Overview of the CMCP500 Series Transmitters and Monitors:

STI’s CMCP500 Series are multi-purpose vibration, temperature and process condition transmitters and monitors. They are compatible with any industrial sensor such as accelerometers, proximity probes, velocity transducers, RTD’s, Thermocouples and many more. Each unit is designed to provide power to the associated transducer, process the signal to determine the overall amplitude and output a 4-20mA dc current that is proportional to the specified range such as 0-1.00 In/Sec, 0-10.0 mils or 0-500°F. The transmitters have up to 5 different ranges that can be adjusted by simply moving a jumper, no software or re-calibration required. Each transmitter also has the option of becoming a Monitor by adding the alarm module which provides adjustable Alert and Danger relay outputs, sensor condition relay output, trip multiply function and a 0-5Vdc output. Combining the alarm module with the transmitter creates a fully API670 Compliant Protection System. The Monitor (alarm module) feature can be ordered by specifying “A” after the base part number. Ex. CMCP530 for the Transmitter function only or CMCP530A for the Monitor function

The Benefit of Single Channel Transmitters and Monitors:

The CMCP500 Series Transmitters and Monitors allow the user to build a system which fits their application. Each transmitter operates independently allowing different for different combinations, configurations, and installations. The CMCP500 Series can be installed in an existing control cabinet or mounted in an enclosure local to the machine, a dedicated housing is not required. In summary combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system. When specified with the alarm feature, the unit functions as a complete single channel API670 compliant monitor which includes alert and danger alarms, and output relays.

Transmitter Features:

- Buffered Output:

A BNC connector mounted on the front of the unit provides access to the buffered sensor output signal. This includes both the unfiltered vibration signal, and the DC bias voltage. Portable test equipment or analyzers can be connected to this output without disturbing other system outputs.

- Fault Detection:

On board fault detection circuitry continuously monitors the sensor for normal operation. If a fault occurs, the output current is reduced to 2 mA to indicate the fault. When connected to a PLC the 2mA drop notifies the operator of a faulty sensor.

- Filters:

For applications which require monitoring specific frequency bands, optional filters can be specified. These filters are modular and can be installed by the factory or in the field.
Alarms Module Function (Monitor):

Relay Contact:

Each monitor has two independent set points with LED alarm indicators on the front panel along with relay contacts (Alert and Danger). Set points can easily be adjusted in the field with only a voltmeter and screwdriver. The relay contacts can be independently configured by the user for either Normally Open (NO) or Normally Closed (NC) operation. Relays are normally de-energized and can be set for latching or non-latching operation. Latched alarms can be reset by closing the reset contact on the front of the monitor. Relays are single pole double throw (SPDT) and are rated for 5 Amps @ 30Vdc or 250Vac resistive loads.

Alert and Danger LED’s

Each monitor comes equipped with a Amber and Red led light on the front of the unit for Alert and Danger condition indications respectively. When the relays are set to latching the LED’s will stay on until the user resets the relays and the amplitude has fallen below the alarm threshold. When the relays are set to non-latching the LED’s will turn off as soon as the amplitude falls below the set threshold.

Trip Multiply:

The Trip Multiply (Tx) function is a contact which when closed increases the alarm values by either 2x or 3x to allow for known periods of known high vibration to pass through while still under the protection of the monitor. The Trip Multiply function is commonly used during start up’s and coast downs when amplitudes are known to rise above the normal alarm thresholds.

Alarm Reset

The Alarm Reset function is utilized by closing the shorting the RST terminal to common (COM). A remote pushbutton switch can be installed to easily reset the alarms or it can be done automatically by utilizing a PLC. The Reset function is only necessary when the relays are set to latching.
CMCP525 Vibration Acceleration Transmitter

Machine Protection Transmitters and Monitors

- **Acceleration Input (mV/g)**
- **4-20mA Output Proportional to Acceleration**
- **Transmitter Only Option or API 670 Compliant Monitor**
- **OK, Alert and Danger Relay Contacts**
- **Adjustable Alarms**
- **CSA and UL Class 1 Division 2 Approved**
- **CE Approved**
- **5 Selectable Full Scale Ranges with Peak or RMS Detection**
- **Low Cost**

**Description:**
The CMCP525 Vibration Acceleration Transmitters and Monitors are compatible with all voltage output accelerometers, and they provide a 4-20 mA output proportional to the overall measurement. Each unit provides power for the associated transducer, processes the vibration signal to determine overall amplitude, and outputs a 4-20 mA dc current that is proportional to a user specified range such as 0-5 g's in Peak or RMS detection. The CMCP525 has 5 selectable full scale ranges (5, 10, 15, 20 and 25 g's) to fit any application. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system.

**Technical Specifications:**
- **Power:** +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- **Consumption:** 50mA Max. for Transmitter
- **Frequency Response:** (-3 dB) 2 Hz to 20 kHz.
- **Optional Filters:** See CMCP591 and CMCP592 Series
- **Buffered Output:** BNC Connector 0-20 kHz.
- **Accuracy:** ±1.0 % of Full Scale Range
- **Output:** 4-20 mA proportional to the full scale range in G's Acceleration
- **Selectable Ranges:** 5, 10, 15, 20 and 25 g's Full Scale
- **Maximum Load:** 600 Ohms Resistive
- **Case:** Isolated.

**Environmental Specification:**
- **Operating Temp.:** -20°C to +80°C (-4°F to +176°F).
- **Storage Temp.:** -55°C to +125°C (-67°F to +257°F).
- **Relative Humidity:** 0 - 95% Non-Condensing.
- **Mounting:** 32mm (G Style) or 35mm (T-Style) DIN Rail

**Certifications:**
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

**Ordering Information:**

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CMCP530 Vibration Velocity Transmitter

**Machine Protection Transmitters and Monitors**

- **Acceleration or Velocity Input**
- **4-20 Output Proportional to Velocity**
- **Transmitter Only Option or API 670 Compliant Monitor**
- **OK, Alert and Danger Relay Contacts**
- **Adjustable Alarms**
- **CSA and UL Class 1 Division 2 Approved**
- **CE Approved**
- **5 Selectable Full Scale Ranges with Peak or RMS Detection**
- **Low Cost**

**Description:**
The CMCP530 Vibration Velocity Transmitters compatible with voltage output accelerometer and velometer sensors, and they provide a 4-20 mA output proportional to the overall measurement. Each unit provides power for the associated transducer, processes the vibration signal to determine overall amplitude, and outputs a 4-20 mA dc current that is proportional to a user specified range such as 0-0.5 in/sec in peak or RMS detection. The CMCP530 has 5 selectable full scale ranges (.5, 1, 1.5, 2 and 2.5 In/Sec with metric equivalents) to fit any application. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system.

**Technical Specifications:**
- **Power:** +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- **Consumption:** 50mA Max. for Transmitter
  100mA Max for Monitor
- **Frequency Response:** (-3 dB) 2 Hz to 2 kHz (Standard)
- **Optional Filters:** See CMCP591 and CMCP592 Series
- **Buffered Output:** BNC Connector 0-20 kHz.
- **Accuracy:** 1.0 % of Full Scale Range
- **Output:** 4-20 mA proportional to the full scale range in Velocity Peak or RMS
- **Selectable Ranges:**
  - English: 0.5, 1, 1.5, 2 and 2.5 In/Sec Full Scale
  - Metric: 12.7, 25.4, 38.1, 50.8 and 63.5mm/Sec Full Scale
- **Maximum Load:** 600 Ohms Resistive
- **Case:** Isolated.

**Environmental Specification:**
- **Operating Temp.:** -20°C to +80°C (-4°F to +176°F).
- **Storage Temp.:** -55°C to +125°C (-67°F to +257°F).
- **Relative Humidity:** 0 - 95% Non-Condensing.
- **Mounting:** 32mm (G Style) or 35mm (T-Style) DIN Rail

**Certifications:**
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

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Rev. 6/2013
CMCP535 Vibration Displacement Transmitter
Machine Protection Transmitters and Monitors

Description:
The CMCP535 Vibration Displacement Transmitters are compatible with voltage output velocity transducer inputs, and they provide a 4-20 mA output proportional to the overall measurement. Each unit provides power for the associated transducer, processes the vibration signal to determine overall amplitude, and outputs a 4-20 mA dc current that is proportional to a user specified range such as 5 mils peak to peak. The CMCP535 has 5 selectable full scale ranges (5, 10, 15, 20 and 25 mils with metric equivalents) to fit any application. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter
- 100mA Max for Monitor
- Frequency Response: (-3 dB) 2 Hz to 2 kHz
- Optional Filters: See CMCP591 and CMCP592 Series
- Buffered Output: BNC Connector 0-20 kHz.
- Accuracy: 1.0 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in Displacement Peak to Peak
-Selectable Ranges: English: 5, 10, 15, 20 and 25 Mils Peak to Peak Full Scale
- Metric: 127, 254, 381, 508 and 635 Microns Peak to Peak Full Scale
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

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Rev. 6/2013
CMCP540 Vibration Displacement Transmitter

Machine Protection Transmitters and Monitors

- Displacement Input from Proximity Probes
- 4-20mA Output Proportional to Displacement
- Transmitter Only Option or API 670 Compliant Monitor
- OK, Alert and Danger Relay Contacts
- Adjustable Alarms
- CSA and UL Class 1 Division 2 Approved
- CE Approved
- 5 Selectable Full Scale Ranges with Peak to Peak Detection
- Low Cost

Description:
The CMCP540 Vibration Displacement Transmitters are compatible with voltage output proximity probe inputs, and they provide a 4-20 mA output proportional to the overall measurement. Each unit processes the vibration signal to determine overall amplitude and outputs a 4-20 mA dc current that is proportional to a user specified range such as 5 mils peak to peak. The CMCP540 has 5 selectable full scale ranges (5, 10, 15, 20 and 25 mils with metric equivalents) to fit any application. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system.

Technical Specifications:

- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter
  100mA Max for Monitor
- Frequency Response: (-3 dB) 2 Hz to 20 kHz
- Optional Filters: See CMCP591 and CMCP592 Series
- Buffered Output: BNC Connector 0-20 kHz.
- Accuracy: 1.0 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in Displacement Peak to Peak
- Selectable Ranges: English: 5, 10, 15, 20 and 25 Mils Peak to Peak Full Scale
  Metric: 127, 254, 381, 508 and 635 Microns Peak to Peak Full Scale
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:

- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:

- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

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Rev. 6/2013
CMCP545 Position (Thrust) Transmitter

Machine Protection Transmitters and Monitors

Description:
The CMCP545 Position Transmitters are compatible with voltage output proximity probe inputs, and they provide a 4-20 mA output proportional to the overall measurement. Each unit processes the signal to determine overall amplitude and outputs a 4-20 mA dc current that is proportional to a user specified range such as +/- 40 mils. The CMCP545 has 4 selectable full scale ranges (20, 40, +/-20 and +/-40 mils with metric equivalents) to fit any application. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter
- 100mA Max for Monitor
- Frequency Response: (-3 dB) 2 Hz to 20 kHz
- Optional Filters: See CMCP591 and CMCP592 Series
- Buffered Output: BNC Connector 0-20 kHz.
- Accuracy: 5.0% of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in Position (Thrust)
- Selectable Ranges: English: 20, 40, +/-20 and +/-40 Mils Full Scale
  Metric: 0.5mm, 1mm, +/-0.5mm and +/- 1.0mm Full Scale
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

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To Order Please Visit www.stiwebstore.com or Contact STI
CMCP547 Differential Expansion Transmitter
Machine Protection Transmitters and Monitors

Description:
The CMCP547 Differential Expansion Transmitters are compatible with voltage output proximity probe and LVDT inputs, and they provide a 4-20 mA output proportional to the overall measurement. Each unit processes the signal to determine overall amplitude and outputs a 4-20 mA dc current that is proportional to a user's specified range such as 1.0 Inch. The CMCP547 has 3 selectable full scale ranges (0.5", 1.0" and 2.0" Inches with metric equivalents) to fit any application. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter
- 100mA Max for Monitor
- Buffered Output: BNC Connector
- Accuracy: 5.0 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in Expansion
- Selectable Ranges: English: 0.5, 1.0 and 2.0 Inches Full Scale
- Metric: 12.7, 25.4 and 50.8 mm Full Scale
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

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Rev. 6/2013
The CMCP548 Case Expansion Transmitters are compatible with voltage output LVDT inputs, and they provide a 4-20 mA output proportional to the overall measurement. Each unit processes the signal to determine overall amplitude and outputs a 4-20 mA dc current that is proportional to a user-specified range such as 1.0 Inch. The CMCP548 has 2 selectable full scale ranges (1.0” and 2.0” Inches with metric equivalents) to fit any application. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter
- 100mA Max for Monitor
- Buffered Output: BNC Connector
- Accuracy: 5.0 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in Expansion
- Selectable Ranges:
  - English: 1.0 and 2.0 Inches Full Scale
  - Metric: 25.4 and 50.8 mm Full Scale
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

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CMCP549 Valve Position Transmitter

Machine Protection Transmitters and Monitors

- Accepts Inputs from Rotary Potentiometers
- 4-20mA Output Proportional to Valve Position
- Transmitter Only Option or API 670 Compliant Monitor
- OK, Alert and Danger Relay Contacts
- Adjustable Alarms
- CSA and UL Class 1 Division 2 Approved
- CE Approved
- Low Cost

Description:
The CMCP549 Valve Position Transmitters are compatible with rotary potentiometer inputs, and they provide a 4-20 mA output proportional to the overall measurement. Each unit processes the signal to determine overall amplitude and outputs a 4-20 mA dc current that is proportional to a user's specified range such as 0 - 100%. Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter, 100mA Max for Monitor
- Buffered Output: BNC Connector
- Accuracy: 5.0 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in percentage
- Range: 0-100%
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F)
- Storage Temp.: -55°C to +125°C (-67°F to +257°F)
- Relative Humidity: 0 - 95% Non-Condensing
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

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Rev. 6/2013
CMCP560 Isolated RTD Transmitter
Machine Protection Transmitters and Monitors

- Accepts Inputs RTD’s
- 4-20mA Output Proportional to Temperature
- Transmitter Only Option or API 670 Compliant Monitor
- OK, Alert and Danger Relay Contacts
- Adjustable Alarms
- CSA and UL Class 1 Division 2 Approved
- CE Approved
- 3 Selectable Ranges
- Low Cost

Description:
The CMCP560 Isolated RTD Temperature Transmitters are compatible with RTD inputs, and they provide a 4 -20 mA output proportional to the overall measurement. Each unit provides power for the associated transducer, processes the signal to determine overall amplitude, and outputs a 4-20 mA dc current that is proportional to a user specified range such as 0-250° F. Each transmitter has 3 selectable ranges (250, 350 and 500°F with metric equivalents). Combining transmitters with an existing PLC or DCS system results in a high density, low cost monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter
- Accuracy: 5.0 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in temperature
- Selectable Ranges: English: 250, 350 and 500°F
- Metric: 121, 177 and 260°C
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

Ordering Information:

<table>
<thead>
<tr>
<th>Base P/N</th>
<th>-Input</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMCP560</td>
<td></td>
<td>Isolated RTD Transmitter</td>
</tr>
<tr>
<td>CMCP560A</td>
<td></td>
<td>Isolated RTD Monitor (with Alarm Module)</td>
</tr>
<tr>
<td></td>
<td>-100P</td>
<td>100 Ohm Platinum RTD</td>
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<tr>
<td></td>
<td>-Specify</td>
<td>Specify Exact Input</td>
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</tbody>
</table>
CMCP565 Isolated Thermocouple Transmitter

Machine Protection Transmitters and Monitors

- Accepts Inputs Thermocouples
- 4-20mA Output Proportional to Temperature
- Transmitter Only Option or API 670 Compliant Monitor
- OK, Alert and Danger Relay Contacts
- Adjustable Alarms
- CSA and UL Class 1 Division 2 Approved
- CE Approved
- 3 Selectable Ranges
- Low Cost

Note: CMCP565 Does not have BNC Buffered Output

Description:
The CMCP565 Isolated Thermocouple Temperature Transmitters are compatible with all thermocouple inputs, and they provide a 4-20 mA output proportional to the overall measurement. Each unit provides power for the associated transducer, processes the signal to determine overall amplitude, and outputs a 4-20 mA dc current that is proportional to a user specified range such as 0-250°F. Each transmitter has 3 selectable ranges (250, 350 and 500°F with metric equivalents). Combining transmitters with an existing PLC or DCS system results in a high density, low cost monitoring system.

Technical Specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>Power:</td>
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</tr>
<tr>
<td>Consumption:</td>
<td>50mA Max. for Transmitter</td>
</tr>
<tr>
<td></td>
<td>100mA Max for Monitor</td>
</tr>
<tr>
<td>Accuracy:</td>
<td>5.0 % of Full Scale Range</td>
</tr>
<tr>
<td>Output:</td>
<td>4-20 mA proportional to the full scale range in temperature</td>
</tr>
<tr>
<td>Selectable Ranges:</td>
<td>English: 250, 350 and 500°F</td>
</tr>
<tr>
<td></td>
<td>Metric: 121, 177 and 260°C</td>
</tr>
<tr>
<td>Maximum Load:</td>
<td>600 Ohms Resistive</td>
</tr>
<tr>
<td>Case:</td>
<td>Isolated.</td>
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</tbody>
</table>

Environmental Specification:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
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<tbody>
<tr>
<td>Operating Temp.:</td>
<td>-20°C to +80°C (-4°F to +176°F).</td>
</tr>
<tr>
<td>Storage Temp.:</td>
<td>-55°C to +125°C (-67°F to +257°F).</td>
</tr>
<tr>
<td>Relative Humidity:</td>
<td>0 - 95% Non-Condensing.</td>
</tr>
<tr>
<td>Mounting:</td>
<td>32mm (G Style) or 35mm (T-Style) DIN Rail</td>
</tr>
</tbody>
</table>

Certifications:

- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

Ordering Information:

<table>
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<th>Input</th>
<th>Description</th>
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<tr>
<td>CMCP565</td>
<td>-Input</td>
<td>Isolated Thermocouple Transmitter</td>
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<tr>
<td>CMCP565A</td>
<td>-J</td>
<td>Type J Thermocouple Input</td>
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<tr>
<td></td>
<td>-K</td>
<td>Type K Thermocouple Input</td>
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<td>Specify Exact Input</td>
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</table>

Note: CMCP565 Does not have BNC Buffered Output

Rev. 6/2013
CMCP570 Solid State Temperature Transmitter
Machine Protection Transmitters and Monitors

Description:
The CMCP570 Solid State Temperature Transmitters are compatible with all most dual output sensors. They provide a 4-20 mA output proportional to the overall measurement. Each unit provides power for the associated transducer, processes the signal to determine overall amplitude, and outputs a 4-20 mA dc current that is proportional to a user specified range such as 2-120°C. Combining transmitters with an existing PLC or DCS system results in a high density, low cost monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter
- Buffered Output: BNC Connector
- Accuracy: 5.0% of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in temperature
- Ranges: See Ordering Table
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

Ordering Information:

<table>
<thead>
<tr>
<th>Base P/N</th>
<th>-Input</th>
<th>Description</th>
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<tbody>
<tr>
<td>CMCP570</td>
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<td>Solid State Temperature Transmitter</td>
</tr>
<tr>
<td>CMCP570A</td>
<td></td>
<td>Solid State Temperature Monitor (with Alarm Module)</td>
</tr>
<tr>
<td></td>
<td>-01</td>
<td>10mV/K Output Sensors</td>
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<tr>
<td></td>
<td></td>
<td>-17 to 121°C (0-250°F) Range</td>
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<tr>
<td></td>
<td>-03</td>
<td>10mV/°C Output Sensors (CMCP793T or CMCP797T)</td>
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<tr>
<td></td>
<td></td>
<td>2 to 120°C (35.6-248°F) Range</td>
</tr>
<tr>
<td></td>
<td>-Specify</td>
<td>Contact STI to Specify Alternate Inputs</td>
</tr>
</tbody>
</table>

To Order Please Visit www.stiwebstore.com or Contact STI
Rev. 6/2013
CMCP575 Speed Transmitter
Machine Protection Transmitters

- Accepts Inputs from Proximity Probes or Hall Effect Sensors
- Easy Setup and Calibration (One Touch Button)
- 0.031 to 83kHz Frequency Response
- Selectable Output (mA or VDC) Proportional to Speed
- Low Cost

Description:
The CMCP575 Speed Transmitters are compatible with proximity probe or Hall effect inputs, they provide a 4-20 mA output proportional to the overall measurement. Each unit processes the signal, and outputs a 4-20 mA dc current that is proportional to a user calibrated range such as 0-1,000 RPM. Combining transmitters with an existing PLC or DCS system results in a high density, low cost monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal
- Consumption: 33mA Max.
- Accuracy: 0.1 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in speed

Environmental Specification:
- Operating Temp.: -31°C to +85°C (-25°F to +185°F).
- Storage Temp.: -40°C to +93°C (-40°F to +200°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Ordering Information:
<table>
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<tr>
<th>Base P/N</th>
<th>Description</th>
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<tbody>
<tr>
<td>CMCP575</td>
<td>Solid State Temperature Transmitter</td>
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</tbody>
</table>
CMCP585 Eccentricity Transmitter
Machine Protection Transmitters and Monitors

- Accepts Inputs from Proximity Probes
- 4-20mA Output
- Transmitter Only Option or API 670 Compliant Monitor
- OK, Alert and Danger Relay Contacts
- Adjustable Alarms
- CSA and UL Class 1 Division 2 Approved
- CE Approved
- Low Cost

Description:
The CMCP585 Eccentricity Transmitters are compatible with proximity probe inputs, they provide a 4-20 mA output proportional to the overall measurement. Each unit provides power for the associated transducer, processes the vibration signal to determine overall amplitude, and outputs a 4-20 mA dc current that is proportional to a user specified range such as 0-10 mils. Each transmitter has 5 user selectable ranges (5, 10, 15, 20 and 25 mils with metric equivalents). Combining transmitters with an existing PLC or DCS system results in a high density, low cost vibration monitoring system. When specified with the alarm feature (CMCP585A), the unit functions as a complete single channel monitor that includes alert and danger alarms, and output relays.

Technical Specifications:
- Power: 24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter
- 100mA Max for Monitor
- Buffered Output: BNC Connector
- Accuracy: 5.0 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range
- Ranges: English: 5, 10, 15, 20 and 25 mils
- Metric: 127, 254, 381, 508 and 635 Microns
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

Ordering Information:

<table>
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<tr>
<th>Base P/N</th>
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<th>Description</th>
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<tr>
<td>CMCP585</td>
<td></td>
<td>Eccentricity Transmitter</td>
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<tr>
<td>CMCP585A</td>
<td></td>
<td>Eccentricity Monitor (with Alarm Module)</td>
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<tr>
<td></td>
<td>-100</td>
<td>100mV/mil</td>
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<tr>
<td></td>
<td>-200</td>
<td>200mV/mil</td>
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<tr>
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<td>-Specify</td>
<td>Specify Input</td>
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</table>
CMCP590 Acceleration Enveloping Transmitter

Machine Protection Transmitters and Monitors

- Accepts Inputs from Accelerometers
- 4-20mA Output
- Transmitter Only Option or API 670 Compliant Monitor
- OK, Alert and Danger Relay Contacts
- Adjustable Alarms
- CSA and UL Class 1 Division 2 Approved
- CE Approved
- 3 Selectable Bandwidths
- 3 Selectable Full Scale Ranges
- Low Cost

Description:
Used with a 100mV/g accelerometers, the CMCP590 Acceleration Enveloping Transmitter processes the dynamic vibration acceleration input signal to defects in over-rolling bearing defects or gearbox problems. Each CMCP590 has 3 selectable bandwidth ranges and 3 full scale ranges. Combining transmitters with an existing PLC or DCS system results in a high density, low cost monitoring system.

Technical Specifications:
- Power: +24 Vdc Nominal (Reverse Polarity and Transient Protection Included)
- Consumption: 50mA Max. for Transmitter, 100mA Max for Monitor
- Buffered Output: BNC Connector
- Accuracy: 5.0 % of Full Scale Range
- Output: 4-20 mA proportional to the full scale range in enveloping
- Bandwidths: 50 to 1,000Hz, 500 to 10,000Hz and 5,000 to 40,000Hz
- Ranges: 10, 30 and 80 gE
- Maximum Load: 600 Ohms Resistive
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F)
- Storage Temp.: -55°C to +125°C (-67°F to +257°F)
- Relative Humidity: 0 - 95% Non-Condensing
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
UL 1604
CSA C22.2 No. 213
Class I Division II, Groups B-D Approved
CE Approved
RoHS Compliant

Ordering Information:

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<tr>
<td>CMCP590</td>
<td>Acceleration Enveloping Transmitter</td>
</tr>
<tr>
<td>CMCP590A</td>
<td>Acceleration Enveloping (with Alarm Module)</td>
</tr>
</tbody>
</table>
CMCP500A Relay Module for Transmitters
Machine Protection Transmitter Accessories

Description:
The CMCP500A Relay Module is a snap on protection system for most CMCP500 Series Transmitters that are not already equipped with it. The alarm module provides Alert and Danger relay contacts that can be configured in the field. By combining a CMCP500A module with one of STI's CMCP500 Series Transmitter the module then becomes a fully API670 compliant protection system.

Technical Specifications:
- Power: Power Supplied from CMCP500 Series Transmitter
- Consumption: 100mA Max for when connected to transmitter
- Output Connector: BNC Connector, 0-5VDC proportional to full scale range
- Output: SPDT Relay Contact for Alert and Danger Output
- SPST Relay Contact for OK Output
- Relay Ratings: 5 Amps at 30 VDC or 250 VAC
- Case: Isolated.

Environmental Specification:
- Operating Temp.: -20°C to +80°C (-4°F to +176°F).
- Storage Temp.: -55°C to +125°C (-67°F to +257°F).
- Relative Humidity: 0 - 95% Non-Condensing.
- Mounting: 32mm (G Style) or 35mm (T-Style) DIN Rail

Certifications:
- UL 1604
- CSA C22.2 No. 213
- Class I Division II, Groups B-D Approved
- CE Approved
- RoHS Compliant

Available For:
- CMCP525, CMCP530, CMCP535, CMCP540, CMCP545, CMCP547, CMCP548, CMCP549, CMCP560, CMCP565, CMCP570, CMCP585 and CMCP590

Ordering Information:
Note: CMCP500 Series Transmitters can be ordered from the factory with the optional Alarm module by specifying “A” after the base part number. Ex. CMCP530A-100A-R-ISO

Base P/N Description
- CMCP500A Alarm Module for CMCP500 Series Transmitters

To Order Please Visit www.stiwebstore.com or Contact STI
Rev. 6/2013
CMCP591 and CMCP592 Series Filters
Machine Protection Transmitter and Monitor Accessories

- For CMCP500 Series Transmitters and Monitors
- Low Pass and High Pass Filters Available
- Easy to Install—Plug In

Description:
All CMCP500 Series Transmitters and Monitors that accept dynamic inputs are equipped with two (2) filter sockets. One for a Low Pass Filter and one for a High Pass Filter. Simply insert the Filter into the appropriate socket as shown in the manual (available online) and move the Filter Jumper to activate. Care should be taken when selecting filters as damaging vibration levels may be filtered out.

Ordering Information:

<table>
<thead>
<tr>
<th>Base P/N</th>
<th>-Filter Range</th>
<th>Description</th>
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</thead>
<tbody>
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<td>CMCP591</td>
<td>-005</td>
<td>5 Hz High Pass Filter</td>
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<tr>
<td></td>
<td>-010</td>
<td>10 Hz High Pass Filter</td>
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<td></td>
<td>-020</td>
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<td>-110</td>
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<td></td>
<td>-10000</td>
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</table>

 Condition Monitoring Custom Products

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Rev. 6/2013