



EL1052 | 2-channel digital input terminal NAMUR

The EL1052 digital input terminal acquires signals from NAMUR field devices according to IEC 60947-5-6. The sensors are supplied with a voltage of 8.2 V and return a diagnosable current signal. In this way, a wire breakage or short-circuit can be detected in addition to the switching state. The LEDs indicate signal or any error states, channel by channel.

Technical data	EL1052 ES1052
Technology	NAMUR
Specification	NAMUR DC switching amplifier (IEC 60947-5-6)
Signal type	binary, current input for NAMUR sensors
Number of inputs	2
Connection technology	2-wire
Open circuit voltage	typ. 8.2 V DC
"0" signal current	≤ 1.2 mA
"1" signal current	≥ 2.1 mA
Switching hysteresis	typ. 350 µA
Short circuit current	typ. 7.8 mA
Fault detection	I ≤ 200 µA (cable break), I ≥ 7.0 mA (short circuit)
Max. switching frequency	5 kHz (duty factor 50 %)
Internal resistance	according to I/V curve IEC 60947-5-6
Distributed clocks	–
Supply voltage electronics	24 V DC (via power contacts)
Current consumption E-bus	typ. 40 mA
Current consumption power contacts	typ. 20 mA + load
Electrical isolation	500 V (E-bus/field potential)
Special features	integrated reverse polarity protection
Weight	approx. 60 g
Operating/storage temperature	-25...+60 °C/-40...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Pluggable wiring	for all ESxxxx terminals
Approvals	CE, Ex, IECEx

Related products	
EL3182	2-channel analog input terminal 4...20 mA, single-ended, 16 bit, HART
ELX1052	2-channel digital input terminal NAMUR, Ex i
ELX3181	1-channel analog input terminal 4...20 mA, single-ended, 16 bit, HART, Ex i