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**DELTA ELEKTRONIKA B.V.**



## ISO AMP - External module - Four channel analog isolation amplifier

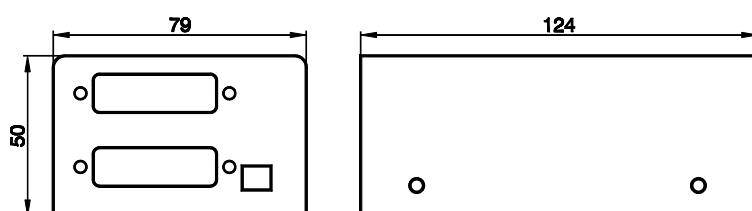
### Features

- Selectable 0-5 V and 0-10 V signal levels
- Isolated programming and monitoring of U, I and status signals
- Prevents problems with earth loops and CM-voltages
- Isolated logic inputs and outputs
- Pin compatible with D15 connector on Delta elektronika power supplies

### Specifications

- Programming and monitoring offset : +/- 60  $\mu$ V typical
- Full scale error : 0.1% calibrated
- Non-linearity : 0.01% typical, TC = 65ppm/ $^{\circ}$ C
- Common mode rejection : 80 db @ 50 Hz

### Dimensions



Dimensions of the external ISO AMP MODULE.

## Specifications

Analog inputs / outputs: CV, CC programming and CV, CC monitoring	
Offset	$\pm 60 \mu\text{V}$ typical, $\pm 180 \mu\text{V}$ max.
Full scale error	0.1 % calibrated.
Non-linearity	0.01 % typical, 0.05 % max.
Temperature coefficient	- 65 ppm typical.
Common mode rejection	80 dB @ 50 Hz.
Voltage range: <i>connector 'to power supply':</i> <i>connector 'to prog. source':</i>	0 - 5 V 0 - 5 V or 0 - 10 V selectable
Input impedance: <i>connector 'to power supply':</i> <i>connector 'to prog. source':</i>	200 k $\Omega$ 200 k $\Omega$ for 5 V input, 400 k $\Omega$ for 10 V input
Output impedance: <i>connector 'to power supply':</i> <i>connector 'to prog. source':</i>	100 $\Omega$ / max. 4 mA 1 $\Omega$ / max. 4 mA
Reference voltage	5.114 V $\pm$ 15 mV ( $R_o = 10 \Omega$ / max. 4 mA), TC = 20 ppm/°C
Auxiliary supply voltage	11.4 - 12.7 V / $R_i = 470 \Omega$
Digital status outputs: CC, LIM, OT, ACF and DCF	
Output voltage: <i>connector 'to prog. source':</i>	+ 5 V / max. 2 mA
Output impedance: <i>connector 'to prog. source':</i>	5 $\Omega$

Digital input: Remote ShutDown.	
Input voltage: <i>connector 'to prog. source':</i>	3 - 15 V
Input impedance: <i>connector 'to prog. source':</i>	1.8 k $\Omega$
General	
Capacitance input / case	3.2 nF
Operating temperature	- 20 to + 50 °C
Storage temperature	- 40 to + 85 °C
Humidity	max. 95% RH, non condensing, up to 40 °C max. 75% RH, non condensing, up to 50 °C
Isolation voltages	Input-Output 1000V Basis isolation Input-Case 1000V Basic isolation
Connections ISO AMP MODULE	
Supply voltage	15 - 30 V DC, max 75 mA.
2 pole terminal block	To connect the external supply voltage.
15P female D-connector	To connect the module to a programming source.
15P male D-connector	To connect the module to the power supply.

The four analog channels are factory-calibrated within 0.1 % for 5 V input and output voltages.  
Selecting a 10 V input and/or output without re-calibrating can introduce an extra full scale error of 0.1 %.  
Offset, full scale error, non-linearity and temperature coefficient have to be added to the specifications of the power supply.

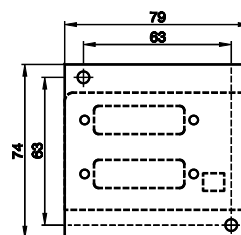
## Ordering information

- Order **ISO AMP MODULE** for the external module.  
The external module can be used in combination with all programmable Delta Elektronika power supplies.

## Accessories

The following is supplied with the ISO AMP MODULE:

- Rail adapter for 35 mm rail mounting
- Wall mounting adapter
- 0.6 m cable with 15 pole D-connectors.



Dimensions wall mounting adapter