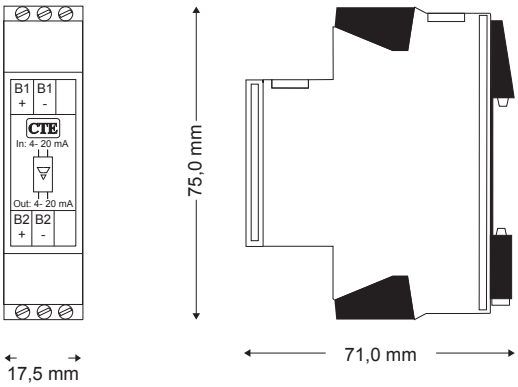


LOOP ISOLATOR

Type: AITB

FEATURES

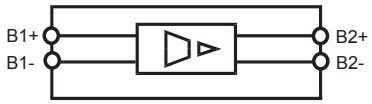
- **4 - 20 mA Loop powered isolator**
- **Prevent lightning from spreading over the system**
- **Working voltage up to 1000 V_{RMS}**
- **Transient overvoltage up to 8000 V_{peak}**
- **Excellent linearity**
- **Small outlines, 17,5 mm. wide**

Description:
The loop isolator is designed to separate one 4 - 20 mA loop into two galvanically separated 4-20 mA loops in order to prevent signal distortion and instrumentation damages due to electrical noise, voltage spikes and ground loop currents.
The insulation is based on a high performance linear optocoupler with an excellent linearity and a low coupling capacitance.

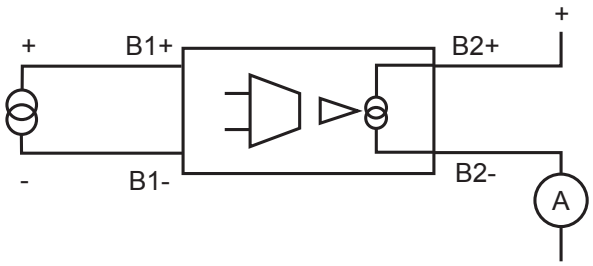
Application:
For use in instrumentation with current loop I/O as used by PLCs, sensors, recorders, indicators, alarm units etc.

CONNECTION DIAGRAM

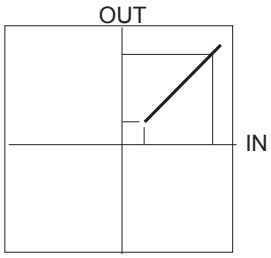
Rail mounting



FUNCTION DIAGRAM



INPUT/OUTPUT CHARACTERISTICS



Input: 4 - 20 mA

Output: 4 - 20 mA

Thiim A/S
Transformervej 31
2730 Herlev - Denmark
Tel.: +45 4485 8000
Fax: +45 4485 8005
Web: www.thiim.com
Webshop: shop.thiim.com

SPECIFICATIONS

INPUT

4 - 20 mA	Max. input 100 mA
Loop supplied	Voltage drop, Max. 7 V

PERFORMANCE PARAMETERS

TIMING	
Response time	< 10 msec.
ELECTRICAL	
Precision	Class 0.5 according to DIN / EN60688
Linearity	< 0.02 %
Temp. dependence	± 0.02 % / °C
Supply dependence	± 0.01 % / % DU

OUTPUT

Loop supplied	Loop voltage, 8 - 32 V
4 - 20 mA	Max. voltage, 36 V
Max. load	600 Ω. @ 20 V Loop voltage

IS0LATION CHARACTERISTICS

Capacitance	< 1 pF, input/output
Safety approval	According to:
	UL1577 (5 kVRMS/1 min. rating)
	VDE 0884/06.92 (VIORM = 1 kVRMS)
	BSI: BS415; 1990 BS7002; 1992 BS EN60950; 1992 EN41003; 1991

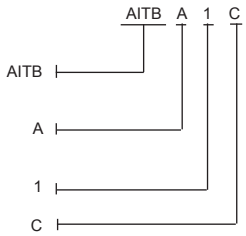
GENERAL

Temperature range	- 25 °C to + 55 °C
Humidity	Up to 90 % RH non-condensing
Weight	0.044 kg

CE

	International Standards
EMC directive 89/336:	EN50081 - Emission EN50082 - Immunity
Low voltage directive 73/23:	EN60255 - Electrical Relays EN60688 - Measuring transducers

ORDERING INFORMATION



TYPE
Loop isolator — AITB

HOUSING
Rail mounting — A

SIZE
17,5 mm. — 1

CODE END — C