



INSTALLATION MANUAL

CHILLERS
REVERSIBLE HEAT PUMPS
CONDENSING UNITS

- EXTERNAL UNITS
- HIGH EFFICIENCY
- HOT WATER PRODUCTION UP TO 50 °C

ANL ANL-H 020-202

EN



Aermec participates in the EUROVENT Programme: LCP. The products of interest can be found on: www.eurovent-certification.com



Dear Customer,

Thank you for choosing an AERMEC product. This product is the result of many years of experience and in-depth research, and it is built using top quality material and advanced technologies.

Moreover, the CE mark guarantees that our appliances fully comply with the requirements of the European Machinery Directive in terms of safety. We constantly monitor the quality level of our products, and as a result they are synonymous with Safety, Quality, and Reliability.

Product data may be subject to modifications deemed necessary for improving the product without obligation to give prior notice.

Thank you again.
AERMEC S.p.A

Aermec reserves the right to make all modification deemed necessary for improving the product at any time with any modification of technical data.

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KONFORMITÄTSEKLRÄRUNG EU / DECLARACIÓN DE CONFORMIDAD UE

ANL

MODEL*	
SERIAL NUMBER	
DATE	

Noi, firmatari della presente, dichiariamo sotto la nostra esclusiva responsabilità che l'insieme in oggetto così definito:
We, the undersigned, hereby declare under our own responsibility that the assembly in question, defined as follows:
Nous, Signataires du présent acte, déclarons sous notre responsabilité exclusive que le groupe cité à l'objet défini de la façon suivante:
Die Unterzeichner erklären unter eigener Verantwortung, dass die oben genannte Maschineneinheit, bestehend aus:
Nosotros, los abajo firmantes, declaramos bajo nuestra exclusiva responsabilidad, que el conjunto en cuestión, denominado:

Nome / Name / Nom / Name / Nombre **ANL**
Tipo / Type / Type / Typ / Tipo **CHILLERS**
Modello / Model / Modèle / Model / Modelo

A cui questa dichiarazione si riferisce è conforme a tutte le disposizioni pertinenti delle seguenti direttive:
To which this declaration refers, complies with all the provisions related to the following directives:
Auquel cette déclaration se réfère, est conforme à toutes les dispositions relatives des directives suivantes:
Das Gerät, auf welches sich diese Erklärung bezieht, entspricht allen Verordnungen im Zusammenhang mit den folgenden Richtlinien:
A la que esta declaración se refiere, es conforme con todas las disposiciones pertinentes de las siguientes directivas:

Direttiva LVD: 2014/35/UE
Direttiva Compatibilità Elettromagnetica EMCD: 2014/30/UE
Direttiva PED in materia di attrezzature a pressione: 2014/68/UE (modulo A)
Direttiva RoHS sulla restrizione dell'uso di determinate sostanze pericolose nelle AEE: 2011/65/UE

L'oggetto della dichiarazione di cui sopra è conforme alle pertinenti normative di armonizzazione dell'Unione:
The above-mentioned declaration complies with the harmonised European standards:
L'objet de la déclaration reportée ci-dessus est conforme aux normes d'harmonisation relatives de l'Union:
Der Gegenstand der genannten Erklärung entspricht den diesbezüglichen harmonisierten Normen der europäischen Gemeinschaft:
El objeto de la declaración de arriba es conforme con las normativas pertinentes de armonización de la Unión:

CEI EN 60335-2-40: 2005	CEI EN 61000-6-1: 2007	UNI EN 378-2: 2017
CEI EN 60335-2-40/A1: 2007	CEI EN 61000-6-3: 2007	UNI EN 12735-1: 2016
CEI EN 60335-2-40/A2: 2009	CEI EN 55014-1: 2017	
CEI EN 60335-2-40/A13: 2012	CEI EN 55014-2: 2016	

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante.
This declaration of conformity has been released under the exclusive responsibility of the manufacturer.
La déclaration de conformité présente est délivrée sous la responsabilité exclusive du fabricant.
Diese Konformitätserklärung wurde unter der ausschließlichen Verantwortung des Herstellers ausgestellt.
Esta declaración de conformidad se ha otorgado bajo la responsabilidad exclusiva del fabricante.

Firmato a nome e per conto di: AERMEC S.p.A.
Signed for and on behalf of: AERMEC S.p.A.
Signé par et au nom de: AERMEC S.p.A.
Unterzeichnet für und im Namen von: AERMEC S.p.A.
Firmado en nombre de: AERMEC S.p.A.

* NOTA: La presente dichiarazione non è valida per tutte le macchine non conformi al regolamento 2016/2281 ed elencate nella Tabella 1 sotto riportata.
* NOTE: This declaration is not valid for machines not compliant with regulation 2016/2281 and listed in Table 1 below.
* REMARQUE: Cette déclaration n'est pas valable pour les machines non conformes au règlement 2016/2281 et listées dans le tableau 1 ci-dessous.
* ANMERKUNG: Diese Erklärung gilt nicht für Maschinen, die nicht der Verordnung 2016/2281 entsprechen und in der nachstehenden Tabelle 1 aufgeführt sind.
* NOTA: Esta declaración no es válida para máquinas que no cumplen con la regulación 2016/2281 y se enumeran en la Tabla 1 a continuación.

Bevilacqua (VR)

Commercial Director
Luigi Zucchi

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KONFORMITÄTSEKTLÄRUNG EG / DECLARACIÓN DE CONFORMIDAD CE

ANL-H

MODEL*	
SERIAL NUMBER	
DATE	

Noi, firmatari della presente, dichiariamo sotto la nostra esclusiva responsabilità che l'insieme in oggetto così definito:
We, the undersigned, hereby declare under our own responsibility that the assembly in question, defined as follows:
Nous, Signataires du présent acte, déclarons sous notre responsabilité exclusive que le groupe cité à l'objet défini de la façon suivante:
Die Unterzeichner erklären unter eigener Verantwortung, dass die oben genannte Maschineneinheit, bestehend aus:
Nosotros, los abajo firmantes, declaramos bajo nuestra exclusiva responsabilidad, que el conjunto en cuestión, denominado:

Nome / Name / Nom / Name / Nombre **ANL-H**
Tipo / Type / Type / Typ / Tipo **REVERSIBLE HEAT PUMPS**
Modello / Model / Modèle / Model / Modelo

A cui questa dichiarazione si riferisce è conforme a tutte le disposizioni pertinenti delle seguenti direttive:
To which this declaration refers, complies with all the provisions related to the following directives:
Auquel cette déclaration se réfère, est conforme à toutes les dispositions relatives des directives suivantes:
Das Gerät, auf welches sich diese Erklärung bezieht, entspricht allen Verordnungen im Zusammenhang mit den folgenden Richtlinien:
A la que esta declaración se refiere, es conforme con todas las disposiciones pertinentes de las siguientes directivas:

Direttiva Macchine: 2006/42/CE
Direttiva Compatibilità Elettromagnetica EMCD: 2014/30/UE
Direttiva PED in materia di attrezzature a pressione: 2014/68/UE
Direttiva RoHS sulla restrizione dell'uso di determinate sostanze pericolose nelle AEE: 2011/65/UE

L'oggetto della dichiarazione di cui sopra è conforme alle pertinenti normative di armonizzazione dell'Unione:
The above-mentioned declaration complies with the harmonised European standards:
L'objet de la déclaration reportée ci-dessus est conforme aux normes d'harmonisation relatives de l'Union:
Der Gegenstand der genannten Erklärung entspricht den diesbezüglichen harmonisierten Normen der europäischen Gemeinschaft:
El objeto de la declaración de arriba es conforme con las normativas pertinentes de armonización de la Unión:

CEI EN 60335-2-40: 2005	CEI EN 61000-6-1: 2007	UNI EN 378-2: 2017
CEI EN 60335-2-40/A1: 2007	CEI EN 61000-6-3: 2007	UNI EN 12735-1: 2016
CEI EN 60335-2-40/A2: 2009	CEI EN 55014-1: 2017	
CEI EN 60335-2-40/A13: 2012	CEI EN 55014-2: 2016	

La presente dichiarazione di conformità è rilasciata sotto la responsabilità esclusiva del fabbricante
This declaration of conformity has been released under the exclusive responsibility of the manufacturer
La déclaration de conformité présente est délivrée sous la responsabilité exclusive du fabricant
Diese Konformitätserklärung wurde unter der ausschließlichen Verantwortung des Herstellers ausgestellt
Esta declaración de conformidad se ha otorgado bajo la responsabilidad exclusiva del fabricante

La persona autorizzata a costituire il fascicolo tecnico è Luca Martin. Il prodotto, in accordo con la direttiva 2014/68/UE, soddisfa la procedura di Garanzia qualità Totale (modulo H) con certificato n.06/270-QT3664 Rev. 10 emesso dall'organismo notificato n.1131 CEC via Pisacane 46 Legnano (MI) – Italy.
The person authorised to compile the technical file is Luca Martin. The product, in agreement with Directive 2014/68/EU, satisfies the Total quality Guarantee procedure (form H) with certificate no. 06/270-QT3664 Rev. 10 issued by the notified body n.1131 CEC via Pisacane 46 Legnano (MI) - Italy.
La personne autorisée à constituer le dossier technique est Luca Martin. Le produit, selon la directive 2014/68/UE, respecte la procédure de Garantie de qualité Totale (module H) par le certificat n.06/270-QT3664 Rév. 10 émis par l'organisme notifié n.1131 CEC via Pisacane 46 Legnano (MI) - Italie.
Die bevollmächtigt, die technischen Unterlagen zusammenzustellen ist Luca Martin. In Übereinstimmung mit der Richtlinie 2014/68/EU, erfüllt das Produkt die Anforderungen des Verfahrens der umfassenden Qualitätssicherung (Modul H), Zertifikat Nr.06/270-QT3664 Rev. 10, ausgestellt durch benannte Stelle Nr. 1131 CEC Via Pisacane 46, Legnano (MI) - Italy.
La persona facultada para elaborar el expediente técnico es Luca Martin. El producto, conforme a la directiva 2014/68/UE, cumple con el procedimiento de Garantía de calidad total (módulo H) con certificado n. 06/270-QT3664 Rev. 10 emitido por el organismo autorizado n. 1131 CEC via Pisacane 46 Legnano (MI) - Italia.

* NOTA: La presente dichiarazione non è valida per tutte le macchine non conformi al regolamento 2016/2281 ed elencate nella Tabella 1 sotto riportata.
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* ANMERKUNG: Diese Erklärung gilt nicht für Maschinen, die nicht der Verordnung 2016/2281 entsprechen und in der nachstehenden Tabelle 1 aufgeführt sind.
* NOTA: Esta declaración no es válida para máquinas que no cumplen con la regulación 2016/2281 y se enumeran en la Tabla 1 a continuación.

Bevilacqua (VR)

Commercial Director
Luigi Zucchi



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EC DECLARATION OF INCORPORATION / DÉCLARATION D'INCORPORATION CE
EINBAUERKLÄRUNG EG / DECLARACIÓN DE INCORPORACIÓN CE

ANL-C

MODEL	_____	
SERIAL NUMBER	_____	
DATE	_____	

Noi, firmatari della presente, dichiariamo sotto la nostra esclusiva responsabilità che l'insieme in oggetto così definito:
We, the undersigned, hereby declare under our own responsibility that the assembly in question, defined as follows:
Nous, Signataires du présent acte, déclarons sous notre responsabilité exclusive que le groupe cité à l'objet défini de la façon suivante:
Die Unterzeichner erklären unter eigener Verantwortung, dass die oben genannte Maschineneinheit, bestehend aus:
Nosotros, los abajo firmantes, declaramos bajo nuestra exclusiva responsabilidad, que el conjunto en cuestión, denominado:

Nome / Name / Nom / Name / Nombre
Tipo / Type / Type / Typ / Tipo
Modello / Model / Modèle / Model / Modelo

ANL-C
CONDENSING UNITS

A cui questa dichiarazione si riferisce è conforme a tutte le disposizioni pertinenti delle seguenti direttive:
To which this declaration refers, complies with all the provisions related to the following directives:
Auquel cette déclaration se réfère, est conforme à toutes les dispositions relatives des directives suivantes :
Das Gerät, auf welches sich diese Erklärung bezieht, entspricht allen Verordnungen im Zusammenhang mit den folgenden Richtlinien:
A la que esta declaración se refiere, es conforme con todas las disposiciones pertinentes de las siguientes directivas:

Direttiva Macchine: 2006/42/CE

La documentazione tecnica pertinente è stata compilata in conformità alla parte B dell'allegato VII; tale documentazione, o parti di essa, sarà trasmessa per posta o per via elettronica, in risposta ad una richiesta motivata da parte delle autorità nazionali competenti.
The relevant technical documentation is compiled in accordance with part B of Annex VII; this documentation, or part of it, will be transmitted by mail, in response to a reasoned request by the national authorities.
La documentation technique pertinente est constituée conformément à l'annexe VII, partie B; cette documentation ou une partie de celui-ci seront envoyés par la poste ou par voie électronique, à la suite d'une demande dûment motivée des autorités nationales.
Die dazugehoerende technische Dokumentation wurde in Uebereinstimmung mit dem Teil B der Anlage VII zusammengestellt. Diese Dokumentation (bzw. Teile davon) wird per Post oder per Email uebermittelt, in Beantwortung einer motivierten Forderung seitens der zustaendigen Nationalbehoerde.
La documentación técnica correspondiente, de conformidad con el anexo VII, parte B; dicha documentación o parte de ella se enviarán por correo o por vía electrónica, en respuesta a un requerimiento debidamente motivado de las autoridades nacionales.

La quasi-macchina a cui fa riferimento questa dichiarazione non deve essere messa in servizio finché la macchina finale in cui deve essere incorporata non sia stata dichiarata in conformità con le disposizioni della Direttiva Macchine 2006/42/CE.
The partly completed machinery must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of Directive 2006/42/EC.
La quasi-machine ne doit pas être mise en service avant que la machine finale dans laquelle elle doit être incorporée ait été déclarée conforme aux dispositions pertinentes de la directive 2006/42/CE.
Die unvollständige maschine, auf die sich diese Erklarung bezieht, soll nicht im Betrieb gesetzt werden, solange die Schlussmaschine, in der sie eingebaut werden soll, nicht in Uebereinstimmung mit den Vorschriften der Maschinevorgabe 2006/42/EC erklart wird.
La cuasi máquina no deberá ser puesta en servicio mientras la máquina final en la cual vaya a ser incorporada no haya sido declarada conforme a lo dispuesto en la Directiva 2006/42/CE.

Bevilacqua (VR),

Commercial Director
Luigi Zucchi

1. GENERAL INSTRUCTIONS FOR THE INSTALLER

The AERMEC ANL units are manufactured in accordance with recognised technical and safety standards. They are designed for air conditioning and production of domestic hot water (DHW) and must be used in a manner compatible with their performance characteristics. All contractual and extra-contractual liabilities causing damage to persons, animals or objects or through errors of installation, control or maintenance or from improper use are excluded by the Company. Any uses not expressly indicated in this manual are not permitted.

1.1. CONSERVATION OF DOCUMENTATION

1. Submit the manual with all supplementary documentation to the system user who will be responsible for the conservation of documents so that they can be available when needed.
2. Read this manual fully: all works must be carried out by qualified personnel, in accordance with any applicable current local regulations.
3. The unit must be installed in a manner to render possible maintenance and/or repair operations.
4. The equipment warranty does not cover any costs associated with lifting or access equipment necessary for warranty procedures.
5. Do not modify or tamper with the equipment as this could result in accidents for which the manufacturer will not be held responsible. The warranty will be voided if the above mentioned warnings are not respected.

1.2. SAFETY INSTRUCTIONS AND INSTALLATION STANDARDS

1. The equipment must be installed by a competent and qualified technician, in compliance with the applicable national legislation of the country of destination. AERMEC assumes no responsibility for any losses incurred by not observing these instructions.
2. Before commencing any works it is necessary to **CAREFULLY READ THE INSTRUCTIONS AND MINIMISE ANY RISKS BY TAKING APPROPRIATE SAFETY PRECAUTIONS**. All relevant personnel must be made aware of the procedures and possible risks that may arise at the time of installation of the unit.

2. SELECTION AND POSITION OF INSTALLATION

Before proceeding with the installation of the equipment agree the location with the client, taking into account the following points:

1. The base must be able to support the weight of the unit.
2. The safe distances between the unit and other equipment or structures must be strictly respected to ensure the intake and outlet air is free to circulate.
3. The equipment must be installed by a competent and qualified technician, in compliance with the applicable national legislation of the country of destination, respecting the required minimum maintenance access spaces.

connections.

In the case of installation where gusts of wind may occur adequately secure the unit using appropriate ties. Ensure the installation of the condensate drain tray on units that require it (as ACCESSORY).

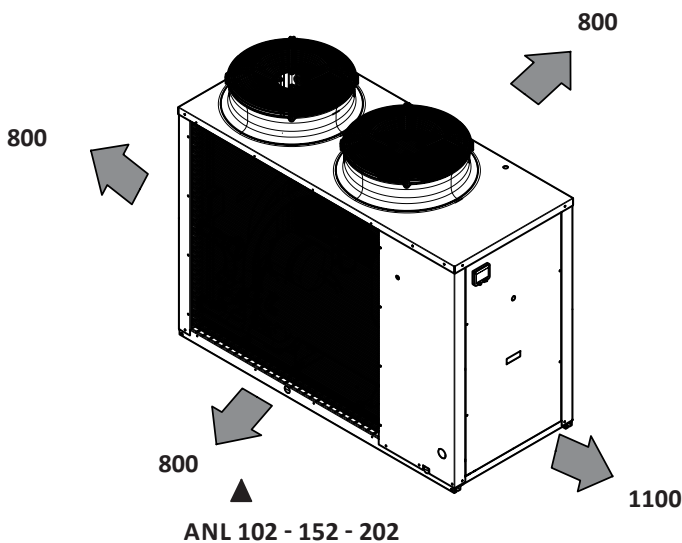
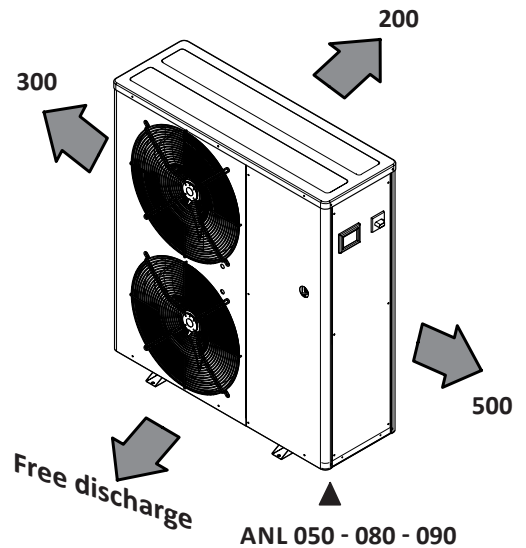
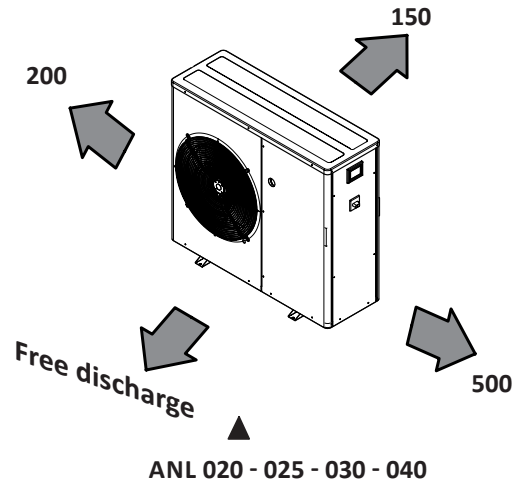
2.2.1. POSITIONING

Before lifting the unit verify the lifting capability of the equipment being used, taking into account the information provided with the packaging.

To move units (ANL 020-090) over horizontal planes use forklifts or similar in the most appropriate manner taking into account the weight distribution of the unit. When lifting (ANL 102-202) insert through the unit's base holes lifting bars (NOT PROVIDED) of sufficient length to locate the lifting chains and safety lugs.

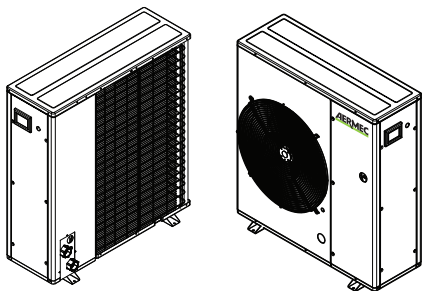
Position the unit in the place indicated by the client, inserting between the unit's base and the base support a rubber pad (minimum 10 mm thick) or feet anti-vibration mounts (ACCESSORY). For further information refer to the dimensional tables.

Secure the unit and ensure it is level; check that sufficient access is provided for hydraulic and electrical

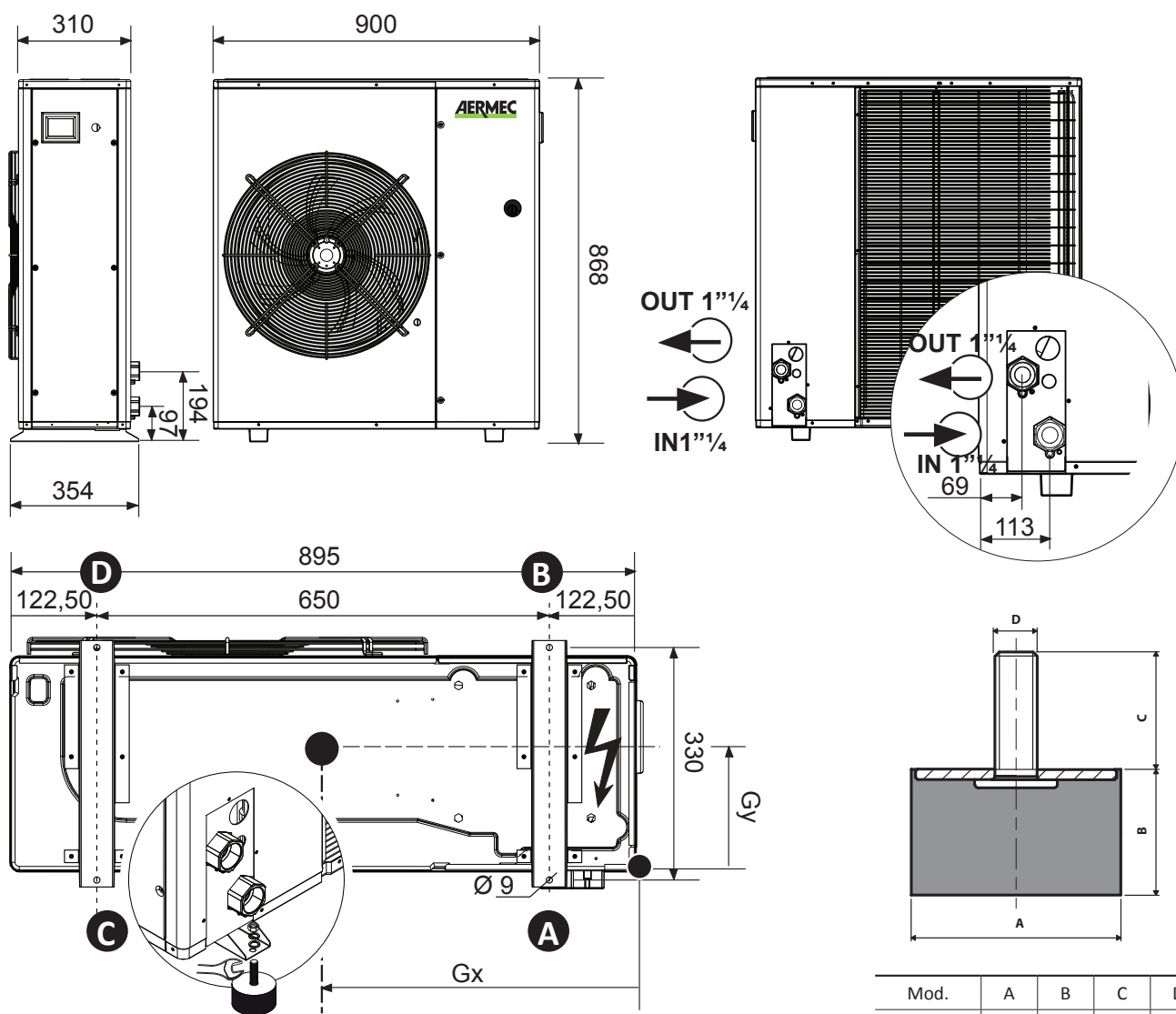


3. DIMENSIONS

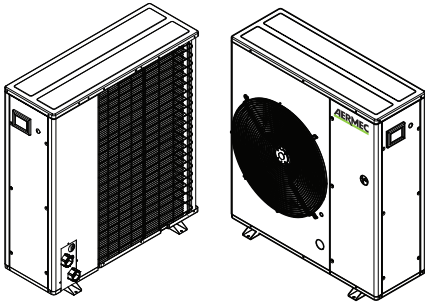
3.1. ANL 020 ÷ 025 version °|P|H|HP



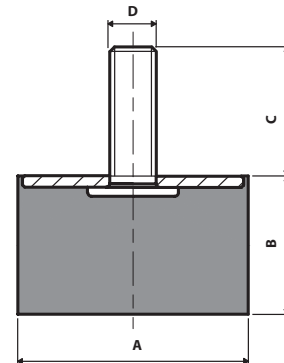
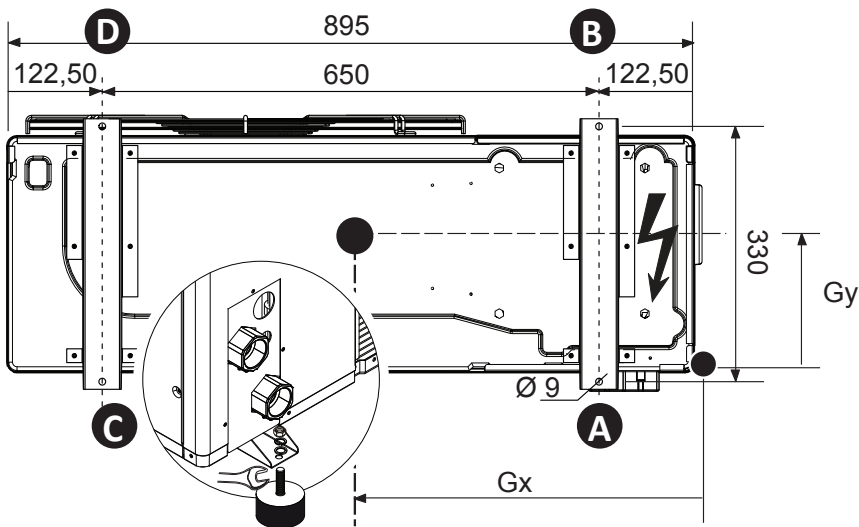
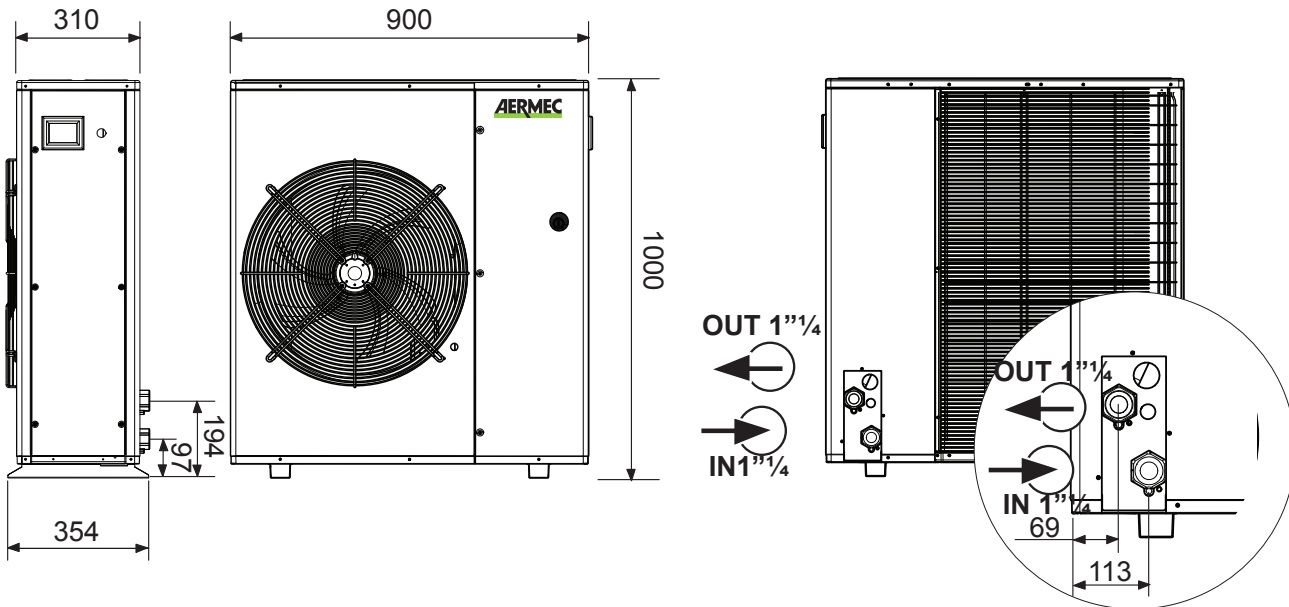
ANL	MOD.	VERS.	WEIGHTS	C. OF G.		A	B	C	D	KIT
				Gy	Gx	%	%	%	%	VT
020	°/H	°	75	174	325	32,1%	31,8%	18,2%	18,0%	9
020	°/H	P	77	177	326	31,6%	32,2%	17,9%	18,3%	9
025	°/H	°	75	174	325	32,1%	31,8%	18,2%	18,0%	9
025	°/H	P	77	177	326	31,6%	32,2%	17,9%	18,3%	9



3.2. ANL 030 ÷ 040 version °P|H|HP

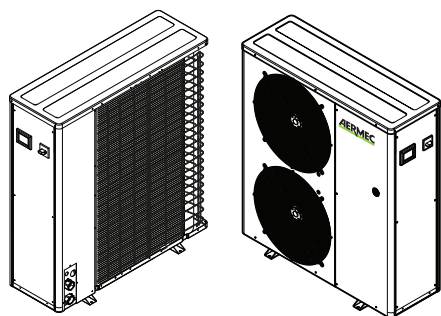


ANL	MOD.	VERS.	WEIGHTS	C. OF G.		A %	B %	C %	D %	KIT VT
				Gy	Gx					
030	°/H	°	86	183	336	30%	33%	18%	19%	9
030	°/H	P	91	180	327	31%	33%	18%	19%	9
040	°/H	°	86	183	336	30%	33%	18%	19%	9
040	°/H	P	91	180	327	31%	33%	18%	19%	9

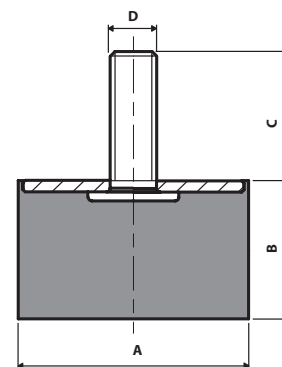
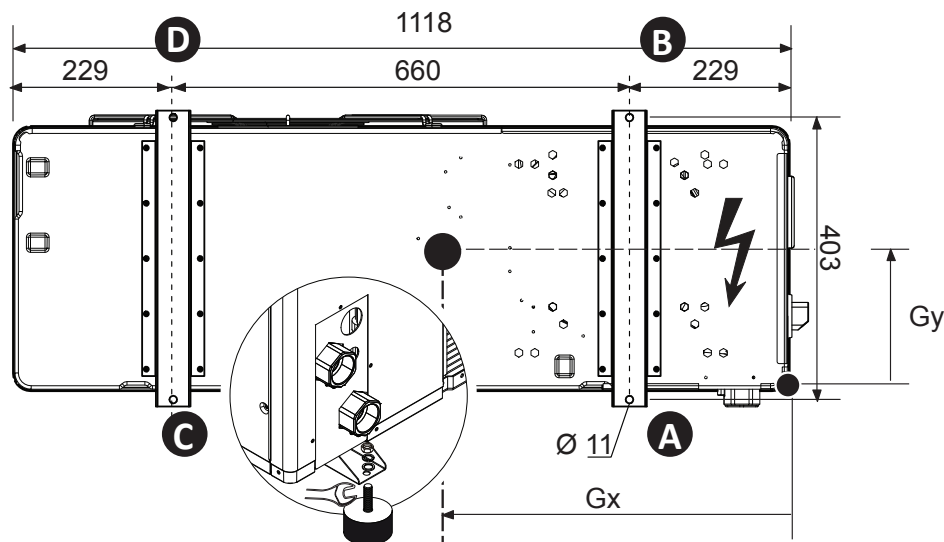
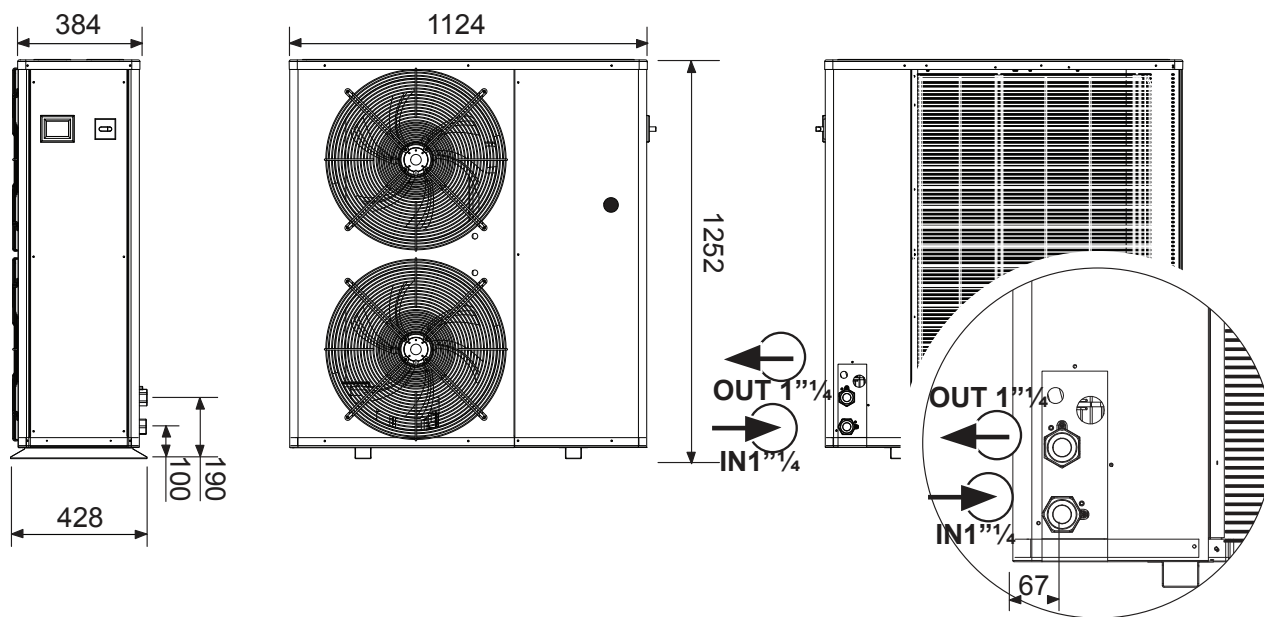


Mod.	A	B	C	D
VT9	40	30	23	M8

3.3. ANL 050 ÷ 090 version °|P|H|HP

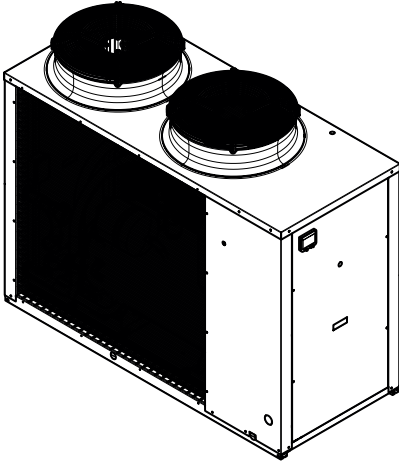


ANL	MOD.	VERS.	WEIGHTS	C. OF G.		A	B	C	D	KIT
				Gy	Gx	%	%	%	%	VT
50	°/H	°	120	213	447	30,3%	29,8%	20,1%	19,8%	9
50	°/H	P	127	212	436	31,0%	30,1%	19,8%	19,2%	9
70	°/H	°	120	213	447	30,3%	29,8%	20,1%	19,8%	9
70	°/H	P	127	212	436	31,0%	30,1%	19,8%	19,2%	9
80	°/H	°	156	217	453	30,3%	29,8%	20,1%	19,8%	9
80	°/H	P	163	216	444	31,0%	30,1%	19,8%	19,2%	9
90	°/H	°	156	217	453	29,5%	30,1%	20,0%	20,4%	9
90	°/H	P	163	216	444	30,0%	30,3%	19,8%	19,9%	9

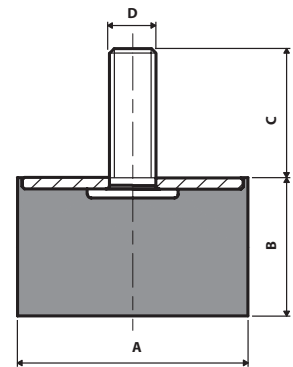
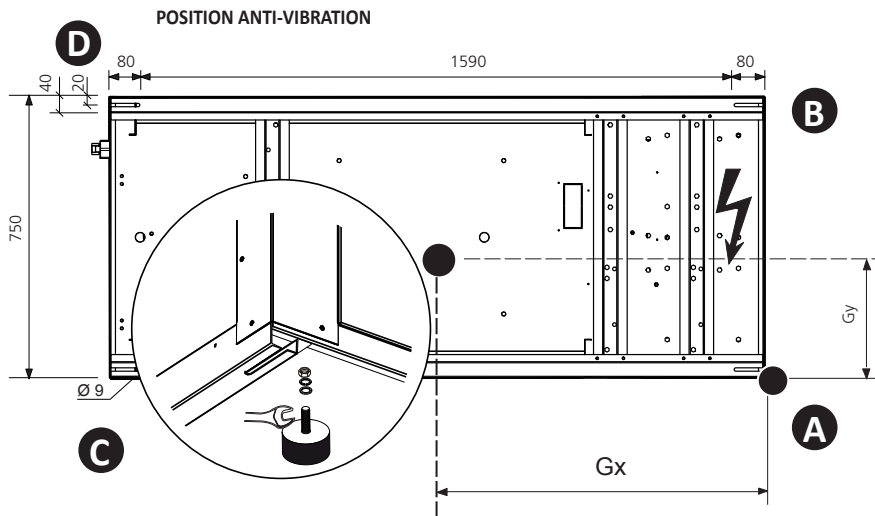
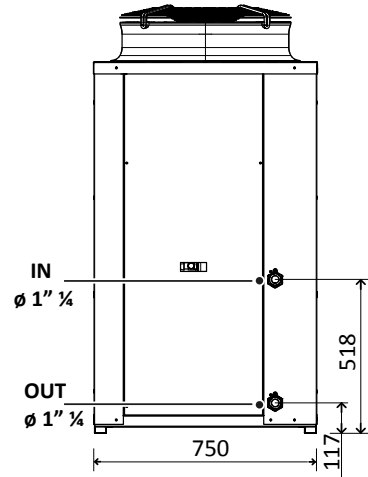
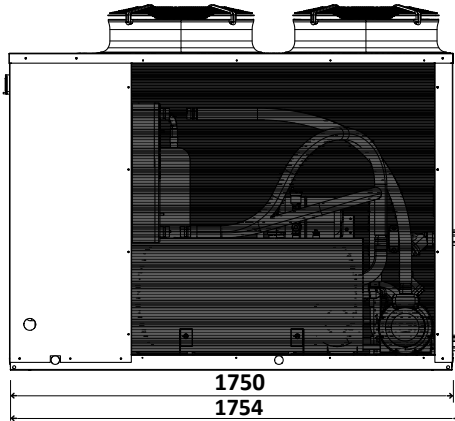
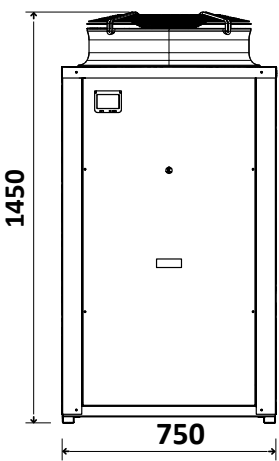


Mod.	A	B	C	D
VT9	40	30	23	M8

3.4. ANL 102 ÷ 202 version °|P|A|N|Q/H|HP|HA|HN|HQ

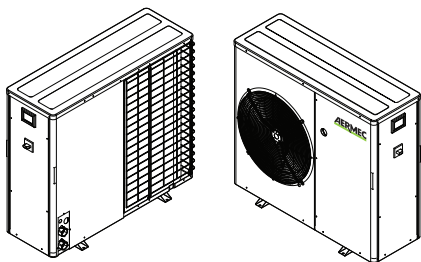


ANL	VERS.	WEIGHTS	C. OF G.		A	B	C	D	KIT VT
			Gy	Gx	%	%	%	%	
ANL102	°	270	381	620	31,7%	32,8%	17,4%	18,0%	15
	P	288	382	659	30,6%	31,7%	18,5%	19,1%	15
	A	338	382	659	29,5%	30,4%	19,8%	20,4%	15
ANL102H	°	295	381	604	32,2%	33,3%	17,0%	17,5%	15
	P	313	381	640	31,2%	32,2%	18,0%	18,6%	15
	A	363	381	640	30,1%	30,9%	19,2%	19,8%	15
ANL152	°	293	383	650	30,8%	32,1%	18,2%	18,9%	15
	P	314	383	693	29,6%	30,8%	19,4%	20,2%	15
	A	364	383	693	28,7%	29,7%	20,4%	21,2%	15
ANL152H	°	322	382	630	31,4%	32,6%	17,7%	18,3%	15
	P	343	382	671	30,3%	31,4%	18,8%	19,5%	15
	A	393	382	671	29,3%	30,3%	19,9%	20,5%	15
ANL 202	°	329	383	600	32,1%	33,6%	16,8%	17,5%	15
	P	350	383	641	31,0%	32,4%	17,9%	18,7%	15
	A	400	383	641	30,0%	31,2%	19,1%	19,8%	15
ANL 202H	°	358	383	586	32,6%	33,9%	16,4%	17,1%	15
	P	379	383	626	31,5%	32,8%	17,5%	18,2%	15
	A	429	383	626	30,5%	31,6%	18,6%	19,3%	15

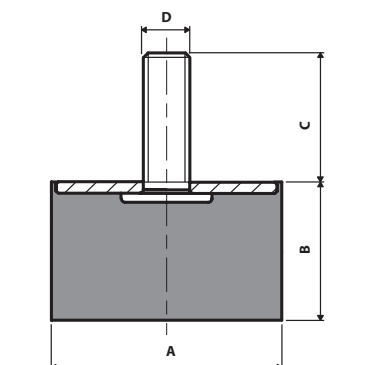
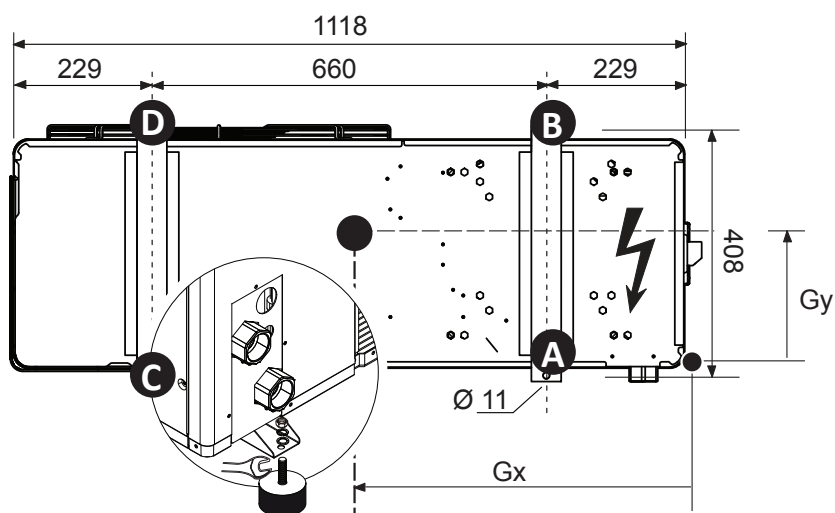
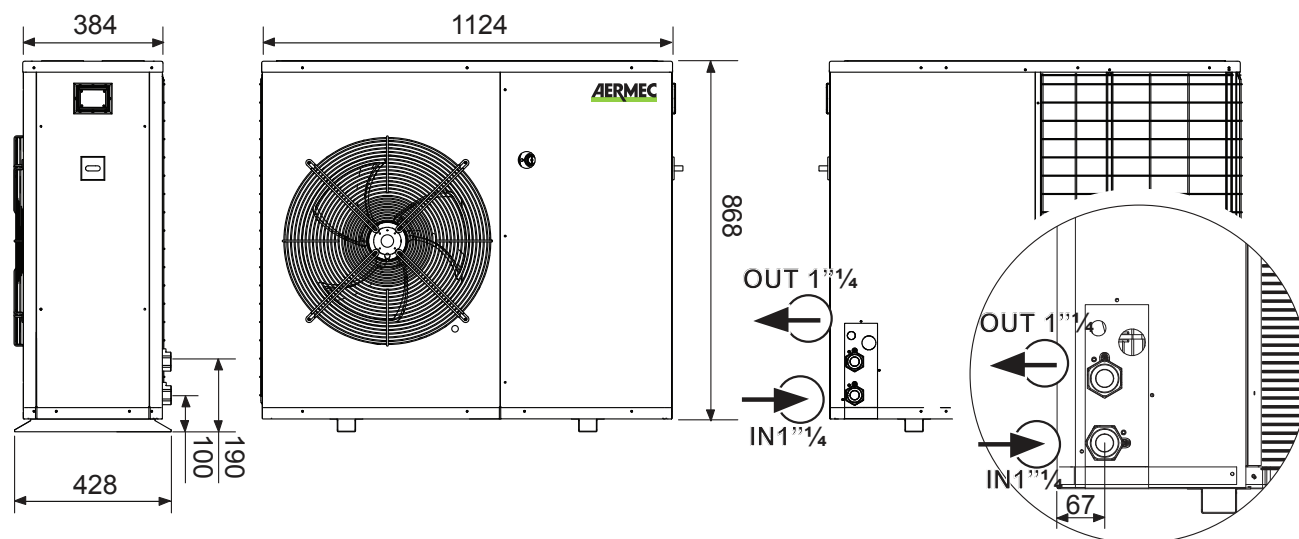


Mod.	A	B	C	D
VT15	50	30	28,5	M10

3.5. ANL 020 ÷ 025 version °A|HA

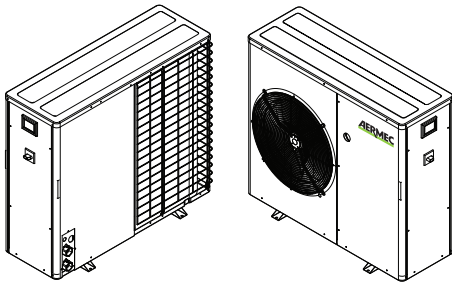


ANL	MOD.	VERS.	WEIGHTS	C. OF G.		A	B	C	D	KIT
				Gy	Gx	%	%	%	%	VT
020	°/H	A	99	177	326	35,6%	31,5%	17,4%	15,5%	9
025	°/H	A	77	177	326	31,6%	32,2%	17,9%	18,3%	9

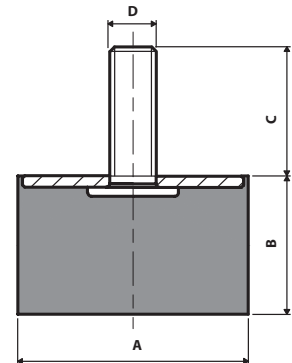
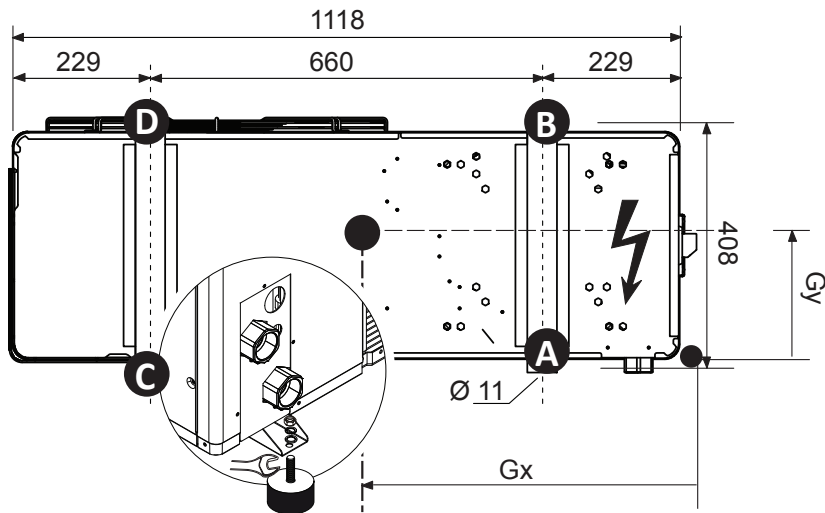
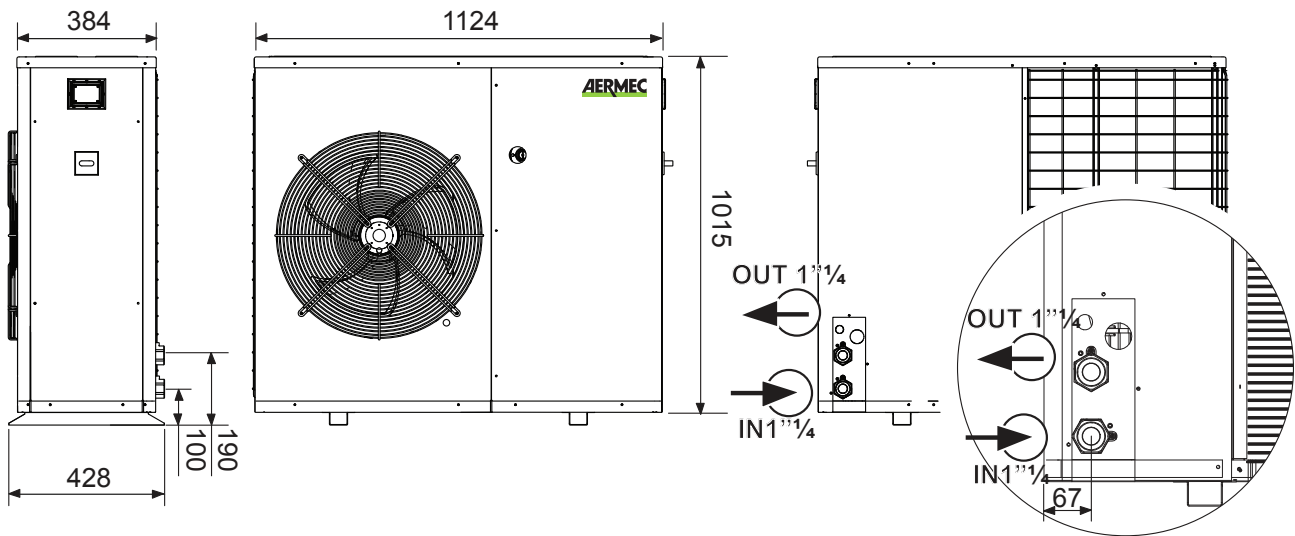


Mod.	A	B	C	D
VT9	40	30	23	M8

3.6. ANL 030 ÷ 040 version °A|HA



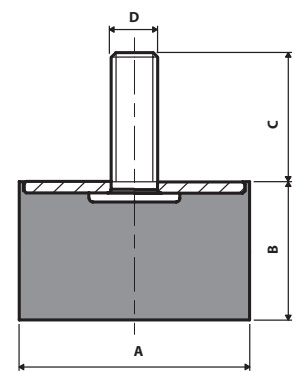
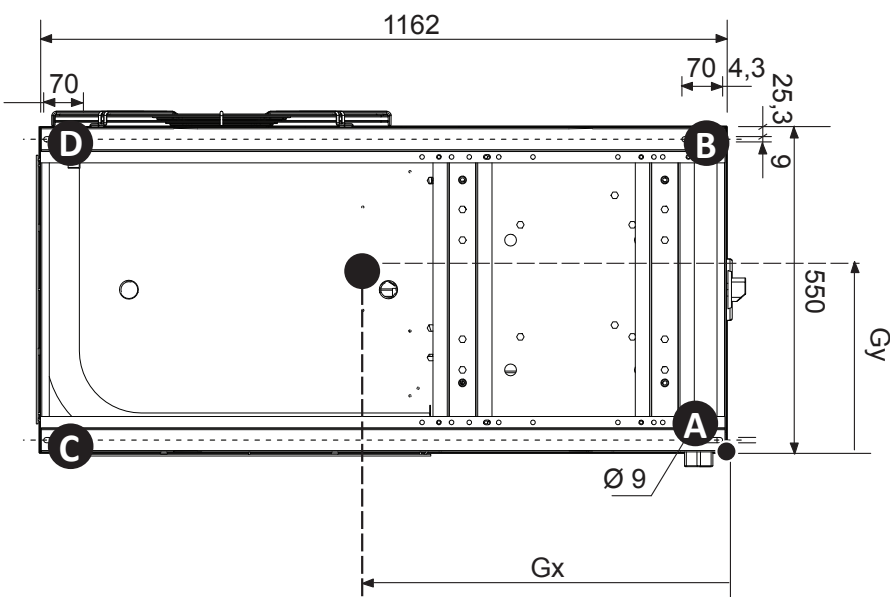
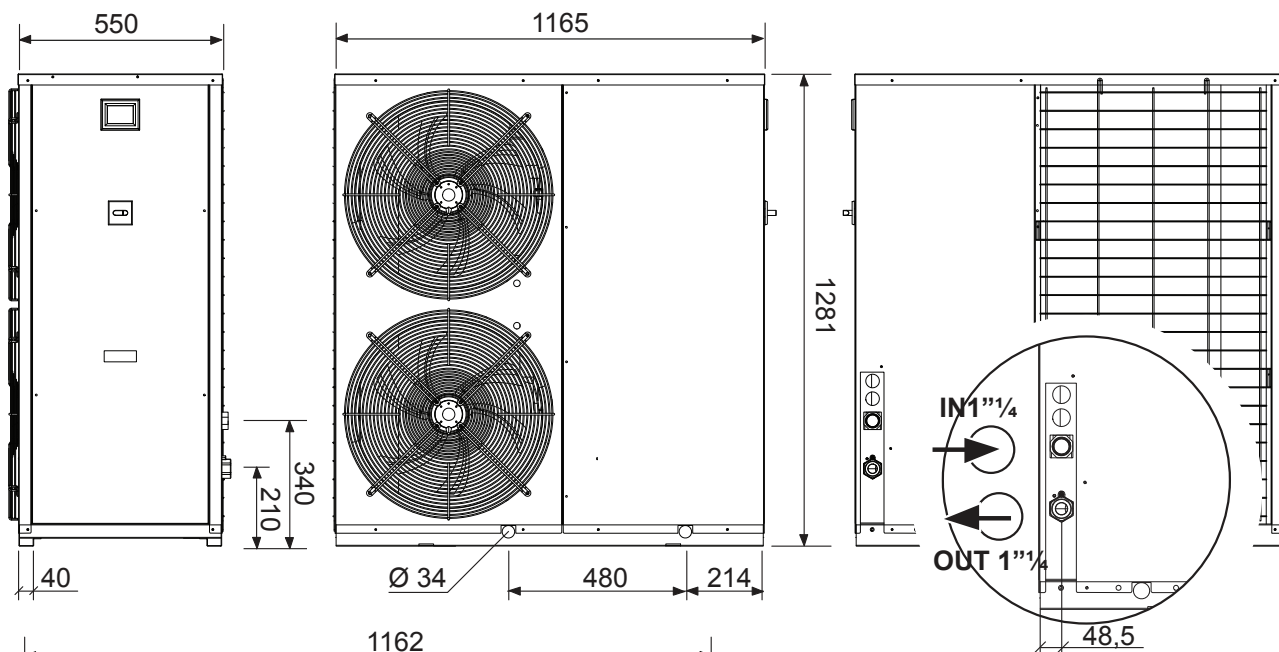
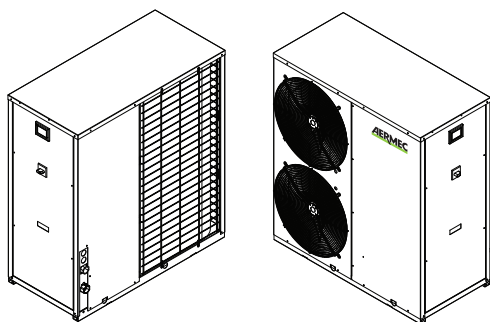
ANL	MOD.	VERS.	WEIGHTS	C. OF G.		A %	B %	C %	D %	KIT VT
				Gy	Gx					
030	°/H	A	103	180	327	39%	32%	16%	13%	9
040	°/H	A	103	180	327	39%	32%	16%	13%	9



Mod.	A	B	C	D
VT9	40	30	23	M8

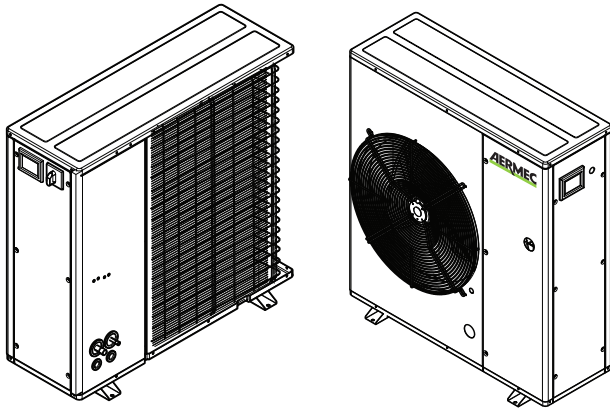
3.7. ANL 050 ÷ 090 version °A|°Q |HA |HQ

ANL	MOD.	VERS.	WEIGHTS	C. OF G.		A	B	C	D	KIT
				Gy	Gx	%	%	%	%	VT
50	°/H	A	147	212	436	32,2%	31,3%	18,5%	18,0%	15
70	°/H	A	147	212	436	32,2%	31,3%	18,5%	18,0%	15
80	°/H	A	147	212	436	32,2%	31,3%	18,5%	18,0%	15
90	°/H	A	183	216	444	31,1%	31,3%	18,8%	18,9%	15

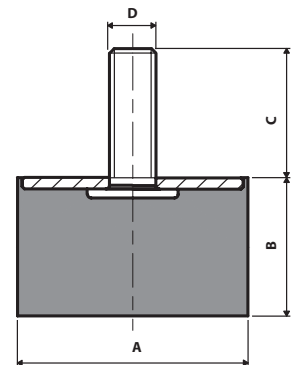
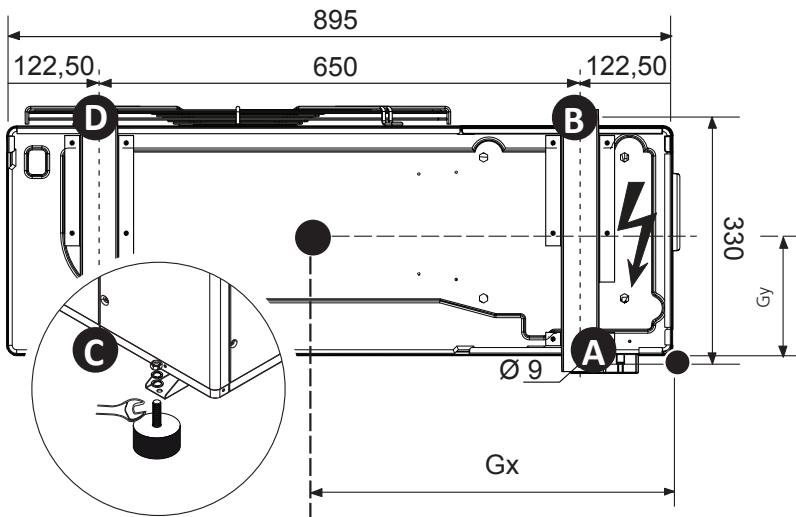
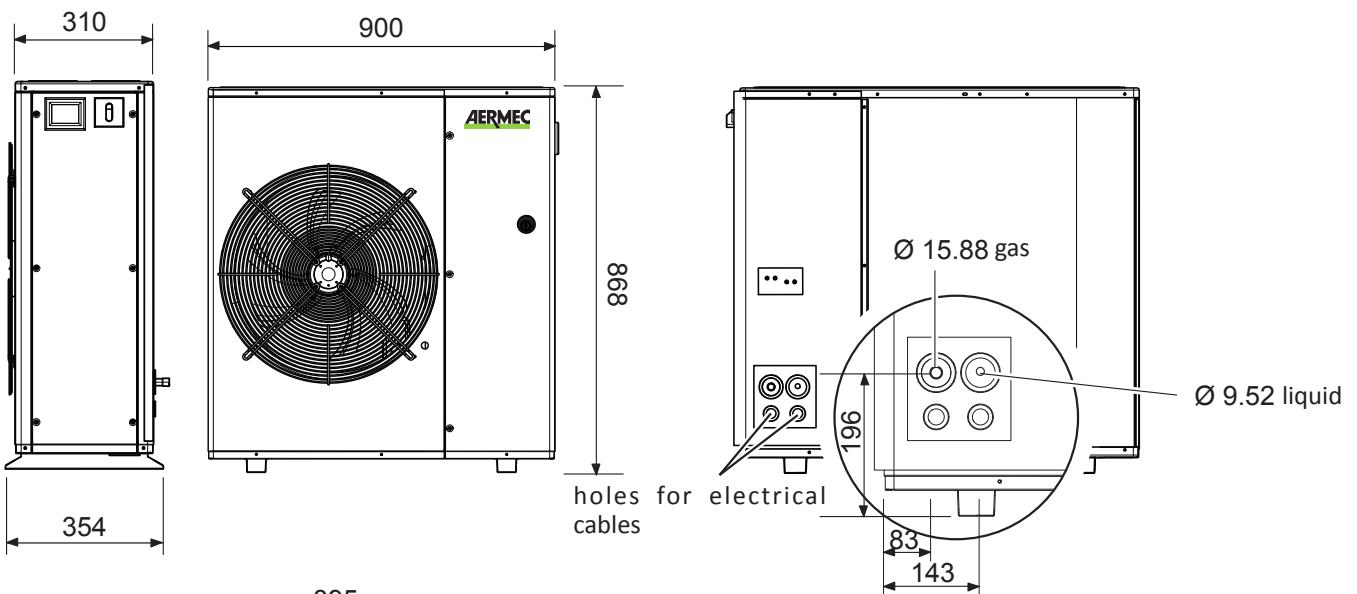


Mod.	A	B	C	D
VT15	50	30	28,5	M10

3.8. ANL 020 ÷ 025 version C

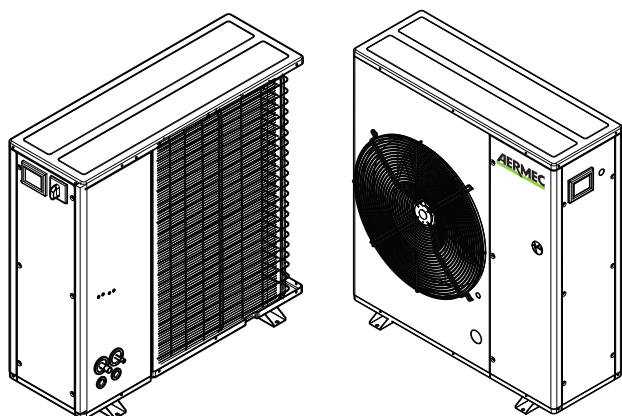


WARNING
For the weight distribution refer to versions "0" | H"

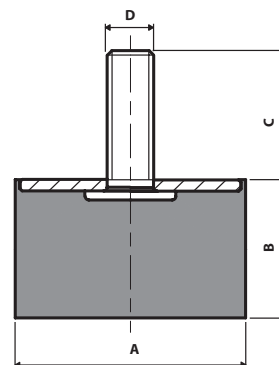
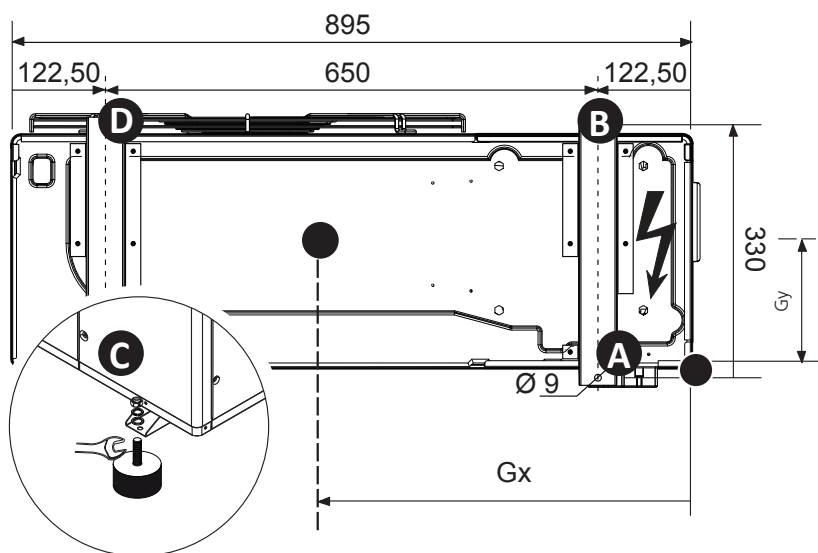
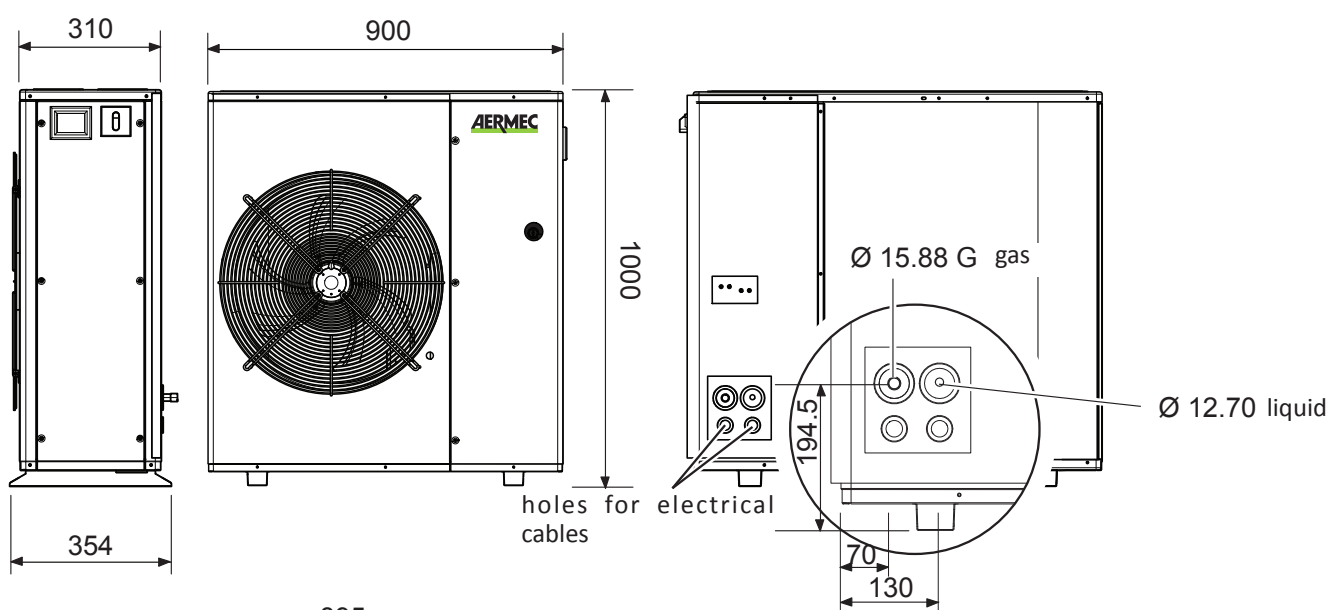


Mod.	A	B	C	D
VT9	40	30	23	M8

3.9. ANL 030 ÷ 040 version C

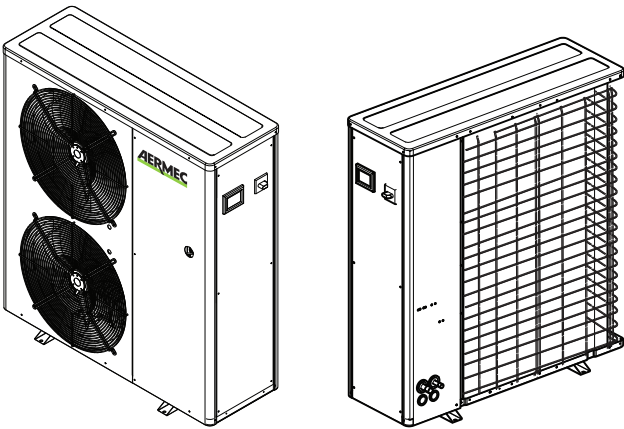


WARNING
For the weight distribution refer to versions "° | H"

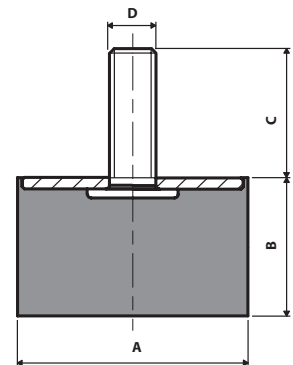
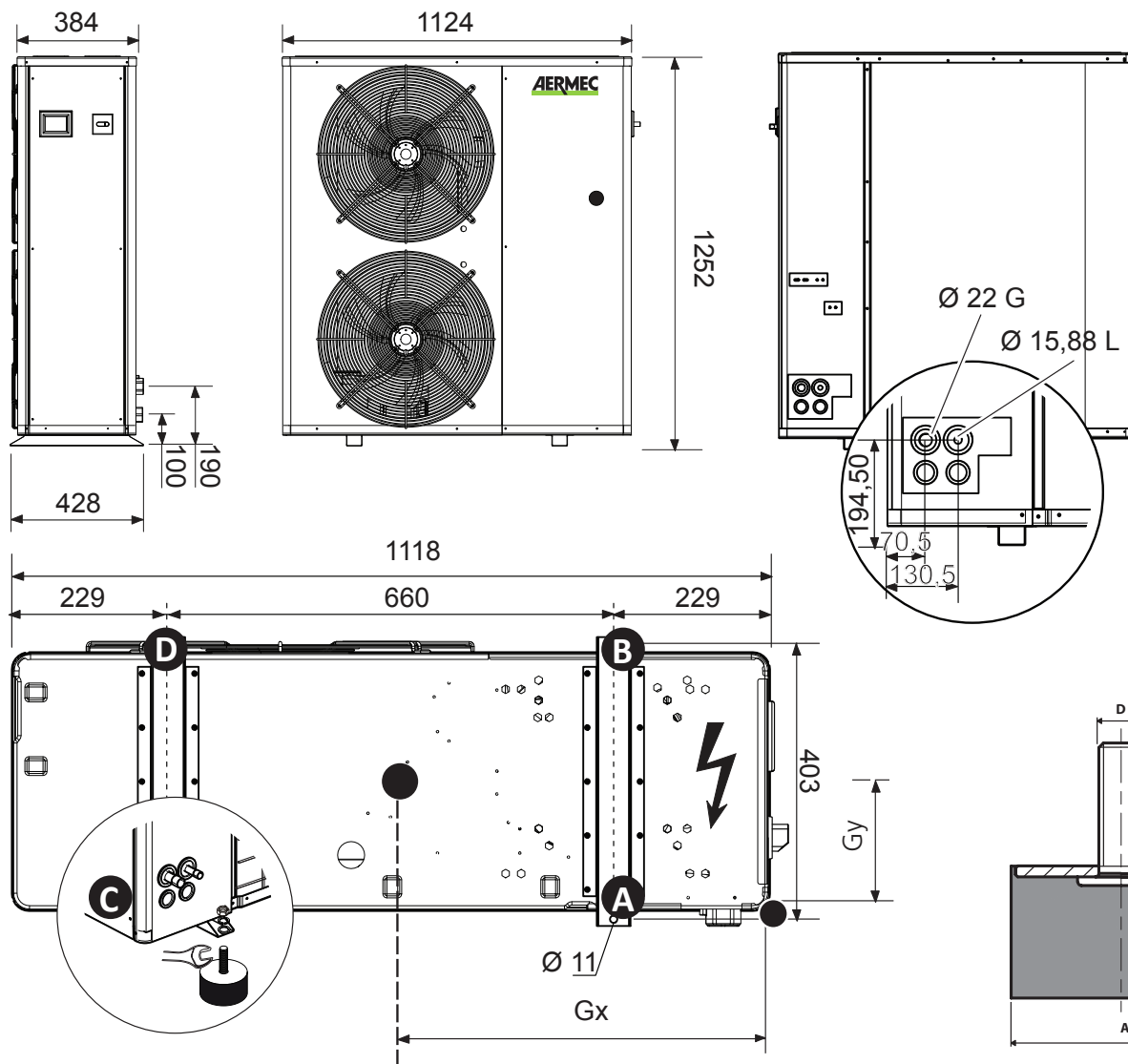


Mod.	A	B	C	D
VT9	40	30	23	M8

3.10. ANL 050 ÷ 090 version C

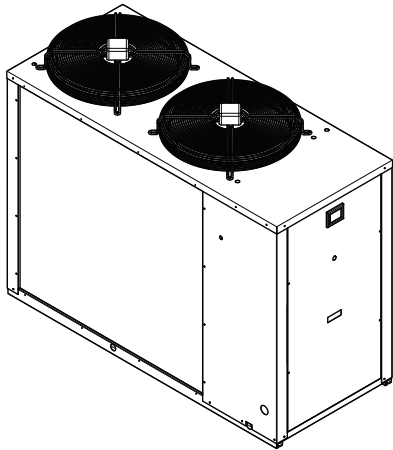


WARNING
For the weight distribution refer to versions "° | H"

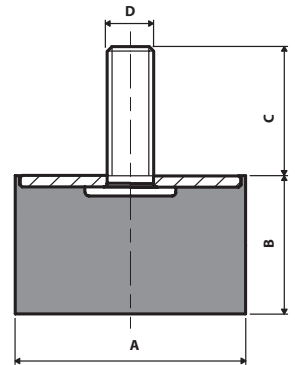
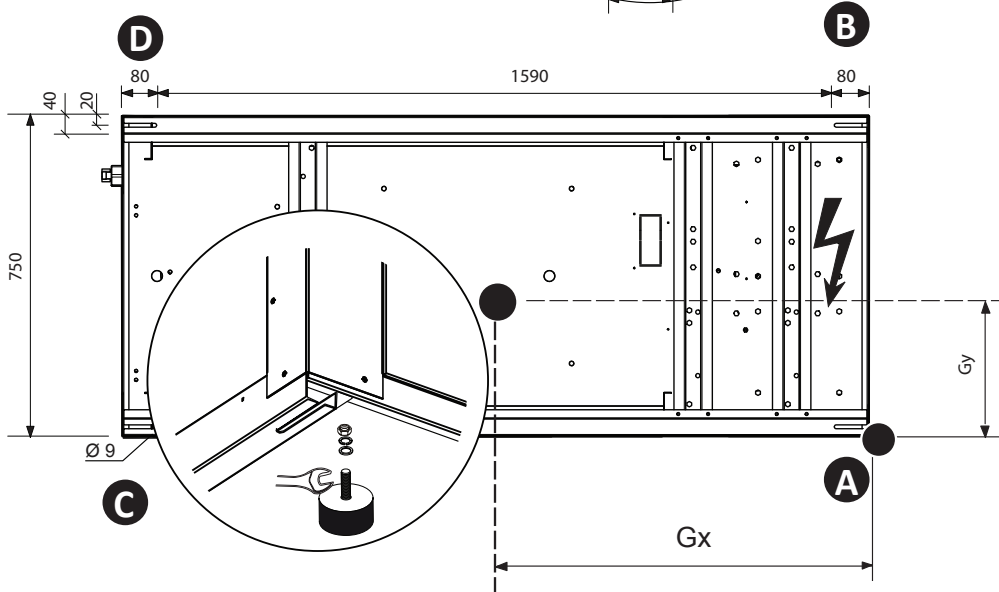
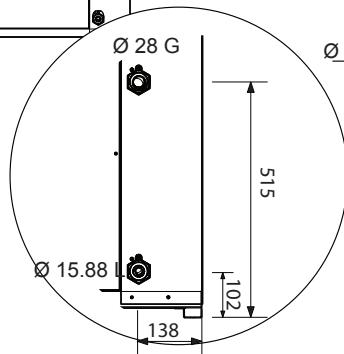
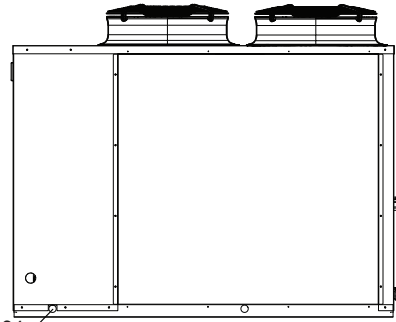
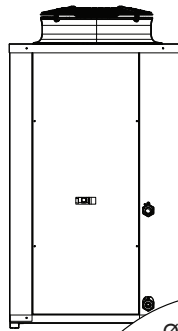
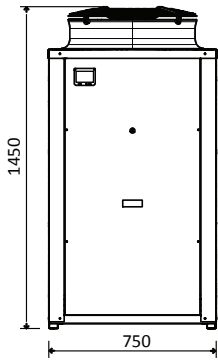


Mod.	A	B	C	D
VT9	40	30	23	M8

3.11. ANL 102 ÷ 202 version C

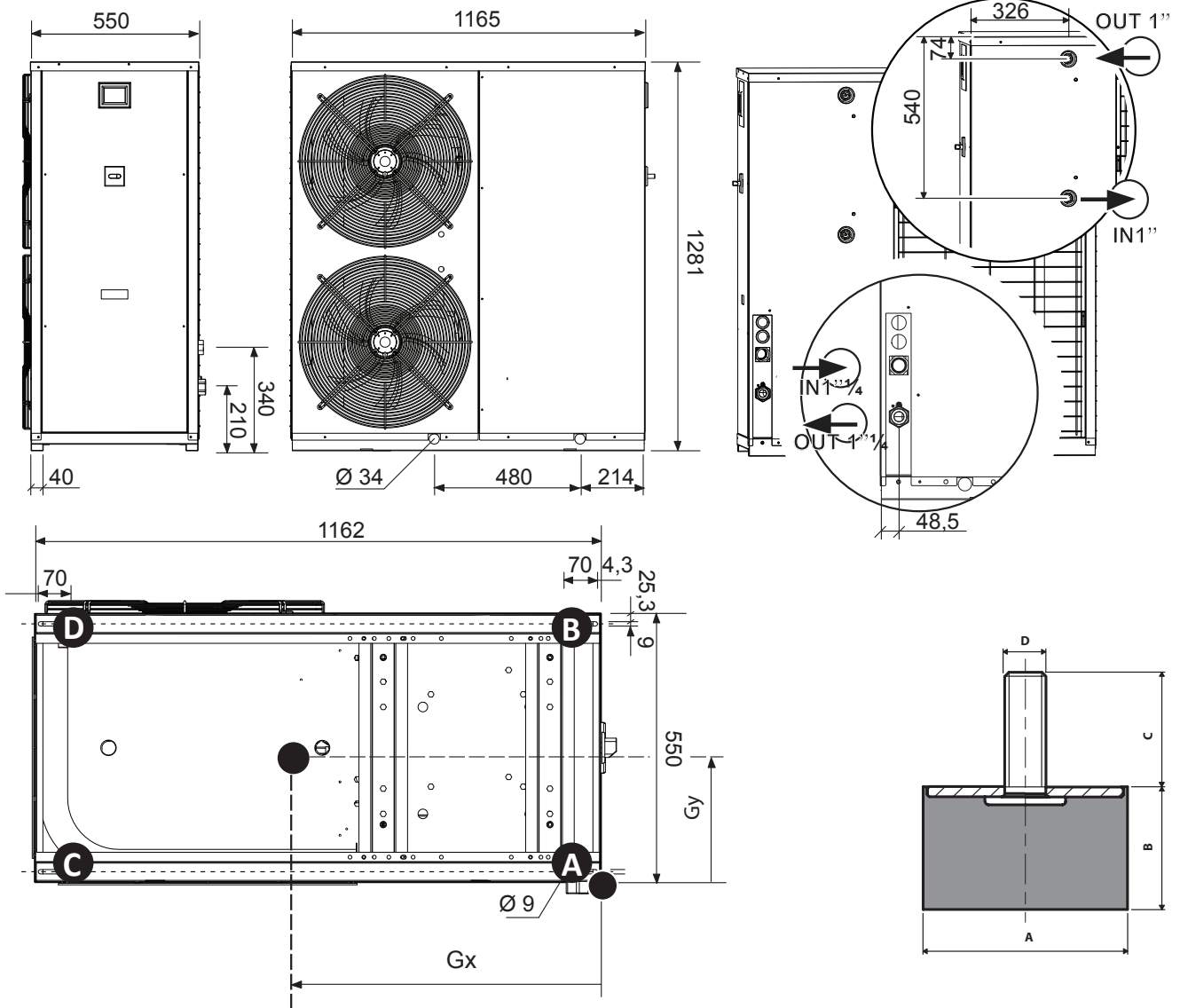
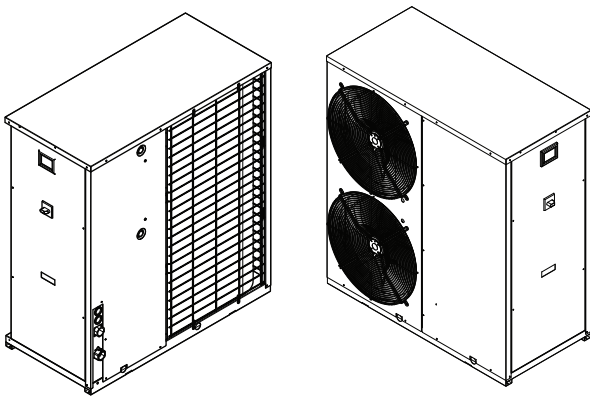


WARNING
For the weight distribution refer to versions "° | H"



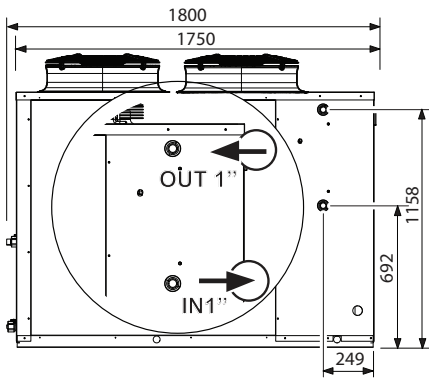
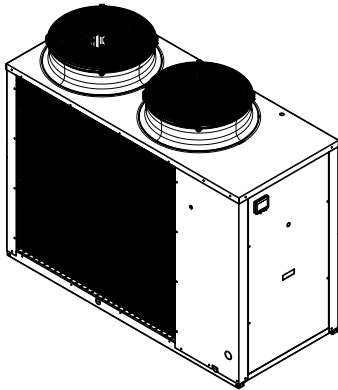
Mod.	A	B	C	D
VT15	50	30	28,5	M10

3.12. ANL 050 ÷ 090 version D|DA / HD|HDA

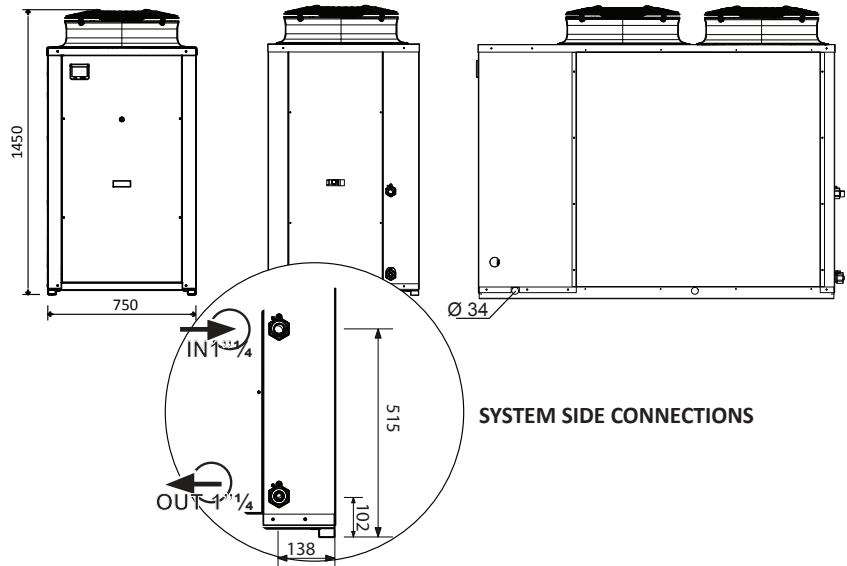


Mod.		A	B	C	D
VT9	D HD	40	30	23	M8
VT15	DA HDA	50	30	28,5	M10

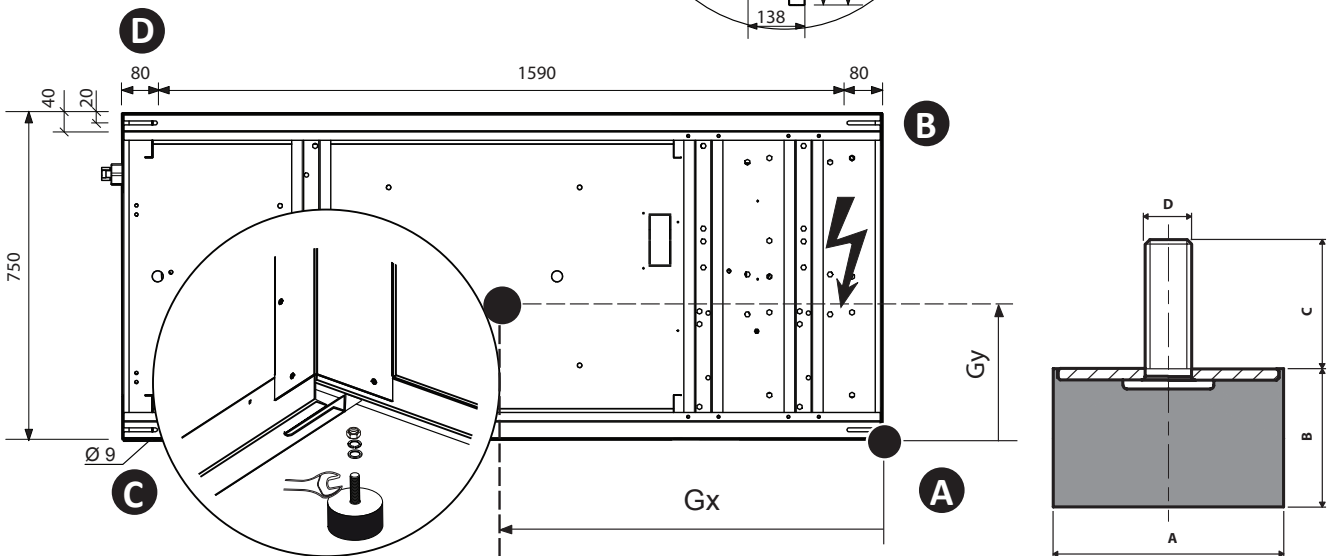
3.13. ANL 102 ÷ 202 version D|DA / HD|HDA



DESUPERHEATER CONNECTIONS



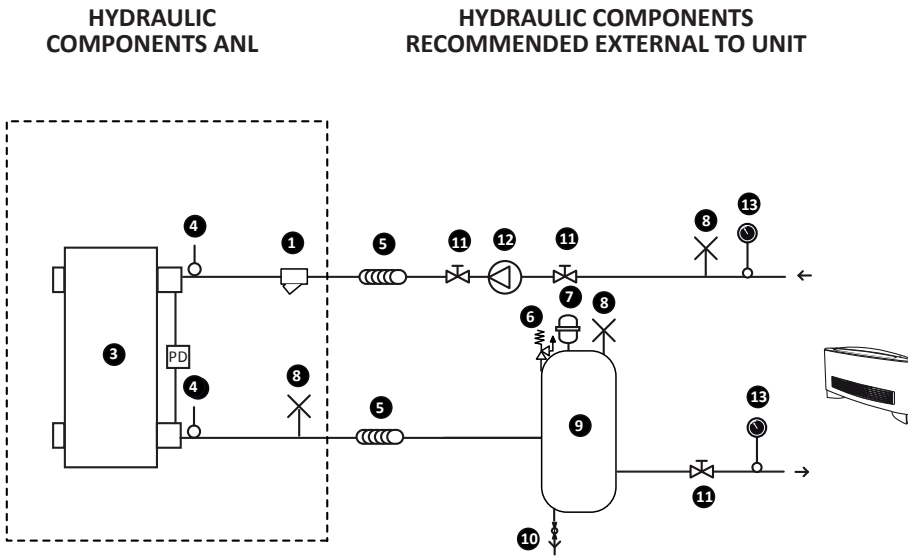
SYSTEM SIDE CONNECTIONS



Mod.	A	B	C	D
VT15	50	30	28,5	M10

4. TYPICAL HYDRAULIC CIRCUITS

4.1. INTERNAL AND EXTERNAL HYDRAULIC CIRCUIT ANL "oo" | "H" (standard)



COMPONENTS PROVIDED AS STANDARD

1	Water filter
2	Differential pressure switch
3	Plate heat exchanger
4	Water temperature sensor (IN/OUT)
8	Air vent

COMPONENTS NOT PROVIDED AND RESPONSIBILITY OF THE INSTALLER

5	Anti-vibration joints
6	Safety valve
7	Expansion tank
9	System buffer tank
10	Drain valve
11	Isolating valve
12	Pump
13	Gauge



WARNING

The selection and installation of components external to the ANL °|H unit are the responsibility of the installer and must be carried out in accordance with good working practices and applicable standards of the country of destination.



WARNING

The hydraulic piping to the unit must be adequately sized for the required flow rate. The water flow rate through the heat exchanger must always be constant.



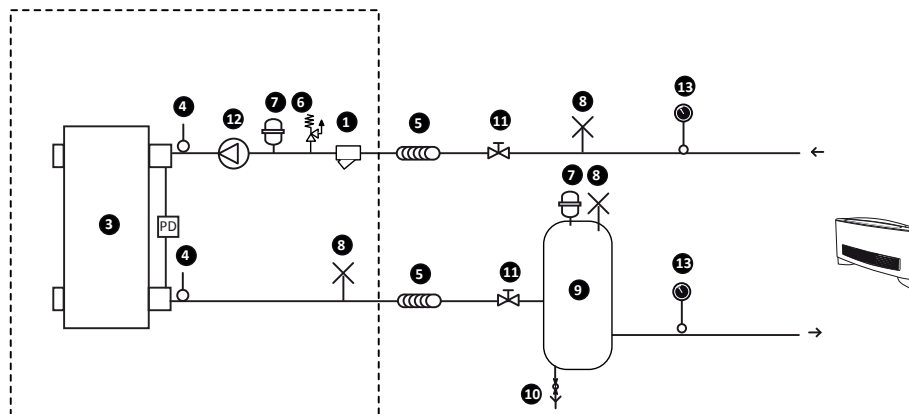
WARNING

Carefully clean the system prior to connection to the unit. This cleaning eliminates welding slag, dirt, rust or any other impurities from the piping. These impurities may otherwise be deposited within the unit and cause a malfunction. The connecting piping must be adequately supported so as not to impose any weight onto the unit.

4.2. INTERNAL AND EXTERNAL HYDRAULIC CIRCUIT ANL "°P|°N" / "HP|HN"

HYDRAULIC COMPONENTS ANL

HYDRAULIC COMPONENTS RECOMMENDED EXTERNAL TO UNIT



COMPONENTS PROVIDED AS STANDARD

- | | |
|----|-----------------------------------|
| 1 | Water filter |
| 2 | Differential pressure switch |
| 3 | Plate heat exchanger |
| 4 | Water temperature sensor (IN/OUT) |
| 6 | Safety valve |
| 7 | Expansion tank |
| 8 | Air vent |
| 12 | Pump |

COMPONENTS NOT PROVIDED AND RESPONSIBILITY OF THE INSTALLER

- | | |
|----|--|
| 5 | Anti-vibration joints |
| 7 | Additional expansion tank (if necessary) |
| 9 | System buffer tank |
| 10 | Drain valve |
| 11 | Isolating valve |
| 13 | Gauge |



WARNING

The selection and installation of components external to the ANL°P|N /ANLHP|HN unit are the responsibility of the installer and must be carried out in accordance with good working practices and applicable standards of the country of destination.



WARNING

The hydraulic piping to the unit must be adequately sized for the required flow rate. The water flow rate through the heat exchanger must always be constant.



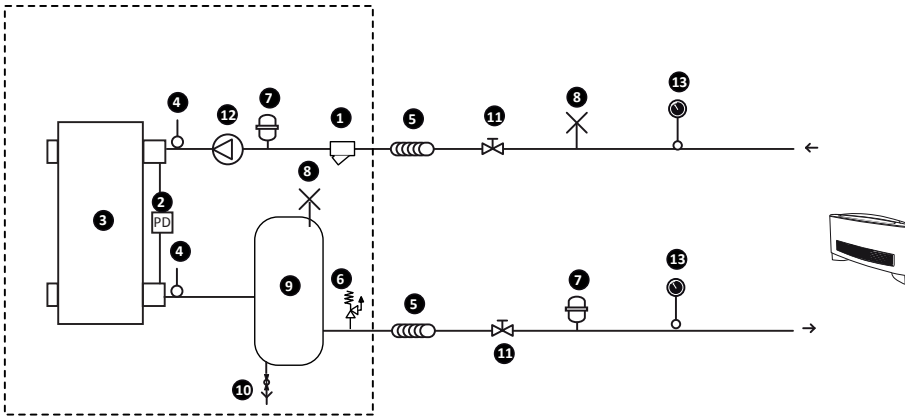
WARNING

Carefully clean the system prior to connection to the unit. This cleaning eliminates welding slag, dirt, rust or any other impurities from the piping. These impurities may otherwise be deposited within the unit and cause a malfunction. The connecting piping must be adequately supported so as not to impose any weight onto the unit.

4.3. INTERNAL AND EXTERNAL HYDRAULIC CIRCUIT ANL "°A|°Q" / "HA|HQ"

HYDRAULIC COMPONENTS ANL

HYDRAULIC COMPONENTS RECOMMENDED EXTERNAL TO UNIT



COMPONENTS PROVIDED AS STANDARD ANL STANDARD

1	Water filter
2	Differential pressure switch / Flow switch (ANL°A HA 020...040)
3	Plate heat exchanger
4	Water temperature sensor (IN/OUT)
6	Safety valve
7	Expansion tank
8	Air vent
9	System buffer tank
12	Pump

COMPONENTS NOT PROVIDED AND RESPONSIBILITY OF THE INSTALLER

5	Anti-vibration joints
7	Additional expansion tank (if necessary)
10	Drain valve
11	Isolating valve
13	Gauge



WARNING

The selection and installation of components external to the ANL°A|Q /ANLHA|HQ unit are the responsibility of the installer and must be carried out in accordance with good working practices and applicable standards of the country of destination.



WARNING

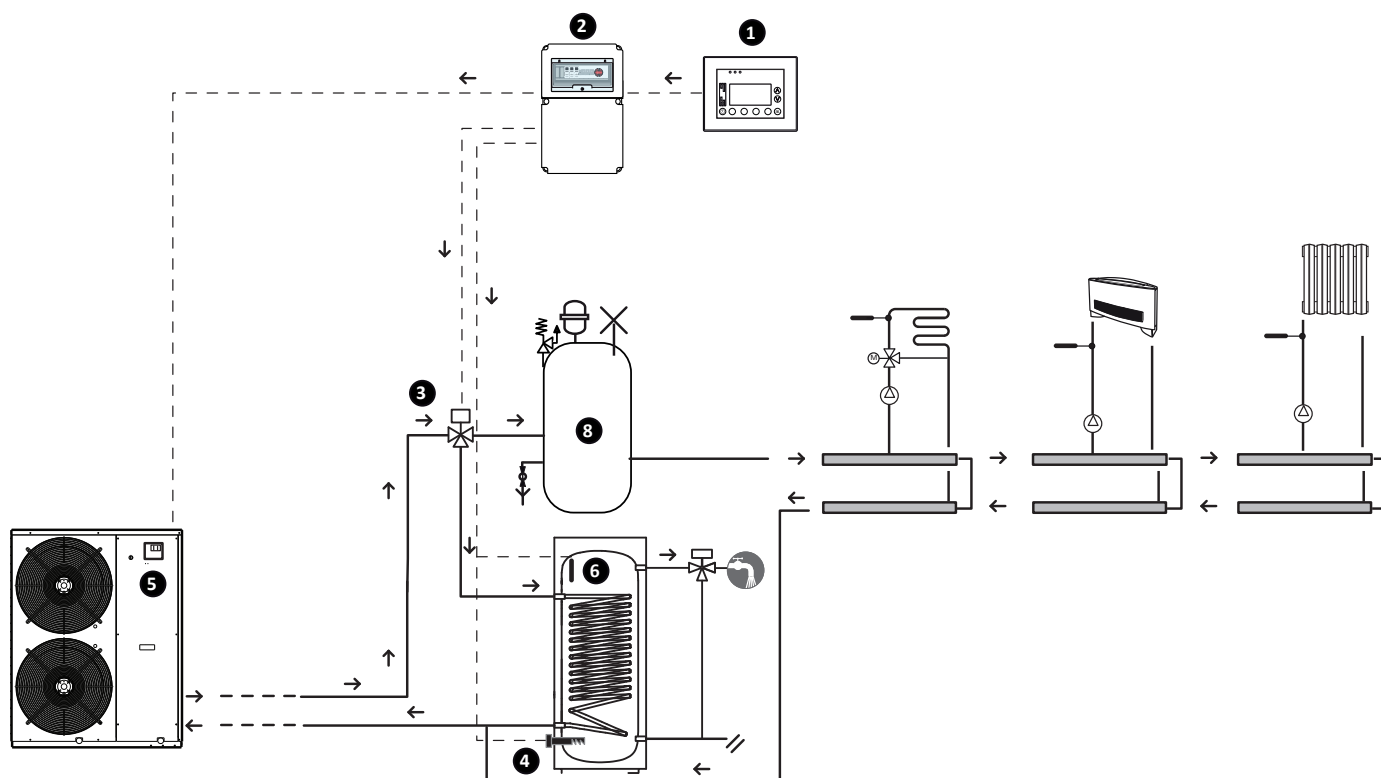
The hydraulic piping to the unit must be adequately sized for the required flow rate. The water flow rate through the heat exchanger must always be constant.



WARNING

Carefully clean the system prior to connection to the unit. This cleaning eliminates welding slag, dirt, rust or any other impurities from the piping. These impurities may otherwise be deposited within the unit and cause a malfunction. The connecting piping must be adequately supported so as not to impose any weight onto the unit.

4.4. SYSTEM EXAMPLE FOR DHW PRODUCTION WITH ANL50H° WITH ACCESSORY VMF-ACS



ANL050H°	
VMF SYSTEM for the CONTROL AND PRODUCTIONS OF DHW (ACCESSORIES) ⁹	
1	E5 (white or black)
VMF-ACS3KTN 6KTN 8KTN Control of:	
2	- 3 way valve - Sensor DHW storage tank - Immersion heater DHW storage tank (for integration and anti-legionella cycle)
3	3 way valve (not supplied)
4	Immersion heater DHW storage tank (not supplied) (for integration and anti-legionella cycle)
5	Interface board RS485 (ACCESSORY MODU-485A) ¹⁰
6	DHW storage tank (not supplied)
8	System buffer tank (not supplied)

⁹ For further information refer to the specific VMF system documentation available on the website:
www.aermec.com

¹⁰ Accessory required for the unit to communicate with the VMF system

**WARNING**

Confirm the hydraulic integrity of the joints.

WARNING

It is recommended to repeat this procedure after the unit has operated for a few hours and to periodically check the system pressure. Charging to be done with unit off (pump OFF).

4.5. SYSTEM CHARGING

Before commencing the charging procedure position the main isolator of the unit in the OFF position.

1. Ensure that the system drain valve is closed
2. Open all the system air vents and of the terminal units
3. Open the system isolating valves
4. Start filling slowly opening the system water

5. When water exits the terminal units air vents close them and continue charging until the required system operating pressure is reached.

4.6. SYSTEM DRAINING

1. Before commencing draining the draining procedure position the main isolator of the unit in the OFF position
2. Ensure the system water charging valve is closed
3. Open the system drain valve external to the unit and all the system air vents and of the terminal units.

5. ELECTRICAL CONNECTIONS

The ANL units are fully factory wired and only require connection to the power supply network, downstream of an isolator, in accordance with the applicable wiring standards of the country of installation.

It is recommended to check the following items:

1. The electrical network is capable of meeting the electrical input data shown in the table below.
2. The unit is only powered up on completion of any hydraulic and electrical works.
3. Comply with the indicated phasing and earth requirements.
4. The power supply cable must have the appropriate protection against short circuits, residual current and earth leakage with suitable isolation from other devices.
5. The tolerance on the power supply voltage is $\pm 10\%$ of the nominal voltage rating of the unit (for three phase units a maximum imbalance of 3% between phases is permitted). If these values are not met please contact the power supply company.
6. For the electrical connections use double insulated cables in accordance with applicable wiring standards.

MANDATORY REQUIREMENTS

1. A magneto-thermal circuit breaker conforming to IEC-EN standards (contact aperture minimum 3 mm) is required, with adequate protection in accordance with the data provided in the following table, to be installed as close as possible to the unit.
2. An effective earth connection is required. The manufacturer cannot be held responsible for any damages caused by lack of, or inadequate, earthing of the unit.
3. For three phase units check the correct cable phasing.

The cable cross sections shown in the following table are the recommended values based on a maximum 50 m cable length.



All electrical works must be carried out by PERSONNEL WITH THE APPROPRIATE LEGAL QUALIFICATIONS, trained and aware of the risks relating to such works.

The design of the cabling and related components must be carried out by PERSONNEL WITH



APPROPRIATE QUALIFICATIONS TO DESIGN ELECTRICAL INSTALLATIONS, following international and national standards of the location the unit is installed, in accordance with current legal requirements.



For installation details refer to the electrical wiring schematics supplied with the unit. The electrical wiring schematic together with the manuals must be conserved with care and MADE AVAILABLE FOR FUTURE REFERENCE.



The weatherproof seals of the equipment must be checked before making electrical connections and the unit must only be powered on completion of all electrical and hydraulic works.

For longer cable lengths or different types of cable installations, the DESIGNER is responsible for correctly sizing the isolator, circuit breaker, earthing protection and cable sizes, based on:

- Length
- Type of cable
- Electrical input of the unit, distance and operating ambients.



WARNING

Using the water piping to earth the unit is not permitted.

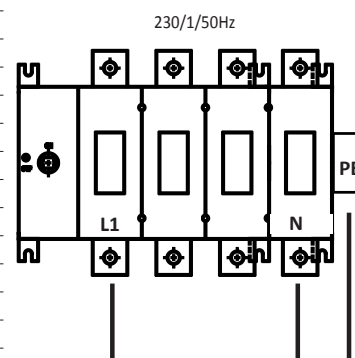
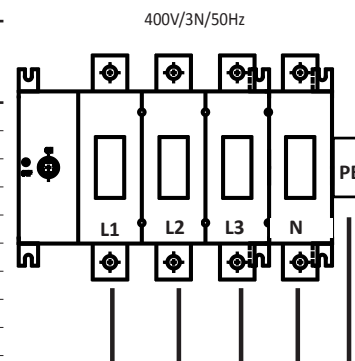


WARNING

Verify that all terminals are tight on power carrying conductors before first start-up and 30 days after putting into service. Afterwards check twice yearly. Loose terminals can result in overheating of cables and components..

6. ELECTRICAL DATA

ANL° H	Power supply	Version	Compressors [n°]	Fans [n°]	TOTAL INPUT		RECOMMENDED CABLE CROSS SECTION						
					L.R.A.	F.L.A.	SEZ. A		SEZ. B	EARTH	IL		
					[A]	[A]	phases [n°]	cables per phase [n°]	Cross section [mm²]	Total cables [n°]	[mm²]	[mm²]	[A]
020	230V/1/50Hz	°	1	1	59,5	16,5	1	1	4	2	0,5	4	25
		P	1	1	26,5	17,5	1	1	4	2	0,5	4	25
025	230V/1/50Hz	°	1	1	62,5	16,5	1	1	4	2	0,5	4	25
		P	1	1	63,5	17,5	1	1	4	2	0,5	4	25
030	230V/1/50Hz	°	1	1	83,7	19,7	1	1	6	2	0,5	6	25
		P	1	1	84,7	20,7	1	1	6	2	0,5	6	25
040	230V/1/50Hz	°	1	1	98,7	23,7	1	1	6	2	0,5	6	32
		P	1	1	99,7	24,7	1	1	6	2	0,5	6	32
020	400V/3N/50Hz	°	1	1	26,5	6,0	3+N	1	2,5	4	0,5	2,5	16
		P	1	1	27,5	7,0	3+N	1	2,5	4	0,5	2,5	16
025	400V/3N/50Hz	°	1	1	32,5	6,0	3+N	1	2,5	4	0,5	2,5	16
		P	1	1	33,5	7,0	3+N	1	2,5	4	0,5	2,5	16
030	400V/3N/50Hz	°	1	1	35,7	6,7	3+N	1	2,5	4	0,5	2,5	16
		P	1	1	36,7	7,7	3+N	1	2,5	4	0,5	2,5	16
040	400V/3N/50Hz	°	1	1	48,7	8,7	3+N	1	2,5	4	0,5	2,5	16
		P	1	1	49,7	9,7	3+N	1	2,5	4	0,5	2,5	16
050	400V/3N/50Hz	°	1	2	65,3	11,3	3+N	1	4	4	0,5	4	16
		P	1	2	67,3	13,3	3+N	1	4	4	0,5	4	16
		N Q	1	2	68,0	14,0	3+N	1	4	4	0,5	4	16
070	400V/3N/50Hz	°	1	2	75,3	13,5	3+N	1	4	4	0,5	4	16
		P	1	2	77,3	15,5	3+N	1	4	4	0,5	4	16
		N Q	1	2	78,0	16,2	3+N	1	4	4	0,5	4	16
080	400V/3N/50Hz	°	1	2	102,3	16,3	3+N	1	6	4	0,5	6	25
		P	1	2	104,3	18,3	3+N	1	6	4	0,5	6	25
		N Q	1	2	105,0	19,0	3+N	1	6	4	0,5	6	25
090	400V/3N/50Hz	°	1	2	96,3	17,3	3+N	1	6	4	0,5	6	25
		P	1	2	98,3	19,3	3+N	1	6	4	0,5	6	25
		N Q	1	2	99,0	20,0	3+N	1	6	4	0,5	6	25
100	400V/3N/50Hz	°	2	2	76,0	22,0	3+N	1	10	4	0,5	10	25
		P	2	2	77,4	23,4	3+N	1	10	4	0,5	10	25
		N Q	2	2	78,8	24,8	3+N	1	10	4	0,5	10	25
150	400V/3N/50Hz	°	2	2	87,0	26,0	3+N	1	16	4	0,5	16	45
		P	2	2	89,8	28,8	3+N	1	16	4	0,5	16	45
		N Q	2	2	90,5	29,5	3+N	1	16	4	0,5	16	45
200	400V/3N/50Hz	°	2	2	117,0	34,0	3+N	1	16	4	0,5	16	45
		P	2	2	119,8	36,8	3+N	1	16	4	0,5	16	45
		N Q	2	2	120,5	37,5	3+N	1	16	4	0,5	16	45



LEGEND

F.L.I.:	Maximum power input
F.L.A.:	Maximum current input
L.R.A.:	Starting current
Sez. A:	Power supply connection
3+N:	3 phase + Neutral
Sez. B:	Control and safeties connection
EARTH:	Earth connection to the unit
IL:	Main isolator

7. ELECTRICAL POWER SUPPLY CONNECTIONS



WARNING

CHECKS AND FIRST START-UP

It is reminded that for units of this series, if requested by the Aermec client or the legal owner and only on ITALIAN territory, free start-up is provided by the regional Aermec technical assistance service. The start-up must be previously agreed based on the intended time of completion of installation. Before the start-up all the works (electrical and hydraulic connections, filling and venting of air in the system) must be completed.

- Before making the electrical connections ensure that the isolator is open.
- Open the front control panel.
- Use the holes provided in the lower part of the cabinet for the electrical power supply and for other external wiring connections.
- Enter cables into the control panel only through the apertures provided.
- Avoid direct contact with un-insulated copper tubes and compressors.
- Identify the terminals for electrical connection with reference to the wiring diagram provided loose with the unit.
- Take the power cable into the control panel and connect to terminals U-N and PE with respect to (U) phase, (N) neutral, (PE) earth in the case of single phase units (230V/50Hz), U-V-W for phases, N for neutral and PE for earth in the case of three phase units (400V/3N/50Hz).
- Replace the inspection panels.
- Ensure that all protection removed for the electrical connection are replaced before powering the unit.
- Place the main isolator (external to the unit) to "ON".

8. CHECKS AND FIRST START-UP



WARNING

Before carrying out the following checks ensure the unit is disconnected from the power supply. Ensure that the main isolator is in the OFF position and locked in that position with appropriate warning label attached. Before starting the procedures check for the absence of voltage with a voltmeter or phase checker.

8.1. PREPARING FOR FIRST START-UP

It is reminded that for units of this series, if requested by the Aermec client or the legal owner and only on ITALIAN territory, free start-up is provided by the regional Aermec technical assistance service. The start-up must be previously agreed based on the intended time of completion of installation. Before the start-up all the works (electrical and hydraulic connections, filling and venting of air in the system) must be completed.

8.2. START-UP

8.2.1. PRELIMINARY CHECKS BEFORE POWERING UP

Check:

1. All safety precautions have been followed.
2. The unit has been appropriately fixed to the support base.
3. Minimum clearance spaces have been observed.
4. Power supply cables are correctly sized and capable of supporting the electrical requirements of the unit (see section on electrical data) and that the unit is correctly earthed.
5. All electrical connections are correctly terminated and tightened.

8.2.2. CHECKS TO BE DONE WHEN POWERED UP



1. Apply power to the unit by turning the main isolator to the ON position. The display will power up after several seconds after applying power, check that the operating status is on OFF (OFF BY KEYB on the lower part of the display).
2. Check with a tester that the power supply voltages on the phases U-V-W are $400V \pm 10\%$, check that the phase imbalance is not greater than 3%.
3. Check that the connections made by the installer comply with the documentation.
4. Check that the compressor crankcase heater(s) are operating by measuring the increase of oil sump temperature. The heater(s) must be in operation for at least 12 hours before starting the compressor, and in all cases the sump oil temperature must be 10-15 K above ambient temperature.

HYDRAULIC CIRCUIT

1. Check that all hydraulic connections have been correctly installed, that the instructions on the labels have been followed, and that a mechanical filter has been installed on the inlet to the evaporator. (Mandatory component otherwise the warranty will be voided).
2. Confirm that the pump(s) are operating and that the flow rate is sufficient to make the contact on the flow switch.
3. Check the water flow rate by measuring the differential pressure across the evaporator inlet and outlet and calculating the flow from the evaporator pressure drop diagram provided in the documentation.
4. Check the correct functioning of any flow switch installed; close the isolating valve on the evaporator outlet and observe the result on the unit display panel; open the valve and reset the flow trip alarm.

8.3. FIRST START-UP

After having rigorously followed the above checks it is possible to start the unit:

1. Close the electrical panel.
2. Turn the main isolator to ON.
3. Press the key ON  for 3 seconds to start the unit. Pressing the key ON  displays the water temperature and the operating mode of the unit. Check the operating setpoint parameters and reset any alarms present. After a few minutes the unit will start.

8.3.1. CHECKS WITH THE UNIT RUNNING

REFRIGERANT CIRCUIT

CHECK:

- That the compressor input current of the compressors is less than that indicated in the table of electrical data.
- That in three phase models the compressor noise is not abnormal, indicating a reverse rotation. In this case reverse one of the phases.
- That the voltage values are within the determined limits and that the phase imbalance (three phase power) is less than 3%.
- Presence of any refrigerant leaks, in particular from connections to gauges, pressure transducers and pressostats. (Vibrations during transportation may have loosened connections).
- Superheat
Compare the compressor suction temperature with a contact temperature sensor reading with the temperature of the low pressure gauge (saturated suction temperature corresponding to the evaporating pressure). The difference between these two temperatures is the superheat value. The optimal values are between 4 and 8 K.
- Discharge temperature
If the values of sub-cooling and superheat are normal the temperature measured in the discharge line from the compressor must be 30/40 K above the condensing temperature.








SAFETY AND CONTROL DEVICES

CHECK:

- The manual high pressure pressostat, which stops the compressor and generates an alarm when the discharge pressure exceeds the preset value. The correct operation is checked by closing the refrigerant isolating valve to the heat exchanger (in cooling mode) and keeping a check on the high pressure gauge, verify the operation corresponds to the rated value. Warning: in the event the pressostat does not operate at the rated value immediately stop the compressor and investigate the cause. Reset is manual but can only be done when the pressure drops below the differential setting. (For the values of the trip and differential setting refer to the technical manual).
- Anti-freeze protection
The electronic control of the anti-freeze protection is from the water temperature sensor leaving the evaporator prevents freezing of water when the temperature is too low. The operation of the anti-freeze protection can be checked by increasing the setpoint value until it is above the temperature of leaving water and checking the water temperature with a high precision sensor. Confirm that the unit stops and generates the responding alarm. After this check reset the anti-freeze setpoint to the original value.

8.4. CHANGE OF SEASON





8.5. CHANGE OF SEASON FROM UNIT CIRCUIT BOARD

Access the **USER SET** menu with the key  and confirm the password 000 pressing key . Using the arrow key  display the parameter **STA** index 0 of the menu and select pressing the key . Using the arrow keys  select the value for either: **VALUE 0** cooling mode operation, or, **VALUE 1** heating mode operation. Confirm the selection pressing key  and exit the menu with the key .

8.6. CHANGE OF SEASON FROM PR3 REMOTE PANEL (ACCESSORY)

If the PR3 remote panel (accessory) is installed it must be enabled after making the electrical connections.

8.6.1. REMOTE PANEL ENABLING

Access the **INSTALLER SET** menu with the key  and insert the menu access password: **password installer 030**. Using the arrow keys  display the parameter **PAN** index 9 of the menu and select pressing the key . Using the arrow keys  select from the desired values of:

VALUE 1:

- **SEASON CHANGE** from the unit circuit board
- **ON/OFF CONTROL** from the PR3

VALUE 2:

- **SEASON CHANGE** controlled from the PR3
- **ON/OFF CONTROL** from the unit

VALUE 3:

- **SEASON CHANGE** controlled from the PR3
- **ON/OFF CONTROL** from the PR3

Confirm the selection pressing key  and exit the menu with the key 

Once the PR3 remote panel is enabled the change of season selection can be made directly from the switch (fig.1). The unit will automatically switch on and off with the selected operating mode.

For further information refer to the USER manual.



(fig.1)

9. OPERATING CHARACTERISTICS

9.1. COOLING SETPOINT

(Factory default) = 7°C, $\Delta t = 5$ K.

9.2. HEATING SETPOINT

(Factory default) = 45°C, $\Delta t = 5$ K.

In the event of a momentary power interruption the selected operating mode will be retained in memory.

9.3. COMPRESSOR DELAY TIMERS

To avoid excessive compressor starts two functions are provided:

- Minimum time from last stop 60 seconds in cooling mode.
- Minimum time from last start 300 seconds in heating mode.

9.4. CIRCULATING PUMPS

The wiring schematic provides outputs to control the circulating pumps. The system side pump starts immediately and after 30 seconds of operation, when the water flow is stabilised, the pressure differential/flow switch control function is enabled. If no alarms are present the unit will start.

9.5. ANTI-FREEZE ALARM

The alarm ¹¹ is always active even in standby mode. To prevent damage to the plate heat exchanger by freezing of the water within the unit is stopped and an alarm raised if the water temperature drops below the minimum anti-freeze setpoint of 3°C. The unit can only re-start after a manual reset and if the anti-freeze sensor reads a water temperature above 4°C ¹². With the unit in off mode and with a water temperature below 4°C the factory standard fitted electric heaters on the heat exchanger are turned on, and turned off when the water temperature exceeds 5°C. The water pump always remains active.

9.6. WATER FLOW ALARM

The unit has a low water flow rate alarm using a factory fitted differential pressure switch or flow switch. This safety activates after the first 30 seconds of pump operation if the water flow rate is not sufficient. The operation of this alarm stops the compressors and the pump.



WARNING

¹¹ The anti-freeze setpoint can only be adjusted by an authorised service centre and only after verifying that the hydraulic circuit has the correct % of anti-freeze solution.

¹² If this alarm occurs immediately call the authorised technical service assistance.



WARNING

FOR 230V/1/50Hz UNITS:

The unit is provided with a compressor soft starter. This device contains capacitors that could overheat through repeated quick starts. If power supply is removed wait at least 3 minutes before powering up.

**WARNING**

For 230V/1/50Hz units with soft-start, if power is removed for reasons of fault or maintenance, it is required to wait 5 minutes before re-applying power to the unit to ensure proper operation.

**WARNING**

We recommend a service log book is provided for the unit (responsibility of the user) to keep records of any works on the unit, which will aid maintenance and repair works. Note in the service log book date, type of works (routine maintenance, inspection or repair), describing the event and the measures taken.

**WARNING**

It is **FORBIDDEN** to charge with refrigerant circuit with a refrigerant type different to that indicated. Using a different refrigerant can cause serious damage to the unit.

10. ROUTINE MAINTENANCE

It is forbidden to carry out any cleaning operation before isolating from the power supply ¹.

Confirm no voltage is present before commencing works.

Periodic maintenance is a fundamental requirement to ensure efficient unit operation both in terms of operation and energy efficiency.

The fundamental required annual checks are:

10.1. HYDRAULIC CIRCUIT**CHECK:**

1. Water circuit is filled.
2. Water filter is clean.
3. Operation of the differential pressure or flow switch.
4. Absence of air in the system (vent).
5. Water flow rate is always constant through the evaporator.
6. Condition of the hydraulic piping insulation.
7. The percentage of anti-freeze liquid, as may be required.

10.2. ELECTRIC CIRCUIT**CHECK:**

1. Operation of safeties.
2. Power supply voltage.
3. Electrical power input.
4. Tightness of connections and terminals.
5. Operation of the compressor crankcase heater.

10.3. REFRIGERANT CIRCUIT**CHECK:**

1. State of compressors.
2. Efficiency of the plate heat exchanger.
3. Operating pressures.
4. Leaks to confirm the correct operating refrigerant charge.
5. Operation of the high and low pressure presostats
6. Efficient operation of the filter drier.

10.4. MECHANICAL CHECKS**CHECK:**

1. **Tightness of screws**, of compressors and electrical panel and external panelling of the unit. Poor fixings cause noise and abnormal vibrations.
2. The state of the unit structure. Treat any parts showing signs of corrosion with the appropriate paints to reduce or eliminate rust.

11. SPECIAL MAINTENANCE

The ANL units are factory charged with R410A and tested. In normal operation they therefore do not require any intervention from the technical assistance service in relation to the refrigerant charge. Over time some small leaks can appear, resulting in refrigerant discharges of the circuit and causing a malfunction of the unit. In this case the leaks have to be found and repaired and the unit recharged in accordance, and as required, under current legislation and good working practices.

12. DISPOSAL



Ensure that the disposal of the unit is carried out in accordance with the current legal requirements.






13. PROCEDURE FOR SELECTION OF SYSTEM TYPE

Several parameters of the MODU CONTROL board have to be set, based on the type of system the unit is installed.

These changes of parameters are summarised in the table below to permit the installer to make the appropriate selections of the unit's electronic circuit board.

13.1. HOW TO MODIFY A USER MENU PARAMETER

To access the **USER** setting press the key  and confirm the password 000 pressing the key . The display will show the parameters of the **USER** index as three identifying characters; the index remains displayed for a second and then is replaced by the value of the parameter it relates to.

To move to the following parameter use the arrow keys . To modify a parameter press the key , modify the value using the arrow keys  and confirm the modification pressing the key . To exit the menu press the key .

13.2. HOW TO MODIFY AN INSTALLER MENU PARAMETER

To enter and modify the **INSTALLER** menu follow the same procedure as the **USER** menu above.

Password INSTALLER menu: 030

QUESTION	ANSWER	WHAT TO DO
(1) What type of terminals are installed in the heating circuit?	• The unit is a cooling only model	• Go to question 2
	• Radiant panels	• Enter in parameter StC (index 3 menu USER) with the value of 35 °C
	• Fan coil units or low temperature radiators	• Enter in parameter StC (index 3 menu USER) with the value of 45 °C (default value)
	• Other applications	• Enter in parameter StC (index 3 menu USER) with the value of 55 °C
(2) Is the remote control accessory panel installed (PR3)?	• Not installed	• Go to question 3
	• Installed	• Enter in parameter PAN (index 9 menu INSTALLER) with the appropriate value: Value (1): • Season selection controlled from the unit circuit board • ON/OFF control from the PR3 Value (2): • Season selection controlled from the PR3 • ON/OFF control from the unit circuit board Value (3): • Season selection controlled from the PR3 • ON/OFF control from the PR3
(3) Is domestic hot water production present?	• Not present	• Go to question 5
	• Present	• Enter in parameter ASA (menu INSTALLER) with the value (1)
(4) In the domestic hot water circuit is a three way diverting valve present?	• Not present	• Go to question 5
	• Present	• Enter in parameter AAS (index C menu INSTALLER) with the appropriate value (in seconds): this parameter shows the reversing time for the three way diverting valve in the circuit for the production of domestic hot water
(5) Is an ambient thermostat present?	• Not present	• No function
	• Present	• This parameter enables a digital contact ID (shown on the electrical schematic with the reference TRA) onto which to connect an ambient thermostat with which to disable the compressors and electric heaters. Enter in parameter trA (index D menu INSTALLER), with the appropriate value selecting from: 1. Value (1 or 2): ENABLED 2. Value (0 or 3): DISABLED 3. It is reminded that the OPEN state of the contact represents: • stops compressors and heaters if the parameter value is set to 1 • stops compressors, pump and heaters if the parameter value is set to 2 • pump alarm (as in the previous software version), if the parameter value is set to 3



WARNING

For more information refer to the **USER manual** provided with the unit and available on the website www.aermec.com

Aermec S.p.A.	ANL020		ANL020M		ANL020A		ANL020AM		ANL020P	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	0	0	0	0	0	0	0	0	0	0
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0
Indoor sound power dB(A)	0	0	0	0	0	0	0	0	0	0
Outdoor sound power dB(A)	61	61	61	61	61	61	61	61	61	61
Colder climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL020PM		ANL020H		ANL020HM		ANL020H		ANL020HM	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	0	0	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	0	0	-	6	-	6	-	6	-	6
Seasonal energy efficiency %	0	0	-	130	-	130	-	130	-	130
Annual energy consumption kWh	0	0	-	9535	-	9535	-	9535	-	9535
Indoor sound power dB(A)	0	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	61	61	-	61	-	61	-	61	-	61
Colder climate conditions										
Rated heat output kW	0	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	0	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	0	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	0	0	-	8	-	8	-	8	-	8
Seasonal energy efficiency %	0	0	-	158	-	158	-	158	-	158
Annual energy consumption kWh	0	0	-	6765	-	6765	-	6765	-	6765

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL020HA		ANL020HAM		ANL020HA		ANL020HAM		ANL020HP	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	6	-	6	-	6	-	6	-	6
Seasonal energy efficiency %	-	133	-	133	-	133	-	133	-	133
Annual energy consumption kWh	-	9320	-	9320	-	9320	-	9320	-	9320
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	61	-	61	-	61	-	61	-	61
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	8	-	8	-	8	-	8	-	8
Seasonal energy efficiency %	-	165	-	165	-	165	-	165	-	165
Annual energy consumption kWh	-	6478	-	6478	-	6478	-	6478	-	6478

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL020HPM		ANL020HP		ANL020HPM		ANL025		ANL025M	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	0	0	0	0
Rated heat output kW	-	6	-	6	-	6	0	0	0	0
Seasonal energy efficiency %	-	133	-	133	-	133	0	0	0	0
Annual energy consumption kWh	-	9320	-	9320	-	9320	0	0	0	0
Indoor sound power dB(A)	-	0	-	0	-	0	0	0	0	0
Outdoor sound power dB(A)	-	61	-	61	-	61	61	61	61	61
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	0	0	0	0
Seasonal energy efficiency %	-	0	-	0	-	0	0	0	0	0
Annual energy consumption kWh	-	0	-	0	-	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	-	8	-	8	-	8	0	0	0	0
Seasonal energy efficiency %	-	165	-	165	-	165	0	0	0	0
Annual energy consumption kWh	-	6478	-	6478	-	6478	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL025A		ANL025AM		ANL025P		ANL025PM		ANL025H		
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C*	35 °C	
Average climatic conditions											
Energy efficiency class	0	0	0	0	0	0	0	0	0	-	A+
Rated heat output kW	0	0	0	0	0	0	0	0	0	-	7
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	-	132
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	-	10956
Indoor sound power dB(A)	0	0	0	0	0	0	0	0	0	-	0
Outdoor sound power dB(A)	61	61	61	61	61	61	61	61	61	-	61
Colder climate conditions											
Rated heat output kW	0	0	0	0	0	0	0	0	0	-	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	-	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	-	0
Warmer climate conditions											
Rated heat output kW	0	0	0	0	0	0	0	0	0	-	9
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	-	162
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	-	7422

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL025HM		ANL025H		ANL025HM		ANL025HA		ANL025HAM	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	7	-	7	-	7	-	6	-	6
Seasonal energy efficiency %	-	132	-	132	-	132	-	136	-	136
Annual energy consumption kWh	-	10956	-	10956	-	10956	-	9115	-	9115
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	61	-	61	-	61	-	61	-	61
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	9	-	9	-	9	-	9	-	9
Seasonal energy efficiency %	-	162	-	162	-	162	-	169	-	169
Annual energy consumption kWh	-	7422	-	7422	-	7422	-	7115	-	7115

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL025HA		ANL025HAM		ANL025HAS		ANL025HAMS		ANL025HP	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	6	-	6	-	6	-	6	-	6
Seasonal energy efficiency %	-	136	-	136	-	136	-	136	-	136
Annual energy consumption kWh	-	9115	-	9115	-	9115	-	9115	-	9115
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	61	-	61	-	61	-	61	-	61
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	9	-	9	-	9	-	9	-	9
Seasonal energy efficiency %	-	169	-	169	-	169	-	169	-	169
Annual energy consumption kWh	-	7115	-	7115	-	7115	-	7115	-	7115

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL025HPM		ANL025HP		ANL025HPM		ANL030		ANL030M	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	0	0	0	0
Rated heat output kW	-	6	-	6	-	6	0	0	0	0
Seasonal energy efficiency %	-	136	-	136	-	136	0	0	0	0
Annual energy consumption kWh	-	9115	-	9115	-	9115	0	0	0	0
Indoor sound power dB(A)	-	0	-	0	-	0	0	0	0	0
Outdoor sound power dB(A)	-	61	-	61	-	61	68	68	68	68
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	0	0	0	0
Seasonal energy efficiency %	-	0	-	0	-	0	0	0	0	0
Annual energy consumption kWh	-	0	-	0	-	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	-	9	-	9	-	9	0	0	0	0
Seasonal energy efficiency %	-	169	-	169	-	169	0	0	0	0
Annual energy consumption kWh	-	7115	-	7115	-	7115	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL030A		ANL030AM		ANL030P		ANL030PM		ANL030H	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	0	0	0	0	0	0	0	0	0	A+
Rated heat output kW	0	0	0	0	0	0	0	0	0	8
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	129
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	12812
Indoor sound power dB(A)	0	0	0	0	0	0	0	0	0	0
Outdoor sound power dB(A)	68	68	68	68	68	68	68	68	68	68
Colder climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	0	11
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	159
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	9243

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL030HM		ANL030H		ANL030HM		ANL030HA		ANL030HAM	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	8	-	8	-	8	-	8	-	8
Seasonal energy efficiency %	-	129	-	129	-	129	-	133	-	133
Annual energy consumption kWh	-	12812	-	12812	-	12812	-	12427	-	12427
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	68	-	68	-	68	-	68	-	68
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	11	-	11	-	11	-	11	-	11
Seasonal energy efficiency %	-	159	-	159	-	159	-	166	-	166
Annual energy consumption kWh	-	9243	-	9243	-	9243	-	8853	-	8853

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL030HA		ANL030HAM		ANL030HAS		ANL030HAMS		ANL030HP	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	8	-	8	-	8	-	8	-	8
Seasonal energy efficiency %	-	133	-	133	-	133	-	133	-	133
Annual energy consumption kWh	-	12427	-	12427	-	12427	-	12427	-	12427
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	68	-	68	-	68	-	68	-	68
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	11	-	11	-	11	-	11	-	11
Seasonal energy efficiency %	-	166	-	166	-	166	-	166	-	166
Annual energy consumption kWh	-	8853	-	8853	-	8853	-	8853	-	8853

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL030HPM		ANL030HP		ANL030HPM		ANL040		ANL040M	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	0	0	0	0
Rated heat output kW	-	8	-	8	-	8	0	0	0	0
Seasonal energy efficiency %	-	133	-	133	-	133	0	0	0	0
Annual energy consumption kWh	-	12427	-	12427	-	12427	0	0	0	0
Indoor sound power dB(A)	-	0	-	0	-	0	0	0	0	0
Outdoor sound power dB(A)	-	68	-	68	-	68	68	68	68	68
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	0	0	0	0
Seasonal energy efficiency %	-	0	-	0	-	0	0	0	0	0
Annual energy consumption kWh	-	0	-	0	-	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	-	11	-	11	-	11	0	0	0	0
Seasonal energy efficiency %	-	166	-	166	-	166	0	0	0	0
Annual energy consumption kWh	-	8853	-	8853	-	8853	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL040A		ANL040AM		ANL040P		ANL040PM		ANL040H		
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C*	35 °C	
Average climatic conditions											
Energy efficiency class	0	0	0	0	0	0	0	0	0	-	A+
Rated heat output kW	0	0	0	0	0	0	0	0	0	-	10
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	-	130
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	-	15892
Indoor sound power dB(A)	0	0	0	0	0	0	0	0	0	-	0
Outdoor sound power dB(A)	68	68	68	68	68	68	68	68	68	-	68
Colder climate conditions											
Rated heat output kW	0	0	0	0	0	0	0	0	0	-	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	-	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	-	0
Warmer climate conditions											
Rated heat output kW	0	0	0	0	0	0	0	0	0	-	14
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	-	161
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	-	11617

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL040HM		ANL040H		ANL040HM		ANL040HA		ANL040HAM	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	10	-	10	-	10	-	10	-	10
Seasonal energy efficiency %	-	130	-	130	-	130	-	133	-	133
Annual energy consumption kWh	-	15892	-	15892	-	15892	-	15534	-	15534
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	68	-	68	-	68	-	68	-	68
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	14	-	14	-	14	-	13	-	13
Seasonal energy efficiency %	-	161	-	161	-	161	-	168	-	168
Annual energy consumption kWh	-	11617	-	11617	-	11617	-	10338	-	10338

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL040HA		ANL040HAM		ANL040HAS		ANL040HAMS		ANL040HP	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	10	-	10	-	10	-	10	-	10
Seasonal energy efficiency %	-	133	-	133	-	133	-	133	-	133
Annual energy consumption kWh	-	15534	-	15534	-	15534	-	15534	-	15534
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	68	-	68	-	68	-	68	-	68
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	13	-	13	-	13	-	13	-	13
Seasonal energy efficiency %	-	168	-	168	-	168	-	168	-	168
Annual energy consumption kWh	-	10338	-	10338	-	10338	-	10338	-	10338

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL040HPM		ANL040HP		ANL040HPM		ANL050		ANL050A	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	0	0	0	0
Rated heat output kW	-	10	-	10	-	10	0	0	0	0
Seasonal energy efficiency %	-	133	-	133	-	133	0	0	0	0
Annual energy consumption kWh	-	15534	-	15534	-	15534	0	0	0	0
Indoor sound power dB(A)	-	0	-	0	-	0	0	0	0	0
Outdoor sound power dB(A)	-	68	-	68	-	68	69	69	69	69
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	0	0	0	0
Seasonal energy efficiency %	-	0	-	0	-	0	0	0	0	0
Annual energy consumption kWh	-	0	-	0	-	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	-	13	-	13	-	13	0	0	0	0
Seasonal energy efficiency %	-	168	-	168	-	168	0	0	0	0
Annual energy consumption kWh	-	10338	-	10338	-	10338	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL050N		ANL050P		ANL050Q		ANL050H		ANL050H3	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	0	0	0	0	0	0	-	A+	-	A+
Rated heat output kW	0	0	0	0	0	0	-	13	-	13
Seasonal energy efficiency %	0	0	0	0	0	0	-	134	-	134
Annual energy consumption kWh	0	0	0	0	0	0	-	20043	-	20043
Indoor sound power dB(A)	0	0	0	0	0	0	-	0	-	0
Outdoor sound power dB(A)	69	69	69	69	69	69	-	69	-	69
Colder climate conditions										
Rated heat output kW	0	0	0	0	0	0	-	0	-	0
Seasonal energy efficiency %	0	0	0	0	0	0	-	0	-	0
Annual energy consumption kWh	0	0	0	0	0	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	0	0	0	0	0	0	-	18	-	18
Seasonal energy efficiency %	0	0	0	0	0	0	-	167	-	167
Annual energy consumption kWh	0	0	0	0	0	0	-	14400	-	14400

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL050H		ANL050HA		ANL050HA3		ANL050HA		ANL050HA3		ANL050HA		ANL050HP	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions														
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	13	-	13	-	13	-	13	-	13	-	13	-	13
Seasonal energy efficiency %	-	134	-	136	-	136	-	136	-	136	-	136	-	136
Annual energy consumption kWh	-	20043	-	19749	-	19749	-	19749	-	19749	-	19749	-	19749
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	69	-	69	-	69	-	69	-	69	-	69	-	69
Colder climate conditions														
Rated heat output kW	-	0	-	0	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions														
Rated heat output kW	-	18	-	18	-	18	-	18	-	18	-	18	-	18
Seasonal energy efficiency %	-	167	-	173	-	173	-	173	-	173	-	173	-	173
Annual energy consumption kWh	-	14400	-	13901	-	13901	-	13901	-	13901	-	13901	-	13901

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL050HP		ANL050HQ		ANL050HQ		ANL070		ANL070A	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	0	0	0	0
Rated heat output kW	-	13	-	13	-	13	0	0	0	0
Seasonal energy efficiency %	-	136	-	128	-	128	0	0	0	0
Annual energy consumption kWh	-	19749	-	20983	-	20983	0	0	0	0
Indoor sound power dB(A)	-	0	-	0	-	0	0	0	0	0
Outdoor sound power dB(A)	-	69	-	69	-	69	69	69	69	69
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	0	0	0	0
Seasonal energy efficiency %	-	0	-	0	-	0	0	0	0	0
Annual energy consumption kWh	-	0	-	0	-	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	-	18	-	17	-	17	0	0	0	0
Seasonal energy efficiency %	-	173	-	163	-	163	0	0	0	0
Annual energy consumption kWh	-	13901	-	13934	-	13934	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL070N		ANL070P		ANL070Q		ANL070H		ANL070H	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	0	0	0	0	0	0	-	A+	-	A+
Rated heat output kW	0	0	0	0	0	0	-	16	-	16
Seasonal energy efficiency %	0	0	0	0	0	0	-	139	-	139
Annual energy consumption kWh	0	0	0	0	0	0	-	23781	-	23781
Indoor sound power dB(A)	0	0	0	0	0	0	-	0	-	0
Outdoor sound power dB(A)	69	69	69	69	69	69	-	69	-	69
Colder climate conditions										
Rated heat output kW	0	0	0	0	0	0	-	0	-	0
Seasonal energy efficiency %	0	0	0	0	0	0	-	0	-	0
Annual energy consumption kWh	0	0	0	0	0	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	0	0	0	0	0	0	-	22	-	22
Seasonal energy efficiency %	0	0	0	0	0	0	-	173	-	173
Annual energy consumption kWh	0	0	0	0	0	0	-	16990	-	16990

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL070HA			ANL070HA			ANL070HP			ANL070HP			ANL070HQ			
	Average temperature applications	Low temperature applications	55 °C*	Average temperature applications	Low temperature applications	35 °C	Average temperature applications	Low temperature applications	55 °C*	35 °C	Average temperature applications	Low temperature applications	55 °C*	35 °C	Average temperature applications	Low temperature applications
Average climatic conditions																
Energy efficiency class	-	A+	-	-	A+	-	-	A+	-	-	A+	-	-	A+	-	A+
Rated heat output kW	-	16	-	-	16	-	-	16	-	-	16	-	-	16	-	16
Seasonal energy efficiency %	-	142	-	-	142	-	-	142	-	-	142	-	-	135	-	135
Annual energy consumption kWh	-	23279	-	-	23279	-	-	23279	-	-	23279	-	-	24486	-	24486
Indoor sound power dB(A)	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
Outdoor sound power dB(A)	-	69	-	-	69	-	-	69	-	-	69	-	-	69	-	69
Colder climate conditions																
Rated heat output kW	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
Seasonal energy efficiency %	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
Annual energy consumption kWh	-	0	-	-	0	-	-	0	-	-	0	-	-	0	-	0
Warmer climate conditions																
Rated heat output kW	-	22	-	-	22	-	-	22	-	-	22	-	-	21	-	21
Seasonal energy efficiency %	-	180	-	-	180	-	-	180	-	-	180	-	-	172	-	172
Annual energy consumption kWh	-	16329	-	-	16329	-	-	16329	-	-	16329	-	-	16312	-	16312

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL070HQ		ANL080		ANL080A		ANL080N		ANL080P	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	0	0	0	0	0	0	0	0
Rated heat output kW	-	16	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	-	135	0	0	0	0	0	0	0	0
Annual energy consumption kWh	-	24486	0	0	0	0	0	0	0	0
Indoor sound power dB(A)	-	0	0	0	0	0	0	0	0	0
Outdoor sound power dB(A)	-	69	69	69	69	69	69	69	69	69
Colder climate conditions										
Rated heat output kW	-	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	-	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	-	0	0	0	0	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	-	21	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	-	172	0	0	0	0	0	0	0	0
Annual energy consumption kWh	-	16312	0	0	0	0	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL080Q		ANL080H		ANL080H		ANL080HA		ANL080HA3	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	0	0	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	0	0	-	21	-	21	-	21	-	21
Seasonal energy efficiency %	0	0	-	139	-	139	-	142	-	142
Annual energy consumption kWh	0	0	-	31213	-	31213	-	30554	-	30554
Indoor sound power dB(A)	0	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	69	69	-	69	-	69	-	69	-	69
Colder climate conditions										
Rated heat output kW	0	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	0	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	0	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	0	0	-	28	-	28	-	28	-	28
Seasonal energy efficiency %	0	0	-	173	-	173	-	180	-	180
Annual energy consumption kWh	0	0	-	21623	-	21623	-	20782	-	20782

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL080HA		ANL080HP		ANL080HP		ANL080HQ		ANL080HQ	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	21	-	21	-	21	-	20	-	20
Seasonal energy efficiency %	-	142	-	142	-	142	-	136	-	136
Annual energy consumption kWh	-	30554	-	30554	-	30554	-	30382	-	30382
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	69	-	69	-	69	-	69	-	69
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	28	-	28	-	28	-	28	-	28
Seasonal energy efficiency %	-	180	-	180	-	180	-	173	-	173
Annual energy consumption kWh	-	20782	-	20782	-	20782	-	21623	-	21623

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL090		ANL090A		ANL090N		ANL090P		ANL090Q	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	0	0	0	0	0	0	0	0	0	0
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0
Indoor sound power dB(A)	0	0	0	0	0	0	0	0	0	0
Outdoor sound power dB(A)	68	68	68	68	68	68	68	68	68	68
Colder climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL090H		ANL090H		ANL090HA		ANL090HA3		ANL090HA	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	23	-	23	-	23	-	23	-	23
Seasonal energy efficiency %	-	138	-	138	-	141	-	141	-	141
Annual energy consumption kWh	-	34433	-	34433	-	33701	-	33701	-	33701
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	68	-	68	-	68	-	68	-	68
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	31	-	31	-	31	-	31	-	31
Seasonal energy efficiency %	-	171	-	171	-	178	-	178	-	178
Annual energy consumption kWh	-	24220	-	24220	-	23267	-	23267	-	23267

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL090HP		ANL090HP		ANL090HQ		ANL090HQ		ANL102	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	0	0
Rated heat output kW	-	23	-	23	-	22	-	22	0	0
Seasonal energy efficiency %	-	141	-	141	-	136	-	136	0	0
Annual energy consumption kWh	-	33701	-	33701	-	33421	-	33421	0	0
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	0	0
Outdoor sound power dB(A)	-	68	-	68	-	68	-	68	76	76
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	0	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	0	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	0	0
Warmer climate conditions										
Rated heat output kW	-	31	-	31	-	30	-	30	0	0
Seasonal energy efficiency %	-	178	-	178	-	172	-	172	0	0
Annual energy consumption kWh	-	23267	-	23267	-	23302	-	23302	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL102A		ANL102N		ANL102P		ANL102Q		ANL102H	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	0	0	0	0	0	0	0	0	-	A+
Rated heat output kW	0	0	0	0	0	0	0	0	-	28
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	-	143
Annual energy consumption kWh	0	0	0	0	0	0	0	0	-	40453
Indoor sound power dB(A)	0	0	0	0	0	0	0	0	-	0
Outdoor sound power dB(A)	76	76	76	76	76	76	76	76	-	76
Colder climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	-	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	-	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	-	0
Warmer climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	-	37
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	-	180
Annual energy consumption kWh	0	0	0	0	0	0	0	0	-	27462

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL102H		ANL102HA		ANL102HA		ANL102HN		ANL102HN	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	28	-	27	-	27	-	26	-	26
Seasonal energy efficiency %	-	143	-	140	-	140	-	130	-	130
Annual energy consumption kWh	-	40453	-	39844	-	39844	-	41320	-	41320
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	76	-	76	-	76	-	76	-	76
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	37	-	36	-	36	-	36	-	36
Seasonal energy efficiency %	-	180	-	181	-	181	-	166	-	166
Annual energy consumption kWh	-	27462	-	26572	-	26572	-	28973	-	28973

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL102HP		ANL102HP3		ANL102HP		ANL102HQ		ANL102HQ	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	27	-	27	-	27	-	26	-	26
Seasonal energy efficiency %	-	140	-	140	-	140	-	130	-	130
Annual energy consumption kWh	-	39844	-	39844	-	39844	-	41320	-	41320
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	76	-	76	-	76	-	76	-	76
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	36	-	36	-	36	-	36	-	36
Seasonal energy efficiency %	-	181	-	181	-	181	-	166	-	166
Annual energy consumption kWh	-	26572	-	26572	-	26572	-	28973	-	28973

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL152		ANL152A		ANL152N		ANL152P		ANL152Q	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	0	0	0	0	0	0	0	0	0	0
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0
Indoor sound power dB(A)	0	0	0	0	0	0	0	0	0	0
Outdoor sound power dB(A)	77	77	77	77	77	77	77	77	77	77
Colder climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	0	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	0	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	0	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL152H		ANL152H3		ANL152H		ANL152HA		ANL152HA	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A++	-	A++	-	A++	-	A+	-	A+
Rated heat output kW	-	33	-	33	-	33	-	32	-	32
Seasonal energy efficiency %	-	152	-	152	-	152	-	140	-	140
Annual energy consumption kWh	-	44854	-	44854	-	44854	-	47223	-	47223
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	77	-	77	-	77	-	77	-	77
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	45	-	45	-	45	-	44	-	44
Seasonal energy efficiency %	-	186	-	186	-	186	-	181	-	181
Annual energy consumption kWh	-	32323	-	32323	-	32323	-	32477	-	32477

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL152HAS		ANL152HN		ANL152HN		ANL152HNS		ANL152HP	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	32	-	32	-	32	-	32	-	32
Seasonal energy efficiency %	-	140	-	136	-	136	-	136	-	140
Annual energy consumption kWh	-	47223	-	48612	-	48612	-	48612	-	47223
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	77	-	77	-	77	-	77	-	77
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	44	-	43	-	43	-	43	-	44
Seasonal energy efficiency %	-	181	-	175	-	175	-	175	-	181
Annual energy consumption kWh	-	32477	-	32827	-	32827	-	32827	-	32477

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL152HP		ANL152HPS		ANL152HQ		ANL152HQ		ANL202	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	0
Rated heat output kW	-	32	-	32	-	32	-	32	-	0
Seasonal energy efficiency %	-	140	-	140	-	136	-	136	-	0
Annual energy consumption kWh	-	47223	-	47223	-	48612	-	48612	-	0
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	77	-	77	-	77	-	77	-	78
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	44	-	44	-	43	-	43	-	0
Seasonal energy efficiency %	-	181	-	181	-	175	-	175	-	0
Annual energy consumption kWh	-	32477	-	32477	-	32827	-	32827	-	0

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL202A		ANL202N		ANL202P		ANL202Q		ANL202H	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	0	0	0	0	0	0	0	0	-	A++
Rated heat output kW	0	0	0	0	0	0	0	0	-	43
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	-	150
Annual energy consumption kWh	0	0	0	0	0	0	0	0	-	59225
Indoor sound power dB(A)	0	0	0	0	0	0	0	0	-	0
Outdoor sound power dB(A)	78	78	78	78	78	78	78	78	-	78
Colder climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	-	0
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	-	0
Annual energy consumption kWh	0	0	0	0	0	0	0	0	-	0
Warmer climate conditions										
Rated heat output kW	0	0	0	0	0	0	0	0	-	58
Seasonal energy efficiency %	0	0	0	0	0	0	0	0	-	185
Annual energy consumption kWh	0	0	0	0	0	0	0	0	-	41885

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL202H3		ANL202H		ANL202HA		ANL202HA		ANL202HAS	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A++	-	A++	-	A+	-	A+	-	A+
Rated heat output kW	-	43	-	43	-	42	-	42	-	42
Seasonal energy efficiency %	-	150	-	150	-	141	-	141	-	141
Annual energy consumption kWh	-	59225	-	59225	-	61540	-	61540	-	61540
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	78	-	78	-	78	-	78	-	78
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	58	-	58	-	57	-	57	-	57
Seasonal energy efficiency %	-	185	-	185	-	182	-	182	-	182
Annual energy consumption kWh	-	41885	-	41885	-	41842	-	41842	-	41842

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL202HN		ANL202HN		ANL202HP		ANL202HP		ANL202HPS	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	-	A+	-	A+
Rated heat output kW	-	41	-	41	-	42	-	42	-	42
Seasonal energy efficiency %	-	137	-	137	-	141	-	141	-	141
Annual energy consumption kWh	-	61829	-	61829	-	61540	-	61540	-	61540
Indoor sound power dB(A)	-	0	-	0	-	0	-	0	-	0
Outdoor sound power dB(A)	-	78	-	78	-	78	-	78	-	78
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	-	0	-	0
Seasonal energy efficiency %	-	0	-	0	-	0	-	0	-	0
Annual energy consumption kWh	-	0	-	0	-	0	-	0	-	0
Warmer climate conditions										
Rated heat output kW	-	56	-	56	-	57	-	57	-	57
Seasonal energy efficiency %	-	177	-	177	-	182	-	182	-	182
Annual energy consumption kWh	-	42269	-	42269	-	41842	-	41842	-	41842

* = This model isn't suitable for average temperature applications.

Aermec S.p.A.	ANL202HQ		ANL202HQ		ANL202HQS		ANL290L00		ANL290L01	
	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications	Average temperature applications	Low temperature applications
	55 °C*	35 °C	55 °C*	35 °C	55 °C*	35 °C	55 °C	35 °C	55 °C	35 °C
Average climatic conditions										
Energy efficiency class	-	A+	-	A+	-	A+	0	0	0	0
Rated heat output kW	-	41	-	41	-	41	0	0	0	0
Seasonal energy efficiency %	-	137	-	137	-	137	0	0	0	0
Annual energy consumption kWh	-	61829	-	61829	-	61829	0	0	0	0
Indoor sound power dB(A)	-	0	-	0	-	0	0	0	0	0
Outdoor sound power dB(A)	-	78	-	78	-	78	72	72	72	72
Colder climate conditions										
Rated heat output kW	-	0	-	0	-	0	0	0	0	0
Seasonal energy efficiency %	-	0	-	0	-	0	0	0	0	0
Annual energy consumption kWh	-	0	-	0	-	0	0	0	0	0
Warmer climate conditions										
Rated heat output kW	-	56	-	56	-	56	0	0	0	0
Seasonal energy efficiency %	-	177	-	177	-	177	0	0	0	0
Annual energy consumption kWh	-	42269	-	42269	-	42269	0	0	0	0

* = This model isn't suitable for average temperature applications.



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