Parameters of inputs MS55D

The user can select the hardware modules to be fitted into the monitoring system MS. The modular design gives you the freedom to start with several input modules and to expand the system later on.

Measured values		Module types	Range	Accuracy	Notes
current	DC	A0	4 to 20 mA	±0.1 % FS	with source approximately 21V for two-wire transducers with current loop (e.g. temperature and humidity transducers Comet).
					only galvanic not isolated
		A1*	4 to 20 mA		for passive sensing of current, Rin = 14 Ohms
		B0*	0 to 20mA		
		B1*	0 to 1 A		input resistance Rin = 0.04 Ohms
		B2*	0 to 5 A		
	AC	C0	0 to 20 mA	±1 % FS	galvanic isolated, sinusoidal signal at a frequency of 50 Hz input resistance Rin by type 0.04 Ohm to 14 Ohms
		C1	0 to 1 A	±1 % FS	
		C2	0 to 5 A		
voltage	DC	D0*	0 to 100 mV	±0.1 % FS	input resistance Rin by a 900 kOhms to 10 Mohms
		D1*	0 to 1 V		
		D2*	0 to 10 V		
		D4*	0 to 75 V		
		D5*	-10 V to +10 V	±0.1 % FS (± 20 mV)	
	AC	E0	0 to 100 mV	±1 % FS	only galvanic isolated, sinusoidal signal at a frequency of 50 Hz input resistance Rin by type 700 kOhms to 10 Mohms
		E1	0 to 1 V		
		E2	0 to 10 V		
		E4	0 to 50 V		
resistance		F*	must be specified	±0.1 % FS	two-wire connection
temperature probes Pt and Ni	Ni1000	J*	-50 °C to +250 °C	±0.2 °C (-50 °C to 100 °C)	Ni1000/6180 ppm, two-wire connection
				±0.2% MV (100 °C to 250 °C)	measuring current of approximately 0.25 mA continuously
	Pt100	K*	-140 °C to +600 °C	±0.2 °C (-140 °C to +100 °C)	Pt100/3850 ppm, two-wire connection
				±0.2 % MV (+100 °C to +600 °C)	measuring current of approximately 2 mA continuously
	Pt1000	K1*	-140 °C to +600 °C	±0.2 °C (-140 °C to +100 °C)	Pt1000/3850 ppm, two-wire connection
				±0.2 % MV (+100 to +600 °C)	measuring current of approximately 0.2 mA continuously
	Pt1000	K3	-10 °C to +50 °C	±0.06 °C	Pt1000/3850 ppm, two-wire connection
					measuring current of approximately 0.2 mA continuously
thermocouple	K (NiCr-Ni)	N*	-70 °C to +1300 °C	±0.3 % MV + 1.5 °C	linearized, cold junction compensation, datalogger must be placed in recommendend working position
	T (Cu-CuNi)	T*	-200 °C to +400 °C		
	J (Fe-Co)	O*	-200 °C to 750 °C		
	S (Pt10 %Rh-Pt)	P*	0 °C to 1700 °C	±0.3 % MV +1.5 °C (200 °C to 1700 °C)	
	B (Pt30 %Rh-Pt)	Q*	100 °C to 1800 °C	±0.3 % MV+1.0 °C (300 °C to 1800 °C)	linearized, without cold junction compensation
binary signal	potential-less contact	S*	binary signal		maximum resistance of closed contact is 1000 Ohms
					minimum duration for recording is 200 ms
	voltage, galvanically isolated	S1	binary signal		voltage for „H" state is 3 V to 30 Vdc @ 9 mA max
					minimum duration for recording: 200 ms
					galvanically isolated
pulse counter	potential-less contact, galvanically isolated	CTU	31 bits, 5kHz max.		voltage change of the counter state is 3 V to 24 Vdc
					backup power, filter bouncing
					galvanically isolated
	potential-less contact, open connector	CTK	31 bits, 5kHz max.		maximum resistance of closed contact is 10 kOhms
					minimum open contact resistance is 250 kOhms
					backup power, filter bouncing
frequency	input voltage signal measurement, galvanically isolated	FU	0 to 5 kHz	±(0.2 % MV + 1 Hz)	input voltage for „H": 3 V to 24 Vdc @ 7 mA
					minimum duration of input pulse: 30 us
			resolution 1Hz		galvanically isolated
	measurement frequency switching contact, galvanically not isolated	FK	0 to 5 kHz	±(0.2 % MV + 1 Hz)	maximum resistance of closed contact is 10 kOhms
					minimum open contact resistance is 250 kOhms
			resolution 1 Hz		minimum duration of input pulse: 30 us
RS485	input for serial signal RS485	RP	digital transmission		input supports Modbus RTU or Advantech
					connected devices must have the same communication parameters
					input can work with up to 16 devices
					galvanic isolated, MS can be equiped wit multiple RP modules