REEL TORINO pricelist

COUNTERS; MEASUREMENTS; REGULATIONS; DISPLAYS; CONVERSIONS; POSITIONS
Valid from 01.05.2001

HOW to select the proper CODE unit for the order?

Each product line has its base family code and a few relevant performances.
Into each group of selection, identified by black characters, only one selection must be made.
Follow the same sequence shows in the pricelist, add after each selection the relevant price.
Example:
to order bidirectional pulse counter 96x48; 6 digits; only display; 230Vac; standard
(riferring to page 4) code will be composed as:
famiglia di prodotto "contaimpulsi bidirezionali 94x48"

B2	
	Display - preselections
L	6 digits, display only
	Power supply
1	230Vac 3,3 VA tollerance -10 +10%
	Version
0	Standard

The code to order will be: **B2L10**

MONODIRECTIONAL COUNTER

Swited for : Namur;NPN; PNP;mechanic contacts

2 - 4 Digit Programmable counter - Max frequence 2KHz DIN 48x48

M1	Designed to be connected to proximity, photo-sensor, encoder, mechanical switches Minidip switches and preselector programmable (+ , - keys), battery back-up Inputs: conter; reset; disable counter Working temperature -10, +50°C. Frontal panel mounting (cutoff 45 x 45mm) IP40
	Display - preselections
C	2 digits display + preselection
E	4 digits display
G	4 digits display + preselection
Z	Special
	Power supply
0	115Vac 1,5 VA -15 +10%
1	230Vac 1,5 VA -15 +10%
3	24Vac 1,5 VA -15 +10%
5	24Vdc 1,5W -10 +10%
9	Special
	Version
P	Standard
Z	Special

6 - 8 Digit Programmable counter - Max frequence 10KHz DIN 96x48

M2	Designed to be connected to proximity, photo-sensor, encoder, mechanical switches Minidip switches and preselector programmable (+ , - keys), battery back-up Inputs: conter; reset; disable counter Working temperature -10, +50°C. Frontal panel mounting (cutoff 92 x 45mm) IP40
	Display - preselections
L	6 digits display
N	6 digits display + preselection
Q	8 digits display
Z	Special
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
3	24Vac 3,3 VA -15 +10%
5	24Vdc 3,3W -10 +10%
9	Special
	Version
P	Standard
Z	Special

BIDIRECTIONAL COUNTER

Input signal from bi-directional-encoder

4 - 6 Digits counter - Max frequence 10KHz DIN 96x48

B2	To be connected to NPN, PNP, PUSH-PULL sensors Minidip switches and preselector programmable (+ , - keys), battery back-up Inputs: 2 conter; reset; disable counter Working temperature -10, +50°C. Frontal panel mounting (cutoff 92 x 45mm) IP40
	Display - preselections
G	4 digits display + preselection
L	6 digits display
N	6 digits display + preselection
Z	Special
	Power supply
0	115Vac 3,3 VA -10 +10%
1	230Vac 3,3 VA -10 +10%
3	24Vac 3,3 VA -10 +10%
5	24Vdc 3,3W -10 +10%
9	Speciale
	Version
0	Standard
9	Speciale

6 Digits counter - Max frequence 10KHz DIN 96x96

B3	To be connected to NPN, PNP, PUSH-PULL sensors Minidip switches and preselector programmable (+ , - keys), battery back-up Inputs:conter; reset; disable counter Working temperature -10, +50°C. Frontal panel mounting (cutoff 92,5 x 92,5mm) IP40
	Display - preselections
L	6 digits display
N	6 digits display + preselection
P	6 digits display + 2 preselections
Z	Special
	Power supply
0	115Vac 3,3 VA -10 +10%
1	230Vac 3,3 VA -10 +10%
3	24Vac 3,3 VA -10 +10%
5	24Vdc 3,3W -10 +10%
9	Special
	Version
0	Standard
9	Speciale

MONO/BIDIRECTIONAL PROGRAMMABLE COUNTER

8 counter modes (encoder,up+down;double up,etc) program.pulse weight

5 Digit Programmable counter - DIN 96x48

B1X	Designed for connection to encoder, proximity sensors, mechanical contacts 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:2 for counter; reset/preset; counter disable; Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vdc 3,3W -10 +10%
9	Special
	Alarm Digital Output
0	None
2	2 Relays SPDT (NO with common if T, R, M out selected, refers to data sheet)
9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

6 Digit Programmable counter - Max frequence 10KHz - DIN 96x48

B2X	Designed for connection to encoder, proximity sensors, mechanical contacts 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:2 for counter; reset/preset; counter block; "self-learning" Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vdc 3,3W -10 +10%
9	Special
	Alarm Digital Output
0	None
2	2 Relays SPDT (NO with common if T, R, M out selected, refers to data sheet)
4	4 Relays NO (with common contact if T, R, M out selected, refers to data sheet)
6	6 NPN static output, not possible if T, R, M out selected, refers to data sheet
9	Special
	Analog/Serial Output (galvanically insulated)
-	none
T	4-20mA (<250ohm); 0-10V (>1Kohm)
R	Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D	RS485 MODBUS 300...19200 baud
Z	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

MONO/BIDIRECTIONAL PROGRAMMABLE COUNTER

8 counter modes (encoder,up+down;double up,etc) program.pulse weight

6 Digits Programmable counter - Max frequence 5KHz - DIN 72x72

B5X	Designed for connection to encoder, proximity sensors, mechanical contacts 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:2 for counter; reset/preset; counter block; "self-learning" Working temperature -10, +50°C. Panel mounting (67,5 x 67,5mm), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vdc 3,3W -10 +10%
9	Special
	Alarm Digital Output
2	2 Relays SPDT (NO with common if T, R, M out selected, refers to data sheet)
9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

6 Digit Programmable counter - DIN 144x72

B6X	Designed for connection to encoder, proximity sensors, mechanical contacts 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:2 for counter; reset/preset; counter block; "self-learning" Working temperature -10, +50°C. Panel mounting (139,5 x 67,5mm), frontal IP54
	Power supply
0	115Vac 4,7 VA -15 +10%
1	230Vac 4,7 VA -15 +10%
2	24Vac 4,7 VA -15 +10%
3	24Vdc 4,7W -10 +10%
9	Special
	Alarm Digital Output
0	None
2	2 Relays SPDT
4	4 Relays SPDT
9	Special
	Analog/Serial Output (galvanically insulated)
-	none
T	4-20mA (<250ohm); 0-10V (>1Kohm)
R	Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
Z	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

MONO/BIDIRECTIONAL PROGRAMMABLE COUNTER

8 counter modes (encoder,up+down;double up,etc) program.pulse weight

8 Digit Programmable counter - Max frequency 10KHz - DIN 96x48

B2K	Designed for connection to encoder, proximity sensors, mechanical contacts 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:2 for counter; reset/preset; counter block; "self-learning" Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vdc 3,3W -10 +10%
9	Special
	Alarm Digital Output
0	None
2	2 Relays SPDT
9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

FLOW TOTALIZER

4...20mA input (default) - 0...10Vdc input

6, 8 Digit Programmable counter - Sampling rate 250ms - DIN 96x48

M2X	To be connected to industrial 4-20mA o 0-10Vdc transmitters 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs: counter; reset Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vdc 3,3W -10 +10%
9	Special
	Function
0/S206	6 digits totalizer
2/S206	6 digits count-down with two thresholds
1H1/S206	6 digits totalizer with counter pulse addressed to the relay output
0H3/S206	8 digits totalizer + 4 digits instantaneus flow
9/S206	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

FREQUENCYMETERS - REVOLUTION COUNTERS - METER COUNTERS
PRODUCTION COUNTERS - LITER COUNTERS - FLOWMETERS

Easy process parameters setting

5 Digit Programmable counter - Max frequency 5KHz - DIN 48x48

G1X	Designed to measure input frequency - selectable resolution x0,01-x0,1-x1-x10-x100 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:measure; hold Working temperature -10, +50°C. Panel mounting (45 x 45mm), frontal IP54
	Power supply
0	115Vac 1,5 VA -15 +10%
1	230Vac 1,5 VA -15 +10%
2	24Vac 1,5 VA -15 +10%
3	24Vdc 1,5W -10 +10%
9	Special
	Alarm Digital Output
0	None
2	2 Relays (NO with common)
9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

6 digits - Frequency measure range 0,001Hz to 10KHz - DIN 96x48

G2X	Designed to measure input frequency - selectable resolution x0,01-x0,1-x1-x10-x100 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:2 for counter (static or reed); hold; peak-hold Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vdc 3,3W -10 +10%
9	Special
	Alarm Digital Output
0	None
2	2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4	4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9	Special
	Analog/Serial Output (galvanically insulated)
-	none
T	4-20mA (<250ohm); 0-10V (>1Kohm)
R	Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D	RS485 MODBUS 300...19200 baud
Z	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

PRODUCTION COUNTER: TOTAL + INSTANTANEUS

Suited to the production control: usefull for service and operator

999999 for production 9999990 for totalizer - DIN 96x48

CRONO	Measurements: production speed;present production batch;working hours; gen. production 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:2 for measurements (indipendent for production/total); reset; counter disable Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Version
61	Production counter + totalizer + hourcounter + scanner
62	Production counter + totalizer + hourcounter + yearly production
	Power supply
/110	115Vac 3,3 VA -15 +10%
/220	230Vac 3,3 VA -15 +10%
/24	24Vac 3,3 VA -15 +10%
/24Vdc	24Vdc 3,3W -10 +10%
/9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

4 digits - Measurement range 2 a 10KHz - DIN 96x48

CG	Suited for speed, revolution measurements Input: for NPN o PNP, reed Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Version
1	Factory configured
2	Programmabile base time
3	Programmabile base time and multiplier
	Power supply
/110	115Vac 3,3 VA -15 +10%
/220	230Vac 3,3 VA -15 +10%
/24	24Vac 3,3 VA -15 +10%
/24Vdc	24Vdc 3,3W -10 +10%
/9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

DIGITAL TIMER

Delay in excitation ; istantaneus; pause work

5 digits - DIN 48x48

D1X	In seconds, minutes, hour; resolution x0,01 - x0,1 - x1 Delayed or intantaneus on excitation; cyclic; pause work 4 keys keyboard programmable unit, EEPROM memory for user parameters Working temperature -10, +50°C. Panel mounting (45 x 45), frontal IP54
	Power supply
0	115Vac 1,5 VA -15 +10%
1	230Vac 1,5 VA -15 +10%
2	24Vac 1,5 VA -15 +10%
3	24Vdc 1,5W -10 +10%
9	Special
	Alarm Digital Output
2	2 Relays SPDT (NO with common)
9	Special

5 digits - DIN 48x48

TM1X	Hourcounter(default) programmable as minutecounter o secondscounter(resolutionx1-x0,1-x0,01) 2 keys programmable extracting frontal panel Input: reset; counter disable Working temperature -10, +50°C. Panel mounting (45 x 45mm), frontal IP54
	Power supply
/110	115Vac 1,5 VA -15 +10%
/220	230Vac 1,5 VA -15 +10%
/24	24Vac 1,5 VA -15 +10%
/24Vdc	24Vdc 1,5W -10 +10%
/9	Special

DIGITAL TIMER

Delay in excitation ; istantaneus; pause work

6 digits - DIN 96x48

D2X	In seconds, minutes, hour; resolution x0,01 - x0,1 - x1 Delayed or intantaneus on excitation; cyclic; pause work 4 keys keyboard programmable unit, EEPROM memory for user parameters Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vdc 3,3W -10 +10%
9	Special
	Alarm Digital Output
2	2 Relays SPDT (NO with common)
9	Special

6 Digit Programmable counter - DIN 96x48

D2	Designed for connection to encoder, proximity sensors, mechanical contacts 4 keys keyboard programmable unit, EEPROM memory for user parameters 5 inputs: start; stop; reset; reset monostable; disable counter Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Display - preselection
E	4 digits display
G	4 digits display + preselection
L	6 digits display
N	6 digits display + preselection
Z	Special
	Power supply
00	115Vac 3,3 VA -15 +10%
10	230Vac 3,3 VA -15 +10%
30	24Vac 3,3 VA -15 +10%
50	24Vdc 3,3W -10 +10%
90	Special
	Range
/99,99 s	99,99 seconds
/999,9 s	999,9 seconds
/9999 s	9999 seconds
/99,99 m	99,99 minutes
/999,9 m	999,9 minutes
/9999 m	9999 minutes
/99,99 h	99,99 hours
/999,9 h	999,9 hours
/9999 h	9999 hours
/59m 59s	59 minutes 59 seconds
/99m 59s	99 minutes 59 seconds
/23h 59m	23 hours 59 minutes
/99h 59m	99 hours 59 minutes
/999999 s	999999 seconds
/999999 m	999999 minutes
/999999 h	999999 hours

VOLTMETER (48x48 mm)

Vdc, Vac voltage input signal

3 ½ digits - Measure range selected during the order from 0,2 and 500 Vdc - DIN 48x48

VM1	Suited to measure voltage signals Scale adjustement trimmer and minidip switches for DP position Engineering unit labels set available with the unit Working temperature -10, +50°C. Panel mounting (45 x 45mm), frontal IP54
	Power supply
/110	115Vac 1,5 VA -15 +10%
/220	230Vac 1,5 VA -15 +10%
/24	24Vac 1,5 VA -15 +10%
/24Vdc	24Vdc1,5W -10 +10%
/9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

3 ½ digits - Measure range selected during the order from19,99mV and 500 Vdc - DIN 48x48

V1G	Suited to measure voltage signals Scale adjustement trimmer and minidip switches for DP position Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Power supply and input type (Vac or Vdc)
1	230Vac 1,5 VA -10 +10% Vdc input
2	230Vac 1,5 VA -10 +10% Vac input
3	24Vac 1,5 VA -10 +10% Vdc input
4	24Vac 1,5 VA -10 +10% Vac input
5	115Vac 1,5 VA -10 +10% Vdc input
6	115Vac 1,5 VA -10 +10% Vac input
A	24Vdc 1,5 W -10 +10% Vdc input
B	24Vdc 1,5W -10 +10% Vac input
9	Special
	Input range
F	19,99 mV
G	1999,9 mV
H	1999 mV
L	19,99 V
M	199,9 V
N	1999 V (max 500 V)
P	custom (please, indicate input range reading value and measure unit)
Z	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

VOLTMETER (96x48 mm)

Vdc, Vac voltage input signal

3 ½ and 3 ½+zero - Measure range from ±2 to ±500 Vdc - DIN 96x48

VM2		Suited for Vdc measurement; range selectable wiring in the main connector Scale adjustement trimmer and minidip switches for DP position Engineering unit labels set available with the unit Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
		Display
	-	3 ½ digits (±1999)
	AB	3 ½ digits + fix zero on the last digit (±19990) (ideal for reading 3000 RPM from dynamo 180Vdc)
	Z	Special
		Power supply
	/110	115Vac 1,5 VA -15 +10%
	/220	230Vac 1,5 VA -15 +10%
	/24	24Vac 1,5 VA -15 +10%
	/24Vdc	24Vdc 1,5W -10 +10%
	/9	Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special

3 ½ digits - Measure range from 19,99 mV to 500V - DIN 96x48

V2G		Suited for Vdc, Vac measurement; depends on the model Scale adjustement trimmer and minidip switches for DP position Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply and input typeo (Vdc or Vac)
	1	230Vac 1,5 VA -10 +10% Vdc input
	2	230Vac 1,5 VA -10 +10% Vac input
	3	24Vac 1,5 VA -10 +10% Vdc input
	4	24Vac 1,5 VA -10 +10% Vac input
	5	115Vac 1,5 VA -10 +10% Vdc input
	6	115Vac 1,5 VA -10 +10% Vac input
	A	24Vdc 1,5 W -10 +10% Vdc input
	B	24Vdc 1,5W -10 +10% Vac input
	9	Special
		Input range
	F	19,99 mV
	G	1999,9 mV
	H	1999mV
	L	19,99 V
	M	199,9 V
	N	1999 V (max 500 V)
	P	custom (please, indicate input range reading value and measure unit)
	Z	Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special

VOLTMETER (72x36 mm)

Vdc, Vac voltage input signal

3 ½ digits - Measure range from 19,99 mV to 500V - DIN 72x36

VAG	Suited for Vdc, Vac measurement; depends on the model Scale adjustement trimmer Working temperature -10, +50°C. Panel mounting (67 x 31), frontal IP54
	Power supply and input typeo (Vdc or Vac)
1	230Vac 1,5 VA -10 +10% Vdc input
2	230Vac 1,5 VA -10 +10% Vac input
3	24Vac 1,5 VA -10 +10% Vdc input
4	24Vac 1,5 VA -10 +10% Vac input
5	115Vac 1,5 VA -10 +10% Vdc input
6	115Vac 1,5 VA -10 +10% Vac input
A	24Vdc 1,5 W -10 +10% Vdc input
B	24Vdc 1,5W -10 +10% Vac input
9	Special
	Input range
F	19,99 mV
G	1999,9 mV
H	1999mV
L	19,99 V
M	199,9 V
N	1999 V (max 500 V)
P	custom (please, indicate input range reading value and measure unit)
Z	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

VOLTMETER (72x72 mm)

Vdc, Vac voltage input signal

3 ½ digits - Measure range from 0 to 500Vac - DIN 72x72

VSP1	Suited for Vac measurement; 24; 115; 230; 380; 500 Vac Lowcost version Working temperature -10, +50°C. Panel mounting (67,5 x 67,5), frontal IP54
	Power supply
/110	115Vac 1,5 VA -15 +10%
/220	230Vac 1,5 VA -15 +10%
/24	24Vac 1,5 VA -15 +10%
/9	Special

3 ½ digits - Measure range from 19,99mV to 500V - DIN 72x72

V5G	Suited for Vdc, Vac measurement; depends on the model Scale adjustement trimmer Working temperature -10, +50°C. Panel mounting (67,5 x 67,5), frontal IP54
	Power supply and input typeo (Vdc or Vac)
1	230Vac 1,5 VA -10 +10% Vdc input
2	230Vac 1,5 VA -10 +10% Vac input
3	24Vac 1,5 VA -10 +10% Vdc input
4	24Vac 1,5 VA -10 +10% Vac input
5	115Vac 1,5 VA -10 +10% Vdc input
6	115Vac 1,5 VA -10 +10% Vac input
A	24Vdc 1,5 W -10 +10% Vdc input
B	24Vdc 1,5W -10 +10% Vac input
9	Special
	Input range
F	19,99 mV
G	1999,9 mV
H	1999mV
L	19,99 V
M	199,9 V
N	1999 V (max 500 V)
P	custom (please, indicate input range reading value and measure unit)
Z	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

AMPEROMETER (48x48 mm)

Input signal from dc/ac current (max input current 14A)

3 ½ digits - Selectable input 4...20 or 0...20 mA from minidip - DIN 48x48

AM1	Suited for 0…20 or 4…20 mA input signal Scale adjustement trimmer and minidip switches for DP position Engineering unit labels set available with the unit Working temperature -10, +50°C. Panel mounting (45 x 45mm), frontal IP54
	Power supply
/110	115Vac 1,5 VA -15 +10%
/220	230Vac 1,5 VA -15 +10%
/24	24Vac 1,5 VA -15 +10%
/24Vdc	24Vdc 1,5W -10 +10%
/9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

6 Digit Programmable counter - DIN 96x48

A1G	Suited for dc/ac current measurement; depends on the model Scale adjustement trimmer Working temperature -10, +50°C. Panel mounting (45 x 45mm), frontal IP54
	Power supply and input type (Adc or Aac)
1	230Vac 1,5 VA -10 +10% Adc input
2	230Vac 1,5 VA -10 +10% Aac input
3	24Vac 1,5 VA -10 +10% Adc input
4	24Vac 1,5 VA -10 +10% Aac input
5	115Vac 1,5 VA -10 +10% Adc input
6	115Vac 1,5 VA -10 +10% Aac input
A	24Vdc 1,5 W -10 +10% Adc input
B	24Vdc 1,5W -10 +10% Aac input
9	Special
	Input range - resolution (amperometric transformer TA)
A	TA 50/5 0,1 A
B	TA 50/5 1 A
C	TA 100/5 0,1 A
D	TA 100/5 1 A
E	TA 150/5 0,1 A
F	TA 150/5 1 A
G	TA 200/5 0,1 A
W	TA 200/5 1 A
H	TA 250/5 1 A
L	TA 400/5 1 A
M	TA 500/5 1 A
N	TA 1000/5 1 A
P	TA 2000/5 1 A
Q	custom (please, indicate input range reading value and measure unit)
V	9,99 A
Z	1999 uA
Y	199,9 mA
J	19,99 mA
K	1999 mA
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

AMPEROMETER (96x48 mm)

Input signal from dc/ac current (max input current 14A)

3 ½ digits and 3 ½+zero - Selectable input 4...20 or 0...20 mA from minidip - DIN 48x48

AM2	Designed for connection to encoder, proximity sensors, mechanical contacts 4 keys keyboard programmable unit, EEPROM memory for user parameters Inputs:2 for counter; reset/preset; counter block; "self-learning" Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Display
-	3 ½ digits (±1999)
AB	3 ½ digits + fix zero on the last digit (±19990)
Z	Special
	Power supply
/110	115Vac 1,5 VA -15 +10%
/220	230Vac 1,5 VA -15 +10%
/24	24Vac 1,5 VA -15 +10%
/24Vdc	24Vdc 1,5W -10 +10%
/9	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

3 ½ digits - Measure range from 999uA to 9,99A - DIN 96x48

A2G	Suited for dc/ac current measurement; depends on the model Scale adjustement trimmer Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
	Power supply and input type (Adc or Aac)
1	230Vac 1,5 VA -10 +10% Adc input
2	230Vac 1,5 VA -10 +10% Aac input
3	24Vac 1,5 VA -10 +10% Adc input
4	24Vac 1,5 VA -10 +10% Aac input
5	115Vac 1,5 VA -10 +10% Adc input
6	115Vac 1,5 VA -10 +10% Aac input
A	24Vdc 1,5 W -10 +10% Adc input
B	24Vdc 1,5W -10 +10% Aac input
9	Special
	Input range - resolution (amperometric transformer TA)
A	TA 50/5 0,1 A
B	TA 50/5 1 A
C	TA 100/5 0,1 A
D	TA 100/5 1 A
E	TA 150/5 0,1 A
F	TA 150/5 1 A
G	TA 200/5 0,1 A
W	TA 200/5 1 A
H	TA 250/5 1 A
L	TA 400/5 1 A
M	TA 500/5 1 A
N	TA 1000/5 1 A
P	TA 2000/5 1 A
Q	custom (please, indicate input range reading value and measure unit)
V	9,99 A
Z	1999 uA
Y	199,9 mA
J	19,99 mA
K	1999 mA
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

AMPEROMETER (72x36 mm)

Input signal from dc/ac current (max input current 14A)

3 ½ digits - Measure range from 999uA to 9,99A - DIN 72x36

AAG	Suited for dc/ac current measurement; depends on the model Scale adjustement trimmer Working temperature -10, +50°C. Panel mounting (67 x 31mm), frontal IP54
	Power supply and input type (Adc or Aac)
1	230Vac 1,5 VA -10 +10% Adc input
2	230Vac 1,5 VA -10 +10% Aac input
3	24Vac 1,5 VA -10 +10% Adc input
4	24Vac 1,5 VA -10 +10% Aac input
5	115Vac 1,5 VA -10 +10% Adc input
6	115Vac 1,5 VA -10 +10% Aac input
A	24Vdc 1,5 W -10 +10% Adc input
B	24Vdc 1,5W -10 +10% Aac input
9	Special
	Input range - resolution (amperometric transformer TA)
A	TA 50/5 0,1 A
B	TA 50/5 1 A
C	TA 100/5 0,1 A
D	TA 100/5 1 A
E	TA 150/5 0,1 A
F	TA 150/5 1 A
G	TA 200/5 0,1 A
W	TA 200/5 1 A
H	TA 250/5 1 A
L	TA 400/5 1 A
M	TA 500/5 1 A
N	TA 1000/5 1 A
P	TA 2000/5 1 A
Q	custom (please, indicate input range reading value and measure unit)
V	9,99 A
Z	1999 uA
Y	199,9 mA
J	19,99 mA
K	1999 mA
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

AMPEROMETER (72x72 mm)

Input signal from dc/ac current (max input current 14A)

3 ½ digits - Input from 5A amperometric transformer (TA) - DIN 72x72

ASP1	TA .. /5 input current TA selection by means minidip; range from 50 to 2000 Aac (steps from 50A) DP selection by means minidip fro range from 5,0 to 200,0 A (steps from 5,0 A) Working temperature -10, +50°C. Panel mounting (67,5 x 67,5), frontal IP54
	Power supply
/110	115Vac 3,3 VA -15 +10%
/220	230Vac 3,3 VA -15 +10%
/24	24Vac 3,3 VA -15 +10%
/9	Special

3 ½ digits - Measure range from 999uA to 9,99A - DIN 72x72

A5G	Suited for dc/ac current measurement; depends on the model Scale adjustement trimmer Working temperature -10, +50°C. Panel mounting (67,5 x 67,5), frontal IP54
	Power supply and input type (Adc or Aac)
1	230Vac 1,5 VA -10 +10% Adc input
2	230Vac 1,5 VA -10 +10% Aac input
3	24Vac 1,5 VA -10 +10% Adc input
4	24Vac 1,5 VA -10 +10% Aac input
5	115Vac 1,5 VA -10 +10% Adc input
6	115Vac 1,5 VA -10 +10% Aac input
A	24Vdc 1,5 W -10 +10% Adc input
B	24Vdc 1,5W -10 +10% Aac input
9	Special
	Input range - resolution (amperometric transformer TA)
A	TA 50/5 0,1 A
B	TA 50/5 1 A
C	TA 100/5 0,1 A
D	TA 100/5 1 A
E	TA 150/5 0,1 A
F	TA 150/5 1 A
G	TA 200/5 0,1 A
W	TA 200/5 1 A
H	TA 250/5 1 A
L	TA 400/5 1 A
M	TA 500/5 1 A
N	TA 1000/5 1 A
P	TA 2000/5 1 A
Q	custom (please, indicate input range reading value and measure unit)
V	9,99 A
Z	1999 uA
Y	199,9 mA
J	19,99 mA
K	1999 mA
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

DC VOLTMETER MULTIFUNCTION (micro-p)

Input signals: <0,1 Vdc;voltage between 40...500 Vdc (for range 0,1...40 Vdc see A2X)

5 digits display - DIN 96x48 - The input range must be defined on the order

V2X		Designed for continus signal measurement (shunt; tachymeter dynamo, etc.) 4 keys keyboard programmable unit, EEPROM memory for user parameters Calibration with automatic "self-learning" by means 2 digital input Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D		RS485 MODBUS 300...19200 baud
Z		Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special
		Input galvanically insulation
	/	None

3 digit display - DIN 96x96 - The input range must be defined on the order

V3X		Designed for continus signal measurement (shunt; tachymeter dynamo, etc.), 20mm display 4 keys keyboard programmable unit, EEPROM memory for user parameters Calibration with automatic "self-learning" by means 2 digital input Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
Z		Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special
		Input range
	/	Specify the input range (for instance V3X12/180Vdc)

AC VOLTMETER MULTIFUNCTION (micro-p)

Input signal: voltag 50mVdc...500 Vac

5 digits display - DIN 96x48 - The input range must be defined on the order

W2X		Suited for ac signal measurements 4 keys keyboard programmable unit, EEPROM memory for user parameters Calibration with automatic "self-learning" by means 2 digital input Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D		RS485 MODBUS 300...19200 baud
Z		Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special
		Input range
	/	Specify the input range (for instanceW2X12/500Vac)

POTENTIOMETRIC INPUT INDICATOR

Angular or Linear measurements

5 Digit Indicator - DIN 96x48

U2X		Suited to linear or rotative potentiometer connection (from 500 to 10.000 ohm) 4 keys keyboard programmable unit, EEPROM memory for user parameters Calibration with automatic "self-learning" by means 2 digital input Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D		RS485 MODBUS 300...19200 baud
Z		Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special

DIGITAL PROCESS VARIABLES INDICATOR

Input signal: 4...20mA (default) - 0...10Vdc (max range ±0,1...40mA - ±0,1...40Vdc)

5 Digit Programmable Indicator - DIN 96x48

A2X		Designed for industrial transmitters connection 4…20mA or 0…10Vdc 4 keys keyboard programmable unit, EEPROM memory for user parameters Calibration with automatic "self-learning" by means 2 digital input Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
6		6 NPN static output, not possible if T, R, D out selected, refers to data sheet
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D		RS485 MODBUS 300...19200 baud
Z		Special
		Linearization
-		None
L		By means max 20 programmable segments
Z		Special
		Input galvanically insulation
-		None
DCI		Input insulation (suggested with 24Vdc power supply)
Z		Special
		Custom calibration
-		None
/		Specify range (for instance 4..20mA - 0…130,0)

3 Digit (high 20mm) Programmable Indicator - DIN 96x48

A3X		Designed for industrial transmitters connection 4…20mA or 0…10Vdc 4 keys keyboard programmable unit, EEPROM memory for user parameters Calibration with automatic "self-learning" by means 2 digital input Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
Z		Special
		Input galvanically insulation
-		None
DCI		Input insulation (suggested with 24Vdc power supply)
Z		Special
		Custom calibration
-		None
/		Specify range (for instance 4..20mA - 0…150)

DIGITAL PROCESS VARIABLES INDICATOR

Input signal: 4...20mA (default) - 0...10Vdc (max range ±0,1...40mA - ±0,1...40Vdc)

5 digit indicator - DIN 144x72

A6X	Designed for industrial transmitters connection 4…20mA or 0…10Vdc 16 keys keyboard programmable unit, EEPROM memory for user parameters Working temperature -10, +50°C. Panel mounting (139,5 x 67,5), frontal IP54
	Power supply
0	115Vac 4,7 VA -15 +10%
1	230Vac 4,7 VA -15 +10%
2	24Vac 4,7 VA -15 +10%
3	24Vdc 4,7W -10 +10%
9	Special
	Alarm Digital Output
0	None
2	2 Relays SPDT
4	4 Relays SPDT)
9	Special
	Analog/Serial Output (galvanically insulated)
-	none
T	4-20mA (<250ohm); 0-10V (>1Kohm)
R	Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
Z	Special
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special
	Custom calibration
-	None
I	Specify range (for instance 4..20mA - 0…130,0)

TA INPUT INDICATOR (micro-p)

Input ac current signal from TA...5A (default) ; different on request from 0,1...14 Aac

5 Digit Indicator - DIN 96x48

N2X		Designed for direct TA../5 connection 4 keys keyboard programmable unit, EEPROM memory for user parameters Calibration with automatic "self-learning" by means 2 digital input Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D		RS485 MODBUS 300...19200 baud
Z		Special
		Linearizzation
-		None
L		By means max 20 programmable segments
Z		Special
		Input galvanically insulation
-		None
DCI		Input insulation (suggested with 24Vdc power supply)
Z		Special
		Input range
	-	Standard (0…5 Aac)
	/	Special, specify the range (ex.TA500/1)

THERMOCOUPLES DISPLAY/CONTROLLER UNIT

Thermocouples: S, R, B, E, J, K, T

5 digits display - DIN96x48

E2X		Designed for connection to thermocouple temperature sensors 4 keys keyboard programmable unit, EEPROM memory for user parameters Automatic cold-joint compensation; Inputs: for hold and peak-hold functions Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D		RS485 MODBUS 300...19200 baud
Z		Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special

THERMOCOUPLES DISPLAY/CONTROLLER UNIT

Thermocouples: J or K must be defined on the order

3 ½ digits indicator - DIN48x48

E1G	Designed for connection to thermocouple temperature sensors Trimmer calibration adjustment Automatic cold-joint compensation Working temperature -10, +50°C. Panel mounting (45 x 45mm), frontal IP54
	Power supply
0	115Vac 1,5 VA -15 +10%
1	230Vac 1,5 VA -15 +10%
2	24Vac 1,5 VA -15 +10%
3	24Vdc 1,5W -10 +10%
9	Special
	Reading range
A	0…199°C J (Fe/Co)
B	0…399°C J (Fe/Co)
C	0…599°C J (Fe/Co)
D	0…599°C K (Cr/Al)
E	0…999°C K (Cr/Al)
F	0…1200°C K (Cr/Al)
R	Special custom
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

3 ½ digits indicator - DIN96x48

E2G	Designed for connection to thermocouple temperature sensors Trimmer calibration adjustment Automatic cold-joint compensation Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
	Power supply
0	115Vac 1,5 VA -15 +10%
1	230Vac 1,5 VA -15 +10%
2	24Vac 1,5 VA -15 +10%
3	24Vdc 1,5W -10 +10%
9	Special
	Reading range
A	0…199°C J (Fe/Co)
B	0…399°C J (Fe/Co)
C	0…599°C J (Fe/Co)
D	0…599°C K (Cr/Al)
E	0…999°C K (Cr/Al)
F	0…1200°C K (Cr/Al)
R	Special custom
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

RTD (Pt100) TEMPERATURE INDICATOR

Platinum RTD 100 ohm at 0°C - max range -200...850°C (-328...1562°F)

5 digits indicator - DIN96x48

T2X		2, 3 wires connection - selectable resolution: 0,1°C - 1°C - 1°F 4 keys keyboard programmable unit, EEPROM memory for user parameters Automatic cable compensation (3wires connection); input hold and peak-hold Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D		RS485 MODBUS 300...19200 baud
Z		Special
		Linearization
	-	None
	L	By means max 20 programmable segments
	Z	Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special

RTD (Pt100) LOWCOST TEMPERATURE INDICATOR

Platinum 100 ohm at 0°C - lowcost

3 ½ digits indicator - DIN48x48

T1G	Designed for connection to RTD temperature sensors Trimmer calibration adjustment Automatic cable compensation (3wires connection) Working temperature -10, +50°C. Panel mounting (45 x 45), frontal IP54
	Power supply
0	115Vac 1,5 VA -15 +10%
1	230Vac 1,5 VA -15 +10%
2	24Vac 1,5 VA -15 +10%
3	24Vdc 1,5W -10 +10%
9	Special
	Reading range
G	0…99,9°C
H	0…199°C
L	0…199,9°C
M	0…250°C
N	0…599°C
P	-9,9…99,9°C
Q	±99°C
S	±199°C
R	Special custom
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

3 ½ digits indicator - DIN96x48

T2G	Designed for connection to RTD temperature sensors Trimmer calibration adjustment Automatic cable compensation (3wires connection) Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
	Power supply
0	115Vac 1,5 VA -15 +10%
1	230Vac 1,5 VA -15 +10%
2	24Vac 1,5 VA -15 +10%
3	24Vdc 1,5W -10 +10%
9	Special
	Reading range
G	0…99,9°C
H	0…199°C
L	0…199,9°C
M	0…250°C
N	0…599°C
P	-9,9…99,9°C
Q	±99°C
S	±199°C
R	Special custom
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

WEIGHT/FORCE MULTIFUNCTION INDICATOR

Load cell input with sensibility from 1,6 to 3,6 mV/V

5 digits display - DIN96x48

P2X		10 Vdc load cell supply 4 keys keyboard programmable unit, EEPROM memory for user parameters Calibration with automatic "self-learning" by means 2 digital input Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
	-	none
	T	4-20mA (<250ohm); 0-10V (>1Kohm)
	R	Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
	D	RS485 MODBUS 300...19200 baud
	Z	Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special

3 ½ digit indicator - DIN96x48

P2G		10 Vdc load cell supply Scale adjustement trimmer and minidip switches for DP position Temperatura di lavoro -10, +50°C. Montaggio ad incasso (dima 92 x 45) IP54
		Alarm Digital Output
G		None
L		1 preselected alarm theshold
P		2 preselected alarm thesholds
Z		Special
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Analog Output
	B	none
	B24	4...20 mA
	B27	0...10 V
	B9	Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special

OHM-METER

Ohm input signal with range from 20ohm to 2 Mohm (must be specify at the order)

5 digits display - DIN96x48

H2X		2-wires connection, no cable compensation
		4-wires connection, with cable compensation
		4 keys keyboard programmable unit, EEPROM memory for user parameters
		Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
		Power supply
0		115Vac 3,3 VA -15 +10%
1		230Vac 3,3 VA -15 +10%
2		24Vac 3,3 VA -15 +10%
3		24Vdc 3,3W -10 +10%
9		Special
		Alarm Digital Output
0		None
2		2 Relays SPDT (NO with common if T, R, D out selected, refers to data sheet)
4		4 Relays NO (with common contact if T, R, D out selected, refers to data sheet)
9		Special
		Analog/Serial Output (galvanically insulated)
-		none
T		4-20mA (<250ohm); 0-10V (>1Kohm)
R		Double port RS232 (max 255 units) 150…9600 baud, refers to data sheet
D		RS485 MODBUS 300...19200 baud
Z		Special
		Input galvanically insulation
	-	None
	DCI	Input insulation (suggested with 24Vdc power supply)
	Z	Special

TEMPERATURE REGULATOR UNIT

Thermocouple/RTD sensor input - ON-OFF regulation;P, PI, PID

Two 4 digits displays for temperature reading & setpoint; DIN 48x48

CR1X	Designed for connection to TC & RTD temperature sensors 4 keys keyboard programmable unit, EEPROM memory for user parameters Input: the same for TC or RTD sensor, software sensor selection Working temperature -10, +50°C. Panel mounting (45 x 45), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
9	Special
	Alarm Digital Output
2	2 Relays NO (setpoint + alarm)
9	Special

Two 4 digits displays for temperature reading and set-point; DIN 96x48

CR2X	Designed for connection to TC & RTD temperature sensors 3 keys keyboard programmable unit, EEPROM memory for user parameters Inputs: the same for TC or RTD sensor, software sensor selection Working temperature -10, +50°C. Panel mounting (92 x 45), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
9	Special
	Alarm Digital Output
2	2 Relays NO (setpoint + alarm)
4	4 Relays NO (setpoint + 3 alarms)
9	Special
	Analog/Serial Output (galvanically insulated)
-	none
T	4-20mA (<250ohm); 0-10V (>1Kohm)
Z	Special
	Version
-	96x48 (orizontal)
6A	48x96 (vertical)
	Static relay Output
-	none
28	Static output (alternative to the relay)

TEMPERATURE/PROCESS REGULATOR UNIT

4...20mA, from thermocouple/RTD transmitters - ON-OFF regulation;P, PI, PID

5 digits display - DIN 48x96 - input 4...20 mA

A2X	Designed for connection to signals coming from the process transmitters Analog/Digital output (4…20 mA & 0…10V, 2 open/close relays) suitable for the regulation 4 keys keyboard programmable unit, EEPROM memory for user parameters Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vac 3,3 VA -15 +10%
9	Special
	Alarm/Digital Output
21P1	2 Relays NO (alarms)
41P1	4 Relays NO (2 alarms + 2 regulation relays open/close)
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

5 digits display - DIN 48x96 - thermocouples input S, R, B, E, J, K, T

E2X	Designed for connection to TC temperature sensors Analog/Digital output (4…20 mA & 0…10V, 2 open/close relays) suitable for the regulation 4 keys keyboard programmable unit, EEPROM memory for user parameters Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vac 3,3 VA -15 +10%
9	Special
	Alarm/Digital Output
21P1	2 Relays NO (alarms)
41P1	4 Relays NO (2 alarms + 2 regulation relays open/close)
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

5 digits display - DIN 48x96 - RTD input Pt100

T2X	Designed for connection to RTD Pt100 temperature sensors Analog/Digital output (4…20 mA & 0…10V, 2 open/close relays) suitable for the regulation 4 keys keyboard programmable unit, EEPROM memory for user parameters Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
	Power supply
0	115Vac 3,3 VA -15 +10%
1	230Vac 3,3 VA -15 +10%
2	24Vac 3,3 VA -15 +10%
3	24Vac 3,3 VA -15 +10%
9	Special
	Alarm/Digital Output
21P1	2 Relays NO (alarms)
41P1	4 Relays NO (2 alarms + 2 regulation relays open/close)
	Input galvanically insulation
-	None
DCI	Input insulation (suggested with 24Vdc power supply)
Z	Special

BCD, GRAY DISPLAY AND LARGE DISPLAY

Input: BCD - GRAY - RS232

2 digits(h.12,5 mm) display - DIN 48x48

ADD2	BCD input NPN - PNP Positive or negative logic Working temperature -10, +50°C. Panel mounting (45 x 45mm), frontal IP54
	Power supply
/110	115Vac 1,5 VA -15 +10%
/220	230Vac 1,5 VA -15 +10%
/24	24Vac 1,5 VA -15 +10%
/24Vdc	24Vdc 1,5W -10 +10%
/9	Special

2 or 4 digits(h.12,5 mm or 20mm) display - DIN 96x48

DD	BCD input NPN - PNP Positive or negative logic Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
	N. display digits
2	2
4	4
9	Special
	Digit high mm.
-	12,5 mm
7A	20 mm
	Power supply
/110	115Vac 1,5VA -15 +10%
/220	230Vac 1,5VA -15 +10%
/24	24Vac 1,5VA -15 +10%
/24Vdc	24Vdc 1,5W -10 +10%
/9	Special

5 digits(h.12,5 mm) display - DIN 96x48

DD5G	GRAY input NPN - PNP Progtammable reading scale Working temperature -10, +50°C. Panel mounting (92 x 45mm), frontal IP54
	Analog output
-	none
T	Analog output
Z	Special
	Bit number
-	12 bit
16	16 bit
	Power supply
/110	115Vac 3,3 VA -15 +10%
/220	230Vac 3,3 VA -15 +10%
/24	24Vac 3,3 VA -15 +10%
/24Vdc	24Vdc 3,3W -10 +10%
/9	Special

4 or 6 digits display (h. 60 / 100 mm) - wall mounting

DDX	RS232 port - directly connectable to the serial output "R" of the REEL units (es.A2X12R) Suitable to display process variables like: temperature, pressure, umidity, speed, etc. Power supply 230 Vac Working temperature -10, +50°C. Wall mounting
	Dimensions
623	6 digit h.60 mm 400 x 144mm
440	4 digit h.100 mm 520 x 144mm
640	6 digit h.100 mm 700 x 144mm

INTERFACE UNIT AZX3

PC input programmable selection from J o K; PT100; Vdc; mA; Ohm

Din rail mounting (12,5 x 110 x 90 mm) - 3-wires connection

AZX3	Suited to analog input and 0/4…20mA output & 0-10V 24Vdc (18…32 V) power supply - input/output/power supply insulation Factory default configuration 0-10V input; 0-10V output mod. AZX3A1 Working temperature -10, +50°C. DIN rail mounting
	Input selection
A	Input voltage scale 0…10 Vdc (DEFAULT)
B	Input voltage scale 0…5 Vdc
C	Input voltage scale 0…1 Vdc
D	thermocouple J - 0...200°C
E	thermocouple J - 0…400°C
F	thermocouple J - 0…600°C
G	thermocouple K - 0…600°C
H	thermocouple K - 0…1200°C
L	PT100 0...100°C
M	PT100 -50…50°C
N	PT100 0…200°C
P	PT100 0…400°C
Q	Input current 0…20 mAdc
R	Input current 4…20 mAdc
S	Ohm-input 0…1000 ohm
T	Ohm-input 0…5000 ohm
	Output selection
1	Output voltage 0…10 Vdc (DEFAULT)
2	Output current 4…20 mAdc
3	Output current 0…20 mAdc

AZX3A1 programmation kit - PC IBM or compatible for communication (SO Win98)

PC minimum requirements: 486 o better; 32MRAM; VGA; 1 RS232 port; mouse; 1 parallel port

AZX3-PC	The kit include: - CD autoinstalled with REEL TORINO SW008 s/w - programmation key - connection cable
	Language
IT	italian (SW008-IT)
UK	english (SW008-UK)
FR	france (SW008-FR)
DE	deutch (SW008-DE)

INTERFACE UNIT

Input from ac/dc voltage

DIN 48x96

VZ	Suited for linear input voltage Current output (4…20 mA) or voltage (0...10 V) depends to the selection Multiturns trimmer output adjustment Working temperature -10, +50°C. cut-off 45 x 92mm frontal panel mounting IP20
	Insulation
C	Yes
T	No
	Range
0	20mV-500Vdc (the requested scale, must be specify during the order after the code)
1	10-500Vac (the requested scale, must be specify during the order after the code)
	Power supply - analog output
A	230Vac 1,5 VA -15 +10% - 0…10Vdc
B	24Vac 1,5 VA -15 +10% - 0…10Vdc
C	230Vac 1,5 VA -15 +10% - 4…20mA
D	24Vac 1,5 VA -15 +10% - 4…20mA
G	115Vac 1,5 VA -15 +10% - 0…10Vdc
H	115Vac 1,5 VA -15 +10% - 4…20mA
M	24Vdc 3,3 W -15 +10% - 0…10Vdc
N	24Vdc 3,3 W -15 +10% - 4…20mA

Input from ac/dc current

DIN 48x96

AZ	Suited for linear input current Current output (4…20 mA) or voltage (0...10 V) depends to the selection Multiturns trimmer output adjustment Working temperature -10, +50°C. cut-off 45 x 92mm frontal panel mounting IP20	
	Insulation	
C	Yes	
T	No	
	Range	***Default***
0	Adc Milliampere	4…20 mA /
1	Adc shunt	60mVdc /
2	Adc 0,1-15Adc	specify the scale during the order (for instance AZT2A/100mA)
3	Aac shunt	60mVdc /
4	Aac TA	5Aac /
5	Aac 1-15Aac	specify the scale during the order (for instance AZT5A/10A)
	Power supply - analog output	
A	230Vac 1,5 VA -15 +10% - 0…10Vdc	
B	24Vac 1,5 VA -15 +10% - 0…10Vdc	
C	230Vac 1,5 VA -15 +10% - 4…20mA	
D	24Vac 1,5 VA -15 +10% - 4…20mA	
G	115Vac 1,5 VA -15 +10% - 0…10Vdc	
H	115Vac 1,5 VA -15 +10% - 4…20mA	
M	24Vdc 3,3 W -15 +10% - 0…10Vdc	
N	24Vdc 3,3 W -15 +10% - 4…20mA	

Input from resistance (passive)

DIN 48x96

HZ	Suited for resistive input Current output (4…20 mA) or voltage (0...10 V) depends to the selection Multiturns trimmer output adjustment Working temperature -10, +50°C. cut-off 45 x 92mm frontal panel mounting IP20
	Insulation
C	Yes
T	No
	Range
0	100 ohm - 1M ohm specify the scale during the order (for instance HZT0A/1Kohm)
	Power supply - analog output
A	230Vac 1,5 VA -15 +10% - 0…10Vdc
B	24Vac 1,5 VA -15 +10% - 0…10Vdc
C	230Vac 1,5 VA -15 +10% - 4…20mA
D	24Vac 1,5 VA -15 +10% - 4…20mA
G	115Vac 1,5 VA -15 +10% - 0…10Vdc
H	115Vac 1,5 VA -15 +10% - 4…20mA
M	24Vdc 3,3 W -15 +10% - 0…10Vdc
N	24Vdc 3,3 W -15 +10% - 4…20mA

INTERFACE UNIT

Input from load cell (extensimetric sensor)

	DIN 48x96
PZ	10Vdc load-cell supply Current output (4…20 mA) or voltage (0...10 V) depends to the selection Multiturns trimmer output adjustment Working temperature -10, +50°C. cut-off 45 x 92mm frontal panel mounting IP20
	Insulation
C	Yes
T	No
	Range
0	1,6...3,6 mV/V
	Power supply - analog output
A	230Vac 1,5 VA -15 +10% - 0…10Vdc
B	24Vac 1,5 VA -15 +10% - 0…10Vdc
C	230Vac 1,5 VA -15 +10% - 4…20mA
D	24Vac 1,5 VA -15 +10% - 4…20mA
G	115Vac 1,5 VA -15 +10% - 0…10Vdc
H	115Vac 1,5 VA -15 +10% - 4…20mA
M	24Vdc 3,3 W -15 +10% - 0…10Vdc
N	24Vdc 3,3 W -15 +10% - 4…20mA

Input from 3-wires potentiometer

	DIN 48x96
TZ	Suited for the 3-wires potentiometer connection (passive) Current output (4…20 mA) or voltage (0...10 V) depends to the selection Multiturns trimmer output adjustment Working temperature -10, +50°C. cut-off 45 x 92mm frontal panel mounting IP20
	Insulation
T	No
	Range
0	Potenziometer value from 1K…50 Kohm
	Power supply - analog output
A	230Vac 1,5 VA -15 +10% - 0…10Vdc
B	24Vac 1,5 VA -15 +10% - 0…10Vdc
C	230Vac 1,5 VA -15 +10% - 4…20mA
D	24Vac 1,5 VA -15 +10% - 4…20mA
G	115Vac 1,5 VA -15 +10% - 0…10Vdc
H	115Vac 1,5 VA -15 +10% - 4…20mA
M	24Vdc 3,3 W -15 +10% - 0…10Vdc
N	24Vdc 3,3 W -15 +10% - 4…20mA

Input : frequency from static switch

	DIN 48x96
GZ	Suited for D/A conversion Current output (4…20 mA) or voltage (0...10 V) depends to the selection Multiturns trimmer output adjustment Working temperature -10, +50°C. cut-off 45 x 92mm frontal panel mounting IP20
	Insulation
T	No
	Range
0	NPN or PNP 100-5000Hz specify the scale during the order (for instance GZT0A/400Hz)
1	NAMUR 100-5000Hz specify the scale during the order (for instance GZT0A/400Hz)
	Power supply - analog output
A	230Vac 1,5 VA -15 +10% - 0…10Vdc
B	24Vac 1,5 VA -15 +10% - 0…10Vdc
C	230Vac 1,5 VA -15 +10% - 4…20mA
D	24Vac 1,5 VA -15 +10% - 4…20mA
G	115Vac 1,5 VA -15 +10% - 0…10Vdc
H	115Vac 1,5 VA -15 +10% - 4…20mA
M	24Vdc 3,3 W -15 +10% - 0…10Vdc
N	24Vdc 3,3 W -15 +10% - 4…20mA

ENCODERS - diameter 63mm size

1, 2, 3 channels version; connector or cable output; from 1 to 10000 pulse / revolution

Protruding shaft (with or without flange); hollow-shaft; through-shaft

ED	Shaft diameter 4, 6, 8 (standard EDN63; EDS63; EDP63), 10, 15 (standard EDC63) Electrical connection by means connector (see accessories) or cable 3, 5, 10 m. lengh Signals: NPN, PNP, push-pull, line driver depends on the model Working temperature -10, +50°C. IP54, IP65, IP67 available depend on the model
	Version
N63	Protruding shaft with flange
S63	Protruding shaft + fitting accessory
C63	Hollow shaft
P63	Through shaft
	Output signal channel
A	Monodirectional
B	Monodirectional + zero
C	Bidirectional
D	Bidirectional + zero
E	1 channel up/down - 1 channel clock
F	1 channel up - 1 channel down
Z	Special
	Electrical connections
1	Axial connector (see accessory for the partner connector) only for EDN63; EDS63; EDC63
2	Axial cable 3 m. only for EDN63; EDS63; EDP63
3	Axial cable 5m. Only for EDN63; EDS63; EDP63
4	Axial cable 10 m. Only for EDN63; EDS63; EDP63
5	Radial connector (see accessory for the partner connector) only for EDN63; EDS63; EDC63
6	Radial cable 3 m.
7	Radial cable 5 m.
8	Radial cable 10 m.
9	Special
	Output signal
A	NPN
B	PNP
C	NPN open collector
D	PNP open collector
E	PUSH-PULL
F	PUSH-PULL short circuit protected
G	Line driver 26LS31
H	Line driver 88C30
L	Line driver PUSH-PULL short circuit protected
Z	Special
	Power supply
1	5 Vdc
2	10…30 Vdc
3	12…30 Vdc (necessary for push-pull protected)
9	Special
	Pulse number/ revolution (specify during the order, for instance EDN63A1B1A/300)
A	from 1 to 250 (std: 1,2,3,4,5,6,10,12,15,16,20,25,30,35,40,50,60,100,106,120,125,127,150,180,200,216,240,250)
B	251 to 1000 (std: 254,256,300,314,360,400,500,512,600,720,900,1000)
C	1001 to 2500 (std: 1024,1250,1500,1800,2000,2048,2400,2500)
D	2501 to 5000 (std: 3000,3600,4000,4096,5000)
E	5001 to 10000 (std: 9000,10000)
	Mechanical protection degree
1	IP54
2	IP65 (only for EDN63; EDS63; EDP63)
3	IP67 (only for EDN63; EDS63; EDP63)
4	IP54
5	IP65 (only for EDN63; EDS63; EDP63)
6	IP67 (only for EDN63; EDS63; EDP63)
9	Special
	Shaft diameter
A	8 mm
B	15 mm (only EDC63)
C	10 mm
D	6 mm (only EDN63; EDS63; EDP63)
E	4 mm (only EDN63; EDS63; EDP63)
Z	Special

ENCODERS - diameter 40mm size

1, 2, 3 channels version; Axial or radial cable output; from 1 to 2500 pulse / revolution

Monodirectional; monodirectional + zero; bidirectional; bidirectional + zero

ED		Shaft diameter 4 or 6 mm 3, 5, 10 m. connection cable Signals: NPN, PNP, push-pull, line driver depends on the model Working temperature -10, +50°C. IP54, IP65, IP67 depends on the model
		Version
N40		Protruding shaft with flange
S40		Protruding shaft + fitting accessory
		Output signal channel
	A	Monodirectional
	B	Monodirectional + zero
	C	Bidirectional
	D	Bidirectional + zero
	Z	Special
		Electrical connections
	2	Axial cable 3 m.
	3	Axial cable 5m.
	4	Axial cable 10 m.
	6	Radial cable 3 m.
	7	Radial cable 5 m.
	8	Radial cable 10 m.
	9	Special
		Output signal
	A	NPN
	B	PNP
	C	NPN open collector
	D	PNP open collector
	E	PUSH-PULL
	F	PUSH-PULL short circuit protected
	G	Line driver 26LS31
	Z	Special
		Power supply
	1	5 Vdc
	2	10…30 Vdc
	3	12…30 Vdc (necessary for push-pull protected)
	9	Special
		Pulse number/ revolution
	A	from 1 to 100 (std: 1,2,3,4,5,6,10,12,15,16,20,25,30,40,50,60,100)
	B	101 to 500 (std: 120,125,150,180,200,250,300,314,360,400,500)
	C	501 to 1000 (std: 600,720,1000)
	D	1001 to 2500 (std: 2000,2500)
		Mechanical protection degree
	1	IP54
	2	IP65
	3	IP67
	4	IP54
	5	IP65
	6	IP67
	9	Special
		Shaft diameter
	A	6 mm (standard)
	B	4 mm
	Z	Special

ENCODERS - diameter 90mm size - Through shaft

1, 2, 3 channels version; Axial or radial cable output; from 1 to 2500 pulse / revolution

Monodirectional; monodirectional + zero; bidirectional; bidirectional + zero

EDAP90	Through shaft 20mm diameter 3, 5, 10 m. connection cable Push-pull signal Working temperature -10, +50°C. IP54
	Output signal channel
A	Monodirectional
B	Monodirectional + zero
C	Bidirectional
D	Bidirectional + zero
Z	Special
	Electrical connections
6	Radial cable 3 m.
7	Radial cable 5 m.
8	Radial cable 10 m.
9	Special
	Output signal
E	PUSH-PULL
	Power supply
2	10…30 Vdc
9	Special
	Pulse number/ revolution
A	10
B	360
Z	Speciale

ENCODERS - ACCESSORIES

Connectors (for model 63); joint (for model 40 e 63) weel (for model 40 e 63)

Connector

CON	For EDN63; EDC63; EDS63
	Version
1	7 pole (for 1,2,3 channel model eccept for line driver 3 channel)
2	10 pole (for line driver 2 channels + zero)

Elastic joint

G	For EDN63; EDS63; EDN40; EDS40
	Diameter / Diameter
0606	6 mm / 6 mm
0608	6 mm / 8 mm
0808	8 mm / 8 mm
0810	8 mm / 10 mm

Metric wheel

R	
	Version
200	Tangential development 200 mm
500	Tangential development 500 mm