

RX A01M ---- SE



8-ZONE INDUSTRIAL CONTROL UNIT

- Power supply 230V~ or 12Vdc
- Possibility of connecting a Backup system
- Possibility of connecting up to 8 4...20mA gas transmitters
- Nor (Normal) or Rev (Reverse) relay logic set-up
- Pre-alarm and Alarm thresholds set-up on two ranges
- Enabling/Disabling of each individual input
- Visual and acoustic signals in case of abnormal events
- Conforms with EEC 2004/108 (EMC), 2006/95 (LVD) Directives

Via Prosdocimo, 30
 I-36061 BASSANO DEL GRAPPA (VI)
 Tel.: +39.0424.567842
 Fax.: +39.0424.567849
<http://www.seitron.it>
 e-mail: info@seitron.it

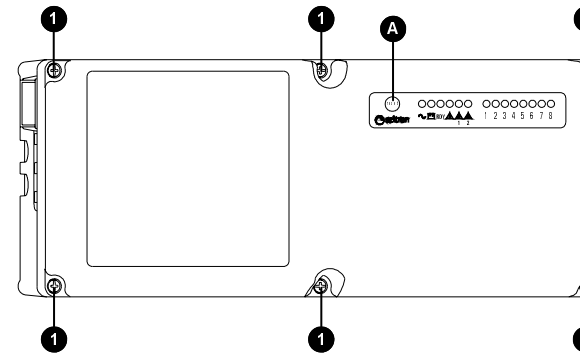


Fig. 1: External aspect.

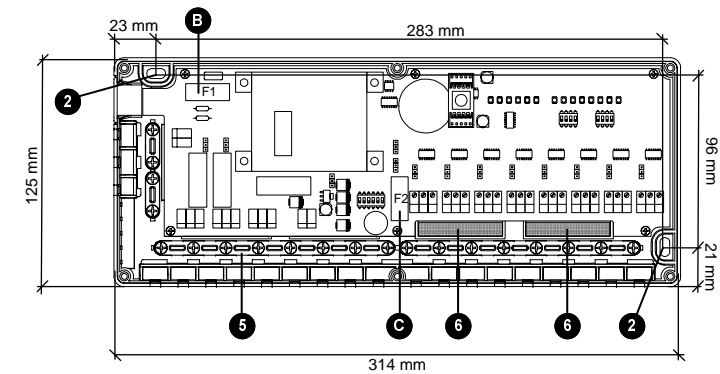


Fig. 2: Internal view and parts.

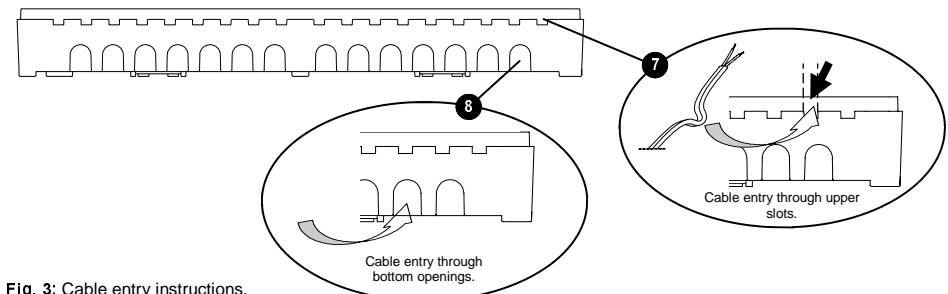


Fig. 3: Cable entry instructions.

WARNING

- This control unit IS NOT suitable for installation in ATEX classified zones.
- We strongly recommend using shielded cables if installed in environments with strong EMC disturbances.
- This device must be installed and the electric connections made by qualified technicians and in compliance with the technical and safety standards in force.
- Connect the device to the power mains using a two-pole switch that conforms with the standards in force and with an opening distance of the contacts of at least 3 mm in each pole.
- Make sure to disconnect power to the plant before making the electric connections on the control unit.
- The installer is responsible for setting up a detection system conform with existing National and European standards and for choosing adequate load types to connect to the control unit, as well as correctly configure the system parameters. Contact the distributor if in doubt.

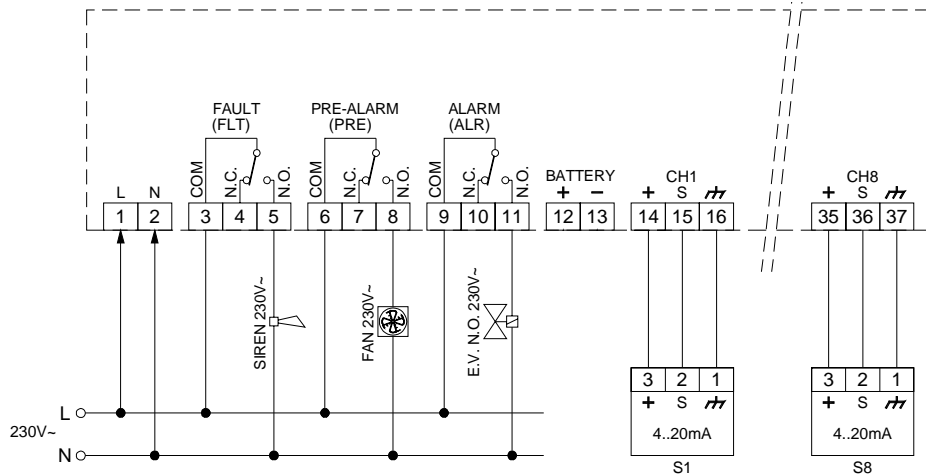


Fig. 4: Diagram of connection with control unit powered at 230V~.

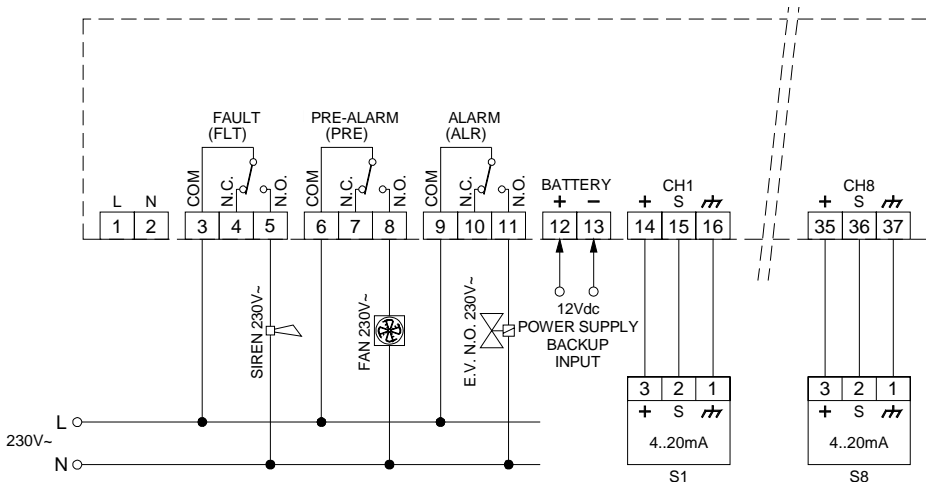


Fig. 5: Diagram of connection with control unit powered through an external 12Vdc power supply unit with buffer battery.

powered by the same source at 12Vdc, this must be able to provide adequate current, therefore have adequate power, equal or greater than the total power absorbed by the system. The power source with 8 devices connected must, therefore, be able to continuously supply at least 1A. The electronic circuit is protected by two 1A quick fuses.

F1 (ⓑ of Fig. 2) protects the control unit power supply at 230V~ F2 (ⓐ of Fig. 2) protects the power supply of transmitters only.

The PRE, ALR and FLT outputs have exchange contacts and can be used to drive generic loads such as a siren or a flashing device or, based on the configured system, a gas shut-off solenoid valve.

Please note that all control units are free from voltage; they do not supply power to the loads giving the user greater freedom to use loads with different operation voltages.

Inputs CH1, CH2, ..., CH8 are used to connect the transmitters to the control unit.

The maximum number of transmitters that can be connected to the control unit is 8 and they must be of 4..20mA output type.

TECHNICAL FEATURES

Power supply:	230V~ -15% +10% 50Hz or 12Vdc ±15% (through external power supply unit with buffer battery)
Absorption:	24VA - with 230V~ power supply and 8 transmitters connected or 20W - with 12Vdc power supply and 8 transmitters connected
Fuses (F1 and F2):	1AF (quick - 5x20 format)
Type of transmitters:	4..20mA Transmitters (SX series) for fuel gas, such as Methane, Petrol vapour and LPG (50% or 100% L.E.L.) or toxic, such as CO (500ppm).
Pre-alarm threshold field:	See table 1 on page 5
Alarm threshold field:	See table 1 on page 5
Contacts capacity:	3 x 5A@250V~ SPDT Contact free from voltage
Protection rating:	IP 20
Operating temp.:	0°C .. 40°C
Storage temp.:	-10°C .. +50°C
Humidity limits:	20% .. 80% RH (non-condensing)
Enclosure: Material:	ABS UL-V0 self-extinguishing
Colour:	Signal White (RAL 9003)
Weight:	~ 1350 gr.

NORMATIVE REFERENCES

The product conforms with the following standards (EMC 2004/108/CE and LVD 2006/95/CE):

EMC Standards of reference: EN 50270
LVD Standards of reference: EN 60335-1

TROUBLESHOOTING

SIGN	PROBABLE CAUSE	SOLUTION
LED 'L' does not switch on although the control unit is powered at 230V~.	Fuse F1 is blown (ⓑ of Fig. 2); one or more loads connected at 230V have caused a short-circuit.	Replace fuse F1 with an equivalent one, same type and capacity (see technical features) and verify the cause of the short-circuit.
The red LEDs from 1 to 8 and the yellow LED 'A' are on.	Fuse F2 is blown (ⓐ of Fig. 2); one or more faulty transmitters have caused a short-circuit.	Replace fuse F2 with an equivalent one, same type and capacity (see technical features) and verify the cause of the short-circuit.

WARRANTY

In the view of a constant development of their products, the manufacturer reserves the right for changing technical data and features without prior notice. The consumer is guaranteed against any lack of conformity according to the European Directive 1999/44/EC as well as to the manufacturer's document about the warranty policy. The full text of warranty is available on request from the seller.

GENERAL INFORMATION

This device is a gas control unit equipped with 3 Outputs with exchange contacts (pre-alarm, alarm and fault relay) able to configure and control up to 8 gas concentration transmitters, carbon monoxide (CO), Methane, Petrol vapour and L.P.G., with 4..20mA output.

The control unit and transmitters' status (normal operation, pre-alarm, alarm or fault) will be shown through the LEDs on the front.

START-UP

OUTPUTS SWITCH-ON AND ACTIVATION

LED 'PWR UP' flashes for 50 seconds indicating the pre-heating phase of the transmitters, upon application of power supply, based on the applied power supply.

The Pre-alarm, Alarm and Fault outputs are deactivated during this phase.

LED 'PWR UP' remains on with permanent light after the pre-heating time.

Activating the outputs is characterised by switching on the 'RDY' LED, in accordance with the set-up made on connector JP4 (see page 3).

RESET KEY (A of Fig. 1)

The use of this key located on the front (Fig. 1) depends on the 'LATCH' dip-switches made set-up and of connector 'JP4' (see paragraph 'JUMPER AND DIP-SWITCH SET-UP').

If enabled, keeping it pressed for at least 5 seconds in either case restores the control unit to normal operation after an abnormal event or black-out.

ACOUSTIC SIGNALS

The control unit is fitted with an internal buzzer allowing it to emit acoustic signals should an abnormal event be detected. The user cannot exclude the acoustic signals.

TRANSMITTERS STATUS DISPLAY

By switching on LEDs from 1 to 8, together with LEDs '1', '2' on the front cover, the control unit signals the status of the connected transmitters.

The LED number corresponds to the relative CH- output number (e.g. LED 1 corresponds to output CH1).

Pre-alarm Status (1, red LED on)

This status is activated if a transmitter sends a greater gas concentration level than the set Pre-alarm threshold. Activating the Pre-alarm status activates the Pre-alarm relay (PRE).

This status is signalled by switching on the red LED '1', by switching on the red LED corresponding to the input to which the transmitter that detected the abnormal event is connected and by the activation of the buzzer with intermittent sound.

The control unit continues to supervise the system.

Alarm Status (2, red LED on)

This status is activated if a transmitter sends a greater gas concentration level than the set Alarm threshold. Activating the Alarm status activates the Pre-alarm relay (ALR).

This status is signalled by switching on the red LED '2', by switching on the red LED corresponding to the input to which the transmitter that detected the abnormal event is connected and by the activation of the buzzer with continuous sound.

The control unit continues to supervise the system.

Fault Status (yellow LED 'E' on)

This status is activated if a transmitter sends a Fault signal to the control unit. Activating the Fault status activates the

Pre-alarm relay (FLT).

This status is signalled by switching on the yellow LED 'E', by switching on the red LED corresponding to the input to which the transmitter that detected the abnormal event is connected and by the activation of the buzzer with continuous sound.

The control unit continues to supervise the system.

BACK-UP SYSTEM

To guarantee the highest safety level, the control unit can be powered through an external 12Vdc power supply unit with buffer battery that assures operation even in case of a black-out.

In this case, the power supply LED 'PWR UP' is always off.

For the electrical wirings please read the paragraph 'Electrical connections'.

PERIODIC CHECK

We recommend periodically checking the proper operation of the entire detection system, control unit + transmitters, by applying gas to each transmitter and checking the displayed value.

Refer to the regulation in force in the country of installation.

INSTALLATION

Carry out the operations below to install the device:

- Remove the 6 screws indicated in 1 Fig. 1 and remove the front panel.

- Fix the device base to the wall using the two holes for screws indicated in 2 Fig. 2

Carefully check that the circuit is disconnected from the 230V~ power mains while working with tools near the electric parts, and make sure not to damage the circuit or the surrounding components.

- Make the electric connections as indicated in the paragraph 'Electric connections' in accordance with the diagrams in Fig. 4 and Fig. 5.

- The cables can be introduced in three ways:

Cables enter from rear 6:

Using a screwdriver, remove the base wedges as indicated in 3 Fig. 2. Now introduce the cables through the openings in the base, up to the clamps.

Cables enter from the lower edge (slots between lid and base) 7:

Using suitable pliers, remove the plastic tooth indicated by the arrow in 4 Fig. 3 and, after having connected the cable to the proper clamp, bend it as indicated in Fig. 3, lock the cables using the specific cable clamps.

Cables enter from the lower edge (cracks on base) 8:

Pass the cables through the lower slots 5 of Fig. 3. Connect the cables to the right clamps and lock the cables with the specific cable clamps.

- Close the device by placing the front back on the container and fixing the six fastening screws.

ELECTRICAL CONNECTIONS

Carefully read below and compare with the wiring diagram of Fig. 4 showing the disposition of the terminals, the internal circuit and the connections with the external components.

The control unit can be powered with 230V~ through terminals L and N (making sure terminal N is connected to Neutral) or with 12Vdc connecting an external power supply unit with buffer battery to the 'BATTERY' terminals (respect polarity).

Warning: the control unit does not supply current to the 'BATTERY' terminals (it does not charge the battery wired to it).

Should the control unit and the connected transmitters be

JUMPER AND DIP-SWITCH SET-UP

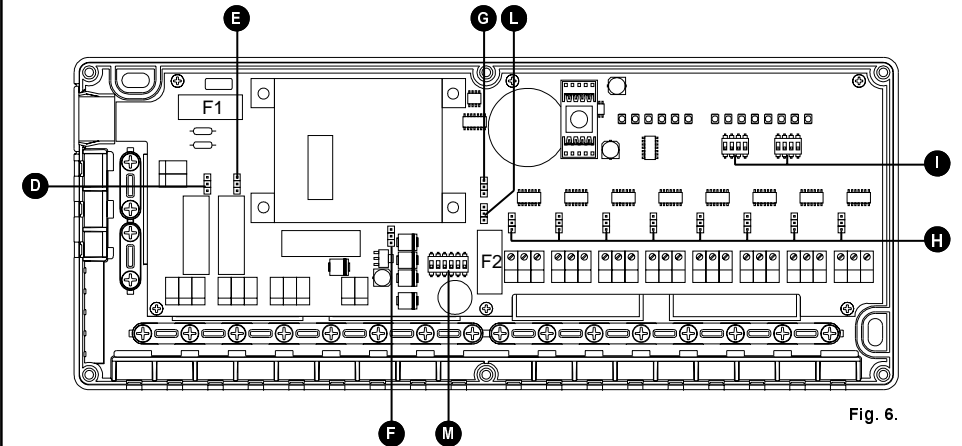


Fig. 6.

D JP1 Connector - Fault relay logic set-up

JP1	FLT		
NOR	REV	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NORmal relay logic (default). COM - N.O.: normally open. COM - N.C.: normally closed.			

JP1	FLT		
NOR	REV	<input type="checkbox"/>	<input checked="" type="checkbox"/>
REVERSED relay logic. COM - N.O.: normally closed. COM - N.C.: normally open.			

E JP2 Connector - Pre-alarm relay logic set-up

JP2	PRE		
NOR	REV	<input checked="" type="checkbox"/>	<input type="checkbox"/>
NORmal relay logic (default). COM - N.O.: normally open. COM - N.C.: normally closed.			

JP2	PRE		
NOR	REV	<input type="checkbox"/>	<input checked="" type="checkbox"/>
REVERSED relay logic. COM - N.O.: normally closed. COM - N.C.: normally open.			

F JP3 Connector - Alarm relay logic set-up

JP3			
ALR	NOR	REV	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
NORmal relay logic (default). COM - N.O.: normally open. COM - N.C.: normally closed.			

JP3			
ALR	NOR	REV	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
REVERSED relay logic. COM - N.O.: normally closed. COM - N.C.: normally open.			

G JP4 Connector: Power Up set-up

Sets the method of activation of the outputs (pre-alarm, alarm and fault) upon application of power supply or after a black-out.

PWR UP	OFF	ON	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
The outputs are automatically enabled after the pre-heating time.			

PWR UP	OFF	ON	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
The outputs are enabled after the pre-heating time, only if the operator presses the 'reset' key for about 5 seconds. Set this mode if human intervention is requested to reset operation after a black-out.			

Switching on of the green LED 'RDY' located on the front, indicates that the outputs are active and the control unit ready to control the entire system.

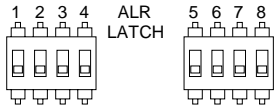
H Connectors for enabling the CH1 .. CH8 inputs

Each input is fitted with a connector that, if adequately set, enables or disables the relative input. Should an input be unused (is not connected to a transmitter) it must be disabled, otherwise the control unit will signal an alarm status for that input. These connectors are placed above the terminals of the relative input (see figure).

INH	ACT		
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Channel disabled - INH - (default).			

INH	ACT		
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Channel enabled - ACT -			

I DIP-SWITCH LATCH - alarm status memory set-up



The alarm status memory can be set for each input through the 'LATCH' dip-switches. This function controls the alarm output (ALR) and the visual and acoustic indications. Each dip-switch corresponds to relative input: e.g. dip-switch no. 1 corresponds to input CH1, dip-switch no. 2 corresponds to input CH2, and so on.

Note
 ▲: dip-switch positioned at ON (upwards)
 ▼: dip-switch positioned at OFF (downwards)

DIP-SWITCH 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8

- ▲ Should the gas concentration drop below the set alarm threshold, with the dip-switch set at ON mode the alarm relay, the relative LEDs and the buzzer will go back to normal operation status only if the Reset key is pressed for 5 seconds. Set this mode if human intervention is requested to reset operation after an alarm status has been detected.
- ▼ Should the gas concentration drop below the set alarm threshold, with the dip-switch set at OFF mode (default setting) the alarm relay, the relative LEDs and the buzzer will automatically go back to normal operation status.

The table on page 5 shows the Pre-alarm and Alarm thresholds values that can be set (X1 o X2).



WARNING
 Since different transmitters with 4..20mA output can be wired to the Control Unit, with different full range and detected gas, all thresholds are meant in mA.

Setting example
 The wired transmitter has different full range and detected gas. The installer needs to set the prealarm threshold at: **4% L.E.L.**, for 0..50%L.E.L. full scale transmitters
10% L.E.L., for 0..100%L.E.L. full scale transmitters
50ppm, for 0..500ppm full scale transmitters

- Proceed as follows:
- 1. Set the Prealarm threshold.**
 The prealarm threshold to set must be a trade-off between the desired value and those who can be actually set, as shown in table 1. In this example, assuming as a priority the 4% level, the actual values which can be set and which are closest to the desired value are:
 4% L.L.E., for 0..50%L.E.L. full scale transmitters
 8% L.L.E., for 0..100%L.E.L. full scale transmitters
 40ppm, for 0..500ppm full scale transmitters
 - 2. Set the Alarm threshold.**
 In this case the alarm threshold to be set, read in table 1 in the two ranges X1 and X2, is placed between the following values:

DIP-SWITCH SET-UP	RANGE X1															
	PRE-ALARM THRESHOLD						ALARM THRESHOLD									
	Current (mA)	0.50% L.E.L.		0.100% L.E.L.		0.500 ppm		Current (mA)	0.50% L.E.L.		0.100% L.E.L.		0.500 ppm			
1 2 3 4 5 6																
▲▲▲▲▲▲	5,28	4	8	40	5,60	5	10	50	5,28	4	8	40	5,92	6	12	60
▲▲▲▲▲▼	5,28	4	8	40	6,24	7	14	70	5,28	4	8	40	6,56	8	16	80
▲▲▲▲▼▲	5,28	4	8	40	6,56	8	16	80	5,28	4	8	40	7,20	10	20	100
▲▲▲▲▼▼	5,28	4	8	40	7,20	11	22	110	5,28	4	8	40	7,84	12	24	120
▲▲▲▼▲▲	5,28	4	8	40	7,84	12	24	120	5,28	4	8	40	8,48	14	28	140
▲▲▲▼▲▼	5,28	4	8	40	8,48	14	28	140	5,28	4	8	40	9,12	16	32	160
▲▲▼▲▲▲	5,28	4	8	40	9,12	16	32	160	5,28	4	8	40	9,76	18	36	180
▲▲▼▲▲▼	5,28	4	8	40	10,40	20	40	200	5,28	4	8	40	11,04	22	44	220
▲▲▼▲▼▲	5,28	4	8	40	11,04	22	44	220	5,28	4	8	40	11,68	24	48	240
▲▲▼▲▼▼	5,28	4	8	40	12,20	24	48	240	5,28	4	8	40	12,84	26	52	260
▲▲▼▼▲▲	5,28	4	8	40	12,84	26	52	260	5,28	4	8	40	13,48	28	56	280
▲▲▼▼▲▼	5,28	4	8	40	13,48	28	56	280	5,28	4	8	40	14,12	30	60	300
▲▲▼▼▲▲	5,28	4	8	40	14,12	30	60	300	5,28	4	8	40	14,76	32	64	320
▲▲▼▼▲▼	5,28	4	8	40	15,40	32	64	320	5,28	4	8	40	16,00	34	68	340
▲▲▼▼▼▲	5,28	4	8	40	16,00	34	68	340	5,28	4	8	40	16,64	36	72	360
▲▲▼▼▼▼	5,28	4	8	40	17,20	36	72	360	5,28	4	8	40	17,84	38	76	380
▲▲▼▼▲▲	5,28	4	8	40	17,84	38	76	380	5,28	4	8	40	18,48	40	80	400
▲▲▼▼▲▼	5,28	4	8	40	18,48	40	80	400	5,28	4	8	40	19,12	42	84	420
▲▲▼▼▲▲	5,28	4	8	40	19,12	42	84	420	5,28	4	8	40	19,76	44	88	440
▲▲▼▼▲▼	5,28	4	8	40	20,40	44	88	440	5,28	4	8	40	21,04	46	92	460
▲▲▼▼▲▲	5,28	4	8	40	21,04	46	92	460	5,28	4	8	40	21,68	48	96	480
▲▲▼▼▲▼	5,28	4	8	40	21,68	48	96	480	5,28	4	8	40	22,32	50	100	500
▲▲▼▼▲▲	5,28	4	8	40	22,32	50	100	500	5,28	4	8	40	22,96	52	104	520
▲▲▼▼▲▼	5,28	4	8	40	22,96	52	104	520	5,28	4	8	40	23,60	54	108	540
▲▲▼▼▲▲	5,28	4	8	40	23,60	54	108	540	5,28	4	8	40	24,24	56	112	560
▲▲▼▼▲▼	5,28	4	8	40	24,24	56	112	560	5,28	4	8	40	24,88	58	116	580
▲▲▼▼▲▲	5,28	4	8	40	24,88	58	116	580	5,28	4	8	40	25,52	60	120	600
▲▲▼▼▲▼	5,28	4	8	40	25,52	60	120	600	5,28	4	8	40	26,16	62	124	620
▲▲▼▼▲▲	5,28	4	8	40	26,16	62	124	620	5,28	4	8	40	26,80	64	128	640
▲▲▼▼▲▼	5,28	4	8	40	26,80	64	128	640	5,28	4	8	40	27,44	66	132	660
▲▲▼▼▲▲	5,28	4	8	40	27,44	66	132	660	5,28	4	8	40	28,08	68	136	680
▲▲▼▼▲▼	5,28	4	8	40	28,08	68	136	680	5,28	4	8	40	28,72	70	140	700
▲▲▼▼▲▲	5,28	4	8	40	28,72	70	140	700	5,28	4	8	40	29,36	72	144	720
▲▲▼▼▲▼	5,28	4	8	40	29,36	72	144	720	5,28	4	8	40	30,00	74	148	740
▲▲▼▼▲▲	5,28	4	8	40	30,00	74	148	740	5,28	4	8	40	30,64	76	152	760
▲▲▼▼▲▼	5,28	4	8	40	30,64	76	152	760	5,28	4	8	40	31,28	78	156	780
▲▲▼▼▲▲	5,28	4	8	40	31,28	78	156	780	5,28	4	8	40	31,92	80	160	800
▲▲▼▼▲▼	5,28	4	8	40	31,92	80	160	800	5,28	4	8	40	32,56	82	164	820
▲▲▼▼▲▲	5,28	4	8	40	32,56	82	164	820	5,28	4	8	40	33,20	84	168	840
▲▲▼▼▲▼	5,28	4	8	40	33,20	84	168	840	5,28	4	8	40	33,84	86	172	860
▲▲▼▼▲▲	5,28	4	8	40	33,84	86	172	860	5,28	4	8	40	34,48	88	176	880
▲▲▼▼▲▼	5,28	4	8	40	34,48	88	176	880	5,28	4	8	40	35,12	90	180	900
▲▲▼▼▲▲	5,28	4	8	40	35,12	90	180	900	5,28	4	8	40	35,76	92	184	920
▲▲▼▼▲▼	5,28	4	8	40	35,76	92	184	920	5,28	4	8	40	36,40	94	188	940
▲▲▼▼▲▲	5,28	4	8	40	36,40	94	188	940	5,28	4	8	40	37,04	96	192	960
▲▲▼▼▲▼	5,28	4	8	40	37,04	96	192	960	5,28	4	8	40	37,68	98	196	980
▲▲▼▼▲▲	5,28	4	8	40	37,68	98	196	980	5,28	4	8	40	38,32	100	200	1000

Or

DIP-SWITCH SET-UP	RANGE X2															
	PRE-ALARM THRESHOLD						ALARM THRESHOLD									
	Current (mA)	0.50% L.E.L.		0.100% L.E.L.		0.500 ppm		Current (mA)	0.50% L.E.L.		0.100% L.E.L.		0.500 ppm			
1 2 3 4 5 6																
▲▲▲▲▲▲	5,28	4	8	40	5,92	6	12	60	5,28	4	8	40	6,56	8	16	80
▲▲▲▲▲▼	5,28	4	8	40	6,56	8	16	80	5,28	4	8	40	7,20	10	20	100
▲▲▲▲▲▲	5,28	4	8	40	7,20	10	20	100	5,28	4	8	40	7,84	12	24	120
▲▲▲▲▲▼	5,28	4	8	40	7,84	12	24	120	5,28	4	8	40	8,48	14	28	140
▲▲▲▲▲▲	5,28	4	8	40	8,48	14	28	140	5,28	4	8	40	9,12	16	32	160
▲▲▲▲▲▼	5,28	4	8	40	9,12	16	32	160	5,28	4	8	40	9,76	18	36	180
▲▲▲▲▲▲	5,28	4	8	40	9,76	18	36	180	5,28	4	8	40	10,40	20	40	200
▲▲▲▲▲▼	5,28	4	8	40	10,40	20	40	200	5,28	4	8	40	11,04	22	44	220
▲▲▲▲▲▲	5,28	4	8	40	11,04	22	44	220	5,28	4	8	40	11,68	24	48	240
▲▲▲▲▲▼	5,28	4	8	40	11,68	24	48	240	5,28	4	8	40	12,32	26	52	260
▲▲▲▲▲▲	5,28	4	8	40	12,32	26	52	260	5,28	4	8	40	12,96	28	56	280
▲▲▲▲▲▼	5,28	4	8	40	12,96	28	56	280	5,28	4	8	40	13,60	30	60	300
▲▲▲▲▲▲	5,28	4	8	40	13,60	30	60	300	5,28	4	8	40	14,24	32	64	320
▲▲▲▲▲▼	5,28	4	8	40	14,24	32	64	320	5,28	4	8	40	14,88	34	68	340
▲▲▲▲▲▲	5,28	4	8	40	14,88	34	68	340	5,28	4	8	40	15,52	36	72	360
▲▲▲▲▲▼	5,28	4	8	40	15,52	36	72	360	5,28	4	8	40	16,16	38	76	380
▲▲▲▲▲▲	5,28	4	8	40	16,16	38	76	380	5,28	4	8	40	16,80	40	80	400
▲▲▲▲▲▼	5,28	4	8	40	16,80	40	80	400	5,28	4	8	40	17,44	42	84	420
▲▲▲▲▲▲	5,28	4	8	40	17,44	42	84	420	5,28	4	8	40	18,08	44	88	440
▲▲▲▲▲▼	5,28	4	8	40	18,08	44	88	440	5,28	4	8	40	18,72	46	92	460
▲▲▲▲▲▲	5,28	4	8	40	18,72	46	92	460	5,28	4	8	40	19,36	48	96	480
▲▲▲▲▲▼	5,28	4	8	40	19,36	48	96	480	5,28	4	8	40	20,00	50	100	500
▲▲▲▲▲▲	5,28	4	8	40	20,00	50	100	500	5,28	4	8	40	20,64	52	104	520
▲▲▲▲▲▼	5,28	4	8	40	20,64	52	104	520	5,28	4	8	40	21,28	54	108	540
▲▲▲▲▲▲	5,28	4	8	40	21,28	54	108	540	5,28	4	8	40	21,92	56	112	560
▲▲▲▲▲▼	5,28	4	8	40	21,92	56	112	560	5,28	4	8	40	22,56	58	116	580
▲▲▲▲▲▲	5,28	4	8	40	22,56	58	116	580	5,28	4	8	40	23,20	60	120	600
▲▲▲▲▲▼	5,28	4	8	40	23,20	60	120	600	5,28	4	8	40	23,84			