MSCI-4 - On/Off Controller with 4 Relays



◆ Description **◆**

Controller MSCI-4

- supplys 4 contacts 220V/5A. Two set-points (activate and release thresholds) of 4 relays are adjusted by 4 pot' HI and 4 pot' LOW. Each relay has jumper for changing operation mode: activated or released above a set point,
- displays value of input signal,
- appropriates for filling and empting control.

◆ Specification ◆

Accuracy: \pm 0.25% F.S. or \pm 1 count.

Power supply: 110 / 220 VAC,

12 VDC / 24V AC/ DC.

Input: current DC 4÷20mA, R_{in} = 25 Ω or vvoltage DC 0÷10V, R_{in} > 10 M Ω or other.

Display: 3.5 digits (0-199.9) 0.5", LCD.

Output: 4 relay C/O contact 220V/5A.

Connection: plug-in terminals.

Mounting: 35mm DI N-rail.

Protection category: IP-40.

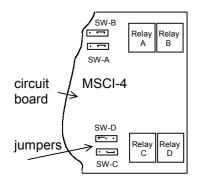
Ambient Temp.: $-10 \div +55$ °C.

Enclosure: W90 X L160 X H73 mm plastic case.

◆ The front panel description ◆

- * [1] Pot' Set A (HI and LOW) for relay A adjusting
- * [2] Pot' Set B (HI and LOW) for relay B adjusting
- [3] Selector switch enables to display inputs values (I N position) / set-point values: Set A (HI,LOW), Set B ...
- [4] Power terminals and A,B output relays
- [5] LED's indicate active relays
- [6] Input and C,D output relays
- * [7,9] Pot' Set D, Set C (HI and LOW) for relay D,C adjusting
- [8] Display LCD, 3.5 digits

◆ Calibration **◆**



The unit is calibrated according to customer requirements. Possibly adjust HI and LOW thresholds of each relay by approprtiate potentiometers. For instance:

- adjust set point LOW by pot' LOW [1] at position Set A/L [3] for relay A, see value on display;
- adjust set point HI by pot' HI [1] at position Set A/H [3] for relay A, see value on display;
- perform the same for B,C,D relay.

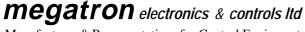
See input signal at position IN [3]

Possible to change operation mode of MSCI-4 (filling or emptyng control) by mounting of 4 jumpers at different position.

See jumpers position in the table:

jumpers	SW-A	SW-B	SW-C	SW-D
emptyng	jumper at right side	right	right	left
filling	right	left	left	left

MSCI 4 - S - 2 - 05-E





http://www.megatron.co.il / sales@megatron.co.il / Tel. 972-4-8410704, Fax 972-4-8410705

Set C MSCI-4

Set B L H L OW A B Relays

Set A H IN Set D A OB

Relays

Set A H IN Set D A OB

Relays

Set A H IN Set D A OB

Relays

Set A H IN Set D A OB

Relays

Set A H IN OC OD

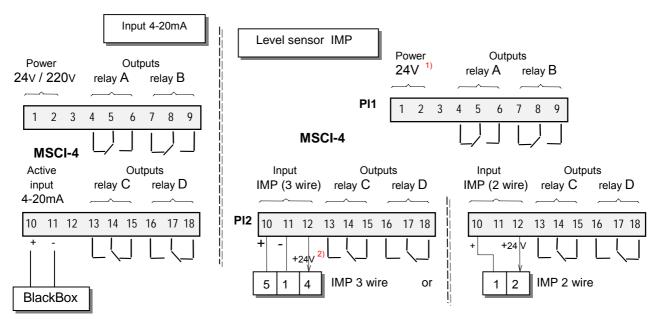
Pl2

relay C, D IN

9 8 7

^{*} They are mounted on circuit board under a plastic cover.

◆ Connection ◆

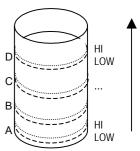


- 1) 24VDC or 24VAC
- 2) Level sensor IMP 3wire (Pulsar) is powered by controller only in case model MSCI-4-24VDC (power supply 24VDC).

◆ Application ◆

A Tank or other volume Emptyng is by two pumps. Level control is executed by level sensor IMP or BlackBox. There are flooding and water deficiency warning.

set- point	level	LED	relay action	action at output	
D	above ні	D lights	D activated	flooding warning	
	under LOW	lights out	D released		
С	above ні	C lights	C activated	+ second pump activation	
	under LOW	lights out	C released	+ second pump activation	
В	above ні	B lights	B activated	first pump activation	
	under LOW	lights out	B released	liist pump activation	
А	above ні	lights out	A released	pump activating prevention in	
	under LOW	A lights	A activated	case of water deficiency	



A Tank or other volume Filling is by two pumps. Level control is executed by level sensor IMP or BlackBox. There are flooding and water deficiency warning.

set- point	level	LED	relay action	action at output
D	above ні	D lights	D activated	flooding warning
	under LOW	lights out	D released	nooding warning
С	above ні	Clights out	C released	first pump activation
	under LOW	C lights	C activated	list pump activation
В	above н	B lights out	B released	+ second pump activation
	under LOW	lights	B activated	+ second pump activation
Α	above ні	A lights out	A released	pump activating prevention in
	under LOW	A lights	A activated	case of water deficiency