Isolation  Galvanic isolators for analogue and digital signals as well as HART® signals. A wide product range with both loop-powered and universal isolators featuring linearisation, inversion, and scaling of output signals.

Displays  Programmable displays with a wide selection of inputs and outputs for display of temperature, volume, weight, etc. Feature linearisation, scaling, and difference measurement functions for programming via PReset software.

Ex barriers  Interfaces for analogue and digital signals as well as HART® signals between sensors / I/P converters / frequency signals and control systems in Ex zone 0, 1 & 2. Feature options such as mathematical functions and 2 wire transmitter interfaces.

Temperature  A wide selection of transmitters for DIN form B mounting and DIN rail modules with analogue and digital bus communication ranging from application-specific to universal transmitters.

Backplane  Flexible motherboard solutions for system 5000 modules. Our backplane range features flexible 8 and 16 module solutions with configuration via PReplan 8470 – a PC program with drop-down menus.

---

**5334**  
2-Wire Programmable Transmitter  
No. 5334V103-IN (0324)  
From ser. no. 990308001
2-TRÅDS
PROGRAMMERBAR TRANSMITTER

PRetop 5334

Indholdsfortegnelse

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2-TRÅDS PROGRAMMERBAR TRANSMITTER
PREtop 5334

• Indgang for TC
• Høj målenøjagtighed
• Galvanisk isolation
• Programmerbar følerfejlsværdi
• Kan monteres i DIN form B følerhoved

Anvendelse:
• Lineariseret temperaturmåling med termoelementføler.
• Forstærkning af bipolare mV-signaler eventuelt lineariseret efter defineret lineariseringsfunktion til et 4...20 mA signal.

Teknisk karakteristik:
• PR5334 kan af brugeren i løbet af få sekunder programmeres til at måle inden for alle normerede TC-temperaturområder.
• CJC-kompensering med indbygget temperaturføler.
• Der er løbende sikkerhedscheck af gemte data.

Montage / installation:
• Kan monteres i DIN form B følerhoved eller på DIN-skinne med et specielt beslag.
• NB: Som Ex-barriere for 5334B anbefaler vi 5104B, 5111B eller 5114B.

Sikkerhedsinstruktion

• Ex-installation:
  For sikker installation af 5334B i eksplosionsfarligt område skal følgende overholdes. Installation må kun foretages af kvalificeret personale, der er bekendt med de nationale og internationale love, direktiver og standarder, der gælder for området.
Elektriske specifikationer:

Specifikationsområde:
-40°C til +85°C

Fælles specifikationer:
Forsyningsspænding DC
Standard .............................................. 7,2...35 V       Ex-version ... 16 bit
Kalibreringstemperatur................................ 20...28°C
Nøjagtighed, størst af generelle og basisværdier:

<table>
<thead>
<tr>
<th>Generelle værdier</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Indgangstype</strong></td>
</tr>
<tr>
<td>Alle</td>
</tr>
</tbody>
</table>
Basisværdier

<table>
<thead>
<tr>
<th>Indgangstype</th>
<th>Basis nøjagtighed</th>
<th>Temperatur-koefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volt</td>
<td>±10 µV</td>
<td>±1 µV/°C</td>
</tr>
<tr>
<td>TC-type:</td>
<td>±1°C</td>
<td>±0,05°C/°C</td>
</tr>
<tr>
<td>B, R, S, W3, W5</td>
<td>±2°C</td>
<td>±0,2°C/°C</td>
</tr>
</tbody>
</table>

EMC-immunitetspåvirkning: < ±0,5% af span
Udvidet EMC-immunitet:
NAMUR NE 21, A kriterium, gniststøj: < ±1% af span

<table>
<thead>
<tr>
<th>Virkning af forsyningsspændingsændring:</th>
<th>&lt; 0,005% af span / VDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vibration</td>
<td>IEC 68-2-6 Test FC</td>
</tr>
<tr>
<td>Lloyd’s specification nr. 1</td>
<td>4 g / 2...100 Hz</td>
</tr>
<tr>
<td>Max. ledningskvadrat</td>
<td>1 x 1,5 mm²</td>
</tr>
<tr>
<td>Luftfugtighed</td>
<td>&lt; 95% RH (ikke konds.)</td>
</tr>
<tr>
<td>Mål</td>
<td>Ø 44 x 20,2 mm</td>
</tr>
<tr>
<td>Tæthedgrad (hus / klemme)</td>
<td>IP68 / IP00</td>
</tr>
<tr>
<td>Vægt</td>
<td>50 g</td>
</tr>
</tbody>
</table>

Elektriske specifikationer indgang:
Max. nulpunktsforskydning (offset): 50% af valgt max. værdi

<table>
<thead>
<tr>
<th>TC-indgang:</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Min. temperatur</th>
<th>Max. temperatur</th>
<th>Min. span</th>
<th>Nom.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>+400°C</td>
<td>+1820°C</td>
<td>200°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>E</td>
<td>-100°C</td>
<td>+1000°C</td>
<td>50°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>J</td>
<td>-100°C</td>
<td>+1200°C</td>
<td>50°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>K</td>
<td>-180°C</td>
<td>+1372°C</td>
<td>50°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>L</td>
<td>-100°C</td>
<td>+900°C</td>
<td>50°C</td>
<td>DIN 43710</td>
</tr>
<tr>
<td>N</td>
<td>-180°C</td>
<td>+1300°C</td>
<td>100°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>R</td>
<td>-50°C</td>
<td>+1760°C</td>
<td>200°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>S</td>
<td>-50°C</td>
<td>+1760°C</td>
<td>200°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>T</td>
<td>-200°C</td>
<td>+400°C</td>
<td>50°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>U</td>
<td>-200°C</td>
<td>+600°C</td>
<td>75°C</td>
<td>DIN 43710</td>
</tr>
<tr>
<td>W3</td>
<td>0°C</td>
<td>+2300°C</td>
<td>200°C</td>
<td>ASTM E988-90</td>
</tr>
<tr>
<td>W5</td>
<td>0°C</td>
<td>+2300°C</td>
<td>200°C</td>
<td>ASTM E988-90</td>
</tr>
</tbody>
</table>

EEx-godkendelse CENELEC:
DEMKO 99 ........................................... ATEX 126963
ATEX ............................................. 0539

<table>
<thead>
<tr>
<th>Overholdte myndighedskrav:</th>
<th>Standard:</th>
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<tbody>
<tr>
<td>EMC 89/336/EØF, Emission</td>
<td>EN 50 081-1, EN 50 081-2</td>
</tr>
<tr>
<td>Immunitet</td>
<td>EN 50 082-2, EN 50 082-1</td>
</tr>
</tbody>
</table>

Af span = Af det aktuelle valgte område
Tilslutninger:

Indgang:

TC, intern CJC

mV

Udgang:

2-Trådsinstallation

mA

BLOKDIAGRAM:
Programmering:

- Loop Link 5905A er et batteridrevet kommunikationsinterface, der er nødvendigt for programmering af PRetop 5334.

- Ved programmering henvises til tegningen nedenfor og hjælpefunktionen i PReset programmet.

Bestilling: Loop Link 5905A.

Mekaniske specifikationer:

* Kun forbundet ved online programmering

2-WIRE
PROGRMMABLE TRANSMITTER

PRetop 5334

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Application ......................................................................... 13
Technical characteristics.................................................... 13
Mounting / installation..................................................... 13
Applications...................................................................... 14
Order ............................................................................... 15
Electrical specifications.................................................... 15
Connexions ....................................................................... 18
Block diagram.................................................................. 19
Programming ..................................................................... 20
Mechanical specifications.................................................. 20
Safety instructions

Ex installation:
For a safe installation of 5334B in hazardous area the following must be observed. The module must only be installed by qualified personnel who are familiar with the national and international laws, directives and standards that apply to this area.

2-WIRE PROGRAMMABLE TRANSMITTER
PRetop 5334

- TC input
- High measurement accuracy
- Galvanic isolation
- Programmable sensor error value
- For DIN form B sensor head mounting

Application:
- Linearised temperature measurement with TC sensor.
- Amplification of bipolar mV signals to a 4...20 mA signal, optionally linearised according to a defined linearisation function.

Technical characteristics:
- Within a few seconds the user can program PR5334 to measure temperatures within all TC ranges defined by the norms.
- Cold junction compensation (CJC) with a built-in temperature sensor.
- Continuous check of vital stored data for safety reasons.

Mounting / installation:
- For DIN form B sensor head or DIN rail mounting with a special fitting.
- NB: As Ex barrier for 5334B we recommend 5104B, 5111B, or 5114B.
Electrical specifications:

Specifications range:
-40°C to +85°C

Common specifications:
Supply voltage, DC
- Standard .............................................. 7.2...35 V
- Ex version ........................................... 7.2...28 V
Internal consumption ........................................ 25 mW...0.8 W
Voltage drop .................................................. 7.2 VDC
Isolation voltage, test / operation .......................... 1.5 kVAC / 50 VAC
Warm-up time .................................................. 5 min.
Communications interface ................................. Loop Link 5905A
Signal / noise ratio ......................................... Min. 60 dB
Response time (programmable) ............................ 1...60 s
EEprom error check ......................................... < 3.5 s
Signal dynamics, input ....................................... 18 bit
Signal dynamics, output ..................................... 16 bit
Calibration temperature .................................... 20...28°C

Accuracy, the greater of general and basic values:

<table>
<thead>
<tr>
<th>Input type</th>
<th>Absolute accuracy</th>
<th>Temperature coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>≤ ±0.05% of span</td>
<td>≤ ±0.01% of span / °C</td>
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</tbody>
</table>
Basic values

<table>
<thead>
<tr>
<th>Input type</th>
<th>Basic accuracy</th>
<th>Temperature coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volt</td>
<td>( \leq \pm 10 \mu V )</td>
<td>( \leq \pm 1 \mu V/\degree C )</td>
</tr>
<tr>
<td>TC type: E, J, K, L, N, T, U</td>
<td>( \leq \pm 1 \degree C )</td>
<td>( \leq \pm 0.05 \degree C/\degree C )</td>
</tr>
<tr>
<td>TC type: B, R, S, W3, W5</td>
<td>( \leq \pm 2 \degree C )</td>
<td>( \leq \pm 0.2 \degree C/\degree C )</td>
</tr>
</tbody>
</table>

EMC immunity influence: < ±0.5% of span
Extended EMC immunity:
NAMUR NE 21, A criterion, burst: < ±1% of span

Effect of supply voltage variation: < 0.005% of span / VDC
Voltage variation: IEC 68-2-6 Test FC
Lloyd's specification no. 1: 4 g / 2...100 Hz
Max. wire size: 1 x 1.5 mm2
Humidity: <95% RH (non-cond.)
Dimensions: \( \phi 44 \times 20.2 \) mm
Tightness (enclosure / terminal): IP68 / IP00
Weight: 50 g

Electrical specifications, input:
Max. offset: 50% of selec. max. value

TC input:

<table>
<thead>
<tr>
<th>Type</th>
<th>Min. temperature</th>
<th>Max. temperature</th>
<th>Min. span</th>
<th>Nom.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>+400°C</td>
<td>+1820°C</td>
<td>200°C</td>
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<td>+1000°C</td>
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</tr>
<tr>
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<td>-100°C</td>
<td>+1200°C</td>
<td>50°C</td>
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</tr>
<tr>
<td>K</td>
<td>-180°C</td>
<td>+1372°C</td>
<td>50°C</td>
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<tr>
<td>L</td>
<td>-100°C</td>
<td>+900°C</td>
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<tr>
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<td>100°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>R</td>
<td>-50°C</td>
<td>+1760°C</td>
<td>200°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>S</td>
<td>-50°C</td>
<td>+1760°C</td>
<td>200°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>T</td>
<td>-200°C</td>
<td>+1000°C</td>
<td>200°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>U</td>
<td>-200°C</td>
<td>+1200°C</td>
<td>200°C</td>
<td>DIN 43710</td>
</tr>
<tr>
<td>W3</td>
<td>0°C</td>
<td>+2300°C</td>
<td>200°C</td>
<td>ASTM E988-90</td>
</tr>
<tr>
<td>W5</td>
<td>0°C</td>
<td>+2300°C</td>
<td>200°C</td>
<td>ASTM E988-90</td>
</tr>
</tbody>
</table>

Cold junction compensation: \( < \pm 1.0^{\circ}C \)
Sensor error detection: Yes
Sensor error current:
When detecting: Nom. 33 mA
Else: 0 mA

Voltage input:
Measurement range: -12...150 mV
Min. span: 5 mV
Input resistance: 10 M\( \Omega \)

Output:
Current output:
Signal range: 4...20 mA
Min. signal range: 16 mA
Updating time: 440 ms
Output signal at EEPROM error: \( \leq 3.5 \) mA
Load resistance: \( \leq \frac{(V_{\text{supply}} - 7.2)}{0.023} \) [\( \Omega \)]
Load stability: \( < \pm 0.01\% \) of span / 100 \( \Omega \)

Sensor error detection:
Programmable: 3.5...23 mA
NAMUR NE43 Upscale: 23 mA
NAMUR NE43 Downscale: 3.5 mA

Ex data:
\( U_{i} \): 28 VDC
\( I_{i} \): 120 mADC
\( P_{i} \): 0.84 W
\( L_{i} \): 10 \( \mu H \).
\( C_{i} \): 1.0 nF.

EEx approval CENELEC:
DEMKO 99: ATEX 126963
ATEX: 0539 (ex) II 1 G
EEx ia IIC T1...T6
Max. amb. temperature for T1...T4: 85°C
Max. amb. temperature for T5 and T6: 60°C
Applicable in zone: 0, 1, or 2

Observed authority requirements:
EMC 89/336/EEC, Emission: EN 50 081-1, EN 50 081-2
Immunity: EN 50 082-2, EN 50 082-1
Emission and immunity: EN 61 326
ATEX 94/9/EC: EN 50 014 and EN 50 020

Of span = Of the presently selected range.
Connections:

Input:

Output:

2-wire installation

BLOCK DIAGRAM:
Programming:

- Loop Link 5905A is a battery-powered communications interface that is needed for programming PRetop 5334.
- For programming please refer to the drawing below and the help functions in PRReset.

Order: Loop Link 5905A.

Mechanical specifications:

**Sommaire**

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<th>Page</th>
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<td>Montage / installation</td>
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<td>Schéma de principe</td>
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<tr>
<td>Programmation</td>
<td>30</td>
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<tr>
<td>Dimensions mécaniques</td>
<td>30</td>
</tr>
</tbody>
</table>
**Consigne de sécurité**

- **Installation S.I. :**
  Pour l’installation de 5334B dans les zones dangereuses, conformez-vous aux consignes de sécurité suivantes : l’installation ne doit être réalisée que par du personnel qualifié connaissant la législation nationale et internationale ainsi que les directives et standards régissant ce domaine.

**TRANSMETTEUR 2-FILS PROGRAMMABLE (TC)**  
PRetop 5334

- Entrée TC
- Grande précision de mesure
- Isolation galvanique
- Sécurité programmable
- Pour tête de sonde DIN B

**Application :**

- Mesure linéarisée de la température avec un capteur de thermocouples.
- Amplification des signaux mV bipolaires en un signal standard de 4…20 mA, éventuellement linéarisé suivant une fonction de linéarisation.

**Caractéristiques techniques :**

- Le PR5334 peut être programmé de manière simple et rapide.
- La compensation de soudure froide (CSF) est réalisée à l’aide d’un capteur de température intégré au module.
- Vérification continue des données sauvegardées.

**Montage / installation :**

- Pour tête de sonde DIN B ou pour rail DIN avec un raccord spécial.
- **N.B. :** Comme barrière S.I. pour le 5334B nous recommandons le PR5104B, 5111B ou 5114B.
Spécifications électriques :

Plage des spécifications :
-40°C à +85°C

Spécifications communes :
Tension d'alimentation cc
- Standard : 7,2...35 V
- Version EEx : 7,2...28 V

Consommation interne : 25 mW...0,8 W
Chute de tension : 7,2 Vcc
Tension d'isolement, test / opération : 1,5 kVca / 50 Vca
Temps de chauffe : 5 min.
Kit de programmation : Loop Link 5905A
Rapport signal / bruit : Min. 60 dB
Temps de réponse (programmable) : 1...60 s
Vérification de l'Eeprom : < 3,5 s
Dynamique du signal d'entrée : 18 bit
Dynamique du signal de sortie : 16 bit
Température d'étalonnage : 20...28°C

Précision, la plus grande des valeurs générales et de base :

<table>
<thead>
<tr>
<th>Type d'entrée</th>
<th>Précision absolue</th>
<th>Coefficient de température</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tous</td>
<td>$\leq \pm 0,05% \text{ de l'EC}$</td>
<td>$\leq \pm 0,01% \text{ de l'EC / } ^{\circ}\text{C}$</td>
</tr>
</tbody>
</table>
Valeurs de base

<table>
<thead>
<tr>
<th>Type d’entrée</th>
<th>Précision de base</th>
<th>Coefficient de température</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volt</td>
<td>≤ ±10 µV</td>
<td>≤ ±1 µV/°C</td>
</tr>
<tr>
<td>Type TC :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E, J, K, L, N, T, U</td>
<td>≤ ±1°C</td>
<td>≤ ±0,05°C/°C</td>
</tr>
<tr>
<td>Type TC :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B, R, S, W3, W5</td>
<td>≤ ±2°C</td>
<td>≤ ±0,2°C/°C</td>
</tr>
</tbody>
</table>

Immunité CEM : < ±0,5% de l’EC
Immunité CEM améliorée :
NAMUR NE 21, critère A, burst < ±1% de l’EC

Effet d’une variation de la tension d’alimen... < 0,005% de l’EC / Vcc
Vibration ........................................... IEC 68-2-6 Test FC
Lloyd, spécification no. 1 .................... 4 g / 2...100 Hz
Taille max. des fils ............................... 1 x 1,5 mm²
Humidité ............................................. < 95% HR (sans cond.)
Dimensions ......................................... Ø 44 x 20,2 mm
Etanchéité (boîtier / bornier) ................. IP68 / IP00
Poids ............................................... 50 g

Spécifications électriques, entrée :
Décalage max. .................................... 50% de la valeur max. sélectionnée

Entrée TC :

<table>
<thead>
<tr>
<th>Type</th>
<th>Température min.</th>
<th>Température max.</th>
<th>Plage min.</th>
<th>Norme</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>+400°C</td>
<td>+1820°C</td>
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<td>+1760°C</td>
<td>200°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>T</td>
<td>-200°C</td>
<td>+400°C</td>
<td>50°C</td>
<td>IEC584</td>
</tr>
<tr>
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<td>-200°C</td>
<td>+600°C</td>
<td>75°C</td>
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<tr>
<td>W3</td>
<td>0°C</td>
<td>+2300°C</td>
<td>200°C</td>
<td>ASTM E988-90</td>
</tr>
<tr>
<td>W5</td>
<td>0°C</td>
<td>+2300°C</td>
<td>200°C</td>
<td>ASTM E988-90</td>
</tr>
</tbody>
</table>

Compensation de soudure froide ............... < ±1,0°C
Détection de rupture sonde ........................ Oui
Courant de sonde :
Pendant la détection ......................... Nom. 33 mA
Si non ........................................... 0 mA

Entrée tension :
Gamme de mesure ................................ -12...150 mV
Plage de mesure min. ............................. 5 mV
Résistance d’entrée ............................. 10 MΩ

Sortie :
Sortie courant :
Gamme de mesure ................................ 4...20 mA
Plage de mesure min. ......................... 16 mA
Temps de scrutation ............................ 440 ms
Sortie en cas de corruption de l’EEprom... ≤ 3,5 mA
Résistance de charge ............................ (Valim. - 7,2) / 0,023 [Ω]
Stabilité de charge .............................. < ±0,01% de l’EC / 100 Ω

Détection de rupture de sonde :
Programmable ..................................... 3,5...23 mA
NAMUR NE43 Haut d’échelle ................. 23 mA
NAMUR NE43 Bas d’échelle ................. 3,5 mA

Caractéristiques S.I. :

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<thead>
<tr>
<th>Type</th>
<th>Ui</th>
<th>Ii</th>
<th>Pi</th>
<th>Li</th>
<th>Ci</th>
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<tbody>
<tr>
<td>B</td>
<td>28 Vcc</td>
<td>120 mAcc</td>
<td>0,84 W</td>
<td>10 µH</td>
<td>1,0 nF</td>
</tr>
<tr>
<td>E</td>
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<td>J</td>
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</table>

Approbation EEx CENELEC :

<table>
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<tr>
<th>Type</th>
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<th>Temps de scrutation</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td></td>
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</tr>
<tr>
<td>J</td>
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<tr>
<td>K</td>
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<tr>
<td>L</td>
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</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td></td>
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</tr>
<tr>
<td>S</td>
<td></td>
<td></td>
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<tr>
<td>T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Agréments et homologations :

Standard :
EMC 89/336/CEE, Emission .................... EN 50 081-1, EN 50 081-2
Immunité ........................................ EN 50 082-2, EN 50 082-1

EC = Echelle configurée
Connexions:

Entrée:

TC, CSF interne

Sortie:

Installation 2-fils

SCHEMA DE PRINCIPE:

Circuit de soumission 5334

Alimentation + 7.2...35Vcc

Alimentation - 4...20mA

CPU

A/D

D/A

MUX

CIF

MV

mA

0...16 mA

4 mA

5334
Programmation :

- Loop Link 5905A est un kit de programmation permettant de programmer le PRetop 5334.
- Pour le raccordement du Loop Link 5905, veuillez vous reporter au schéma ci-dessous et à l’aide en ligne du logiciel PR'est.

Numéro de référence : Loop Link 5905A.

Dimensions mécaniques :

2-DRAHT PROGRAMMIERBARER MESSUMFORMER

PRetop 5334

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Verwendung ........................................................................ 33
Technische Merkmale ........................................................... 33
Montage / Installation .......................................................... 33
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Anschlüsse ............................................................................. 38
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* Connexion facultative
Sicherheitsinstruktion

• Ex-Installation:

2-DRAHT
PROGRAMMIERBARER MESSUMFORMER
PRetop 5334

• Eingang für TE
• Hohe Messgenauigkeit
• Galvanische Trennung
• Programmierbare Sensorfehlanzeige
• Für Einbau in Anschlusskopf DIN Form B

Verwendung:

• Linearisierte Temperaturmessung mit Thermoelement Sensor.
• Verstärkung von bipolaren mV-Signalen, eventuell nach definiertener Linearisierungsfunktion, zu einem 4...20 mA Signal linearisiert.

Technische Merkmale:

• PR5334 kann vom Benutzer innerhalb von weingen Sekunden zur Messung in allen genormten TE-Temperaturbereiche programmiert werden.
• CJC-Vergleichstellenkompensation mit eingebautem Temperaturfühler.
• Die gespeicherten Daten werden laufend kontrolliert.

Montage / Installation:

• Für Einbau in Anschlusskopf DIN Form B oder Montage auf DIN-Schiene mittels eines speziellen BeschLAGes.
• NB: Als Ex-Sicherheitsbarriere für 5334B empfehlen wir 5104B, 5111B oder 5114B.
Elektrische Daten:

Spiegelfensterbereich:
-40°C bis +85°C

Immerwährende Daten:
- Versorgungsspannung DC
  - Standard .............................................. 7,2...35 V
  - Ex-version .............................................. 7,2...28 V
- Spannungsabsenkung................................. 7,2 VDC
- Isolationsspannung, Test / Betrieb ................. 1,5 kVAC / 50 VAC
- Aufwärmzeit ............................................. 5 Min.
- Kommunikationsschnittstelle ....................... Loop Link 5905A
- Signal-/ Rauschverhältnis ............................. min. 60 dB
- Ansprechzeit (programmierbar) ..................... 1...60 s
- EEPROM Fehlerkontrolle .............................. < 3,5 s
- Signalauflösung, Eingang ............................. 18 bit
- Signalauflösung, Ausgang ............................. 16 bit
- Kalibrierungstemperatur ............................. 20...28°C

Genauigkeit, der größte von generellen und Basiswerten:

<table>
<thead>
<tr>
<th>Generelle Werte</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eingangstyp</td>
</tr>
<tr>
<td>Alle</td>
</tr>
</tbody>
</table>

Bestellangaben: 5334

<table>
<thead>
<tr>
<th>Typ</th>
<th>Version</th>
<th>Umgebungs-temperatur</th>
<th>Galvanische Trennung</th>
</tr>
</thead>
<tbody>
<tr>
<td>5334</td>
<td>Standard: A</td>
<td>-40°C...+85°C : 3</td>
<td>1500 V AC : B</td>
</tr>
</tbody>
</table>

Elektrische Daten:

Spezifikationsbereich:
-40°C bis +85°C

Gemeinsame Daten:
- Versorgungsspannung DC
  - Standard .............................................. 7,2...35 V
  - Ex-version .............................................. 7,2...28 V
- Spannungsabsenkung................................. 7,2 VDC
- Isolationsspannung, Test / Betrieb ................. 1,5 kVAC / 50 VAC
- Aufwärmzeit ............................................. 5 Min.
- Kommunikationsschnittstelle ....................... Loop Link 5905A
- Signal-/ Rauschverhältnis ............................. min. 60 dB
- Ansprechzeit (programmierbar) ..................... 1...60 s
- EEPROM Fehlerkontrolle .............................. < 3,5 s
- Signalauflösung, Eingang ............................. 18 bit
- Signalauflösung, Ausgang ............................. 16 bit
- Kalibrierungstemperatur ............................. 20...28°C
<table>
<thead>
<tr>
<th>Basiswerte</th>
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</thead>
<tbody>
<tr>
<td><strong>Eingangstyp</strong></td>
</tr>
<tr>
<td>Volt</td>
</tr>
<tr>
<td>TE-Typ: E, J, K, L, N, T, U</td>
</tr>
<tr>
<td>TE-Typ: B, R, S, W3, W5</td>
</tr>
</tbody>
</table>

- **EMV-Immunitätswirkung**: < ±0,5% d. Messsp. für den maximalen Wert
- **Erweiterte EMV-Immunität**: NAMUR NE 21, A Kriterium, Burst: < ±1% d. Messsp.

**Elektrische Daten, Eingang:**
Max. Nullpunktverschiebung (Offset): 50% des gewählten Max.-Wertes

**TE-Eingang:**

<table>
<thead>
<tr>
<th>Typ</th>
<th>Min. Temperatur</th>
<th>Max. Temperatur</th>
<th>Min. Spannung</th>
<th>Norm</th>
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<tbody>
<tr>
<td>B</td>
<td>+400°C</td>
<td>+1820°C</td>
<td>200°C</td>
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</tr>
<tr>
<td>E</td>
<td>−100°C</td>
<td>+1000°C</td>
<td>50°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>J</td>
<td>−100°C</td>
<td>+1200°C</td>
<td>50°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>K</td>
<td>−180°C</td>
<td>+1372°C</td>
<td>50°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>L</td>
<td>−100°C</td>
<td>+900°C</td>
<td>50°C</td>
<td>DIN 43710</td>
</tr>
<tr>
<td>N</td>
<td>−180°C</td>
<td>+1300°C</td>
<td>100°C</td>
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</tr>
<tr>
<td>R</td>
<td>−50°C</td>
<td>+1760°C</td>
<td>200°C</td>
<td>IEC584</td>
</tr>
<tr>
<td>S</td>
<td>−50°C</td>
<td>+1760°C</td>
<td>200°C</td>
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</tr>
<tr>
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<td>+400°C</td>
<td>50°C</td>
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<td>+600°C</td>
<td>200°C</td>
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<tr>
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<td>200°C</td>
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</tr>
<tr>
<td>W5</td>
<td>0°C</td>
<td>+2300°C</td>
<td>200°C</td>
<td>ASTM E988-90</td>
</tr>
</tbody>
</table>

**Verweildauerkompensation (CJC)**: < ±1,0°C

**Fühlerfehlererkennung**: Ja

**Fühlerfehlerstrom:**
- Bei Erkennung: Nom. 33 mA
- Sonst: 0 mA

**Spannungseingang:**
- Messbereich: -12...150 mV
- Min. Messbereich: 5 mV
- Eingangswiderstand: 10 mΩ

**Ausgang:**
- Stromausgang:
  - Signalbereich: 4...20 mA
  - Min. Signalbereich: 16 mA
  - Aktualisierungszeit: 440 ms
  - Ausgangssignal bei EEPROMfehler: ≤ 3,5 mA
- Belastungswiderstand: ≤ (UVers. - 7,2)/0,023 [Ω]
- Belastungsstabilität: < ±0,01% d. Messsp. / 100 Ω

**Sensorfehlanzeige:**
- Programmierbar: 3,5...23 mA
- NAMUR NE43 aufsteuernd: 23 mA
- NAMUR NE43 zusteuernd: 3,5 mA

**Ex-Daten:**
- U1 : 28 VDC
- I1 : 120 mADC
- P1 : 0,84 W
- L1 : 10 µH
- C1 : 1,0 nF

**EEEx-Zulassung CENELEC:**
- DEMKO 99: ATEX 126963
- ATEX: 0539 Ex II 1 G
- EEEx ia IIIC T1...T6

**Anwendungsbereich in zone:**
- 0, 1 oder 2

**Eingehaltene Behördenvorschriften:**
- EMV-Immunitätswirkung: < ±0,5% d. Messsp.

**Vergleichstellenkompensation (CJC)**: < ±1,0°C

**Fühlerfehlererkennung**: Ja

**Fühlerfehlerstrom:**
- Bei Erkennung: Nom. 33 mA
- Sonst: 0 mA

**Spannungseingang:**
- Messbereich: -12...150 mV
- Min. Messbereich (Spanne): 5 mV
- Eingangswiderstand: 10 mΩ

**Ausgang:**
- Stromausgang:
  - Signalbereich: 4...20 mA
  - Min. Signalbereich: 16 mA
  - Aktualisierungszeit: 440 ms
  - Ausgangssignal bei EEPROMfehler: ≤ 3,5 mA
- Belastungswiderstand: ≤ (UVers. - 7,2)/0,023 [Ω]
- Belastungsstabilität: < ±0,01% d. Messsp. / 100 Ω

**Sensorfehlanzeige:**
- Programmierbar: 3,5...23 mA
- NAMUR NE43 aufsteuernd: 23 mA
- NAMUR NE43 zusteuernd: 3,5 mA

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- ATEX: 0539 Ex II 1 G
- EEEx ia IIIC T1...T6

**Anwendungsbereich in zone:**
- 0, 1 oder 2

**Eingehaltene Behördenvorschriften:**
- EMV-Immunitätswirkung: < ±0,5% d. Messsp.
Anschlüsse:

Eingang:

Ausgang:

2-Draht-Installation

BLOCKDIAGRAMM:
Programmierung:

- Loop Link 5905A ist eine batteriegespeiste Schnittstelle zur Programmierung des PREtop 5334.
- Bezüglich Programmierung verweisen wir auf die nachfolgende Zeichnung und die "Hilfe"-Funktion im PREset-Programm.

Bestellangaben: Loop Link 5905A.

Abmessungen:

UK  PR electronics A/S offers a wide range of analogue and digital signal conditioning modules for industrial automation. Our areas of competence include: Isolation, Displays, Ex barriers, Temperature, and Backplanes. All products comply with the most exacting international standards and the majority feature our patented STREAM-SHIELD technology ensuring reliability in even the worst of conditions. »Signals the Best« is the epitome of our philosophy – and your guarantee for quality.

FR  PR electronics A/S offre une large gamme de produits pour le traitement des signaux analogiques et numériques dans tous les domaines industriels. Nos compétences s’étendent des transmetteurs de température aux afficheurs, des isolateurs aux barrières SI, jusqu’aux platines de montage. Tous nos produits sont conformes aux normes internationales les plus strictes et la majorité d’entre eux répondent même à la technologie brevetée STREAM-SHIELD qui garantie un fonctionnement fiable sous les conditions les plus défavorables. Notre devise »SIGNALS the BEST« c’est notre ligne de conduite - et pour vous l’assurance de la meilleure qualité.