

Title (en)

Circuit for transmitting a measurement current from an intrinsically safe sensor to a non-intrinsical area

Title (de)

Schaltung zur Übertragung eines Messstroms von einem eigensicheren Sensor in einen nicht-eigensicheren Bereich

Title (fr)

Circuit transférant un courant de mesure d'un capteur de sécurité intrinsèque dans une zone de sécurité non-intrinsèque

Publication

EP 0817149 B1 19990512 (DE)

Application

EP 97109825 A 19970617

Priority

- EP 97109825 A 19970617
- EP 96110541 A 19960628

Abstract (en)

[origin: EP0817149A1] The sensor 1 is located in an intrinsically safe region 10 and is connected with a current measuring resistor in a non-intrinsically safe region 20. The sensor output is in the 4-20 mA range, and is supplied from the secondary of a transformer 2 via a rectifier unit 8 and a conditioning stage 9. The transformer has a primary with two windings 21,22 which are coupled to an output stage arrangement 31, in which the current measuring resistor connected to the centre tap of the transformer primary. The voltage developed across the resistor is fed to an offset unit, and subsequently to a voltage to current converter (7),

IPC 1-7

G08C 19/02

IPC 8 full level

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CPC (source: EP US)

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