

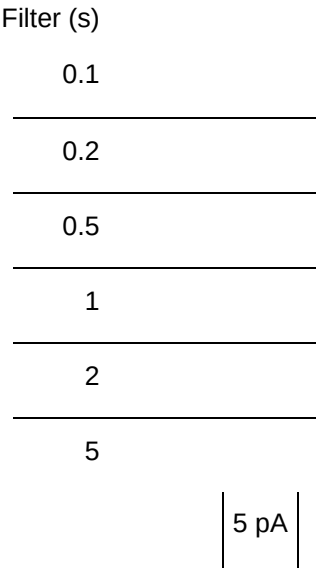
Certificate of Performance

STAR 9080 s.n.

Antec Leyden declares that the performance of this controller has been tested in accordance with our standard operating procedure (no. 122.0001), and has fulfilled all requirements.

Date (YY - MM - DD)	 - -	Software version	
Checked by			

Noise



Recorder setting: 1 V full scale, chart speed: 5 mm/min

Test	Specified	Value
Current in display (I-cell)	2.67 ± 0.05 nA	nA
Noise peak-to-peak (filter 0.1 s)	< 2.0 pA	pA

Service mode

Test		Specified	Value
Reference voltage adjustment (VLTCL)		+2.000 ± 0.001V	V
		0.0 ± 0.1 mV	mV
		-2.000 ± 0.001V	V
I/E converter (ZER.IE)	RANGE=nA, Value(1)	0000 ± 0005	HEX
	Value(10)	0000 ± 0010	HEX
	RANGE=pA, Value(1)	0000 ± 0010	HEX
	Value(10)	0000 ± 0030	HEX
	RANGE=μA, Value(1)	0000 ± 0005	HEX
	Value(10)	0000 ± 0010	HEX
Autozero level (AZERO)		0000 ± 0005	HEX
		4800 ± 0010	HEX
Recorder output (REC)	+full	+1.00 ± 0.05 V	V
	0.00	0.00 ± 0.05 V	V
	-full	-1.00 ± 0.05 V	V
Integrator output (INT)	+full	+10.0 ± 0.5 V	V
	0.00	0.00 ± 0.05 V	V
	-full	-10.0 ± 0.5 V	V
Oven maximum temperature		60 ± 0.5 °C	°C

Range

Test		Specified	Value
+0.8V, 100MΩ dummy load	pA	8.0 ± 0.2 nA	nA
	INT output	8.0 ± 0.2 V	V
	nA	8.0 ± 0.2 nA	nA
	INT output	0.800 ± 0.015 V	V
	μA	8 ± 1 nA	nA
	INT output	8.0 ± 2 mV	mV

Test	Specified	Value
-0.8V, 100M Ω dummy load	8.0 $\pm$ 0.2 nA	nA
INT output	8.0 $\pm$ 0.2 V	V
nA	8.0 $\pm$ 0.2 nA	nA
INT output	0.800 $\pm$ 0.015 V	V
μ A	8 $\pm$ 1 nA	nA
INT output	8.0 $\pm$ 2 mV	mV

Twin

Test	Specified	Value
Twin cell option	0.0 $\pm$ 1 mV	mV
Etwin (0 V)	2000 $\pm$ 200 nA	nA
Itwin (10k, +0.02V)	-2000 $\pm$ 200 nA	nA
Itwin (10k, -0.02V)	200 $\pm$ 20 μ A	μ A
Itwin (10k, +2V)	-200 $\pm$ 20 μ A	μ A
Itwin (10k, -2V)		

Miscellaneous

Test	Passed	Failed
Display		
Keyboard		
I/O input (I/O)		
I/O output (I/O)		
AUX / REF connection		
Manual valve connection		
Electric valve connection		
RS232C connection		
TWIN connection		
HiPot & Ground Continuity		
Overall appearance		