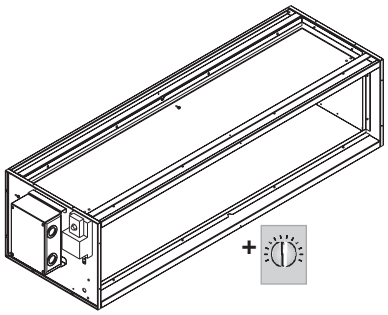
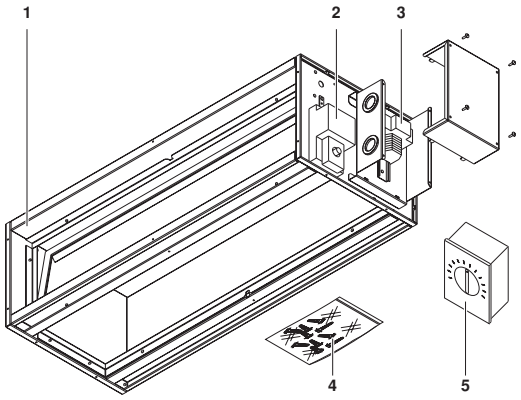
DAIKIN

INSTALLATION MANUAL

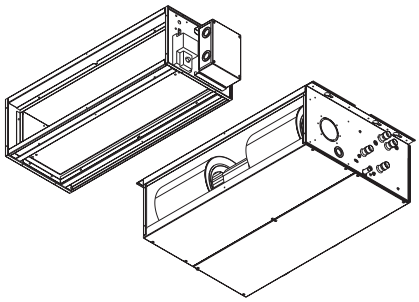
Motorised fresh air intake louvre



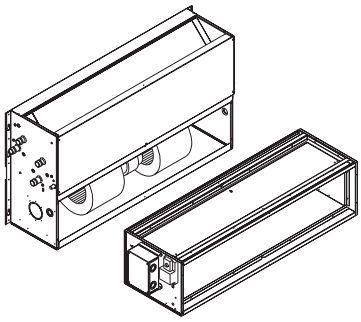
EDMFA04A6
EDMFA06A6
EDMFA10A6
EDMFA12A6
EDMFA18A6



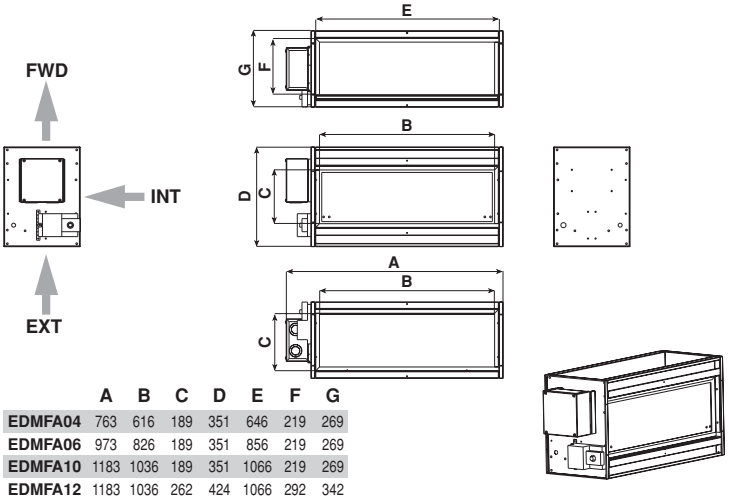
1



2a

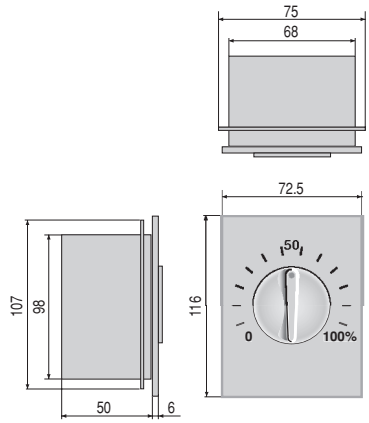


2b

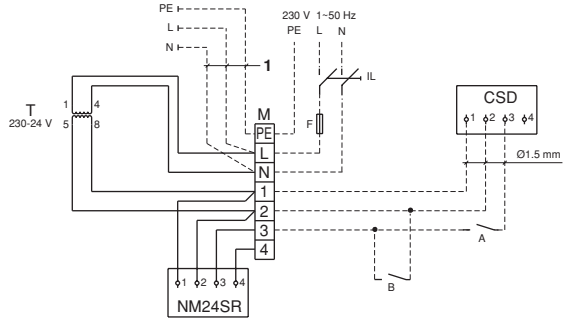


	A	B	C	D	E	F	G
EDMFA04	763	616	189	351	646	219	269
EDMFA06	973	826	189	351	856	219	269
EDMFA10	1183	1036	189	351	1066	219	269
EDMFA12	1183	1036	262	424	1066	292	342
EDMFA18	1393	1246	262	424	1276	292	342

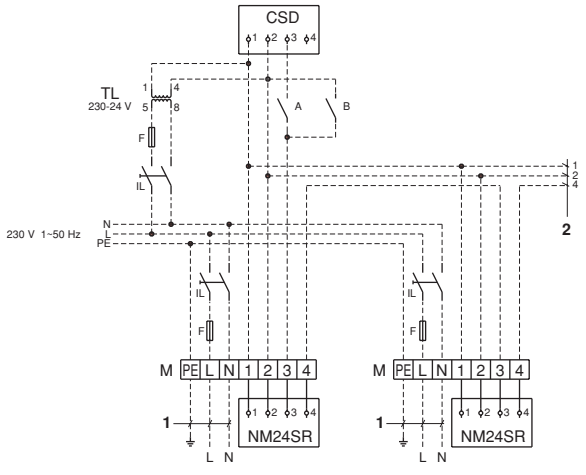
3



4



5



6

Read this manual attentively before starting up the unit. Do not throw it away. Keep it in your files for future reference.

Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for the use with the equipment and have them installed by a professional.

If unsure of installation procedures or use, always contact your Daikin dealer for advice and information.

The motorised fresh air intake louvre is intended for replacing the air in the room directly from the air-handling unit. The amount of outdoor air that will be let into the room, after having been filtered and treated thermally, may be regulated proportionally from 0 to 100% by means of the servomotor controlled by the supplied controller, which is designed for flush wall-mounting installations.

Overview of options

Unit	Options
FWD04	EDMFA04A6
FWD06	EDMFA06A6
FWD08+10	EDMFA10A6
FWD12	EDMFA12A6
FWD16+18	EDMFA18A6

The EDMFA kit shown in figure 1 consists of:

1 Outdoor air inlet louvre made of galvanized steel sheet and setup for being connected to the machine, at one end, and to the other required accessories.

2 Servomotor connected directly to the louvre's baffle, with a protection rating of IP54 and power supply of ~24 V.
The louvre may be opened or closed automatically at the signal of the external auxiliary contacts (not supplied) such as antifreeze thermostats, timers, etc., with the possibility of connecting multi-servomotors in parallel to an individual opening-closing control.

3 230 V - 24 V voltage transformer, complete with support terminal strip housed inside the specific electrical box, which functions as a mechanical protection for preventing the access to the connecting terminal strip and to the transformer itself.

4 Self-tapping fixing screws.

5 Control panel.
The control panel for activating the servomotor is to be remotely installed and is to be used for closing or opening the louvre from 0 to 100%.

Installation

- All field wiring and components must be installed by a licensed electrician and must comply with relevant local and national regulations.
- Before obtaining access to terminals, all power supply circuits must be interrupted.

To prevent the water from freezing inside the heat exchanger during winter, close the outdoor air inlet when the system is not operational or use an anti-freeze solution for controlling its freezing point:

% of glycol	0	10	20	30	40
Freezing point (°C)	0	–4	–10	–16	–24

The EDMFA air inlet louvre may be installed on the FWD air-handling unit in both air intake configurations (AA or AB) outlined in the installation and operation manual.

1 Check that the desired installation complies with one of the configurations in figure 2.

2a EDMFA+FWD unit installed horizontally

2b EDMFA+FWD unit installed vertically

It is advisable to mount the air inlet louvre on the air-handling unit before installing the unit in its final seat. Use the self-tapping fixing screws (supplied with the kit).

Do not lift the accessory kit by holding it at the mobile louvre in order to prevent permanent deformation that could cause malfunctions over time.

The drilled holes on both ends of the EDMFA module (outdoor air inlet and recycled air inlet) are like those on the machine's intake inlet. As such, it is possible to mount the module on the unit itself. As a consequence you can couple all accessories that may be mounted on the basic unit onto the EDMFA option.

To limit flow resistance of the sucked outdoor air, comply with the sections indicated in figure 3. As such, even when sucking in all the fresh air, the intake section remains at least the same as the air intake section of the basic unit.

FWD Air handling unit intake

INT Indoor recycled air

EXT Outdoor fresh air

2 Install the flush-mounted remote control panel shown in figure 4.

3 Make the electrical connections complying with the diagrams in figure 5 (control panel with 1 EDMFA) and figure 6 (control panel with more than 1 EDMFA (maximum = 10)).

Wiring parts table

CSD	Remote control
F.....	Protection fuse (field supply)
IL.....	Line circuit breaker (field supply)
NM24SR ...	Louvre servomotor
M.....	Terminal strip
T.....	Supplied transformer
TL.....	Transformer for centralized 24 V line (field supply)
A, B	Auxiliary contacts (antifreeze thermostat, etc) (field supply): A open + B open = indoor air 100% A open + B closed = outdoor air 100% A closed + B open = adjustment 0 to 100% A closed + B closed = outdoor air 100%
1.....	Air-handling unit power line
2.....	Power supply of succeeding louvre servo motors
-----	Electrical connections to be made by the installer.

Each thermal-ventilating unit requires a switch (IL) on the power supply line with a distance of at least 3 mm between the opening contacts, and a suitable safety fuse (F).

If more than one louvre is connected to an individual controller, eliminate the transformer (T) and wire everything as indicated in the diagram of figure 6. In this case, provide a 24 V power supply line by sizing the transformer (TL) according to the number of expected louvres. The consumption of every single servomotor is 5 VA.

The EDMFA louvres may be connected in parallel to 1 unique controller up to a maximum of 10.

Operation

The louvre is operated by the control panel that contains the rotary potentiometer that regulates the opening of the louvre in proportional mode.

When setting the control to 100%, the position of the louvre is that of total outdoor air inlet. When setting the control to 0%, the position of the louvre is that of total ambient air recycle.

The scale on the control panel indicates the percentage of the fresh air.

Cleaning of the air filter

At regular intervals, clean the filter on the fresh air line and the filter on the recycled air line.



The servomotor is always located on the left-hand side.

NOTES

NOTES

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