

Certificate of Compliance

Certificate: 1701657

Master Contract: 190597

Project: 2066363

Date Issued: November 24, 2008


Issued to: MICHELL Instruments
48 Lancaster Way Business Park Ely
Cambridgeshire CB6 3NW
UNITED KINGDOM

*The products listed below are eligible to bear cCSAus Field Certification
Labels, bearing the cCSAus Mark shown*



Issued by: E. Giusti

Authorized by: M.H.J. Hoendervangers
Area Director Europe



PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations
CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations -Certified according to US standards.

Class I, Division 1, Groups B, C and D:

Model: Condumax II Hydrocarbon Dewpoint Analyser; rated 240 Vac, 125 Watts input; operating ambient: -40°C to + 60°C; temperature code: T4; max working pressure (MWP): 206 bar, max process flow rate 10 l/min.

Note: The maximum allowable flow rate into the flameproof enclosure is 10LPM, with a maximum pressure of 206bar for the water dewpoint circuit and 100bar for the hydrocarbon dewpoint circuit; these limits ensure pressure build up within the enclosure is below 100mbar.

Model: Liquidew Dewpoint Analyser; rated 90...260 Vac, 50 / 60 Hz, 180 Watts input; operating ambient: -40°C to + 60°C; temperature code: T4, max process flow rate 2.6 l/min.

Note: The maximum allowable flow rate into the flameproof enclosure is 2.6LPM, with a maximum pressure of 50bar for the water dewpoint circuit; these limits ensure pressure build up within the enclosure is below 100mbar.

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.

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Model: Promet Dewpoint Analyser; rated 90...260 Vac, 50 / 60 Hz, 180 Watts input; operating ambient: -40°C to + 60°C; temperature code: T4, max process flow rate 10 l/min.

Note: The maximum allowable flow rate into the flameproof enclosure is 10LPM, with a maximum pressure of 138 or 206bar (depending on the version) for the water dewpoint circuit; these limits ensure pressure build up within the enclosure is below 100mbar.

Conditions of acceptance for all models:

- Maximum process pressure shall not exceed the rated pressure.
- Maximum flow rate into the flameproof enclosure shall not be exceeded.
- Process line shall be purged to ensure process gas or liquid is above its upper explosive limit before switching the power on.
- Power shall be switched off if a leak is detected.

APPLICABLE REQUIREMENTS

CSA C22.2 No. 142-M1987

C22.2 No. 30-M1986

UL508

UL1203

Process Control Equipment

Explosion-Proof Enclosures for Use in Class I Hazardous Locations

Industrial Control Equipment

Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for use in hazardous (classified) locations.

MARKINGS

Model Condumax:

- Company Name
- Model number
- Serial number
- Electrical rating
- Hazardous Location designation
- CSA Monogram
- Temperature Code Rating
- Re: Marking " Disconnect power before removing cover"
- Warning:"After de energizing wait for 45 minutes before opening enclosure".
- Warning:" To reduce the risk of ignition hazardous atmospheres, conduit runs must have a sealing fitting connected within 18 inches (50mm) of the enclosure"
- For Canada: "Un scellement doit être installé à moins de 50mm du boîtier".
- Grounding symbols appear next to earth stud.

Model Liquidew and Promet:

- Company Name
- Model number
- Serial number
- Electrical rating
- Hazardous Location designation
- CSA Monogram
- Temperature Code Rating
- Marking " Do not open when an explosive gas atmosphere may be present"
- Warning:"After de energizing wait for 45 minutes before opening enclosure".

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- Warning:” To reduce the risk of ignition hazardous atmospheres, conduit runs must have a sealing fitting connected within 18 inches (50mm) of the enclosure”
- For Canada: “Un scellement doit être installé à moins de 50mm du boîtier”.
- Grounding symbols appear next to earth stud.

Special conditions for safe use:

For Condumax II:

- Prior to energisation, purge with sample gas.
- Power to the equipment shall be removed if a leak in the process is evident.
- Process pressure not exceed 206bar for the water dewpoint circuit and 100bar for the hydrocarbon dewpoint circuit
- Process flow shall not exceed 10 l/min.

For Liquidew:

- Prior to energisation, purge with sample gas.
- Power to the equipment shall be removed if a leak in the process is evident.
- Process pressure not exceed 50bar.
- Process flow shall not exceed 2.6 l/min.

For Promet:

- Prior to energisation, purge with sample gas.
- Power to the equipment shall be removed if a leak in the process is evident.
- Process pressure not exceed 138 or 206bar.
- Process flow shall not exceed 10 l/min.



CSA INTERNATIONAL

Supplement to Certificate of Compliance

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*The products listed, including the latest revision described below,
are eligible to be marked in accordance with the referenced Certificate.*

Product Certification History

Project	Date	Description
2066363	August 29, 2008	Update to report 1863469 to include alternate flow switch on Condumax
186346	October 29, 2006	Update to report 1701657 to include two new models :Liquidew and Promet dewpoint analysers
1701657	September29, 2005	Original cCSAus certification for Condumax II Hydrocarbon Dewpoint Analyser