

• **COM48 COM96**

- Passive blind switch
- 96 x 48 mm or 96 x 96mm format
- up to 24 positions
- For digital or analog signals

- **COM96A**            10 000 points display
- **COM96A/S**        Analog output option (4...20mA, 0...10 V)
- **COM192**            Version with momentary contact switches
- **SEL105**            input selector by logic control

• **High adaptability**

- Switching a wide range of signals
- mV, mA, Volt, PT100, thermocouples, .....

• **Excellent reliability**

- Low resistance golden switches
- Very low thermoelectric emf



The switches of type COM48-96 allow the switching of process or temperature signals, with or without treatment and measure conversion.

**Description: COM48 - COM96**

These versions are passive switches (multi input for one output). The number of channels and the number of switched circuits is made on demand.

**Switch specification:**

- Max breaking power: 37.5 VA
- Max breaking current: 0.3 A
- Max through current: 3A
- Number of operations (at Pmax): >20000
- Contact resistance: < 0.1 Ohms
- Inter-channel insulation: 500 V

**Description: COM96A**

Configurable via the front face buttons or via RS232 link. 4 digits 7-segment displays with red LEDs (14.2 mm digit height) and 4 digits alphanumeric display for the units. Inputs: mV, V, mA, thermocouples, PT100, PT1000, ..... Calculation functions: square root extraction, measure range conversion, special linearization function. Optional configurable 0...4...20 mA or 0...10 V output.

**Description: SEL105**

2-state input selector by logic input on DIN rail allowing simultaneous switching of up to 6 inputs (2 x 6 inputs to 6 outputs max)

**Features:**

- DIN panel case : **COM48**: 48 x 96 x 85, **COM96**: 96 x 96 x 85, **COM192** : 192 x 96 mm
  - Fastening with side U-links.
  - Connection with un-pluggable terminals.
  - Changing channels per switch or selector key.
- The configuration of the device must be specified at order:
- The number of input and output channels and the type of input to switch.

COM192



Version and order code:

[Request a quote](#)

- COM48**            12 channels passive switch, maxi 48 x 96 mm.
- COM96**            12 channels passive switch, maxi 96 x 96 mm.
- COM96A**        COM96 with display.
- COM96A/S**      COM96 with display and analogue output.
- COM192**        24-way momentary selector, maxi 192 x 96 mm
- SEL105**        2-state selector 2 to 12 inputs; 1 to 6 output (turnout)

Type of input signals to be specified  
Supply voltage to be specified (except for passive switch)

**Measures available on COM96/A**

Type	Range	Accuracy
<b>Low levels voltage</b>	-250 to 2000mVdc	+/-40 uV
Input impedance	1 MOhms	to +/-1 mV
<i>(on two calibers : 250mV and 2000 mV)</i>		
<b>Differential voltage</b>	-50 to +50mVdc	+/-10 uV
Input impedance	1 MOhms	
<b>High levels voltage</b>	-25 to 200Vdc	+/-0.02 V
Input impedance	500 kOhms	to +/-0.8 V
<i>(on two calibers : 25 V and 200 V)</i>		
<b>Current</b>	-4mA to 40 mA	+/- 0.01 mA
Input impedance	50 Ohms	
<b>Resistance 2, 3 wires</b>	0 / 380 Ohms	+/- 0.2 Ohms
Measure current	< 700 uA	
<b>Pt100 2, 3 wires</b>	-200.....800 °C	+/- 0.2 °C
<b>Pt100 4 wires</b>	-200.....800 °C	+/- 0.1 °C
<b>Thermocouples:</b>		
Tc B	+200.....1800 °C	+/- 2 °C
Tc E	-250.....1000 °C	+/- 0.3 °C
Tc J	-200.....600 °C	+/- 0.4 °C
Tc K	-200.....1350 °C	+/- 0.5 °C
Tc R	0.....1750 °C	+/- 1.5 °C
Tc S	0.....1600 °C	+/- 1.5 °C
Tc T	-250.....400 °C	+/- 0.4 °C
Tc N	-250.....1350 °C	+/- 0.5 °C
TC W3	0.....2300 °C	+/- 2 °C
TC W5	0.....2300 °C	+/- 2 °C
T° compensation	-10 / 60 °C	+/- 0.2 °C
<i>thermocouple breakdown detection current = 0.5 uA.</i>		
<b>Frequency</b>	0.25 / 100 000 Hz	+/- 0.2 %
<b>Duty cycle</b>	50 Hz.....5000 Hz	+/- 0.2 %
Input impedance	100 kOhms	

**POWER SUPPLY**

(to specify at the order)

Standard: 20.....265 Vac/dc  
low voltage: 9 Vdc.....to.....30 Vdc.

**Analogical output (12 bits resolution)**

Type	Range	Accuracy
<b>Current</b>	0 ... 4 ... 20 mA	+/-20 µA
Allowable load:	0.....800 Ohms	
<b>Voltage</b>	0 ... 10 V	+/-10 mV
Impedance output:	500 Ohms (internal shunt 0.1%)	

**RECOMMENDED OPERATING CONDITIONS**

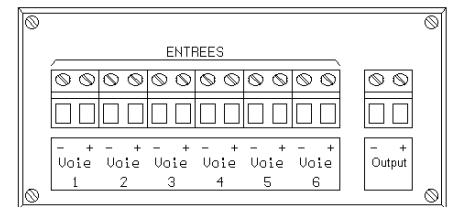
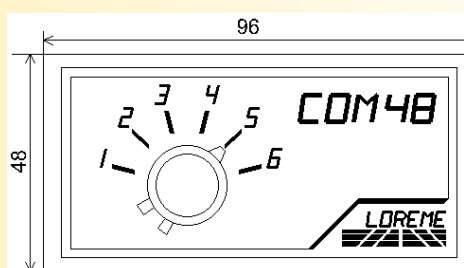
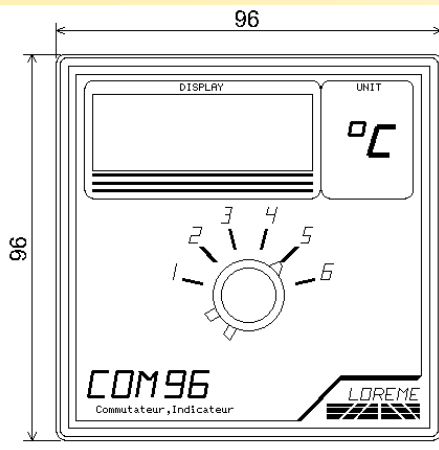
Operating temperature	-10 to +60 °C
Storage temperature	-20 to +85 °C
Temperature drift	< 20 PPM / °C (of full scale)
Relative humidity	85 % (no condensed)
Weight	~ 180 g
Protection	IP20
Dielectric strength	1500 Vrms continuous

**Electromagnetic compatibility 2014/30/UE / Low Voltage Directive 2014/35/UE**

Immunity standard for industrial environments EN 61000-6-2		Emission standard for industrial environments EN 61000-6-4
EN 61000-4-2 ESD	EN 61000-4-8 AC MF	EN 55011 group 1 class A
EN 61000-4-3 RF	EN 61000-4-9 pulse MF	
EN 61000-4-4 EFT	EN 61000-4-11 AC dips	
EN 61000-4-5 CWG	EN 61000-4-12 ring wave	
EN 61000-4-6 RF	EN 61000-4-29 DC dips	



**WIRING AND OUTLINE DIMENSIONS:**



CUT OFF: COM96: 92 x 89 mm, COM48: 92 x 42 mm, DEPTH: 85 mm

SEL105 input selector by logic input, DIN rail version

