CROUZET CONTROL

48 x 48 Max. Counting Speed 40 KHZ Multicoloured LCD display (green-red) Part number 87621222



- Counter, Tachometer, Chronometer, Multi-totalizer, Batch counter, Preselection totalizer
- Maximum input frequency 40 k Hz
- Simple parameter setting, configuration using text menus
- Easy modification of presets
- Scaling factor
- 5 A changeover relay and solid state output
- Removable connectors
- Backlit LCD display (orange) : 2 lines, 6 digits or multicoloured display (green-red)
- IP 65 sealed panel
- Option of locking the keypad, completely or partially (preset, programming)
- Accessories for 72 x 72 or 55 x 55 cut-out, DIN rail adaptor

Part numbers

	Type	Functions	Preset	Voltages	Output
87621222	Multicoloured LCD display (green-red)	Counter, Tachometer, Chronometer, Multi-totalizer, Batch counter, Preselection totalizer	2	24 VAC	1 changeover relay, 1 NO relay, 2 solid state

Specifications

Physical details and protection

Supply	10 →30 VDC / 24 V AC / 90 →260 VAC
Relative humidity (no condensation)	EN 60068-2-30 40/93 % RLF
Altitude	0 < 2000 m
Certifications	UL - cULus (pending) - CE
Vibration resistance in 3 axes	10-55 Hz/1 min/XYZ EN 60068-2-6 : 30 min. in each direction
Connection by screw terminals	Removable
Protection	Conforming to standard EN 60529 IP65 for panel/IP20 for connections
Front panel watertight seal	•
Temperature limits use (°C)	-20 →+65
Temperature limits stored (°C)	-25 →+75
Weight (g)	150 DC version 250 AC version

General characteristics

Reset to zero or to preset	On panel : if not locked during programming Electrical : automatic, voltage or solid state (NPN or PNP depending on programming)
Minimum pulse time	Impulse counter : < 15 ms Chronometer : 500 µs
Option to protect against reset from front panel	•
Scale factor (each input pulse is multiplied by this figure)	00,0001 →99,9999
Scaling factor (each input impulse is divided by this value)	01,0000 →99,9999
Decimal point selectable for ease of reading	0 0,0 0,00 0,000 0,0000 0,00000
Sensor supply version AC	24 VDC -20/+15 % 50 mA
Programming and current value backed up via EEPROM memory	• Service life 10 years

Operating characteristics

Functions	Preselection counter, Tachometer, Chronometer, Multi-totalizer, Batch counters, Totalizer
Number of presets	1 or 2
Display	LCD with orange backlighting/Multicoloured LCD (green-red)
Height digits (mm)	LCD 9
Display details	- 999 999 →999 999

Inputs specifications

Inputs	2 counter inputs 1 reset input, 1 gate input
Input modes	Dir : Directional AS : up/dn AA : up/up PP : phase PP2 : phase 2 PP4 : phase 4
Input type	Voltage or solid state
High level	8 VDC→30 VDC
Low level	0 →2 VDC

Unless otherwise specified, the characteristics given are applicable to all or part of the product range selected

Solid state output characteristics

Maximum current	30 mA
Max. voltage	10 →30 VDC for the DC version 24 VDC -20/+15 %

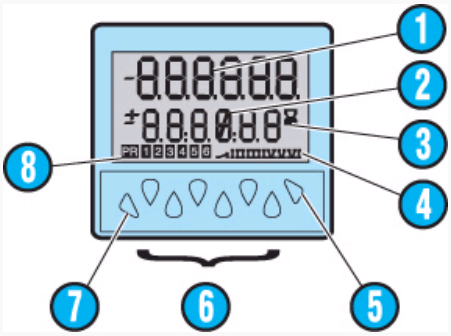
Relay output characteristics

Changeover relay	●
NO contact	Depending on version
Maximum current	5 A
Minimum current	10 mA
Maximum voltage	30 VDC / 250 VAC
Min. voltage	5 VAC/DC
Response time	< 13 ms
Mechanical life (operations)	20 x 10^6
Number of operations to 5 A	5 x 10^4
Output modes : maintained or pulsed	0.01 →99.99 s

Accessories

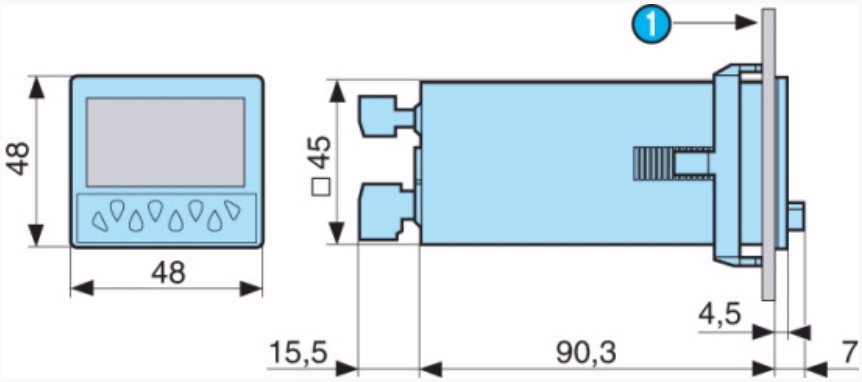
Description	Code
Adaptor for 72 x 72 mm cut-out	26546842
Adaptor for 55 x 55 mm cut-out	26546846
DIN rail adaptor	26546841

Principles



Nº	Legend
1	Current value
2	Selected value
3	Chronometer display
4	Active output indication
8	Shows which value is displayed
5	Prog/mode button
6	Preset control buttons
7	Button required for programming parameters

Dimensions (mm)

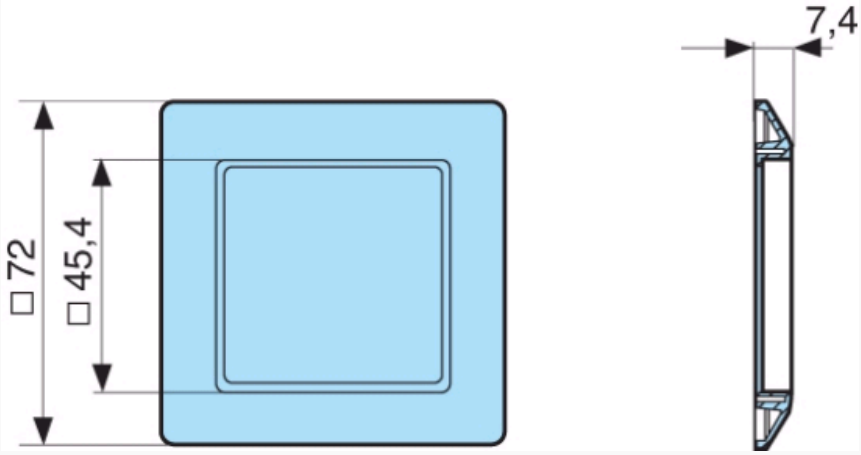


Unless otherwise specified, the characteristics given are applicable to all or part of the product range selected

Nº	Legend
1	10.5 max.

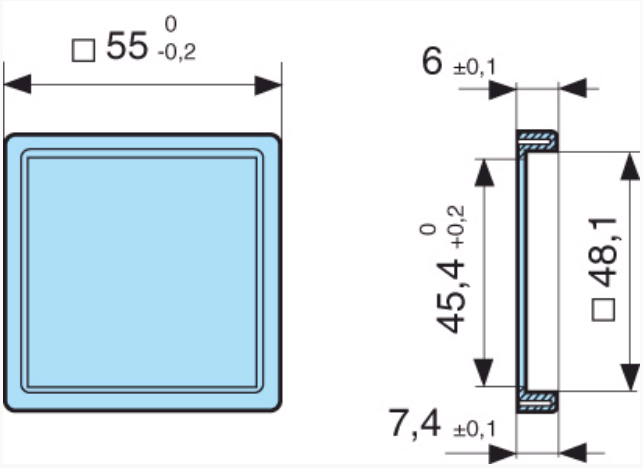
Dimensions (mm)

26546842 - Adaptor for 72 x 72 mm cut-out



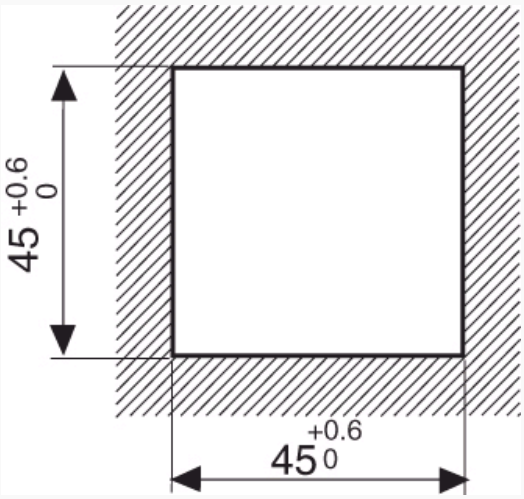
Dimensions (mm)

26546846 - Adaptor for 55 x 55 mm cut-out



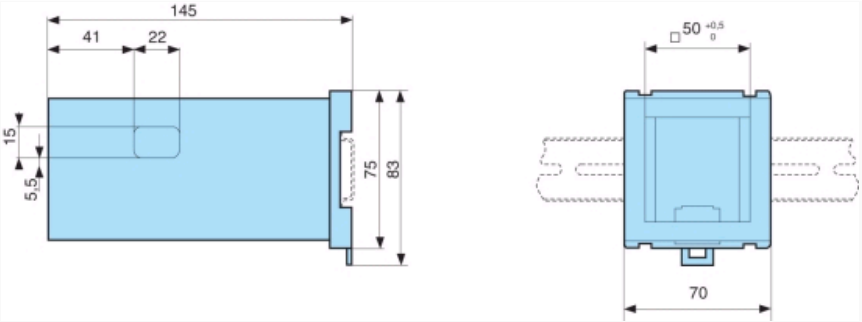
Dimensions (mm)

Panel cut-out



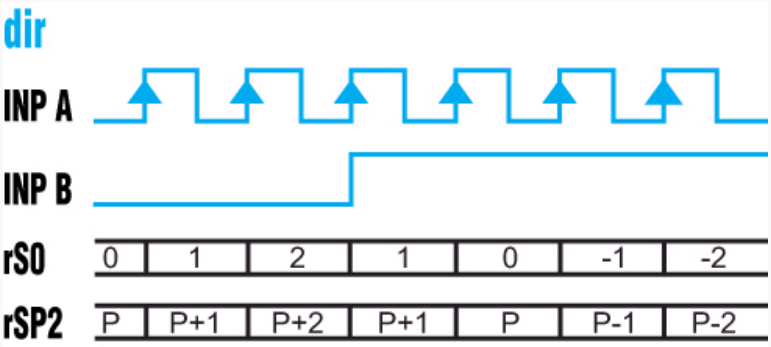
Dimensions (mm)

26546841 - DIN rail adaptor



Curves

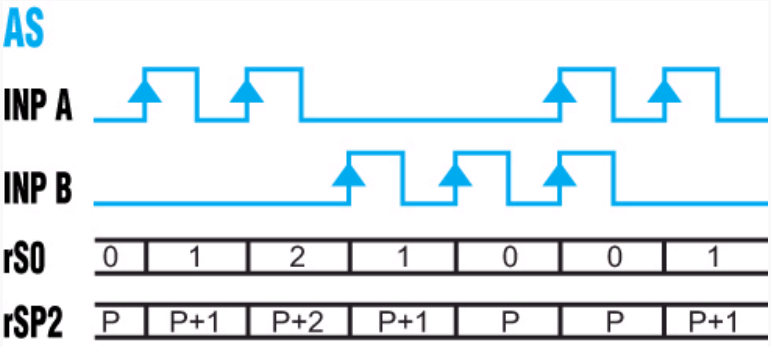
Counter : dir



Inp A : counter input Inp B : count direction rS0 : Display 0 →Preset rSP2 : Display Preset →0

Curves

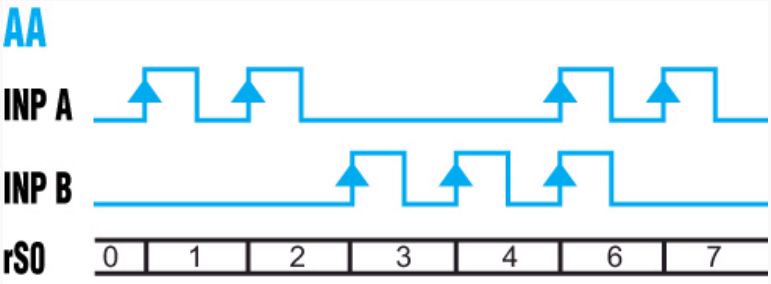
Counter : AS



Inp A : Add. counter input 1 Inp B : Sub.. counter input 2 rS0 : Display 0 →Preset rSP2 : Display Preset →0

Curves

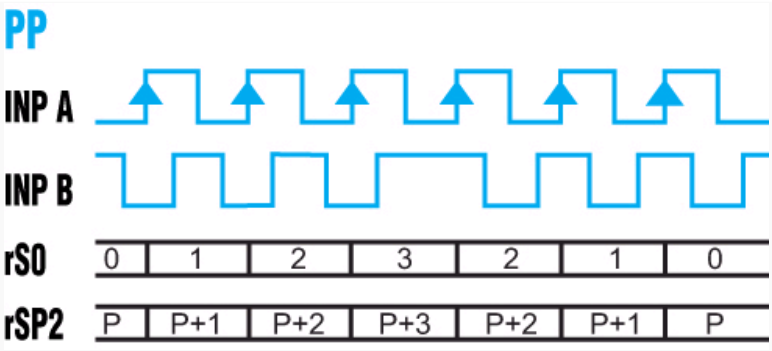
Counter : AA



Inp A : Add. counter input 1 Inp B : Sub.. counter input 2 rS0 : Display 0 →Preset

Curves

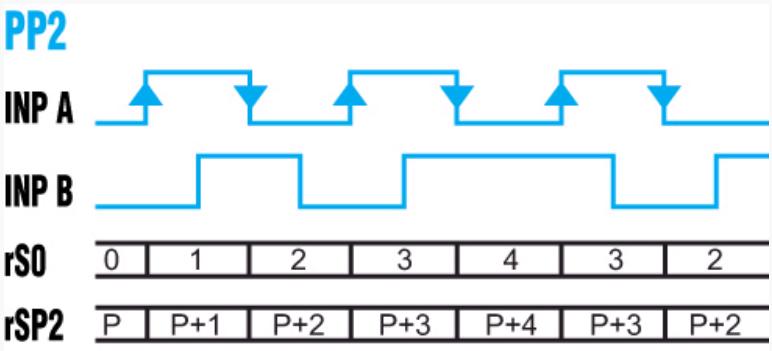
Counter : PP



A 90° B Inp A : Counter input Counting on an edge Inp B : Reversal of direction rS0 : Display 0 →Preset rSP2 : Display Preset →0

Curves

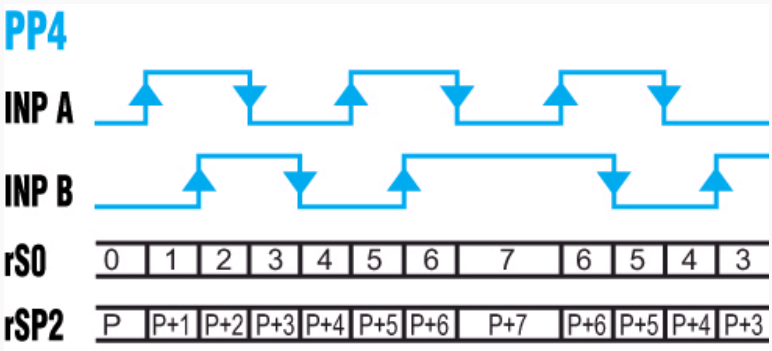
Counter : PP2



A 90° B Inp A : Counter input Counting on a rising edge and on a falling edge Inp B : Reversal of direction rS0 : Display 0 →Preset rSP2 : Display Preset →0

Curves

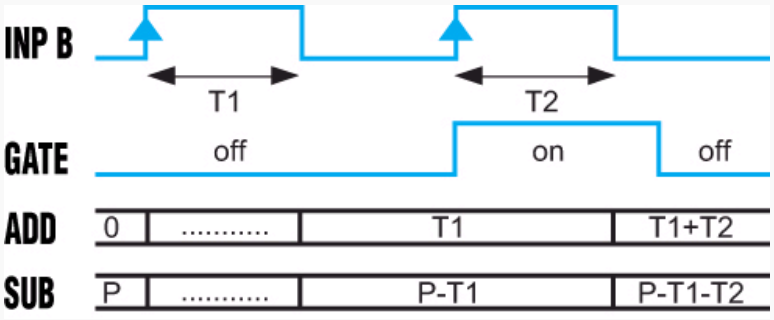
Counter : PP4



A 90° B Inp A : Counter input Counting on a rising edge and on a falling edge Inp B : Counter input Counting on a rising edge and on a falling edge, reversal of direction rS0 : Display 0 →Preset rSP2 : Display Preset →0

Curves

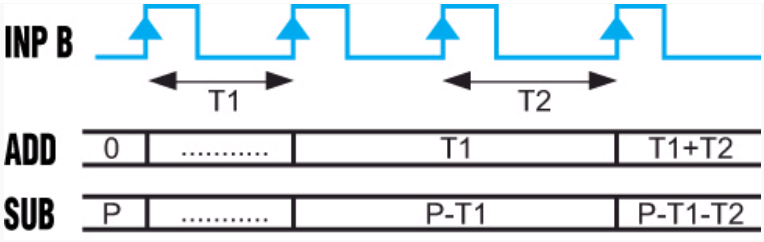
Chronometer : Start tcCb



Inp A : No function Inp B : On/Off Cumulative time counting while B is active Add : Display 0 →Preset Sub : Display Preset →0

Curves

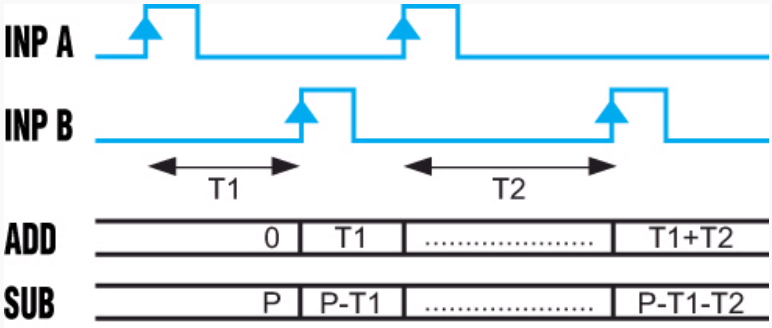
Chronometer : Start tcCbb



Inp A : No function Inp B : On/Off Cumulative time counting Add : Display 0 →Preset Sub : Display Preset →0

Curves

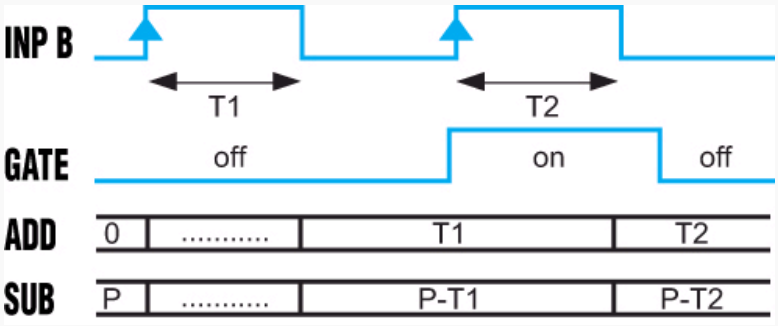
Chronometer : Start tcCAb



Inp A : On Inp B : Off Cumulative time counting Add : Display 0 →Preset Sub : Display Preset →0

Curves

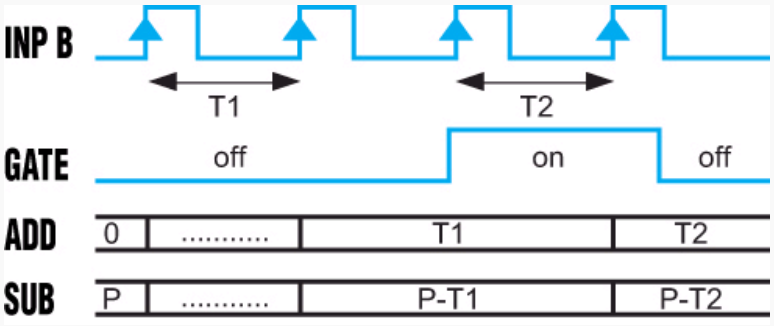
Chronometer : Start tcSb



Inp A : No function Inp B : On/Off Individual time counting, automatic reset before each new count Add : Display 0 →Preset Sub : Display Preset →0

Curves

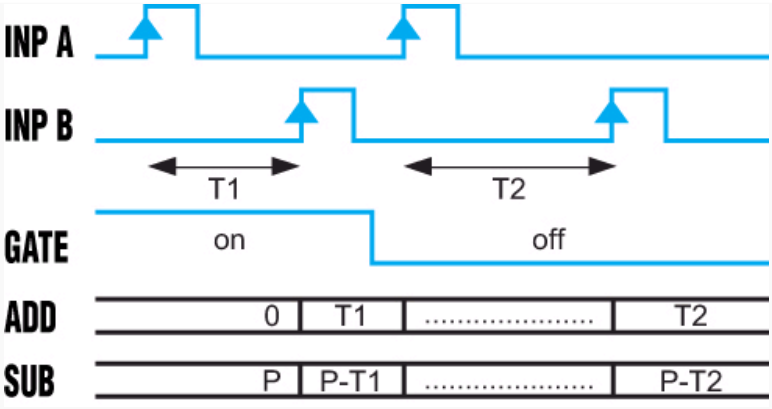
Chronometer : Start tcSbb



Inp A : No function Inp B : On/Off Individual time counting, automatic reset before each new count Add : Display 0 →Preset Sub : Display Preset →0

Curves

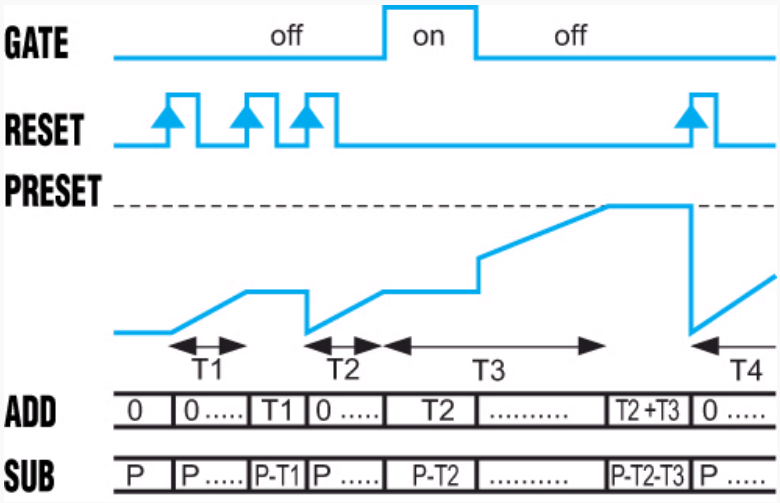
Chronometer : Start tcSAb



Inp A : On Inp B : Off Individual time counting, automatic reset before each new count Add : Display 0 →Preset Sub : Display Preset →0

Curves

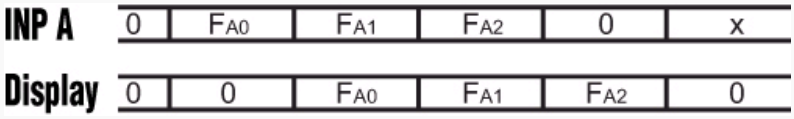
Chronometer : Start tcAuto



Inp A : No function Inp B : No function Time counting command via Reset (manual or electrical) Add : Display 0 →Preset Sub : Display Preset →0 The Gate input has a display memory function

Curves

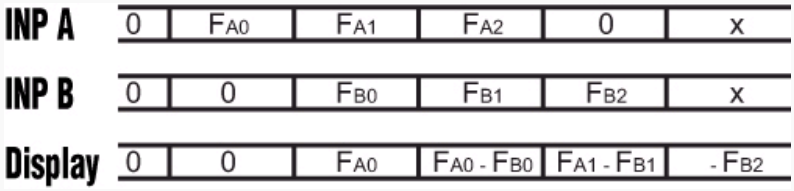
Tachometer : Start tA.A



Inp A : Frequency input Inp B : No function

Curves

Tachometer : Start tA.AS



Inp A : Frequency input 1 Inp B : Frequency input 2 Formula : A - B

Curves

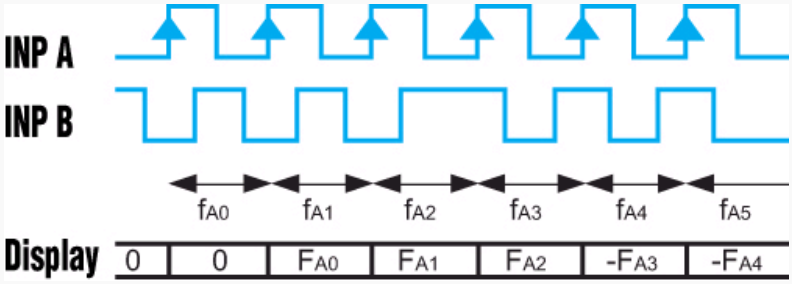
Tachometer : Start tA.AA

INP A	0	F_{A0}	F_{A1}	F_{A2}	0	x
INP B	0	0	F_{B0}	F_{B1}	F_{B2}	x
Display	0	0	F_{A0}	$F_{A0} + F_{B0}$	$F_{A1} + F_{B1}$	F_{B2}

Inp A : Frequency input 1 Inp B : Frequency input 2 Formula : A + B

Curves

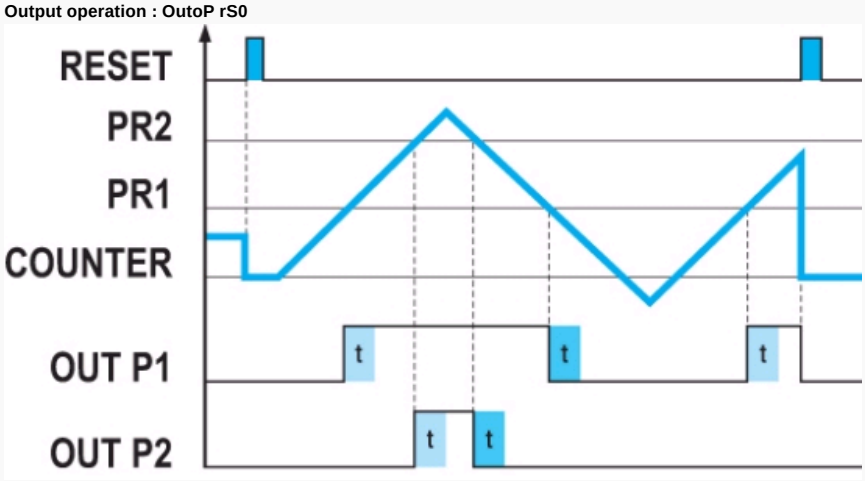
Tachometer : Start tA.PP



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

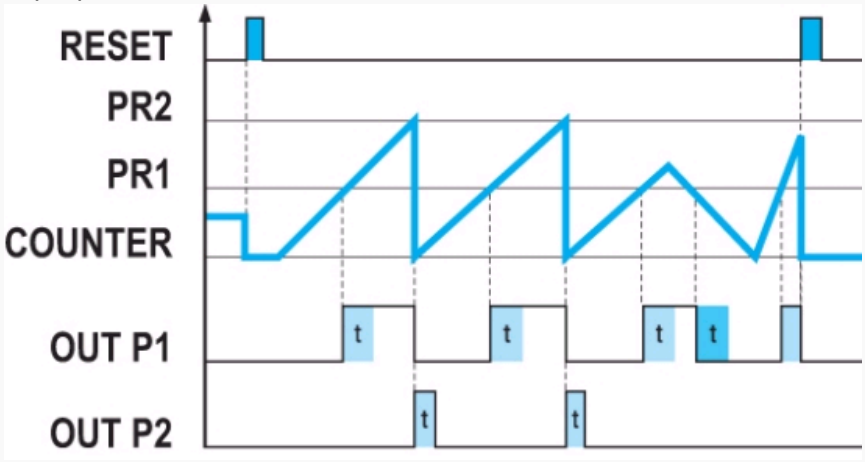
Output operation : OutoP rS0



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

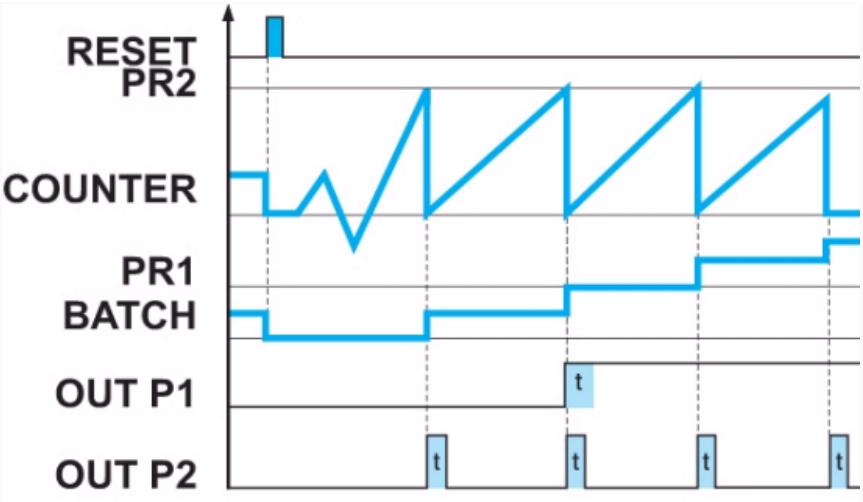
Output operation : OutoP rSA0



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

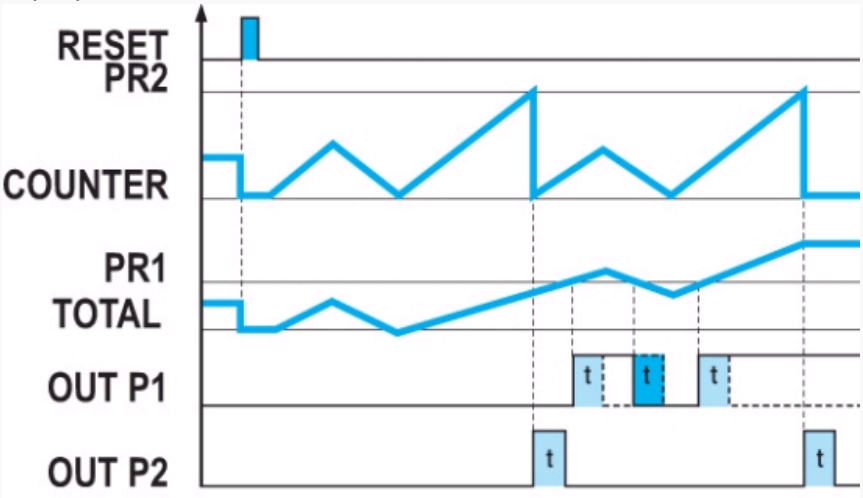
Output operation : OutoP bCrSA0



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

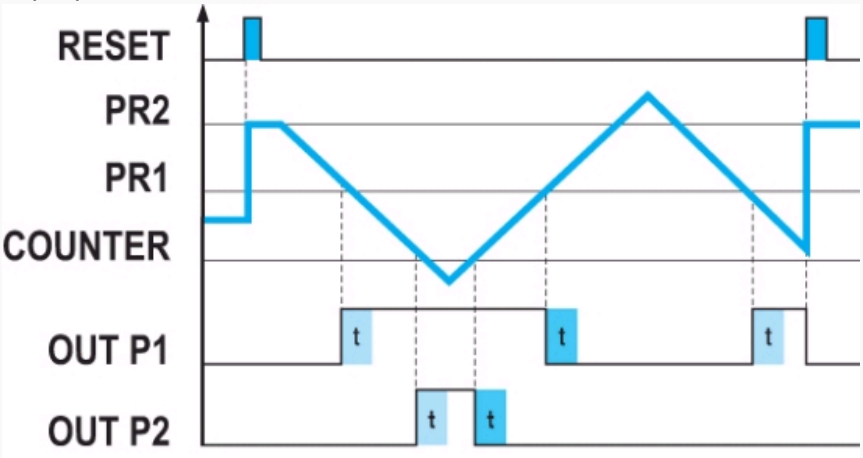
Output operation : OutoP tCrSA0



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

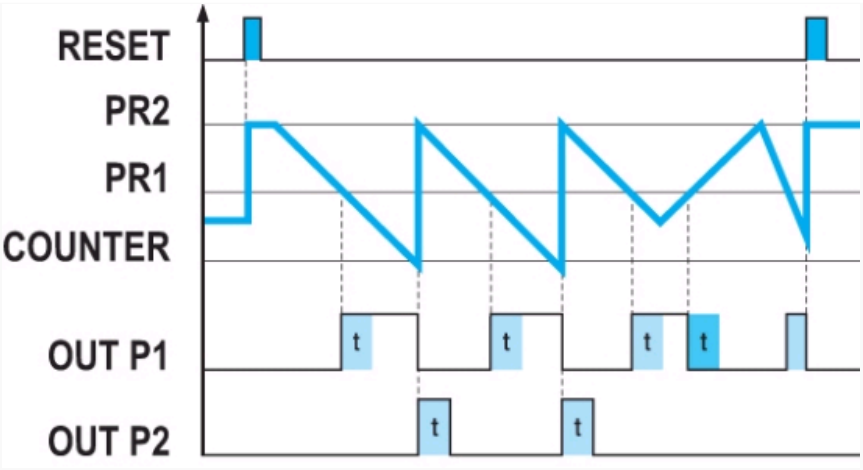
Output operation : OutoP rSP2



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

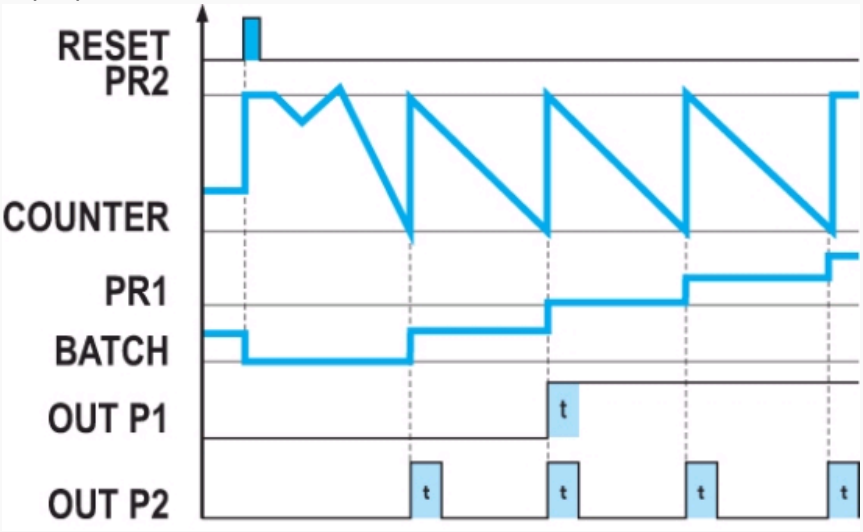
Output operation : OutoP rSAP2



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

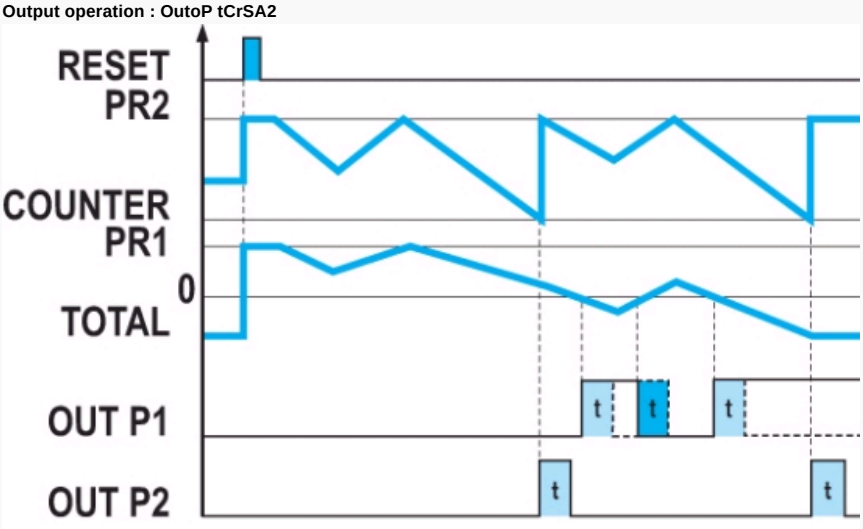
Output operation : OutoPbCrSA2



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

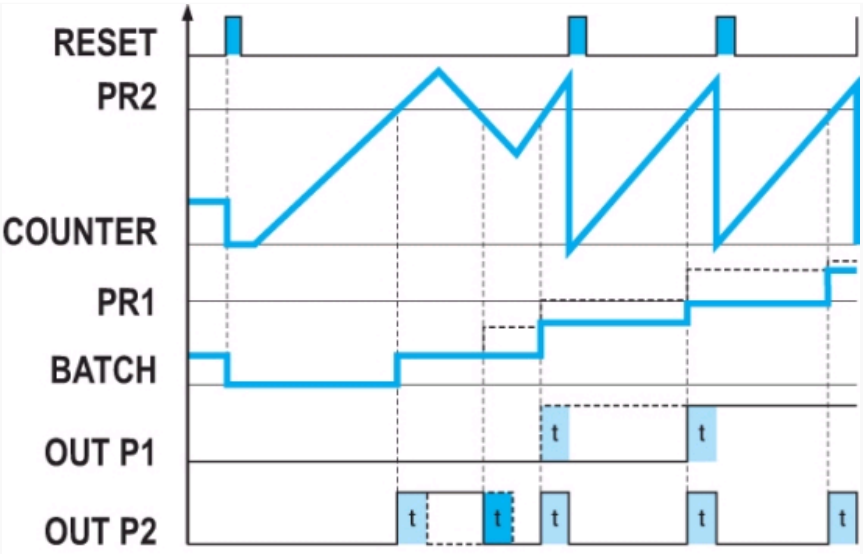
Output operation : OutoP tCrSA2



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

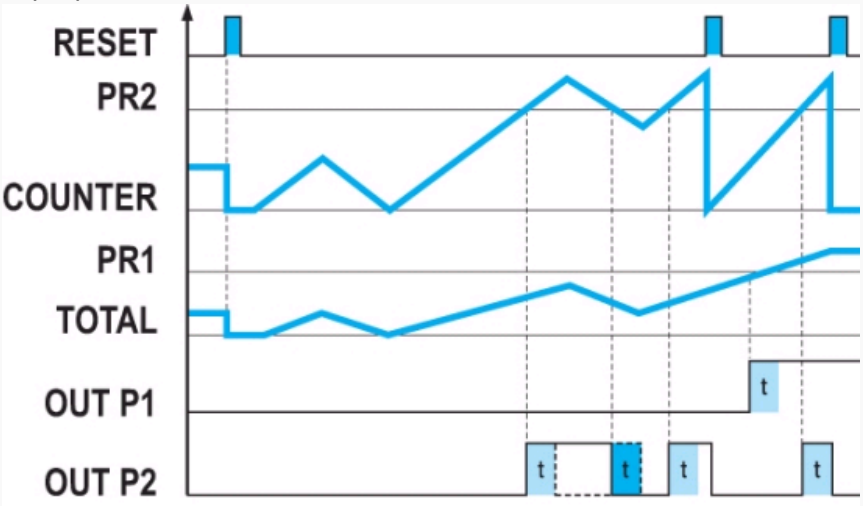
Output operation : OutoP bCrS0



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

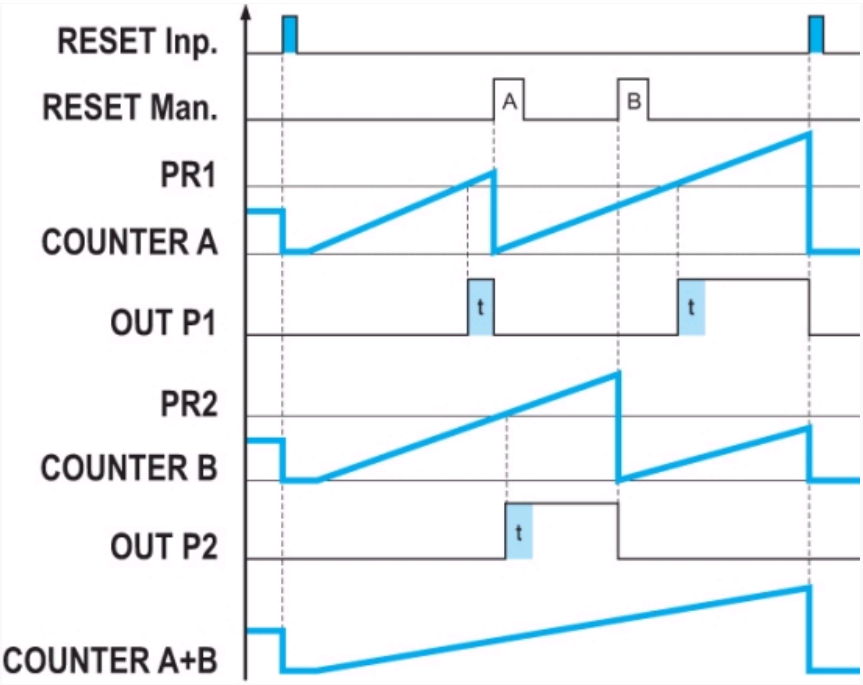
Output operation : OutoP tCrS0



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

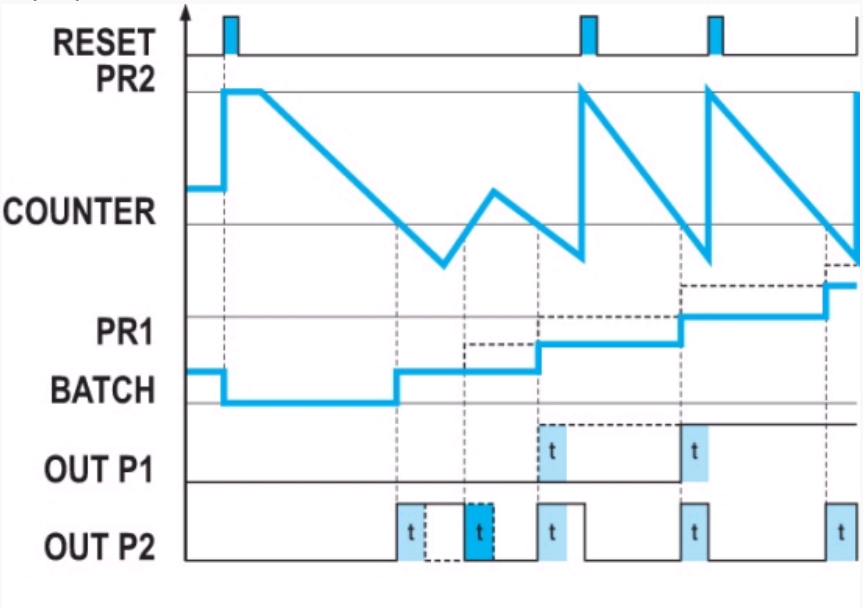
Output operation : OutoP MurS0 (AA)



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

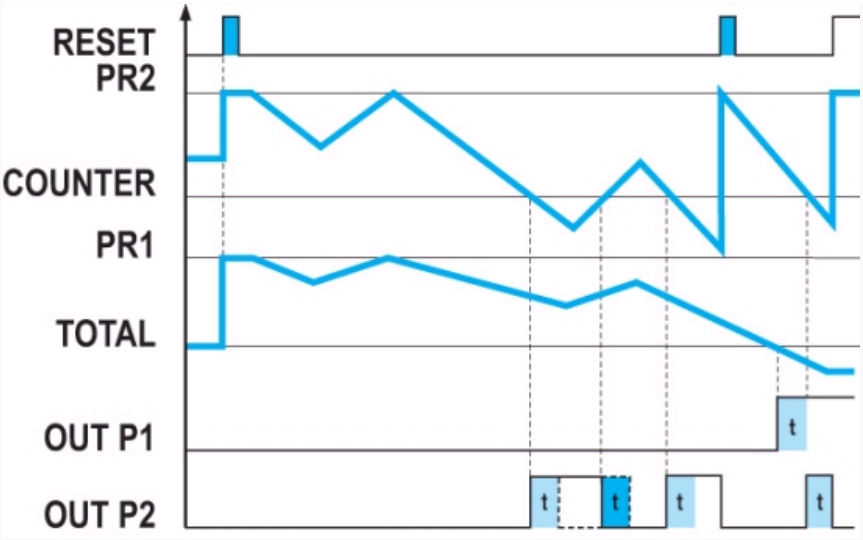
Output operation : OutoP bCrSP2



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

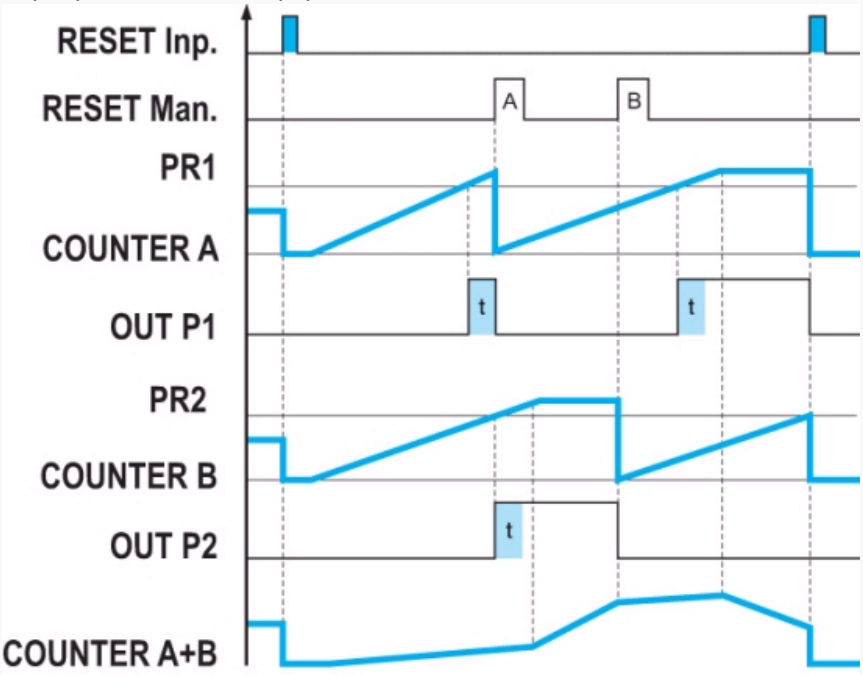
Output operation : OutoP tCrSP2



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Curves

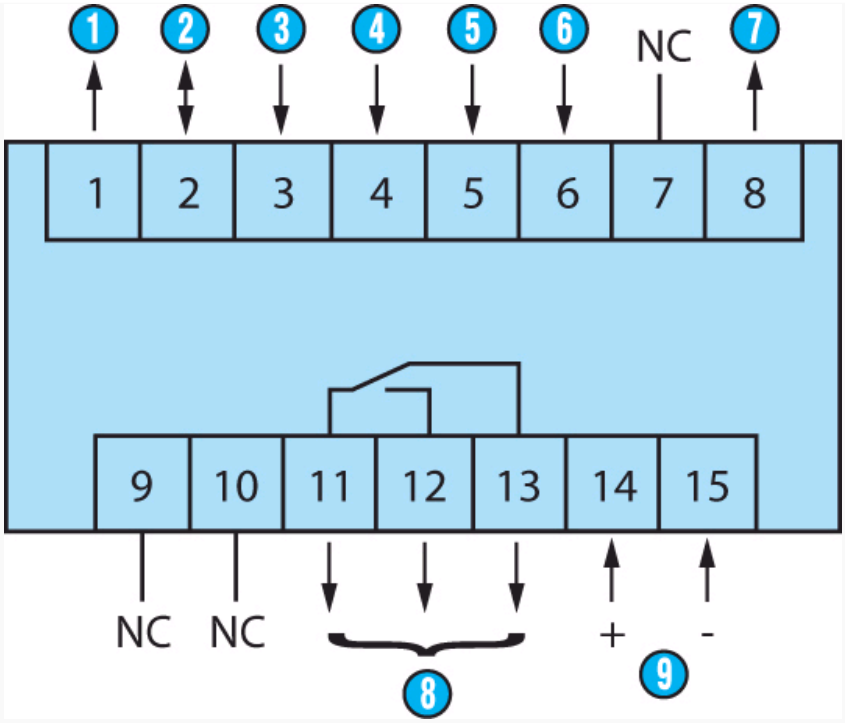
Output operation : OutoP MurS0 (AS)



A 90° B Inp A : Frequency input 1 Inp B : Reversal of direction

Connections

87621111 / 211

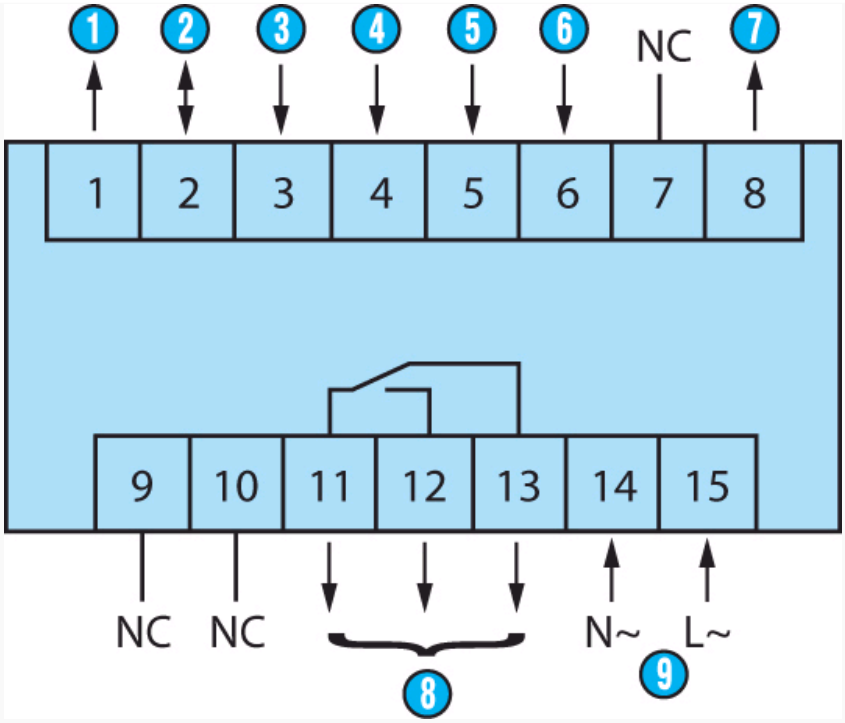


Output : 5 A/250 VAC/AC : 24 VAC

Nº	Legend
1	Sensor voltage supply (* UB interconnected)
2	GND (0 VDC)
3	INP A (signal A input)
4	INP B (signal B input)
5	Reset (Reset input)
6	Gate input
7	Output 1 - 10-30 VDC/30 mA
8	11-12-13 : Output 1
9	14-15 : Supply

Connections

87621112 / 212

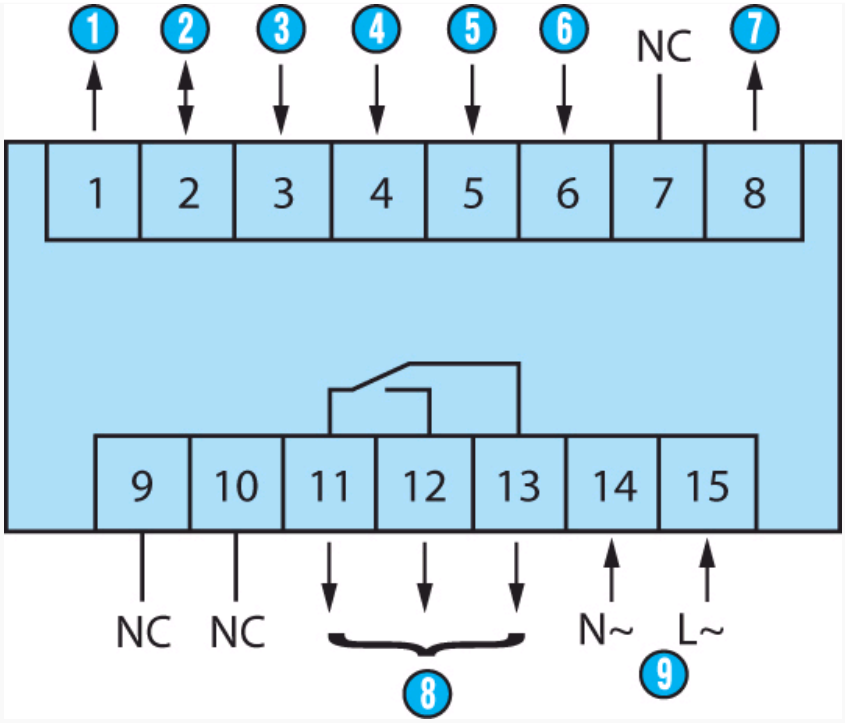


Output : 5 A/250 VAC/AC : 90 260 VDC

Nº	Legend
1	Sensor voltage supply
2	GND (0 VDC)
3	INP A (signal A input)
4	INP B (signal B input)
5	Reset (Reset input)
6	Gate input
7	Output 1 - 24 VDC/30 mA
8	11-12-13 : Output 1
9	14-15 : Supply

Connections

87621115 / 215

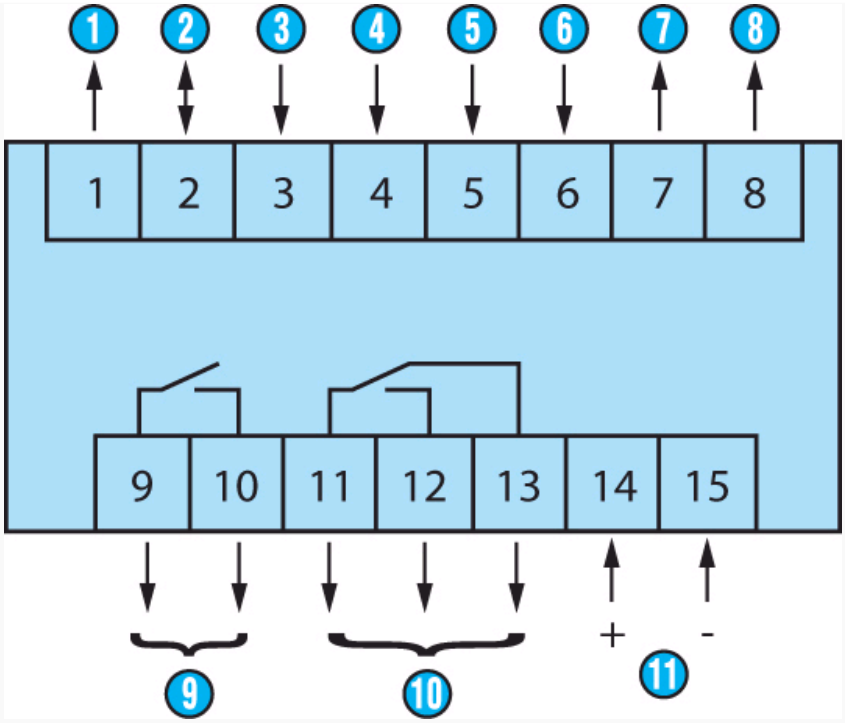


Output : 5 A/250 VAC/AC : 24 VAC

Nº	Legend
1	Sensor voltage supply
2	GND (0 VDC)
3	INP A (signal A input)
4	INP B (signal B input)
5	Reset (Reset input)
6	Gate input
7	Output 1 - 24 VDC/30 mA
8	11-12-13 : Output 1
9	14-15 : Supply

Connections

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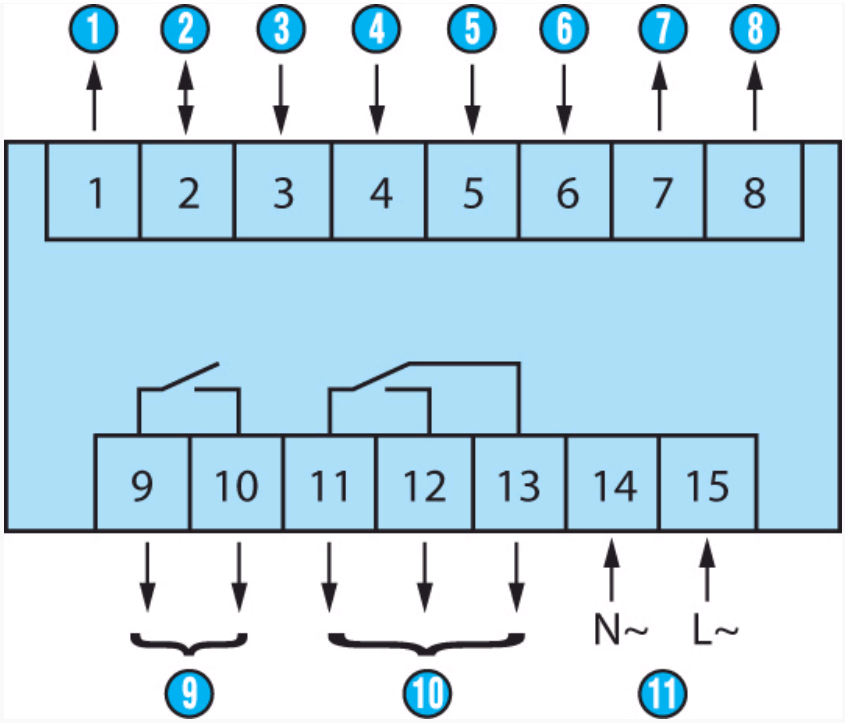
Output : 5 A/250 VAC/DC : 10 30 VDC

Nº	Legend
1	Sensor voltage supply (* UB interconnected)
2	GND (0 VDC)
3	INP A (signal A input)
4	INP B (signal B input)
5	Reset (Reset input)
6	Gate input
7	Output 1 : 10-30 VDC/30 mA
8	Output 2 : 10-30 VDC/30 mA
9	9-10 : Output 1
10	11-12-13 : Output 2
11	14-15 : Supply

Connections

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Unless otherwise specified, the characteristics given are applicable to all or part of the product range selected

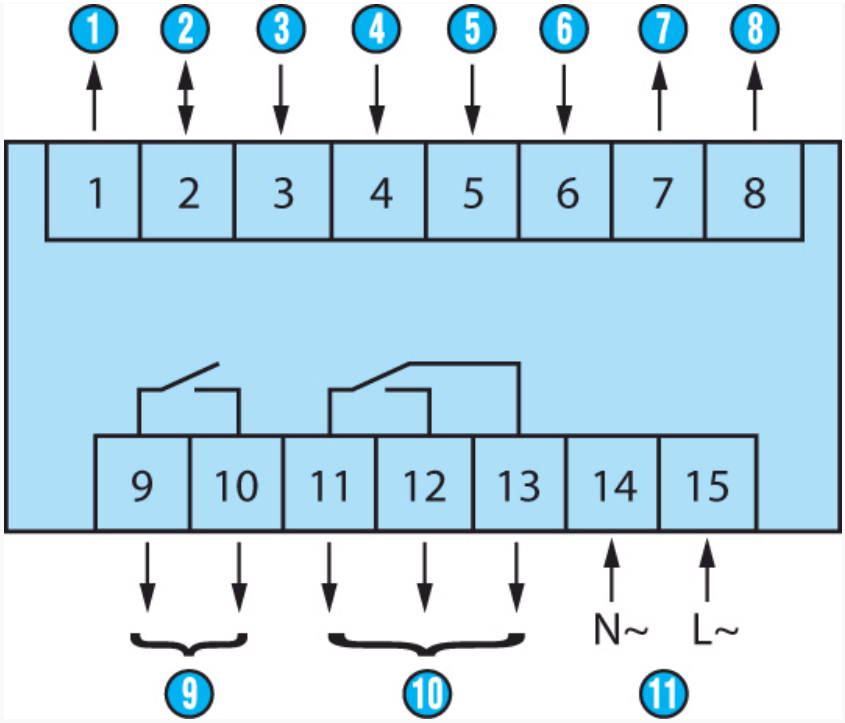


Output : 5 A/250 VAC/AC : 90 260 DC

Nº	Legend
1	Sensor voltage supply
2	GND (0 VDC)
3	INP A (signal A input)
4	INP B (signal B input)
5	Reset (Reset input)
6	Gate input
7	Output 1 : 24 VDC/30 mA
8	Output 2 : 24 VDC/30 mA
9	9-10 : Output 1
10	11-12-13 : Output 2
11	14-15 : Supply

Connections

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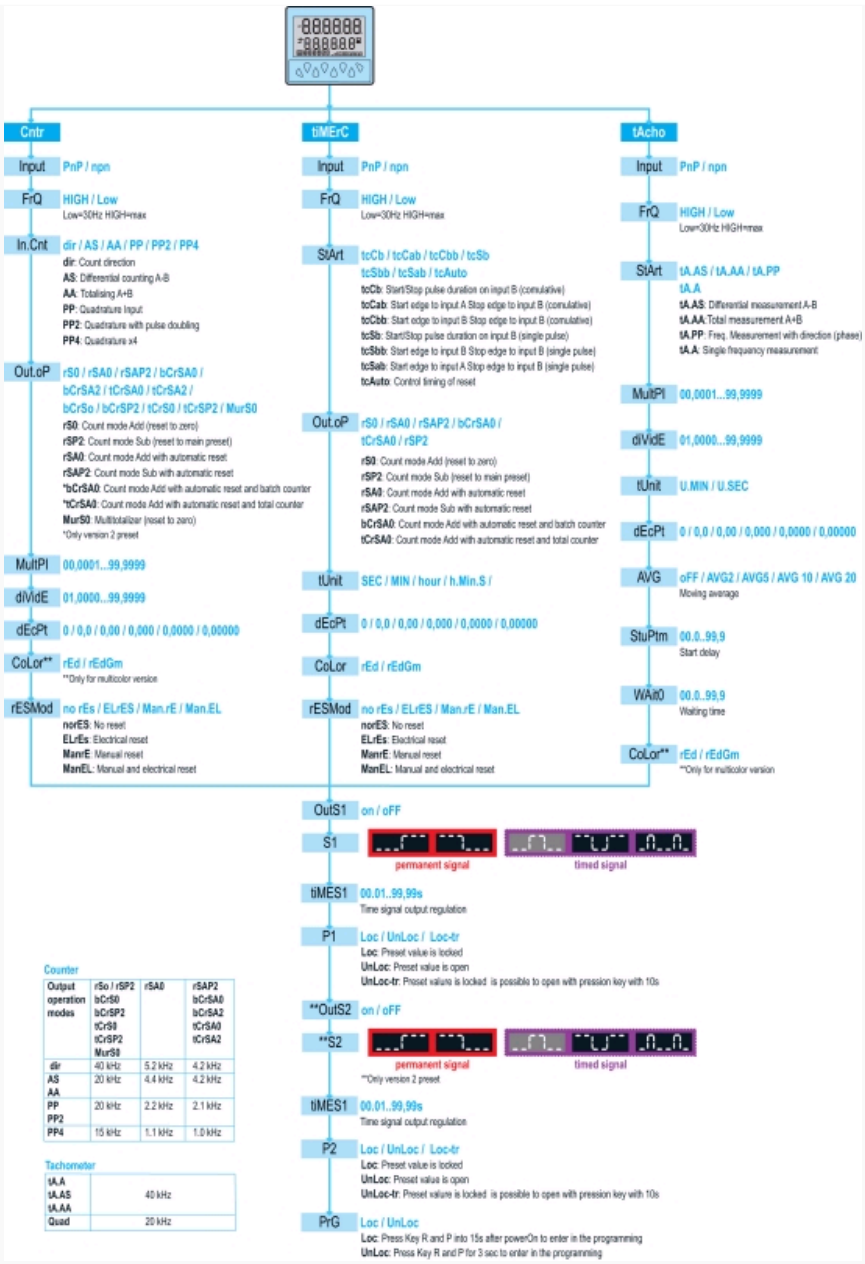


Output : 5 A/250 VAC/AC : 90 260 VDC

Nº	Legend
1	Sensor voltage supply
2	GND (0 VDC)
3	INP A (signal A input)
4	INP B (signal B input)
5	Reset (Reset input)
6	Gate input
7	Output 1 : 24 VDC/30 mA
8	Output 2 : 24 VDC/30 mA
9	9-10 : Output 1
10	11-12-13 : Output 2
11	14-15 : Supply

Applications

Programming diagram



Counter

Output operation modes	rSo / rSP2 bCrS0 bCrSP2 tCrS0 tCrSP2 MurS0	rSA0	rSAP2 bCrSA0 bCrSA2 tCrSA0 tCrSA2
dir	40 kHz	5.2 kHz	4.2 kHz
AS	20 kHz	4.4 kHz	4.2 kHz
AA			
PP	20 kHz	2.2 kHz	2.1 kHz
PP2			
PP4	15 kHz	1.1 kHz	1.0 kHz

Tachometer

tA.A tA.AS tA.AA	40 kHz
Quad	20 kHz