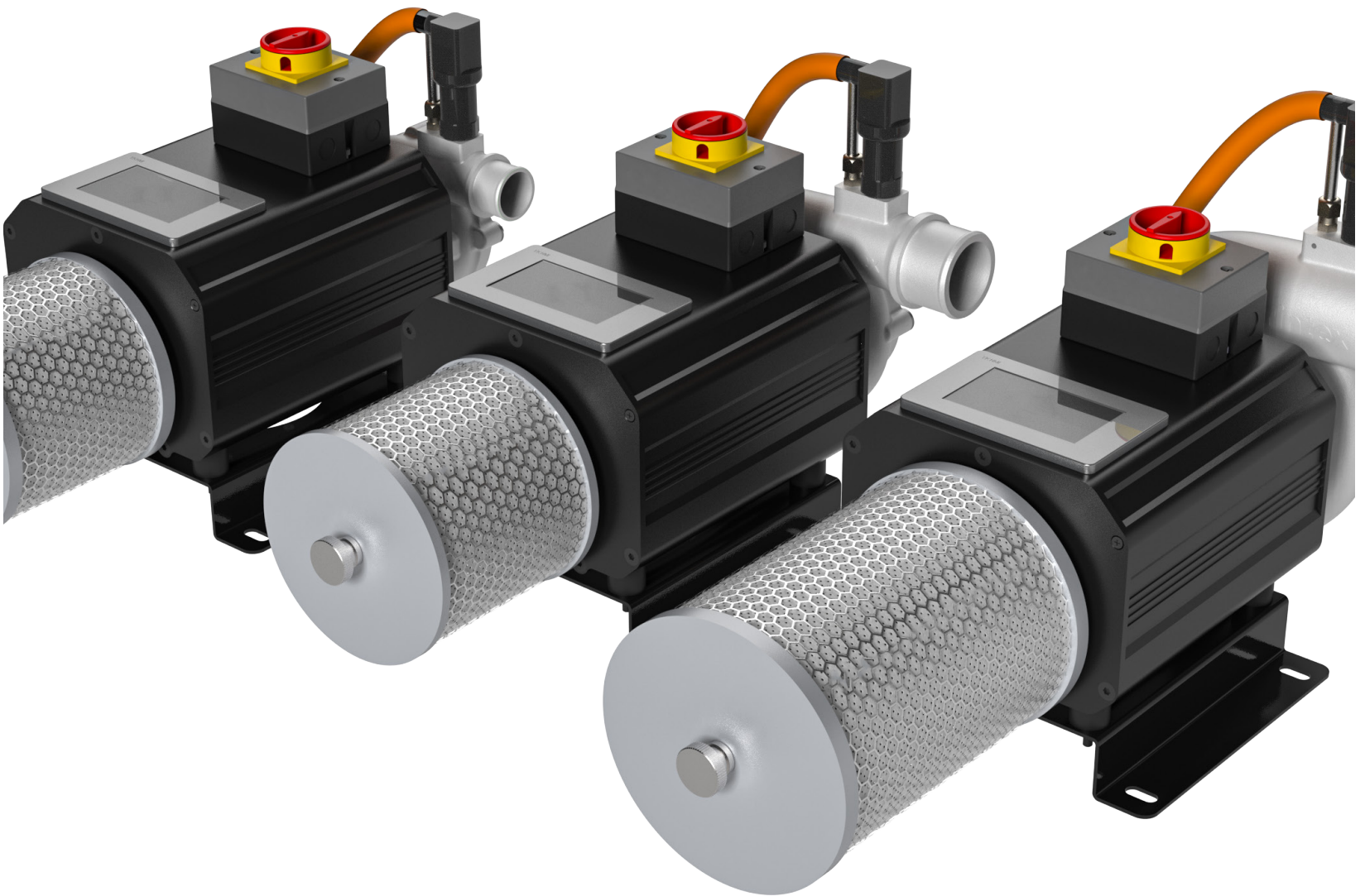


Operating and Maintenance Instructions

Sprintex G15 Jet Blower Series

G15-0010-004, G15-0010-005,
G15-0010-0012, G15-0010-0013

Ensure you read these instructions thoroughly before starting any task.
Save this document for future reference.





Sprintex

G15 Jet Blower Series

with Smart Pulse Aeration (SPA™) Technology

Table of Contents

1. General Information	5
1.1 Introduction	5
1.2 Safety Symbol Descriptions	5
1.3 Warranty	6
1.4 General Specifications	6
1.5 Overview of the G15 Series	7
1.6 Technical Description of the Machine	8
1.6.1 Composition of G15	8
1.6.2 Impeller	8
1.6.3 Shaft and Ball Bearing	8
1.6.4 Variable Frequency Drive	8
1.6.5 PMSM (Permanent Magnet Synchronous Motor)	8
1.6.6 HMI (Human Machine Interface)	9
1.6.7 Sensors	9
1.6.8 Auxiliary Components	9
1.7 Maps	10
2. Safety Guidelines	10
2.1 Precautions Before and During Operation	10
2.2 General Safety Instructions	10
3. Storage	12
3.1 Storage Guidelines (Up to 120 Days and Beyond)	12
3.2 Transportation Precautions	12
4. Installation	12
4.1 Inspection of Components	12
4.2 Installation Location	14
4.3 Preparation Before Installation	14
4.4 Filter Installation	15
4.5 Assembly Installation	11
4.6 Power Cable and Grounding	18
4.7 Insulation Resistance	21
4.8 Check Valve Installation	21

Table of Contents

5. Operation	22
5.1 Local Operation	22
5.1.1 Error Mapping Table	23
5.1.2 Setting Interface	24
5.1.3 Control Interface	25
5.1.4 Settings Interface Details	25
5.1.5 Fieldbus Operation	27
5.2 Unacceptable Operating Practices	32
5.3 Recommended Operating Practices	32
5.4 Fault Handling and Manufacturer Contact	32
6. Maintenance	33
6.1 Maintenance Reminders	33
6.2 Maintenance Schedule	33
6.3 Air Filter Replacement	34
7. Contact Information	34
Service and Support	34

1. General Information

1.1 Introduction

This manual provides guidance for the **safe and efficient operation** of the Sprintex G15 series blowers. The manual must remain near the machine and be easily accessible to personnel. Keep it in a secure place for future reference.

Before beginning any work, all personnel must carefully **read and fully understand** this manual. Compliance with all safety instructions and guidelines in this document is essential. In addition, **local occupational health and safety regulations** must be followed.

“Sprintex” hereinafter refers to Sprintex Energy Technology (Suzhou) Co., Ltd



WARNING!
Read, be sure to understand clearly and completely, and then carefully follow all the directions included in this instruction. Failure to adhere to the guidelines and specific instructions provided could cause equipment damage and/or serious personal injury or death.

Illustrations in this manual are examples and may differ slightly from the actual product.



NOTICE!
Sprintex and its subsidiaries are released from any warranty and liability regarding replacement for consequential damages if the technical operating limits are not observed and/or the safety guidelines outlined in this instruction are not followed. The same applies for equipment failures resulting from improper maintenance.

1.2 Safety Symbol Descriptions

The following symbols and signal words are used to identify levels of danger:

Table 1-1 Safety symbols

Symbol	Term	Definition
	DANGER!	Imminent risk of serious injury or death if not avoided.
	WARNING!	Potential risk of serious injury or death if not avoided.
	CAUTION!	Risk of minor injuries or equipment damage if precautions are not taken.

The following symbols are used to highlight operating guidelines, events, references, and other key elements in this manual.

Table 1-2 Safety Labels

No.	Labels	Comments
1		CAUTION PROTECTIVE EARTH Establish and maintain protective earth ground according to the O&M instructions.
2		WARNING ELECTRIC SHOCK HAZARD Potential risk of serious injury or death if not avoided.
3		WARNING HOT SURFACE Risk of minor injuries or equipment damage if precautions are not taken.
4		WARNING AVOID INJURY This unit is to be serviced by trained personnel only.

1.3 Warranty

The warranty period for the G15 series is 12 months.

- Damages caused by improper handling, storage, or maintenance are not covered.
- Sprintex will be responsible only for defects in the product itself.
- Secondary damages resulting from product defects will not be covered.

1.4 Specifications

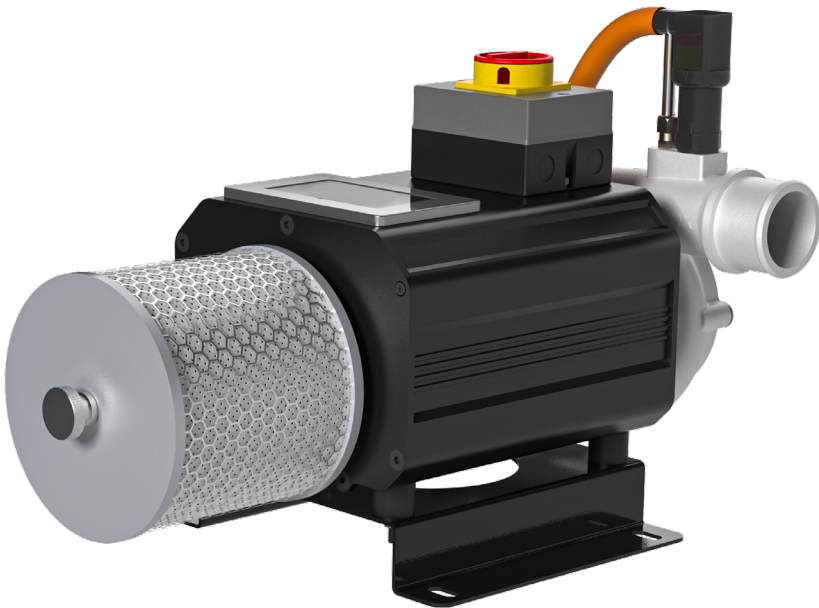
Table 1-3 G15 series general specifications

Item	Specification	Comment
Item	Turbo blower with PM motor/ball bearing/FOC	
Flow Control	By speed variation	
Motor Drive	Inverter drive with FOC control	
Voltage / Frequency	190v~290v for single phase/340V~420v for three phase, 50 Hz/60HZ	
Cooling	Air-cooled	
Sound Noise	60dB ~ 75dB	@ 1m in free field conditions without pipe noise
Temperature	-20°C ~ +45°C (-4°F ~ +109°F)	

1.5 Overview

The components of Sprintex G15 series blowers are shown in following figures.

Fig. 1-2 Overview of G15 view

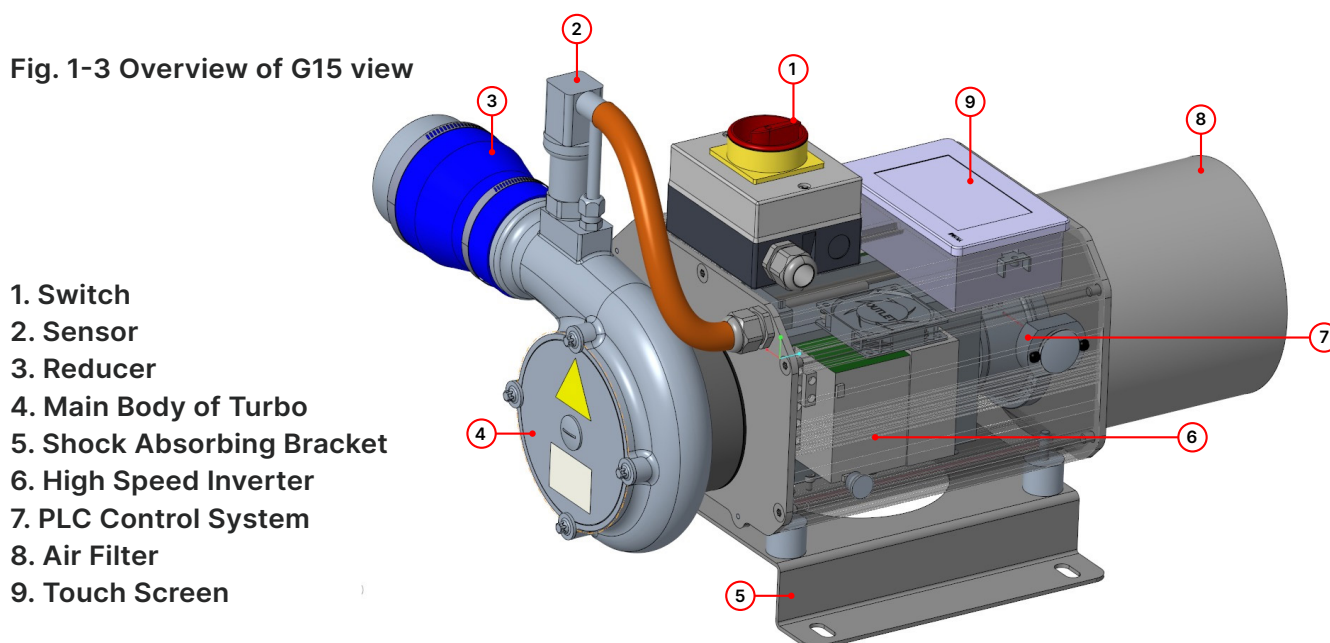


1.6 Technical description of the machine

1.6.1 The composition of G15

The composition of G15 is as shown in the figure 1-3.

Fig. 1-3 Overview of G15 view



1.6.2 Impeller

The impellers are made from aviation aluminum alloys by precision 5-Axis CNC Machining. The impeller blades are designed using three-dimensional computational fluid dynamics numeric analysis.

1.6.3 Shaft and Ball Bearing

The main motor shaft is directly connected to the impeller. Ceramic ball bearings used for high-speed rotor rotation.

1.6.4 Variable Frequency Drive

The converter module drives the motor to adjust impeller rotational speed, which in turn controls the flow rate and/or the discharge pressure.

1.6.5 PMSM

The PMSM (permanent magnet synchronous motor) rotates due to the electromagnetic interactions between the stator coils and the rotor, which is constructed from the permanent magnets. The PMSM can operate at speed up to 80,000rpm and with efficiency over 95%

1.6.6 HMI: Human Machine Interface

The color LCD displays the following measurement data and alarms.

- Operating data
 - Air temperature at intake and discharge
 - Differential pressure across the intake filter
 - Discharge pressure
 - Flow rate of air
 - Rotating speed
 - Run time
- The fault summary and error codes
- Instance graphic view of each operating value in real time.
- Machine setup

1.6.7 Sensors

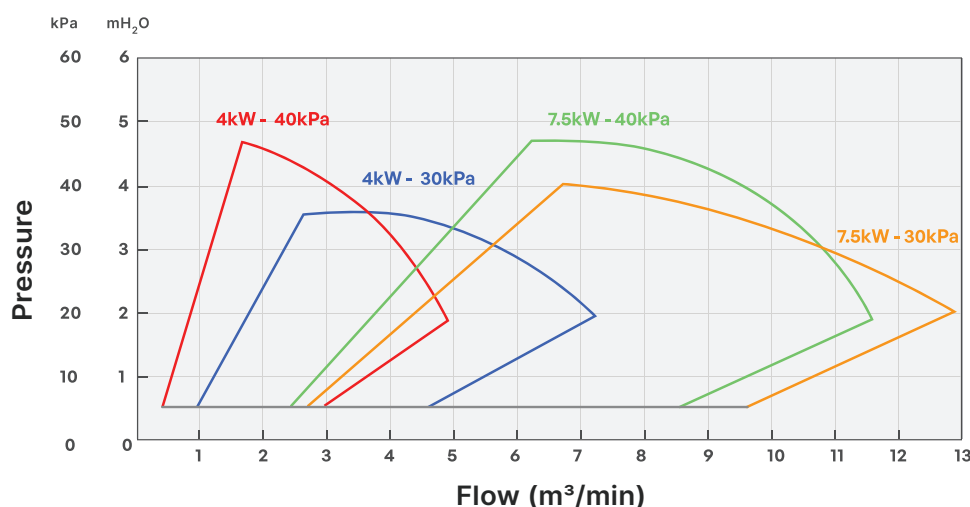
- Intake/discharge temperature sensor
- Discharge pressure sensor
- Inverter current sensor
- Inverter temperature sensor

1.6.8 Auxiliary Components

- Air outlet tube adapter
- Air filter

1.7 Maps

Fig. 1-4 Map of G15



At present, there are four models of G15 series blowers, and their working ranges are shown in Figure 1-4. With the pressure and flow we need, we select the right blower version in Map

2. Safety

This section outlines key safety considerations essential for protecting personnel and ensuring smooth, hazard-free operation. Ignoring the safety and handling guidelines in this manual could lead to significant risks.

2.1 Precautions - prior to and during operation

The following symbols and signal words are used to identify levels of danger:

- Operator training – Operators must be trained and knowledgeable in all aspects of this blower package as stated in this and related operation and maintenance manuals (motor, accessories, etc):
 - Protection – Guards, electrical components, etc.
 - Operation – Blower limits (speed, pressure, temperature, etc.)
 - Monitoring devices – HMI, control panel, master control panel, transmitters, etc.
 - Motor operation & safety The fault summary and error codes
- Safety regulations (in-house, local, national, etc.) must be adhered
- Do NOT operate if electrical connections or other enclosure panels are defective or missing
- Do NOT operate the unit with the inlet air filter removed (blower inlet flange open to atmosphere)
- Ensure that the motor power has been turned off and locked out prior to doing any work on the unit
- Wear safety gloves when touching the blower surface while the machine is at operating temperatures. The unit could be hot enough to cause severe burns!
- Wear ear protection while the blower is in operation!
- If assistance is needed contact the **Sprintex** Customer Service Department!

2.2 General Safety Instructions

- Read and understand the operating and maintenance instructions and all other safety instructions before using this equipment
- Do NOT modify components or structures without authorization from **Sprintex**.



WARNING!

Abnormal operation may cause serious injury or financial losses.
Consult with Sprintex technician for support and assistance

- Do NOT place foreign objects or substances into the blower package
- Do NOT place foreign objects or substances near the blower package or suction piping and housing where they may be pulled into the blower suction

**WARNING!**

Foreign objects and substances sucked into the high-speed impeller may cause serious damage or injury.

Do not change or modify intake filters during operation

- Do NOT exceed the maximum nameplate pressure rating of the blower
- Do NOT close the main suction or discharge valve during operation
- Unexpected closure of these valves may result in surge
- Do NOT perform any maintenance during blower operation
- Warning: The inverter remains electrically charged for up to 10 minutes after the blower has been shut down. Do not open or service the unit until fully discharged.

**CAUTION!**

Do NOT attempt to access any blower panels, including filters, for a minimum of 10 minutes after complete shutdown

- Warning: The disconnect panel remains live with electric power, even if the main breaker in the blower package is turned off.

**WARNING!**

Risk of electric shock is present even with this breaker in the off position

- Do not add unauthorized circuits to the control panel
- Please contact Sprintex for support and assistance
- All grounding should be completed in accordance with international electric standards
- Working on or disassembling the inverter is dangerous
- Please contact Sprintex for support and assistance
- The blower package does not meet standards for explosion proof equipment. Do not install or operate this blower in a classified space
- Wear protective hearing equipment while working around the blowers

**CAUTION!**

Failing to use proper protective hearing equipment may expose you to noise levels that are dangerous

3. Storage

Proper storage is essential to prevent damage to equipment and materials before installation. Follow the guidelines below to ensure the longevity of the blowers.

3.1 Storage up to 120 days

The following symbols and signal words are used to identify levels of danger:

- The blowers are sealed in an **air-tight plastic enclosure** to protect against dust and moisture.
- If the seal is intact, no special storage measures are needed.
- If the seal is compromised:
- Store the blowers in a **clean, dust-free environment**.
- Control ambient temperature and humidity.
- Provide supplemental ventilation for electric components in high-humidity conditions.

3.2 Storage longer than 120 days

- The blowers are sealed in shrink wrap to protect against dust and moisture.
- **Do not store the equipment outdoors.**

the seal is compromised or removed, follow these guidelines:

a) Store the equipment in a **dry location**, free from excessive dust and humidity.

- Use a cover to prevent dust accumulation inside the blower package.
- b) Maintain a **constant storage temperature** between **4.5°C and 38°C** (40°F to 100°F).
- Avoid condensation caused by temperature changes, as this can damage electrical components.
- c) Use **desiccants** such as silica gel to absorb moisture and prevent condensation.
- d) Install **space heaters** or 100-watt electric light bulbs to remove excess moisture.

Important: Improper storage may affect the product warranty. If you encounter special circumstances, consult your local representative for guidance.

4. Installation

4.1 Inspection of the components

Sprintex blowers and enclosures are shipped fully assembled, except for the air filter and outlet tube adapter.

Upon receiving the shipment:

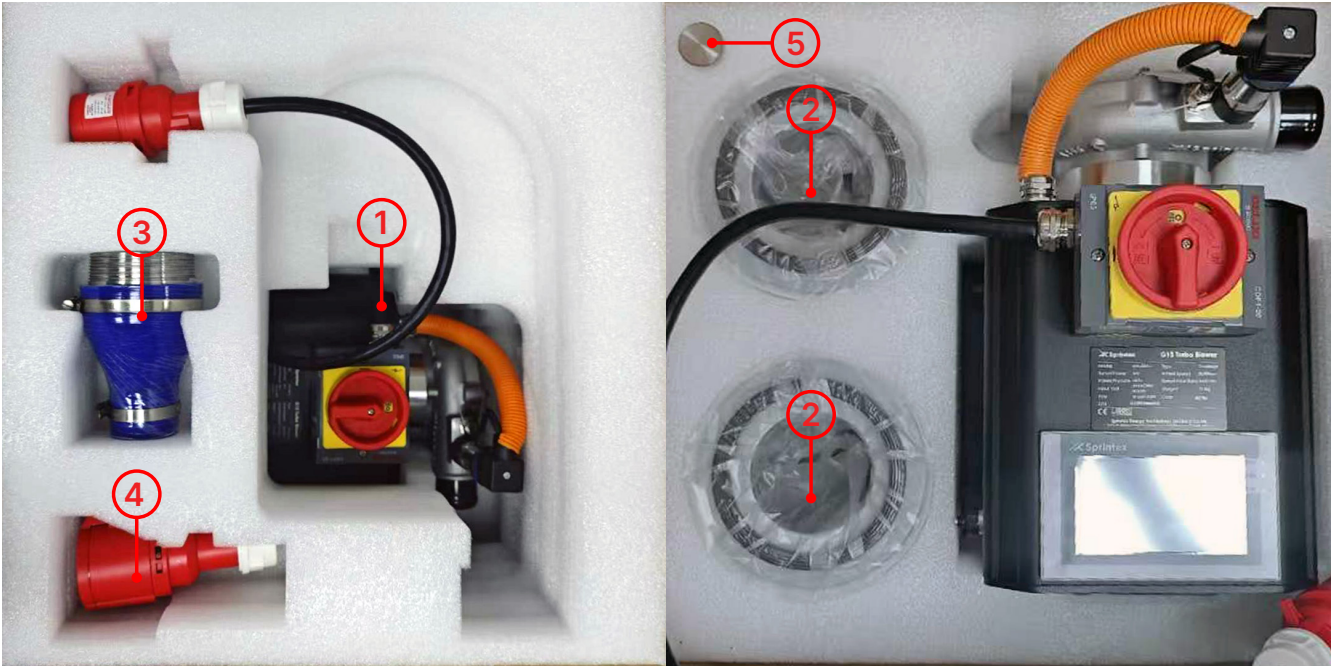
- 1. Inspect all components to confirm that no items are missing or damaged.
- 2. Use **Table 4-1** to record any issues and provide a brief description of missing or damaged items.
- 3. Forward the completed table to your local representative or contact the Sprintex office for assistance.

Note: The 7.5 kW version does not include a reducer.

Table 4-1 Delivery check list

Classification	No.	Specification	Quantity	Missing*	Damaged**
Main Body	1	Host machine	1		
Aux. Element	2	Filter element	2		
	3	Reducer	1		
	4	Connector (female)	1		
	5	Hand screw bolt	1		

*please check “√ ”



4.2 Installation location

Selecting an appropriate installation environment and equipment layout is critical to minimise both installation and maintenance costs.

Ideal Installation Environment:

- **Indoors:**
 - Choose a location with **adequate lighting** and **sufficient space** for operation and maintenance
 - Protect the blower from **climatic changes** and dust.

Note: If installed in a dusty indoor environment, the intake filter will need **more frequent cleaning or replacement**.

- **Outdoors:**
 - If the blower must be installed outdoors, ensure proper protection for the blower enclosure and suction inlet to prevent damage from precipitation.

Ventilation and Accessibility:

- Ensure the location has **adequate ventilation** for:
 - Fresh air supply to the blower intake (if applicable).
 - Proper cooling of the blower system.
- Provide **sufficient working space** around the blower for safe operation and easy maintenance.

4.3 Preparation before Installation

Before installation, the following items should be checked.

Table 4-1 Delivery check list

Classification		Check Point	Results
Operating Condition	Pressure	Nominal operating pressure	
	Flow Rate	Nominal operating flow rate	
	Drawing	Preparation of drawings with respect to piping	
	Usage	Fitness for the process	
Place	Space	Enough space for inspection	
	Suitability	Environmental suitability for installation	
	Maintenance	Enough space for maintenance	
Electricity	Power	Enough space for inspection	
	Switching Board	Capacity of NFB(No Fuse Breaker) & power cable	
		Distance between NFB and installation place	

Classification		Check Point	Results
Piping	Discharge	Status of discharge piping	
	Accessory	Status of check valve, flexible,	
	Intake	Status of intake piping (if available)	
Etc.	Environmental Condition	Mechanical vibration level	
		Amount of dust	
	Picture	Pictures at the installation place	
	Etc.	The other items	

4.4 Filter Installation

Before Installation

- Remove the **protective sticker** from the air inlet.
- Check for **foreign objects** inside the machine.
 - If any foreign objects are found, use appropriate tools to remove them.
- **Do not** turn the machine upside down or blow air into the machine.

Installing the Filter:

- Use the **fastening bolts** provided in the package to secure the filter to the air inlet.
- Ensure all bolts are **properly tightened**.

Filter Installation Steps

- Remove the packaging from the **intake air filter**.
- Ensure the filter material is clean and undamaged.





- Position the filter element so it aligns properly with the air intake opening.



Insert the **hand screw bolt** into the centre of the filter element.
Tighten the bolt securely to ensure the filter is firmly fixed in place

Note: If alternative intake piping and filters are used:

- The system must remove **98% of particles larger than 2.5µm.**
- Differential pressure across the filter should not exceed **2kPa (0.3psi).**

4.5 Assembly Installation

The blower outlet is equipped with a **G2.5 external thread interface** (compliant with ISO228-1-2000 standards).

Ensure that **all exhaust pipes are properly sealed** to prevent air leakage.

Note: Air leaks can negatively impact the blower's performance and cause excessive heating in the surrounding environment.

Blower performance and cause the surrounding environment to heat up.

Reducer Installation



1. Use a Phillips or flat-head screwdriver to loosen the hoop



2. Align the reducer with the air outlet. Insert the reducer



3. Tighten the hoop with a screwdriver

Blower Outlet Safety and Check Valve Installation

1. Temperature Warning:

- During blower operation, the **outlet pipe temperature** will rise as the **outlet pressure increases**.
- Ensure sufficient safety warnings are in place to avoid accidental contact.

2. Check Valve Installation:

- Install a **check valve** at the blower outlet or in the air supply line.
- This prevents **compressed air** from flowing back into the blower during downtime.
- **Why it matters:** Reverse airflow can damage the blower and its components.

4.6 Power Cable and Ground

Ground cable color should be green/yellow. These color cables should not be used for any other purpose.



WARNING!

Only qualified electrical engineers can install and maintain the electrical components.

Ensure that power cables and grounding conditions meet standards.



WARNING!

Provide the power supply with the same voltage, voltage system, and frequency characteristics as required by the parameters on the blower nameplate. Please pay special attention to the difference between single-phase input and three-phase input models.

When the blower starts, at least 90% of the rated voltage is required. During normal operation, the fluctuation of the input voltage should be kept within the range of $\pm 10\%$ of the rated voltage, and the pressure difference between the three-phase voltage should be kept within 3%.

Electrical Installation

The power socket is connected by the user. The power plug is already connected to the device, as shown in the figure.

Steps for Connecting the Power Socket



1. Open the Connector Housing:

2.

- Use a **screwdriver** or similar tool to press the **black buckle** on the socket.
- Rotate the plug to the **OPEN position** following the direction indicated by the triangle.
- Open the connector housing carefully.



3. Loosen the Screws:

- Use a **screwdriver** to loosen the **pre-tightened screws** inside the connector housing.



4. Connect the Ground Cable (PGND):

- Use a **screwdriver** to connect the **PGND cable** (green/yellow) to the appropriate terminal.
- Ensure the connection is **secure** by tightening the screw firmly.

Connect the Three-Phase Wires:



5. Insert the three-phase wires (L1, L2, L3) into their corresponding terminals.

- Use a screwdriver to **tighten the three screws** to secure the wires in place.



WARNING!

Please ensure proper grounding.



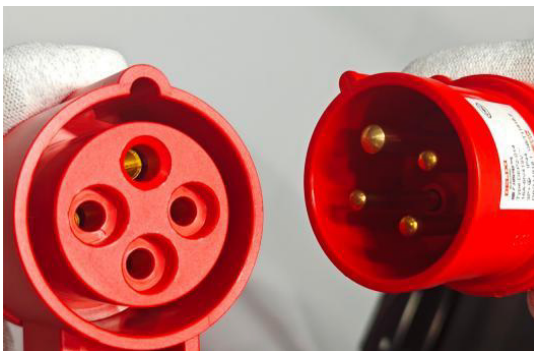
6. Align the Knob:

- Position the plug correctly by aligning the knob with the corresponding groove.



7. Insert and Lock:

- Insert the plug into the connector and rotate it to the **closed position** until it locks securely.



8. Connect to the Device:

- After connecting both the **power cable** and the **ground cable**, plug the connector into the device.



9. Secure the White Lock:

- Insert the white locking part and tighten it to ensure a firm and stable connection.

4.7 Insulation resistance

- In **high humidity conditions**, the insulation resistance of the blower should be measured.
- Ensure the resistance is above **2000MΩ** to maintain safe and reliable operation.

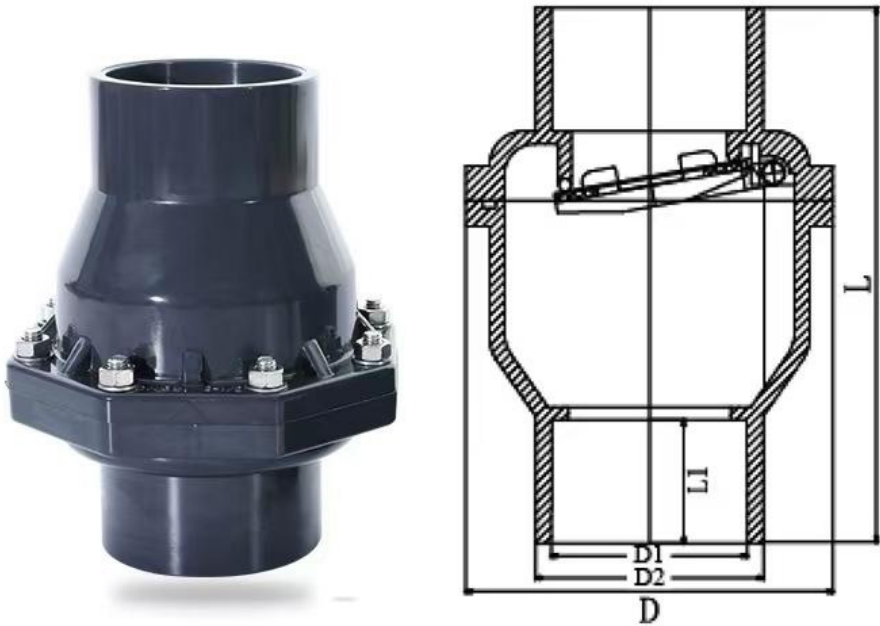
4.8 Check valve recommended

- To prevent **water** or **wind** from entering the G15 blower, it is recommended to install a **flap check valve**.

Sizing the Check Valve:

- Select a check valve that is appropriately sized for the system.
- Ensure the **inner diameter** of the check valve and pipeline is **larger** than the outer diameter of the G15 blower outlet.

Note: Proper valve installation protects the blower from reverse airflow or environmental factors that could cause damage.



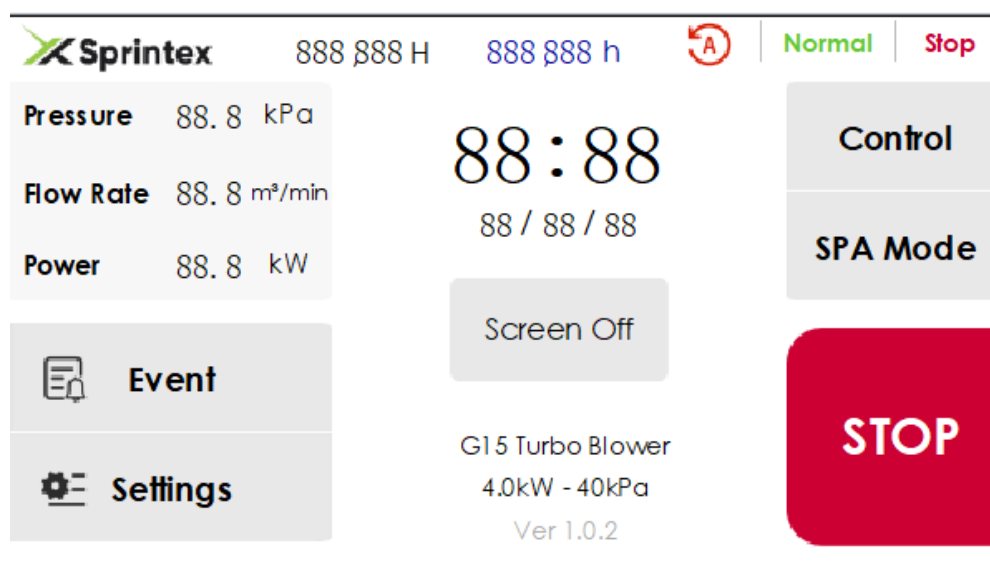
规格(SIZE)	编号	D	D1	D2	L	L1
DN20	FZ20	63.9	34.8	25.1	97.3	22.9
DN25	FZ25	74.9	32.1	43.64	106.8	24.8
DN32	FZ32	97.5	40.4	52.7	129.8	34.9
DN40	FZ40	105	50.45	60.25	144	38.3
DN50	FZ50	117	63.5	75.9	160	37.7
DN65	FZ65	145	75.5	88.91	193	44.8
DN80	FZ80	163	90.55	105.15	246	56.7
DN100	FZ100	190	110.6	127.39	323	75.1
DN125	FZ125	247	140.6	164.4	407.8	95
DN150	FZ150	270	160.7	184.5	425	99.9
Φ 200	FZ200	344.6	200.9	226	530.5	124.8
DN200	FZ200	332	226.2	253.8	470	118.5

5. Operation

5.1 Local operation

Main Screen Parameter Description

Fig. 5-1 Main screen parameter description

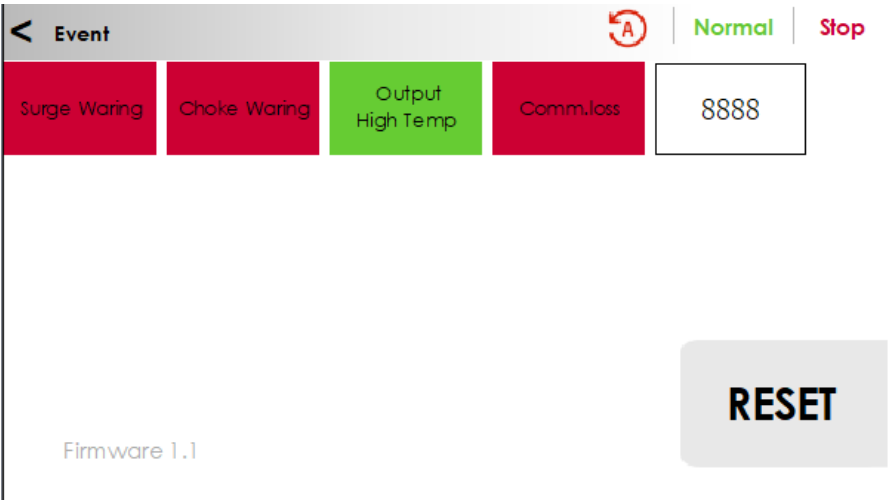


The main screen displays the following parameters (see Fig. 5-1):

- **Pressure:** Measured in **kPa** – indicates the pressure difference between the output pressure and atmospheric pressure.
- **Flow Rate:** Measured in **m³/min** – shows the current airflow rate.
- **Power:** Measured in **kW** – represents the system's output power.
- **Event:** Opens the **Events Interface** to view fault alarms and error codes.
- **Settings:** Opens the **Settings Interface** to configure parameters.
- **Screen Off:** Turns off the screen display.
- **Control:** Opens the **Control Interface** to set parameters like pressure, flow, or power.
- **SPA Mode:** Opens the **Pulse Mode Screen** to configure pulse operation.
- **STOP:** Stops the blower operation.
- **888 888 H:** Displays the **cumulative elapsed time** (cannot be modified).
- **888 888 h:** Displays the **cumulative running time** (can be reset by clicking).

EVENT Interface

Fig. 5-2 EVENT Interface



The **EVENT Interface** displays warnings and errors (see Fig. 5-2):

- **< (Top Left Icon):** Return to the **Main Screen**.
- **Surge Warning:** Indicates a **surge condition** (icon turns red).
- **Choke Warning:** Indicates a **choke condition** (icon turns red).
- **Output High Temp:** Indicates **overheating** (icon turns red).
- **Comm.Loss:** Indicates **communication loss** (icon turns red).
- **Error Codes:** Displays numeric error codes for specific faults.

5.1.1 Error Mapping Table

The G-15 blowers use two versions of PLC software. The error codes and their corresponding issues for the **new PLC version** are listed in **Table 5-1** below. Use this table to diagnose and troubleshoot errors efficiently.

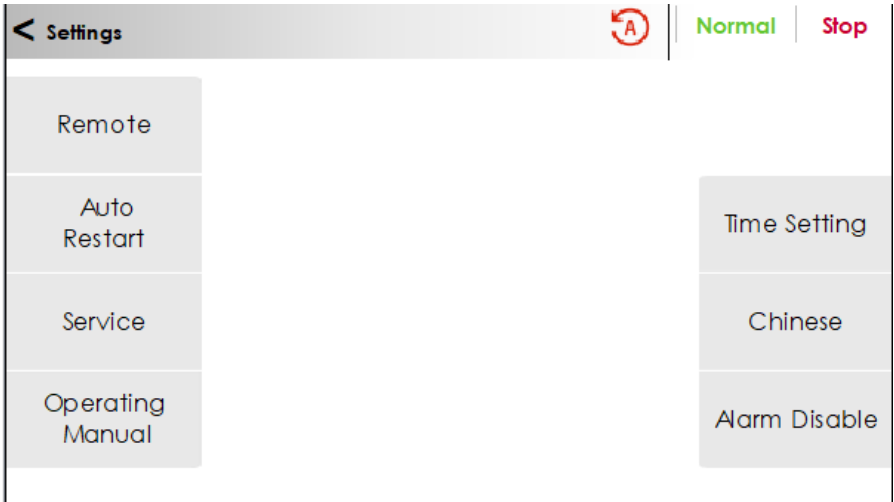
Table 5-1: PLC Error Mapping Table

Error Display	Corresponding Error	Error Display	Corresponding Error
8000	High initial bus voltage	0080	Operating undervoltage
4000	Relay not closed	0040	Overspeed fault
2000	Initial undervoltage	0020	Busbar overcurrent
1000	Initial overvoltage	0010	Boot timeout
0800	Operating overcurrent	0008	Low-speed fault
0400	Strong drag over the current	0004	Communication outage
0200	Switching overcurrent	0002	Mos overtemperature
0100	Operating overvoltage	0001	Inductance overtemperature

RESET: Click this icon to clear errors and reset the system.

5.1.2 Settings Interface

Fig. 5-3 Settings Interface

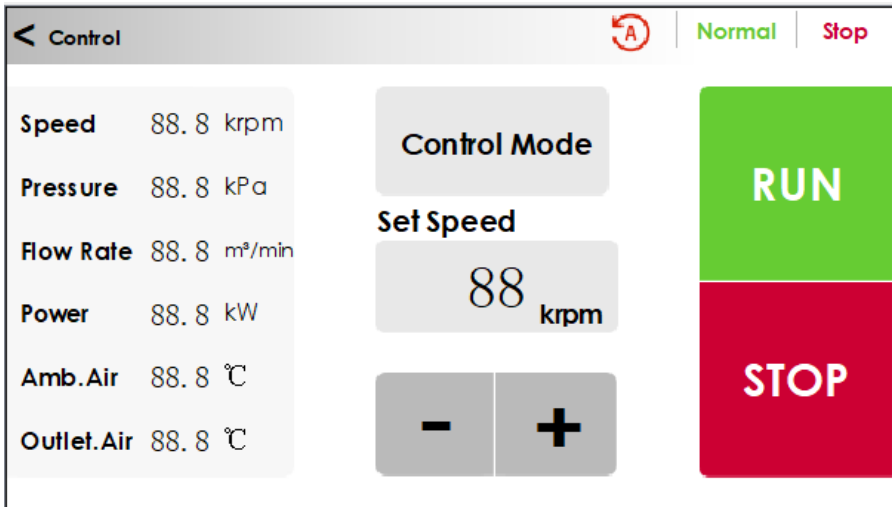


The **Settings Interface** allows users to adjust key parameters and perform critical operations. Below is a breakdown of the available options (see Fig. 5-3 for reference).

- **< (Back Icon):** Returns to the main screen.
- **Remote:** Opens the remote operation screen to configure external control settings.
- **Auto Restart:** Enables or disables the automatic restart function after a system stop.
- **Service:** Displays the URL to access the relevant service support portal.
- **Operating Manual:** Opens the link to the electronic version of the operating manual.
- **Time Setting:** Allows adjustment of time-related parameters (e.g., clock, reset timers).
- **Chinese/English:** Switches the language display between Chinese and English.
- **Alarm Disable:** Toggles alarm protection on or off for specific parameters (use with caution).

5.1.3 Control Interface

Fig. 5-4 Control Interface

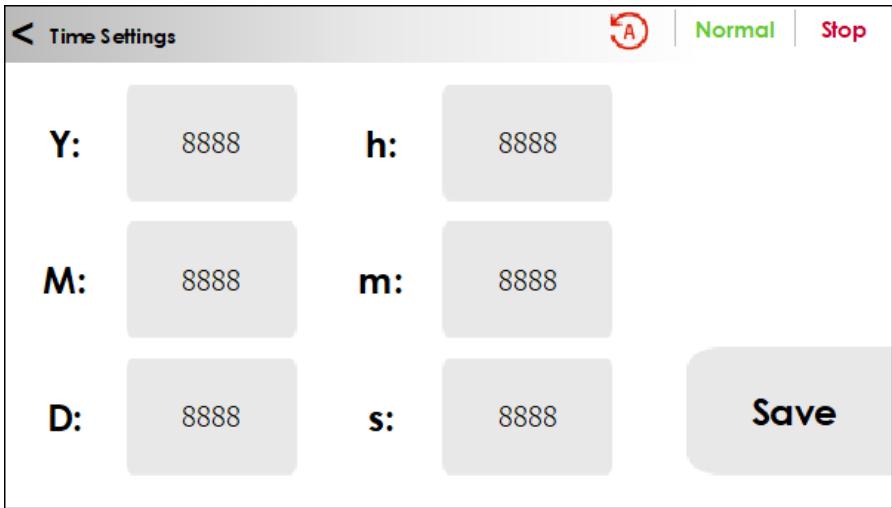


The **Control Interface** allows users to adjust key operational parameters of the blower. Below are detailed descriptions of the available options (refer to the figure for clarity):

- **< (Back Icon):** Returns to the main screen.
- **Control Mode:** Select the parameter you want to adjust (e.g., speed, pressure, flow rate, or power).
- **– (Minus Icon):** Decreases the selected parameter value incrementally.
- **+ (Plus Icon):** Increases the selected parameter value incrementally.
- **RUN:** Starts the operation of the blower.
- **STOP:** Stops the blower operation immediately.

5.1.4 Settings Interface Details

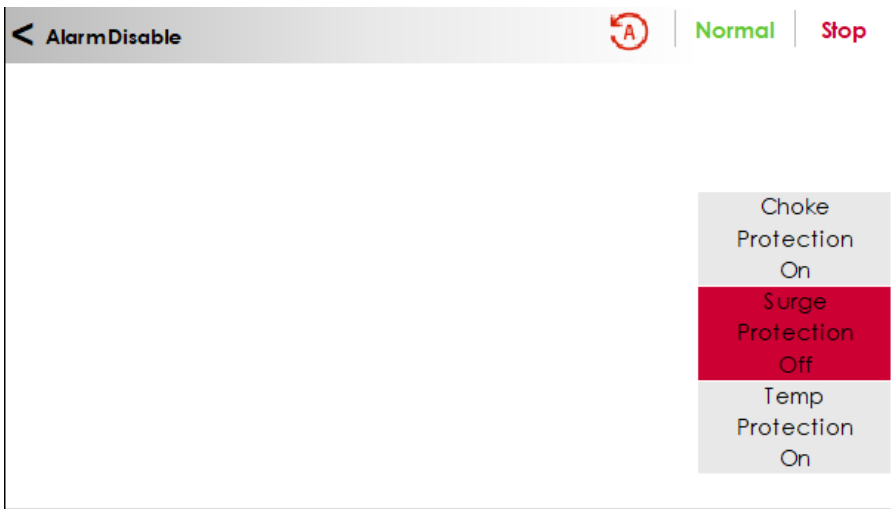
Fig. 5-5 Time Setting Interface



The **Time Setting Interface** allows you to configure date and time parameters. The options are described below:

- **< (Back Icon):** Returns to the main screen.
- **Y, M, D, h, m, s:** Allows you to set the year (Y), month (M), day (D), hour (h), minute (m), and second (s) by selecting each field.
- **Save:** Saves the updated time settings.

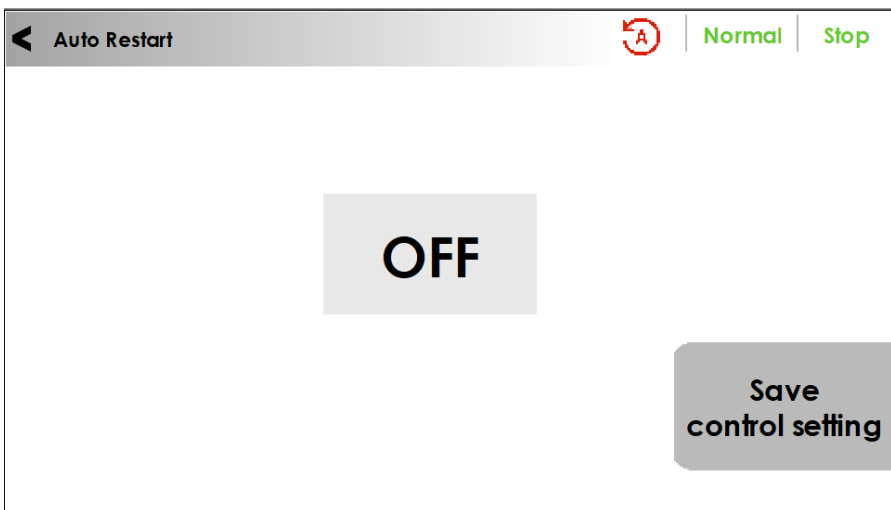
Fig. 5-6 Alarm Disable Interface

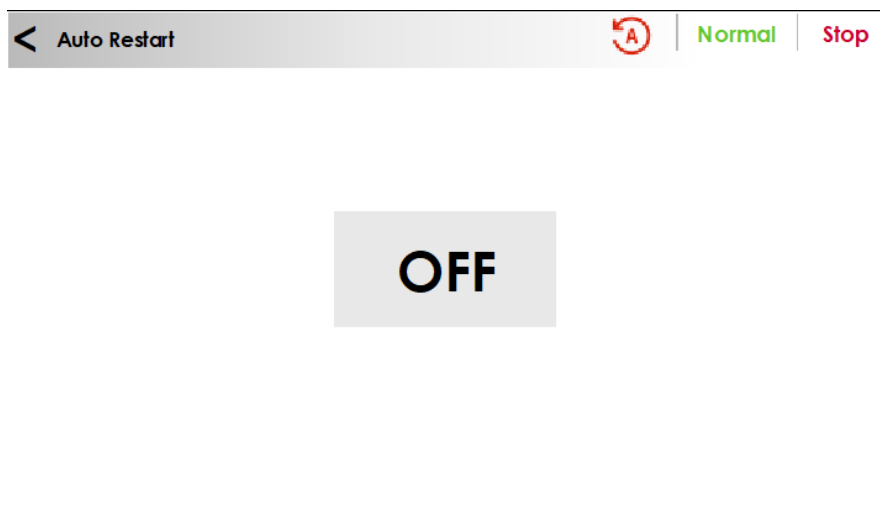


The **Alarm Disable Interface** lets you enable or disable specific protection features. Each setting is described below:

- **< (Back Icon):** Returns to the main screen.
- **Choke Protection Off:** Toggles **Choke Protection** (blocking protection) on or off.
- **Surge Protection Off:** Toggles **Surge Protection** on or off.
- **Temp Protection On:** Toggles **High-Temperature Protection** on or off.

Fig. 5-7 Auto Restart Interface





The Auto Restart Interface allows you to enable or disable the automatic restart function:

- **Auto Restart On/Off:** Click the central icon to toggle the **Auto Restart** feature.

Note: There are two versions of this feature:

1. **Automatic Save:** Settings are saved automatically.
2. **Manual Save:** The user must manually save the settings for changes to take effect.

5.1.5 Fieldbus Operation

The Sprintex blowers are equipped with a **communication module** that allows them to connect with a plant PLC (Programmable Logic Controller) or SCADA (Supervisory Control and Data Acquisition) system.

MODBUS Communication Protocol

The blowers utilise the industry-standard **MODBUS protocol**. Both RS485 and Ethernet devices are supported. The key parameters are as follows:

- **Baud Rate:** 9600
- **Data Bits:** 8
- **Stop Bit:** 1
- **Station Number:** 100
- **Communication Requirements:** Isolated 485 interface

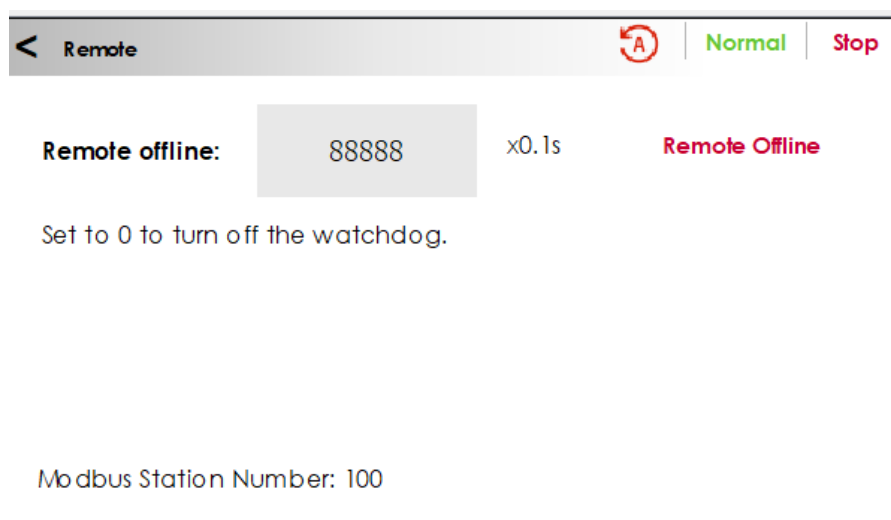
Read and write address:

H0000	Write 1–999: Cycle increase to automatically start remote communication. If no changes occur within the set time, the remote connection will close, triggering an offline alarm. Screen time set to “0” disables this alarm.
H0001	Values: H0001 = Stop, H0002 = Reset, H0003 = Start, H0005 = Set to Speed Mode.
H0002	High Byte: Speed setting (60–80kRPM) with coefficient 1.

Read only address:

H0005	Heartbeat signal: Cycle between 1–999.
H0006	High Byte: Velocity Feedback (KRPM, coefficient 1) Low Byte: Pressure Feedback (KPA, coefficient 1).
H0007	High Byte: Power Feedback (kW, coefficient 0.1) Low Byte: Flow Feedback (m ³ /min, coefficient 0.1).
H0008	Inverter fault code
H0009	Equipment fault codes: 0-bit = Surge Alarm, 1-bit = Blocking Alarm, 2-bit = High-Temperature Alarm, 3-bit = Communication Interruption Alarm, 4-bit = Remote Offline Alarm.
H000A	High Byte: H01 = Speed Mode, H02 = Power Mode, H03 = Flow Mode, H04 = Pressure Mode. Low Byte: Pulse settings (Low Segment, High Segment, Full Segment).
H000B	Outlet temperature (°C) coefficient 1
H000C	Inductance temperature (°C) coefficient 1
H000D	Inverter temperature (°C) coefficient 1
H000E	Intake temperature (°C) coefficient 1
H0011	Input voltage (V) coefficient 1

Fig. 5-8 Remote Interface



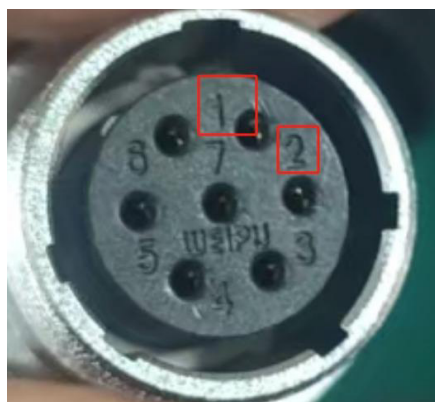
Settings/Remote Interface parameter description

- **< (Back Icon):** Returns to the Settings screen.
- **88888:** Allows you to set the value for communication cycles. If exceeded, the device will go offline.
 1. Set the desired **time value**.
 2. Reset the communication on the **Events Interface**.
 3. Return to the **Remote Interface** to confirm the "Remote Online" status.
 4. Write the updated **heartbeat**, set the **speed mode**, enter a speed (60–80 KRPM), and initiate the start command.

MODBUS Communication Note:

The 7-pin port (model WS16-7) is used for MODBUS communication.

- **Pins 1 and 2:** Communication lines for MODBUS.
- **Other Pins:** Not used.



For more technical details, please contact the manufacturer. For details, please contact the manufacturer.

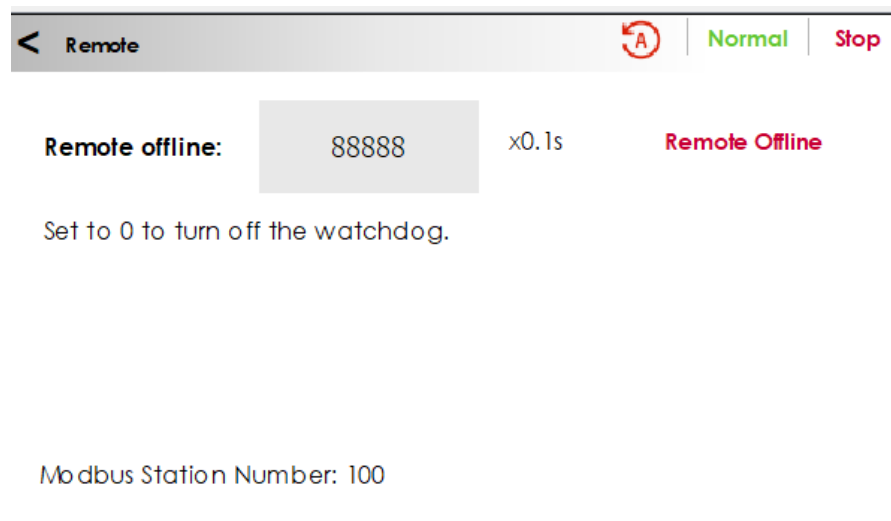
Read and write address:

H0000	Write 1–999: Cycle increase to automatically start remote communication. If no changes occur within the set time, the remote connection will close, triggering an offline alarm. Screen time set to “0” disables this alarm.
H0001	Values: H0001 = Stop, H0002 = Reset, H0003 = Start, H0005 = Set to Speed Mode.
H0002	High Byte: Speed setting (60–80kRPM) with coefficient 1.

Read only address:

H0005	Heartbeat signal: Cycle between 1–999.
H0006	High Byte: Velocity Feedback (KRPM, coefficient 1) Low Byte: Pressure Feedback (KPA, coefficient 1).
H0007	High Byte: Power Feedback (kW, coefficient 0.1) Low Byte: Flow Feedback (m ³ /min, coefficient 0.1).
H0008	Inverter fault code
H0009	Equipment fault codes: 0-bit = Surge Alarm, 1-bit = Blocking Alarm, 2-bit = High-Temperature Alarm, 3-bit = Communication Interruption Alarm, 4-bit = Remote Offline Alarm.
H000A	High Byte: H01 = Speed Mode, H02 = Power Mode, H03 = Flow Mode, H04 = Pressure Mode. Low Byte: Pulse settings (Low Segment, High Segment, Full Segment).
H000B	Outlet temperature (°C) coefficient 1
H000C	Inductance temperature (°C) coefficient 1
H000D	Inverter temperature (°C) coefficient 1
H000E	Intake temperature (°C) coefficient 1
H0011	Input voltage (V) coefficient 1

Fig. 5-8 Remote Interface



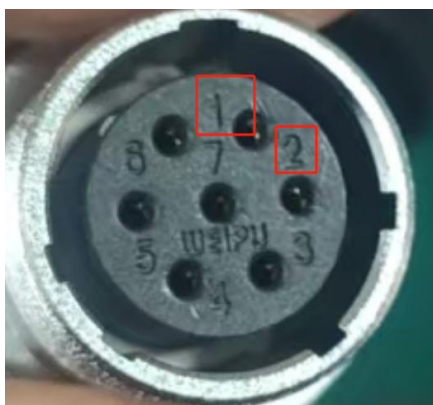
Settings/Remote Interface parameter description

- **< (Back Icon):** Returns to the Settings screen.
- **88888:** Allows you to set the value for communication cycles. If exceeded, the device will go offline.
 1. Set the desired **time value**.
 2. Reset the communication on the **Events Interface**.
 3. Return to the **Remote Interface** to confirm the "Remote Online" status.
 4. Write the updated **heartbeat**, set the **speed mode**, enter a speed (60–80 KRPM), and initiate the start command.

MODBUS Communication Note:

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For more technical details, please contact the manufacturer. For details, please contact the manufacturer.

5.2 Unacceptable Operating Practices

To ensure safe operation, avoid the following practices:

1. Expose the blower to direct sunlight.
2. Operate in or near water.
3. Use improper grounding. Ensure the system is properly earthed.
4. Use wires smaller than **2.5 square mm**.
5. Operate without an installed air filter or with a dirty filter. Replace the filter regularly.
6. Operate outside the voltage range of **350V–410V**.
7. Run with an incomplete three-phase power supply.
8. Allow pipelines to dip below the liquid level. The pipeline must be at least **1 metre higher** than the liquid level to prevent backflow.

5.3 Recommended Operating Practices

To maintain efficiency and performance, follow these best practices:

1. Use appropriately sized check valves to avoid excessive pressure on the system.
2. Calculate pipeline diameters carefully to prevent pressure buildup.
3. Use a sufficient number of aeration discs to avoid pressure accumulation during operation.
4. Adjust valve openings to remain within reasonable limits.
5. Begin operation using **speed mode** for control.
6. Avoid parallel piping configurations. If necessary, install check valves for each blower pipe and expand the pipe diameter.
7. Keep blowers out of direct sunlight.
8. Maintain a maximum air temperature of **45°C**.
9. Ensure the supply voltage remains within **350V–410V**.
10. Use appropriate air breakers:
 - **20A breaker** for 4kW blowers.
 - **32A breaker** for 7.5kW blowers.

5.4 Fault Handling and Manufacturer Contact

- **After a fault occurs:** Take a picture of the fault screen and contact the manufacturer immediately.
- **Contact for Assistance:**
Email: service@sprintex.com.cn

6. Maintenance

6.1 Maintenance Reminders

The maintenance work described here may only be performed by the designated personnel. The personnel entrusted with the respective maintenance tasks are listed in the maintenance plan.

For the preparation of the maintenance plan: Service personnel

For cleaning after maintenance: User

For commissioning after maintenance work: Service personnel / Authorized person

Protective equipment

For maintenance, the following is necessary:

Protective work clothing

Safety shoes

Hearing protection

Protective gloves

Safety goggles

Industrial hard hat

Important reminders:

Check regularly to ensure that main blower are operating properly. Do NOT disassemble or reassemble blowers without permission from **Sprintex** technicians. Repair costs as a result of unauthorized assembly or disassembly will not be covered under warranty. If abnormal operation is observed shut the blower down and contact the Sprintex technician for assistance. In the event of a blower failure and automatic shut-down, record the Event Log/ Error Code and contact an **Sprintex** technician prior to restarting the blower.

6.2 Maintenance Schedule

Table 6-1 Maintenance schedule

Inspection cycle	Inspection item	Inspection content
Daily	Touch display value	Check current, RPM, outlet pressure, flow rate, inlet, and outlet temperature.
	Inlet pressure differential	Equipment stops automatically if pressure difference exceeds 3 kPa. Replace filter every 3 months.
	Equipment vibration	Check for unusual vibration by hand and through the pipeline. Adjust the access valve if oscillation persists.
	Outlet air leakage	Inspect exhaust ports, pipes, and flange interfaces for air leaks.
	Noise	Check for abnormal noises during operation.

Inspection cycle	Inspection item	Inspection content
Daily	Smell	Inspect for burning or unusual odours near the blower.
	Power access section	Verify there is no abnormal heating in the power cable.
Monthly	Filter	Check the filter for blockages.
	Monthly operation data comparison	Compare monthly data (pressure, flow, temperature, current, voltage).
	Check the device installation status	Verify level status, connectors, and check valves.
Semiannually	Check frequency converter	Inspect internal wiring and electrical components.
	Check engine room	Check pipe connections and inspect the impeller.
Yearly	Check control cabinet	Inspect sensor calibration and test safety shutdown systems. Verify all remote and manual control systems are functioning properly.
	Run/remote control	

6.3 Air filter replacement

Follow these steps to replace the air filter and maintain equipment performance:

1. Replace the filter regularly based on pollution levels.
2. Stop the device before starting the replacement process.
3. Remove the filter bolt and extract the contaminated filter.
4. Install the new filter and secure it with the bolt.
5. Replace the filter based on environment conditions:
 - **Clean environments:** Replace every **2–3 months**.
 - **Dusty environments:** Replace monthly.

Contact Information:

Email: service@sprintex.com.cn