АО «Научно-производственное предприятие «Эталон»

ул. Лермонтова, 175, г. Омск, 644009

**Протокол градуировки**

№ measurement\_id от measurement\_date

**Наименование СИ:** термопреобразователь сопротивления

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Тип СИ | Регистр. № | Зав. № | Год вып. | Заказчик | НСХ | Кл. допуска | Диапазон, °С |
| sensor\_name#1 | sensor\_rn#1 | sensor\_sn#1 | sensor\_year\_of\_issue#1 | measurement\_customer#1 | measurement\_type#1 | sensor\_class#1 | sensor\_t\_range#1 |
| sensor\_name#2 | sensor\_rn#2 | sensor\_sn#2 | sensor\_year\_of\_issue#2 | measurement\_customer#2 | measurement\_type#2 | sensor\_class#2 | sensor\_t\_range#2 |
| sensor\_name#3 | sensor\_rn#3 | sensor\_sn#3 | sensor\_year\_of\_issue#3 | measurement\_customer#3 | measurement\_type#3 | sensor\_class#3 | sensor\_t\_range#3 |
| sensor\_name#4 | sensor\_rn#4 | sensor\_sn#4 | sensor\_year\_of\_issue#4 | measurement\_customer#4 | measurement\_type#4 | sensor\_class#4 | sensor\_t\_range#4 |
| sensor\_name#5 | sensor\_rn#5 | sensor\_sn#5 | sensor\_year\_of\_issue#5 | measurement\_customer#5 | measurement\_type#5 | sensor\_class#5 | sensor\_t\_range#5 |
| sensor\_name#6 | sensor\_rn#6 | sensor\_sn#6 | sensor\_year\_of\_issue#6 | measurement\_customer#6 | measurement\_type#6 | sensor\_class#6 | sensor\_t\_range#6 |
| sensor\_name#7 | sensor\_rn#7 | sensor\_sn#7 | sensor\_year\_of\_issue#7 | measurement\_customer#7 | measurement\_type#7 | sensor\_class#7 | sensor\_t\_range#7 |

**Методика:** ГОСТ 8.461-2009 ГСИ «Термопреобразователи сопротивления из платины, меди и никеля. Методика поверки».

**Средства измерений:**

эталон единицы температуры sensor\_class#8 разряда в диапазоне значений от sensor\_t\_range#8 °С, Sensor\_name#8, sensor\_sn#8, sensor\_year\_of\_issue#8, measurement\_type#8

калибратор сухоблочный КС 1200-2 № device\_nubmer

мегаомметр: megaohmmeter\_model, № megaohmmeter\_sn

**Условия:**

температура окружающего воздуха, °С (20±5) temperature

относительная влажность воздуха,% (не более 80) hydro

атмосферное давление, кПа (84…106,7) pressure

**Внешний осмотр, проверка электрической прочности изоляции, электрического сопротивления изоляции:**

|  |  |  |  |
| --- | --- | --- | --- |
| Тип СИ | Зав. № | Замечания по внешнему осмотру | Электрическое сопротивление изоляции |
| sensor\_name#1 | sensor\_sn#1 | ext\_inspection\_notes#1 | r\_isolation#1 |
| sensor\_name#2 | sensor\_sn#2 | ext\_inspection\_notes#2 | r\_isolation#2 |
| sensor\_name#3 | sensor\_sn#3 | ext\_inspection\_notes#3 | r\_isolation#3 |
| sensor\_name#4 | sensor\_sn#4 | ext\_inspection\_notes#4 | r\_isolation#4 |
| sensor\_name#5 | sensor\_sn#5 | ext\_inspection\_notes#5 | r\_isolation#5 |
| sensor\_name#6 | sensor\_sn#6 | ext\_inspection\_notes#6 | r\_isolation#6 |
| sensor\_name#7 | sensor\_sn#7 | ext\_inspection\_notes#7 | r\_isolation#7 |

**Проверка отклонения сопротивления ТС от НСХ: (значения сопротивлений приведены к температуре точек калибровки)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Тип СИ | sensor\_name#1 | sensor\_name#2 | sensor\_name#3 | sensor\_name#4 | sensor\_name#5 | sensor\_name#6 | sensor\_name#7 |
| Зав. № | sensor\_sn#1 | sensor\_sn#2 | sensor\_sn#3 | sensor\_sn#4 | sensor\_sn#5 | sensor\_sn#6 | sensor\_sn#7 |
| Rвыв, Ом | r\_pins#1 | r\_pins#2 | r\_pins#3 | r\_pins#4 | r\_pins#5 | r\_pins#6 | r\_pins#7 |
| Т1, оС | sensor#1\_t1 | sensor#2\_t1 | sensor#3\_t1 | sensor#4\_t1 | sensor#5\_t1 | sensor#6\_t1 | sensor#7\_t1 |
| R1, оС | sensor#1\_r1 | sensor#2\_r1 | sensor#3\_r1 | sensor#4\_r1 | sensor#5\_r1 | sensor#6\_r1 | sensor#7\_r1 |
|  |  |  |  |  |  |  |  |
| Т1, оС | sensor#1\_t2 | sensor#2\_t2 | sensor#3\_t2 | sensor#4\_t2 | sensor#5\_t2 | sensor#6\_t2 | sensor#7\_t2 |
| R1, оС | sensor#1\_r2 | sensor#2\_r2 | sensor#3\_r2 | sensor#4\_r2 | sensor#5\_r2 | sensor#6\_r2 | sensor#7\_r2 |
|  |  |  |  |  |  |  |  |
| Т1, оС | sensor#1\_t3 | sensor#2\_t3 | sensor#3\_t3 | sensor#4\_t3 | sensor#5\_t3 | sensor#6\_t3 | sensor#7\_t3 |
| R1, оС | sensor#1\_r3 | sensor#2\_r3 | sensor#3\_r3 | sensor#4\_r3 | sensor#5\_r3 | sensor#6\_r3 | sensor#7\_r3 |
|  |  |  |  |  |  |  |  |
| Т1, оС | sensor#1\_t4 | sensor#2\_t4 | sensor#3\_t4 | sensor#4\_t4 | sensor#5\_t4 | sensor#6\_t4 | sensor#7\_t4 |
| R1, оС | sensor#1\_r4 | sensor#2\_r4 | sensor#3\_r4 | sensor#4\_r4 | sensor#5\_r4 | sensor#6\_r4 | sensor#7\_r4 |
|  |  |  |  |  |  |  |  |
| Т1, оС | sensor#1\_t5 | sensor#2\_t5 | sensor#3\_t5 | sensor#4\_t5 | sensor#5\_t5 | sensor#6\_t5 | sensor#7\_t5 |
| R1, оС | sensor#1\_r5 | sensor#2\_r5 | sensor#3\_r5 | sensor#4\_r5 | sensor#5\_r5 | sensor#6\_r5 | sensor#7\_r5 |

Поверитель measurement\_operator

подпись Ф.И.О.