

***We Bring Air to Life***  
*Technical Catalogue > Controls, Switches and Drivers*  
*for Demand Control of Fans*



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**FläktWoods**

# Transformer Speed Controllers & Drives – Three Phase TDID – Transformer Three Phase Independent Drive



## Features

- Independent 5 step transformer drive with motor overheat protection via thermostats
- Supply: 400 VAC, 50/60 Hz, 3 Phase
- IP54 ingress protection
- In built motor overheat protection via motor thermostats (Tk)
- Switch: 5 positions with off-position
- Indicator light
- 230 VAC unregulated output
- Enclosure: plastic (R-ABS, UL94-V0, RAL 7035) / sheet steel (RAL 7035)
- Maximum ambient temperature: 50 °C

## Description

The TDID transformer speed controllers are based on the principle of voltage control with auto-transformers. They are applicable to three phase voltage-controllable motors (400 VAC, 50/60 Hz), to control the rotational speed of fans in five steps.

They are fitted out with contacts for motors equipped with thermostat (Tk) overheat protection.

A safety isolator/switch disconnecter should be installed on the mains side of all motor drives; refer to SISO.

## Wiring Diagram

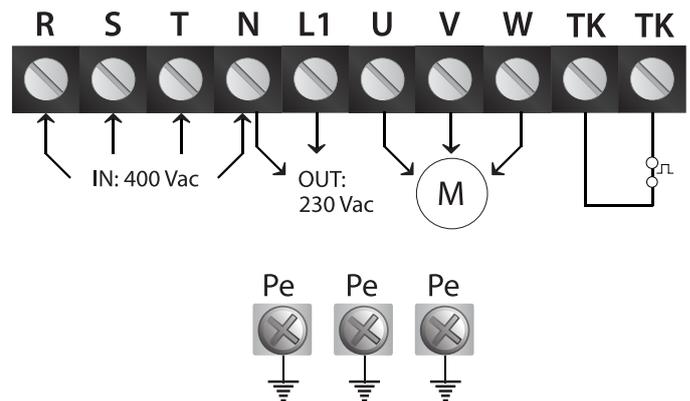
R S T - power supply 400 VAC– 50/60 Hz N - Neutral

L1 - unregulated output 230 VAC (2 A)

U V W - motor connection

TK - input thermal contacts of the motor

Pe - earth connections

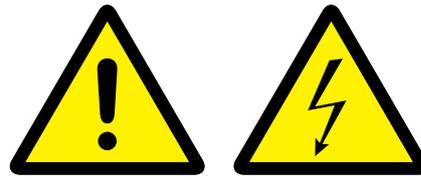
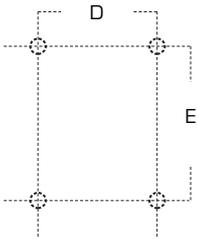
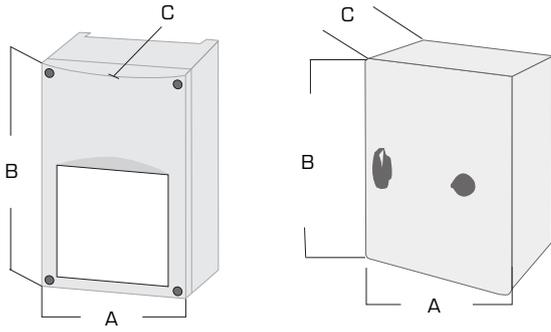


## Range

For selection of the correctly current rated drive select the first model with a current rating above the fan full load current (FLC) to be controlled.

Model	TDID2.5A	TDID4A	TDID8A	TDID11A
Part	EA900025	EA900026	EA900027	EA900028
Lmax (A)	2.5	4	8	11
IP Rate	IP54	IP54	IP54	IP54

## Dimensions & Weights



General danger

Electrical hazard

**All works may only be carried out by skilled personnel following the local regulations and AFTER the controller is completely separated from the mains.**

Model	A	B	C	D	E	Net kg	Gross kg	Enclosure
TDID2.5A	300	325	175	255	255	13.2	13.5	Steel
TDID4A	300	425	175	255	355	18.2	18.7	Steel
TDID8A	300	425	235	255	355	36.4	37	Steel
TDID11A	400	430	235	355	355	38.4	39	Steel

## Mounting Instructions

Speed controller for three phase voltage controllable motors.

### Mounting

Break (Isolate) mains voltage. The controllers are to be mounted on a smooth surface. Connect voltage supply, motor(s) and earth as shown in the scheme with cables of the proper diameter.

### Wiring (see diagram on previous page)

A safety isolator/switch disconnecter should be installed on the mains side of all motor drives; refer to SISO.

### Transport and stock keeping

Avoid shocks. Stock in original packing. Avoid extreme conditions.

### Warranty

Two years from delivery date against defects in manufacturing. Any modifications or alterations to the product relieve the manufacturer of all responsibility. The manufacturer bears no responsibility for any misprints or mistakes in this data, and modifications or improvements to the product can be made at any time after date of publication.

### Maintenance

In normal conditions the controllers are maintenance-free. If soiled clean with dry or damp cloth. In case of heavy pollution clean with a non-aggressive product. In these circumstances the controller should be disconnected from the mains. Pay attention that no fluids enter the controller. Only reconnect the controller to the mains when it is completely dry.

### Motor protection

The controller has contacts for motors with thermostat (Tk) overheat protection (NC-contact). When motor overheating (or a power failure) is detected the controller stops power to the motor. The red indicator light and alarm output will signal this error condition. (Reset: main switch to off position and back).