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ISO AMP CARD

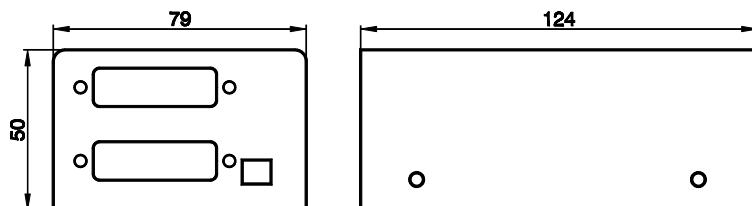
ISO AMP MODULE

Four channel analog isolation amplifier

Features

- Built-in Card or External Module
- **Isolated programming** of voltage and current
- Galvanic isolation when programming and monitoring
- **Prevents** problems with **earth loops** and common mode voltages
- **Isolated logic inputs** and outputs
- Isolated monitoring of voltage and current
- Selectable 0 - 5 V or 0 - 10 V signal levels
- The External Module is pin compatible with the D15 connector on Delta Elektronika power supplies

Dimensions



Dimensions of the external ISO AMP MODULE.

Specifications

Analog inputs / outputs: CV, CC programming and CV, CC monitoring	
Offset	$\pm 60 \mu V$ typical, $\pm 180 \mu V$ 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: connector 'to power supply': connector 'to prog. source':	0 - 5 V 0 - 5 V or 0 - 10 V selectable
Input impedance: connector 'to power supply': connector 'to prog. source':	200 k Ω 200 k Ω for 5 V input, 400 k Ω for 10 V input
Output impedance: connector 'to power supply': connector 'to prog. source':	100 Ω / max. 4 mA 1 Ω / max. 4 mA
Reference voltage	5.114 V ± 15 mV ($R_o = 10 \Omega$ / max. 4 mA), $TC = 20$ ppm/ $^{\circ}C$
Auxiliary supply voltage	11.4 - 12.7 V / $R_i = 470 \Omega$
Digital status outputs: CC, LIM, OT, ACF and DCF	
Output voltage: connector 'to prog. source':	+ 5 V / max. 2 mA
Output impedance: connector 'to prog. source':	5 Ω

Digital input: Remote ShutDown.	
Input voltage: connector 'to prog. source':	3 - 15 V
Input impedance: connector 'to prog. source':	1.8 k Ω
General	
Capacitance input / case	3.2 nF
Operating temperature	- 20 to + 50 $^{\circ}C$
Storage temperature	- 40 to + 85 $^{\circ}C$
Humidity	max. 95% RH, non condensing, up to 40 $^{\circ}C$ max. 75% RH, non condensing, up to 50 $^{\circ}C$
Isolation voltage	Input-Output: 1000 V DC, Input-Case: 1000 V DC
Connections ISO AMP CARD	
15P female D-connector	To connect the card to a programming source.
20P header connector	To plug the card inside the power supply.
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.
<i>Specifications are measured at an ambient temperature of 25 $^{\circ}C$ ± 5 $^{\circ}C$ unless otherwise noted.</i>	

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.

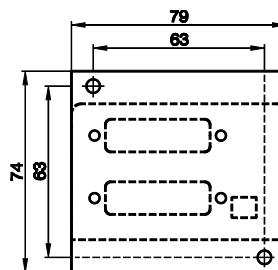
Ordering information

- For the following options the ISO AMP CARD is factory mounted, tested and calibrated in combination with the power supply:
order SM800 **OPTION P249**, SM1500 **OPTION P218**, SM3000 **OPTION P145** or SM6000 **OPTION P154**.
- 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