# **Протокол проведения проверки от <Date>**

Цифрового измерительного преобразователя сигналов от термосопротивления DMC-RT24, серийный номер <SerialNumber> с целью проверки на соответствие

**ТУ 26.51.43.117-026-83746501-2020**

**1.Содержание:**

Определение погрешности измерения сопротивления и преобразования в цифровой код.

2. калибровка производится по п. инструкции по наладке **РАКУРС.КБ2.02.52.00И1**

3.**Условия испытаний:**

Соответствуют нормальным климатическим условиям

**4.Применяемые СИ:**

Эталоны

**5. Таблица основной абсолютной погрешности DMC-RT24 входного сопротивления**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № канала | Наименование | Погрешность, Ом | | Результат |
| Допуск. | Фактич. |
| 1 | 4x – точечная схема подключения | <I0d0EValue> | <I0GenErr> | <I0GenRez> |
| 2 | 4x – точечная схема подключения | <I1d0EValue> | <I1GenErr> | <I1GenRez> |
| 3 | 4x – точечная схема подключения | <I2d0EValue> | <I2GenErr> | <I2GenRez> |
| 4 | 4x – точечная схема подключения | <I3d0EValue> | <I3GenErr> | <I3GenRez> |
| 5 | 4x – точечная схема подключения | <I4d0EValue> | <I4GenErr> | <I4GenRez> |
| 6 | 4x – точечная схема подключения | <I5d0EValue> | <I5GenErr> | <I5GenRez> |
| 7 | 4x – точечная схема подключения | <I6d0EValue> | <I6GenErr> | <I6GenRez> |
| 8 | 4x – точечная схема подключения | <I7d0EValue> | <I7GenErr> | <I7GenRez> |

**6. Таблица основной абсолютной погрешности DMC-RT24 токовые аналоговые выходы**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № канала | Наименование | Погрешность, Ом | | Результат |
| Допуск. | Фактич. |
| 1 | Сила тока на выходе | <O0d0EValue> | <O0GenErr> | <O0GenRez> |
| 2 | Сила тока на выходе | <O1d0EValue> | <O1GenErr> | <O1GenRez> |
| 3 | Сила тока на выходе | <O2d0EValue> | <O2GenErr> | <O2GenRez> |
| 4 | Сила тока на выходе | <O3d0EValue> | <O3GenErr> | <O3GenRez> |
| 5 | Сила тока на выходе | <O4d0EValue> | <O4GenErr> | <O4GenRez> |
| 6 | Сила тока на выходе | <O5d0EValue> | <O5GenErr> | <O5GenRez> |
| 7 | Сила тока на выходе | <O6d0EValue> | <O6GenErr> | <O6GenRez> |
| 8 | Сила тока на выходе | <O7d0EValue> | <O7GenErr> | <O7GenRez> |

**Результаты при проверке калибровки при 4-x точечной схеме подключения**

**Канал 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <I0d0Ref> | <I0d0x0> | <I0d0x1> | <I0d0x2> | <I0d0x3> | <I0d0x4> | <I0d0x5> | <I0d0x6> | <I0d0x7> | <I0d0x8> | <I0d0x9> | <I0d0AverVal> | <I0d0MEValue> |
| <I0d4Ref> | <I0d4x0> | <I0d4x1> | <I0d4x2> | <I0d4x3> | <I0d4x4> | <I0d4x5> | <I0d4x6> | <I0d4x7> | <I0d4x8> | <I0d4x9> | <I0d0AverVal> | <I0d4MEValue> |

**Канал 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <I1d0Ref> | <I1d0x0> | <I1d0x1> | <I1d0x2> | <I1d0x3> | <I1d0x4> | <I1d0x5> | <I1d0x6> | <I1d0x7> | <I1d0x8> | <I1d0x9> | <I1d0AverVal> | <I1d0MEValue> |
| <I1d4Ref> | <I1d4x0> | <I1d4x1> | <I1d4x2> | <I1d4x3> | <I1d4x4> | <I1d4x5> | <I1d4x6> | <I1d4x7> | <I1d4x8> | <I1d4x9> | <I1d0AverVal> | <I1d4MEValue> |

**Канал 3**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <I2d0Ref> | <I2d0x0> | <I2d0x1> | <I2d0x2> | <I2d0x3> | <I2d0x4> | <I2d0x5> | <I2d0x6> | <I2d0x7> | <I2d0x8> | <I2d0x9> | <I2d0AverVal> | <I2d0MEValue> |
| <I2d4Ref> | <I2d4x0> | <I2d4x1> | <I2d4x2> | <I2d4x3> | <I2d4x4> | <I2d4x5> | <I2d4x6> | <I2d4x7> | <I2d4x8> | <I2d4x9> | <I2d0AverVal> | <I2d4MEValue> |

**Канал 4**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <I3d0Ref> | <I3d0x0> | <I3d0x1> | <I3d0x2> | <I3d0x3> | <I3d0x4> | <I3d0x5> | <I3d0x6> | <I3d0x7> | <I3d0x8> | <I3d0x9> | <I3d0AverVal> | <I3d0MEValue> |
| <I3d4Ref> | <I3d4x0> | <I3d4x1> | <I3d4x2> | <I3d4x3> | <I3d4x4> | <I3d4x5> | <I3d4x6> | <I3d4x7> | <I3d4x8> | <I3d4x9> | <I3d0AverVal> | <I3d4MEValue> |

**Канал 5**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <I4d0Ref> | <I4d0x0> | <I4d0x1> | <I4d0x2> | <I4d0x3> | <I4d0x4> | <I4d0x5> | <I4d0x6> | <I4d0x7> | <I4d0x8> | <I4d0x9> | <I4d0AverVal> | <I4d0MEValue> |
| <I4d4Ref> | <I4d4x0> | <I4d4x1> | <I4d4x2> | <I4d4x3> | <I4d4x4> | <I4d4x5> | <I4d4x6> | <I4d4x7> | <I4d4x8> | <I4d4x9> | <I4d0AverVal> | <I4d4MEValue> |

**Канал 6**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <I5d0Ref> | <I5d0x0> | <I5d0x1> | <I5d0x2> | <I5d0x3> | <I5d0x4> | <I5d0x5> | <I5d0x6> | <I5d0x7> | <I5d0x8> | <I5d0x9> | <I5d0AverVal> | <I5d0MEValue> |
| <I5d4Ref> | <I5d4x0> | <I5d4x1> | <I5d4x2> | <I5d4x3> | <I5d4x4> | <I5d4x5> | <I5d4x6> | <I5d4x7> | <I5d4x8> | <I5d4x9> | <I5d0AverVal> | <I5d4MEValue> |

**Канал 7**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <I6d0Ref> | <I6d0x0> | <I6d0x1> | <I6d0x2> | <I6d0x3> | <I6d0x4> | <I6d0x5> | <I6d0x6> | <I6d0x7> | <I6d0x8> | <I6d0x9> | <I6d0AverVal> | <I6d0MEValue> |
| <I6d4Ref> | <I6d4x0> | <I6d4x1> | <I6d4x2> | <I6d4x3> | <I6d4x4> | <I6d4x5> | <I6d4x6> | <I6d4x7> | <I6d4x8> | <I6d4x9> | <I6d0AverVal> | <I6d4MEValue> |

**Канал 8**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <I7d0Ref> | <I7d0x0> | <I7d0x1> | <I7d0x2> | <I7d0x3> | <I7d0x4> | <I7d0x5> | <I7d0x6> | <I7d0x7> | <I7d0x8> | <I7d0x9> | <I7d0AverVal> | <I7d0MEValue> |
| <I7d4Ref> | <I7d4x0> | <I7d4x1> | <I7d4x2> | <I7d4x3> | <I7d4x4> | <I7d4x5> | <I7d4x6> | <I7d4x7> | <I7d4x8> | <I7d4x9> | <I7d0AverVal> | <I7d4MEValue> |

**Результаты при проверке калибровки аналоговых выходов**

**Канал 1**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <O0d0Ref> | <O0d0x0> | <O0d0x1> | <O0d0x2> | <O0d0x3> | <O0d0x4> | <O0d0x5> | <O0d0x6> | <O0d0x7> | <O0d0x8> | <O0d0x9> | <O0d0AverVal> | <O0d0MEValue> |
| <O0d4Ref> | <O0d4x0> | <O0d4x1> | <O0d4x2> | <O0d4x3> | <O0d4x4> | <O0d4x5> | <O0d4x6> | <O0d4x7> | <O0d4x8> | <O0d4x9> | <O0d0AverVal> | <O0d4MEValue> |

**Канал 2**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <O1d0Ref> | <O1d0x0> | <O1d0x1> | <O1d0x2> | <O1d0x3> | <O1d0x4> | <O1d0x5> | <O1d0x6> | <O1d0x7> | <O1d0x8> | <O1d0x9> | <O1d0AverVal> | <O1d0MEValue> |
| <O1d4Ref> | <O1d4x0> | <O1d4x1> | <O1d4x2> | <O1d4x3> | <O1d4x4> | <O1d4x5> | <O1d4x6> | <O1d4x7> | <O1d4x8> | <O1d4x9> | <O1d0AverVal> | <O1d4MEValue> |

**Канал 3**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <O2d0Ref> | <O2d0x0> | <O2d0x1> | <O2d0x2> | <O2d0x3> | <O2d0x4> | <O2d0x5> | <O2d0x6> | <O2d0x7> | <O2d0x8> | <O2d0x9> | <O2d0AverVal> | <O2d0MEValue> |
| <O2d4Ref> | <O2d4x0> | <O2d4x1> | <O2d4x2> | <O2d4x3> | <O2d4x4> | <O2d4x5> | <O2d4x6> | <O2d4x7> | <O2d4x8> | <O2d4x9> | <O2d0AverVal> | <O2d4MEValue> |

**Канал 4**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <O3d0Ref> | <O3d0x0> | <O3d0x1> | <O3d0x2> | <O3d0x3> | <O3d0x4> | <O3d0x5> | <O3d0x6> | <O3d0x7> | <O3d0x8> | <O3d0x9> | <O3d0AverVal> | <O3d0MEValue> |
| <O3d4Ref> | <O3d4x0> | <O3d4x1> | <O3d4x2> | <O3d4x3> | <O3d4x4> | <O3d4x5> | <O3d4x6> | <O3d4x7> | <O3d4x8> | <O3d4x9> | <O3d0AverVal> | <O3d4MEValue> |

**Канал 5**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <O4d0Ref> | <O4d0x0> | <O4d0x1> | <O4d0x2> | <O4d0x3> | <O4d0x4> | <O4d0x5> | <O4d0x6> | <O4d0x7> | <O4d0x8> | <O4d0x9> | <O4d0AverVal> | <O4d0MEValue> |
| <O4d4Ref> | <O4d4x0> | <O4d4x1> | <O4d4x2> | <O4d4x3> | <O4d4x4> | <O4d4x5> | <O4d4x6> | <O4d4x7> | <O4d4x8> | <O4d4x9> | <O4d0AverVal> | <O4d4MEValue> |

**Канал 6**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <O5d0Ref> | <O5d0x0> | <O5d0x1> | <O5d0x2> | <O5d0x3> | <O5d0x4> | <O5d0x5> | <O5d0x6> | <O5d0x7> | <O5d0x8> | <O5d0x9> | <O5d0AverVal> | <O5d0MEValue> |
| <O5d4Ref> | <O5d4x0> | <O5d4x1> | <O5d4x2> | <O5d4x3> | <O5d4x4> | <O5d4x5> | <O5d4x6> | <O5d4x7> | <O5d4x8> | <O5d4x9> | <O5d0AverVal> | <O5d4MEValue> |

**Канал 7**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <O6d0Ref> | <O6d0x0> | <O6d0x1> | <O6d0x2> | <O6d0x3> | <O6d0x4> | <O6d0x5> | <O6d0x6> | <O6d0x7> | <O6d0x8> | <O6d0x9> | <O6d0AverVal> | <O6d0MEValue> |
| <O6d4Ref> | <O6d4x0> | <O6d4x1> | <O6d4x2> | <O6d4x3> | <O6d4x4> | <O6d4x5> | <O6d4x6> | <O6d4x7> | <O6d4x8> | <O6d4x9> | <O6d0AverVal> | <O6d4MEValue> |

**Канал 8**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Ед. изм. | Xo | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | Xоткл. | Xоткл.-Xo |
| Ом | <O7d0Ref> | <O7d0x0> | <O7d0x1> | <O7d0x2> | <O7d0x3> | <O7d0x4> | <O7d0x5> | <O7d0x6> | <O7d0x7> | <O7d0x8> | <O7d0x9> | <O7d0AverVal> | <O7d0MEValue> |
| <O7d4Ref> | <O7d4x0> | <O7d4x1> | <O7d4x2> | <O7d4x3> | <O7d4x4> | <O7d4x5> | <O7d4x6> | <O7d4x7> | <O7d4x8> | <O7d4x9> | <O7d0AverVal> | <O7d4MEValue> |

**Калибровочные коэффициенты**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| № канала | Смещение, 3-x точка прямая | Множитель, 3-x точка прямая | Смещение, 3-x точка обратная | Множитель, 3-x точка обратная | Смещение, аналоговый выход | Множитель, аналоговый выход |
| 1 | <InO3Dc0> | <InM3Dc0> | <InO3Rc0> | <InM3Rc0> | <OutOc0> | <OutMc0> |
| 2 | <InO3Dc1> | <InM3Dc1> | <InO3Rc1> | <InM3Rc1> | <OutOc1> | <OutMc1> |
| 3 | <InO3Dc2> | <InM3Dc2> | <InO3Rc2> | <InM3Rc2> | <OutOc2> | <OutMc2> |
| 4 | <InO3Dc3> | <InM3Dc3> | <InO3Rc3> | <InM3Rc3> | <OutOc3> | <OutMc3> |
| 5 | <InO3Dc4> | <InM3Dc4> | <InO3Rc4> | <InM3Rc4> | <OutOc4> | <OutMc4> |
| 6 | <InO3Dc5> | <InM3Dc5> | <InO3Rc5> | <InM3Rc5> | <OutOc5> | <OutMc5> |
| 7 | <InO3Dc6> | <InM3Dc6> | <InO3Rc6> | <InM3Rc6> | <OutOc6> | <OutMc6> |
| 8 | <InO3Dc7> | <InM3Dc7> | <InO3Rc7> | <InM3Rc7> | <OutOc7> | <OutMc7> |