

## Resistance characteristics

Temp.	PT100	PT1000	NI1000	NI1000 TK5000	NTC 1kOhm	NTC 1,8kOhm	NTC 3kOhm	NTC 5kOhm	NTC 10kOhm
°C	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm
-50	80,31	803,10	743,00	790,88	32886,00		200338,00		
-40	84,27	842,70	791,00	830,83	18641,00	35658	100701,00	166555	333282
-30	88,22	882,20	842,00	871,69	10961,00	21131	53005,00	87897	175846
-20	92,16	921,60	893,00	913,48	6662,00	12838	29092,00	48322	96659
-10	96,06	960,90	946,00	956,24	4175,00	7992	16589,00	27584	55171
0	100,00	1000,00	1000,00	1000,00	2961,00	5095	9795,20	16300	32600
10	103,90	1039,00	1056,00	1044,79	1781,00	3221	5971,12	9942	19885
20	107,79	1077,90	1112,00	1090,65	1205,00	2212	3748,10	6244	12489
25	109,74	1097,40	1141,00	1113,99	1000,00	1820	3000,00	5000	10000
30	111,67	1116,70	1171,00	1137,61	834,20	1504	2416,80	4029	8058
40	115,54	1155,40	1230,00	1185,71	589,20	1042	1597,50	2664	5329
50	119,40	1194,00	1291,00	1234,97	424,00	735	1080,30	1803	3606
60	123,24	1232,40	1353,00	1285,44	310,40	528	746,12	1246	2492
70	127,07	1270,70	1417,00	1337,14	231,00	384	525,49	878	1756
80	130,89	1308,90	1483,00	1390,12	174,50	284	376,85	630	1260
90	134,70	1347,00	1549,00	1444,39	133,60	213	274,83	459	920
100	138,50	1385,00	1618,00	1500,00	103,70	162	203,59	340	682
110	142,29	1422,00	1688,00	1556,98	81,40	125	153,03	256	513
120	146,06	1460,60	1760,00	1615,36	64,70	97	116,58	195	391
130	149,82	1498,20	1833,00	1675,18	51,90		89,95	150	
140	153,58	1535,80	1909,00	1736,47	42,10		70,22	117	
150	157,31	1573,10	1987,00	1799,26	34,40		55,44	93	

## Resistance characteristics

Temp.	NTC 20kOhm	KTY 81-210	KTY 11-6	KTY 81-110	KTY 81-121	NTC 10kPRECON	LM235Z
°C	Ohm	Ohm	Ohm	Ohm	Ohm	Ohm	mVolt
-50		1068,65	1035,91	515,00	510,00	454910	2232,00
-40	804170	1158,95	1139,27	567,00	562,00	245089	2332,00
-30	412798	1269,25	1250,39	624,00	617,00	137307	2432,00
-20	220734	1385,15	1396,25	684,00	677,00	79729	2532,00
-10	122439	1508,65	1495,86	747,00	740,00	47843	2632,00
0	70440	1639,60	1630,21	815,00	807,00	29588	2732,00
10	41544	1778,10	1772,32	886,00	877,00	18813	2832,00
20	25341	1924,15	1922,17	961,00	951,00	12272	2932,00
25	20000	2000,00	2000,00	1000,00	990,00	10000	2982,00
30	15888	2077,80	2079,77	1040,00	1029,00	8195	3032,00
40	10214	2238,90	2245,17	1122,00	1111,00	5593	3132,00
50	6718	2407,60	2418,21	1209,00	1196,00	3894	3232,00
60	4517	2583,80	2599,06	1299,00	1286,00	2763	3332,00
70	3110	2767,50	2787,65	1392,00	1378,00	1994	3432,00
80	2167	2958,80	2983,99	1490,00	1475,00	1462	3532,00
90	1541	3152,50	3188,08	1591,00	1575,00	1088	3632,00
100	1114	3363,90	3399,91	1696,00	1679,00	821	3732,00
110	818	3577,75	3619,50	1805,00	1786,00	628	3832,00
120	608	3799,10	3846,83	1915,00	1896,00	486	3932,00
130	457	4028,05	4081,91	2023,00	2003,00	380	4032,00
140	347	4188,10	4324,74	2124,00	2103,00	301	4132,00
150	266	4397,70	4575,31	2211,00	2189,00	240	4232,00

**DDCtech** °C Temperatur % Feuchte CO<sup>2</sup> Luftqualität Pa Druck

## OTT-A-.....

Outside temperature sensors



### Application

Our OTT is available with all common sensor Types. Measurement takes place inside the sturdy and humidity-resistant plastic housing. The AUTF is mainly used in weather-dependent environments, such as outer walls (please avoid direct insolation). With the help of the respective sensors (see below) the device can be connected to all conventional control and display systems.

## Optional accessoires

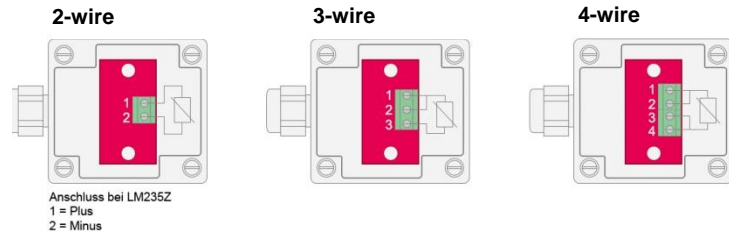


Sun Protection/Physical Impact Protection G25.1

## Technical Specifications

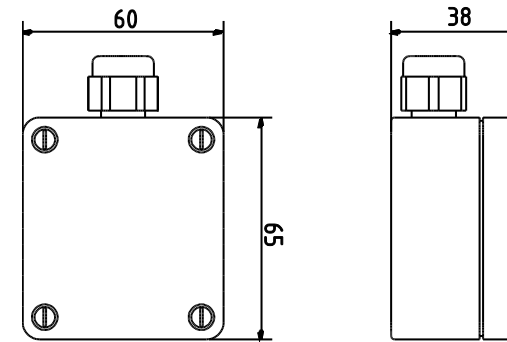
Sensor	NTC1.8k, NTC5k, NTC10k, NTC20k, Precon, KTY81-110, KTY81-210, LM235Z, Ni1000, Ni1000TK5000, PT100, PT100 1/3DIN, PT1000, PT1000 1/3DIN
Measuring range:	-50°...+100°C (Standard)
Tmax Casing	+100°C
Casing	PA6 15% GK, RAL9010
Sleeve	6x42mm, VA
Measurement current	Typ. <1mA
Switching mode	2-wire connection
Terminal	Screw clamps, max. 1.5 mm <sup>2</sup>
Protection class:	IP65

## Electrical Connection

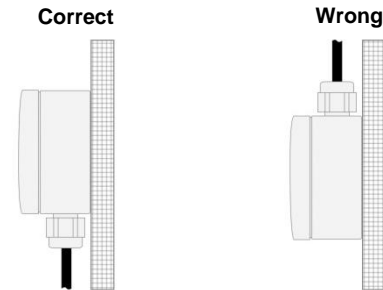


The devices are built for safety extra-low voltage operation. The technical data from the data sheet apply when connecting the devices. Especially with passive sensors (f. ex. PT100,...) in two-wire configurations, the output resistance of the feed line must be observed and possibly adjusted via the evaluation electronics. The measuring current affects the accuracy of the measurement due to self-heating. Therefore, this current should be set to no higher than 1 mA.

## Technical drawing



## Mounting



## General Information

- Installation of the equipment must be performed by qualified personnel.
- The device may only be connected with the power off.
- The safety of the VDE, the states, the TÜV and the local energy supply company must be observed.
- The EMC directives are observed. It must be shielded connecting cables, and a parallel installation to live pipes to be avoided.
- The operation in the vicinity of equipment that does not comply with EMC directives may adversely affect the functioning.
- The buyer has to ensure compliance with the applicable building and safety guidelines.
- This product should not be used for safety-related tasks, such as for the protection of persons as emergency stop switch on equipment.
- Improper use of any deficiencies or damage are excluded from warranty or liability.
- Consequential damages caused by a fault in this device are excluded from warranty or liability.
- Only the technical data and connecting conditions of installation and operating instructions supplied with the instrument. Changes are possible at any time in the sense of technical progress and the improvement of the products.
- Changes of the device by the user, all warranty claims.