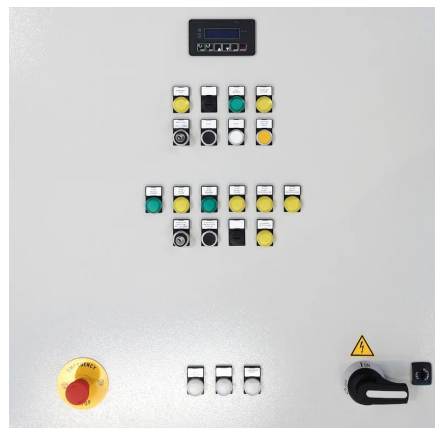


# Switch cabinet with inverter for fan control

📌 Sectors

📌 Applications: **Fix**

COD: QEI000000000000



**Industrial electrical panel** complete with three-phase inverter and remote operator terminal with LCD display, run/stop control, frequency regulation, monitor and alarm reset.





The QEI version of **SECUREAIR®** switchboards is complete with an inverter and MITOS VT6 operator terminal that allows the adjustment of fan speed, so as to reduce noise or adapt performance to the exact needs of the intake systems.

#### Why use the inverter to serve fans

Example of savings in an ideal case of centrifugal fan regulation:

- Reducing the speed by 50% reduces the energy consumed to one eighth
- Reducing the speed by 20% saves 50% of the energy
- Reducing the speed by only 10% (from 100 to 90) saves 27% of the energy

#### Composition

- Power supply 3F+T 400Vac 50/60Hz
- Carpentry painted RAL7035 with external protection rating IP65
- General door lock disconnect switch
- inverter Toshiba or Invt
- MITOS VT6 operator panel for inverter management
- cooling system
- Motor saver
- Contactor
- Emergency mushroom button
- Color-coded run-stop buttons
- Voltage presence indicator light
- Fan operation indicator light
- Inverter alarm indicator light
- Fan thermal warning light

#### Practical example always with application on centrifugal fan serving a centralized air extraction system :

Air extraction system equipped with a 75 kW motor with an average absorption of 56 kW

4.000 hours/year of operation

Using the inverter we will have an average absorption of 36 kW instead of 56.

Consequently 80,000 kWh per year saved

With an energy cost of 0.15 (?) €/kWh, you save 12,000 €/year !!!

Investment amortized in a very short time

Designed to **meet** current **European and international standards** for low voltage switchboards. Our switchboards are manufactured for power ratings up to 55kW and are supplied with:

- WIRING DIAGRAM
- TEST CERTIFICATE
- DECLARATION OF CONFORMITY

For code QED000000001 the power rating must be specified when ordering.

#### Options available

External pressure switch with alarm indicator lamp

Rotovalve up to 4 kW

Screw conveyor up to 4 kW

Economizer power supply

Programmer power supply with pressure alarm lamp

Level status with level alarm warning lamp

Triboelectric probe

Extractor fan

Timed electric vibrator

Timed solenoid valve

Damper solenoid valve

Ammeter + CT

Voltmeter + voltmeter switch



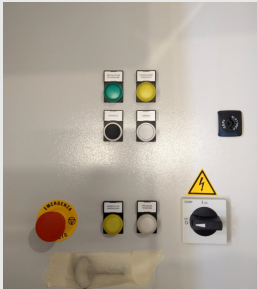
## Accessories



### Extra operator panel VT6 AIR for QEI switchboards

QEIVT6AIR000000

Extra VT6 AIR operator panel for QEI switchboards. Basic functionality similar to VT6 HVAC, but with more advanced PID and built-in 0-999 or 0-3000 mmH<sub>2</sub>O pressure transducer.



### Electric panel for fan start-up

QED000000000000

Direct-start and star-delta **industrial switchboard** for starting and protecting fan motors with 3F+T 400Vac 50/60Hz power supply.



### TOSHIBA VFS15 Series 400V Three-Phase Inverter

IVTO154004PL1W0

Toshiba's range is differentiated in the market by reliability, technological innovation of the solutions adopted, and is designed to ensure the best performance in full compliance with international standards.



## Spare parts



### SVM industrial centrifugal fans

SVM0000000000000

Industrial centrifugal fans with backward-bladed impeller SVM series



### SVF industrial centrifugal fans

SVF0000000000000

Industrial centrifugal fans with backward-bladed impeller SVF series



### SVR industrial centrifugal fans

SVR0000000000000

Industrial centrifugal fans with backward-bladed impeller SVR series

