

EC-SWAP

Control converter for EC motors

PATENTED SOLUTION

EC-SWAP converts the **two-speed control** of an existing ventilation system into **EC motor control**. The existing wiring and controls stay in place.

THE PROBLEM IT SOLVES

Without EC-SWAP

A worn-out induction motor is almost never replaced on its own. The wiring has to be redone end to end and the MCR controls reprogrammed. The quotation moves into another league, the works tie up the unit — and the customer puts it off until a hypothetical full replacement.

With EC-SWAP

One module per air stream: a 130 × 130 × 75 mm enclosure fitted in the air stream next to the new EC fan and wired to terminal blocks. No rewiring, no reprogramming. The existing low-speed / high-speed command becomes the control signal for the EC motor, and the unit runs on, modernised.

WHAT THE CUSTOMER GAINS

Up to 70 % savings

on fan energy consumption, measured on an existing installation.

Less noise

a noticeable drop in the sound level of the unit.

MCR compatible

the existing automation is kept, with no rewiring.

Smart ventilation

optional control from a CO₂ or VOC sensor in the extract air duct.

WHAT IT CHANGES, DEPENDING ON YOUR ROLE

HVAC CONTRACTOR, SERVICE TECHNICIAN

A short job, with no rewiring and without touching the controls: work you can sell, schedule and invoice quickly — where a full replacement stays stuck in discussion.

OPERATOR, PROPERTY OR FACILITY MANAGER

Lower consumption without shutting the building down. The upgrade proceeds step by step, out of the maintenance budget rather than capital expenditure, with no replacement of the control system.

CONSULTING ENGINEER

A documented solution you can specify: data sheet, wiring diagrams and known limits of use — enough to write the upgrade into an energy retrofit project without specification risk.

TECHNICAL ESSENTIALS

Function	Converts a two-speed command into EC motor control	Input / output	400 V AC three-phase without neutral, 50 Hz
Rewiring	None — existing wiring and MCR controls retained	Maximum current	16 A
Unit	One module per air stream	Dimensions · mounting	130 × 130 × 75 mm · by screws, in the air stream
Logic	Low-speed priority or high-speed priority	Protection rating	IP65
Setpoint	LOW / HIGH potentiometers, or external PLC	Protections	Overvoltage, overcurrent, replaceable 0.5 A fuses
Industrial property	Patented solution	Compliance	CE marking · WEEE Directive 2012/19/EU