Innovative Sensor Technology physical. chemical. biological.	ECN — Engineering Change No	ote	A23.019	.019	
Change class:	Class I (customer notification and approval required prior to implementation)				
Project:	General	Release by			
Department:	Production		☐ IST:		
Product:	Platinum RTD sensors	Date / Signat	Date / Signature		
Customer:	different	Name (plain text) / Position			
Abstract of change:	Improvement of the resistance to voltage discharges				
Passan(s) for change (re	Name (plain text) / Fosition				

## Reason(s) for change *(refer to attachment if necessary)*.

The scope of the change is a technology upgrade according to the state-of-the-art technology and make the sensor more robust in both, the customer's assembly process and end application. Also due to market requirements, the resistance to voltage discharges (according to IEC 61000-4-2) has been improved.

## Change details (refer to attachment if necessary.

Optimized meander structure with

- Uniform specification, performance
- Uniform outer dimensions
- Unchanged bill of material (raw materials)

Certificates REACH, RoHS, CMRT etc. remain valid.

For internal approval, IST performed ESD testing according to IEC 61000-4-2. Using the example of sensor type POK1.202.6W.A.007, the old sensor version (Mat. no. 100870) only passed ESD level 2, but the new sensor version (Mat. no. 153741) passes ESD level 4.

In addition, the long-term performance (1000h @ Tmax, 1000h cycling, 1000h at high humidity >95%r.H.) was compared between old and new sensor types. No decrease in performance was observed. According the specification, the change in resistance after 1000 hours is still less than 0.04% of the  $R_0$ .

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product name	former order code		new product name	new order code
P0K1.161.6W.B.010	100137	$\rightarrow$	P0K1.161.6W.B.010	154367
P0K1.161.6W.A.010	100138	$\rightarrow$	P0K1.161.6W.A.010	154366
P0K1.161.6W.Y.010	100139	$\rightarrow$	P0K1.161.6W.Y.010	155582
P0K1.161.6W.C.010	100643	$\rightarrow$	P0K1.161.6W.C.010	155583
		$\rightarrow$	P1K0.202.2W.B.010.D.S	153963
P0K1.202.3K.A.010	101156	$\rightarrow$	P0K1.202.3W.A.010	155548
P0K1.202.3K.B.010	101155	$\rightarrow$	P0K1.202.3W.B.010	155549
P1K0.202.3K.B.010	101116	$\rightarrow$	P1K0.202.3W.B.010	155528
P1K0.202.3W.B.010	151426	$\rightarrow$	P1K0.202.3W.B.010	155528
P1K0.202.3K.A.010	101189	$\rightarrow$	P1K0.202.3W.A.010	155750
P1K0.202.3K.Y.010	101469	$\rightarrow$	P1K0.202.3W.Y.010	156194
P0K1.202.3FW.B.007	100850	$\rightarrow$	P0K1.202.3FW.B.007	155743
P0K1.202.3FW.Y.007	100953	$\rightarrow$	P0K1.202.3FW.Y.007	155742
P0K1.202.3FW.A.007	100878	$\rightarrow$	P0K1.202.3FW.A.007	155576
P1K0.202.3FW.C.007	100851	$\rightarrow$	P1K0.202.3FW.C.007	154735
P1K0.202.3FW.B.007	100849	$\rightarrow$	P1K0.202.3FW.B.007	155041
P1K0.202.3FW.A.007	100884	$\rightarrow$	P1K0.202.3FW.A.007	155751
P1K0.202.3FW.Y.007	101004	$\rightarrow$	P1K0.202.3FW.Y.007	155752
P0K1.202.6W.A.007	100870	$\rightarrow$	P0K1.202.6W.A.007	153741
P0K1.202.6W.B.007	100871	$\rightarrow$	P0K1.202.6W.B.007	153742
P0K1.202.6W.B.007.S	151430	$\rightarrow$	P0K1.202.6W.B.007.S	155716
		$\rightarrow$	P0K1.202.6W.Y.007	153442
P1K0.202.6W.A.007	100963	$\rightarrow$	P1K0.202.6W.A.007	154721
P1K0.202.6W.B.007	100972	$\rightarrow$	P1K0.202.6W.B.007	155771
P1K0.202.6W.Y.007	152582	$\rightarrow$	P1K0.202.6W.Y.007	155770
P0K1.202.6W.A.010	100876	$\rightarrow$	P0K1.202.6W.A.010	155763
P0K1.202.6W.B.010	100877	$\rightarrow$	P0K1.202.6W.B.010	155764
P0K1.202.6W.Y.010	100908	$\rightarrow$	P0K1.202.6W.Y.010	155762
P1K0.202.6W.A.010	100896	$\rightarrow$	P1K0.202.6W.A.010	155773
P1K0.202.6W.B.010	100897	$\rightarrow$	P1K0.202.6W.B.010	155772
		$\rightarrow$	P1K0.202.6W.Y.010	155774
P0K1.202.6W.G.007.S	151438	$\rightarrow$	P0K1.202.6W.G.007.S	156446
P0K1.232.6W.B.010.D.S	152297	$\rightarrow$	P0K1.232.6W.B.010.D.S	154038
P0K1.232.6W.B.010	100116	$\rightarrow$	P0K1.232.6W.B.010	154000
P0K1.232.6W.A.010	100117	$\rightarrow$	P0K1.232.6W.A.010	154004
P0K1.232.6W.Y.010	100118	$\rightarrow$	P0K1.232.6W.Y.010	154005
P1K0.232.6W.A.010	100256	$\rightarrow$	P1K0.232.6W.A.010	153766
P1K0.232.6W.Y.010	100257	$\rightarrow$	P1K0.232.6W.Y.010	153765
P1K0.232.6W.B.010	100255	$\rightarrow$	P1K0.232.6W.B.010	153768
P1K0.232.6W.C.010	100691	$\rightarrow$	P1K0.232.6W.C.010	155765
P1K0.520.6W.B.010	100284	$\rightarrow$	P1K0.520.6W.B.010	156117
P1K0.520.6W.Y.010	100287	$\rightarrow$	P1K0.520.6W.Y.010	156115
P1K0.520.6W.A.010	100285	$\rightarrow$	P1K0.520.6W.A.010	156116