Reversible heat pump GOLD RX/HC
Installation and Maintenance Instructions
Sizes 011-080

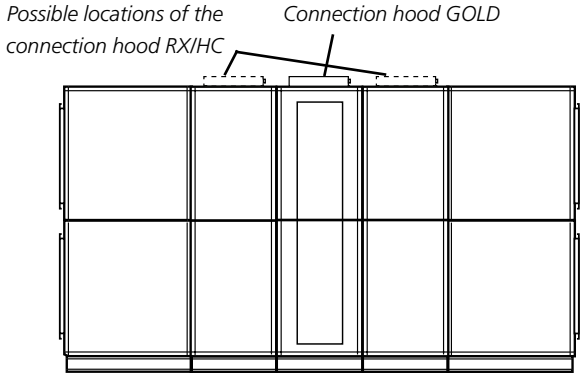
GOLD RX/HC

The document was originally written in Swedish.

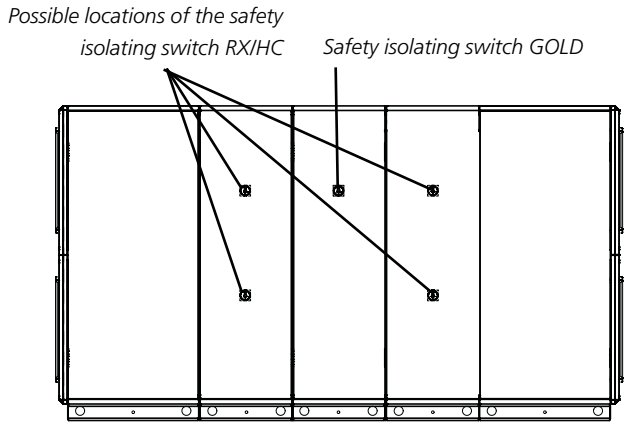
1. SAFETY INSTRUCTIONS

1.1 Safety isolating switch/Main switch

The connection hood for RX/HC 011-020 is placed on top of the air handling unit to the right or left of the GOLD air handling unit's connection hood (above the rotating heat exchanger), see illustration. The safety isolating switch is located on the side of the connection hood for RX/HC size 011-020.



For size 025-080, the safety isolating switch is located on the air handling unit's inspection side to the right or left of the GOLD air handling unit's safety isolating switch (in front of rotating heat exchanger), see illustration.



The safety switch should not be used to start or stop of the reversible heat pump.

Ensure that the RX/HC is shut off by stopping the air handling unit or by temporarily shutting off the RX/HC via the hand-held micro terminal, see the GOLD operation and maintenance instructions.

When this has been carried out, the current can be isolated with the safety switch. The safety switch must be switched off in order to make it possible to open the inspection door.

Important:
Always switch off the safety isolating switch before servicing the unit if not otherwise specified in the pertinent instructions.

1.2 Risks

Warning
Before carrying out any work, make sure that the power supply to the air handling unit has been switched off.

Warning
Under no circumstances may the refrigerant circuit be opened by unauthorised personnel, since it contains gas under high pressure.

Risk areas for refrigerant

Risk area for refrigerant is in principal inside the entire reversible heat pump. For handling when leakage, see section 7.2.

The refrigerant used is R410A.

Warning
The inspection doors must not be opened when air handling unit is operational. The doors can open and injure personnel.

1.3 Electrical equipment

Housed on the inside of an inspection door to the right or left of the rotating heat exchanger is electrical equipment for RX/HC mounted in a separate electrical equipment cubicle.

1.4 Authorisation

Only authorized electricians shall be permitted to install electrical wiring in the unit.

Only an accredited refrigeration company shall be permitted to modify or repair the refrigeration circuit.

Other service work in the unit should only be performed by service personnel trained by Swegon.

1.5 Decals

The type number mark with type designation, serial number, refrigerant volume and more is affixed on the chiller's door.

2. OVERVIEW

2.1 General

General

RX/HC is a complete reversible heat pump, fully integrated in the GOLD air handling unit.

RX/HC consists of one section with sorption rotor and one section on each side of this that contains heating/cooling engineering components.

All components from a cooling and electrical standpoint are pre-wired.

The casing is composed of cover panels and inspection doors. The outer skin is made of galvanized sheet steel, pre-painted in Swegon's grey metallic colour (closest comparable: RAL, 9007). The inner skin is made of aluminium-zinc plated sheet steel and Magnelis. Environmental Class C4. Panel thickness of 52 mm with intervening insulation consisting of mineral wool.

The evaporator and condenser consist of copper tubes and profiled aluminium fins.

RX/HC is test run prior to delivery.

RX/HC is available in 6 physical sizes, designed for GOLD air handling units in size 011-080.

RX/HC are designed and tested for ambient temperatures from -40°C to +40°C. The heat pump function withstands temperatures from -25°C to +35°C.

Compressors

The refrigerant circuit contains a variable speed controlled compressor (all sizes) that regulates the output. Size 040-080 also comprises an on/off compressor for increased capacity.

Completely direct-acting system

The RX/HC has a completely direct-acting system. It has an evaporation coil for direct-evaporating refrigerant on the cold side and a condenser coil on the hot side.

Refrigerant

Type R410A refrigerant is used. The refrigerant circuits are charged with refrigerant on delivery. At present, this refrigerant has no known influence on the ozone layer and no known future restrictions are anticipated.

Refrigerant volume

See section 10. General technical data.

Installation check/Obligation to report/ Leakage tracing interval

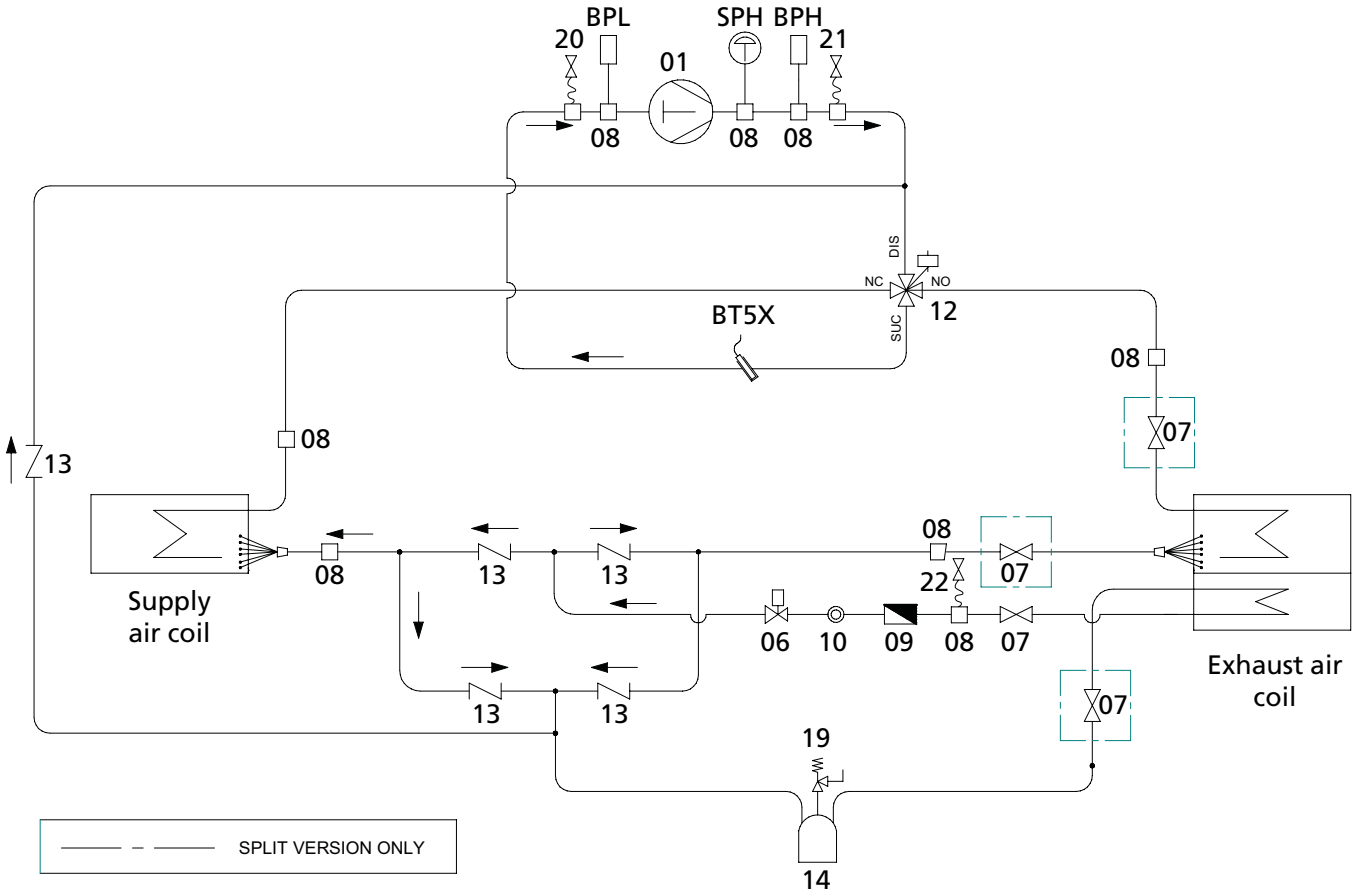
Must be carried out according to the F-Gas Regulation EU/517/2014 and associated local legislation. See also Section 3.1.

Quality System to ISO 9001 and Environmental Management System to ISO 14001

Swegon AB works to a certified quality system that conforms to ISO 9001 standard and a certified Environmental Management System that conforms to ISO 14001.

2.2 Basic function diagram

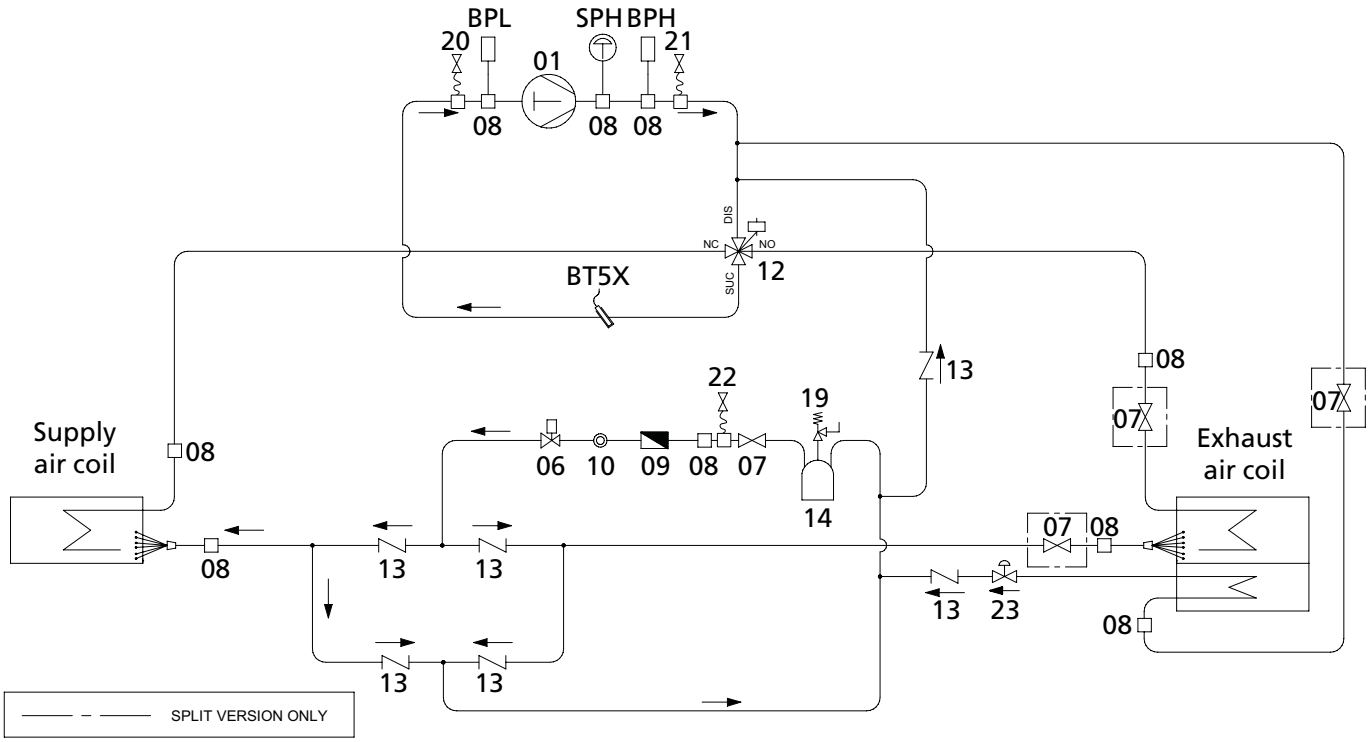
2.2.1 Size 011-030



SPH	High pressure switch
BPH	High pressure sensor
BPL	Low pressure sensor
BT5X	Sensor, electronic expansion valve
01	Compressor
02	Condenser (exhaust air) (Evaporator for heating operations)
03	Evaporator (supply air) (Condenser for heating operations)
06	Electronic expansion valve
07	Shut-off valve
08	Connection, service
09	Drying filter
10	Sight glass
12	4-way valve
13	Non-return valve
14	Container, fluid
19	Safety valve
20	LP, service outlet in RX section
21	HP, service outlet in RX section
22	Fluid, service outlet in RX section

For a description of the control functionality, see the function guide reversible heat pump RX/HC.

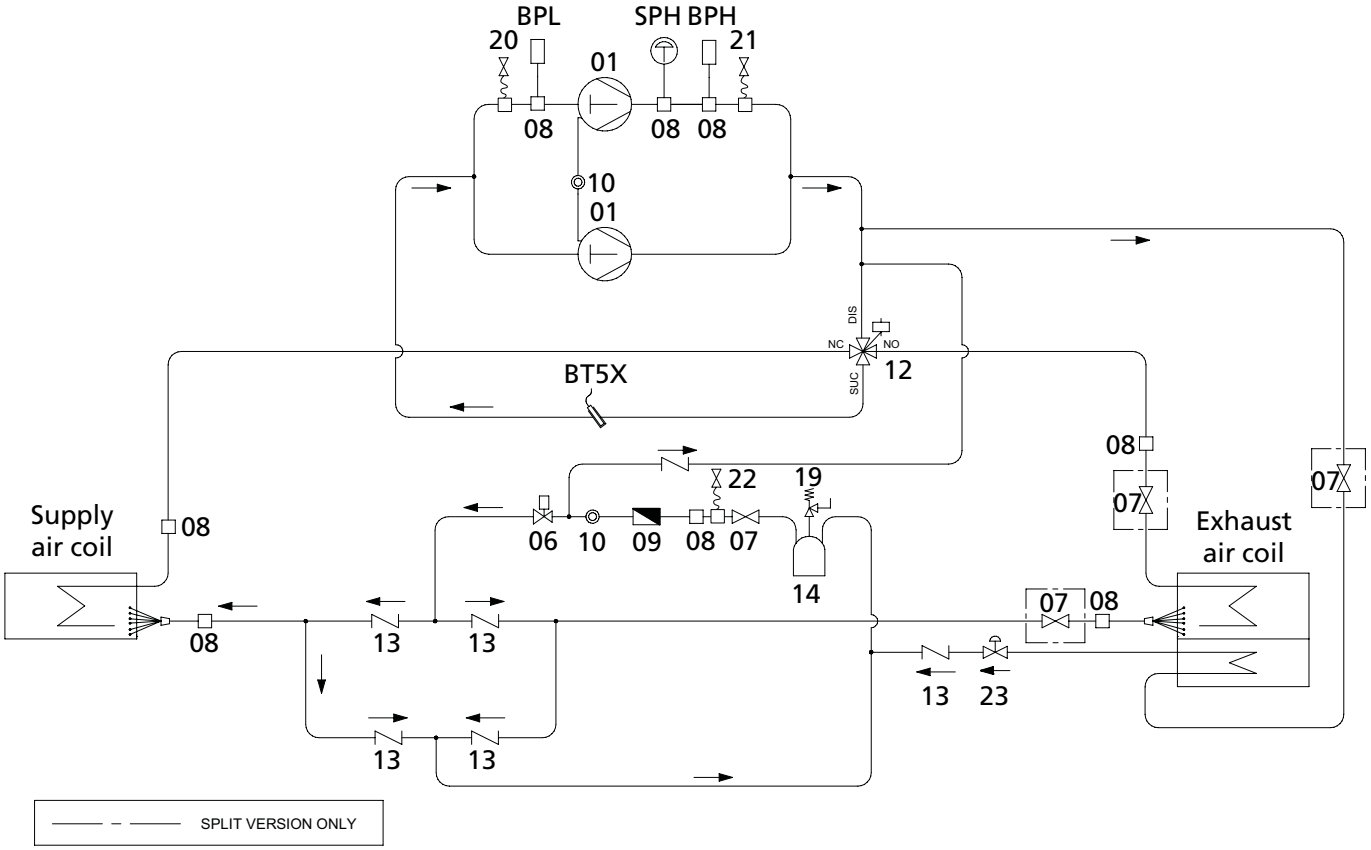
2.2.2 Size 035



SPH	High pressure switch	08	Connection, service
BPH	High pressure sensor	09	Drying filter
BPL	Low pressure sensor	10	Sight glass
BT5X	Sensor, electronic expansion valve	12	4-way valve
01	Compressor	13	Non-return valve
02	Condenser (exhaust air) (Evaporator for heating operations)	14	Container, fluid
03	Evaporator (supply air) (Condenser for heating operations)	19	Safety valve
06	Electronic expansion valve	20	LP, service outlet in RX section
07	Shut-off valve	21	HP, service outlet in RX section
		22	Fluid, service outlet in RX section
		23	Solenoid valve

For a description of the control functionality, see the function guide reversible heat pump RX/HC.

2.2.1 Size 040-080



SPH	High pressure switch	08	Connection, service
BPH	High pressure sensor	09	Drying filter
BPL	Low pressure sensor	10	Sight glass
BT5X	Sensor, electronic expansion valve	12	4-way valve
01	Compressor	13	Non-return valve
02	Condenser (exhaust air) (Evaporator for heating operations)	14	Container, fluid
		19	Safety valve
03	Evaporator (supply air) (Condenser for heating operations)	20	LP, service outlet in RX section
		21	HP, service outlet in RX section
06	Electronic expansion valve	22	Fluid, service outlet in RX section
07	Shut-off valve	23	Solenoid valve

For a description of the control functionality, see the function guide reversible heat pump RX/HC.

3. INSTALLATION

3.1 Legal requirements

This product relies on the fluorinated gas R410A as the refrigerant. It is known as a greenhouse gas because it contributes to the global warming if released to the atmosphere.

The European Union is committed to reducing emissions of such gases and Regulation 517/2014 (F-Gas) must be complied with.

Ensure that you are fully aware of your local regulations and that they are complied with.

The global warming potential (GWP) of greenhouse gases is expressed in equivalent mass of CO_2. R410A has a GWP of 2088 as per IPCC AR4.

The F-Gas regulation requires that all steps are taken to eliminate the release of greenhouse gases to the atmosphere. In accordance with Regulation 517/2014, this product is designed and manufactured so that all parts containing the refrigerant gas are made tight by welding, brazing or a similar permanent connection including capped valves and capped service ports that allow proper repair or disposal. The product is leak tested in the factory in accordance with EN 378-2.

If the installation in which this product shall be installed will have a total quantity of green house gas with a total GWP equivalent to 14 tonnes then it must be reported to the relevant authority. This is the responsibility of the operator and must be done prior to the installation.

Regulation 517/2014 requires that this product is leak tested periodically. Details are given in the table below. The product shall be leak tested after installation and prior to start-up.

Leak testing and any other service work on the refrigerant circuit must be carried out by an authorised person with the necessary training and certification in accordance with Regulation 517/2014.

Note that the Regulations governing refrigerants and their use are subject to change and it is important to follow the latest editions.

Table

Unit	Refrigerant (kg)	CO_2e
GOLD RX/HC 011	6	12,53
GOLD RX/HC 012/014	8	16,7
GOLD RX/HC 020/025	10	20,88
GOLD RX/HC 030	13	27,14
GOLD RX/HC 035	15	31,32
GOLD RX/HC 040	17,5	36,54
GOLD RX/HC 050	17,5	36,54
GOLD RX/HC 060	20	41,76
GOLD RX/HC 070	25	52,2
GOLD RX/HC 080	30	62,64

Leakage warning system not installed

3.2 Unloading/site transport

See the Installation Instructions for the GOLD air handling unit.

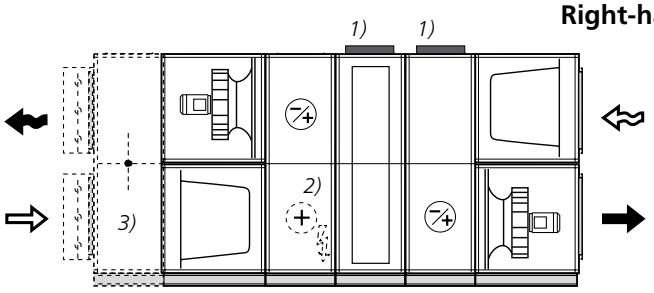
3.3 Arrangement

See the Installation Instructions for the GOLD air handling unit.

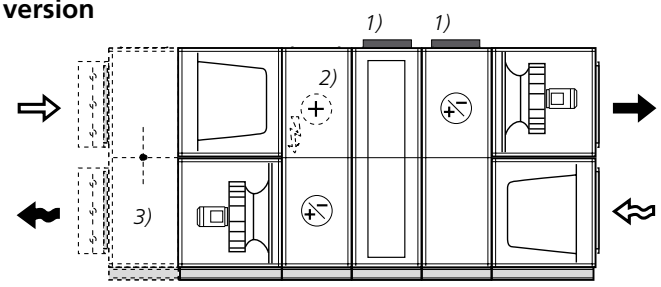
3.4 Basic installation principle

GOLD RX/HC 011-080

Right-hand version

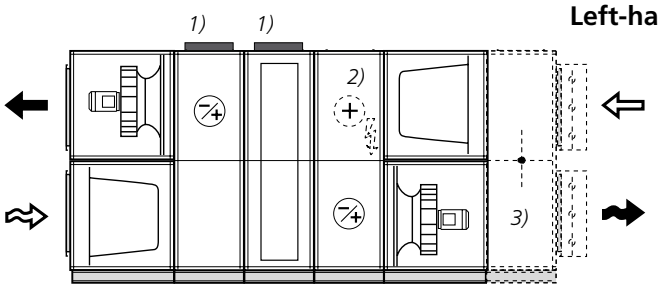


GOLD RX/HC supply air fan, right, lower level

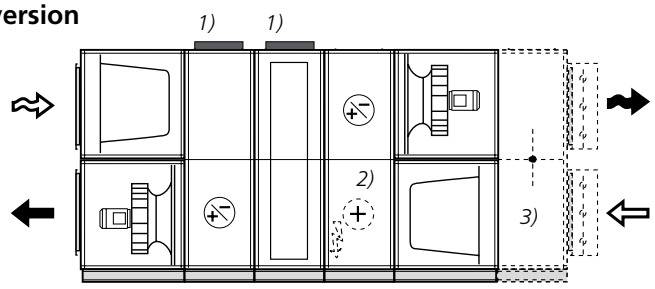


GOLD RX/HC supply air fan, right, upper level

Left-hand version



GOLD RX/HC supply air fan, left, upper level



GOLD RX/HC supply air fan, left, lower level

[1] Connection hood, only size 011-020.
[2] Electric air heater for defrosting (accessory).
[3] Air recirculation section RX/HC (accessory).

Outdoor air Supply air Extract air Exhaust air

3.4.1 Height adaptation/water trap installation

The drainage pipes to the evaporator/condenser must each be fitted with a water trap (accessory). The air handling unit must be raised by at least 50 mm to provide space for the water trap on the lower level. Adjustable support feet (accessory) can be appropriately fitted to the base beams for this purpose.

3.4.2 Splitting/Installation of air handling unit sections

RX/HC with full refrigerant circuit

For separation/installation to other air handling unit sections, see the separate installation instructions for each GOLD.

RX/HC with split refrigerant circuit

The outer section in RX/HC housing the compressor is prefilled with refrigerant, the other outer section is prefilled with nitrogen.

RX/HC is divided into three sections, see the separate installation instructions for each GOLD.

All brazing must be carried out with a shield gas.

All the cover panels at the rear of the air handling unit (torx screws) are to be removed to gain access for continued work.

NOTE! The sections must not be transported when the cover plates are removed.

NOTE!
The work below may only be performed by certified refrigeration technicians.

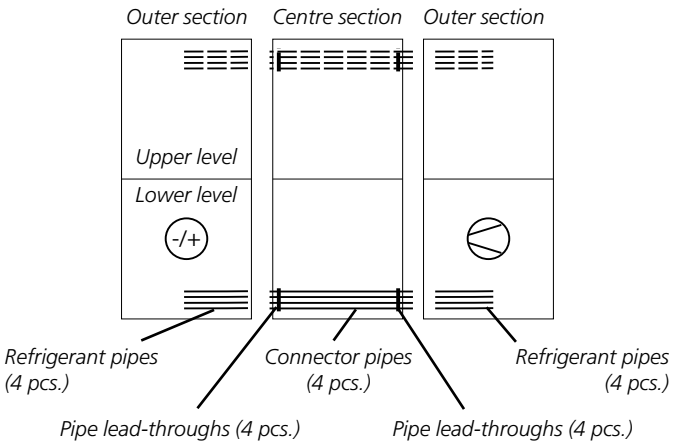
There are lead-throughs in the lower edge of the centre section for a supply air fan on the lower level. There are pipe lead-throughs in the upper edge of the upper level for a supply air fan. See the basic circuit diagram.

There are four refrigerant pipes (of which two to the subcooling circuit) in each outer section. The refrigerant pipes are closed at the ends. Braze loose ends on all refrigerant pipes.

There are connector pipes supplied in some of the outer sections.

Refrigerant pipes and connector pipes are numbered 1-4. Refrigerant pipe 1 should be paired with connector pipe 1 etc.

Basic circuit diagram



The illustration shows RX/HC as seen from the back in an air handling unit with the supply air fan on the upper level. The refrigerant pipes are placed on the top edge of the upper level with the supply air fan on the lower level, see dashed lines.

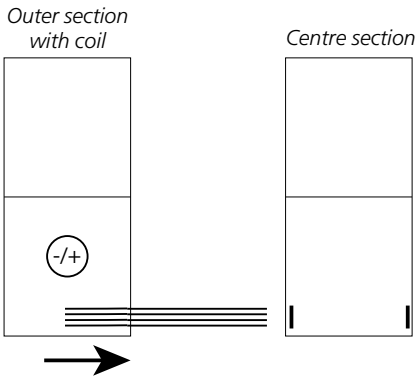
Connector pipes must be insulated to the extent required. This can occur during or after installation of connector pipes.

The connector pipes are delivered in appropriate lengths and do not need to be cut.

NOTE! In order to facilitate access, work to solder the connector pipes is to be started in the outer section with coil.

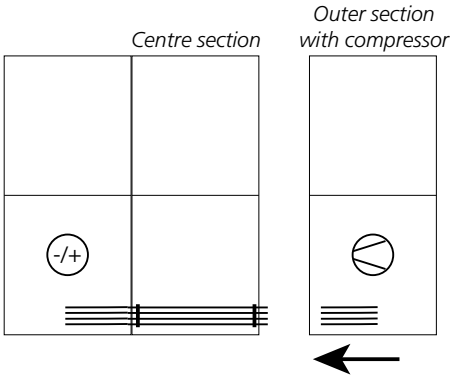
Solder the connector pipes on the refrigerant pipes in the outer section with coil.

The outer section (with coil) is slid into the centre section, at the same time as the connector pipe is guided through the centre section via the rubber seals in the pipe lead-throughs. Be careful not to damage the pipes!



Screw the outer section (with coil) to the centre section.

The outer section with compressor is slid into the centre section.



Screw the outer section (with compressor) to the centre section.

Solder the connector pipes to the refrigerant pipes in the outer section (with compressor).

Connect hoses marked HP, LP and LIQUID to each service outlet in the centre section (behind the inspection cover).

Leakage test, vacuum the refrigerant circuit and open the taps (x4) to fill the whole circuit with refrigerant.

Install fan/filter parts to RX/HC and connect electrical quick connectors, see the separate installation instruction for GOLD.

4. POWER CONNECTION

The cross-sectional dimension of the power supply cable should take into consideration the ambient temperature and way the cable is run.

Cables must be routed safely. Make sure that the cables do not touch components, since surfaces could be hot or vibrate.

The connection of RX/HC is shown here. For the connection of the GOLD air handling unit, see the installation instruction GOLD.

Important:
Installation must be carried out by a authorised electrician.

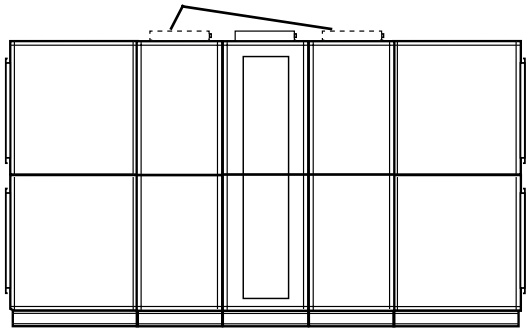
Size 011-020

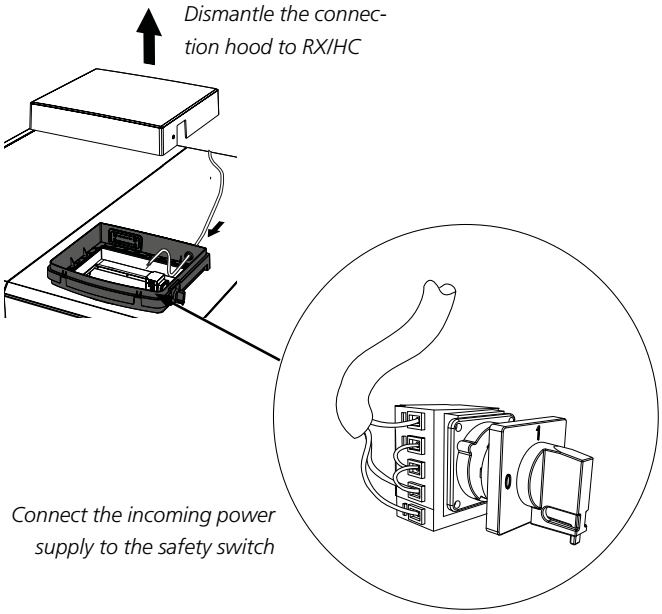
Dismantle the connection hood to RX/HC.

Connect the incoming power supply to the safety switch, see the illustration.

5-core system, 400 V ±10%. Also see section 10 Technical data.

Possible locations of the connection hood RX/HC





Size 025-080

Open the inspection door in front of the electrical equipment cubicle.

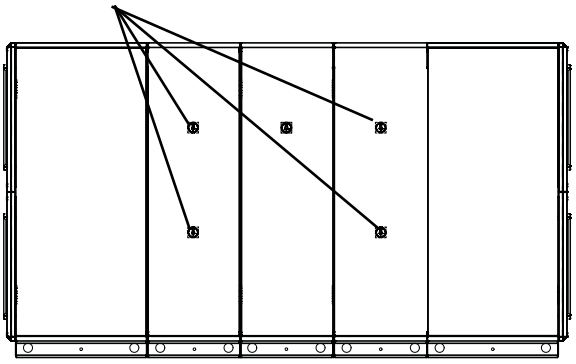
Open the cover on the electrical equipment cubicle.

The incoming power supply is routed through the cable entry on the upper cover panel by the **electrical equipment cubicle on the upper level** and on to the safety switch block in the electric equipment cubicle.

At **electrical equipment cubicle on the lower level,** open the inspection door above the electrical equipment cubicle. The incoming power supply is routed through the cable entry on the upper cover panel, down to the cable entries on the rear of the electrical equipment cubicle and on to the safety switch block in the electric equipment cubicle.

The cable entries on the back of the electrical equipment cubicle are accessible by opening the inspection door on the closest air handling unit section.

Possible locations of the safety isolating switch RX/HC

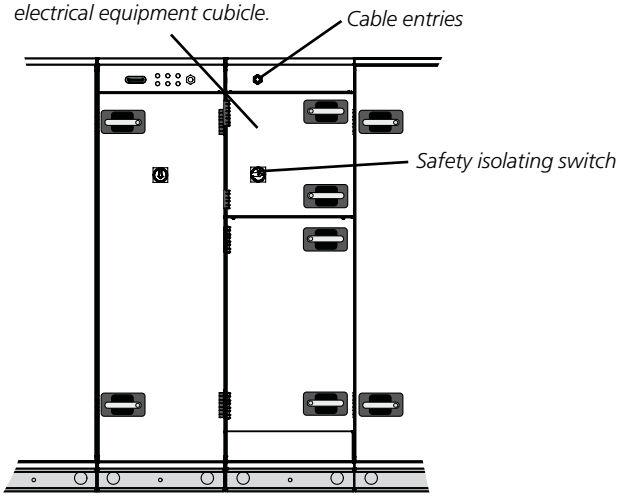


Electrical equipment cubicle on the upper level

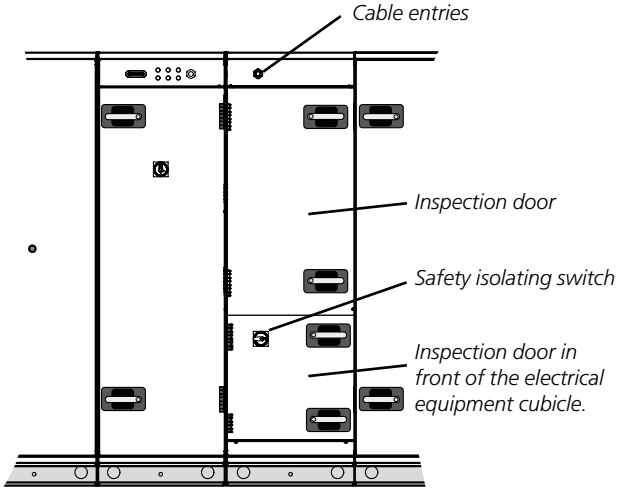
Inspection door in front of the electrical equipment cubicle.

Cable entries

Safety isolating switch



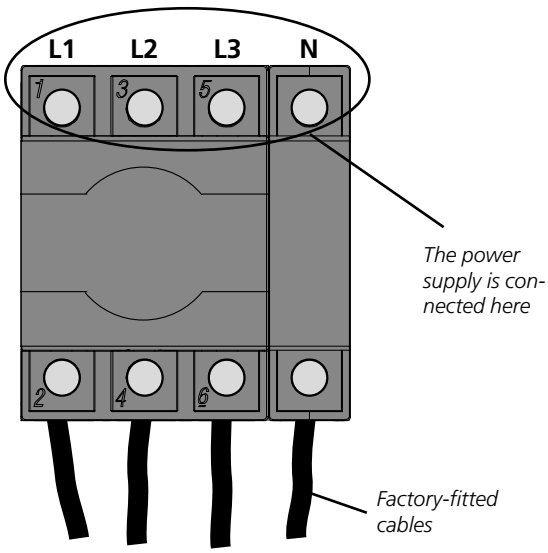
Electrical equipment cubicle on the lower level



Connect the incoming power supply to the safety switch block. The wiring terminal for incoming earth is situated right next to the safety switch.

5-core system, 400 V ±10%. Also see section 10 Technical data.

Safety switch block.



5. COMMISSIONING / CALIBRATION

5.1 General

Commissioning is performed according to the ordinary commissioning for GOLD RX, see the separate Operation and Maintenance Instructions.

Calibration of defrosting parameters is performed at the factory before delivery.

Recalibration may be necessary in the following instances:
Replacement of the GOLD air handling unit's control card IQlogic.
The exhaust air coil is modified or deformed.
The exhaust air coil has a surface coating that is considered small enough not to be rectified.
Other suspicions of erroneous calibration.

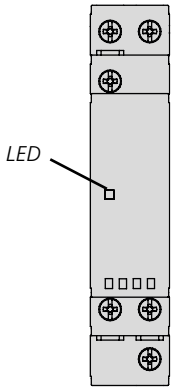
It is important during calibration that the coil is dry and the airflow is unaffected.

5.2 Phase-sequence monitor

GOLD RX/HC size 040 - 080 is equipped with a phase sequence monitor for compressors.

The phase sequence monitor is installed in the electrical equipment cubicle for RX/HC, see section 4 for the location of the electrical equipment cubicle.

Alarm no. 70:12 is initiated if an incorrect phase sequence is detected.



LED on = phase sequence correct.
LED flashes = fault indication.

5.3 Actions if incorrect phase-sequence

⚠ *Warning*
May only be performed by a qualified electrician or trained service personnel.

- Stop GOLD RX/HC on the handheld terminal.
- Set the safety switch to position OFF on RX/HC.
- Isolate the power supply to RX/HC.

Important:
Check that the incoming power supply to RX/HC is off by measuring.

- Switch two phases on the incoming power supply cable in order to obtain the correct phase sequence (direction of rotation).
- Connect the power supply to RX/HC.
- Set the safety switch on RX/HC to ON.
- Start GOLD RX/HC, see section 5.1.

6. ALARMS

For a description of the alarms, see the GOLD Manual for Alarms and Information Messages.

7 MAINTENANCE

7.1 Cleaning

If needed, clean the inside cleaning of the unit by vacuum cleaning and wiping surfaces with a damp cloth. Inspections should be performed twice a year.

7.2 Handling of refrigerant

The refrigerant used is R410A.

The refrigerant circuit is completely charged when the unit is delivered.

Warning
Under no circumstances may the refrigerant circuit be opened by unauthorised personnel, since it contains gas under high pressure. Only an accredited refrigeration company shall be permitted to modify or repair the refrigeration circuit. RX/HC is equipped with a safety valve to prevent excessively high pressure in the system caused by e.g. a fire.

Important:
Contact Swegon Service in the event of leakage of refrigerant.

Warning
If refrigerant is exposed to fire or in some other way becomes superheated in the atmosphere, poisonous gases can form.

Important:
Filling of refrigerant must be performed in accordance with the recommendations of the refrigerant manufacturer. Avoid direct skin contact with refrigerant and lubricant. Use tightly sitting protective glasses, protective gloves and covering work clothes. Arrange ventilation/point extraction. **In the event of eye contact** rinse the eyes using an eye-wash shower (or with lukewarm water) for 20 minutes. seek a doctor. **In the event of contact with skin** carefully wash with soap and lukewarm water. **In the event of frostbite** seek a doctor.

7.3 Leakage tracing interval/ Obligation to report

Must be carried out according to the F-Gas Regulation EU/517/2014 and associated local legislation.

7.4 Service

Only service personnel trained by Swegon should be permitted to modify the chiller.

8. TROUBLE SHOOTING AND LEAKAGE TRACING

8.1 Troubleshooting Schedule

Symptoms	Possible cause	Action
Compressor is not operating	The voltage has been isolated. Incorrect phase sequence. The compressor safety circuit has been broken. Defective compressor.	Check the operating/safety switch. Check the condition of the fuses. Check and change the phase sequence. Check, reset if needed. Replace the compressor.
Too low capacity	Leakage, inadequate refrigerant. The voltage has been isolated. No air flow or too low air flow across the evaporator. Thermostat/Control equipment incorrectly set or defective.	Leak test, fill with refrigerant if necessary. Check the operating/safety switch. Check the condition of the fuses. Check the air flow. Adjust the setting or replace faulty components.
The compressor switches off because the low pressure sensor has measured an excessively low value.	Inadequate refrigerant. No air flow or too low air flow across the evaporator. The expansion valve is defective. The low pressure switch is defective.	The cooling system is leaking. Tighten the leak and charge with refrigerant. Check the airflow. Check, replace. Check, replace.
The compressor switches off because the high pressure sensor has measured an excessively high value.	No air flow or too low air flow across the condenser. Excessively high exhaust air temperature. The high pressure sensor is defective.	Check the air flow. Check the exhaust air temperature. Check, replace.
Significant freezing on the evaporator.	The expansion valve is defective or incorrectly set. No air flow or too low air flow across the evaporator.	Check. Replace or adjust setting. Check the air flow.

8.2 Leakage Tracing

Leakage tracing should be carried out at least once per year as a precaution. The leakage tracing inspection must be documented.

If the system is leaking, this will become apparent firstly by impaired performance, or if the leakage is substantial, when the system does not operate at all.

If you suspect that the cooling system is leaking refrigerant, check the level of refrigerant in the sight glass located on the heating circuit's electrical equipment cubicle.

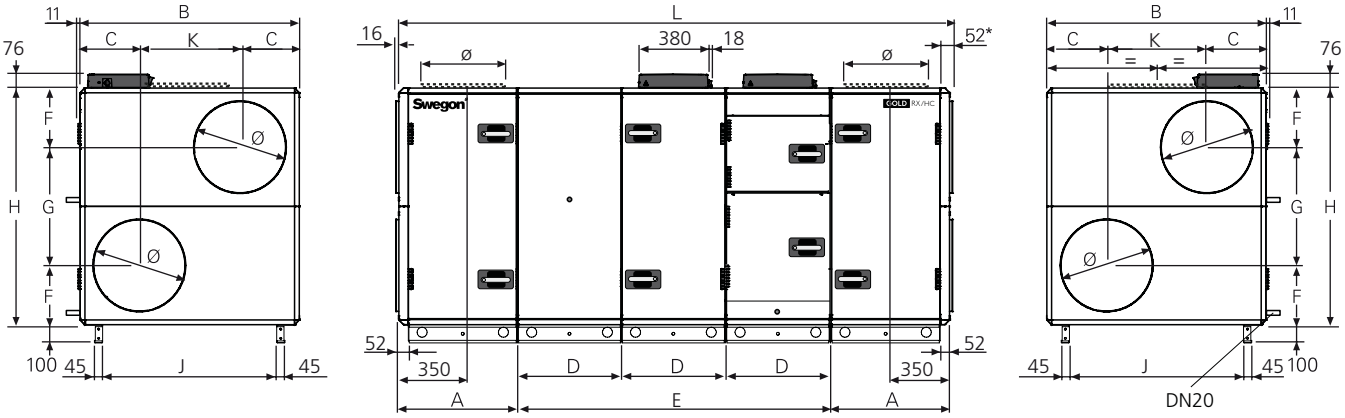
If you see continuous and a substantial amount of bubbling in the sight glass and the reversible heat pump operates at appreciably lower capacity than normal, the system is probably leaking. One or several bubbles appearing when the chiller is started up, operation at reduced capacity or normal operation need not necessarily indicate a refrigerant deficiency.

If it is bubbling in the sight glass and the chiller operates at appreciably lower capacity, call for qualified service help.

NOTE! Maintenance work in the refrigerant system is permitted to be carried out only by an accredited inspectorate (a company with requisite authorisation).

9. DIMENSIONS

RX/HC 011/012

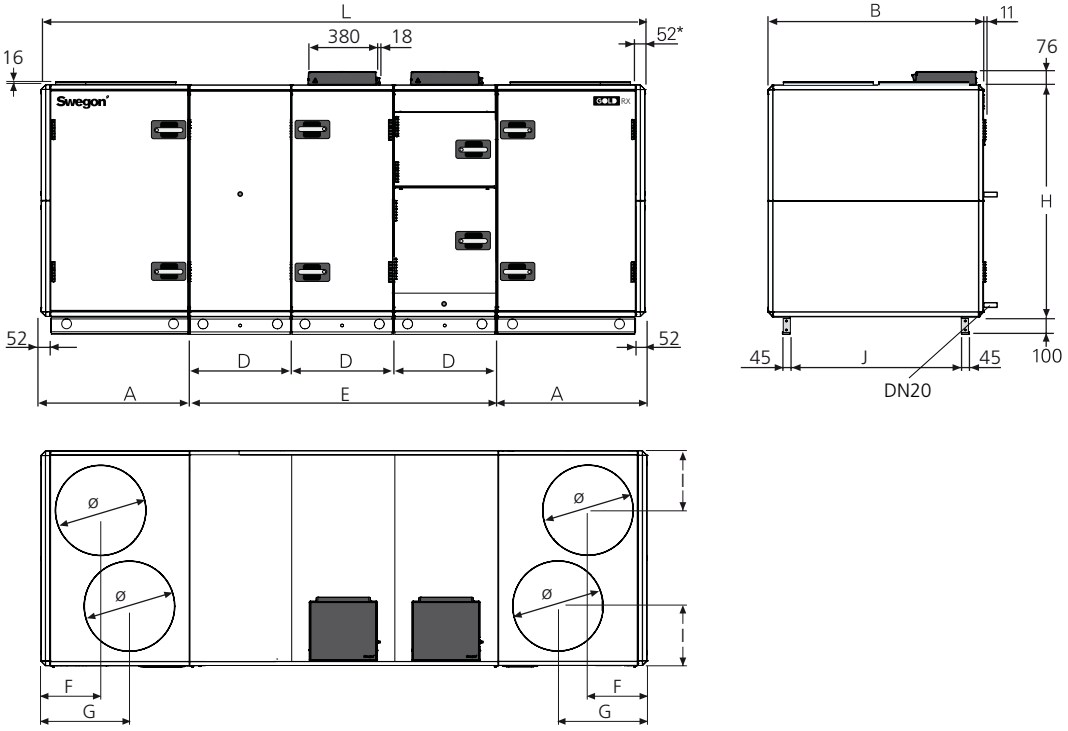


The illustration shows RX/HC integrated in a GOLD standard air handling unit set-up.
The installation length for RX/HC corresponds to the E-measurement.
Placement of the air handling unit sections, duct connections, connection hood, drain pipe, etc. may vary depending on the selected variant.

** The air handling unit is supplied without end connection panel if a duct accessory housed in an insulated casing will be connected. The AHU can also be supplied with full face end connection panel (accessory).*

Size	A	B	C	D	E	F	G	H	J	K	L	Ø	Weight, kg
011	647	1199	324	565	1695	324	647	1295	953	551	2989	500	737-845
012	647	1199	324	565	1695	324	647	1295	953	551	2989	500	765-879

RX/HC Top 011/012



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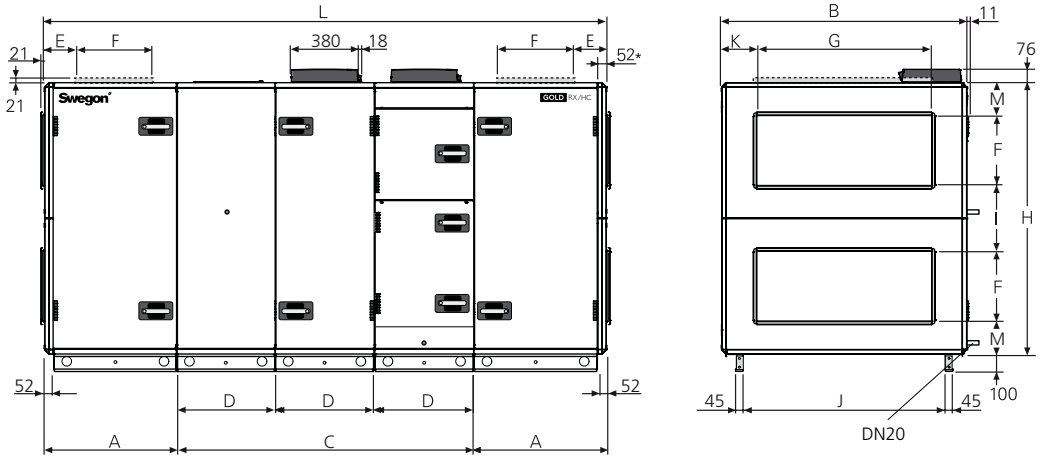
The installation length for RX/HC corresponds to the E-measurement.
Placement of the air handling unit sections, duct connections, connection hood, drain pipe, etc. may vary depending on the selected variant.

Size	A	B	D	E	F	G	H	I	J	L	Ø	Weight, kg
011	827	1199	565	1695	332	500	1295	332	953	3349	500	837-867
012	827	1199	565	1695	332	500	1295	332	953	3349	500	865-901

RX/HC 014/020

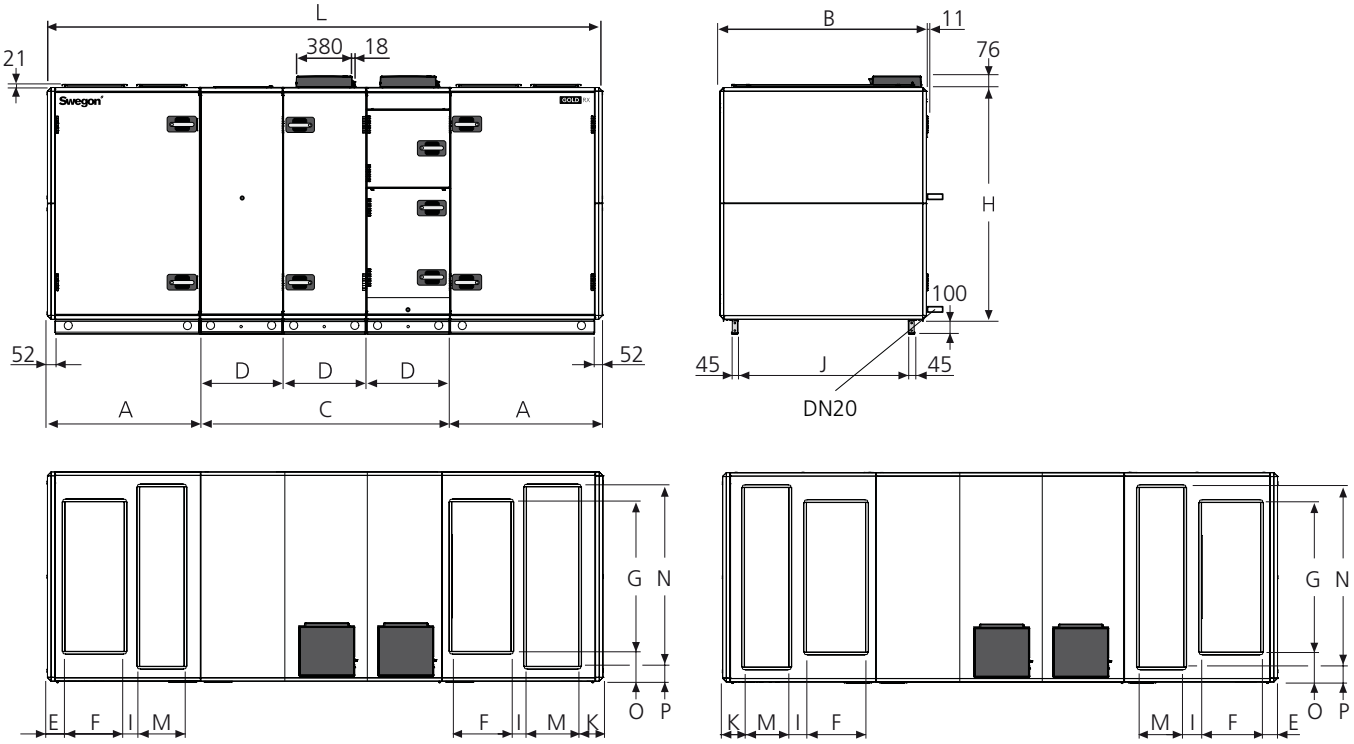


The illustration shows RX/HC integrated in a GOLD standard air handling unit set-up.
The installation length for RX/HC corresponds to the C-measurement.
Placement of the air handling unit sections, duct connections, connection hood, drain pipe, etc. may vary depending on the selected variant.

** The air handling unit is supplied without end connection panel if a duct accessory housed in an insulated casing will be connected.*
The AHU can also be supplied with full face end connection panel (accessory).

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	Weight, kg
014	757,5	1400	1695	565	205	400	1000	1551	375	1154	200	3210	188	934-1074
020	757,5	1400	1695	565	205	400	1000	1551	375	1154	200	3210	188	964-1124

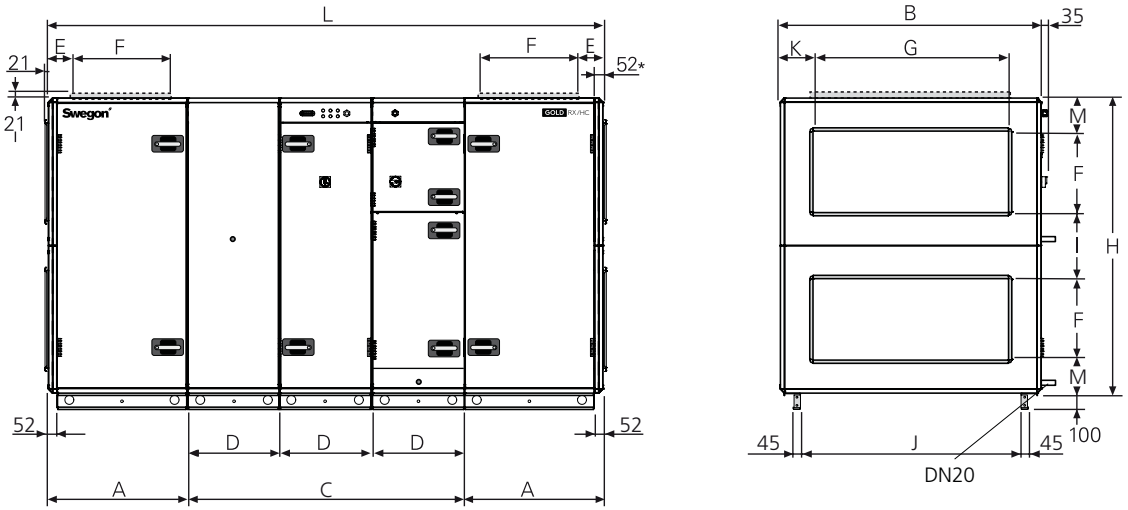
RX/HC Top 014/020



The illustration shows RX/HC integrated in a GOLD standard air handling unit set-up.
The installation length for RX/HC corresponds to the C-measurement.
Placement of the air handling unit sections, connection hood, drain pipe, etc. may vary depending on the selected variant.

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight, kg
014	1039	1400	1695	565	120	400	1000	1551	106	1154	165	3773	300	1200	200	100	1088-1156
020	1039	1400	1695	565	120	400	1000	1551	106	1154	165	3773	300	1200	200	100	1118-1210

RX/HC 025/030

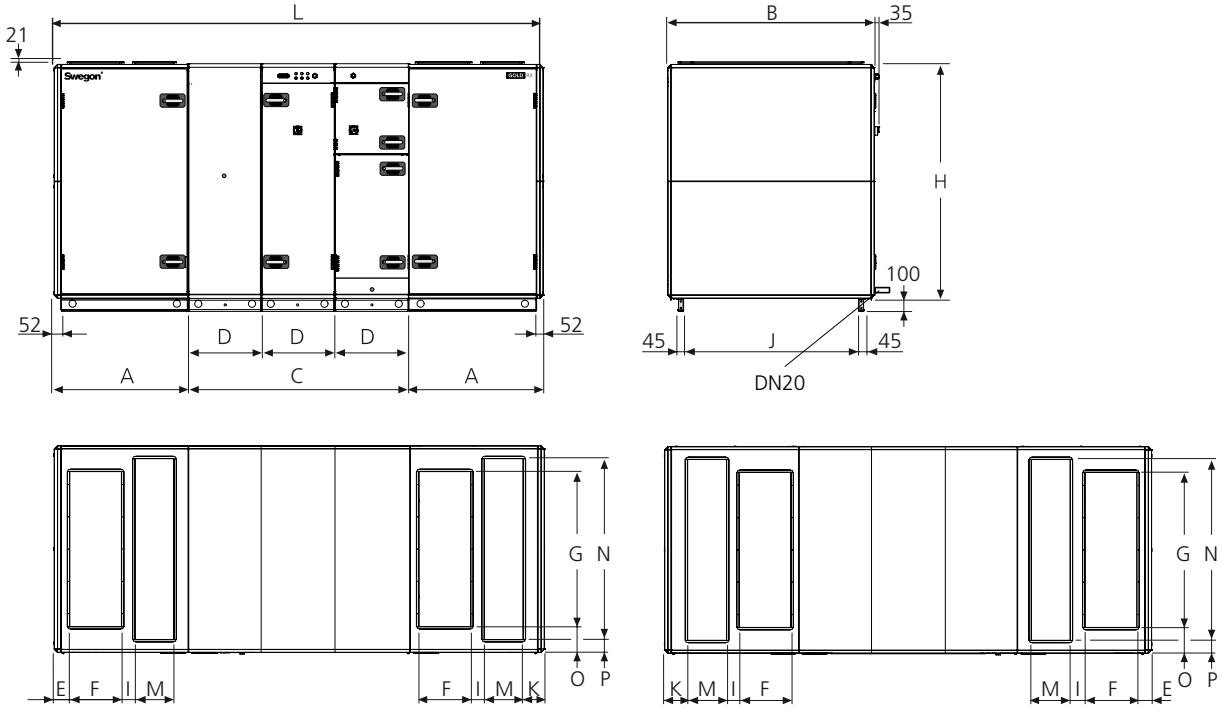


The illustration shows RX/HC integrated in a GOLD standard air handling unit set-up.
The installation length for RX/HC corresponds to the C-measurement.
Placement of the air handling unit sections, duct connections, connection hood, drain pipe, etc. may vary depending on the selected variant.

** The air handling unit is supplied without end connection panel if a duct accessory housed in an insulated casing will be connected.*
The AHU can also be supplied with full face end connection panel (accessory).

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	Weight, kg
025	848	1600	1695	565	200	500	1200	1811	405	1354	200	3391	203	1238-1445
030	848	1600	1695	565	200	500	1200	1811	405	1354	200	3391	203	1300-1479

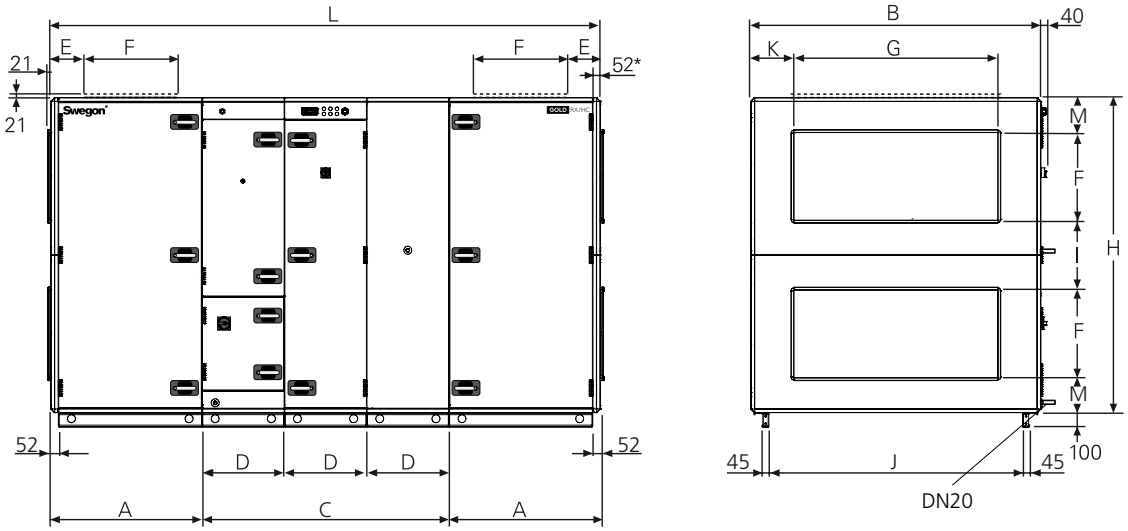
RX/HC Top 025/030



The illustration shows RX/HC integrated in a GOLD standard air handling unit set-up.
The installation length for RX/HC corresponds to the C-measurement.
Placement of the air handling unit sections, connection hood, drain pipe, etc. may vary depending on the selected variant.

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Weight, kg
025	1039	1600	1695	565	120	400	1200	1811	106	1354	165	3773	300	1400	200	100	1378-1507
030	1039	1600	1695	565	120	400	1200	1811	106	1354	165	3773	300	1400	200	100	1440-1541

RX/HC 035/040

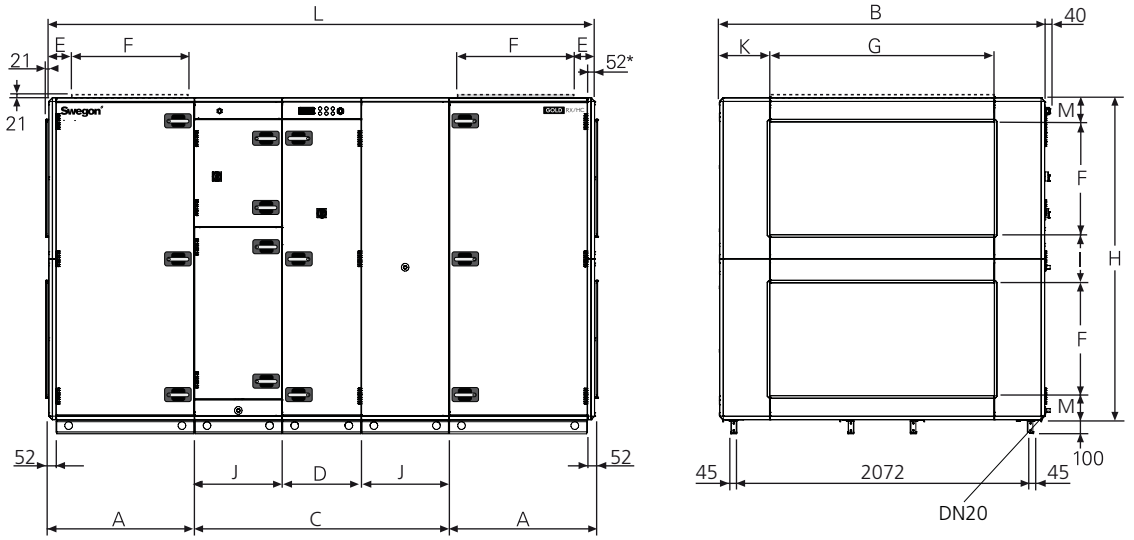


The illustration shows RX/HC integrated in a GOLD standard air handling unit set-up.
The installation length for RX/HC corresponds to the C-measurement.
Placement of the air handling unit sections, duct connections, connection hood, drain pipe, etc. may vary depending on the selected variant.

** The air handling unit is supplied without end connection panel if a duct accessory housed in an insulated casing will be connected. The AHU can also be supplied with full face end connection panel (accessory).*

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	Weight, kg
035	1038.5	1990	1695	565	245	600	1400	2159	479	1744	295	3772	240	1664-1922
040	1038.5	1990	1695	565	245	600	1400	2159	479	1744	295	3772	240	1740-2016

RX/HC 050/060

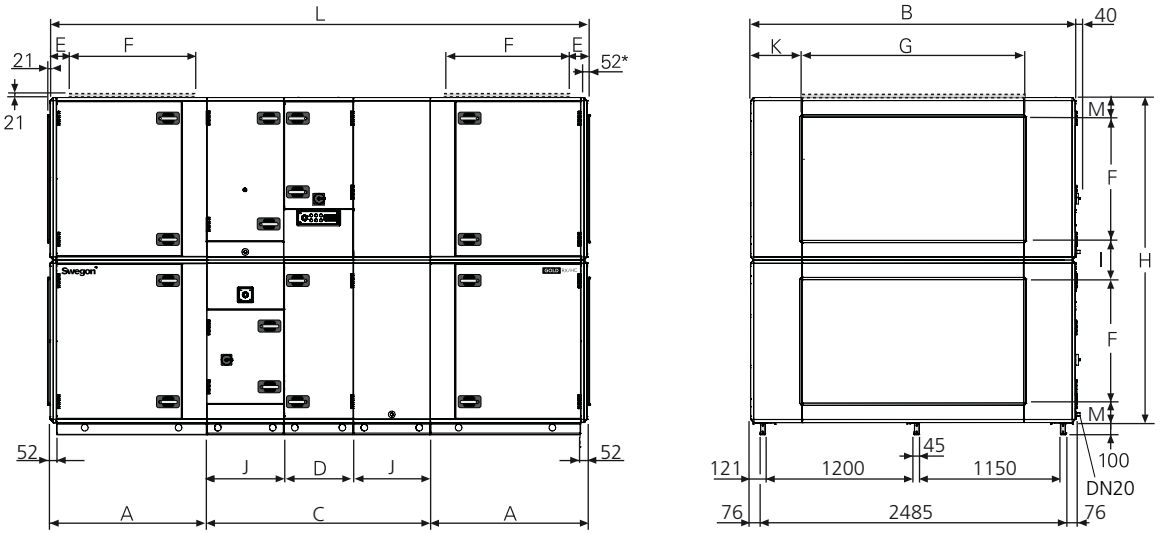


The illustration shows RX/HC integrated in a GOLD standard air handling unit set-up.
The installation length for RX/HC corresponds to the C-measurement.
Placement of the air handling unit sections, connection hood, drain pipe, etc. may vary depending on the selected variant.

** The air handling unit is supplied without end connection panel if a duct accessory housed in an insulated casing will be connected. The AHU can also be supplied with full face end connection panel (accessory).*

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	Weight, kg
050	1038.5	2318	1815	565	145	800	1600	2288	344	625	359	3892	172	2138-2445
060	1038.5	2318	1815	565	145	800	1600	2288	344	625	359	3892	172	2322-2611

RX/HC 070/080



The illustration shows RX/HC integrated in a GOLD standard air handling unit set-up.
The installation length for RX/HC corresponds to the C-measurement.
Placement of the air handling unit sections, connection hood, drain pipe, etc. may vary depending on the selected variant.

** The air handling unit is supplied without end connection panel if a duct accessory housed in an insulated casing will be connected. The AHU can also be supplied with full face end connection panel (accessory).*

Size	A	B	C	D	E	F	G	H	I	J	K	L	M	Weight, kg
070	1273,5	2637	1815	565	162	1000	1800	2640	320	625	418,5	4362	160	3322-3645
080	1273,5	2637	1815	565	162	1000	1800	2640	320	625	418,5	4362	160	3426-3785

10. GENERAL TECHNICAL DATA

Size	Airflow at SFPv 1.8 (m^3/s)	Min. airflow (m^3/s)	Cooling capacity (kW)[1)]	Heating capacity (kW)[2)]	Refrigerant (kg)	Power supply	EER[1)]	COP[2)]
011	0.89	0.45	14.8 / 8.2	44.0 / 4.1	6	3 x 400 V ±10%, +N +PE 16A	4.7	3.5
012	0.97	0.50	15.9 / 8.9	47.4 / 4.8	8	3 x 400 V ±10%, +N +PE 25A	4.6	3.5
014	1.48	0.75	24.2 / 13.6	72.0 / 7.9	8	3 x 400 V ±10%, +N +PE 25A	5.3	3.6
020	1.53	0.75	25.0 / 14.1	74.1 / 8.4	10	3 x 400 V ±10%, +N +PE 25A	4.4	3.4
025	2.07	0.95	33.7 / 19.1	100.1 / 11.5	10	3 x 400 V ±10%, +N +PE 25A	4.4	3.4
030	2.10	0.95	34.1 / 19.4	101.4 / 11.8	13	3 x 400 V ±10%, +N +PE 32A	4.9	3.4
035	3.12	1.50	51.2 / 28.5	152.0 / 16.4	15	3 x 400 V ±10%, +N +PE 50A	4.5	3.2
040	3.30	1,10	53.8 / 30.3	159.7 / 18.3	17.5	3 x 400 V ±10%, +N +PE 50A	4.9	3.3
050	4.22	1,40	68.8 / 38.9	204.4 / 23.2	17.5	3 x 400 V ±10%, +N +PE 63A	4.3	3.1
060	4.25	1,50	69.3 / 39.2	205.7 / 23.5	20	3 x 400 V ±10%, +N +PE 63A	3.9	3.0
070	5.51	2,00	90.5 / 50.5	268.8 / 28.7	25	3 x 400 V ±10%, +N +PE 63A	4.0	2.9
080	5.52	2,10	90.6 / 50.6	269.2 / 28.8	30	3 x 400 V ±10%, +N +PE 80A	4.0	2.9

1) For an outdoor temperature of 26°C, 50% RH, extract air temperature of 22°C, supply air temperature 16°C. Cooling capacity: rotating heat exchange / coil HC.
2) For an outdoor temperature of -20°C, 95% RH, extract air temperature of 22°C, supply air temperature 20°C. Heating capacity: rotating heat exchange / coil HC.

Sizing
For correct sizing, we refer to our air handling unit selection program AHU Design.

11. WIRING DIAGRAM

For the wiring diagram, see the separate document.

12. DECLARATION OF CONFORMITY

For Declaration of Conformity, see our home page at www.swegon.com under Products & Services.