D117206

Installer manual

Jäspi Split R6

Table of Contents

1 Important information

This manual describes installation and service procedures for implementation by specialists.

The manual must be left with the customer.

System solution

SPLIT R6 is intended for installation with SplitBox 6 and indoor module (TW AIR) or control module (MCU) for a complete system solution.

Symbols

NOTE

This symbol indicates danger to person or machine.

Caution

This symbol indicates important information about what you should consider when installing or servicing the installation.

TIP

This symbol indicates tips on how to facilitate using the product.

Marking

CE The CE mark is obligatory for most products sold in the EU, regardless of where they are made.

IP21 Classification of enclosure of electro-technical equipment.

Flammable.

Danger to person or machine.

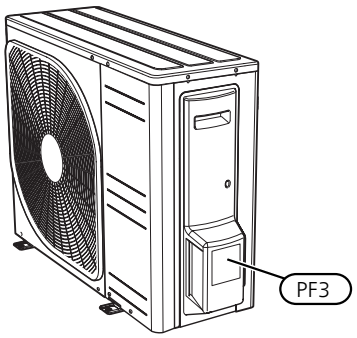
Read the User Manual.

Read the User Manual.

Read the Installer Manual.

Serial number

You can find the service code and the serial number (PF3) on the right-hand side of SPLIT R6.



Caution

You need the product's service code and serial number for servicing and support.

Checklist: Checks before commissioning

Refrigerant system	*Notes*	*Checked*
Pipe length		☐
Height difference		☐
Pressurization test		☐
Leak testing		☐
End pressure vacuum		☐
Pipe insulation		☐

Electrical installation	*Notes*	*Checked*
Property's main fuse		☐
Group fuse		☐
Load monitor / current sensor (Connects to indoor module / control module.)		☐
KVR 10		☐
When installing Split R6 / SplitBox 6, check that the software version of the indoor module / control module is at least that given in the table, see section "Software version".		☐

Cooling	*Notes*	*Checked*
Pipe system, condensation insulation		☐
		☐

Compatible indoor and control modules

SOFTWARE VERSION

In order for Split R6 / SplitBox 6 to be able to communicate with indoor module (TW AIR) / control module (MCU), its software version must be at least that given in the table.

Indoor module / Control module	*Software version*
TW AIR	9298
MCU 40	9298

2 Delivery and handling

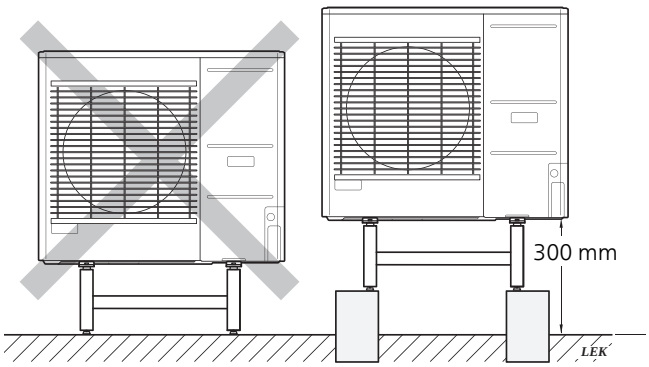
Transport and storage

SPLIT R6 must be transported and stored vertically.

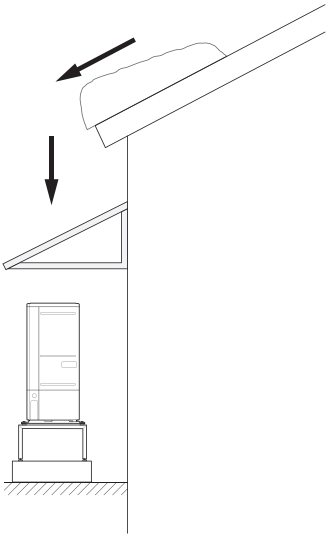
> *NOTE*
>
> Ensure that the heat pump can not fall over during transport.

Assembly

- Place SPLIT R6 outdoors on a solid level base that can take the weight, preferably a concrete foundation. If concrete slabs are used they must rest on asphalt or shingle.
- The concrete foundation or slabs must be positioned so that the lower edge of the evaporator is at the level of the average local snow depth; however, a minimum of 300 mm. See our stands and brackets on page 30.
- SPLIT R6 should not be positioned next to noise sensitive walls, for example, next to a bedroom.
- Also ensure that the placement does not inconvenience the neighbours.
- SPLIT R6 must not be placed so that recirculation of the outdoor air can occur. This cause slower output and impaire defficiency.
- The evaporator should be sheltered from direct wind, which negatively affects the defrosting function. Place SPLIT R6 protected from wind against the evaporator.
- Large amounts of condensation water, as well as melt water from defrosting, can be produced. Condensation water must be led off to a drain or similar(see page 10).
- Care must be exercised so that the heat pump is not scratched during installation.



Do not place SPLIT R6 directly on the lawn or other non solid surface.



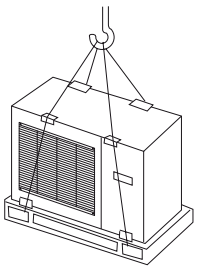
If there is a risk of snow slip from roof, a protective roof or cover must be erected to protect the heat pump, pipes and wiring.

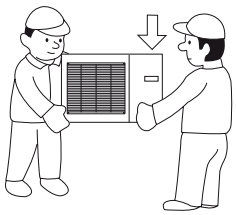
LIFT FROM THE STREET TO THE SET UP LOCATION

If the base allows, the simplest thing is to use a pallet truck to move the SPLIT R6 to the set up location.

NOTE

The centre of gravity is offset to one side (see print on the packaging).





If SPLIT R6 needs to be transported across soft ground, such as a lawn, we recommend that a crane truck is used that can lift the unit to the installation location. When SPLIT R6 is lifted with a crane, the packaging must be undamaged and the load distributedwithaboom, see the illustration above.

If a crane can not be used SPLIT R6 can be transported using an extended sack truck. SPLIT R6 must be used on the side marked "heavy side" and two people are required to get the SPLIT R6 up.

LIFT FROM THE PALLET TO FINAL

POSITIONING

Before lifting remove the packag in gand the securing strap to the pallet.

Place lifting straps around each machine foot. Lifting from the pallet to the base requires four persons, one for each lifting strap.

It is not permitted to lift any thing other than the machine feet.

SCRAPPING

When scrapping, the product is removed in reverse order. Lift by the bottom panel instead of a pallet!

CONDENSATION RUN OFF

Condensation runs out on to the ground below SPLIT R6. To avoid damage to the house and heat pump, the condensation must be gathered and drained away.

NOTE

It is important to the heat pump function that condensation water is led away and that the drain for the condensation water run off is not positioned so that it can cause damage to the house.

NOTE

To ensure thisf unction, the accessory KVR 10 should be used. (Not included)

Connection of KVR 10 is performed in SplitBox 6.

NOTE

The electrical installation and wiring must be carried out under the supervision of an authorised electrician.

NOTE

Self regulating heating cables must not be connected.

- The condensation water (up to 50 litres / 24 hrs) must be routed away by a pipe to an appropriate drain, it is recommended that the shortest outdoor length possible is used.
- The section of the pipe that can be affected by frost must be heated by the heating cable to prevent freezing.
- Route the pipe downward from SPLIT R6.
- The outlet of the condensation water pipe must be at a depth that is frost free or alternatively indoors (with reservation for local ordinances and regulations).
- Use a water trap fori nstallations where air circulation may occur in the condensation water pipe.
- The insulation must be tight against the bottom of the condensation water trough.

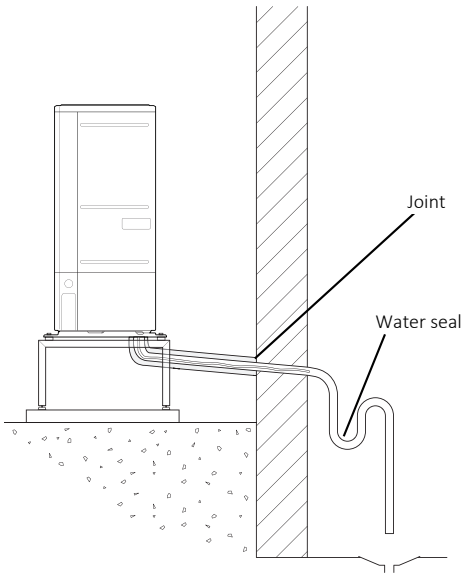
Drain pan heater, control

The drain pan heater is supplied with power when one of the following conditions is met:

1. The compressor has been in operationfor at least 30 minutes after last start.
2. The ambient temperature is lower than 1°C.

Recommended alternative for leading off condensation water

Drain indoors



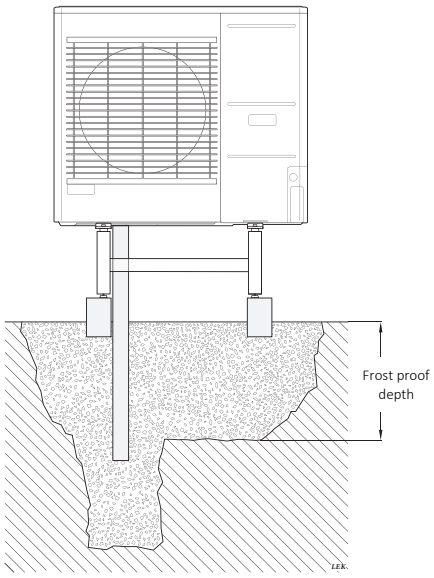
The condensation water is lead to an indoor drain (subject to local rules and regulations).

Route the pipe downward from the air/water heat pump.

The condensation water pipe must have a water seal to prevent air circulation in the pipe.

KVR 10 spliced as illustrated. Pipe routing inside house not included.

Stone caisson



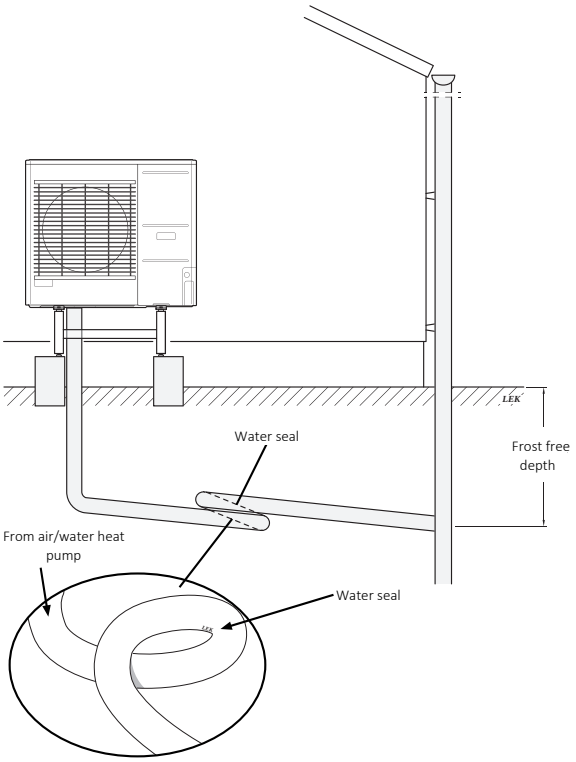
If the house has a cellar the stone caisson must be positioned so that condensation water does not affect the house. Otherwise the stone caisson can be positioned directly under the heat pump.

The outlet of the condensation water pipe must be at frost free depth.

Gutter drainage

NOTE

Bend the hose to create a water seal, see illustration.



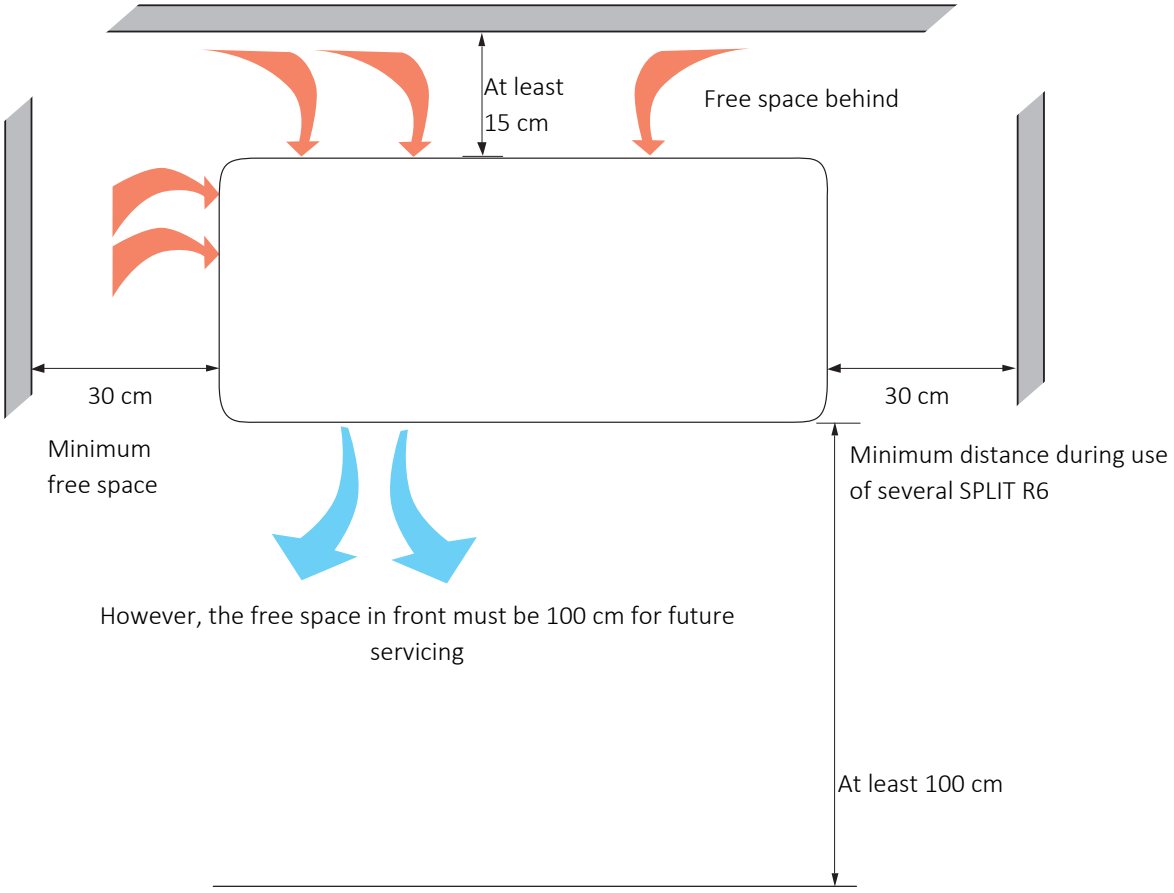
- The outlet of the condensation water pipe must be at frost free depth.
- Route the pipe downward from the air/water heat pump.
- The condensation water pipe must have a water seal to prevent air circulation in the pipe.
- The installation length can be adjusted by the size of the water seal.

Caution

If none of the recommended alternatives is used good lead off of condensation water must be assured.

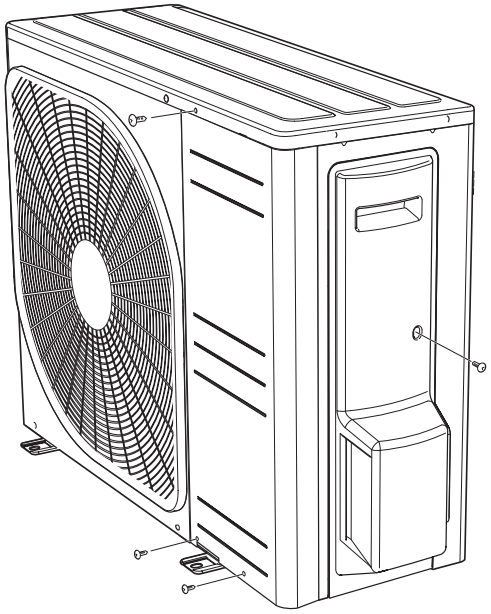
INSTALLATION AREA

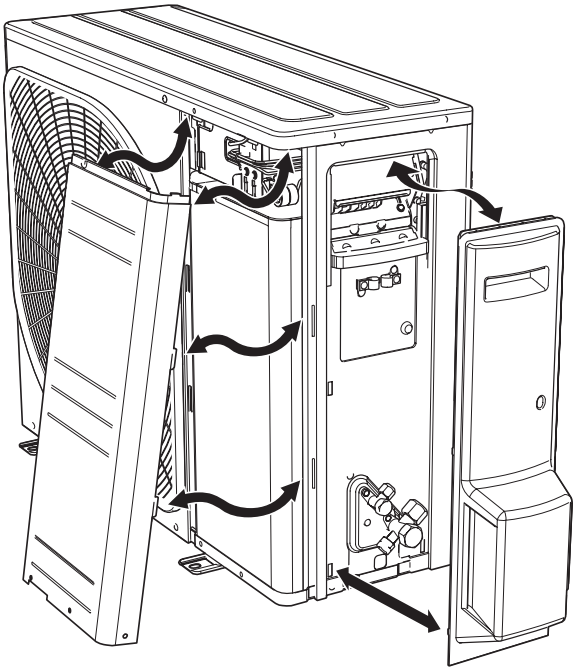
The recommended distance between SPLIT R6 and the house wall must be at least 15 cm. Clearance above SPLIT R6 should be at least 100 cm. However, free space in front must be 100 cm for future servicing.



Removing the covers

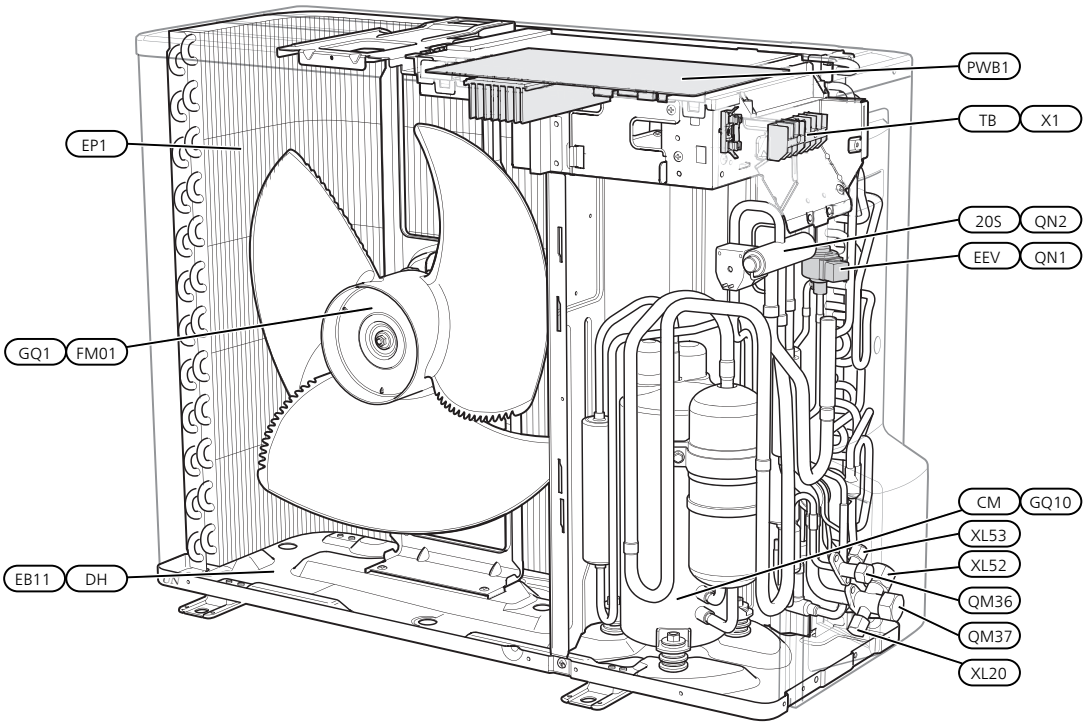
Split R6





3 The heat pump design

Component locations SPLIT R6



List of components
SPLIT R6

PIPE CONNECTIONS

QM36	Service valve, liquid side
QM37	Service valve , gas side
XL20	Connection, service
XL52	Connection, gas line
XL53	Connection, liquid line

ELECTRICAL COMPONENTS

EB11 (DH)	Drain pan heater
GQ1 (FM01)	Fan
(PWB1)	Control board
X1 (TB)	Terminal block, incoming supply and communication

COOLING COMPONENTS

EB10 (CH)	Compressor heater
EP1	Evaporator
GQ10 (CM)	Compressor
QN1 (EEV-H)	Expansion valve, heating
QN2(20S)	4-way valve

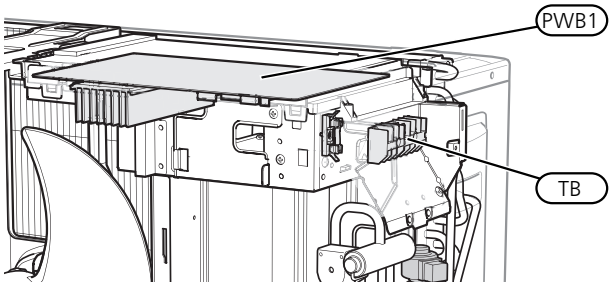
MISCELLANEOUS

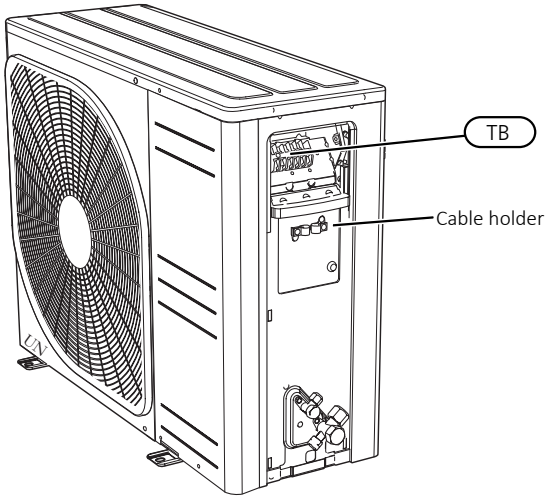
PF3	Serial number plate

Designations according to standard EN 81346-2.
Designations within brackets according to the supplier's standard.

Electrical panel

COMPONENT LOCATION SPLIT R6





Electrical components SPLIT R6

(CH)	Compressor heater
(DH)	Drain pan heater
F	Fuse
(FM01)	Fan motor
(PWB1)	Control board
(TB)	Terminal block, incoming supply and communication

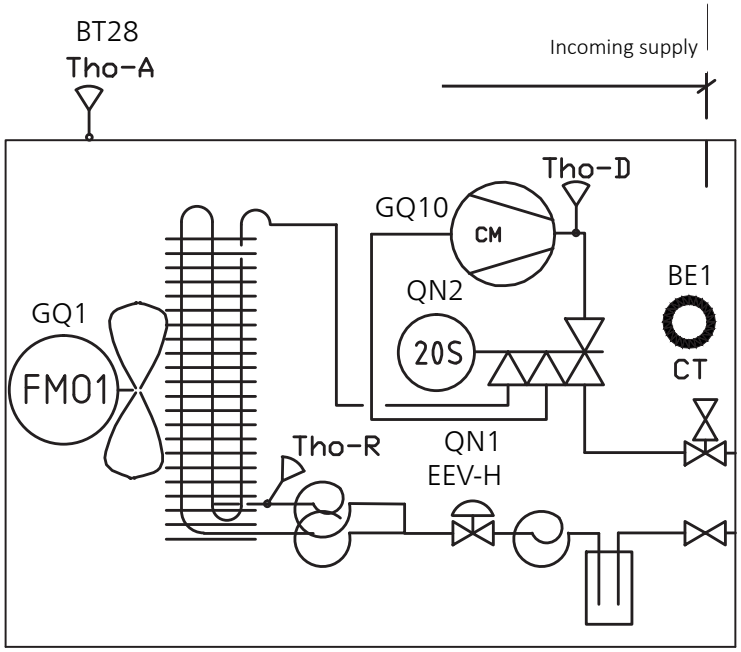
Designations according to standard EN 81346-2.

Designations within brackets according to the supplier's standard.

Sensor placement

POSITIONING THE TEMPERATURE SENSOR

Split R6



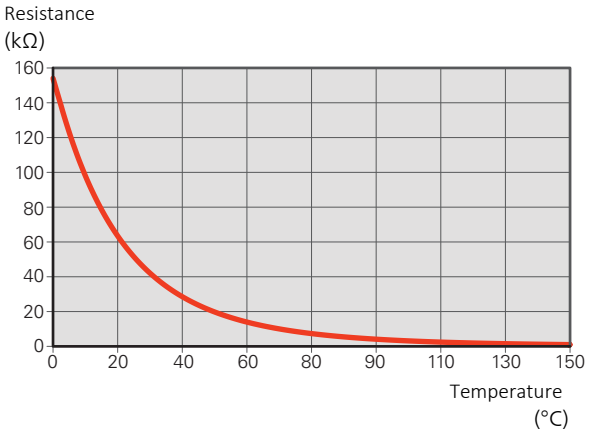
BE1 (CT)	Current sensor
BT28 (Tho-A)	Outdoor temperature
GQ1 (FM01)	Fan
GQ10 (CM)	Compressor
QN1 (EEV-H)	Expansion valve, heating
QN2 (20S)	4-way valve
Tho-D	Hot gas sensor
Tho-R	Evaporator sensor, out

Designations according to standard EN 81346-2.

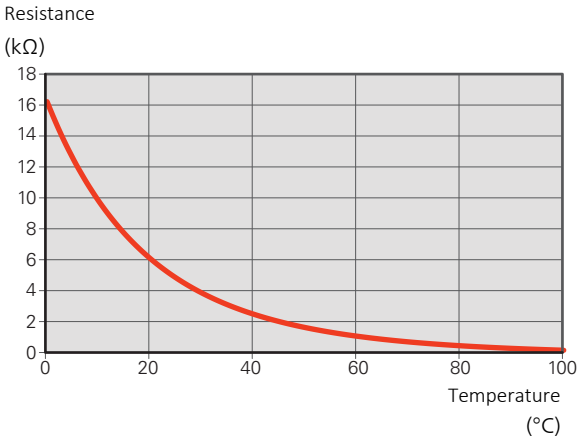
Designations within brackets according to the supplier's standard.

DATA FOR SENSOR IN SPLIT R6

Tho-D



Tho-A, R



4 Pipe connections

NOTE

For information: See section "Pipe connections" in the Installer Manual for SplitBox 6.

5 Electrical connections

General

SPLIT R6 and SplitBox 6 does not include a circuit breaker on the incoming power supply. For this reason, each one of its supply cables must be connected to its own circuit breaker with a breaking gap of at least 3 mm. Incoming supply must be 230V~50Hz via electrical distribution board with fuses.

- Disconnect the SplitBox 6 and outdoor module SPLIT R6 beforei nsulation testing the house wiring.
- For fuse ratings, see technical data, “Fuse protection”.
- If the building is equipped with an earth-fault breaker, SPLIT R6 should be equipped with a separate one.
- Connection must not be carried out without the permission of the electricity supplier and undert he supervision of aqualified electrician.
- Cables must be routed so that they are not damaged by metal edge sort rapped by panels.
- SPLIT R6 is equipped with a single phase compressor. This means that one of the phases will be loaded with a number of amperes (A) during compressor operation. Check the maximum load in the table below.

Outdoor module	*Maximum current (A)*
SPLIT R6	15

- Maximum permitted phase loading can be restricted to a lower maximum current in the indoor module or control module.

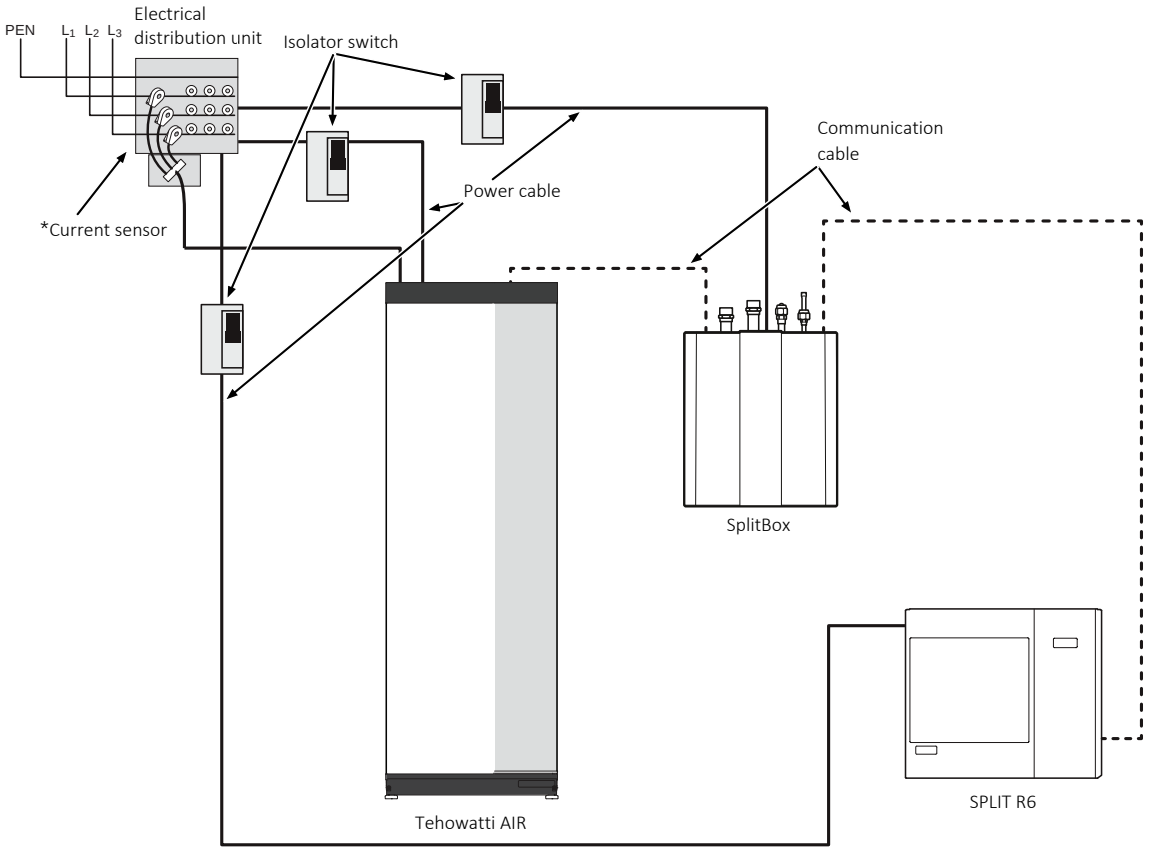
NOTE

Electrical installation and any servicing must be carried out under the supervision of a qualified electrician. Disconnect the current with the circuit breaker before carrying out any servicing. Electrical installation and wiring must be carried out in accordance with the national stipulations in force.

NOTE

Check the connections, main voltage and phase voltage before starting the machine to prevent damage to the air/water heat pump’s electronics.

PRINCIPLE DIAGRAM, ELECTRICAL INSTALLATION



* Only in a 3-phase installation.

Electrical components

See component location in section "The heat pump design", "Electrical panel".

Accessibility, electrical connection

REMOVING THE COVERS

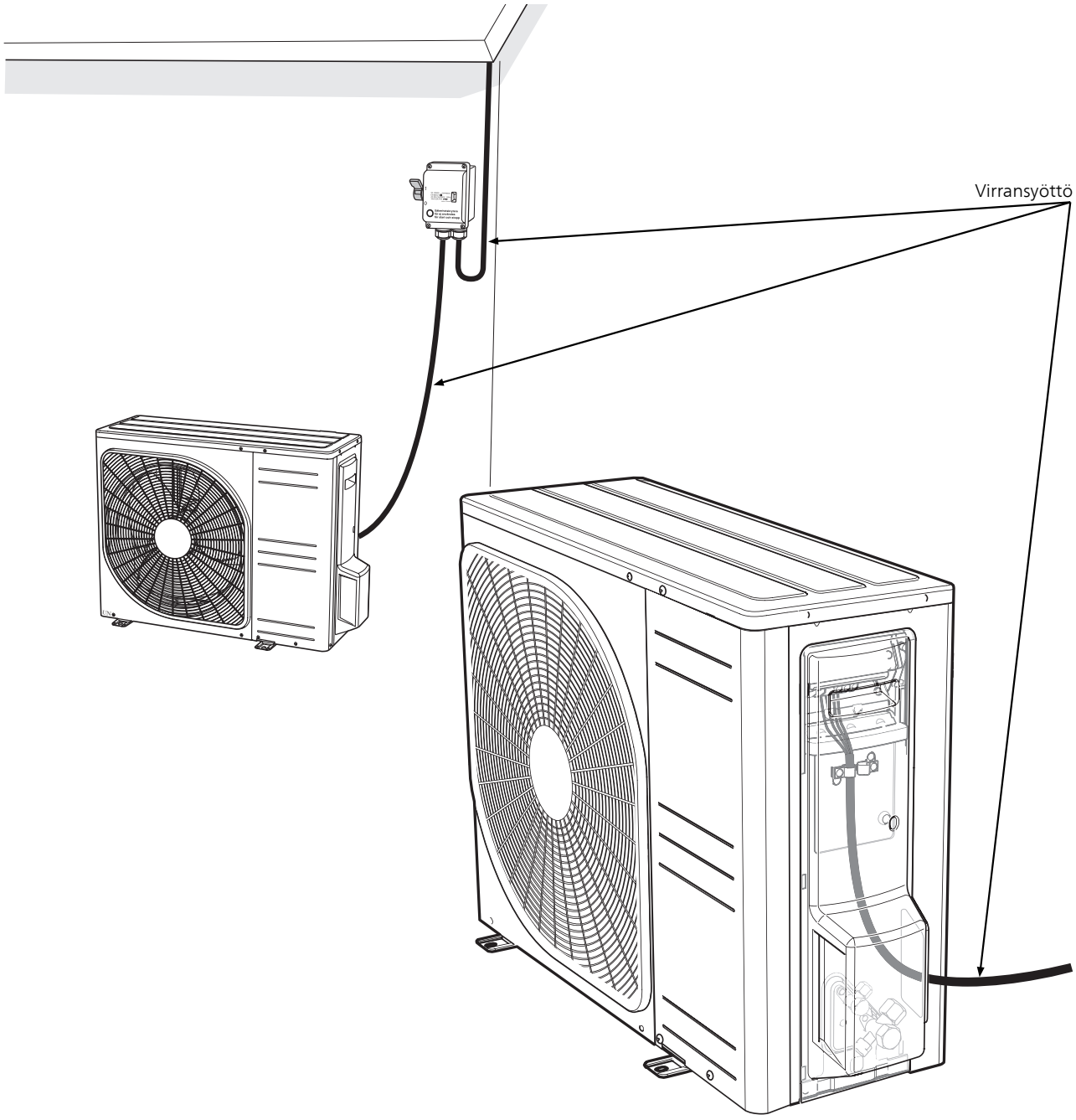
See section "Removing the covers".

Connections

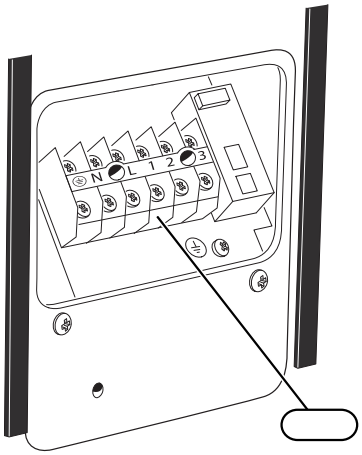
NOTE

To prevent interference, unscreened communication and/or sensor cables to external connections must not be laid closer than 20 cm from high voltage cables.

POWER CONNECTION SPLIT R6



COMMUNICATION CONNECTION



Communication is connected on terminal block TB. See also section "Electrical circuit diagram".

You can find more information in the Installer Manual for SplitBox.

CONNECTING ACCESSORIES

Instructions for connecting accessories are in the installation instructions provided for the respective accessory. See page 30 for the list of the accessories that can be used with SPLIT R6.

NOTE

For more information: See section "Electrical connections" in the Installer Manual for SplitBox.

6 Commissioning and adjusting

NOTE

For information: See section "Commissioning and adjustment" in the Installer Manual for SplitBox.

7 Control-Heat pump EB101

NOTE

For information: See section "Control–Heat pump EB101" in the Installer Manual for SplitBox.

8 Disturbances in comfort

NOTE

For more information: See section "Disturbances in comfort" in the Installer Manual for SplitBox.

9 Alarm list

Alarms		*Alarm text on the display*	*Description*	*May be due to*
162		High condenser out	Too high temperature out from the condenser. Self-resetting.	• Low flow during heat. operation • Too high set temperatures
163		High condenser in	Too high temperature into the condenser. Self-resetting.	• Temperature generated by another heat source
183		Defrosting in progress	Not an alarm, but an operating status.	• Set when the heat pump runs the defrosting procedure
223		OU Com.error	Communication between the control board and the comm. board is interrupted. There must be 22 V direct current (DC) at the switch CNW2 on the control board (PWB1)	• Any circuit breakers for SPLIT R6 off • Incorrect cable routing
224		Fan alarm	Deviations in the fan speed in SPLIT R6.	• The fan cannot rotate freely • Defective control board in SPLIT R6 • Defective fan motor • Control board in SPLIT R6 dirty • Fuse (F2) blown
230		Continuously high hot gas	Temperature deviation on the hot gas sensor (Tho-D) twice within 60 minutes or for 60 minutes continuously.	• Sensor does not work (see s. "Communication connection") • Insufficient air circulation or blocked heat exchanger • If the fault persists during cooling, there may be an insufficient amount of refrigerant • Defective control board in SPLIT R6
254		Communication error	Communication fault with accessory board	• SPLIT R6 not powered • Fault in the communicat. cable
261		High temperature in heat exchanger	Temperature deviation on the heat exchanger sensor (Tho-R1/R2) five times within 60 minutes or for 60 minutes continuously.	• Sensor does not work (see s. "Disturbances in comfort") • Insufficient air circulation or blocked heat exchanger • Defective control board SPLIT R6 • Too much refrigerant
262		Power transistor too hot	When IPM (Intelligent power module) displays FO-signal (Fault Output) five times during a 60-minute period.	• Can occur when 15V power supply to the inverter PCBis unstable.

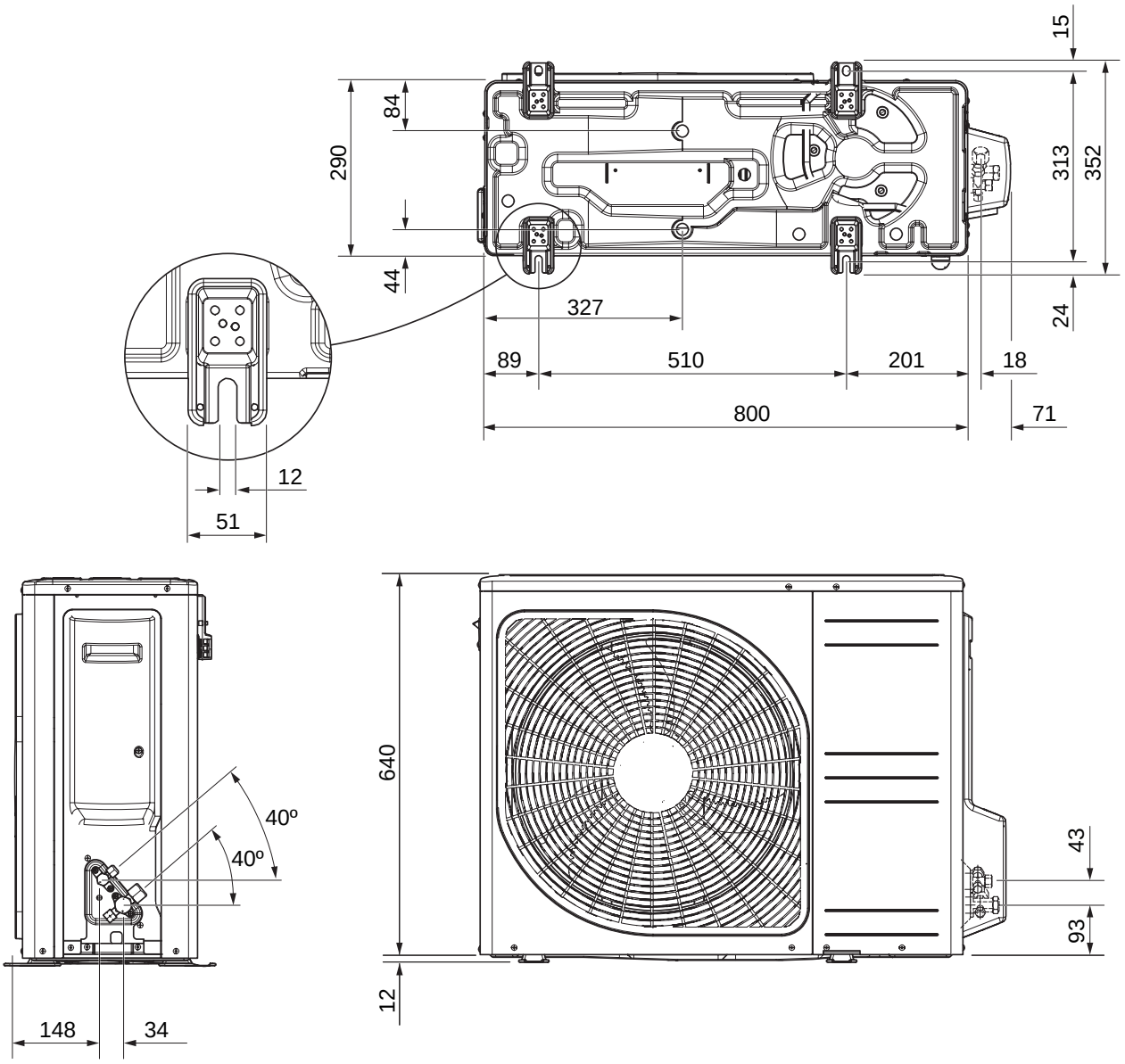
Alarms		*Alarm text on the display*	*Description*	*May be due to*
263		Inverter error	Voltage from the inverter outside the parameters four times within 30 minutes.	• Incoming power supply interference • Service valve closed • Insufficient amount of refrigerant • Compressor fault • Defective circuit board for inverter
264		Inverter error	Communication between circuit board for inverter and control board broken.	• Open circuitinc onnection between boards • Defective circuit board for inverter in SPLIT R6 • Defective control board in SPLIT R6
265		Inverter error	Continuous deviation on power transistor for 15 minutes.	• Defective fan motor • Defective circuit board for inverter in SPLIT R6
266		Insufficient refrigerant	Insufficient refrigerant is detected upon start-up in cooling mode.	• Service valve closed • Loose connection sensor (BT15, BT3) • Defective sensor(BT15, BT3) • Too little refrigerant
267		Inverter error	Failed start for compressor	• Defective circuit board for inverter in SPLIT R6 • Defective control board in SPLIT R6 • Compressor fault
268		Inverter error	Overcurrent, Inverter A/F module	• Sudden power failure
271		Cold outdoor air	Temperature of BT28 (Tho-A) below the set value that permits operation	• Cold weather conditions • Sensor fault
272		Hot outdoor air	Temperature of BT28 (Tho-A) above the value that permits operation	• Warm weather conditions • Sensor fault
277		Sensor fault Tho-R	Sensor fault, heat exchanger in SPLIT R6 (Tho-R).	• Open circuit or short circuiton sensor input • Sensor does not work (see s. "Disturbances in comfort") • Defective control board (Split R6)
278		Sensor fault Tho-A	Sensor fault, outdoor temperature sensor in SPLIT R6 BT28 (Tho-A).	• Open circuit or short circuiton sensor input • Sensor does not work (see s. "Disturbances in comfort") • Defective control board (Split R6)
279		Sensor fault Tho-D	Sensor fault, hot gas in SPLIT R6 (Tho-D).	• Open circuit or short circuiton sensor input • Sensor does not work (see s. "Disturbances in comfort") • Defective control board (Split R6)

Alarms		*Alarm text on the display*	*Description*	*May be due to*
280		Sensor fault Tho-S	Sensor fault, suction gas in SPLIT R6 (Tho-S).	• Open circuit or short circuiton sensor input • Sensor does not work (see s. "Disturbances in comfort") • Defective control board (Split R6)
281		Sensor fault LPT	Sensor fault, low pressure transmitter in SPLIT R6.	• Open circuit or short circuiton sensor input • Sensor does not work (see s. "Disturbances in comfort") • Defective control board (Split R6) • Fault in the refrigerant circuit
294		Non-compatible outdoor air heat pump	Heat pump and indoor module / control module do not work properly together due to technical parameters.	• Outdoor module and indoor module / control module are not compatible.

11 Technical data

Dimensions

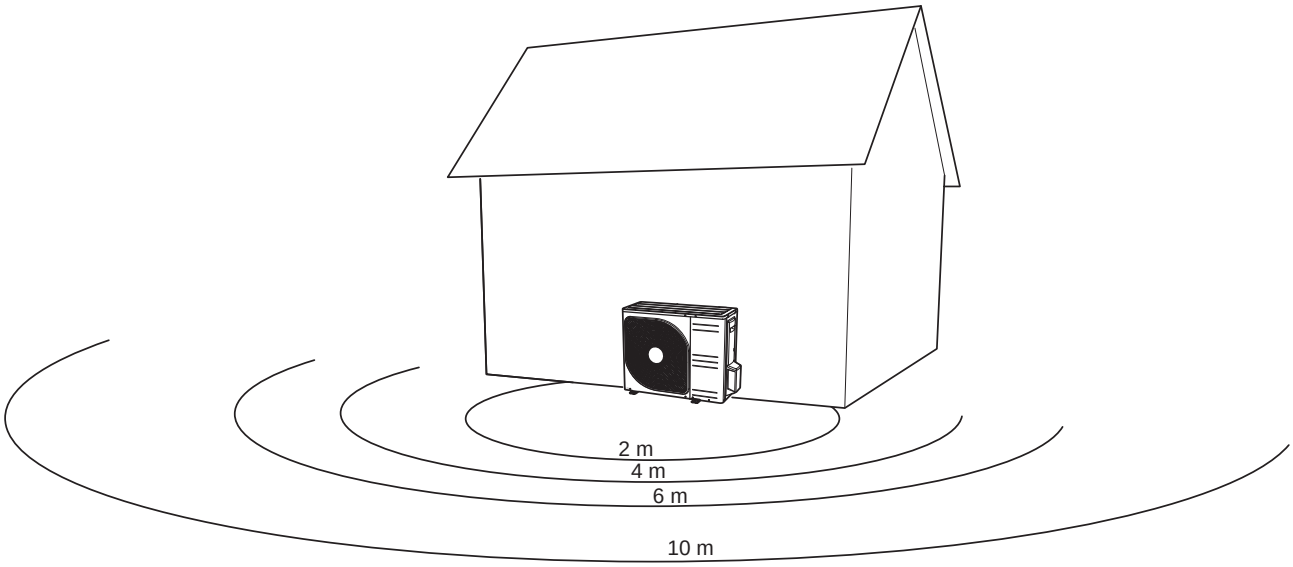
SPLIT R6



Sound levels

SPLIT R6 is usually placed next to a house wall, which gives a directed sound distribution that should be considered. Accordingly, you should always attempt to find a placement on the side that faces the least sound sensitive neighbouring area.

The sound pressure levels are further affected by walls, bricks, differences in ground level, etc and should therefore only be seen as guide values.



Jäspi Split R6		
Sound power level, according to EN 12102 at 7/35°C (nominal)*	L_W(A)	54
Sound pressure level at 2 m free standing (nominal)*	dB(A)	40
Sound pressure level at 6 m free standing (nominal)*	dB(A)	30,5
Sound pressure level at 10 m free standing (nominal)*	dB(A)	26

* Free space.

Technical specifications

SPLIT R6

Outdoor module		*SPLIT R6*
Heating *Output data according to EN 14511 ΔT5K* Capacity / Power input / COP(kW/kW/-) at nominal flow	Outdoor temp./Supply temperature	
	7/35 °C (floor)	2,64/0,486/5,42
	2/35 °C (floor)	2,31/0,56/4,13
	-7/35 °C (floor)	5,55/2,05/2,71
	7/45 °C	2,43/0,65/3,74
	2/45 °C	2,02/0,67/3,01
Cooling Capacity / Power input / EER(kW/kW/-) at maximum flow	27/7 °C	6,14/1,69/3,63
	27/18 °C	8,19/1,8/4,55
	35/7 °C	5,32/1,94/2,74
	35/18 °C	7,55/2,11/3,58
Electrical data		
Rated voltage		230V 50 Hz, 230V 2AC 50Hz
Max. current	A_{rms}	15
Recommended fuse rating	A_{rms}	16
Starting current	A_{rms}	5
Max fan flow (heating, nominal)	m^3/h	2 530
Fan rating	W	50
Drain pan heater (integrated)	W	110
Defrosting		Reverse cycle
Enclosure class		IP24
Refrigerant circuit		
Type of refrigerant		R32
GWP refrigerant		675
Compressor		Twin Rotary
Refrigerant quantity	kg	1,3
CO_2 equivalent	t	0,88
Cut-out value, pressure switch, high pressure	MPa (bar)	-
Breaking value high pressure	MPa (bar)	4,5 (45)
Cut-out value, pressure switch, low pressure (15 s)	MPa (bar)	-
Max. length, refrigerant pipe, one way	m	30*
Max height difference, refrigerant pipe	m	20
Dimensions, refrigerant pipe		Gas pipe: OD12.7 (1/2") Fluid pipe: OD6.35 (1/4")
Pipe connections		
Pipe connection option		Right-hand side
Pipe connections		Flare
Dimensions and weight		
Width	mm	800
Depth	mm	290
Height	mm	640
Weight	kg	46
Miscellaneous		
Substances according to Directive(EG) no. 1907/2006, article 33 (Reach)		Lead in brass components
Part no.		064 235

*If the length of the refrigerant pipes exceeds 15 metres, extra refrigerant must be added at 0.02kg/m. Use the enclosed label to remark the unit with the new amount of refrigerant.

SCOP & PDESIGNH

SCOP & $P_{designh}$ SPLIT R6 according to EN14825		
Outdoor module / SPLIT box	*SPLIT R6 SplitBox*	
	$P_{designh}$	SCOP
SCOP 35 Average climate	5,2	5,08
SCOP 55 Average climate	5,6	3,58
SCOP 35 Cold climate	5,8	4,25
SCOP 55 Cold climate	5,7	3,17
SCOP 35 Warm climate	5,57	6,76
SCOP 55 Warm climate	5,48	4,55

ENERGY RATING, AVERAGE CLIMATE

Model		*SPLIT R6 SplitBox*
Control module model		*MCU*
Temperature application	*°C*	*35 / 55*
The product's room heating efficiency class1)		A+++ / A++
Space heating efficiency class of the system2)		A+++ / A++

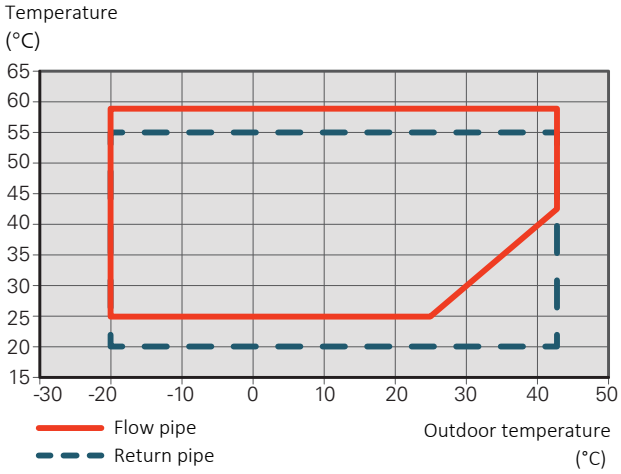
[1]Scale for the product's room heating efficiency class A++ to G.

[2]Scale for the system's room heating efficiency class A+++ to G.

The reported efficiency of the package also takes the controller into account. If an external supplementary boiler or solar heating is added to the package, the overall efficiency of the package should be recalculated.

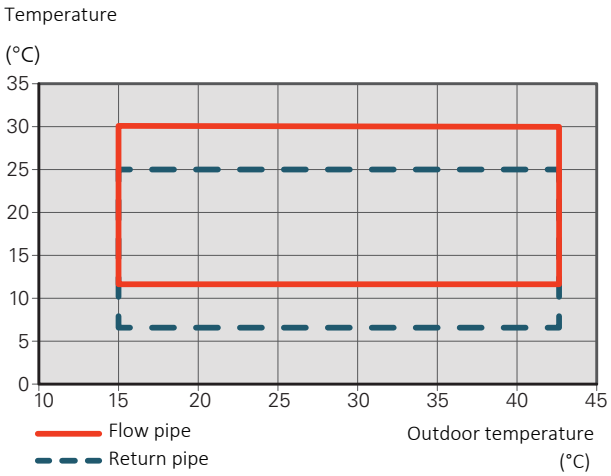
Working area

Compressor operation – heating



During shorter time it is allowed to have lower working temperatures on the water side, e.g. during start up.

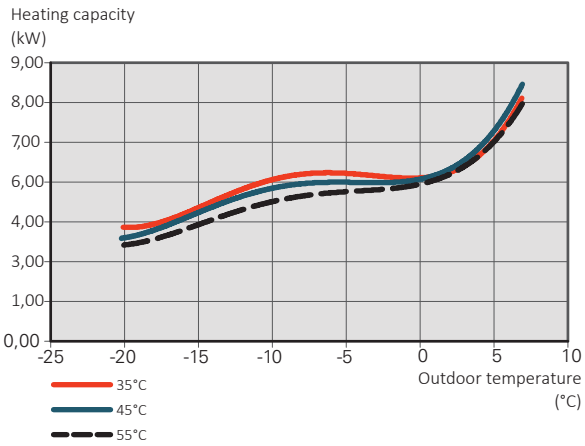
Compressor operation – cooling



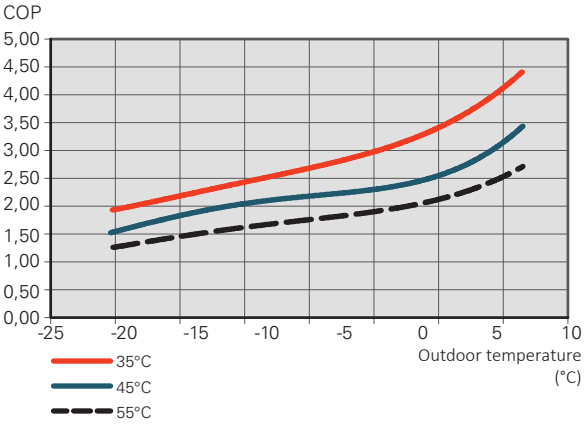
Capacity and COP

Capacity and COP at different supply temperatures. Maximum capacity including defrosting. According to standard EN 14511.

Max. specified power SPLIT R6



COP SPLIT R6



Energy labelling

INFORMATION SHEET

Supplier		*Jäspi*
Model		*Jäspi Split R6 / SplitBox*
Temperature application	*°C*	*35 / 55*
Seasonal space heating energy efficiency class, average climate		**A+++ / A++**
Rated heat out put (Pdesignh), average climate	kW	5 / 6
Annual energy consumption space heating, average climate	kWh	2 116 / 3 250
Seasonal space heating energy efficiency, average climate	%	200 / 139
Sound power level LWA indoors	dB	35
Rated heat output (Pdesignh), cold climate	kW	6 / 6
Rated heat output (Pdesignh), warm climate	kW	6 / 5
Annual energy consumption space heating, cold climate	kWh	3 487 / 4 604
Annual energy consumption space heating, warm climate	kWh	1 110 / 1 617
Seasonal space heating energy efficiency, cold climate	%	161 / 119
Seasonal space heating energy efficiency, warm climate	%	265 / 178
Sound power level LWA outdoors	dB	54

DATA FOR ENERGY EFFICIENCY OF THE PACKAGE

Model		*Jäspi Split R6 / MCU*
Control module model		*MCU*
Temperature application	*°C*	*35 / 55*
Controller, class		VI
Controller, contribution to efficiency	%	4,0
Seasonal space heating energy efficiency of the package, average climate	%	204 / 143
Seasonal space heating energy efficiency class of the package, average climate		A+++ / A++
Seasonal space heating energy efficiency of the package, cold climate	%	165 / 123
Seasonal space heating energy efficiency of the package, warm climate	%	269 / 182

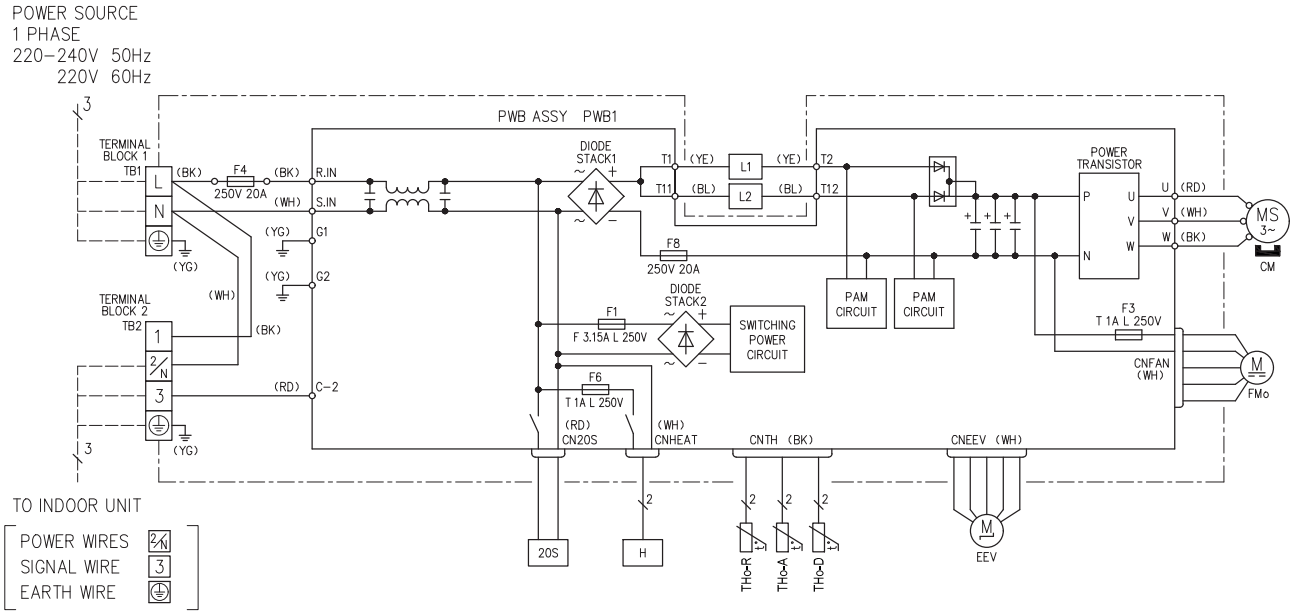
The reported efficiency of the package also takes the controller into account. If an external supplementary boiler or solar heating is added to the package, the overall efficiency of the package should be recalculated.

TECHNICAL DOCUMENTATION

Model		*Jäspi Split R6 / SplitBox*					
Type of heat pump		☒ Air-water ☐ Exhaust-water ☐ Brine-water ☐ Water-water					
Low-temperature heat pump		☐ Yes ☒ No					
Integrated immersion heater for additional heat		☐ Yes ☒ No					
Heat pump combination heater		☐ Yes ☒ No					
Climate		☒ Average ☐ Cold ☐ Warm					
Temperature application		☒ Average (55°C) ☐ Low (35°C)					
Applied standards		EN14511 / EN14825 / EN12102					
Rated heat output	Prated	5,6	kW	*Seasonal space heating energy efficiency*	η_s	139	%
Declared capacity for space heating at part load and at outdoor temperature Tj				*Declared COP for space heating at part load and at outdoor temperature Tj*			
Tj = -7 °C	Pdh	5,0	kW	Tj = -7 °C	COPd	2,0	-
Tj = +2 °C	Pdh	2,9	kW	Tj = +2 °C	COPd	3,5	-
Tj = +7 °C	Pdh	1,9	kW	Tj = +7 °C	COPd	5,0	-
Tj = +12 °C	Pdh	1,7	kW	Tj = +12 °C	COPd	6,3	-
Tj = biv	Pdh	5,0	kW	Tj = biv	COPd	2,0	-
Tj = TOL	Pdh	4,6	kW	Tj = TOL	COPd	1,8	-
Tj = -15 °C (jos TOL < -20 °C)	Pdh		kW	Tj = -15 °C (if TOL < -20°C)	COPd		-
Bivalent temperature	T_{biv}	-7	°C	Min. outdoor air temperature	TOL	-10	°C
Cycling interval capacity	Pcych		kW	Cycling interval efficiency	COPcyc		-
Degradation coefficient	Cdh	0,96	-	Max supply temperature	WTOL	58	°C
Power consumption in modes other than active mode				*Additional heat*			
Off mode	P_{OFF}	0,007	kW	Rated heat output	Psup	1,0	kW
Thermostat-off mode	P_{TO}	0,0112	kW				
Standby mode	P_{SB}	0,0107	kW	Type of energy input	Electric		
Crank case heater mode	P_{CK}	0	kW				
Other items							
Capacity control	Variable			Rated air flow (air-water)		2 340	m^3/h
Sound power level, indoors/outdoors	L_{WA}	35 / 54	dB	Nominal heating medium flow			m^3/h
Annual energy consumption	Q_{HE}	3 250	kWh	Brine flow brine-water or water-water heat pumps			m^3/h
Contact information	*Kaukora Oy Tuotekatu 11 21200 Raisio Finland*						

Electrical circuit diagram

SPLIT R6



Designation	*Description*
20S	Solenoid for 4-way valve
CM	Compressor motor
CnA~Z	Terminal block
CT	Current sensor
DH	Drain pan heater
F	Fuse
FM01	Fan motor
L/L1	Induction coil
QN1 (EEV-H)	Expansion valve for heating
(EEV-C)	Expansion valve for cooling
TB	Terminal block
BT28 (Tho-A)	Temperature sensor, outdoor air
Tho-D	Temperature sensor, hot gas
Tho-R	Temperature sensor, heat exchanger

TRANSLATION TABLE

English	*Translation Finnish*
2 times	2 kertaa
4-way valve	4-tieventtiili
Alarm	Hälytys
Alarm output	Hälytyslähtö
Ambience temp	Ulkolämpötilan anturi
Black	musta
Blue	sininen
Brown	ruskea
Charge pump	Latauspumppu
Communication input	Tiedonsiirtotulo
Compressor	Kompressori
Control	Ohjaus
CPU card	CPU-kortti
Crank case heater	Kompressorilämmitin
Drip tray heater	Tippakaukalon lämmitin/Kondenssivesikourun lämmitin
Evaporator temp.	Höyrystin, lämpötilan anturi
External communication	Ulkoinen tiedonsiirto
External heater (Ext. heater)	Ulkoinen lämmitin
Fan	Puhallin
Fan speed	Puhaltimen nopeus
Ferrite	Ferriitti
Fluid line temp.	Nesteputki, lämpötilan anturi
Heating	Lämpö
High pressure pressostat	Ylipaineensäädin
gn/ye (green/yellow)	vihreä/keltainen
Low pressure pressostat	Alipaineensäädin
Next unit	Seuraava yksikkö
Noise filter	Häiriösuodatin
Main supply	Syöttö
On/Off	Päälle/Pois
Option	Lisävarusteet
Previous unit	Edellinen yksikkö
RCBO	Vikavirtasuojakytkin
Red	Punainen
Return line temp.	Paluulämpötilan anturi
Supply line temp.	Menolämpötilan anturi
Supply voltage	Sähkönsyöttö/jännite
Temperature sensor, Hot gas	Lämpötila-anturi, kuumakaasu
Temperature sensor, Suction gas	Lämpötila-anturi, imukaasu
Two fan unit only	Vain kahdella puhaltimella varustetut yksiköt
White	Valkoinen

Item register

Contact information

FINLAND
Kaukora Oy
Tuotekatu 11
21200 Raisio
www.jaspi.fi/en

For countries not mentioned in this list, contact Kaukora or check jaspi.fi for more information.