

Dual HART Isolator DHI733

DESCRIPTION

The DHI733 combines two fully independent HART transparent isolator channels in one housing. Optional 10A rated trip point for monitoring and alarming is available on channel 2.

The DHI733 can be used in a number of ways:

- Two channel isolation of HART transmitters.
- Series connect the inputs to split the input signal into two isolated full drive output signals while still maintaining the digital HART communication.

Split one HART transmitter into an isolated HART transmitter output plus a conditioned analogue process signal to drive meters or other devices. Channel 1 is 4-20mA HART transparent input and output. Channel 2 is 4-20mA HART transparent input and output or a coding plug configurable output for common process signals.

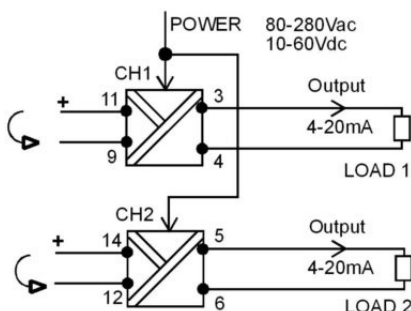
Final calibration of the mA signal can be trimmed by using the front accessible SPAN (S) and ZERO (Z) potentiometers. The optional alarm point on channel 2 is also set by potentiometer utilising the adjacent test socket. The wide swing DC/DC converter allows for two power supply ranges: 10-60Vdc (16-42Vac), 80-280Vac (80-300Vdc). Isolation is 2kV.r.m.s. between all 6 ports. Connection is via pluggable 8-way screw terminals.



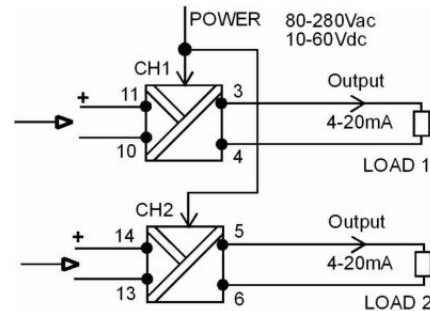
General Specifications

Mounting:	35mm DIN-Rail.
Termination	Plug-in screw terminals.
Weight:	0.300 kg.
Protection class:	IP40 (IP65 Enclosure optional.)
Size:	60W x 70H x 110D (mm).
Housing material:	ABS, aluminium.
Calibration accuracy:	<0.2% of range.
Auxiliary Supply:	19V/22mA (fitted on current inputs only).
Ambient temperature	
Operating range:	0...+60°C.
Storage temp. range:	-20...+70°C.
Temperature effect:	0.02% per °C.
Output drive:	0 to 22mA (20V drive). or 0 to 20V (20mA drive).
Response time:	500ms standard (5ms link).
Zero/Span adjust:	Typically ±20%
Contact rating:	10A/250Vac resistive.
Trip repeatability:	<0.5% of range.
Trip response time:	<100ms.
Switching hysteresis:	1 to 25% of input range. Factory set 1%.
Power requirements:	4VA.
6-way Isolation:	2kV r.m.s.
Electromagnetic compatibility:	Complies with AS/NZS 4251.1 (EN 50081.1)
Digital Signal Bandwidth:	100Hz to 10kHz.
Input Drive:	16V at 20mA.
Output Load:	1k ohm.

2 Wire Input Connection



External Source Input Connection



TYPE NO. DESIGNATION

Power Supply: _____

- 1 = 80-300Vdc / 80 – 280Vac.
- 2 = 10-60Vdc / 16 – 42Vac

Input Type: _____

- 0 = 2-wire
- 1 = External source

In/Out: _____

- *) 1 = CH1 4-20mA HART[®] transparent in/out.
CH2 4-20mA HART[®] transparent in/out.
Connect inputs in series for HART[®] splitting.
- 2 = CH1 4-20mA HART[®] transparent in/out
CH2 link selectable output (default 4-20mA) that follows CH1 input.
This provides an extra isolated signal to drive non-HART[®] instrumentation.

Alarm: _____

- 0 = Not fitted.
- *) 1 = Channel 2 change over 1% hysteresis.

Option: _____

- 0 = none.
- *) 2 = Customised response time.

CH2 Link Selectable Output Option Only

Select required range using SW2 on the C204 PCB.
X = coding plug inserted

Output Table 2 Selection C204 PCB

Output	1	2	3	4	5
4-20mA	X		X		
0-20mA		X			
0-5V		X			X
1-5V	X		X		X
0-10V		X		X	

To change output ranges:

- 1) Disconnect power to unit.
- 2) Unscrew right-side cover and withdraw PCB assembly.
- 3) Set the coding plugs as required.
- 4) Reassemble unit and connect power.
- 5) Adjust “span” and “zero” pots to recalibrate.
- 6) Change the label information to the new input/output values.

***) Price Extra..**

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