instrument dashboard, side wall, operator / driver space, door entries, sleeping cabins, on-board kitchens, or as a defroster unit.

Specifications									
<div>Housing: Glass-fiber reinforced polyamide PA6, black Aluminum Flat-tube heat exchanger system Powerful electric long-life motor. Blower speeds defined by series resistors with ceramic heat sink and micro-temperature fuses.</div>									
Variations									
Part Number / Technical Information					Description				
153-801-0005 / 912-100-0960					12V Blower; <120V PTC; 1280 W				
153-801-0001/ 912-100-1135					12V Blower; 80 V PTC; 1100 W				
153-802-0001/ 912-100-0304					24V Blower; 80 V PTC; 1100 W				
153-802-0003/ 912-100-0374					24V Blower; 24V PTC; 870 W				
153-802-0002/ 912-100-0374					24V Blower; 24V PTC; 750 W				
Performance									
Blower Speed Level		12V Model (PTC Radiator <120V)	1	2	3	24V Model (PTC Radiator 80V)	1	2	3
Nominal Heat Power (kW)	W		980	1130	1280		720	900	1100
	BTU / hr.		3344	3856	4367		2459	3074	3757



STANDARD HEATERS

KKH HEATER ALL ELECTRIC



STANDARD HEATERS

TEDDY 2000

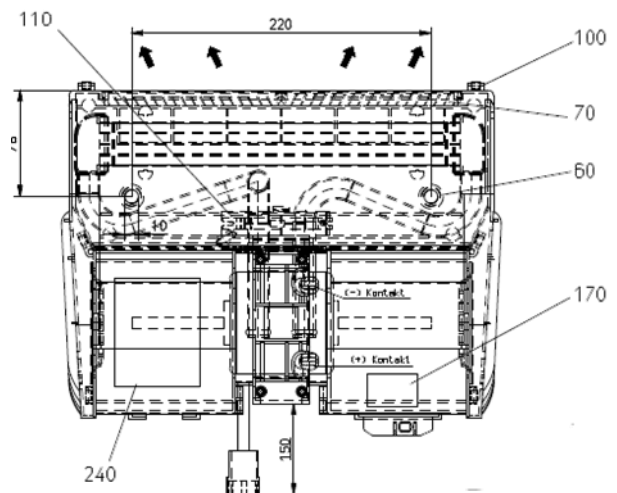
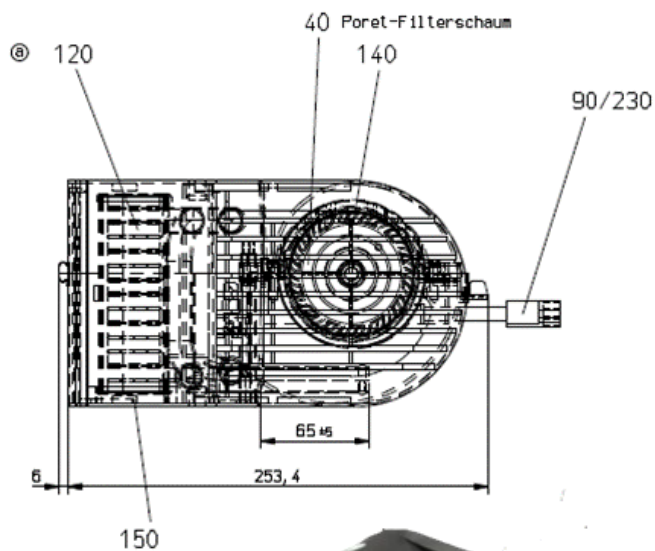
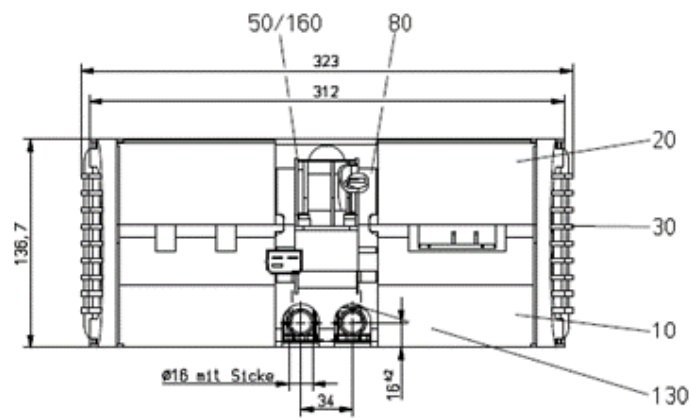
The heater Teddy can be delivered in several different versions to meet various requirements. While functionally, the units have less variance. The differences lie in the individual components and connections. The built-in model has no air outlet grille and no air intake grilles on the side. This recirculating model has an air outlet grille and a side section with integrated air intake grille. The air direction can be changed by adjusting the air outlet grille by 90°. These are specifically designed for the under the seat mounting in buses, coaches, or cabins.

Specifications	
Housing: PA-6 35% glass fibre reinforcement Blower: DC with two radial wheel, resistor,MTS Aluminum Flat-Tube Heat Exchanger: max pressure 2-bar	
Technical Information	
912-100-0968	
Variations	
Part Number	Description
151-551-0222	Defroster 12V 2-speed
151-552-0222	Defroster 24V 2-speed
151-551-0242	12V 3-speed
151-552-0224	24V 2-speed
151-552-0251	24V 2-speed
Performance	
Airflow: 332 m³/h	
Heat Power: 7.7 kW	
Weight: 2.9 kg. (6.4 lbs.)	



STANDARD HEATERS

TEDDY 2000





CONVECTORS

WIDE-DISTRIBUTION OF HEAT,
SPECIALIZED FOR BUS APPLICATIONS



AURORA

Advanced HVAC Solutions



CONVECTORS

AF SERIES

All our convectors are developed by AURORA and manufactured at several locations of the AURO-RA group. They are especially designed for use in bus and coach and available in two different power classes and sizes.

Convectors are used whenever the advantages of natural convection predominate. Optionally, our convectors can be combined with our Puma heater. The blower-assisted version offers an even better heating capacity.

Technical Information			
	AF 60	AF 70	Puma
Size / Measurements	160 mm. x 73 mm.	170 mm. x 100 mm.	170 mm. x 100 mm.
Heating Capacity	700 W / m at Q ₆₀	830 W / m at Q ₆₀	2900 W / m at Q ₆₀
Blower	None	None	73 ³ / blower
Molding	Aluminum EN AW 6063 one-piece	Aluminum EN AW 6063	--
Weight	2.5 kg / m	3.5 kg / m	--
Connector(s)	16 + 18 mm.	22 mm.	22 mm.

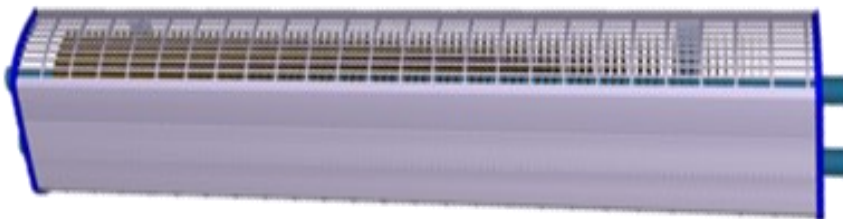


CONVECTORS

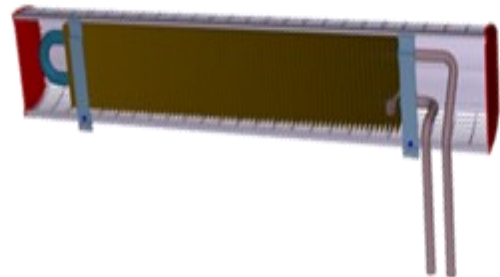
AF SERIES



AF60



AF70



Puma



BLOWERS

EFFICIENT, LOW-NOISE, POWERFUL



AURORA

Kornel G. Schütz GmbH & Co. KG

DRG 1000

No. de serie AURORA n. 131.900.0010

No. de serie AURORA n. 131.71.00.40

REG. RUSTVEDO No.: 5000 788 790

Tension nominal: 24 Volt

Construcción: 1/2" metal

Material: aluminio

Color: negro

Grado de protección: IP54

Grado de protección: IP54

AURORA

Advanced HVAC Solutions



BLOWERS

AXIAL

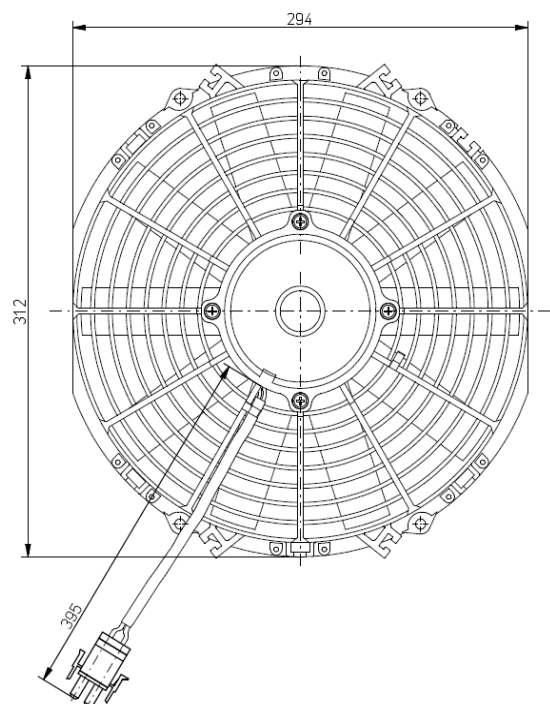
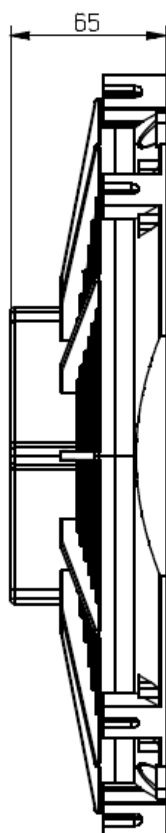
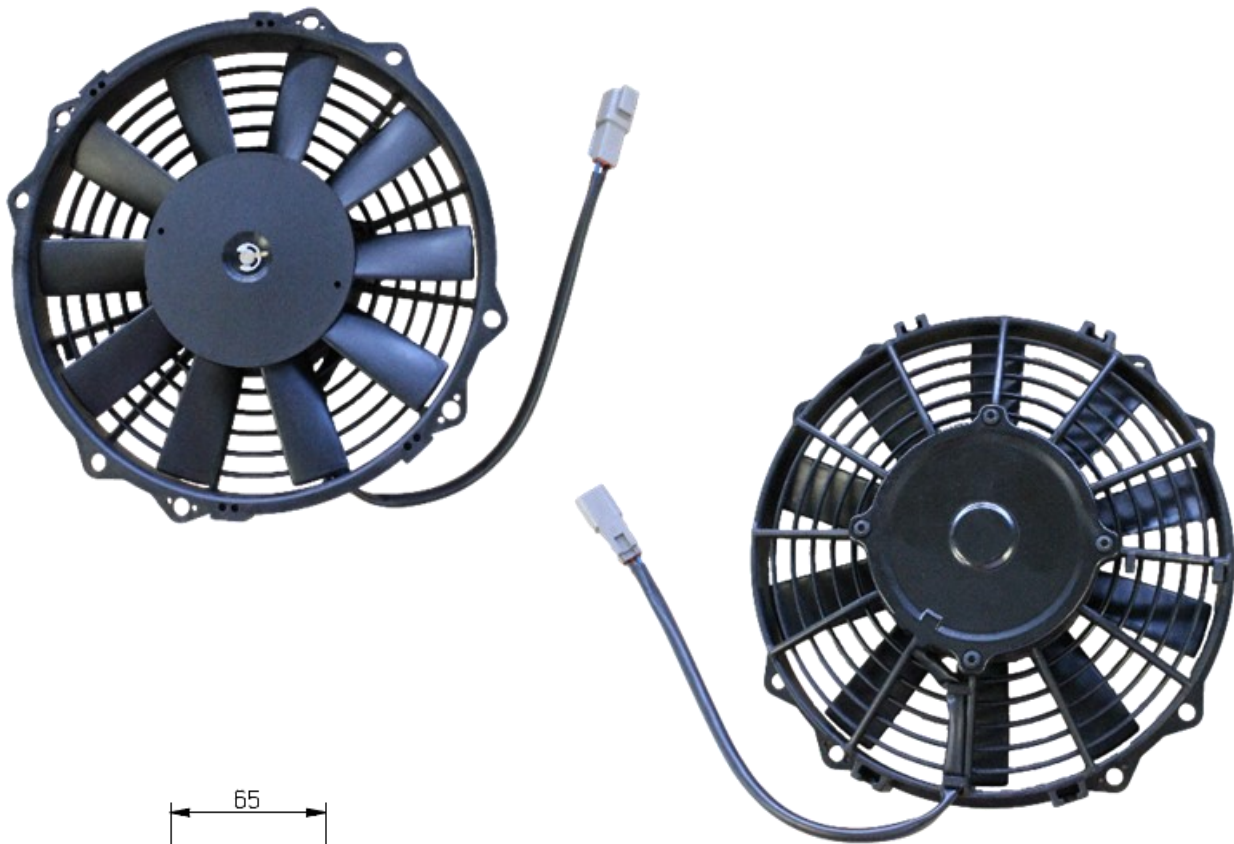
AURORA's Axial Fans come in several different sizes and mounting options in order to ensure the correct fit. These fans are powerful, durable, and lightweight. They are ideal for use as roof vents, condenser fans, oil coolers, and several other applications where maximum airflow is essential.

Technical Information	
<i>912-100-0617 / 912-100-0948 912-100-0482 / 912-100-0751 912-100-0754</i>	
Variations	
Part Number	Description Dimension Performance Max.
134-801-0008	12V / 8" / suction 210 x 5260 mm 805
134-802-0008	24V / 8" / suction 210 x 5260 mm 805
134-801-0010	12V / 9" / suction 2478 x 526 mm 1060
134-802-0011	24V / 9" / suction 2478 x 526 mm 1090
134-801-0009	12V / 10" / blowing 285 x 525 mm 1325
134-801-0043	12V / 10" / suction 285 x 525 mm 1480
134-801-0004	12V / 11" / blowing 310 x 524 mm 1530
134-802-0004	24V / 11" / blowing 310 x 524 mm 1580
134-801-0054	12V / 12" / suction 335 x 62 mm 2050
134-802-0054	24V / 12" / suction 335 x 62 mm 2050
134-802-0012	12V / 16" / suction 416 x 704 mm 2820
134-802-0017	24V / 16" / blowing 416 x 704 mm 2820



BLOWERS

AXIAL

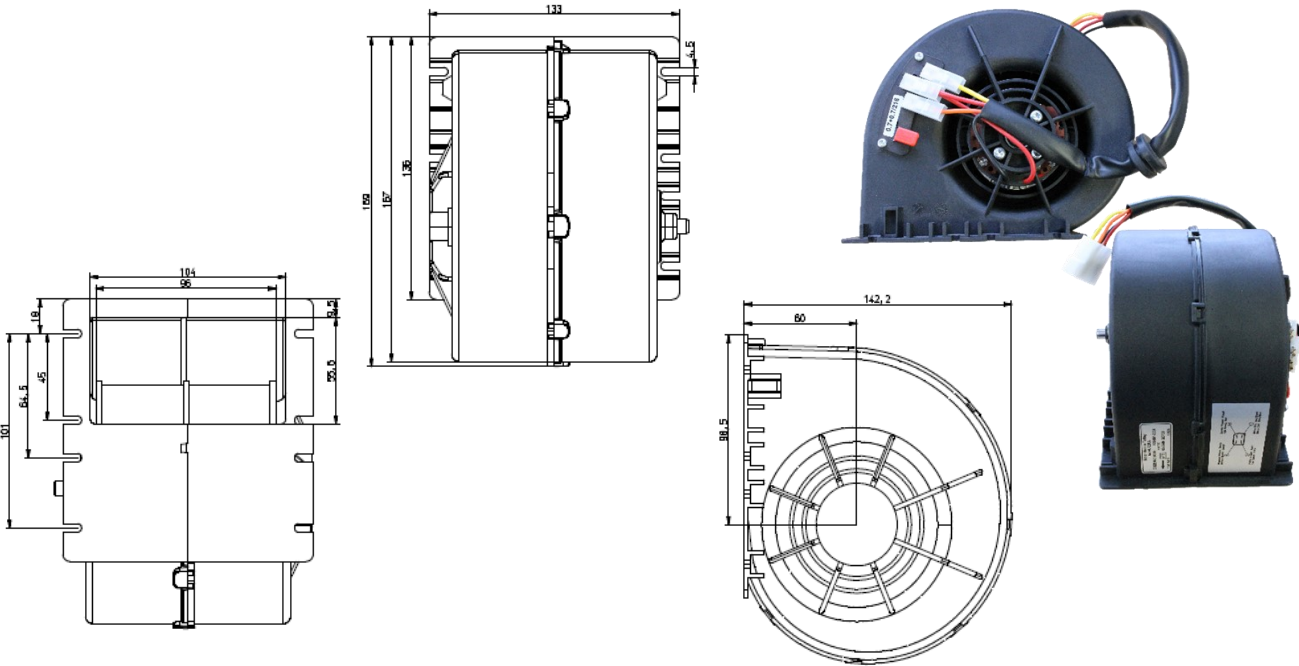


BLOWERS

RG550

AURORA's Radial Blowers are built with powerful electric motors for high efficiency throughout a long lifetime of performance. These blowers feature a high proportion of air flow vs. system resistance. All radial blowers have flange seals made out of cellular rubber. Our family of Radial Blowers are built with a powerful electro motor to boost high efficiency over a long lifetime of performance.

Specifications	
Housing: 35% glass fiber polyamide PA6 Airflow: 500 m³/h (294 cfm) Nominal voltage: 12 or 24 Volt Weight: ~1.27 kg (2.8 lbs.) Pel: 210 W Lp: 75.5 dB (A)	
Technical Information	
912-100-0674/1102	
Variations	
Part Number	Description
132-901-0023	12V 3 Speed
132-901-0028	12V brushless stepless controlled
132-902-0004	24V - 3 Speed
132-902-0028	24V brushless stepless controlled

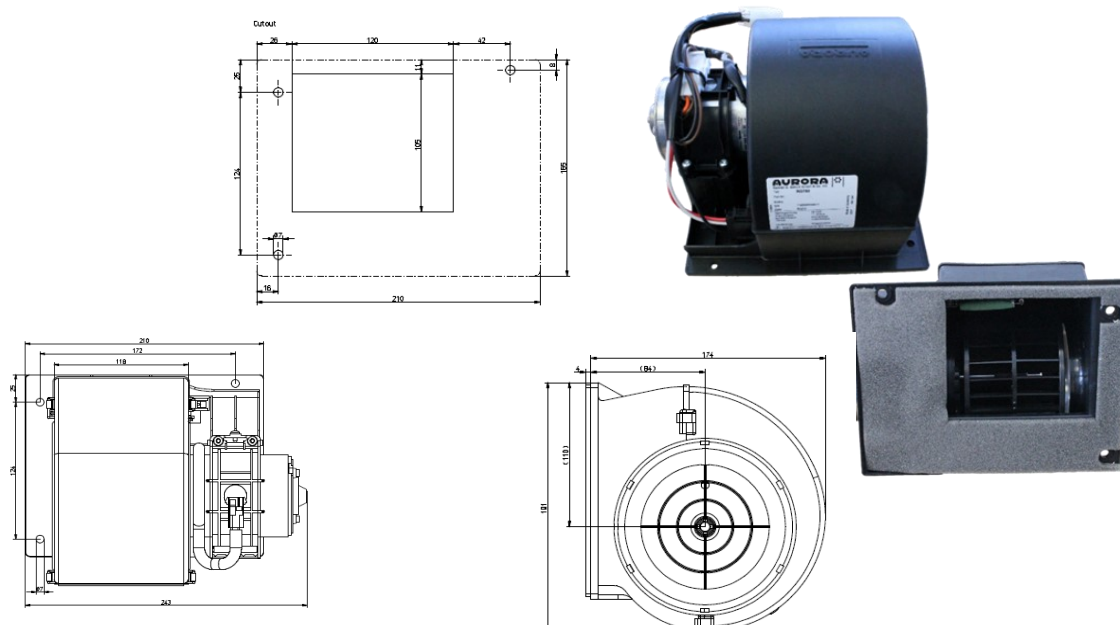


BLOWERS

RG780

AURORA's Radial Blowers are built with powerful electric motors for high efficiency throughout a long lifetime of performance. These blowers feature a high proportion of air flow vs. system resistance. All radial blowers have flange seals made out of cellular rubber. Our family of Radial Blowers are built with a powerful electro motor to boost high efficiency over a long lifetime of performance.

Specifications				
Housing: 35% glass fiber polyamide PA6 Airflow: 780 m³/h (459 cfm) Nominal voltage: 12 or 24 Volt Weight: ~2 kg (4.41 lbs.)				
Technical Information				
912-100-0579				
Variations				
Part Number	Description			
132-901-0400	12V - Standard			
132-901-0405	12V - 4 Speed			
132-902-0400	24V - Standard			
132-902-0405	24V - 4 Speed			
	Speed 1	Speed 2	Speed 3	Speed 4
V air m³/h.	300	410	530	780
Pel in W	70	110	160	280
Lp in dB (A)	57	65	71	77

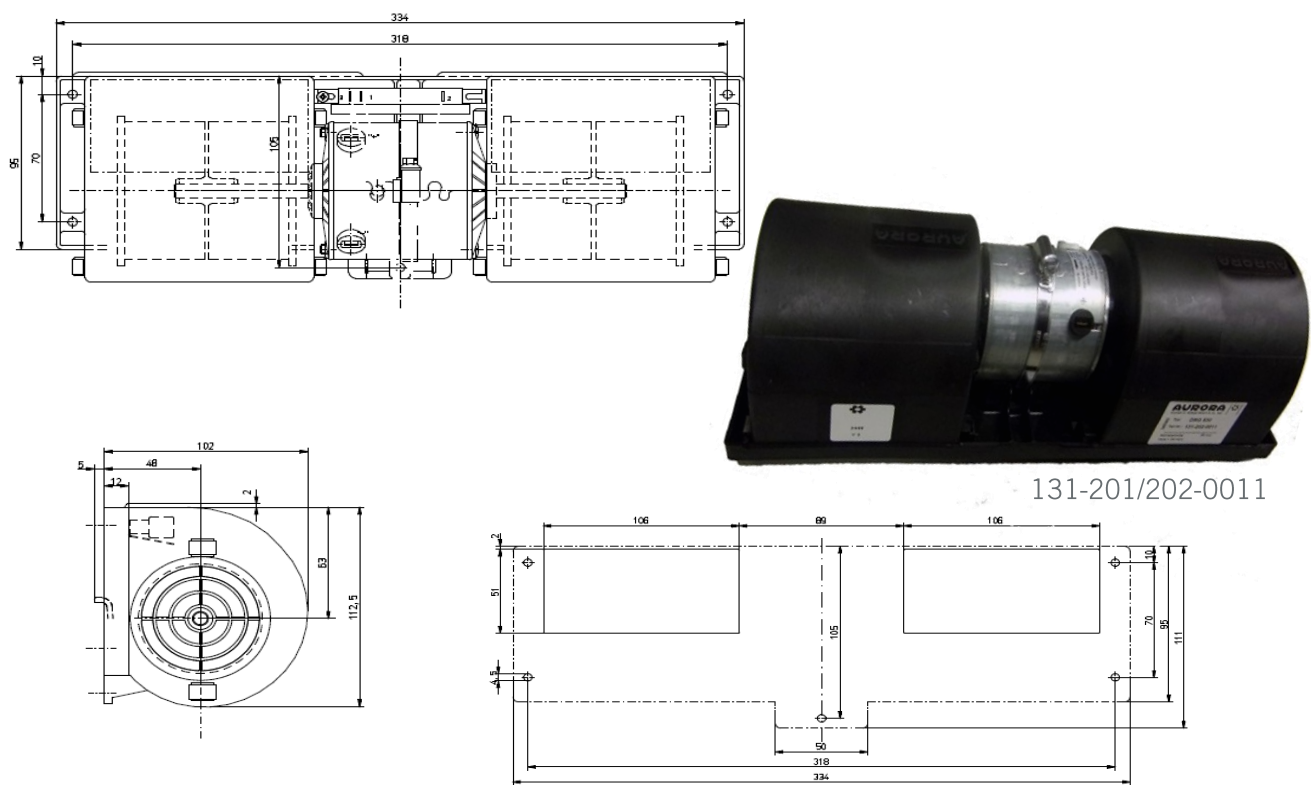


BLOWERS

DRG530

AURORA's Double Radial Blower (DRG) design incorporates high performance, low noise, and long life. The compact *DRG 530* design produces 530 m³/h of airflow and utilizes longer brushes and internal resistors extending the life of the blowers. Blower speeds are regulated via a series resistor thanks to ceramic heat sink and micro-temperature-fusing.

Specifications	
Housing: 35% glass fiber polyamide PA6 Airflow: 530 m³/h Nominal voltage: 12 or 24 Volt Weight: ~1.25 kg (2.76 lbs.)	
Technical Information	
912-100-0550/1102	
Variations	
Part Number	Description
131-201-0011	12V - Standard
131-201-0020	12V - 3 Speed
131-201-0035	12V brushless stepless controlled
131-202-0011	24V - Standard
131-202-0020	24V - 3 Speed
131-202-0035	24V brushless stepless controlled



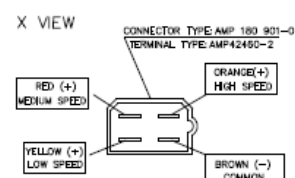
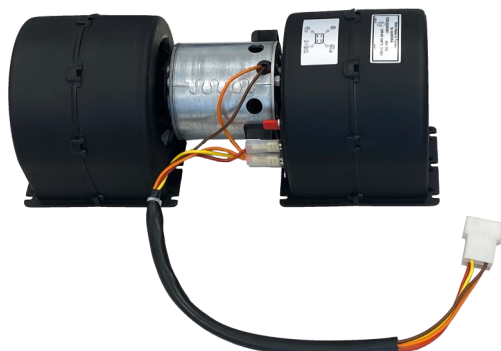
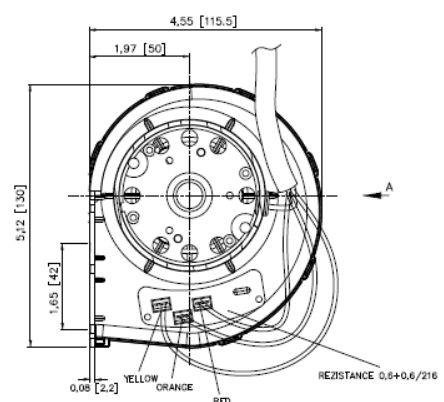
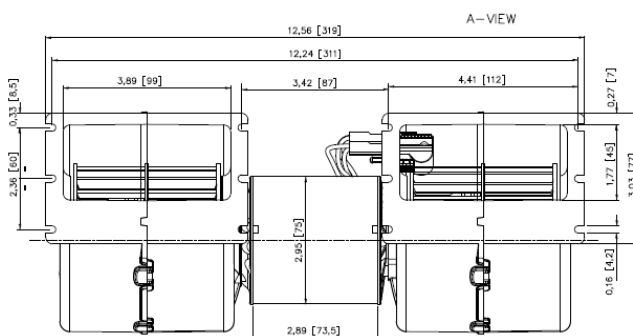
BLOWERS

DRG FZ 800

AURORA's Radial Blowers are built with powerful electric motors for high efficiency throughout a long lifetime of performance. These blowers feature a high proportion of air flow vs. system resistance. Our family of Radial Blowers are built with a powerful electro motor to boost high efficiency over a long lifetime of performance.

Specifications			
Housing: polyamide PA6 GF35 Airflow: 770 m³/h (452 cfm) Nominal voltage: 12 or 24 Volt Weight: ~2 kg (4.41 lbs.)			
Technical Information			
912-100-1181			
Variations			
Part Number	Description		
132-901-0058	12V - 3 speed Standard		
132-902-0058	24V - 3 speed Standard		
	Speed 1	Speed 2	Speed 3
V air m³/h.	380	490	770
Pel in W	84	125	265
Lp in dB (A)	61	67	74,5

Values +/- 10%



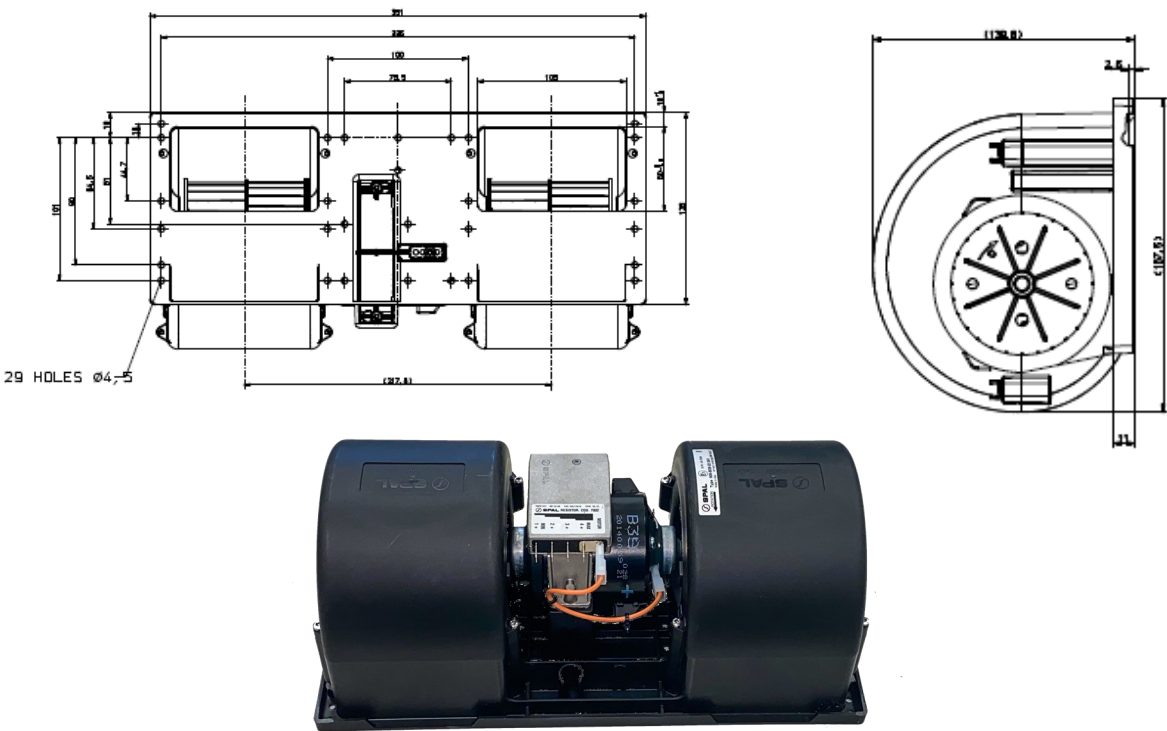
BLOWERS

DRG SP 1150

AURORA's Radial Blowers are built with powerful electric motors for high efficiency throughout a long lifetime of performance. These blowers feature a high proportion of air flow vs. system resistance. Our family of Radial Blowers are built with a powerful electro motor to boost high efficiency over a long lifetime of performance.

Specifications				
Housing: polypropylene PPT40 wheels: polyamide PA6 GF35 Airflow: 1150 m³/h (676 cfm) Nominal voltage: 12 or 24 Volt Weight: ~2 kg (4.41 lbs.)				
Technical Information				
912-100-1162				
Variations				
Part Number		Description		
132-901-0050		12V - 4 speed Standard		
132-902-0050		24V - 4 speed Standard		
	Speed 1	Speed 2	Speed 3	Speed 4
V air m³/h.	400	705	850	1150
Pel in W	89	193	263	440
Lp in dB (A)	59	67	69	76

Values +/- 10%

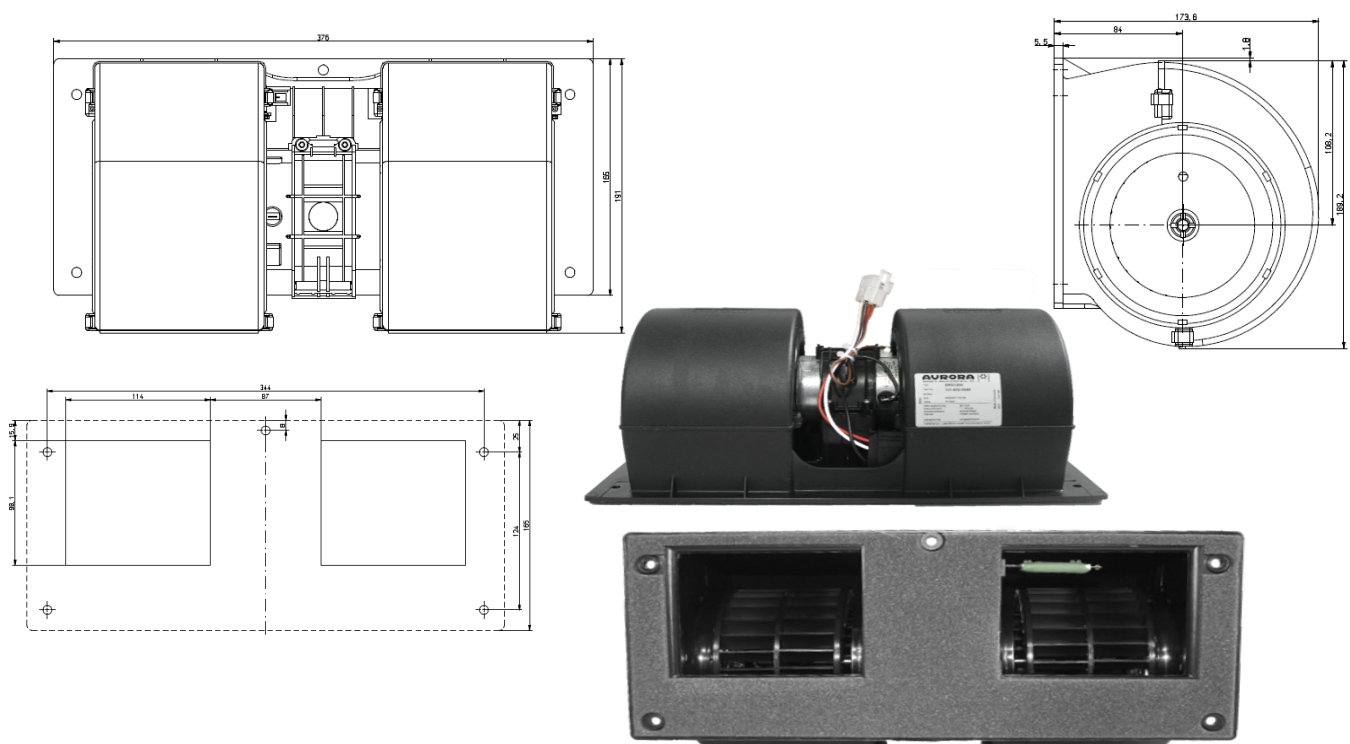


BLOWERS

DRG1200

AURORA's Double Radial Blower *DRG1200* is ideal for heating, AC, and ventilation. *DRG1200*'s powerful electric motor has high efficiency and a long lifetime of performance. AURORA Double Radial Blowers contain a high air flow vs. system resistance proportion. Blower speeds are regulated via a series resistor with ceramic heat sink and micro-temperature-fusing. Only available as replacement, not new projects

Specifications				
Housing: 35% glass fiber polyamide PA6 Airflow: 1200 m³/h (736 cfm) Nominal voltage: 12 or 24 Volt Weight: ~2.54 kg (6 lbs.)				
Technical Data				
912-100-0578				
Variations				
Part Number		Description		
131-601-0400		12V - Standard		
131-601-0403		12V - 3 Speed		
131-602-0400		24V - Standard		
131-602-0450		24V - 4 Speed		
Vair in m³/h Vair in cfm Pel in W Lp in dB(A)	Speed 1	Speed 2	Speed 3	Speed 4
	470	675	800	1250
	277	397	471	736
	70	109	150	307
	56	63	68	77

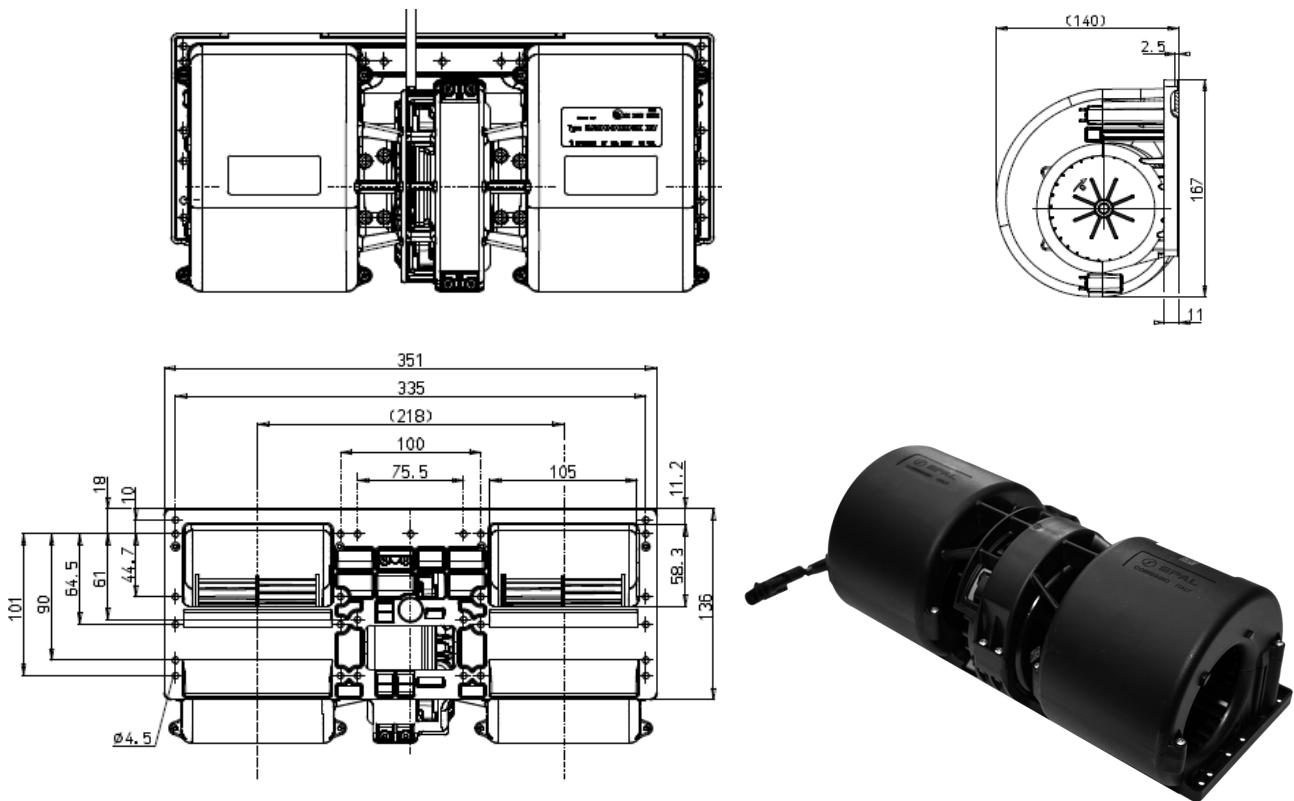


BLOWERS

DRG1150 EC

The twin radial blower *DRG1150 EC* is infinitely adjustable, satisfying to even the highest, most attune comfort standards. This blower also has a high lifetime of about 25,000 operation hours. The twin radial blowers are very efficient with low noise emission. Used exclusively for air flow distribution in heaters, air conditioning units, and ventilation units. The DRG1150 EC is generally suitable for all mounting positions and consists of a plastic housing, two fan wheels and a brushless DC motor with dual ball bearings.

Specifications		
Housing: polypropylene reinforced with 40% Talcum PP T40		
Airflow: 1200 m³/h (244 cfm)		
Nominal voltage: 12 or 24 Volt		
Weight: ~2.4 kg (5.3 lbs.)		
Technical Information		
912-100-1168/1193		
Variations		
Part Number	Description	
131-901-0036	12V - Standard	
131-902-0051	24V - Standard	
Vair in m³/h	12V	24V
	1200	1200
	370	330
	74	73

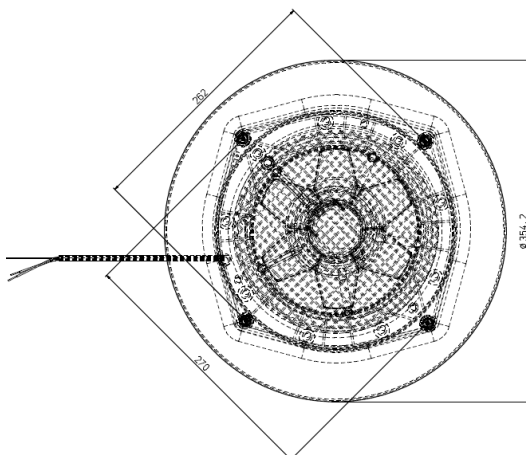
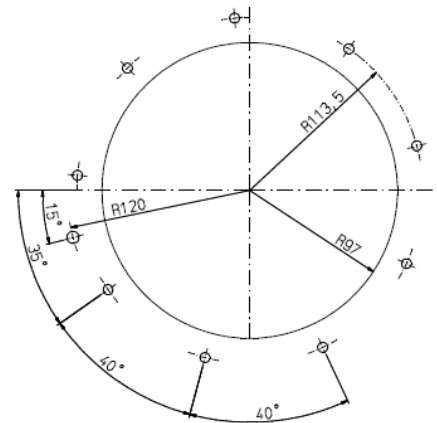
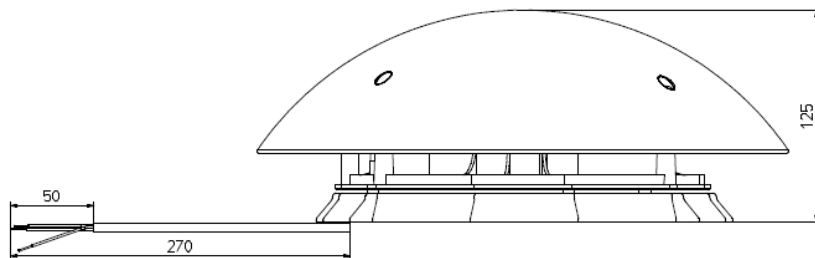


HOOD VENTILATORS

HV350

AURORA Hood ventilators are designed to efficiently and easily provide transit vehicles, cargo vans, and buses, with additional airflow. Most models are can be switched to either provide air intake or air extraction in any desired application. The plastic hood is constructed of polyamide PA6 35% glass fiber reinforced material to increase durability against the elements. These units are manufactured to specifications which reduce weight and noise emissions.

	Standard	Speed 1*	Speed 2*
Vair in m ³ /h	350	310	500
Pel in W	65	32	45
Lp in dB(A)	62.5 - 67	70	75

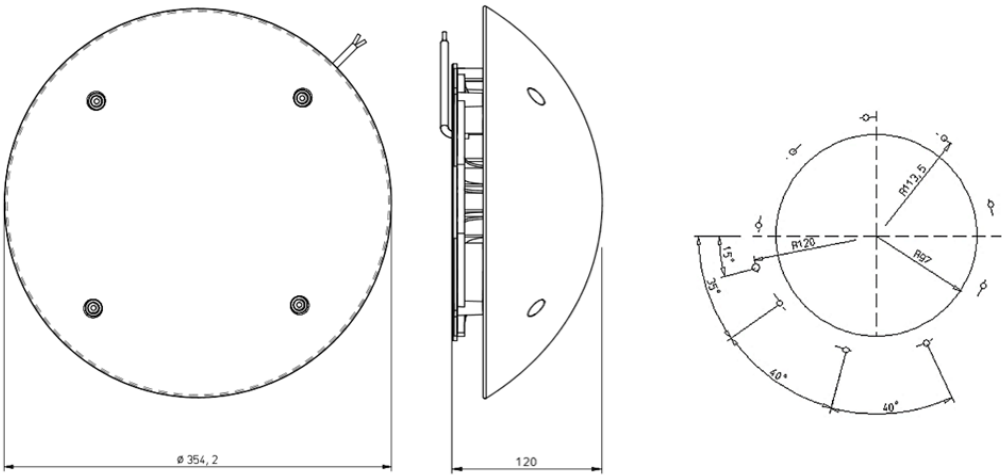


HOOD VENTILATORS

HV420

AURORA Hood Ventilators are designed to efficiently and easily provide transit vehicles, cargo vans, and buses, with additional airflow. The plastic hood is constructed of polyamide PA6 35% glass fiber reinforced material to increase durability against the elements. These units are manufactured to specifications which reduce both weight and noise emissions, simultaneously.

Specifications	
Nominal Voltage: 12 or 24 Volt Air Flow: 420 m³/h Sound Level: 67 dB(A) Weight: 1.8 kg (3.97 lbs.)	
Technical Information	
912-100-0435	
Variations	
Part Number	Description
134-151-0000	HV420-KB 12V
134-151-0002	HV420-KE 12V
134-152-0000	HV420-KB 24V
134-152-0009	HV420-KE 24V

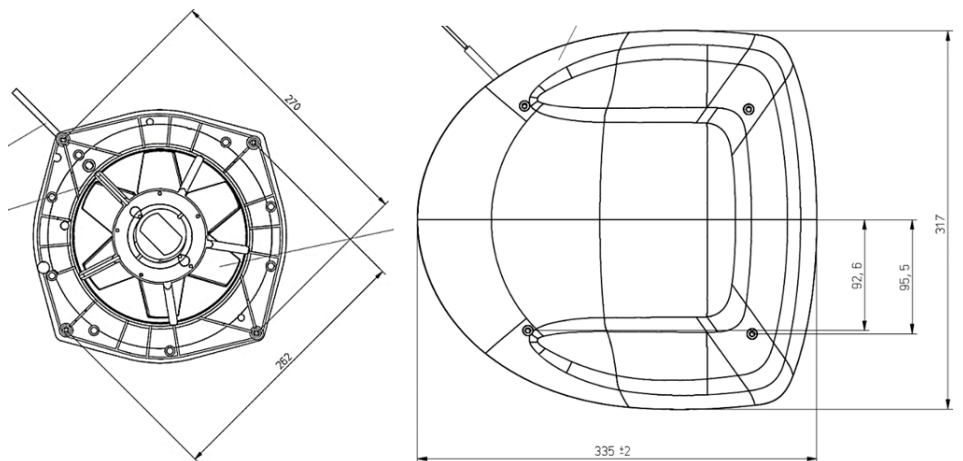


HOOD VENTILATORS

HV500

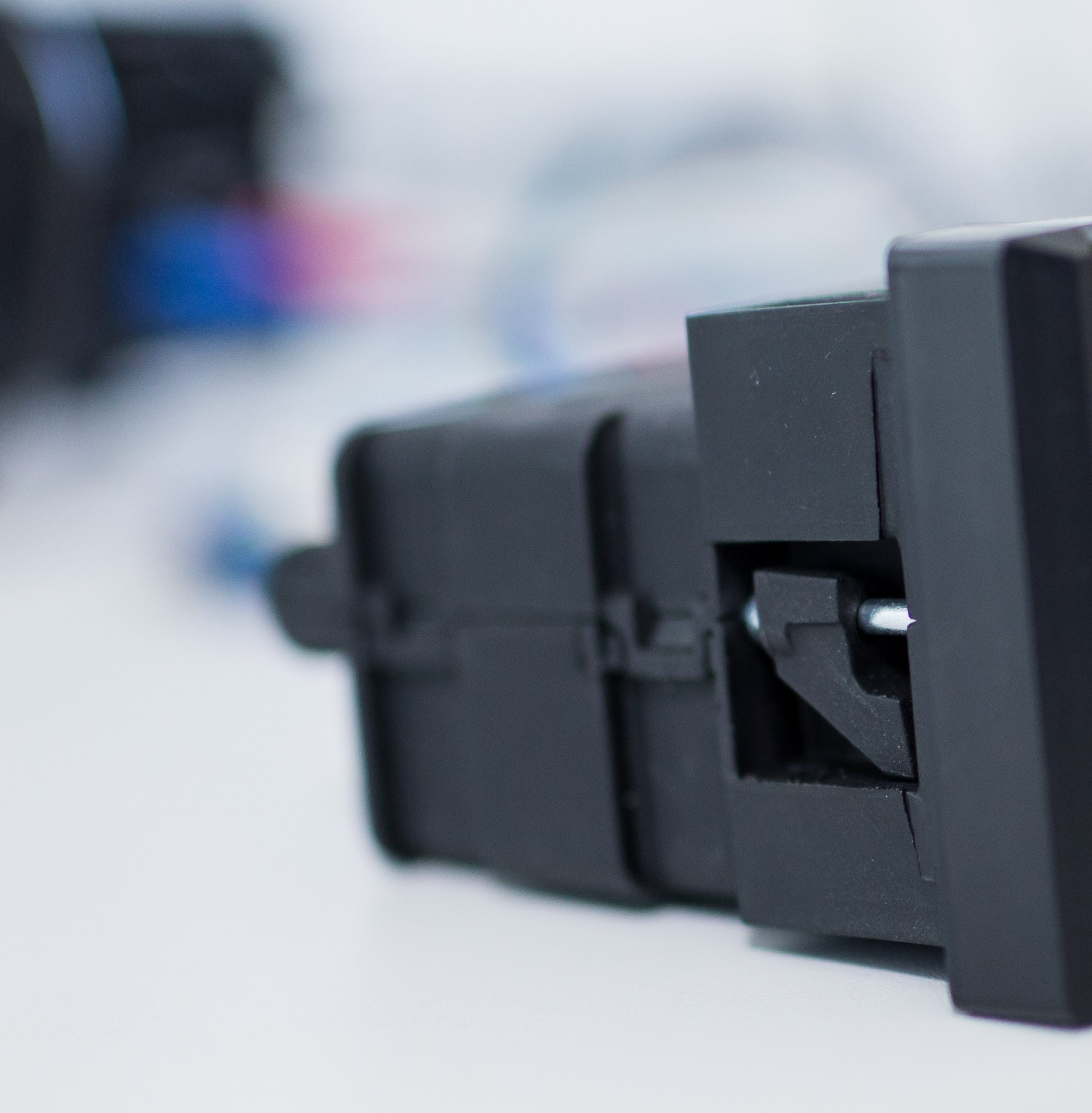
AURORA Hood ventilators are designed to efficiently and easily provide transit vehicles, cargo vans, and buses, with additional airflow. Most models are can be switched to either provide air intake or air extraction in any desired application. The plastic hood is constructed of polyamide PA6 35% glass fiber reinforced material to increase durability against the elements. These units are manufactured to specifications which reduce weight and noise emissions, simultaneously.

Specifications	
Material: ABS Plastic Airflow: ~ 500m³/h Power Consumption: Pel ~ 45W Sound Level: Max 69 dB(A)	
Technical Information	
912-100-0285	
Variations	
Part Number	Description
134-171-0012	HV500-B+E 12V LC
134-172-0012	HV500-B+E 24V LC



AURORA

Advanced HVAC Solutions





CONTROL PANELS

INTELLIGENT-RESPONSIVENESS,
DYNAMIC; USER-FRIENDLY

CONTROL PANELS

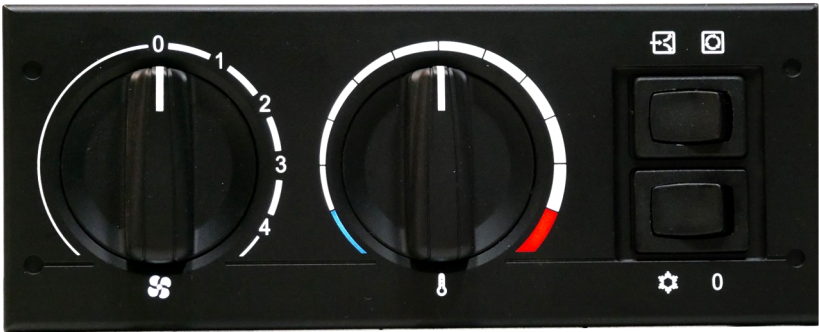
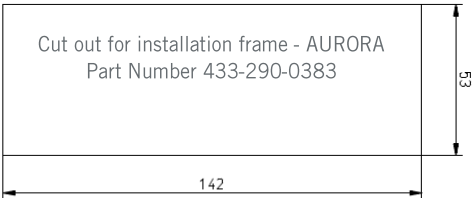
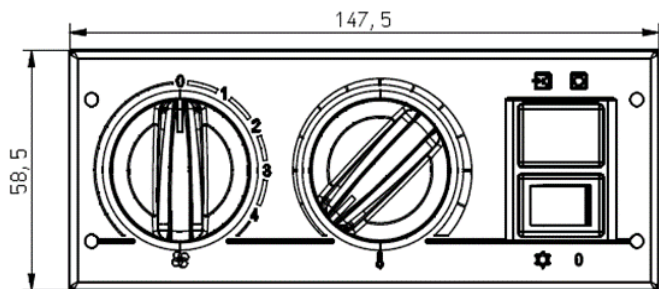
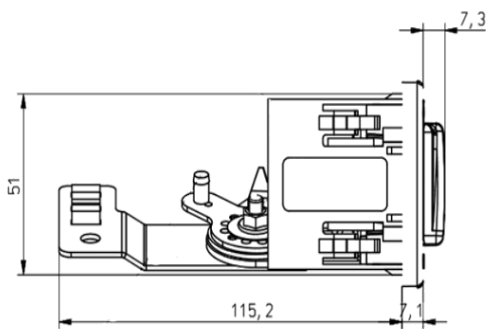
ECONOMY - CCM K

AURORA’s line of Economy Control Panels is designed for the rough and tough operator. For this line, we’ve stripped out all the extra bells and whistles to give customers exactly what they need: simplicity and functionality.

The CCM-K can have up to two rotary actuators and two rocker switches, all of which are mechanically manipulated (electronic versions available - see CCE Controls). Knob and switch functions can be defined by the Customer for specific operator requirements

Blower Control	Switch
Set Temperature	Bowden Controls
Integrated Climate Control	No
Display	No
A/C	Yes
Defrost	No
Fresh Air / Circulating Air	Yes
Outside Temperature	No
Air Distribution Flap	No
2nd Air Distribution Flap	No
Automatic Climate Control	No

Infinitely Variable Blower	No (if applicable, by means of separate electronic blower control module)
Auxiliary Heating	No
Failure Code Readout	No
Diagnostics	No
Digital Inputs	-
Digital Outputs	-
Analog Inputs	-
Analog Outputs	-
Illuminated Symbols	Yes
Illuminated Rotary Actors	No
CAN-Bus	No



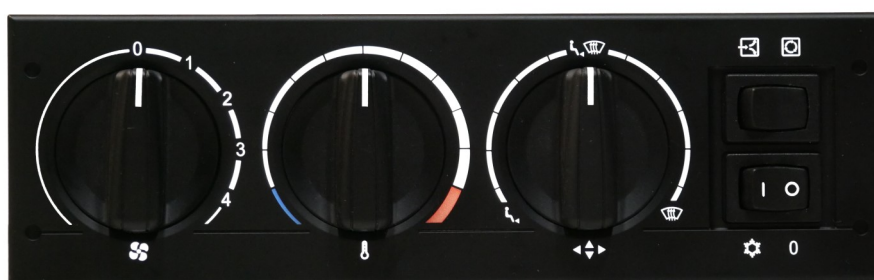
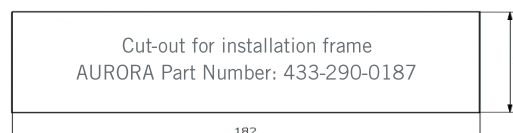
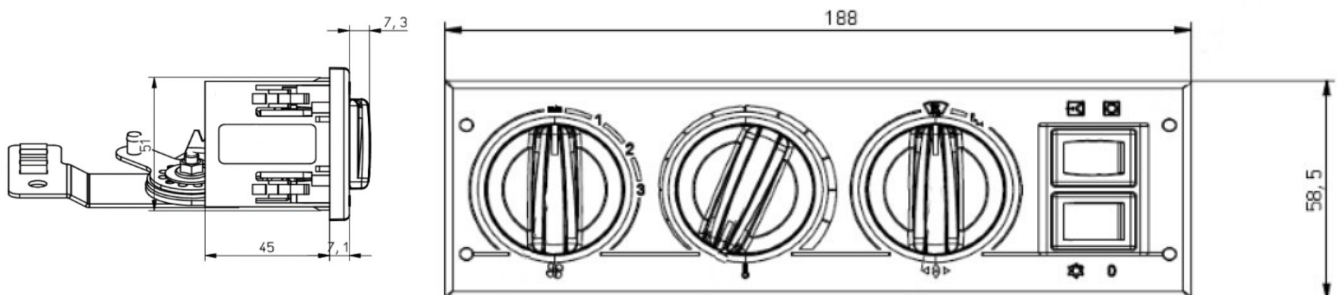
CONTROL PANELS

ECONOMY - CCM L

AURORA's line of Economy Control Panels is designed for the rough and tough operator. For this line, we've stripped out all the extra bells and whistles to give customers exactly what they need: simplicity and functionality. *CCM-L* can have up to three rotary actuators and two rocker switches, all of which are mechanically manipulated (electronic versions available - see CCE Controls). Knob and switch functions can be defined by the Customer for specific operator requirements.

Blower Control	Switch
Set Temperature	Bowden Controls
Integrated Climate	No
Display	No
A/C	Yes
Defrost	No
Fresh Air / Circulating	Yes
Outside Temperature	No
Air Distribution Flap	Yes, Bowden Con-
2nd Air Distribution	No
Automatic Climate	No

Infinitely Variable Blower	No (if applicable, by means of separate electronic blower control mod-
Auxiliary Heating	No
Failure Code Readout	No
Diagnostics	No
Digital Inputs	-
Digital Outputs	-
Analog Inputs	-
Analog Outputs	-
Illuminated Symbols	Yes
Illuminated Rotary Actors	No
CAN-Bus	No



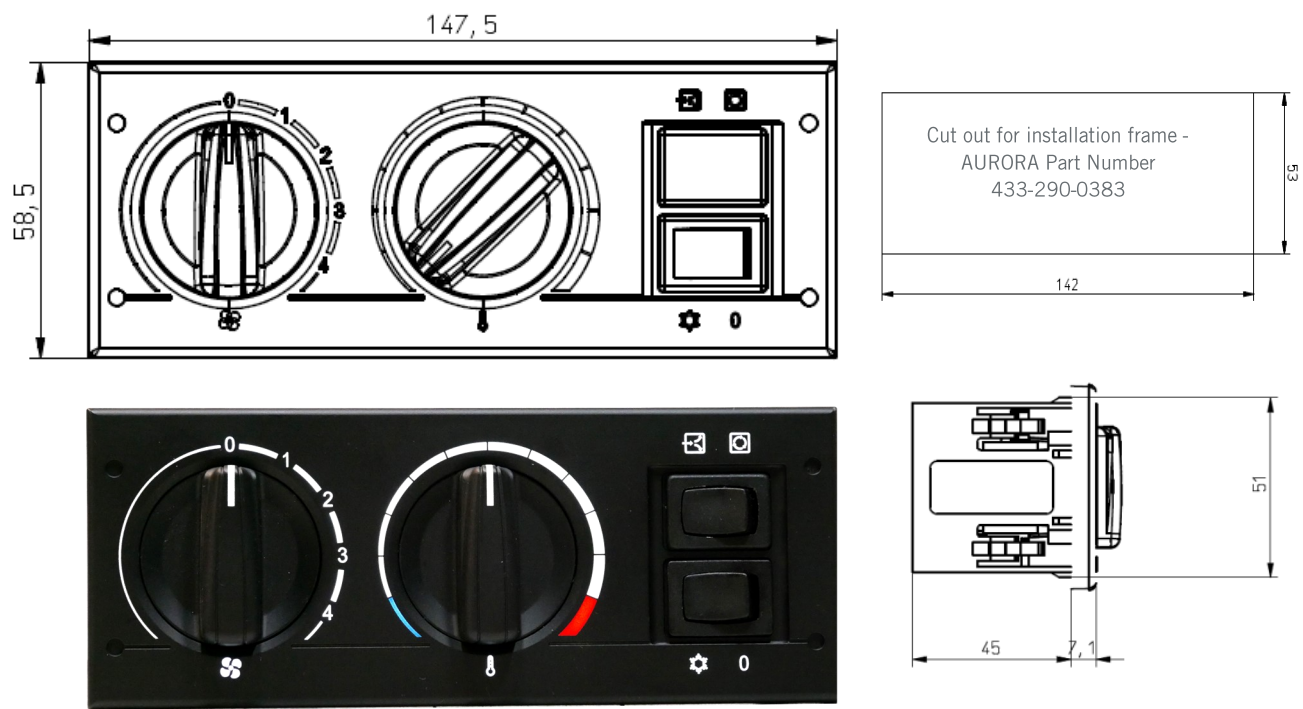
CONTROL PANELS

ECONOMY - CCE K

AURORA’s line of Economy Control Panels is designed for the rough and tough operator. For this line, we’ve stripped out all the extra bells and whistles to give customers exactly what they need: simplicity and functionality. The CCE-K can have up to two rotary actuators and two rocker switches, all of which are electronically manipulated (for mechanical options - see CCM). The functions of these knobs and switches can be defined by the customer for specific operator requirements. Climate Control options are feasible with the addition of either an HCC control module or a 6-pol AMA actuator.

Blower Control	Switch / Potentiometer
Set Temperature	Potentiometer
Integrated Climate Control	No
Display	No
A/C	Yes
Defrost	No
Fresh Air / Circulating Air	Yes
Outside Temperature	No
Air Distribution Flap	No
2nd Air Distribution Flap	No
Automatic Climate Control	No

Infinitely Variable Blower	No (if applicable, by means of separate electronic blower control module)
Auxiliary Heating	No
Failure Code Readout	No
Diagnostics	No
Digital Inputs	-
Digital Outputs	-
Analog Inputs	-
Analog Outputs	-
Illuminated Symbols	Yes
Illuminated Rotary Actors	No
CAN-Bus	No
Special Feature	Climate control feasible by means of HCC or 6-pol AMA
Technical Information	912-100-1059



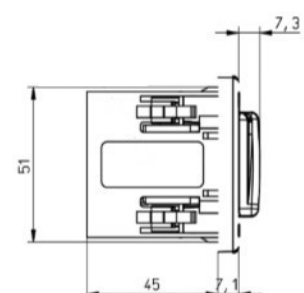
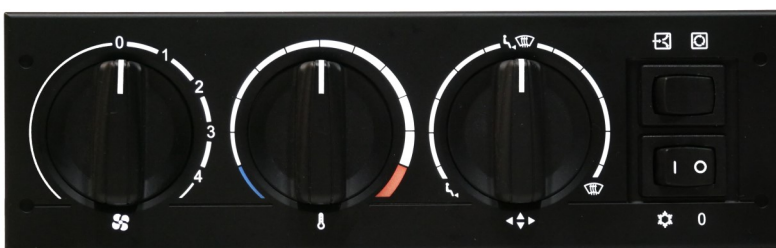
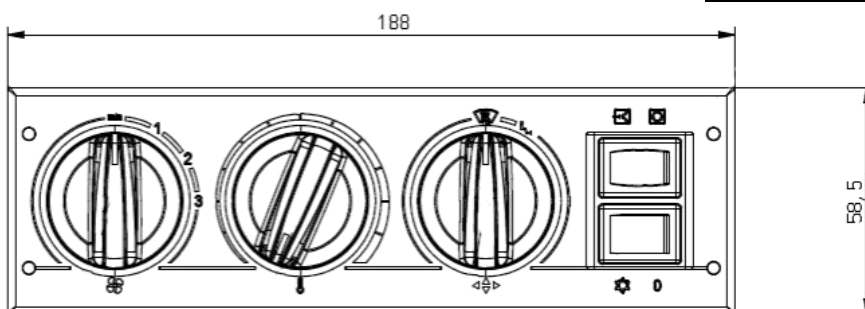
CONTROL PANELS

ECONOMY - CCE L

AURORA's line of Economy Control Panels is designed for the rough and tough operator. For this line, we've stripped out all the extra bells and whistles to give customers exactly what they need: simplicity and functionality. The CCE-L can have up to three rotary actuators and two rocker switches, all of which are electronically manipulated (for mechanical options - see CCM). The functions of these knobs and switches can be defined by the customer for specific operator requirements. Climate Control options are feasible with the addition of either an HCC control module or a 6-pol AMA actuator.

Blower Control	Switch / Potentiometer
Set Temperature	Potentiometer
Integrated Climate Control	No
Display	No
A/C	Yes
Defrost	No
Fresh Air / Circulating Air	Yes
Outside Temperature	No
Air Distribution Flap	Yes
2nd Air Distribution Flap	No
Automatic Climate Control	No

Infinitely Variable Blower	No (if applicable, by means of separate electronic blower control module)
Auxiliary Heating	No
Failure Code Readout	No
Diagnostics	No
Digital Inputs	-
Digital Outputs	-
Analogue Inputs	-
Analogue Outputs	-
Illuminated Symbols	Yes
Illuminated Rotary Actors	No
CAN-Bus	No
Special Feature	Climate control feasible by means of HCC or 6-pol AMA
Technical Information	912-100-1059



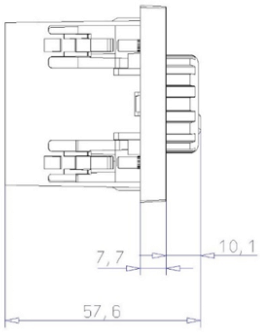
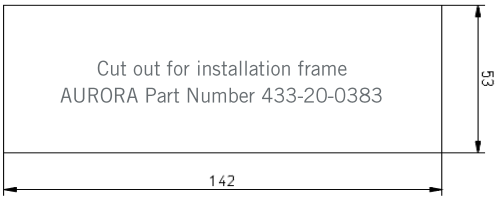
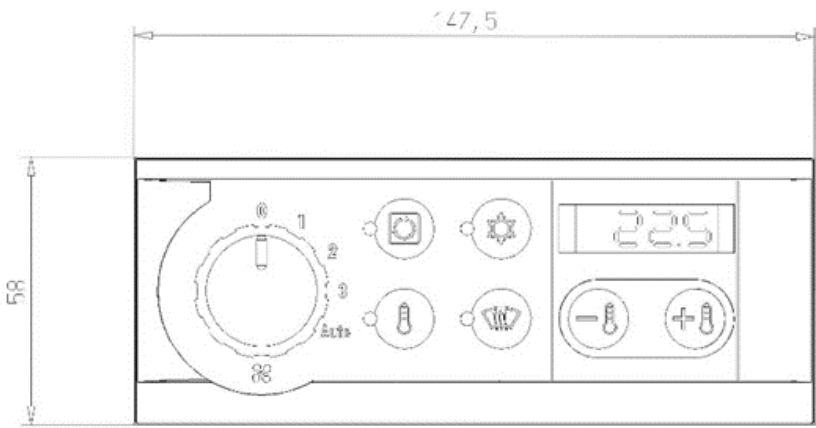
CONTROL PANELS

COMFORT - ECR - K CAN

AURORA’s line of Comfort Control Panels takes the next step towards ultimate climate control in a cabin or vehicles. The short version *ECR-K* offers a single rotary knob for blower speed control with up to six key buttons. The LED display allows the operator to show setup temperature and receive instantaneous feedback with important information regarding the current state of the cabin.

Blower Control	Switch or Potentiometer
Set Temperature	Push Buttons
Integrated Climate Control	Yes
Display	Yes
A/C	Yes
Defrost	Yes
Fresh Air / Circulating Air	Yes
Outside Temperature	Yes
Air Distribution Flap	No
2nd Air Distribution Flap	No
Automatic Climate Control	Yes

Infinitely Variable Blower	Yes
Auxiliary Heating	Yes
Failure Code Readout	Yes
Diagnostics	Yes
Digital Inputs	2
Digital Outputs	1
Sensor Inputs	4
Analog Outputs	2
Illuminated Symbols	Yes
Illuminated Rotary Actors	optional
CAN-Bus	Yes



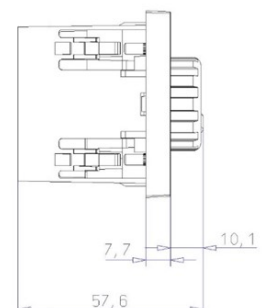
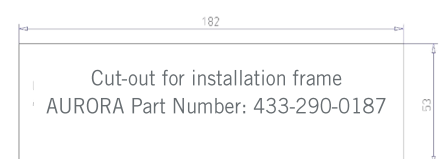
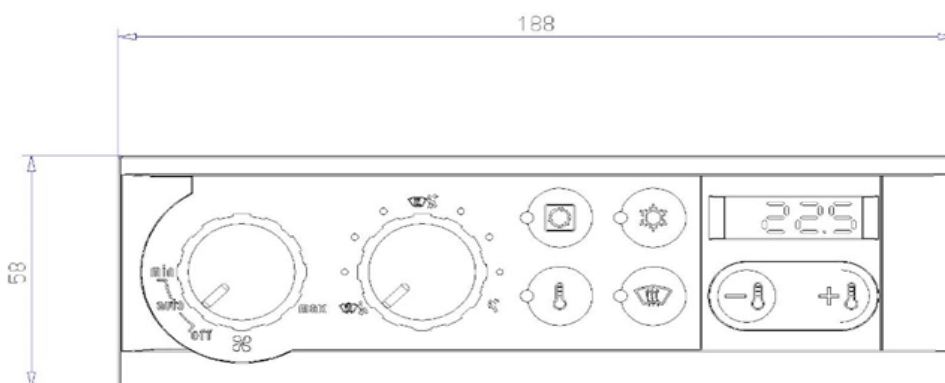
CONTROL PANELS

COMFORT - ECR - L CAN

AURORA's line of Comfort Control Panels takes the next step towards ultimate climate control in a cabin or vehicles. The long version *ECR-L* offers two rotary knobs for blower speed control and air distribution control with up to six key buttons. The LED display allows the operator to show setup temperature and receive instantaneous feedback with important information regarding the current state of the cabin.

Blower Control	Switch or Potentiometer
Set Temperature	Push Buttons
Integrated Climate Control	Yes
Display	Yes
A/C	Yes
Defrost	Yes
Fresh Air / Circulating Air	Yes
Outside Temperature	Yes
Air Distribution Flap	Yes
2nd Air Distribution Flap	No
Automatic Climate Control	Yes

Infinitely Variable Blower	Yes
Auxiliary Heating	Yes
Failure Code Readout	Yes
Diagnostics	Yes
Digital Inputs	2
Digital Outputs	1
Sensor Inputs	4
Analog Outputs	2
Illuminated Symbols	Yes
Illuminated Rotary Actors	optional
CAN-Bus	Yes



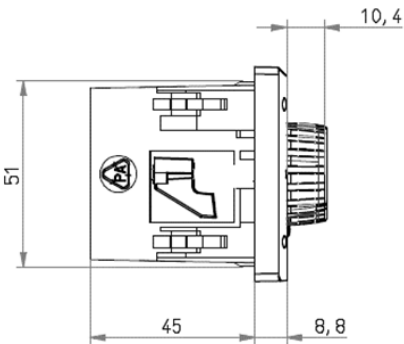
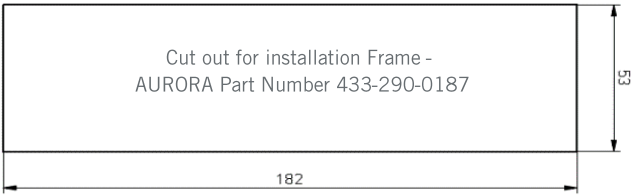
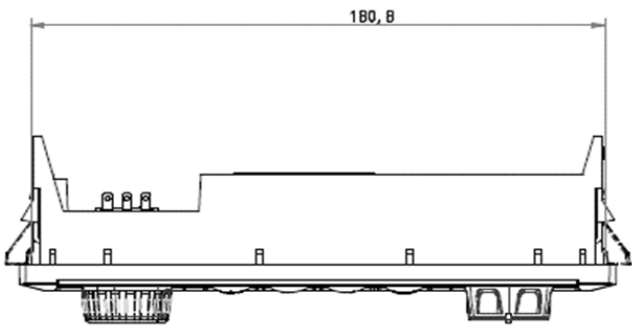
CONTROL PANELS

COMFORT - ACD

AURORA’s line of Comfort Control Panels takes the next step towards ultimate climate control in a cabin or vehicle. In comparison to the Economy line, our Comfort Controls offers dual knobs coupled with up to six key buttons. The OLED Display allows the operator to receive instantaneous feedback with important information regarding the current state of the cabin including: blower speeds, current temperature, and air flow allocations. The ACD-L can also have a variable number of inputs and outputs depending on the system requirements.

Blower Control	Switch / Potentiometer
Set Temperature	Potentiometer or key buttons
Integrated Climate Control	Yes
Display	OLED display
A/C	Yes
Defrost	Yes
Fresh Air / Circulating Air	Yes
Outside Temperature	Yes
Air Distribution Flap	Yes
2nd Air Distribution Flap	Yes
Automatic Climate Control	Yes

Infinitely Variable Blower	Yes
Auxiliary Heating	Yes
Failure Code Readout	Yes (by means of numerical codes)
Diagnostics	Yes
Digital Inputs	3
Digital Outputs	2
Analog Inputs	2 (+1 reserve)
Temperature Sensors	4
Analog Outputs	2 (+1 reserve)
Illuminated Symbols	Yes
Illuminated Rotary Actors	Yes
CAN-Bus	Yes
Actuator 2 pol.	1
Actuator 5 pol.	2 (+1 optional)
Humidity Sensor	optional
Technical Information	912-100-1022



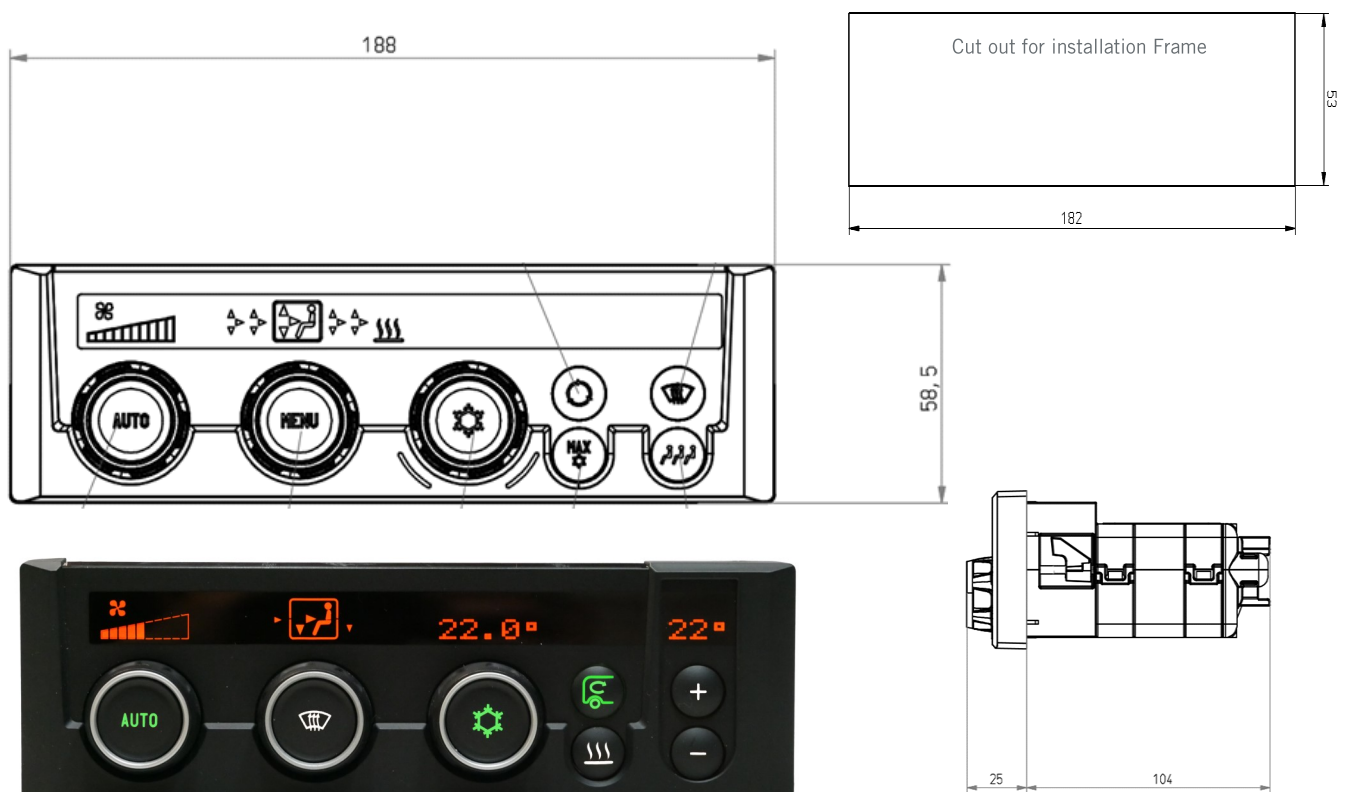
CONTROL PANELS

PREMIUM - ARANEA

AURORA's line of Premium Control Panels takes the industry to a whole new level. *Aranea* was developed for bus and coach applications. It encompasses graphic display with 3 encoders and up to 7 key button options. The *Aranea* is the ultimate control panel for higher end applications. Thanks to a modern design and one-touch Auto Function, *Aranea* gives operators the cabin temperatures they desire with the single push of a button. The *Aranea* reimagines operator comfort as we know it.

Blower Control	Encoder
Set Temperature	Encoder
Air Distribution	Encoder
Integrated Climate Control	Yes
Display	Yes
A/C	Yes
Defrost	Yes
Fresh Air / Circulating Air	Yes
Outside Temperature	Yes
Air Distribution Flap	Yes
2nd Air Distribution Flap	Yes
Automatic Climate Control	Yes

Infinitely Variable Blower	Yes
Auxiliary Heating	Yes
Failure Code Readout	Yes
Diagnostics	Yes
Digital Inputs	5
Digital Outputs	8 (2x2A, 6x0, 5A)
Analog Inputs	3
Temperature Sensor	4
Analog Outputs	3
Illuminated Symbols	Yes
Illuminated Rotary Actors	Yes
CAN-Bus	2-interfaces
Actuator 5 pol.	4
Humidity Sensor	Optional
Technical Specification	912-100-1015



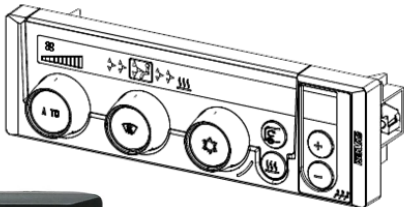
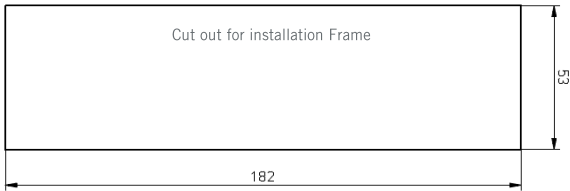
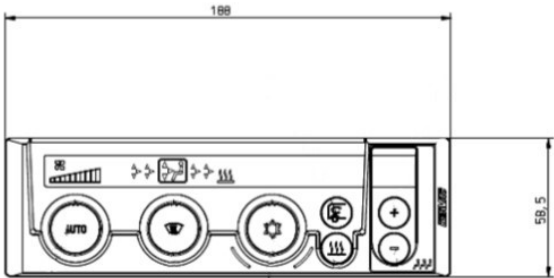
CONTROL PANELS

PREMIUM - ARANEA HMI

AURORA's line of Premium Control Panels takes the industry to a whole new level. The *Aranea HMI* was developed specifically for applications where the controls and A/C System are not installed within a close proximity to one another. With similar characteristics to those of the *Aranea Kombi*, *HMI* encompasses graphic display with 3 encoders and up to 7 key button options. The *Aranea HMI* is the ultimate control panel for higher end applications. With a modern design and one-touch Auto Function, *Aranea HMI* gives operators the cabin temperatures they desire with the single push of a button. The *Aranea* Family reinvents operator comfort.

Blower Control	Encoder
Set Temperature	Encoder
Air Distribution	Encoder
Display	Yes

Illuminated Symbols	Yes
Illuminated Rotary Actors	Yes
CAN-Bus	1 interface
Technical Information	912-100-1015



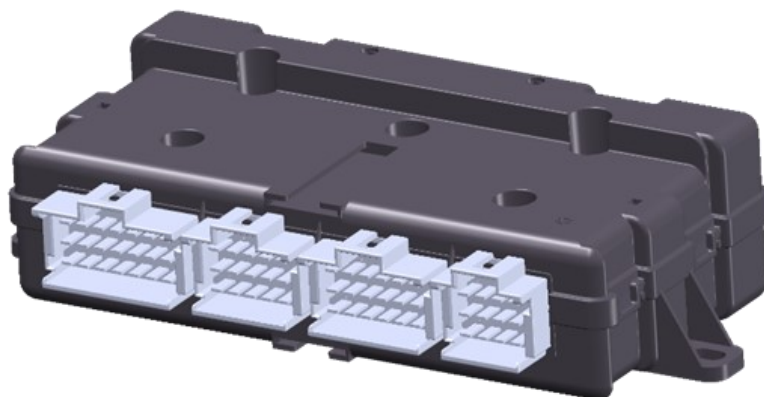
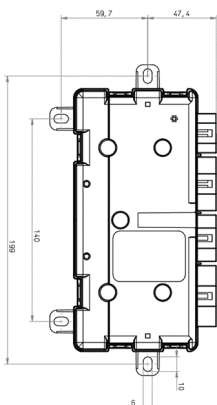
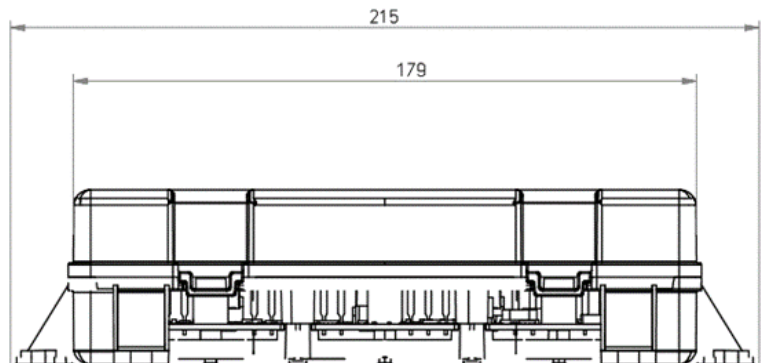
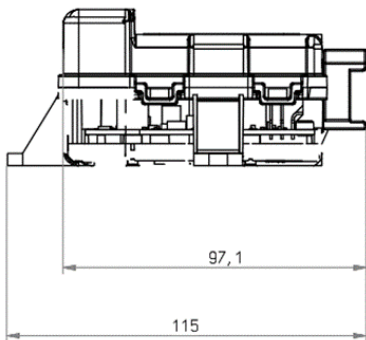
CAN CONTROLLER

PREMIUM - AR HCP

AURORA's line of Premium Control Panels takes the industry to a whole new level. The *AR-HCP* module works in combination with the *Aranea* family in order to facilitate communication between the system and the control panel. This module helps reduce installation costs by reducing the amount of wiring and cables inside the vehicle. These are especially popular in applications where the control panel and the air conditioning system are not located within proximity of one another, and eliminates lengthy wiring.

Stepped Blowers	Yes
Stepless Blowers	Yes
Digital Inputs	5
Digital Outputs	6 x 0.5 A, 2 x 2.0 A
Analog Inputs	2

<u>Temperature Sensors</u>	<u>3</u>
<u>Analog Outputs</u>	<u>3</u>
<u>5-pole Actuators</u>	<u>4</u>
<u>CAN-Bus</u>	<u>2 interfaces</u>
<u>Technical Information</u>	<u>912-100-1060</u>



CONTROL PANELS

PREMIUM - AR HCP - MINI

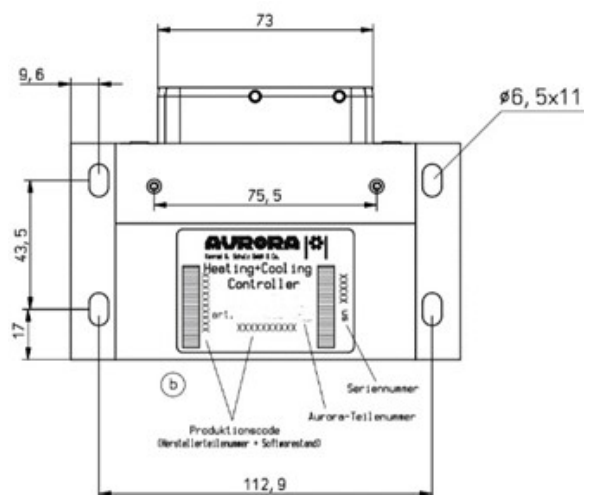
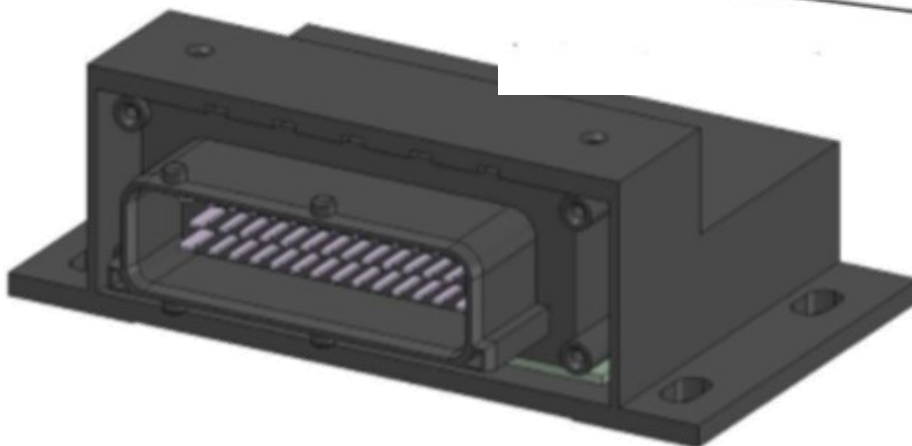
The HCP-mini is a standalone CAN I/O module to connect various sensors and actuators of an air conditioning unit. The communication with the control unit (and possibly other I/O modules) takes place by a CAN-bus interface. The connection to a vehicle CAN bus can be realized by an optional CAN interface. The controller can be implemented in vehicles with 12 or 24 voltage and the installation is carried out via four screw points. By the potted PCB-board and the sealed connector, the controller achieves the protection class IP67.

Voltage	9-34 V
Temperature Range	-40°C — +80°C
Digital Inputs	2
Digital Outputs	6 x 0.5 A, 2 x 2.0 A
Analog Voltage Inputs	3
Analog Sensor Inputs	5

Frequency Input	1
Digital Outputs	8 at 0.5A (up to 3 actuators)
Analog- / PWM-Outputs	3
Analog Output 2A Power	1
CAN-BUS	1 (+ option for 1 additional)
LIN-BUS	1
Qualifications	Protection Class IP67
	E1-Certification



PREMIUM - AR HCP - MINI



LOUVERS

DURABLE,
DYNAMIC, USER-
FRIENDLY





AURORA

Advanced HVAC Solutions

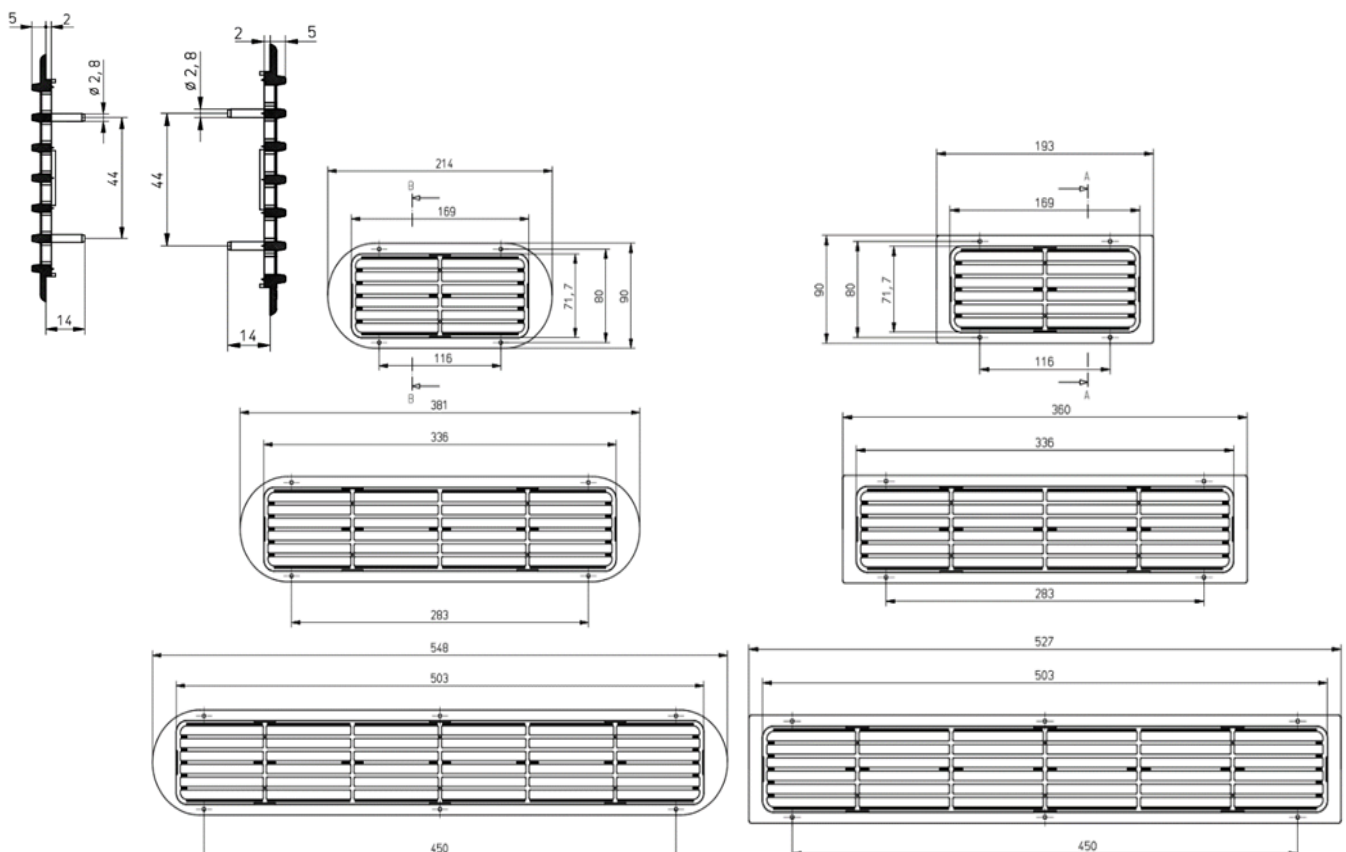


VENTILATION LOUVERS

AIR GRILLS

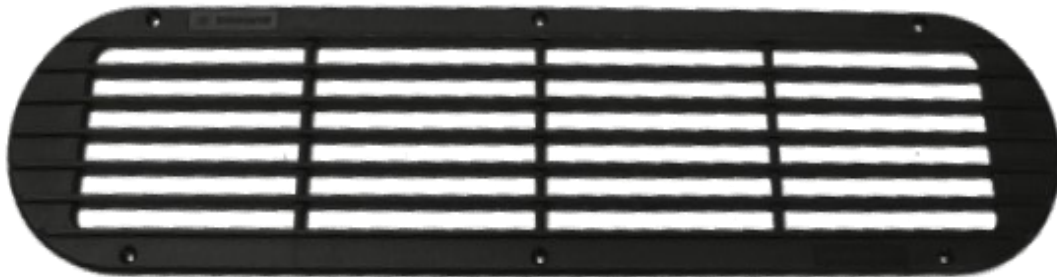
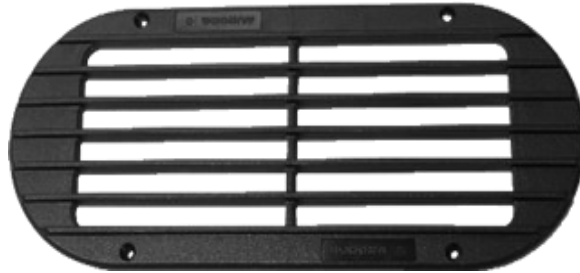
AURORA's Air Grills have horizontal fixed air guide vanes that can be used in both air intake and outtake applications. The grills are designed to allow for different filtration elements in order to keep all foreign and unwanted objects out of the air circulation system. The grills come in several sizes and shapes, and some also have pegged inserts for easier installation with various filtration options.

Material and Color	
Polyamide PA6 15% glass fiber reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0324	
Variations	
Part Number	Description
431-410-0010	Round Long
431-410-0011	Round Medium
431-410-0012	Round Short
334-130-0001	Round Long with ppi30 filter
334-130-0002	Round Medium with ppi30 filter
334-130-0003	Round Short with ppi30 filter
431-410-0020	Edged Long
431-410-0021	Edged Medium
431-410-0022	Edged Short



VENTILATION LOUVERS

AIR GRILLS

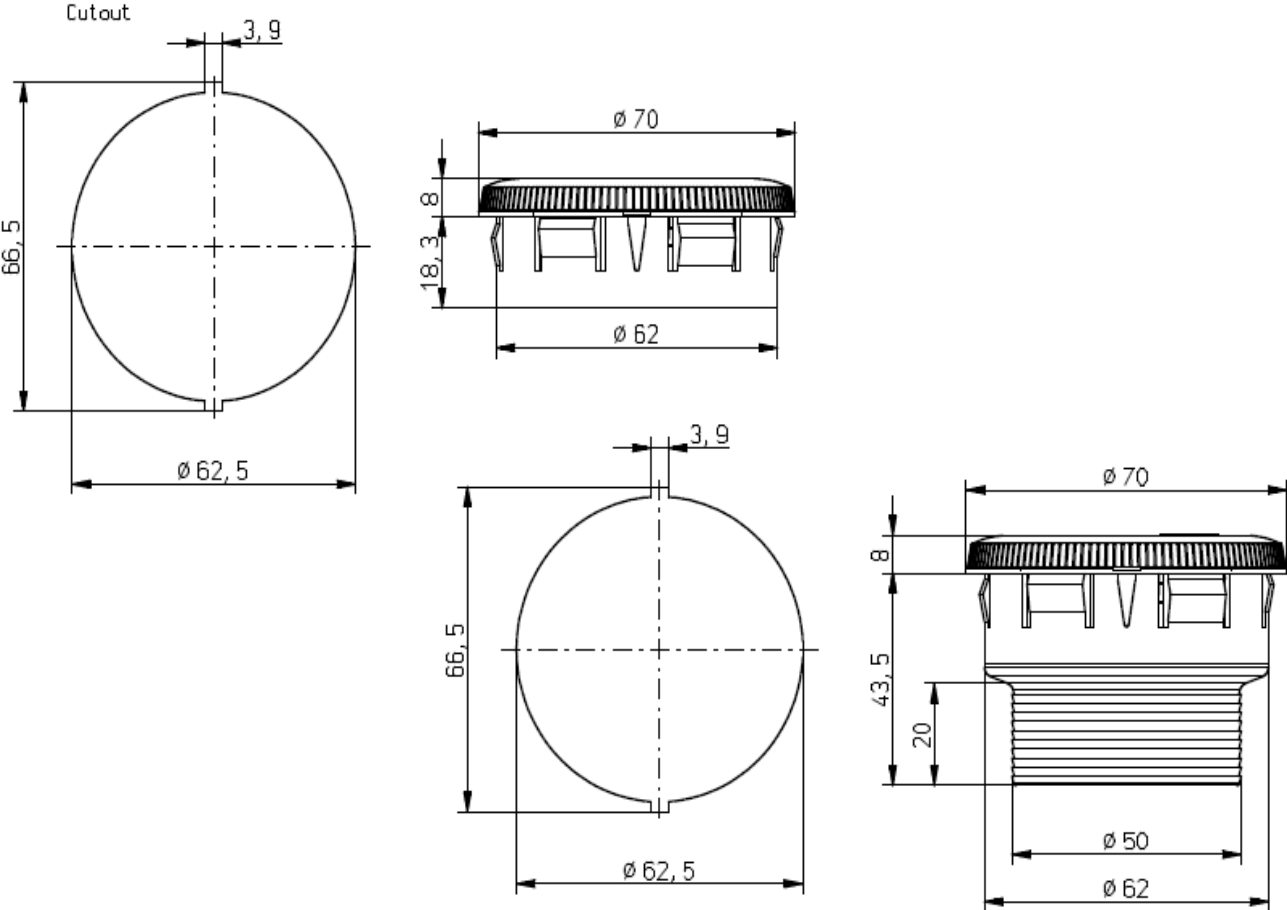


ROUND LOUVERS

RD70

RD70, named such for its 70 mm. diameter, features flaps, a 3 mm. as well as 5 mm dashboard clip adaptor standard, and an optional 50 mm. hose adaptor — all for easy affixation into most any hole spaces near its size. Flaps that rotate 360 degrees in a clockwise manner of the Louver provide for maximum air concentration in any user-defined, desired direction.

Material and Color		
Polyamide PA6 35% glass fiber reinforced Standard Color: black, similar to RAL 9005		
Technical Information		
912-100-0178		
Variations		
Part Number	Clip Range	Descriptions
334-220-0046	3 or 5 mm	RD 70 Black - Clip
334-220-0045	3 - 5 mm	RD 70 Black with 50 mm Ø Hose Adaptor



ROUND LOUVERS

RD70

Printed widths (2.75"/ 70 mm diameter) closely mimic actual piece size



Pictured from Top-to-Bottom:

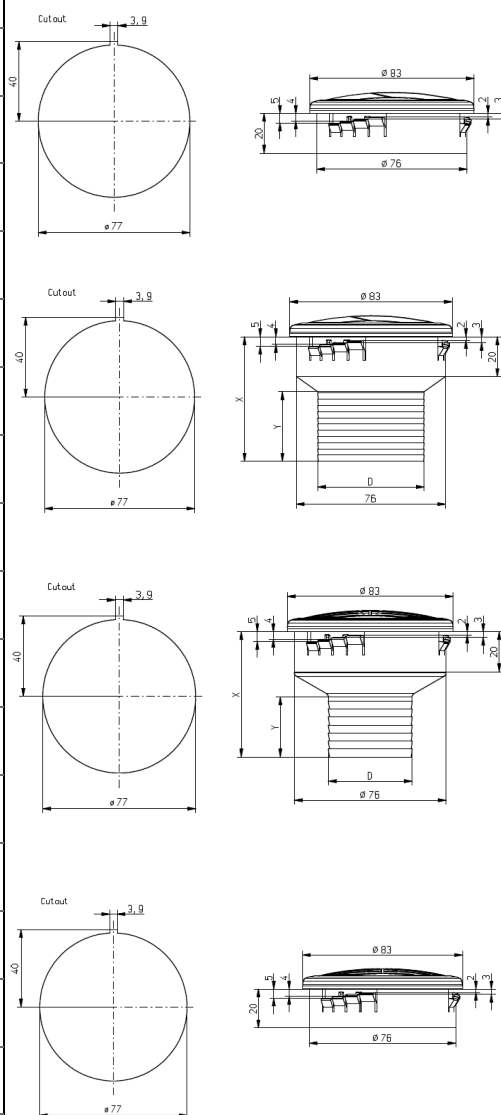
RD70 without Adaptor; RD70 with 50mm. Ø Hose Adaptor

ROUND LOUVERS

RD83

Material & Color					
Polyamide PA6 35% glass fiber reinforcement Standard Color: black, similar to RAL 9005					
Technical Information					
912-100-0911 / 912-100-0505					
Variations					
Description	Subcategories	Part Number	D – Adaptor Ø	X (mm)	Y (mm)
Custom, Flaps Ver- sion with Clip Adaptor	RD83 Stand- ard Black no adaptor	334-220- 0122	—	—	—
	Silver Ring Accent no adaptor	334-220- 0123	—	—	—
	Chrome Ring Accent no adaptor	334-220- 0154	—	—	—
Standard Black, Flaps Ver- sion with Clip & Hose Adap- tor		334-220- 0144	42 mm	62.5	30
		334-220- 0145	50 mm	49	18
		334-220- 0146	55 mm	62.5	35
		334-220- 0147	60 mm	62.5	35
		334-220- 0148	65 mm	63.5	38
		334-220- 0149	70 mm	63	40
		334-220- 0150	75 mm	50	28
Standard Black, Grill Ver- sion with Clip & Hose Adap- tor		334-220- 0155	42 mm	62.5	30
		334-220- 0156	50 mm	49	18
		334-220- 0157	55 mm	62.5	35
		334-220- 0158	60 mm	62.5	35
		334-220- 0159	65 mm	63.5	38
		334-220- 0160	70 mm	63	40
		334-220- 0161	75 mm	50	28
Custom, Grill Version with Clip	Standard Black	334-220- 0142	—	—	—
	Silver Ring	334-220- 0127	—	—	—
	Chrome Ring	334-220- 0168	—	—	—

AURORA's *RD83* is built for the industry. This next generation louver comes standard with 2 mm, 3 mm, 4 mm, and 5 mm clip ranges. The *RD 83*'s convex design allows for maximum air flow in any desired direction. Perfect for personal airflow, these round louvers are best used in dash and headliner applications. *RD 83* also snaps closed for complete air shut off. Various color options for the Louver's outer ring are also available upon request (see title page for examples).



ROUND LOUVERS

RD83

Printed widths (3.25" / 83 mm. diameter) closely mimic actual piece size



Standard Black with Flaps & Clip Adaptor



Custom with Silver or Colored-Ring & Clip Adaptor



Custom with Chrome Ring & Clip Adaptor



Standard Black with Fixed Vanes / Grill & Hose Adaptor



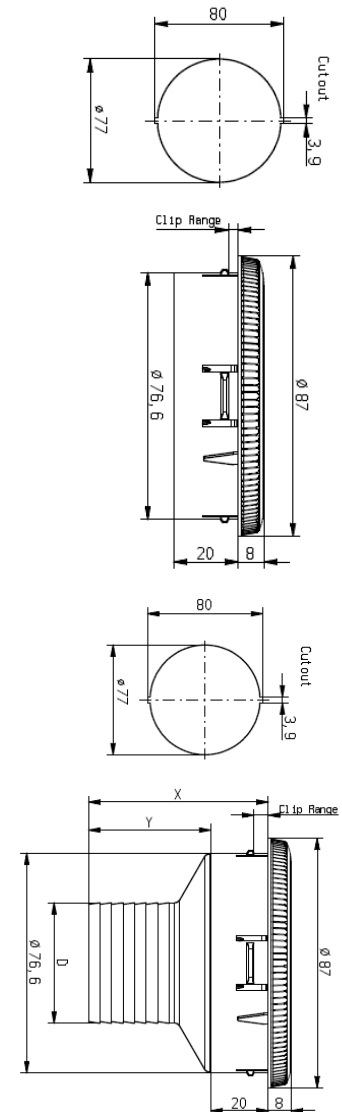
Standard Black with Flaps & Hose Adaptor

ROUND LOUVERS

RD85

Material & Color				
Polyamide PA6 35% glass fiber reinforcement Standard Color: black, similar to RAL 9005				
Technical Information				
912-100-0911 / 912-100-0178				
Variations				
Description	Part Number	D – Adaptor Ø	X (mm)	Y (mm)
3mm Clip Standard Black Flaps	334-220-0052	None	n/a	n/a
	335-220-0053	42 mm	62.5	30
	334-220-0054	50 mm	49	18
	334-220-0055	55 mm	62.5	35
	334-220-0084	60 mm	62.5	35
	334-220-0056	65 mm	63.5	38
	334-220-0057	70 mm	63	40
	334-220-0058	75 mm	50	28
5mm Clip Standard Black Flaps	334-220-0013	None	n/a	n/a
	334-220-0024	42 mm	62.5	30
	334-220-0025	50 mm	49	18
	334-220-0026	55 mm	62.5	35
	334-220-0083	60 mm	62.5	35
	334-220-0027	65 mm	63.5	38
	334-220-0028	70 mm	63	40
	334-220-0029	75 mm	50	28
3mm Clip featuring Grey Flaps	334-220-0108	—	—	—
3mm. Clip Standard Black Grill	334-220-0060	None	-	-
	334-220-0061	42 mm	62.5	30
	334-220-0062	50 mm	49	18
	334-220-0063	55 mm	62.5	35
	334-220-0064	65 mm	63.5	38
	334-220-0065	70 mm	63	40
	334-220-0066	75 mm	50	28
5mm. Clip Standard Black Grill	334-220-0075	None	-	-
	334-220-0076	42 mm	62.5	30
	334-220-0077	50 mm	49	18
	334-220-0078	55 mm	62.5	35
	334-220-0079	65 mm	63.5	38
	334-220-0080	70 mm	63	40
	334-220-0081	75 mm	50	28

This particular, robust round 85 mm louver is intended for use in multiple locations (headliners, dash panels, cabin floor). With either a 3 mm or 5 mm clip range, *RD85* can easily snap into most surfaces. The 360° rotation of the louver provides maximum air concentration in most every desired direction. *RD85*'s rugged design is ideal for heavy machinery, especially whenever durability matters most.



ROUND LOUVERS

RD85

Printed widths (3.34" / 85 mm. diameter) closely mimic actual piece size

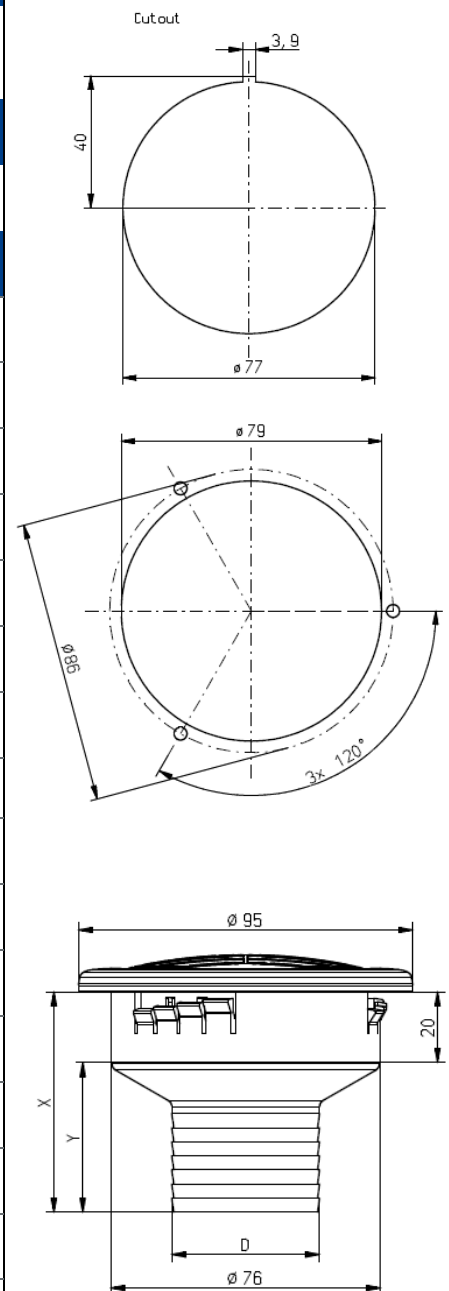


ROUND LOUVERS

RD95

AURORA's round nozzle *RD 95* is built for the industry. This next generation louver comes standard with 2 mm, 3 mm, 4 mm, and 5 mm clip ranges. The *RD 95*'s convex design allows for maximum air flow in most any desired direction. Awesome for personal airflow, these round louvers are best used in dash and headliner applications. The *RD 95* also snaps closed for complete air shut off.

Material & Color				
Polyamide PA6 35% glass fiber reinforcement Standard Color: black, similar to RAL 9005				
Technical Information				
912-100-1041				
Variations				
Description	Part Number	D – Adaptor Ø	X (mm)	Y (mm)
Flaps Version Standard Black	334-220-0136	No Adaptor	60.5	20
	334-220-0178	42 mm	62.5	30
	334-220-0179	50 mm	49	18
	334-220-0180	55 mm	62.5	35
	334-220-0181	60 mm	62.5	35
	334-220-0182	65 mm	63.5	38
	334-220-0183	70 mm	63	40
	334-220-0184	75 mm	50	28
Grill Version Standard Black	334-220-0177	No Adaptor	60.5	20
	334-220-0185	42 mm	62.5	30
	334-220-0186	50 mm	49	18
	334-220-0187	55 mm	62.5	35
	334-220-0188	60 mm	62.5	35
	334-220-0189	65 mm	63.5	38
	334-220-0190	70 mm	63	40
	334-220-0191	75 mm	50	28



ROUND LOUVERS

RD95

Printed widths (3.74" / 95 mm. diameter) closely mimic actual piece size

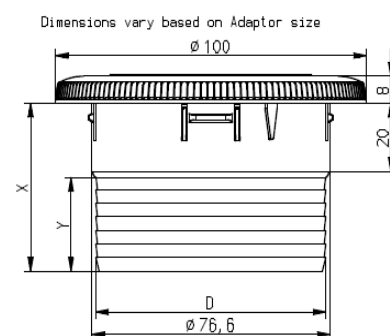
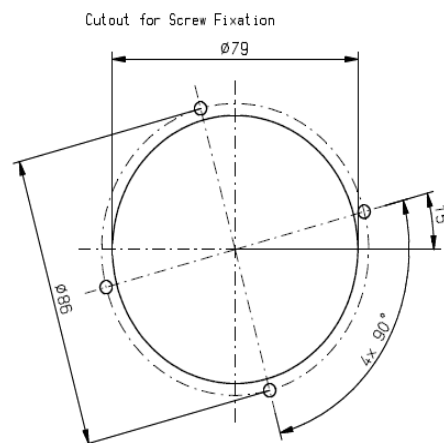
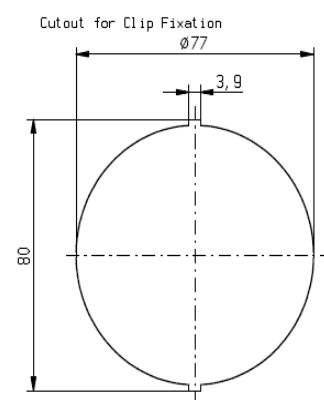


ROUND LOUVERS

RD100

RD100 is available either with or without adaptors. The robust round 100.0 mm diameter Louver is intended for use in headliners or dash consoles. This Louver is built for durability and massive spot airflow. Its multiple fixation capabilities also make this louver extremely adaptable. With a standard 3 mm clip range, this component easily snaps into most surfaces. For headliners and dash cutouts greater than a 3 mm thickness, the RD100 can also be fixed into position via screw holes in the mounting base. The 360° rotation of RD100 louver provides maximum air flow in most any desired direction.

Material & Color				
Polyamide PA6 35% glass fiber reinforcement Standard Color: black, similar to RAL 9005				
Technical Information				
912-100-0699 (Nexus) / 912-100-0178 (Flaps Traditional) / 912-100-0505 (Grill)				
Variations				
Description	Part Number	D – Adaptor Ø	X (mm)	Y (mm)
Flaps Version Traditional Bezel	334-220-0016	No Adaptor	n/a	n/a
	334-220-0017	41.5 mm	62.5	30
	334-220-0018	50 mm	49	18
	334-220-0019	55 mm	62.5	35
	334-220-0082	60 mm	62.5	35
	334-220-0020	65 mm	62.5	38
	334-220-0021	70 mm	63	40
	334-220-0022	75 mm	50	28
Flaps Version Nexus with 0.5-9 mm. clip range	334-220-0102	No Adaptor	n/a	n/a
Grill Version Traditional Bezel	334-220-0067	No Adaptor	n/a	n/a
	334-220-0069	41.5 mm	62.5	30
	334-220-0070	50 mm	50	18
	334-220-0071	55 mm	62.5	35
	334-220-0086	60 mm	62.5	35
	334-220-0072	65 mm	63.5	38
	334-220-0073	70 mm	63	40
	334-220-0074	75 mm	50	28



ROUND LOUVERS

RD100

Printed widths closely mimic actual piece size.

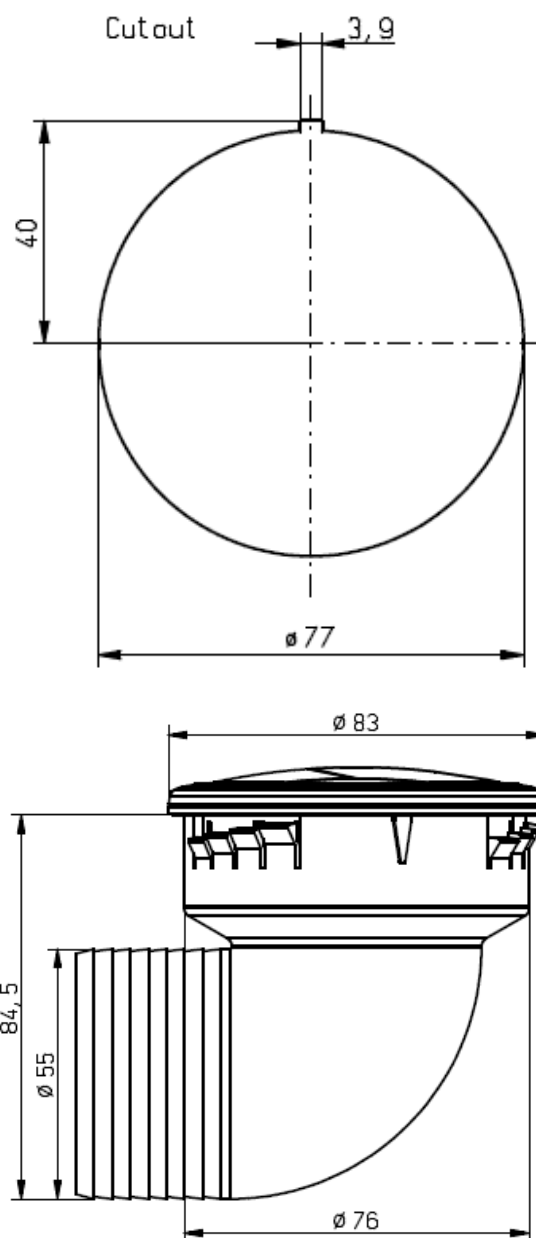


ROUND LOUVERS

SPECIALTY WITH 90° ADAPTERS

This Louver features a specialty, 90 degree hose adapter to accommodate attachment to spaces, which are otherwise not reachable in any other manner. Representing yet another significant sign of the AURORA Group's flexibility factored into the design of its standard component Solutions.

Material and Color	
Polyamide PA6 35% glass fiber reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0911 + 912-100-0505	
Variations	
Part Number	Description
334-220-0162	RD 100.55 - 3 mm clip Grill Version with 90° adaptor
334-220-0163	RD 83.55 – 2/3/4/5 mm Clip version with 90° adaptor



ROUND LOUVERS

SPECIALTY WITH 90° ADAPTERS

Printed dimensions of photographs no longer mimic actual size.



ROUND LOUVERS

RD120

As the largest Round Louver in AURORA's variety, this Round 120.0 mm diameter Louver is intended for use in multiple locations (headliners, dash panels, foot spaces). *RD120* has a standard 3 mm Clip Range. Coupled with screw fastening capabilities, this component can easily be mounted into any surface. The 360 degree rotation of the louver provides maximum air concentration in most every desired direction. This gigantic louver is specially designed for near zero breakages across even the roughest, most rugged environments.

Material and Color

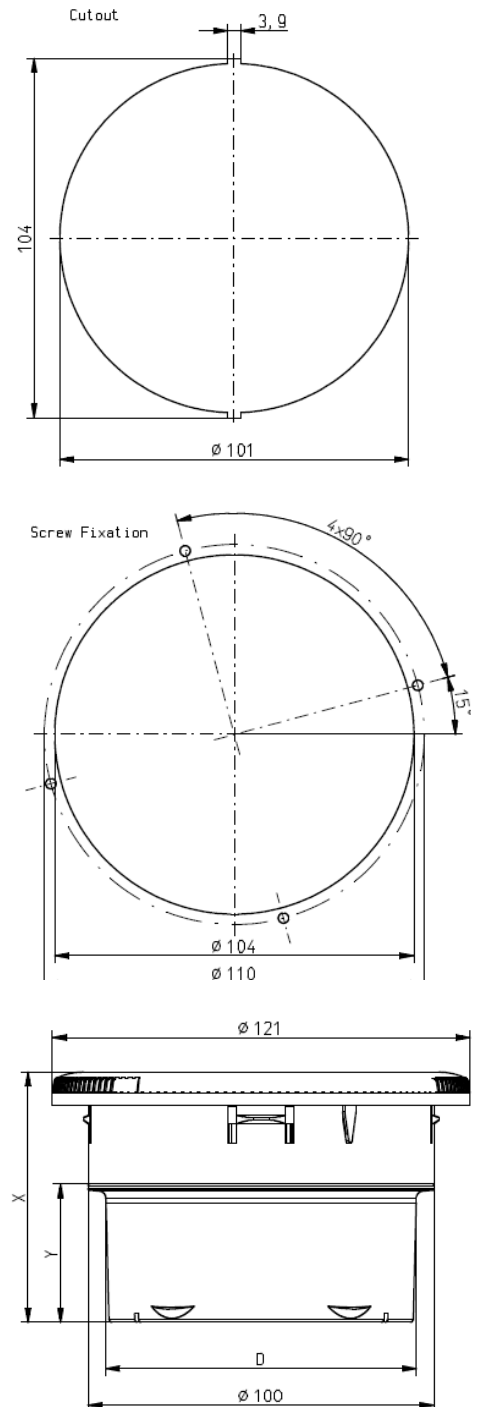
Polyamide PA6 35% glass fiber reinforced
Standard Color: black, similar to RAL 9005

Technical Information

912-100-0178

Variations

Part Number	D Adaptor Ø (mm)	X (mm)	Y (mm)
334-220-0030	None	29	n/a
334-220-0090	90	72	40



ROUND LOUVERS

RD120

Printed dimensions (4.72" / 120 mm diameter) closely mimic actual piece size

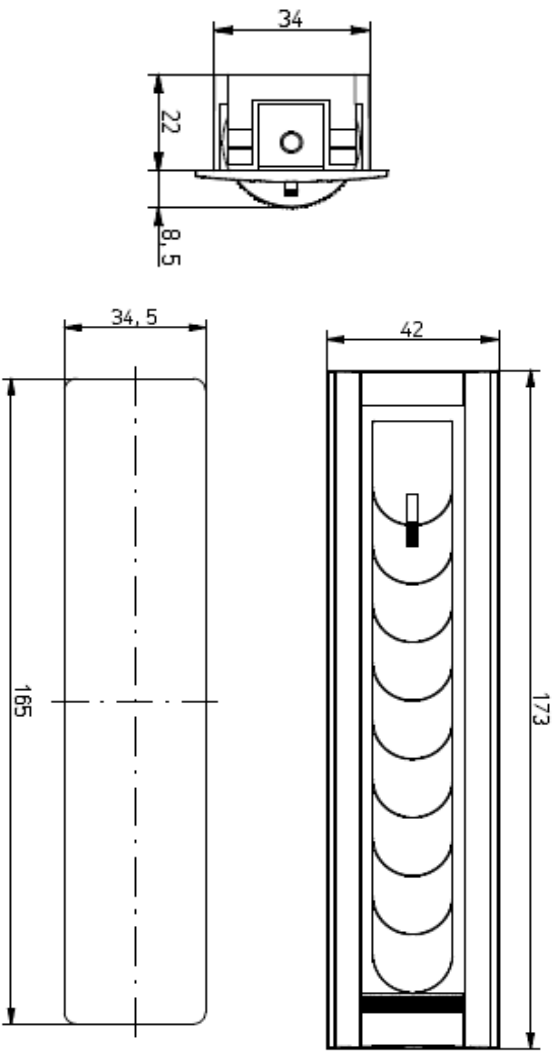


RECTANGULAR LOUVERS

THIN LOUVER

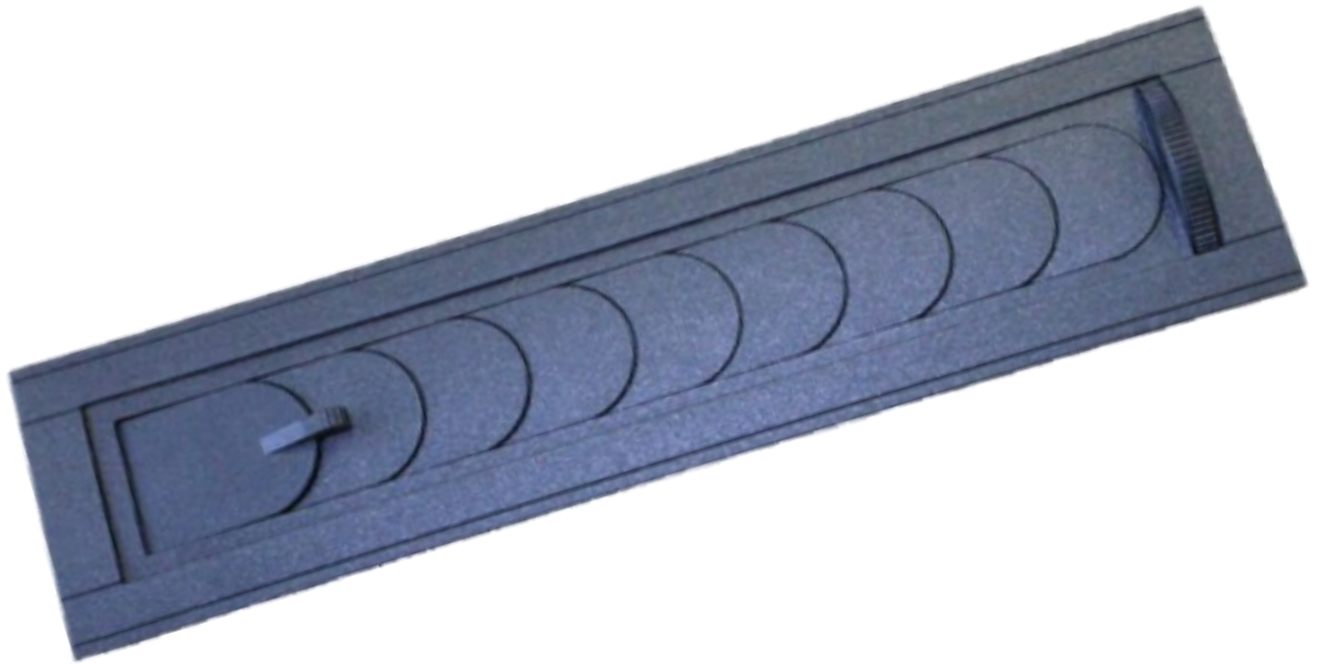
AURORA’s Thin Louver incorporates a slim design for installation in spaces where room is scarce. The roll function allows the operator adjust the direction of airflow to the desired destination. The flap control also adds to the adjustability. When closed, the louver is completely shut. Thin Louvers have excellent flow characteristics in a compact size and are ideal in the support posts or even to utilize as a defrost louver.

Material and Color	
Polyamide PA6 35% glass reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0469	
Variations	
Part Number	Description
334-315-0002	Thin Louver Black



RECTANGULAR LOUVERS

THIN LOUVER

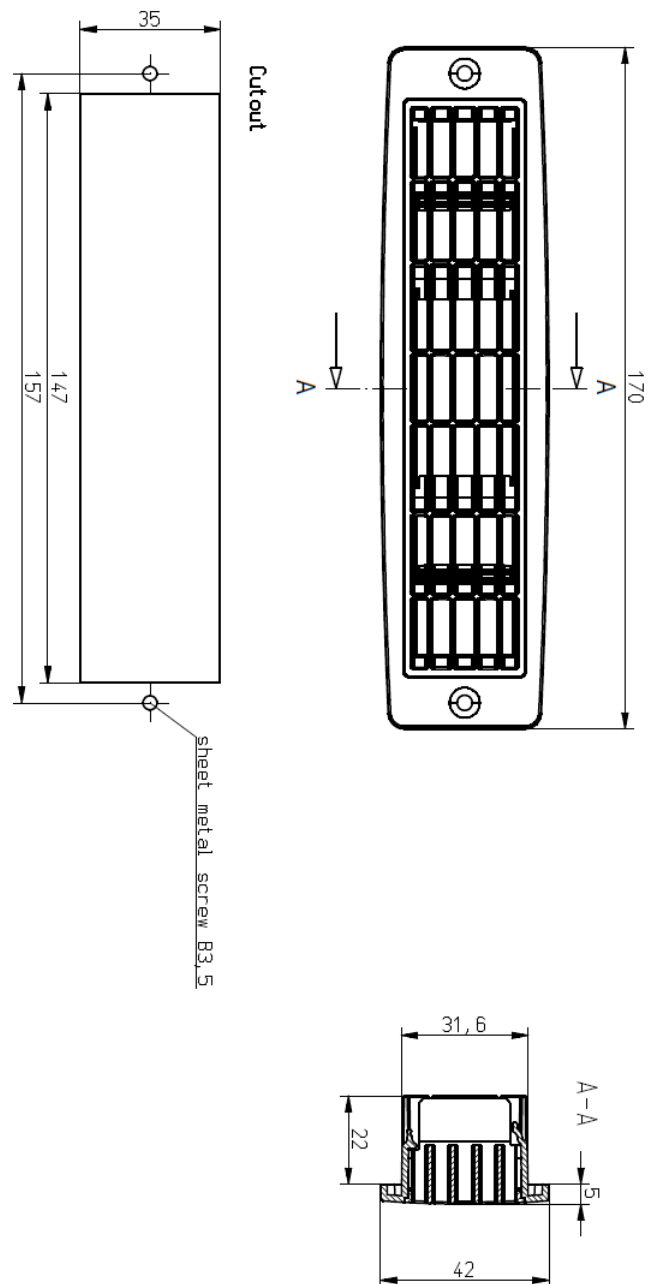


RECTANGULAR LOUVERS

VECTOR NOZZLE

AURORA's Vector Nozzle is the ultimate defrost or under the seat louver. With fixed vanes to optimize airflow over the desired surface area, the Vector was designed for defrosting and defogging glass. This component also doubles as a great below the seat option. With a faceplate, this grill prevents any foreign objects from entering the ducting while the spindle allows the operator the option for complete air shut-off in order to allocate maximum air flow to additional areas of the operating environment.

Material and Color	
Polyamide PA6 35% glass reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0950	
Variations	
Part Number	Description
334-150-0014	Screw Version Flaps
334-150-0017	Clip Version Flaps
334-150-0016	Screw Version Fix Grill
334-150-0018	Clip Version Fix Grill



RECTANGULAR LOUVERS

VECTOR NOZZLE

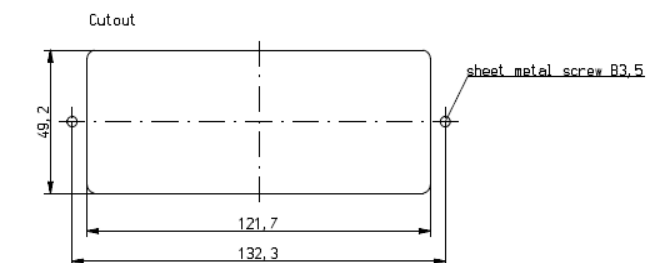
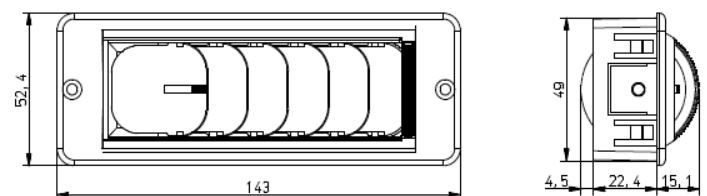
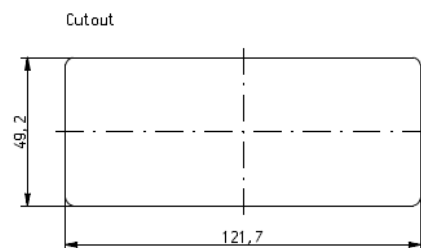
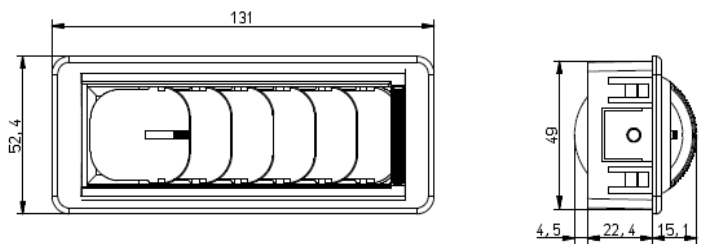


RECTANGULAR LOUVERS

SMALL LOUVER I

AURORA's small louver has a narrow bezel with vanes that open, close, and roll, providing excellent air distribution. The rugged design allows these louvers to be placed in all locations of the cab. Both the screw and clip versions provide easy mounting options for versatile usage. The Small Louver is an excellent option for headliners, dash panels, and A or B pillars.

Material and Color	
Polyamide PA6 35% glass fiber reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0066 / 912-100-0176 / 912-100-0234	
Variations	
Part Number	Attachment
334-314-0003	Screw
334-314-0004	Clip
334-314-0023	Screw with 59mm Clip



RECTANGULAR LOUVERS

SMALL LOUVER I

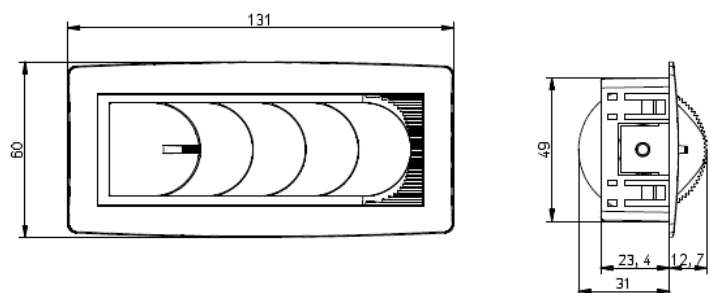


RECTANGULAR LOUVERS

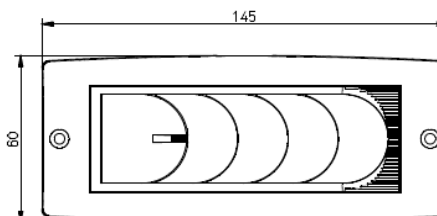
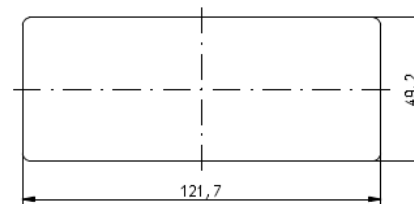
SMALL LOUVER II

AURORA's newest edition to the Small Louver family. This edition has a new facelift with arched bezels for a modern looking design. Coupled with the same durability and features as the rest of the family, these louvers are a universal rectangular solution to all locations in the cab. Both the screw and clip versions provide easy mounting options for versatile usage. The Small Louver II is an excellent option for headliners, dash panels, and A or B pillars.

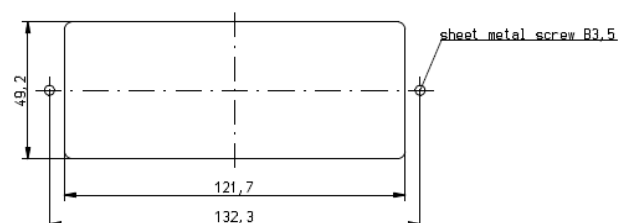
Material and Color	
Polyamide PA6 35% glass reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0912	
Variations	
Part Number	Attachment
334-314-0020	Clip
334-314-0021	Screw



Cutout

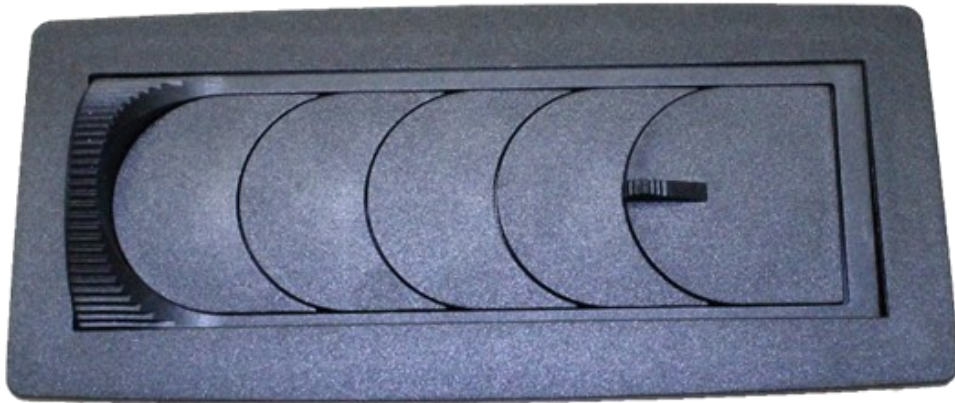


Cutout



RECTANGULAR LOUVERS

SMALL LOUVER II

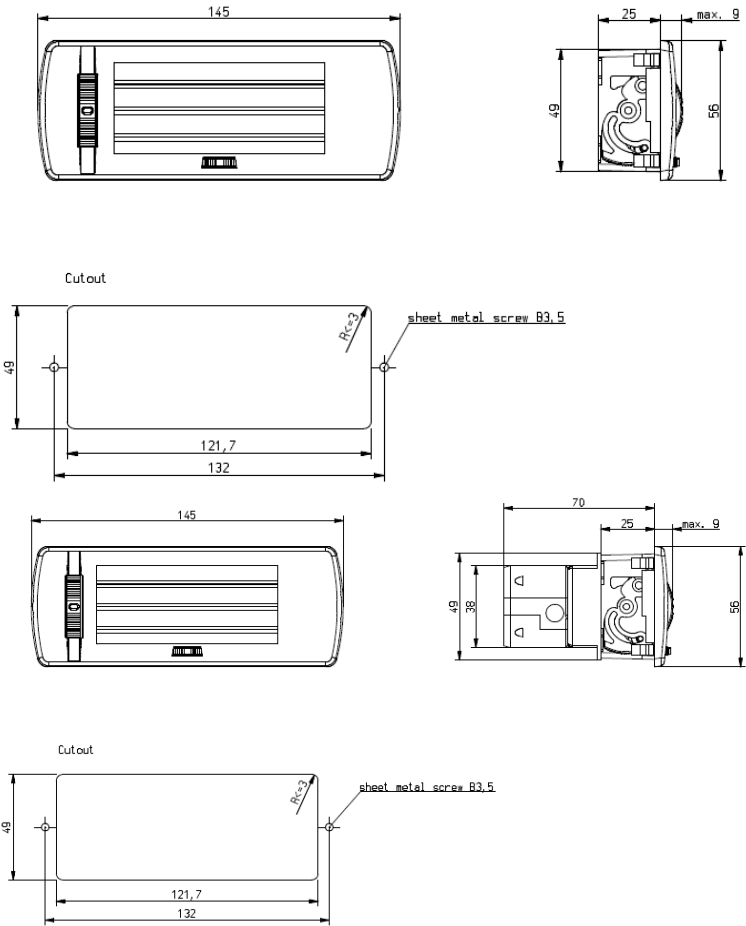


RECTANGULAR LOUVERS

AERO LOUVER

AURORA’s Aero Louver serves multiple functions for cabin air distribution. This louver caters to cab builders and designers who do not wish to have visible screws in their vehicles. Once the base of the louver is installed, a clip-on face plate hides the screws from view inside the cabin. The Aero louver also has dual wheels for adjusting airflow direction to ensure operator comfort. This louver is a great option for headliner and console applications, as well as under-seat personal air distribution.

Material and Color	
Polyamide PA6 35% glass fiber reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0404	
Variations	
Part Number	Attachment
334-314-0050	Screw
334-314-0052	Screw with Hose Adaptor



RECTANGULAR LOUVERS

AERO LOUVER



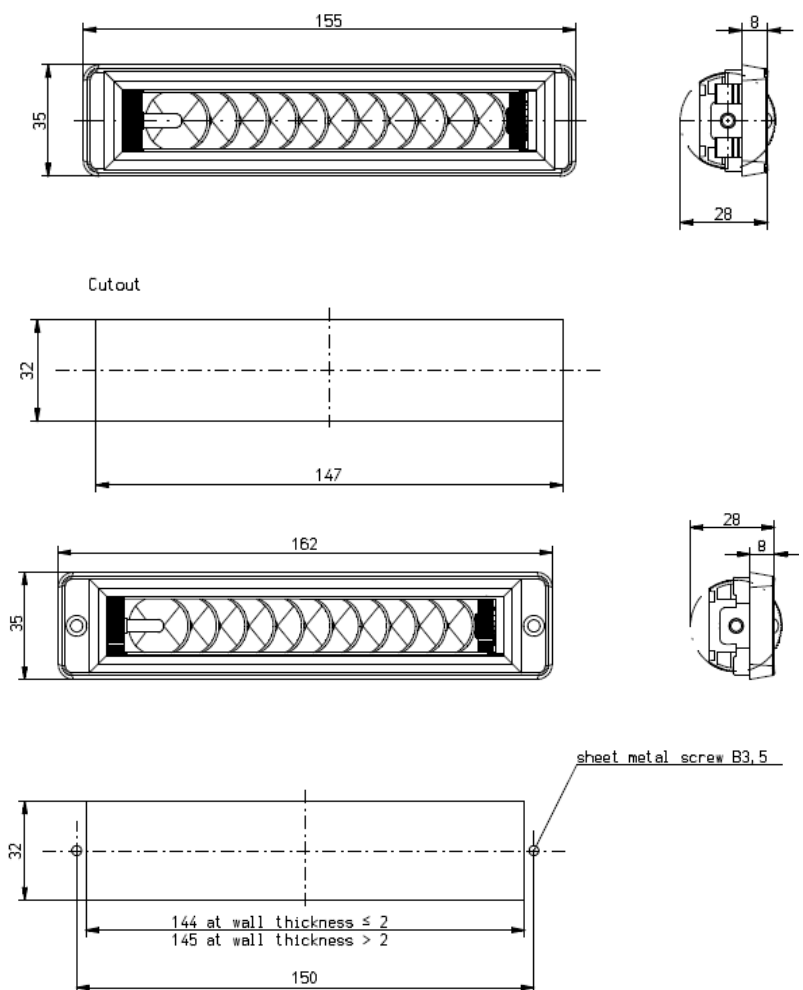
RECTANGULAR LOUVERS

STANDARD ROLL NOZZLE

AURORA's Roll Nozzle offers a slim profile allowing this Louver to be located near the wind shield for defrost applications. The inner roll rotates enabling even more flexible air distribution. The roll can also be closed to block airflow through the louver.

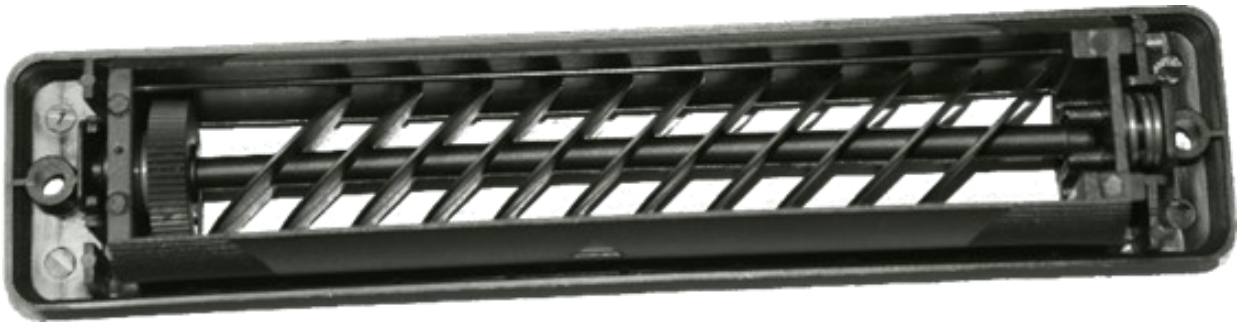
AURORA's Roll Nozzle has a slim profile allowing it to be located near the wind shield for defrost applications. The inner roll rotates allowing flexible air distribution. The roll can also be rotated to close off of the air through the louver. This particular roll nozzle has a wider frame to cover up unclean cut outs and frayed edges in the dash.

Material and Color	
Polyamide PA6 35% glass fiber reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0177 Standard / 912-100-0142 Special Frame	
Variations	
Part Number	Attachment
334-341-0001	Clip
334-341-0002	Screw
334-341-0007	Screw; Special Frame



RECTANGULAR LOUVERS

STANDARD ROLL NOZZLE



RECTANGULAR LOUVERS

DOUBLE ROLL NOZZLE

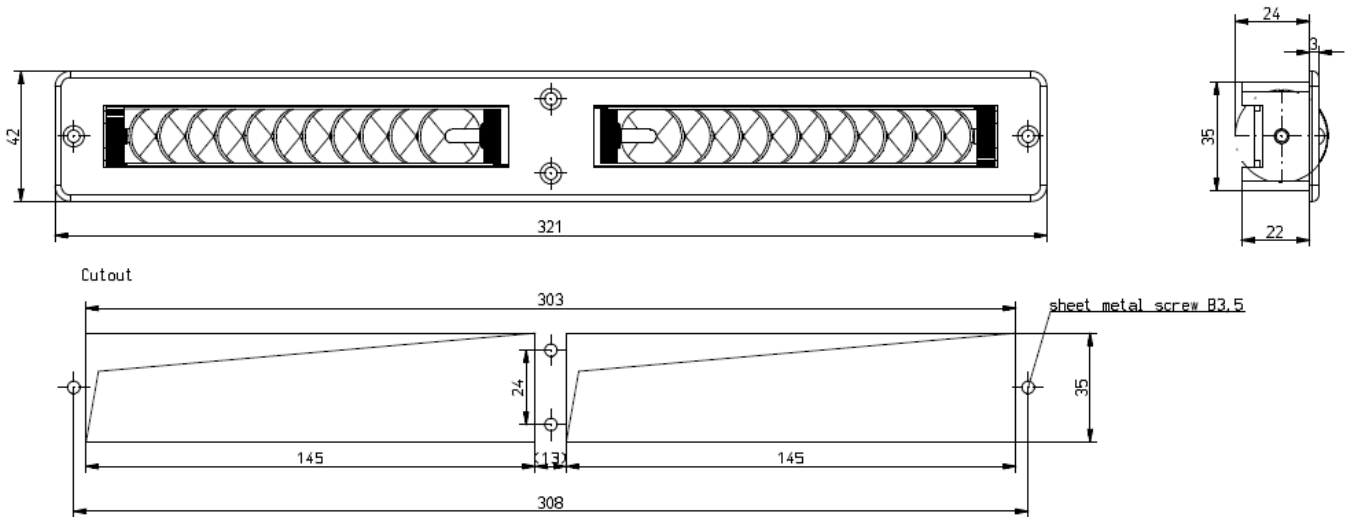
AURORA's Roll Nozzle has a slim profile allowing it to be located near the windshield for defrost applications. The inner roll rotates allowing flexible air distribution. The roll can also be rotated to close of the air through the louver. The Double Roll Nozzle is an excellent option for dash panels.

Material and Color	
Polyamide PA6 35% glass fiber reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0142	
Variations	
Part Number	Attachment
334-341-0008	Screw – Double Roll



RECTANGULAR LOUVERS

DOUBLE ROLL NOZZLE



DEFROST LOUVERS

QUARTER CIRCLE VENT

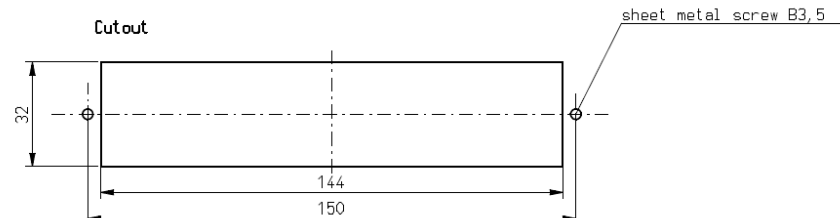
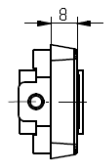
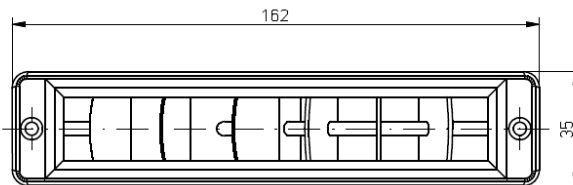
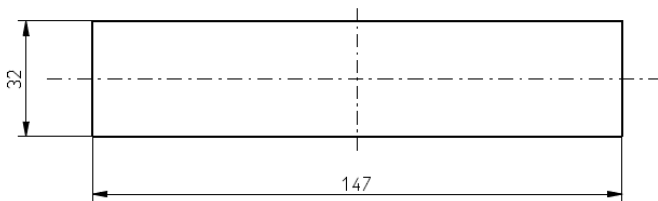
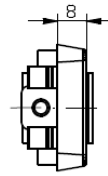
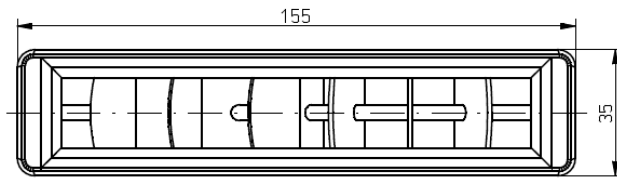
AURORA’s Quarter Circle Vent has a fixed vane profile that evenly distributes airflow, making it ideal for defrost applications. This louver is most suitable for dashboard and window edge applications where defrost functionality is key.

Material and Color	
Polyamide PA6 35% glass fiber reinforced Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0185	
Variations	
Part Number	Attachment
334-150-0001	Clip
334-150-0002	Screw



DEFROST LOUVERS

QUARTER CIRCLE VENT



DEFROST LOUVERS

PD NOZZLE

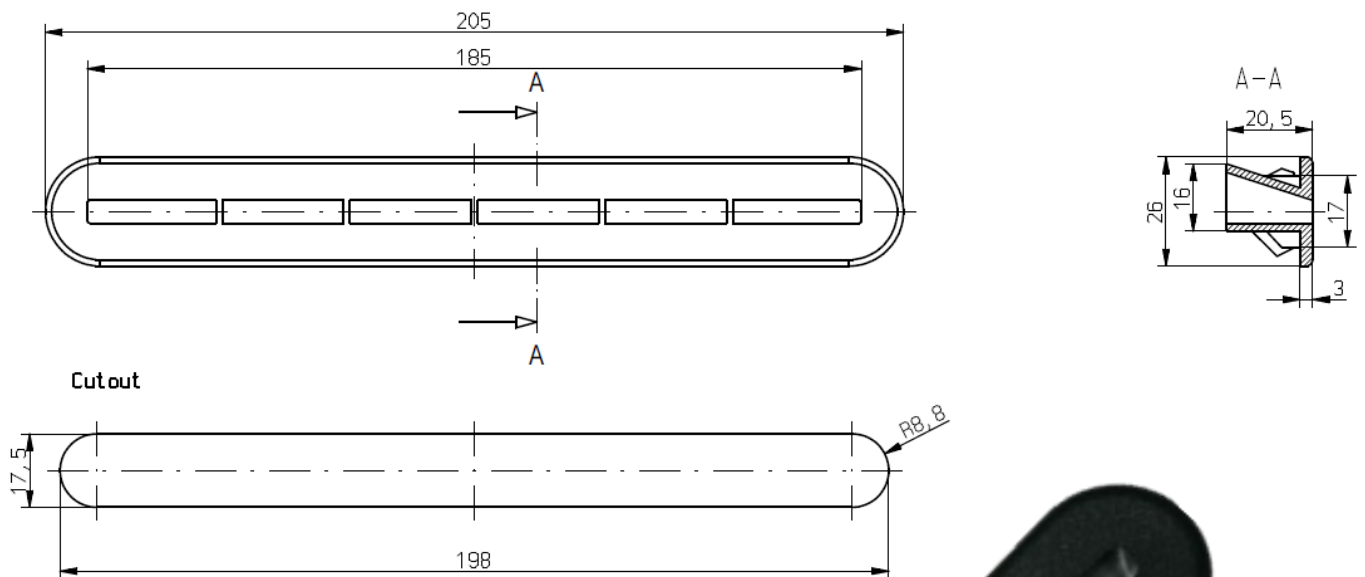
The *PD Nozzle* is a defrost louver designed to be installed nearest the windshield. Resulting from a sleek profile design, *PD* makes an excellent addition to include in any dash board or headliner. Integrated guide vanes distribute optimal airflow along the surface. Various sizes are available up-on request.

Material and Color	
ABS Plastic Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0323	
Variations	
Part Number	Description
334-150-0003	PD Long Louver



DEFROST LOUVERS

PD NOZZLE



DEFROST LOUVERS

PD2 LOUVER LONG

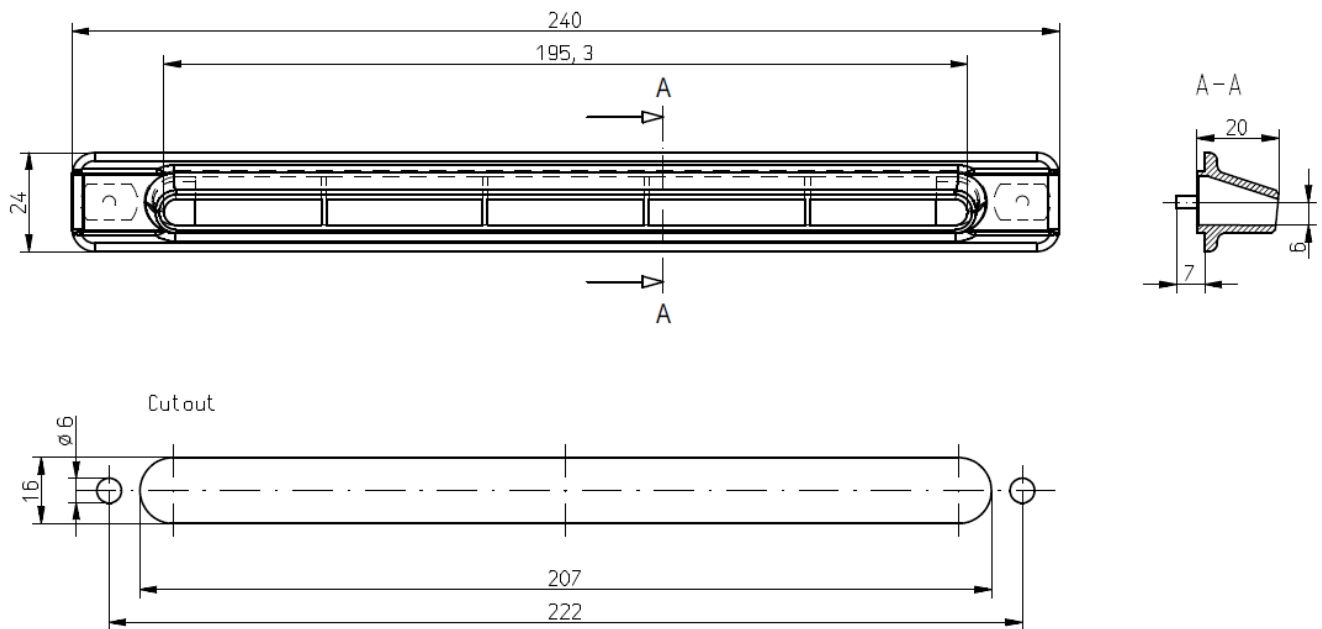
The *PD Nozzle* is a defrost louver designed to be installed close to the windshield. As a result of its slim profile, it is an excellent product to be incorporated into a dash board or headliner. Integrated guide vanes distribute optimal airflow along the surface. Various sizes are available upon request.

Material and Color	
ABS Plastic Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0323	
Variations	
Part Number	Description
334-150-0005	PD2 Long Louver



DEFROST LOUVERS

PD2 LOUVER LONG



DEFROST LOUVERS

PD SHORT

The *PD Short* is a defrost louver designed to be installed close to the windshield. As a result of its slim profile, it is an excellent product to be incorporated into a dash board or headliner. Integrated guide vanes distribute optimal airflow along the surface. Various sizes are available upon request.

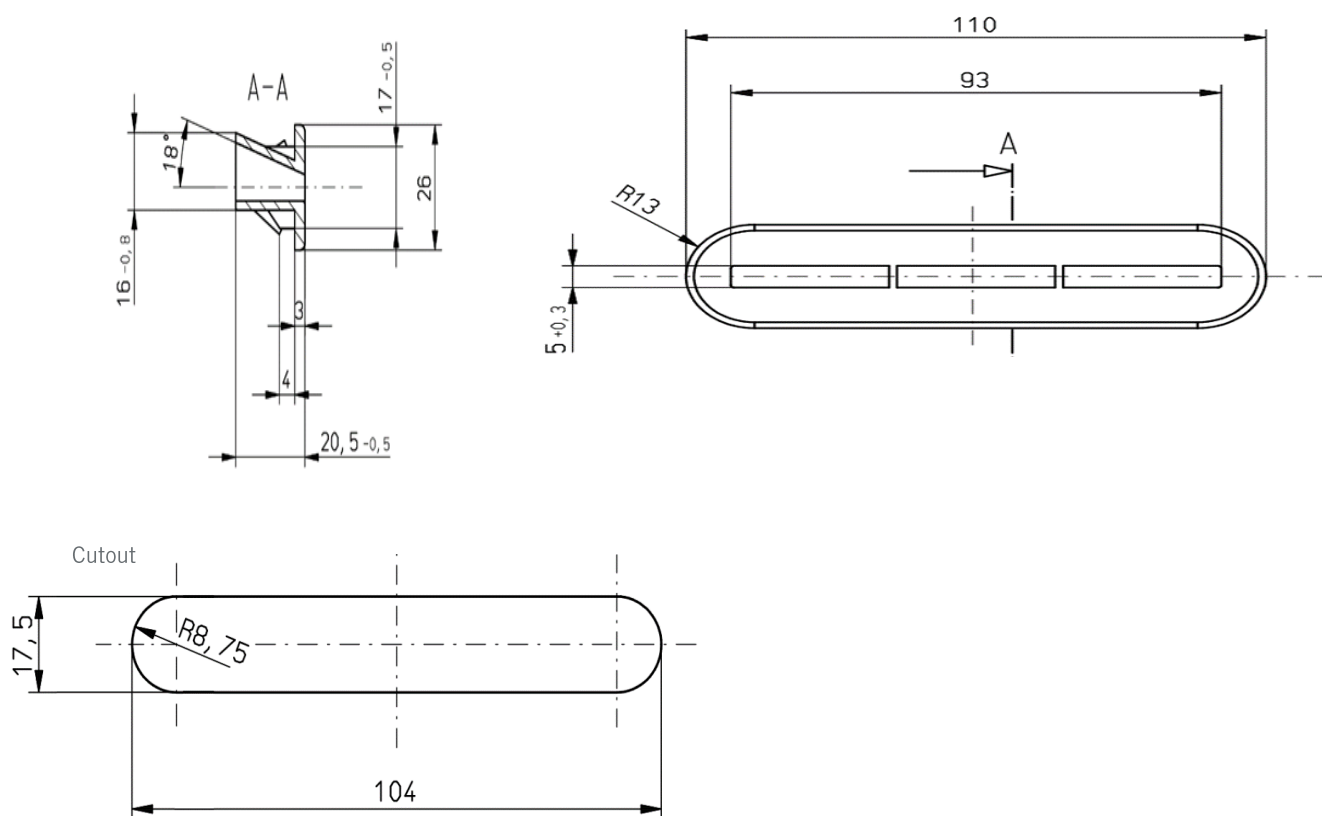
Material and Color	
ABS Plastic Standard Color: black, similar to RAL 9005	
Technical Information	
912-100-0323	
Variations	
Part Number	Description
334-150-0004	PD Short Louver



DEFROST LOUVERS

PD SHORT

Printed dimensions closely mimic actual piece size.



DEFROST LOUVERS

DOMINO

The *Domino* Louver’s compact dimensions allow for ideal defrost applications. Their sleek design allows these louvers to adapt to the curve and width of any surface with minimal space requirements.

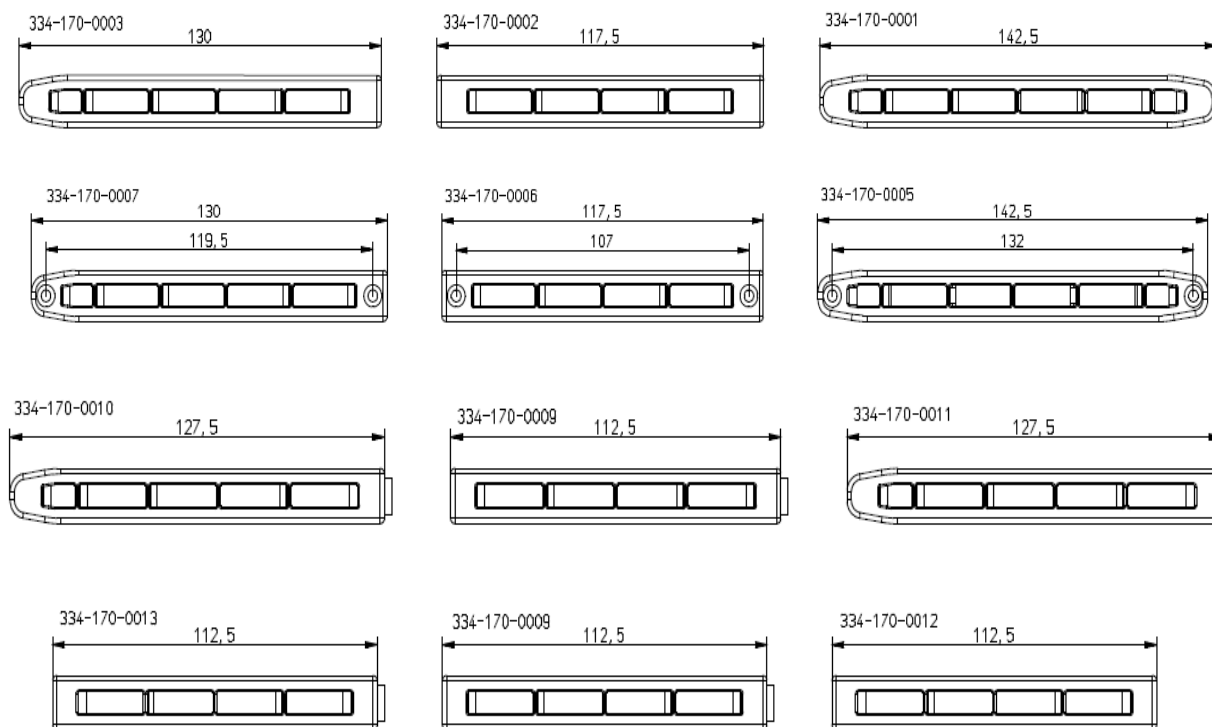
Domino louvers are optimal for bus and coach applications, as they can be stacked and chained in a tongue and groove system in order to distribute airflow over a larger surface area. *Domino* is available in both clip and screw versions with clip ranges between 2 mm and 5 mm.

Material and Color
Polyamide PA6 15% glass fiber reinforced Standard Color: black, similar to RAL 9005
Technical Information
912-100-0186
Variations
Please reference Drawings on page 129



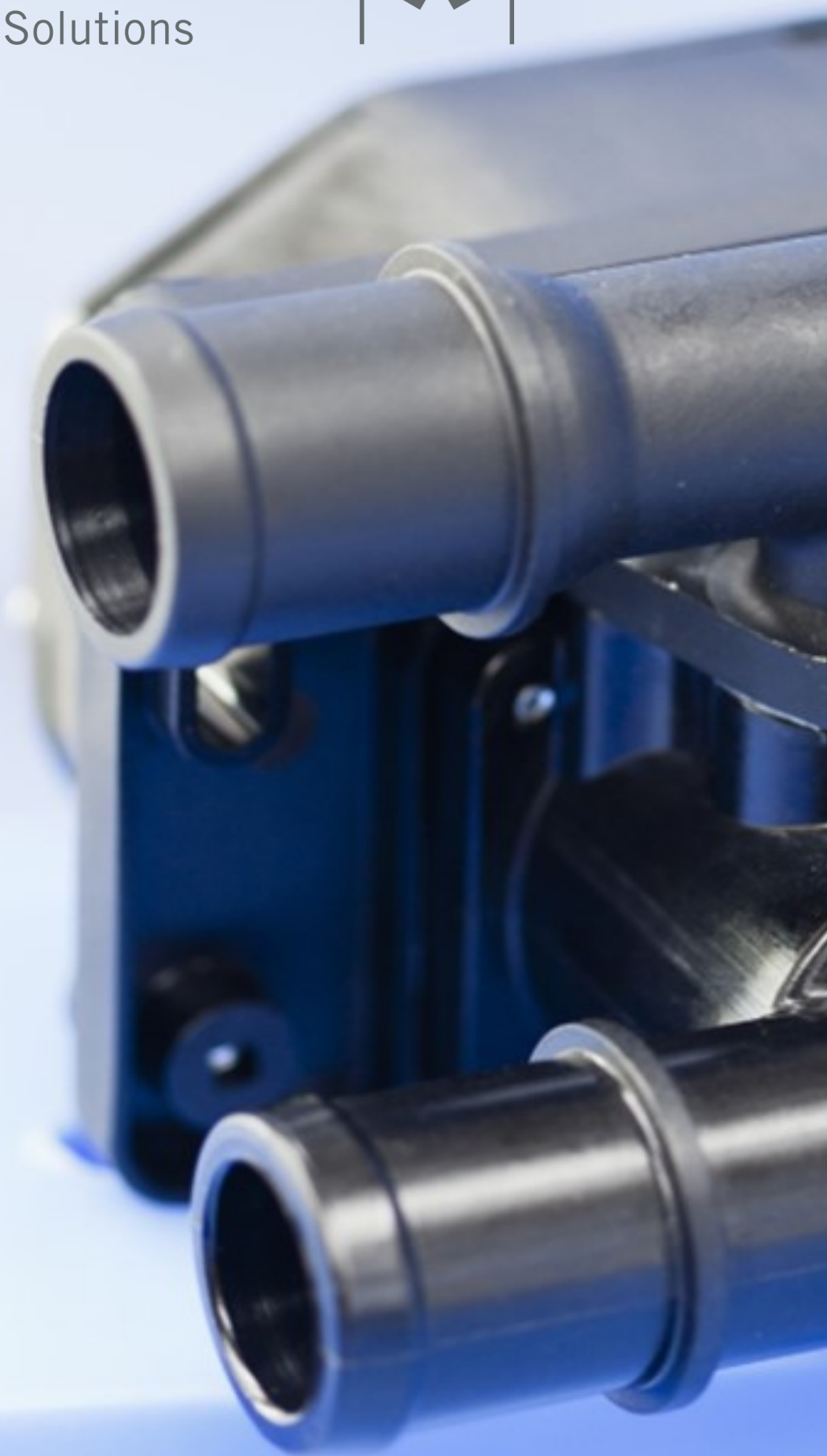
DEFROST LOUVERS

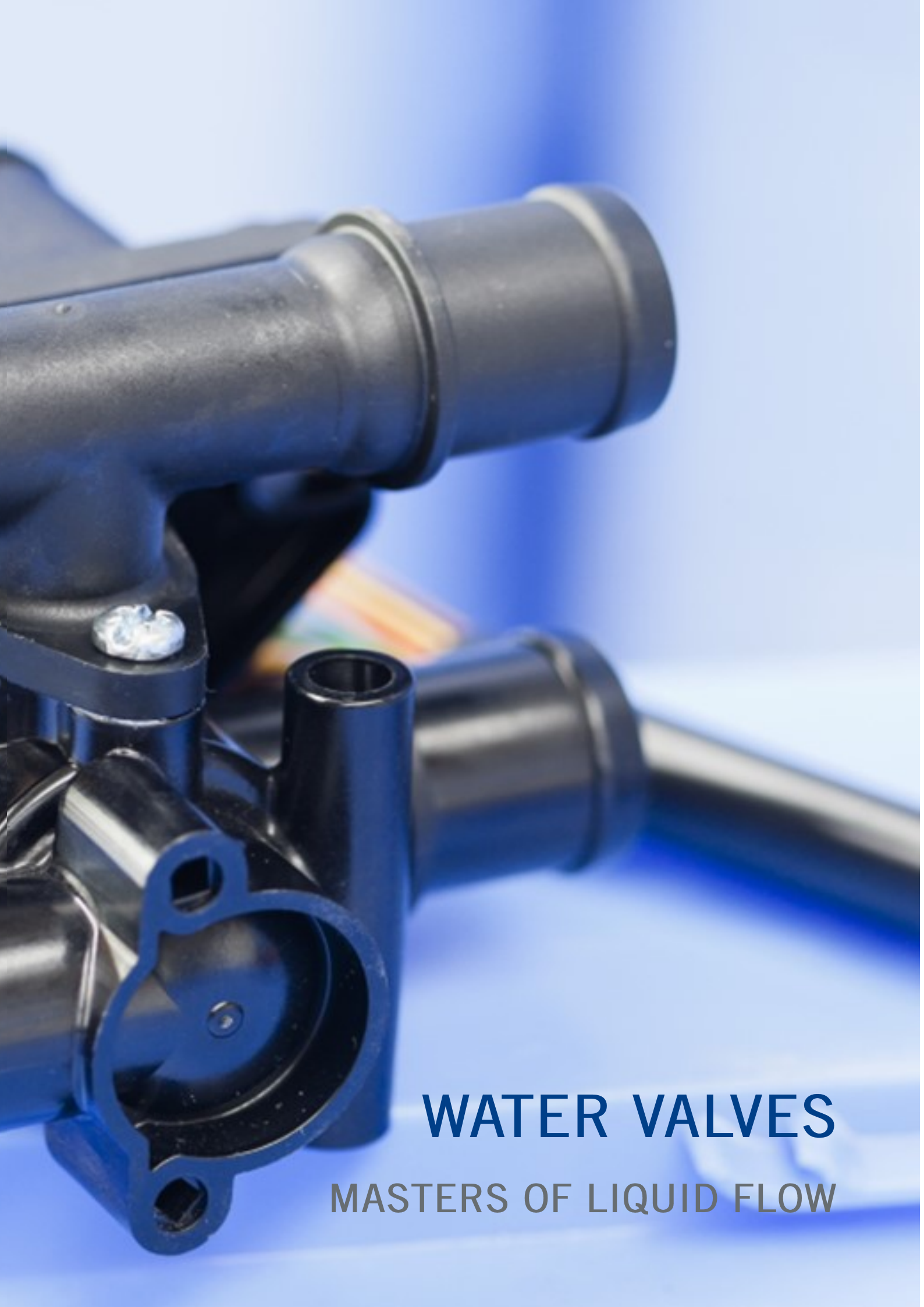
DOMINO



AURORA

Advanced HVAC Solutions





WATER VALVES

MASTERS OF LIQUID FLOW

WATER VALVES

MECHANICAL BOWDEN CABLE

Mechanical Water Valves control the heating performance via easy adjustable Bowden Cables. Standard connection diameters are \varnothing 16 mm / 18 mm / 22 mm / 28 mm. Varied connecting diameters are also available upon request. This water valve has mostly linear operating characteristics, and operates efficiently with a minimum pressure loss.

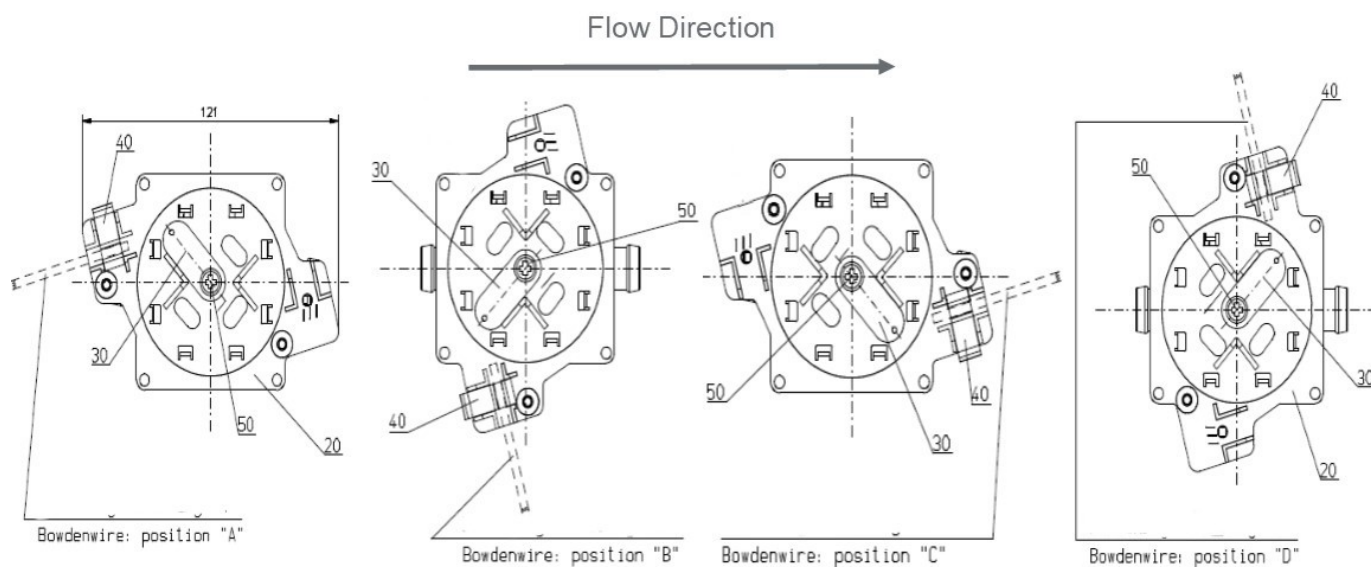
The valve housing is comprised of Polyamide 66 Material, providing AURORA's line of water valves with lightweight and non-corrodible qualities.

Specifications	
<p>Flow medium: water with antifreeze (mixture ratio max. 1:1) Volumetric flow: 100-1.200 l/h Operating temperature range: -40°C to +100°C fluid temp. Environmental temperature range: -40°C to +85°C Nominal pressure of liquid: p = 1 bar relative Test pressure of the water valve: p1 = 2.5 bar absolute</p>	
Technical Information	
912-100-0007	
Variations	
Part Number	Description
381-000-0141	\varnothing 16/16 with lever Bowden Wire Pos. A
381-000-0142	\varnothing 16/16 with lever Bowden Wire Pos. B
381-000-0143	\varnothing 16/16 with lever Bowden Wire Pos. C
381-000-0144	\varnothing 16/16 with lever Bowden Wire Pos. D
381-000-0145	\varnothing 22/22 with lever Bowden Wire Pos. A
381-000-0146	\varnothing 22/22 with lever Bowden Wire Pos. B
381-000-0147	\varnothing 22/22 with lever Bowden Wire Pos. C
381-000-0148	\varnothing 22/22 with lever Bowden Wire Pos. D
381-000-0149	\varnothing 28/28 with lever Bowden Wire Pos. A
381-000-0150	\varnothing 28/28 with lever Bowden Wire Pos. B
381-000-0151	\varnothing 28/28 with lever Bowden Wire Pos. C
381-000-0152	\varnothing 28/28 with lever Bowden Wire Pos. D
381-000-0170	\varnothing 18/18 with lever Bowden Wire Pos. A
381-000-0171	\varnothing 18/18 with lever Bowden Wire Pos. B
381-000-0158	\varnothing 18/18 with lever Bowden Wire Pos. C
381-000-0172	\varnothing 18/18 with lever Bowden Wire Pos. D



WATER VALVES

MECHANICAL BOWDEN CABLE



WATER VALVES

5 POLE WITH SERVO MOTOR

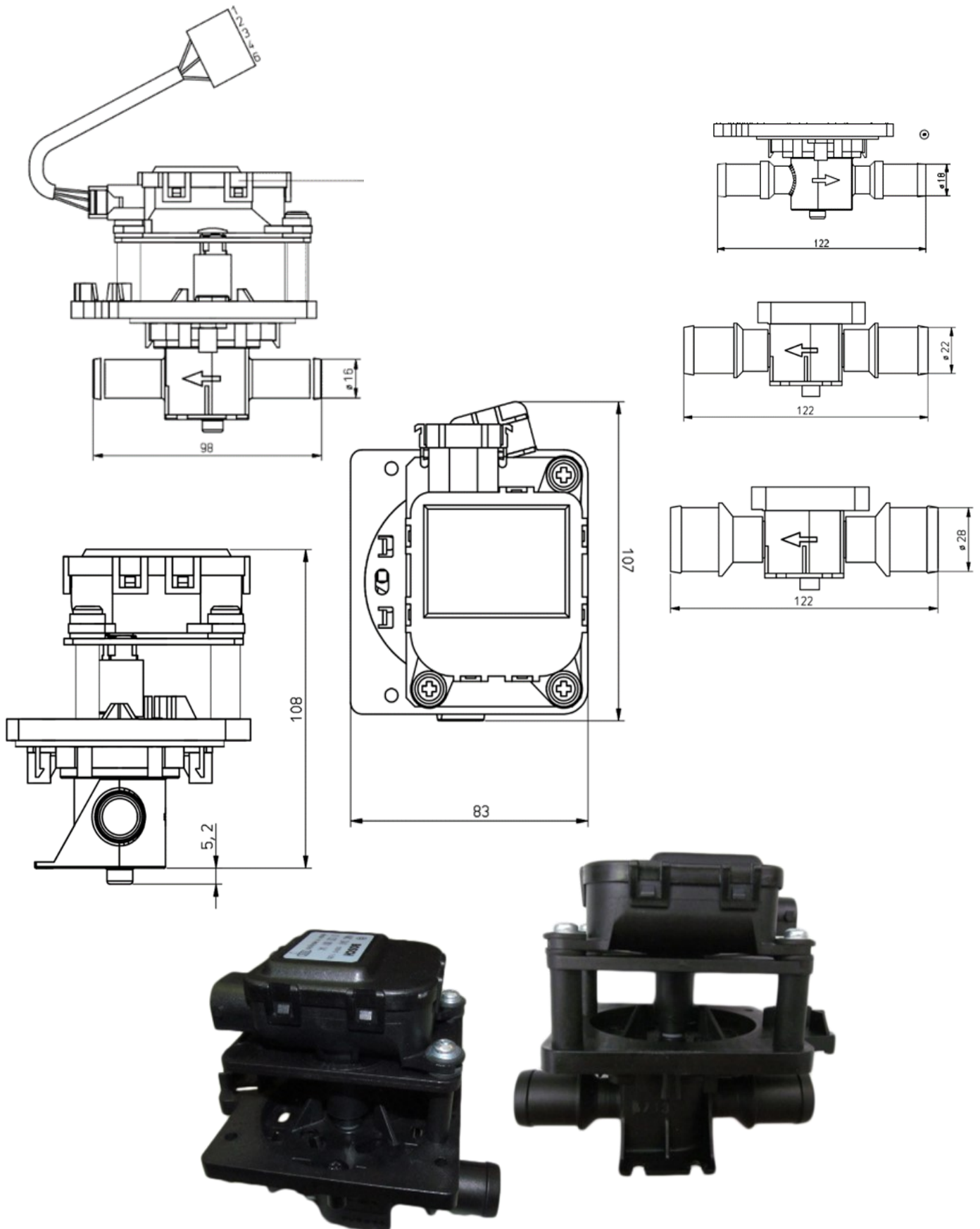
Electrical Water Valve with Servo Motor 5 Pole with varied diameters. Standard connection diameters are 16 mm / 18 mm / 22 mm / 28 mm. Control of this valve is steered by a 5-pole Servo Motor, providing easy adjustment of the heating performance. Varied connecting diameters are also available upon request. Servo Motors available in both 12 and 24 Volts. This water valve has mostly linear operating characteristics, and operates efficiently with minimum pressure loss. The valve housing is comprised of Polyamide 66 Material, giving AURORA's line of water valves with light-weight and non-corrodible qualities.

Specifications		
Flow medium: water with antifreeze with mix ratio max. 1:1 Volumetric flow: 100-1.200 l/h Operating temperature range: -40°C to +100°C fluid temperature Environmental temperature range: -40°C to +85°C Nominal pressure of the fluid: p = 1 bar relative Test pressure of the water valve p1 = 2.5 bar absolute		
Technical Information		
912-100-0007/421		
Variations		
Part Number	Diameter Ø	Voltage (V)
381-000-0300	16/16	24V
381-000-0350	16/16	12V
381-000-0302	22/22	24V
381-000-0352	22/22	12V
381-000-0304	28/28	24V
381-000-0354	28/28	12V
381-000-0390	18/18	12V
381-000-0339	18/18	24V



WATER VALVES

5 POLE WITH SERVO MOTOR

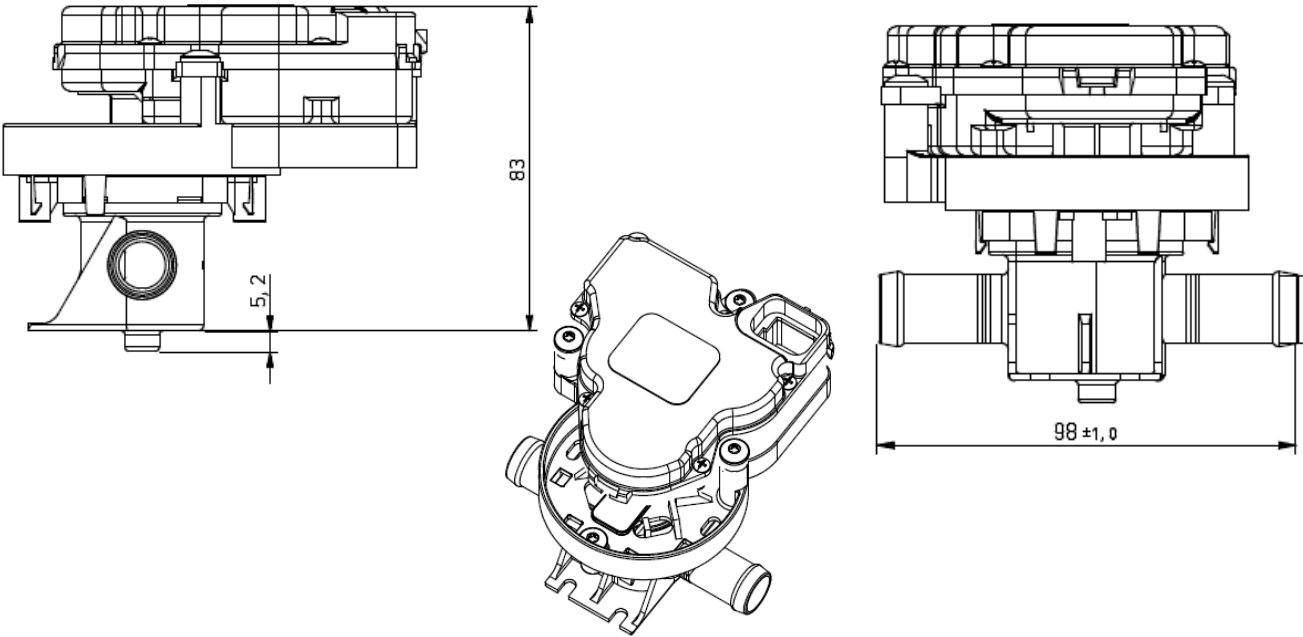


WATER VALVES

2-WAYS WITH 3 POLES SERVO MOTOR

Electrical Water Valve with Servo Motor 3 Pole with varied diameters. Control of this valve is direct by a control voltage to the Servo Motor, providing easy adjustment of the heating performance. Varied connecting diameters are also available upon request. This water valve has mostly linear operating characteristics, and operates efficiently with minimum pressure loss. The valve housing is comprised of Polyamide 66 Material.

Specifications		
Flow medium: water with antifreeze with mix ratio max. 1:1		
Volumetric flow: 100-1.200 l/h		
Operating temperature range: -40°C to +100°C fluid temperature		
Environmental temperature range: -40°C to +85°C		
Nominal pressure of the fluid: p = 1 bar relative		
Test pressure of the water valve p1 = 2.5 bar absolute		
Technical Information		
912-100-0007/0957		
Variations		
Part Number	Diameter Ø	Voltage (V)
381-000-0401	16/16	24V
381-000-0402	22/22	24V
381-000-0451	16/16	12V

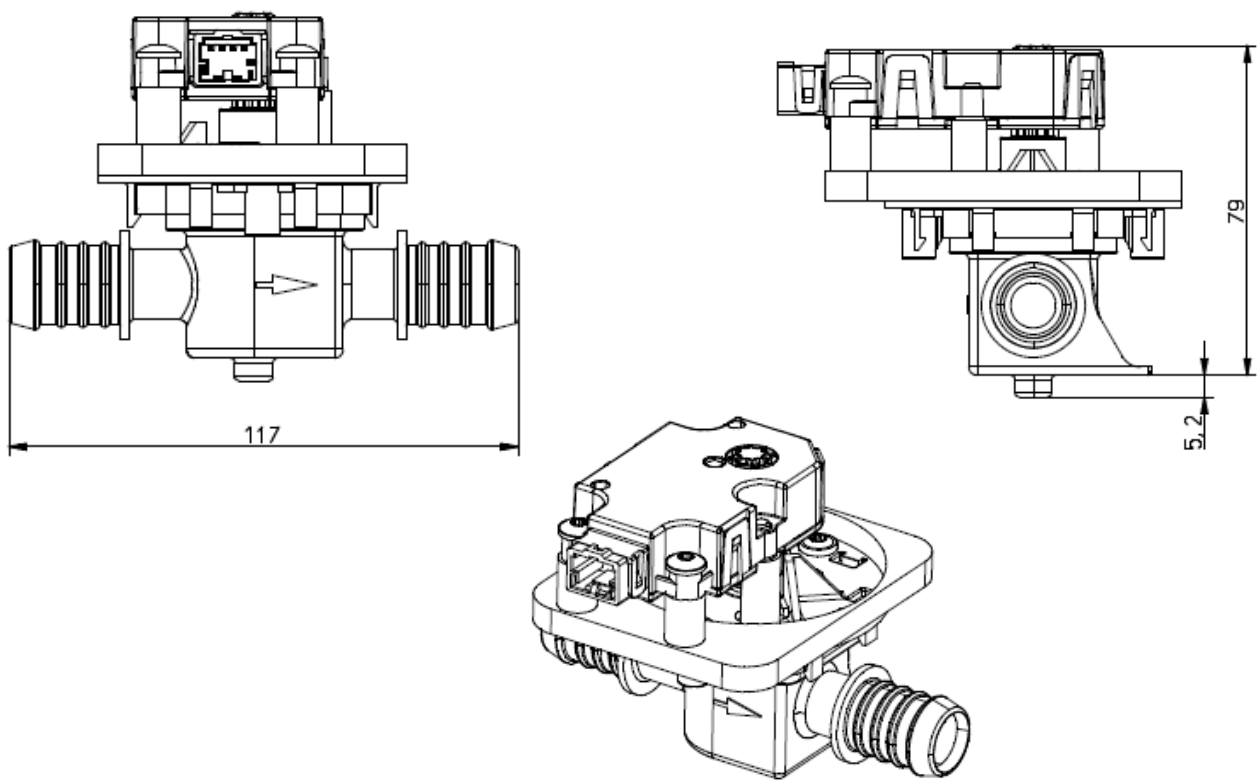


WATER VALVES

SERVO MOTOR LINBUS

Electrical Water Valve with Servo Motor LINBUS controlled. Control of this valve is by LINBUS signal, providing easy adjustment of the heating performance. Varied connecting diameters are also available upon request. This water valve has mostly linear operating characteristics, and operates efficiently with minimum pressure loss. The valve housing is comprised of Polyamide 66 Material.

Specifications		
Flow medium: water with antifreeze with mix ratio max. 1:1		
Volumetric flow: 100-1.200 l/h		
Operating temperature range: -40°C to +100°C fluid temperature		
Environmental temperature range: -40°C to +85°C		
Nominal pressure of the fluid: p = 1 bar relative		
Test pressure of the water valve p1 = 2.5 bar absolute		
Technical Information		
912-100-0007/0978		
Variations		
Part Number	Diameter Ø	Voltage (V)
381-000-0042	18/18	12V



SPECIAL MESSAGE FROM AURORA'S PRESIDENT

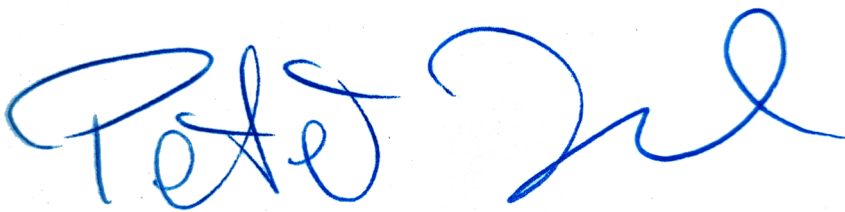
Dearest Ladies & Gentlemen,

Thank you very much for your interest in our Solutions, Company, and Team alike.

We greatly value the relationships, which we have shared with many of you for nearly a century.

Looking forward, we intend to continue innovating towards an even more sustainable, brighter future for us all.

Sincerely,



Peter Lohse, C.E.O.





Thank you. | Dankeschön. | Dank je. | Merci. | Teşekkür ederim. | 谢谢. | Gracias. | Obrigado.

2	Company Background
8	Customizable System Features
10	Electromobility Solutions
22	Rooftop Mountable Units
34	Standard Heaters
50	Convectors
54	Blowers
68	Control Panels
82	Louvers
124	Water Valves

AURORA
Advanced HVAC Solutions

