

SRF201/202/203

Smart Recorders, 1/2/3-Pen Recording Models



The SRF201/202/203 are high-performance pen-recording chart recorders that use a chart 180mm wide. DC voltage, thermocouple and resistance temperature detector (RTD) can be applied as input signals.

Options include event outputs, external contact inputs and communications.

RECORDERS, INDICATORS

Specifications		
General	Power	100 to 240Vac, 50/60Hz
	Power consumption	Approx. 40VA
	Ambient temperature	0 to 50°C
	Ambient humidity	30 to 90% RH (no condensation allowed)
	Mass	Pen 1: 7.8kg, Pen 2: 8.3kg, Pen 3: 8.8kg
Input	Type	Thermocouple: R, S, B, K, E, J, T, Ni-NiMo, WRe0-26 WRe5-26, PLII, Nicrosil-Nisil DC voltage: mV, V, RTD: Pt100, JPt100
	No. of channels	1, 2 or 3
	Input measuring period	Approx. 125ms
	PV bias	-19999 to 29999 (engineering unit including decimal point)
	Display	7-digit, 7-segment LEDs (red and green)
Display	Display system	7-digit, 7-segment LEDs (red and green)
	Display period	4s (channel updating): 0.5s (data updating)
	Display contents	Measuring value, channel number, alarm display, date, time, chart feeding speed, other configuration data
Recorder	Chart form	Fan fold type (folding system)
	Trend recording period	Continuous recording with cartridge pen (disposable type)
	Digital printing	Dot recording with cartridge pen (disposable type)
	Effective recording width	-0.5 to +180.5mm with respect to calibration position (0%)
	Chart feeding speed	1 to 599mm/h or 10 to 200mm/min, selectable
	Recording accuracy	±0.5% FS
Recording format	Trend recording	PV value (analog)
	Trend + tabular recording	PV value (analog)
	Trend + schedule demand recording	PV value (analog)
	Event output (option)	Output relay points: 6
External contact input	Output operation	Up to 2 events set per channel can be combined freely, and ORed output is available
	Output form	Transfer contact (NC and NO contacts)
	Contact ratings	100Vac/0.2A or 30Vdc/0.3A
External contact input	Input points	4
	Function	RSW1: Recording start; RSW2: Demand (DMD) printing; RSW3: Chart feeding; RSW4: #1 to #4 message printing
	Switch type	Dry contacts or open collector

Accessories (sold separately)	
Model No.	Description
SLP-F10J20	Smart Loader Package
81407861-001	Folding chart, 100-section (10 units per box)
81409978-001	Folding chart, 100-section (10 units per box) (recycled paper)
81409978-002	Folding chart, 120-section (10 units per box) (recycled paper)
81409978-003	Folding chart, 140-section (10 units per box) (recycled paper)
81409978-004	Folding chart, 80-section (10 units per box) (recycled paper)
81409978-005	Folding chart, 150-section (10 units per box) (recycled paper)
81407937-001	Clean paper chart, 100-section (10 units per box)
81446632-001	Spare 1st pens, red (3 units)
81446633-001	Spare 2nd pens, green (3 units)
81446634-001	Spare 3rd pens, blue (3 units)
81446296-001	Spare plotter pens, purple (3 units)
81401325	250Ω resistor (accuracy ±0.02%) (1 unit)
81446642-001	250Ω resistor (accuracy ±0.05%) (2 units)

Selection Guide		I	II	III	IV	V	VI	VII	Example: SRF201AA00000		
Segment	Model No. selection	Description									
I	Basic No.	SRF201	180mm 1-Pen recorder								
		SRF202	180mm 2-Pen recorder								
		SRF203	180mm 3-Pen recorder								
II	Power	A	100 to 240Vac								
		III	Input types ranges	Model No.	1 st pen	2 nd pen	3 rd pen				
SRF201	T/C and Voltage				—	—					
SRF202	T/C and Voltage				T/C and Voltage	—					
A	SRF203			T/C and Voltage	T/C and Voltage	T/C and Voltage					
	SRF201			RTD and Voltage	—	—					
	SRF202			RTD and Voltage	RTD and Voltage	—					
B	SRF203			RTD and Voltage	RTD and Voltage	RTD and Voltage					
	SRF202			T/C and Voltage	RTD and Voltage	—					
	SRF203			T/C and Voltage	RTD and Voltage	RTD and Voltage					
C	SRF202			RTD and Voltage	T/C and Voltage	—					
	SRF203			T/C and Voltage	RTD and Voltage	RTD and Voltage					
	SRF202			RTD and Voltage	T/C and Voltage	—					
D	SRF203	RTD and Voltage	T/C and Voltage	T/C and Voltage							
	SRF202	T/C and Voltage	T/C and Voltage	RTD and Voltage							
	SRF203	T/C and Voltage	T/C and Voltage	RTD and Voltage							
E	SRF203	RTD and Voltage	RTD and Voltage	T/C and Voltage							
	SRF203	RTD and Voltage	RTD and Voltage	T/C and Voltage							
	SRF203	RTD and Voltage	RTD and Voltage	T/C and Voltage							
IV	Option 1	0	None								
		1	6 event outputs								
		2	6 event outputs + 4 remote switch inputs								
V	Communications	0	None								
		1	RS-485								
		2	RS-232C								
VI	Option 2	0	None								
VII	Option 3	00	None								
		D0	With inspection data								
		T0	Tropicalization								
		B0	Tropicalization + inspection data								
		Y0	With traceability certification								

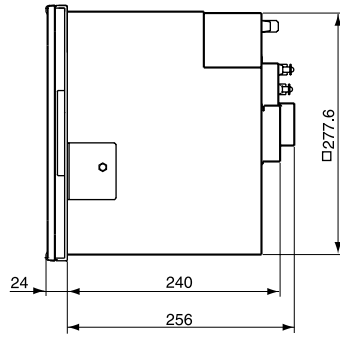
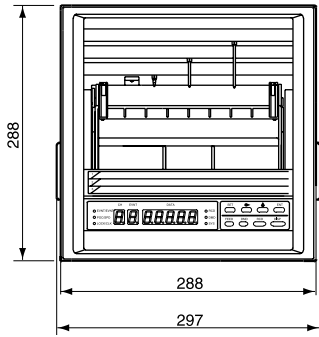
Input Types and Ranges					
Range code	Input type	Range (°C)	Range code	Input type	Range (°C)
100	mV	±14.00mV*	270	N	0.0 to 1300.0
101		±25.00mV*	271		0.0 to 700.0
102		±70.00mV*	272		0.0 to 350.0
105	V	±5.000V*	280	WRe0-26	0.0 to 2320.0
200	R	0.0 to 1760.0	290	WRe5-26	0.0 to 2320.0
210	S		310	PL II	-100.0 to +1390.0
220	B		311		-100.0 to +600.0
230	K	-200.0 to +1370.0	312	-100.0 to +300.0	
231		-200.0 to +600.0	320	Ni-Ni-Mo	0.0 to 1310.0
232		-200.0 to +300.0	401	Pt100Ω	-200.0 to +300.0
240	-200.0 to +900.0	402	-140.0 to +150.0		
241	-200.0 to +350.0	403	-100.0 to +100.0		
250	J	-200.0 to +1100.0	411	JPt100Ω	-200.0 to +300.0
251		-200.0 to +450.0	412		-140.0 to +150.0
260		-200.0 to +400.0	413		-100.0 to +100.0
261	T	-200.0 to +250.0			

* Indication range: -19999 to +29999.
*F display is selectable.

Dimensions

(Unit: mm)

• SRF201/202/203



• Panel cutout

