



NEW VCON-HL

ISOLATING SIGNAL CONVERTER

- Wide Range of Inputs Available
- AC current and voltage inputs
- Zero & Span Pots For Output
- Optional Isolated Transmitter Supply
- High Accuracy, Low Cost
- Only 12.5mm Wide on DIN Rail



Description

The VCON family of Isolating Signal Converters can accept a wide range of inputs including 4-20mA, 0-10V and other DC voltage and current signals. The units produce a high level DC output of either voltage or current.

Full 3 port isolation is standard but the unit can be supplied as

- Non-Isolated
- Input Only Isolation
- Output Only Isolation
- Full 3-Port Isolation

The NEW VCON can be user configured to accept a standard current or voltage input and provide a current or voltage output.

There is also an isolated excitation option. This can be user configured to provide an isolated 24Vdc supply which can be used to excite any standard transmitter. Alternatively it can be user configured to provide either a voltage or current excitation for a potentiometer or bridge input

The unit may be powered from a wide range of power supplies, ranging from 12Vdc to 24Vac.

Inputs

Standard User Configurable Ranges

0-20mA, 4-20mA, 0-10mA into 5Ω/10Ω
0-1V, 1-5V, 0-10V into 100kΩ/500kΩ/1MΩ

Min & Max Full Scale Ranges are:

DC Current	0 to 50mA	0 to 5A
DC Voltage	0 to 100mV	0 to 300V
2 Wire Pot	0 to 10Ω	0 to 10MΩ
3 Wire Pot	100Ω	10MΩ

Note: For input voltages greater than 60Vdc a Divider unit must be specified.

Factory Configured inputs for AC Current & Voltage

Min & Max Full Scale Ranges are:

AC Current	0 to 100mA rms	0 to 5A rms
AC Voltage	0 to 200mV rms	0 to 250V rms

Note: For input voltages greater than 30Vac a Divider unit must be specified.

Outputs

Standard User Configurable Ranges:

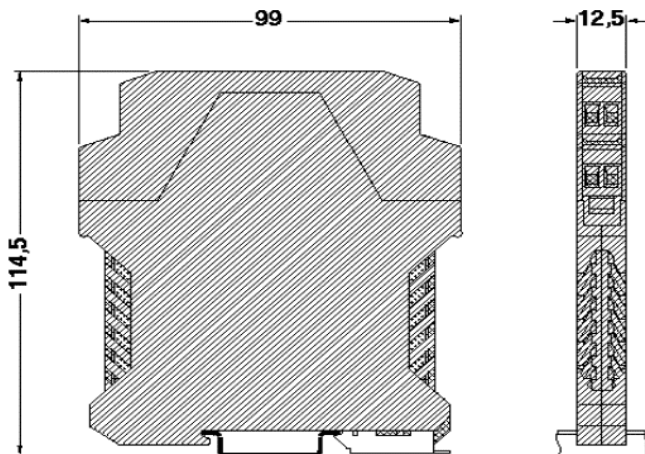
0-20mA, 4-20mA into 750Ω max
0-5V, 0-10V into a 100kΩ min

Factory configured ranges up to a maximum of:
Current: 0-20mA. Voltage: 0-15Vdc



Performance Characteristics

Parameter	Min	Typ	Max	Comments
Supply Voltage (V)		24V		Options: 12,24Vdc 24Vac
Supply Current (mA)		45	100	Based on 24 V dc supply
Input Impedance (Volt)	100kΩ	1MΩ	10MΩ	Dependent on range (Typ=10V)
Input Impedance(mA)	0.02Ω	5Ω	2kΩ	Dependent on range (Typ=20mA)
Volt drop (mA input)		0.1	0.15	At 20mA input
Output Linearity Error		±0.03%	±0.1%	R _L = 250Ω (1% for sinusoidal ac inputs)
Temp Coefficient			±100ppm/≡ C	
Load Resistance Error			-20ppm/Ω	0 < R _L < 750Ω
Time Constant (10-90%)		30ms		Damping option can be selected
Operating Ambient	0≡C		55≡C	
Relative Humidity	0%		90%	
Isolation Voltage <small>see note 1</small>	1kV			
Surge Voltage	2.5kV for 50μS			Transient of 10kV/μS
Notes	Absolute maximum ratings indicate sustained limits beyond which damage to the device may occur. Accuracy figures based on 24Vdc supply, 4-20mA output with 250Ω load and 20≡C ambient. Device is protected against reverse polarity connection. VCON-HL does NOT provide safety isolation when the input is connected to the mains.			



Installation Data

Mounting	DIN Rail TS35
Orientation	Any
Connections	Screw Clamp with pressure plate
Conductor size	0.5-4.0mm
Insulation Stripping	12mm
Weight	Approx 95g

Connection Details

1. Power Input -ve
2. Power Input +ve
4. Process Input -ve
5. Process Input +ve
3. Trans supply +ve
6. Trans supply -ve
10. Output -ve
12. Output +ve

Ordering Information

Please supply:

Part Number:	VCON-HL
Input Type:	e.g mA, Volt
Input Range:	e.g 4-20, 0-10
Output Type:	e.g mA, Volt
Output Range:	e.g 4-20mA, 0-10V
Power Supply:	e.g 24Vdc
Isolation:	Full 3-Port
Transmitter Supply:	Yes / No