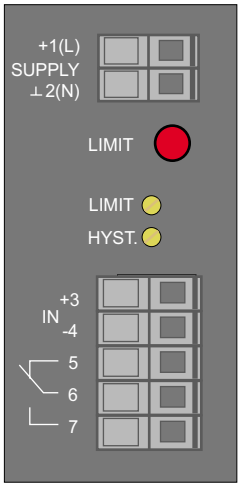
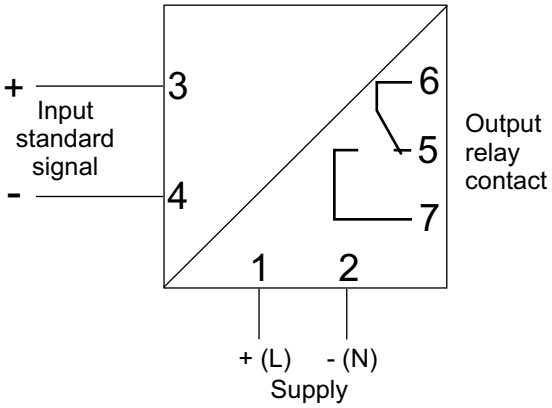
Limit value switch for standard signals

Characteristics



Input: 0...10 V, 0...20 mA, 4...20 mA
Output: Relay with change-over contact
Adjustment of limit value and hysteresis
Switching when above or below limit value
Indication of status of relay
Supply voltage 24 VDC +/-20%
Optional supply 230 VAC or 115 VAC
Measuring fault <0,5% of end scale value
Temperature coefficient 50 ppm/K
Easy mounting with top hat rail case
Degree of protection IP 20

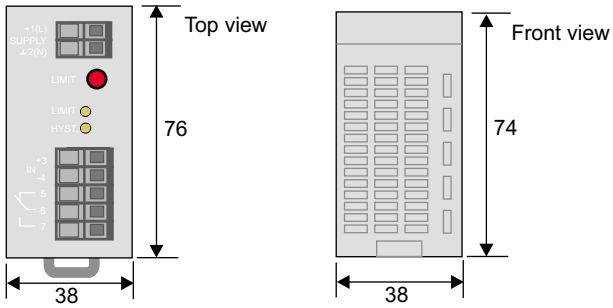
Connection



Configuration of terminals

terminal	24 VDC	230 VAC	115 VAC
1	+24 V	L	L
2	0V	N	N
3	Input + (0(4)...20 mA, 0...10 V)		
4	Input - (0(4)...20 mA, 0...10 V)		
5	Relay point break		
6	Relay point common		
7	Relay point make contact		

Dimension, function



Function:
With the potentiometer LIMIT it is possible to adjust the limit value all over the range of the input signal.
Relay active = LED LIMIT “ON”.
With the potentiometer HYST. it is possible to adjust the range of limit value (difference between relay ON/OFF), maximum is approx. 10% of the input range
LIMIT= adjustment of limit value
HYST. = adjustment of hysteresis of the switch point

Applications

The limit value switch is very well suitable in installations with available standard signals where an additional limit switch is necessary beside existing limit switches or as a supplementing for devices without limit switch.

Ordering code

N	U	X	X	X	X	X	X	-	X	X	X

Input:	0...10 V	0
	0...20 mA	1
	4...20 mA	2
Output:	Relay with change-over contact	0
Supply:	24 VDC	0
	230 VAC	1
	115 VAC	2
Case:	top hat rail case IP20	0
Switching when:	input signal is above limit value	0
	input signal is below limit value	1
Limit value adjusted:	(please indicate)	0
Customized type:	on request	0

Technical data

Input

Current	0(4)...20 mA DC, Ri 47 ohms
Voltage	0...10 V DC, Ri >100 kohms

Output

Relay	1 change-over contact
Contact	AC: 4000 VA ohmic load AC: 750 VA inductive load DC: 30 V 16 A ohmic load DC: 110 V 0,3 A ohmic load

Accuracy

Measuring fault	< 0,5% of end scale value
Temperature coefficient	50 ppm/K

Supply

Supply voltage	24 VDC +/-20%
Optional	230 VAC or 115 VAC
Residual ripple	10%
Current consumption	< 50 mA with supply 24 VDC

Ambient conditions

Nominal temperature	10...40 °C
Operating temperature	0...60 °C
Storage temperature	-10...70 °C

Mechanics

Enclosure	syntetic material PA6
Dimension	W38 x D76 x H74
Mounting	top hat rail
Colour	black
Degree of protection	IP 20
Weight	approx. 80 g (supply DC) approx. 160 g (supply AC)
Connection	plug-in terminal strip up to 2,5 mm²