DRAWING No.

USED ON

THIRD ANGLE PROJECTION

DO NOT SCALE THIS PRINT
REMOVE ALL BURRS

NON-HAZARDOUS AREA

WARNING: SUBSTITUTIONOF COMPONENTS MAY IMPAIR SUITABILITY FOR HAZARDOUS LOCATIONS

WARNING: RESISTANCE BETWEEN BARRIER GROUND AND EARTH GROUND MUST BE LESS THAN 1.0 Ohm

NOTES:

1. INSTALLATION TO BE IN ACCORDANCE WITH THE CANADIAN NATIONAL ELECTRICAL CODE PART 1
2. MAXIMUM NON HAZARDOUS AREA VOLTAGE MUST NO EXCEED 250V.
3. A DUST TIGHT SEAL MUST BE USED AT THE ENTRY WHEN THE TRANSMITTER IS USED IN A CLASS II & III LOCATION
4. SUITABLE SEPARATION MUST BE MAINTAINED BETWEEN INPUT WIRING AND SENSOR WIRING
5. WARNING: DO NOT DISCONNECT EQUIPMENT WHILE LIVE UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS
6. ASSOCIATED APPARATUS PROVIDING NON INCENDIVE FIELD WIRING OUTPUTS MUST BE APPROVED BY AUTHORITY HAVING JURISDICTION AND MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
7. ASSOCIATED APPARATUS PROVIDING NON INCENDIVE FIELD WIRING OUTPUTS, PARAMETERS MUST MEET THE FOLLOWING REQUIREMENTS:
   - Voc/Uo ≤ Vmax;
   - Isc/Io ≤ Imax;
   - Po or Pt ≤ Pmax
   - Ca ≥ Ci + Ccable
   - La ≥ Li + Lcable
8. THE OUTPUTS OF THE SENSOR MODULES MEET THE REQUIREMENTS FOR NON INCENDIVE FIELD WIRING.

HAZARDOUS AREA

NON-INCENDIVE

CLASS I, DIV 2 GROUPS A, B, C, D; T4

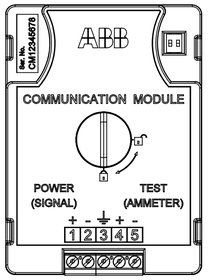
CLASS II/III, DIV 2 GROUPS F, G; T4

AWT210 FOR CONNECTION TO:

1. OTHER SENSORS CERTIFIED FOR USE IN CANADA SUITABLE FOR THE HAZARDOUS LOCATION WITH ENTITY PARAMETERS Vmax/Ui ≥ Voc/Uo; Imax/ Ii ≥ Isc/Io; Pi ≥ Po; Co ≥ Ci + Ccable; Lo ≥ Li = Lcable
2. SIMPLE APPARATUS; PASSIVE DEVICE THAT DOES NOT CONTAIN ENERGY STORING COMPONENTS AND DOES NOT GENERATE MORE THAN1.5V, 100mA, OR 25mW

COMMUNICATIONS OPTION MODULES:

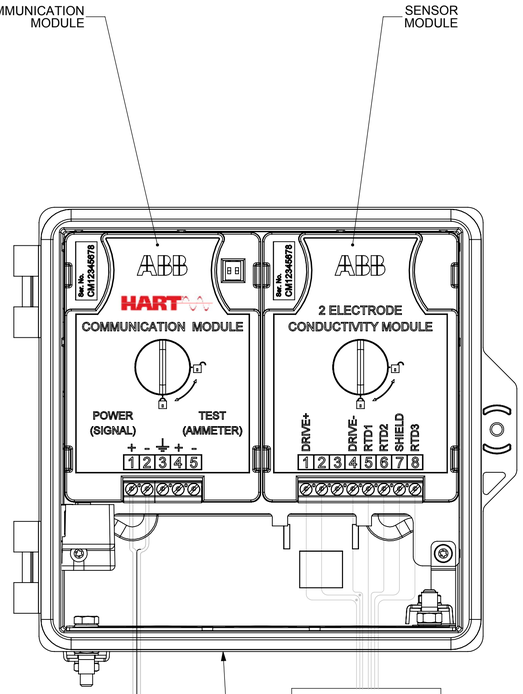
HART
Fieldbus
Profibus



HART
INPUT PARAMETERS:
TERMINALS 1 & 2
Vmax (Ui) = 30V
Imax(Ii) = 100mA
Pi = 0.8W
Ci = 0.56nF
Li = 3.3mH

Fieldbus
INPUT PARAMETERS:
TERMINALS 1 & 2
Vmax (Ui) = 24V
Imax(Ii) = 250mA
Pi = 1.2W
Ci = 1.1nF
Li = 0mH

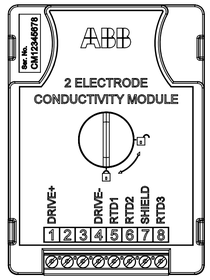
Profibus
INPUT PARAMETERS:
TERMINALS 1 & 2
Vmax (Ui) = 24V
Imax(Ii) = 250mA
Pi = 1.2W
Ci = 1.1nF
Li = 0mH



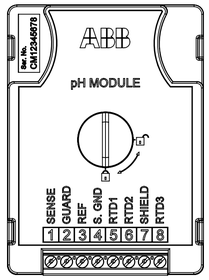
pH/ORP/ISE
OR
Conductivity
OR
Digital/EZLink
SENSOR
(As Appropriate)

IPX6 ENCLOSURE

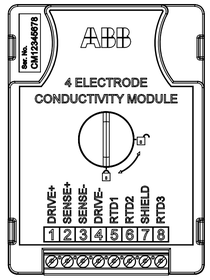
SENSOR OPTION MODULES



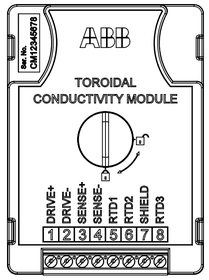
OUTPUT PARAMETERS - 2 ELECTRODE
Voc(Uo) = 11.8V
Isc(Io) = 11.8mA
Po = 36mW
Ca(Co) = 1.5uF
La = 1H



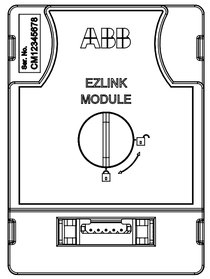
OUTPUT PARAMETERS - pH
Voc(Uo) = 11.8V
Isc(Io) = 11.8mA
Po = 36mW
Ca(Co) = 1.5uF
La = 1H



OUTPUT PARAMETERS - 4 ELECTRODE
Voc(Uo) = 11.8V
Isc(Io) = 11.8mA
Po = 36mW
Ca(Co) = 1.5uF
La = 1H



OUTPUT PARAMETERS - TOROIDAL
Voc(Uo) = 11.8V
Isc(Io) = 11.8mA
Po = 36mW
Ca(Co) = 1.5uF
La = 1H



OUTPUT PARAMETERS - EZLINK
Voc (Uo) = 5.21V
Isc (Io) = 98.2mA
Po = 127.9mW
Ca (Co) = 60uF
La (Lo) = 43mH

INSTALLATION METHODS

POWER SUPPLY

< 250 V

CLASS I, DIV 2, USING ANY CLASS I, DIV 2 WIRING METHOD WITH THE EXCEPTION OF CONDUIT TO THE TRANSMITTER:
HART: Vmax: 30V, Pmax: 0.8W
FF/PA: Vmax: 24V. Pmax: 1.2W

" 2 WIRE HOOKUP"

ASSOCIATED APPARATUS
(Providing Non Incendive Field Wiring Outputs)

< 250 V

CLASS I, DIV 2, USING OPTIONAL NON INCENDIVE FIELD WIRING & MEETING PARAMETERS AS PER NOTE 7

" 2 WIRE HOOKUP"

CERTIFIED PRODUCT
NO MODIFICATION IS PERMITTED WITHOUT REFERENCE TO THE APPROVAL AUTHORITY

THIS DRAWING WAS CREATED ON A COMPUTER AIDED DESIGN (CAD) SYSTEM TO ENSURE THE INTEGRITY OF THE DATA BASE ALL CHANGES/REVISIONS MUST BE MADE ON THE CAD SYSTEM.

MATERIAL
FINISH
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SCALE
DIMS. IN

TOLERANCES
LINEAR DIMS
X = ± 0.5
X.X = ± 0.1
ANGULAR DIMS
±0.5°
UNLESS OTHERWISE STATED

	AMENDMENTS	MOD No	DRAWN	CH'KD	D & D	M.E.D.	DATE
G	Output parameters added for each sensor module		CEH				12/11/18
F	SENSOR MODULE OPTIONS ADDED		CEH				31-05-18
E	Input Parameters Imax was 160mA Pi was 1.0W		CEH				06-07-17

	AMENDMENTS	MOD No	DRAWN	CH'KD	D & D	M.E.D.	DATE
K	EZLink Module Option Added (Parameters updated)	CR2003015	SME				010421
J	Fieldbus & Profibus Variants added		CEH				11-06-19
H	Note 1 Changed		CEH				22/01/19

TITLE: AWT210 cFMus NON-INCENDIVE CONTROL DRAWING (CANADA)

DRAWING No. AWT200033

A1