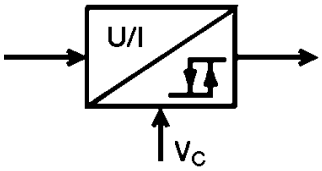
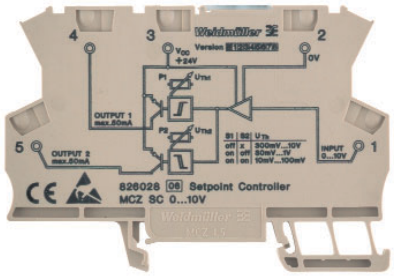


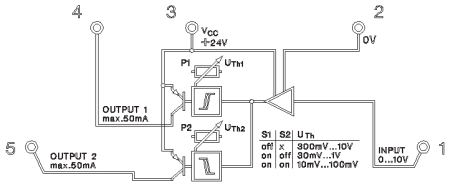
The Setpoint Controller allows cost effective units to be built for monitoring analog signals. An upper and lower limit value, which covers the entire signal range, can be set by the user via 2 potentiometers. The respective statuses of the upper and lower limit value are indicated at the 2 digital outputs (upper limit value under/over flow; lower limit value under/over flow).

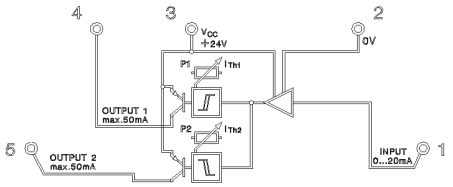
MCZ SC 0…10 VDC

MCZ SC 0…20 mA



Block diagram





Ordering data	Type	Part No.
for TS 35	MCZ SC 24 V/0…10V	**8260280000**

Ordering data	Type	Part No.
	MCZ SC 24 V/0…20 mA	**8227350000**

Technical data				
Voltage supply				
Supply voltage	24 VDC ± 20%			
Supply current	15 mA			
Input				
Input voltage	0…10 V			
Input resistance	60 kΩ			
Voltage drop at full scale				
Max. input current				
Cut-off frequency	100 Hz			
Transmission behavior		S1	S2	Temperature coefficient T_k
Threshold voltage ranges of U_{th}	10…100 mV	on	on	500 ppm max.
	0.03…1 V	on	off	250 ppm max.
	0.3…10 V	off	x	250 ppm max.
Setting of switching threshold	via 2 potentiometers (12 turns)			
Hysteresis of switching threshold	1% of the end value			
Function of output 1	active High for $U_{Input} < U_{th1}$ (set via P1)			
Function of output 2	active High for $U_{Input} > U_{th2}$ (set via P2)			
Response time	< 250 µs (switch threshold at 90% of the max. input signal;			
	$R_L \leq 1$ kΩ)			
Output	2 channel switching PNP			
Output current per output	max. 50 mA			
Voltage drop at output transistor	< 1.2 V at 50 mA			
Insulation coordination/safe separation to EN 50178				
Separation input/output	none			
Dielectric strength I/O to mounting rail	4 kV_{eff}/1 min			
Ambient temperature	0°C…+50°C			
Storage temperature	-25°C…+60°C			
Conductor	AWG 22…12			
Conductor cross-section	1.5 mm^2 (16 AWG)			
Approvals	CE, UL, CSA			
Overall width mm (in.)	6 (.24)			
Dimensions and accessories see	Page 363			

Technical data				
Voltage supply				
Supply voltage	24 VDC ± 20%			
Supply current	15 mA			
Input				
Input voltage	0.5…20 mA			
Input resistance	50 Ω			
Voltage drop at full scale	1 V			
Max. input current	40 mA			
Cut-off frequency	100 Hz			
Transmission behavior				Temperature coefficient T_k 250 ppm max.
Threshold voltage ranges of U_{th}				
Setting of switching threshold	via 2 potentiometers (12 turns)			
Hysteresis of switching threshold	1% of the end value			
Function of output 1	active High for $I_{Input} < I_{th1}$ (set via P1)			
Function of output 2	active High for $I_{Input} > I_{th2}$ (set via P2)			
Response time	< 250 µs (switch threshold at 90% of the max. input signal;			
	$R_L \leq 1$ kΩ)			
Output	2 channel switching PNP			
Output current per output	max. 50 mA			
Voltage drop at output transistor	< 1.2 V at 50 mA			
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