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WINOX-L/R Stainless Steel IP68 (optional: IPX9K) Weight Indicators

LAUMAS® ELETTRONICA

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	WINOXL-B	Base - LCD display
	WINOXL-C	Load - LCD display
	WINOXL-S	Unload - LCD display
	WINOXL-3	3 Products - LCD display
*	WINOXL-6	6 Products - LCD display
*	WINOXL-14	14 Products - LCD display
	WINOXL-MU	Multiprogram Six different operating modes SELECTABLE
	BY CUSTOMER: BA	SE, LOAD, UNLOAD, 3/6/14 PRODUCTS (8-relay modules NOT included)

	WINOXR-B	Base - red LED display
	WINOXR-C	Load - red LED display
	WINOXR-S	Unload - red LED display
	WINOXR-3	3 Products - red LED display
*	WINOXR-6	6 Products - red LED display
*	WINOXR-14	14 Products - red LED display
	WINOXR-MU BY CUSTOMER: BA	Multiprogram Six different operating modes SELECTABLE SE, LOAD, UNLOAD, 3/6/14 PRODUCTS (8-relay modules NOT included)

back view



(with 6 PG9 cable glands - power supply included

- A/D Converter 24bit (16000000 points) 4800Hz
- Display range 999999
- Conversion rate 300 Hz



On request: Data storage on Pen Drive USB

AISI 304 stainless steel weight Indicator (dimensions: 206x286x108 mm) with 6 PG9 cable glands, IP68 (optional: IPX9K) protection rating, stainless steel adjustable bracket included (overall dimensions with bracket: 206x290x187 mm). Optionals: panel / desk / column mounting. Six-key membrane keyboard with buzzer. Real-time clock with buffer battery. Weight reading by another instrument via serial port.

- WINOX-L: Six-digit backlit LCD semialphanumeric display (20 mm h), 7 segment; 46 signaling symbols.

- WINOX-R: Six-digit red LED semialphanumeric display (20 mm h), 7 segment; 16 signaling LED.

* Models 6-14 PRODUCTS include 8-relay modules.







STANDARD

wall version with bracket that can be used also for desk





see OPTIONS on request





Two serial ports (RS232 and RS485) for connection to:

- PC/PLC up to 32 instruments (max 99 with line repeaters) by ASCII Laumas protocol (compatible with W60000 only for WINOX- L/-R BASE) or ModBus RTU.
- Intelligent junction box or other multi-channel instruments: allow to have same beneasts and performance of an advanced digital weighing system even using analog load cells (if necessary, it is possible add an optional RS485 port)
 Remote display.
- Printer

Optional integrated output: Profibus DP, DeviceNet, CANopen, Profinet IO, Ethernet/IP, Ethernet TCP/IP (<u>connectable to your smartphone, tablet,</u> <u>etc.. via web</u>), Modbus/TCP.

THEORETICAL CALIBRATION is performed via the keyboard. REAL CALIBRATION with linearization up to 5 points.

TECHNICAL FEATURES

12 - 24VDC +/-10% ; 6W max 8 (350 ohm) ; 5VDC / 120 mA < 0.01% Full Scale ; < 0.01% F.S. < 0.0005 % F.S./°C < 0.003 % F.S./°C 24 bit (16000000 points) 4.8kHz ± 999999 ± 39 mV ±7 mV/V 300 conversions/sec. - 9999999 ; + 9999999 0 - 4 / x 1 x 2 x 5 x 10 x 20 x 50 x 100 0.012 - 7 sec / 5 - 300 Hz N. 5 - max 115 VAC ; 150 mA (N. 4 - Analog output versions) N. 3 - optoisolated 5 - 24 VDC PNP (N. 2 - Analog output versions) RS232, RS485 2400, 4800, 9600, 19200, 38400, 115200 85% -30°C + 80°C -20°C + 60°C -10°C + 40°C

POWER SUPPLY and CONSUMPTION NUMBER OF LOAD CELLS IN PARALLEL and SUPPLY LINEARITY/ LINEARITY OF THE ANALOG OUTPUT THERMAL DRIFT / THERMAL DRIFT OF THE ANALOG OUT. A/D CONVERTER MAX DIVISIONS (with measure range: +/- 10mV =2mV/V) MEASURE RANGE MAX LOAD CELL'S SENSITIVITY MAX CONVERSIONS PER SECOND DISPLAY RANGE DECIMALS / DISPLAY INCREMENTS DIGITAL FILTER / CONVERSION RATE LOGIC OUTPUTS (relays)

LOGIC INPUTS

SERIAL PORTS BAUD RATE HUMIDITY (condensate free) STORAGE TEMPERATURE WORKING TEMPERATURE WORKING TEMPERATURE (CE-M APPROVED)

"Q" back view



PANEL version with extractable terminal board. Dimensions 206 x 286 x 96 mm (drilling template: 160 x 248 mm)



OPTIONS ON REQUEST

IP68 ATEX/IECEx version (zone 2-22) with 6 cable glands. Dimensions: 206 x 286 x 108 mm (drilling template in case of panel mounting: 160 x 248 mm). Bracket included. "D" back view



IP 40 DESK version with 6 D-SUB connectors. Dimensioni: 206 x 286 x 85 mm. Power supply included.





- *(3) USCITA ANALOGICA 16 bit optoisolata:
- (11)
 - , - 0:
 - D:
 - X:
 - ----
 - IEX:
 - STAFFAIWINOXSUP:
 - COLONNAM+STAFFAI:
 - COLONNAM+STAFFAC:
 - OPZWALIBI:
 - E:
 - EC:
 - ALI24SPINA1A/ALI24SPINA1AJACK:
 - ALI24SPINAPRESA:
- (11) OPZWBATTWINOX:
 - OPZWING010:
 - OPZWING420:
- * OPZW1RADIO:
- OPZWCONWF:
- OPZW1RADIOQ:
- OPZW1RS485:
- (2-7) OPZWSCARP:
- (2-7) OPZWSCARI:
- (2) OPZWSCA3614:
- OPZWDATIPC:
- (6-9) OPZWUSB68:
 - OPZWCONUSBIP68:
 - OPZWCONETHEIP68:
 - OPZWCONETHE5MT:
- (2) OPZWFORPERC:
- (5-7) OPZWQMC:
 - RELE5M:
 - RELE6PROD24V:
 - RELE6PROD115V:
 - RELE6PROD230V:
 - RELE14PROD:
- (1) OPZWLAUMAN:
- *(4-8) OPZW1CA:
- *(4-8) OPZW1DE:
- *(8) OPZW1PR:
- <u>к</u>(4-6-10)⁻ ОР**ZW1ETIP68**:
- * (4-6-10)⁻ **OPZW1ETTCP68**:
- * (4-6-10)⁻ OPZW1MBTCP68:
- * (4-6-10)⁻ OPZW1PNETIO68:
- * OPZW1LOADCELL2:
- (12) IPX9KWINOX:
- (12) IPASKWINOA:

IPX9K

- 16 bit optoisolated ANALOG OUTPUT: 0-20mA; 4-20mA (max 300 ohm); 0-10V; 0-5V; ±10V; ±5V (min. 10 kohm)
- Power supply 115/230 VAC 50/60 Hz 6 VA (P ver. only)
- PANEL version with extractable terminal board
- IP40 DESK version with 6 D-SUB connectors
- IP68 ATEX version 😥 II 3GD (zone 2-22) with 6 cable galnds
- IP68 IECEx version (zone 2-22) with 6 cable galnds
- ABS adjustable bracket for column mounting
- Indicator stainless steel stand (Ø 38 mm, h 700 mm) with stainless steel bracket for platform mounting
- Indicator stainless steel stand (Ø 38 mm, h 700 mm) with painted steel bracket for platform mounting
- Initial verification (Legal Metrology)
- Alibi memory
- 12 formulas/setpoint selection from external contacts.....
- 12 formulas/setpoint selection from external selector switch
- 24VDC 1A stabilized power supply
- 24VDC 1A stabilized power supply with socket and support for Omega rail
- Power supply with internal rechargeable 12V 2.2Ah battery nonremovable (20-hour operating time). Not available for type "D"
- Weight reading from 0-10Vdc (15kΩ) input
- Weight reading from 4-20mA (120Ω) input
- Radio module (available for D-P versions)
- Wifi module extension cable
- Radio module (available for Q version)
- RS485 additional port
- End cycle partial unloadings
- Unloadings between a product and the next
- Unloading of more products from same scale
- Data transfer via serial port to PC
- Storage of data on USB Pen Drive (included) by USB IP68 saled port built-in
- IP68 USB panel extension cable
- IP68 ethernet panel extension cable (0.5 m)
- IP68 ethernet extension cable (5 m)
- Formula setting in percentage
- Possibility of setting a quantity to be batched greater than the scale capacity with automatic calculation of cycles
- 2A relay module (not available for 6/14 PRODUCTS)
- 8-Relay module for 6/14 Prod. (12-24VDC)
- 8-Relay module for 6/14 Prod. (115VAC)
- 8-Relay module for 6/14 Prod. (230VAC)
- Additional 8-relay module for 14 Prod.
- Assisted manual batching with remote displays
- CANopen protocol
- DeviceNet protocol
- Profibus DP protocol

Water protection when cleaning high pressure / steam jet (Test: pressurized hot water is sprayed from a distance of 150 mm). Water pressure 100 bar; temperature 80 ° C; test duration 250 seconds (Reference standard DIN 40050-9).

- Ethernet/IP protocol (IP68 ethernet port)
- Ethernet TCP/IP protocol (IP68 ethernet port)
- Modbus/TCP protocol (IP68 ethernet port)
- Profinet IO protocol (IP68 ethernet port)
- Input for connecting a second load cell
- Declaration of conformity + IPX9K marking protection rating for weight indicators

- (1) not available for model BASE
- (2) available for models 3-6-14 PRODUCTS
 (3) if analog output is present: input on terminal 2 and output on terminal 3 are not available (see wiring diagrams); E / EC options not available
 (4) available for model BASE

. (7) not available for CE-M approved versions (8) for version "Q": RS485 integrated serial port is not available. Also

(11) Power supply 115/230 excludes battery option and vice versa.

★) you can only choose one option from those marked with asterisk.

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(5) available for models 3-6-14 PRODUCTS and LOAD (6) for version "D": USB/Ethernet connectors are not IP68

No.5 output and No.3 intput are not available. (9) not available for ATEX versions

(12) not available for "Q" and "D" versions.

(10) for ATEX version the connectors are not IP68

ALTHE

SENSORS & CONTROLS





▼ OPZWUSB68



Data storage (weighed values, batchings, alarms) on Pen Drive USB. These data can be imported and processed on PC using the PROG-DB software included in the supply.

Data can be saved in two different ways, continuous or manual:
 Continuous: USB pen must always be inserted during the instrument operation.

- Manual: the operator inserts the pen into the instrument only when needs to copy the data from the instrument.

Note: for version "D" the USB connector is not IP68.

▼ OPZWDATIPC



Data transfer (weighed values, batchings, alarms) from the weight indicator to the PC via RS232 serial port (directly) o RS485 (by converter). These data can be imported and processed on PC using the PROG-DB software included in the supply.

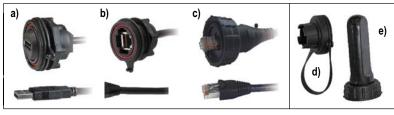
We suggest to use this option when the indicator is always connected to the PC.

OPZWLAUMAN



Manual batching with remote displays (example of application with 3 remote display side by side). This option allows to display on different remote displays, connected in parallel to the instrument via RS485 serial port, the following batching information: formula and product number, instrument status, the remaining quantity to be batched, gross weight.

OPZWCONUSBIP68 - OPZWCONETHEIP68 - OPZWCONETHE5MT



a) OPZWCONUSBIP68: IP68 USB extension cable (male/female) for panel mounting, sealed connector, 50 cm long cable, sealing cap (d) and cover (e) included.

- b) OPZWCONETHEIP68: IP68 ETHERNET extension cable (male/female) for panel mounting, sealed connector, 50 cm long cable, sealing cap (d) included.
- c) OPZWCONETHE5MT: IP68

ETHERNET extension cable (male/male) combined with OPZWCONETHEIP68 sealed connector, 5 m long cable

▼ RELE6PROD -24V/-115V /-230V



External 8-relay module to manage from 1 to 6 products; 8 relays up to max 115VAC/2A. Module already included for mod. 6/14 PRODUCTS.

RELE14PROD



External 8-relay module to manage from 7 to 14 product; to be added to RELE6PROD module; 8 relays up to max. 115VAC/2A. **Module already included for mod. 14 PRODUCTS.** External 5-relay module to to increase the capacity of SPDT contacts to 2A/115Vac. **Option not available for mod. 6/14 PRODUCTS**.



For Load, Unload, 3/6/14 Products: Selector switch for 12 formulas selection. For Base: Selector switch for 12 groups selection by 5 setpoint.

ALI24SPINA1A ALI24SPINA1AJACK



24VDC 1A stabilized power supply, input 100-240VAC, 3 meters long cable.

ALI24SPINAPRESA



24VDC 1A stabilized power supply, input 100-240 VAC, 3 meters long cable, with socket and support for Omega rail.

▼ COLONNAM+STAFFA

RELE5M



Indicator stainless steel stand (Ø 38 mm, h 700 mm) with bracket for platform mounting.

STAFFAIWINOXSUP



ABS support to be fixed to the bracket for column mounting.

▼ OPZW1ETIP68 - OPZW1ETTCP68 - OPZW1MBTCP68 - OPZW1PNETIO68



IP68 ETHERNET for the following optional protocols: Ethernet/IP, Ethernet TPC/IP, Modbus/TCP, Profinet IO.

Note: for version "D" the Ethernet connector is not IP68.

▼ EC





WINOXL/R-B Base

Main functions

- 5 setpoints (4 setpoints if Analog Output is present) configurable as normally open or normally closed. The operator can decide the setpoints activation for the net weight value, gross weight value, otherwise for positive weights or for positive and negative weights.
- Counting.
- Totalizing.
- Setting of hysteresis value for each setpoint.
- 12 groups selection by 5 setpoint from selector switch or contacts (EC/E options).
- Peak holder displaying by closing the Peak contact.
- Net/Gross function by keyboard or external contact.
- Manual adjustment of zero value in case of zero-setting not possible.
- Auto zero function.
- Auto zero-tracking function.
- Print of the weight via keyboard or external contact with date and time.

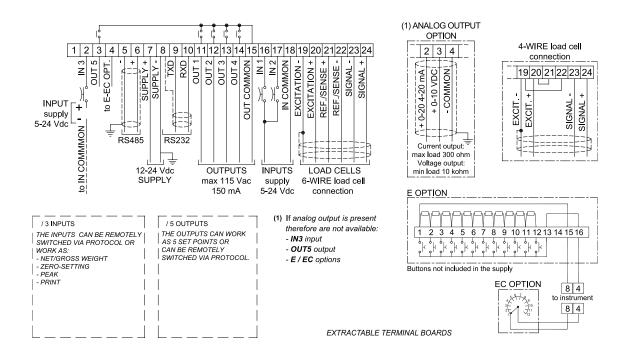
Operation: The inputs can work as: net/gross weight, zero-setting, peak, print or can be remotely read via protocol.

The outputs can works as setpoints or can be remotely switched via protocol.

Weight transmitter approved OIML R61 (Automatic Gravimetric Filling Instruments) according to WELMEC Guide 8.8:2011 (MID).

C € M approvable EN45501-2014/31/UE-OIML R76:2006

- Maximum number of verification scale intervals n=10000
- Minimum input-voltage per VSI 0.2 µV
- Weighing range single range or multi range (max 3) or multi interval (max 3)
- Calibration via keyboard is protected through seals for the access to a setting jumper or installer password
- Semi-automatic zero and tare, predetermined tare funcions.
- Weight subdivisions displaying (1/10 e)
- The following values can be printed from external contact: net/gross weight; tare; predetermined tare; date; time; ID code (if alibi memory is present)



SENSORS & CONTROLS





LOADING MONOPRODUCT BATCHING

WINOXL/R-C Load - 99 Formulas

Main functions

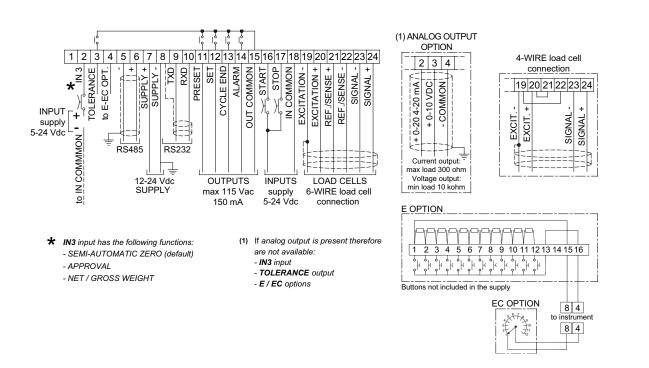
- Memorization of 99 different formulas with SET and PRESET.
- Setting of a only Slow value for all 99 formulas.
- Automatic fall calculation after one or more batching cycles.
- Tolerance value setting for each formula.
- "Tapping" function: It is possible to select the slow-on and slow-off times.
- 12 formula selection from selector switch or external contacts (EC/E options).
- Autotare function after one or more batching cycles.
- It is possible to utilize the Tolerance and Alarm contacts as signals of maximum and minimum.
- Batching start from external contact for only one cycle.
- Batching start via keyboard: it is possible to program the desired batching cycles (max. 9999).
- Calculation of total consumption and consumption of each formula.
- The following values can be printed via the keyboard: constants, formulas, consumption. Automatic printout of batching data.
- In the event of a power failure during batching, the microprocessor can resume batching from the point of interruption.
- Pause of the batching by the keyboard.

Operation: By closing the START contact or by pressing the Start key, the operator or external logic (EC/E options) selects the formula and starts the batching. The instrument verifies that approval contact is closed (if available) the weight is lower than the minimum one; executes the autotare (if enabled). After the delay tare time has elapsed (max 99.9 sec.) it closes the set and preset contacts. When the weight has reached the preset value the relative contact is opened, once it has reached the set value minus the fall value the set contact is closed and after the weight is stable (if enabled), it memorizes the consumption value and closes the cycle end contact, sending the batching data to the printer. When the weight has reached the minimum weight (unloading phase) and after the safe emptying time has elapsed (max 999.9 sec.) the instrument opens the cycle end contact. If more than one cycle has been programmed, the instrument will continue automatically.

Weight transmitter approved OIML R61 (Automatic Gravimetric Filling Instruments) according to WELMEC Guide 8.8:2011 (MID). C € M approvable EN45501-2014/31/UE-OIML R76:2006

FOR NON-AUTOMATIC BATCHING

Operation: During the start phase at the stable weight, with weight lower than the minimum weight set, there are two possible operation modes: the storage of the removable container's tare weight or the scale zero-setting within 2% of the maximum weight with fixed container. Once started the batching and reached the Set value, the instrument stops the batching. To move on the unloading phase and to store the weight in the alibi memory with the identification code ID (if presents OPZWALIBI option) the weight must be steady the operator must close the start input or press the Menu button. The instrument closes the end cycle contact to realize the unloading, increases the consumption (if enabled) and performs the printing, if enabled. Once it has reached the minimum weight and has finished the safe emptying time, it opens the end cycle. At the steady weight condition, wait until the closing of the start input or press the batching cycle.







UNLOADING MONOPRODUCT BATCHING

WINOXL/R-S Unload - 99 Formulas

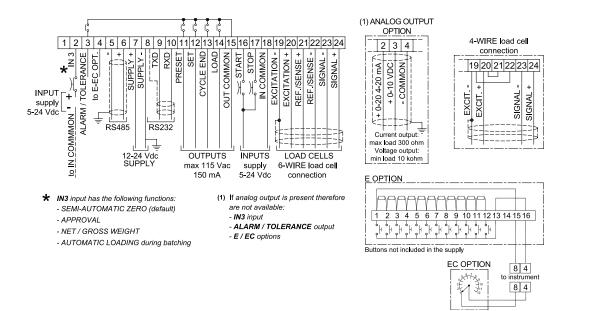
Main functions

- Memorization of 99 different formulas with SET and PRESET.
- Setting of a only Slow value for all 99 formulas.
- Automatic fall calculation after one or more batching cycles.
- Tolerance value setting for each formula.
- "Tapping" function: It is possible to select the slow-on and slow-off times.
- 12 formula selection from selector switch or external contacts (EC/E options).
- It is possible to utilize the Alarm/Tolerance contact as signals of maximum or minimum.
- Batching start from external contact for only one cycle.
- Batching start via keyboard: it is possible to program the desired batching cycles (max. 9999).
- Calculation of total consumption and consumption of each formula.
- The following values can be printed via the keyboard: constants, formulas, consumption. Automatic printout of batching data.
- In the event of a power failure during batching, the microprocessor can resume batching from the point of interruption.
- Pause of the batching by the keyboard.
- Automatic loading option if weight is below minimum value after batching.
- Possibility of unloading "big bag" by finishing the batching on next big bag in case of product lower than the programmed quantity.

Operation: By closing the START contact or by pressing the Start key, the operator or external logic (EC/E options) selects the formula and starts the batching. The instrument verifies that the approval contact is closed (if enabled), that there is enough weight on scale to perform the batching, displays "0" and then closes the set and preset contacts. The net weight increase is displayed while the weight is extracted. When the weight reaches the preset value the relative contact is opened, and when the set value minus the fall value is reached, the set contact is opened. Once elapsed the waiting time (max 999.9 sec., if enabled in the constants), after the start contact was closed and the weight is stable, the indicator memorizes the consumption a closes the cycle-end contact sending data for printing. The instrument opens the end prepares to receive a new start or restart automatically if more cycles were programmed from the keyboard.

Weight transmitter approved OIML R61 (Automatic Gravimetric Filling Instruments) according to WELMEC Guide 8.8:2011 (MID). C C M approvable EN45501-2014/31/UE-OIML R76:2006 FOR NON-AUTOMATIC BATCHING

Operation: By closing the START contact or by pressing the Start key, the operator or external logic (EC/E options) selects the formula and starts the batching. The instrument starts the batching and checks that the approval is closed (if enable), that the weight on scale is enough to perform the batching, then closes the set and preset contacts; (the display shows the gross weight decreases). Once reached the Set value, the instrument stops the batching. To stop the batching and to store the weight in the alibi memory with the identification code ID (if presents OPZWALIBI option) the weight must be steady and the operator must close the start input or press the Menu/Enter button. The instrument closes the end cycle contact for the set time, increases the consumption (if enable) and prints if any. At the steady weight condition, wait until the closing of the start input or press the Start button to repeat the batching cycle.







BATCHING 3 / 6 / 14 PRODUCTS

WINOXL/R-3	3 Prodcucts - 99 Formulas
WINOXL/R-6	6 Prodcucts - 99 Formulas
WINOXL/R-14	14 Prodcucts - 99 Formulas

Mod. 6 PRODUCT includes:

- one 8-relay module mod. RELE6PROD (80 x 160 x h 60 mm), supplied with 12-24VDC supply or 115 VAC or 230 VAC.

Mod. 14 PRODUCT includes:

- one 8-relay module mod. RELE6PROD (80 x 160 x h 60 mm), supplied with 12-24VDC supply or 115 VAC or 230 VAC.

- one 8-relay module mod. RELE14PROD (80 x 120 x h 60 mm).

Main functions

- Memorization of 99 different formulas.

- Programming products in a fixed increasing order or to steps 3/6/14, recalling the product in the desired order, repeating several times the same product (if possible).
- Setting of Fall, Slow and Tolerance values for each product.
- Automatic fall value calculation for each product.
- "Tapping" function: It is possible to select the slow-on and slow-o
- 12 formula selection from selector switch or external contacts (EC/E options).
- Batching in net weight for each product.
- It is possible to use the Alarm contact as signals of maximum and minimum.
- Batching start from external contact for only one cycle.
- Batching start via keyboard: it is possible to program the desired batching cycles (max. 9999).
- Calculation of total consumption for each product.
- The following values can be printed via the keyboard: constants, formulas, consumption. Automatic printout of batching data.
- In the event of a power failure during batching, the microprocessor can resume batching from the point of interruption.
- Pause of the batching by the keyboard.

Operation: By closing the START contact or by pressing the Start key, the operator or external logic (EC/E options) selects the formula and starts the batching. The instrument verifies that the approval contact is closed (if enabled), the weight is lower than the minimum one, executes the autotare (if enabled), then closes the contact of the first product set. Once reached the set value minus the Fall value, minus the Slow value, it closes its Slow contatct. Once reached the set value minus the fall value, it opens the product contact and Slow contact and when the waiting time has elapsed (max 999,9 sec.), after the start contact has been closed (if enabled) and the weight is stable(if enabled), memorizes the consumption (if available) and closes the contact of another product if set in formula. Otherwise it closes the end cycle contact sending the data to the printer. When the weight has reached the minimum weight (unloading phase) and after the safe emptying time has elapsed (max 999.9 sec.) the instrument reopens the cycle end contact. If more than one cycle has been programmed, the instrument will continue automatically or getting ready to receive a new start.

Weight transmitter approved OIML R61 (Automatic Gravimetric Filling Instruments) according to WELMEC Guide 8.8:2011 (MID).

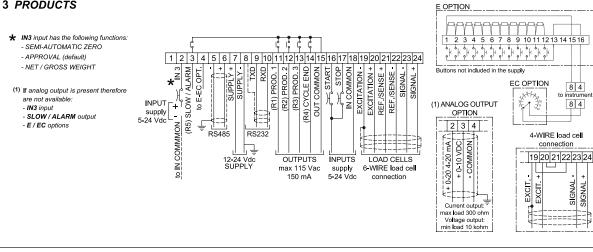
C € M approvable EN45501-2014/31/UE-OIML R76:2006 FOR NON-AUTOMATIC BATCHING

Operation: During the start phase at the stable weight, with weight lower than the minimum weight set, there are two possible operation modes: the storage of the removable container's tare weight or the scale zero-setting within 2% of the maximum weight with fixed container. Once started the batching and reached the Set value about the first product, the instrument stops the batching. To move to the following product, to increase the consumption, to store the value in the alibi memory with the identification code ID (if presents OPZWALIBI option) and to send data to the printer (if enable), the weight must be steady and the operator must close the start input or press the Menu/Enter button. This sequence is repeated for all the products by order of the operator, through the closure of the start input or the Menu/Enter button. The instrument closes the end cycle to realize the unloading. Once it has reached the minimum weight and has finished the safe emptying time, it opens the end cycle. At the steady weight condition, wait until the closing of the start input or press the batching cycle.

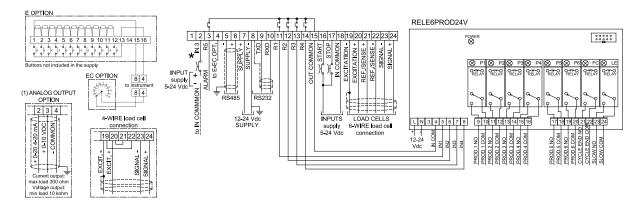




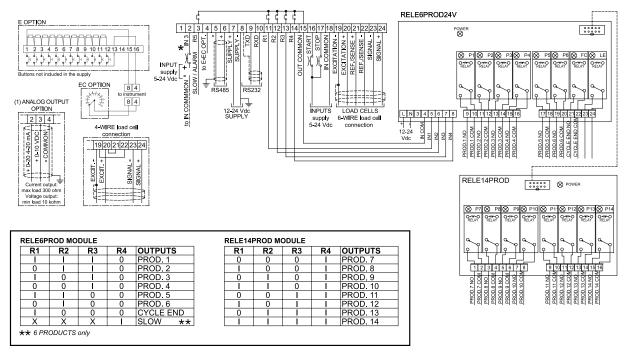
3 PRODUCTS



6 PRODUCTS



14 PRODUCTS



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The information provided herein is to the best of our knowledge true and accurate, it is provided for guidance only. All specifications are subject to change without prior notification. Althen – Your expert partner in Sensors & Controls | althensensors.com

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