

KR-100N intelligent recorder is measurable up to maximum 12 channels with high accuracy and each channel is controlled independently.

Features

- Easy operation
- Clear printing
- Multi input per channel(TC, RTD, mV, V, mA)
- 12 channel input in 100mm
- 6 point alarm relay output
- RS485 communication
- Diverse filter selection
- **CE**

Ordering Codes

MODEL	TYPE	ALARM (OPTION)	COMMUNICATION (OPTION)	CONTENT	
KR-100N	01			1 Channel	
	02			2 Channel	
	03			3 Channel	
	06			6 Point	
	12			12 Point	
			0		Without Alarm
			1		Alarm 6EA
				0	Without communication
				1	RS485

Specifications

Input

- Measuring interval : 1sec(1, 2, 3 channel type)
6sec(6, 12 point type)
- Input resistance : TC, mV, RTD ... over 1MΩ
VOLT ... over 200kΩ
mA ... external resistance, 250kΩ
- Insulation resistance
 - Between channels ... Over 10MΩ(500VAC) only for channel type
In case of dot type, none isolation
 - Between power and input : Over 100MΩ(500VAC)
- Isolation internal voltage : Between channels, Between case(FG)
input ... 500VAC for a minute

Input table

KIND OF INPUT	RANGE	SCALE
TC_B		0~1800℃
TC_R		0~1750℃
TC_S		0~1750℃
TC_K		-200~1350℃
TC_E		-200.0~800.0℃
TC_J		-200.0~800.0℃
TC_T		-200.0~400.0℃
JPt100		-200.0~600.0℃
DPT100		-200.0~600.0℃
mV	-500.0~+500.0mV	-9.999~+9.999(-9999~+9999)
VOLT	-50.0~+50.0V	-9.999~+9.999(-9999~+9999)
mA	-100.0~+100.0mA	-9.999~+9.999(-9999~+9999)

>> AS for mA type, external 250Ω 0.05% 25PPM precise resistance is attached.



Accuracy

- Indicating accuracy : (±)0.25% of Full scale
- Recording accuracy : (±)0.5% of Full scale

Recording

- Responding time : Min. 3 seconds, subject to chart speed
- Recording type : Pseudo-thread line recording type by 6 color pen
- Recording speed : 10, 20, 40, 60, 120, 240 mm/H
- Recording paper : Konics KR-100N exclusive recording paper
(length : 9M/1 volume)

Environment

- Used temperature : -10~60℃
- Used humidity : 10~80%
- Storage temperature : -20~70℃
- Storage humidity : 5~90%

Battery for Clock

- Over 3 years in power-off state
- Type : TL-5101(3.6volt) Lithium battery

Power supply

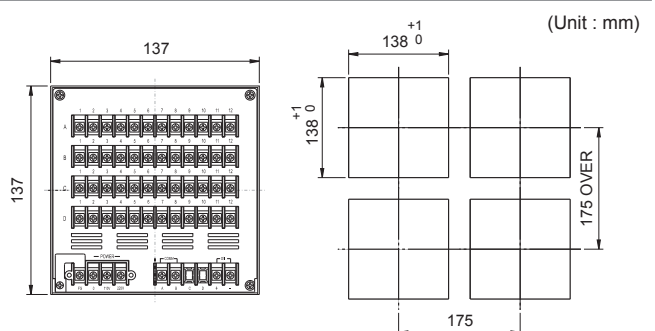
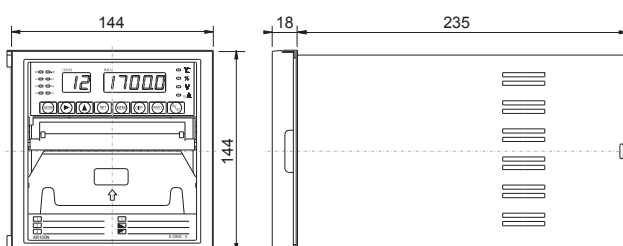
- Supplied voltage : 110/220VAC(±10%), transformed by external terminal

- Capacity : Max. 20VA
- Frequency : Combined use for 50/60Hz
- Isolation resistance : Min. 5MΩ FG-Power terminal(500VAC)
- Isolation internal voltage : 1500VAC FG-Power terminal for a minute

Contact point output of alarm relay(Optional)

- Capacity of contact point : 5A 30VDC or 250VAC,
1/10HP 120VAC(UL Rating)
- Max. switching voltage : 150VDC or 250VAC
- Dielectric strength : 750Vrms contact to contact,
3000Vrms contact to coil

Dimension, Panel Cutout

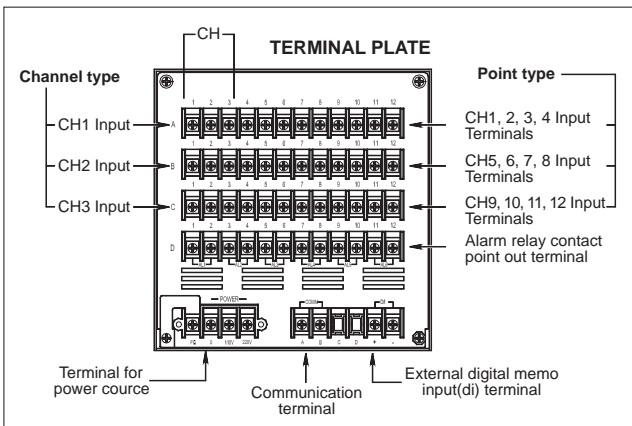


A
Recorders
B
Indicators
C
Converters
D
Controllers
E
Thyristor Units
F
Pressure Transmitters
G
Temperature Transmitters

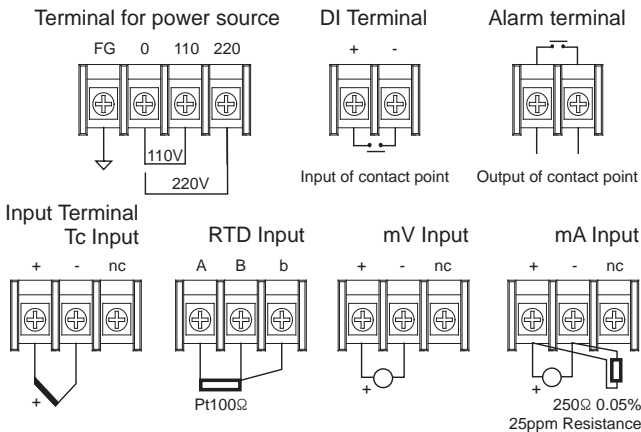
Specifications

- **RS485 communication port (Option)**
 - Connecting wire type : 2-wire multi drop method
 - Communication type : 1: N
 - Maximum number of instrument per 1 port : Max. 16
 - Protocol : Konics standard protocol
 - Max line length : 1km
 - Wire type : Twisted shield 2c 0.75SQ over
- **Outward shape**
 - Size : 144(W) X 144(H) X 235(D)mm
 - Panel cutting : 138 X 138mm(+1/-0mm)
 - Weight : Approx. 4kg

Connections



Wiring method per kinds



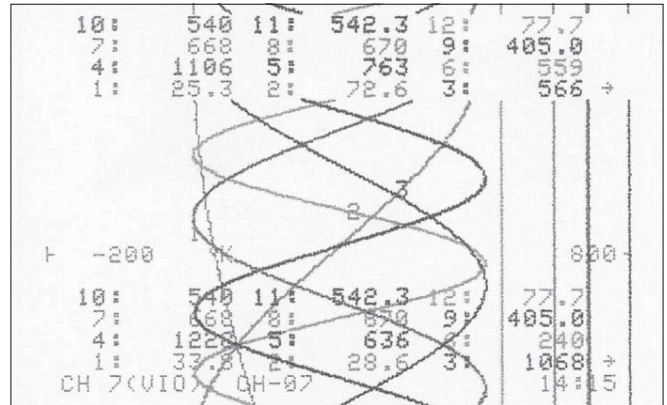
Functions

Example of list out functioning recording paper

CH	INPUT	RANGE	SCALE	UNIT	ALARM
T	A	G	LO/ HI	LO/ HI	FILT
1	MV	-200.0	0.0	mV	0.0 0
CH-01		200.0	100.0	NONE	100.0 1
2	VOLT	-10.00	0.0	V	0.0 0
CH-02		10.00	100.0	FIR	100.0 1
3	TC-B		0	°C	0 0
CH-03			1800	AU- 4	1800 3
4	TC-R		0	°C	0 1
CH-04			1750	AU- 8	1750 2
5	TC-S		0	°F	1000 4
CH-05			1750	AU-16	1000 2
6	TC-K		-200	°K	-200 6
CH-06			1350	NONE	1350 4

Functions

Example of digital memo functioning recording paper



Multi Input and User Scaling Function

User can select B,R,S,K,E,J,T of thermocouple. RTD, JPT 100, DPT 100 and DC voltage mV, Volt DC current mA by inputting key. The input range of DC voltage mV, Volt DC current mA can be set up in the fixed range by user, to all inputs, it can be set up in full scale by the scale-extension user wants.

Sensor Deviation Compensating Function per Channel

Deviated value can be compensated by setting up the sensor compensation value in required channel.

Digital Memo Function

This recorder can record the input values of all channels into numbers by pushing key or inputting external DI at the fixed intervals.

Print Mode Setting Function

The recorder can record analog continuous line and make a digital print at a fixed period.

Printing Function in Recording Paper when Alarm brings forth

When alarm occurs, the recorder indicates ↑ (HI-alarm), ↓ (LO-alarm) beside the trend of channel concerned.

Listing Out Function

The recorder can print out the set parameters per channel.

Channel No Printing Function

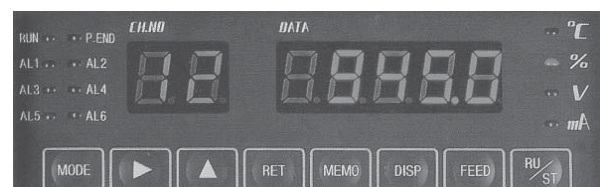
The number of input channels is over 6 dots. It is difficult to read as same color is doubly printed. So this record or can record the channel numbers from 1 to 6 at the same color as the trend beside it.

Digital Filter Function

The recorder can select and use the most proper filter for the spot condition among 5 kinds of filters.

- None filter : Recording mode to record the input thing as it is.
- Record feature per various filter types.

Clear DISPLAY and convenient KEY BOARD



KRN100
KRN50
KR-100N
KA-100
VR-18
KODAS Series

Key Functions

- Status LED : 8 LED indicate the condition of recorder and alarm output
- Data : 7 segment LED indicate input value, message of setting parameter and data
- CH No : Input channel number of data indicated on data display at present
- Unit LED : LED indicates setting unit per channel



>> Mode Key : Converting mode and storing data when setting up parameter



>> Shift Key : Moving the number of digits of setting data



>> Up Key : Increasing setting data



>> Ret Key : Storing data when getting out of setting parameter mode



>> Memo Key : Digital memo and list out



>> Disp Key : Selecting Manual / Automatic for converting channel



>> Feed Key : Transmitting channel paper manually



>> RU/ST Key : Starting or stopping record

Intelligent Hybrid Recorder
KONICS