





# Air/water heat pumps

Product brochure 2022/2023

# About us Simply logical

NOVELAN has made it its mission to sustainably improve access to heat pumps with a straightforward range of product and system solutions. As a reliable partner to the wholesale trade, efficiency is a top priority – from the selection and delivery of the right solution to its quick and easy installation, right through to its intuitive and trouble-free operation.



#### Simply reliable

As part of ait-deutschland GmbH, and therefore also the NIBE Group – one of the world's leading providers of climate-friendly energy solutions – NOVELAN has access to a comprehensive network as well as being able to draw on efficient structures and processes. This provides security and ensures ultra-reliable availability.



#### Simply practical

Whether you want quick and easy installation for increased turnover in a short timeframe, or intuitive and reliable operation, we've got you covered. With decades of competence in heat pumps, NOVELAN is a partner that knows what really counts in practice.



#### Simply flexible

With the perfect combination of solutions for products, systems and services, NOVELAN provides a complete ecosystem for everything related to heat pumps. We have made our products are compatible with other heating components to ensure maximum customer satisfaction.

# 1973

As far back as 50 years ago, the first field tests with NOVELAN heat pumps were carried out – at the time under the name of SIEMENS. Today, at the company headquarters in Kasendorf in Upper Franconia, heat pumps for almost every conceivable application are produced and sold through specialist wholesalers.

# Simple. Novelan



# Overview Simplychoosetheheat pump for you

Discover the NOVELAN ecosystem with the perfect combination of solutions for products, systems and services. The benefits are obvious:

- ✓ Fossil-freeheating, can be combined with any PV system, solar heat system or tiled stove with back boiler\*
- ✓ Dedicated NOVELAN support with comprehensive customer service
- ✓ Made in Germany using only high-quality materials
- ✓ 5-year warranty\*\* with flexible option of 10 further years of insurance
- ✓ Free internet connection for the smart era\*\*

\*in combination with a multifunctional storage device

\*\*in combination with an IBN 5+

	Air / water Outdoor installation				
		- <u>+</u> -			0,
	Jabbah	LAD(V)	LAV(S)	LA	L Split
Heating	<b>√</b>	<b>v</b>	<ul> <li>Image: A second s</li></ul>	✓	✓
Domestic hot water	<b>√</b>	<b>v</b>	<ul> <li>Image: A second s</li></ul>	✓	✓
Cooling	<ul> <li>Image: A start of the start of</li></ul>	RX model	<b>√</b>	-	✓
Integrated hydraulics	_	_	_	_	_











# The compact plug-and-play solution

- ✓ Cost-effective plug-and-play solution for entry into the world of heat pump technology
- ✓ Sound-proof housing for minimal noise levels
- Flexible installation options thanks to omission of safety zone
- Easy handling thanks to compact size
- ✓ Easy transfer of maintenance data via USB stick to units in houses of similar sizes or with similar usage conditions







With automatic adjustment to the energy requirements of the house, Jabbah is an intelligent and compact output-regulated air/water heat pump. The intelligent control system also automatically regulates the room climate – from heating in winter to cooling in summer. Numerous ports for easy connection to PV systems.



Jabbah 7 with CS 7

Jabbah 5 with CS 7

Jabbah series
A++
up to 4.20 (at A2 / W35 as per EN 14511)
up to 7.21 kW (at A-7 / W35 as per EN 14511)
62 / 48 dB(A) max. / night (Jabbah 5)

Detailed technical data can be found from page 36 onwards.

**Technical data** 



# LAD(V) Dual air/water heat pump



# The allrounder

- $\checkmark\,$  Cascadable, with optional cooling function
- ✓ Ultra-sustainable thanks to natural refrigerant R290 (propane)
- ✓ Output-regulated model (LADV)

- Can be wall-mounted or ground-mounted for extra flexibility
- ✓ In combination with LWDV or LADV
- ✓ Very high flow temperature of up to +70°C







The uncomplicated and easy-to-install solution for heating, cooling (RX) and preparing domestic hot water – in an output-regulated model (LADV) that perfectly adapts to the requirements of the house and its inhabitants. This solution ensures maximum efficiency and, if needed, can be combined with a range of compatible accessories.



Technical data

LAD(V) with hydraulic module or hydraulic tower

Туре	LADV series (output-regulated)	LAD series 5, 7 and 9 kW
Energy efficiency rating	A+++	A++
COP value	4.61(atA2 / W35asperEN 14511)	up to 3.80 (at A2 / W35 as per EN 14511)
Heating power	up to 8.1 kW (at A-7 / W35 as per EN 14511)	up to 9.0 kW (at A-7 / W35 as per EN 14511)

Detailed technical data can be found from page 36 onwards.



# LAV(S) Outputregulated air/water heat pumps



## The silent wonder

- Extra-quiet, even when not in noise-reducing silent mode
- Particularly suitable for installation close to buildings or walls thanks to pre-fabricated wall bushing, with no need for major earth works or digging
- ✓ Heating and cooling in a single unit

- Lightweight, with extensive pre-fabricated accessory range
- LAVS model with noise-protection hood for even more sensitive installation locations







As well as offering simple outdoor installation, the output-regulated units in the LAV series set new standards in efficiency, planning security and noise insulation. The LAVS model has been further sound-proofed and, thanks to its special noise-protection hood, falls below legally-regulated noise levels for industrial and commercial installation (from 6 m distance).



LAV(S) with wall-mounted controller, hydraulic module or hydraulic tower
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Туре	LAVS series (output-regulated)	LAV series (output-regulated)	
Energy efficiency rating	A++	A++	
COP value	up to 4.19 (partial load, at A2 / W35 as per EN 14511)	up to 4.19 (partial load, at A2 / W35 as per EN 14511)	
Heating power	up to 8.5 kW (at A-7 / W35 as per EN 14511)	upto8.5kW(atA-7 / W35as per EN 14511)	
Acoustic noise levels	53 / 49 dB(A) max. / night	58 / 52 dB(A) max. / night	
Detailed technical data can be found from page 36 onwards.			

\*Max. sound pressure level in open-air test site at 1 m distance to unit (LAVS 8.2)

**Technical data** 



# LA Air/water heat pumps



# The powerhouse

- ✓ 2 compressors for needs-based output adjustment
- ✓ Cascadable for up to 100 kW output
- ✓ Universal hardware design, with optional roof installation
- $\checkmark$  For both residential buildings and industry
- Integration with building services management system and Modbus

#### LA 16.1HV also offers

- Output regulation as well as high flow temperature of +65°C
- Planning security thanks to extensive modulation range
- ✓ Ideal for renovations
- In combination with a multifunctional storage device, can be combined with a PV system etc.







Available with various outputs, this series is perfect for both newly built apartment buildings, for modernisation works and – thanks to the outdoor installation option – for properties without a basement. Also available as an output-regulated model (LA 16.1HV).



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LA /(16.1HV) with wall-mounted controller

Туре	LA 16.1HV series (output-regulated)	LA 18, LA 25.1 LA 30
Energy efficiency rating	A++	A++
COP value	4.20(partialload,atA2 / W35 as per EN 14511)	up to 3.50 (at A2 / W35 as per EN 14511)
Heating power	upto13.9kW(atA2 / W35as per EN 14511)	upto29.9kW(atA2/W35as per EN 14511)

Detailed technical data can be found from page 36 onwards.



# L Split Air/water Split heat pumps

# The cost-effective entry-level model

- ✓ Frost-proof connection to outdoor unit
- Allows for flexible bivalent systems (e.g. in combination with existing oil, gas, pellet heating systems etc.)
- Refrigeration connection possible via factory customer support, incl. 5-year factory warranty\*\*





Cosy warmth and refreshing cold in all rooms for year-round comfort in the house, with just a single distributor system. Yet another advantage: We include a practical outdoor and indoor unit (compact station,hydraulicmodule)asacompactsystem. The integrated energy-efficient pump and a pre-installed heat meter, as well as an electrical heating elementround off the package. The compact station also includes an integrated 180-litre hot-water reservoir for drinking water.





L Split with compact station or hydraulic module

Туре	L6 Split	L8 Split	L12 Split
Energy efficiency rating	A++	A++	A++
COP value	4.2 (partial load, at A2 / W35 as per EN 14511)	3.76 (partial load, at A2 / W35 as per EN 14511)	3.86 (partial load, at A2 / W35 as per EN 14511)
Heating power	up to 4.6 kW (at A-7 / W35 as per EN 14511)	up to 6.6 kW (at A-7 / W35 as per EN 14511)	up to 9.0 kW (at A-7 / W35 as per EN 14511)
Detailed technical data can be found from page 36 onwards.			

**Technical data** 











Outdoor installation Noise 60.9 dB(A)\*

# LAP Air/water heat pumps Professional



# Themultifunctionalmodelfor large properties

- Simultaneous active cooling and domestic hot water supply or heating with hot-gas usage
- ✓ Cascadable to 4 units up to 180 kW
- Incremental output regulation with dualcompressor operation
- ✓ High flow temperature of up to +65 °C

- ✓ Low operating costs and ultra-quiet operation
- Space-saving installation on the roof incl. optional connection to PV/solar system
- Electrical soft starter for reduced start-up current and low mains load
- Optional integration into building services management system







The dual-compressor solution allows the heat pump to output heat while cooling thanks to the integrated hot-gas usage. This effectively reduces operating costs. In parallel connection, up to four units canbeconnected.Thisensuresmaximum performance.



#### **Technical data**

Туре	LAP series
Energy efficiency rating	A+
COP value	up to 3.83 (at A2 / W35 as per EN 14511)
Heating power	up to 45.5 kW (at A2/W35 as per EN 14511)

Detailed technical data can be found from page 36 onwards.





Indoor installation

Noise 39 dB(A)\*

Renovation/replacement Single-family house

New build

## The powerful space-saver

- ✓ Modular transport concept for easy set-up
- Quiet and compact with extremely low noise levels outdoors
- Version with flexible air duct system also available
- Pre-fabricated components for quick, clean installation
- ✓ Integrated, active cooling
- Hassle-free planning thanks to integrated heating components







High output, easy handling, and space-saving installation combined in an adaptable module. This model also offers the clever transport concept that makes it even easier to get the unit into the building – even through narrow doors or stairwells, in both renovated properties and new builds.



#### **Technical data**

Туре	LICV series (output-regulated)
Energy efficiency rating	A++
COP value	up to 4.19 (partial load, at A2 / W35 as per EN 14511)
Heating power	up to 8.5 kW (at A-7 / W35 as per EN 14511)

Detailed technical data can be found from page 36 onwards.



# LIV Outputregulated air/water heat pumps

# The adaptable combo expert

- ✓ Noise-sensitive in case outdoor installation is not possible, with extremely low noise levels outdoors
- Complete air duct system from unit connector to wall bushing
- ✓ Efficient transport concept for easy set-up
- ✓ Pre-fabricated components for quick, clean

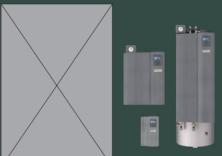
installation

- ✓ Integrated active cooling
- Hassle-free planning thanks to integrated heating components
- ✓ Version with flexible air duct system also available





Thanks to a highly efficient system with a wide range of possible combinations, you can fine-tine the atmosphere in the entire house to suit your needs – be it heating, cooling or preparing domestic hot water. New acoustic standards ensure outstanding performance, even for applications where low noise is essential.



LICV with wall-mounted controller, hydraulic module or hydraulic station

#### **Technical data**

Туре	LIV series (output-regulated)
Energy efficiency rating	A++
COP value	up to 4.19 (partial load, at A2 / W35 as per EN 14511)
Heating power	up to 8.5 kW (at A-7 / W35 as per EN 14511)

Detailed technical data can be found from page 36 onwards.

\*Max. sound pressure level outdoors at 1 m distance to central air duct, when installed indoors (original accessories) (LIV 8.2 R1/3)







# The quiet indoor solution

- ✓ 2 compressors for needs-based output adjustment
- ✓ Universal hardware design
- ✓ Cascadable for 4 units with up to 120 kW output (LI 18 to LI 30)
- Wide range of applications from residential buildings to industry
- Optional integration with building services management system and Modbus









In combination with the dedicated air duct system, the noise-proof design provides an extremely straightforward solution, particularly for applications where low noise is essential. For modernisation jobs, the output-regulated compressor of the LI 16.1 HV really comes into its own – perfectly adjusting to actual heat requirements and therefore only producing the exact amount of heat that is needed.





#### **Technical data**

Туре	LI16.1HV series (output-regulated)	LI 18, LI 25.1, LI 30
Energy efficiency rating	A++	A+
COP value	4.20 (partial load, at A2 / W35asperEN14511)	up to 3.80 (at A2 / W35 as per EN 14511)
Heating power	up to 13.9 kW (at A-7 / W35 as per EN 14511)	upto24.3 kW(atA-7/ W35 as per EN 14511)

Detailed technical data can be found from page 36 onwards.



# Polaris Air/water heat pumps

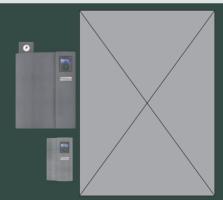
# Theintelligentplug-and-playsystem

- Compact and quiet plug-and-play solution for heating, cooling and potable hot water preparation in a single system
- Simple, user-friendly handling, similar to fridge, dishwasher etc.
- Ideal for new builds, as well as replacing existing heat pumps
- ✓ Intelligent solution, e.g. for installation in attics with limited floor space
- Flexible air connection options via roof, corners, external walls
- Perfectly adjusts to individual needs thanks to output regulation
- ✓ Integrated active cooling
- Dedicated system components for easy connection to photovoltaic systems, wood-burning stoves, fuel cells and other heat generators





The Polaris air/water heat pumps for internal installation provide unprecedented possibilities when planning living spaces – be it basements, ground floors, upper floors or attics. This model will save you valuable living space whether installed indoors or in the garden, making it perfect for tight spaces and small sites. The adaptable air duct system for roof or wall bushing requires just 1 m of clearance without thermal bypass.



#### **Technical data**

Polaris with wall-mounted controller, hydraulic module or hydraulic station

Туре	Polaris (output-regulated)
Energy efficiency rating	A++
COP value	4.02 (partial load, at A2 / W35 as per EN 14511)
Heating power	up to 3.68 kW (at A-7 / W35 as per EN 14511)
Acoustic noise levels, interior	49 / 48 dB(A) max. / night
Detailed technical data can b	e found from page 36 onwards.

# Simple modular



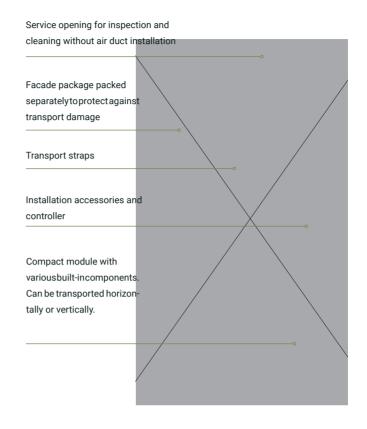
as an energy hub

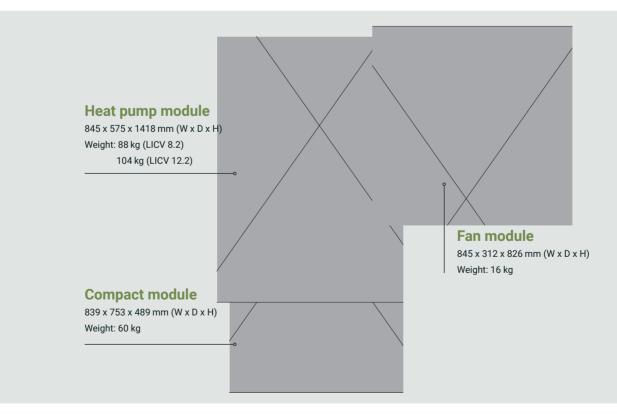


The appeal of NOVELAN is obvious: From the first step to the last, our clever features make installation and transport easier. Even when in storage, this can lead to valuable time savings – also for complex installations.

#### Success made simpler

The output-regulated LICV units shine during installation thanks to their outstanding adaptability. One particularly handy feature for units that are installed internally is that modules weighing less than 100 kg can be split into parts. This makes the individual parts easy to get into the building using the dedicated cargo straps. Thanks to the pre-fabricated connection system, installation is child's play.





# Smart control, easy operation

Everything from a single source for your convenience: Designed as an integrated system, NOVELAN doesn't just offer the units themselves. It also offers the corresponding control solutions.

#### **RBE+** room control unit

- ✓ All necessary information at a glance (room temperature, humidity, outside temperature, possible faults etc.)
- Control heat pumps directly via the control unit in real time and without needing to make the annoying trip to the boiler room
- Added comfort and efficiency thanks to integrated room sensor
- ✓ Attractive design with user-friendly touch control
- ✓ Can be used in combination with a heat pump





#### WPR net

- Self-explanatory control technology with intuitive rotary and touch control
- Controllable via internet for added convenience
- Enables the efficient, central management of the heating system across the entire house
- Can be mounted on the unit or on the wall

## Simple Smart # **- -** - # 18.03.2019 10:52 ₩ 3.4 °C Heizkreis Automatik > Mischkreis 2 Automatik > MWACCER Betriebsart Automatik > i 6<sup>1</sup> # ШП.

#### NOVELAN Net and NOVELAN app

- ✓ As standard with all WPR net controllers
- No additional costs or installations (internet connection required for heat pump)
- Intuitive app for smartphone and tablet (available for iOS and Android)
- Secure connection via dedicated NOVELAN server

# Partners simply achieve more

Thanks to its extensive network of partners, NOVELAN's additional services are also a valuable resource for plumbers and their customers. The result: Better service and added value for all concerned.

# Simple for you



#### A simple overview of all documents with Oxomi

- Quickaccesstoallprintdocuments(brochures,pricelists, assembly instructions etc.)
- Accessible from anywhere at any time, including from smartphones and tablets



#### Simply up-to-date website content with ieQ systems

- Central administration of information
- ✓ Always the latest information for your website
- ✓ Simple integration via ieQ-systems plug-in



#### Simply reliable product data with Open Datacheck

- Platform that provides verified product data for DG-Haustechnik and VEG member companies
- ✓ Also provided via ZVSHK and Open Datapool platforms





## Simply avail of grants with PUR GmbH

- ✓ Competent support for grants, energy consultation and financing
- ✓ Effective, reliable sounding out of suitable offers on a community, regional, state and national level

For further information visit www.pur-gmbh.eu



## Geothermal energy made simple with Erdwärme PLUS

- Local partners with detailed expertiseaboutgeologicalconditions and legal stipulations
- Extensive machine fleet with DVGW 120 certification

For further information visit www.erdwaermeplus.de

# Simple more

## for your customers



#### Heating load calculation made simple with Planungsbüro Bartsch

- Time-saving heating load calculation for optimal sizing
- Quickandcompetentinaccordance with EN 12831



## Custom design simply realised by FH-Werbetechnik GmbH

- Customisation of heat pumpsLarge selection of films/foils or
- designing of custom motifs
- ✓ Acts as additional paint protection





### Simply on the safe side with ARCTIC

- Additional insurance for up to 15 years' protection
- ✓ Can be extended flexibly every year
- Additional to manufacturer's warranty as per IBN 5+ package

For further information visit www.planungsbuero-bartsch.de

#### For further information visit

www.novelan.com/kooperationspartner

For further information visit www.arctic.se/novelan-de

# Simple always

## the right contact partner

#### Internal Sales / Order Processing Centre

Order Acceptance / Consultation T +49 9228 / 99 607 - 1000 F +49 9228 / 99 607 - 1099 E info@novelan.com Mon. – Thurs. 08:00 – 16:00, Fri. 08:00 – 13:00

#### **Customer Support Centre**

**Technical Support / Planning Support** T +49 9228 / 99 607 - 190 F +49 9228 / 99 607 - 1099 E support@ait-deutschland.eu Mon. – Thurs. 08:00 – 17:00, Fri. 08:00 – 15:00

#### Invoice Queries / Job Log

T +49 9228 / 99 607 - 1950 F +49 9228 / 99 607 - 131784 E serviceadmin@ait-deutschland.eu Mon. – Thurs. 08:00 – 17:00, Fri. 08:00 – 13:30

#### Service

Order Service Job / Appointment Queries / General Queries T +49 9228 / 99 607 - 1190

F +49 9228 / 99 607 - 1099 E einsatzplanung@ait-deutschland.eu E service@ait-deutschland.eu Mon. – Fri.08:00 – 17:00,weekends/holidays:09:00 – 16:00

#### **Replacement Parts Service**

T +49 9228 / 99 607 - 1950 F +49 9228 / 99 607 - 199 E ersatzteile@ait-deutschland.eu Mon. – Fri. 08:00 – 17:00



# Simply clever – ait Academy

Much like NOVELAN products, our training events are individually tailored and fine-tuned to market requirements. We can thus offer everything ranging from basic training to detailed technical training. The training events take place either at our ait Academy in Kasendorf – with optional factory tour – or in our subsidiaries in Forsting (southern Bavaria) and Anröchte (North-Rhine Westphalia).

#### Training Registration Ines Fuhrmann

T +49 9228 / 99 607 - 250 F +49 9228 / 99 607 - 1099 E academy@ait-deutschland.eu Mon. – Thurs. 08:00 – 16:00, Fri. 08:00 – 13:00

## Technical data

#### **JABBAH**

Short designation	Art. no.	Essential accessories	Performance data		Unit		Energy efficiency rating
			Heating power A-7 / W35 min. / max. kW	COP A2 / W35 (at partial load)	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
Jabbah 5 – 1	1037984101	CS 7	4.64	4.20	995 x 453 x 891	82	A+++
Jabbah 7 – 1	1037994101	CS 7	7.21	4.20	995 x 453 x 891	82	A+++

Units filled with natural refrigerant R290.

#### LAD V

Short designation	Art. no.	Essential accessories	Performance data		Unit	Energy efficiency rating		
			Heating power A-7 / W35 min. / max. kW	COP A2 / W35 (at partial load)	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)	
LADV 9 – HDV 9	103699HDV901	HDV 9	3.1/ 8.1	4.61	1320 x 510 x 930	141	A+++	
LADV 9 – HDV 12	103699HDV1241	HDV 12	3.1/ 8.1	4.61	1320 x 510 x 930	141	A+++	
LADV 9 – HSDV 9	103699HSDV941	HSDV 9	3.1/8.1	4.61	1320 x 510 x 930	141	A+++ *	
LADV 9 – HSDV 12.1	103699HSDV12141	HSDV 12.1	3.1/8.1	4.61	1320 x 510 x 930	141	A+++ *	

\*Combi heater. Units filled with natural refrigerant R290.

#### LAD

Shortdesig- nation	Art. no.	Essential accessories	Performance of	lata			Unit		Energy efficiency rating		
			Heatingpower A-7 / W35 kW	Heating power A2 / W35 kW	Cooling power A27 / W18 kW	COP A2 / W35	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)		
LAD 5	103601HID22	HID 1E	4.6	5.6		3.80	1320 x 510 x 930	141	A++		
LAD 7	103602HID22	HID 1E	6.3	7.7	-	3.80	1320 x 510 x 930	146	A++		
LAD 9	103609HID22	HID 1E	7.5	9.0		3.60	1320 x 510 x 930	149	A++		
LAD 5	103601CSD22	CSD	4.6	5.6	-	3.80	1320 x 510 x 930	141	A++ **		
LAD 7	103602CSD22	CSD	6.3	7.7	-	3.80	1320 x 510 x 930	146	A++ **		
LAD 9	103609CSD22	CSD	7.5	9.0	-	3.60	1320 x 510 x 930	149	A++ **		

\*With integrated cooling. \*\* Combi heater. Units filled with natural refrigerant R290.

Short designation	Art. no.	Essential accesso- ries	Performan	ce data				Unit		Energy efficiency rating		
			Heating power A-7 / W35 min. / max. kW		Cooling power A35 / W17 min. / max. kW	lat nartial	CO <sub>2</sub> equiv- alent t CO <sub>2</sub>	Refrigerant fillcapacity kg	Hermetical- ly sealed	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
LAV 8 – WR	103776WR2141	WR	2.3 / 6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++
LAV12 – WR	103777WR2141	WR	3.6/8.5	5.0	2.0/6.0	4.01	7.5	3.60		995 x 830 x 1480	148	A++
LAV 8 – HV 9	103776HV941	HV 9	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++
LAV 8 – HV 12	103776HV1241	HV 12	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++
LAV 12 – HV 12	103777HV1241	HV 12	3.6/8.5	5.0	2.0/6.0	4.01	7.5	3.60		995 x 830 x 1480	148	A++
LAV 8 – HSV 9	103776HSV941	HSV 9	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++ *
LAV 8 – HSV 12	103776HSV1241	HSV 12	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++ *
LAV 12 – HSV 12	103777HSV1241	HSV 12	3.6/8.5	5.0	2.0 / 6.0	4.01	7.5	3.60		995 x 830 x 1480	148	A++ *
LAVS 8 – WR	103778WR2141	WR	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++
LAVS 12 – WR	103779WR2141	WR	3.6/8.5	5.0	2.0 / 6.0	4.01	7.5	3.60		995 x 830 x 1480	148	A++
LAVS 8 – HV 9	103778HV941	HV 9	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++
LAVS 8 – HV 12	103778HV1241	HV 12	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++
LAVS 12 – HV 12	103779HV1241	HV 12	3.6/8.5	5.0	2.0/6.0	4.01	7.5	3.60		995 x 830 x 1480	148	A++
LAVS 8 – HSV 9	103778HSV941	HSV 9	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++ *
LAVS8 - HSV12.1	103778HSV12141	HSV 12.1	2.3/6.5	3.8	1.0/4.5	4.19	6.3	3.00		995 x 830 x 1480	132	A++ *
LAVS12 - HSV12.1	103779HSV12141	HSV 12.1	3.6/8.5	5.0	2.0/6.0	4.01	7.5	3.60		995 x 830 x 1480	148	A++ *

\*Combi heater. Units filled with fluorinated greenhouse gas R410A. GWP value: 2088.

Short designation	Art. no.	Essential accesso- ries	Performance		Unit	Energy efficiency rating					
			Heating pow- er A-7 / W35 min. / max. kW	Heating pow- er A2 / W35 (at partial load) kW	COP A2 / W35 (at partial load)	CO <sub>2</sub> equiv- alent t CO <sub>2</sub>	Refrigerant fillcapacity kg	Hermetical ly sealed	- Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
LA 16.1HV	103649WR2101	WR 2.1	4.0 / 13.9 8.1 4.20 7.9			4.00		1931 x 1050 x 1780	310	A++	

Unit filled with fluorinated greenhouse gas R410A.GWP value: 2088.

Short designation	Art. no.	Essential accesso- ries	Performance			Unit		Energy efficiency rating		
			Heating pow- er A-7 / W35 kW	Heating pow- er A2 / W35 kW		CO <sub>2</sub> equiv- alent t CO <sub>2</sub>	Refrigerant fillcapacity kg	- Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
LA 18	103545WPR32	WPR net	14.1*/7.3	17.2/9.5*	3.60 / 3.80*	12.1	6.80	1931 x 1050 x 1780	420	A+
LA 25.1	103546WPR32	WPR net	19.4*/10.1	24.0 / 13.2 *	3.60 / 3.80*	17.4	9.80	1779 x 1258 x 1817	540	A+
LA 30	103547WPR32	WPR net	24.2*/13.1	29.9 / 16.1 *	3.50 / 3.55*	39.2	10.00	1779 x 1258 x 2127	573	A+

\*When operated with a compressor. Units LA 18 – LA 25.1 are filled with fluorinated greenhouse gas R407C. GWP value: 1744. Unit LA 30 filled with fluorinated greenhouse gas R404A. GWP value: 3922.

## Technical data

#### L SPLIT

Short desig- nation	Art. no.	Essential accessories	Performance	data			Unit		Energy efficiency rating		
				Heating pow- er A2 / W35 kW	COP A2 / W35	CO <sub>2</sub> equiv- alent t CO <sub>2</sub>	Refrigerant fillcapacity kg	Hermetical- ly sealed	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to D)
L6 Split	103698CS601	CS 6 Split	4.60	2.32	4.2	3.2	1.50		800 x 290 x 640	46	A++
L8 Split	103626CS1201	CS 12 Split	6.60	5.11	3.76	5.3	2.55		880 x 340 x 750	60	A++
L12 Split	103627CS1201	CS 12 Split	9.00	6.91	3.86	6.1	2.90		970 x 370 x 845	74	A++
L6 Split	103698HV601	HV 6 Split	4.60	2.32	4.2	3.2	1.50		800 x 290 x 640	46	A++
L8 Split	103626HV1201	HV 12 Split	6.60	5.11	3.76	5.3	2.55		880 x 340 x 750	60	A++
L12 Split	103627HV1201	HV 12 Split	9.00	6.91	3.86	6.1	2.90		970 x 370 x 845	74	A++

Units filled with fluorinated greenhouse gas R410A. GWP value: 2088.

#### **LAP 45**

Short desig- nation	Art. no.	Performance da	ita			Unit				Energy efficiency rating
		Heating power A-7 / W35 min. / max. kW	A35 / W18	COP A2 / W35	CO2 equivalent t CO2	Refrigerantfill capacity kg	Hermetical- ly sealed	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
LAP45-WPR	103750WPRP02	45.5 / 26.4* 55.0 3.50 / 3.70* 48.0			48.0	0 23.00 ✓ 1800 x 850 x 2320 68				A+

\*When operated with a compressor. Unit filled with fluorinated greenhouse gas R410A. GWP value: 2088.

#### LICV

Short desig- nation	Art. no.	Performance	data			Unit		Energy efficiency rating			
		Heating pow- er A-7 / W35 min. / max. kW		Cooling pow- erA35 / W187 min. / max. kW	COP A2 / W35 (at partial load)	CO2 equiv- alent t CO2	Refrigerant fillcapacity kg	Hermetical- ly sealed	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
LICV 8.2 R1/3	10377041	2.3 / 6.5	3.8	1.0/6.0	4.19	6.3	3.00		845 x 740 x 1880	208	A++
LICV 12.2R3	10377141	3.6 / 8.5	5.0	2 ,0/8.5	4.01	7.5	3.60		845 x 740 x 1880	227	A++

Units filled with fluorinated greenhouse gas R410A; GWP value: 2088.

All information on heating power and COP conforms with EN 14511. All information on cooling power for maximum volume flow at B15/W20. The CO<sub>2</sub> equivalent of a refrigerant is calculated by multiplying the fill capacity by the GWP (global warming potential). The GWP ("global warming potential") describes the climate warming potential of a greenhouse gas in terms of carbon dioxide (CO2). Subject to errors and technical modifications.

Short designation	Art. no.	Essential accesso- ries	Performan	ice data				Unit		Energy efficiency rating		
			Heating power A-7 / W35 min. / max. kW	A2/W35	Cooling pow- er A35 / W18 min. / max. kW		CO <sub>2</sub> equiv- alent t CO <sub>2</sub>	Refrigerant fillcapacity kg	Hermetical- ly sealed	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
LIV 8 – WR	103772WR2141	WR	2.3 / 6.5	3.8	1.0 / 6.0	4.19	6.3	3.00		845 x 740 x 1420	138	A++
LIV 12 – WR	103773WR2141	WR	3.6/8.5	5.0	2.0/8.5	4.01	7.5	3.60		845 x 740 x 1420	154	A++
LIV 8 – HV 9	103772HV941	HV 9	2.3/6.5	3.8	1.0 / 6.0	4.19	6.3	3.00		845 x 740 x 1420	138	A++
LIV 8 – HV 12	103772HV1241	HV 12	2.3/6.5	3.8	1.0 / 6.0	4.19	6.3	3.00	<ul> <li>Image: A start of the start of</li></ul>	845 x 740 x 1420	138	A++
LIV 12 – HV 12	103773HV1241	HV 12	3.6/8.5	5.0	2.0 / 8.5	4.01	7.5	3.60		845 x 740 x 1420	154	A++
LIV 8 – HSV 9	103772HSV941	HSV 9	2.3/6.5	3.8	1.0 / 6.0	4.19	6.3	3.00		845 x 740 x 1420	138	A++ *
LIV 8 - HSV 12	103772HSV1241	HSV 12	2.3/6.5	3.8	1.0 / 6.0	4.19	6.3	3.00	<ul> <li>Image: A start of the start of</li></ul>	845 x 740 x 1420	138	A++ *
LIV 12 - HSV 12	103773HSV1241	HSV 12	3.6/8.5	5.0	2.0 / 8.5	4.01	7.5	3.60		845 x 740 x 1420	154	A++ *

\*Combi heater. Units filled with fluorinated greenhouse gas R410A; GWP value: 2088.

Short desig- nation	Art. no.	Performance da	ita			Unit		Energy efficiency rating		
		Heating power A-7 / W35 min. / max. kW				Refrigerantfill capacity kg	Hermetical- ly sealed	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
LI 16.1HV	10364701	4.0 / 13.9	8.1	4.20	8.4	4.00		795 x 1050 x 1780	367	A++

Unit LI 16.1HV is filled with fluorinated greenhouse gas R410A.GWP value: 2088.

Short desig- nation	Art. no.	Performance data				Unit	Energy efficiency rating			
		Heating power A-7 / W35 kW	Heating power A2 / W35 kW	COP A2 / W35	$     CO_2 equivalent     t CO_2 $	Refrigerantfill capacity kg	Hermetical- ly sealed	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
LI 18	10353402	7.3 / 14.1 *	17.2/9.5*	3.60 / 3.80*	12.1	6.80		795 x 1050 x 1780	420	A+
LI 25.1	10353602	10.1 / 19.4*	24.0 / 13.2 *	3.60 / 3.80*	17.4	9.80		795 x 1318 x 1887	540	A+
LI 30	10353802	13.2/25.0*	31.0 / 16.8 *	3.50 / 3.60*	39.2	10.00		795 x 1318 x 1887	540	A+

\*When operated with a compressor. Units LI 14 – LI 25.1 are filled with fluorinated greenhouse gas R407C. GWP value: 1774. Unit LI 31 filled with fluorinated greenhouse gas R404A.

#### POLARIS

Short desig- nation	Art. no.	Essential accessories	Performance data				Unit				Energy efficiency rating
			Heating pow- er A-7 / W35 kW	Heating pow- er A2 / W35 kW	COP A2 / W35	CO <sub>2</sub> equiv- alent t CO <sub>2</sub>	Refrigerant fillcapacity kg	Hermetical- Vy sealed	Dimensions (mm) W x D x H	Weight kg	Heater in combina- tion with controller (A+++ to G)
Polaris 4-3	1038004103	WR 4	3.42/1.80*	2.17	4.02	0.8	1.65		598 x 621 x 1331	116	A++
Polaris 4-2	1038004102	HV 4	3.42/1.80*	2.17	4.02	0.8	1.65		598 x 621 x 1331	116	A++
Polaris 4–3	1038004101	HSV 4	3.42/1.80*	2.17	4.02	0.8	1.65		598 x 621 x 1331	116	A++

\*When operated with a compressor. Units filled with fluorinated greenhouse gas R454B. GWP value: 467.



