

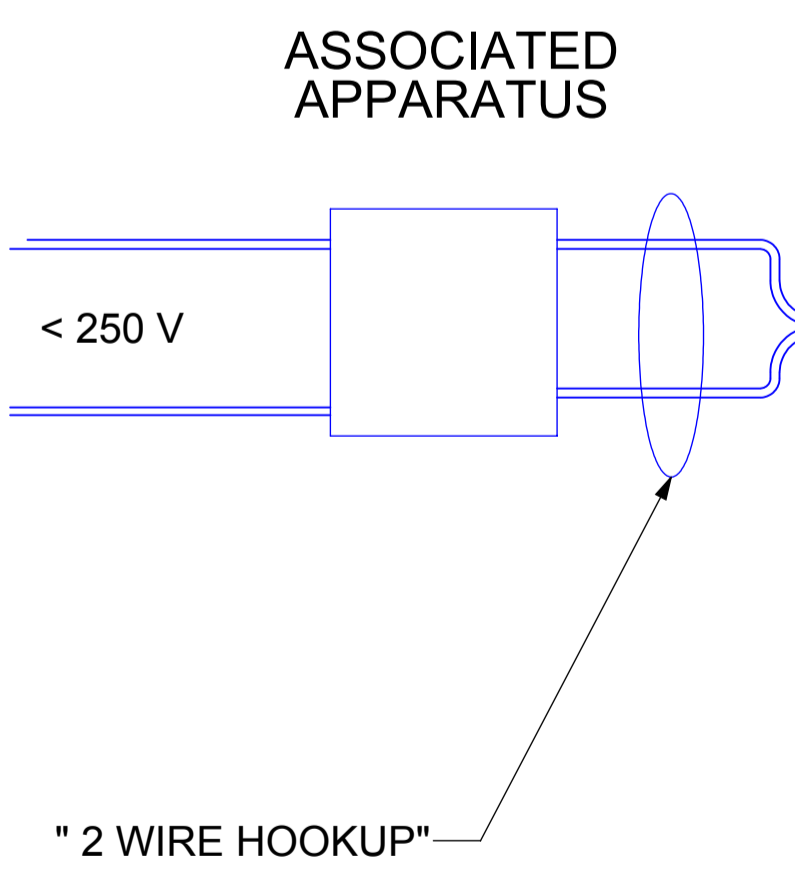
NON-HAZARDOUS AREA

WARNING: SUBSTITUTION OF 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. ASSOCIATED APPARATUS MUST BE APPROVED BY AUTHORITY HAVING JURISDICTION AND MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS.
3. ASSOCIATED APPARATUS PARAMETERS MUST MEET THE FOLLOWING REQUIREMENTS:
 - $V_{oc}/U_o \leq V_{max}$;
 - $I_{sc}/I_o \leq I_{max}$;
 - P_o or $P_t \leq P_{max}$
 - $C_a \geq C_i + C_{cable}$
 - $L_a \geq L_i + L_{cable}$
4. MAXIMUM NON HAZARDOUS AREA VOLTAGE MUST NO EXCEED 250V.
5. A DUST TIGHT SEAL MUST BE USED AT THE CONDUIT ENTRY WHEN THE TRANSMITTER IS USED IN A CLASS II & III LOCATION
6. SUITABLE SEPERATION MUST BE MAINTAINED BETWEEN INPUT WIRING AND SENSOR WIRING
7. WARNING: DO NOT DISCONNECT EQUIPMENT WHILE LIVE UNLESS THE AREA IS KNOWN TO BE NON-HAZARDOUS



THIRD ANGLE PROJECTION
DO NOT SCALE THIS PRINT
REMOVE ALL BURRS

HAZARDOUS AREA

NON INCENDIVE

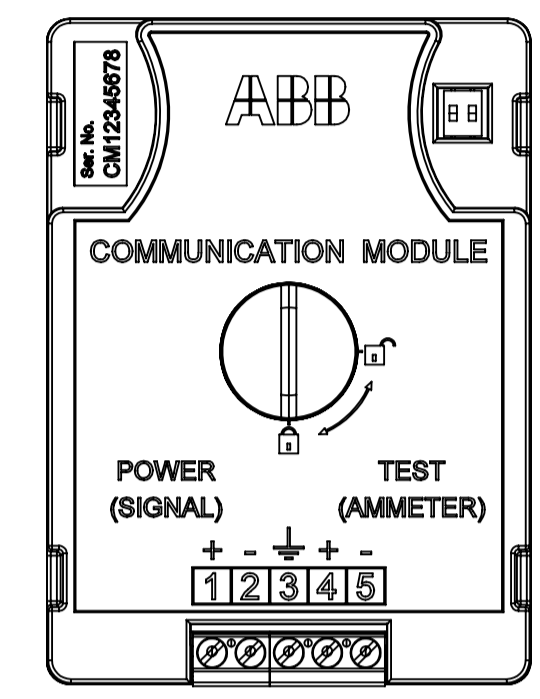
CLASS I, DIV2 GROUPS A,B,C,D; T4
CLASS II/III, DIV 2, GROUPS F,G; T4

AWT210 FOR CONNECTION TO:

1. OTHER SENSORS CERTIFIED FOR USE IN CANADA SUITABLE FOR THE HAZARDOUS LOCATION WITH ENTITY PARAMETERS $V_{max}/U_i \geq V_{oc}/U_o$; $I_{max}/I_i \geq I_{sc}/I_o$; $P_i \geq P_o$; $C_o \geq C_i + C_{cable}$; $L_o \geq L_i + L_{cable}$
2. SIMPLE APPARATUS: PASSIVE DEVICE THAT DOES NOT CONTAIN ENERGY STORING COMPONENTS AND DOES NOT GENERATE MORE THAN 1.5V, 100mA, OR 25mW

COMMUNICATIONS OPTION MODULES:

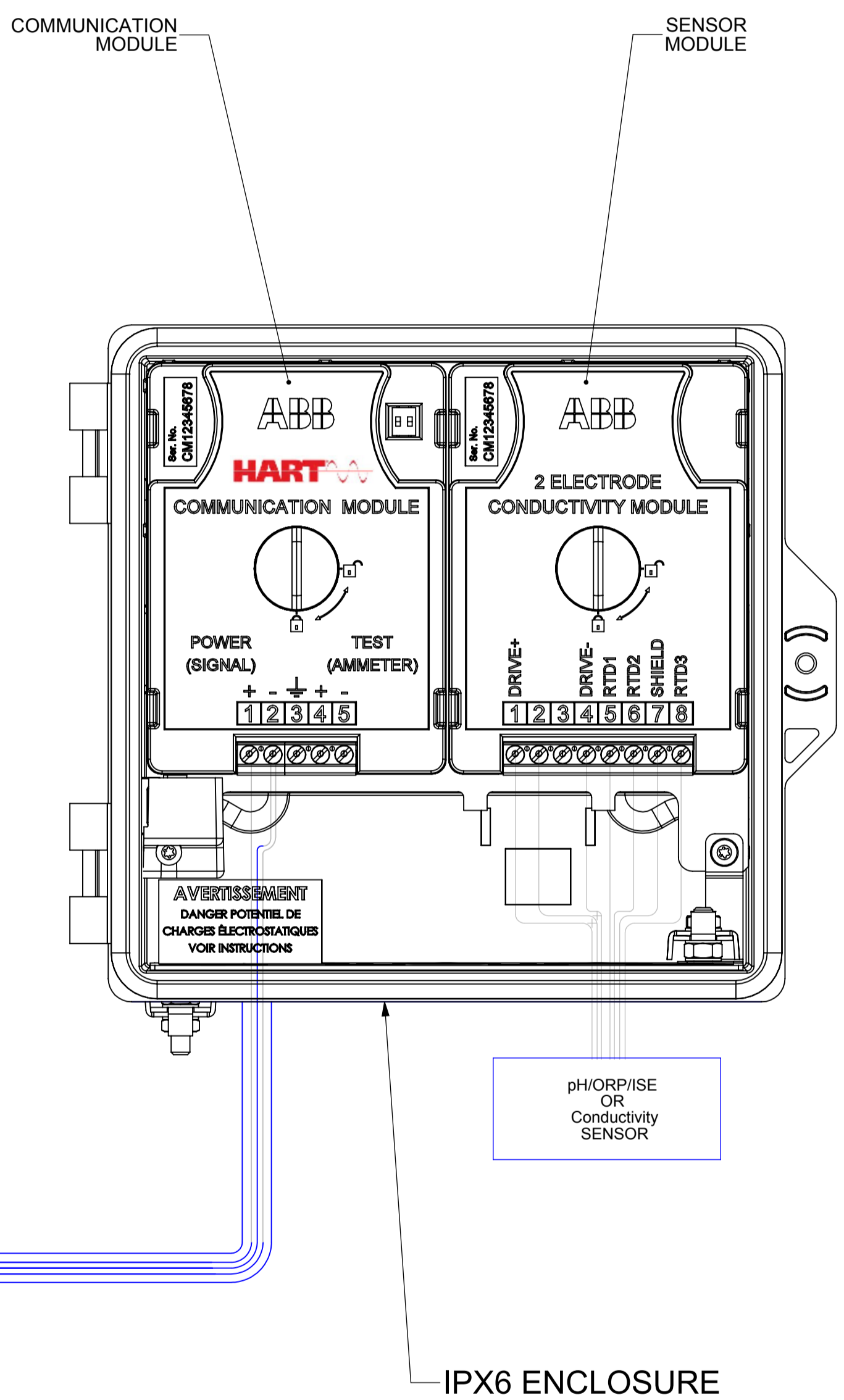
HART
Fieldbus
Profibus



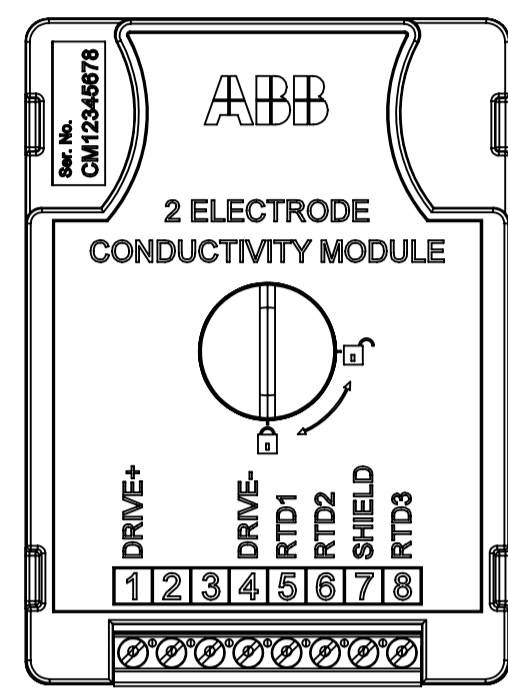
HART
INPUT PARAMETERS:
TERMINALS 1 & 2
 $V_{max}(U_i) = 30V$
 $I_{max}(I_i) = 100mA$
 $P_i = 0.8W$
 $C_i = 0.56nF$
 $L_i = 3.3mH$

Fieldbus
INPUT PARAMETERS:
TERMINALS 1 & 2
 $V_{max}(U_i) = 24V$
 $I_{max}(I_i) = 250mA$
 $P_i = 1.2W$
 $C_i = 1.1nF$
 $L_i = 0mH$

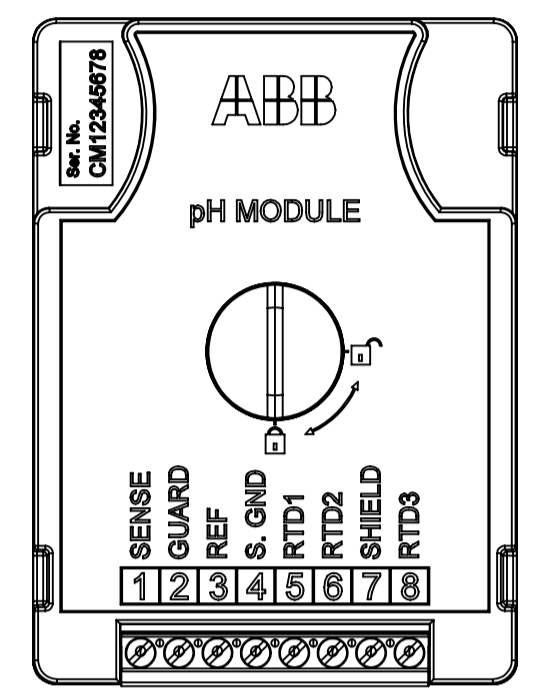
Profibus
INPUT PARAMETERS:
TERMINALS 1 & 2
 $V_{max}(U_i) = 24V$
 $I_{max}(I_i) = 250mA$
 $P_i = 1.2W$
 $C_i = 1.1nF$
 $L_i = 0mH$



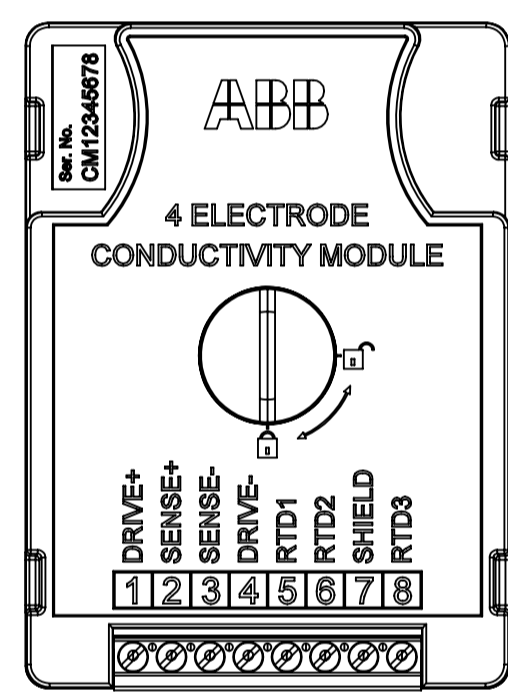
SENSOR OPTION MODULES



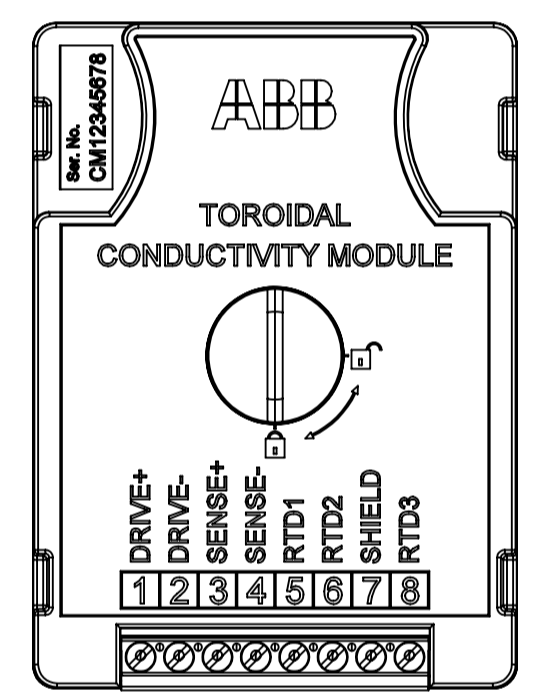
OUTPUT PARAMETERS - 2 ELECTRODE
 $V_{oc}(U_o) = 11.8V$
 $I_{sc}(I_o) = 11.8mA$
 $P_o = 36mW$
 $Ca(Co) = 1.5uF$
 $La = 1H$



OUTPUT PARAMETERS - pH
 $V_{oc}(U_o) = 11.8V$
 $I_{sc}(I_o) = 11.8mA$
 $P_o = 36mW$
 $Ca(Co) = 1.5uF$
 $La = 1H$



OUTPUT PARAMETERS - 4 ELECTRODE
 $V_{oc}(U_o) = 11.8V$
 $I_{sc}(I_o) = 11.8mA$
 $P_o = 36mW$
 $Ca(Co) = 1.5uF$
 $La = 1H$



OUTPUT PARAMETERS - TOROIDAL
 $V_{oc}(U_o) = 11.8V$
 $I_{sc}(I_o) = 11.8mA$
 $P_o = 36mW$
 $Ca(Co) = 1.5uF$
 $La = 1H$

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	SCALE DIMS. IN	J Fieldbus & Profibus Variants added	CEH	11-06-19	F	SENSOR MODULE OPTIONS ADDED	CEH	31-05-18
CONFIDENTIAL	TOLERANCES LINEAR DIMS X = ± 0.5 X,X = ± 0.1 ANGULAR DIMS ± 0.5° UNLESS OTHERWISE STATED	H Note 1 Changed	CEH	22/01/19	E	Input Parameters I _{max} was 160mA P _i was 1.0W	CEH	06-07-17
ABB Ltd 2018		G Output parameters added for each sensor module	CEH	12/11/18	D	Input & Entity Parameters amended	CEH	15-11-16
ABB Ltd St Neots, Cambs, PE19 8EU, UK		TITLE				AMENDMENTS		
		AWT210 CSA NON-INCENDIVE CONTROL DRAWING			DRAWING No.	AWT200033		