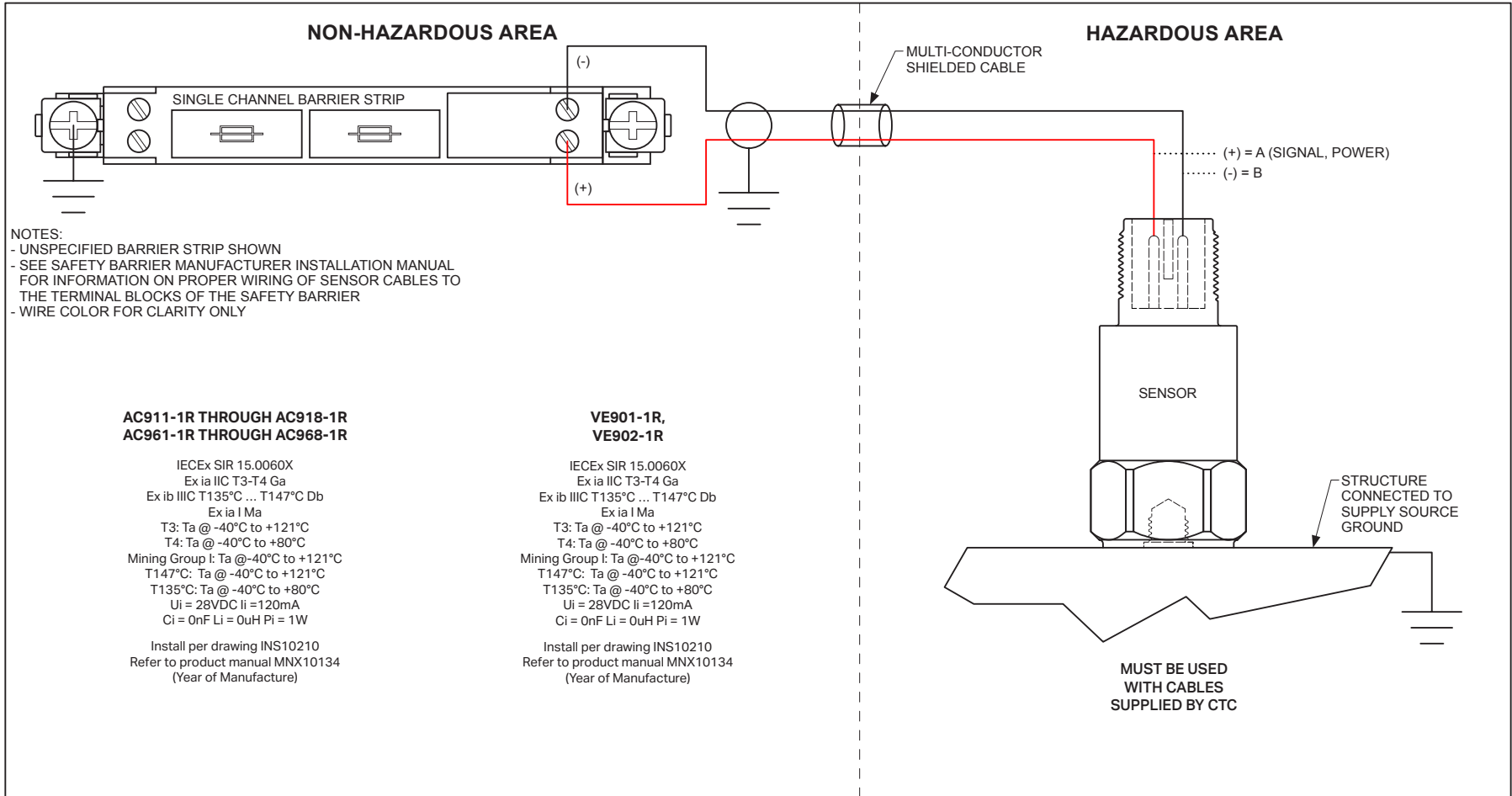


CTC TECHNICAL DOCUMENTATION



NOTES:
 - UNSPECIFIED BARRIER STRIP SHOWN
 - SEE SAFETY BARRIER MANUFACTURER INSTALLATION MANUAL FOR INFORMATION ON PROPER WIRING OF SENSOR CABLES TO THE TERMINAL BLOCKS OF THE SAFETY BARRIER
 - WIRE COLOR FOR CLARITY ONLY

**AC911-1R THROUGH AC918-1R
 AC961-1R THROUGH AC968-1R**

IECEX SIR 15.0060X
 Ex ia IIC T3-T4 Ga
 Ex ib IIIC T135°C ... T147°C Db
 Ex ia I Ma
 T3: Ta @ -40°C to +121°C
 T4: Ta @ -40°C to +80°C
 Mining Group I: Ta @ -40°C to +121°C
 T147°C: Ta @ -40°C to +121°C
 T135°C: Ta @ -40°C to +80°C
 Ui = 28VDC li = 120mA
 Ci = 0nF Li = 0uH Pi = 1W

Install per drawing INS10210
 Refer to product manual MNX10134
 (Year of Manufacture)

**VE901-1R,
 VE902-1R**

IECEX SIR 15.0060X
 Ex ia IIC T3-T4 Ga
 Ex ib IIIC T135°C ... T147°C Db
 Ex ia I Ma
 T3: Ta @ -40°C to +121°C
 T4: Ta @ -40°C to +80°C
 Mining Group I: Ta @ -40°C to +121°C
 T147°C: Ta @ -40°C to +121°C
 T135°C: Ta @ -40°C to +80°C
 Ui = 28VDC li = 120mA
 Ci = 0nF Li = 0uH Pi = 1W

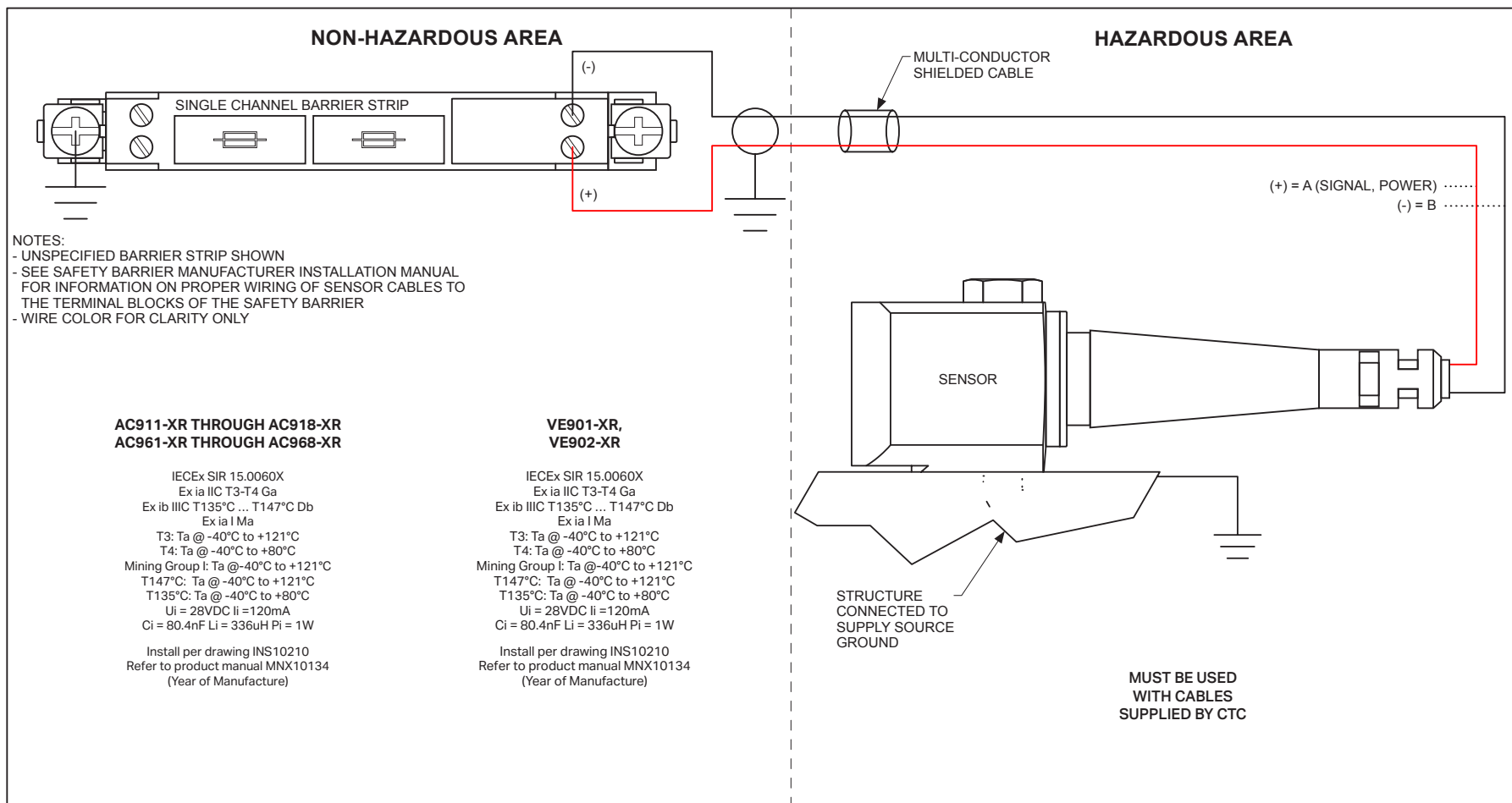
Install per drawing INS10210
 Refer to product manual MNX10134
 (Year of Manufacture)

NOTES:
 - DO NOT PARALLEL ASSOCIATE APPARATUS UNLESS PERMITTED BY ASSOCIATED APPARATUS APPROVAL
 - CABLE CAPACITANCE & INDUCTANCE PLUS THE I.S. APPARATUS UNPROTECTED CAPACITANCE (Ci) AND INDUCTANCE (Li) MUST NOT EXCEED THE ALLOWED CAPACITANCE (Ca) AND INDUCTANCE (La) INDICATED ON THE ASSOCIATED APPARATUS
 [(C_{cable} + Ci < Ca) & (L_{cable} + Li < La)]

 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL N/A	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED): XXXX ± 0.0005 XXX ± 0.005 63 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
	PART #: INS10210	
DESCRIPTION: IECEX ZONE 0,1 INTRINSIC SAFE SENSOR CONTROL DRAWING		SHEET 1/12 NOT DRAWN TO SCALE

A	IECEX INTRINSICALLY SAFE SENSOR CONTROL DRAWING - INITIAL RELEASE	-	CT	CCM	2/12/2026	CCM	2/12/2026
REV	DESCRIPTION	ECO#	DESIGNER	ENG APPROVED	DATE	MFG APPROVED	DATE

CTC TECHNICAL DOCUMENTATION



NOTES:
 - UNSPECIFIED BARRIER STRIP SHOWN
 - SEE SAFETY BARRIER MANUFACTURER INSTALLATION MANUAL FOR INFORMATION ON PROPER WIRING OF SENSOR CABLES TO THE TERMINAL BLOCKS OF THE SAFETY BARRIER
 - WIRE COLOR FOR CLARITY ONLY

**AC911-XR THROUGH AC918-XR
AC961-XR THROUGH AC968-XR**

IECEx SIR 15.0060X
 Ex ia IIC T3-T4 Ga
 Ex ib IIIC T135°C ... T147°C Db
 Ex ia I Ma
 T3: Ta @ -40°C to +121°C
 T4: Ta @ -40°C to +80°C
 Mining Group I: Ta @ -40°C to +121°C
 T147°C: Ta @ -40°C to +121°C
 T135°C: Ta @ -40°C to +80°C
 Ui = 28VDC li = 120mA
 Ci = 80.4nF Li = 336uH Pi = 1W

Install per drawing INS10210
 Refer to product manual MNX10134
 (Year of Manufacture)

**VE901-XR,
VE902-XR**

IECEx SIR 15.0060X
 Ex ia IIC T3-T4 Ga
 Ex ib IIIC T135°C ... T147°C Db
 Ex ia I Ma
 T3: Ta @ -40°C to +121°C
 T4: Ta @ -40°C to +80°C
 Mining Group I: Ta @ -40°C to +121°C
 T147°C: Ta @ -40°C to +121°C
 T135°C: Ta @ -40°C to +80°C
 Ui = 28VDC li = 120mA
 Ci = 80.4nF Li = 336uH Pi = 1W

Install per drawing INS10210
 Refer to product manual MNX10134
 (Year of Manufacture)

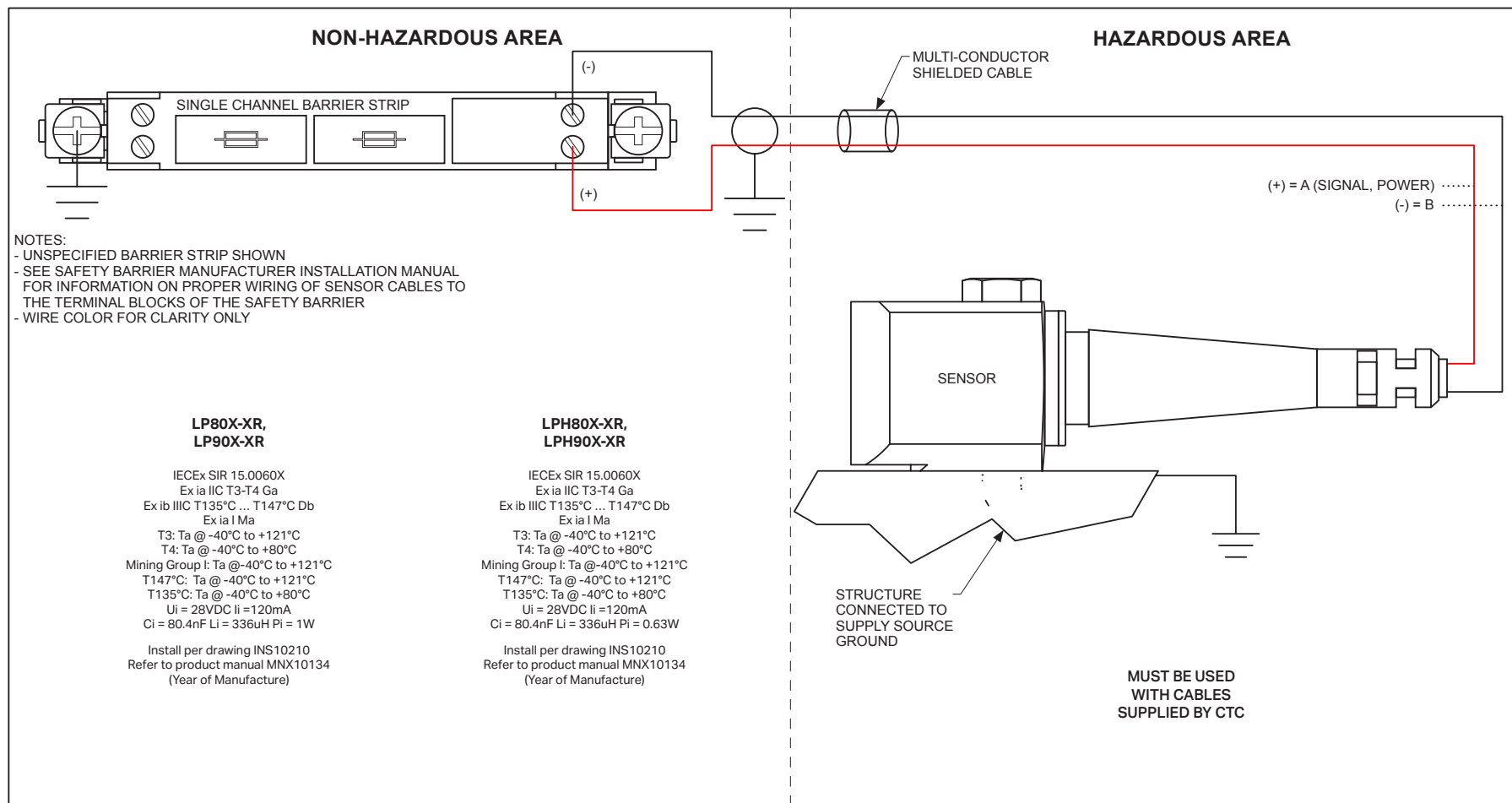
**MUST BE USED
WITH CABLES
SUPPLIED BY CTC**

NOTES:
 - DO NOT PARALLEL ASSOCIATE APPARATUS UNLESS PERMITTED BY ASSOCIATED APPARATUS APPROVAL
 - CABLE CAPACITANCE & INDUCTANCE PLUS THE I.S. APPARATUS UNPROTECTED CAPACITANCE (Ci) AND INDUCTANCE (Li) MUST NOT EXCEED THE ALLOWED CAPACITANCE (Ca) AND INDUCTANCE (La) INDICATED ON THE ASSOCIATED APPARATUS
 [(C_{cable} + C_i < C_a) & (L_{cable} + L_i < L_a)]

 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL N/A	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED): XXXX ± 0.0005 XXX ± 0.005 63 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
	PART #: SHEET <div style="text-align: center; font-size: 1.2em; font-weight: bold;">INS10210</div> DESCRIPTION: 2/12 IECEx ZONE 0,1 INTRINSIC SAFE SENSOR CONTROL DRAWING NOT DRAWN TO SCALE	

A	IECEx INTRINSICALLY SAFE SENSOR CONTROL DRAWING - INITIAL RELEASE	-	CT	CCM	2/12/2026	CCM	2/12/2026
REV	DESCRIPTION	ECO#	DESIGNER	ENG APPROVED	DATE	MFG APPROVED	DATE

CTC TECHNICAL DOCUMENTATION

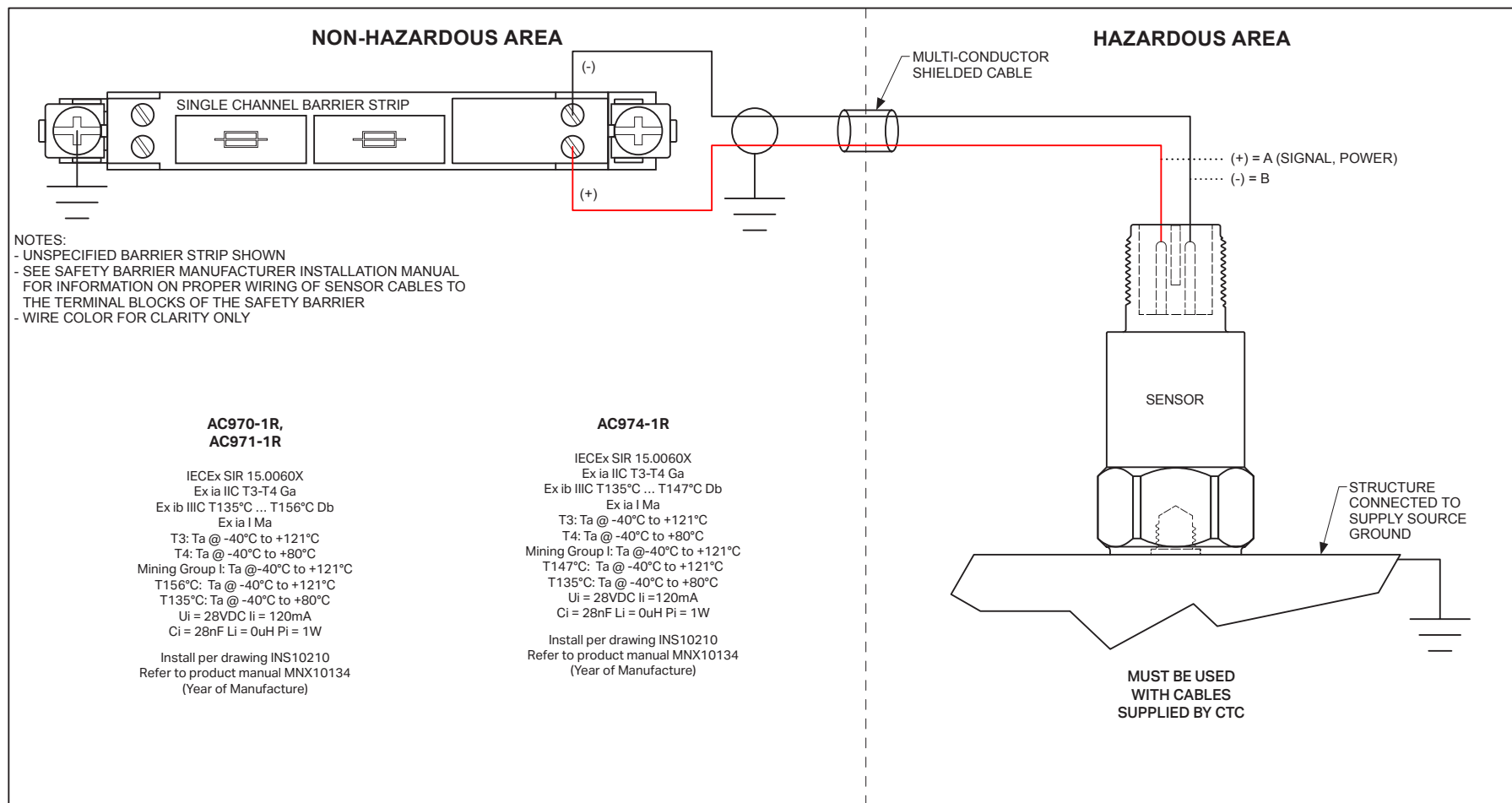


NOTES:
- DO NOT PARALLEL ASSOCIATE APPARATUS UNLESS PERMITTED BY ASSOCIATED APPARATUS APPROVAL
- CABLE CAPACITANCE & INDUCTANCE PLUS THE I.S. APPARATUS UNPROTECTED CAPACITANCE (Ci) AND INDUCTANCE (Li) MUST NOT EXCEED THE ALLOWED CAPACITANCE (Ca) AND INDUCTANCE (La) INDICATED ON THE ASSOCIATED APPARATUS [(C_{cable} + C_i < C_a) & (L_{cable} + L_i < L_a)]

 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED) XXXX ± 0.0005 XXX ± 0.005 63 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
	N/A	
PART #:		SHEET
INS10210		4/12
DESCRIPTION:		NOT DRAWN TO SCALE
IECEx ZONE 0,1 INTRINSIC SAFE SENSOR CONTROL DRAWING		

A	IECEx INTRINSICALLY SAFE SENSOR CONTROL DRAWING - INITIAL RELEASE	-	CT	CCM	2/12/2026	CCM	2/12/2026
REV	DESCRIPTION	ECO#	DESIGNER	ENG APPROVED	DATE	MFG APPROVED	DATE

CTC TECHNICAL DOCUMENTATION



NOTES:
 - UNSPECIFIED BARRIER STRIP SHOWN
 - SEE SAFETY BARRIER MANUFACTURER INSTALLATION MANUAL FOR INFORMATION ON PROPER WIRING OF SENSOR CABLES TO THE TERMINAL BLOCKS OF THE SAFETY BARRIER
 - WIRE COLOR FOR CLARITY ONLY

**AC970-1R,
AC971-1R**

IECEx SIR 15.0060X
 Ex ia IIC T3-T4 Ga
 Ex ib IIIC T135°C ... T156°C Db
 Ex ia I Ma
 T3: Ta @ -40°C to +121°C
 T4: Ta @ -40°C to +80°C
 Mining Group I: Ta @ -40°C to +121°C
 T156°C: Ta @ -40°C to +121°C
 T135°C: Ta @ -40°C to +80°C
 Ui = 28VDC li = 120mA
 Ci = 28nF Li = 0uH Pi = 1W

Install per drawing INS10210
 Refer to product manual MNX10134
 (Year of Manufacture)

AC974-1R

IECEx SIR 15.0060X
 Ex ia IIC T3-T4 Ga
 Ex ib IIIC T135°C ... T147°C Db
 Ex ia I Ma
 T3: Ta @ -40°C to +121°C
 T4: Ta @ -40°C to +80°C
 Mining Group I: Ta @ -40°C to +121°C
 T147°C: Ta @ -40°C to +121°C
 T135°C: Ta @ -40°C to +80°C
 Ui = 28VDC li = 120mA
 Ci = 28nF Li = 0uH Pi = 1W

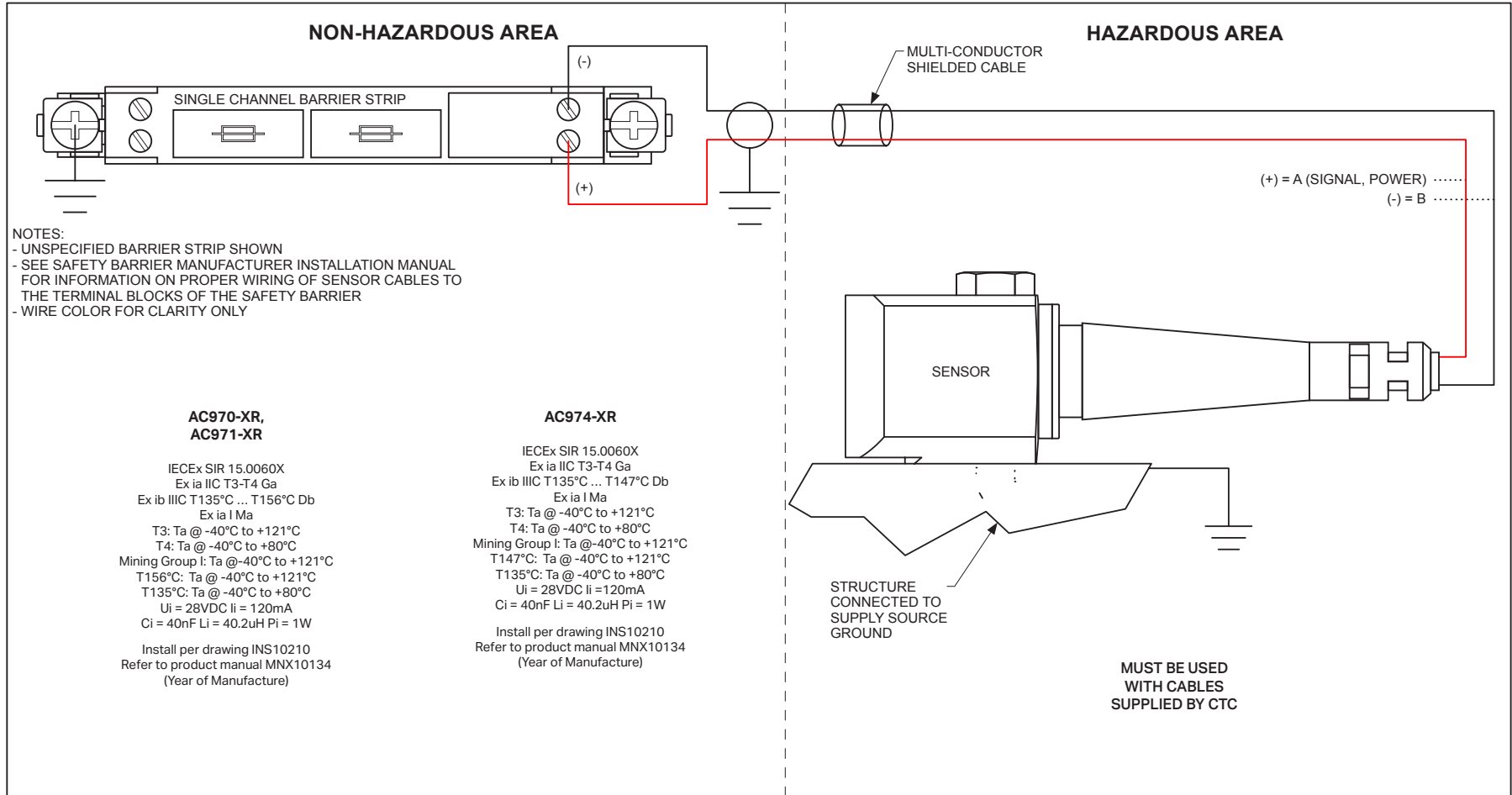
Install per drawing INS10210
 Refer to product manual MNX10134
 (Year of Manufacture)

NOTES:
 - DO NOT PARALLEL ASSOCIATE APPARATUS UNLESS PERMITTED BY ASSOCIATED APPARATUS APPROVAL
 - CABLE CAPACITANCE & INDUCTANCE PLUS THE I.S. APPARATUS UNPROTECTED CAPACITANCE (Ci) AND INDUCTANCE (Li) MUST NOT EXCEED THE ALLOWED CAPACITANCE (Ca) AND INDUCTANCE (La) INDICATED ON THE ASSOCIATED APPARATUS
 [(Cable + Ci < Ca) & (Lcable + Li < La)]

 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED): XXXX ± 0.0005 XXX ± 0.005 63 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
	N/A	
PART #:		SHEET
INS10210		5/12
DESCRIPTION:		NOT DRAWN TO SCALE
IECEx ZONE 0,1 INTRINSIC SAFE SENSOR CONTROL DRAWING		

A	IECEx INTRINSICALLY SAFE SENSOR CONTROL DRAWING - INITIAL RELEASE	-	CT	CCM	2/12/2026	CCM	2/12/2026
REV	DESCRIPTION	ECO#	DESIGNER	ENG APPROVED	DATE	MFG APPROVED	DATE

CTC TECHNICAL DOCUMENTATION

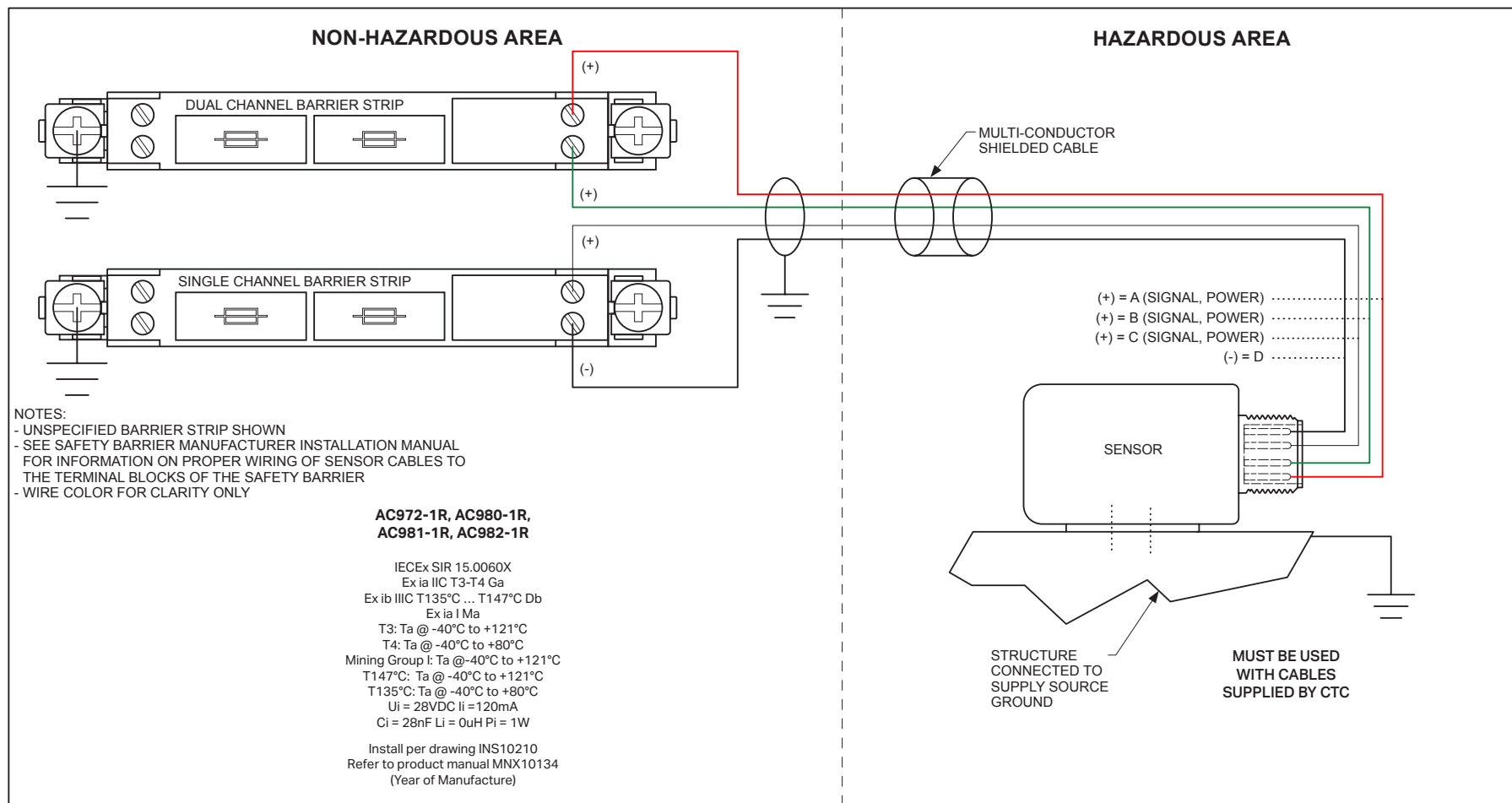


NOTES:
 - DO NOT PARALLEL ASSOCIATE APPARATUS UNLESS PERMITTED BY ASSOCIATED APPARATUS APPROVAL
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 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL N/A	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED): XXXX ± 0.0005 XXX ± 0.005 63 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
	PART #: SHEET <div style="text-align: center; font-size: 1.2em; font-weight: bold;">INS10210</div> 6/12	
DESCRIPTION: IECEX ZONE 0,1 INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE

A	IECEX INTRINSICALLY SAFE SENSOR CONTROL DRAWING - INITIAL RELEASE	-	CT	CCM	2/12/2026	CCM	2/12/2026
REV	DESCRIPTION	ECO#	DESIGNER	ENG APPROVED	DATE	MFG APPROVED	DATE

CTC TECHNICAL DOCUMENTATION

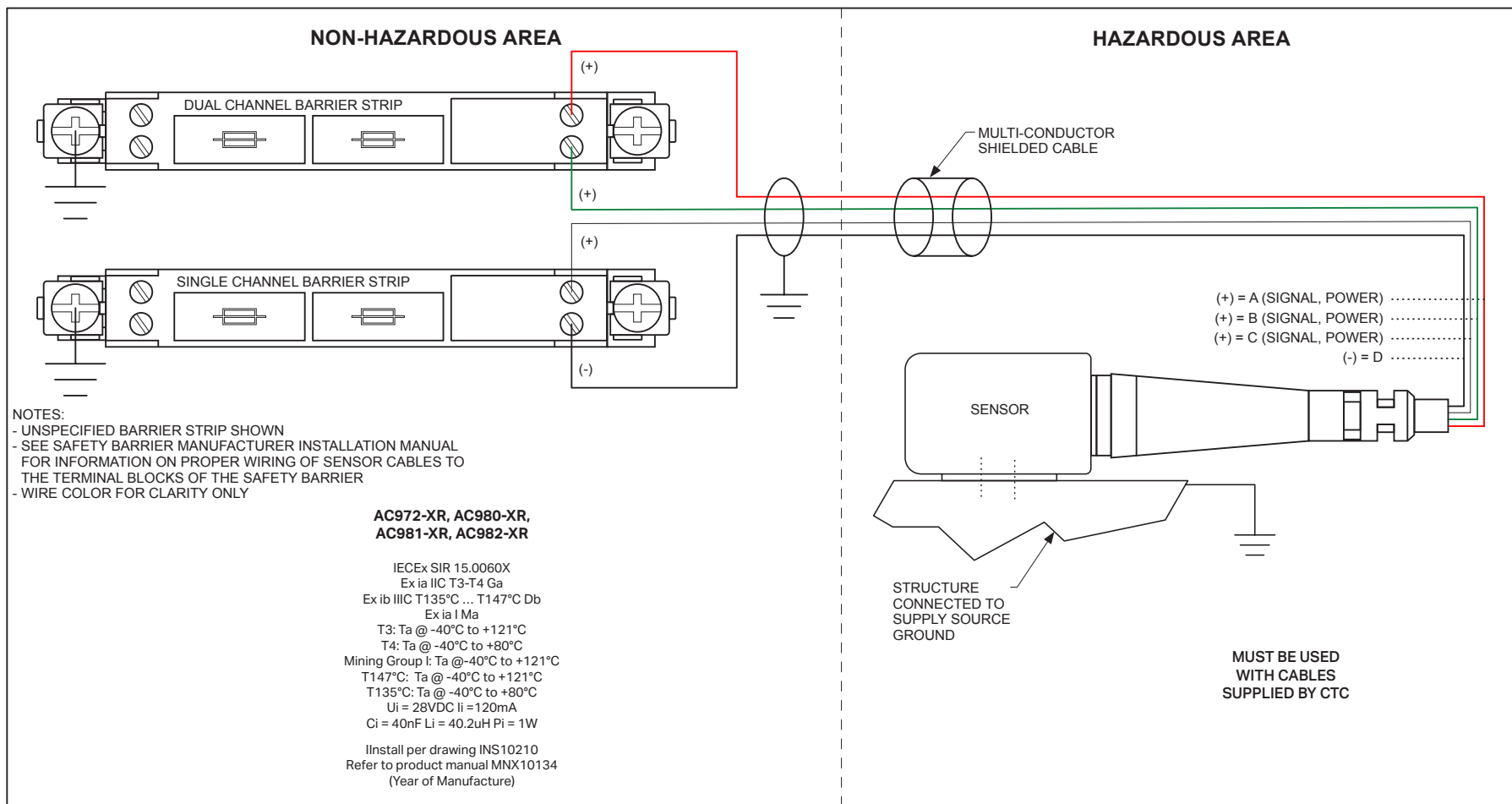


NOTES:
 - DO NOT PARALLEL ASSOCIATE APPARATUS UNLESS PERMITTED BY ASSOCIATED APPARATUS APPROVAL
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 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED): XXXX ± 0.0005 XXX ± 0.005 63 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
	N/A	
PART #:		SHEET
INS10210		9/12
DESCRIPTION:		NOT DRAWN TO SCALE
IECEX ZONE 0,1 INTRINSIC SAFE SENSOR CONTROL DRAWING		

A	IECEX INTRINSICALLY SAFE SENSOR CONTROL DRAWING - INITIAL RELEASE	-	CT	CCM	2/12/2026	CCM	2/12/2026
REV	DESCRIPTION	ECO#	DESIGNER	ENG APPROVED	DATE	MFG APPROVED	DATE

CTC TECHNICAL DOCUMENTATION

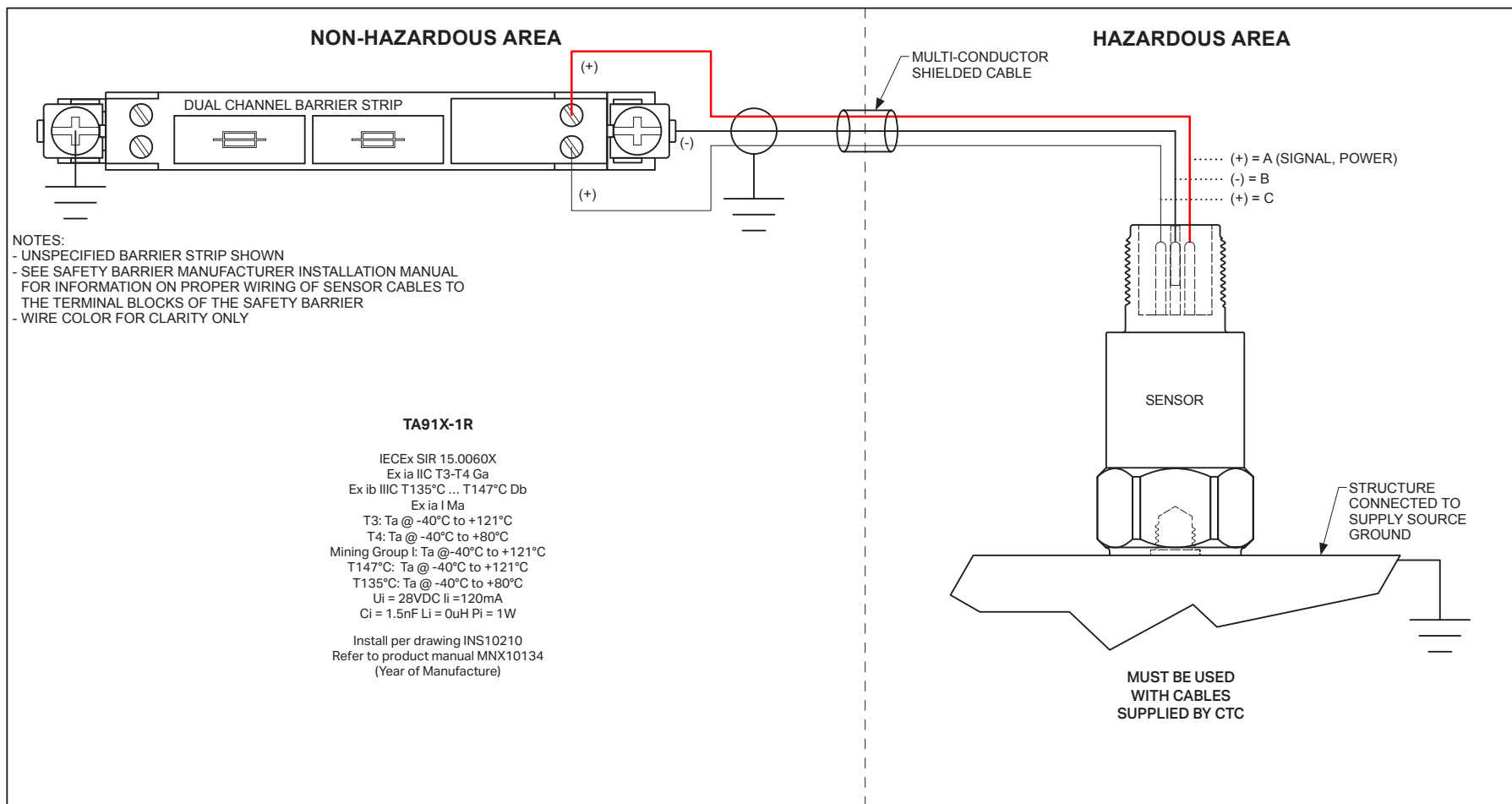


NOTES:
 - DO NOT PARALLEL ASSOCIATE APPARATUS UNLESS PERMITTED BY ASSOCIATED APPARATUS APPROVAL
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 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED): XXXX ± 0.0005 XXX ± 0.005 63 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
	N/A	
PART #:		SHEET
INS10210		10/12
DESCRIPTION:		NOT DRAWN TO SCALE
IECEX ZONE 0,1 INTRINSIC SAFE SENSOR CONTROL DRAWING		

A	IECEX INTRINSICALLY SAFE SENSOR CONTROL DRAWING - INITIAL RELEASE	-	CT	CCM	2/12/2026	CCM	2/12/2026
REV	DESCRIPTION	ECO#	DESIGNER	ENG APPROVED	DATE	MFG APPROVED	DATE

CTC TECHNICAL DOCUMENTATION



A	IECEx INTRINSICALLY SAFE SENSOR CONTROL DRAWING - INITIAL RELEASE	-	CT	CCM	2/12/2026	CCM	2/12/2026
REV	DESCRIPTION	ECO#	DESIGNER	ENG APPROVED	DATE	MFG APPROVED	DATE

 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL N/A	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED) XXXX ± 0.0005 XXX ± 0.005 63 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
	PART #: INS10210	SHEET 11/12
DESCRIPTION: IECEx ZONE 0.1 INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE

