

# TOSHIBA VFS15 Series 400V Three-Phase Inverter

COD: IVTO154004PLIWO



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.

## Detailed description

Toshiba frequency inverter for speed control of three-phase fans; model with Input for 400V Three-phase Motors with Integrated STO.

400V Three-phase Power Supply - 400V Three-phase Output

Two Power ratings are displayed in the abbreviations in each model, the lowest refers to heavy duty use (HD) , the highest for normal use (ND). **Important: As suggested by the manufacturer for fans the normal use size is fine.**

### Why use the inverter to service fans

The inverter allows the frequency and supply voltage of an electric motor to be varied, adjusting its speed to the actual needs of the load, that is, it adapts the performance of the motor in real time to the needs of the application by delivering only the real power required.

The inverter, in fan applications, provides the best energy efficiency in realizing variable flow systems. In these cases, the power input is proportional to the cube of the speed.

### Example of savings in an ideal case of centrifugal fan control:

- 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

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

- Air extraction system equipped with 75 kW motor with 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.
- As a result 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





## Photogallery



## Related products



### SE● axial panel fans

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**Axial** wall-mounted **fans** are ideal exhaust fans for applications where high air flow rates and installation with wall or panel mounting are needed. For example: ventilation of warehouses, gymnasiums, factories, parking lots, farms, cooling of electrical equipment, refrigeration equipment, etc.

