

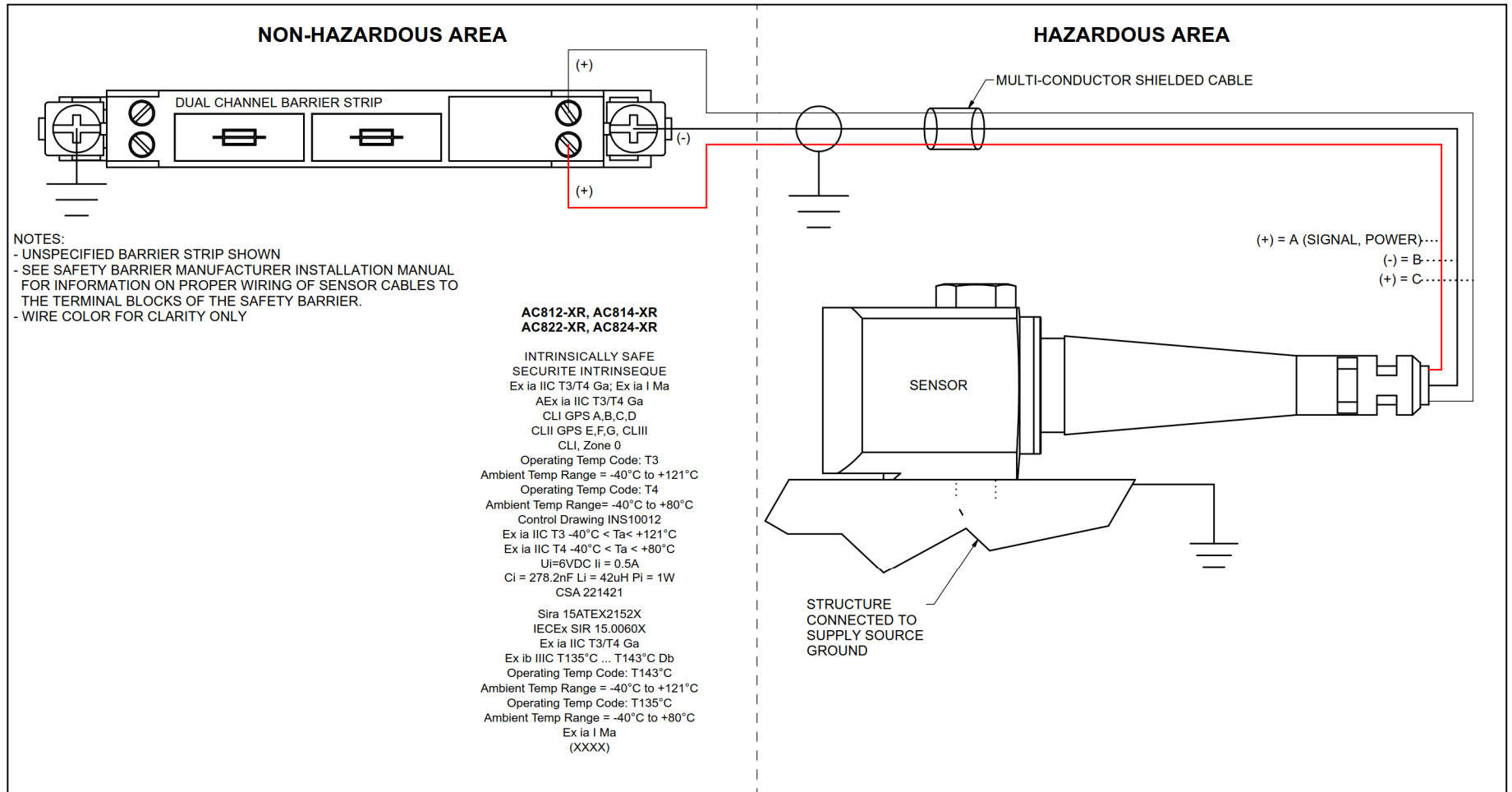


NOTES:

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N	REMOVED CSAE 22UKEX1408X, UPDATED IECEX SIR 15.0060X		CT	CCM	02/25/2025	CCM	02/25/2025
M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
I	REMOVED WT83*, CHANGED TO 120mA	-	CRW	JBD	02/19/2019	AJN	02/19/2019
H	ADDED SINGLE CHANNEL BARRIER WIRINGS, UPDATE LAYOUT OF DRAWINGS AND ADD MODAL TRIAX VARIATION, MOVE ADDRESS TO TITLE BLOCK, SEPERATED TA & BIAxIAL SENSORS	-	CRW/DMG	MGS	04/18/2017	JLS	04/18/2017
G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECOW	DESIGNER	DATE	DATE	DATE	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 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX	
PART #: INS10012		SHEET 1 / 18	
DESCRIPTION: INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE	




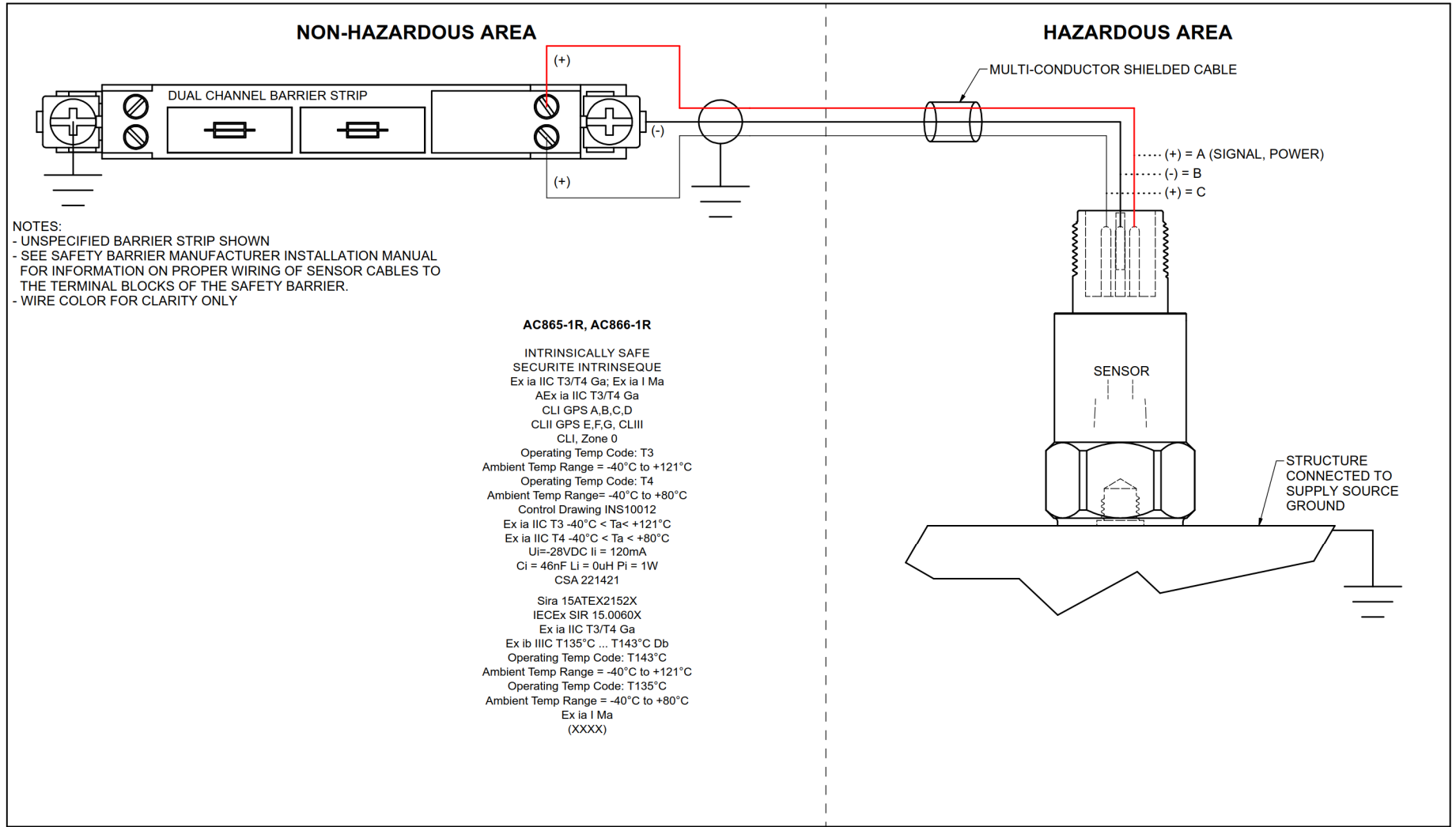
NOTES:

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[(Cable + Ci < Ca) & (Lcable + Li < La)]

N	REMOVED CSAE 22UKEX1408X, UPDATED IECEX SIR 15.0060X		CT	CCM	02/25/2025	CCM	02/25/2025
M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	FCOM	DESIGNER	FILE APPROVED	DATE	FILE 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 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
		63
PART #:		SHEET
INS10012		2 / 18
DESCRIPTION:		
INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE

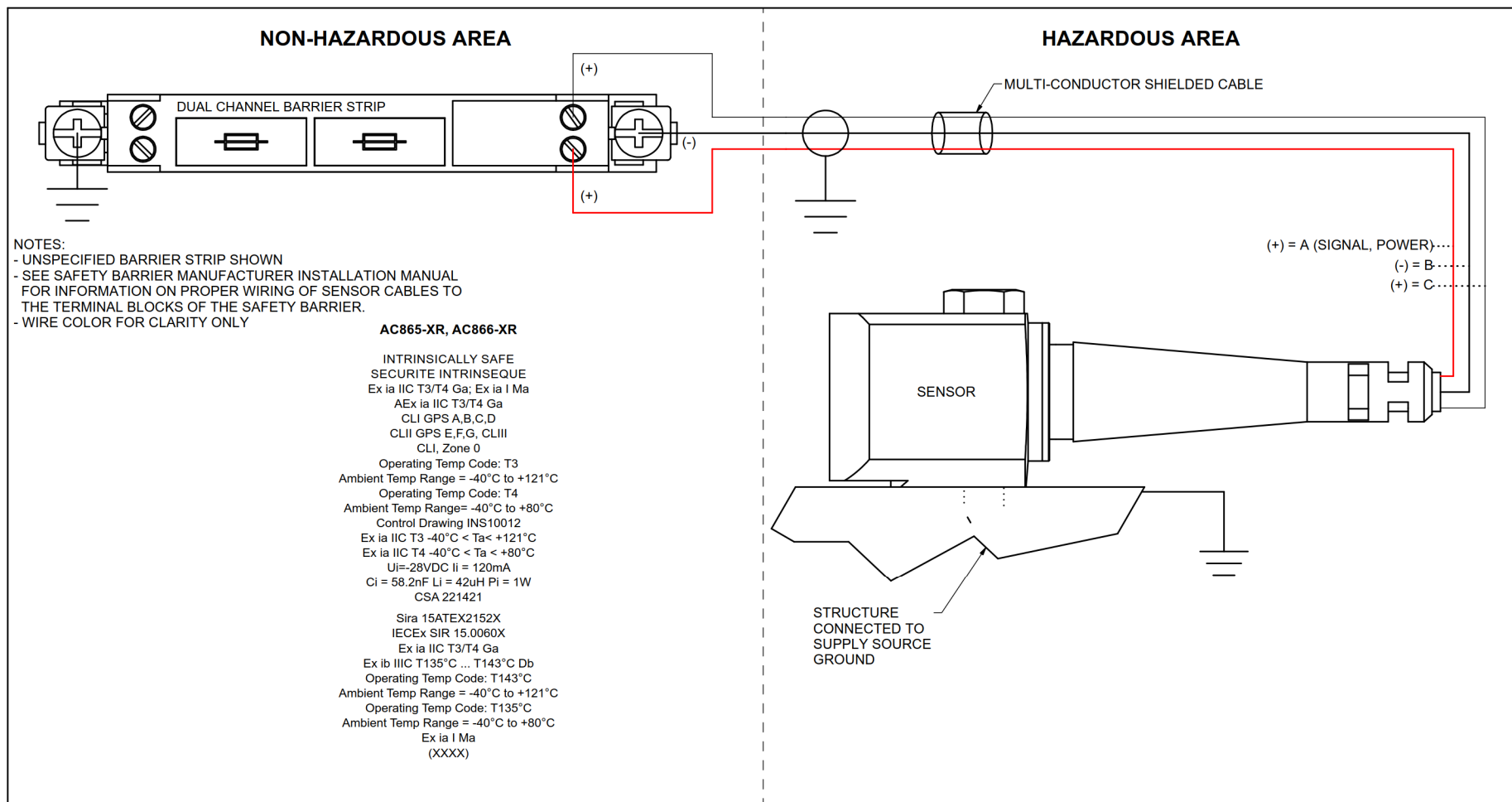


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N	REMOVED CSAE 22UKEX1408X, UPDATED IECEX SIR 15.0060X		CT	CCM	02/25/2025	CCM	02/25/2025
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L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
I	REMOVED WT83*, CHANGED TO 120mA	-	CRW	JBD	02/19/2019	AJN	02/19/2019
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECOM	DESIGNER	DATE APPROVED	DATE	DATE 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	
		XX ± 0.01	
X ± 0.1			
		ANGLE ± 2°	
		BREAK ALL SHARP EDGES .010 MAX	
PART #: INS10012		SHEET 3 / 18	
DESCRIPTION: INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE	

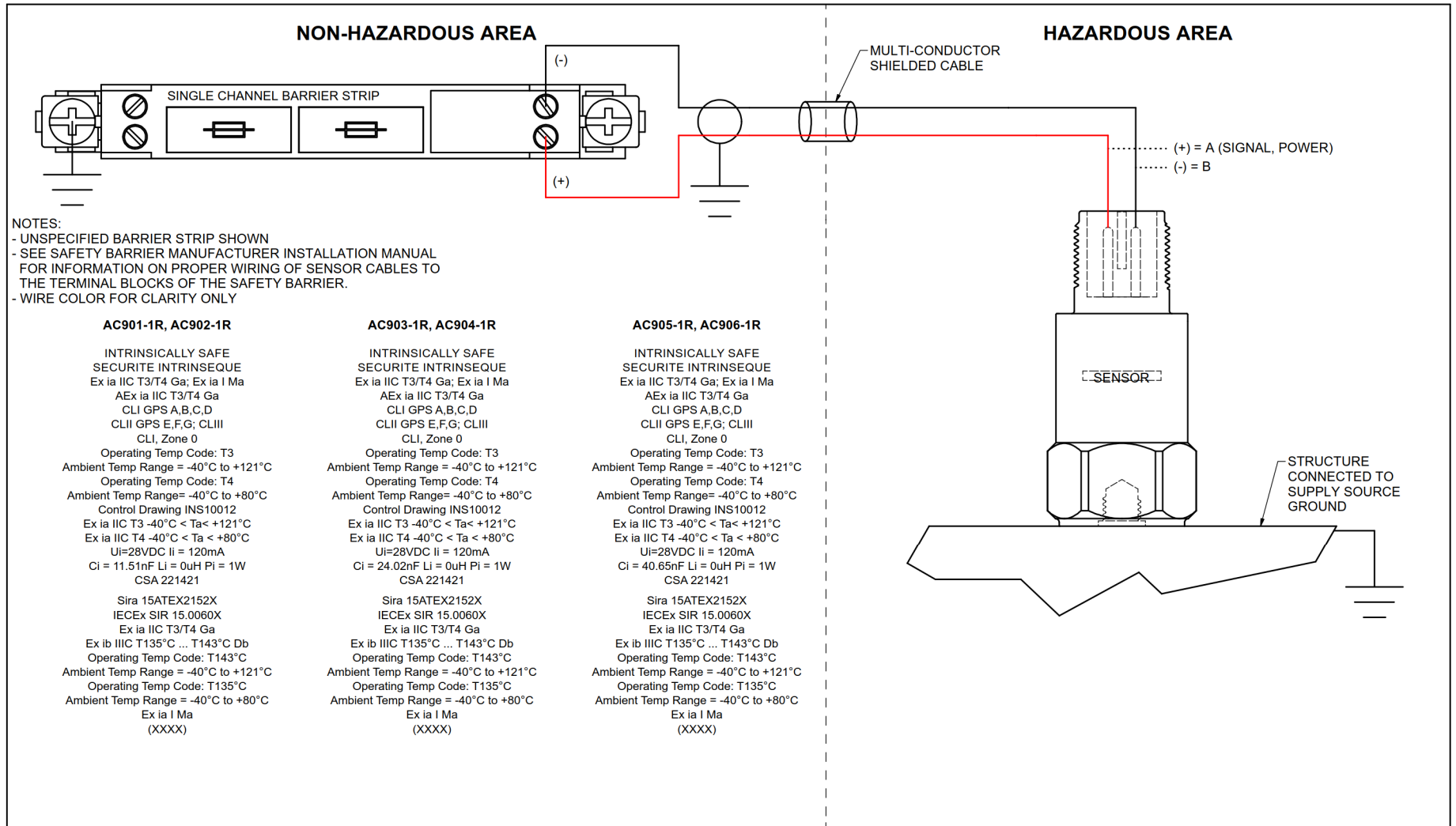


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M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	DESIGNER	DATE	DESIGNER	DATE	DESIGNER	DATE


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PART #:	INS10012	SHEET 4 / 18
DESCRIPTION:	INTRINSIC SAFE SENSOR CONTROL DRAWING	NOT DRAWN TO SCALE

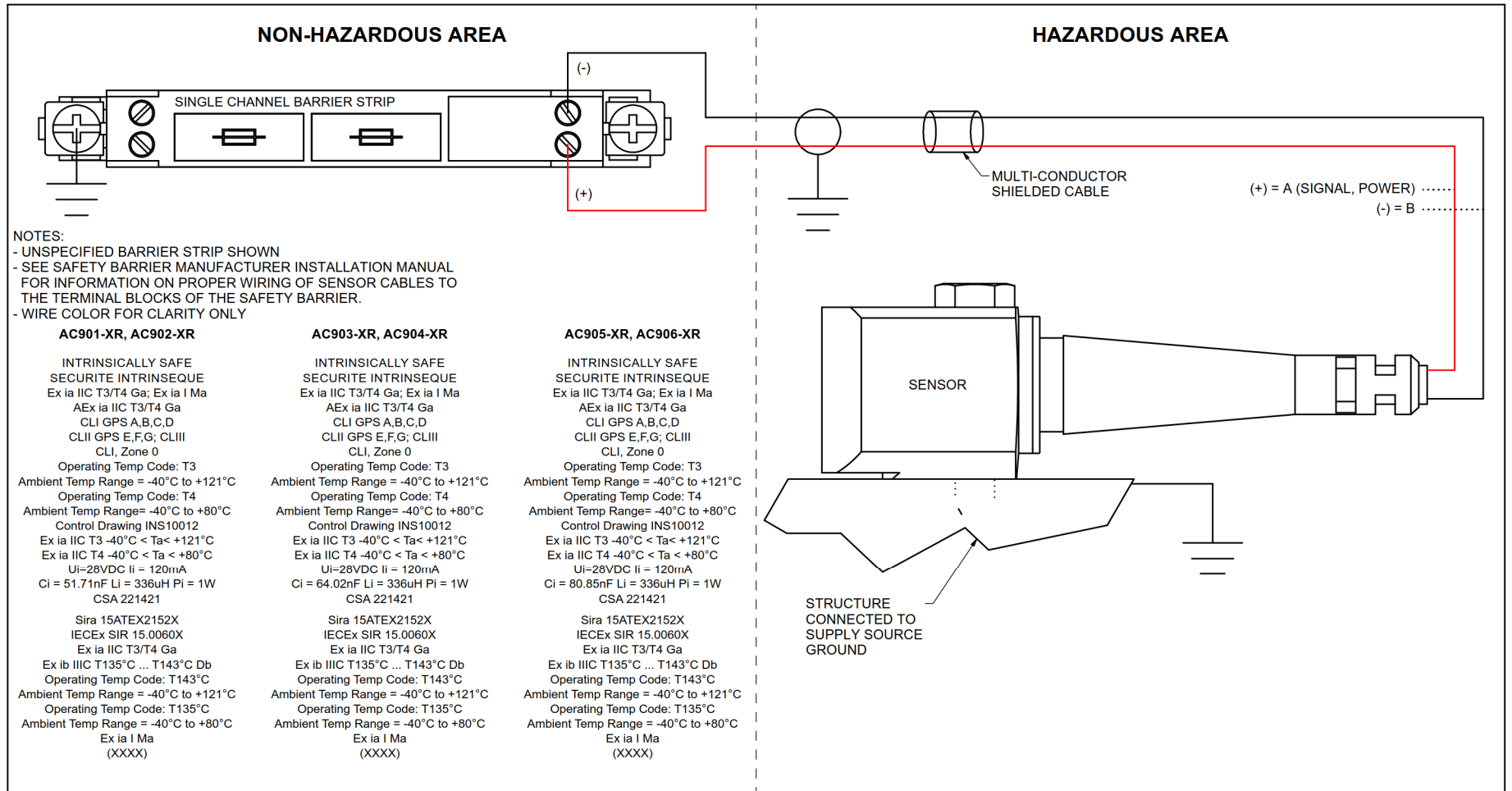


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N	REMOVED CSAE 22UKEX1408X, UPDATED IECEX SIR 15.0060X		CT	CCM	02/25/2025	CCM	02/25/2025
M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECN#	DESIGNER	FILE APPROVED	DATE	FILE 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 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
		63√
PART #:	INS10012	SHEET
DESCRIPTION:		5 / 18
INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE

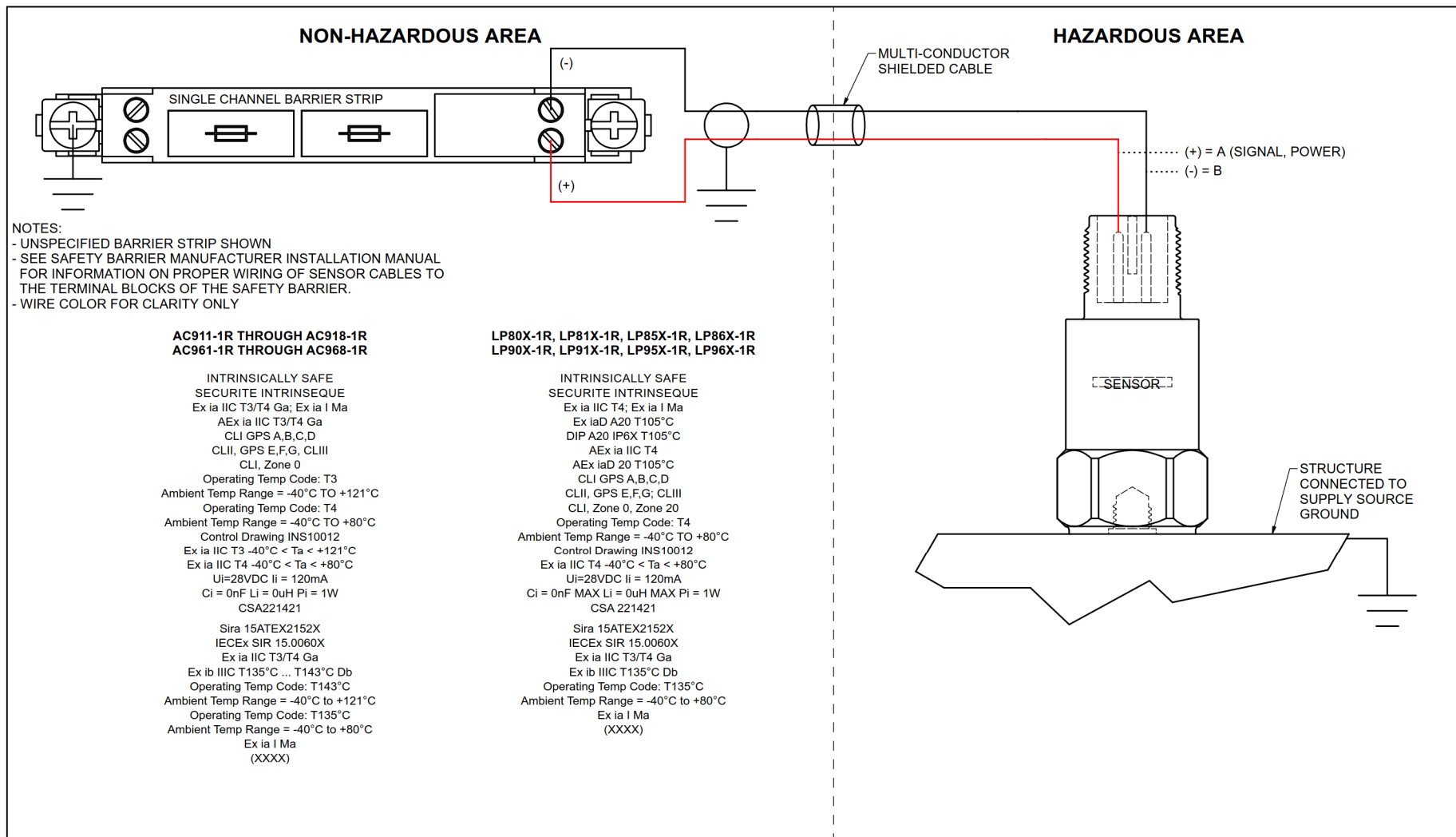


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L	UPDATED TO INCLUDE Ex ia Ma	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	CRW	LC	02/07/2022	JN	02/07/2022
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G	ADDING CTC ADDRESS	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	DESIGNER	DATE	DESIGNER	DATE	DESIGNER


 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL N/A	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED) XXXX ± 0.0005 XXX ± 0.005 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
		63√
PART #: INS10012	SHEET 6 / 18	
DESCRIPTION: INTRINSIC SAFE SENSOR CONTROL DRAWING	NOT DRAWN TO SCALE	

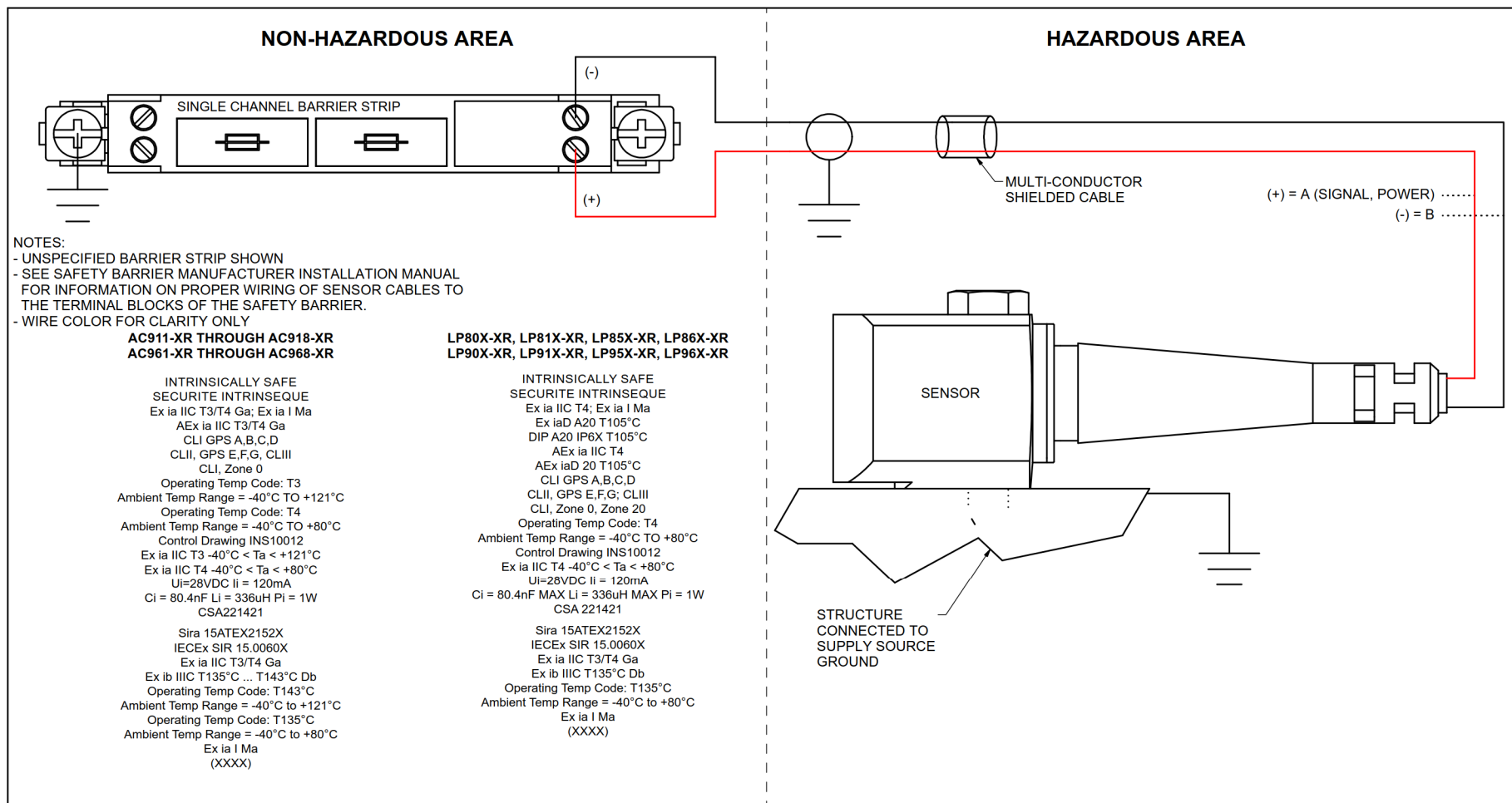


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N	REMOVED CSAE 22UKEX1408X, UPDATED IECEX SIR 15.0060X		CT	CCM	02/25/2025	CCM	02/25/2025
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L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECN#	DESIGNER	FILE APPROVED	DATE	FILE 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 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
		63
PART #: INS10012	SHEET 7 / 18	
DESCRIPTION: INTRINSIC SAFE SENSOR CONTROL DRAWING	NOT DRAWN TO SCALE	

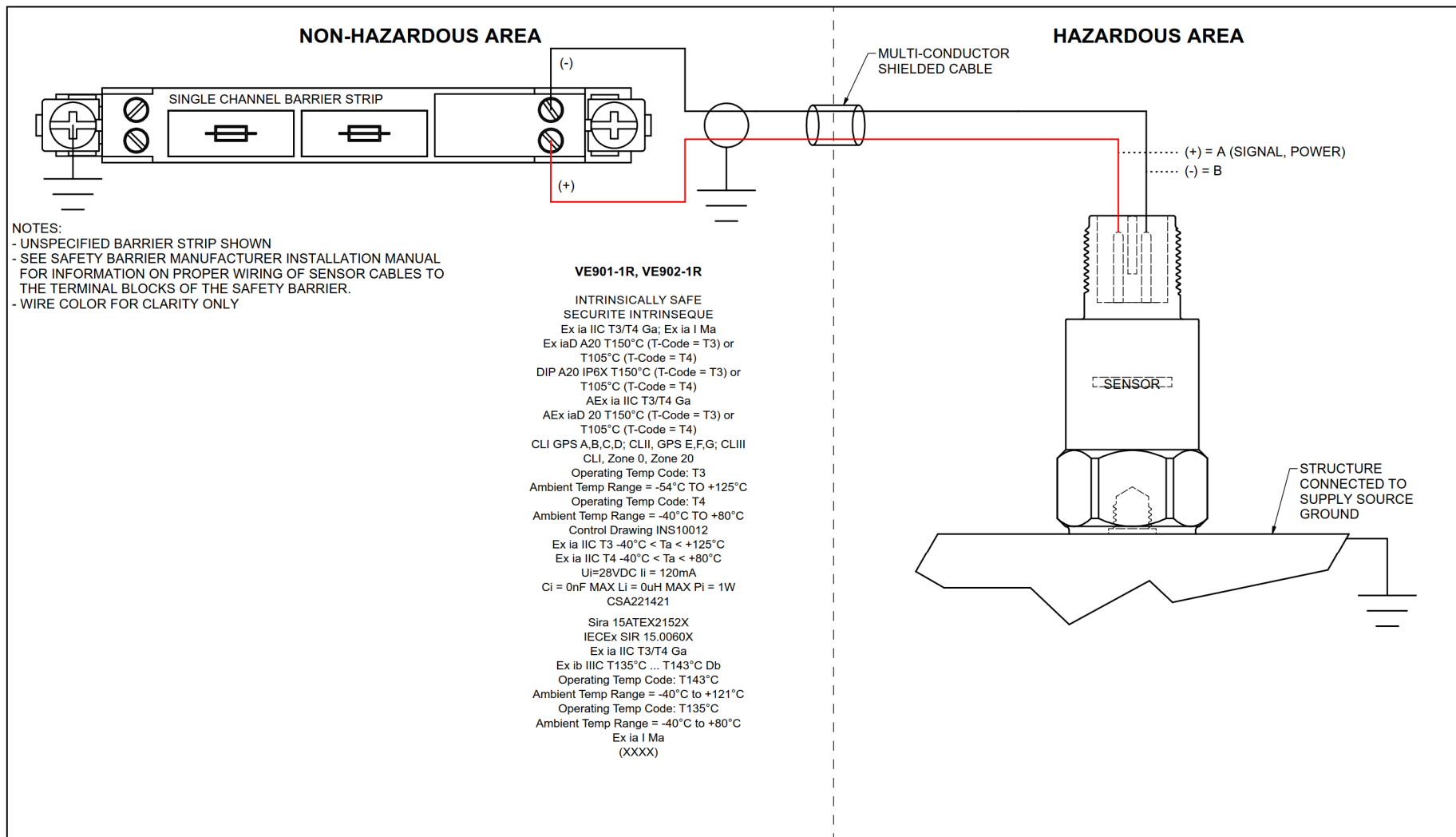


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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	FCOM	DESIGNER	DATE	DATE	DATE	DATE

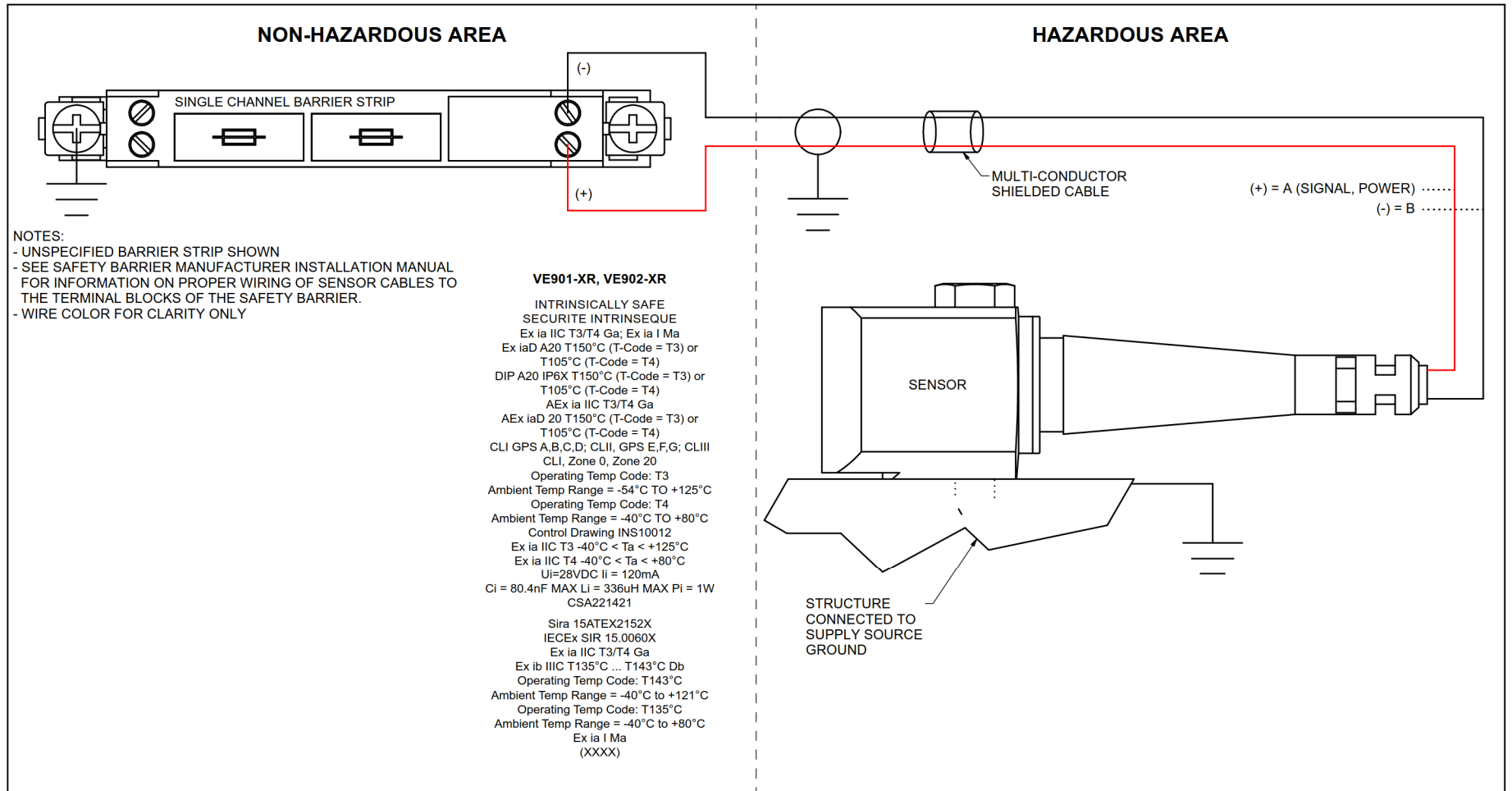
 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL N/A	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED)	63 
		XXXX ± 0.0005	
		XXX ± 0.005	
		XX ± 0.01	
		X ± 0.1	
		ANGLE ± 2°	
		BREAK ALL SHARP EDGES .010 MAX	
PART #:	INS10012		SHEET
			8 / 18
DESCRIPTION:	INTRINSIC SAFE SENSOR CONTROL DRAWING		
			NOT DRAWN TO SCALE



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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECOW	DESIGNER	DATE	DATE	DATE	DATE

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PART #:			SHEET
	INS10012		9 / 18
DESCRIPTION:			
INTRINSIC SAFE SENSOR CONTROL DRAWING			
NOT DRAWN TO SCALE			




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

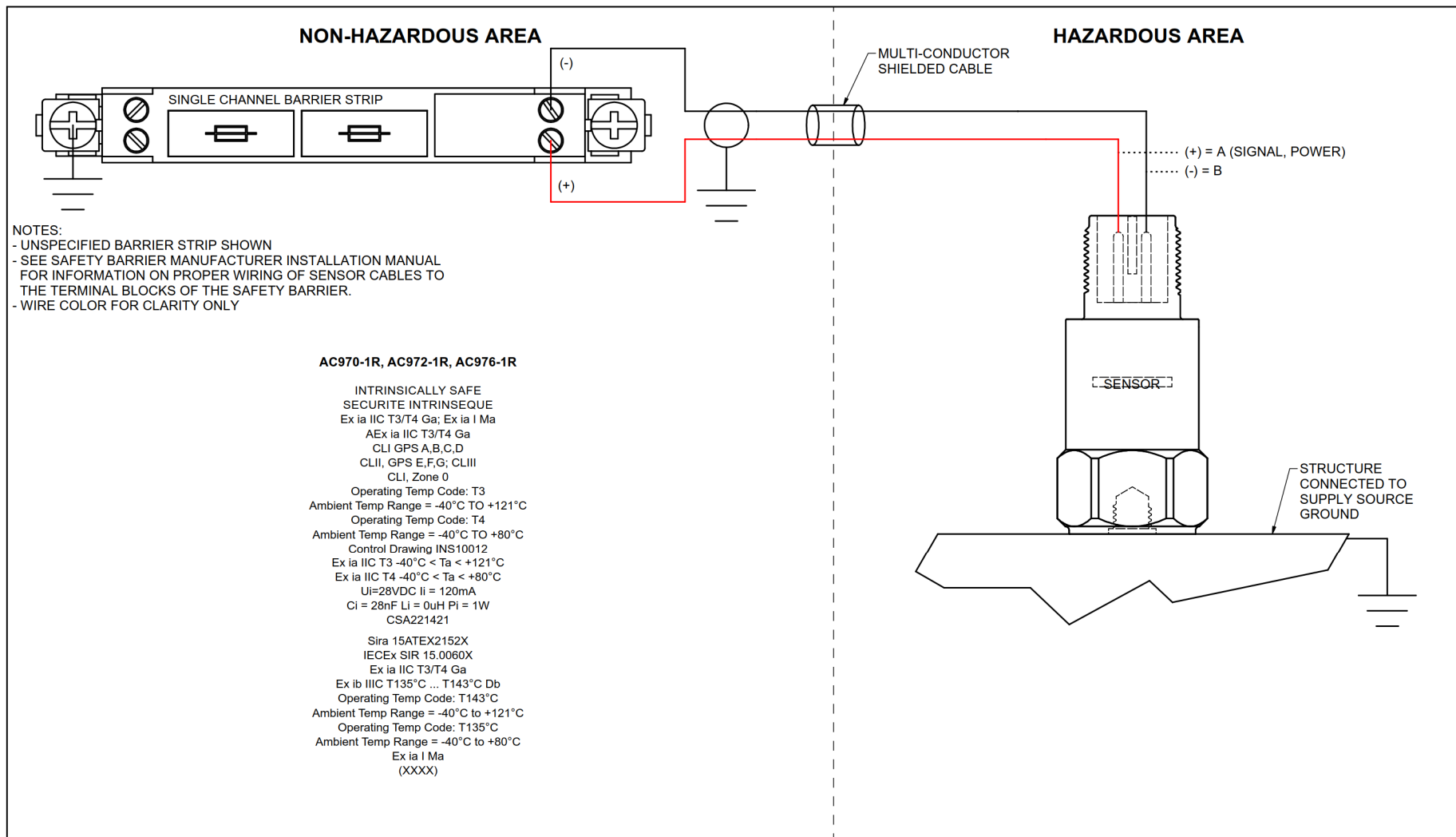
VE901-XR, VE902-XR

INTRINSICALLY SAFE
SECURITE INTRINSEQUE
Ex ia IIC T3/T4 Ga; Ex ia I Ma
Ex iaD A20 T150°C (T-Code = T3) or
T105°C (T-Code = T4)
DIP A20 IP6X T150°C (T-Code = T3) or
T105°C (T-Code = T4)
AEx ia IIC T3/T4 Ga
AEx iaD 20 T150°C (T-Code = T3) or
T105°C (T-Code = T4)
CLI GPS A,B,C,D; CLII, GPS E,F,G; CLIII
CLI, Zone 0, Zone 20
Operating Temp Code: T3
Ambient Temp Range = -54°C TO +125°C
Operating Temp Code: T4
Ambient Temp Range = -40°C TO +80°C
Control Drawing INS10012
Ex ia IIC T3 -40°C < Ta < +125°C
Ex ia IIC T4 -40°C < Ta < +80°C
Ui=28VDC Ii = 120mA
Ci = 80.4nF MAX Li = 336uH MAX Pi = 1W
CSA221421
Sira 15ATEX2152X
IECEX SIR 15.0060X
Ex ia IIC T3/T4 Ga
Ex ib IIIC T135°C ... T143°C Db
Operating Temp Code: T143°C
Ambient Temp Range = -40°C to +121°C
Operating Temp Code: T135°C
Ambient Temp Range = -40°C to +80°C
Ex ia I Ma
(XXXX)

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L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	FCOM	DESIGNER	FILE APPROVED	DATE	FILE APPROVED	DATE



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		<div>63</div> <div>√</div>
PART #:		SHEET
INS10012		10 / 18
DESCRIPTION:		NOT DRAWN TO SCALE
INTRINSIC SAFE SENSOR CONTROL DRAWING		

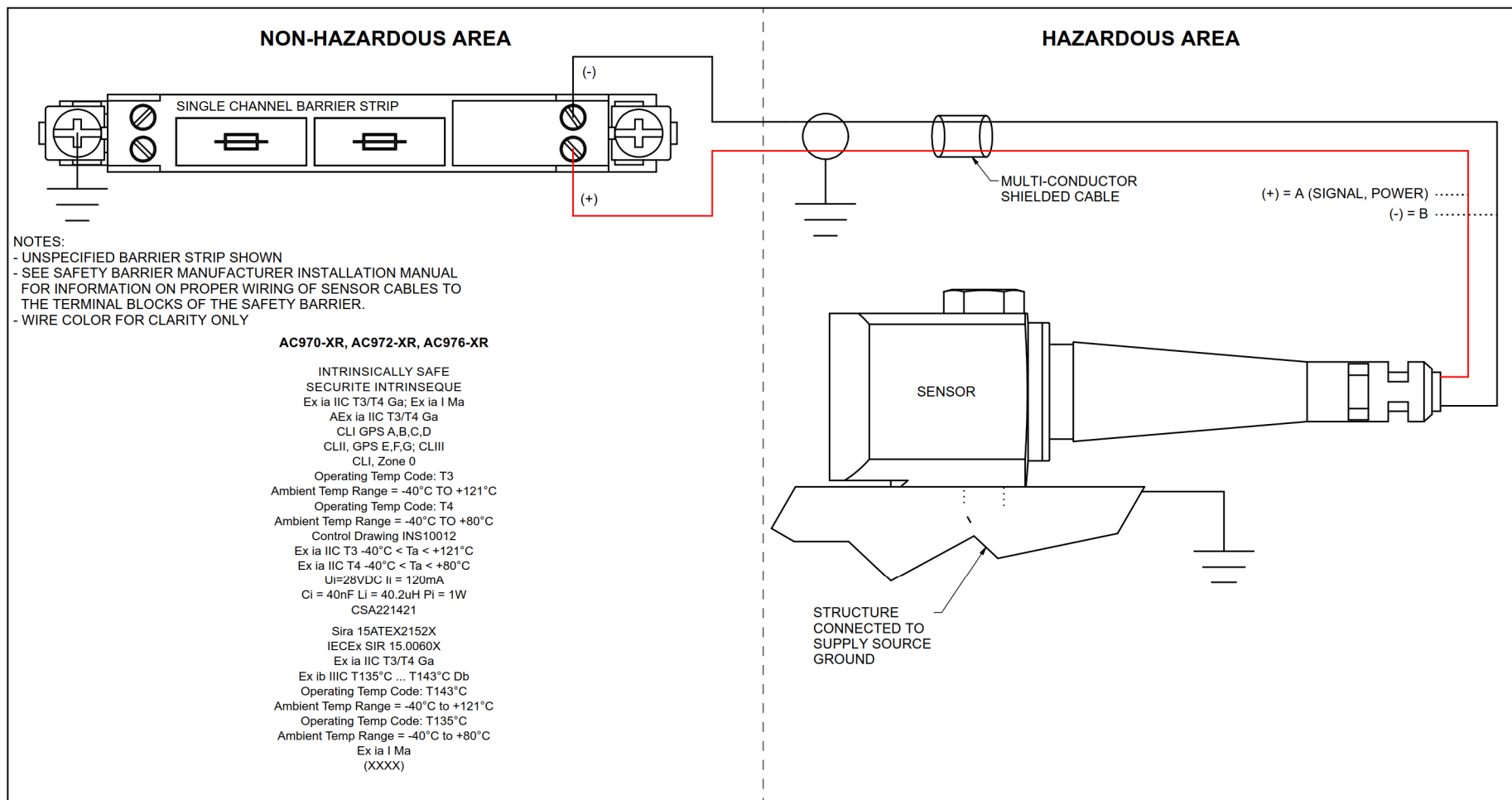


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N	REMOVED CSAE 22UKEX1408X, UPDATED IECEx SIR 15.0060X	CT	CCM	02/25/2025	CCM	02/25/2025
M	UPDATED CSAE 22UKEX1408X	CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	CRW	LC	02/07/2022	JN	02/07/2022
I	REMOVED WT83*, CHANGED TO 120mA	CRW	JBD	02/19/2019	AJN	02/19/2019
H	ADDED SINGLE CHANNEL BARRIER WIRINGS, UPDATE LAYOUT OF DRAWINGS AND ADD MODAL TRIAX VARIATION, MOVE ADDRESS TO TITLE BLOCK, SEPERATED TA & BIAxIAL SENSORS	CRW/DMG	MGS	04/18/2017	JLS	04/18/2017
G	ADDING CTC ADDRESS	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	DESIGNER	DATE	APPROVED	DATE	APPROVED



 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL N/A	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED) XXXX ± 0.0005 XXX ± 0.005 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
		
PART #:	INS10012	SHEET 11 / 18
DESCRIPTION:	INTRINSIC SAFE SENSOR CONTROL DRAWING	NOT DRAWN TO SCALE



NOTES:

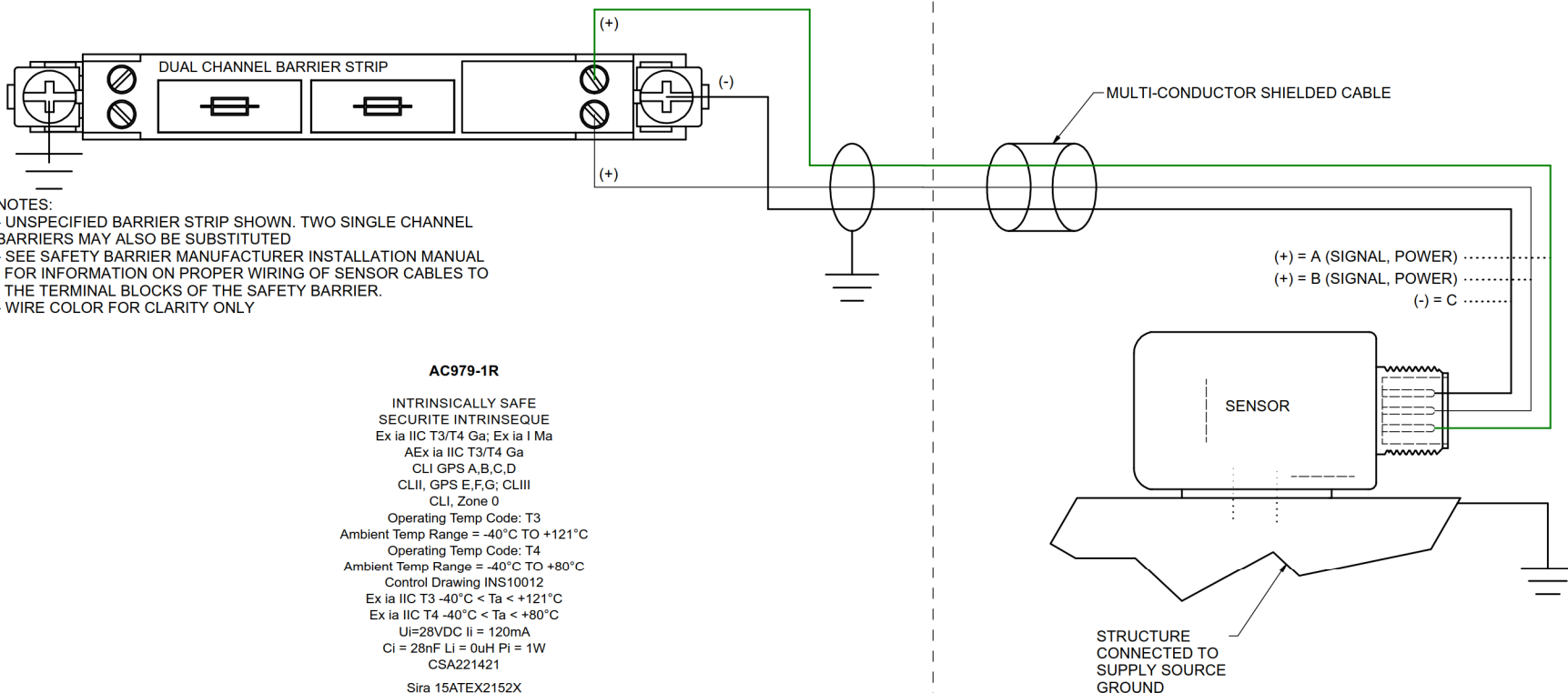
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N	REMOVED CSAE 22UKEX1408X, UPDATED IECEX SIR 15.0060X		CT	CCM	02/25/2025	CCM	02/25/2025
M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
I	REMOVED WT83*, CHANGED TO 120mA	-	CRW	JBD	02/19/2019	AJN	02/19/2019
H	ADDED SINGLE CHANNEL BARRIER WIRINGS, UPDATE LAYOUT OF DRAWINGS AND ADD MODAL TRIAX VARIATION, MOVE ADDRESS TO TITLE BLOCK, SEPERATED TA & BIAxIAL SENSORS	-	CRW/DMG	MGS	04/18/2017	JLS	04/18/2017
G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	FCOM	DESIGNER	DATE	DATE	DATE	DATE

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PART #: INS10012	SHEET 12 / 18	
DESCRIPTION: INTRINSIC SAFE SENSOR CONTROL DRAWING	NOT DRAWN TO SCALE	

NON-HAZARDOUS AREA

HAZARDOUS AREA



NOTES:

- UNSPECIFIED BARRIER STRIP SHOWN. TWO SINGLE CHANNEL BARRIERS MAY ALSO BE SUBSTITUTED
- 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



AC979-1R

INTRINSICALLY SAFE
SECURITE INTRINSEQUE
Ex ia IIC T3/T4 Ga; Ex ia I Ma
AEx ia IIC T3/T4 Ga
CLI GPS A,B,C,D
CLII, GPS E,F,G; CLIII
CLI, Zone 0
Operating Temp Code: T3
Ambient Temp Range = -40°C TO +121°C
Operating Temp Code: T4
Ambient Temp Range = -40°C TO +80°C
Control Drawing INS10012
Ex ia IIC T3 -40°C < Ta < +121°C
Ex ia IIC T4 -40°C < Ta < +80°C
Ui=28VDC li = 120mA
Ci = 28nF Li = 0uH Pi = 1W
CSA221421
Sira 15ATEX2152X
IECEX SIR 15.0060X
Ex ia IIC T3/T4 Ga
Ex ib IIIC T135°C ... T143°C Db
Operating Temp Code: T143°C
Ambient Temp Range = -40°C to +121°C
Operating Temp Code: T135°C
Ambient Temp Range = -40°C to +80°C
Ex ia I Ma
(XXXX)

NOTES:

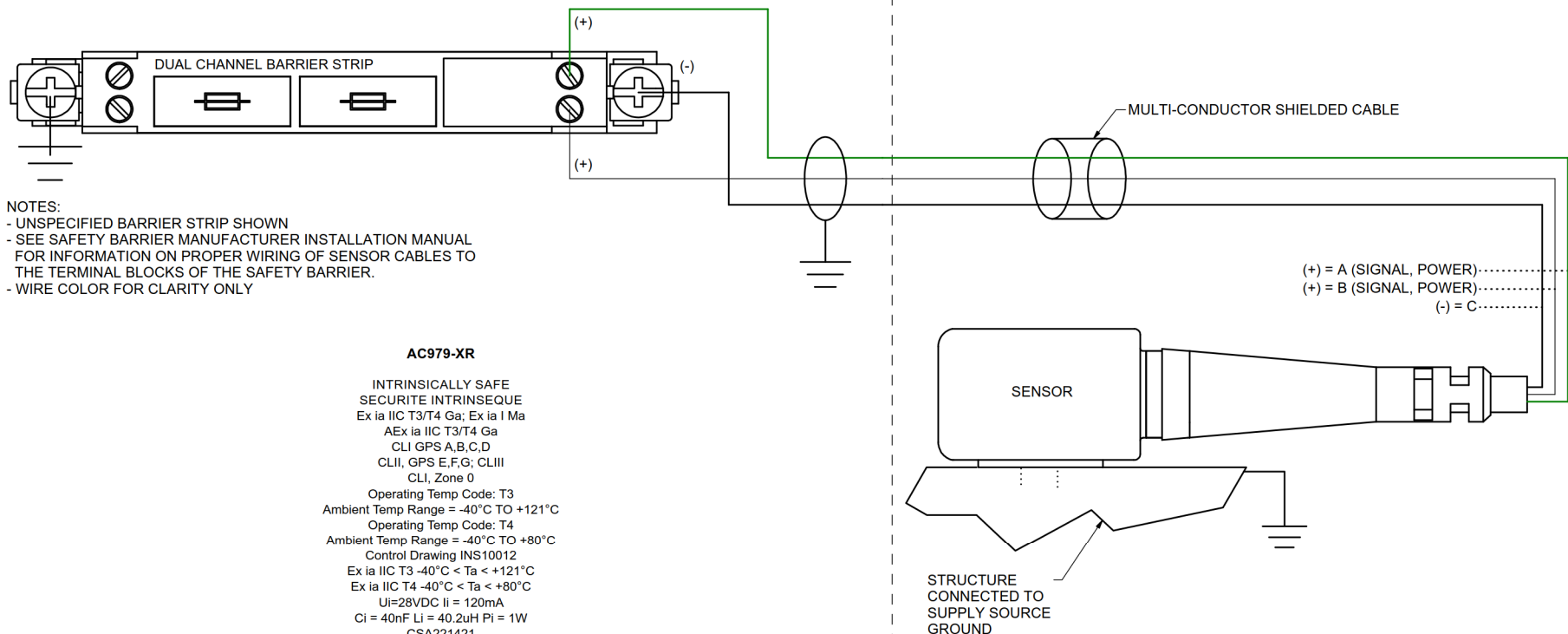
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N	REMOVED CSAE 22UKEX1408X, UPDATED IECEX SIR 15.0060X		CT	CCM	02/25/2025	CCM	02/25/2025
M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
I	REMOVED WT83*, CHANGED TO 120mA	-	CRW	JBD	02/19/2019	AJN	02/19/2019
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECOW	DESIGNER	FILE APPROVED	DATE	FILE APPROVED	DATE

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PART #:	SHEET	
INS10012	13 / 18	
DESCRIPTION:	NOT DRAWN TO SCALE	
INTRINSIC SAFE SENSOR CONTROL DRAWING		

NON-HAZARDOUS AREA



HAZARDOUS AREA

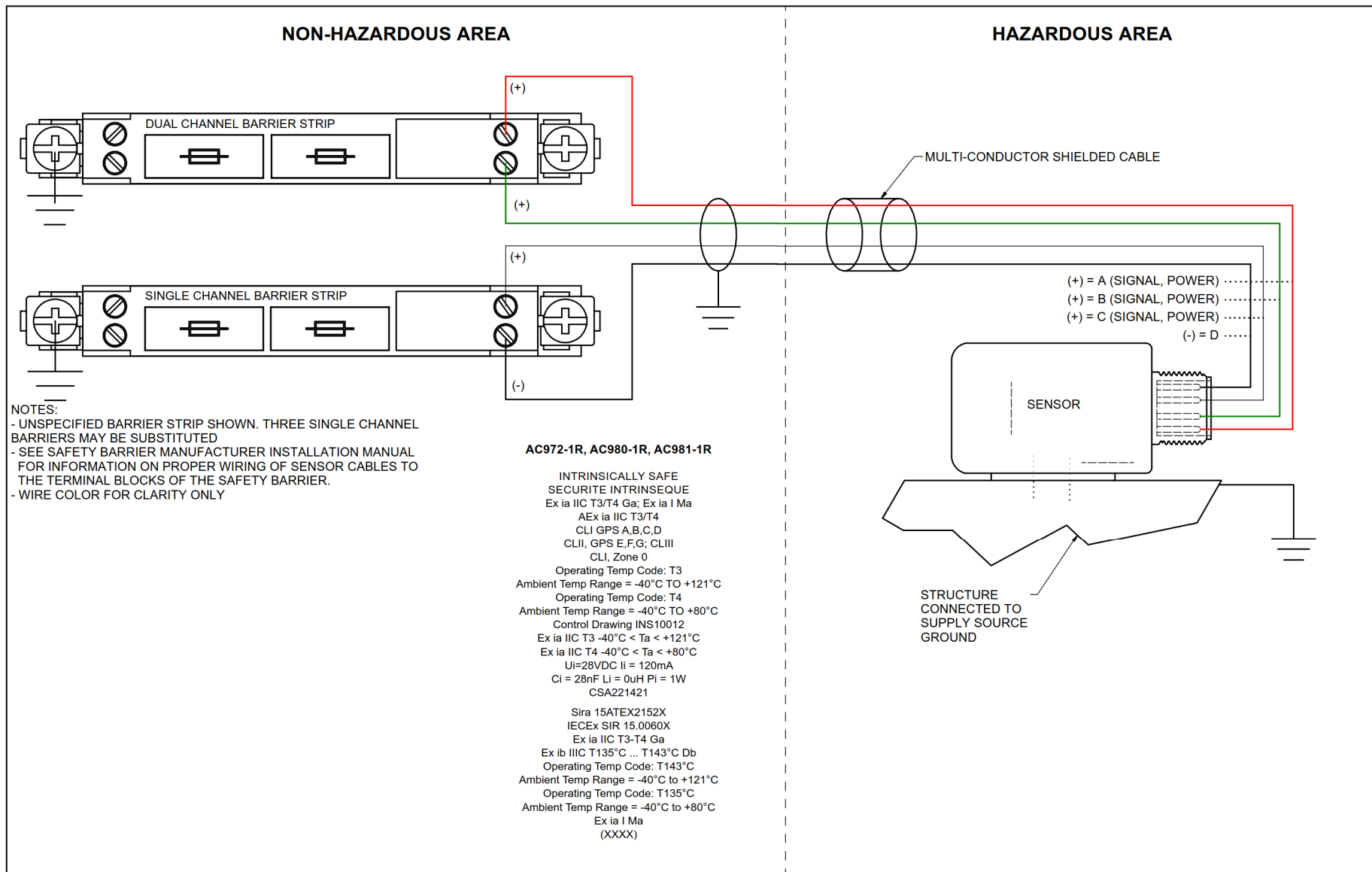


NOTES:

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N	REMOVED CSAE 22UKEX1408X, UPDATED IECEX SIR 15.0060X		CT	CCM	02/25/2025	CCM	02/25/2025
M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
I	REMOVED WT83*, CHANGED TO 120mA	-	CRW	JBD	02/19/2019	AJN	02/19/2019
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECOW	DESIGNER	DATE	DATE	DATE	DATE

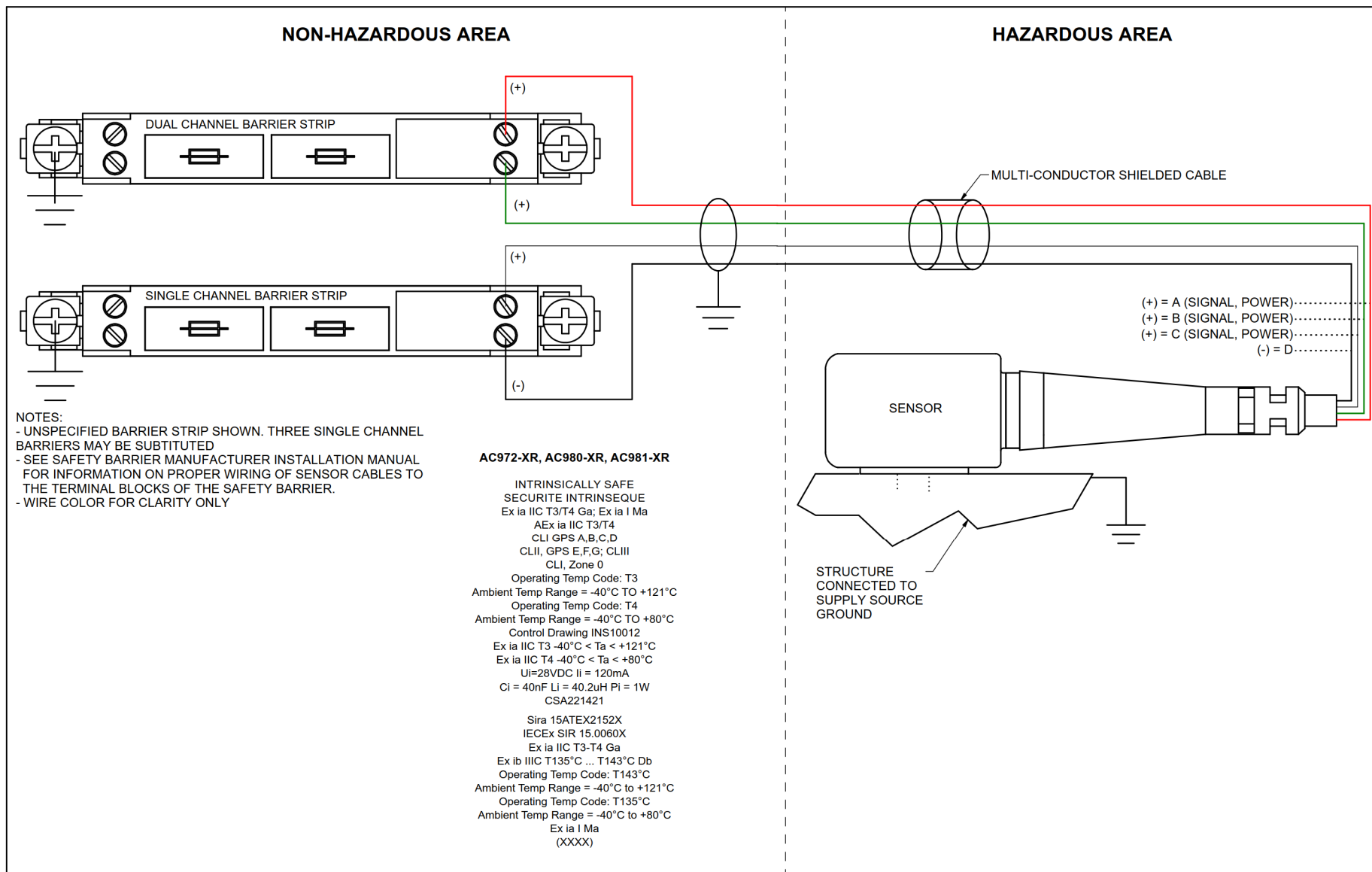
 CONNECTION TECHNOLOGY CENTER, INC	MATERIAL N/A	ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED TOLERANCES (UNLESS SPECIFIED) XXXX ± 0.0005 XXX ± 0.005 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
		
PART #:		SHEET
	INS10012	14 / 18
DESCRIPTION:		
INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE



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M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
I	REMOVED WT83*, CHANGED TO 120mA	-	CRW	JBD	02/19/2019	AJN	02/19/2019
H	ADDED SINGLE CHANNEL BARRIER WIRINGS, UPDATE LAYOUT OF DRAWINGS AND ADD MODAL TRIAX VARIATION, MOVE ADDRESS TO TITLE BLOCK, SEPERATED TA & BIAIXIAL SENSORS	-	CRW/DMG	MGS	04/18/2017	JLS	04/18/2017
G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECN#	DESIGNER	FILE APPROVED	DATE	FILE 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	
XX		± 0.01	
X		± 0.1	
ANGLE	± 2°		
BREAK ALL SHARP EDGES .010 MAX		SHEET 15 / 18	
PART #: INS10012			
DESCRIPTION: INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE	
hong on 25 Mar 25			

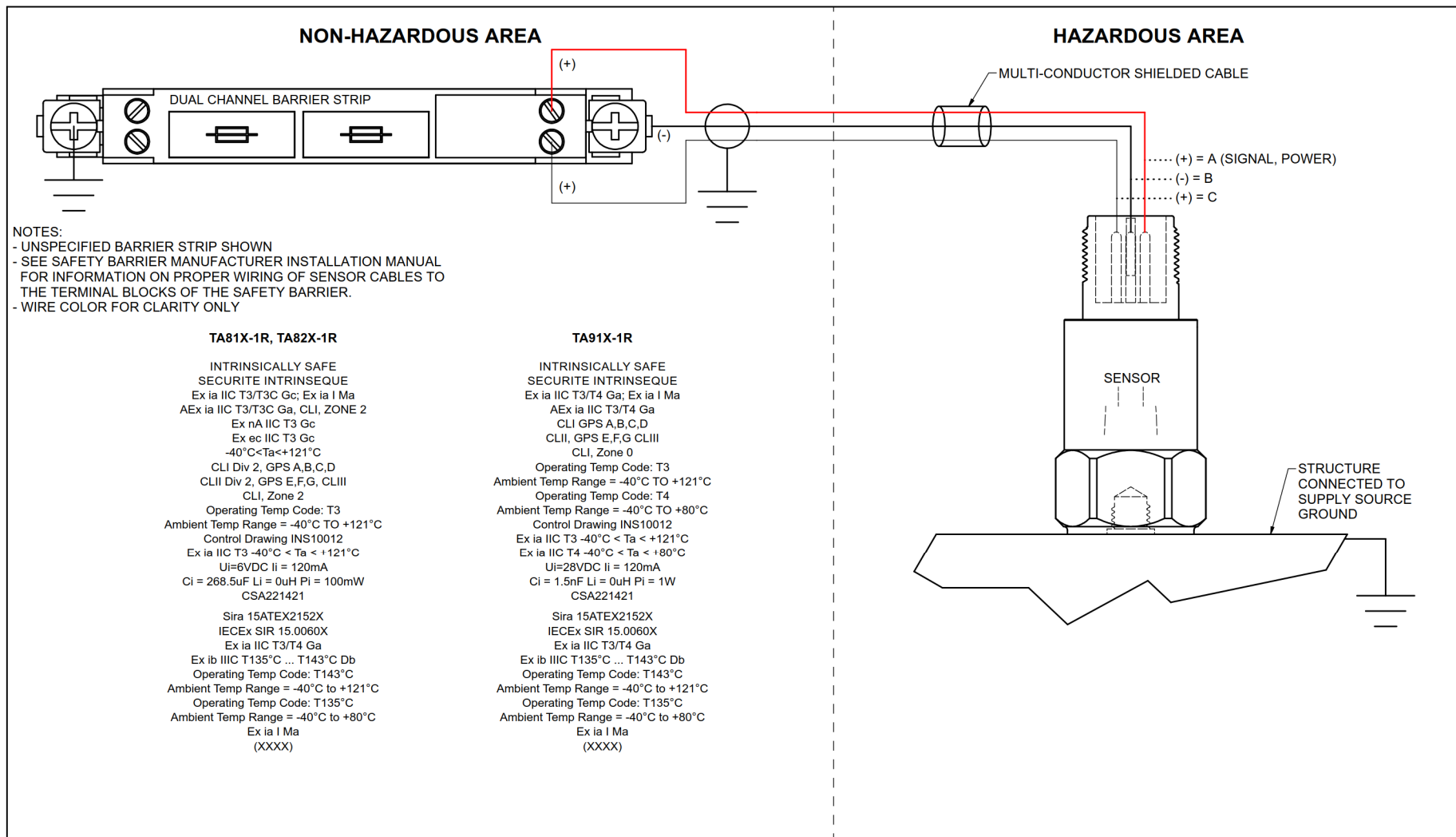


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M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
K	CHANGED FORMAT TO BE MORE SPECIFIC, ADDED UKCA	-	CRW	LC	02/07/2022	JN	02/07/2022
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G	ADDING CTC ADDRESS	-	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECN#	DESIGNER	DATE APPROVED	DATE	ECN#	DATE


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PART #:	INS10012	SHEET
DESCRIPTION:	INTRINSIC SAFE SENSOR CONTROL DRAWING	16 / 18
		NOT DRAWN TO SCALE

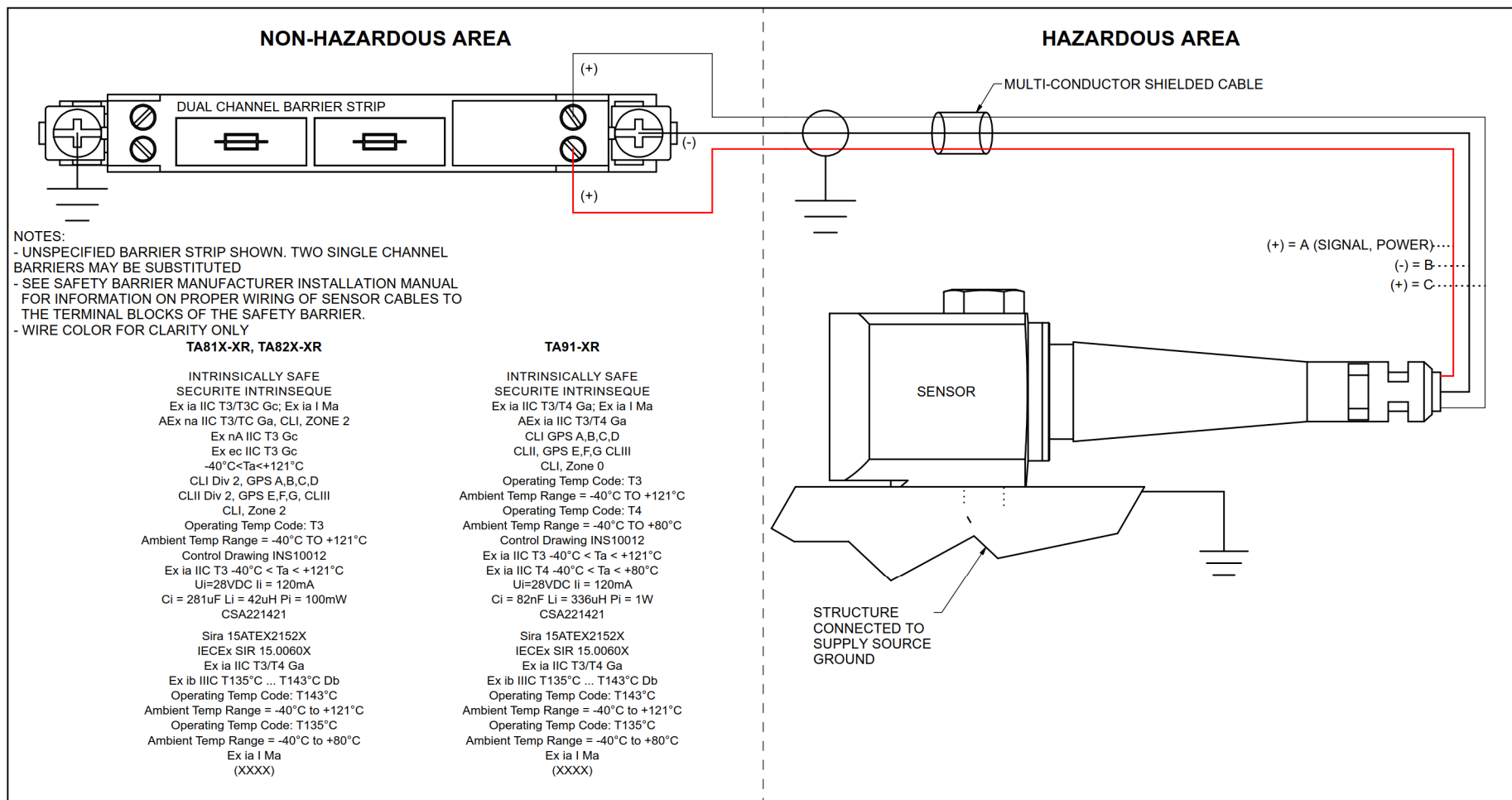


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M	UPDATED CSAE 22UKEX1408X		CRW	JN	03/31/2023	JN	03/31/2023
L	UPDATED TO INCLUDE Ex ia Ma	-	CRW	LC	02/22/2023	JN	02/22/2022
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G	ADDING CTC ADDRESS		CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECN#	DESIGNER	DATE APPROVED	DATE	ECN#	DATE



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		63√
PART #:		SHEET
INS10012		17 / 18
DESCRIPTION:		
INTRINSIC SAFE SENSOR CONTROL DRAWING		NOT DRAWN TO SCALE



NOTES:

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G	ADDING CTC ADDRESS	CRW	TJW	06/15/2015	-	-
REV	DESCRIPTION	ECN#	DESIGNER	DATE APPROVED	DATE / REVISION	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 XX ± 0.01 X ± 0.1 ANGLE ± 2° BREAK ALL SHARP EDGES .010 MAX
		
PART #:	INS10012	SHEET 18 / 18
DESCRIPTION:	INTRINSIC SAFE SENSOR CONTROL DRAWING	NOT DRAWN TO SCALE