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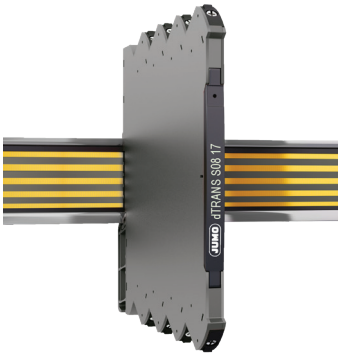


JUMO dTRANS S08 17
Bipolar signal converter/isolator

707217

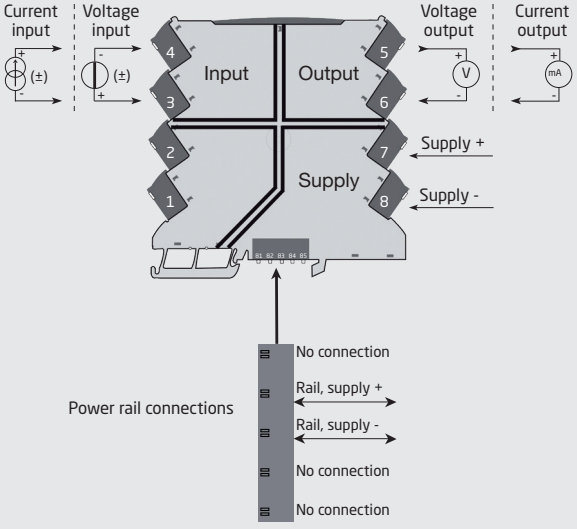
– Conversion of voltage and current bipolar process signals to unipolar signals
– Multiple signal ranges are selectable via DIP-switches
– Fast response time < 7 ms and high output load stability
– Excellent accuracy, better than 0.05 % of span
– Slimline 6 mm housing

Application
- The 707217 is an isolating converter which can be used for signal conversion of standard bipolar analog process signals into a unipolar analog signal.
- The unit offers 3-port isolation and provides surge suppression and protects control systems from transients and noise.
- The 707217 also eliminates ground loops and can be used for measuring floating signals.
- Mounting of the 707217 can be in Safe area or in Zone 2 and Cl. 1 Div 2 area and is approved for marine applications.

Technical characteristics
- Flexible 24 VDC (±30%) supply via power rail or connectors.
- Excellent conversion accuracy, better than 0.05% of selected range.
- Inputs and outputs are floating and galvanically separated.
- A green front LED indicates operation status for the device.
- All terminals are protected against overvoltage and polarity error.
- Meeting the NAMUR NE21 recommendations, the 707217 ensures top measurement performance in harsh EMC environments.
- High galvanic isolation of 2.5 kVAC.
- Fast input to output response time < 7 ms / > 100 Hz – 10 Hz bandwidth damping possible via DIP-switch.
- Excellent signal/noise ratio > 60 dB.

Mounting / installation / programming
- Fast and easy configuration of factory calibrated measurement ranges via DIP-switches.
- A very low power consumption allows DIN rail mounting without the need for any air gap.
- Wide temperature operation range: -25...+70°C.

Applications



Safe Area or Zone 2 & Cl. 1, Div. 2, gr. A-D

Order

Type	Product name	Description	Part no./TN (order code)
707217	JUMO dTRANS S08 17	Bipolar signal converter/ isolator	00697487

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 mm² / AWG 26...12 stranded wire
Screw terminal torque..... 0.5 Nm

Common specifications

Supply

Supply voltage ..... 16.8...31.2 VDC
Max. required power..... 0.80 W
Max. power dissipation ..... 0.43 W

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%)..... < 7 ms or < 44 ms
MTBF, acc. to IEC 61709 (SN29500) ..... > 241 years
Signal / noise ratio ..... Min. 60 dB (0...100 kHz)
Programming ..... DIP-switches
Cut-off frequency (3 dB) ..... > 100 Hz or 10 Hz (selectable via DIP-switch)
Accuracy..... < ±0.05% of span
Temperature coefficient ..... < ±0.01% of span / °C
EMC immunity influence..... < ±0.5% of span
Extended EMC immunity: NAMUR
NE21, A criterion, burst..... < ±1% of span

Input specifications

Current input

Measurement range ..... -23...+23 mA
Programmable measurement ranges..... ± 10 and ± 20 mA
Input voltage drop..... < 1 VDC @ 23 mA

Voltage input

Measurement range ..... -11.5...+11.5 V
Programmable ranges..... ±5 and ±10 V
Input resistance ..... ≥ 1 MΩ

Output specifications

Current output

Signal range ..... 0...23 mA
Programmable signal ranges..... 0 / 4...20 mA
Load (@ current output) ..... ≤ 600 Ω
Load stability..... ≤ 0.002% of span / 100 Ω
Current limit ..... ≤ 28 mA

Voltage output

Signal range ..... 0...10 VDC
Programmable signal ranges..... 0/1...5 and 0/2...10 V
Load (@ voltage output)..... ≥ 10 kΩ

of span..... = of the currently selected measurement range

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

V1.00/EN/00698557 - 707217T00T10Z001K000