

# Measuring Point Change-over Switch Type MUM

for 8 or 16 Measuring points

## Allgemeines

Measuring point change-over switches allow the connection of up to 16 measuring points to 1 measuring device, e.g. an analog input of a PLC.

The inputs can be selected with a BCD-Code.

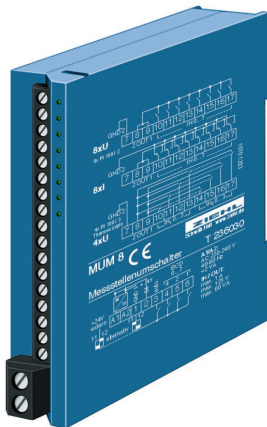
Manual selection can be made with a code-switch.

In automatic mode, the inputs are polled (tact-time adjustable) and thus be displayed in succession.

When using a measuring point change-over switch, only 1 measuring input is needed to collect multiple values. Especially with slowly changing signals like temperatures, measuring every other second is enough.

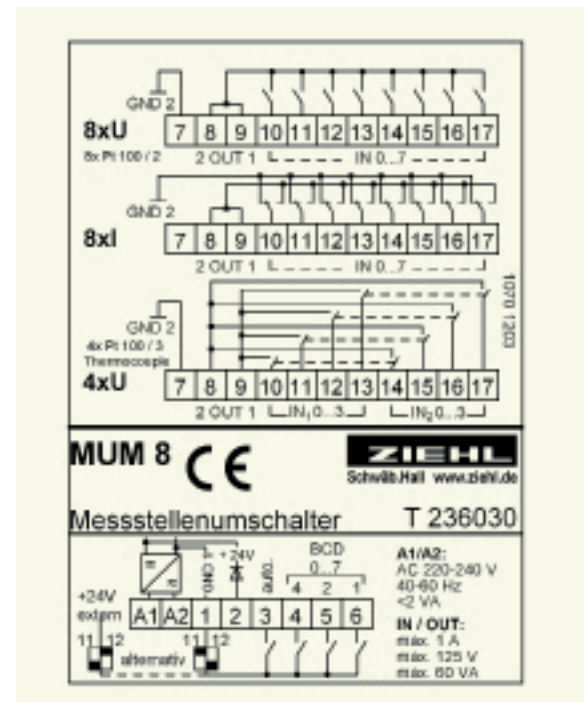
Expensive inputs for Pt100 or 0-10 V/0-20 mA at PLCs can be saved.

## MUM8 8-fach



With the MUM8, alternatively 8 measuring points with common ground or 4 measuring points with separated ground can be switched.

- PLC-compatibel. Channel-selection over 3 bit parallel (24 V), e.g. PLC or by a code switch
- Optional switching + or - 8 channels (0/4 ... 20 mA, 0 ... 10V, Pt 100) with common ground
- 4 double-channels (=Pt 100/3-wire and thermocouples)
- Supply-voltage AC 230 V or DC 24 V
- LED-display for selected channel
- Tact-time in automatic mode adjustable 0,5 ... 10 s
- plug-in terminals



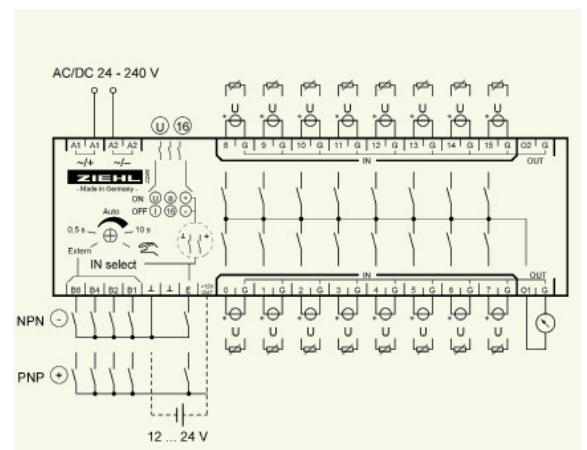
## MUM16 16-fach



With the MUM16, alternatively 16 measuring points with common ground or 8 measuring points with separated ground can be switched.

- PLC-compatibel. Channel-selection over 4 bit parallel (24 V), e.g. PLC or by a code-switch
- Optional switching + or -
- Enable-input for using multiple MUM in parallel
- Monitoring of up to 16 signals for one limit with only 1 limit switch
- 16 channels (0/4 ... 20 mA, 0 ... 10V, Pt 100) with common ground
- 8 double-channels (= Pt 100/3-wire and thermocouples)
- Simple configuration with 3 DIP-switches

- Supply AC/DC 24-240 V
- LED-display for selected channel
- Tact-time in automatic mode adjustable 0,5 ... 10 s
- plug-in terminals
- Housing for mounting in switchgear cabinets or fuse boxes, 140 mm wide, mounting height 55 mm



Technical Data		MUM8	MUM16
Supply voltage	Rated supply-Voltage $U_s$	AC 220 - 240 V/ DC 24 V	AC/DC 24 - 240 V
	Frequency	50/ 60 Hz	0/ 50/ 60 Hz
	Power consumption	< 2 VA	< 6,5 VA, 4 W
	Admissible tolerance	AC -10...+10%	-10...+10%
Inputs	Number of input channels	8 channels with common ground or 4 x 2 channels potentially separated	16 channels with common ground or 8 x 2 channels potentially separated
	display	1 LED / channel	
	switching voltage	max. AC/ DC 24 V	
	switching current	max. 100 mA	
	switching capacity	max. 2,4 W or 2,4 VA (ohmic Load)	
	relays	8 x 1 co	16 x 1 co
	expected contact life mech.	approx. $10^8$ operations	
	expected contact life elec.	5 x $10^7$ operations at 12 V/ 10 mA 3 x $10^6$ operations at 24 V/ 0,1 A	
	control inputs	manual / automatic channel select 3 bit BCD potentially separated from analog part	enable channel select 4 bit BCD
	control signal	for all control inputs 0/24 V (PLC-compatible) aktive high or low selectable with DIP-switches	
Outputs	clock-time	adjustable (potentiometer) 0,5...10 s	
	switching time	break between 2 channels app. 1-2 ms	
	outputs	max. 2	
Test Conditions	at single channel:	In 0 - 7 to Out 1 + Out 2	In 0 - 15 to Out 1
	at double channel:	In 0 - 3 to Out 1 In 4 - 7 to Out 2	In 0 - 7 to Out 1 In 8 - 15 to Out 2
Normal conditions of use	rated insulation voltage $U_i$	EN 50 178 AC 250 V/ DC 300 V	
	insulation	EN 60664	
	pollution grade	4 kV	
	EMC	2	
	transformer	EN 61 000-6-2, EN 61 000-6-3 EN 61 558	
Housing	rated ambient temperature	0...+50°C	-20...+55°C
	storage temperature	-40°...+75°C	
	environmental conditions	EN 60 068-1	
	on-period	100%	
Housing	Dimensions (h x w x d) mm	Design K: 75 x 22,5 x 118	V8: 90 x 140 x 58
	Protection housing	IP 20, EN 60 529	
	Protection terminals	IP 20, EN 60 529	
	Fitting position	any	
	Weight	app. 150 g	app. 350 g
	Attachment	on 35 mm DIN-rail according to EN 60 715 option: screw-mount M 4 with additional bar (not included)	
	Order-numbers:	<b>T236030</b>	<b>T236035</b>