

ADC315X Combined Multiplier and Divider

• Suitable for any process input(s)

• Supply voltages: 115Vac ±20%

240Vac ±20% 24Vdc ±2.5V 48Vdc ±5V

AMELEC Standard 10 year warranty

Technical Specifications

An arithmetic unit to perform a multiply and divide calculation the 4-20mA input signals from the field are terminated in 20 ohms resistors in one unit and the resultant volts wired in parallel to the second unit.

Input

The first units 3 x 4-20mA (load 20 ohms)
The second unit 3 x 80 to 400mV (load 1M ohms)

Output

A 4-20mA current source, drive voltage up to 24V

Equation

The mA unit: Output = $(B/(A+B) \times C)$ The mV unit: Output = $(A/A+B) \times C$

Where:

- Input 1 = Signal C
- Input 2 = Signal A
- Input 3 = Signal B

Environmental Conditions

Storage Temperature: -40 to 70°C Operating Ambient: -15 to 55°C Relative Humidity: 5 – 95% RH

Isolation

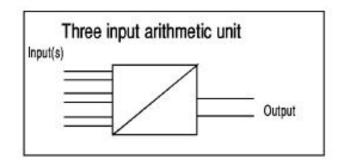
1000V RMS Input(s)/Output/Supply/Earth

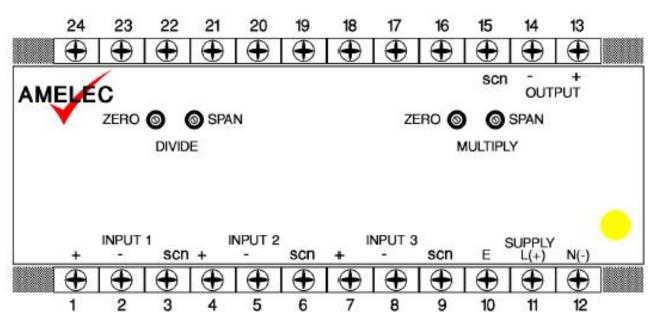
Accuracy

Linearity <±0.1% Divider dynamic range 10:1

Others:

To stop the denominator failing to a zero in the equation a low level limiter has been fitted to ensure (A+B) is always> 5% of span





Tel: 01908-567003 Email: sales@amelec-uk.com Visit: www.amelec-uk.com Fax: 01908-566735

AMELEC Instruments, Cochran Close, Crownhill, Milton Keynes, MK8 0AJ