

# **SAMSUNG**

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AE090JNYDEH  
AE090JNYDGH  
AE160JNYDEH  
AE160JNYDGH

# Air to Water Heat Pump -Split Hydro Unit installation manual

imagine the possibilities

Thank you for purchasing this Samsung product.

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# Safety precautions

All materials supplied to this manual are indispensable for the safety of equipment.

Users shall establish appropriate safety and health practices and determine the applicability of regulatory limitation based on following descriptions prior to use.



## WARNING

- Always disconnect the air to water heat pump from the power supply before servicing it or accessing its internal components.
- Verify that installation and testing operations are performed by qualified personnel.
- Verify that the air to water heat pump is not installed in an easily accessible area.

## GENERAL INFORMATION

- ▶ Carefully read the content of this manual before installing the air to water heat pump and store the manual in a safe place in order to be able to use it as reference after installation.
- ▶ For maximum safety, installers shall always carefully read the following warnings.
- ▶ Store the user and installation manual in a safe location and remember to hand it over to the new owner if the air to water heat pump is sold or transferred.
- ▶ This manual explains how to install an indoor unit with a split system with two SAMSUNG units. The use of other types of units with different control systems may damage the units and invalidate the warranty. The manufacturer shall not be responsible for damages arising from the use of non compliant units.
- ▶ The manufacturer shall not be responsible for damage originating from unauthorized changes or the improper connection of electric and hydraulic lines. Failure to comply with these instructions or to comply with the requirements set forth in the "Operating limits" table, included in the manual, shall immediately invalidate the warranty.
- ▶ Do not use the units if damaged. If problems occur, switch the unit off and disconnect it from the power supply.
- ▶ In order to prevent electric shocks, fires or injuries, always stop the unit, disable the protection switch and contact SAMSUNG's technical support if the unit produces smoke, if the power cable is hot or damaged or if the unit is very noisy.
- ▶ Always remember to inspect the unit, electric connections, refrigerant tubes and protections regularly. These operations should be performed by qualified personnel only.
- ▶ The unit contains moving parts, which should always be kept out of the reach of children.
- ▶ Do not attempt to repair, move, alter or reinstall the unit. If performed by unauthorized personnel, these operations may cause electric shocks or fires.
- ▶ Do not place containers with liquids or other objects on the unit.
- ▶ All the materials used for the manufacture and packaging of the air to water heat pump are recyclable.
- ▶ The packing material and exhaust batteries of the remote control(optional) must be disposed of in accordance with current laws.
- ▶ The air to water heat pump contains a refrigerant must be disposed in authorized center or returned to retailer as special wastes.
- ▶ Do not disassemble and alter the heater at your own discretion.

# Safety precautions

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## INSTALLING THE UNIT

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**IMPORTANT:** When installing the unit, always remember to connect first the refrigerant tubes, then the electrical lines.  
Always disassemble the electric lines before the refrigerant tubes.

- ▶ Upon receipt, inspect the product to verify that it has not been damaged during transport. If the product appears damaged, DO NOT INSTALL it and immediately report the damage to the carrier or retailer (if the installer or the authorized technician has collected the material from the retailer.)
- ▶ After completing the installation, always carry out a functional test and provide the instructions on how to operate the air to water heat pump to the user.
- ▶ Do not use the air to water heat pump in environments with hazardous substances or close to equipment that release free flames to avoid the occurrence of fires, explosions or injuries.

## POWER SUPPLY LINE, FUSE OR CIRCUIT BREAKER

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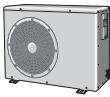



- ▶ Always make sure that the power supply is compliant with current safety standards. Always install the air to water heat pump in compliance with current local safety standards.
- ▶ Always verify that a suitable grounding connection is available.
- ▶ Verify that the voltage and frequency of the power supply comply with the specifications and that the installed power is sufficient to ensure the operation of any other domestic appliance connected to the same electric lines.
- ▶ Always verify that the cut-off and protection switches are suitably dimensioned.
- ▶ Verify that the air to water heat pump is connected to the power supply in accordance with the instructions provided in the wiring diagram included in the manual.
- ▶ Always verify that electric connections (cable entry, section of leads, protections . . .) are compliant with the electric specifications and with the instructions provided in the wiring scheme. Always verify that all connections comply with the standards applicable to the installation of air to water heat pumps.



- Make sure that you earth the cables.
  - Do not connect the earth wire to the gas pipe, water pipe, lighting rod or telephone wire. If earthing is not complete, electric shock or fire may occur.
- Install the circuit breaker.
  - If the circuit breaker is not installed, electric shock or fire may occur.
- Make sure that the condensed water dripping from the drain hose runs out properly and safely.
- Install the power cable and communication cable of the indoor and outdoor unit at least 1m away from the electric appliance.



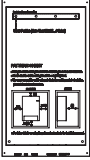

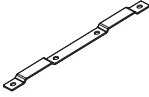










# Product specifications

## Product compatibility

Line-up				Remark	
Heat pump units	Chassis				-
	Model name	AE040XEDEH AE060XEDEH	AE090XEDEH AE090XEDGH	AE120XEDEH AE140XEDEH AE160XEDEH AE120XEDGH AE140XEDGH AE160XEDGH	
Indoor units	Hydro units				-
	Model name	AE090JNYDEH AE090JNYDGH	AE160JNYDEH AE160JNYDGH		

# Product specifications

## Accessories

Installation Manual(1)	User Manual(1)	Pattern Sheet(1)
		
Service Valve(2)	Wall Mounting Bracket(1)	Ring band (1)
		
Temperature Sensor for DHW Tank (1x15m, YEL) (1)	Temperature Sensor for Mixing Valve (1x15m, BLU) (1)	Sensor holder of mixing valve (ID Ø6.8 mm) (1)
		
Sensor clip for mixing Valve Sensor (1)	Cable-tie for mixing valve (4)	Aluminum tape for mixing valve (1)
		
Rubber tape for mixing Valve Sensor (1)	Insulator for for mixing valve (1)	Connector Wire -Smart Grid (1x2 m, RED) (1)
		

## Specifications

Type		Unit	AE090JNYDEH	AE090JNYDGH	AE160JNYDEH	AE160JNYDGH
Power Source		V/Hz	1ø, 220-240 V~, 50 Hz	3ø, 380-415 V~, 50 Hz	1ø, 220-240 V~, 50Hz	3ø, 380-415 V~, 50 Hz
Operation Range [Water]	Cooling	°C	5~25	5~25	5~25	5~25
	Heating	°C	15~55	15~55	15~55	15~55
Sound Pressure	Cooling	dB(A)	26	26	33	33
	Heating	dB(A)	26	26	33	33
Sound Power	Heating	dB(A)	40	40	47	47
Dimension (WxHxD)	Net	mm	850 x 510 x 315	850 x 510 x 315	850 x 510 x 315	850 x 510 x 315
	Gross	mm	1024 x 412 x 564	1024 x 412 x 564	1024 x 412 x 564	1024 x 412 x 564
Weight	Net	kg	45.0	46.5	45.0	46.5
	Gross	kg	55.0	56.0	55.0	56.0
Connecting Pipe [Refrigerant]	Liquid	Inch	1/4	1/4	3/8	3/8
	Gas	Inch	5/8	5/8	5/8	5/8
Service Valve Connecting Pipe [Water]	Inlet	Inch	BSPP male 1 1/4	BSPP male 1 1/4	BSPP male 1 1/4	BSPP male 1 1/4
	Outlet	Inch	BSPP male 1 1/4	BSPP male 1 1/4	BSPP male 1 1/4	BSPP male 1 1/4
Water Pump	Model name	-	UPM3 25-75 180	UPM3 25-75 180	STRATOS PARA 25/1-9	STRATOS PARA 25/1-9
	Maker	-	Grundfos	Grundfos	Wilo	Wilo
	Max Vol Folw	m³/h	3.5	3.5	5.0	5.0
Electric Heater	Input power	W	4,000	6,000	6,000	6,000
Flow Switch	Set Point	LPM	7±1.5	7±1.5	12±1.5	12±1.5
Expansion Vessel	Volume	Liter	8.0	8.0	8.0	8.0
Pressure relief valve	Size	Inch	BSPP male 1/2	BSPP male 1/2	BSPP male 1/2	BSPP male 1/2
	Relief Pressure	bar	2.9	2.9	2.9	2.9
Air-vent Valve	Size	inch	BSPP male 3/8	BSPP male 3/8	BSPP male 3/8	BSPP male 3/8
Operating Outdoor Temp. Range	Heating	°C	-25 ~ 35	-25 ~ 35	-25 ~ 35	-25 ~ 35
	Cooling		10 ~ 46	10 ~ 46	10 ~ 46	10 ~ 46
	DHW Water		-25 ~ 43	-25 ~ 43	-25 ~ 43	-25 ~ 43

\* Heat pump operating range of DHW : -25 ~ 35 °C

\* At the temperature -25 °C ~ -20 °C, operation is available but capacity cannot be guaranteed.



# Typical application examples

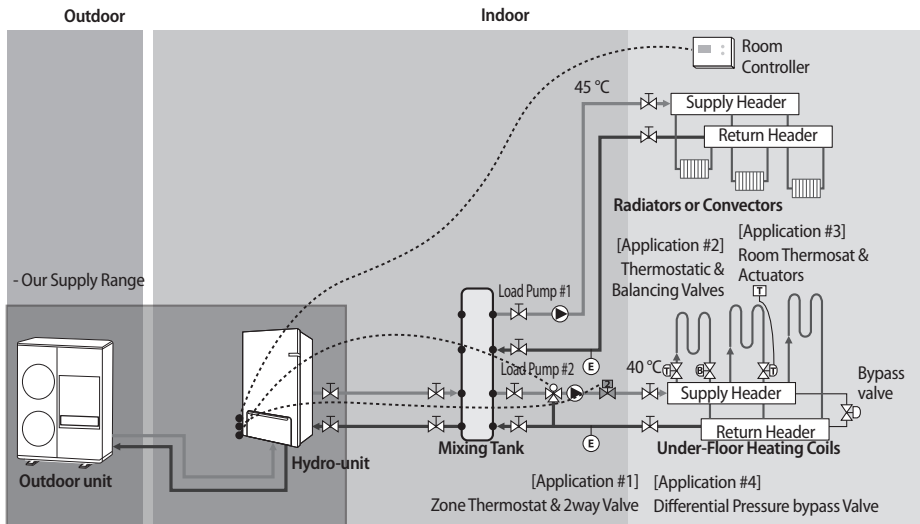


WARNING

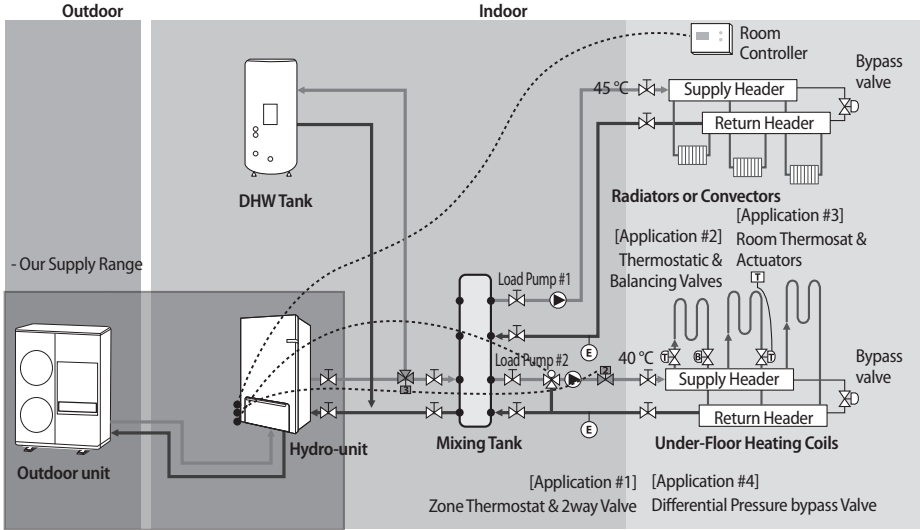
- The application examples given below are for illustration purposes only.
- When the SAMSUNG Air-to-Water Heat Pump system is used in series with another heat source (e.g. gas boiler), ensure that the return water temperature not exceed 55 °C.
- The unit is only to be used in a closed water system. Application in an open water circuit can lead to excessive corrosion of the water piping.
- SAMSUNG can not be responsible put responsible for incorrect or unsafe situations in the water system. Make sure that the boiler, radiators, convectors, solar collectors, UFHs, FCUs, additional pumps, pipings, and controls in the water system are in accordance with relevant local laws and regulations under the installer's responsibility.
- SAMSUNG shall not be held liable for any damage resulting from not observing this rule.
- SAMSUNG do not provide specific water system components such as Pressure relief valve, Air vent valve, buffer tank and etc. Installers and end-users shall consider how to install the above designated components in overall water system depending on the installation conditions. If the components are not installed in appropriate location, the water system can not be operated as designed.

\* The below examples are for illustration purposes only.

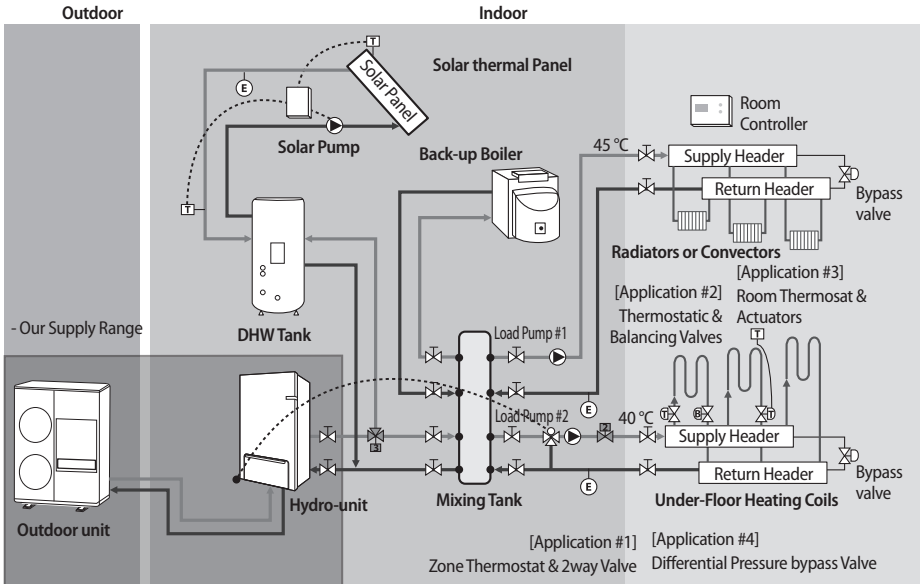
## Application 1: Space heating



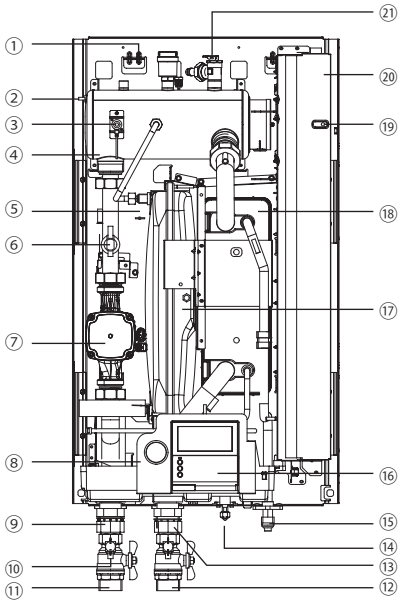
## Application 2: Space heating + water heating



## Application 3: Hybrid application (backup boiler and solar panel connected)

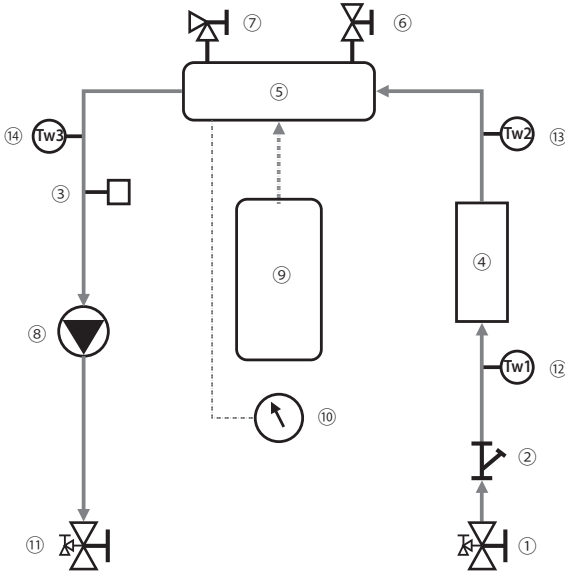


# Main components



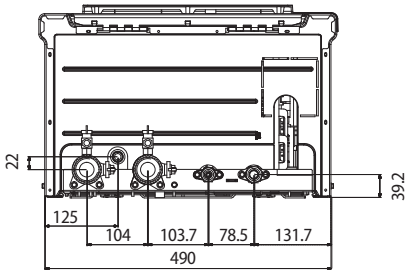
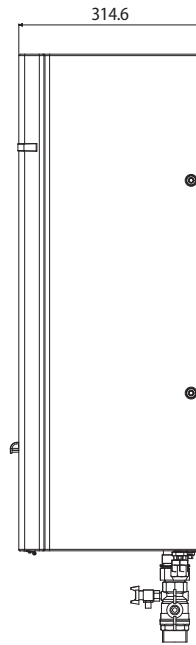
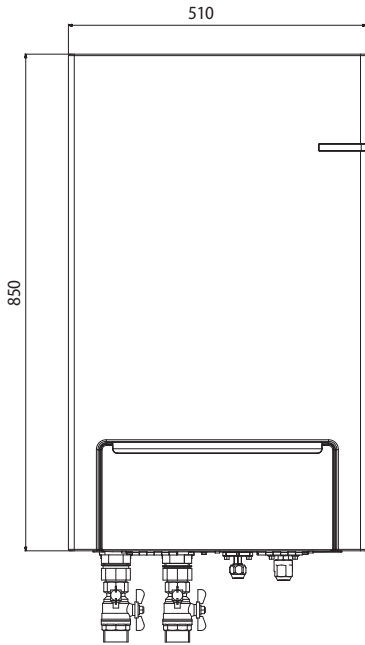
No.	Name	Note
①	Air vent 3/8"	BSPP male 3/8"
②	Backup heater thermal fuse	Thermal cut out 94 °C (+0, -6 °C)
③	Backup heater thermostat	Disc. 65 °C ±4 °C
④	Backup Heater Element	Incoloy 800, 4/6 kW, 230 V AC 50 Hz
⑤	Drain Hose	
⑥	Flow switch	9 kW : 7 LPM ± 1.5 LPM / 16 kW : 12 LPM ± 1.5 LPM
⑦	Water pump	1P-230 V-50 Hz, 46 LPM x 54 kPa
⑧	Manometer	ø48, 0~4 bar
⑨	Water outlet pipe	BSPP male 1 1/4"
⑩	Drain valves	
⑪	Service valve (L)	BSPP male, 1-1/4"
⑫	Service valve (R)	BSPP male, 1-1/4"
⑬	Water inlet pipe	BSPP male 1 1/4"
⑭	Refrigerant pipe	9 kW : Ø6.35(1/4") / 16 kW : Ø9.52(3/8")
⑮	Refrigerant pipe	ø15.88 (5/8")
⑯	Remote Controller	
⑰	Expansion Vessel	8 Liter, Pre-charge gas : 0.1 MPa, N2, BSPP male, 3/8"
⑱	LED display	
⑳	Control box	
㉑	Pressure relief valve	0.3 MPa, BSPP 1/2"

# Functional diagram



No.	Note
①	Service valve(R)
②	Strainer
③	Flow switch
④	Heat exchanger
⑤	Backup heater
⑥	Pressure relief valve
⑦	Air-vent valve
⑧	Variable Speed water pump
⑨	Expansion tank
⑩	Manometer
⑪	Service valve(L)
⑫	Water temp. sensor 1
⑬	Water temp. sensor 2
⑭	Water temp. sensor 3

# Dimensional drawing



	Gas pipe (O.D.)	Liquid pipe (O.D.)	Water Inlet	Water Outlet
<b>Indoor unit</b>	15.88 mm (5/8 inch)	9kW : 6.35 mm (1/4 inch) 16kW : 9.52 mm (3/8 inch)	BSPP male 1 1/4"	BSPP male 1 1/4"

# Installing the unit

## Installation of the indoor unit

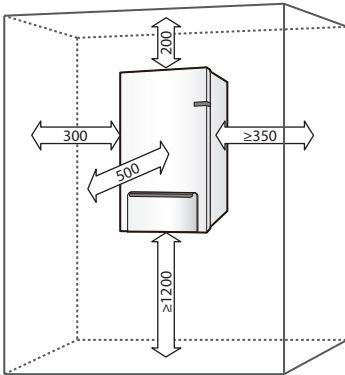
The indoor unit should be installed indoors and meet the following conditions.

- ▶ Installation site should be sheltered from frost.
- ▶ In area with suitable space for servicing.
- ▶ A place with adequate ventilation.
- ▶ Where there is no risk of leakage of flammable gases.
- ▶ There is a provision for condensate drain and pressure relief valve blow-off.
- ▶ The wall for installation is a flat, vertical and non-combustible wall, capable of supporting the operation weight of the unit.

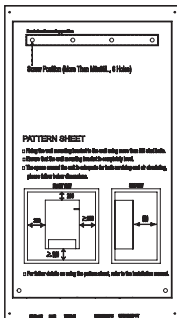
## Installation space

- ▶ Ensure to leave the appropriate space as indicated in the drawing.
- ▶ Installation site should be secured with adequate ventilation so that the components of hydro unit will not be damaged from overheating.

(Unit : mm)



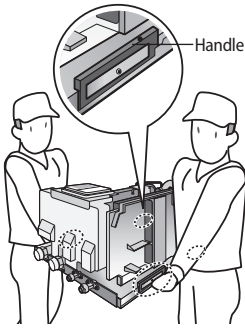
- ▶ Before installing the indoor unit, fix the pattern sheet on the wall. This sheet has a function to take correct position for the wall mounting bracket and screws.



Pattern Sheet

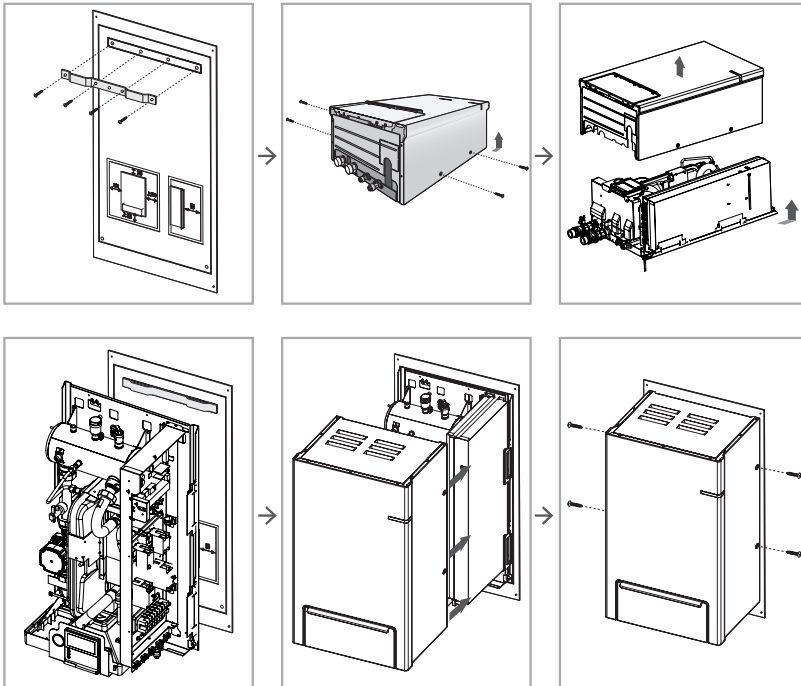
# Installing the unit

## Mounting the indoor unit



\* A minimum of two people should lift the unit by the handles and not by the drain pan or pipe work.

- ▶ Drill 6 holes from the pattern sheet for fixing the wall bracket and unit. After completing holes, detach the pattern sheet.
- ▶ Fix the wall-mount-bracket to the wall using appropriate plugs and screws(Use over M8 6 screws).
- ▶ Hang the indoor unit on an wall-mount-bracket and fix a front cabinet on the unit by using 4 screws.



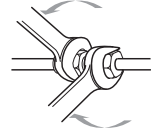
- ▶ Fix screw through base panel of the unit.

# Pipe work

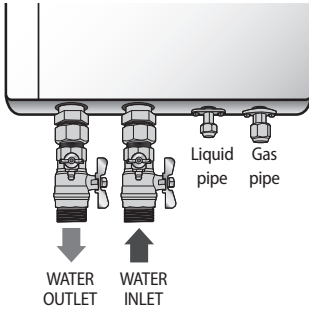
## Refrigerant pipe work

For all guide lines, specifications regarding refrigerant pipe work between the indoor unit and the outdoor unit, please follow the outdoor unit installation manual.

	Gas pipe (O.D.)	Liquid pipe (O.D.)	Tightening Torque	Final Torque
Indoor unit	15.88 mm (5/8 inch)	9 kW : 6.35 mm (1/4 inch) 16 kW : 9.52 mm (3/8 inch)	400 kg·cm	450 kg·cm
Outdoor unit	15.88 mm (5/8 inch)	4/6/9 kW : 6.35 mm (1/4 inch) 12/14/16 kW : 9.52 mm (3/8 inch)	700 kg·cm	750 kg·cm



- When connecting the refrigerant pipes, always use 2 wrenches/spanners for tightening or loosening nuts. If not, piping connections can be damaged.





# Pipe work

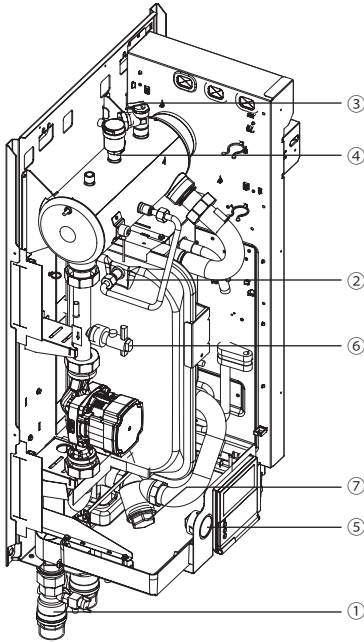
## Water pipe work

The hydro unit is equipped with components listed on the table below.

The hot and cold water supply connections are clearly marked on the unit with labels. And service valves are provided.

Whole water plumbing system including Hydro unit shall be installed by a qualified technician and must comply with all relevant European and national regulations.

- ▶ Allowable water pressure of hydro unit is maximum 3.0 bar.
- ▶ 2 service valves are provided with the Hydro unit. To facilitate service and maintenance work, install R-Type service valve at the water inlet of the hydro unit and L-Type service valve at the water outlet of the hydro unit.
- ▶ An air-vent valve is integrated on the hydro unit. Please check that air-vent valve is not overtightened so the air-vent valve can release any air out of the system during system operation.



Hydro unit	No.	Name	Tightening Torque	
	①	1.25" BSPP	350 ~ 380 kgf·cm	34 ~ 37 N·m
	②	3/8" BSPP	120 ~ 150 kgf·cm	12 ~ 15 N·m
	③	Pressure relief valve	120 ~ 150 kgf·cm	12 ~ 15 N·m
	④	Air-vent valve	120 ~ 150 kgf·cm	12 ~ 15 N·m
	⑤	Manometer	92 ~ 102 kgf·cm	9 ~ 10 N·m
	⑥	Flow switch	72 ~ 82 kgf·cm	7 ~ 8 N·m
	⑦	Strainer	350 ~ 380 kgf·cm	34 ~ 37 N·m

## Flushing and air-purging

When filling water, the following start-up procedure should be followed.

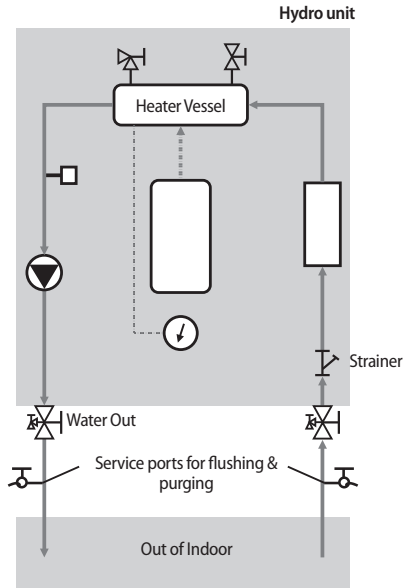
1. All system components and pipes must be tested for the presence of leaks.
2. Preparation of a make-up water assembly or Flushing unit is recommended for installation and service.
3. Before connecting pipes to the hydro unit, Flush water pipes clean to remove contaminants during 1 hours using a flushing unit or tap water pressure if it is adequate (at 2 to 3 bar)
4. Fill water into the hydro unit by opening service valves.
5. Purge the air. (Fill with a flushing unit with sufficient capacity: avoid aerating the water)
6. Circulate for long enough to ensure that all air has been bled from the complete water piping system.

After installations, Commissioning should be performed by qualified representatives.

Unless flushing and air-purging works are performed adequately, It might result in malfunctions.



Flushing unit (or purging cart)



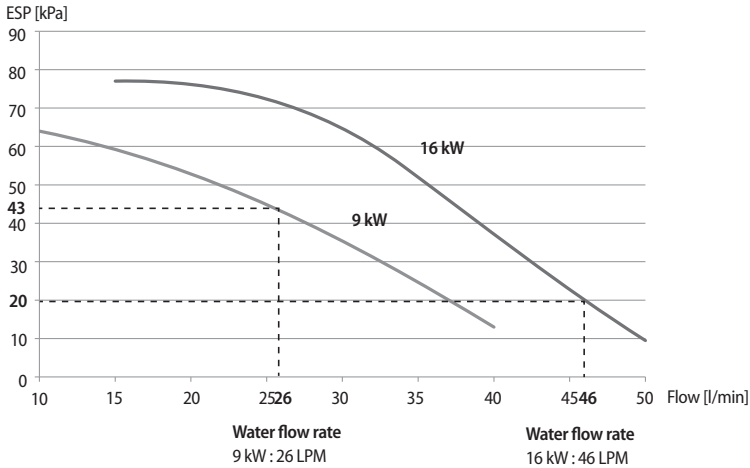
CAUTION

- Check and clean strainer periodically.
- Replace strainer when necessary.
- Its recommended that you flush the system for 4 hours minimum once a per annum.
- Use chemical cleaning agents(Begin with acid , finish with alkali).
- Install Air vents on the top of the system
- Pressure of entering water(over 2.0 bar)

# Pipe work

## ESP(External Static Pressure) Diagram

The illustration below shows the external static pressure of the unit depending on the water flow and the pump setting.



If the pressure loss of total system is over 43(9 kW) or 20(16 kW)kPa, additional water pump should be installed in series. Otherwise, the flow rate might decreased, causing insufficient heating or cooling.

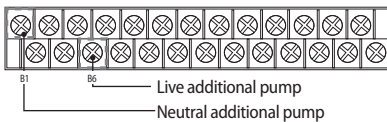
When ESP is not enough, additional pump should be installed. In this case, install the PWM control external type pump (Heating type) additionally.

## Connection guide of additional pump

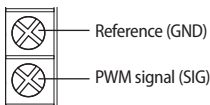
### Case 1) INV. pump

Connect the PWM control external type pump to PWM terminal block and power cable to the external contact terminal. The maximum number of additional pump installation is one inverter pumps (Input power 100W).

1. Power supply (INV. Pump)



2. PWM control (for INV. Pump only)

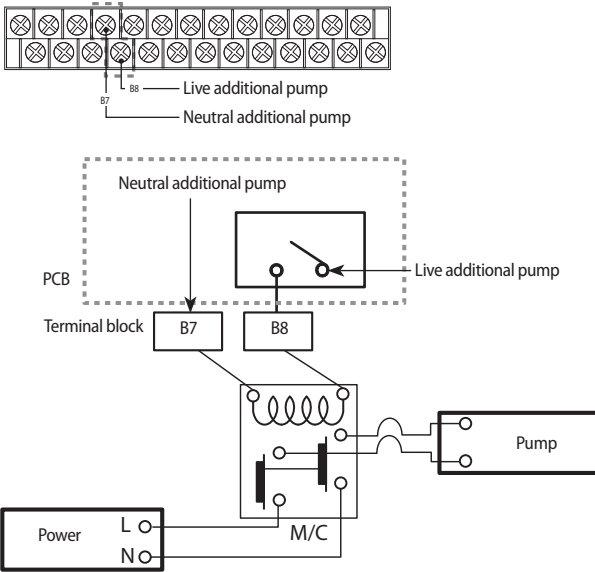


- If there is wrong wiring between PWM and reference, INV. Water Pump may not work or wrong operation.

## Case 2) AC pump

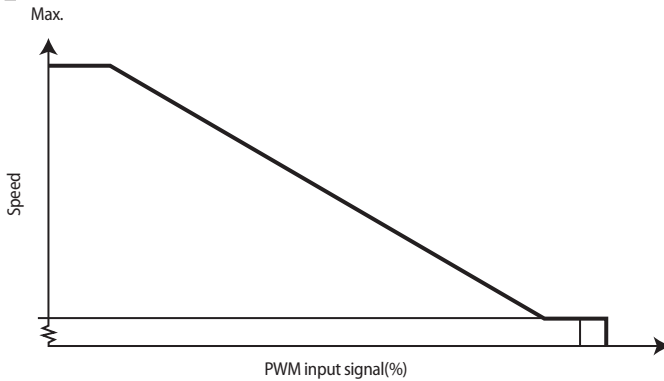
The maximum number of additional pump installation is one AC pumps (Input power 100W).

### 1. Power supply (AC Pump)



• Terminal of this product is for additional water pump and the maximum allowable current is 0.5 A.

### PWM characteristic curve



The additional pump should be the same type of product as the above graph.

Recommendation

9kW (AE090\*\*\*): GRUNDFOS UPM3 25-75 (Heating Type)

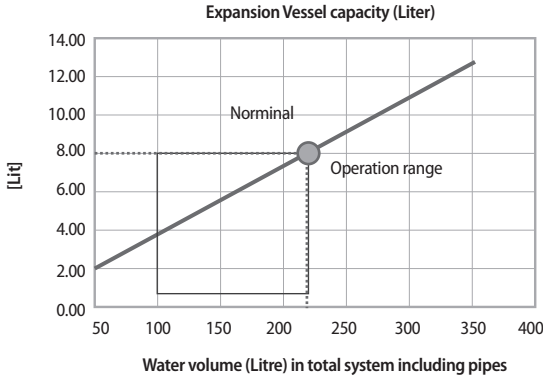
16kW (AE160\*\*\*): WILO STRATOS PARA 25/1-9 (Heating Type)

# Pipe work

## Setting the pre-pressure of the expansion vessel

When it is required to change the default pre-pressure of the expansion vessel(1 bar), keep in mind the following guidelines:

- ▶ Use only dry nitrogen to set the expansion vessel pre-pressure.
- ▶ Inappropriate setting of the expansion vessel pre-pressure will lead to malfunction of the system. Therefore, the pre-pressure should only be adjusted by a licensed installer.



- Water volume of total system for reliable performance is minimum 50 liters.

Installation height difference <sup>a)</sup>	Water volume	
	< 220 Litres	> 220 Litres
< 7 m	No pre-pressure adjustment required.	Actions required: <ul style="list-style-type: none"> <li>• Pre-pressure must be decreased, calculate according to "Calculating the pre-pressure of the expansion vessel".</li> <li>• Check if the water volume is lower than maximum allowed water volume</li> </ul>
> 7 m	Actions required: <ul style="list-style-type: none"> <li>• Pre-pressure must be increased, calculate the appropriate value following by "Calculating the pre-pressure of the expansion vessel".</li> <li>• Check if the water volume is lower than maximum allowed water volume</li> </ul>	Expansion vessel of the unit too small for the installation.

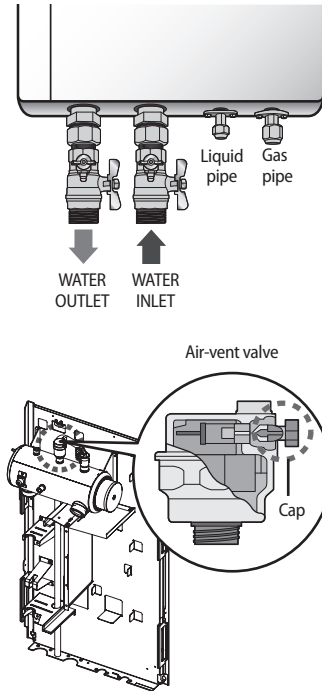
- a) Installation height difference: height difference(m) between the highest point of the water circuit and the indoor unit. If the indoor unit is located at the highest point of the installation, the installation height is considered 0 m.

### Calculating the pre-pressure of the expansion vessel

The pre-pressure( $P_g$ ) to be set depends on the maximum installation height difference( $H$ ) and is calculated as below:

$$P_g = (H/10 + 0.3) \text{ bar}$$

## Charging water



After installation is completed the following procedures shall be used to charge water into the hydro unit.

- ▶ Connect water lines to water connections of hydro unit.
- ▶ The air-vent valve shall be opened at least 2 turns and drain valves shall be closed.
- ▶ Open the service valve in the water supply connection.
- ▶ Water pressure of supply line shall be over 2.0 bar for good charging work.
- ▶ Stop water supply when the pressure gauge of hydro unit indicates 2.0 bar.



CAUTION

- Service space should be secured.
- Water pipe and connections must be cleaned using water.
- If internal water pump capacity is not enough, install external water pump.
- Do not connect electric wire while water charging.
- When initial installation or re-installation required, open the cap to prevent air trap in the unit while charging water.
- The back-up heater vessel shall be full of water before heater is turned on. Confirm if the vessel is empty by opening the pressure relief valve of hydro unit. (OK if water is flowing out)
- It is recommended to install the make-up water assembly to feed small quantities of water to the system automatically, replacing the minor water losses and maintaining the system pressure. This assembly usually consists of a pressure-reducing valve, water filter, check-valve and shut-off valves. In this case, Check-valve must be installed to prevent from contaminating city water.

## Pressure relief valve

A pressure relief valve is integrated on heater vessel of hydro unit and shall work in abnormal condition for protecting the hydro unit.



CAUTION

- The pressure relief valve will operate releasing the pressure by flowing out some water through the drain hose.
- Make certain that the discharged water out of drain pan can not contact any electrical parts.

## Piping insulation

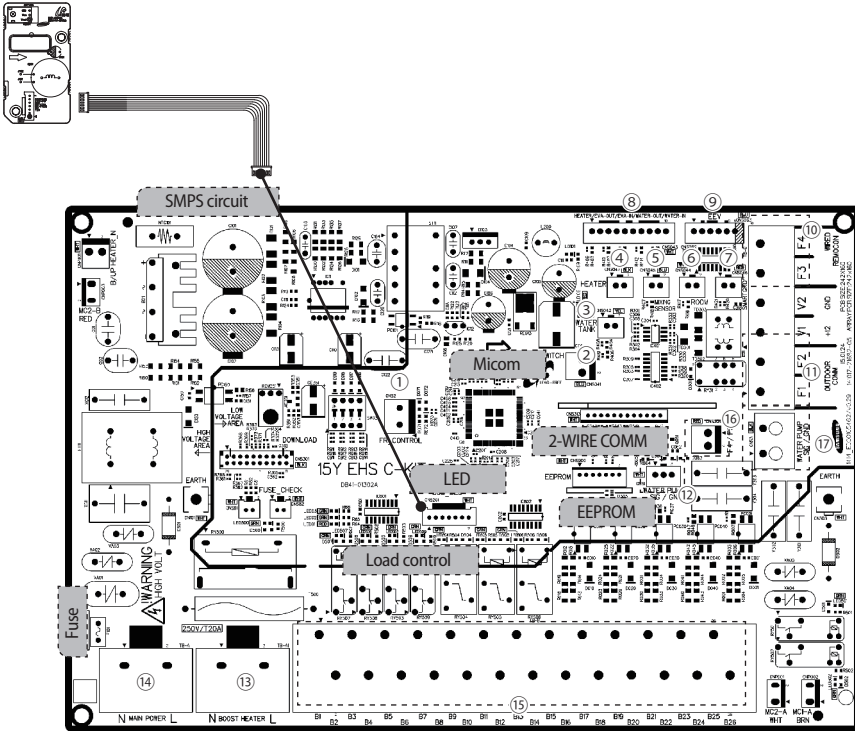
The complete water circuit, including all piping must be insulated to prevent condensation forming on the surface of the pipe and heat loss to external environment.

# Wiring work



- Field-supplied electrical components such as power switch, circuit breakers, wires, terminal blocks, etc must be properly chosen with compliance with national legislation or regulation.
- Switch off the power supply before making any connections.
- All field wiring and components must be installed by a licensed electrician.
- Use a dedicated power supply.
- All power connections must be protected from dew condensation by thermal insulation.
- The system shall be earthed. Do not earth the unit to a utility pipe, surge absorber or telephone earth. Incomplete earth may cause electrical problems.

## Layout of PCB

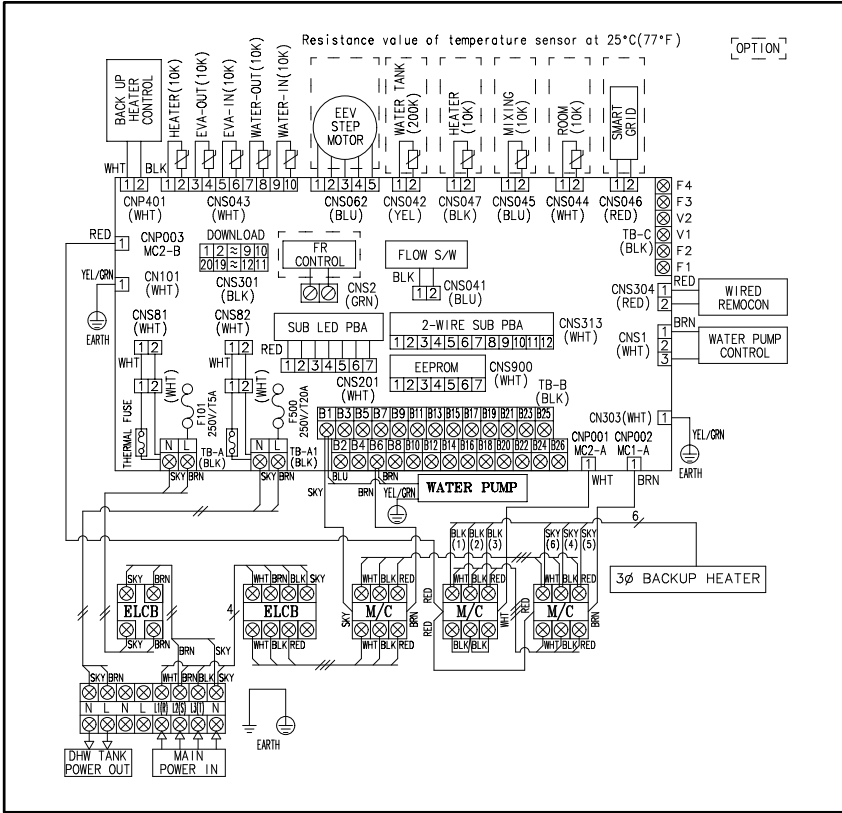


No.	Note	No.	Note
①	FR Control CNS2(Green)	⑧	CNS043(White) 1-2:Heater Out 3-4:Eva Out 5-6:Eva in 7-8:Water Out 9-10:Water In
②	Flow Switch CNS041(Blue)	⑨	EEV CNS062(Blue)
③	Water Tank CNS042(Yellow)	⑩	TB-C (Black) F3-F4:COMM2 (Wired Remocon) INPUT/OUTPUT, DC, 210 mA(per each controller)
④	Heater Out(Mono) CNS047(Black)	⑪	TB-C (Black) F1-F2:COMM1 (IN-OUT COMM) INPUT/OUTPUT, DC, 10 mA
⑤	Mixing Sensor CNS045(Blue)	⑫	CNS1 (White) 1:Signal 3:Gnd
⑥	Room Sensor CNS044(White)	⑬	Boost Heater TB-A1 (Black) L-N, OUTPUT AC
⑦	Smart Grid CNS046(Red)	⑭	Main Power TB-A(Black) L-N, INPUT, AC
⑮	TB-B(Black) B1:Neutral_INV PUMP, OUTPUT, AC B2:Mixing Valve_CW, OUTPUT, AC B3:Mixing Valve_CCW, OUTPUT, AC B4:Boiler, OUTPUT, AC B5:Neutral, OUTPUT, AC B6:Lived_INV PUMP, OUTPUT, AC B7:Neutral, OUTPUT, AC B8:Lived, OUTPUT, AC B9:2WAY1_NO, OUTPUT, AC B10:2WAY1_NC, OUTPUT, AC B11:Neutral, OUTPUT, AC B12:Lived, OUTPUT, AC B13:2WAY2_NO, OUTPUT, AC B14:2WAY2_NC, OUTPUT, AC B15:Neutral, OUTPUT, AC B16:Lived, OUTPUT, AC B17:3WAY_NO, OUTPUT, AC B18:3WAY_NC, OUTPUT, AC B19:Neutral, OUTPUT, AC B20:Lived, OUTPUT, AC B21:THERM01_C, INPUT, AC B22:THERM01_H, INPUT, AC B23:THERM02_C, INPUT, AC B24:THERM02_H, INPUT, AC B25:Solar/Thermostat_N, INPUT, AC B26:Solar/Thermostat_L, INPUT, AC		
⑯	CNS304(RED) F3-F4:COMM2 (Wired Remote controller)		
⑰	CNS3(Black) 1:Signal 2:Gnd		

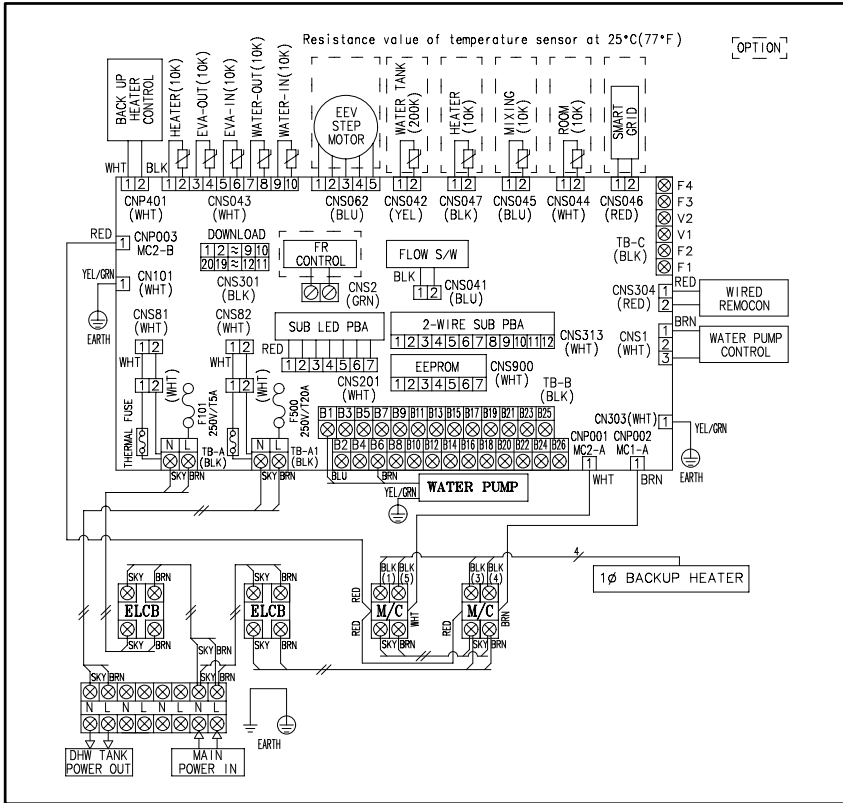


# Wiring work

## Wiring diagram (AE090JNYDGH/AE160JNYDGH) 3-Phase



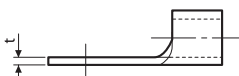
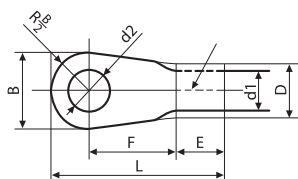
# Wiring diagram (AE090JNYDEH/AE160JNYDEH) 1-Phase



# Wiring work

## Selecting solderless ring terminal

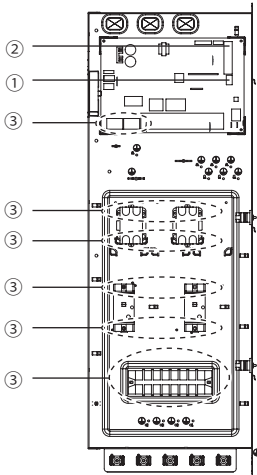
- ▶ Select a solderless ring terminal of a connecting power cable based on a nominal dimensions for cable.
- ▶ Cover a solderless ring terminal and a connector part of the power cable and then connect it.



Nominal dimensions for cable (mm <sup>2</sup> )	Nominal dimensions for screw (mm)	B		D		d1		E	F	L	d2		t
		Standard dimension (mm)	Allowance (mm)	Standard dimension (mm)	Allowance (mm)	Standard dimension (mm)	Allowance (mm)	Min.	Min.	Max.	Standard dimension (mm)	Allowance (mm)	Min.
4/6	4	9.5	±0.2	5.6	+0.3 -0.2	3.4	±0.2	6	5	20	4.3	+0.2 0	0.9
	8	15							9	28.5	8.4		
10	8	15	±0.2	7.1	+0.3 -0.2	4.5	±0.2	7.9	9	30	8.4	+0.4 0	1.15
16	8	16	±0.2	9	+0.3 -0.2	5.8	±0.2	9.5	13	33	8.4	+0.4 0	1.45
25	8	12	±0.3	11.5	+0.5 -0.2	7.7	±0.2	11	15	34	8.4	+0.4 0	1.7
	8	16.5							13		8.4		
35	8	16	±0.3	13.3	+0.5 -0.2	9.4	±0.2	12.5	13	38	8.4	+0.4 0	1.8
	8	22			+0.5 -0.2				13		43		
50	8	22	±0.3	13.5	+0.5 -0.2	11.4	±0.3	17.5	14	50	8.4	+0.4 0	1.8
70	8	24	±0.4	17.5	+0.5 -0.4	13.3	±0.4	18.5	20	51	8.4	+0.4 0	2

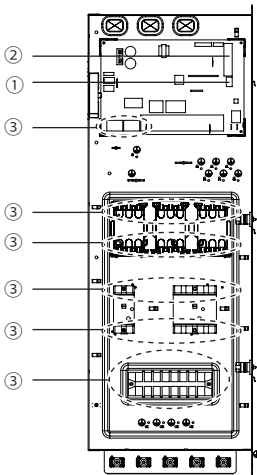
## Torque requirements

### 1 Phase



No.	Terminal name	Specification	Tightening Torque (N · m)
①	PWM control (INV. Pump)	M3	0.5 ~ 0.75
②	Communication & External contact	M3.5	0.8 ~ 1.2
③	Power	M4	1.2 ~ 1.8

### 3 Phase



No.	Terminal name	Specification	Tightening Torque (N · m)
①	PWM control (INV. Pump)	M3	0.5 ~ 0.75
②	Communication & External contact	M3.5	0.8 ~ 1.2
③	Power	M4	1.2 ~ 1.8

# Wiring work

## Types of allowable current

Conductors of supply cord shall have a nominal cross-sectional area not less than that shown in the table below.

### Minimum cross-sectional area of conductors

Rated current of appliance (A)	Nominal cross-sectional area (mm <sup>2</sup> )	
≤0.2	Tinsel cord <sup>a)</sup>	
≤0.2 and ≤3	0.5 <sup>a)</sup>	
>3 and ≤6	0.75	
>6 and ≤10	1.0(0.75) <sup>b)</sup>	
>10 and ≤16	1.5(1.0) <sup>b)</sup>	
>16 and ≤25	2.5	
>25 and ≤32	4	
>32 and ≤40	6	
>40 and ≤63	10	

- a) These cords may only be used if their length does not exceed 2m between the point where the cord or cord guard enters the appliance and the entry to the plug.
- b) Cords having the cross-sectional areas indicated in the parentheses may be used for portable appliances if their length does not exceed 2 m.

## Grounding work

- ▶ Grounding must be done by a qualified installer for your safety.

### Grounding the power cable

- ▶ The standard of grounding may vary according to the rated voltage and installation place of a heating pump.
- ▶ Ground the power cable according to the following.

Power condition \ Installation place	High humidity	Average humidity	Low humidity
	Electrical potential of lower than 150V		Perform the grounding work 3. <sup>Note 1)</sup>
Electrical potential of higher than 150V	Must perform the grounding work 3. <sup>Note 1)</sup> (In case of installing circuit breaker)		

#### \* Note 1) Grounding work 3

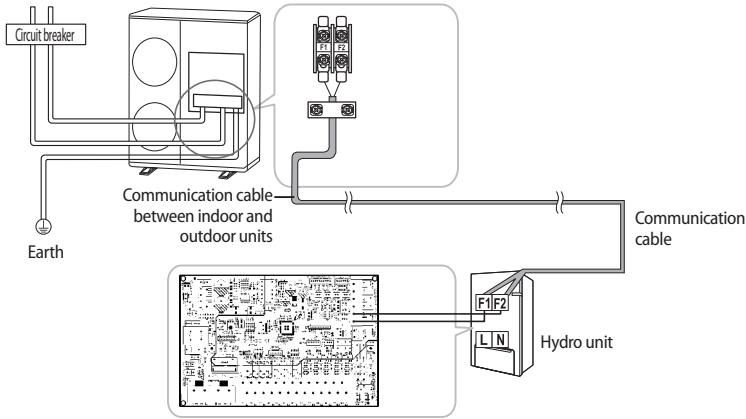
- Grounding must be done by your installation specialist.
- Check if the grounding resistance is lower than 100 Ω.

When installing a circuit breaker that can cut the electric circuit in case of a short circuit, the allowable grounding resistance can be 30~500 Ω.

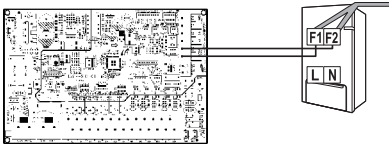
## Connection of the power supply and communication cable

Description	No. of wires	Max. A	Thickness	Supply Scope
Main power	2+ground	32A	4.0mm <sup>2</sup> H05RN-F or H07RN-F	Field supply (230 V~, Input)
Communication	2	6A	0.75mm <sup>2</sup> H05RN-F or H07RN-F	7Vdc data

### 2 wires for communication cable

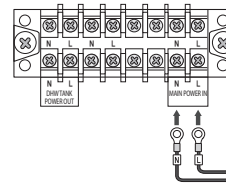


### Communication cable connection

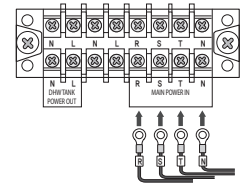


### Power wire connection

#### 1 phase



#### 3 phase



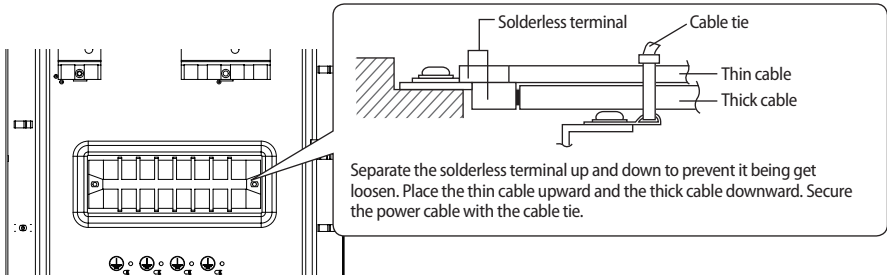
- If the supply cable is damaged, it must be replaced by a special cable or assembly available from the manufacturer or installer.
- Circuit Breaker (ELCB, ELB, MCCB etc.) for outdoor and indoor units shall be installed by installers because they are not sub-parts in the units. But you don't need to install for hydro unit (Built-in ELCB).

- \* ELCB : Earth leakage circuit breaker
- ELB : Earth leakage breaker
- MCCB : Molded case circuit breaker

# Wiring work

## Connecting the power terminal

- ▶ Connect the cables to the terminal board using the solderless ring terminal.
- ▶ Use certified and reliable cables.
- ▶ Connect the cables with the torque chart as below.
- ▶ If the terminal is loose, fire may occur caused by arc. If the terminal is connected too firmly, the terminal may be damaged.
- ▶ External force should not be applied to the terminal block and wires.
- ▶ The cable ties to fasten the wire should be an incombustible material, V0 or above. (The cable ties should be used to fasten the power wire and they are supplied with the unit.)



Tightening Torque (kgf • cm)	
M3	5~7.5
M5	20 ~ 30

## Connection of the backup heater power supply

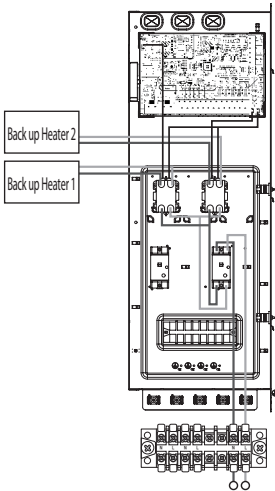


- Do not use a power supply shared by other appliances. Each components for outdoor unit, indoor unit, backup heater and booster heater has the dedicated power supply.

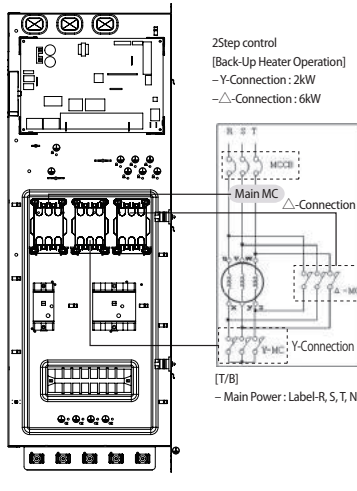
Model	Heater capacity (kW)	ELCB capacity (A)
AE160JNYDGH/AE090JNYDGH	6	20
AE160JNYDEH	6	40
AE090JNYDEH	4	30

- \* Circuit Breaker(ELCB, ELB, MCCB etc.)s written above are already included in the hydro unit.  
 ELCB : Earth leakage circuit breaker  
 ELB : Earth leakage breaker  
 MCCB : Molded case circuit breaker

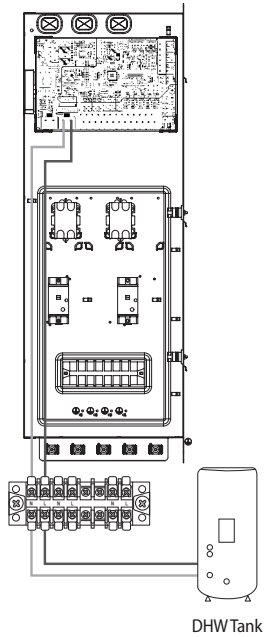
1 phase



3 phase



Booster heater (DHW)

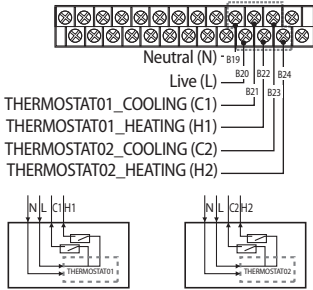




# Wiring work

## Connection of the thermostat

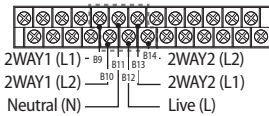
Description	No. of wires	Max. A	Thickness	Supply Scope
Room Thermostat for weather control	4	22 mA	> 0.75 mm <sup>2</sup> , H05RN-F or H07RH-F	Field supply (230 V~, Input)



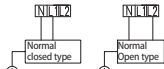
1. Before the installation, hydro unit should be turned off.
2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
3. Make sure what type is you use.
  - Contact signal must be "L". When you install two thermostats, thermostat2 prior to thermostat1.

## Connection of the 2-way valve

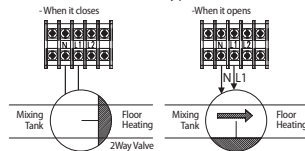
Description	No. of wires	Max. A	Thickness	Supply Scope
Motorized 2-way valve to shut off UFH loops during cooling.	2+ground	22 mA	> 0.75 mm <sup>2</sup> , H05RN-F or H07RH-F	Field supply (230 V~, Output)



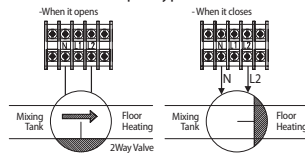
\* Connection of 2 wires 2-way valve



In case of normal closed type



In case of normal open type



2-way motorized valve

► When outlet water temperature reach to lower than 16 °C in cooling mode, UFH loops will be closed.

► 230V AC

► 2 wires(Normal Open or Normal Close)

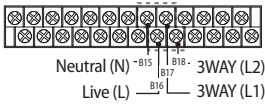
1. Before the installation, hydro unit should be turned off.
2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
3. Make sure what type is you use.
  - Normal OPEN or Normal CLOSED.



• There are 2 types of 2-way valve, normal open type and normal closed type. Make sure to connect terminals to right positions of terminal block. As detailed on the wiring diagram and illustrations above.

## Connection of the 3-way valve

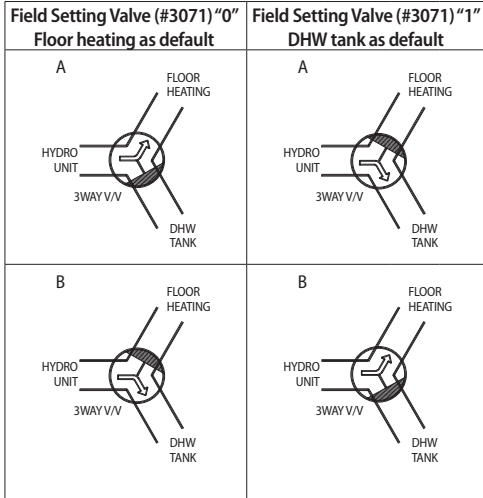
Description	No. of wires	Max. A	Thickness	Supply Scope
Diverting type 3way valve	4	22 mA	> 0.75 mm <sup>2</sup> , H05RN-F or H07RN-F	Field supply (230 V~, Input)



Status	L1	L2
A (Initial)	OFF	ON
B	ON	OFF

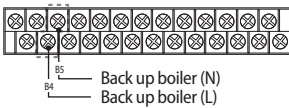
3-way diverting valve for water tank

- ▶ Diverting type cooling mode, UFH loops will be closed.
  - ▶ 230V AC
1. Before the installation, hydro unit should be turned off.
  2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
  3. Make sure what type of 3 way V/V you use.



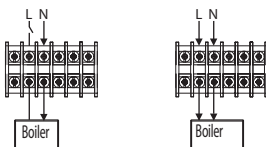
## Connection of the back-up boiler

Description	No. of wires	Max. A	Thickness	Supply Scope
Back-up Boiler	2+ground	10 mA	0.75mm <sup>2</sup> H05RN-F or H07RN-F	Field supply (230 V~, Input)



When it set back up boiler on the hydro unit (relay off)

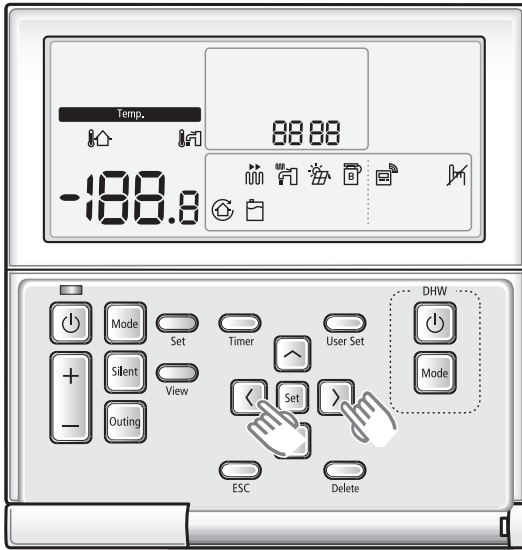
When it order to back up boiler operates (relay on)



1. Before the installation, hydro unit should be turned off.
  2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
  3. Make sure EXT-CTRL signal of back up boiler must be 230Vac.
    - Do not connect supply power of back up boiler directly.
- \* Heat pump does not work when the Back-up boiler operates.

# Self-test mode of wired remote controller

## Use of self-test mode



1. When using the self-test mode of the wired remote controller, press the [**<**] and [**>**] buttons for more than 3 seconds.
2. You can operate the self-test mode as follows.
  - ▶ Load list: When pressing the corresponding button, you can set the load On or Off.

Enter button	Operating part	LCD display
(Red)	Water pump	
	Booster heater	
	DHW valve	
	Zone #1 Valve	2- 1
	Back Up Heater 1	
	Back Up Heater 2	
	Back Up Boiler	
	Zone #2 Valve	2- 2
	Mixing Valve	3- 1

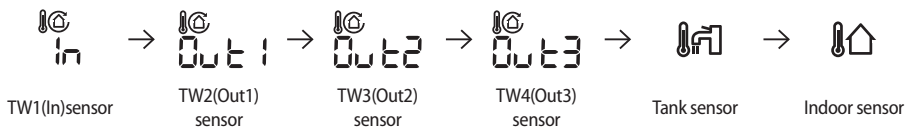
- ▶ When the water pump is turned off, the back up heater cannot be turned on.
- ▶ DHW valve, Zone #1 Valve, Zone #2 Valve and Mixing Valve cannot be turned on at the same time.



- ▶ Thermostat 1, 2, and solar heat panel are displayed as below when you set them with an indoor unit.



Thermostat 1 (Zone 1), Thermostat 2 (Zone 2), Solar heat panel (ON/OFF)

- ▶ Timer button: Whenever you press the button, the sensor value will be displayed in order.



- ▶ While the sensor value is being displayed but you don't press the 'Timer' button for 5 seconds, the previous status will be shown.
- ▶ For the sensor fault or absence of sensor installation, corresponding sensor temperature will be displayed as "Er".
- ▶ When you press the button that does not have a function,  will blink for 3 seconds.
- ▶ When pressing the **Delete** button one time, all the loads will be Off.
- ▶ When all the loads are OFF status, "Cancel" Key input will be ignored and  will blink for 3 seconds.
- ▶ When pressing the **ESC** button, you will exit to the general mode.
- ▶ Mixing valve related operation will work depending on the use of mixing valve (FSV Code : 4041).

# Troubleshooting

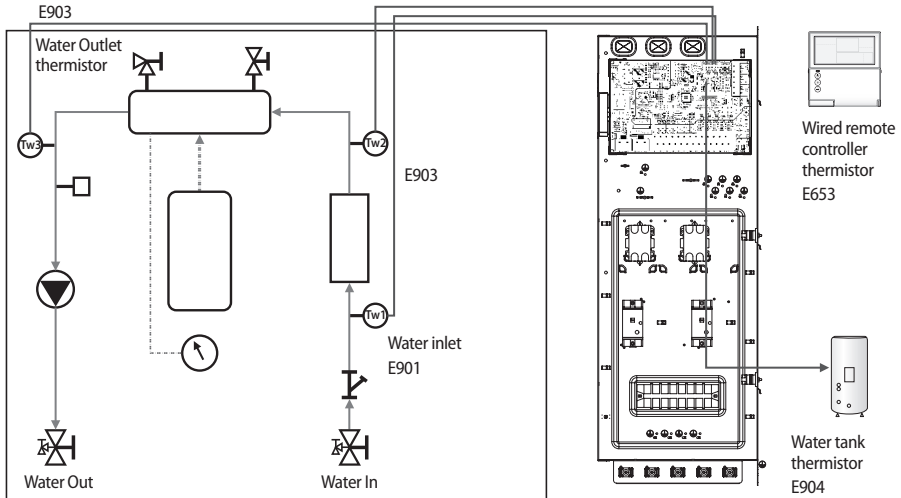
If the unit has some problem to work properly, the LED on hydro unit will flash and some error codes will be displayed on the controller.

The following table described the explanation of error codes on the LCD display.

## Thermistor

- ▶ Check its resistance. 10kohm@25 °C (Hydro unit), 200kohm@25 °C (DHW Tank, Solar)
- ▶ Check its location as shown at the diagram.
- ▶ Check its contact status with pipe.
- ▶ Final solution is to change parts

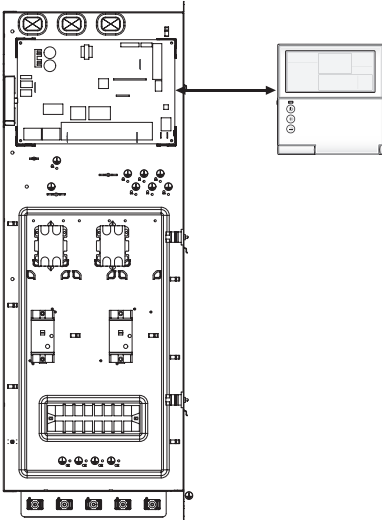
Display	Explanation
653	Wired remote controller thermistor SHORT or OPEN
901	Water Inlet thermistor SHORT or OPEN
902	PHE Outlet thermistor SHORT or OPEN
903	Water Outlet thermistor SHORT or OPEN
904	Water TANK thermistor SHORT or OPEN
916	Mixing Valve thermistor SHORT or OPEN



## Communication

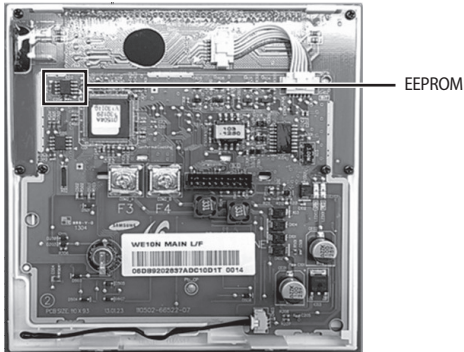
Display	Explanation
601	Communication error between remote controller and the Hydro unit
604	Tracking error between remote controller and the Hydro unit
654	Memory(EEPROM) Read/Write Error(Wired remote controller data error)

### E601, E604



### E654

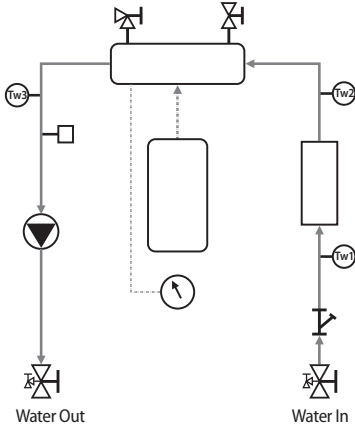
MEMORY(EEPROM) Read/Write Error (Wired controller data error)



# Troubleshooting

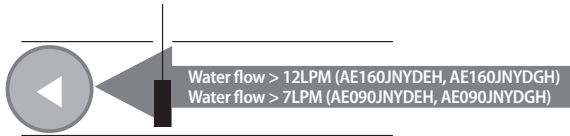
## Water pump & flow S/W

Display	Explanation
9 11	Flow S/W OFF error <ul style="list-style-type: none"> <li>• In case of flow S/W OFF in 30 sec during water pump signal is ON(Starting)</li> <li>• In case of flow S/W OFF in 15 sec during water pump signal is ON (After starting)</li> </ul>
9 12	Flow S/W ON error <ul style="list-style-type: none"> <li>• In case of flow S/W ON in 10min during water pump signal is OFF</li> </ul>

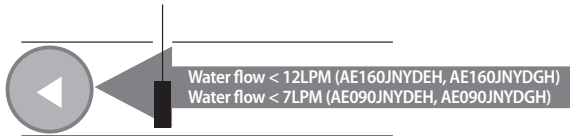


### E911

- ▶ Water pump ON ( Flow S/W off )

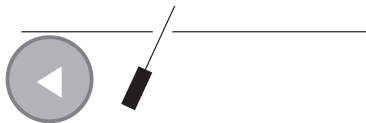


- ▶ Water pump ON ( Flow S/W off ) : NOT enough water flow



### E912

- ▶ Water pump OFF ( Flow S/W on )



# DHW tank

DHW tank should be purchased separately (not supplied).

## Safety information

(Before installing an DHW Tank, please read this manual thoroughly to ensure that you know how to safely and efficiently install a new appliance.)



### WARNING

• If you don't follow the safety precautions, you may get the risk of serious wound or death.

- ▶ The installation must be done by the manufacturer or its service agent or a qualified person in order to avoid a hazard.
  - Installation by an unqualified person may cause a water leakage, electric shock or fire and so on.
- ▶ The electric work must be done by service agent or qualified persons according to national wiring regulations and use only rated cable.
  - Use certified power cable in the market suggested here and do electric work according to installation manual otherwise, electric shock or fire may occur.
- ▶ Install the outdoor unit correctly according to the installation manual.
  - An incorrect installation may cause a water leakage, electric shock or fire and so on.
- ▶ Manufacturer is not responsible for accidents due to incorrect installation.
- ▶ Use certified parts in the market and supplied parts from the factory.
  - All wiring, components and materials to be procured on the site must comply with the applicable local and national codes. If you don't use the certified parts and tools, it can cause trouble to the Air to Water Heat pump and bring into injury.
- ▶ Install the DHW Tank on a hard and even place that can support its weight.
  - If the place cannot support its weight, the outdoor unit may fall down and it may cause injury.
- ▶ Fix the outdoor unit securely on foundation it can fall over strong wind or earthquake.
  - If the outdoor unit is not properly fixed, it turns over and accidents may occur.
- ▶ Secure power cable with a conduit, which is accessory part for DHW tank, not to be pulled out by external force.
  - If fixing is incomplete, it can cause trouble with a heat generation, electric shock or fire and so on.

## GENERAL INFORMATION

- ▶ The piping, valves and system configuration of DHW tank system should be followed a relevant local or national regulations.
- ▶ A pressure relief valve in accordance with an opening pressure of max. 0.9MPa should be connected.
- ▶ The electrical box must be opened by a licensed electrician.
- ▶ Switch off the power supply before opening the electrical box lid.
- ▶ Make sure that the installation location of DHW tank system including piping and valves is frost free.



- DHW Tank shall be located and installed indoors (garage, multipurpose room, boiler room).



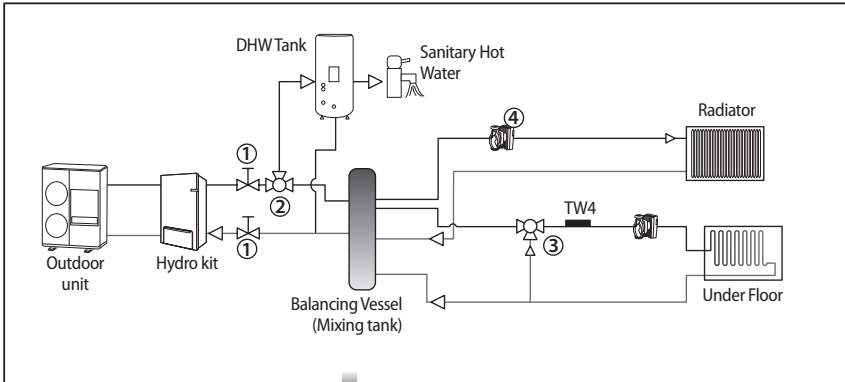
# DHW tank

## Piping diagram

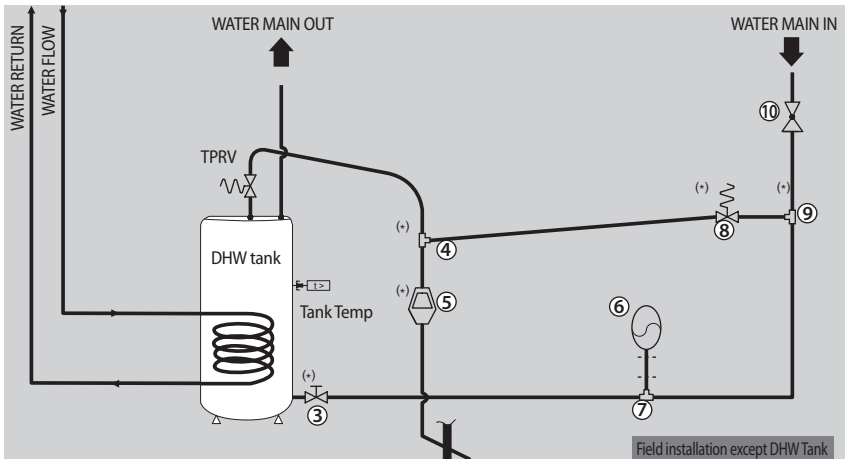


- The product must be installed without any water leakage.
- Please verify that the DHW tank and other components are properly installed and reinstall them if necessary.
  - Use certified components and the correct tools.
  - Keep adequate space for the installing.

### OVERVIEW



### OPTION SANITARY WARM WATER TANK



No.	Note	No.	Note
①	Service valve	⑧	Expansion vessel
②	3 way diverting valve	⑨	T-Joint
③	Mixing Valve	⑩	Expansion relief Valve
④	Circulation Pump	⑪	T-Joint
⑤	Drain Valve	⑫	Pressure reducing valve with integrated check valve and strainer
⑥	T-Joint	TW4	Temperature Sensor for Mixing Valve
⑦	Tundish	Tank Temp	Temperature sensor for DHW tank

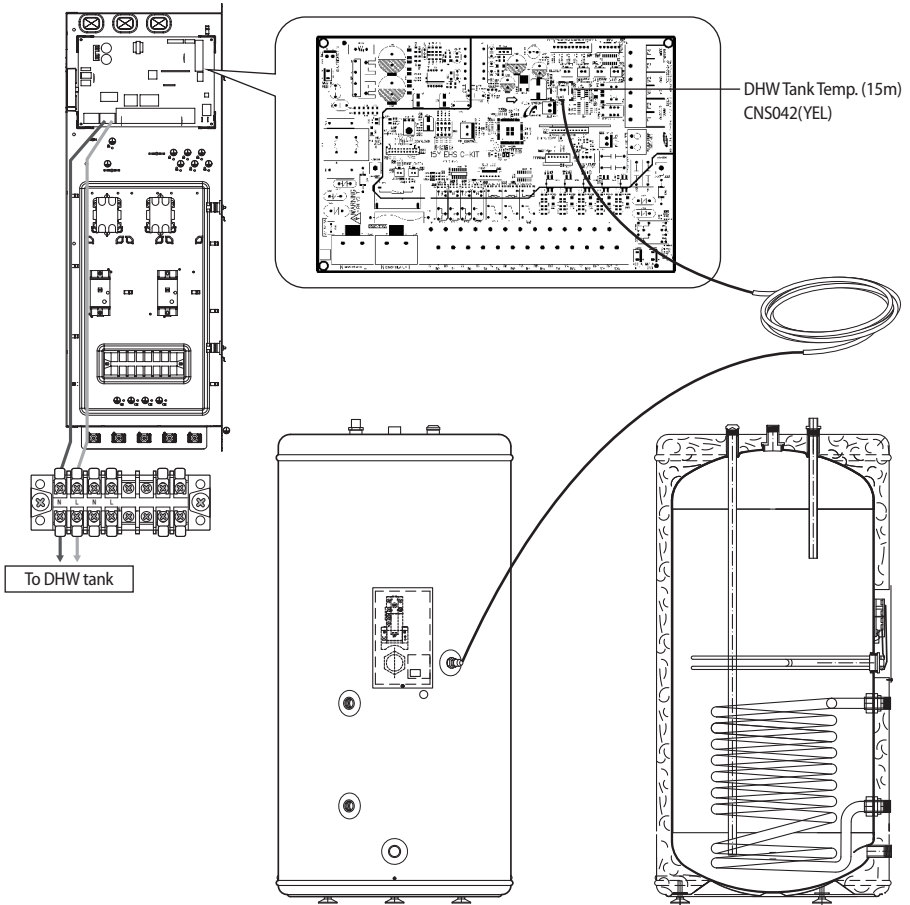
\* The table above contains the different components of the functional diagrams.

### System configuration

- ▶ For the reliable performance and durability, all parts as listed below, including a relief valve, an expansion vessel, a drain valve and pressure reducing valve, should be installed according to each national or regional standards. They are not supplied by SAMSUNG.
  - Pressure relief valve
  - Expansion vessel
  - Drain valve
  - Tundish
  - Expansion relief valve
  - Pressure reducing valve
- ▶ Screw the thermistor socket in the foreseen threaded thermistor hole in the tank, use a thread sealant such as Teflon or similar to make water tight.
- ▶ Apply contact glue to the thermistor and insert the thermistor as deep as possible in the thermistor socket. Fix using the nut provided.

# DHW tank

## Switch box layout



- \* Use a correct sensor pocket which is fit for the DHW tank sensor(OD Ø6).  
If the gap between the supplied sensor and DHW tank sensor pocket is big, use thermal grease.

## Electrical connections

### Procedure



- Switch off the power supply before making any connections.
- Use a thermal grease in thermistor pocket after installing electric connections.

#### Connections to be made in the electrical box of DHW tank

1. Connect the booster heater power supply and thermal protection cable.
2. Make sure to ensure strain relief of the cable.

#### Connections to be made in the electrical box of indoor units

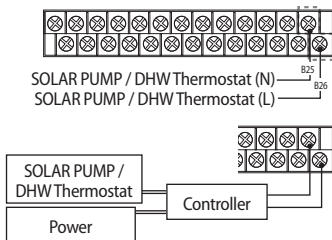
3. Plug the thermistor cable connector in the connector CNS042 on the pcb.
4. Connect the booster heater power supply and thermal protection cable(field supply) to terminal TB-A1 and earth on the terminal block.
5. Connector the loose ends of the TB-A1 on the terminal block and the connector CNS042 on the PCB.
6. Plug the thermistor cable connector in the socket X9A on the PCB.
7. Connect the booster heater power supply and thermal protection cable (field supply) to terminal 7, 8, 21, 22 and earth on the terminal block.
8. Connect the booster heater power supply cable to the circuit breaker and earthing screw.
9. Fix the cables to the cable tie mountings with cable ties to ensure strain relief.



- It is of great importance that the heater is filled with water before the electricity is hooked up, or else- the warranty is not valid. If the heater is installed and not used, it must be flushed with water once a week.

### Connection of the solar circulation pump for DHW tank

Description	No. of wires	Max. A	Thickness	Supply Scope
Solar pump / DHW Thermostat	2+ground	10 mA	0.75mm <sup>2</sup> H05RN-F or H07RN-F	Field supply (230 V~, Input)



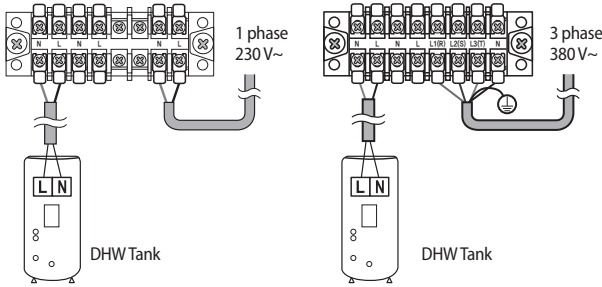
1. Before the installation, control kit should be turned off.
2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.
3. It is for control kit to inform that the Solar pump / DHW Thermostat is operating.
4. Solar pump / DHW Thermostat is controlled by installer's handling. And it send the signal to control kit depending on Solar pump / DHW Thermostat conditions. In operating mode, signal shall be around 230Vac B/W N&L. In non-operating mode, signal shall be around 0Vac B/W N&L.



- Maximum allowable current of each terminal is below 10 mA.
- Ports number B25, B26 are for input port for detection and they do not supply power to a Solar pump / DHW Thermostat.

# DHW tank

## Power connection



- It is important that the 3-way valve is fitted correctly: When the 3-way valve is idle (not activated) the space heating circuit should be selected, when the 3-way valve is activated the sanitary heating circuit should be selected.
- The booster heater that will be connected should be 3 kW or lower.

## Troubleshooting

**IMPORTANT:** All maintenance or repair work must be executed by an approved installer.

Problem	Possible cause	Solution
Hot water is not coming out.	No power supply to the water heater	Check if there is any power on the power supply terminal on the thermostat.
	The thermostat may be set too high and cause the fuse or safety cut-off to operate.	Reduce thermostat setting by 5 °C and press the reset button.
Heating is not working	Heating element or internal electrical wiring is out of order.	Check if there is any power on the power supply on the connector of the heating element between black and yellow/green wires. If this is OK, press the reset button on the fuse/safety cut-off.
Water is not warm enough	Thermostat is set too low.	Adjust the thermostat up using a standard screwdriver.
	Heating element or the internal electrical wiring is partially out of order.	Check the resistance of the heating element on the connector of the heater bundle, and the condition of the internal wiring.
	UX mixing valve(fitted on top) is incorrectly adjusted.	Adjust the UX mixing valve correctly to the preferred temperature.

Safety valve(SV) is dripping.	Water expands when heated. If there is no consumption of hot water over a period of time pressure builds up, causing the safety valve to open.	If drip from the SV is severe, it might need to be replaced. Some dripping is normal. Alternatively an expansion vessel can be fitted.
Leak warning outlet is dripping.	The heating element may not be properly tightened.	Check the heating element o-ring seal and all connections.
	There may be a leak.	
Other problems, or if none of the above solves the problem.	-	Contact the installer/supplier regarding any other failure.



WARNING

Incorrect handling of thermostat, safety valve or other valves may lead to tank rupture. When servicing the unit follow instructions carefully:

- Always turn off main power supply when water supply is being shut off.
- Test the free operation of the safety valve regularly by opening the valve ensuring the water flows freely.
- Electrical connection and all servicing of the electrical components should only be carried out by an authorized electrician.
- Fitting and all servicing of plumbing fixtures should only be carried out by an authorized installer.
- When replacing the thermostat, safety valve or any other valve or part supplied with this unit, use only approved parts of the same specification.

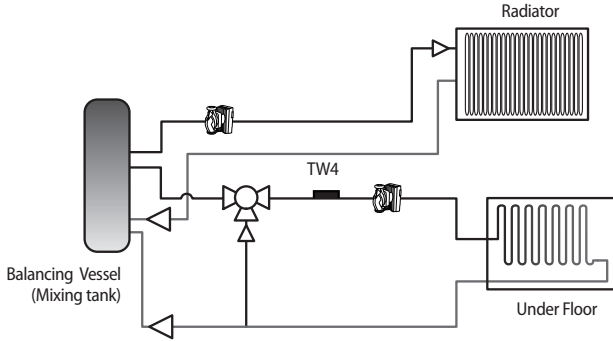


CAUTION

- Before resetting the safety cut-off or altering the thermostat setting, always remember to isolate the electrical supply to the unit. This must be done prior to removing the electrical box lid.
- If the electric element or thermostat is defective, contact authorized electrician.
- After adjustments are completed, ensure the lid to the electrical box is refitted correctly and that the retaining screw is properly fitted.

# Mixing Valve

## Installation of mixing valve



When two different zones are used with different temperature, adjust the temperature of discharge water to high temperature water and control the amount of bypass to provide low temperature water by applying the mixing valve and temperature sensor of the mixing valve (TW4).

1. Select a mixing valve from the manufacturers as below (recommended) and install it at the entrance of the zone.
2. Install the supplied temperature sensor (TW4) on the rear part of the mixing valve. Install TW4 Sensor within 1m of Mixing Valve.
3. Since running time varies depending on the manufacturer, set the FSV (default 90 sec.) by referring to the FSV value below.

Maker		BELIMO	SIEMENS	HONEYWELL
Model code	3 Way Valve	R3020-6P3-S2	VXP45.20-4 (kvs 4)	V5011E1213
	Actuator	LR230A(-S)	SSB31	ML6420A3015
Running time		90 sec.	150 sec.	60 sec.
FSV(#4046) setting		9	15	6

\* The table above is for your reference. It can be changed without advanced notice.

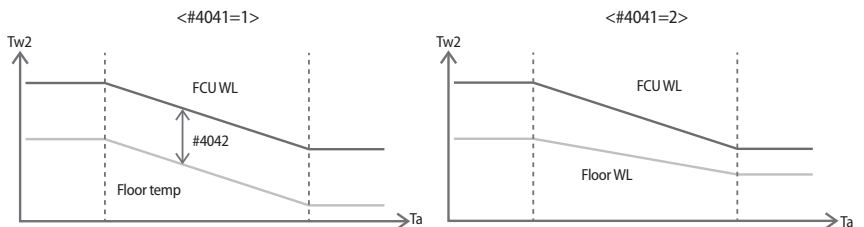
4. Set the FSV value by referring to the table below depending on installation environment.

Function	Details	Code	Unit	Default	Min.	Max.
Mixing valve	Use or not	4041	-	0(No)	0	2
	Target temperature difference (Heating) (TW3-TW4)	4042	°C	10	5	15
	Target temperature difference (Cooling) (TW4-TW3)	4043	°C	10	5	15
	Control factor	4044	-	2	1	5
	Interval of valve control	4045	Min.	2	1	30
	Running time (10 second unit)	4046	(x10) sec	9	6	24

\* 4041 = 1 : Controlled based on the temperature difference (4042, 4043)

\* 4041 = 2 : Controlled based on the temperature difference of the WL value

ex) Heating

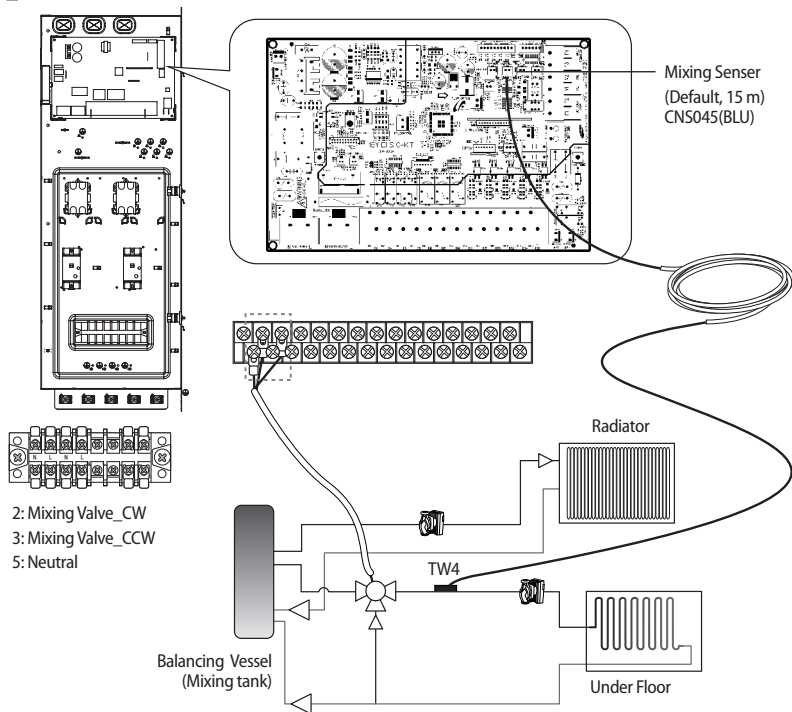


- \* The mixing valve is controlled based on the FCU WL value.
- \* As the #4044 value increases and the #4045 value decreases, the control speed increases. (Temperature hunting may occur if the control speed increases depending on the load.)
- \* The additional pump and mixing valve should be purchased separately. TW4 sensor is included in the product accessories.
- \* TW3 : Water temp. sensor 3

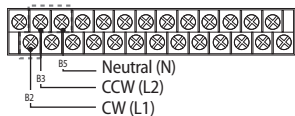


• When the thermostat control is set as 'Use', the mixing valve can be used for Zone 1 and Zone 2. (When both FSV #2091 and #2092 are set as 1)

### Connection of the mixing valve



Description	No. of wires	Max. A	Thickness	Supply Scope
Mixing valve	4	22 mA	> 0.75 mm <sup>2</sup> , H05RN-F or H07RH-F	Field supply (230 V~, Input)



1. Before the installation, hydro unit should be turned off.
2. Using the appropriate equipment to correct position of terminal block as shown on the diagram.

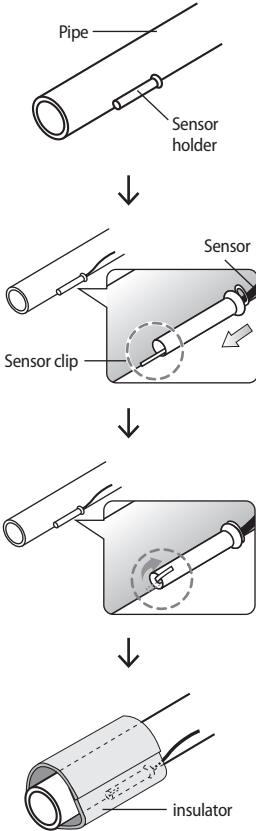


# Mixing Valve

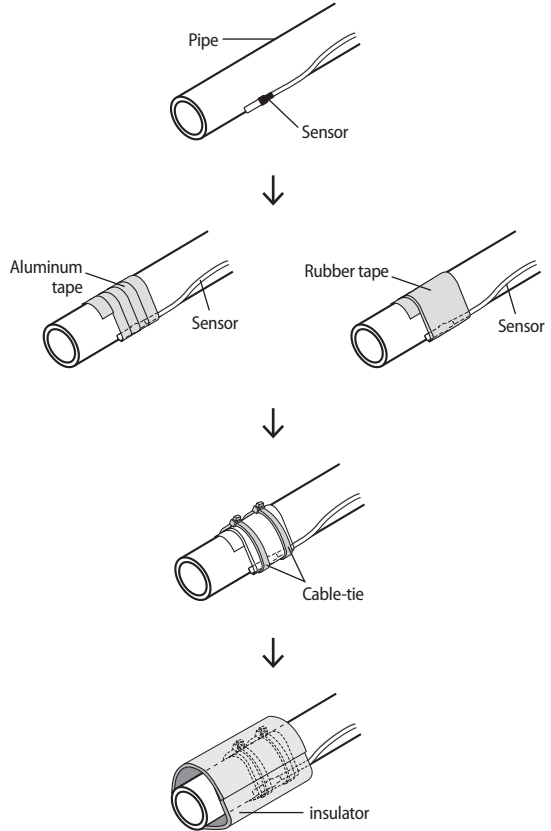
## Example of sensor installation (TW4)

Weld the sensor holder on the selected location of the pipe and then insulate it.

When the pipe is a copper pipe



When the pipe is not a copper pipe



• When the holder sensor cannot be welded on the pipe, fix the sensor with aluminum tape and insulate it.

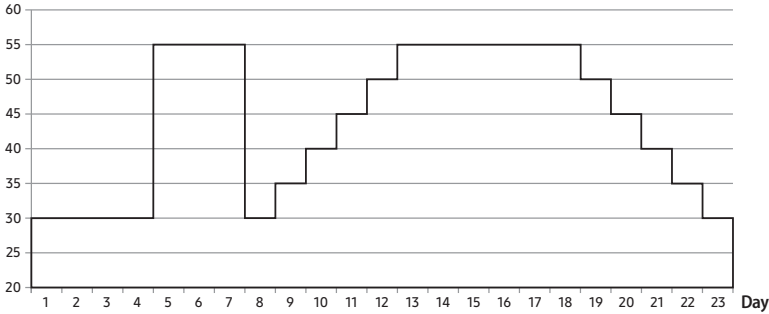
# Concrete curing function

When pipes of floor heating are installed, operation for reinforcing concrete curing is applied. (Period of operation: 23 days)

## Entering procedure

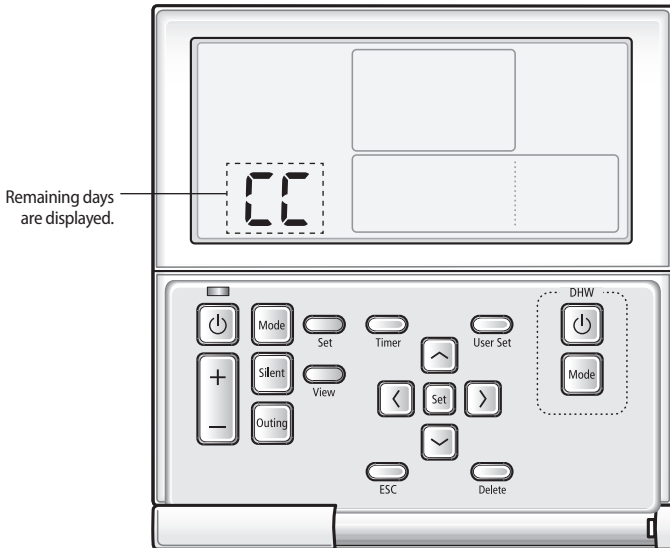
1. After turning off the DIP switch K3 of indoor unit (Default ON), turn off and turn on the indoor unit. The operation for concrete curing starts automatically. (If blackout occurs and communication restarts later, operation will continue.)
2. Temperature of discharge water is controlled as time goes on like below.

Temp.



Classification	Initial Heating		Step raise				Heating	Step down					Total (Hour)	
	Time	Temperature	Time	Temperature	Time	Temperature		Time	Temperature	Time	Temperature			
Time	96	72	24	24	24	24	144	24	24	24	24	24	552	
Temperature	30	55	30	35	40	45	50	55	50	45	40	35	30	-

3. Remaining days are displayed on the wired remote controller during operation but key operation is unavailable.

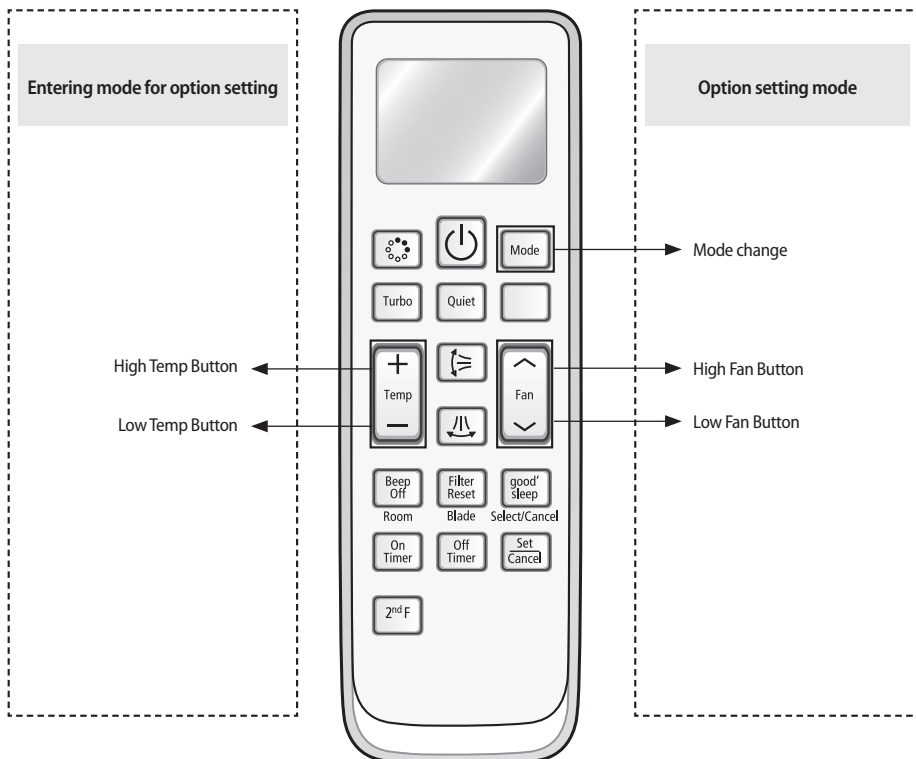


\* If an error is displayed, concrete curing function does not work.

# Installation option setting

- ▶ Set the indoor unit installation option with remote controller option.

## The procedure of option setting

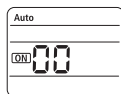


## Entering mode to set option

1. Remove batteries from the remote controller.
2. Insert batteries and enter the option setting mode while pressing High Temp button and Low Temp button.



3. Check if you have entered the option setting status.



## Changing a particular option

You can change each digit of set option.

Option	SEG1		SEG2		SEG3		SEG4		SEG5		SEG6	
Explanation	PAGE		MODE		The option mode you want to change		The tens' digit of an option SEG you will change		The unit digit of an option SEG you will change		The changed value	
Remote Controller Display												
Indication and Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details	Indication	Details
	0		D		Option mode	1~6	Tens' digit of SEG	0~9	Unit digit of SEG	0~9	The changed value	0~F



NOTE

- When changing a digit of an indoor unit address setting option, set the SEG3 as 'A'.
- When changing a digit of indoor unit installation option, set the SEG3 as '2'.

Ex) When setting the 'central controller' into disuse status.





Option	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6
Explanation	PAGE	MODE	The option mode you want to change	The tens' digit of an option SEG you will change	The unit digit of an option SEG you will change	The changed value
Indication	0	D	2	0	5	0

### \* 02 Series installation option

Classification	SEG1~24
Use central controller (Default)	020010 100000 200000 300000
Disuse central controller	020000 100000 200000 300000

# How to connect your extended power cables

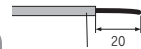
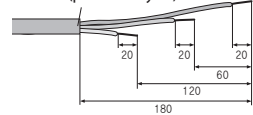
1. Prepare a compressor and the following tools.

Tools	Crimping pliers	Connection sleeve (mm)	Insulation tape	Contraction tube (mm)
Spec	MH-14	20xØ6.5(HxOD)	Width 19mm	70xØ8.0(LxOD)
Shape				

2. As shown in the figure, peel off the shields from the rubber or wire of the power cable.

- Peel off 20 mm of the wire shields of the tube installed already.

Power cable (provided by us)



(Unit: mm)

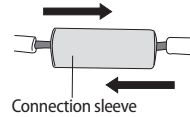


- After peeling off the tube wire, you must insert a contraction tube.
- For information about the power cable specifications for indoor and outdoor units, refer to the installation manual.

3. Insert both sides of core wire of the power cable into the connection sleeve.

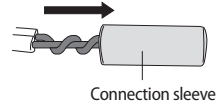
► **Method 1**

- Push the core wire into the sleeve from both sides.



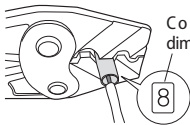
► **Method 2**

- Twist the wire cores together and push it into the sleeve.

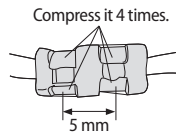


4. Using a compressor, compress the two points and flip it over and compress another two points in the same location.

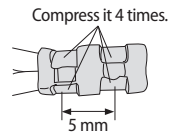
- The compression dimension should be 8.0.
- After compressing it, pull both sides of the wire to make sure it is firmly pressed.



► **Method 1**



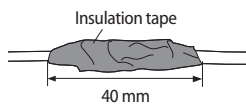
► **Method 2**



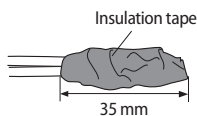
5. Wrap it with the insulation tape twice or more and position your contraction tube in the middle of the insulation tape.

A total of three or more layers of insulation is required.

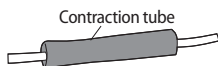
► **Method 1**



► **Method 2**



6. Apply heat to the contraction tube to contract it.

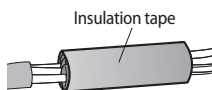


7. After tube contraction work is completed, wrap it with the insulation tape to finish.



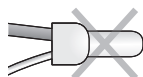
CAUTION

- Make sure that the connection parts are not exposed to outside.
- Be sure to use insulation tape and a contraction tube made of approved reinforced insulating materials that have the same level of withstand voltage with the power cable. (Comply with the local regulations on extensions.)



WARNING

- In case of extending the electric wire, please **DO NOT** use a round-shaped Pressing socket.
- Incomplete wire connections can cause electric shock or a fire.



# COMMISSION REGULATION (EU) No 813/2013 <sup>1)</sup>

## ECODESIGN REQUIREMENTS FOR SPACE HEATER <sup>1)</sup>

A	Model(s) : AE040XEDEH/AE090JNYDEH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>	
N	Rated heat output <sup>(1)</sup>	Prated <sup>(6)</sup>	4 kW	
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
-	T <sub>j</sub> = -7 °C	P <sub>dh</sub>	3.5 kW	
	T <sub>j</sub> = +2 °C	P <sub>dh</sub>	2.2 kW	
	T <sub>j</sub> = +7 °C	P <sub>dh</sub>	1.4 kW	
	T <sub>j</sub> = +12 °C	P <sub>dh</sub>	0.6 kW	
T	T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	4.0 kW	
U	T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	4.0 kW	
V	For air-to-water heat pumps T <sub>j</sub> = -15 °C (if TOL < -20 °C)	P <sub>dh</sub>	- kW	
W	Bivalent temperature	T <sub>biv</sub>	-10 °C	
Y	Cycling interval capacity for heating	P <sub>cyh</sub>	- kW	
AB	Degradation co-efficient <sup>(7)</sup>	C <sub>dh</sub>	0.9 -	
AD	Power consumption in modes other than active mode			
AF	Off mode	P <sub>off</sub>	0.080 kW	
AG	Thermostat-off mode	P <sub>to</sub>	0.011 kW	
AH	Standby mode	P <sub>st</sub>	0.011 kW	
AI	Crankcase heater mode	P <sub>ck</sub>	0.000 kW	
AK	Other items			
AL	Capacity control	variable <sup>(8A)</sup>		
AP	Sound power level, indoors/outdoors	L <sub>wa</sub>	40/61	dB
AQ	Emissions of nitrogen oxides	NO <sub>x</sub>	-	mg/kWh
AS	For heat pump combination heater			
AT	Declared load profile	-		
AV	Daily electricity consumption	Q <sub>elec</sub>	-	kWh
AX	Contact details	http://www.samsung.com		

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>	
P	Seasonal space heating energy efficiency	η <sub>s</sub>	126 %	
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
-	T <sub>j</sub> = -7 °C	COP <sub>d</sub> <sup>(5)</sup>	1.92 -	
	T <sub>j</sub> = +2 °C	COP <sub>d</sub> <sup>(5)</sup>	3.13 -	
	T <sub>j</sub> = +7 °C	COP <sub>d</sub> <sup>(5)</sup>	3.90 -	
	T <sub>j</sub> = +12 °C	COP <sub>d</sub> <sup>(5)</sup>	6.90 -	
T	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub> <sup>(5)</sup>	2.05 -	
U	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub> <sup>(5)</sup>	2.05 -	
V	For air-to-water heat pumps T <sub>j</sub> = -15 °C (if TOL < -20 °C)	COP <sub>d</sub> <sup>(5)</sup>	- -	
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C	
Z	Cycling interval efficiency	COP <sub>cyh</sub> <sup>(8A)</sup>	- -	
AC	Heating water operating limit temperature	WTOL	- °C	
AE	Supplementary heater			
N	Rated heat output <sup>(1)</sup>	P <sub>sup</sub>	- kW	
AJ	Type of energy input			
AK	Other items			
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	40	m <sup>3</sup> /h <sup>(8A)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h <sup>(8A)</sup>
AS	For heat pump combination heater			
AU	Water heating energy efficiency	η <sub>wh</sub>	-	%
AW	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh

AZ <sup>(7)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T<sub>j</sub>).

BA <sup>(8A)</sup> If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0.9.

BB <sup>(1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BC <sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com

A	Model(s) : AE060XEDEH/AE090JNYDEH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

	Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
N	Rated heat output <sup>(1)</sup>	Prated <sup>(6)</sup>	5	kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	Pdh	4.0	kW
	Tj = +2 °C	Pdh	2.4	kW
	Tj = +7 °C	Pdh	1.6	kW
	Tj = +12 °C	Pdh	0.7	kW
T	Tj = bivalent temperature	Pdh	4.5	kW
U	Tj = operation limit temperature	Pdh	4.5	kW
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	-	kW
W	Bivalent temperature	Tbiv	-10	°C
Y	Cycling interval capacity for heating	Pcyc	-	kW
AB	Degradation co-efficient <sup>(7)</sup>	Cdh	0.9	-
AD	<b>Power consumption in modes other than active mode</b>			
AF	Off mode	Poff	0.080	kW
AG	Thermostat-off mode	Pto	0.011	kW
AH	Standby mode	Psb	0.011	kW
AI	Crankcase heater mode	Pcc	0.000	kW
AK	<b>Other items</b>			
AL	Capacity control		variable <sup>(8M)</sup>	
AP	Sound power level, indoors/ outdoors	L <sub>WA</sub>	40/61	dB
AQ	Emissions of nitrogen oxides	NOx	-	mg/kWh
AS	<b>For heat pump combination heater</b>			
AT	Declared load profile		-	
AV	Daily electricity consumption	Q <sub>elec</sub>	-	kWh
AX	Contact details	http://www.samsung.com		

	Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
P	Seasonal space heating energy efficiency	η <sub>f</sub>	126	%
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	COPd <sup>(5)</sup>	1.94	-
	Tj = +2 °C	COPd <sup>(5)</sup>	3.10	-
	Tj = +7 °C	COPd <sup>(5)</sup>	3.90	-
	Tj = +12 °C	COPd <sup>(5)</sup>	6.90	-
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1.90	-
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1.90	-
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	-	-
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Z	Cycling interval efficiency	COP <sub>cyc</sub> <sup>(8A)</sup>	-	-
AC	Heating water operating limit temperature	WTOL	-	°C
AE	<b>Supplementary heater</b>			
N	Rated heat output <sup>(1)</sup>	Psup	-	kW
AJ	Type of energy input			
AK	<b>Other items</b>			
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	43	m <sup>3</sup> /h <sup>(8D)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h <sup>(8D)</sup>
AS	<b>For heat pump combination heater</b>			
AU	Water heating energy efficiency	η <sub>wh</sub>	-	%
AW	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh

AY <sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

AZ <sup>(7)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

BA <sup>(1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB <sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com



# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

## ECODESIGN REQUIREMENTS FOR SPACE HEATER<sup>1)</sup>

A	Model(s): AE090JXEDEH/AE090JNYDEH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>	
N	Rated heat output <sup>(5)</sup>	Prated <sup>(6)</sup>	6 kW	
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	Pdh	5.5 kW	
	Tj = +2 °C	Pdh	3.3 kW	
	Tj = +7 °C	Pdh	2.1 kW	
	Tj = +12 °C	Pdh	1.0 kW	
T	Tj = bivalent temperature	Pdh	6.2 kW	
U	Tj = operation limit temperature	Pdh	6.2 kW	
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	- kW	
W	Bivalent temperature	Tbiv	-10 °C	
Y	Cycling interval capacity for heating	Ppsych	- kW	
AB	Degradation co-efficient <sup>(7)</sup>	Cdh	0.9 -	
AD	Power consumption in modes other than active mode			
AF	Off mode	Poff	0.080 kW	
AG	Thermostat-off mode	Pto	0.011 kW	
AH	Standby mode	Pstb	0.011 kW	
AI	Crankcase heater mode	Pck	0.000 kW	
AK	Other items			
AL	Capacity control	variable <sup>(8a)</sup>		
AP	Sound power level, indoors/outdoors	Lwa	40/64 dB	
AQ	Emissions of nitrogen oxides	NOx	- mg/kWh	
AS	For heat pump combination heater			
AT	Declared load profile	-		
AV	Daily electricity consumption	Q <sup>elec</sup>	- kWh	
AX	Contact details	http://www.samsung.com		

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>	
P	Seasonal space heating energy efficiency	η <sub>f</sub>	128 %	
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	COPd <sup>(5)</sup>	1.93 -	
	Tj = +2 °C	COPd <sup>(5)</sup>	3.11 -	
	Tj = +7 °C	COPd <sup>(5)</sup>	4.30 -	
	Tj = +12 °C	COPd <sup>(5)</sup>	6.64 -	
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1.72 -	
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1.72 -	
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	- -	
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C	
Z	Cycling interval efficiency	COP <sub>psych</sub> <sup>(6A)</sup>	- -	
AC	Heating water operating limit temperature	WTOL	- °C	
AE	Supplementary heater			
N	Rated heat output <sup>(5)</sup>	Psup	- kW	
AJ	Type of energy input			
AK	Other items			
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	53 m <sup>3</sup> /h <sup>(6b)</sup>	
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	- m <sup>3</sup> /h <sup>(6b)</sup>	
AS	For heat pump combination heater			
AU	Water heating energy efficiency	η <sub>wh</sub>	- %	
AW	Daily fuel consumption	Q <sup>fuel</sup>	- kWh	

AY<sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

AZ<sup>(7)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

BA<sup>1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB<sup>2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com

A	Model(s) : AE090JXEDGH/AE090JNYDGH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
N	Rated heat output <sup>(1)</sup>	Prated <sup>(6)</sup>	6 kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj		
-	Tj = -7 °C	Pdh	5.7 kW
-	Tj = +2 °C	Pdh	3.4 kW
-	Tj = +7 °C	Pdh	2.2 kW
-	Tj = +12 °C	Pdh	1.0 kW
T	Tj = bivalent temperature	Pdh	6.4 kW
U	Tj = operation limit temperature	Pdh	6.4 kW
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	- kW
W	Bivalent temperature	Tbiv	-10 °C
Y	Cycling interval capacity for heating	Ppsych	- kW
AB	Degradation co-efficient <sup>(7)</sup>	Cdh	0.9 -
AD	Power consumption in modes other than active mode		
AF	Off mode	Poff	0.080 kW
AG	Thermostat-off mode	Pto	0.011 kW
AH	Standby mode	Psb	0.011 kW
AI	Crankcase heater mode	Pck	0.000 kW
AK	Other items		
AL	Capacity control	variable <sup>(8)</sup>	
AP	Sound power level, indoors/ outdoors	L <sub>WA</sub>	40/64 dB
AQ	Emissions of nitrogen oxides	NOx	- mg/kWh
AS	For heat pump combination heater		
AT	Declared load profile	-	
AV	Daily electricity consumption	Q <sub>elec</sub>	- kWh
AX	Contact details	http://www.samsung.com	

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
P	Seasonal space heating energy efficiency	η <sub>s</sub>	131 %
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj		
-	Tj = -7 °C	COPd <sup>(5)</sup>	2.10 -
-	Tj = +2 °C	COPd <sup>(5)</sup>	3.19 -
-	Tj = +7 °C	COPd <sup>(5)</sup>	4.24 -
-	Tj = +12 °C	COPd <sup>(5)</sup>	6.37 -
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1.74 -
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1.74 -
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	- -
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C
Z	Cycling interval efficiency	COP <sub>cyc</sub> <sup>(4A)</sup>	- -
AC	Heating water operating limit temperature	WTOL	- °C
AE	Supplementary heater		
N	Rated heat output <sup>(1)</sup>	Psup	- kW
AJ	Type of energy input		
AK	Other items		
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	53 m <sup>3</sup> /h <sup>(4D)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	m <sup>3</sup> /h <sup>(4D)</sup>
AS	For heat pump combination heater		
AU	Water heating energy efficiency	η <sub>wh</sub>	- %
AW	Daily fuel consumption	Q <sub>fuel</sub>	- kWh

AY<sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

AZ<sup>(7)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

BA<sup>(1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB<sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com

# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

A	Model(s) : AE120JXEDEH/AE160JNYDEH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

	Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
N	Rated heat output <sup>(5)</sup>	Prated <sup>(6)</sup>	8	kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
-	T <sub>j</sub> = -7 °C	P <sub>dh</sub>	7.1	kW
	T <sub>j</sub> = +2 °C	P <sub>dh</sub>	4.3	kW
	T <sub>j</sub> = +7 °C	P <sub>dh</sub>	2.8	kW
	T <sub>j</sub> = +12 °C	P <sub>dh</sub>	1.2	kW
T	T <sub>j</sub> = bivalent temperature	P <sub>dh</sub>	8.0	kW
U	T <sub>j</sub> = operation limit temperature	P <sub>dh</sub>	8.0	kW
V	For air-to-water heat pumps T <sub>j</sub> = -15 °C (if TOL < -20 °C)	P <sub>dh</sub>	-	kW
W	Bivalent temperature	T <sub>biv</sub>	-10	°C
Y	Cycling interval capacity for heating	P <sub>psych</sub>	-	kW
AB	Degradation co-efficient <sup>(7)</sup>	C <sub>dh</sub>	0.9	-
AD	Power consumption in modes other than active mode			
AF	Off mode	P <sub>off</sub>	0.080	kW
AG	Thermostat-off mode	P <sub>ro</sub>	0.011	kW
AH	Standby mode	P <sub>stb</sub>	0.011	kW
AI	Crankcase heater mode	P <sub>ck</sub>	0.000	kW
AK	Other items			
AL	Capacity control		variable <sup>(8A)</sup>	
AP	Sound power level, indoors/ outdoors	L <sub>WA</sub>	47/64	dB
AQ	Emissions of nitrogen oxides	NO <sub>x</sub>	-	mg/kWh
AS	For heat pump combination heater			
AT	Declared load profile		-	
AV	Daily electricity consumption	Q <sub>elec</sub>	-	kWh
AX	Contact details	http://www.samsung.com		

	Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
P	Seasonal space heating energy efficiency	η <sub>s</sub>	112	%
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T <sub>j</sub>			
-	T <sub>j</sub> = -7 °C	COP <sub>d</sub> <sup>(5)</sup>	1.77	-
	T <sub>j</sub> = +2 °C	COP <sub>d</sub> <sup>(5)</sup>	2.74	-
	T <sub>j</sub> = +7 °C	COP <sub>d</sub> <sup>(5)</sup>	4.51	-
	T <sub>j</sub> = +12 °C	COP <sub>d</sub> <sup>(5)</sup>	7.02	-
T	T <sub>j</sub> = bivalent temperature	COP <sub>d</sub> <sup>(5)</sup>	1.62	-
U	T <sub>j</sub> = operation limit temperature	COP <sub>d</sub> <sup>(5)</sup>	1.62	-
V	For air-to-water heat pumps T <sub>j</sub> = -15 °C (if TOL < -20 °C)	COP <sub>d</sub> <sup>(5)</sup>	-	-
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Z	Cycling interval efficiency	COP <sub>cyc</sub> <sup>(8A)</sup>	-	-
AC	Heating water operating limit temperature	WTOL	-	°C
AE	Supplementary heater			
N	Rated heat output <sup>(1)</sup>	P <sub>sup</sub>	-	kW
AJ	Type of energy input			
AK	Other items			
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	108	m <sup>3</sup> /h <sup>(8A)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h <sup>(8A)</sup>
AS	For heat pump combination heater			
AU	Water heating energy efficiency	η <sub>wh</sub>	-	%
AW	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh

AY <sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(T<sub>j</sub>).

AZ <sup>(7)</sup> If C<sub>dh</sub> is not determined by measurement then the default degradation coefficient is C<sub>dh</sub> = 0.9.

BA <sup>(1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB <sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com

A	Model(s) : AE120JXEDGH/AE160JNYDGH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
N	Rated heat output <sup>(1)</sup>	Prated <sup>(6)</sup>	8 kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj		
-	Tj = -7 °C	Pdh	7.1 kW
-	Tj = +2 °C	Pdh	4.3 kW
-	Tj = +7 °C	Pdh	2.8 kW
-	Tj = +12 °C	Pdh	1.2 kW
T	Tj = bivalent temperature	Pdh	8.0 kW
U	Tj = operation limit temperature	Pdh	8.0 kW
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	- kW
W	Bivalent temperature	Tbiv	-10 °C
Y	Cycling interval capacity for heating	Pcyh	- kW
AB	Degradation co-efficient <sup>(7)</sup>	Cdh	0.9 -
AD	Power consumption in modes other than active mode		
AF	Off mode	Poff	0.080 kW
AG	Thermostat-off mode	Pto	0.011 kW
AH	Standby mode	Psb	0.011 kW
AI	Crankcase heater mode	Pck	0.000 kW
AK	Other items		
AL	Capacity control	variable <sup>(8)</sup>	
AP	Sound power level, indoors/ outdoors	L <sub>wa</sub>	47/64 dB
AQ	Emissions of nitrogen oxides	NOx	- mg/kWh
AS	For heat pump combination heater		
AT	Declared load profile	-	
AV	Daily electricity consumption	Q <sub>elec</sub>	- kWh
AX	Contact details	http://www.samsung.com	

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
P	Seasonal space heating energy efficiency	η <sub>s</sub>	112 %
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj		
-	Tj = -7 °C	COPd <sup>(5)</sup>	1.77 -
-	Tj = +2 °C	COPd <sup>(5)</sup>	2.74 -
-	Tj = +7 °C	COPd <sup>(5)</sup>	4.51 -
-	Tj = +12 °C	COPd <sup>(5)</sup>	7.02 -
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1.62 -
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1.62 -
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	- -
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C
Z	Cycling interval efficiency	COP <sub>cyh</sub> <sup>(4A)</sup>	- -
AC	Heating water operating limit temperature	WTOL	- °C
AE	Supplementary heater		
N	Rated heat output <sup>(1)</sup>	Psup	- kW
AJ	Type of energy input		
AK	Other items		
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	108 m <sup>3</sup> /h <sup>(4D)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	m <sup>3</sup> /h <sup>(4D)</sup>
AS	For heat pump combination heater		
AU	Water heating energy efficiency	η <sub>wh</sub>	- %
AW	Daily fuel consumption	Q <sub>fuel</sub>	- kWh

AY <sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

AZ <sup>(7)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

BA <sup>(1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB <sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com

# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

A	Model(s) : AE140JXEDEH/AE160JNYDEH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

	Item <sup>(1)</sup>	Symbol <sup>(6)</sup>	Value <sup>(1)</sup>	Unit <sup>(6)</sup>
N	Rated heat output <sup>(7)</sup>	Prated <sup>(6)</sup>	9	kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	Pdh	7.5	kW
-	Tj = +2 °C	Pdh	4.6	kW
-	Tj = +7 °C	Pdh	2.9	kW
-	Tj = +12 °C	Pdh	1.3	kW
T	Tj = bivalent temperature	Pdh	8.5	kW
U	Tj = operation limit temperature	Pdh	8.5	kW
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	-	kW
W	Bivalent temperature	Tbiv	-10	°C
Y	Cycling interval capacity for heating	Psych	-	kW
AB	Degradation co-efficient <sup>(7)</sup>	Cdh	0.9	-
AD	Power consumption in modes other than active mode			
AF	Off mode	Poff	0.080	kW
AG	Thermostat-off mode	Pto	0.011	kW
AH	Standby mode	Psr	0.011	kW
AI	Crankcase heater mode	Pck	0.000	kW
AK	Other items			
AL	Capacity control		variable <sup>(8M)</sup>	
AP	Sound power level, indoors/ outdoors	Lwa	47/64	dB
AQ	Emissions of nitrogen oxides	NOx	-	mg/kWh
AS	For heat pump combination heater			
AT	Declared load profile		-	
AV	Daily electricity consumption	Qelec	-	kWh
AX	Contact details		http://www.samsung.com	

	Item <sup>(1)</sup>	Symbol <sup>(6)</sup>	Value <sup>(1)</sup>	Unit <sup>(6)</sup>
P	Seasonal space heating energy efficiency	η <sup>(6)</sup>	110	%
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	COPd <sup>(5)</sup>	1.83	-
-	Tj = +2 °C	COPd <sup>(5)</sup>	2.33	-
-	Tj = +7 °C	COPd <sup>(5)</sup>	4.47	-
-	Tj = +12 °C	COPd <sup>(5)</sup>	6.94	-
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1.63	-
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1.63	-
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	-	-
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Z	Cycling interval efficiency	COPyc <sup>(8A)</sup>	-	-
AC	Heating water operating limit temperature	WTOL	-	°C
AE	Supplementary heater			
N	Rated heat output <sup>(7)</sup>	Psup	-	kW
AJ	Type of energy input			
AK	Other items			
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	108	m <sup>3</sup> /h <sup>(8O)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h <sup>(8O)</sup>
AS	For heat pump combination heater			
AU	Water heating energy efficiency	η <sup>wh</sup>	-	%
AW	Daily fuel consumption	Qfuel	-	kWh

AY <sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

AZ <sup>(7)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

BA <sup>(1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB <sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com

A	Model(s) : AE140JXEDGH/AE160JNYDGH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

	Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
N	Rated heat output <sup>(1)</sup>	Prated <sup>(6)</sup>	9	kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	Pdh	7.5	kW
	Tj = +2 °C	Pdh	4.6	kW
	Tj = +7 °C	Pdh	2.9	kW
	Tj = +12 °C	Pdh	1.3	kW
T	Tj = bivalent temperature	Pdh	8.5	kW
U	Tj = operation limit temperature	Pdh	8.5	kW
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	-	kW
W	Bivalent temperature	Tbiv	-10	°C
Y	Cycling interval capacity for heating	Psych	-	kW
AB	Degradation co-efficient <sup>(7)</sup>	Cdh	0.9	-
AD	Power consumption in modes other than active mode			
AF	Off mode	Poff	0.080	kW
AG	Thermostat-off mode	Pto	0.011	kW
AH	Standby mode	Psb	0.011	kW
AI	Crankcase heater mode	Pck	0.000	kW
AK	Other items			
AL	Capacity control	variable <sup>(4M)</sup>		
AP	Sound power level, indoors/ outdoors	L <sub>WA</sub>	47/64	dB
AQ	Emissions of nitrogen oxides	NOx	-	mg/kWh
AS	For heat pump combination heater			
AT	Declared load profile	-		
AV	Daily electricity consumption	Q <sub>elec</sub>	-	kWh
AX	Contact details	http://www.samsung.com		

	Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
P	Seasonal space heating energy efficiency	η <sub>s</sub>	110	%
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	COPd <sup>(5)</sup>	1.83	-
	Tj = +2 °C	COPd <sup>(5)</sup>	2.33	-
	Tj = +7 °C	COPd <sup>(5)</sup>	4.47	-
	Tj = +12 °C	COPd <sup>(5)</sup>	6.94	-
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1.63	-
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1.63	-
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	-	-
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Z	Cycling interval efficiency	COP <sub>cy</sub> <sup>(4A)</sup>	-	-
AC	Heating water operating limit temperature	WTOL	-	°C
AE	Supplementary heater			
N	Rated heat output <sup>(1)</sup>	Psup	-	kW
AJ	Type of energy input			
AK	Other items			
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	108	m <sup>3</sup> /h <sup>(4O)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h <sup>(4O)</sup>
AS	For heat pump combination heater			
AU	Water heating energy efficiency	η <sub>wh</sub>	-	%
AW	Daily fuel consumption	Q <sub>fuel</sub>	-	kWh

AY <sup>(7)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

AZ <sup>(7)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

BA <sup>(1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB <sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com

# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

A	Model(s): AE160XEDEH/AE160JNYDEH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
N	Rated heat output <sup>(1)</sup>	Prated <sup>(6)</sup>	10 kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj		
-	Tj = -7 °C	Pdh	8.4 kW
	Tj = +2 °C	Pdh	5.1 kW
	Tj = +7 °C	Pdh	3.3 kW
	Tj = +12 °C	Pdh	1.5 kW
T	Tj = bivalent temperature	Pdh	9.5 kW
U	Tj = operation limit temperature	Pdh	9.5 kW
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	- kW
W	Bivalent temperature	Tbiv	-10 °C
Y	Cycling interval capacity for heating	Ppsych	- kW
AB	Degradation co-efficient <sup>(7)</sup>	Cdh	0.9 -
AD	Power consumption in modes other than active mode		
AF	Off mode	Poff	0.080 kW
AG	Thermostat-off mode	Pto	0.011 kW
AH	Standby mode	Psb	0.011 kW
AI	Crankcase heater mode	Pck	0.000 kW
AK	Other items		
AL	Capacity control	variable <sup>(8a)</sup>	
AP	Sound power level, indoors/outdoors	LWA	47/66 dB
AQ	Emissions of nitrogen oxides	NOx	- mg/kWh
AS	For heat pump combination heater		
AT	Declared load profile	-	
AV	Daily electricity consumption	Qelec	- kWh
AX	Contact details	http://www.samsung.com	

Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
P	Seasonal space heating energy efficiency	η <sup>(5)</sup>	108 %
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj		
-	Tj = -7 °C	COPd <sup>(5)</sup>	1.83 -
	Tj = +2 °C	COPd <sup>(5)</sup>	2.37 -
	Tj = +7 °C	COPd <sup>(5)</sup>	3.84 -
	Tj = +12 °C	COPd <sup>(5)</sup>	6.94 -
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1.63 -
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1.63 -
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	- -
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10 °C
Z	Cycling interval efficiency	COP <sub>psych</sub> <sup>(6a)</sup>	- -
AC	Heating water operating limit temperature	WTOL	- °C
AE	Supplementary heater		
N	Rated heat output <sup>(1)</sup>	Psup	- kW
AJ	Type of energy input		
AK	Other items		
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	108 m <sup>3</sup> /h <sup>(6b)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	- m <sup>3</sup> /h <sup>(6b)</sup>
AS	For heat pump combination heater		
AU	Water heating energy efficiency	η <sup>(5b)</sup>	- %
AW	Daily fuel consumption	Q <sub>fuel</sub>	- kWh

AY<sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

AZ<sup>(7)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

BA<sup>1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB<sup>2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com

A	Model(s) : AE160JEDGH/AE160JNYDGH
B	Air-to-water heat pump : yes
C	Water-to-water heat pump : no
D	Brine-to-water heat pump : no
E	Low-temperature heat pump : no
F	Equipped with a supplementary heater : no
G	Heat pump combination heater : no
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pump, parameters shall be declared for low-temperature application.
I	Parameters shall be declared for average climate conditions.

	Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
N	Rated heat output <sup>(1)</sup>	Prated <sup>(4)</sup>	10	kW
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	Pdh	8.4	kW
	Tj = +2 °C	Pdh	5.1	kW
	Tj = +7 °C	Pdh	3.3	kW
T	Tj = +12 °C	Pdh	1.5	kW
	Tj = bivalent temperature	Pdh	9.5	kW
U	Tj = operation limit temperature	Pdh	9.5	kW
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	Pdh	-	kW
W	Bivalent temperature	Tbiv	-10	°C
Y	Cycling interval capacity for heating	Pcyc	-	kW
AB	Degradation co-efficient <sup>(2)</sup>	Cdh	0.9	-
AD	Power consumption in modes other than active mode			
AF	Off mode	Poff	0.080	kW
AG	Thermostat-off mode	Pto	0.011	kW
AH	Standby mode	Psa	0.011	kW
AI	Crankcase heater mode	Pck	0.000	kW
AK	Other items			
AL	Capacity control	variable <sup>(4A)</sup>		
AP	Sound power level, indoors/ outdoors	Lwa	47/69	dB
AQ	Emissions of nitrogen oxides	NOx	-	mg/kWh
AS	For heat pump combination heater			
AT	Declared load profile	-		
AV	Daily electricity consumption	Q <sup>elec</sup>	-	kWh
AX	Contact details	<a href="http://www.samsung.com">http://www.samsung.com</a>		

	Item <sup>(1)</sup>	Symbol <sup>(2)</sup>	Value <sup>(3)</sup>	Unit <sup>(4)</sup>
P	Seasonal space heating energy efficiency	η <sup>s</sup>	108	%
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj			
-	Tj = -7 °C	COPd <sup>(5)</sup>	1.83	-
	Tj = +2 °C	COPd <sup>(5)</sup>	2.37	-
	Tj = +7 °C	COPd <sup>(5)</sup>	3.84	-
	Tj = +12 °C	COPd <sup>(5)</sup>	6.94	-
T	Tj = bivalent temperature	COPd <sup>(5)</sup>	1.63	-
U	Tj = operation limit temperature	COPd <sup>(5)</sup>	1.63	-
V	For air-to-water heat pumps Tj = -15 °C (if TOL < -20 °C)	COPd <sup>(5)</sup>	-	-
X	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Z	Cycling interval efficiency	COP <sub>yc</sub> <sup>(4A)</sup>	-	-
AC	Heating water operating limit temperature	WTOL	-	°C
AE	Supplementary heater			
N	Rated heat output <sup>(1)</sup>	Psup	-	kW
AJ	Type of energy input			
AK	Other items			
AN	For air-to-water heat pumps : Rated air flow rate, outdoors	-	108	m <sup>3</sup> /h <sup>(4B)</sup>
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	-	m <sup>3</sup> /h <sup>(4B)</sup>
AS	For heat pump combination heater			
AU	Water heating energy efficiency	η <sup>wh</sup>	-	%
AW	Daily fuel consumption	Q <sup>fuel</sup>	-	kWh

AY<sup>(1)</sup> For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).

AZ<sup>(2)</sup> If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.

BA<sup>(3)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

BB<sup>(2)</sup> If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: [erims.sec@samsung.com](mailto:erims.sec@samsung.com)



# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

No	English(EN)	Bulgarian(BG)	Spanish(ES)	Czech(CS)
I	COMMISSION REGULATION (EU) No 813/2013	РЕГЛАМЕНТ (ЕС) № 813/2013 НА КОМИСИЯТА	REGLAMENTO (UE) No 813/2013 DE LA COMISIÓN	NAŘÍZENÍ KOMISE (EU) č. 813/2013
II	ECODESIGN REQUIREMENTS FOR SPACE HEATER	Изискванията за екопроектиране на отоплителен топлоизточник	Los requisitos de diseño ecológico de aparato de calefacción	Požadavky na ekodesign pro vytápění vnitřních prostorů
A	Model(s); [information identifying the model(s) to which the information relates]	Модел/моделі; [информация за определяне на модела(ите), за който(ито) тя се отнася]	Modelos; [Datos que identifican el modelo o modelos a que se refiere la información]	Model/y; [informace k určení modelu/ů, na který/ě se informace vztahují]
B	Air-to-water heat pump; [yes/no]	Термопомпа „въздух-вода“; [да/не]	Bomba de calor aire-agua; [sí/no]	Teplotně čerpadlo vzduch-voda; [ano/ne]
C	Water-to-water heat pump; [yes/no]	Термопомпа „вода-вода“; [да/не]	Bomba de calor agua-agua; [sí/no]	Teplotně čerpadlo voda-voda; [ano/ne]
D	Brine-to-water heat pump; [yes/no]	Термопомпа „солон разтвор-вода“; [да/не]	Bomba de calor salmuera-agua; [sí/no]	Teplotně čerpadlo solanka-voda; [ano/ne]
E	Low-temperature heat pump; [yes/no]	Термопомпа за нискотемпературни приложения; [да/не]	Bomba de calor de baja temperatura; [sí/no]	Nízkooteplotní teplotně čerpadlo; [ano/ne]
F	Equipped with a supplementary heater; [yes/no]	Оборудвана с допълнителен подгревател; [да/не]	Equipado con un calefactor complementario; [sí/no]	Vybavenost přídavným ohřívačem; [ano/ne]
G	Heat pump combination heater; [yes/no]	Комбиниран термопомпен апарат за отопление и БВ; [да/не]	Calefactor combinado con bomba de calor; [sí/no]	Kombinovaný ohřívač s teplotním čerpadlem; [ano/ne]
H	Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.	Параметрите се обявяват за среднотемпературни приложения, освен при термопомпите с нискотемпературни приложения. При термопомпите с нискотемпературни приложения параметрите се обявяват за нискотемпературните приложения.	Los parámetros se declararán para aplicaciones de media temperatura, excepto si se trata de bombas de calor de baja temperatura. En el caso de las bombas de calor de baja temperatura, los parámetros se declararán para aplicaciones de baja temperatura.	Parametry musí být uvedeny pro středněteplotní aplikace, s výjimkou nízkoteplotních teplotních čerpadel. U nízkoteplotních teplotních čerpadel musí být parametry uvedeny pro nízkoteplotní aplikace.
I	Parameters shall be declared for average climate conditions.	Параметрите се обявяват за средни климатични условия.	Los parámetros se indicarán para condiciones climáticas medias.	Parametry musí být uvedeny pro průměrné klimatické podmínky.
J	Item	Характеристика	Elemento	Položka
K	Symbol	Означение	Símbolo	Označení
L	Value	Стойност	Valor	Hodnota
M	Unit	Мерна единица	Unidad	Jednotka
N	Rated heat output(*)	Номинална топлинна мощност(*)	Potencia calorífica nominal (*)	Jmenovitý tepelný výkon (*)
O	Prated	Prated	Prated	Prated
P	Seasonal space heating energy efficiency	Сезонна енергийна ефективност при отопление	Eficiencia energética estacional de calefacción	Sezónní energetická účinnost vytápění
Q	Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature Tj	Обявена отоплителна мощност за частичен товар при температура вътре 20 °C и външна температура Tj	Capacidad de calefacción declarada para una carga parcial a una temperatura interior de 20 °C y una temperatura exterior Tj	Deklarovaný topný výkon pro částečné zatížení při vnitřní teplotě 20 °C a venkovní teplotě Tj
R	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature Tj	Обявен коефициент на трансформация или коефициент на първичната енергия за частичен товар при температура вътре 20 °C и външна температура Tj	Coefficiente de rendimiento declarado o factor energético primario para una carga parcial a una temperatura interior de 20 °C y una temperatura exterior Tj	Deklarovaný topný faktor či koeficient primární energie pro částečné zatížení při vnitřní teplotě 20 °C a venkovní teplotě Tj
S	COPd or PERd	COPd или PERd	COPd o PERd	COPd nebo PERd
T	Tj = bivalent temperature	Tj = температура на включване на допълнително подгреване	Tj = temperatura bivalente	Tj = bivalentní teplota
U	Tj = operation limit temperature	Tj = гранична работна температура	Tj = temperatura límite de funcionamiento	Tj = mezní provozní teplota
V	For air-to-water heat pumps: Tj = - 15 °C (if TOL < - 20 °C)	За термопомпи „въздух-вода“: Tj = - 15 °C (ако TOL < - 20 °C)	Para bombas de calor aire-agua: Tj = - 15 °C (si TOL < - 20 °C)	U teplotních čerpadel vzduch-voda: Tj = - 15 °C (pokud TOL < - 20 °C)
W	Bivalent temperature	Температура на включване на допълнително подгреване	Temperatura bivalente	Bivalentní teplota
X	For air-to-water heat pumps: Operation limit temperature	За термопомпи „въздух-вода“: гранична работна температура	Para bombas de calor aire-agua: Temperatura límite de funcionamiento	U teplotních čerpadel vzduch-voda: mezní provozní teplota
Y	Cycling interval capacity for heating	Мощност при повторно-кратковременен режим на отопление	Eficiencia del intervalo cíclico para calefacción	Topný výkon v cyklickém intervalu
Z	Cycling interval efficiency	Ефективност при повторно-кратковременен режим	Eficiencia del intervalo cíclico	Účinnost v cyklickém intervalu
AA	COPcyc or PERcyc	COPcyc или PERcyc	COPcyc o PERcyc	COPcyc nebo PERcyc
AB	Degradation co-efficient(**)	Коефициент на влошаване на ефективността(**)	Coefficiente de degradación (**)	Koeficient ztráty energie (**)

No	English(EN)	Bulgarian(BG)	Spanish(ES)	Czech(CS)
AC	Heating water operating limit temperature	Гранична температура на загряваната вода	Temperatura límite de calentamiento de agua	Mezni provozní teplota ohřívání vody
AD	Power consumption in modes other than active mode	Консумирана мощност в режими, различни от работен режим	Consumo de electricidad en modos distintos del activo	Spotřeba elektrické energie v jiných režimech než aktivní režim
AE	Supplementary heater	Допълнителен подгревател	Calefactor complementario	Přídavný ohřívač
AF	Off mode	Режим „изключен“	Modo desactivado	Vypnutý stav
AG	Thermostat-off mode	Режим „термостатно изключен“	Modo desactivado por termostato	Stav vypnutého termostatu
AH	Standby mode	Режим „в готовност“	Modo de espera	Pohotovostní režim
AI	Crankcase heater mode	Режим „подгряване на картера на компресора“	Modo de calentador del cárter	Režim zahřívání skříně kompresoru
AJ	Type of energy input	Вид на постъпващата енергия	Tipo de insumo de energía	Energetický příkon
AK	Other items	Други характеристики	Otros elementos	Jiné položky
AL	Capacity control	Регулиране на мощността	Control de capacidad	Regulace výkonu
AM	fixed/variable	фиксирана/регулируема	fijo/variable	pevná/proměnná
AN	For air-to-water heat pumps: Rated air flow rate, outdoors	За термопомпи „въздух-вода“: номинален дебит на въздуха (на открито)	Para bombas de calor aire-agua: Caudal de aire nominal (exterior)	U tepelných čerpadel vzduch-voda: jmenovitý průtok vzduchu ve venkovním prostoru
AO	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h
AP	Sound power level, indoors/outdoors	Ниво на шума (вътре/на открито)	Nivel de potencia acústica (interior/exterior)	Hladina akustického výkonu ve vnitřním prostoru/venkovním prostoru
AQ	Emissions of nitrogen oxides	Емисии на азотни окиси	Emisiones de óxidos de nitrógeno	Emise oxidů dusíku
AR	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	За термопомпи „вода/солдов разтвор-вода“: номинален дебит на солевия разтвор, или вода, външен теплообменник	Para bombas de calor agua/salmuera a agua: Caudal de salmuera o de agua nominal, intercambiador de calor de exterior	U tepelných čerpadel voda-voda/solanka-voda: jmenovitý průtok solanky nebo vody, venkovní výměník tepla
AS	For heat pump combination heater:	За комбиниран термопомпен агрегат за отопление и БГВ:	Para calefactores combinados con bomba de calor:	U kombinovaného ohříváče s tepelným čerpadlem:
AT	Declared load profile	Обявен товаров профил	Perfil de carga declarado	Deklarovaný zátěžový profil
AU	Water heating energy efficiency	Енергийна ефективност при подгряване на вода	Eficiencia energética de caldeo de agua	Energetická účinnost ohřevu vody
AV	Daily electricity consumption	Дневно електропотребление	Consumo diario de electricidad	Denní spotřeba elektrické energie
AW	Daily fuel consumption	Дневно потребление на гориво	Consumo diario de combustible	Denní spotřeba paliva
AX	Contact details	Координати за връзка	Datos de contacto	Kontaktní údaje
AY	(*) For heat pump space heaters and heat pump combination heaters, the rated that output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj).	(*) За отоплителни термопомпени агрегати и комбиниранни термопомпени агрегати, номиналната топлинна мощност Prated е равна на проекцията отоплителен товар Pdesignh, а номиналната топлинна мощност на допълнителния подгревател Psup е равна на допълнителната отоплителна мощност sup(Tj)	(*) Para los aparatos de calefacción con bomba de calor y calefactores combinados con bomba de calor, la potencia calorífica nominal Prated es igual a la carga de calefacción de diseño Pdesignh, y la potencia calorífica nominal de un calefactor complementario Psup es igual a la capacidad complementaria de calefacción sup(Tj).	(*) U ohříváči pro vytápění vnitřních prostorů s tepelným čerpadlem a kombinovaných ohříváčů s tepelným čerpadlem je jmenovitý tepelný výkon Prated roven návrhovému topnému zatížení Pdesignh a jmenovitý tepelný výkon přídavného ohříváče Psup je roven doplňkovému topnému výkonu sup(Tj).
AZ	(**) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0.9.	(**) Ако Cdh не е определен чрез измерване, съответната ориентировъчно приемана стойност за коефициента на влошаване на ефективността е Cdh = 0.9.	(**) Si no se determina Cdh por medición, el coeficiente de degradación predeterminado será Cdh = 0.9.	(**) Není-li koeficient ztráty energie Cdh stanoven měřením, má implicitní hodnotu 0.9.
BA	1) Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.	1) Описаните в ръководството за монтиране/ръководството за потребителя предпазни мерки трябва да се спазват при сглобяване, монтиране и поддръжка на продукта.	1) Deben tomarse las precauciones que se indican en el manual de instalación/usuario al montar e instalar el producto, así como al realizar tareas de mantenimiento.	1) Při montáži, instalaci a údržbě tohoto produktu je třeba se řídit bezpečnostními opatřeními popsanými v instalační a uživatelské příručce.
BB	2) If you are a professional looking for information on non-destructive disassembly and dismantling, please send an email to: erims.sec@samsung.com	2) Ако сте професионалист и търсите информация относно възможностите за неразрушително разглобяване и демонтаж, моля, изпратете имейл на адрес: erims.sec@samsung.com	2) Si Usted es un profesional que desea obtener información sobre el desmontaje y desmantelamiento no destructivo de este producto, por favor, dirijase a la siguiente dirección de correo electrónico: erims.sec@samsung.com	2) Pokud jste odborným pracovníkem a hledáte informace ohledně bezpečné demontáže produktu, napište e-mail na adresu: erims.sec@samsung.com.

# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

No	Danish(DA)	German(DE)	Estonian(ET)	Greek(EL)
I	KOMMISSIONENS FORORDNING (EU) Nr. 813/2013	VERORDNUNG (EU) Nr. 813/2013 DER KOMMISSION	KOMISJONI MÄÄRUS (EU) nr 813/2013,	ΚΑΝΟΝΙΣΜΟΣ (ΕΕ) αριθ. 813/2013 ΤΗΣ ΕΠΙΤΡΟΠΗΣ
II	Kravene til miljøvenligt design af anlæg til rumopvarmning	Die Ökodesign-Anforderungen an Raumheizgerät	Ökodsaini nõuded ruumi kütteseks	Οι απαιτήσεις οικολογικού σχεδιασμού για θερμαντήρες χώρου
A	Model(ler); [Information, som identificerer den eller de modeller, som oplysningerne vedrører]	Modell(e); [Angaben zur Bestimmung des Modells/der Modelle, auf das/die sich die Angaben beziehen]	Mudel(id); [mudelit (mudeleid) iseloomustavad näitajad]	Μοντέλο(-οι); [πληροφορίες για την ταυτοποίηση του μοντέλου (των μοντέλων) που αφορούν οι πληροφορίες]
B	Luft-vand-varmepumpe: [ja/nej]	Luft-Wasser-Wärmepumpe: (Ja/Nein)	Õhu-vee-soojuspump: [jah/ei]	Αντλία θερμότητας αέρα-νερού: [ναι/όχι]
C	Vand-vand-varmepumpe: [ja/nej]	Wasser-Wasser-Wärmepumpe: (Ja/Nein)	Vee-vee-soojuspump: [jah/ei]	Αντλία θερμότητας νερού-νερού: [ναι/όχι]
D	Brine-vand-varmepumpe: [ja/nej]	Sole-Wasser-Wärmepumpe: (Ja/Nein)	Soojuskanjaja-vee-soojuspump: [jah/ei]	Αντλία θερμότητας άλατος-νερού: [ναι/όχι]
E	Lavtemperaturvarmepumpe: [ja/nej]	Niedertemperatur-Wärmepumpe: (Ja/Nein)	Külma kliima soojuspump: [jah/ei]	Αντλία θερμότητας χαμηλής θερμοκρασίας: [ναι/όχι]
F	Udstyret med supplerende forsyningsanlæg: [ja/nej]	Mit Zusatzheizgerät: (Ja/Nein)	Koos lisakütteseadmega: [jah/ei]	Εξοπλισμένος με συμπληρωματικό θερμαντήρα: [ναι/όχι]
G	Varmepumpeanlæg til kombineret rum- og brugsvarmopvarmning: [ja/nej]	Kombiheizgerät mit Wärmepumpe: (Ja/Nein)	Soojuspumbaga vee-soojendi-küttesead: [jah/ei]	Θερμαντήρας συνδυασμένης λειτουργίας με αντλία θερμότητας: [ναι/όχι]
H	Parametre skal angives for middeltemperaturanvendelse, dog ikke for lavtemperaturvarmepumper. For lavtemperaturvarmepumper angives parametre for lavtemperaturanvendelse.	Die Parameter sind für eine Mitteltemperaturanwendung anzugeben, außer für Niedertemperatur-Wärmepumpen. Für Niedertemperatur-Wärmepumpen sind die Parameter für eine Niedertemperaturanwendung anzugeben.	Näitajad esitatakse keskmise temperatuuriga kasutuse kohta, välja arvatud külma kliima soojuspumpade näitajad esitatakse madalatemperatuurilise kasutuse kohta.	Δηλώνονται οι παράμετροι για εφαρμογή μέσης θερμοκρασίας, εξαιρουμένων των αντλιών θερμότητας χαμηλής θερμοκρασίας. Για τις αντλίες θερμότητας χαμηλής θερμοκρασίας δηλώνονται οι παράμετροι για εφαρμογή χαμηλής θερμοκρασίας.
I	Parametre skal angives for gennemsnitlige klimaforhold.	Die Parameter sind für durchschnittliche Klimaverhältnisse anzugeben:	Näitajad esitatakse keskmiste kliimatingimuste kohta.	Δηλώνονται οι παράμετροι για μέσες κλιματικές συνθήκες.
J	Element	Angabe	Näitaja	Χαρακτηριστικό
K	Symbol	Symbol	Tähis	Σύμβολο
L	Værdi	Wert	Väärtus	Τιμή
M	Enhed	Einheit	Ühik	Μονάδα
N	Nominal nytteeffekt (*)	Wärmennennleistung (3)	Nimisoojusvõimsus (*)	Ονομαστική θερμική ισχύς (*)
O	Prated	Prated	Prated	Prated
P	Årsvirkningsgrad ved rumopvarmning	Jahreszeitbedingte Raumheizungs-Energieeffizienz	Kütmise sesoonne energiatõhusus	Ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου
Q	Angivet varmelydelse for delast ved indetemperatur på 20 °C og udetemperatur på Tj	Angegebene Leistung für Teilast bei Raumlufttemperatur 20 °C und Außenlufttemperatur Tj	Esitatud soojusvõimsus ruumitemperatuurile 20 °C ja välitemperatuurile Tj vastaval (osalise koormuse) võimsustarbel	Δηλωμένη θερμαντική ισχύς για μερικό φορτίο σε θερμοκρασία εσωτερικού χώρου 20 °C και θερμοκρασία εξωτερικού χώρου Tj
R	Angivet effektfaktor eller primærenergi-effektfaktor for delast ved indetemperatur på 20 °C og udetemperatur på Tj	Angegebene Leistungszahl oder Heizzahl für Teilast bei Raumlufttemperatur 20 °C und Außenlufttemperatur Tj	Esitatud soojustegur (primaarenergiategur) ruumitemperatuurile 20 °C ja välitemperatuurile Tj vastaval (osalise koormuse) võimsustarbel	Δηλωμένος συντελεστής απόδοσης ή λόγος πρωτογενούς ενέργειας σε θερμοκρασία εσωτερικού χώρου 20 °C και θερμοκρασία εξωτερικού χώρου Tj
S	COPd eller PERd	COPd oder PERd	COPd või PERd	COPd ή PERd
T	Tj = bivalenttemperatur	Tj = Bivalenttemperatur	Tj = tasakaalutemperatuur	Tj = δίτημη θερμοκρασία
U	Tj = temperaturgrense for drift	Tj = Betriebsstemperaturgrenzwert	Tj = piirtõotemperatuur	Tj = οριακή θερμοκρασία λειτουργίας
V	For luft-vand-varmepumper: Tj = - 15 °C (hvis TOL < - 20 °C)	Für Luft-Wasser-Wärmepumpen: Tj = - 15 °C (wenn TOL < - 20 °C)	Õhu-vee-soojuspump: Tj = - 15 °C (kui TOL < - 20 °C)	Για αντλίες θερμότητας αέρα-νερού: Tj = - 15 °C (εάν TOL < - 20 °C)
W	Bivalenttemperatur	Bivalenttemperatur	Tasakaalutemperatuur	Δίτημη θερμοκρασία
X	For luft-vand-varmepumper: Temperaturgrense for drift	Für Luft-Wasser-Wärmepumpen: Betriebsgrenzwert-Temperatur	Õhu-vee-soojuspump: piirtõotemperatuur	Για αντλίες θερμότητας αέρα-νερού: Οριακή θερμοκρασία λειτουργίας
Y	Cykusintervaldyldelse for opvarmning	Leistung bei zyklischem Intervall-Heizbetrieb	Tsükli soojusvõimsus	Θερμαντική ισχύς κατά τη διάρκεια ενός κύκλου
Z	Cykusintervaldyldelse	Leistungszahl bei zyklischem Intervallbetrieb	Tsükli tõhusus või primaarenergiategur	Απόδοση κατά τη διάρκεια ενός κύκλου
AA	COPcyc eller PERcyc	COPcyc oder PERcyc	COPcyc või PERcyc	COPcyc ή PERcyc
AB	Koefficient for effektivitetstab (**)	Minderungsfaktor (4)	Kaotegur (**)	Συντελεστής υποβάθμισης (**)
AC	Temperaturgrense for vandopvarmning	Grenzwert der Betriebstemperatur des Heizwassers	Küttevee piirtõotemperatuur	Οριακή θερμοκρασία λειτουργίας για θέρμανση νερού

No	Danish(DA)	German(DE)	Estonian(ET)	Greek(EL)
AD	Elforbbrug i andre tilstande end aktiv tilstand	Stromverbrauch in anderen Betriebsarten als dem Betriebszustand	Võimsustarve ajal, kui seade ei ole aktiivses seisundis	Κατανάλωση ισχύος σε καταστάσεις πλην της ενεργού κατάστασης
AE	Supplerende forsyningsanlæg	Zusatzheizgerät	Lisakütteaseade	Συμπληρωματικός θερμαντήρας
AF	Slukket tilstand	Aus-Zustand	Väljalülitatud seisund	Κατάσταση εκτός λειτουργίας
AG	Termostat fra-tilstand	Thermostat-aus-Zustand	Termostaadiga välja lülitatud seisund	Κατάσταση χωρίς λειτουργία θερμοστάτη
AH	Standbytilstand	Bereitschaftszustand	Ooteseisund	Κατάσταση αναμονής
AI	Krumtaphusopvarmningstilstand	Betriebszustand mit Kurbelgehäuseheizung	Kambrikütte seisund	Λειτουργία θερμαντήρα στροφαλοθαλάμου
AJ	Energiinputtype	Art der Energiezufuhr	Sisendenergia liik	Τύπος εισερχόμενης ενέργειας
AK	Andre elementer	Sonstige Angaben	Muud näitajad	Άλλα χαρακτηριστικά
AL	Ydelsesregulering	Leistungssteuerung	Võimsuse reguleerimine	Ρύθμιση ισχύος
AM	fast/variabel	fest/veränderlich	Muutumatu/muudetav	σταθερή/μεταβλητή
AN	For luft-vand-varmepumper: Nominel luftgennemstrømning, ude	Für Luft-Wasser-Wärmepumpen: Nenn-Luftdurchsatz, außen	Õhu-vee-soojuspump: õhu nimivooluhulk, väliskeskonnas	Για αντλίες θερμότητας αέρα-νερού: Ονομαστική παροχή αέρα, εξωτερικού χώρου
AO	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h
AP	Lydeffektivniveau, inde/ude	Schalleistungspegel, innen/außen	Müravõimsustase, siseruumis/väliskeskonnas	Στάθμη ηχητικής ισχύος, εσωτερικού/ εξωτερικού χώρου
AQ	Emissioner af kvælstofilter	Stickoxidausstoß	Lämmastikoksiidide heide	Εκπομπές οξειδίου του αζώτου
AR	For vand/brine-vand-varmepumper: nominel brine- eller vandgennemstrømning, varmeveksler, ude	Für Wasser/Sole-Wasser-Wärmepumpen: Wasser- oder Sole-Nenndurchsatz	Vee-soojuskandja-vee-soojuspump: soojuskandja või vee nimivooluhulk, soojusvaheti väljas	Για αντλίες θερμότητας νερού-/άμλης-νερού: Ονομαστική παροχή άμλης ή νερού, εναλλάκτη θερμότητας εξωτερικού χώρου
AS	For varmepumpeanlæg til kombineret rum- og brugsvarmsopvarmning:	Kombiheizgerät mit Wärmepumpe	Soojuspumbaga vee-soojendi-kütteaseade:	Για θερμαντήρα συνδυασμένης λειτουργίας με αντλία θερμότητας
AT	Angivet forbrugsprofil	Angegebenes Lastprofil	Eitatud koormusprofiil	Δηλωμένο προφίλ φορτίου
AU	Energieeffektivitet ved vandopvarmning	Warmwasserbereitungs-Energieeffizienz	Vee soojendamise kasutegur	Ενεργειακή απόδοση θέρμανσης νερού
AV	Dagligt elforbbrug	Täglicher Stromverbrauch	Päevane elektrienergiatarve	Ημερήσια κατανάλωση ηλεκτρικής ενέργειας
AW	Dagligt brændselsforbrug	Täglicher Brennstoffverbrauch	Päevane kütteenergiatarve	Ημερήσια κατανάλωση καυσίμου
AX	Kontaktoplysninger	Kontakt	Kontaktandmed	Στοιχεία επικοινωνίας
AY	(*) For varmepumpeanlæg til rumopvarmning og varmepumpeanlæg til kombineret rum- og brugsvarmsopvarmning er den nominelle nytteeffekt Prated lig med den dimensionerende last for opvarmning Pdesignh, og den nominelle nytteeffekt for et supplerende forsyningsanlæg Psup er lig med den supplerende varmeydelse sup(TJ).	(*) Für Heizgeräte und Kombiheizgeräte mit Wärmepumpe ist die Wärmenennleistung Prated gleich der Auslegungslast im Heizbetrieb Pdesignh und die Wärmenennleistung eines Zusatzheizgerätes Psup gleich der zusätzlichen Heizleistung sup(TJ).	(*) Soojuspumbaga kütteaseademe ja soojuspumbaga vee-soojendite-kütteaseademe nimisoojusvõimsus Prated on võrdne arutusliku soojusvõimsusega Pdesignh, lisakütteadme Psup nimisoojusvõimsus on võrdne lisakütteadme soojusvõimsusega sup(TJ).	(*) Για θερμαντήρες χώρου με αντλία θερμότητας και θερμαντήρες συνδυασμένης λειτουργίας με αντλία θερμότητας, η ονομαστική θερμική ισχύς Prated ισούται με το θερμαντικό φορτίο σχεδιασμού Pdesignh , και η ονομαστική θερμική ισχύς του συμπληρωματικού θερμαντήρα Psup ισούται με τη συμπληρωματική θερμαντική ισχύ sup(TJ).
AZ	(**) Hvis Cdh ikke bestemmes ved måling, er koefficienten for effektivitetstab som standard Cdh = 0,9.	(**) Wird der Cdh-Wert nicht durch Messung bestimmt, gilt für den Minderungsfaktor der Vorgabewert Cdh = 0,9.	(**) Kui tegur Cdh on määratama, võetakse väärtiksiks Cdh = 0,9.	(**) Εάν ο Cdh δεν προσδιορίζεται με μέτρηση, ο εξ ορισμού συντελεστής υποβάθμισης είναι Cdh = 0,9.
BA	1) Du skal tage de forholdsregler, der er beskrevet i installations-/brugervejledningen, når du samler, installerer og vedligeholder dette produkt.	1) Beim Montieren, Installieren und Warten des Geräts müssen die im Installations-/ Benutzerhandbuch beschriebenen Vorsichtsmaßnahmen eingehalten werden.	1) Seadme kokkupaneluk, paigaldamisel ja hooldusel tuleb rakendada paigaldus-/kasutusjuhendis kirjeldatud ettevaatusabinõusid	1) Όταν συναρμολογείτε, εγκαθιστάτε και συντηρείτε αυτό το προϊόν, πρέπει να λαμβάνετε τις προφυλάξεις που περιγράφονται στο εγχειρίδιο εγκατάστασης/χρήσης.
BB	2) Hvis du er en erhvervsdrivende, der søger information om, hvordan man afmonterer støvsugeren uden at adlægge nogle dele, bedes du sende en e-mail til: erims.sec@samsung.com	2) Wenn Sie als Fachkraft Informationen zu zerstörungsfreier Demontage und Zerlegung benötigen, schreiben Sie bitte eine E-Mail an: erims.sec@samsung.com.	2) Kui olete professionaal, kes otsib teavet mittekahjustava lahivõtmise ja demonteerimise kohta, saateke palun e-kiri aadressil: erims.sec@samsung.com.	2) Εάν είστε επαγγελματίας και αναζητείτε πληροφορίες σχετικά με την αποσυρμολόγηση χωρίς να προκληθούν καταστροφές, στείτε μήνυμα ηλεκτρονικού ταχυδρομείου στη διεύθυνση: erims.sec@samsung.com

# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

No	French(FR)	Croatian(HR)	Italian(IT)	Latvian(LV)
I	RÈGLEMENT (UE) No 813/2013 DE LA COMMISSION	UREDBA KOMISIJE (EU) br. 813/2013	REGOLAMENTO (UE) N. 813/2013 DELLA COMMISSIONE	KOMISIJAS REGULA (ES) Nr. 813/2013
II	Les exigences d'écoconception applicables aux dispositifs de chauffage des locaux	Zahtjevi za ekološki dizajn grijaja prostora	Le specifiche per la progettazione ecocompatibile per apparecchio il riscaldamento d'ambiente	Ekodizaina prasibas par telpu silditajs
A	Modèle(s): [informations d'identification du ou des modèles concernés]	Modeli: [informacije za identifikaciju modela na koj(-e) se informacije odnose]	Modelli: [Informazioni per identificare i modelli cui sono riferibili le informazioni]	Modelis(-i): [informācija, ar ko identificē modeli(-)us, uz kuru(-)iem informācija attiecas]
B	Pompes à chaleur air-eau: [oui/non]	Toplinska crpka zrak-voda: [da/ne]	Pompa di calore aria/acqua: [sì/no]	Gaiss-ūdens siltumsūknis: [jā/nē]
C	Pompes à chaleur eau-eau: [oui/non]	Toplinska crpka voda-voda: [da/ne]	Pompa di calore acqua/acqua: [sì/no]	Ūdens-ūdens siltumsūknis: [jā/nē]
D	Pompe à chaleur eau glycolée-eau: [oui/non]	Toplinska crpka slana voda-voda: [da/ne]	Pompa di calore salamoia/acqua: [sì/no]	Sālsūdens-ūdens siltumsūknis: [jā/nē]
E	Pompes à chaleur basse température: [oui/non]	Niskotemperatūra toplinska crpka: [da/ne]	Pompa di calore a bassa temperatura: [sì/no]	Zemas temperatūras diapazona siltumsūknis: [jā/nē]
F	Équipée d'un dispositif de chauffage d'appoint: [oui/non]	Opremljena dodatnim grijajem: [da/ne]	Con riscaldatore supplementare: [sì/no]	Aprikots ar papildu sildītāju: [jā/nē]
G	Dispositif de chauffage mixte par pompe à chaleur: [oui/non]	Kombinirani grijajci s toplinskom crpkom: [da/ne]	Apparecchio misto a pompa di calore: [sì/no]	Siltumsūkņa kombinētais sildītājs: [jā/nē]
H	Les paramètres sont déclarés pour l'application à moyenne température, excepté pour les pompes à chaleur basse température. Pour les pompes à chaleur basse température, les paramètres sont déclarés pour l'application à basse température.	Parametri se navode za uporabu pri srednjoj temperaturi, osim za niskotemperaturne toplinske crpkve. Za niskotemperaturne toplinske crpkve parametri se navode za uporabu pri niskoj temperaturi.	I parametri sono dichiarati per l'applicazione a temperatura media, tranne per le pompe di calore a bassa temperatura. Per le pompe di calore a bassa temperatura, i parametri sono dichiarati per l'applicazione a bassa temperatura.	Parametrus deklarē izmantošanai vidējās temperatūras diapazonā, izņemot zemas temperatūras diapazona siltumsūknēm. Zemas temperatūras diapazona siltumsūknēm parametrus deklarē izmantošanai zemas temperatūras diapazonā.
I	Les paramètres sont déclarés pour les conditions climatiques moyennes.	Parametri se navode za prosječne klimatske uvjete.	I parametri sono dichiarati per condizioni climatiche medie.	Parametrus deklarē vidējām klimatiskajiem apstākļiem.
J	Caractéristique	Stavka	Elemento	Pozīcija
K	Symbole	Oznaka	Simbolo	Apzīmējums
L	Valeur	Vrijednost	Valore	Vērtība
M	Unité	Jednica	Unità	Vienība
N	Puissance thermique nominale (*)	Nazīva toplinska snaga (*)	Potenza termica nominale (*)	Nominālā siltuma jauda (*)
O	Prated	Prated	Pnominale	Prated
p	Efficacité énergétique saisonnière pour le chauffage des locaux	Sezonska enerģētiska učinkovitost grijanja prostora	Efficienza energetica stagionale del riscaldamento d'ambiente	Telpu apsildes sezonas energoefektivitāte
Q	Puissance calorifique déclarée à charge partielle pour une température intérieure de 20 °C et une température extérieure Tj	Deklarirani ogrievjuni kapacitet za djelomično opterećenje pri unutarnjoj temperaturi od 20 °C i vanjskoj temperaturi Tj	Capacità di riscaldamento dichiarata a carico parziale, con temperatura interna pari a 20 °C e temperatura esterna Tj	Deklarētā jauda sildīšanai pie daļējās slodzes, ja temperatūra telpās ir 20 °C un ārējais temperatūra ir Tj
R	Coefficient de performance déclaré ou coefficient sur énergie primaire déclaré à charge partielle pour une température intérieure de 20 °C et une température extérieure Tj	Deklarirani koeficient učinkovitosti ili omjer primarne energije za djelomično opterećenje pri unutarnjoj temperaturi od 20 °C i vanjskoj temperaturi Tj	Coefficiente di prestazione dichiarato o indice di energia primaria per carico parziale, con temperatura interna pari a 20 °C e temperatura esterna Tj	Deklarētais lietderības koeficients vai primārās enerģijas patēriņa rādītājs pie daļējās slodzes, ja temperatūra telpās ir 20 °C un ārējais temperatūra ir Tj
S	COPd ou PERd	COPd ili PERd	COPd oppure PERd	COPd vai PERd
T	Tj = température bivalente	Tj = bivalentna temperatura	Tj = temperatura bivalente	Tj = bivalentā temperatūra
U	Tj = température limite de fonctionnement	Tj = grāniņa radna temperatura	Tj = temperatura limite di esercizio	Tj = darba režīma robežtemperatūra
V	Pour les pompes à chaleur air-eau: Tj = -15 °C (si TOL < -20 °C)	Za toplinske crpkve zrak-voda: Tj = -15 °C (ako je TOL < -20 °C)	Per le pompe di calore aria/acqua: Tj = -15 °C (se TOL < -20 °C)	Gaiss-ūdens siltumsūknēm: Tj = -15 °C (ja TOL < -20 °C)
W	Température bivalente	Bivalentna temperatura	Temperatura bivalente	Bivalentā temperatūra
X	Pour les pompes à chaleur air-eau: température limite de fonctionnement	Za toplinske crpkve zrak-voda: Grāniņa radna temperatura	Per le pompe di calore aria/acqua: temperatura limite di esercizio	Gaiss-ūdens siltumsūknēm: darba režīma robežtemperatūra
Y	Puissance calorifique sur un intervalle cyclique	Ogrievjuni kapacitet intervala ciklusa	Ciclicità degli intervalli di capacità per il riscaldamento	Cikliskā intervāla jauda sildīšanai
Z	Efficacité sur un intervalle cyclique	Učinkovitost intervala ciklusa	Efficienza della ciclicità degli intervalli	Cikliskā intervāla efektivitāte
AA	COPcyc ou PERcyc	COPcyc ili PERcyc	COPcyc oppure PERcyc	COPcyc vai PERcyc
AB	Coefficient de dégradation (**)	Koeficient degradacije (**)	Coefficiente di degradazione (**)	Pazeminājuma koeficients (**)

No	French(FR)	Croatian(HR)	Italian(IT)	Latvian(LV)
AC	Température maximale de service de l'eau de chauffage	Granična radna temperatura za grijanje vode	Temperatura limite di esercizio di riscaldamento dell'acqua	Ūdens uzsildīšanas darba režīma robežtemperatūra
AD	Consommation d'électricité dans les modes autres que le mode actif	Potrošnja energije u načinima koji ne uključuju aktivni način rada	Consumo energetico in modi diversi dal modo attivo	Jauda režīms, kas nav darba režīms
AE	Dispositif de chauffage d'appoint	Dodatni grijač	Riscaldatore supplementare	Papildu sildītājs
AF	Mode arrêt	Stanje isključenosti	Modo spento	Izslēgts režīms
AG	Mode arrêt par thermostat	Stanje isključenosti termostata	Modo termostato spento	Izslēgta termostata režīms
AH	Mode veille	Stanje mirovanja	Modo stand-by	Gaidstāves režīms
AI	Mode résistance de carter active	Način rada grijača kučīšta	Modo riscaldamento del carter	Kartera sildītāja režīms
AJ	Type d'énergie utilisée	Vrsta utrošene energije	Tipo di alimentazione energetica	Pievadītās enerģijas veids
AK	Autres caractéristiques	Druge stavke	Altri elementi	Citas pozīcijas
AL	Régulation de la puissance	Upravljanje kapacitetom	Controllo della capacità	Jaudas regulēšana
AM	fixe/variable	fiksno/promenljivo	fisso/variabile	fiksēta/maināma jauda
AN	Pour les pompes à chaleur air-eau: débit d'air nominal, à l'extérieur	Za toplinski crpku zrak-voda: Nazivna stopa protoka zraka, na otvorenom	Per le pompe di calore aria/acqua: portata d'aria, all'esterno	Gaiss-ūdens siltumsūkņiem: nominālā gaisa caurplūde, ārpus telpām
AO	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h
AP	Niveau de puissance acoustique, à l'intérieur/à l'extérieur	Razina zvucne snage, unutra/vani	Livello della potenza sonora, all'interno/all'esterno	Akustiskās jaudas līmenis telpās/ārpus telpām
AQ	Émissions d'oxydes d'azote	Emisija dušokvoo oksīda	Emissioni di ossidi di azoto	Slāpekļa oksīdu emisijas
AR	Pour les pompes à chaleur eau-eau ou eau glycolée-eau: débit nominal d'eau glycolée ou d'eau, échangeur thermique extérieur	Za toplinske crpke voda/slana voda-voda: Nazivna stopa protoka slane vode ili vode, na vanjskom izmjenjivaču topline	Per le pompe di calore acqua/acqua e salamoia/acqua: flusso di salamoia o acqua nominale, scambiatore di calore all'esterno	Ūdens vai sālsūdens-ūdens siltumsūkņiem: nominālā sālsūdens vai ūdens caurplūde, ārējo siltummainis
AS	Pour les dispositifs de chauffage mixtes par pompe à chaleur:	Za kombinirane grijače s toplinskom crpkom:	Per gli apparecchi di riscaldamento misti a pompa di calore:	Siltumsūkņa kombinētajam sildītājam:
AT	Profil de soutirage déclaré	Deklarirani profil opterečenja	Profilo di carico dichiarato	Deklarētais slodzes profils
AU	Efficacité énergétique pour le chauffage de l'eau	Enerģetiska učinkovitost zagrijavanja vode	Efficienza energetica di riscaldamento dell'acqua	Ūdens uzsildīšanas energoefektivitāte
AV	Consommation journalière d'électricité	Dnevna potrošnja elektrīcne energije	Consumo quotidiano di energia elettrica	Dienas elektroenerģijas patēriņš
AW	Consommation journalière de combustible	Dnevna potrošnja gorīva	Consumo quotidiano di combustibile	Dienas kurināmā patēriņš
AX	Coordonnées de contact	Podaci za kontakt	Recapiti	Kontaktinformācija
AY	(*) Pour les dispositifs de chauffage des locaux par pompe à chaleur et les dispositifs de chauffage mixtes par pompe à chaleur, la puissance thermique nominale Prated est égale à la charge calorifique nominale Pdesignh et la puissance thermique nominale d'un dispositif de chauffage d'appoint Ppsup est égale à la puissance calorifique d'appoint sup(Tj).	(*) Za toplinske crpke za grijanje prostora i kombinirane grijače s toplinskom crpkom nazivna toplinska snaga Prated jednaka je projektnom ogrijevnom opterečenju Pdesignh, a nazivna toplinska snaga dodatnog grijača Ppsup jednaka je dodatnom ogrijevnom kapacitetu sup(Tj).	(*) Per gli apparecchi a pompa di calore per il riscaldamento d'ambiente e gli apparecchi di riscaldamento misti a pompa di calore, la potenza termica nominale Pnominale è pari al carico teorico per il riscaldamento Pdesignh e la potenza termica nominale di un riscaldatore supplementare Ppsup è pari alla capacità supplementare di riscaldamento sup(Tj).	(*) Siltumsūkņa telpu sildītājiem un siltumsūkņa kombinētajiem sildītājiem nominālā siltuma jauda Prated ir vienāda ar aprēķināto slodzi sildīšanai Pdesignh un papildu sildītāja nominālā siltuma jauda Ppsup ir vienāda ar sildīšanas papildu jaudu sup(Tj).
AZ	(**) Si le Cdh n'est pas déterminé par des mesures, le coefficient de dégradation par défaut est Cdh = 0,9.	(**) Ako Cdh nije određen mjerenjem, standardni koeficijent degradacije je Cdh = 0,9.	(**) Se Cdh non è determinato mediante misurazione, il coefficiente di degradazione è Cdh = 0,9.	(**) Ja Cdh nenosaka, izmantojot mērījumus, tad standarta pazeminājuma koeficients ir Cdh = 0,9.
BA	1) Des précautions, comme décrit dans le manuel d'installation/d'utilisation, doivent être prises lors du montage, de l'installation et de l'entretien de l'appareil.	1) Prikom sastavljanja, instalacije i održavanja proizvoda potrebno je poduzeti mjere opreza navedene u priručniku za instalaciju / korisničkom priručniku.	1) Durante l'assiemeaggio, l'installazione e la manutenzione di questo apparecchio vanno poste in atto tutte le avvertenze e le precauzioni che sono indicate nei manuali di installazione e per l'utente.	1) Montāža un produkta apkope jāveic saskaņā ar montāžas/lietošanas instrukciju.
BB	2) Si vous êtes un professionnel à la recherche des informations sur le démontage et le démantèlement, veuillez envoyer un e-mail à l'adresse: erims.sec@samsung.com	2) Ako ste stručnjak u potrazi za informacijama o nerazotom rastavljanju i rasklapanju, pošaljite elektroničku poruku na adresu: erims.sec@samsung.com	2) Se sei un tecnico e vuoi sapere come smontare in modo accurato e non distruttivo il prodotto, invia una email all'indirizzo: erims.sec@samsung.com	2) Ja esat meistars, kas meklē informāciju, kā demontēt un izjaukt ierīci, to nesabojājot, sūtiet e-pasta vēstuli uz adresi: erims.sec@samsung.com.

# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

No	Lithuanian(LT)	Hungarian(HU)	Maltese(MT)	Dutch(NL)
I	KOMISIJS REGLAMENTAS (ES) Nr. 813/2013	A BIZOTTSÁG 813/2013/EU RENDELETÉ	REGOLAMENT TAL-KUMMISSJONI (UE) Nru 813/2013	VERORDENING (EU) Nr. 813/2013 VAN DE COMMISSIE
II	Ekologinio projektavimo reikalavimai už patalpų šildytuvus	A környezettudatos tervezésére vonatkozó követelményeket helyéshűtő berendezés	Rekwiziti tal-ekodisinn għall hitar tal-post	De eisen inzake ecologisch ontwerp voor ruimteverwarmingstoestel
A	Modelis (-iai) [modelio (-ų), kuriam (-iems) taikoma informacija, identifikavimo duomenys]	Modell(ek); [az információk tárgyát képező modell(ek) megjelölése]	Mudell(i); [tagħrif li bih jiġi identifikat il-mudell/ jiġu identifikati l-mudelli li magħhom huwa relatat dan it-tagħrif]	Model(len); [informatie ter bepaling van het model waarop de informatie betrekking heeft]
B	Oro-vandens šilumos siurblys [taip / ne]	Levegő-víz típusú hőszivattyú; [igen/nem]	Pompa tas-shana arja-ilma; [iva/le]	Lucht/water-warmtepomp; [ja/nee]
C	Vandens-vandens šilumos siurblys [taip / ne]	Víz-víz típusú hőszivattyú; [igen/nem]	Pompa tas-shana ilma-ilma; [iva/le]	Water/water-warmtepomp; [ja/nee]
D	Tirpalo-vandens šilumos siurblys [taip / ne]	Sós víz-víz típusú hőszivattyú; [igen/nem]	Pompa tas-shana salmura-ilma; [iva/le]	Pekel/water-warmtepomp; [ja/nee]
E	Žematemperatūris šilumos siurblys [taip / ne]	Alacsony hőmérsékletű hőszivattyú; [igen/nem]	Pompa tas-shana b'temperatura baxxa; [iva/le]	Lagetemperatuurwarmtepomp; [ja/nee]
F	Ar yra papildomas šildytuvus [taip / ne]	Rendelkezik-e kiegészítő fűtőberendezéssel; [igen/nem]	Mgħammar b'hitir supplementari; [iva/le]	Uitgerust met aanvullend verwarmingstoestel; [ja/nee]
G	Kombinuotasis šildytuvus su šilumos siurbliu [taip / ne]	Hőszivattyús kombinált fűtőberendezés; [igen/nem]	Hitir ikkombinat b'pompa tas-shana; [iva/le]	Combinatieverwarmingstoestel met warmtepomp; [ja/nee]
H	Pateikiami naudojimo esant vidutinei temperatūrai parametrai, išskyrus atvejus, kai teikiama informacija apie žematemperatūris šilumos siurblius. Žematemperatūris šilumos siurbliu atveju pateikiami naudojimo esant žemai temperatūrai parametrai.	A paramétereket az alacsony hőmérsékletű hőszivattyúk kivételével a közepes hőmérsékletű használatra vonatkozóan kell megadni. Az alacsony hőmérsékletű hőszivattyúk esetében a paramétereket az alacsony hőmérsékletű használatra vonatkozóan kell megadni.	Il-parametri għandhom jingħataw għal applikazzjoni b'temperatura medja, għief għall-pompi tas-shana b'temperatura baxxa. Għall-pompi tas-shana b'temperatura baxxa, il-parametri għandhom jingħataw għal applikazzjoni b'temperatura baxxa.	Parameters moeten worden opgegeven voor toepassing op middelgrote temperatuur, uitgezonderd voor lagetemperatuurwarmtepompen. Voor lagetemperatuurwarmtepompen moeten parameters worden opgegeven bij toepassing op lage temperatuur.
I	Pateikiami naudojimo vidutinišnis klimato sąlygomis parametrai.	A paramétereket az átlagos éghajlati viszonyokra vonatkozóan kell megadni.	Il-parametri għandhom jingħataw għall-kundizzjonijiet klimatiċi medji.	Parameters moeten worden opgegeven voor gemiddelde klimaatomstandigheden.
J	Parametras	Elem	Fattur	Kenmerk
K	Sutartinis ženklas	Jel	Simbolu	Symbol
L	Vertė	Érték	Valur	Waarde
M	Vienetai	Mértékegység	Unità	Eenheid
N	Vardinis šilumos atidavimas (*)	Mért hőteljesítmény (*)	Potenza termika nominali (*)	Nominale warmteafgifte (*)
O	Prated	Prated	Prated	Prated
P	Sezoninis energijos patalpos šildyti vartojimo efektyvumas	Szezonális helyiségfűtési hatásfok	Effiċjenza enerġetika stagjonali tat-tishin tal-post	Seizoensgebonden energie-efficiëntie van ruimteverwarming
Q	Deklaruotasis šildymo pajėgumas su daline aprova, esant 20 °C patalpų temperatūrai ir lauko temperatūrai Tj.	Néveges fűtőteljesítmény részterhelés mellett, 20 °C beltéri és Tj kültéri hőmérsékleten.	Kapaċitá tat-tishin iddikjarata għal tagħbija parzjali b'temperatura ta'għewwa ta' 20 °C u temperatura ta'barra ta' Tj	Opgegeven verwarmingsvermogen voor deellast bij een binnentemperatuur van 20 °C en een buitentemperatuur Tj
R	Deklaruotasis veiksmingumo koeficientas arba pirminės energijos santykis su daline aprova, esant 20 °C patalpų temperatūrai ir lauko temperatūrai Tj.	Néveges fűtési jóságfok vagy primerenergia-hányados részterhelés mellett, 20 °C beltéri és Tj kültéri hőmérsékleten	Koeffiċjent iddikjarat tal-prestazzjoni jew proporzjoni iddikjarat tal-enerġija primarja għal tagħbija parzjali b'temperatura ta'għewwa ta' 20 °C u temperatura ta'barra ta' Tj	Opgegeven prestatiecoëfficiënt of primaire-energie-verhouding voor deellast bij een binnentemperatuur van 20 °C en buitentemperatuur Tj
S	COPd arba PERd	COPd vagy PERd	COPd jew PERd	COPd or PERd
T	Tj = perėjimo į dvejojo šildymo režimą temperatūra	Tj = bivalens hőmérséklet	Tj = temperatura bivalenti	Tj = bivalente temperatuur
U	Tj = ribinė veikimo temperatūra	Tj = megengedett üzemi hőmérséklet	Tj = temperatura tal-limitu tat-thaddim	Tj = uiterste bedrijfstemperatuur
V	Oro-vandens šilumos siurblių atveju – Tj = – 15 °C (jei TOL < – 20 °C)	Levegő-víz típusú hőszivattyúk esetében: Tj = – 15 °C (ha TOL < – 20 °C)	Għall-pompi tas-shana arja-ilma: Tj = – 15 °C (jekk TOL < – 20 °C)	Voor lucht/water-warmtepompen: Tj = – 15 °C (als TOL < – 20 °C)
W	Pereėjimo į dvejojo šildymo režimą temperatūra	Bivalens hőmérséklet	Temperatura bivalenti	Bivalente temperatuur
X	Oro-vandens šilumos siurblių atveju – Ribinė veikimo temperatūra	Levegő-víz típusú hőszivattyúk esetében: Megengedett üzemi hőmérséklet	Għall-pompi tas-shana arja-ilma: Temperatura tal-limitu tat-thaddim	Voor lucht/water-warmtepompen: uiterste bedrijfstemperatuur
Y	Ciklinis pajėgumas šildymo režimu	Fűtési ciklusteljesítmény	Kapaċitá tal-intervall cikliku għat-tishin	Cyclisch-intervalvermogen voor verwarming
Z	Ciklinis efektyvumas	Ciklikus jóságfok	Effiċjenza tal-intervall cikliku	Cyclisch-intervalefficiëntie
AA	COPpvc arba PERpvc	COPpvc vagy PERpvc	COPpvc jew PERpvc	COPpvc or PERpvc
AB	Blogėjimo koeficientas (**)	Degradációs tényező (**)	Koeffiċjent ta' degradazzjoni (**)	Verliescoëfficiënt (**)

No	Lithuanian(LT)	Hungarian(HU)	Maltese(MT)	Dutch(NL)
AC	Šildymo vandens ribinė veikimo temperatūra	Fűtővíz megengedett üzemi hőmérséklete	Temperatura limitu tat-tħaddim ħhall-ilma tat-tishin	Uiterste bedrijfstemperatuur van sanitair water
AD	Vartojamoji galia ne aktyviaja veikiena	Energiafogyasztás a főfokúban kívüli üzemmódoiban	Konsum tal-enerġija fil-modalitajiet minbarra dikta attiva	Elektriciteitsverbruik in andere standen dan de actieve modus
AE	Papildomas šildytuvus	Kiegészítő fűtőberendezés	Ħiter supplementari	Aanvullend verwarmingstoestel
AF	Išjungties veikiena	Kikapcsolt üzemmód	Modalità Mitfi	Uit-stand
AG	Termostato išjungties veikiena	Termostát által kikapcsolt üzemmód	Modalità bit-termostat mitfi	Thermostaat-uit-stand
AH	Budėjimo veikiena	Készenléti üzemmód	Modalità Stennija	Stand-by-stand
AI	Karterio šildymo veikiena	Forgattyúház-fűtési üzemmód	Modalità tal-ħiter tal-kisi tal-krank	Carterverwarming-stand
AJ	Tiekiamos energijos rūšis	Energiabevitel jellege	Tip ta' kontribut tal-enerġija	Sooort energie-input
AK	Kiti parametrai	További elemek	oġġetti oħra	Andere kenmerken
AL	Pajėgumo valdymas	Teljesítményszabályozás	Kontroll tal-kapacità	Vermogenscontrole
AM	pastovus/kintamas	rögzített/állítható	fiss/varjabbli	vast/variabel
AN	Oro vandens šilumos siurbliu atveju – vardinis oro srautas (lauke)	Levegő-víz típusú hőszivattyúk esetében: Mért légtömégáram, kültéri	Għall-pompi tas-shana arja-ilma: Rata nominali ta' fluss tal-arja fuq barra	Voor lucht/water-warmtepompen: nominaal luchtdebiet, buiten
AO	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h
AP	Garso galios lygis (patalpoje/lauke)	Hangteljesítményszint, beltéri/kültéri	Livell ta' qawwa tal-hoss, fuq barra/fuq ġewwa	Geluidsvermogensniveau, binnen/buiten
AQ	Išmetamų azoto oksidų kiekis	Nitrogén-oxid-kibocsátás	Emissionijiet tal-ossidi tan-nitroġenu	Emissies van stikstofoxiden
AR	Vandens vandens ir tirpalo vandens šilumos siurbliu atveju – vardinis tirpalo arba vandens srautas (lauko šilumokaitijje)	Víz-/sós víz-víz típusú hőszivattyúk esetében: Mért sósvíz- vagy vízáramlási sebesség, kültéri hőcserélővel	Għall-pompi tas-shana ilma-/salmura-ilma: Rata nominali ta' fluss tal-ilma jew tas-salmura, skambjatur tas-shana li jkun jinsab fuq barra	Voor water/water- en pekkel/water-warmtepompen: nominaal pekkel- of waterdebiet, warmtewisselaar buiten
AS	Kombinuotojo šildytuvo su šilumos siurbliu atveju	Hőszivattyús kombinált fűtőberendezés esetében:	Għall-ħiters ikkombinati b'pompa tas-shana:	Voor combinatieverwarmingstoestellen met warmtepomp:
AT	Deklaruotasis apkrovos profilis	Névleges terhelési profil	Profil tat-tagħbija ddiġjarat	Opgegeven capaciteitsprofiel
AU	Enerģijos vandeniu šildyti vartojimo efektyvumas	Vizmelegitėsi hatásfok	Effiċjenza energetika tat-tishin tal-ilma	Energie-efficiëntie van waterverwarming
AV	Elektros energijos suvartojimas per parą	Napi villamosenergia-fogyasztás	Konsum ta' kuljum tal-eletriku	Dagelijks elektriciteitsverbruik
AW	Kuro suvartojimas per parą	Napi tüzelőanyag-fogyasztás	Konsum ta' kuljum tal-fjuwil	Dagelijks brandstofverbruik
AX	Kontaktiniai duomenys	Elérhetőség	Dettalji ta' kuntatt	Contactgegevens
AY	(*) Patalpoj šildytuvų su šilumos siurbliu ir kombinuotųjų šildytuvų su šilumos siurbliu atveju vardinis šilumos atidavimas Prated lygus projektinei apkrovai šildymo režimu Pdesiqnh, o papildomo šildytuvo vardinis šilumos atidavimas Psup lygus papildomam šildymo pajėgumui sup(Tj).	(*) Hőszivattyús helyiségfűtő berendezések és hőszivattyús kombinált fűtőberendezések esetében a Prated mért hőteljesítmény egyenlő a Pdesiqnh tervezési terheléssel, emellett a kiegészítő fűtőberendezés Psup mért hőteljesítménye megegyezik a sup(Tj) kiegészítő fűtőteljesítménnyel.	(*) Għall-ħiters tal-f'pompa tas-shana u għall-ħiters ikkombinati b'pompa tas-shana, il-potenza termika nominali, Prated, ħija daqs it-tagħbija tad-disinn għat-tishin, Pdesiqnh, u l-potenza termika nominali ta' ħiter supplementari, Psup, ħija daqs il-kapacità supplementari tat-tishin, sup(Tj).	(*) Voor ruimteverwarmingstoestellen met warmtepomp en combinatieverwarmingstoestellen met warmtepomp, is de nominale warmteafgifte Prated gelijk aan de ontwerpbelasting voor verwarming Pdesiqnh, en is de nominale warmteafgifte van een aanvullend verwarmingstoestel Psup gelijk aan het aanvullend vermogen voor verwarming sup(Tj).
AZ	(**) Jė Cdh nenustatomas matuojant, naudojama numatytoji blogesnio koeficiento vertė Cdh = 0,9.	(**) Amennyiben a Cdh értékét nem mérésrel állapítják meg, akkor az alapértelmezett degradációs tényező: Cdh = 0,9.	(**) Jekk il-koeffiċjent ta' degradazzjoni, Cdh, ma jingix stabbilt bil-kejl, b'mod awtomatiku jittqies li huwa ta' Cdh = 0,9.	(**) Als Cdh niet door meting is bepaald, is de standaardwaarde van de verliescoëfficiënt Cdh = 0,9.
BA	1) Atlietkant montavimo ir aptarnavimo darbus privaloma laikytis atsargumo priemonių, nurodytų diegimo/vartotojo vadove.	1) A termék összeszerelése, telepítése és a karbantartása során tartsa be a telepítési/használati útmutatóban leírt óvintézkedéseket.	1) Prekawzjonijiet kif deskritt fl-installazzjoni u l-utent manwali għandhom jittieħdu meta jiaqqa' installazzjoni, u ż-zamma dan il-prodott	1) De voorzorgsmaatregelen die in de gebruikershandleiding worden beschreven, moeten in acht worden genomen bij montage, installatie en onderhoud van dit product.
BB	2) Jei esate specialistas ir iškote informacijos kaip išardyti įrangą jos nepažeidžiant, parašykite el. laišką adresu: erims.sec@samsung.com	2) Ha Ön szakember, és információt keres az ártalmatlan szétszereléssel és bontással kapcsolatban, kérjük, küldjön egy e-mailt az: erims.sec@samsung.com címre.	2) Jekk inti persuna professional u qed tiftex informazzjoni fuq amar u zarmar li ma jagħmlix danni, jekk jogħbok ibagħat email fuq: erims.sec@samsung.com	2) Als u als professional op zoek bent naar informatie over de niet-destructieve demontage en ontmanteling, stuur dan een e-mail naar: erims.sec@samsung.com



# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

No	Polish(PL)	Portuguese(PT)	Romanian(RO)	Slovak(SK)
I	ROZPORZĄDZENIE KOMISJI (UE) NR 813/2013	REGULAMENTO (UE) N.º 813/2013 DA COMISSÃO	NARIADENIE KOMISIE (EÚ) č. 813/2013	NARIADENIE KOMISIE (EÚ) č. 813/2013
II	Wymogi dotyczące ekoprojektu dla ogrzewaczy pomieszczeń	Os requisitos de conceção ecológica para aquecedor de ambiente	Požadavky na ekodizajn tepelný zdroj na vykurovanie priestoru	Požadavky na ekodizajn tepelný zdroj na vykurovanie priestoru
A	Model(-e); [dane określające modele, do których odnosią się informacje]	Modelo(s); [dados de identificação do(s) modelo(s) a que se refere a informação]	Model(-y); [informácie na určenie modelu(-ov), ktorého(-ých) sa informácie týkajú]	Model(-y); [informácie na určenie modelu(-ov), ktorého(-ých) sa informácie týkajú]
B	Pompa ciepła powietrze/woda: [tak/nie]	Bomba de calor ar-águ: [sim/não]	Tepelné čerpadlo vzduch – voda: [áno/nie]	Tepelné čerpadlo vzduch – voda: [áno/nie]
C	Pompa ciepła woda/woda: [tak/nie]	Bomba de calor água-águ: [sim/não]	Tepelné čerpadlo voda – voda: [áno/nie]	Tepelné čerpadlo voda – voda: [áno/nie]
D	Pompa ciepła solanka/woda: [tak/nie]	Bomba de calor salmoura-águ: [sim/não]	Tepelné čerpadlo slaná voda – voda: [áno/nie]	Tepelné čerpadlo studničná voda – voda: [áno/nie]
E	Niskotemperaturowa pompa ciepła: [tak/nie]	Bomba de calor de baixa temperatura: [sim/não]	Nízko-teplotné tepelné čerpadlo: [áno/nie]	Nízko-teplotné tepelné čerpadlo: [áno/nie]
F	Wyposażona w dodatkowy ogrzewacz: [tak/nie]	Equipada com um aquecedor suplementar: [sim/não]	Vybavené dodatočným tepelným zdrojom: [áno/nie]	Vybavené dodatočným tepelným zdrojom: [áno/nie]
G	Wielofunkcyjny ogrzewacz z pompą ciepła: [tak/nie]	Aquecedor combinado com bomba de calor: [sim/não]	Kombinovaný tepelný zdroj – tepelné čerpadlo: [áno/nie]	Kombinovaný tepelný zdroj – tepelné čerpadlo: [áno/nie]
H	Parametry podaje się dla zastosowań w średnich temperaturach, z wyjątkiem niskotemperaturowych pomp ciepła. W przypadku niskotemperaturowych pomp ciepła parametry podaje się dla zastosowań w niskich temperaturach.	Devem ser indicados parâmetros para aplicação a média temperatura, exceto para as bombas de calor de baixa temperatura. Para as bombas de calor de baixa temperatura, devem ser indicados parâmetros para aplicação a baixa temperatura.	Parametre sa deklarujú pre použitie pri stredných teplotách, okrem tepelných čerpadiel pre nízke teploty. V prípade tepelných čerpadiel pre nízke teploty sa parametre deklarujú pre použitie pri nízkych teplotách.	Parametre majú byť deklarované pre použitie pri stredných teplotách, okrem tepelných čerpadiel pre nízke teploty. V prípade tepelných čerpadiel pre nízke teploty sa parametre majú byť deklarované pre použitie pri nízkych teplotách.
I	Parametry są deklarowane dla warunków klimatu umiarkowanego.	Os parâmetros declarados devem corresponder a condições climáticas médias.	Parametre sa deklarujú pre priemerné klimatické podmienky.	Parametre majú byť deklarované pre priemerné klimatické podmienky.
J	Parametr	Elemento	Položka	Položka
K	Symbol	Símbolo	Símbol	Símbol
L	Wartość	Valor	Hodnota	Hodnota
M	Jednostka	Unidade	Jednotka	Jednotka
N	Znamionowa moc cieplna (*)	Potência calorífica nominal (*)	Menovitý tepelný výkon (*)	Menovitý tepelný výkon (*)
O	Prated	Prated	Prated	Prated
p	Sezonowa efektywność energetyczna ogrzewania pomieszczeń	Eficiência energética do aquecimento ambiente sazonal	Sezónna energetická účinnosť vykurovania	Sezónna energetická účinnosť vykurovania
Q	Deklarowana wydajność grzewcza przy częściowym obciążeniu w temperaturze pomieszczenia 20 °C i temperaturze zewnętrznej Tj	Capacidade declarada para aquecimento a carga parcial a uma temperatura interior de 20 °C e a uma temperatura exterior Tj	Deklarovaný tepelný výkon pre čiastočné zaťaženie pri vnútornej teplote 20 °C a vonkajšej teplote Tj	Deklarovaný tepelný výkon pre čiastočné zaťaženie pri vnútornej teplote 20 °C a vonkajšej teplote Tj
R	Deklarowany wskaźnik efektywności lub wskaźnik zużycia energii pierwotnej przy częściowym obciążeniu w temperaturze pomieszczenia 20 °C i temperaturze zewnętrznej Tj	Coefficiente de desempenho declarado ou rácio de energia primária a carga parcial a uma temperatura interior de 20 °C e a uma temperatura exterior Tj	Deklarovaný vykurovací súčiniteľ alebo súčiniteľ využitia primárnej energie pre čiastočné zaťaženie pri vnútornej teplote 20 °C a vonkajšej teplote Tj	Deklarovaný vykurovací súčiniteľ alebo súčiniteľ využitia primárnej energie pre čiastočné zaťaženie pri vnútornej teplote 20 °C a vonkajšej teplote Tj
S	COPd lub PERd	COPd ou PERd	COPd alebo PERd	COPd alebo PERd
T	Tj = temperatura dwuwartościowa	Tj = temperatura bivalente	Tj = bivalentná teplota	Tj = teplota bivalencie
U	Tj = graniczna temperatura robocza	Tj = temperatura-limite de funcionamento	Tj = prevádzková hraničná teplota	Tj = hraničná prevádzková teplota
V	Pompy ciepła powietrze/woda: Tj = - 15 °C (jeżeli TOL < - 20 °C)	Para bombas de calor ar-águ: Tj = - 15 °C (se TOL < - 20 °C)	Pre tepelné čerpadlá vzduch – voda: Tj = - 15 °C (ak TOL < - 20 °C)	Pre tepelné čerpadlá vzduch – voda: Tj = - 15 °C (ak TOL < - 20 °C)
W	Temperatura dwuwartościowa	Temperatura bivalente	Bivalentná teplota	Teplota bivalencie
X	Pompy ciepła powietrze/woda: Graniczna temperatura robocza	Para bombas de calor ar-águ: Temperatura-limite de funcionamento	Pre tepelné čerpadlá vzduch – voda: Hraničná prevádzková teplota	Pre tepelné čerpadlá vzduch – voda: Hraničná prevádzková teplota
Y	Wydajność w okresie cyklu w interwale dla ogrzewania	Capacidade de aquecimento em intervalo cíclico	Výkon v rámci cyklického intervalu pre vykurovanie	Výkon v rámci cyklického intervalu pre vykurovanie
Z	Wydajność w okresie cyklu w interwale	Eficiência em intervalo cíclico	Súčiniteľ v rámci cyklického intervalu	Súčiniteľ v rámci cyklického intervalu
AA	COPcyc lub PERcyc	COPcyc ou PERcyc	COPcyc alebo PERcyc	COPcyc alebo PERcyc
AB	Współczynnik strat (**)	Coefficiente de degradação (**)	Súčiniteľ straty účinnosti (**)	Súčiniteľ straty účinnosti (**)

No	Polish(PL)	Portuguese(PT)	Romanian(RO)	Slovak(SK)
AC	Graniczna temperatura robocza dla podgrzewania wody	Temperatura-limite de funcionamento para água de aquecimento	Hraničná prevádzková teplota pre ohrev úžitkovej vody	Hraničná prevádzková teplota pre ohrev vody
AD	Pobór mocy w trybach innych niż aktywne	Consumo energético em modos distintos do modo ativo	Elektrický príkon v iných režimoch ako aktívny režim	Spotreba el. energie v iných režimoch ako aktívnych
AE	Ogrzewacz dodatkowy	Aquecedor suplementar	Dodatčný tepelný zdroj	Dodatčný tepelný zdroj
AF	Tryb wyłączenia	Modo desligado	Režim vypnutia	Režim vypnutia
AG	Tryb wyłączzonego termostatu	Modo termostato desligado	Režim vypnutia termostatu	Režim vypnutia termostatu
AH	Tryb czuwania	Modo de vigília	Pohotovostný režim	Pohotovostný režim
AI	Tryb wyłączonej grzałki karteru	Modo de resistência do cárter	Režim ohreву kľukovej skrine	Režim nahrievania oleja
AJ	Rodzaj pobieranej energii	Tipo de alimentação de energia	Typ elektrického príkonu	Typ elektrického príkonu
AK	Inne parametry	Outros elementos	Alti parametri	Iné položky
AL	Regulacja wydajności	Controlo de capacidade	Regulácia výkonu	Regulácia výkonu
AM	wydajność stała/zmienna	fixo/variável	Pevná/premenlivá	Pevná/premenlivá
AN	Pompy ciepła powietrze/woda: znamionowy przepływ powietrza na zewnątrz	Para bombas de calor ar-água: Caudal de ar nominal, exterior	Pre tepelné čerpadlá vzduch – voda: Menovitý prietok vzduchu, von	Pre tepelné čerpadlá vzduch – voda: Menovitý prietok vzduchu, exteriér
AO	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h
AP	Poziom mocy akustycznej w pomieszczeniu/ na zewnątrz	Nível de potência sonora interior/exterior	Vnútrná/vonkajšia hladina akustického výkonu	Vnútrná/vonkajšia hladina akustického výkonu
AQ	Emisie tlenków azotu	Emissões de óxidos de azoto	Emisie oxidov dusíka	Emisie oxidov dusíka
AR	Pompy ciepła woda/solanka-woda: znamionowe natężenie przepływu solanki lub wody, zewnętrzny wymiennik ciepła	Para bombas de calor água/salmoura-água: Caudal nominal de salmoura ou água, permutador térmico exterior	Pre tepelné čerpadlá voda/slaná voda – voda: Menovitý prietok slanej vody alebo vody, vonkajší výmenník tepla	Pre tepelné čerpadlá voda/studničná voda – voda: Menovitý prietok studničnej vody alebo vody, vonkajší výmenník tepla
AS	Wielofunkcyjne ogrzewacze z pompą ciepła:	Para aquecedores combinados com bomba de calor.	Pre kombinovaný tepelný zdroj – tepelné čerpadlo:	Pre kombinovaný tepelný zdroj tepelného čerpadla:
AT	Deklarowany profil obciążeń	Perfil de carga declarado	Deklarowany profil zatażenia	Deklarowany profil zatażenia
AU	Efektywność energetyczna podgrzewania wody	Eficiência energética do aquecimento de água	Energetická účinnosť prípravy teplej vody	Energetická účinnosť prípravy teplej vody
AV	Dzienne zużycie energii elektrycznej	Consumo diário de eletricidade	Denná spotreba elektrickej energie	Denná spotreba elektrickej energie
AW	Dzienne zużycie paliwa	Consumo diário de combustível	Denná spotreba paliva	Denná spotreba paliva
AX	Dane kontaktowe	Elementos de contacto	Kontaktné údaje	Kontaktné údaje
AY	(*) W przypadku ogrzewaczy pomieszczeni z pompą ciepła i wielofunkcyjnych ogrzewaczy z pompą ciepła znamionowa moc cieplna Prated jest równa obciążeniu obliczeniowemu dla trybu ogrzewania Pdesighn, a znamionowa moc cieplna ogrzewacza dodatkowego Ppsup jest równa dodatkowej wydajności grzewczej dla trybu ogrzewania sup(Tj).	(*) Para aquecedores de ambiente com bomba de calor e aquecedores combinados com bomba de calor, a potência calorífica nominal Prated é igual à carga de projeto para aquecimento Pdesighn e a potência calorífica nominal de um aquecedor suplementar Ppsup é igual à capacidade de aquecimento suplementar sup(Tj).	(*) Pre tepelné zdroje na vykurovanie priestoru – tepelné čerpadlá a kombinované tepelné zdroje – tepelné čerpadlá sa menovitý tepelný výkon Prated rovná projektovanému vykurovaciemu zaťaženiu Pdesighn, a menovitý tepelný výkon dodatčného tepelného zdroja Ppsup sa rovná dodatčnému tepelnému výkonu sup(Tj).	(*) Pre tepelné zdroje na vykurovanie priestoru – tepelné čerpadlá a kombinované tepelné zdroje sa menovitý tepelný výkon Prated rovná projektovanému vykurovaciemu zaťaženiu Pdesighn a menovitý tepelný výkon dodatčného tepelného zdroja Ppsup sa rovná dodatčnému tepelnému výkonu sup(Tj).
AZ	(**) Jeżeli współczynnik Cdh nie został wyznaczony przez pomiar, współczynnik strat przyjmuje wartość domyślną Cdh = 0,9.	(**) Se não se determinar Cdh por medição, o coeficiente de degradação predefinido é Cdh = 0,9.	(**) Ak Cdh nie je určené meraním, implicitný súčiniteľ straty účinnosti je Cdh = 0,9.	(**) Ak Cdh nie je určené meraním, potom predvolený súčiniteľ straty účinnosti je Cdh = 0,9.
BA	1) W trakcie montażu, instalacji i obsługi tego produktu należy zachować zasady bezpieczeństwa opisane w instrukcji instalacji/obsługi.	1) As precauções descritas no manual de instalação/instruções dever ser adotadas durante a montagem, instalação ou manutenção do produto.	1) Trebuie să fiți precauți conform manualului de utilizare/instalare în timpul asamblării, instalării și întreinerii acestui produs.	1) Výstrahy ako sú popísané v inštaláčnom/ užívateľskom manuáli musia byť užvané pri montáži, inštalácii a starostlivosti o produkt.
BB	2) Jeśli jesteś profesjonalistą szukającym informacji dotyczących nieniszczących metod demontażu i rozbiórki, uprzejmie prosimy o wysłanie wiadomości email na adres: erims.sec@samsung.com	2) Se é um profissional e pretende obter informações sobre desmontagem e desmantelamento não destrutivos, envie um e-mail para: erims.sec@samsung.com	2) Odborní pracovníci môžu získať informácie týkajúce sa neštruktúry demontáže na nasledujúcej e-mailovej adrese: erims.sec@samsung.com.	2) Odborní pracovníci môžu získať informácie týkajúce sa správnej demontáže na nasledujúcej e-mailovej adrese: erims.sec@samsung.com.

# COMMISSION REGULATION (EU) No 813/2013<sup>1)</sup>

No	Slovenian(SL)	Finnish(FI)	Swedish(SV)
I	UREDBA KOMISIJE (EU) št. 813/2013	KOMISSION ASETUS (EU) N:o 813/2013,	KOMMISSIONENS FÖRORDNING (EU) nr 813/2013
II	Okoljsko primerno zasnovano zahtevo za grelnik prostorov	Ekosuunnitteluvaatimukset varren tilälämmittimellä	Ekodesignkraven för rumsuppvärmning
A	Model(-i):[informacije za identifikacijo modela(-lov), na katere se informacije nanašajo]	Malli(t): [tiedot sen mallin (noiden mallien) yksilöimiseksi, joita tiedot koskevat]	Modell(er): [Information som identifierar den modell (de modeller) som informationen gäller]
B	Toplotna črpalka zrak-voda: [da/ne]	Ilma-vesi-lämpöpumppu: [kyllä/ei]	Luft-till-vatten-värmepump: [ja/nej]
C	Toplotna črpalka voda-voda: [da/ne]	Vesi-vesi-lämpöpumppu: [kyllä/ei]	Vatten-till-vatten-värmepump: [ja/nej]
D	Toplotna črpalka slanica-voda: [da/ne]	Suolavesi-vesi-lämpöpumppu: [kyllä/ei]	Saltlösning-till-vatten-värmepump: [ja/nej]
E	Nizkotemperaturna toplotna črpalka: [da/ne]	Matalan lämpötilan lämpöpumppu: [kyllä/ei]	Lågtemperaturvärmepump: [ja/nej]
F	Opremljena z dodatnim grelnikom: [da/ne]	Varustettu lisälämmittimellä: [kyllä/ei]	Utrustad med extra värmegenerator: [ja/nej]
G	Kombinirani grelnik s toplotno črpalko: [da/ne]	Lämpöpumppuyhdistelmälämmitin: [kyllä/ei]	Pannor med inbyggd tappvarmvattenberedning och med värmepump: [ja/nej]
H	Parametri se navedejo za uporabo pri srednji temperaturi, razen za nizkotemperaturne toplotne črpalke. Parametri za nizkotemperaturne toplotne črpalke se navedejo za uporabo pri nizki temperaturi.	Parametrit ilmoitetaan keskilämpötilan sovelluksesta, lukuun ottamatta matalan lämpötilan lämpöpumppuja. Matalan lämpötilan lämpöpumppuista parametrit ilmoitetaan matalan lämpötilan sovelluksesta.	Parametrar ska anges för mediumtemperaturtillämpning, utom för lågtemperaturvärmepumpar. För lågtemperaturvärmepumpar ska parametrarna anges för lågtemperaturapplikationer.
I	Parametri se navedejo za povprečne podnebne razmere.	Parametrit ilmoitetaan keskimääräisissä ilmasto-olosuhteissa.	Parametrarna ska anges för genomsnittliga klimatförhållanden.
J	Postavka	Kohta	Post
K	Oznaka	Symboli	Beteckning
L	Vrednost	Arvo	Värde
M	Enota	Yksikkö	Enhet
N	Nazivna izhodna toplota (*)	Nimellislämpöteho (*)	Nominell avgiven värmeeffekt (*)
O	Prated	Prated	Pmärk
P	Sezonska energijska učinkovitost ogrevanja prostorov	Tilälämmityksen kausittainen energiatehokkuus	Säsongsmedelverkningsgrad för rumsuppvärmning
Q	Prijavljena zmogljivost ogrevanja za delno obremenitev pri temperaturi v notranjih prostorih 20 °C in temperaturi na prostem Tj	Ilmoitettu lämmitysteho osakuormalla sisälämpötilassa 20 °C ja ulkolämpötilassa Tj	Deklarerad kapacitet för uppvärmning för delbelastning vid innetemperatur 20 °C och utetemperatur Tj
R	Prijavljen koeficient učinkovitosti ali razmerje primarne energije za delno obremenitev pri temperaturi v notranjih prostorih 20 °C in temperaturi na prostem Tj	Ilmoitettu lämpökertoin tai primäärienergiakerroin osakuormalla sisälämpötilassa 20 °C ja ulkolämpötilassa Tj	Deklarerad värmefaktor eller primärenergifaktor för delbelastning vid en inomhustemperatur på 20 °C och en utomhustemperatur Tj
S	COPd ali PERd	COPd tai PERd	COPd eller PERd
T	Tj = bivalentna temperatura	Tj = kaksiarvoinen lämpötila	Tj = bivalenttemperatur
U	Tj = mejna delovna temperatura	Tj = toimintarajalämpötila	Tj = gränstemperatur för drift
V	Za toplotne črpalke zrak-voda: Tj = -15 °C (če je TOL < -20 °C)	Ilma-vesi-lämpöpumput: Tj = -15 °C (jos TOL < -20 °C)	För luft-till-vatten-värmepumpar: Tj = -15 °C (om TOL < -20 °C)
W	Bivalentna temperatura	Kaksiarvoinen lämpötila	Bivalenttemperatur
X	Za toplotne črpalke zrak-voda: mejna delovna temperatura	Ilma-vesi-lämpöpumput: Toimintarajalämpötila	För luft-till-vatten-värmepumpar: Gränstemperatur för drift
Y	Zmogljivost intervala cikla za ogrevanje	Lämmityksen vuorottelujaksoteho	Cykelintervallets uppvärmningskapacitet
Z	Učinkovitost intervala cikla	Vuorottelujakson energiatehokkuus	Cykelintervallets verkningsgrad
AA	COPcyc ali PERcyc	COPcyc tai PERcyc	COPcyc eller PERcyc
AB	Koeficient degradacije (**)	Alenemiskerroin (**)	Degraderingskoefficient (**)
AC	Mejna delovna temperatura za ogrevanje vode	Lämmitysveden toimintarajalämpötila	Uppvärmningsvattnets gränstemperatur för drift
AD	Poraba energije v načinih, ki ne vključujejo načina aktivnega delovanja	Tehonkulutus muissa tiloissa kuin aktiivisessa toimintatilassa	Effektförbrukning i andra lägen än aktivt läge

No	Slovenian(SL)	Finnish(FI)	Swedish(SV)
AE	Dodatni grelnik	Lisälämmitin	Extra värmegenerator
AF	Stanje izključenosti	Pois päältä -tila	Frånläge
AG	Stanje izključenosti termostata	Termostaatti pois päältä -tila	Termostatfrånläge
AH	Stanje pripravljenosti	Valmiustila	Standbyläge
AI	Način grelnika ohljšja	Kampikammion lämmitys-tila	Vevhusvärmeläge
AJ	Vrsta dovedene energije	Ottoenergian tyyppi	Typ av tillförd energi
AK	Druge postavke	Muut kohdat	Andra poster
AL	Upravljanje zmogljivosti	Tehonsäätö	Kapacitetsreglering
AM	stalna/spremenljiva	kiinteä/muuttuva	fast/variabel
AN	Za toplotne črpalke zrak-voda: nazivna stopnja pretoka zraka, zunanja	Ilma-vesi-lämpöpumput: nimellislämpövirta, ulkona	För luft-till-vatten-värmepumpar: Nominellt luftflöde (ute)
AO	m <sup>3</sup> /h	m <sup>3</sup> /h	m <sup>3</sup> /h
AP	Nivo zvokovne moči, v notranjih prostorih/na prostem	Äänitehosas, sisällä/ulkona	Ljudeffektiv, inomhus/utomhus
AQ	Emisije dušikovih oksidov	Tyypen oksidien päästöt	Utsläpp av kväveoxider
AR	Za toplotne črpalke voda/slanica-voda: nazivna stopnja pretoka slanice ali vode, zunanji izmenjevalnik toplote	Vesi-/suolavesi-vesi-lämpöpumput: suolaveden tai veden nimellislämpövirtaus, ulkolämpönsiirrin	För vatten-/saltlösning-till-vatten-värmepumpar: Nominellt saltlösning- eller vattenflöde, värmväxlare utomhus
AS	Za kombinirani grelnik s toplotno črpalke:	Lämpöpumppuyhdistelmälämmitin:	För pannor med inbyggd tappvarmvattenberedning och med värmepump:
AT	Določeni profil rabe	Ilmoitettu kuormitusprofiili	Deklarerad belastningsprofil
AU	Energijska učinkovitost ogrevanja vode	Vedenlämmityksen energiatehokkuus	Energieffektivitet vid uppvärmning av vatten
AV	Dnevna poraba električne energije	Vuorokautinen sähkönkulutus	Daglig elförbrukning
AW	Dnevna poraba goriva	Vuorokautinen polttoaineenkulutus	Daglig bränsleförbrukning
AX	Kontaktni podatki	Yhteystedot	Kontakt
AY	(*) Za toplotne črpalke za ogrevanje prostorov in kombinirane grelnike s toplotno črpalke je nazivna izhodna toplota Prated enaka nazivni obremenitvi za ogrevanje Pdesignh, nazivna izhodna toplota dodatnega grelnika Psup pa je enaka dodatni zmogljivosti ogrevanja sup(Tj).	(*) Lämpöpumppuyhdistelmämittimillä ja lämpöpumppuyhdistelmämittimillä nimellislämpöteho Prated on yhtä suuri kuin lämmityksen mitoituskuorma Pdesignh ja lisälämmittimen nimellislämpöteho Psup on yhtä suuri kuin lisälämmitysteho sup(Tj).	(*) För värmare med värmepump för runsuppvärmning och pannor med inbyggd tappvarmvattenberedning och med värmepump är den nominella avgivna värmeeffekten Prated lika med den dimensionerade värmekapaciteten Pdesignh, och den nominella avgivna värmeeffekten hos en extra värmegenerator Psup är lika med den kompletterande uppvärmningskapaciteten sup(Tj).
AZ	(**) Če Cdh ni določen z meritvami, privzeti koeficient degradacije znaša Cdh = 0,9.	(**) Jos Cdh:n arvoa ei määritetä mittaamalla, alenemiskertoimen oletusarvo on Cdh = 0,9.	(**) Om Cdh inte bestäms genom mätningar ska degraderingskoefficienten vara Cdh = 0,9.
BA	1) Pri sestavljanju, nameščanju ter vzdrževanju izdelka upoštevajte previdnostne ukrepe, ki so navedeni v priložniku za uporabo in nameštitev.	1) Asennus- tai käyttöoppaassa kuvattuja turvaohjeita on noudatettava laitteen kokoamisen, asentamisen ja huollon aikana.	1) Försiktighetsåtgärderna som beskrivs i installationsmanualen/bruksanvisningen måste följas vid montering, installation och underhåll av denna produkt.
BB	2) Če ste strokovnjaki in iščete informacije o neporušitvenem razstavljanju in demontaži, pošljite e-poštno sporočilo na: erims.sec@samsung.com	2) Jos olet ammattiasentaja ja haluat lisätietoja asennuksen turvallisesta purkamisesta, lähettäkää sähköpostia osoitteeseen erims.sec@samsung.com	2) Om du är en professionell användare som letar efter information om icke-destruktiv demontering och isärtagande av dammsugaren, kan du skicka ett e-postmeddelande till: erims.sec@samsung.com

# COMMISSION DELEGATED REGULATION (EU) No 811/2013 <sup>i)</sup>

## PRODUCT FICHE (ENERGY LABELLING OF SPACE HEATERS) <sup>ii)</sup>

a	Supplier's name or trademark		Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.
b	Supplier's model identifier		AE040XEDEH/AE090JNYDEH	AE060XEDEH/AE090JNYDEH
c	Seasonal space heating energy efficiency class	Medium-temperature <sup>69)</sup>	-	A++
		Low-temperature <sup>69)</sup>	-	A++
d	Rated heat output (Average)	Medium-temperature <sup>69)</sup>	kW	4
		Low-temperature <sup>69)</sup>	kW	4
e	Seasonal space heating energy efficiency (Average)	Medium-temperature <sup>69)</sup>	%	126
		Low-temperature <sup>69)</sup>	%	178
f	Annual energy consumption (Average)	Medium-temperature <sup>69)</sup>	kWh	1778
		Low-temperature <sup>69)</sup>	kWh	1387
g	L <sub>WA</sub> (sound power level, indoor)		dB	40
h	Specific precautions <sup>1)</sup>		-	-
i	Rated heat output (Colder)	Medium-temperature <sup>69)</sup>	kW	4
		Low-temperature <sup>69)</sup>	kW	4
j	Rated heat output (Warmer)	Medium-temperature <sup>69)</sup>	kW	4
		Low-temperature <sup>69)</sup>	kW	4
k	Seasonal space heating energy efficiency (Colder)	Medium-temperature <sup>69)</sup>	%	100
		Low-temperature <sup>69)</sup>	%	152
l	Seasonal space heating energy efficiency (Warmer)	Medium-temperature <sup>69)</sup>	%	153
		Low-temperature <sup>69)</sup>	%	248
m	Annual energy consumption (Colder)	Medium-temperature <sup>69)</sup>	kWh	3024
		Low-temperature <sup>69)</sup>	kWh	2216
n	Annual energy consumption (Warmer)	Medium-temperature <sup>69)</sup>	kWh	1389
		Low-temperature <sup>69)</sup>	kWh	950
o	L <sub>WA</sub> (sound power level, outdoor)		dB	61

r <sup>1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

## PRODUCT FICHE (ENERGY LABELLING OF PACKAGES OF SPACE HEATER) <sup>iii)</sup>

a	Supplier's name or trademark		Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.
b	Supplier's model identifier		AE040XEDEH/AE090JNYDEH	AE060XEDEH/AE090JNYDEH
s	Seasonal space heating energy efficiency (Preferential space heater)	%	128	128
t	Factor for weighting the heat output (Preferential space heater)	-	0	0
u	Mathematical expression : 294 / (11 • Prated) <sup>1)</sup>	-	6.7	5.3
v	Mathematical expression : 115 / (11 • Prated) <sup>2)</sup>	-	2.6	2.1
w	The difference between the seasonal space heating energy efficiencies under average and colder climate conditions <sup>3)</sup>	%	26	27
x	The difference between the seasonal space heating energy efficiencies under warmer and average climate conditions <sup>4)</sup>	%	27	31

y <sup>1)</sup> Whereby Prated is related to the preferential space heater.

z <sup>2)</sup> Whereby Prated is related to the preferential space heater.

aa <sup>3), 4)</sup> For preferential heat pump space heaters.

## PRODUCT FICHE (ENERGY LABELLING OF TEMPERATURE CONTROLS) <sup>iv)</sup>

a	Supplier's name or trademark	-	Samsung Electronics Co., Ltd.
b	Supplier's model identifier	-	AE090JNYDEH
ab	The class of the temperature control	-	Class II
ac	The contribution of the temperature control to seasonal space heating energy efficiency	%	2

# PRODUCT FICHE (ENERGY LABELLING OF SPACE HEATERS) <sup>ii)</sup>

a	Supplier's name or trademark		Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.		
b	Supplier's model identifier		AE090XEDEH/ AE090JNYDEH	AE090XEDGH/ AE090JNYDGH	AE120XEDEH/ AE160JNYDEH	AE120XEDGH/ AE160JNYDGH		
c	Seasonal space heating energy efficiency class	Medium-temperature <sup>(6)</sup>	-	A++	A++	A+	A+	
		Low-temperature <sup>(6)</sup>	-	A++	A++	A++	A++	
d	Rated heat output (Average)	Medium-temperature <sup>(6)</sup>	kW	6	6	8	8	
		Low-temperature <sup>(6)</sup>	kW	7	7	11	11	
e	Seasonal space heating energy efficiency (Average)	Medium-temperature <sup>(6)</sup>	%	128	131	112	112	
		Low-temperature <sup>(6)</sup>	%	178	180	180	180	
f	Annual energy consumption (Average)	Medium-temperature <sup>(6)</sup>	kWh	2704	2732	4000	4000	
		Low-temperature <sup>(6)</sup>	kWh	2139	2178	3298	3298	
g	L <sub>WA</sub> (sound power level, indoor)			dB	40	40	47	47
h	Specific precautions <sup>1)</sup>			-				
i	Rated heat output (Colder)	Medium-temperature <sup>(6)</sup>	kW	5	5	8	8	
		Low-temperature <sup>(6)</sup>	kW	6	6	11	11	
j	Rated heat output (Warmer)	Medium-temperature <sup>(6)</sup>	kW	6	6	8	8	
		Low-temperature <sup>(6)</sup>	kW	7	7	11	11	
k	Seasonal space heating energy efficiency (Colder)	Medium-temperature <sup>(6)</sup>	%	108	112	107	107	
		Low-temperature <sup>(6)</sup>	%	154	162	169	169	
l	Seasonal space heating energy efficiency (Warmer)	Medium-temperature <sup>(6)</sup>	%	154	132	157	157	
		Low-temperature <sup>(6)</sup>	%	238	252	232	232	
m	Annual energy consumption (Colder)	Medium-temperature <sup>(6)</sup>	kWh	3875	3900	6292	6292	
		Low-temperature <sup>(6)</sup>	kWh	3164	3103	5275	5275	
n	Annual energy consumption (Warmer)	Medium-temperature <sup>(6)</sup>	kWh	2255	2715	2992	2992	
		Low-temperature <sup>(6)</sup>	kWh	1694	1644	2752	2752	
o	L <sub>WA</sub> (sound power level, outdoor)			dB	64	64	64	64

a	Supplier's name or trademark		Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	
b	Supplier's model identifier		AE140XEDEH/ AE160JNYDEH	AE140XEDGH/ AE160JNYDGH	AE160XEDEH/ AE160JNYDEH	AE160XEDGH/ AE160JNYDGH	
c	Seasonal space heating energy efficiency class	Medium-temperature <sup>(6)</sup>	-	A+	A+	A+	A+
		Low-temperature <sup>(6)</sup>	-	A++	A++	A++	A++
d	Rated heat output (Average)	Medium-temperature <sup>(6)</sup>	kW	9	9	10	10
		Low-temperature <sup>(6)</sup>	kW	12	12	13	13
e	Seasonal space heating energy efficiency (Average)	Medium-temperature <sup>(6)</sup>	%	110	110	108	108
		Low-temperature <sup>(6)</sup>	%	179	179	178	178
f	Annual energy consumption (Average)	Medium-temperature <sup>(6)</sup>	kWh	4327	4327	4926	4926
		Low-temperature <sup>(6)</sup>	kWh	3594	3594	3933	3933
g	L <sub>WA</sub> (sound power level, indoor)			dB	47	47	47
h	Specific precautions <sup>1)</sup>			-			
i	Rated heat output (Colder)	Medium-temperature <sup>(6)</sup>	kW	9	9	10	10
		Low-temperature <sup>(6)</sup>	kW	12	12	13	13
j	Rated heat output (Warmer)	Medium-temperature <sup>(6)</sup>	kW	9	9	10	10
		Low-temperature <sup>(6)</sup>	kW	12	12	13	13
k	Seasonal space heating energy efficiency (Colder)	Medium-temperature <sup>(6)</sup>	%	109	109	113	113
		Low-temperature <sup>(6)</sup>	%	170	170	173	173
l	Seasonal space heating energy efficiency (Warmer)	Medium-temperature <sup>(6)</sup>	%	155	155	150	150
		Low-temperature <sup>(6)</sup>	%	233	233	222	222
m	Annual energy consumption (Colder)	Medium-temperature <sup>(6)</sup>	kWh	6538	6538	7074	7074
		Low-temperature <sup>(6)</sup>	kWh	5669	5669	6076	6076
n	Annual energy consumption (Warmer)	Medium-temperature <sup>(6)</sup>	kWh	3392	3392	3883	3883
		Low-temperature <sup>(6)</sup>	kWh	2978	2978	3380	3380
o	L <sub>WA</sub> (sound power level, outdoor)			dB	64	64	66

<sup>1)</sup> Precautions as described in the installation/user manual must be taken when assembling, installing and maintaining this product.

# COMMISSION DELEGATED REGULATION (EU) No 811/2013<sup>i)</sup>

## PRODUCT FICHE (ENERGY LABELLING OF PACKAGES OF SPACE HEATER)<sup>iii)</sup>

a	Supplier's name or trademark		Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.
b	Supplier's model identifier		AE090JXEDEH/ AE090JNYDEH	AE090JXEDGH/ AE090JNYDGH	AE120JXEDEH/ AE160JNYDEH	AE120JXEDGH/ AE160JNYDGH
s	Seasonal space heating energy efficiency (Preferential space heater)	%	130	133	114	114
t	Factor for weighting the heat output (Preferential space heater)	-	0	0	0	0
u	Mathematical expression : $294 / (11 \cdot \text{Prated})$ <sup>1)</sup>	-	4.5	4.5	3.3	3.3
v	Mathematical expression : $115 / (11 \cdot \text{Prated})$ <sup>2)</sup>	-	1.7	1.7	1.3	1.3
w	The difference between the seasonal space heating energy efficiencies under average and colder climate conditions <sup>3)</sup>	%	20	19	5	5
x	The difference between the seasonal space heating energy efficiencies under warmer and average climate conditions <sup>4)</sup>	%	26	1	45	45

a	Supplier's name or trademark		Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.
b	Supplier's model identifier		AE140JXEDEH/ AE160JNYDEH	AE140JXEDGH/ AE160JNYDGH	AE160JXEDEH/ AE160JNYDEH	AE160JXEDGH/ AE160JNYDGH
s	Seasonal space heating energy efficiency (Preferential space heater)	%	112	112	110	110
t	Factor for weighting the heat output of the preferential and supplementary heaters	-	0	0	0	0
u	Mathematical expression : $294 / (11 \cdot \text{Prated})$ <sup>1)</sup>	-	3.0	3.0	2.7	2.7
v	Mathematical expression : $115 / (11 \cdot \text{Prated})$ <sup>2)</sup>	-	1.2	1.2	1.0	1.0
w	The difference between the seasonal space heating energy efficiencies under average and colder climate conditions <sup>3)</sup>	%	1	1	5	5
x	The difference between the seasonal space heating energy efficiencies under warmer and average climate conditions <sup>4)</sup>	%	45	45	42	42

y <sup>1)</sup> Whereby Prated is related to the preferential space heater.

z <sup>2)</sup> Whereby Prated is related to the preferential space heater.

aa <sup>3), 4)</sup> For preferential heat pump space heaters.

## PRODUCT FICHE (ENERGY LABELLING OF TEMPERATURE CONTROLS)<sup>iv)</sup>

a	Supplier's name or trademark	-	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.	Samsung Electronics Co., Ltd.
b	Supplier's model identifier	-	AE090JNYDEH	AE090JNYDGH	AE160JNYDEH	AE160JNYDGH
ab	The class of the temperature control	-	Class II	Class II	Class II	Class II
ac	The contribution of the temperature control to seasonal space heating energy efficiency	%	2	2	2	2

No	English(EN)	Bulgarian(BG)	Spanish(ES)	Czech(CS)
i	COMMISSION DELEGATED REGULATION (EU) No 811/2013	ДЕЛЕГИРАН РЕГЛАМЕНТ (ЕС) № 811/2013 НА КОМИСИЯТА	REGLAMENTO DELEGADO (UE) No 811/2013 DE LA COMISIÓN	NAŘÍZENÍ KOMISE V PŘENEŠENÉ PRÁVOMOCI (EU) č. 811/2013
ii	PRODUCT FICHE (ENERGY LABELLING OF SPACE HEATERS)	Продуктов фиш (енергийното етикетирание на отоплителни топлоизточници)	Ficha del producto (etiquetado energético de aparatos de calefacción)	Informační list výrobku (energie na energetických štítcích ohřivačů pro vytápění vnitřních prostorů)
iii	PRODUCT FICHE (ENERGY LABELLING OF PACKAGES OF SPACE HEATER)	Продуктов фиш (енергийното етикетирание на КОМПЛЕКТИ ОТ ОТОПИЛИТЕЛНИ ТОПЛОИЗТОЧНИЦИ)	Ficha del producto (etiquetado energético de EQUIPOS COMBINADOS DE APARATO DE CALEFACCIÓN)	Informační list výrobku (energie na energetických štítcích ohřivačů pro souprav sestávajících z ohřivače pro vytápění vnitřních prostorů)
iv	PRODUCT FICHE (ENERGY LABELLING OF TEMPERATURE CONTROLS)	Продуктов фиш (енергийното етикетирание на	Ficha del producto (etiquetado energético de CONTROLES DE TEMPERATURA)	Informační list výrobku (energie na energetických štítcích ohřivačů pro regulátoru teploty)
a	Supplier's name or trademark	наименование или търговска марка на доставчика	nombre o marca comercial del proveedor	název nebo ochranná známka dodavatele
b	Supplier's model identifier	идентификатор на доставчика за модела	identificador del modelo del proveedor	identifikační značka modelu používaná dodavatelem
c	Seasonal space heating energy efficiency class	класът на сезонна отоплителна енергийна ефективност	la clase de eficiencia energética estacional de calefacción	třída sezonní energetické účinnosti vytápění
d	Rated heat output (Average)	номиналната топлинна мощност (средни)	la potencia calorífica nominal (medias)	jmenovitý tepelný výkon (průměrných)
e	Seasonal space heating energy efficiency (Average)	сезонната енергийна ефективност при отопление (средни)	la eficiencia energética estacional de calefacción (medias)	sezonní energetická účinnost vytápění (průměrných)
f	Annual energy consumption (Average)	годишното потребление на енергия (средни)	el consumo anual de energía (medias)	roční spotřeba energie (průměrných)
g	L <sub>WA</sub> (sound power level, indoors)	L <sub>WA</sub> (нивото на звуковата мощност, на закрито)	LWA (el nivel de potencia acústica, en interiores)	L <sub>WA</sub> (případně hladina akustického výkonu, vnitřním prostorem)
h	Specific precautions <sup>1)</sup>	специфични предпазни <sup>1)</sup>	precauciones específicas <sup>1)</sup>	konkrétní preventivní opatření <sup>1)</sup>
i	Rated heat output (Colder)	номиналната топлинна мощност (по-студени)	la potencia calorífica nominal (l)	jmenovitý tepelný výkon (chladnějších)
j	Rated heat output (Warmer)	номиналната топлинна мощност (по-топли)	la potencia calorífica nominal (l)	jmenovitý tepelný výkon (teplejších)
k	Seasonal space heating energy efficiency (Colder)	сезонната енергийна ефективност при отопление (по-студени)	la eficiencia energética estacional de calefacción (más frías)	sezonní energetická účinnost vytápění (chladnějších)
l	Seasonal space heating energy efficiency (Warmer)	сезонната енергийна ефективност при отопление (по-топли)	la eficiencia energética estacional de calefacción (más cálidas)	sezonní energetická účinnost vytápění (teplejších)
m	Annual energy consumption (Colder)	годишното потребление на енергия (по-студени)	el consumo anual de energía (más frías)	roční spotřeba energie (chladnějších)
n	Annual energy consumption (Warmer)	годишното потребление на енергия (по-топли)	el consumo anual de energía (más cálidas)	roční spotřeba energie (teplejších)
o	L <sub>WA</sub> (sound power level, outdoors)	L <sub>WA</sub> (нивото на звуковата мощност, на открито)	LWA (el nivel de potencia acústica, en exteriores)	L <sub>WA</sub> (případně hladina akustického výkonu, venkovním prostorem)
p	Medium-temperature	среднотемпературни	de temperatura media	středněteplotní
q	Low-temperature	нискотемпературни	de baja temperatura	nizkoteplotní
r	<sup>1)</sup> Precautions as described in the installation/ user manual must be taken when assembling, installing and maintaining this product.	<sup>1)</sup> Описаните в ръководството за монтаж/ръководството за потребителя предпазни мерки трябва да се вземат при сглобяване, мониториране и поддръжка на продукта.	<sup>1)</sup> Las precauciones descritas en los manuales de usuario e instalación deben tomarse cuando se ensambla, instala y mantiene este producto	<sup>1)</sup> Při montáži, instalaci a údržbě tohoto produktu je třeba se řídit bezpečnostními opatřeními popsanými v instalační a uživatelské příručce.
s	Seasonal space heating energy efficiency (Preferential space heater)	сезонната енергийна ефективност при отопление (приоритетно използвания отоплителен топлоизточник)	la eficiencia energética estacional de calefacción (aparato de calefacción preferente)	Seasonal space heating energy efficiency (preferovaného ohřivače pro vytápění vnitřních prostorů)
t	Factor for weighting the heat output of the preferential and supplementary heaters	тепловият коефициент за претегляне на топлинната енергия, произведена от приоритетно използвания и от допълнителния подгревател на даден комплект	el factor de ponderación de la potencia calorífica de los calefactores preferente y complementario de un equipo combinado	faktor pro porovnání tepelného výkonu preferovaného ohřivače a přidavných ohřivačů soupravy
u	Mathematical expression : 294 / (11 • Prated) <sup>1)</sup>	математически израз : 294 / (11 • Prated) <sup>1)</sup>	la expresión matemática : 294 / (11 • Prated) <sup>1)</sup>	hodnotu matematického výrazu : 294 / (11 • Prated) <sup>1)</sup>
v	Mathematical expression : 115 / (11 • Prated) <sup>2)</sup>	математически израз : 115 / (11 • Prated) <sup>2)</sup>	la expresión matemática : 115 / (11 • Prated) <sup>2)</sup>	hodnotu matematického výrazu : 115 / (11 • Prated) <sup>2)</sup>
w	The difference between the seasonal space heating energy efficiencies under average and colder climate conditions <sup>3)</sup>	разликата между сезонната отоплителна енергийна ефективност при средни климатични условия и тази при по-студени климатични условия <sup>3)</sup>	la diferencia entre las eficiencias energéticas estacionales de calefacción en condiciones climáticas medias y más frías, expresado en porcentaje	rozdíl mezi sezonními energetickými účinnosti vytápění za průměrných a chladnějších klimatických podmínek <sup>3)</sup>
x	The difference between the seasonal space heating energy efficiencies under warmer and average climate conditions <sup>4)</sup>	разликата между сезонната отоплителна енергийна ефективност при по-топли климатични условия и тази при средни климатични условия <sup>4)</sup>	la diferencia entre las eficiencias energéticas estacionales de calefacción en condiciones climáticas más cálidas y medias, expresado en porcentaje	rozdíl mezi sezonními energetickými účinnosti vytápění za teplejších a průměrných klimatických podmínek <sup>4)</sup>
y	<sup>1)</sup> Whereby Prated is related to the preferential space heater.	<sup>1)</sup> където Prated е свързана с приоритетно използвания отоплителен топлоизточник	<sup>1)</sup> donde la Prated está relacionada con el aparato de calefacción preferente	<sup>1)</sup> přičemž Prated se vztahuje k preferovanému ohřivači pro vytápění vnitřních prostorů
z	<sup>2)</sup> Whereby Prated is related to the preferential space heater.	<sup>2)</sup> където Prated е свързана с приоритетно използвания отоплителен топлоизточник	<sup>2)</sup> donde la Prated está relacionada con el aparato de calefacción preferente	<sup>2)</sup> preferovanému ohřivači pro vytápění vnitřních prostorů
aa	<sup>3)</sup> / <sup>4)</sup> For preferential heat pump space heaters	<sup>3)</sup> / <sup>4)</sup> за приоритетно използвани отоплителни термолупменни агрегати	<sup>3)</sup> / <sup>4)</sup> en lo que respecta a los aparatos de calefacción preferentes con bomba de calor	<sup>3)</sup> / <sup>4)</sup> preferovaných ohřivačů pro vytápění vnitřních prostorů s tepelným čerpadlem navíc
ab	The class of the temperature control	класът на регулатора на температурата	la clase del control de temperatura	třída regulátoru teploty
ac	The contribution of the temperature control to seasonal space heating energy efficiency	приносът на регулатора на температурата към сезонната енергийна ефективност при отопление	la contribución del control de temperatura a la eficiencia energética estacional de calefacción	prínos regulátoru teploty k sezonní energetické účinnosti vytápění



# COMMISSION DELEGATED REGULATION (EU) No 811/2013<sup>1)</sup>

No	Danish(DA)	German(DE)	Estonian(ET)	Greek(EL)
i	KOMMISSIONENS DELEGEREDE FORORDNING (EU) Nr. 811/2013	DELEGIERTE VERORDNUNG (EU) Nr. 811/2013 DER KOMMISSION	KOMISJONI DELEGEERITUD MÄÄRUS (EL) nr 811/2013	ΚΑΤ' ΕΞΟΥΣΙΟΔΟΤΗΣΗ ΚΑΝΟΝΙΣΜΟΣ (ΕΕ) αριθ. 811/2013 ΤΗΣ ΕΠΙΤΡΟΠΗΣ
ii	Produktdatablad (energimærkning af anlæg til rumopvarmning)	Produktdatenblatt (Energiekennzeichnung von Raumheizgeräten)	Tootekirjeldus (energiamärgistusega kohta kütteseadmest)	Δελτίο προϊόντος (ενεργειακή επισήμανση των θερμαντήρων χώρου)
iii	Produktdatablad (energimærkning af anlæg til pakker med anlæg til rumopvarmning)	Produktdatenblatt (Energiekennzeichnung von Verbundanlagen aus Raumheizgeräten)	Tootekirjeldus (energiamärgistusega kohta kütteseadme, komplekt)	Δελτίο προϊόντος (ενεργειακή επισήμανση των των των των συγκροτημάτων θερμαντήρα χώρου)
iv	Produktdatablad (energimærkning af anlæg til temperaturstyring)	Produktdatenblatt (Energiekennzeichnung von Temperaturreglern)	Tootekirjeldus (energiamärgistusega kohta temperatuuriregulaatorist)	Δελτίο προϊόντος (ενεργειακή επισήμανση των ρυθμιστή θερμοκρασίας)
a	leverandørens navn eller varemærke	Name oder Warenzeichen des Lieferanten	tamija nimi või kaubamärk	το όνομα/η επωνυμία του προμηθευτή ή εμπορικό σήμα
b	leverandørens modelidentifikation	Modellkennung des Lieferanten	tamija mudelitähis	το αναγνωριστικό μοντέλου από τον προμηθευτή
c	klasse for årsvirkningsgrad ved rumopvarmning fastslået	die Klasse für die jahreszeitbedingte Raumheizungs-Energieeffizienz	kütmise sesoonse energiatõhususe klass	η τάξη ενεργειακής απόδοσης της εποχιακής θέρμανσης χώρου
d	den nominelle nytteeffekt (gennemsnitlige)	die Wärmenennleistung (durchschnittlichen)	nimisoojusvõimsus (keskmistel)	η ονομαστική θερμική ισχύς (μέσος)
e	årsvirkningsgraden ved rumopvarmning (gennemsnitlige)	die jahreszeitbedingte Raumheizungs-Energieeffizienz (durchschnittlichen)	kütmise sesoonne energiatõhusus (keskmistel)	η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου σε (μέσος)
f	det årlige energiforbrug (gennemsnitlige)	den jährlichen Energieverbrauch (durchschnittlichen)	aastane energiatarbimine (keskmistel)	ετήσια κατανάλωση ενέργειας (μέσος)
g	LWA (lydeffektniveauet, inde)	LWA (den Schalleistungspegel, in Innenräumen)	LWA (müravõimsustase, siseruumis)	LWA (η στάθμη ηχητικής ισχύος, εσωτερικού χώρου)
h	specifikke forholdsregler <sup>1)</sup>	besonderen Vorkehrungen <sup>1)</sup>	ettevaatusmeetmed kütteseadme koostamisel <sup>1)</sup>	ειδικές προφυλάξεις <sup>1)</sup>
i	den nominelle nytteeffekt (koldere)	die Wärmenennleistung (kälteren)	nimisoojusvõimsus (külmema)	η ονομαστική θερμική ισχύς (ψυχρότερες)
j	den nominelle nytteeffekt (varmere)	die Wärmenennleistung (wärmeren)	nimisoojusvõimsus (soojema)	η ονομαστική θερμική ισχύς (θερμότερες)
k	årsvirkningsgraden ved rumopvarmning (koldere)	die jahreszeitbedingte Raumheizungs-Energieeffizienz (kälteren)	kütmise sesoonne energiatõhusus (külmema)	η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου σε (ψυχρότερες)
l	årsvirkningsgraden ved rumopvarmning (varmere)	die jahreszeitbedingte Raumheizungs-Energieeffizienz (wärmeren)	kütmise sesoonne energiatõhusus (soojema)	η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου σε (θερμότερες)
m	det årlige energiforbrug (koldere)	den årlige energiforbrug (kälteren)	aastane energiatarbimine (külmema)	ετήσια κατανάλωση ενέργειας (ψυχρότερες)
n	det årlige energiforbrug (varmere)	den årlige energiforbrug (wärmeren)	aastane energiatarbimine (soojema)	ετήσια κατανάλωση ενέργειας (θερμότερες)
o	L <sub>wa</sub> (lydeffektniveauet, ude)	L <sub>wa</sub> (den Schalleistungspegel, im Freien)	L <sub>wa</sub> (müravõimsustase, väljas)	L <sub>wa</sub> (η στάθμη ηχητικής ισχύος, εξωτερικού χώρου)
p	middeitemperatur	Mitteltemperatur	keskmisel temperatuuril	μέσος θερμοκρασίας
q	lavtemperatur	Niedertemperatur	külmä kliima	χαμηλής θερμοκρασίας
r	<sup>1)</sup> Du skal tage de forholdsregler, der er beskrevet i installations-/brugervejledningen, når du samler, installerer og vedligeholder dette produkt.	<sup>1)</sup> Beim Montieren, Installieren und Warten des Geräts müssen die im Installations-/ Benutzerhandbuch beschriebenen Vorsichtsmaßnahmen eingehalten werden.	<sup>1)</sup> Toote kokkupanekul, installimisel ja hooldamisel järgilge paigaldus-/kasutusjuhendis kirjeldatud ettevaatusabinõusid.	<sup>1)</sup> Όταν συναρμολογείτε, εγκαθιστάτε και συντηρείτε αυτό το προϊόν, πρέπει να λαμβάνετε τις προφυλάξεις που περιγράφονται στο εγχειρίδιο εγκατάστασης/χρήσης.
s	årsvirkningsgraden ved rumopvarmning (det primære anlæg til rumopvarmning)	Seasonal space heating energy efficiency (Vorzugsraumheizgerätes)	kütmise sesoonne energiatõhusus (põhiküttesaadme)	η ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου σε (προτιμώμενου θερμαντήρα χώρου)
t	faktoren for vægtning af den nominelle nytteeffekt af primære og supplerende forsyningsanlæg i en pakke	Faktor zur Gewichtung der Wärmeleistung der Vorzugs- und Zusatzheizgeräte	komplekti põhi- ja täiendavate kütteseadmete soojusvõimsuse kaalumistegur vastavalt käesoleva	ο συντελεστής στάθμησης της θερμικής ισχύος του προτιμώμενου και του συμπληρωματικού θερμαντήρα του συγκροτήματος
u	værdien af det matematiske udtryk : 294 / (11 • Prated) <sup>1)</sup>	Wert des mathematischen Ausdrucks : 294 / (11 • Prated) <sup>1)</sup>	matemaatilise avaldise : 294 / (11 • Prated) <sup>1)</sup>	η τιμή του μαθηματικού τύπου : 294 / (11 • Prated) <sup>1)</sup>
v	værdien af det matematiske udtryk : 115 / (11 • Prated) <sup>2)</sup>	Wert des mathematischen Ausdrucks : 115 / (11 • Prated) <sup>2)</sup>	matemaatilise avaldise : 115 / (11 • Prated) <sup>2)</sup>	η τιμή του μαθηματικού τύπου : 115 / (11 • Prated) <sup>2)</sup>
w	værdien af forskellen mellem årsvirkningsgraden ved rumopvarmning under gennemsnitlige og koldere klimaforhold <sup>3)</sup>	Wert der Differenz zwischen der jahreszeitbedingten Raumheizungs-Energieeffizienz bei durchschnittlichen und derjenigen bei kälteren Klimaverhältnissen <sup>3)</sup>	keskmistel kliimatingimustel ja külmema kliima korral leitud kütmise sesoonsete energiatõhususte vahe <sup>3)</sup>	διαφοράς της ενεργειακής απόδοσης της εποχιακής θέρμανσης χώρου υπο μέσος και ψυχρότερες κλιματικές συνθήκες <sup>3)</sup>
x	værdien af forskellen mellem årsvirkningsgraden ved rumopvarmning under varmere og gennemsnitlige klimaforhold <sup>4)</sup>	Wert der Differenz zwischen der jahreszeitbedingten Raumheizungs-Energieeffizienz bei wärmeren und derjenigen bei durchschnittlichen Klimaverhältnissen <sup>4)</sup>	soojema kliima korral ja keskmistel kliimatingimustel leitud kütmise sesoonsete energiatõhususte vahe <sup>4)</sup>	διαφοράς της ενεργειακής απόδοσης της εποχιακής θέρμανσης χώρου υπο θερμότερες και μέσος κλιματικές συνθήκες <sup>4)</sup>
y	<sup>1)</sup> hvor Prated vedrører det primære anlæg til rumopvarmning	<sup>1)</sup> wobei sich Prated auf das Vorzugsraumheizgerät bezieht	<sup>1)</sup> siin Prated iseloomustab põhiküttesaadet	<sup>1)</sup> όπου Prated αφορά τον προτιμώμενο θερμαντήρα χώρου
z	<sup>2)</sup> hvor Prated vedrører det primære anlæg til rumopvarmning	<sup>2)</sup> wobei sich Prated auf das Vorzugsraumheizgerät bezieht	<sup>2)</sup> siin Prated iseloomustab põhiküttesaadet	<sup>2)</sup> όπου Prated αφορά τον προτιμώμενο θερμαντήρα χώρου
aa	<sup>3)</sup> , <sup>4)</sup> for primære varmepumpeanlæg til rumopvarmning	<sup>3)</sup> , <sup>4)</sup> für Vorzugsraumheizgeräte mit Wärmepumpe	<sup>3)</sup> , <sup>4)</sup> soojuspumbaoga põhiküttesaadmete kohta	<sup>3)</sup> , <sup>4)</sup> για τους προτιμώμενους θερμαντήρες χώρου με αντλία θερμότητας
ab	klasse for temperaturstyring	die Klasse des Temperaturreglers	temperatuuriregulaatori klass	η τάξη του ρυθμιστή θερμοκρασίας
ac	temperaturstyringsens andel af årsvirkningsgraden ved rumopvarmning i procent afrundet til en decimal	Beitrag des Temperaturreglers zur jahreszeitbedingten Raumheizungs-Energieeffizienz	temperatuuriregulaatori osa kütmise sesoonsete energiatõhususes	το μερίδιο του ρυθμιστή θερμοκρασίας στην ενεργειακή απόδοση της εποχιακής θέρμανσης χώρου

No	French(FR)	Croatian(HR)	Italian(IT)	Latvian(LV)
i	RÈGLEMENT DÉLÉGUÉ (UE) No 811/2013 DE LA COMMISSION	DELEGIрана UREDBA KOMISIJE (EU) br. 811/2013	REGOLAMENTO DELEGATO N. 811/2013 DELLA COMMISSIONE EUROPEA	KOMISIJAS DELEĢĒTĀ REGULĀ (ES) Nr. 811/2013
ii	Fiche de produit (l'étiquetage énergétique des dispositifs de chauffage des locaux)	Informacijski list proizvoda (označivanja energetske učinkovitosti grijača prostora)	Scheda prodotto (l'etichetta indica il consumo d'energia degli apparati per il riscaldamento)	Ražojuma datu lapa (energomarkējumu uz telpu sildītāju)
iii	Fiche de produit (l'étiquetage énergétique des produit combiné constitué d'un dispositif de chauffage des locaux)	Informacijski list proizvoda (označivanja energetske učinkovitosti kompleta koji sadržavaju grijač prostora)	Scheda prodotto (l'etichetta indica il consumo d'energia degli insiemi di apparati per il riscaldamento)	Ražojuma datu lapa (energomarkējumu uz telpu sildītāja iekārtas, komplektu)
iv	Fiche de produit (l'étiquetage énergétique des d'un régulateur de température)	Informacijski list proizvoda (označivanja energetske učinkovitosti uređaj za upravljanje temperaturom)	Scheda prodotto (l'etichetta indica il consumo d'energia dispositivi di controllo della temperatura)	Ražojuma datu lapa (energomarkējumu uz temperatūras regulatori)
a	le nom du fournisseur ou la marque commerciale	naziv ili zaštitni znak dobavljača	il nome o marchio del fornitore	piegādātāja nosaukums vai preču zīme
b	la référence du modèle donnée par le fournisseur	dobavljačeva identifikacijska oznaka modela	Identificativo del modello del fornitore	piegādātāja modeļa identifikators
c	la classe d'efficacité énergétique saisonnière, pour le chauffage des locaux	razred sezonske energetske učinkovitosti pri zagrijavanju prostora	la classe di efficienza energetica stagionale di riscaldamento	telpu apsildes sezonas energoefektivitātes klase
d	la puissance thermique nominale (moyennes)	nazivna toplinska snaga (prosjecnim)	la potenza termica nominale (medie)	nominalā siltuma jauda (vidējās)
e	l'efficacité énergétique saisonnière pour le chauffage des locaux (moyennes)	sezonska energetska učinkovitost pri zagrijavanju prostora (prosjecnim)	l'efficienza energetica stagionale di riscaldamento dell'ambiente (medie)	telpu apsildes sezonas energoefektivitāte (vidējās)
f	la consommation annuelle d'énergie (moyennes)	godišnja potrošnja enerģije (prosjecnim)	il consumo annuo di energia (medie)	gada enerģijas patēriņš (vidējās)
g	L <sub>WA</sub> (le niveau de puissance acoustique, à l'intérieur)	L <sub>WA</sub> (razina zvucne snage, u zatvorenom)	LWA (il livello di potenza sonora, interna)	L <sub>WA</sub> (akustiskās jaudas līmenis, telpās)
h	les précautions particulières <sup>1)</sup>	posebne mjere opreza <sup>1)</sup>	eventuali precauzioni <sup>1)</sup>	īpaši piesardzības pasākumi <sup>1)</sup>
i	la puissance thermique nominale (plus froides)	nazivna toplinska snaga (hladnijim)	la potenza termica nominale (più fredde)	nominalā siltuma jauda (aukstākās)
j	la puissance thermique nominale (plus chaudes)	nazivna toplinska snaga (toplijim)	la potenza termica nominale (più calde)	nominalā siltuma jauda (siltākās)
k	l'efficacité énergétique saisonnière pour le chauffage des locaux (plus froides)	sezonska energetska učinkovitost pri zagrijavanju prostora (hladnijim)	l'efficienza energetica stagionale di riscaldamento (più fredde)	telpu apsildes sezonas energoefektivitāte (aukstākās)
l	l'efficacité énergétique saisonnière pour le chauffage des locaux (plus chaudes)	sezonska energetska učinkovitost pri zagrijavanju prostora (toplijim)	l'efficienza energetica stagionale di riscaldamento (più calde)	telpu apsildes sezonas energoefektivitāte (siltākās)
m	la consommation annuelle d'énergie (plus froides)	godišnja potrošnja enerģije (hladnijim)	il consumo annuo di energia (più fredde)	gada enerģijas patēriņš (aukstākās)
n	la consommation annuelle d'énergie (plus chaudes)	godišnja potrošnja enerģije (toplijim)	il consumo annuo di energia (più calde)	gada enerģijas patēriņš (siltākās)
o	L <sub>WA</sub> (le niveau de puissance acoustique, à l'extérieur)	L <sub>WA</sub> (razina zvucne snage, na otvorenom)	LWA (il livello di potenza sonora, all'esterno)	L <sub>WA</sub> (akustiskās jaudas līmenis, ārpus telpām)
p	moyenne température	srednjam temperatūram	media temperatura	vidējās temperatūras
q	basse température	nisko temperatūra	bassa temperatura	Zemas temperatūras
r	<sup>1)</sup> Des précautions, comme décrit dans le manuel d'installation/d'utilisation, doivent être prises lors du montage, de l'installation et de l'entretien de l'appareil.	<sup>1)</sup> Prilikom sastavljanja, instalacije i održavanja proizvoda potrebno je poduzeti mjere opreza navedene u priručniku za instalaciju / korisničkom priručniku.	<sup>1)</sup> Le precauzioni descritte nel manuale Installazione/utente devono essere rispettate in fase di montaggio, installazione e manutenzione del prodotto	<sup>1)</sup> Izstrādājuma salikšanas, uzstādīšanas un apkopes laikā jāievēro uzstādīšanas/lietošanas rokasgrāmātā norādītie piesardzības pasākumi.
s	l'efficacité énergétique saisonnière pour le chauffage des locaux (du dispositif de chauffage des locaux utilisé à titre principal)	sezonska energetska učinkovitost pri zagrijavanju prostora (primarnog grijača prostora)	l'efficienza energetica stagionale di riscaldamento (preferenziale per il riscaldamento)	telpu apsildes sezonas energoefektivitāte (preferenciālā telpu sildītāja)
t	le coefficient de pondération de la puissance thermique du dispositif de chauffage utilisé à titre principal et du dispositif de chauffage d'appoint d'un produit combiné	težinski faktor toplinske snage primarnog ili dodatnih grijača u kompletu	il fattore di ponderazione della potenza termica degli apparecchi di riscaldamento preferenziali o supplementari d'un insieme	koeficients komplekta preferenciālā un papildu sildītāja siltuma jaudas svērtās vērtības iegūšanai
u	l'expression mathématique : 294 / (11 • Prated) <sup>1)</sup>	matematičke formule : 294 / (11 • Prated) <sup>1)</sup>	espressione matematica : 294 / (11 • Prated) <sup>1)</sup>	matemātiskās izteiksmes : 294 / (11 • Prated) <sup>1)</sup>
v	l'expression mathématique : 115 / (11 • Prated) <sup>2)</sup>	matematičke formule : 115 / (11 • Prated) <sup>2)</sup>	espressione matematica : 115 / (11 • Prated) <sup>2)</sup>	matemātiskās izteiksmes : 115 / (11 • Prated) <sup>2)</sup>
w	la différence entre les efficacités énergétiques saisonnières pour le chauffage des locaux dans les conditions climatiques moyennes et plus froides <sup>3)</sup>	razlike između sezonskih energetske učinkovitosti pri zagrijavanju prostora u prosječnim i hladnijim klimatskim uvjetima <sup>3)</sup>	Differenza tra l'efficienza energetica stagionale di riscaldamento in condizioni climatiche medie e più fredde <sup>3)</sup>	atšķirībai starp telpu apsildes sezonas energoefektivitāti vidējos un aukstākos apstākļos <sup>3)</sup>
x	la différence entre les efficacités énergétiques saisonnières pour le chauffage des locaux dans les conditions climatiques plus chaudes et moyennes <sup>4)</sup>	razlike između sezonskih energetske učinkovitosti pri zagrijavanju prostora u toplijim i prosječnim klimatskim uvjetima <sup>4)</sup>	Differenza tra l'efficienza energetica stagionale di riscaldamento in condizioni climatiche più calde e medie <sup>4)</sup>	atšķirībai starp telpu apsildes sezonas energoefektivitāti siltākos un vidējos apstākļos <sup>4)</sup>
y	<sup>1)</sup> dans laquelle Prated renvoie au dispositif de chauffage des locaux utilisé à titre principal	<sup>1)</sup> pri čemu se Prated odnosi na primarni grijač prostora	<sup>1)</sup> dove Prated si riferisce all'apparecchio per il riscaldamento preferenziale	<sup>1)</sup> vērtība, kur Prated attiecas uz preferenciālo telpu sildītāju
z	<sup>2)</sup> dans laquelle Prated renvoie au dispositif de chauffage des locaux utilisé à titre principal	<sup>2)</sup> pri čemu se Prated odnosi na primarni grijač prostora	<sup>2)</sup> dove Prated si riferisce all'apparecchio per il riscaldamento preferenziale	<sup>2)</sup> vērtība, kur Prated attiecas uz preferenciālo telpu sildītāju
aa	<sup>3)</sup> <sup>4)</sup> pour les dispositifs de chauffage des locaux par pompe à chaleur utilisés à titre principal	<sup>3)</sup> <sup>4)</sup> za primarne toplinske crpkpe za grijanje prostora	<sup>3)</sup> <sup>4)</sup> per gli apparati per il riscaldamento preferenziali a pompa di calore	<sup>3)</sup> <sup>4)</sup> preferenciālajiem siltumsūkņņa telpu sildītājiem
ab	la classe du régulateur de température	razred uređaja za upravljanje temperaturom	la classe del dispositivo di controllo della temperatura	temperatūras regulatora klase
ac	la contribution du régulateur de température à l'efficacité énergétique saisonnière pour le chauffage des locaux	doprinosa uređaja za upravljanje temperaturom sezonskoj energetske učinkovitosti pri zagrijavanju prostora	il contributo del dispositivo di controllo della temperatura all'efficienza energetica stagionale di riscaldamento	temperatūras regulatora devums telpu apsildes sezonas energoefektivitātē

# COMMISSION DELEGATED REGULATION (EU) No 811/2013<sup>1)</sup>

No	Lithuanian(LT)	Hungarian(HU)	Maltese(MT)	Dutch(NL)
i	KOMISIJOS DELEGUOTASIS REGLAMENTAS (ES) Nr. 811/2013	A BIZOTTSÁG 811/2013/EU FELHATALMAZÁSON ALAPULÓ RENDELETEI	REGOLAMENT TA'DELEG TAL-KUMMISSJONI (UE) Nru 811/2013	GEDELEGEERDE VERORDENING (EU) Nr. 811/2013 VAN DE COMMISSIE
ii	Gaminio vardinii parametru lentelė (energijos vartojimo efektyvumo ženklinimo dėl patalpų šildytuvo)	Termékismertető adatlap (energiafogyasztásának címkezése a helyiségfűtő berendezések)	L-iskeda tat-tagħrif tal-prodott (tikkettar enerġetiku ta' hiters tal-post)	Productkaart (de energie-etikettering van ruimteverwarmingstoestellen)
iii	Gaminio vardinii parametru lentelė (energijos vartojimo efektyvumo ženklinimo dėl patalpų šildytuvo, komplektu)	Termékismertető adatlap (energiafogyasztásának címkezése a helyiségfűtő berendezésből)	L-iskeda tat-tagħrif tal-prodott (tikkettar enerġetiku ta' pakketti magħmulin minn hiter tal-post)	Productkaart (de energie-etikettering van pakketten van ruimteverwarmingstoestellen)
iv	Gaminio vardinii parametru lentelė (energijos vartojimo efektyvumo ženklinimo dėl temperatūros regulatoriaus)	Termékismertető adatlap (energiafogyasztásának címkezése a hőmérséklet-szabályozóból)	L-iskeda tat-tagħrif tal-prodott (tikkettar enerġetiku ta' regulator tat-temperatura)	Productkaart (de energie-etikettering van temperatuurregelaars)
a	tiekejo pavadinimas arba prekės ženklas	a beszállító neve vagy védjegye	isem il-fornitur jew il-marka kummerċjali tiegħu	de naam van de leverancier of het handelsmerk
b	tiekejo modelio žymuo	a beszállító által megadott modellazonosító	l-identifikatur tal-mudell tal-fornitur	de typeaanduiding van de leverancier
c	sezoninio energijos patalpoms šildyti vartojimo efektyvumo klasė	sezonális helyiségfűtési energiahatékonysági osztálya	il-klassi tal-effiċjenza enerġetika staġonali tat-tishin tal-post	de seizoensgebonden energie-efficiëntieklasse voor ruimteverwarming
d	vardinis šilumos atidavimas (vidutinio)	a mért hőteljesítmény (átlagos)	il-potenza termika nominali (medji)	de nominale warmteafgifte (gemiddelde)
e	sezoninis energijos patalpoms šildyti vartojimo efektyvumas (vidutinio)	a sezonális helyiségfűtési hatásfok (átlagos)	l-effiċjenza enerġetika staġonali tat-tishin tal-post (medji)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming (gemiddelde)
f	metinis energijos suvartojimas (vidutinio)	az éves energiafogyasztás (átlagos)	il-konsum annwali tal-enerġija (medji)	het jaarlijkse energieverbruik (gemiddelde)
g	L <sub>wa</sub> (garso galios lygis, patalpoje decibelais)	L <sub>wa</sub> (hangteljesítmémszint, beltéri)	L <sub>wa</sub> (il-livell ta' qawwa tal-hoss, fuq geywva)	L <sub>wa</sub> (het geluidsvernogensniveau, binnen)
h	specialios atargumo priemonės <sup>3)</sup>	külön övintézkedések <sup>3)</sup>	prekavzjonij specifika <sup>3)</sup>	specifieke voorzorgmaatregelen <sup>3)</sup>
i	vardinis šilumos atidavimas (šaltiesnio)	a mért hőteljesítmény (hidegebb)	il-potenza termika nominali (iksah)	de nominale warmteafgifte (koudere)
j	vardinis šilumos atidavimas (šiltiesnio)	a mért hőteljesítmény (melegebb)	il-potenza termika nominali (iřhan)	de nominale warmteafgifte (warmere)
k	sezoninis energijos patalpoms šildyti vartojimo efektyvumas (šaltiesnio)	a sezonális helyiségfűtési hatásfok (hidegebb)	l-effiċjenza enerġetika staġonali tat-tishin tal-post (iksah)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming (koudere)
l	sezoninis energijos patalpoms šildyti vartojimo efektyvumas (šiltiesnio)	a sezonális helyiségfűtési hatásfok (melegebb)	l-effiċjenza enerġetika staġonali tat-tishin tal-post (iřhan)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming (warmere)
m	metinis energijos suvartojimas (šaltiesnio)	az éves energiafogyasztás (hidegebb)	il-konsum annwali tal-enerġija (iksah)	het jaarlijkse energieverbruik (koudere)
n	metinis energijos suvartojimas (šiltiesnio)	az éves energiafogyasztás (melegebb)	il-konsum annwali tal-enerġija (iřhan)	het jaarlijkse energieverbruik (warmere)
o	L <sub>wb</sub> (garso galios lygis, lauke decibelais)	L <sub>wb</sub> (hangteljesítmémszint, kültéri)	L <sub>wb</sub> (il-livell ta' qawwa tal-hoss, fuq barra)	L <sub>wb</sub> (het geluidsvernogensniveau, buiten)
p	vidutinėje temperatūroje	közepes hőmérsékletű	b'temperatura medja	midde temperatuur
q	žematemperatūris	alacsony hőmérsékletű	b'temperatura baxxa	lagetemperatuur
r	<sup>1)</sup> Montuojant ar įrengiant šį produktą, taip pat atliekant jo techninę priežiūrą, būtina atsižvelgti į montavimo / naudojimo vadove aprašytas atsargumo priemones.	<sup>1)</sup> A termék összeszerelése, telepítése és a karbantartása során tartása be a telepítési/használati útmutatóban leírt övintézkedéseket.	<sup>1)</sup> Prekavzjonijiet kif deskritt fl-installazzjoni u l-utent manwali għandhom jittieħdu meta jlaqqa l'installazzjoni, u l-żamma dan il-prodott	<sup>1)</sup> De voorzorgsmaatregelen die in de gebruikershandleiding worden beschreven, moeten in acht worden genomen bij montage, installatie en onderhoud van dit product.
s	sezoninis energijos patalpoms šildyti vartojimo efektyvumas (pirmiausia naudojamo patalpų šildytuvo)	a sezonális helyiségfűtési hatásfok (az elsődleges helyiségfűtő berendezés)	l-effiċjenza enerġetika staġonali tat-tishin tal-post (tat-tishin tal-post tal-hiter tal-post preferenzjali)	de seizoensgebonden energie-efficiëntie voor ruimteverwarming (ruimteverwarming van de hoofdverwarming)
t	komplekto pirmiausia naudojami ir papildomo šildytuvo šilumos atidavimo svorinis koeficientas	a csomagban található elsődleges és kiegészítő fűtőberendezések hőteljesítményének súlyozására szolgáló tényező	il-fattur għall-għajpeżar tal-potenza termika tal-hiters preferenzjali u tal-hiters supplementari ta' pakkett	de factor voor het wegen van de warmteafgifte van hoofd- en aanvullende verwarmingstoestellen van een pakket
u	matematinio reiškinio : 294 / (11 + Prated) <sup>1)</sup>	matematikai kifejezés : 294 / (11 + Prated) <sup>1)</sup>	tal-formola matematika : 294 / (11 + Prated) <sup>1)</sup>	de wiskundige formule : 294 / (11 + Prated) <sup>1)</sup>
v	matematinio reiškinio : 115 / (11 + Prated) <sup>2)</sup>	matematikai kifejezés : 115 / (11 + Prated) <sup>2)</sup>	tal-formola matematika : 115 / (11 + Prated) <sup>2)</sup>	de wiskundige formule : 115 / (11 + Prated) <sup>2)</sup>
w	sezoninių energijos patalpoms šildyti vartojimo efektyvumų skirtumo vidutinio ir šaltiesnio klimato sąlygomis <sup>3)</sup>	az átlagos és a hidegebb éghajlati viszonyok mellett mért szezonális helyiségfűtési hatásfok közötti különbség <sup>3)</sup>	tad-differenza bejn l-effiċjenza enerġetika staġonali tat-tishin tal-post f'kundizzjonijiet klimatiċi medji u dik f'kundizzjonijiet klimatiċi iksah <sup>3)</sup>	het verschil tussen de seizoensgebonden energie-efficiënties voor ruimteverwarming onder warmere en gemiddelde klimaatomstandigheden <sup>3)</sup>
x	sezoninių energijos patalpoms šildyti vartojimo efektyvumų skirtumo šiltiesnio ir vidutinio klimato sąlygomis <sup>4)</sup>	a melegebb és az átlagos éghajlati viszonyok mellett mért szezonális helyiségfűtési hatásfok közötti különbség <sup>4)</sup>	tad-differenza bejn l-effiċjenza enerġetika staġonali tat-tishin tal-post f'kundizzjonijiet klimatiċi medji u dik f'kundizzjonijiet klimatiċi iřhan <sup>4)</sup>	het verschil tussen de seizoensgebonden energie-efficiënties voor ruimteverwarming onder gemiddelde en koudere klimaatomstandigheden <sup>4)</sup>
y	<sup>1)</sup> kur Prated yra susijęs su pirmiausia naudojamu patalpų šildytuvu	<sup>1)</sup> ahol a Prated az elsődleges helyiségfűtő berendezésre vonatkozik	<sup>1)</sup> fejn il-valur ta' Prated huwa marbut mal-hiter tal-post preferenzjali	<sup>1)</sup> waarbij Prated is gerelateerd aan het ruimteverwarmingstoestel als hoofdverwarming
z	<sup>2)</sup> kur Prated yra susijęs su pirmiausia naudojamu patalpų šildytuvu	<sup>2)</sup> ahol a Prated az elsődleges helyiségfűtő berendezésre vonatkozik	<sup>2)</sup> fejn il-valur ta' Prated huwa marbut mal-hiter tal-post preferenzjali	<sup>2)</sup> waarbij Prated is gerelateerd aan het ruimteverwarmingstoestel als hoofdverwarming
aa	<sup>3)</sup> <sup>4)</sup> pirmiausia naudojami patalpų šildytuvai su šilumos siurbliu	<sup>3)</sup> <sup>4)</sup> elsődleges hőszivattyús helyiségfűtő berendezések esetében	<sup>3)</sup> <sup>4)</sup> għall-hiters tal-post preferenzjali b'pompja tas-hana	<sup>3)</sup> <sup>4)</sup> voor ruimteverwarmingstoestellen met warmtepomp als hoofdverwarming
ab	temperatūros regulatoriaus klasė	a hőmérséklet-szabályozó osztálya	il-klassi tar-regulator tat-temperatura	de klasse van de temperatuurregelaar
ac	temperatūros regulatoriaus sandas sezoniniam energijos patalpoms šildyti vartojimo efektyvumui	a hőmérséklet-szabályozó szezonális helyiségfűtési hatásfokhoz való hozzájárulásának	il-kontribut tar-regulator tat-temperatura għall-effiċjenza enerġetika staġonali tat-tishin tal-post	de bijdrage van de temperatuurregelaar aan de seizoensgebonden energie-efficiëntie voor ruimteverwarming

No	Poish(PL)	Portuguese(PT)	Romanian(RO)	Slovak(SK)
i	ROZPORZĄDZENIE DELEGOWANE KOMISJI (UE) NR 811/2013	REGULAMENTO DELEGADO (UE) Nº 811/2013 DA COMISSÃO	REGULAMENTUL DELEGAT AL COMISIEI (UE) NR. 811/2013	DELEGOVANÉ NARIADENIE KOMISIE (EÚ) č. 811/2013
ii	Karta produktu (w odniesieniu do etykiet efektywności energetycznej dla ogrzewaczy pomieszczeń)	Ficha de produto (rotulagem energética dos aquecedores de ambiente)	Fișa produsului (ce privește clasa de energie a instalațiilor pentru încălzire incintelor)	Informačný list (energetické označovanie tepelných zdrojov na vykurovanie priestoru)
iii	Karta produktu (w odniesieniu do etykiet efektywności energetycznej dla zestawów zawierających ogrzewacz pomieszczeń)	Ficha de produto (rotulagem energética dos sistemas mistos de aquecedor de ambiente)	Fișa produsului (ce privește clasa de energie a instalațiilor pentru încălzire incintelor)	Informačný list (energetické označovanie tepelných zdrojov na vykurovanie priestoru)
iv	Karta produktu (w odniesieniu do etykiet efektywności energetycznej dla regulatorów temperatury)	Ficha de produto (rotulagem energética dos dispositivos de controlo de temperatura)	Fișa produsului (ce privește eticheta energetică a regulatorelor de temperatură)	Informačný list (energetické označovanie regulatorov teploty)
a	nazwa dostawcy lub jego znak towarowy	Nome do fornecedor	Denumirea sau marca comercială a furnizorului	meno dodávateľa alebo ochranná známka
b	identyfikator modelu dostawy	Modelo	Modelul identificator al furnizorului	identifikačný kód modelu
c	klasa sezonowej efektywności energetycznej ogrzewania pomieszczeń	Clase de eficiența energetică do aquecimento ambiente sazonal	Clasa de eficiență energetică sezonieră aferentă încălzirii incintelor	trieda sezónnej energetickej účinnosti vykurovania priestoru
d	Znamionowa moc cieplna (uśredniona)	Potência calorífica nominal (condições climáticas médias)	Puterea termică nominală (medie)	menovitý tepelný výkon (priemerný)
e	Sezonowa efektywność energetyczna ogrzewania pomieszczeń (uśredniona)	Eficiência energética do aquecimento ambiente sazonal (condições climáticas médias)	Eficiență energetică sezonieră aferentă încălzirii incintelor (medie)	sezónna energetická účinnosť vykurovania priestoru (priemerná)
f	Roczne zużycie energii (uśrednione)	Consumo anual de energia (condições climáticas médias)	Consumul anual de energie (medie)	ročná spotreba energie (priemerná)
g	LWA (poziom poziom akustycznej, w pomieszczeniu)	LWA (Nível de potência sonora, no interior)	LWA (niveleu de putere acustică, la interior)	LWA (hladina akustického výkonu, vnitorné jednotky)
h	Szczególne środki ostrożności <sup>1)</sup>	Precauções específicas <sup>1)</sup>	Măsură de precauție specifică <sup>1)</sup>	osobitné bezpečnostné opatrenie <sup>1)</sup>
i	znamionowa moc cieplna (chłodnego)	Potência calorífica nominal (condições climáticas mais frias)	Puterea termică nominală (mai reci)	menovitý tepelný výkon (chladnejší)
j	znamionowa moc cieplna (cieplego)	Potência calorífica nominal (condições climáticas mais quentes)	Puterea termică nominală (mai calde)	menovitý tepelný výkon (teplejší)
k	sezonowa efektywność energetyczna ogrzewania pomieszczeń (chłodnego)	Eficiência energética do aquecimento ambiente sazonal (condições climáticas mais frias)	Eficiență energetică sezonieră aferentă încălzirii incintelor (mai reci)	sezónna energetická účinnosť vykurovania priestoru (chladnejší)
l	sezonowa efektywność energetyczna ogrzewania pomieszczeń (cieplego)	Eficiência energética do aquecimento ambiente sazonal (condições climáticas mais quentes)	Eficiență energetică sezonieră aferentă încălzirii incintelor (mai calde)	sezónna energetická účinnosť vykurovania priestoru (teplejší)
m	roczne zużycie energii (chłodnego)	Consumo anual de energia (condições climáticas mais frias)	Consum anual de energie (mai reci)	ročná spotreba energie (chladnejší)
n	roczne zużycie energii (cieplego)	Consumo anual de energia (condições climáticas mais quentes)	Consum anual de energie (mai calde)	ročná spotreba energie (teplejších)
o	LWA (poziom mocy akustycznej, na zewnątrz)	LWA (Nível de potência sonora, no exterior)	LWA (niveleu de putere acustică, la exterior)	LWA (hladina akustického výkonu, vonkajšie jednotky)
p	średnotemperaturowe	média temperatura	Temperatură medie	stredná teplota
q	niskotemperaturowe	baixa temperatura	Temperatură scăzută	nizkoteplotné
r	<sup>1)</sup> Podczas montażu, instalacji oraz serwisowaniu produktu należy stosować szczególne środki ostrożności zgodnie z informacjami zawartymi w instrukcji instalacji/podreczniku użytkownika.	<sup>1)</sup> As precauções descritas no manual de instalação/instruções dever ser adotadas durante a montagem, instalação ou manutenção do produto.	<sup>1)</sup> Atenționări, descrie în manualul de instalare/operare, ce trebuie luate în considerare când se asamblează, instalează sau întreține acest produs.	<sup>1)</sup> Bezpečnostné opatrenia, ktoré sú popísané v inštalácii/používateľskej príručke, sa musia vykonať pri inštalácii a údržbe tohto produktu.
s	sezonowa efektywność energetyczna ogrzewania pomieszczeń (podstawowego ogrzewacza pomieszczeń)	Eficiência energética do aquecimento ambiente sazonal (do aquecedor de ambiente preferencial)	Eficiență energetică sezonieră aferentă încălzirii incintelor (al instalație preferențiale pentru încălzire incintelor)	sezónna energetická účinnosť vykurovania priestoru (uprednostňované tepelného zdroja na vykurovanie priestoru)
t	współczynnik ważący moc cieplną ogrzewaczy podstawowych oraz ogrzewaczy dodatkowych w zestawie	o fator de ponderação da potência calorífica do aquecedor preferencial e dos aquecedores complementares de um sistema misto	factorul de pondere a puterii termice a instalațiilor de încălzire preferențiale și suplimentare din cadrul unui pachet	súčiniteľ na váznenie tepelného výkonu uprednostňovaného tepelného zdroja a dodatočných tepelných zdrojov
u	Wartość wyrażenia matematycznego : 294/(11 + Prated) <sup>1)</sup>	Expressão matemática : 294/(11 + Prated) <sup>1)</sup>	Valoarea expresiei matematice : 294/(11 + Prated) <sup>1)</sup>	matematický výraz : 294/(11 + Prated) <sup>1)</sup>
v	Wartość wyrażenia matematycznego : 115/(11 + Prated) <sup>2)</sup>	Expressão matemática : 115/(11 + Prated) <sup>2)</sup>	Valoarea expresiei matematice : 115/(11 + Prated) <sup>2)</sup>	matematický výraz : 115/(11 + Prated) <sup>2)</sup>
w	Różnica między sezonowymi efektywnościami energetycznymi ogrzewania pomieszczeń w warunkach klimatu umiarkowanego i chłodnego <sup>3)</sup>	Diferença entre as eficiências energéticas do aquecimento ambiente sazonal em condições climáticas médias e em condições climáticas mais frias <sup>3)</sup>	Diferența dintre eficiența energetică sezonieră aferentă încălzirii incintelor în condiții climatice medii și mai reci <sup>3)</sup>	hodnota rozdielu sezónnych energetických účinností vykurovania priestoru za priemerných a chladnejších podmienok <sup>3)</sup>
x	Różnica między sezonowymi efektywnościami energetycznymi ogrzewania pomieszczeń w warunkach klimatu ciepłego i umiarkowanego <sup>4)</sup>	Diferença entre as eficiências energéticas do aquecimento ambiente sazonal em condições climáticas mais quentes e em condições climáticas médias <sup>4)</sup>	Diferența dintre eficiența energetică sezonieră aferentă încălzirii incintelor în condiții climatice calde și medii <sup>4)</sup>	hodnota rozdielu sezónnych energetických účinností vykurovania priestoru za teplejších a priemerných podmienok <sup>4)</sup>
y	<sup>1)</sup> gdzie Prated dotyczy podstawowego ogrzewacza pomieszczeń	<sup>1)</sup> em que Prated diz respeito ao aquecedor de ambiente preferencial	<sup>1)</sup> Unde Prated se referă la instalația preferențială pentru încălzire incintelor.	<sup>1)</sup> kde Prated súvisí s uprednostňovaným tepelným zdrojom na vykurovanie priestoru
z	<sup>2)</sup> gdzie Prated dotyczy podstawowego ogrzewacza pomieszczeń	<sup>2)</sup> em que Prated diz respeito ao aquecedor de ambiente preferencial	<sup>2)</sup> Unde Prated se referă la instalația preferențială pentru încălzire incintelor.	<sup>2)</sup> kde Prated súvisí s uprednostňovaným tepelným zdrojom na vykurovanie priestoru
aa	<sup>3)</sup> , <sup>4)</sup> Dla podstawowych ogrzewaczy pomieszczeń z pompą ciepła	<sup>3)</sup> , <sup>4)</sup> para os aquecedores de ambiente preferenciais com bomba de calor	<sup>3)</sup> , <sup>4)</sup> Pentru instalațiile preferențiale cu pompă de căldură pentru încălzire incintelor.	<sup>3)</sup> , <sup>4)</sup> pre uprednostňované tepelné zdroje na vykurovanie priestoru – tepelné čerpadlá
ab	klasa regulatora temperatury	A classe do dispositivo de controlo de temperatura	Clasa regulatorului de temperatură	trieda regulatora teploty
ac	udział regulatora temperatury w sezonowej efektywności energetycznej ogrzewania pomieszczeń	A contribuição do dispositivo de controlo de temperatura para a eficiência energética do aquecimento ambiente sazonal	Contribuția regulatorului de temperatură la eficiența energetică sezonieră aferentă încălzirii incintelor	príspevok regulatora teploty k sezónnej energetickej účinnosti vykurovania priestoru

# COMMISSION DELEGATED REGULATION (EU) No 811/2013<sup>1)</sup>

No	Slovenian(SL)	Finnish(FI)	Swedish(SV)
i	DELEGIHRANA UREDBA KOMISIJE (EU) št. 811/2013	KOMISSIION DELEGOITU ASETUS (EU) No 811/2013	KOMMISSIONENS DELEGERADE FÖRORDNING (EU) nr 811/2013
ii	Podatkovni list izdelka (energijskega označevanja grelnikov prostorov)	Tuoteseloste (tilälämmittimien, energiemerkinnän)	Produktblad (energimärkning av pannor och värmepumpar för rumsuppvärmning)
iii	Podatkovni list izdelka (energijskega označevanja kompletov grelnika prostorov)	Tuoteseloste (tilälämmittimestä, energiemerkinnän)	Produktblad (energimärkning av paket med pannor och värmepumpar för rumsuppvärmning)
iv	Podatkovni list izdelka (energijskega označevanja naprave za uravnavanje temperature)	Tuoteseloste (lämmönsäätölaitteesta, energiemerkinnän)	Produktblad (energimärkning av temperaturregulator)
a	dobaviteljavo ime ali blagovna znamka	tavarantoimittajan nimi tai tavamerkki	Leverantörens namn eller varumärke
b	dobaviteljeva identifikacijska oznaka modela	tavarantoimittajan mallitunniste	Leverantörens modellbeteckning
c	razred sezonske energijske učinkovitosti pri ogrevanju prostorov	tilälämmityksen kausittainen energiatehokkuusluokka	säsongrelaterade energieffektivitetsklass vid rumsuppvärmning
d	nazivna izhodna toplota (povprečnih)	niemilislämpöteho, mukaan lukien mahdollisen lisälämmittimen niemilislämpöteho (keskimääräisissä)	Den nominella avgivna värmeeffekten (genomsnittliga)
e	sezonska energijska učinkovitost pri ogrevanju prostorov (povprečnih)	tilälämmityksen kausittainen energiatehokkuus (keskimääräisissä)	Säsongmedelverkningsgrad för rumsuppvärmning (genomsnittliga)
f	letna poraba energije (povprečnih)	vuotuinen energiankulutus (keskimääräisissä)	Årlig energiförbrukning (genomsnittliga)
g	L <sup>wa</sup> (raven zvočne moči, notranja)	L <sup>wa</sup> (äänitehotas, sisällä desibeleinä)	L <sup>wa</sup> (Ljudeffektiviv, inomhus)
h	posebni varnostni ukrepi <sup>1)</sup>	erityiset varotoimenpiteet <sup>1)</sup>	särskilda försiktighetsåtgärder <sup>1)</sup>
i	nazivna izhodna toplota (hladnejših)	niemilislämpöteho, mukaan lukien mahdollisen lisälämmittimen niemilislämpöteho (kylmissä)	Den nominella avgivna värmeeffekten (kallare)
j	nazivna izhodna toplota (toplejših)	niemilislämpöteho, mukaan lukien mahdollisen lisälämmittimen niemilislämpöteho (lämpimissä)	Den nominella avgivna värmeeffekten (varmare)
k	sezonska energijska učinkovitost pri ogrevanju prostorov (hladnejših)	tilälämmityksen kausittainen energiatehokkuus (kylmissä)	Säsongmedelverkningsgrad för rumsuppvärmning (kallare)
l	sezonska energijska učinkovitost pri ogrevanju prostorov (toplejših)	tilälämmityksen kausittainen energiatehokkuus (lämpimissä)	Säsongmedelverkningsgrad för rumsuppvärmning (varmare)
m	letna poraba energije (hladnejših)	vuotuinen energiankulutus (kylmissä)	Årlig energiförbrukning (kallare)
n	letna poraba energije (toplejših)	vuotuinen energiankulutus (lämpimissä)	Årlig energiförbrukning (varmare)
o	L <sup>wa</sup> (raven zvočne moči, zunanja)	L <sup>wa</sup> (äänitehotas, ulkona desibeleinä)	L <sup>wa</sup> (Ljudeffektiviv, utomhus)
p	srednjih temperaturah	keskilämpötilan	mediumtemperatur
q	nižkotemperaturna	matalan lämpötilan	lågtemperatur
r	<sup>1)</sup> Pri sestavljanju, namešljanju ter vzdrževanju izdelka upoštevajte previdnostne ukrepe, ki so navedeni v priložniku za uporabo in nameštitev.	<sup>1)</sup> Asennus- tai käyttöoppaassa kuvattuja turvaohjeita on noudatettava laitteen kokoamisen, asentamisen ja huollon aikana.	<sup>1)</sup> Försiktighetsåtgärder som beskrivs i installationsmanualen/bruksanvisningen måste följas vid montering, installation och underhåll av denna produkt.
s	sezonska energijska učinkovitost pri ogrevanju prostorov (za prednostni grelnik prostorov)	tilälämmityksen kausittainen energiatehokkuus (ensisijaisen tilälämmittimen tilälämmityksen)	Säsongmedelverkningsgrad för rumsuppvärmning (primära pannans eller värmepumpens)
t	ensisijaisen lämmittimen ja lisälämmittimen lämpötehon painotuskertoin	ensisijaisen lämmittimen ja lisälämmittimen lämpötehon painotuskertoin	Viktningfaktor för primär- och tillätsvärmarens värmepumpens för paket
u	matematične enačbe : 294 / (11 • Prated) <sup>1)</sup>	matemaattisen ilmaisen : 294 / (11 • Prated) <sup>1)</sup>	matematiska formeln : 294 / (11 • Prated) <sup>1)</sup>
v	matematične enačbe : 115 / (11 • Prated) <sup>2)</sup>	matemaattisen ilmaisen : 115 / (11 • Prated) <sup>2)</sup>	matematiska formeln : 115 / (11 • Prated) <sup>2)</sup>
w	razlike med sezonskima energijskima učinkovitostma pri ogrevanju prostorov v povprečnih in hladnejših podnebni razmerah <sup>3)</sup>	keskimääräisissä ja kylmissä ilmasto-olosuhteissa saavutettavien tilälämmityksen kausittaisen energiatehokkuuksien ero <sup>3)</sup>	Skillnaden mellan den säsongrelaterade energieffektiviteten vid rumsuppvärmning under genomsnittliga och kallare klimatförhållanden <sup>3)</sup>
x	razlike med sezonskima energijskima učinkovitostma pri ogrevanju prostorov v toplejših in povprečnih podnebni razmerah <sup>4)</sup>	lämpimissä ja keskimääräisissä ilmasto-olosuhteissa saavutettavien tilälämmityksen kausittaisen energiatehokkuuksien ero <sup>4)</sup>	Skillnaden mellan den säsongrelaterade energieffektiviteten vid rumsuppvärmning under varmare och genomsnittliga klimatförhållanden <sup>4)</sup>
y	<sup>1)</sup> pri čemer se Prated navezuje na prednostni grelnik prostorov	<sup>1)</sup> jossa Prated liittyy ensisijaiseen tilälämmittimeen	<sup>1)</sup> där Prated är relaterat till den primära pannan eller värmepumpen
z	<sup>2)</sup> pri čemer se Prated navezuje na prednostni grelnik prostorov	<sup>2)</sup> jossa Prated liittyy ensisijaiseen tilälämmittimeen	<sup>2)</sup> där Prated är relaterat till den primära pannan eller värmepumpen
aa	<sup>3)</sup> <sup>4)</sup> prednostne toplotne črpalke za ogrevanje prostorov	<sup>3)</sup> <sup>4)</sup> ensisijaisista lämpöpumputilälämmittimestä	<sup>3)</sup> <sup>4)</sup> för primära varmare med värmepump för rumsuppvärmning
ab	razred naprave za uravnavanje temperature	lämmönsäätölaitteen luokka	Temperaturregulatorns klass
ac	prispevek naprave za uravnavanje temperature k sezonski energijski učinkovitosti pri ogrevanju prostorov	lämmönsäätölaitteen vaikutus tilälämmityksen kausittaisen energiatehokkuuteen	Temperaturregulatorns bidrag till säsongmedelverkningsgraden för rumsuppvärmning