

**SPECIFICATIONS:**

**MECHANICAL:**  
 WETTED MATERIALS: 316 STAINLESS STEEL  
 ENCLOSURE: TYPE 360 ALUMINUM; EPOXY POWDER COATED

**ELECTRICAL:**  
 ELECTRICAL CONNECTION:  
 3 POSITION TERMINAL BLOCK, 22-14 AWG Max  
 2 POSITION TERMINAL BLOCK, 22-14 AWG Max

**SWITCH SPECS (Switch and IAV):**  
 POWER INPUT: 2 WIRE Electronic Switch  
 (Derives operating power from the switch output wires)  
 SWITCH OUTPUT: 7.8 to 50 VDC @ 100mA,  
 de-rate 1mA / °C above 25 °C. 2.7 mA MIN. LOAD REQUIRED.

**SWITCH CHARACTERISTICS:**  
 Open(off) State: 7.8-50 VDC @750 uA MAX  
 Closed (on) State:4.7 VDC @100 mA

**APPROVALS:**

**cULus LISTED**  
 CLASS I, DIVISION 1, GROUPS A, B, C & D;  
 CLASS II, DIVISION 1, GROUPS E, F & G; CLASS III  
 CLASS I, ZONE 0 AEx ia IIC T4  
 CLASS I, ZONE 0 Ex ia IIC T4  
 CLASS I, ZONE 1, AEx d IIC T5; CLASS 1, ZONE 1, Ex d IIC T5  
 CLASS I, ZONE 2, AEx nA IIC T4  
 CLASS I, ZONE 2 EX nA IIC T4  
 Tamb= -40°C TO +85°C (-40°F TO 185°F)  
 ENCLOSURE TYPE 4X; IP66

**ATEX APPROVED**  
 II 1 G Ex ia IIC T4  
 II 1 D Ex ia IIIC T135°C  
 II 2 G Ex d IIC T5  
 II 2 D Ex tD A21 IP66 T+90C  
 II 3 G Ex nA IIC T4  
 DEMKO 09 ATEX 0813748X  
 Tamb = -40°C TO +85°C (-40°F TO 185°F)

**APPROVALS:**

**IECEx APPROVED**  
 IECEx UL 08.0017  
 Ex ia IIC T4  
 Ex ia IIIC T135°C  
 Ex d IIC T5  
 Ex tD A21 IP66 T+90C  
 Ex nA IIC T4  
 Tamb. = -40°C TO +85°C (-40°F TO 185°F)

MODEL KXX	OPERATING RANGE			MAX. OVER PRESSURE		MAX. WORKING PRESSURE	
	LOW	HIGH		psi	bar	psi	bar
	psi/bar	psi	bar				
K10	0	5	0.3	10	0.7	50	3.4
K11	0	50	3.4	100	6.9	500	34.5
K12	0	100	6.9	200	13.8	1500	103.4
K13	0	200	13.8	400	27.6	1500	103.4

**INSTRUMENTS • CONTROLS • VALVES**

CLICK TO VISIT OUR WEBSITE

**ARCO Engineering, Inc.**  
 SINCE 1954  
 www.arcoengineering.com

3317 Gilmore Industrial Blvd.  
 Louisville, KY 40213

Ph: (502) 966-3134  
 Fx: (502) 966-3135

ORIGINAL DATE	4-13-15
DRWN	SR
CHKD	RJG
APPD	S. MILLS
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON FRACTIONS ±1/64	
2 PLACE DEC ±0.010	3 PLACE DEC ±0.005
ANGLES ±1/2°	
DO NOT SCALE THIS DRAWING	

TITLE

**1XSWLL  
DIFF.  
PRESSURE  
SWITCH**

USED ON:

SCALE 1:2.5

**UE**

**UNITED ELECTRIC  
CONTROLS COMPANY**

WATERTOWN \* MASSACHUSETTS

DWG NO Page 1 of 2

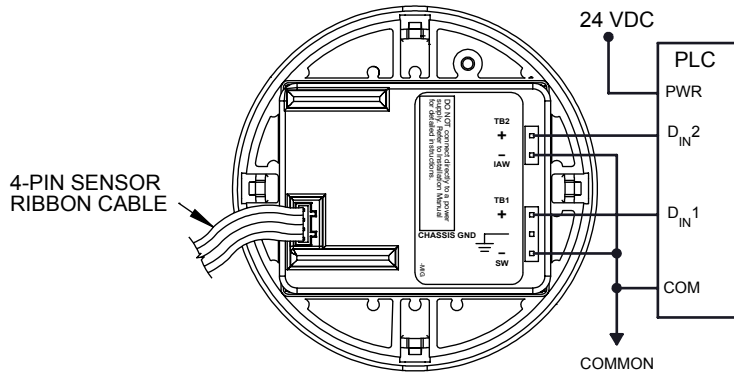
**A-14013**

REV.	ECN#	DESCRIPTION	DATE	DRWN	APPD
B	E5527	DRILLED HOLES IN CASTING NOW CORED	6-15-15	RJG	RAM
A	E5458	FIRST ISSUE.	4-13-15	SR	SJM

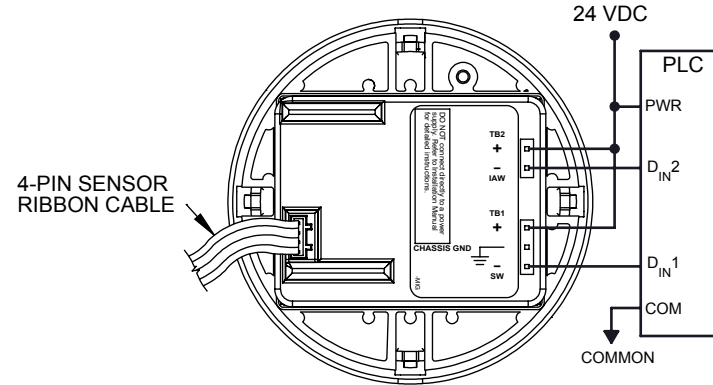
THIS DOCUMENT IS PROPRIETARY PROPERTY OF UNITED ELECTRIC CONTROLS. UNAUTHORIZED USE IS STRICTLY PROHIBITED.

RECOMMENDED WIRING SCHEMES

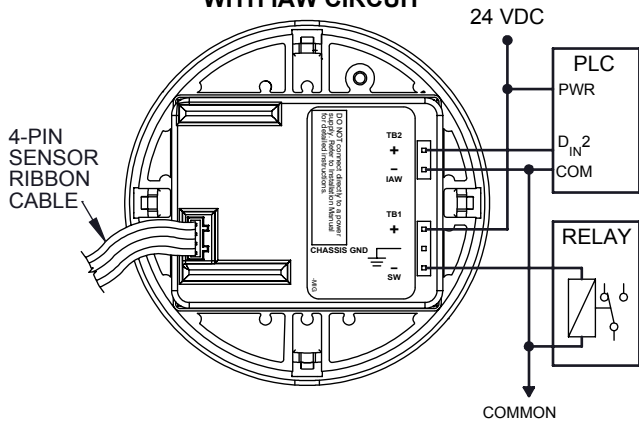
SW AND IAW  
PLC INPUTS CIRCUIT  
SINKING SWITCH



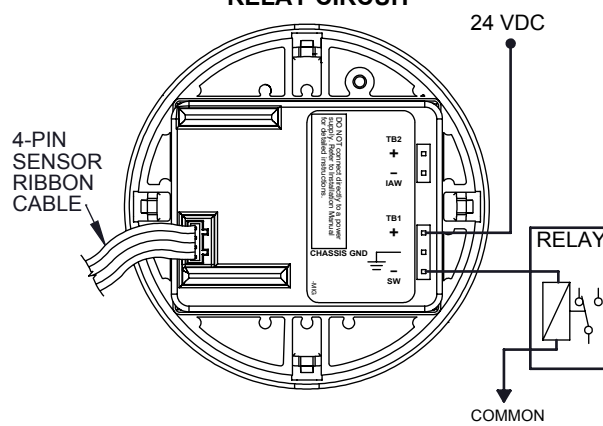
SW AND IAW  
PLC INPUTS CIRCUIT  
SOURCING SWITCH



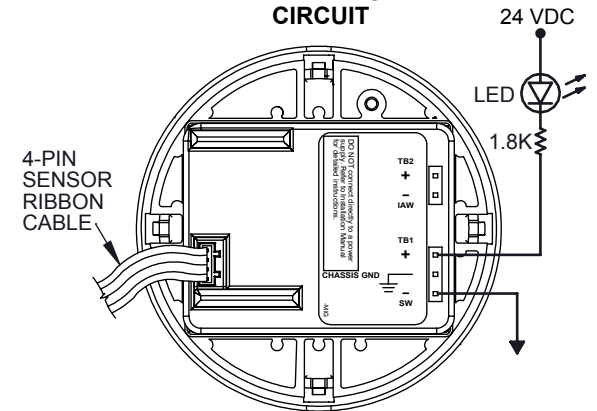
SWITCH INPUT SINKING  
INTERPOSING RELAY  
WITH IAW CIRCUIT



INTERPOSING  
RELAY CIRCUIT



RECOMMENDED  
BENCH TEST  
CIRCUIT



ORIGINAL DATE	4-13-15
DRWN	SR
CHKD	RJG
APPD	S. MILLS
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON FRACTIONS ±1/64 2 PLACE DEC 3 PLACE DEC ANGLES ±0.010 ±0.005 ±1/2°	
DO NOT SCALE THIS DRAWING	

TITLE	1XSWLL DIFF. PRESSURE SWITCH
USED ON:	
SCALE	1:1

**UE**  
UNITED ELECTRIC  
CONTROLS COMPANY  
WATERTOWN \* MASSACHUSETTS

DWG NO Page 2 of 2  
**A-14013**

REV.	ECN#	DESCRIPTION	DATE	DRWN	APPD
B	E5527	SEE PAGE 1	6-15-15	RJG	RJG
A	E5458	FIRST ISSUE	4-13-15	SR	SJM

THIS DOCUMENT IS PROPRIETARY  
PROPERTY OF UNITED ELECTRIC CONTROLS.  
UNAUTHORIZED USE IS STRICTLY PROHIBITED.