

# Delta Drive Micro



## Description

**Delta Drive Micro** from **DeltaSense** is an IP54 miniature plug and play LOW COST frequency converter, intended for variable speed regulation of fans etc up to 370W max with a 2-10V input range and approx. 5-50Hz output range with linear V/F control.

**Delta Drive Micro** is an extremely rugged product and comes in a Die Cast Aluminium Box, enabling it be placed almost anywhere. It is simple to use, yet also very efficient, and as the electronics have been potted with resin it is also very robust.

**Delta Drive Micro** is used to control a 3 phase motor from a single 230Vac supply using a simple 2-10V isolated control signal.

**Delta Drive Micro** has a built in START / STOP detector which will STOP the motor, if the input signal is less than apr. 1Vdc, eliminating the need for an extra start/stop signal!

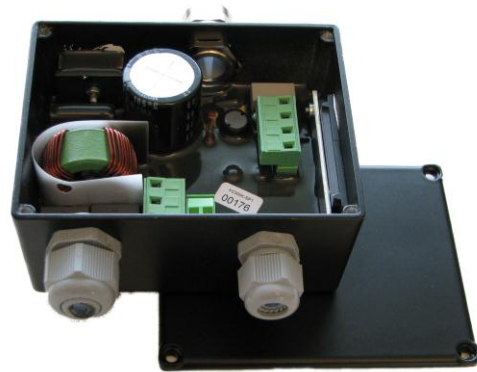
**Delta Drive Micro** has a number of built in **safety features**, all of which stop the motor, thus avoiding damage or worst still, failure. The Drive will automatically retry after approx. 30 seconds. Over temperature, motor shorts, over voltage, under voltage, ground failures etc will all be detected.

**Delta Drive Micro** is available in 2 different standard versions. A Wall Mount version with integrated bottom flanges for mounting, or a Flange Version is supplied for mounting directly in Air Convection systems. (Flange type needs to be cooled by forced air.)

**Delta Drive Micro** is designed with an integrated EMC filter to comply with International regulations. Isolation between control input and live supply is designed to withstand min 3kV, according to the LVD directive.

**Delta Drive Micro** as standard is supplied with glands and snap in terminals, or can be supplied as a Complete Delta Drive with integrated Cables as per Customer requirements.

## Picture



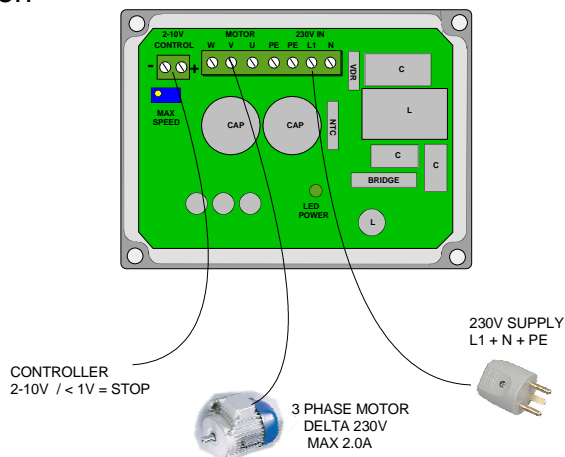
*Never has Speed Control of small appliances been so easy!*

**PLUG AND PLAY**

## Technical data

- Supply 230V +/- 20% + PE / 50/60Hz.
- Input current max 5A.
- Motor rating max 370W (6 pole motor)
- Output current max 2A
- Efficiency min 95%.
- Ambient temperature -10 - +40°C
- Humidity non condensing 10-90%RH
- Short circuit rated and protected
- Overtemperature protected
- Over volt and under volt protected
- Ground failure protected
- 15.9KHz switch frequency
- 2-10V control input max 10KOhm
- Automatic STOP at input < 1-2V for easy control
- V/F drive scheme with max 50Hz output
- Minimum frequency apr. 7 Hz
- Retry timer fixed at 30 seconds for any failure
- Adjustment trimmer for max speed setting
- Galvanic (3kV) isolation between live and control circuit.
- Passive cooled from die cast alu box and heatsink
- Snap in terminals for easy electrical connection
- Die cast alu box with integrated heatsink and flanges for mounting
- IP54 grade, all electronics sealed . Molded from factory
- Measures Max 118x118x56mm

## Connection



## Trimmer inside

Maximum speed can be adjusted from the integrated trim potentiometer.

Maximum frequency, 50-60 Hz, can be adjusted between approx. 5-10V of the input control voltage.

Therefore Max speed can be achieved with 5V DC systems as well as with 10V DC systems.

Speed should be limited to 50 Hz for standard Motors. Avoid slip with the motor, as the current will increase and can cause damage.

The Delta Micro Drive will stop automatically when the dc input signal is less than approx. 1-2V.