

Inputs				
Input signal	Measuring range/	Accuracy class (%)	Subrange/	Accuracy class (%)Minimal
Voltage	0 .. ±9999 mV	0.15	5 mV	0.25
Current	0 .. ±20 mA	0.15	1 mA	
Thermocouple (TC): J (Fe-CuNi)	-200 .. 1200°C	0.1	100°C	1
K (NiCr-NiAl)	-200 .. 1370°C		130°C	0.7
N (NiCrSi-NiSi)	-200...1300°C		200°C	0.5
E (NiCr-CuNi)	-200...1000°C		100°C	1
R (PtRh13-Pt)	0 .. 1760°C	0.2	540°C	0.3
S (PtRh10-Pt)	0 .. 1760°C		570°C	0.3
T (Cu-CuNi)	-200 .. 400°C	0.1	110°C	0.9
B (PtRh30-PtRh6)	400 .. 1820°C	0.2	1000°C	0.2
L (GOST)	-200 .. 800°C	0.1	90°C	0.2
K (GOST)	-200 .. 1370°C		130°C	0.7
Resistance transmitter (RTD): Pt 100	-200 .. 850°C	0.15	50°C	0.25
Pt 500		0.3		0.5
Pt 1000		0.3		
Ni 100	-60 .. 180°C	0.15		0.25
Cu 100	-50 .. 180°C			
GR.21 (GOST'78) (GOST'94)	-260 .. 1100°C			
50P (GOST'78) (GOST'94)				
100P (GOST'78)				
100P (GOST'94)				
50M (GOST'78) (GOST'94)	-200 .. 200°C			
100M (GOST'78) (GOST'94)				
Potentiometric transmitter	50 .. 2000 W	100 W		
Resistance transmitter	0 .. 2000 W	100 W		
Logic input	control signal 0/5 .. 24 V d.c.		switching frequency up to 50 Hz	
Outputs				
Output type	Properties			
Analog	- current: 0 .. 5 mA, 0 .. 20 mA lub 4 ..20 mA, load resistance < 500 W - voltage: 0 .. 5 V, 1 ..5 V, 0 .. 10 V			
Relay	- electromagnetic relays: ≤ 250 V a.c./1 A or ≤ 30 V d.c./1 A - OptoMOS relays:≤85 V d.c., 100 mA or ≤60 V a.c., 70 mA			
Output to supply object transducers	- 2 outputs 24 V d.c./ 30 mA			
Digital interface				
Interface type	Properties			
RS-485	2 interfaces: MODBUS Slave and Master, baud rate 0.3 .. 256 kbit/s, transmission mode ASCII/ RTU			
RS-232	interface: MODBUS Slave, baud rate 0.3 .. 256 kbit/s, transmission mode ASCII/ RTU			
USB	Device V.1.1, socket USB-B			
ETHERNET	10 Base-T, socket RJ45, MODBUS Slave TCP/IP, FTP and WWW server			
External features				
Supply voltage	90 ..230.. 253 V	input power ≤ 30 VA		
Temperature	operating: 0 .. 23 .. 55°C	storage: -20 .. 60°C		
Humidity	< 70%	condensation inadmissible		
Rated operating conditions				
Display field	LCD 5.7" TFT type	320 x 240 pixels, with touch screen		
Overall dimensions	144 x 144 mm	panel cut-out dimensions: 138+1 x 138+1 mm		
Weight	< 2 kg			
Protection grade	from frontal side: IP65	from terminal side: IP20		
Safety and compatibility requirements				
Electromagnetic compatibility	noise emissions	acc. to EN 61000-6-4		
	noise immunity	acc. to EN 61000-6-2		
Isolation between circuits	500 V d.c.	acc. to EN 61010-1		
Isolation between supply and measuring system	2 kV			
Pollution level	2			
Installation category	II			
Maximal operating voltage in relation to earth	for the measuring system, relays and supply: 500 V	acc. to EN 61010-1		
Altitude above sea level	< 2000 m			

KD7 Screen Recorder

Ordering

Screen Recorder KD7 -	X	X	X	X	X	X	X	X	X	X	X	X
Measuring inputs (Slot 1):												
without measuring inputs	0											
6 programmable measuring inputs	1											
6 standard measuring inputs: 0..10 V	2											
6 standard measuring inputs: 0..20 mA	3											
6 standard measuring inputs: 4..20 mA	4											
6 standard measuring inputs:	5											
3 x 0..10 V + 3 x 0..20 mA												
6 standard measuring inputs:	6											
3 x 0..10 V + 3 x 4..20 mA												
3 programmable measuring inputs	7											
Measuring inputs (Slot 2):												
without measuring inputs	0											
6 programmable measuring inputs	1											
6 standard measuring inputs ¹⁾	2..6											
3 programmable measuring inputs	7											
Interface measuring input:												
with RS-485 (1) interface measuring input	1											
Digital signals/analog outputs (Slot 3):												
without digital signals and analog outputs	0											
8 alarms (NO relays) + 8 alarms (OptoMos)	1											
8 alarms (NC relays) + 8 alarms (OptoMos)	2											
8 digital inputs + 4 analog outputs: 0..5 mA	3											
8 digital inputs + 4 analog outputs: 0..20 mA	4											
8 digital inputs + 4 analog outputs: 4..20 mA	5											
8 digital inputs + 4 analog outputs: 0..5 V	6											
8 digital inputs + 4 analog outputs: 0..10 V	7											
Digital signals/analog outputs (Slot 4):												
without digital signals and analog outputs	0											
8 alarms (NO relays) + 8 alarms (OptoMos)	1											
8 alarms (NC relays) + 8 alarms (OptoMos)	2											
8 digital inputs + 4 analog outputs ²⁾	3..7											
Interfaces:												
USB	1											
USB + Ethernet + RS-485 (2)	2											
USB + Ethernet + RS-232	3											
Memory for measuring data:												
with a 4 GB CF card	6											
as per order	X											
Supply:												
90..253 V a.c.	1											
Recorder firmware:												
without mathematical functions ³⁾	0											
with mathematical functions	1											
Softwares servicing the recorder from PC:												
KD Connect, KD Check	1											
KD Connect, KD Check, KD Archive, KD7 Setup	2											
Acceptance tests:												
without extra quality inspection requirements	8											
with an extra quality inspection certificate	7											
according to customer's request	X											

¹⁾ Write the range code from the item 2...6 as above: (Slot 1)

²⁾ Write the range code from the item 3...7 as above: (Slot 3)

³⁾ A key for the activation of mathematical functions can be ordered separately

Example:

the code **KD7-1-1-1-0- 0-1-6-1-1-1-8** means: KD7 recorder, (Slot 1) with 6 programmable measuring inputs, (Slot 2) with 6 programmable measuring inputs, with RS-485 interface measuring input, (Slot 3) without digital and analog outputs, (Slot 4) without digital signals and analog outputs, with USB interface, with a 4 GB CF memory card, supply: 90 .. 253 V a.c., with mathematical functions, with KD Connect and KD Check softwares, without extra quality inspection requirements.