

MTL ICC200 SERIES



ICC211 current to current/voltage isolator



- ◆ Galvanic isolation between input and output
- ◆ Optional choice of inputs; 4 to 20mA, 0 to 20mA or 10 to 50mA
- ◆ Optional choice of outputs; 4 to 20mA or 1 to 5V dc
- ◆ Eliminates earthing problems
- ◆ T- or G-section DIN-rail mounting

The ICC211 is a loop-powered isolator which provides galvanic isolation for current signals from sensors and instruments in the field and control instrumentation; so simplifying interface wiring by eliminating possible earthing and ground loop problems. Options are available for input current ranges of 4 to 20mA, 0 to 20mA and 10 to 50mA respectively combined with choices of 4 to 20mA or 1 to 5V output ranges. Simple signal checking facilities are provided by incorporating internal resistors in the input and output circuits (on output circuits these are 10Ω for 4 to 20mA versions or 250Ω for 1 to 5V versions).

SPECIFICATION

Number of channels

One

Input signal options

4 to 20mA: (ICC211-I1-xx)

0 to 20mA: (ICC211-I2-xx)

10 to 50mA: (ICC211-I3-xx)

Output signal options

4 to 20mA: (ICC211-xx-O1)

1 to 5V: (ICC211-xx-O2)

Isolation between input and output

1500V dc/ac

Power supply required

For 4 to 20mA output

$V_s \text{ min} = 17 + (R_L \times 0.02) \text{V dc}$

$V_s \text{ max} = 35 \text{V dc}$

For 1 to 5V output

$V_s = 22 \text{ to } 35 \text{V dc}$

Maximum load (R_L)

$50(V_s - 17) \Omega$

Input impedance

10Ω + 0.3V maximum without test resistors

Response time

To reach 90% of span: 40ms

To reach 99.9% of span: 250ms

Transfer accuracy at 25°C (including non-linearity and hysteresis)

Better than 20μA

Temperature drift

<0.01% of span/°C

Ambient temperature limits

-20°C to +55°C (operating)

-40°C to +80°C (storage)

Humidity

5 to 95% RH, non-condensing

Common mode rejection ratio

150dB typical

RFI susceptibility

Conforms to IEC801.3

Terminals

Accommodate 2.5mm² conductors

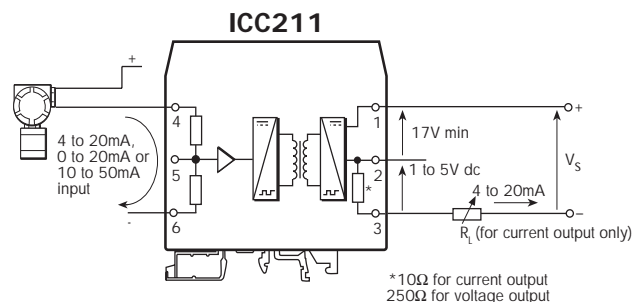
Casing

25mm width polyamide casing

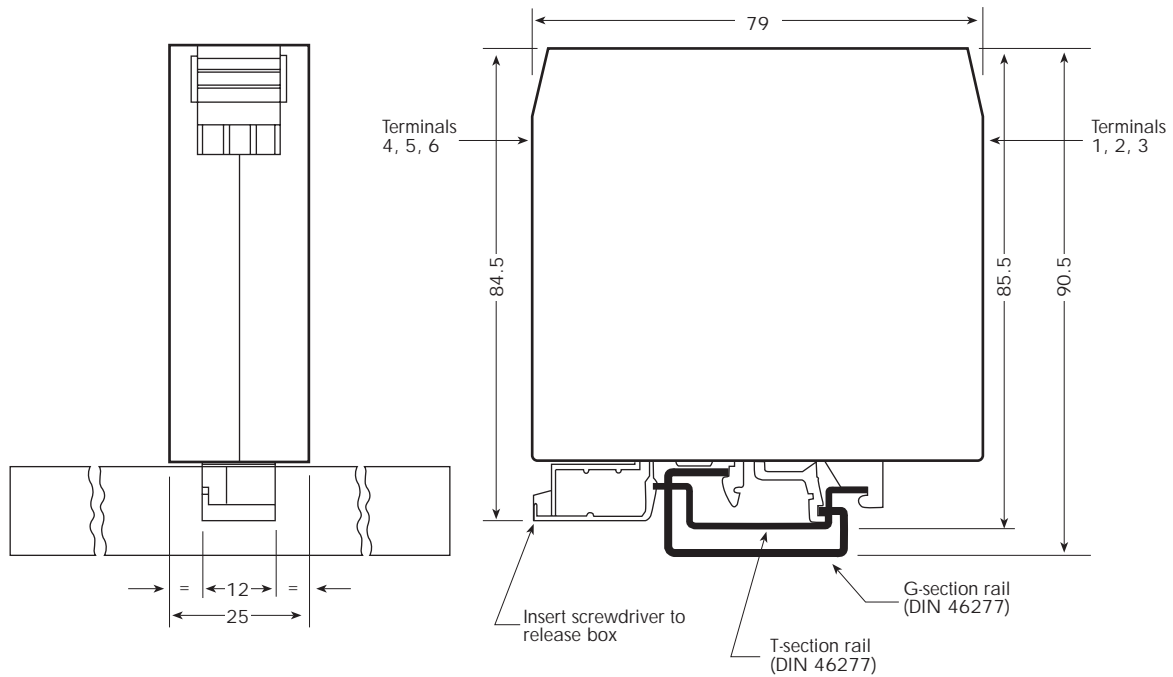
Mounting

Directly onto T- or G-section DIN-rail to DIN46277

Circuit diagram



Dimensions and mounting (in mm)



TO ORDER:-

- ICC211-I1-O1** Current to current isolator (with 4 to 20mA input and 4 to 20mA output)
- ICC211-I2-O1** Current to current isolator (with 0 to 20mA input and 4 to 20mA output)
- ICC211-I3-O1** Current to current isolator (with 10 to 50mA input and 4 to 20mA output)
- ICC211-I1-O2** Current to voltage isolator (with 4 to 20mA input and 1 to 5V dc output)
- ICC211-I2-O2** Current to voltage isolator (with 0 to 20mA input and 1 to 5V dc output)
- ICC211-I3-O2** Current to voltage isolator (with 10 to 50mA input and 1 to 5V dc output)

Specification subject to change without notice

MTL Instruments Pvt Ltd

No 3 Old Mahabalipuram Road, Sholinganallur, Chennai 600119
Tel: 91 44 496 0552 Telefax: 91 44 496 0477 Fax:91 44 496 1657
Email: mds.engg@mtlindia.sprintprg.ems.vsnl.net.in

A member of The MTL Instruments Group plc

