

Comparison Between 5950 and 5900

SERIES 5950

SERIES 5900

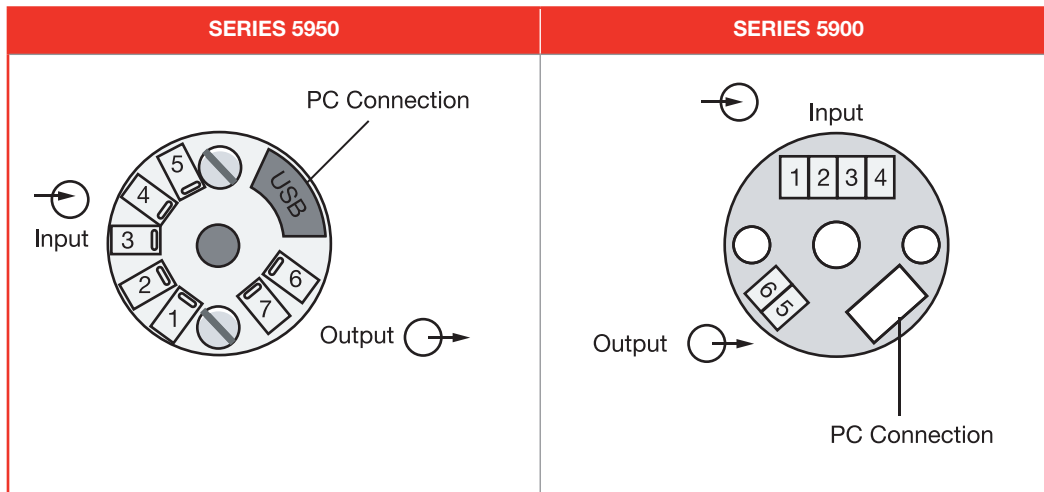

Input		
RTD	Pt100, Ptx, Ni100, Ni120, Ni1000, Cu10	Pt100, Pt1000, Ptx, Ni100, Ni120, Ni1000, Cu10
Connection	2, 3- and 4-wire	3- and 4-wire
Thermocouple	B, C, D, E, J, K, N, R, S, T	B, C, E, J, K, L, N, R, S, T, U
Resistance (Ω)	0 to 10000	0 to 200
Potentiometer (Ω)	100 to 10000	No
Voltage	-10 to 1000	-10 to 500
Output		
Current (mA)	4 - 20 / 20 - 4	4 - 20 / 20 - 4 / Special
Step response (t90) (sek)	0.15	1.5
NAMUR compl.		
NE 21	Yes	No
NE 43	Yes	Yes
NE 107	Yes (partly)	No
Isolation		
In to Out (1 min) (V)	1500	1500
Power Supply		
Min. (V)	8 / 8 (Ex)	6.5 / 8 (Ex)
Max. (V)	36 / 30 (Ex)	36 / 30 (Ex)
Load (Ω) @24VDC	750	700
Accuracy @25°C		
Basic accuracy	$\pm 0.08^\circ\text{C}$ or $\pm 0.8\%$ of span	$\pm 0.02^\circ\text{C}$ or $\pm 0.1\%$ of span
Pt 100/0...100°C	$\pm 0.08^\circ\text{C}$	$\pm 0.24^\circ\text{C}$
Pt 100/0...300°C	$\pm 0.24^\circ\text{C}$	$\pm 0.52^\circ\text{C}$
"T/C K 0...1000°C (incl. CJC)"	$\pm 1.12^\circ\text{C}$	$\pm 2.5^\circ\text{C}$
Temperature drift (Note 1 and 2)	0.01% / °C	0.01% / °C
Long-term drift (Note 1)	0.02% / year	0.2% / year
EMC Characteristics		
EN61326-1	Yes	Yes
NE 21	<0.5% of span	No

Comparison Between 5950 and 5900 (cont.)

Approvals (Ex i)		
ATEX	II 1 G Ex ia IIC T6...T4 Ga	II 1 G Ex ia IIC T6...T4 Ga
IECEX	Ex ia IIC T6...T4 Ga	No
FM	Pending	IS Class I, Div. 1, Gr. A-D
CSA	Pending	Class I, Grupp A-D
Environment conditions		
Ambient temp. operating (°C)	-40 to +85	-40 to +85
Humidity (RH) max.	98% non cond.	95%
Vibration (IEC60068-2-6)	Test Fc, 10g	Not specified
Shock (IEC-60068-2-27)	Test Ea	Not specified
Rough handling (IEC-60068-2-31)	Test Ec	Not specified
DIN B Mounting	Yes, d = 44 mm	Yes, d = 44 mm
Height (mm)	19.7	26
Weight (g)	35	50
Wire connection (mm ²)	1.5	1.5
Protection, housing/terminals	IP 65 / IP 00	IP 50 / IP 10
Terminals	Nut: Cold rolled steelwith Nickel plating Screw: Tri-blue Zn plating Terminal: Nickel plated brass	Screw: Blue passivated tinned copper Solder pin: Tinned copper
RoHS Compliant	Yes	Not specified
Special functions		
Customized linearization	50-points	9-points
Excel compatibel tabel transfer	Yes	No
Callendar-Van Dusen support	Yes	No
Adjustable filtering	0.15 - 79 sec	0 or 2 sec
Sensor correction	± 10% of span / max. ± 5°C	± 10% of span
System correction	± 10% of span / max. ± 5°C	± 10% of span
Runtime counter	Operational hour	No
Password protection	8 characters	No
Configuration date	Last download	No
User signature	8 characters	No
Configuration no power	Yes - ICON-X	No
Tag	15 characters	4 characters
Operational temp. logging	Min. / max.	No
Output simulation	Yes	Yes

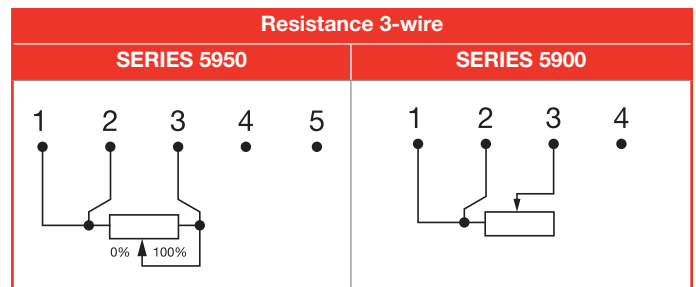
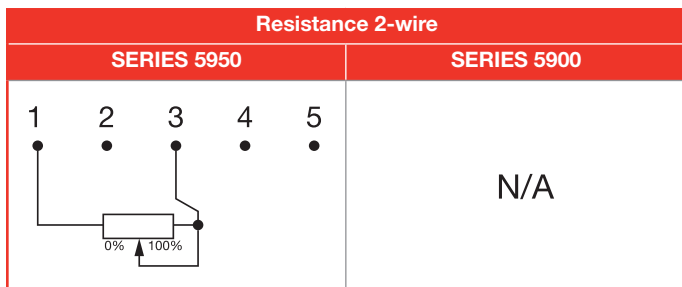
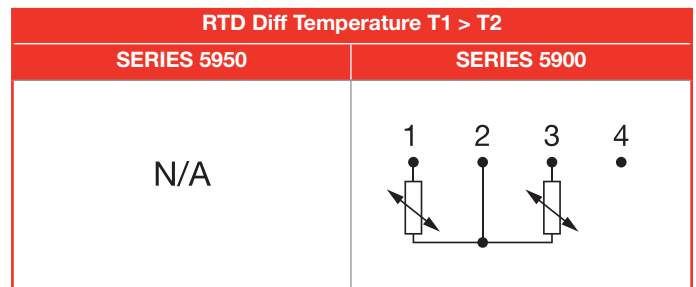
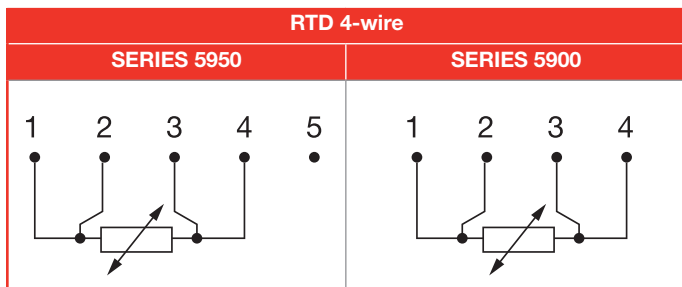
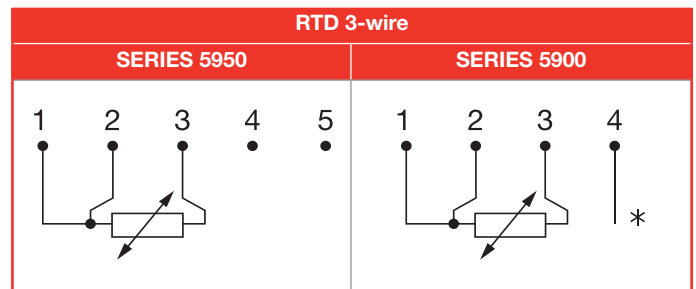
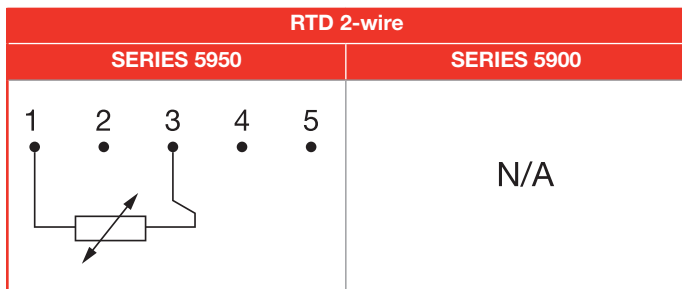
How to replace SERIES 5900 with SERIES 5950

Input and Output terminals



Terminals	
SERIES 5950	SERIES 5900
1	1
2	2
3	3
4	4
6	5
7	6
5	N/A

SERIES 5900 and SERIES 5950 Connection Diagram



SERIES 5900 and SERIES 5950 Connection Diagram (cont.)

