



Intelligent Fan Systems

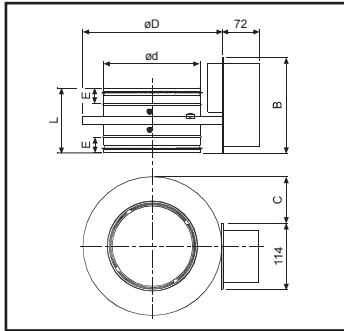
iFIRIS-M (Pg 1)

# 418972

## Installation Guide

### Iris Damper

#### Dimensions



size	∅d	∅D	B	C	E	L	Weight kg
100	99	163	167	43,0	30	113	2,0
125	124	188	167	55,5	30	113	2,2
160	159	231	167	77,0	30	114	2,4
200	199	284	167	103,5	30	115	2,9
250	249	331	167	127,5	30	138	3,6
315	314	407	167	164,0	30	138	5,0

The IRIS-M damper is selected to be suitable for operation with *iFan* system via the PIR switch.

#### Installation

The damper is delivered with detailed instructions for installation. IRIS-M is delivered ready assembled. Access to the potentiometers for damper position settings, to the opening switch and to the terminal blocks is gained by removing the plastic window of the motor casing. The method of air flow measurement and the required safety distances are the same as with standard iris dampers.

#### Damper settings and air flow control.

The IRIS-M motor casing contains two potentiometers for stepless adjustment of the min. and max. position of the damper (the smallest and largest opening to be formed by the damper blades). The min. position determines the basic air flow rate, the max. position the air flow rate during forced ventilation. The motor casing also encloses a cleaning switch to force the damper fully open for cleaning the duct. In *iFan* applications IRIS-M is intended

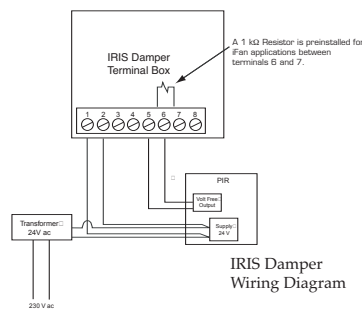


to be controlled with the PIR switch. For this purpose there is an internal resistor installed between terminals 6 & 7. Should IRIS-M be used with other controls such as 3 position manual switch or 0-10V or 4-20mA control signals, the resistor must be removed and the IRIS-M technical instructions must be followed. Due to the mechanical durability of the IRIS-M damper, it can be used in systems where the flow rate is changed once every hour.

For *iFan* applications the jumper marked number 7 should be in place. Jumpers 6 and 8 should be left open.

#### Operation

IRIS-M dampers are designed to be used alone or in



pairs. The min. (basic air flow rate) and max. (forced ventilation) position of every damper can be set when balancing the ductwork.

To make sure that the right balance between supply and exhaust air remains, the master damper can be connected in a cascade with a slave damper imitating the movements of the master damper. The min. and max. positions of the two dampers can be different. The slave damper receives signals from the master damper as follows; When the master

#### Technical Specification

Supply voltage	24 V AC (protective extra low voltage, PELV)
Rated power	4,5 VA
Control signal	2 ... 10 V 0 ... 10 V 4 ... 20 mA
Fully open to fully closed in	1-3 min
Electrical protection	III (protective extra low voltage, PELV)
Enclosure	IP55
Ambient temperature	-25°C ... +50°C
Storage temperature	-40°C ... +50°C
Humidity	10 ... 90% no condensing
Electromagnetic compatibility	89/336/EEC
Safety	98/37/EEC
Maintenance	Maintenance free
Calculated life	

damper is closed (0%), the signal is 4 mA, and the slave damper closes (0%). When the master damper is open (100%), the signal is 20 mA, and the slave damper opens (100%). In intermediate positions the signal and the corresponding slave damper position follow the master damper position linearly.

The cleaning switch only opens the damper that it is connected to, i.e., no signal to open is sent from the master damper to the slave damper.

The *iFan* iris damper is designed to perform up to three open and close cycles in one hour. This corresponds to a ventilation run on time of 20 mins.

#### Maintenance

The unit does not require any regular maintenance. Any accumulated dust should however be removed.

#### Service

Fläkt Woods Service Centre will be happy to provide any assistance required.



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## Installation Guide Iris Damper

### Iris Performance

