



FULL DC INVERTER SYSTEMS
USER AND INSTALLATION MANUAL

OUTDOOR UNITS SDV6-ExxxASI

COMMERCIAL AIR CONDITIONERS SDV6

Original instructions

IMPORTANT NOTE:

Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.

EN

For downloading manual for this product, please enter the model name at this link:

**DE**

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OWNER'S MANUAL

1 OVERVIEW

1.1 Meaning of Various Labels

The precautions and things to note in this document involve very important information. Please read them carefully.

WARNING

A situation that may lead to severe injury or death.

CAUTION

A situation that may lead to mild or moderate injury.

NOTE

A situation that may cause damage to the equipment or loss of property.

INFORMATION

Indicates a useful hint or additional information.

2 SYSTEM INFORMATION

INFORMATION

The equipment must be operated by professionals or trained people, and it is mainly used for commercial purposes such as stores, shopping malls and large office buildings.

This unit can be used for heating/cooling.

NOTE

- Do not use the air conditioning system for other purposes. In order to avoid quality degradation, do not use the unit to cool precision instruments, food, plants, animals or works of art.
- For system maintenance and expansion, please contact professional staff.
- The units are partial unit airconditioners, complying with partial unit requirements of this International Standard, and must only be connected to other units that have been confirmed as complying to corresponding partial unit requirements of this International Standard.

3 USER INTERFACE

CAUTION

- Please contact the agent if you need to check and adjust the internal components.
- The figure shown in this manual is for reference only and may be slightly different from the actual product.

This operation manual only provides information on the main functions of this system.

4 BEFORE OPERATING

WARNING

- This unit consists of electrical components and hot parts (danger of electric shock and scald).
- Before you operate this unit, make sure that the installation personnel have installed it properly.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.

CAUTION

- The air outlet must not be directed at any human body as it is not conducive to the person's health to be exposed to long periods of moving cold/hot air.
- If the air conditioner is used together with a device that comes with a burner, make sure the room is fully ventilated to prevent anoxia (oxygen insufficiency).
- Do not operate the air conditioner when applying fumigated insecticide in the room. This may cause chemicals to be deposited inside the unit, and pose a danger to the health of people allergic to chemicals. This unit should only be serviced and maintained by a professional air conditioning service engineer. Incorrect servicing or maintenance can cause electric shock, fire or leakage of water. Contact your dealer for servicing and maintenance.
- A-weighted sound pressure of all the units level are all below 70 dB.
- Cleaning and user maintenance shall not be made by children without supervision.
- The appliance shall be installed in accordance with national wiring regulations.
- This appliance is intended to domestic and used by expert or trained users in shops, in light industry and on farms, or for commercial use by lay persons.

This operation manual is suitable for air conditioning systems with standard controls. Before you start the system, please contact the agent for information on the things to note when operating the system. If the installed unit has a custom control system, please ask the agent for information on the things to note when operating the system. Operating modes of the outdoor unit (depends on the indoor unit):

- Heating and cooling.
- Fan only operation.

Specialized functions vary with the type of indoor unit. Refer to the installation/user manuals for more information.

- Unit is marked with the following symbols:



This symbol indicates that electrical and electronic products must not be mixed with unsorted household waste. Do not attempt to dismantle the system on your own. All works involved in dismantling the system, handling the refrigerant, oil and other components must be carried out by authorized installation personnel, and the works must be carried out in accordance with the applicable law. The unit must be disposed of and treated at special treatment facilities for reuse and recycling. By making sure that this product is properly handled and disposed of, you help to minimize the negative impact on the environment and human health. For more information, please contact the installation personnel or local organization.

DISPOSAL: Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities.

Contact your local government for information regarding the collection systems available.

If electrical appliances are disposed of in landfills or dumps, hazardous substances can leak into the groundwater and get into the food chain, damaging your health and well-being.

5 OPERATIONS

5.1 Operating Range

Table 5.1

IDU Type	Common indoor unit		Fresh processing air indoor unit	
	Cooling mode	Heating mode	Cooling mode	Heating mode
Outdoor temperature	-15~55°C	-30~30°C	20~43°C	-5~16°C
Indoor temperature	16~32°C	15~30°C		
Indoor humidity	≤80% ^(a)			

(a) Condensate might form on the unit's surface if the humidity is above 80%

NOTE

The safety device will be triggered if the temperature or humidity exceeds these conditions, and the air conditioner may not run.

5.2 Operating System

5.2.1 System operations

The operating program varies with different combinations of outdoor unit and controller.

To protect this unit, please turn on the main power supply 12 hours before you start to operate this unit.

If there is a power outage while the unit is running, the unit will automatically restart its operation when the power supply resumes.

5.2.2 Cooling, heating, fan only and auto operations

The indoor units in the air conditioner can be controlled separately, but the indoor units in the same system cannot operate in the heating and cooling modes at the same time.

When the cooling and heating modes conflict, the mode is determined based on the setting of the "Menu mode" of the outdoor unit.

Table 5.2

Automatic priority mode	Automatic selection of heating or cooling priority based on the ambient temperature.
Cooling priority mode	When you select the cooling mode as the priority mode, the heating operations in the indoor unit stops running, while the cooling mode will operate as usual;
No.63 (VIP indoor unit) + voting priority mode	If the indoor unit 63 has been set and turned on, the operating mode of unit 63 will be regarded as the priority operating mode of the system. If the indoor unit 63 has not been set or not turned on, the mode adopted by most indoor units at the same time will be the priority operating mode of the system.
In response to heating mode only	Indoor units with the heating mode will operate normally, while indoor units in the cooling or fan mode will display the "mode conflict error". (SDV6 series indoorunit would not display this error)
In response to cooling mode only	Indoor units in the cooling and fan modes will operate normally, while indoor units in the heating mode will display the "E0 mode conflict error". (SDV6 series indoor unit would not displaythis error)
Heating priority mode	Indoor units in the cooling or fan mode will stop running, while indoor units in the heating mode will run as usual.
Change over	Only applicable to SDV6 series indoor unit, must set the No.63 (VIP indoor unit). The operation mode of non-VIP indoor unit cannot be selected by the wire controller even the outdoor unit is stop running.
Voting priority mode	The mode adopted by most indoor units at the same time will be the priority operating mode of the system.
First on priority mode	The operating mode of the first running Indoor unit will be regarded as the priority operating mode of the system.
Capability requirements priority mode	The mode adopted by the greater demand of indoor units at the same time will be the priority operating mode of the system.

5.2.3 Heating operation

Compared to the cooling operation, the heating operation takes a longer time.

Perform the following operations to prevent the heating capacity from dropping or prevent cold air from coming out of the system.

Defrost Operation

In the heating operation, as the outdoor temperature decreases, frost may be formed on the heat exchanger in the outdoor unit, making it more difficult for the heat exchanger to heat up the air. The heating capacity decreases, and a defrosting operation needs to be performed on the system in order for the system to provide sufficient heat to the indoor unit. At this point, the indoor unit will show the defrost operation on the display screen.

The indoor fan motor will automatically stop running so as to prevent cold air from coming out of the indoor unit when the heating operation starts. This process will take some time. This is not a malfunction.

INFORMATION

- When there is a drop in the external temperature, the heating capacity decreases. If this happens, please use another heating equipment and unit at the same time. (Make sure the room is well ventilated if you are using an equipment that produces fire.) Do not place any equipment that may produce a fire where the air outlets of the unit are or below the unit itself.
- Once the unit starts, it takes some time for the room temperature to rise, as the unit uses a hot air circulation system to heat the room.
- If the hot air rises to the ceiling, causing the ground area to become cold, it is recommended that you use a circulating device (to circulate the indoor air). Please contact the agent for details.

5.2.4 Operating system

1. Press the "switch" button on the controller.
Result: The running light turns on and the system starts to run.

2. Repeatedly press the mode selector on the controller to select the required operation mode.

Stop

Press the "switch" button on the controller again.
Result: The running light is now off, and the system stops running.

NOTE

Once the unit has stopped running, do not disconnect the power immediately. Wait for at least 10 minutes.

Adjust

Refer to the user manual for the controller on how to set the required temperature, fan speed and air flow direction.

5.3 Dry Program

5.3.1 System operations

The function in this program uses the minimum temperature drop (minimum indoor cooling) to bring about a drop in humidity in the room.

In the drying process, the system automatically determines the temperature and fan speed (cannot use the user interface to implement the settings).

5.3.2 Dry operations

Start

1. Press the switch button on the controller.
Result: The running light turns on and the system starts to run.
2. Repeatedly press the mode selector on the controller.
3. Press the button to adjust the air flow direction (this function is not available for all indoor units).

Stop

4. Press the switch button on the user interface again.
Result: The running light is now off, and the system stopped running.

WARNING

Do not touch the air outlet or the horizontal blade when operating in the fan swing mode. Your fingers may be caught in the unit or the unit may be damaged.

6 MAINTENANCE AND REPAIR

NOTE

- Do not check or repair the unit on your own. Please get relevant professionals to conduct any checks or repairs.
- Do not use substances like gasoline, diluent, and chemical dust cloth to wipe the operations panel of the controller. This may remove the surface layer of the controller. If the unit is dirty, immerse a cloth in diluted and neutral detergent, squeeze it dry, and then use it to clean the panel. Finally, wipe it with a dry cloth.

WARNING

- When the fuse melts, do not use any unspecified fuse or other wire to replace the original fuse. The use of electrical wires or copper wires may cause the unit to malfunction or cause a fire.
- Do not insert fingers, sticks, or other items into the air inlet or outlet. Do not remove the fan mesh cover. When the fan rotates at a high speed, it may cause bodily injury.
- It is very dangerous to check the unit when the fan is rotating.
- Make sure you turn off the main power switch before any maintenance work begins.
- Do check the supporting and base structure of the unit for any damages after a long period of use. The unit may drop and cause personal injury if there is any damage.

6.1 Maintenance After the Unit Has Been Shut Down For a Long Period

For example, in early summer or winter.

- Check and remove all objects that may clog the air inlets and outlets of the indoor and outdoor units.
- Clean the air filter and external shell of the unit. Please contact the installation or maintenance personnel. The installation/operation manual of the indoor unit includes maintenance tips and cleaning procedures. Make sure that the clean air filter is installed in its original position.
- Turn on the main power supply 12 hours before this unit is operated in order to ensure that the unit runs smoothly. The user interface is displayed once the power is turned on.

6.2 Maintenance Before the Unit Is Shut Down for a Long Period

For example, at the end of winter and summer.

- Run the indoor unit in the fan mode for about half a day to dry the internal parts of the unit.
- Turn off the power supply.
- Clean the air filter and external shell of the unit. Please contact the installation or maintenance personnel to clean the air filter and external shell of the indoor unit. The installation/operation manual of the specialized indoor unit includes maintenance tips and cleaning procedures. Make sure that the clean air filter is installed in its original position.

6.3 About The Refrigerant

This product contains fluorinated greenhouse gases as stipulated in the Kyoto Protocol. Do not discharge the gas into the atmosphere.

Refrigerant Type: R410A

GWP Value: 2088

Based on the applicable law, the refrigerant must be checked regularly for leakages. Please contact the installation personnel for more information.

WARNING

- The refrigerant in the air conditioner is relatively safer, and usually does not leak. If the refrigerant leaks, and comes in contact with burning objects in the room, it will produce harmful gases.
- Shut down any flammable heating device, ventilate the room and contact the agent of the unit immediately.
- Do not use the air conditioner again until the maintenance personnel has confirmed that the refrigerant leakage has been sufficiently resolved.

6.4 After-sales Service and Warranty

6.4.1 Warranty period

This product contains the warranty card that was completed by the agent during installation. The customer must check the completed warranty card and keep it properly.

If you need to repair the air conditioner during the warranty period, please contact the agent and provide the warranty card.

6.4.2 Recommended maintenance and inspection

As the use of the unit for many years will eventually lead to a dust layer, the performance of the unit will degenerate to a certain extent.

As professional skills are needed to dismantle and clean the unit, and for the optimal maintenance effects of this unit, please contact your agent for more details.

When you request the agent for assistance, please remember to state:

- Complete model name of the air conditioner.
- Date of installation.
- Details on the fault symptoms or errors, and any defects.

WARNING

- Do not attempt to modify, dismantle, remove, reinstall or repair this unit, as the improper dismantling or installation may result in electric shock or fire. Please contact the agent.
- If the refrigerant accidentally leaks, make sure that there is no fire around the unit. The refrigerant itself is completely safe, non-toxic and non-flammable, but it will produce toxic gases when it accidentally leaks and comes in contact with flammable substances generated by existing heaters, and burning devices in the room. You must get a qualified maintenance personnel to verify that the point of leakage has been repaired or rectified before you restore the operations of the unit.

6.4.3 Shorter maintenance and replacement cycle

In the following situations, the "maintenance cycle" and "replacement cycle" may be shortened.

The unit is used in the following situations:

- Temperature and humidity fluctuations are outside the normal ranges.
- Large power fluctuations (voltage, frequency, waveform distortion etc.) (must not use the unit if the power fluctuations exceed the allowed range).
- Frequent collisions and vibrations.
- The air may contain dust, salt, harmful gas or oil such as sulphite and hydrogen sulphide.
- Frequent on and off of unit or operating time is too long (in places where the air conditioning is on for 24 hours a day).

The system maintenance must be carried out by a qualified maintenance personnel:

Table 7.1

Symptom	Measures
If a safety device, such as a fuse, circuit breaker or a leakage circuit breaker is triggered frequently or the ON/OFF switch is not working properly.	Turn off the main power switch.
The operating switch is not functioning normally.	Turn off the power supply.
If the unit number is displayed on the user interface, and the operating indicator is flickering, and an error code is shown on the screen as well.	Notify the installation personnel and report the error code.

Other than the above-mentioned situations, and where the fault is not obvious, if the system continues to malfunction, carry out the following steps to investigate.

Table 7.2

Symptom	Measures
The system does not run at all.	<p>Check if there is a power failure. Wait for the power supply to be restored. If a power failure occurs when the unit is still running, the system will restart automatically once the power is restored.</p> <p>Check if the fuse is broken or if the circuit breaker is working. If necessary, replace the fuse or reset the circuit breaker.</p>
The system works fine in the fan-only operating mode but stop running once it enters the heating or cooling operation modes.	<p>Check if the air inlets or outlets of the outdoor or indoor units are blocked by any obstacles. Remove the obstacles, and maintain good ventilation in the room.</p>
The system is running but there is insufficient cooling or heating.	<p>Check if the air inlets or outlets of the outdoor or indoor units are blocked by any obstacles.</p> <p>Remove the obstacles, and maintain good ventilation in the room.</p> <p>Check if the filter is blocked (please refer to the "Maintenance" section in the manual of the indoor unit).</p> <p>Check the temperature settings.</p> <p>Check the fan speed settings on the user interface.</p> <p>Check if the doors and windows are open. Close the doors and windows to shut out wind from the external environment.</p> <p>Check if there are too many people in the room when the cooling mode is in operation. Check if the heat source of the room is too high.</p> <p>Check if there is direct sunlight into the room. Use curtains or blinds.</p> <p>Check that the angle of air flow is appropriate.</p>

7 TROUBLESHOOTING

The warranty does not cover the damage caused by dismantling or cleaning of the internal components by unauthorized agents.

WARNING

- When any unusual situations arises (burning odour, etc.), stop the unit immediately and turn off the power.
- As a result of a certain situation, the unit has caused damage, an electric shock, or a fire. Please contact the agent.

7.1 Error Code: Overview

If an error code appears on the unit user interface, please contact the installation personnel and inform them of the error code, device model, and serial number (you can find the information on the nameplate of this unit).

Table 7.3 Error code

Error code	Error description	Manual restart required
A01	Emergency stop	NO
xA61	Address (x) of the slave unit error	NO
AAx	No.x driver mismatch	NO
xb53	No. x cooling fan error	YES
C13	Outdoor unit address is repeated	NO
C21	Communication error between indoor and master unit	NO
C26	Number of indoor units detected by master unit has decreased or less than the setting amount	NO
C28	Number of indoor units detected by master unit has increased or more than the setting amount	NO
xC31	Communication error of address X slave outdoor unit	NO
C32	Number of slave units detected by master unit has decreased	NO
C33	Number of slave units detected by master unit has increased	NO
xC41	Communication error between main control chip and inverter driver chip	NO
E41	Outdoor ambient temperature sensor (T4) error (open/short)	NO
F31	Plate heat exchanger cooling refrigerant inlet temperature sensor (T6B) error (open/short)	NO
F41	Outdoor heat exchanger temperature sensor (T3) error (open/short)	NO
F51	Plate heat exchanger cooling refrigerant inlet temperature sensor (T6A) error (open/short)	NO
F62	Inverter module temperature (NTC) protection	NO
F63	Non-inductance Resistor temperature (Tr) protection	NO
F6A	F62 protection occurs 3 times in 100 minutes	YES
F71	Discharge temperature sensor (T7C) error (open/short)	YES
F72	Discharge temperature (T7C) protection	NO
F75	Compressor discharge insufficient superheat protection	NO
F7A	F72 protection occurs 3 times in 100 minutes	YES
F81	Gas stop-valve temperature sensor (Tg) error (open/short)	NO
F91	Liquid pipe temperature sensor (T5) error (open/short)	NO
FA1	Outdoor heat exchanger inlet temperature sensor (T8) error (open/short)	NO
FC1	Outdoor heat exchanger outlet temperature sensor (TL) error (open/short)	NO
Fd1	Compressor suction temperature sensor (T7) error (open/short)	NO
xL--	No. (x) compressor error. Refer to Table 7.5 for indications of "--"	YES
xL01	xL1* or xL2* error occurs 3 times in 60 minutes. Refer to Table 7.5 for indications of "**"	YES
xJ--	No. (x) fan motor error. Refer to Table 7.6 for indications of "--"	YES
xJ01	xJ1* or xJ2* error occurs 10 times in 60 minutes. Refer to Table 7.6 for indications of "**"	YES
P11	High pressure sensor error	NO
P12	Discharge pipe high pressure protection	NO
P13	Discharge pipe high pressure switch protection	NO
P14	P12 error occurs 3 times in 60 minutes	YES
P21	Low pressure sensor error	YES
P22	Suction pipe low pressure protection	NO
P24	Suction pipe low pressure abnormal rise	NO
P25	P22 error occurs 3 times in 100 minutes	YES

xP32	No. (x) compressor high DC bus current protection	NO
xP33	xP32 protection occurs 3 times in 100 minutes	YES
P51	High AC voltage protection	NO
P52	Low AC voltage protection	NO
P53	Power supply BN connect protection, or the phase is missing, or unbalanced when powered on	YES
P54	DC bus low voltage protection	NO
P55	DC bus ripple wave protection, or the phase is missing, or unbalanced when powered on	YES
xP56	No. (x) Inverter module DC bus low voltage error	YES
xP57	No. (x) Inverter module DC bus high voltage error	YES
xP58	No. (x) Inverter module DC bus excessively high voltage error	YES
P71	EEPROM error	YES
Pb1	HyperLink overcurrent error	YES
Pd1	Anti-condensation protection	NO
Pd2	Pd1 protection occurs 2 times in 60 minutes	YES
1b01	Electronic expansion valve (EEVA) error	YES
2b01	Electronic expansion valve (EEVB) error	YES
3b01	Electronic expansion valve (EEVC) error	YES
4b01	Electronic expansion valve (EEVD) error	YES
bA1	HyperLink cannot control indoor unit's electronic expansion valve	YES

Note: 'x' is a placeholder for the fan or compressor address, with 1 representing fan A or compressor A and 2 representing fan B or compressor B.

Table 7.4 Installation and debugging error code

Error code	Error description	Manual re-start required
U11	Outdoor unit type setting error	YES
U12	Capacity setting error	YES
U21	The system contains the 1 st generation indoor unit or the indoor units address are repeated	YES
U31	No test run or unsuccessful test run, please re-enter the test run.	YES
U32	Outdoor temperature out of operating range	YES
U33	Indoor temperature out of operating range	YES
U34	Outdoor and indoor temperature out of operating range	YES
U35	Liquid side stop valve is not opened	YES
U37	Gas side stop valve is not opened	YES
U38	No address	YES
U3A	The communication cable is connected incorrectly	NO
U3b	The installation environment is abnormal	YES
U3C	Auto mode error	NO
U41	Common indoor unit exceeds the allowable connection range	YES
U42	Fresh Air Processing indoor unit exceeds the allowable connection range	YES
U43	AHU kit (discharge air temperature control) is out of the allowable connection range	YES
U44	AHU kit (return air temperature control) is out of the allowable connection range	YES
U48	The total capacity of the indoor unit is out of the allowable connection range	YES
U51	Detected more than one outdoor unit in the individual VRF system	YES
U53	Detected different series outdoor units in the same VRF system	YES

Table 7.5 Compressor driver error code

Error code	Error description	Manual re-start required
1L1E	Hardware overcurrent	NO
1L11	Software overcurrent	NO
1L12	Software overcurrent protection last 30s	NO
1L2E	Inverter module high temperature protection	NO
1L3E	Low bus voltage error	NO
1L31	High bus voltage error	NO
1L32	Serious over voltage error of bus	NO
1L33	Bus voltage drop fault	NO
1L43	Abnormal current sampling	NO
1L5E	Startup failed	NO
1L52	No load protection	NO
1L6E	Motor phase loss protection	NO

Table 7.6 Fan motor error code

Error code	Error description	Manual re-start required
xJ1E	Hardware overcurrent	NO
xJ11	Software overcurrent	NO
xJ12	Software overcurrent protection last 30s	NO
xJ2E	Inverter module high temperature protection	NO
xJ3E	Low bus voltage error	NO
xJ31	High bus voltage error	NO
xJ32	Serious over voltage error of bus	NO
xJ43	Abnormal current sampling	NO
xJ5E	Startup failed	NO
xJ52	No load protection	NO
xJ6E	Motor phase loss protection	NO

Note: 'x' is a placeholder for the fan address, with 1 representing fan A and 2 representing fan B.

Table 7.7 Status code

Status code	Code description	Manual re-start required
d0x	Oil return running , x represents oil return operation steps	NO
dfx	Defrost running , x represents defrosting operation steps	NO
d11	Outdoor ambient temperature exceeds the upper limit in Heating mode	NO
d12	Outdoor ambient temperature exceeds the lower limit in Heating mode	NO
d13	Outdoor ambient temperature exceeds the upper limit in Cooling mode	NO
d14	Outdoor ambient temperature exceeds the lower limit in Cooling mode	NO
d31	Refrigerant judgment, no result	NO
d32	Refrigerant quantity judgment, Significantly excessive	NO
d33	Refrigerant quantity judgment, Slightly excessive	NO
d34	Refrigerant quantity judgment, normal	NO
d35	Refrigerant quantity judgment, Slightly insufficient	NO
d36	Refrigerant quantity judgment, Significantly insufficient	NO
d41	System exist no power indoor unit, HyperLink is controlling the indoor unit's valve	NO
d42	Communication error between the outdoor unit and the expansion board	NO

7.2 Fault Symptom: Non Air Conditioning Issues

The following fault symptoms are not caused by the air conditioning:

7.2.1 Fault symptom: System cannot run

Air conditioner does not start immediately after pressing the switch button on the controller. If the operating indicator lights up, the system is working normally. In order to prevent overloading of the compressor motor, restart the air conditioner 7 minutes after the switch button is pressed to prevent it from shutting down immediately after it is on. The same start-up delay occurs after the mode selector is pressed.

7.2.2 Fault symptom: Fan speed is not consistent with the setting

Even if the fan speed regulation button is pressed, the fan speed does not change. During heating, when the indoor temperature reaches the set temperature, the outdoor unit will shut down, and the indoor unit switches to the quiet fan speed mode. This is to prevent cold air from blowing directly at the room user. The fan speed will not change even when another indoor unit is in heating operation, if the button is pressed.

7.2.3 Fault symptom: Fan direction is not consistent with the setting

The air direction is not consistent with the user interface display. The air direction does not swing. This is because the unit is controlled by the centralized controller.

7.2.4 Fault symptom: A unit is emitting white smoke (indoor unit)

When cooling during high humidity, if the interior pollution of the indoor unit is severe, the indoor temperature distribution will be uneven. The interior of the indoor unit should be cleaned. Ask the agent for detailed information on how to clean the unit. This operation must be carried out by qualified maintenance personnel.

Surface immediately after cooling has stopped and when the indoor humidity is relatively low. This is due to the steam produced by the warm refrigerant gas on its return path to the indoor unit.

7.2.5 Fault symptom: A unit is emitting white smoke (indoor unit, outdoor unit)

After the defrosting operation, switch the system to the heating mode. The moisture produced by the defrosting operation will become steam to be discharged out of the system.

7.2.6 Fault symptom: The air conditioner is producing noise (indoor unit)

A "zeen" sound is heard the moment the system is powered on. This noise is produced by the electronic expansion valves inside the indoor unit as they begin to work. The sound volume will be reduced in about 1 minute.

A soft and continuous "shah" sound can be heard when the system is in a cooling mode or has stopped running. This noise can be heard when the drainage pump is running (optional accessory).

A loud creaking "pishi-pishi" sound can be heard once the system stops after it has heated up the room. The expansion and contraction of plastic parts caused by temperature changes will also make this noise.

Once the indoor unit stops, a soft "sah" or "choro-choro" sound can be heard. This noise can be heard when another indoor unit is still running. Must maintain a small amount of refrigerant flow in order to prevent oil and refrigerant residues in the system.

7.2.7 Fault symptom: Noise from air conditioner (indoor unit, outdoor unit)

A soft, continuous hissing sound can be heard when the system is in cooling or defrosting operation. This is the sound of the refrigerant gas flowing in the indoor and outdoor units.

A hissing sound is heard the moment the system starts or stops operation or after the defrosting operation has been completed. This is the noise produced when the refrigerant flow is stopped or changed.

7.2.8 Fault symptom: Noise from air conditioner (outdoor unit)

When the tone of the operating noise changes. This noise is caused by frequency changes.

7.2.9 Fault symptom: Dust and dirt in the unit

When using the unit for the first time. This is because there is dust inside the unit.

7.2.10 Fault symptom: The unit is emitting a strange odor

This unit will absorb the odours of rooms, furniture, cigarettes and others, and then disperse the odours again.

Small animals stray into the unit, which can also cause odors.

7.2.11 Fault symptom: ODU fan does not run

In the course of operation. Control speed of fan motor to optimize the product operations.

7.2.12 Fault symptom: Hot air is felt when the indoor unit stops

Different types of indoor units operating in the same system. When another unit is running, part of the refrigerant will still flow through this unit.

8 CHANGE INSTALLATION SITE

Please contact the agent to dismantle and reinstall all the units. You need specialized skills and technology to move the units.

9 DISPOSAL

This unit uses hydrogen fluorocarbons. Please contact the agent when you want to dispose this unit. Based on the requirements of the law, the collection, transportation and disposal of refrigerants must be in accordance with the regulations governing the collection and destruction of hydrofluorocarbons.

10 TECHNICAL DATA

10.1 Erp information

8HP

Cooling mode:

Information requirements for air-to-air conditioners								
Model(s): SDV6-E252ASI								
Test matching indoor units form, no-duct: 2×SDV6-C45+SDV6-C80+SDV6-C90								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
Type: compressor driven								
Driver of compressor: electric motor								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	25.20	kW		Seasonal space cooling energy efficiency	η _{s,c}	287.0	%
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27/19°C (dry/wet bulb)					Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T _j			
T _j =+35°C	P _{dc}	25.20	kW		T _j =+35°C	EER _d	330	%
T _j =+30°C	P _{dc}	18.57	kW		T _j =+30°C	EER _d	497	%
T _j =+25°C	P _{dc}	11.94	kW		T _j =+25°C	EER _d	841	%
T _j =+20°C	P _{dc}	8.42	kW		T _j =+20°C	EER _d	1520	%
Degradation co-efficient for air conditioners(*)								
	C _{dc}	0.25	--					
Power consumption in modes other than "active mode"								
Off mode	P _{OFF}	0.005	kW		Crankcase heater mode	P _{CK}	0.04	kW
Thermosat-off mode	P _{TO}	0.005	kW		Standby mode	P _{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air air conditioner: air flow rate, outdoor measured	--	11800	m ³ /h
Sound power level, outdoor	L _{WA}	76	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)If C _{dc} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

8HP

Heating mode:

Information requirements for heat pumps								
Model(s): SDV6-E252ASI Test matching indoor units form, no-duct: 2×SDV6-C45+SDV6-C80+SDV6-C90								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	25.20	kW		Seasonal space heating energy efficiency	η _{s,h}	163.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T _j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T _j			
T _j =-7°C	P _{dh}	12.12	kW		T _j =-7°C	COP _d	292	%
T _j =+2°C	P _{dh}	7.38	kW		T _j =+2°C	COP _d	366	%
T _j =+7°C	P _{dh}	4.74	kW		T _j =+7°C	COP _d	590	%
T _j =+12°C	P _{dh}	4.92	kW		T _j =+12°C	COP _d	860	%
T _{biv} =bivalent temperature	P _{dh}	13.70	kW		T _{biv} =bivalent temperature	COP _d	235	%
T _{OL} =operation temperature	P _{dh}	13.70	kW		T _{OL} =operation temperature	COP _d	235	%
Bivalent temperature	T _{biv}	-10	°C					
Degradation co-efficient for heat pumps(**)	C _{dh}	0.25	--					
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P _{OFF}	0.005	kW		Back-up heating capacity(*)	e _{ibu}	0.04	kW
Thermosat-off mode	P _{TO}	0.005	kW		Type of energy input			
Crankcase heater mode	P _{CK}	0.04	kW		Standby mode	P _{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	11800	m ³ /h
Sound power level,outdoor	LWA	76	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)								
(**)If C _{dh} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

10HP

Cooling mode:

Information requirements for air-to-air conditioners								
Model(s): SDV6-E280ASI								
Test matching indoor units form, no-duct: SDV6-C45 + 3×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
Type: compressor driven								
Driver of compressor: electric motor								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	28.00	kW		Seasonal space cooling energy efficiency	$\eta_{s,c}$	279.0	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19°C (dry/wet bulb)					Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	28.00	kW		$T_j=+35^\circ\text{C}$	EER_d	309	%
$T_j=+30^\circ\text{C}$	P_{dc}	20.63	kW		$T_j=+30^\circ\text{C}$	EER_d	480	%
$T_j=+25^\circ\text{C}$	P_{dc}	13.26	kW		$T_j=+25^\circ\text{C}$	EER_d	834	%
$T_j=+20^\circ\text{C}$	P_{dc}	8.96	kW		$T_j=+20^\circ\text{C}$	EER_d	1460	%
Degradation co-efficient for air conditioners(*)								
	C_{dc}	0.25	--					
Power consumption in modes other than "active mode"								
Off mode	P_{OFF}	0.005	kW		Crankcase heater mode	P_{CK}	0.04	kW
Thermosat-off mode	P_{TO}	0.005	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air air conditioner: air flow rate, outdoor measured	--	12500	m^3/h
Sound power level, outdoor	L_{WA}	79	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)If C_{dc} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

10HP

Heating mode:

Information requirements for heat pumps								
Model(s): SDV6-E280ASI Test matching indoor units form, no-duct: SDV6-C45 + 3×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	28.00	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	161.4	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T_j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=-7^\circ\text{C}$	P_{dh}	14.16	kW		$T_j=-7^\circ\text{C}$	COP_d	285	%
$T_j=+2^\circ\text{C}$	P_{dh}	8.62	kW		$T_j=+2^\circ\text{C}$	COP_d	402	%
$T_j=+7^\circ\text{C}$	P_{dh}	5.54	kW		$T_j=+7^\circ\text{C}$	COP_d	491	%
$T_j=+12^\circ\text{C}$	P_{dh}	5.19	kW		$T_j=+12^\circ\text{C}$	COP_d	712	%
T_{biv} =bivalent temperature	P_{dh}	16.00	kW		T_{biv} =bivalent temperature	COP_d	228	%
T_{OL} =operation temperature	P_{dh}	16.00	kW		T_{OL} =operation temperature	COP_d	228	%
Bivalent temperature	T_{biv}	-10	°C					
Degradation co-efficient for heat pumps(**)								
	C_{dh}	0.25	--		Supplementary heater			
Power consumption in modes other than "active mode"					Back-up heating capacity(*)			
Off mode	P_{OFF}	0.005	kW		e_{lbu}	0.04	kW	
Thermosat-off mode	P_{TO}	0.005	kW		Type of energy input			
Crankcase heater mode	P_{CK}	0.04	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	12500	m ³ /h
Sound power level,outdoor	LWA	79	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)								
(**)If C_{dh} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

12HP

Cooling mode:

Information requirements for air-to-air conditioners							
Model(s): SDV6-E335ASI							
Test matching indoor units form, no-duct: 4×SDV6-C45 + 2×SDV6-C80							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	33.50	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	273.4	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	33.50	kW	$T_j=+35^\circ\text{C}$	EER_d	290	%
$T_j=+30^\circ\text{C}$	P_{dc}	24.68	kW	$T_j=+30^\circ\text{C}$	EER_d	519	%
$T_j=+25^\circ\text{C}$	P_{dc}	15.86	kW	$T_j=+25^\circ\text{C}$	EER_d	754	%
$T_j=+20^\circ\text{C}$	P_{dc}	8.62	kW	$T_j=+20^\circ\text{C}$	EER_d	1410	%
Degradation co-efficient for air conditioners(*)	C_{dc}	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.005	kW	Crankcase heater mode	P_{CK}	0.04	kW
Thermostat-off mode	P_{TO}	0.005	kW	Standby mode	P_{SB}	0.005	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	12500	m^3/h
Sound power level, outdoor	L_{WA}	81	dB				
GWP of the refrigerant		2088	kg CO ₂ eq (100years)				
Contact details							
(*)If C_{dc} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

12HP

Heating mode:

Information requirements for heat pumps								
Model(s): SDV6-E335ASI								
Test matching indoor units form, no-duct: 4×SDV6-C45 + 2×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	33.50	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	161.4	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T_j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=-7^\circ\text{C}$	P_{dh}	16.24	kW		$T_j=-7^\circ\text{C}$	COP_d	248	%
$T_j=+2^\circ\text{C}$	P_{dh}	9.89	kW		$T_j=+2^\circ\text{C}$	COP_d	415	%
$T_j=+7^\circ\text{C}$	P_{dh}	6.36	kW		$T_j=+7^\circ\text{C}$	COP_d	495	%
$T_j=+12^\circ\text{C}$	P_{dh}	5.03	kW		$T_j=+12^\circ\text{C}$	COP_d	762	%
T_{biv} =bivalent temperature	P_{dh}	18.37	kW		T_{biv} =bivalent temperature	COP_d	227	%
T_{OL} =operation temperature	P_{dh}	18.37	kW		T_{OL} =operation temperature	COP_d	227	%
Bivalent temperature	T_{biv}	-10	°C					
Degradation co-efficient for heat pumps(**)								
	C_{dh}	0.25	--		Supplementary heater			
Power consumption in modes other than "active mode"					Back-up heating capacity(*)			
Off mode	P_{OFF}	0.005	kW		e_{lbu}	0.04	kW	
Thermosat-off mode	P_{TO}	0.005	kW		Type of energy input			
Crankcase heater mode	P_{CK}	0.04	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	12500	m ³ /h
Sound power level,outdoor	LWA	81	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)								
(**)If C_{dh} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

14HP

Cooling mode:

Information requirements for air-to-air conditioners							
Model(s):SDV6-E400ASI Test matching indoor units form, cassette: 2×SDV6-C45 + 4×SDV6-C80							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	40.00	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	263.0	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	40.00	kW	$T_j=+35^\circ\text{C}$	EER_d	254	%
$T_j=+30^\circ\text{C}$	P_{dc}	29.48	kW	$T_j=+30^\circ\text{C}$	EER_d	436	%
$T_j=+25^\circ\text{C}$	P_{dc}	18.95	kW	$T_j=+25^\circ\text{C}$	EER_d	821	%
$T_j=+20^\circ\text{C}$	P_{dc}	7.88	kW	$T_j=+20^\circ\text{C}$	EER_d	1360	%
Degradation co-efficient for air conditioners(*)							
	C_{dc}	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.005	kW	Crankcase heater mode	P_{CK}	0.04	kW
Thermosat-off mode	P_{TO}	0.005	kW	Standby mode	P_{SB}	0.005	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	12500	m ³ /h
Sound power level, outdoor	L_{WA}	82	dB				
GWP of the refrigerant		2088	kg CO ₂ eq (100years)				
Contact details							
(*)If C_{dc} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

14HP

Heating mode:

Information requirements for heat pumps								
Model(s):SDV6-E400ASI Test matching indoor units form, cassette: 2×SDV6-C45 + 4×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	40.00	kW		Seasonal space heating energy efficiency	η _{s,h}	163.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T _j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T _j			
T _j =-7°C	P _{dh}	19.47	kW		T _j =-7°C	COP _d	251	%
T _j =+2°C	P _{dh}	11.85	kW		T _j =+2°C	COP _d	419	%
T _j =+7°C	P _{dh}	7.62	kW		T _j =+7°C	COP _d	498	%
T _j =+12°C	P _{dh}	4.65	kW		T _j =+12°C	COP _d	731	%
T _{biv} =bivalent temperature	P _{dh}	22.01	kW		T _{biv} =bivalent temperature	COP _d	252	%
T _{OL} =operation temperature	P _{dh}	22.01	kW		T _{OL} =operation temperature	COP _d	252	%
Bivalent temperature	T _{biv}	-10	°C					
Degradation co-efficient for heat pumps(**)								
	C _{dh}	0.25	--		Supplementary heater			
Power consumption in modes other than "active mode"					Back-up heating capacity(*)			
Off mode	P _{OFF}	0.005	kW		elbu	0.04	kW	
Thermosat-off mode	P _{TO}	0.005	kW		Type of energy input			
Crankcase heater mode	P _{CK}	0.04	kW		Standby mode	P _{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	12500	m ³ /h
Sound power level,outdoor	LWA	82	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)								
(**)If C _{dh} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

16HP

Cooling mode:

Information requirements for air-to-air conditioners								
Model(s): SDV6-E450ASI Test matching indoor units form, cassette: SDV6-C56 + 4×SDV6-C80 + SDV6-C90								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
Type: compressor driven								
Driver of compressor: electric motor								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	45.00	kW		Seasonal space cooling energy efficiency	$\eta_{s,c}$	267.8	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19°C (dry/wet bulb)					Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	45.00	kW		$T_j=+35^\circ\text{C}$	EER_d	282	%
$T_j=+30^\circ\text{C}$	P_{dc}	33.17	kW		$T_j=+30^\circ\text{C}$	EER_d	447	%
$T_j=+25^\circ\text{C}$	P_{dc}	21.31	kW		$T_j=+25^\circ\text{C}$	EER_d	791	%
$T_j=+20^\circ\text{C}$	P_{dc}	9.46	kW		$T_j=+20^\circ\text{C}$	EER_d	1420	%
Degradation co-efficient for air conditioners(*)								
	C_{dc}	0.25	--					
Power consumption in modes other than "active mode"								
Off mode	P_{OFF}	0.005	kW		Crankcase heater mode	P_{CK}	0.04	kW
Thermosat-off mode	P_{TO}	0.005	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air air conditioner: air flow rate, outdoor measured	--	18500	m ³ /h
Sound power level, outdoor	L_{WA}	86	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)If C_{dc} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

16HP

Heating mode:

Information requirements for heat pumps								
Model(s): SDV6-E450ASI Test matching indoor units form, cassette: SDV6-C56 + 4×SDV6-C80 + SDV6-C90								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	45.00	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	166.2	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T_j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=-7^\circ\text{C}$	P_{dh}	21.88	kW		$T_j=-7^\circ\text{C}$	COP_d	268	%
$T_j=+2^\circ\text{C}$	P_{dh}	13.32	kW		$T_j=+2^\circ\text{C}$	COP_d	429	%
$T_j=+7^\circ\text{C}$	P_{dh}	8.57	kW		$T_j=+7^\circ\text{C}$	COP_d	513	%
$T_j=+12^\circ\text{C}$	P_{dh}	7.39	kW		$T_j=+12^\circ\text{C}$	COP_d	696	%
T_{biv} =bivalent temperature	P_{dh}	24.74	kW		T_{biv} =bivalent temperature	COP_d	208	%
T_{OL} =operation temperature	P_{dh}	24.74	kW		T_{OL} =operation temperature	COP_d	208	%
Bivalent temperature	T_{biv}	-10	°C					
Degradation co-efficient for heat pumps(**)								
	C_{dh}	0.25	--		Supplementary heater			
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P_{OFF}	0.005	kW		Back-up heating capacity(*)	el_{bu}	0.04	kW
Thermosat-off mode	P_{TO}	0.005	kW		Type of energy input			
Crankcase heater mode	P_{CK}	0.04	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	18500	m ³ /h
Sound power level,outdoor	LWA	86	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)								
(**)If C_{dh} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

18HP

Cooling mode:

Information requirements for air-to-air conditioners								
Model(s): SDV6-E500ASI								
Test matching indoor units form, cassette: 4×SDV6-C45 + 4×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
Type: compressor driven								
Driver of compressor: electric motor								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	50.00	kW		Seasonal space cooling energy efficiency	$\eta_{s,c}$	255.8	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19°C (dry/wet bulb)					Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	50.00	kW		$T_j=+35^\circ\text{C}$	EER_d	257	%
$T_j=+30^\circ\text{C}$	P_{dc}	37.12	kW		$T_j=+30^\circ\text{C}$	EER_d	419	%
$T_j=+25^\circ\text{C}$	P_{dc}	23.89	kW		$T_j=+25^\circ\text{C}$	EER_d	778	%
$T_j=+20^\circ\text{C}$	P_{dc}	10.61	kW		$T_j=+20^\circ\text{C}$	EER_d	1380	%
Degradation co-efficient for air conditioners(*)								
	C_{dc}	0.25	--					
Power consumption in modes other than "active mode"								
Off mode	P_{OFF}	0.005	kW		Crankcase heater mode	P_{CK}	0.04	kW
Thermosat-off mode	P_{TO}	0.005	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air air conditioner: air flow rate, outdoor measured	--	20000	m ³ /h
Sound power level, outdoor	L_{WA}	88	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)If C_{dc} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

18HP

Heating mode:

Information requirements for heat pumps								
Model(s): SDV6-E500ASI Test matching indoor units form, cassette: 4×SDV6-C45 + 4×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	50.00	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	163.8	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T_j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=-7^\circ\text{C}$	P_{dh}	26.43	kW		$T_j=-7^\circ\text{C}$	COP_d	262	%
$T_j=+2^\circ\text{C}$	P_{dh}	16.46	kW		$T_j=+2^\circ\text{C}$	COP_d	423	%
$T_j=+7^\circ\text{C}$	P_{dh}	9.51	kW		$T_j=+7^\circ\text{C}$	COP_d	553	%
$T_j=+12^\circ\text{C}$	P_{dh}	7.50	kW		$T_j=+12^\circ\text{C}$	COP_d	612	%
T_{biv} =bivalent temperature	P_{dh}	27.50	kW		T_{biv} =bivalent temperature	COP_d	213	%
T_{OL} =operation temperature	P_{dh}	27.50	kW		T_{OL} =operation temperature	COP_d	213	%
Bivalent temperature	T_{biv}	-10	°C					
Degradation co-efficient for heat pumps(**)								
	C_{dh}	0.25	--		Supplementary heater			
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P_{OFF}	0.005	kW		Back-up heating capacity(*)	e_{lbu}	0.04	kW
Thermosat-off mode	P_{TO}	0.005	kW		Type of energy input			
Crankcase heater mode	P_{CK}	0.04	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	20000	m ³ /h
Sound power level,outdoor	LWA	88	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)								
(**)If C_{dh} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

20HP

Cooling mode:

Information requirements for air-to-air conditioners								
Model(s): SDV6-E560ASI								
Test matching indoor units form, cassette: 2×SDV6-C45 + 6×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
Type: compressor driven								
Driver of compressor: electric motor								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	56.00	kW		Seasonal space cooling energy efficiency	$\eta_{s,c}$	249.0	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19°C (dry/wet bulb)					Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	56.00	kW		$T_j=+35^\circ\text{C}$	EER_d	245	%
$T_j=+30^\circ\text{C}$	P_{dc}	40.04	kW		$T_j=+30^\circ\text{C}$	EER_d	410	%
$T_j=+25^\circ\text{C}$	P_{dc}	25.74	kW		$T_j=+25^\circ\text{C}$	EER_d	764	%
$T_j=+20^\circ\text{C}$	P_{dc}	12.26	kW		$T_j=+20^\circ\text{C}$	EER_d	1360	%
Degradation co-efficient for air conditioners(*)								
	C_{dc}		--					
Power consumption in modes other than "active mode"								
Off mode	P_{OFF}	0.005	kW		Crankcase heater mode	P_{CK}	0.04	kW
Thermosat-off mode	P_{TO}	0.005	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air air conditioner: air flow rate, outdoor measured	--	18500	m ³ /h
Sound power level, outdoor	L_{WA}	89	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)If C_{dc} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

20HP

Heating mode:

Information requirements for heat pumps								
Model(s): SDV6-E560ASI								
Test matching indoor units form, cassette: 2×SDV6-C45 + 6×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	56.00	kW		Seasonal space heating energy efficiency	η _{s,h}	159.8	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T _j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T _j			
T _j =-7°C	P _{dh}	30.51	kW		T _j =-7°C	COP _d	257	%
T _j =+2°C	P _{dh}	18.58	kW		T _j =+2°C	COP _d	359	%
T _j =+7°C	P _{dh}	12.42	kW		T _j =+7°C	COP _d	636	%
T _j =+12°C	P _{dh}	10.38	kW		T _j =+12°C	COP _d	831	%
T _{biv} =bivalent temperature	P _{dh}	30.80	kW		T _{biv} =bivalent temperature	COP _d	203	%
T _{OL} =operation temperature	P _{dh}	30.80	kW		T _{OL} =operation temperature	COP _d	203	%
Bivalent temperature	T _{biv}	-10	°C					
Degradation co-efficient for heat pumps(**)								
	C _{dh}	0.25	--					
Power consumption in modes other than "active mode"					Supplementary heater			
Off mode	P _{OFF}	0.005	kW		Back-up heating capacity(*)	e _{lbu}	0.04	kW
Thermosat-off mode	P _{TO}	0.005	kW		Type of energy input			
Crankcase heater mode	P _{CK}	0.04	kW		Standby mode	P _{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	18500	m ³ /h
Sound power level,outdoor	LWA	89	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)								
(**)If C _{dh} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

22HP

Cooling mode:

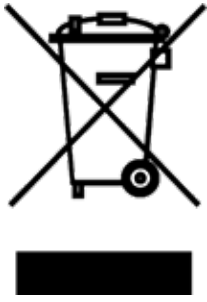
Information requirements for air-to-air conditioners							
Model(s):SDV6-E615ASI							
Test matching indoor units form, cassette: 8×SDV6-C80							
Outdoor side heat exchanger of air conditioner: air							
Indoor side heat exchanger of air conditioner: air							
Type: compressor driven							
Driver of compressor: electric motor							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	61.50	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	243.0	%
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27/19°C (dry/wet bulb)				Declared energy efficiency ratio or gas utilisation efficiency /auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=+35^\circ\text{C}$	P_{dc}	61.50	kW	$T_j=+35^\circ\text{C}$	EER_d	200	%
$T_j=+30^\circ\text{C}$	P_{dc}	43.96	kW	$T_j=+30^\circ\text{C}$	EER_d	424	%
$T_j=+25^\circ\text{C}$	P_{dc}	28.27	kW	$T_j=+25^\circ\text{C}$	EER_d	760	%
$T_j=+20^\circ\text{C}$	P_{dc}	12.57	kW	$T_j=+20^\circ\text{C}$	EER_d	1313	%
Degradation co-efficient for air conditioners(*)							
	C_{dc}	0.25	--				
Power consumption in modes other than "active mode"							
Off mode	P_{OFF}	0.005	kW	Crankcase heater mode	P_{CK}	0.04	kW
Thermosat-off mode	P_{TO}	0.005	kW	Standby mode	P_{SB}	0.005	kW
Other items							
Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor measured	--	19000	m ³ /h
Sound power level, outdoor	L_{WA}	89	dB				
GWP of the refrigerant		2088	kg CO ₂ eq (100years)				
Contact details							
(*)If C_{dc} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.							
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.							

22HP

Heating mode:

Information requirements for heat pumps								
Model(s):SDV6-E615ASI								
Test matching indoor units form, cassette: 8×SDV6-C80								
Outdoor side heat exchanger of air conditioner: air								
Indoor side heat exchanger of air conditioner: air								
If the heater is equipped with a supplementary heater: no								
Driver of compressor: electric motor								
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.								
Item	Symbol	Value	Unit		Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	61.50	kW		Seasonal space heating energy efficiency	$\eta_{s,h}$	157.0	%
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperatures T_j					Declared coefficient of performance or gas utilisation efficiency/auxiliary energy factor for part load at given outdoor temperatures T_j			
$T_j=-7^\circ\text{C}$	P_{dh}	32.36	kW		$T_j=-7^\circ\text{C}$	COP_d	255	%
$T_j=+2^\circ\text{C}$	P_{dh}	19.70	kW		$T_j=+2^\circ\text{C}$	COP_d	346	%
$T_j=+7^\circ\text{C}$	P_{dh}	12.67	kW		$T_j=+7^\circ\text{C}$	COP_d	631	%
$T_j=+12^\circ\text{C}$	P_{dh}	10.84	kW		$T_j=+12^\circ\text{C}$	COP_d	899	%
T_{biv} =bivalent temperature	P_{dh}	36.60	kW		T_{biv} =bivalent temperature	COP_d	204	%
T_{OL} =operation temperature	P_{dh}	36.60	kW		T_{OL} =operation temperature	COP_d	204	%
Bivalent temperature	T_{biv}	-10	°C					
Degradation co-efficient for heat pumps(**)								
	C_{dh}	0.25	--		Supplementary heater			
Power consumption in modes other than "active mode"					Back-up heating capacity(*)			
Off mode	P_{OFF}	0.005	kW		e_{lbu}	0.04		kW
Thermosat-off mode	P_{TO}	0.005	kW		Type of energy input			
Crankcase heater mode	P_{CK}	0.04	kW		Standby mode	P_{SB}	0.005	kW
Other items								
Capacity control	variable				For air-to-air heat pump: air flow rate, outdoor measured	--	19000	m ³ /h
Sound power level,outdoor	LWA	89	dB					
GWP of the refrigerant		2088	kg CO ₂ eq (100years)					
Contact details								
(*)								
(**)If C_{dh} is not determined by measurement, then the default degradation coefficient of heat pumps shall be 0.25.								
Where information relates to multi-split heat pumps, xthe test result and performance data may be obtained on the basis of performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.								

NOTE CONCERNING PROTECTION OF ENVIRONMENT



This product must not be disposed of via normal household waste after its service life, but must be taken to a collection station for the recycling of electrical and electronic devices. The symbol on the product, the operating instructions or the packaging indicate such disposal procedures. The materials are recyclable in accordance with their respective symbols. By means of re-use, material recycling or any other form of recycling old appliances you are making an important contribution to the protection of our environment. Please ask your local council where your nearest disposal station is located.

INFORMATION CONCERNING USED REFRIGERANT MEDIUM

This unit is containing fluorinated gases included in the Kyoto protocol.

The maintenance and the liquidation must be carried out by qualified personnel.

The composition of the cooling medium R410a: (50% HFC-32, 50% HFC-125)

Type of refrigerant: R410a

The quantity of the refrigerant: Please see the unit label.

The value GWP: 2088 (1 kg R410a = 2,088 t CO₂ eq)

GWP = Global Warming Potential

In case of quality problem or other please contact your local supplier or authorized service center.

Emergency number: 112

PRODUCER

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This product was manufactured in China (Made in China).

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