

EC-SWAP®

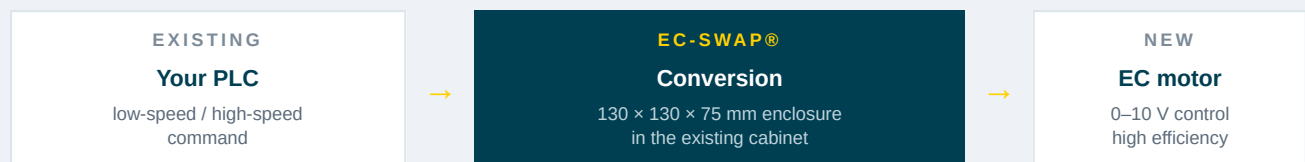
The « plug & play » motor retrofit. Move to high-efficiency EC motors **without** changing the wiring or the control PLC.



THE SITUATION

Your air handling units are twenty or thirty years old, and an induction motor inside runs at full speed whether the building is full or empty. Everyone knows the answer is EC motors. But the quotation is not about the motor: it is about redoing the wiring, touching the PLC, reprogramming the MCR controls, recommissioning. **The cost and the risk are right there — so the project gets postponed.**

EC-SWAP® is a control converter: it translates the low-speed / high-speed signal from your PLC into the control signal for an EC motor.



Your PLC keeps sending exactly what it sent yesterday. **The wiring does not move. The programming does not move.** Patented solution, Depair SA.

WHAT YOU GAIN

UP TO

70 %

energy savings

on the electricity consumed by your ventilation systems

Less noise

a noticeable drop in the sound level of the installation — direct comfort for the occupants

MCR compatible

compatible with the existing automation, with no rewiring: fewer trades involved, less downtime

Smart ventilation

optional control based on measured air quality (CO₂ / VOC)

TECHNICAL SPECIFICATIONS

Input	400 V AC three-phase, 50 Hz
Output	400 V AC three-phase, 50 Hz
Maximum current	16 A
EC logic port	24 V DC max. 50 mA
Control	0–10 V max. 1 mA
Dimensions	130 × 130 × 75 mm
Compliance	CE marking · WEEE 2012/19/EU

REGULATORY FRAMEWORK — SIA 382/1:2025

Since 1 February 2025, the standard defines **for every installation** a limit value and a target value for **SFP** — specific fan power, in W/(m³/s) — the target being 80 % of the limit. At unchanged flow rate and pressure drop, every watt of absorbed power saved shows up in the SFP: **changing the motor acts on the very indicator the standard measures.**

FOUR CONTROL MODES

Constant air volume

Maintains the air flow rate that has been set, whatever the air conditions. Optional temperature / humidity measurement for an accurate calculation of the actual flow rate.

Constant pressure

Pressure sensors hold the duct pressure despite variations in pressure drop.

Fixed speed

Simple command as a percentage of the motor's maximum speed.

Air quality (CO₂ / VOC)

Speed adjusts automatically to the measured level.

Communicating version. One EC-SWAP® module per air handling unit, linked to the EC motors through MOD-IO® modules. **Modbus or BACnet/IP** fieldbus, built-in protection and alarm reporting. Modular architecture: equip the estate at the pace of your budgets.

An air handling unit more than fifteen years old and an electricity bill that will not come down? **Send us the motor nameplate and your control diagram: we will tell you whether EC-SWAP® applies.**

DEPAIR SA

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Custom air handling units
Controls · Remote management · Commissioning
Designed and manufactured in Switzerland