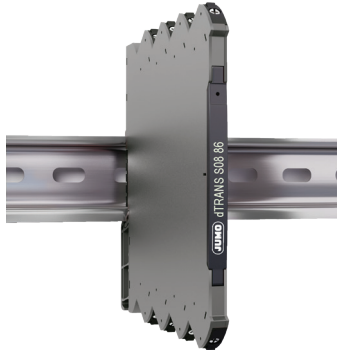


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JUMO dTRANS S08 86

Two-wire transmitter signal amplifier / Two-wire current isolator

707286

- 1 or 2 channel 2-wire transmitter isolator / current isolator
- 1:1 conversion in the range 3.5...23 mA
- Low channel voltage drop and fast response time < 5 ms
- Excellent accuracy, better than 0.05%
- Slimline 6 mm housing



Application

- JUMO dTRANS S08 86A is a 1:1 output loop-powered 2-wire transmitter isolator that excites and measures passive input signals.
- JUMO dTRANS S08 86B is a 1:1 output loop-powered 2-wire current isolator that measures active input signals.
- A very competitive choice in terms of both price and technology for galvanic isolation.
- Provides surge suppression and protects control systems from transients and noise.
- 707286 eliminates ground loops and can be used for measuring floating signals.
- The device can be mounted in Safe area or in Zone 2 and Cl. 1 Div 2. area.

Technical characteristics

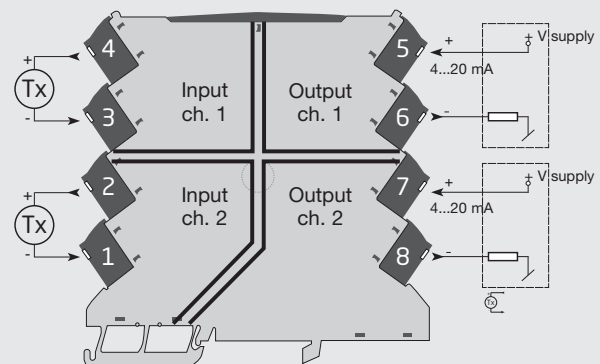
- 707286 is powered by the host loop voltage.
- Wide supply range from 6...35 V.
- Low input to output voltage drop typ. 2.5 V (JUMO dTRANS S08 86A).
- Low input drop ≤ 3 V (JUMO dTRANS S08 86B), even when no loop power is applied to the output terminals.
- Excellent conversion accuracy, better than 0.05% in the range 3.8...20.5 mA.
- Signal range is 3.5...23 mA which means that 707286 is NAMUR NE43 compliant.
- Inputs and outputs are floating and galvanically separated.
- High galvanic isolation of 2.5 kVAC.
- Fast response time < 5 ms.
- Excellent signal/noise ratio > 60 dB.

Mounting / installation

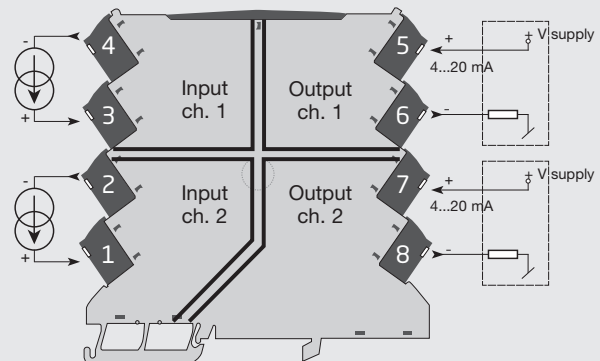
- DIN rail mounting with up to 330 channels per meter.
- Extended operating temperature range from -25...+70°C.

Applications

JUMO dTRANS S08 86A



JUMO dTRANS S08 86B



Order

Type	Product name	Description	Part no./TN (order code)
707286	JUMO dTRANS S08 86A1	Two-wire transmitter signal amplifier (1 channel)	00697492
707286	JUMO dTRANS S08 86A2	Two-wire transmitter signal amplifier (2 channel)	00697493
707286	JUMO dTRANS S08 86B1	Two-wire current isolator (1 channel)	00697610
707286	JUMO dTRANS S08 86B2	Two-wire current isolator (2 channel)	00697611

Environmental Conditions

Operating temperature	-25°C to +70°C
Storage temperature.....	-40°C to +85°C
Calibration temperature.....	20...28°C
Relative humidity	< 95% RH (non-cond.)
Protection degree	IP20
Installation in.....	Pollution degree 2 & measurement / overvoltage cat. II

Mechanical specifications

Dimensions (HxWxD).....	113 x 6.1 x 115 mm
Weight approx	70 g
DIN rail type.....	DIN EN 60715/35 mm
Wire size.....	0.13 x 2.5 mm ² / AWG 26...12 stranded wire
Screw terminal torque.....	0.5 Nm
Vibration	IEC 60068-2-6
2...25 Hz	±1.6 mm
25...100 Hz	±4 g

Common specifications

Supply

Supply voltage	6...35 VDC
Power dissipation, per channel.....	50 mW (JUMO dTRANS S08 86A)
Power dissipation, per channel.....	V _{terminal} x I (JUMO dTRANS S08 86B)

Isolation voltage

Isolation voltage, test / working	2.5 kVAC / 300 VAC (reinforced)
Zone 2 / Div. 2	250 VAC

Response time

Response time (0...90%, 100...10%).....	< 5 ms
Signal / noise ratio	> 60 dB
Accuracy	Better than 0.05%
Cut-off frequency (3 dB).....	100 Hz
EMC immunity influence.....	< ±0.5% of span
Extended EMC immunity: NAMUR NE21, A criterion, burst.....	< ±1% of span

Input specifications

Current input

Measurement range	3.5...23 mA
Input to output voltage drop, typ.....	2.5 V (JUMO dTRANS S08 86A)
Input voltage drop typ.: Supplied and non-supplied unit	≤ 3 V (JUMO dTRANS S08 86B)
2-wire transmitter supply	3.5...32.5 V
Signal conversion	1:1

Output specifications

Current output

Signal range	3.5...23 mA
Signal range, input to output.....	3.8...20.5 mA
Output loop current limitation, typ.....	24 mA
Current output overload, max.....	50 mA

I.S. / Ex marking

ATEX	II 3 G Ex nA IIC T4 Gc
IECEx	Ex nA IIC T4 Gc

Observed authority requirements

EMC.....	2014/30/EU
LVD.....	2014/35/EU
RoHS.....	2011/65/EU

Approvals

ATEX 2014/34/EU	DEKRA 18ATEX0007 X
IECEx	DEK 18.0006 X
DNV-GL Marine	DNVGL-CG-0339
UL	E201387