

NON-HAZARDOUS AREA

HAZARDOUS (CLASSIFIED) AREA

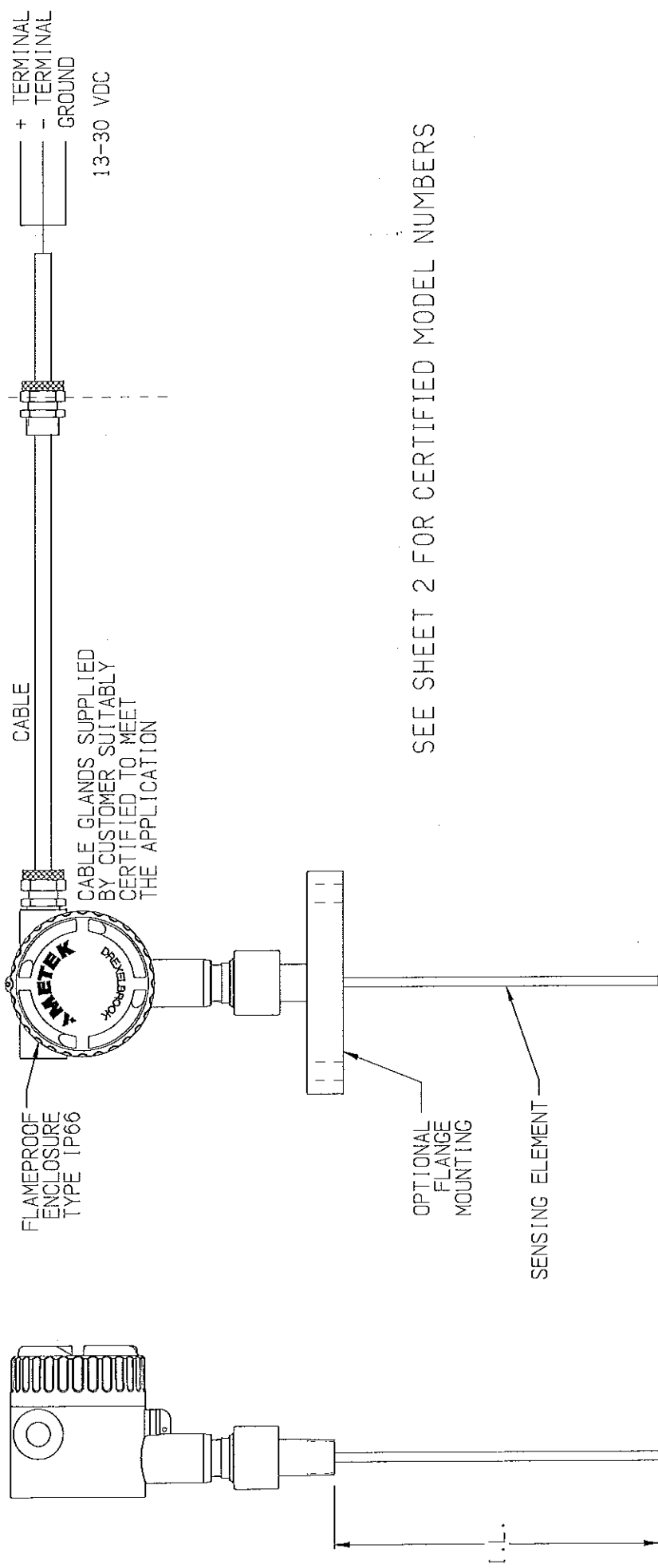
FLAMEPROOF TRANSMITTER  
ENCLOSURE WITH INTRINSICALLY  
SAFE OUTPUT (INTEGRAL PROBE)

-40°C ≤ T<sub>amb</sub> < +75°C; IP66

IECEX FMG11.0024X  
Ex d ia IIB T4 Gb  
Ex ia fb IIC T90°C Db

AIEX FM12ATEX0018X  
II 2 G Ex d ia IIB T4 Gb  
II 2 D Ex ia fb IIC T90°C Db

(SENSING ELEMENTS ARE INTRINSICALLY SAFE FOR ABOVE CLASSIFICATIONS)



SEE SHEET 2 FOR CERTIFIED MODEL NUMBERS

- NOTES:
1. EUROPEAN LOCAL CODES AND INSTALLATION STANDARDS SHALL BE FOLLOWED.
  2. NO REVISION TO DRAWING WITHOUT PRIOR FM APPROVAL.
  3. UNUSED OPENINGS MUST BE PROPERLY SEALED TO MAINTAIN ENCLOSURE ENVIRONMENTAL AND/OR HAZARDOUS LOCATION RATINGS.

CERTIFIED	by _____	7-9-15	SGA	7-9-15	COPYRIGHT 2015
PO #		5-6-15	SGA	5-6-15	AMETEK DREXELBROOK
ENG		11-14-107	SGA	11-25-14	SCALE NONE
USER		7-13-129	SGA	7-29-13	UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (IP66)
DE #		12-12-109	SGA	5-21-13	DR. IDH 7-9-15
ISS.	EDD/DSR NO.	APP/D	DATE	CK.	JEN 7-9-15

**AMETEK®**  
**DREXELBROOK**

205 KEITH VALLEY RD  
HORSHAM, PA 19044-9986  
215-674-1234  
FAX 215-674-2731

ATEX - IECEX  
CONTROL DRAWING FOR  
UNIVERSAL IV (INTEGRAL)  
FLAMEPROOF INSTALLATION

420-0004-424-CD


SHT. 1 OF 10  
ISS. 7

SPECIFIC CONDITIONS FOR USE:  
 THE APPARATUS ENCLOSURE CONTAINS ALUMINUM AND IS CONSIDERED TO  
 CONSTITUTE A POTENTIAL RISK OF IGNITION BY IMPACT OR FRICTION. CARE  
 MUST BE TAKEN INTO ACCOUNT DURING INSTALLATION AND USE TO PREVENT  
 IMPACT OR FRICTION.

CERTIFIED MODELS

Uab10cd000-e-f. Universal IV - Flameproof - Model Code

- a = TYPE P, L, C, T, OR M
- b = FREQUENCY AND PHASING 0, 1, 2, OR 3
- c = APPROVAL 4 (ATEX), 6 (IECEX)
- d = ENTRIES 1 OR 2
- e = SENSING ELEMENT 201, 202, 203, 204, 205, 206, 251, 252, 253, 254, 255,  
256, 257, 258, 259, 260, 261, 262
- f = 24 CHARACTER NUMBERING SYSTEM THAT DOES NOT AFFECT SAFETY

CERTIFIED	by _____	7	7-15-103	SGA	7-9-15	COPYRIGHT 2015	 <p>205 KEITH VALLEY RD          HORSHAN, PA 19044-9986          215-674-1234          FAX 215-674-2731</p>	ATEX - IECEX CONTROL DRAWING FOR UNIVERSAL IV (INTEGRAL) FLAMEPROOF INSTALLATION	SH. 2 OF 10 7
PO # _____	6	2-15-122	SGA	5-6-15	AMETEK DREXELBROOK				
ENG _____	5	11-14-107	SGA	11-25-14	SCALE NONE				
USER _____	4	7-13-129	SGA	7-29-13	UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)				
DE # _____	3	12-12-109	SGA	5-21-13	DR. JDH 7-9-15				
ISS. EDO/DSR NO. APP'D		ISS. _____	DATE	CK. _____	JEN 7-9-15	420-0004-424-CD			

NON-HAZARDOUS AREA

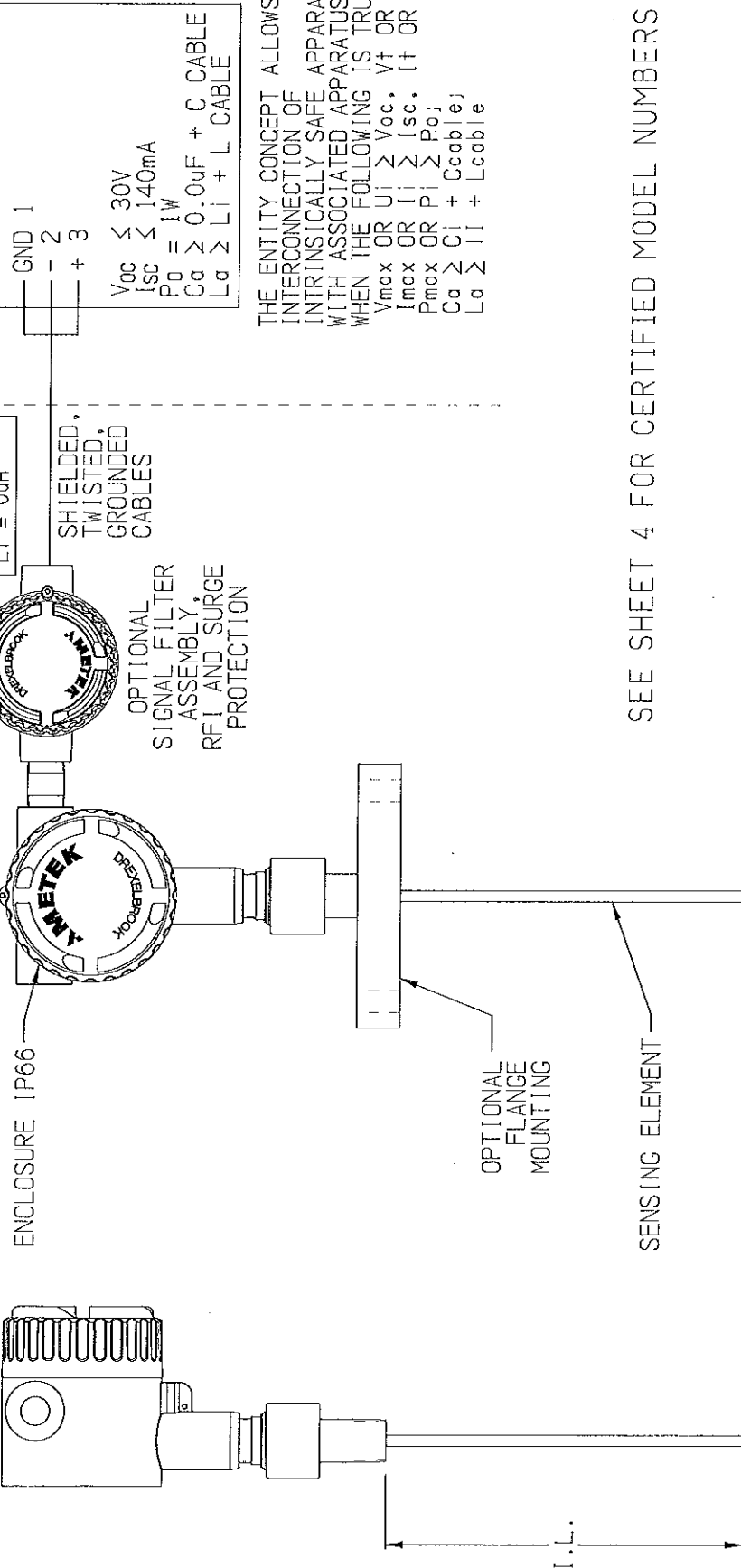
HAZARDOUS (CLASSIFIED) AREA

IECEX FMG11.0024X  
Ex ia IIC T4 Ga

ATEX FM12ATEX0018X  
II 1 G Ex ia IIC T4 Ga

-40°C ≤ Tamb < +75°C; IP66

(SENSING ELEMENTS ARE INTRINSICALLY SAFE FOR ABOVE CLASSIFICATIONS)



FM APPROVED ASSOCIATED APPARATUS

GND 1  
- 2  
+ 3

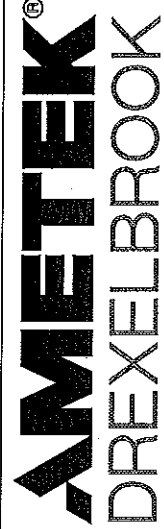
$V_{oc} \leq 30V$   
 $I_{sc} \leq 140mA$   
 $P_o = 1W$   
 $C_a \geq 0.0\mu F + C \text{ CABLE}$   
 $L_a \geq L_i + L \text{ CABLE}$

THE ENTITY CONCEPT ALLOWS INTERCONNECTION OF INTRINSICALLY SAFE APPARATUS WITH ASSOCIATED APPARATUS WHEN THE FOLLOWING IS TRUE:  
 $V_{max} \text{ OR } U_i \geq V_{oc}, V_f \text{ OR } U_o;$   
 $I_{max} \text{ OR } I_i \geq I_{sc}, I_f \text{ OR } I_o;$   
 $P_{max} \text{ OR } P_i \geq P_o;$   
 $C_a \geq C_i + C_{cable};$   
 $L_a \geq L_i + L_{cable}$

SEE SHEET 4 FOR CERTIFIED MODEL NUMBERS

- NOTES:
1. EUROPEAN LOCAL CODES AND INSTALLATION STANDARDS SHALL BE FOLLOWED.
  2. NO REVISION TO DRAWING WITHOUT PRIOR FM APPROVAL.
  3. CONTROL EQUIPMENT CONNECTED TO ASSOCIATED APPARATUS MUST NOT USE OR GENERATE MORE THAN 250 V<sub>rms</sub> OR V<sub>dc</sub>.
  4. ASSOCIATED APPARATUS MANUFACTURER'S INSTALLATION DRAWING MUST BE FOLLOWED WHEN INSTALLING THIS EQUIPMENT.
  5. WARNING - SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.
  6. UNUSED OPENINGS MUST BE PROPERLY SEALED TO MAINTAIN ENCLOSURE ENVIRONMENTAL AND/OR HAZARDOUS LOCATION RATINGS.

CERTIFIED		7	7-15-103	SGA	7-9-15	COPYRIGHT 2015	ATEX - IECEX CONTROL DRAWING FOR UNIVERSAL IV (INTEGRAL) IS ENTITY INSTALLATION	
PO #	by	6	2-15-122	SGA	5-6-15	AMETEK DREXELBROOK	ISS. 3 OF 10	
ENG		5	11-14-107	SGA	11-25-14	SCALE NONE	420-0004-424-CD	
USER		4	7-13-129	SGA	7-29-13	UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)	SHT. 3 OF 10	
ISS. #	EDO/DSR NO.	3	12-12-109	SGA	5-21-13	DR. JDH 7-9-15	7	
DE #	APP'D					CK. JEN 7-9-15	215-674-1234 FAX 215-674-2731	
	DATE					205 KEITH VALLEY RD HORSHAM, PA 19044-9986		



SPECIFIC CONDITIONS FOR USE:  
 THE APPARATUS ENCLOSURE CONTAINS ALUMINUM AND IS CONSIDERED TO  
 CONSTITUTE A POTENTIAL RISK OF IGNITION BY IMPACT OR FRICTION. CARE  
 MUST BE TAKEN INTO ACCOUNT DURING INSTALLATION AND USE TO PREVENT  
 IMPACT OR FRICTION.

CERTIFIED MODELS

Uab10cde00-f-g. Universal IV - Integral Intrinsically Safe - Model Code

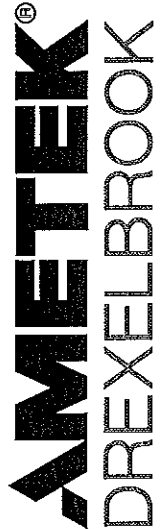
a = TYPE P, L, C, T, OR M  
 b = FREQUENCY AND PHASING 0, 1, 2, OR 3  
 c = APPROVAL 3 (ATEX), 5 (IECEX)  
 d = ENTRIES 1 OR 2  
 e = SURGE SUPPRESSION 0 OR 1  
 f = SENSING ELEMENT R00, R01, R02, R03, R04, R05, 201, 202, 203, 204, 205,  
 206, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262,  
 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313,  
 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326,  
 327, 328, 329, 330, 331, 332, 333, 334, 335, 501, 502, 503, 504,  
 505, 506, 507, 508, 509, 510, 511, 512, 513, 601, 603, 604, 605,  
 606, 607, 608, 609, 610, 611, 613, 703, 705, 706, 708, 709, 713,  
 714, 715, 722, ZZZ

g = 24 CHARACTER NUMBERING SYSTEM THAT DOES NOT AFFECT SAFETY

ZZZ = SPECIAL SENSING ELEMENT  
 700- ANY 7 DIGIT NUMERIC COMBINATION

NOTES:

1. MAXIMUM PROCESS TEMPERATURE 290°C
2. MAXIMUM SENSOR CAPACITANCE < 1uF
3. MAXIMUM INSERTION LENGTH RIGID SENSOR 30 FEET (9.144 METERS)
4. MAXIMUM INSERTION LENGTH FLEXIBLE SENSOR 2000 FEET (609.6 METERS)
5. SENSING ELEMENT ENCLOSURE IP66 (IP RATING DOES NOT APPLY TO SPECIAL SENSORS SUPPLIED WITHOUT A 285- SERIES SENSING ELEMENT ENCLOSURE).

CERTIFIED	7	7-15-103	SGA	7-9-15	COPYRIGHT 2015		ATEX - IECEX CONTROL DRAWING FOR UNIVERSAL IV (INTEGRAL) IS ENTITY INSTALLATION
PC #	6	2-15-122	SGA	5-6-15	AMETEK DREXELBROOK		
ENG	5	11-14-107	SGA	11-25-14	SCALE NONE		
USER	4	7-13-129	SGA	7-29-13	UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)		
DE #	3	12-12-109	SGA	5-21-13	DR. TDH 7-9-15		
ISS.		EDD/DSR NO.	APP'D	DATE	CK.	JEN 7-9-15	420-0004-424-CD SHT. 4 OF 10 ISS. 7

NON-HAZARDOUS AREA

HAZARDOUS (CLASSIFIED) AREA

EXPLOSIONPROOF TRANSMITTER  
ENCLOSURE WITH INTRINSICALLY  
SAFE OUTPUT (REMOTE PROBE)

-40°C ≤ T<sub>amb</sub> < +75°C; IP66

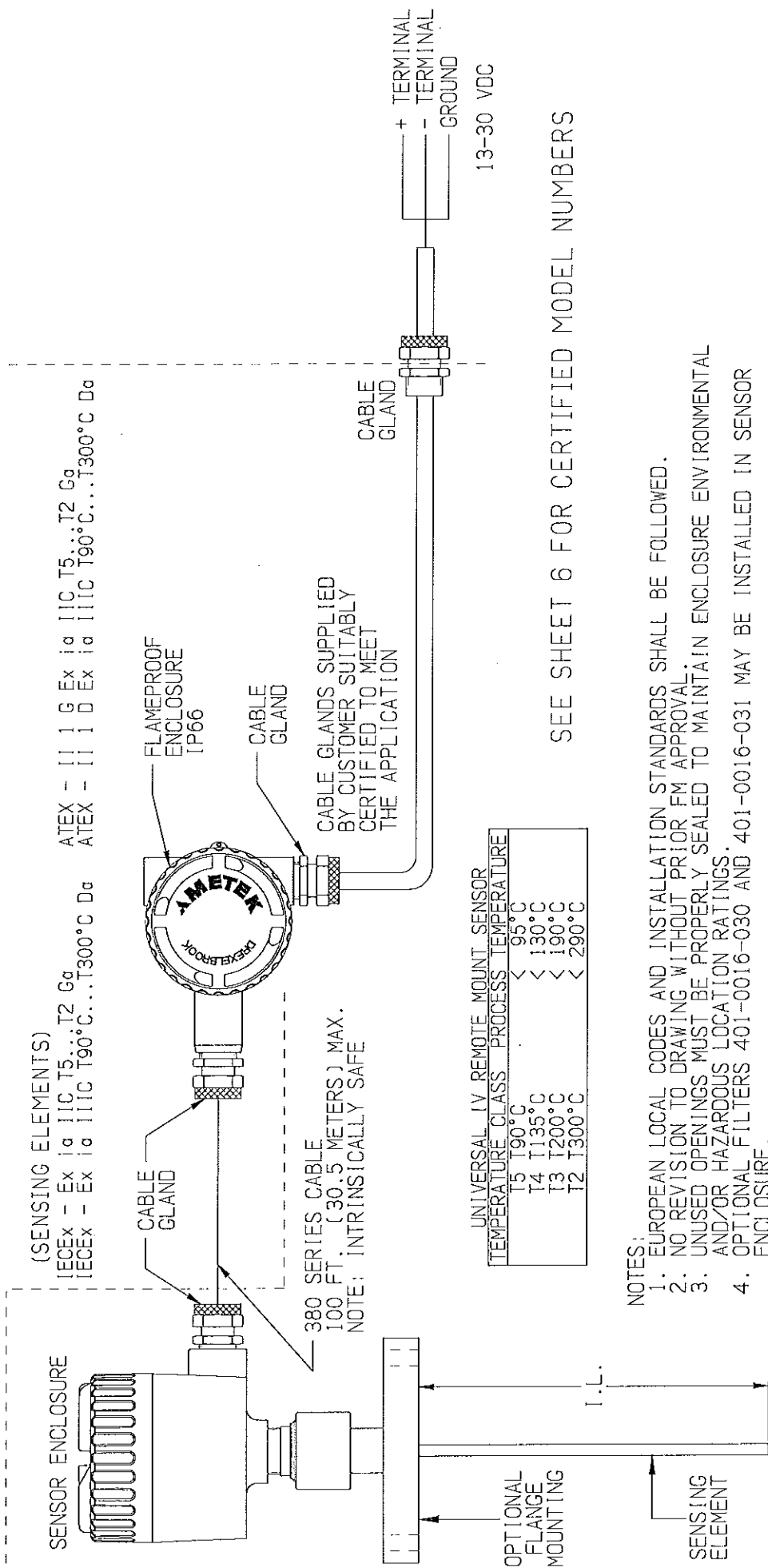
IECEX FMG11.0024X  
Ex d [ia] IIB T4 Gb  
Ex fb [ia] IIIC T90°C Db

ATEX FM12ATEX0018X  
II 2 (1) G Ex d [ia] IIB T4 Gb  
II 2 (1) D Ex fb [ia] IIIC T90°C Db

(SENSING ELEMENTS)

IECEX - Ex ia IIC T5...T2 G<sub>a</sub>  
IECEX - Ex ia IIC T90°C...T300°C D<sub>a</sub>

ATEX - II 1 G Ex ia IIC T5...T2 G<sub>a</sub>  
ATEX - II 1 D Ex ia IIC T90°C...T300°C D<sub>a</sub>



TEMPERATURE CLASS	PROCESS TEMPERATURE
T5 T90°C	< 95°C
T4 T135°C	< 130°C
T3 T200°C	< 190°C
T2 T300°C	< 290°C

SEE SHEET 6 FOR CERTIFIED MODEL NUMBERS

NOTES:

1. EUROPEAN LOCAL CODES AND INSTALLATION STANDARDS SHALL BE FOLLOWED.
2. NO REVISION TO DRAWING WITHOUT PRIOR FM APPROVAL.
3. UNUSED OPENINGS MUST BE PROPERLY SEALED TO MAINTAIN ENCLOSURE ENVIRONMENTAL AND/OR HAZARDOUS LOCATION RATINGS.
4. OPTIONAL FILTERS 401-0016-030 AND 401-0016-031 MAY BE INSTALLED IN SENSOR ENCLOSURE.

CERTIFIED	by _____	7-9-15	SGA	7-9-15	COPYRIGHT 2015
PO # _____		5-6-15	SGA	5-6-15	AMETEK DREXELBROOK
ENG _____		11-25-14	SGA	11-25-14	SCALE NONE
USER _____		7-29-13	SGA	7-29-13	UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)
DE # _____		5-21-13	SGA	5-21-13	DR. IDH 7-9-15
ISS. EDO/DSR NO. APP'D	DATE	CK. JEN 7-9-15			

**AMETEK®**  
**DREXELBROOK**

205 KEITH VALLEY RD  
HORSHAM, PA 19044-9986

215-674-1234  
FAX 215-674-2731

ATEX - IECEX  
CONTROL DRAWING FOR  
UNIVERSAL IV (REMOTE)  
FLAMEPROOF INSTALLATION

420-0004-424-CD

SHT. 5  
OF 10

ISS. 7

SPECIFIC CONDITIONS FOR USE:  
 THE APPARATUS ENCLOSURE CONTAINS ALUMINUM AND IS CONSIDERED TO  
 CONSTITUTE A POTENTIAL RISK OF IGNITION BY IMPACT OR FRICTION. CARE  
 MUST BE TAKEN INTO ACCOUNT DURING INSTALLATION AND USE TO PREVENT  
 IMPACT OR FRICTION.

CERTIFIED MODELS

Uab10def0-g-h. Universal IV - Remote Flameproof - Model Code

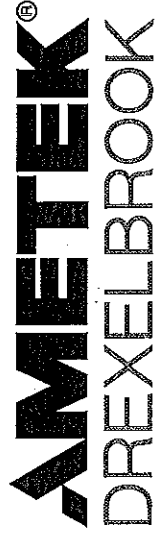
a = TYPE P, L, OR C  
 b = FREQUENCY AND PHASING 0, 1, 2, OR 3  
 c = APPROVAL 4 (ATEX), 6 (IECEX)  
 d = ENTRIES 1 OR 2  
 e = SURGE SUPPRESSION 0, 4, OR D  
 f = REMOTE CONFIGURATION 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, OR Z  
 g = SENSING ELEMENT R09, 000, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 513, 601, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, ZZZ  
 h = 24 CHARACTER NUMBERING SYSTEM THAT DOES NOT AFFECT SAFETY.

ZZZ = SPECIAL SENSING ELEMENT  
 700- ANY 7 DIGIT NUMERIC COMBINATION

NOTES:

1. MAXIMUM PROCESS TEMPERATURE 290°C
2. MAXIMUM SENSOR CAPACITANCE < 1uF
3. MAXIMUM INSERTION LENGTH RIGID SENSOR 30 FEET (9.144 METERS)
4. MAXIMUM INSERTION LENGTH FLEXIBLE SENSOR 2000 FEET (609.6 METERS)
5. SENSING ELEMENT ENCLOSURE IP66 (IP RATING DOES NOT APPLY TO SPECIAL SENSORS SUPPLIED WITHOUT A 285- SERIES SENSING ELEMENT ENCLOSURE).

CERTIFIED	7	7-15-103	SGA	7-9-15	COPYRIGHT 2015
PO #	6	2-15-122	SGA	5-6-15	AMETEK DREXELBROOK
ENG	5	11-14-107	SGA	11-25-14	SCALE NONE
USER	4	7-13-129	SGA	7-29-13	UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)
DE #	3	12-12-109	SGA	5-21-13	DR. JDH 7-9-15
ISS.	EDD/DSR	NO. APP'D	DATE	CK.	JEN 7-9-15



205 KEITH VALLEY RD  
 HORSHAM, PA 19044-9986

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 FAX 215-674-2731

ATEX - IECEX  
 CONTROL DRAWING FOR  
 UNIVERSAL IV (REMOTE)  
 FLAMEPROOF  
 INSTALLATION

420-0004-424-CD

SHT. 6  
 OF 10

ISS. 7

NON-HAZARDOUS AREA

HAZARDOUS (CLASSIFIED) AREA

IECEX FMG11.0024X  
 Ex ia IIC T4 Gc  
 Ex #b [ia] IIC T90°C Db

ATEX FM12ATEX0018X  
 II 1 G Ex ia IIC T4 Gc  
 II 2 (1) D Ex #b [ia] IIC T90°C Db

ENCLOSURE IP66  
 -40°C <  $T_{AMB}$  < +75°C; IP66  
 (SENSING ELEMENTS)  
 IECEX - Ex ia IIC T5...T2 Gc  
 IECEX - Ex ia IIC T90°C...T300°C Da  
 ATEX - II 1 G Ex ia IIC T5...T2 Gc  
 ATEX - II 1 D Ex ia IIC T90°C...T300°C Da

OPTIONAL PROBE FILTER ASSEMBLY,  
 RFI AND SURGE PROTECTION

SEE SHEET 8  
 FOR CERTIFIED  
 MODEL NUMBERS

380 SERIES CABLE  
 100 FT. (30.5 METERS) MAX.  
 NOTE: INTRINSICALLY SAFE

TEMPERATURE CLASS	PROCESS TEMPERATURE
T5	190°C
T4	135°C
T3	1200°C
T2	190°C
T2	290°C

UNIVERSAL IV REMOTE MOUNT SENSOR

NOTES:

1. EUROPEAN LOCAL CODES AND INSTALLATION STANDARDS SHALL BE FOLLOWED.
2. NO REVISION TO DRAWING WITHOUT PRIOR FM APPROVAL.
3. CONTROL EQUIPMENT CONNECTED TO ASSOCIATED APPARATUS MUST NOT USE OR GENERATE MORE THAN 250 Vrms OR Vdc.
4. ASSOCIATED APPARATUS MANUFACTURER'S INSTALLATION DRAWING MUST BE FOLLOWED WHEN INSTALLING THIS EQUIPMENT.
5. WARNING - SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY.
6. UNUSED OPENINGS MUST BE PROPERLY SEALED TO MAINTAIN ENCLOSURE ENVIRONMENTAL AND/OR HAZARDOUS LOCATION RATINGS.
7. OPTIONAL FILTERS 401-0016-030 AND 401-0016-031 MAY BE INSTALLED IN SENSOR ENCLOSURE.

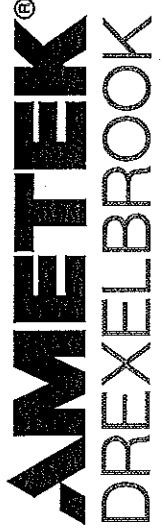
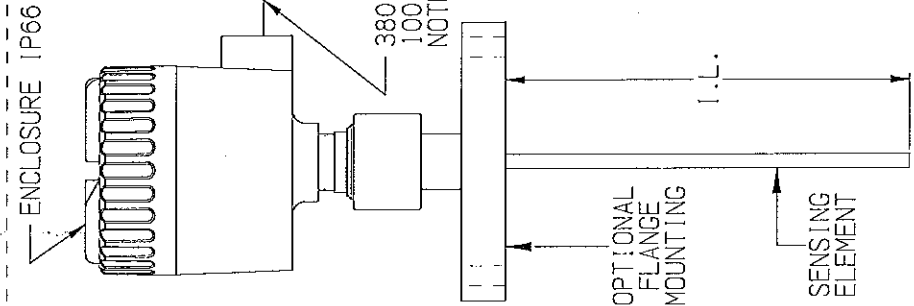
THE ENTITY CONCEPT ALLOWS  
 INTERCONNECTION OF  
 INTRINSICALLY SAFE APPARATUS  
 WITH ASSOCIATED APPARATUS  
 WHEN THE FOLLOWING IS TRUE:  
 $V_{max}$  OR  $U_i \geq V_{oc}$ ,  $V_f$  OR  $U_{o_j}$   
 $I_{max}$  OR  $I_i \geq I_{sc}$ ,  $I_f$  OR  $I_{o_j}$   
 $P_{max}$  OR  $P_i \geq P_{o_j}$   
 $C_a \geq C_i + C_{cable}$ ;  
 $L_a \geq L_i + L_{cable}$

FM APPROVED  
 ASSOCIATED  
 APPARATUS

GND 1  
 - 2  
 + 3

$V_{oc} \leq 30V$   
 $I_{sc} \leq 140mA$   
 $P_o = 1W$   
 $C_a \geq 0.0\mu F + C_{CABLE}$   
 $L_a \geq L_i + L_{CABLE}$

SHIELDED, TWISTED, GROUNDED CABLES



205 KEITH VALLEY RD  
 HORSHAM, PA 19044-9986

215-674-1234  
 FAX 215-674-2731

CERTIFIED	by	7-15-103	SGA	7-9-15	COPYRIGHT	2015
PO #		2-15-122	SGA	5-6-15	AMETEK DREXELBROOK	
ENG		11-14-107	SGA	11-25-14	SCALE NONE	
USER		7-13-129	SGA	7-29-13	UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)	
DE #		12-12-109	SGA	5-21-13	DR. JDH 7-9-15	
ISS. EDO/DSR NO.	APP'D	DATE	CK.	JEN 7-9-15		

ATEX - IECEX  
 CONTROL DRAWING FOR  
 UNIVERSAL IV (REMOTE)  
 IS ENTITY INSTALLATION

420-0004-424-CD

SHT. 7  
 OF 10

SPECIFIC CONDITIONS FOR USE:  
 THE APPARATUS ENCLOSURE CONTAINS ALUMINUM AND IS CONSIDERED TO CONSTITUTE A POTENTIAL RISK OF IGNITION BY IMPACT OR FRICTION. CARE MUST BE TAKEN INTO ACCOUNT DURING INSTALLATION AND USE TO PREVENT IMPACT OR FRICTION.

CERTIFIED MODELS


Uab10cdef0-g-h. Universal IV - Remote Intrinsically Safe - Model Code

- a = TYPE P, L, OR C
- b = FREQUENCY AND PHASING 0, 1, 2, OR 3
- c = APPROVAL 3 (ATEX), 5 (IECEx)
- d = ENTRIES 1 OR 2
- e = SURGE SUPPRESSION 0, 1, 2, 3, 4, 5, 6, 7, OR D
- f = REMOTE CONFIGURATION 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, OR Z
- g = SENSING ELEMENT R09, 000, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 513, 601, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754
- h = 24 CHARACTER NUMBERING SYSTEM THAT DOES NOT AFFECT SAFETY

ZZZ = SPECIAL SENSING ELEMENT  
 700- ANY 7 DIGIT NUMERIC COMBINATION

NOTES:

1. MAXIMUM PROCESS TEMPERATURE 290°C
2. MAXIMUM SENSOR CAPACITANCE < 1uF
3. MAXIMUM INSERTION LENGTH RIGID SENSOR 30 FEET (9.144 METERS)
4. MAXIMUM INSERTION LENGTH FLEXIBLE SENSOR 2000 FEET (609.6 METERS)
5. SENSING ELEMENT ENCLOSURE IP66 (IP RATING DOES NOT APPLY TO SPECIAL SENSORS SUPPLIED WITHOUT A 285- SERIES SENSING ELEMENT ENCLOSURE).

CERTIFIED PC # ENG USER  DE #	by _____	7 6 5 4 3	7-15-103 2-15-122 11-14-107 7-13-129 12-12-109	SGA SGA SGA SGA SGA	7-9-15 5-6-15 11-25-14 7-29-13 5-21-13	COPYRIGHT 2015 AMETEK DREXELBROOK  SCALE NONE <small>UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)</small>  DR. TDH 7-9-15		ATEX - IECEx CONTROL DRAWING FOR UNIVERSAL IV (REMOTE) IS ENTITY INSTALLATION	
ISS, EDO/DSR NO., APP'D DATE	CK. JEN 7-9-15					215-674-1234 FAX 215-674-2731	420-0004-424-CD SHT. 8 OF 10		



NON-HAZARDOUS AREA

HAZARDOUS (CLASSIFIED) AREA

FLAMEPROOF TRANSMITTER ENCLOSURE WITH INTRINSICALLY SAFE OUTPUT (INTEGRAL PROBE)

-40°C ≤ T<sub>AMB</sub> ≤ +75°C; IP66

U1V

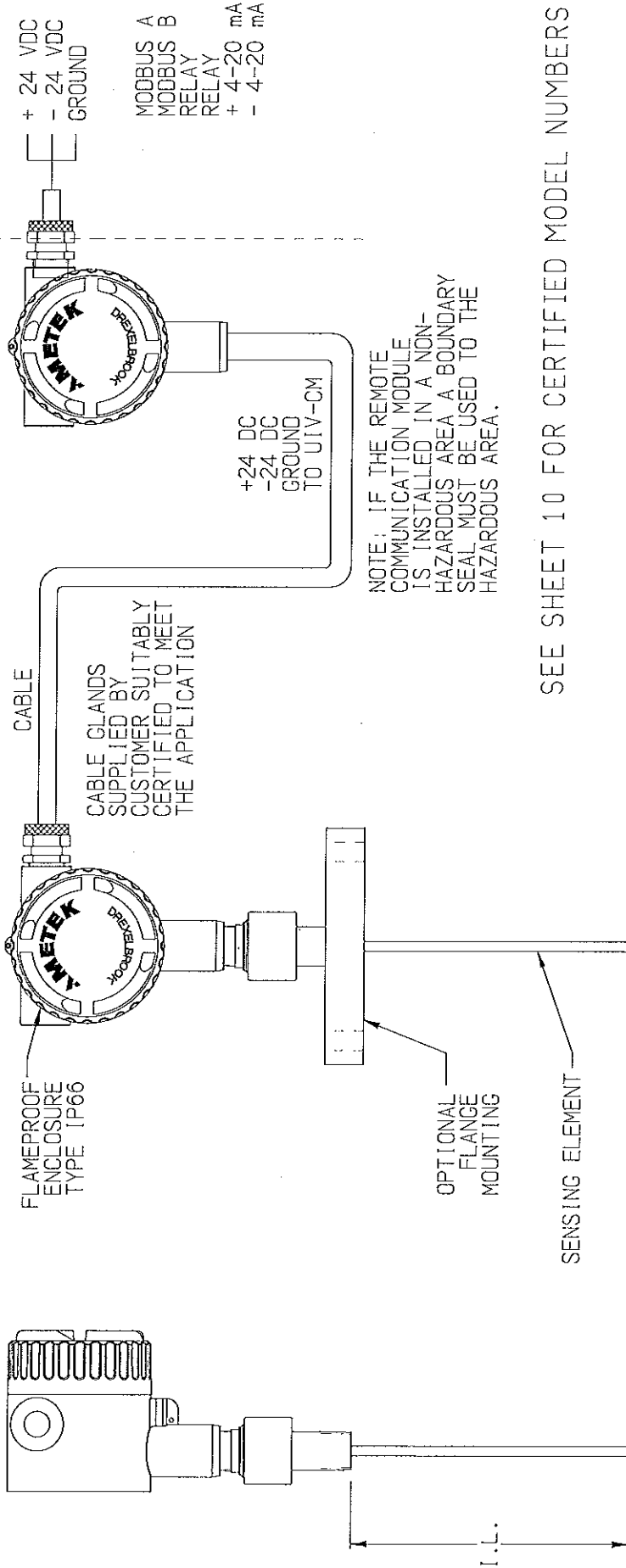
IECEX FMG11.0024X  
Ex d IIB T4 Gb  
Ex ia IIC T90°C Db

U1V REMOTE COMMUNICATIONS MODULE

IECEX FMG11.0024X  
Ex d IIB T4 Gb  
Ex fb IIC T90°C Db

ATEX FM12ATEX0018X  
Ex d IIB T4 Gb  
Ex fb IIC T90°C Db

(SENSING ELEMENTS ARE INTRINSICALLY SAFE FOR ABOVE CLASSIFICATIONS)



13-30 VDC

+ 24 VDC  
- 24 VDC  
GROUND

MODBUS A  
MODBUS B  
RELAY  
RELAY  
+ 4-20 mA  
- 4-20 mA

+24 DC  
-24 DC  
GROUND  
TO U1V-CM

NOTE: IF THE REMOTE COMMUNICATION MODULE IS INSTALLED IN A NON-HAZARDOUS AREA A BOUNDARY SEAL MUST BE USED TO THE HAZARDOUS AREA.

SEE SHEET 10 FOR CERTIFIED MODEL NUMBERS

- NOTES:
1. EUROPEAN LOCAL CODES AND INSTALLATION STANDARDS SHALL BE FOLLOWED.
  2. NO REVISION TO DRAWING WITHOUT PRIOR FM APPROVAL.
  3. UNUSED OPENINGS MUST BE PROPERLY SEALED TO MAINTAIN ENCLOSE ENVIRONMENTAL AND/OR HAZARDOUS LOCATION RATINGS.

CERTIFIED	by	7	7-15-103	SGA	7-9-15	COPYRIGHT 2015
PO #		6	2-15-122	SGA	5-6-15	AMETEK DREXELBROOK
ENG		5	11-14-107	SGA	11-25-14	SCALE NONE
USER		4	7-13-129	SGA	7-29-13	UNLESS OTHERWISE STATED ALL DIMENSIONS IN INCHES (MM)
DE #		3	12-12-109	SGA	5-21-13	DR. TDH 7-9-15
ISS.	EDD/DSR NO	APP'D	DATE	CK.	JEN 7-9-15	

**AMETEK®**  
**DREXELBROOK**

205 KEITH VALLEY RD  
HORSHAY, PA 19044-9986

215-674-1234  
FAX 215-674-2731

ATEX - IECEX  
CONTROL DRAWING FOR  
UNIVERSAL IV (INTEGRAL)  
FLAMEPROOF INSTALLATION  
WITH REMOTE DENSITY  
COMMUNICATIONS MODULE

420-0004-424-CD

SHT. 9 OF 10

ISS. 7

SPECIFIC CONDITIONS FOR USE:  
THE APPARATUS ENCLOSURE CONTAINS ALUMINUM AND IS CONSIDERED TO CONSTITUTE A POTENTIAL RISK OF IGNITION BY IMPACT OR FRICTION. CARE MUST BE TAKEN INTO ACCOUNT DURING INSTALLATION AND USE TO PREVENT IMPACT OR FRICTION.

CERTIFIED MODELS

UDa10bc000-d-e. Universal IV - Flameproof - Model Code

- a = FREQUENCY AND PHASING 0, or \*R
- b = APPROVAL A (ATEX), B (IECEX)
- c = ENTRIES 1 OR 2
- d = SENSING ELEMENT 201, 202, 203, 204, 205, 206, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262
- e = 24 CHARACTER NUMBERING SYSTEM THAT DOES NOT AFFECT SAFETY

\*R = Retrofit

CERTIFIED	7	7-15-103	SGA	7-9-15	COPYRIGHT 2015
PO #	6	2-15-122	SGA	5-6-15	AMETEK DREXELBROOK
ENG	5	11-14-107	SGA	11-25-14	SCALE NONE
USER	4	7-13-129	SGA	7-29-13	UNLESS OTHERWISE STATED
	3	12-12-109	SGA	5-21-13	ALL DIMENSIONS IN INCHES (IPS)
DE #	ISS.	EDO/DSR NO.	APP'D	DATE	DR. IDH 7-9-15
					CK. JEN 7-9-15

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SHT. 10 OF 10

ISS. 7