

# FAN MODULAR



GB MANUAL

NL HANDLEIDING

DE ANLEITUNG

FR NOTICE

RU РУКОВОДСТВО

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This manual has been compiled with the utmost care. If, however, you should discover an error, please inform Fancom B.V.

**Art.Nr. 5911828**

**GB160509**

# Table of contents








- 1. General introduction ..... 1**
  - 1.1 How to use this manual ..... 1
  - 1.2 Symbols on the Fan..... 1
  - 1.3 Fancom helpdesk ..... 1
  - 1.4 Safety instructions and warnings ..... 2
- 2. Installing the Fan ..... 2**
  - 2.1 Mount the Fan ..... 2
  - 2.2 Connect the Fan ..... 6
  - 2.3 Install the DRS-feedback sensor (optional) ..... 9
  - 2.4 Install the protective screen (optional) ..... 9
  - 2.5 Test the Fan ..... 10
- 3. Using the Fan ..... 11**
  - 3.1 First use..... 11
  - 3.2 Maintenance ..... 11
  - 3.3 Disposal / recycling..... 11
- 4. Technical specifications ..... 11**
- 5. EG declaration of conformity ..... 12**

# 1. General introduction

This manual has been compiled with the utmost care. If, however, you should discover an error, please inform Fancom B.V..








## 1.1 How to use this manual

The following symbols are used in this manual:

-  Tips and suggestions.
-  Note providing recommendations and additional information.
-  Warning indicating damage to the product if you do not follow procedures carefully.
-  Warning indicating danger to humans or animals.
-  Electrical shock hazard. Danger to humans and animals.
-  Example of a practical application of the described functionality.
-  Calculation example.

## 1.2 Symbols on the Fan

The following symbols are used on the Fan:




	Read the documentation and safety instructions which are provided in this user manual.
	Warning indicating danger to the product or danger to human or animals.
	Electrical shock hazard. Danger to humans and animals.
	This unit may start at any time.
	Moving parts can crush and cut.
	Air flow direction.
	Air flow direction.

## 1.3 Fancom helpdesk

For any questions and support, please contact the local Fancom Sales & Service Center.

## 1.4 Safety instructions and warnings

Before installing and commissioning the Fan, read the safety instructions, provisions and conditions carefully. This paragraph contains a number of general safety instructions. In the following paragraph, a number of specific safety instructions are included in the installation instruction. The installation of the device and remedying of any malfunctions should be performed by a certified electrical installer according to the applicable norms. The guarantee does not apply if this product is installed in any other way than is indicated by Fancom and if the product's motor has been opened and changes have been made to the product.





	Never install a damaged Fan! Notify your supplier of any damages.
	Parts of this product may have sharp edges. Wearing safety gloves is therefore recommended.
	Ensure that the workplace is clean and dry.

## 2. Installing the Fan

Install the Fan and associated components as follows:

1. Mount the Fan (see page 2)
2. Connect the Fan (see)
3. Install the DRS-feedback sensor (optional) (see page 9)
4. Install the protective screen (optional) (see page 9)
5. Test the Fan (see page 10)

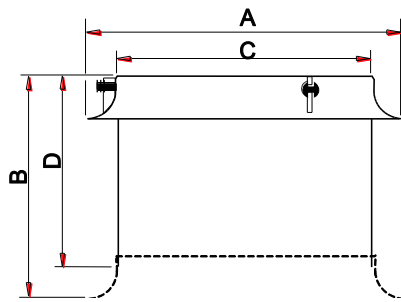
### 2.1 Mount the Fan

	Mount the Fan in or on a (roof) structure with sufficient load-bearing capacity.
	The direction of airflow must be from the motor to the impeller.
	There must be sufficient free airflow available to cool the motor.
	Most Fan units are too heavy to lift. Take the necessary precautions.

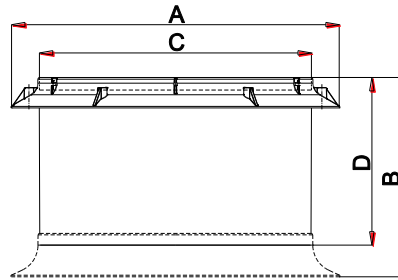
Take the dimensions of various types of Fan into account when installing.

Type	Ø A mm (inch)	B mm (inch)	Ø C mm (inch)	D mm (inch)
..35	440 (17.3)	393 (15.5)	362 (14.3)	350 (13.8)
..40	502 (19.8)	398 (15.7)	412 (16.2)	350 (13.8)
..45	565 (22.2)	404 (15.9)	462 (18.2)	350 (13.8)
..50	628 (24.7)	410 (16.1)	512 (20.2)	350 (13.8)
..56	702 (27.6)	418 (16.5)	572 (22.5)	350 (13.8)
..63	775 (30.5)	571 (22.5)	650 (25.6)	500 (19.7)
..80	985 (38.8)	595 (23.4)	813 (32.0)	500 (19.7)

35 - 56



63 - 80



### Quick installation 35 - 80

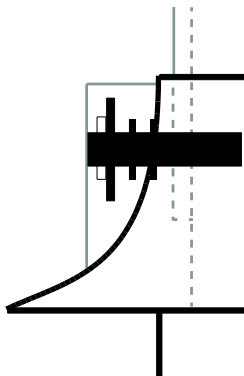


Quick installation may only be done if the structure has exactly the same dimensions as the underside of the module and is sufficiently solid.

Position the tube on the underside of the module. Take note that the openings through which the linking pins go are directly across from each other.

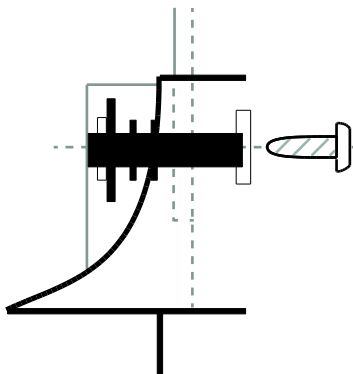
1. Push the linking pins in so that the tube is connected to the module. If the linking pins can't be pushed in completely (e.g. because they come in contact with the blades), then place them in the half-closed position.

#### Closed



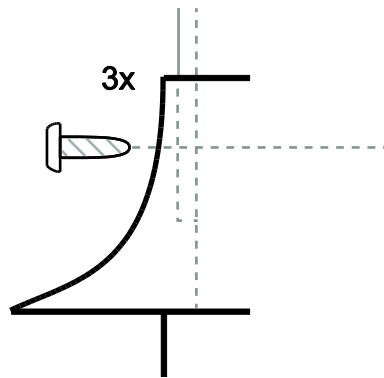
2. Secure the linking pins by screwing in a screw with lock washer from inside the tube into the linking pins.

#### Drilling





50 and 56 Fan in combination with CLICK extension tubes must be secured with 3 extra M4 bolts (M4 bolts spaced 120° from each other) in addition to the 3 standard linking pins.

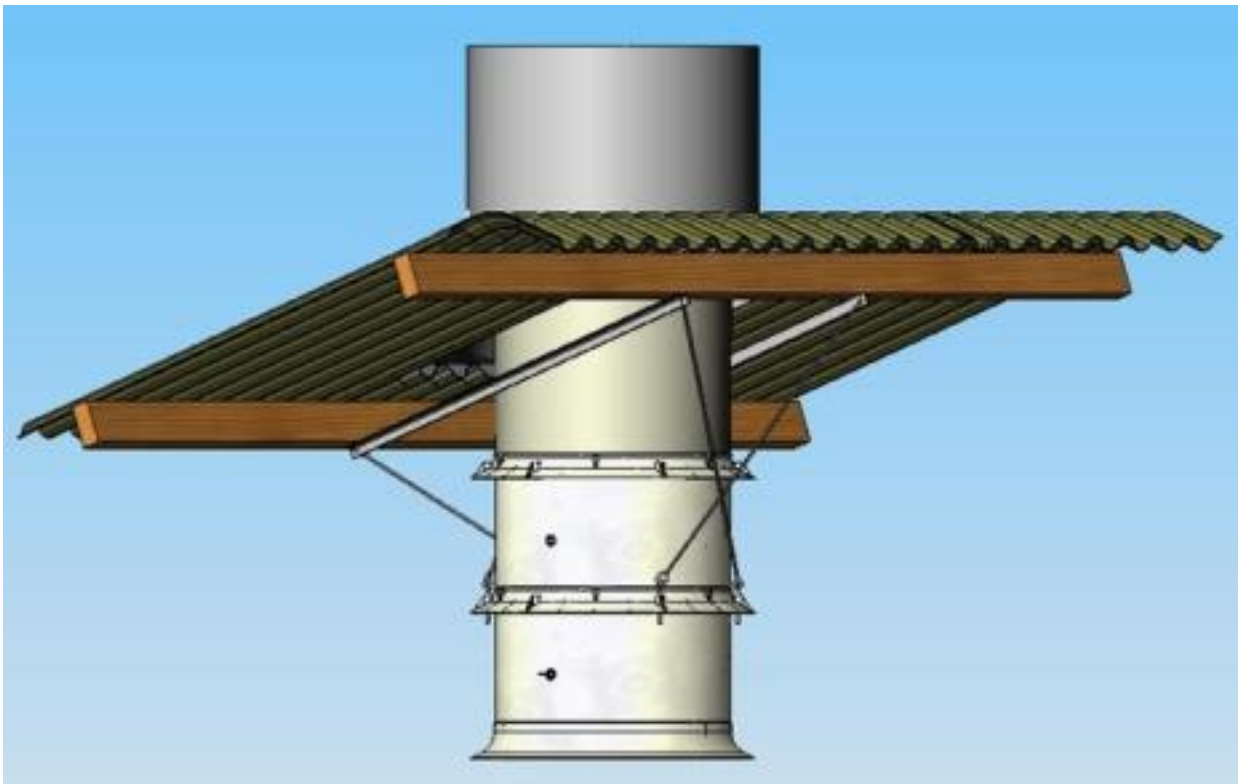


### Assembly 63 – 80



The 63-80 tube module is equipped with 6 mounting eyes; you must use at least 4 of these for affixing to the (roof) structure.

Attach the wire/chain to the tube module and to the (roof) structure. Make sure the wires/chains cross each other.



The wire/chain may not be fed directly through the tube module's hanging eye. Fancom recommends running steel hanging eyes through the tube module's hanging eyes and then attaching the wire or chain to this. These hanging eyes and accessories are available in a mounting kit.

### Install the protective screen (optional)



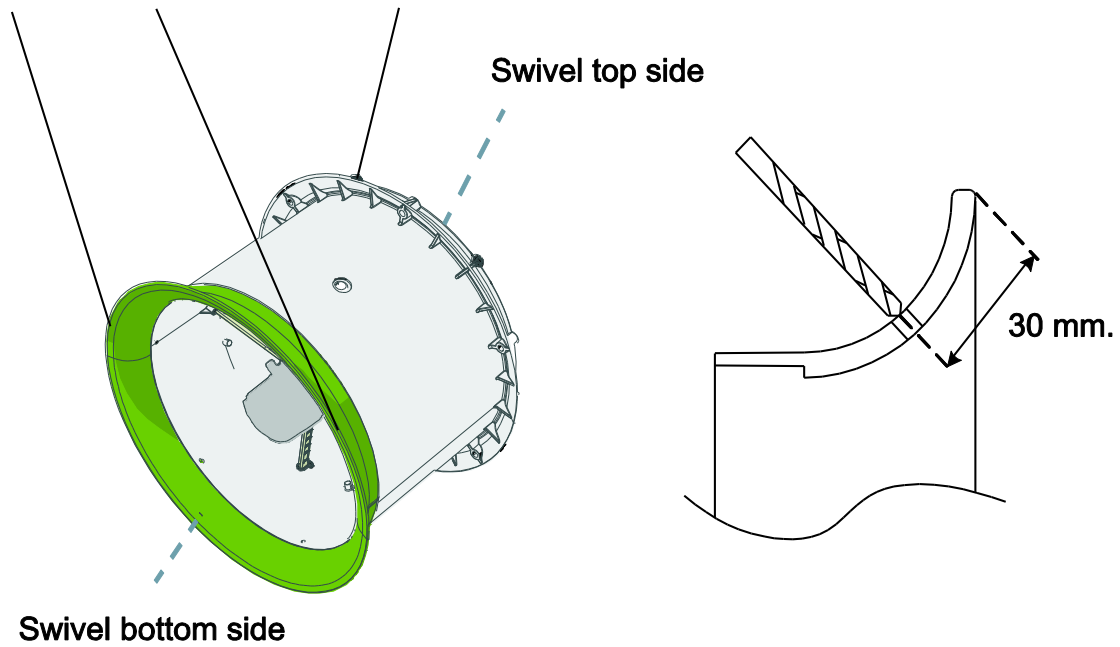
Placement of a protective screen is necessary if the Fan:

- is within reach of animals and/or people, and
- is installed at heights less than 2.7 m above the floor.

### Mounting 35G - 56G










Multiple mounting points provide greater stability.










## 2.2 Connect the Fan

	Before connecting, turn off the power and turn it back on only after the entire installation is ready.
	Make sure that the Fan is well and properly grounded according to the guidelines.
	Keep signal and power cables as short as possible.
	Place cables preferably in a duct (separate signal cables from power supply cables).
	Use low current cables for the DSR-feedback connection.
	Use high current cables for the electrical connection of the Fan.
	Mounting and electric connection may be executed by qualified personnel only according to the current standards and regulations. Please see the ID label attached to the motor for additional information. Also see detailed specifications and fan characteristics for each type at <a href="http://www.fancom.com/uk/downloads">www.fancom.com/uk/downloads</a> or the Fancom extranet.

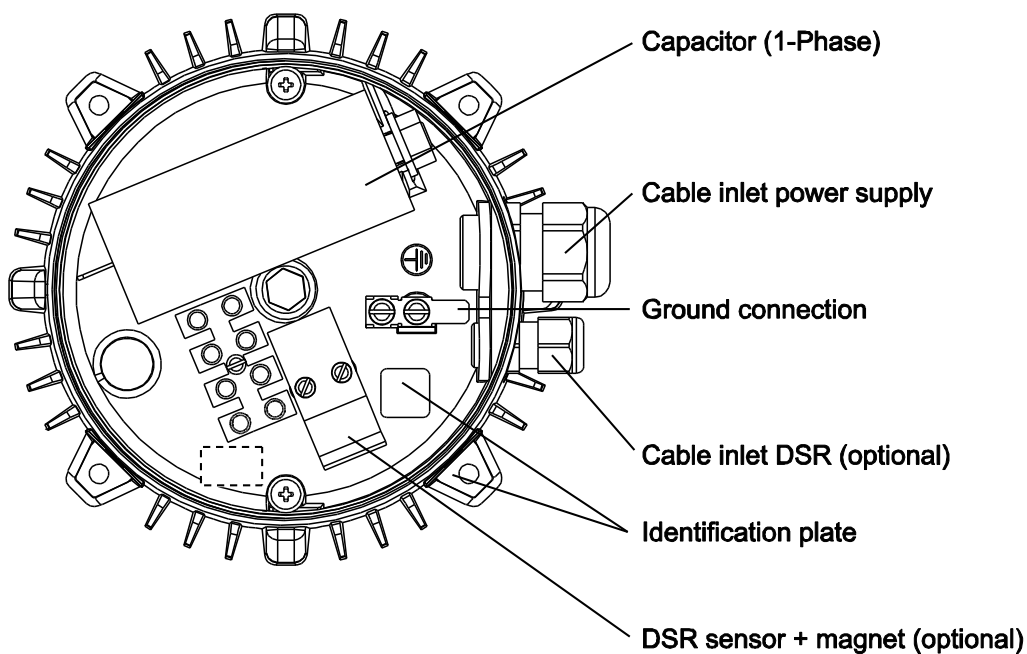
### 1-phase

	The Fan can be controlled electronically or by a transformer.
	If the Fan units are connected in a parallel circuit, the heat produced per Fan can increase (this means a shorter fan life). Fancom therefore advises that no more than three Fan units are connected in a parallel circuit.
	The motor/thermal protection is already integrated in the Fan.

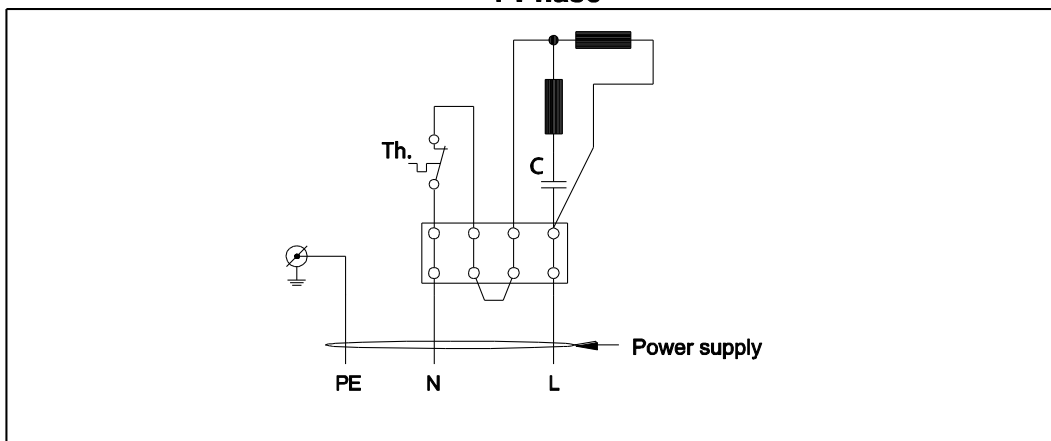
### 3-phase

	The Fan can only be controlled by a frequency controller.
	Always use a motor protection switch (MPS) per Fan. Always set the MPS higher than the current used by the Fan. However, NEVER set the MPS higher than 20% above the rated current of the Fan.

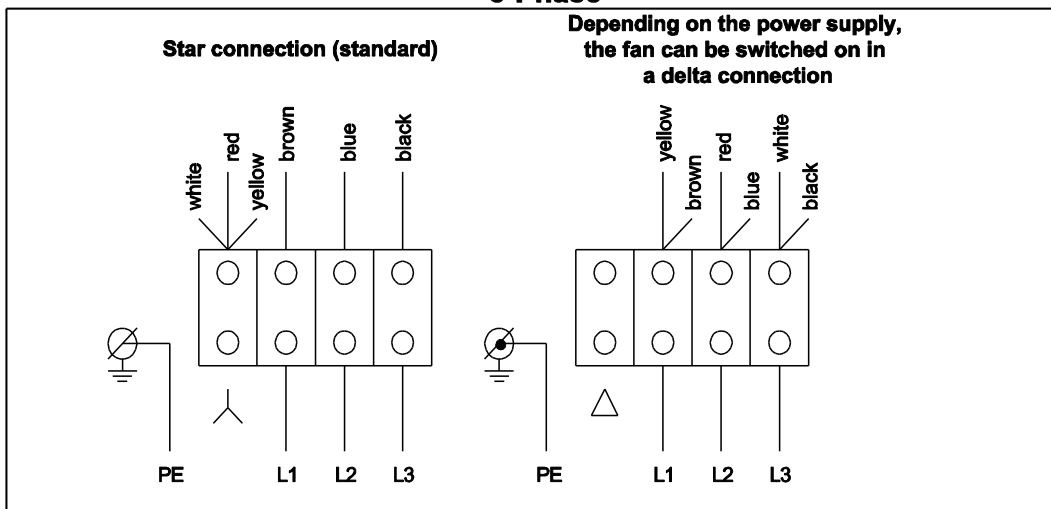
Connection diagram (35-56 excl. 1450P + 1456)



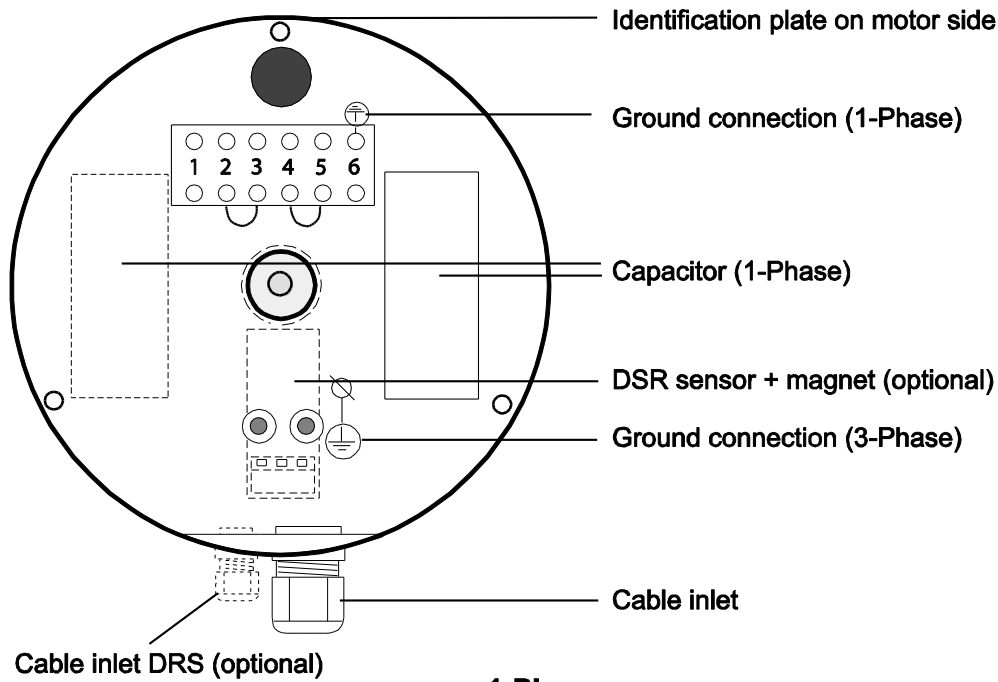
1-Phase



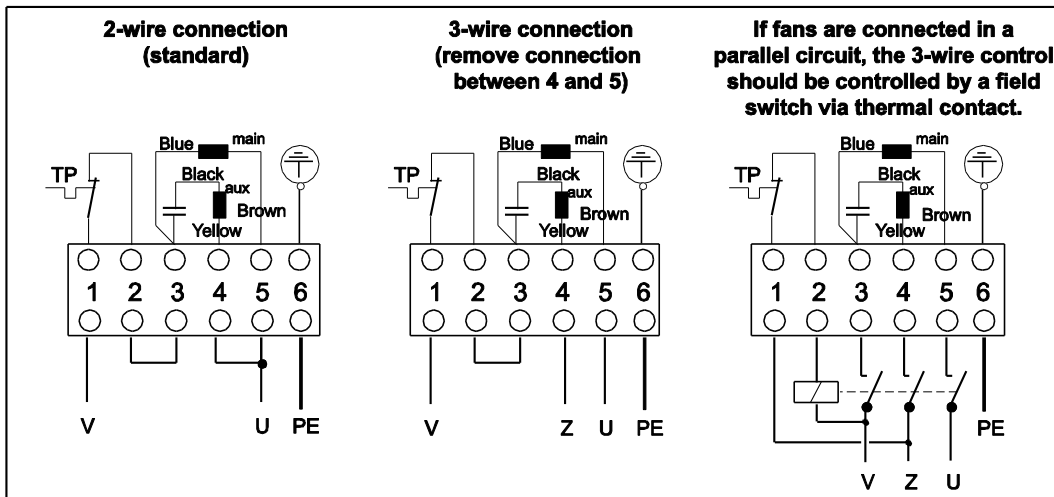
3-Phase



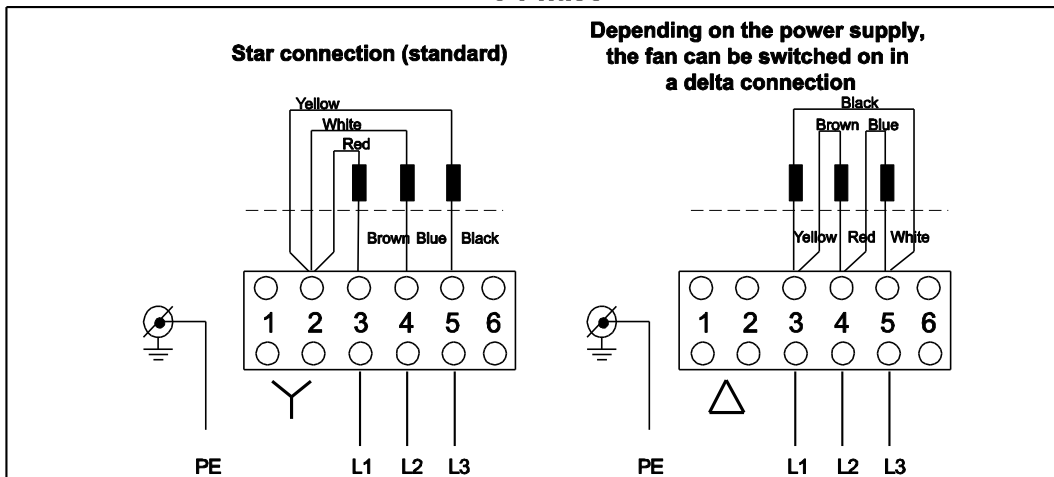
Connection diagram (63-92 + 1450P + 1456)



**1-Phase**

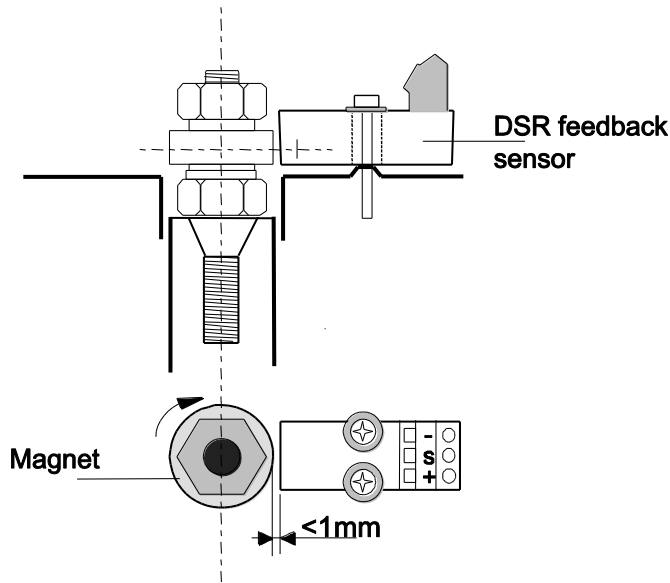


**3-Phase**



### 2.3 Install the DRS-feedback sensor (optional)

1. Unscrew the lid and remove it.
2. Place the DRS-feedback sensor and the magnet. Ensure the bottom of the DRS-feedback sensor is on a level with the bottom of the magnet and that it revolves exactly around the center line of the magnet.



3. Connect the DRS-feedback sensor according to the instructions and diagram (see page 7 and page 8).
4. Replace the lid and crew the lid on the Fan.

### 2.4 Install the protective screen (optional)



Remove power from the Fan before mounting the protective screen.

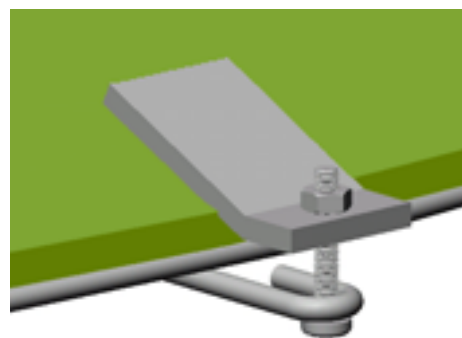
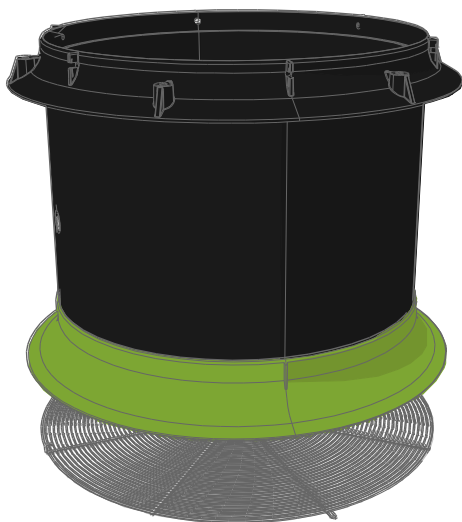


Make sure that the impeller is not turning.

Install the protective screen as follows:

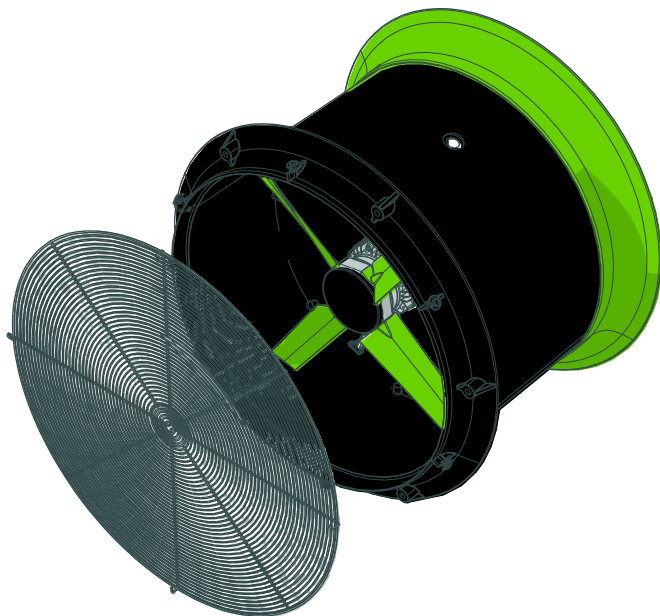
#### Air inlet side

Install the protective screen on the Fan and secure it as shown in the illustration below.

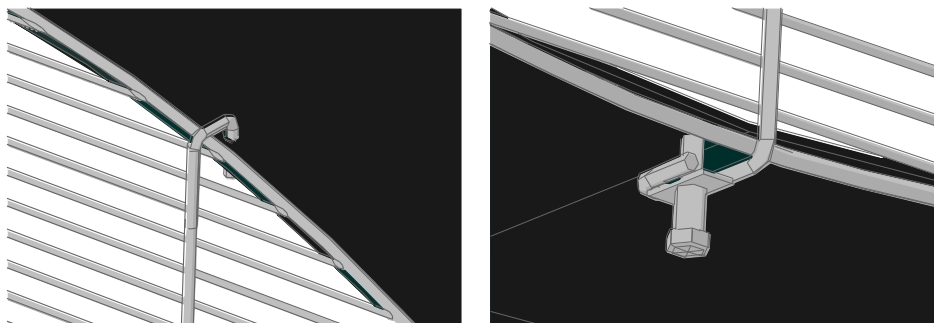


## Air outlet side

1. Hold the protective screen up to the Fan and trace the three drill holes.



2. Drill the three holes with a  $\varnothing 5\text{mm}$  bit.
3. Place the protective screen on the Fan and fix the protective screen with a M5 x 30 bolt.



## 2.5 Test the Fan

1. Check whether the Fan has been connected correctly.
2. Check whether the Fan works optimally.



Do not touch any of the Fan moving parts.

## 3. Using the Fan

### 3.1 First use



Do not touch any of the Fan moving parts.

Fancom advises to leave the Fan on for about 6 hours after installation, to let it run in.

### 3.2 Maintenance

The Fan requires no specific maintenance. Fancom recommends that your installation technician inspects the complete climate installation, of which the Fan is a component, every half-year.



Inspect the Fan periodically for any damages. Notify your installation technician immediately of any damages. A damaged Fan is unsafe!



Check the Fan for proper functioning regularly.



There must always be power to the Fan. This prevents the formation of condensation in the Fan.

### Cleaning

The Fan may be cleaned wet, but consider the following:



Do not use a high pressure hose or aim at motor seals or openings at close range.



The fan should be turning. This makes for a better seal at the shaft ends and prevents water flowing into the motor. It is recommended that the fan turns at 50%. If so, water will be discharged faster by the airflow.



This fan has protection class IP66.



After cleaning the Fan, it should run at 100% rpm for at least 30 minutes to remove all dampness.

### 3.3 Disposal / recycling

When disposing the Fan please comply with all relevant requirements and regulations applicable in your country.

## 4. Technical specifications



See the ID label on the motor for additional information. Also see detailed specifications and fan characteristics for each type at [www.fancom.com/uk/downloads](http://www.fancom.com/uk/downloads) or the Fancom extranet.

## 5. EG declaration of conformity

Manufacturer: Fancom B.V.

Address: Industrieterrein 34

City: Panningen (the Netherlands)

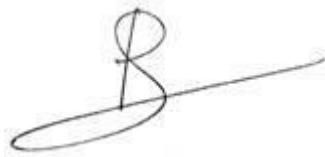
Hereby declares that the: **Fan Modular**

Complies with the provisions of the:

1. Low voltage directive 2014/35/EU  
according to NEN-EN-IEC 60335-01: 2012
2. Machine directive 2006/42/EC  
Industrial ventilators according to NEN-EN-IEC 14461: 2002
3. Ecodesign requirements directive 2009/125/EC  
according to NR. 327/2011

Place: Panningen

Date: 9/5/2016



Paul Smits

Managing Director