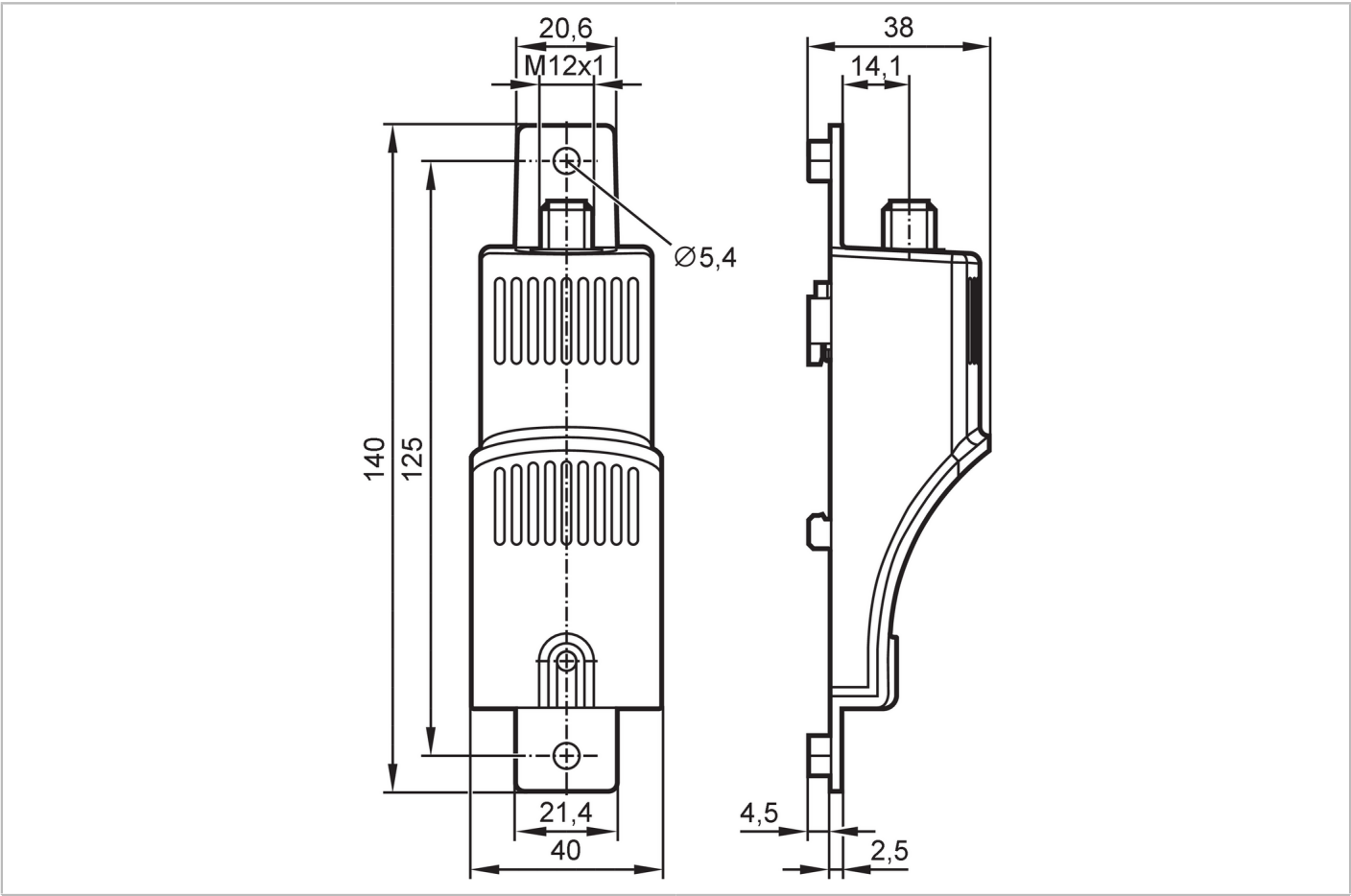


LDH290



Air humidity sensor

AIR HUMIDITY SENSOR ANALOG



Product characteristics		
Number of inputs and outputs		Number of analog outputs: 2
Application		
Special feature		gold-plated contacts
Electrical data		
Operating voltage	[V]	12...30 DC
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	< 1
Measuring principle		capacitive
Inputs / outputs		
Number of inputs and outputs		Number of analog outputs: 2
Outputs		
Total number of outputs		2
Output signal		analog signal
Number of analog outputs		2
Analog current output	[mA]	4...20
Max. load	[Ω]	(Ub - 12 V) / 20 mA

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Measuring/setting range		
Measuring range	[% RH]	0...100
Temperature measurement		
Measuring range	[°C]	-40...60
Accuracy / deviations		
Accuracy	[% RH]	4; (in the range 20...80 % RH)
Resolution	[% RH]	0,1
Temperature measurement		
Accuracy	[K]	± 1
Resolution	[K]	0.1
Reaction times		
Response time	[s]	< 30; (T90)
Temperature measurement		
Response time	[s]	< 300; (T90)
Operating conditions		
Ambient temperature	[°C]	-40...70
Note on ambient temperature		application humidity: ≤ 90 % RH non condensing
Storage temperature	[°C]	-40...85
Note on storage temperature		storage humidity: ≤ 90 % RH non condensing
Protection		IP 20; (only sensor: IP 57)
Tests / approvals		
EMC	DIN EN 61000-6-2	
	DIN EN 61000-6-4	
MTTF	[years]	178
UL approval	File number UL	E224228
Mechanical data		
Weight	[g]	72.3
Type of mounting		Mounting on DIN rail and panel; (TH35 (EN 60715) / M5)
Dimensions	[mm]	140 x 40 x 38
Material		plastics UL94 V-0; light grey
Mounting orientation		vertical; connector facing upwards
Remarks		
Pack quantity		1 pcs.
Electrical connection		
Connector: 1 x M12 (EN 61067-2-101); coding: A; Contacts: gold-plated		

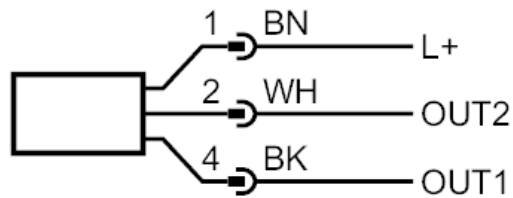
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Air humidity sensor

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Connection



OUT1: analog output temperature
OUT2: analog output air humidity
Colors to DIN EN 60947-5-2
Core colors :
BK = black
BN = brown
WH = white