



ISO AMP - External module - Four channel analog isolation amplifier

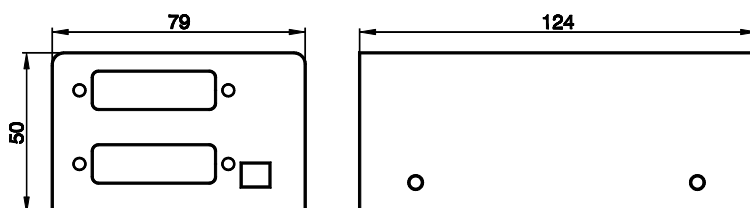
Features

- 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 μ 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.

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 | | : -65ppm typical |
| • Common mode rejection | | : 80 dB @ 50 Hz |
| • Voltage rage : | Connector 'to power supply' | : 0 - 5 V |
| | Connector 'to prog. source ' | : 0 - 5 V or 0 - 10 V selectable |
| • Input impedance | Connector 'to power supply' | : 200 k Ω |
| | Connector 'to prog. source ' | : 200 k Ω for 5 V input, 400 k Ω for 10 V input. |
| • Output impedance | Connector 'to power supply' | : 100 Ω / max. 4 mA |
| | Connector 'to prog. source ' | : 1 Ω / max. 4 mA |
| • Reference voltage | | : $5.114 \text{ V} \pm 15 \text{ mV}$ ($R_o = 10 \Omega$ / max. 4 mA), TC = 20 ppm/ $^{\circ}\text{C}$ |
| • Auxiliary supply voltage | | : 11.4 - 12.7 V / $R_i = 470 \Omega$ |

Digital status outputs : CV, LIM, OT, ACF, DCF

| | | |
|--------------------|-------|---------------------|
| • Output voltage | CON 2 | : + 5 V / max. 2 mA |
| • Output impedance | CON 2 | : 5 Ω |

Digital input : Remote shutdown

| | | |
|-------------------|-------|------------------|
| • Input voltage | CON 2 | : 3 - 15 V |
| • Input impedance | CON 2 | : 1.8 k Ω |

General

| | | |
|----------------------------|--|--|
| • Capacitance input / case | | : 3.2 nF |
| • Operating temperature | | : - 20 to + 50 $^{\circ}\text{C}$ |
| • Storage temperature | | : - 40 to + 85 $^{\circ}\text{C}$ |
| • Humidity | | : max. 95% RH, non condensing, up to 40 $^{\circ}\text{C}$: max. 75% RH, non condensing, up to 50 $^{\circ}\text{C}$ |
| • Isolation voltage | | : Input-Output 1000 V Basic isolation : Input-Case 1000 V Basic isolation |

Connections ISO AMP Module

| | | |
|---------------------------|--|--|
| • Supply voltage | | : 15 - 30 V DC, max. 75mA |
| • 2 pole theminal block | | : To connect the external supply voltage |
| • 15 P female D-connector | | : To connect the module to a programming source. |
| • 15 P 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.

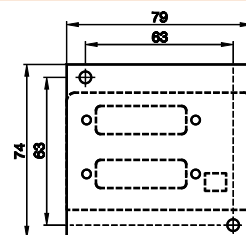
Ordering information

- 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