

## 1. HOW TO OPERATE

**AT POWER-UP** When the power supply is connected:

- the instrument is now in 'normal mode' of operation.

**FROM 'NORMAL MODE' OF OPERATION**

- key 'SQ' (■) gives access to the 'configuration menu' (see section 11).
- key 'UP' (▲) gives access to the 'fast access' menu
- key 'LE' (◀) activates the 'key left' functions.

**HOW TO ENTER THE 'CONFIGURATION MENU'**

With the instrument in 'normal mode' of operation, press the 'SQ' (■) key and maintain for 1 second.

The first menu entry displayed is 'Input' (InP). Download the user's manual (see section 3) for a full explanation on the functions available.

**HOW TO OPERATE INSIDE THE 'CONFIGURATION MENU'**

Inside the 'configuration menu', use the front keypad to move through menu entries, parameters, and select configuration values:

- Key 'SQ'** (■) functions as the 'ENTER' key. It selects the menu entry currently displayed. At numerical value entries, it validates the number displayed.

- Key 'UP'** (▲) moves vertically through the different menu entries. At numerical value entries, it modifies the selected digit by increasing its value to 0, 1, 2, 3, 4, 5, 6, 7, 8, 9.

- Key 'LE'** (◀) functions as the 'ESCAPE' key. It leaves the selected menu entry, and eventually, will leave the 'configuration menu'. When leaving the 'configuration menu', the changed parameters are activated. At numerical value entries, the 'LE' (◀) key allows to select the active digit. To modify a numeric value press the 'UP' (▲) key to increase the value '+1'. Press the 'SQ' (■) key to validate the value.

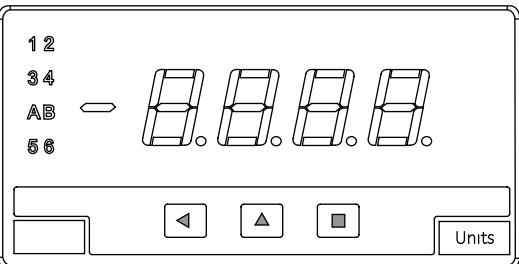
**'ROLLBACK' FUNCTION**

If there is no interaction from the operator for 30 seconds, the instrument exits the 'configuration menu' discarding changes, and returns to 'normal mode' of operation.

**WHEN EXITING THE 'CONFIGURATION MENU'**

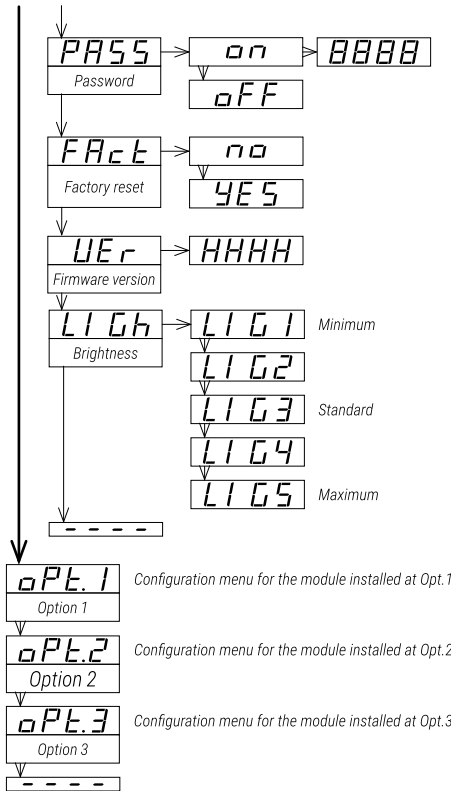
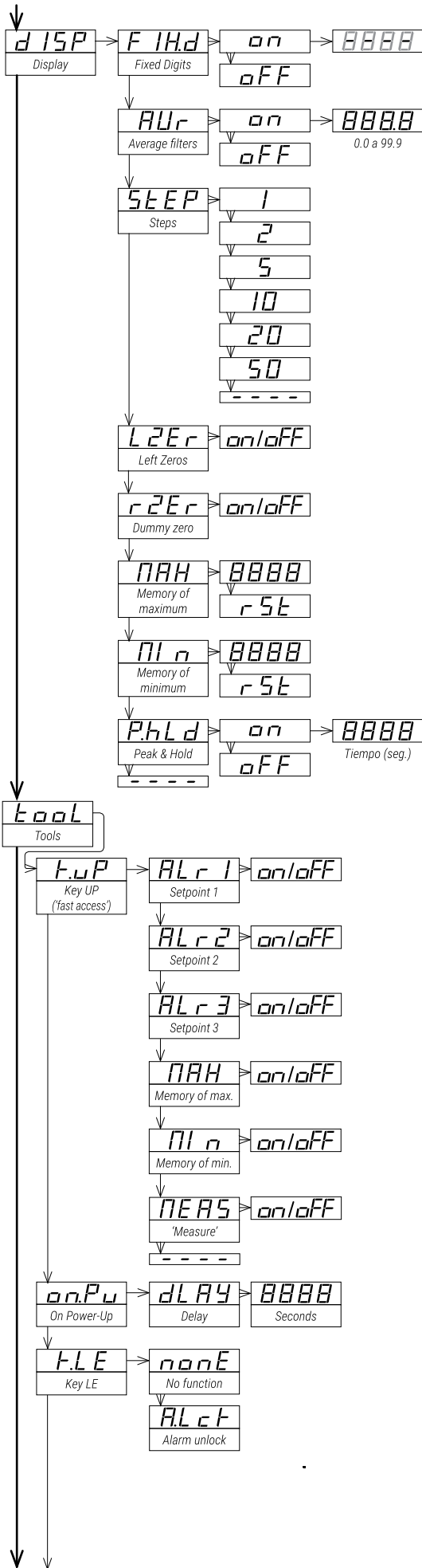
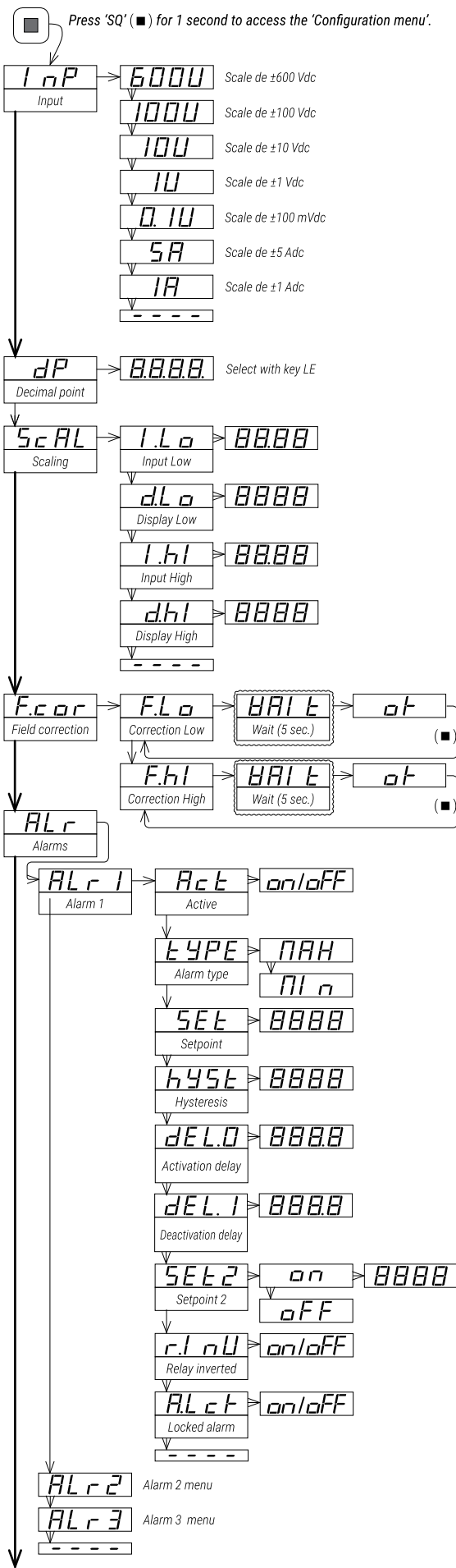
When exiting the 'configuration menu', a start-up is applied. After start-up, the new configuration is active and the instrument is in 'normal mode' of operation.

## 2. FRONT VIEW



Key 'LE' Front reset  
Key 'UP' 'Fast access'  
Key 'SQ' 'Configuration menu'

## 3. CONFIGURATION MENU



## 4. FACTORY CONFIGURATION

Scale	±600 Vdc
Scaling and decimal point	0/600 Vdc = 0/600.0
Alarms 1,2 and 3	
Active	off (disabled)
Type	alarm as maximum
Setpoint	1000
Hysteresis	0 counts
Activation delay	0.0 seconds
Deactivation delay	0.0 seconds
Setpoint 2	off
Inverted relay	off
Locked alarms	off
Display	
Fixed digits	off
Average	off
Steps	off
Left zeros	off
Dummy zero	off
Maximum memory	-9999
Minimum memory	9999
Peak&Hold	off
Tools	
'Fast access'	off
'On power-up'	
Delay	0 seconds
Key LE	no function
Password	off
Brightness	3

**RESET TO DEFAULT FACTORY PARAMETERS**

To return to default factory parameters, enter into 'configuration menu', go to 'Tools' (toolL) / 'Factory reset' (FAc t) and select 'yes'

- the instrument applies a restart
- the instrument is in 'normal mode' of operation

## 5. ERROR CODES

Table 6 | Error codes

'h.udr' / 'h.ovr'	Hardware underrange ('h.udr') / overrange ('h.ovr'). Input signal is lower / higher than the minimum / maximum signal the instrument can detect.
'd.udr' / 'd.ovr'	Display underrange ('d.udr') / overrange ('d.ovr'). The instrument already displays the minimum / maximum value possible (-9999 / 9999).
'hoLD'	The 'hold' function is active. Display is on hold.
'PhLD'	At the 'scaling' ('ScAL') menu entry, the defined slope is higher than '5000' (slope almost vertical). Entered values are dismissed and default values are activated.
'Err.0'	Password error. The password code entered is not correct.
'Err.2'	The installed menu option is not recognized.

## 6. REGULATIONS

This instrument conforms to the actual CE regulations. For a copy of the 'CE declaration of conformity' see section 3. Applicable regulations are :

**Security regulations EN-61010-1** ('Fixed' equipment, 'Permanently connected'. 'Double' isolation. Overvoltage category 2).

**Electromagnetic compatibility regulations EN-61326-1**

This instrument does not provide a general mains switch and will start operation as soon as power is connected. The instrument does not provide protection fuse, and the fuse must be added during installation. Instrument designed to be panel mounted.

Risk of electrical shock. Instrument terminals can be connected to dangerous voltage.

Instrument protected with double isolation. No earth connection required.

Instrument conforms to CE and UKCA rules and regulations.

According to directive 2012/19/EU, electronic equipment must be recycled in a selective and controlled way at the end of its useful life.

Installation of this instrument must be performed by qualified personnel only. The user's manual contains the appropriate information for the installation. Using the instrument in ways not specified by the manufacturer may lead to a reduction of the specified protection level. Disconnect the instrument from power before starting any maintenance and/or installation action.

The instrument does not have a general switch and will start operation as soon as power is connected. The instrument does not have protection fuse, the fuse must be added during installation.

The instrument is designed to be panel mounted. An appropriate ventilation of the instrument must be assured. Do not expose the instrument to excess of humidity. Maintain clean by using a humid rag and do NOT use abrasive products such as alcohols, solvents, etc.

General recommendations for electrical installations apply, and for proper functionality we recommend : if possible, install the instrument far from electrical noise or magnetic field generators such as power relays, electrical motors, speed variators, ... If possible, do not install along the same conduits power cables (power, motor controllers, electrovalves, ...) together with signal and/or control cables.

Before proceeding to the power connection, verify that the voltage level available matches the power levels indicated in the label on the instrument.

In case of fire, disconnect the instrument from the power line, fire alarm according to local rules, disconnect the air conditioning, attack fire with carbonic snow, never with water.

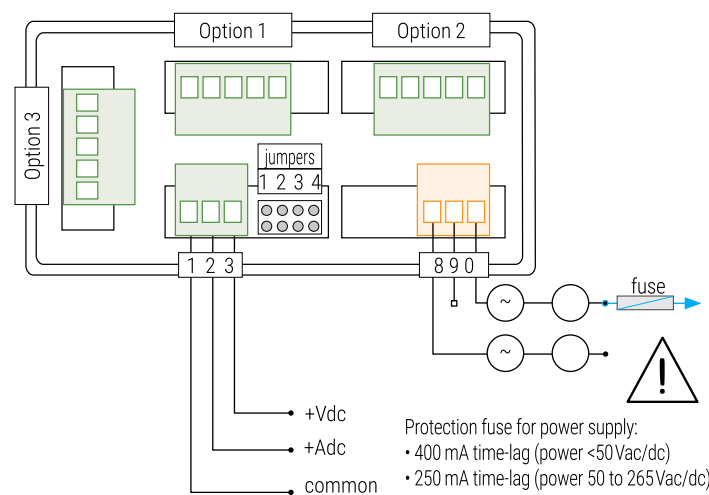
## SPECIFIC INFORMATION FOR K-RD48K-D



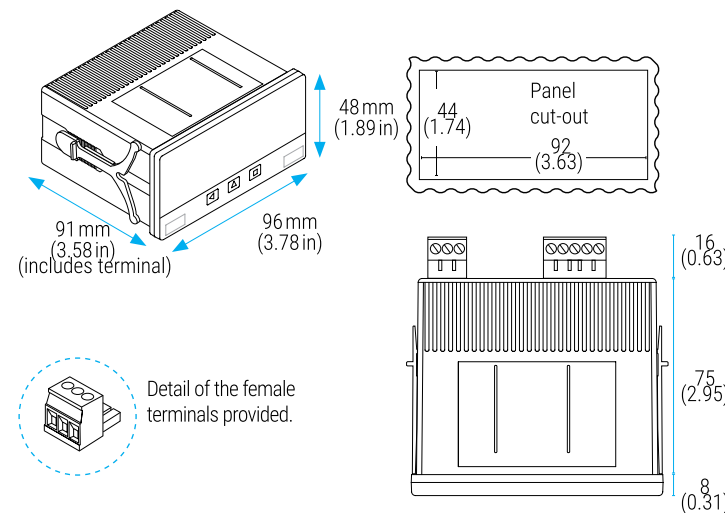
Scan the QR code to directly access the user's manual of this instrument.



## K-RD48-K-D CONNECTIONS

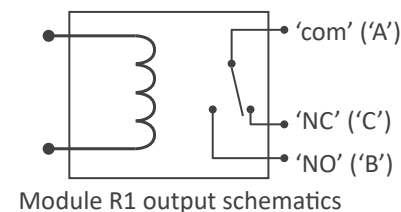


## DIMENSIONS & PANEL CUT-OUT in mm (in)



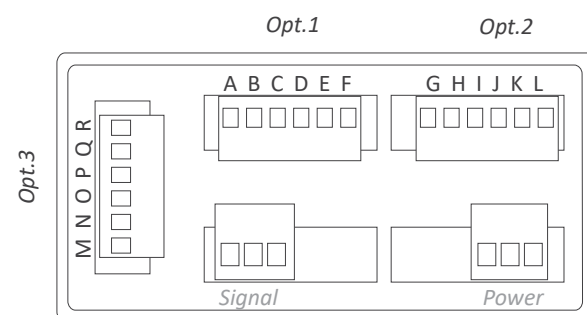
## 1. Option R1: Relay

Option	R1
Output type	relay
Relay type	3 contact relay (NC, NO, common)
Maximum current	8 A (resistive load)
Maximum voltage	250 Vac continuous
Isolation	3500 Veff
Type of terminal	plug-in screw terminal pitch 5.08 mm
Installation allowed at	'Opt.1', 'Opt.2', 'Opt.3'



	Occupied slots	Alarms	Relays
Module R2	Opt.1,	1 and 2	2
Module R4	Opt.1 and Opt.2	1, 2, 3 and 4	4
Module R6	Opt.1, Opt.2 and Opt.3	1, 2, 3, 4, 5 and 6	6

Relay	Common	Normally open (NO)	Normally closed (NC)
relay 1	A	B	C
relay 2	D	E	F
relay 3	G	H	I
relay 4	J	K	L
relay 5	M	N	O
relay 6	P	Q	R

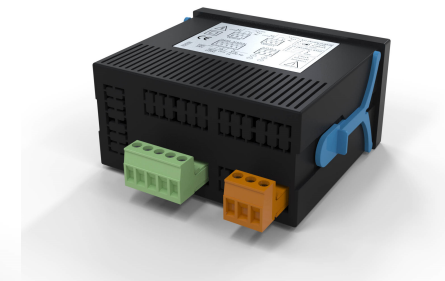


## OUR RANGE OF DIGITAL INSTRUMENTS:

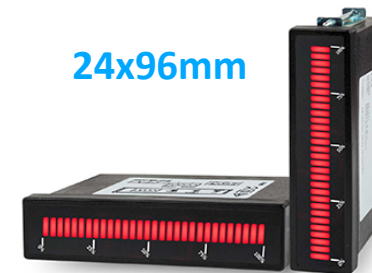
### DIN-RAIL



### 48x96mm



### 24x96mm



### 36x72mm



### 24x48mm



## LARGE FORMAT METERS

