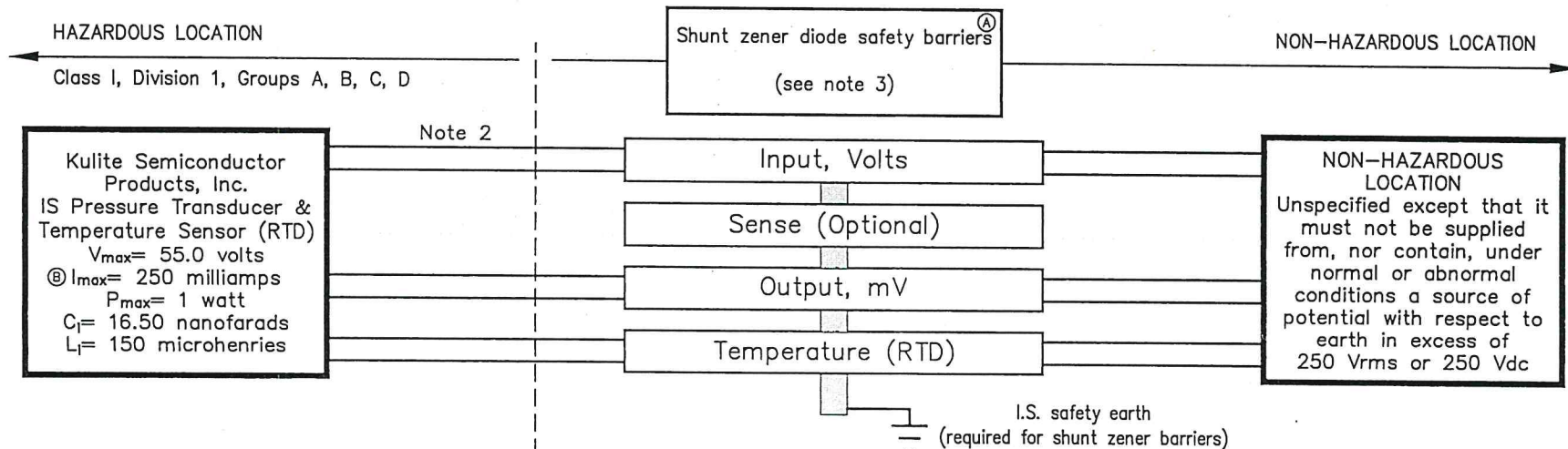


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FEB 23 2021

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
-	A	REVISED DIAGRAM, NOTES 2-3; ADDED CHART/TITLE	01/07/14	SRM WL
-	B	REVISED I _{max} : 250 mA WAS 200 mA;	06/18/15	SRM <i>SW/AF</i>

KULITE PRESSURE & TEMPERATURE INSTALLATION DRAWING - TYPE V



NOTES:

- The electrical circuit in the hazardous area must be capable of withstanding an a.c. test voltage of 500 Vrms to earth or frame of the apparatus for 1 minute.
- The cabling shown is for eight-wire system (6 wires for the pressure signal; 2 wires for the temperature signal). Ci and Li parameters include the optional integral cable capacitance and inductance (maximum total length 50m). Therefore, the total additional field wiring parameters shall not exceed the values given in Table 1 for the barrier combinations given in Note 3.
- Any positive polarity shunt zener diode safety barriers for Class I, Division 1 (Groups A, B, C & D), approved by CSA with a 9V/90Ω (1 off); 12V/1000Ω (2 off) for the pressure channels plus (3V/100Ω (1 off) for the temperature channel.
- The installation including barrier earthing arrangements (if applicable) must comply with the installation requirements in the country of use, e.g. ANSI/ISA RP12.6 ('Installation of intrinsically safe systems for hazardous (classified) locations') and the Canadian Electrical Code. Installation must be in accordance with the manufacturer's guidelines.

UNLESS OTHERWISE SPECIFIED			DO NOT SCALE DRAWING		KULITE SEMICONDUCTOR PRODUCTS, INC.			
DIMENSIONS ARE IN INCHES			DR	John Chivers	07/20/2013	One Willow Tree Road, Leonia, New Jersey 07605, tel: (201)461-0900		
TOLERANCES ON			CHKD			INSTALLATION OF COMBINED PRESSURE & TEMPERATURE TRANSDUCERS TYPE V (UNAMPLIFIED)		
DIMENSIONS	DECIMALS	FRACTIONS	APPD	J. CHIVERS	12/19/13			
IN PARENTHESIS	X = ±.1	± 1/64						
ARE IN	XX = ±.01	ANGLES				SIZE		
MILLIMETERS	XXX = ±.005	± 1'				A	FSCM NO. 34345	DWG NO. 230-A-82234
WORKMANSHIP OF MACH. PARTS TO BE IN ACCORDANCE WITH KULITE ST-D 1036			MATERIAL		N/A	SCALE		1 : 1
			PROTECTIVE FINISH		N/A	SHEET		1 OF 2
								REV B

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FEB 23 2021


REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
-	-	SEE SHEET 1 OF 2	-	158/11

[Ⓐ] *KULITE INSTALLATION DRAWING – TYPE V
TOTAL ADDITIONAL FIELD WIRING PARAMETERS PERMITTED FOR THE
BARRIER COMBINATIONS GIVEN IN NOTE 3*

[Ⓐ]

TABLE 1

Group (Europe)	Group (North America)	Capacitance	Inductance
IIC	A, B	1390nF	1.34mH
IIB	C	8980nF	5.84mH
IIA	D	35900nF	11.8mH

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DIMENSIONS ARE IN INCHES TOLERANCES ON			DR John Chivers	07/20/2013					
DIMENSIONS DECIMALS FRACTIONS			CHKD			INSTALLATION OF COMBINED PRESSURE & TEMPERATURE TRANSDUCERS TYPE V (UNAMPLIFIED)			
IN PARENTHESIS X = ±.1 ± 1/64			APPD J. CHIVERS	12/19/13					
ARE IN XX = ±.01 ANGLES									
MILLIMETERS XXX = ±.005 ± 1°									
WORKMANSHIP OF MACH. PARTS TO BE IN ACCORDANCE WITH KULITE ST-D 1036			MATERIAL N/A			SIZE A	FSCM NO. 34345	DWG NO. 230-A-82234	REV B
			PROTECTIVE FINISH N/A			SCALE 1 : 1		SHEET 2 OF 2	

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FEB 23 2021

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
-	A	REVISED Li: 250 mA WAS 200 mA;	06/18/15	SRM <i>SV/15</i>

*KULITE PRESSURE & TEMPERATURE TRANSDUCERS
TYPE V*

Description: Silicon Diaphragm Oil-Filled or Leadless & Metal Diaphragm Design, Unamplified fitted with platinum RTD (Resistance Temperature Detector)

Modes: Absolute, Gauge and Differential

Supplies: $U_i=55$ volts; $P_i=1.0$ watt; $C_i=16.5$ nanofarads; $L_i=150$ microhenries; $I_i=250$ milliamps $\text{\textcircled{A}}$

Outputs: 100mV nominal voltage output and 2-wire RTD output.

Examples of Compliant Kulite Model Numbers:


IS-HKL/T-1-235 Series

IS-HKL/T-312 Series

IS-HKL/T-375 Series

Other Kulite Models complying with Type V design specification may be included.

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DIMENSIONS ARE IN INCHES			DR	John Chivers	07/20/2013	TYPE V COMBINED PRESSURE & TEMPERATURE TRANSDUCER DESCRIPTION & COMPLIANT MODELS			
TOLERANCES ON			CHKD						
DIMENSIONS	DECIMALS	FRACTIONS	APPD	J. CHIVERS	12/19/13				
IN PARENTHESIS	X = $\pm .1$	$\pm 1/64$							
ARE IN	XX = $\pm .01$	ANGLES							
MILLIMETERS	XXX = $\pm .005$	$\pm 1^\circ$							
WORKMANSHIP OF MACH. PARTS TO BE IN ACCORDANCE WITH KULITE ST-D 1036			MATERIAL			SIZE	FSCM NO.	DWG NO.	REV
			N/A			A	34345	230-A-82233	A
			PROTECTIVE FINISH			SCALE 1 : 1		SHEET 1 OF 1	
			N/A						

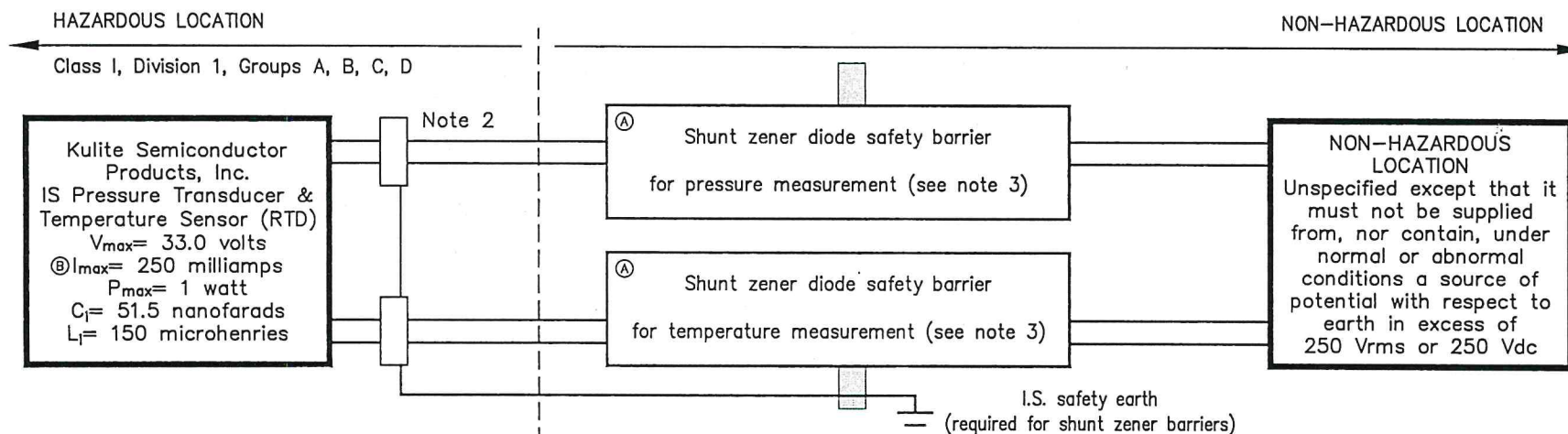
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FEB 23 2021

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
-	A	REVISED DIAGRAM, NOTES 2-3 & CHART/TITLE	01/07/14	SRM WL
-	B	REVISED I _{max} : 250 mA WAS 200 mA;	06/18/15	SRM <i>SM/AF</i>

KULITE PRESSURE & TEMPERATURE INSTALLATION DRAWING - TYPE IV



NOTES:

- The electrical circuit in the hazardous area must be capable of withstanding an a.c. test voltage of 500 Vrms to earth or frame of the apparatus for 1 minute.
- The cabling shown is for a four-wire system (2-wires for the pressure signal; 2-wires for the temperature signal). Ci and Li parameters include the optional integral cable capacitance and inductance (maximum total length 50m). Therefore, the total additional field wiring parameters shall not exceed the values given in Table 1 for the barrier combinations given in Note 3.
- Any positive polarity shunt zener diode safety barriers or galvanic isolators for Class I, Division 1 (Groups A, B, C & D), approved by CSA with (1) a 28V output and a source impedance of 300Ω for the pressure channel plus (2) a 3V output and a source impedance of 100Ω for the temperature channel.
- The installation including barrier earthing arrangements (if applicable) must comply with the installation requirements in the country of use, e.g. ANSI/ISA RP12.6 ('Installation of intrinsically safe systems for hazardous (classified) locations') and the Canadian Electrical Code. Installation must be in accordance with the manufacturer's guidelines.

UNLESS OTHERWISE SPECIFIED			DO NOT SCALE DRAWING		KULITE SEMICONDUCTOR PRODUCTS, INC. One Willow Tree Road, Leonia, New Jersey 07605, tel: (201)461-0900			
DIMENSIONS ARE IN INCHES			DR	John Chivers	07/20/2013	INSTALLATION OF COMBINED PRESSURE & TEMPERATURE TRANSDUCERS TYPE IV (AMPLIFIED)		
TOLERANCES ON			CHKD					
DIMENSIONS	DECIMALS	FRACTIONS	APPD	J. CHIVERS	12/19/13			
IN PARENTHESIS	X = ±.1	± 1/64						
ARE IN	XX = ±.01	ANGLES				SIZE A FSCM NO. 34345 DWG NO. 230-A-82232 REV B		
MILLIMETERS	XXX = ±.005	± 1°				SCALE 1 : 1 SHEET 1 OF 2		
WORKMANSHIP OF MACH. PARTS TO BE IN ACCORDANCE WITH KULITE ST-D 1036			MATERIAL		N/A			
			PROTECTIVE FINISH		N/A			

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
-	-	SEE SHEET 1 OF 2	-	SM

[Ⓐ]*KULITE INSTALLATION DRAWING – TYPE IV
TOTAL ADDITIONAL FIELD WIRING PARAMETERS PERMITTED FOR THE
BARRIER COMBINATIONS GIVEN IN NOTE 3*

TABLE 1

Group (Europe)	Group (North America)	Capacitance	Inductance
IIC	A, B	31.5nF [Ⓐ]	2.16mH [Ⓐ]
IIB	C	598nF [Ⓐ]	9.09mH [Ⓐ]
IIA	D	2098nF [Ⓐ]	18.3mH [Ⓐ]

UNLESS OTHERWISE SPECIFIED		DO NOT SCALE DRAWING		 KULITE SEMICONDUCTOR PRODUCTS, INC. One Willow Tree Road, Leonia, New Jersey 07605, tel: (201)461-0900	
DIMENSIONS ARE IN INCHES TOLERANCES ON DIMENSIONS DECIMALS FRACTIONS IN PARENTHESIS X = ±.1 ± 1/64 ARE IN XX = ±.01 ANGLES MILLIMETERS XXX = ±.005 ± 1°		DR John Chivers 07/20/2013			
		CHKD		INSTALLATION OF COMBINED PRESSURE & TEMPERATURE TRANSDUCERS TYPE IV (AMPLIFIED)	
		APPD J. CHIVERS 12/19/13			
WORKMANSHIP OF MACH. PARTS TO BE IN ACCORDANCE WITH KULITE ST-D 1036		MATERIAL N/A		SIZE A	FSCM NO. 34345
		PROTECTIVE FINISH N/A		DWG NO. 230-A-82232	REV B
				SCALE 1 : 1	SHEET 2 OF 2

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FEB 23 2021

REVISIONS

ZONE	REV	DESCRIPTION	DATE	APPROVED
-	A	REVISED Li: 250 mA WAS 200 mA;	06/18/15	SRM <i>[Signature]</i>

*KULITE PRESSURE & TEMPERATURE TRANSDUCERS
TYPE IV*

Description: Silicon Diaphragm Oil-Filled or Leadless Design, Amplified (internal or in-line) fitted with platinum RTD (Resistance Temperature Detector)

Modes: Absolute, Gauge and Differential

Supplies: $U_i=33.0$ volts; $P_i=1.0$ watts; $C_i=51.5$ nanofarads; $L_i=150$ microhenries; $I_i=250$ milliamps @


Outputs: 3-wire and 4-wire voltage output and 4-20mA current output and 4v amplitude square wave frequency output and 2-wire RTD output.

Examples of Compliant Kulite Model Numbers:

IS-EPTS-312 Series
IS-ETL/T-312 Series
IS-ETL/T-375 Series
IS-ETLR/T-634 Series

Other Kulite Models complying with Type IV design specification may be included Type V Kulite Pressure Transducers with KA-XXX Series (in-line amplifier).

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DIMENSIONS ARE IN INCHES TOLERANCES ON		DR John Chivers 07/20/2013	CHKD		
DIMENSIONS IN PARENTHESIS	DECIMALS X = ± 0.1	FRACTIONS $\pm 1/64$	APPD J. CHIVERS 12/19/13	TYPE IV COMBINED PRESSURE & TEMPERATURE TRANSDUCER DESCRIPTION & COMPLIANT MODELS	
ARE IN	XX = ± 0.01	ANGLES			
MILLIMETERS	XXX = ± 0.005	$\pm 1^\circ$			
WORKMANSHIP OF MACH. PARTS TO BE IN ACCORDANCE WITH KULITE ST-D 1036		MATERIAL N/A		SIZE A	FSCM NO. 34345
		PROTECTIVE FINISH N/A		DWG NO. 230-A-82231	REV A
				SCALE 1 : 1	SHEET 1 OF 1