RECORD Recorders

PANEL LINE RECORDER ZR 440



OUR PANEL LINE CHART RECORDERS

the new design complies with the safety standards EN in the safety, EMC and operation.

- Alarm for max and min on all channels
- galvanic separation of inputs
- improved dynamic characteristics (frequency responce)
- various values of input and supply voltage
- compatibillity with transducers

BASIC OPTION:

ZR 441 Chart Recorder - single channel with

fibre pen

ZR 442 Chart Recorder - two channel

with fibre pens

ZR 443 Chart Recorder - three channels with

fibre pens

The line recording instrumnent ZR 440 uses the compensation principle based on the linear motor and position resistivity sensor. The instrument is designed to be easily built into a panel. On the rear pannel there are contacts for connection of input signals.

USER'S OPTION:

• number of channels: 1, 2, 3

recording chart: rolls or folded paper

• power supply: 24 - 230 V DC

or 6 voltages AC

• input signal parameters: DC, AC

• standard scale division: 0...100

• line colour: blue, red, green

TECHNICAL PARAMETERS

Operating condition: EN 61 143-1

Accuracy: 1%

Measured input signals:



Technical parameters

rechnical parameters	
with galvanic channel separation - DC	1 mA; 2,5 mA; 5 mA; 10 mA; 20 mA; 420 mA; 25 mA; 50 mA; 100 mA; 250 mA; 500 mA; 1 A 60 mV; 150 mV; 300 mV; 500 mV; 1 V; 2,5 V; 10 V; 25 V; 50 V; 100 V; 400 V; 500 V ± 1 mA; ± 2,5 mA; ± 5 mA; ± 10 mA; ± 20 mA; ± 25 mA; ± 50 mA; ± 100 mA; ± 250 mA; ± 500 mX; ± 1 A; ± 60 mV; ± 150 mV; ± 300 mV; ± 500 mV; ± 1 V; ± 2,5 V; ± 5 V; ± 10 V; ± 25 V; ± 50 V; ± 100 V; ± 250 V; ± 500 V;
with galvanic channel separation - AC	100 mA; 250 mA; 500 mA; 1 A; 2,5 A; 5 A 50 V; 57,7 V; 100 V; 120 V; 230 V; 250 V; 500 V
Temperature measurement	sensor PT 100 - without galvanic channel separation (three-wire connection on terminals x3, x4, x5, where x indicates the number of channel, limit device is limited by the number of terminals) -70130 °C, -5050 °C, 0100 °C, 0150 °C, 0200 °C, 0400 °C, 0600 °C
Recording chart	refillable fibre pen, line lenght min. 1000 m pro one filling, max. chart speed 0,1 m/sec
Width of recording	100 mm
Response time	adjustable from 0,25 to 10 sec
Frequency response	2 Hz
Non-sensitivity	0.5 %
Time quartz-unit	crystal controlled
Paper feed rate	1, 2, 5, 10, 20, 60, 120, 240, 300, 600, 1500, 3000 mm/h ± 0,2 %
Feed control	by means of code switches inside the instruments - by remote control
Power supply	by means of code switches inside the institutions - by femote control
DC Power supply	24, 48, 60, 110 V ± 20 % DC
AC	120, 230 V ± 15 % AC (45-66 Hz)
The line recorder complies with safety st	
Protection class	
Overvoltage category	
Pollution degree	2
Climate resistance category	WT according to IEC 721-2-1
Electromagnetic compatibility	according to EN 50081-1
	EN 50082-1
Dimensions	
front	144x144 mm, opening downwards (option to the left)
total lenght	max. 293 mm
total lenght with fixed convertors NCR	max. 330 mm
Weight	max.5 kg