Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

CROUZET
CONTROL

24 x 48 Hour CTR24 non-backlit model Part number 87622170

- Display : 8-digit LCD, height 8 mm
- Built-in module for voltage inputs 10 →260 VAC/DC (2224-2324)
- 4 timing ranges : 99,999.99 hrs - 99,999.59 hrs - 999,999.9 s - 9,999 hrs 59 min 59 s
- Powered by a lithium battery, service life 8 years
- Reset on panel or external with inhibition option
- Backlit model (2323-2333-2324)
- Accessories for 50 x 25 mm cut-out

Part numbers

	Type	Type	Functions
87622170	CTR24 non-backlit model	2224	Hour counter, voltage input

Specifications

Physical details and protection

Consumption	Backlighting : 24 VDC± 20 % 50 mA
Connection by 8 screw terminals at rear of casing	▪
Connection capacity	1,5 mm^2
Fixed using bracket	▪
Degree of protection front face	IP 65
Temperature limits use (°C)	-10 →+60
Temperature limits stored (°C)	-20 →+70
Breakdown voltage	EN 610110-1 : 2000 V / 50 Hz / 1 min.
Conformity to standards	EN 61000-6-2 - EN 55011 class B
Altitude	2000 m
Certifications	UL - cULus (pending) - CE
Weight (g)	50

Operating characteristics

Function	Hour counter
Display	8-digit LCD
Height digits (mm)	8
Time ranges	0 →99 999.99 h 0 →99 999.59 h 0 →9 999 999.9 s 0 →9 999 h 59 min 59 s
Time base : Crystal controlled (Accuracy ± 100)	▪

Input 2223-2323

Start/stop input	by PNP or dry contact (terminals 2-6)
Low level	0 →0,7 VDC
High level	4 →30 VDC PNP
Min time closed	> 100 ms
Input impedance	100 kΩ PNP

Input 2233-2333

Start/stop input	by PNP or dry contact (terminals 2-6)
Low level	0 →0,7 VDC
High level	3 →30 VDC
Minimum time closed	> 100 ms
Input impedance	1 MΩ

Reset to zero - External 2223-2323 & 2233-2333

Volt-free contact or open collector (terminals 3-6)	▪
Minimum time closed	50 ms

Input 2224-2324

One start/stop input Two voltage levels (terminals 3-6)	▪
Voltage - Terminals 1-2	10 →260 VAC/DC
Input impedance	160 KΩ
Minimum pulse time DC	100 ms
Minimum pulse time AC	100 ms
Low level	0 →2 VAC/DC
High level	10 →260 VAC/DC

Reset to zero - External 2224-2324

Voltage - Terminals 2-3	▪
Minimum pulse time	16 ms
Low level	0 →2 VAC/DC
High level	10 →260 VAC/DC

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

Reset to zero - Panel	
Reset via	Inhibited : Terminals 4-6 not connected Active : Terminals 4-6 connected

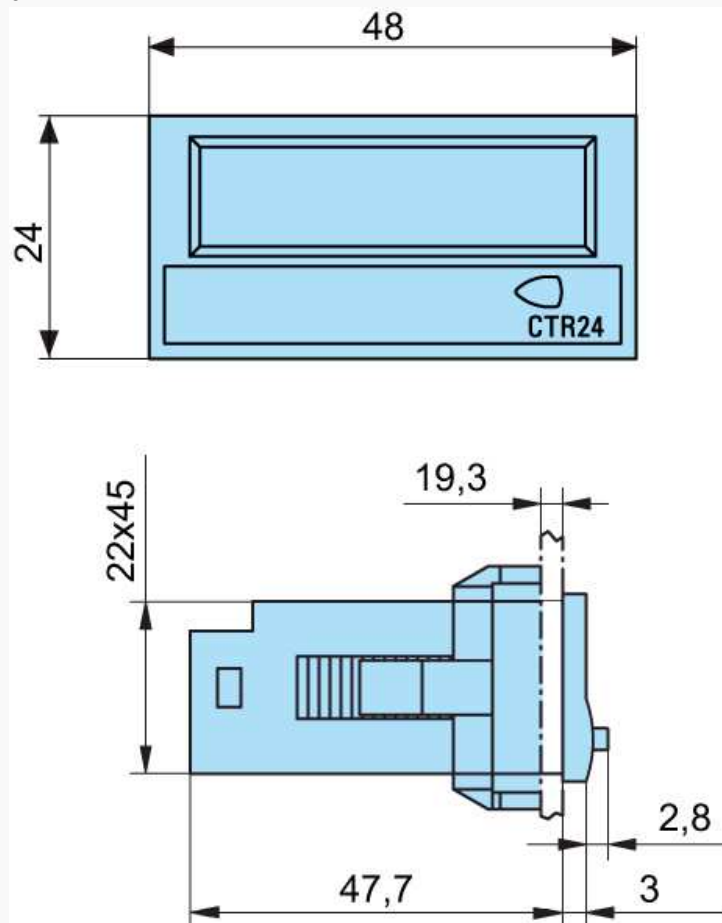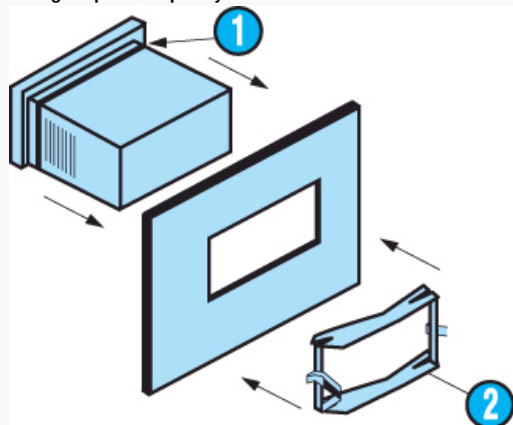| Supply	
1 lithium battery - Life (years)	8

Accessories

Description	Code
Adaptor for 50 x 25 mm cut-out - Fixed with screws	26546843
Adaptor for 50 x 25 mm cut-out - Fixed with clips	26546844
DIN rail adaptor	26546840
Clip-fixing kit (supplied with the product)	26546848

Dimensions (mm)

CTR24

Dimensions (mm)

Fixing strip with clip-on yoke

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

Nº	Legend
①	Seal
②	Fixing yoke

Dimensions (mm)
Panel cut-out

$45^{+0,6}$

$22,2^{+0,3}_{-0}$
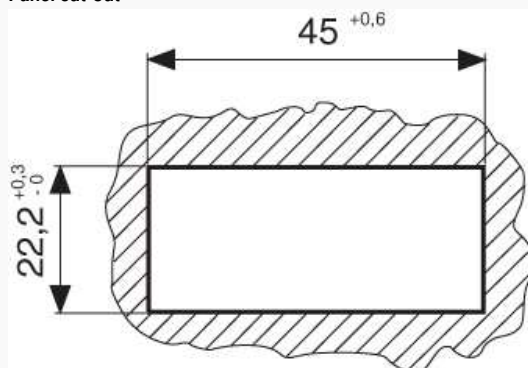
Dimensions (mm)
4 appliances

$45^{+0,6}$ 30

$22,2^{+0,3}$ 20
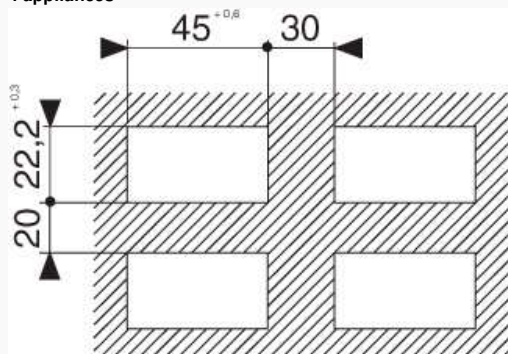
Dimensions (mm)
26546843 - Adaptor for 50 x 25 mm cut-out - Fixed with screws

56

40 32

25X50

1 4
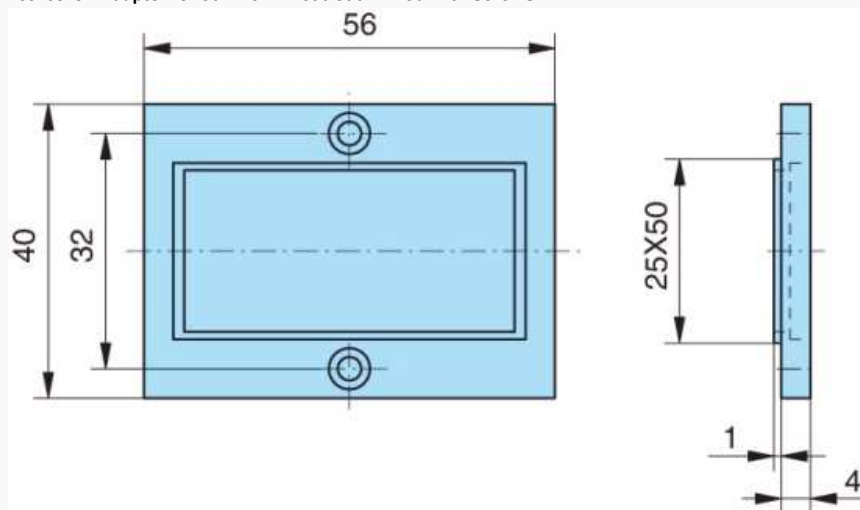
Dimensions (mm)
26546844 - Adaptor for 50 x 25 mm cut-out - Fixed with clips

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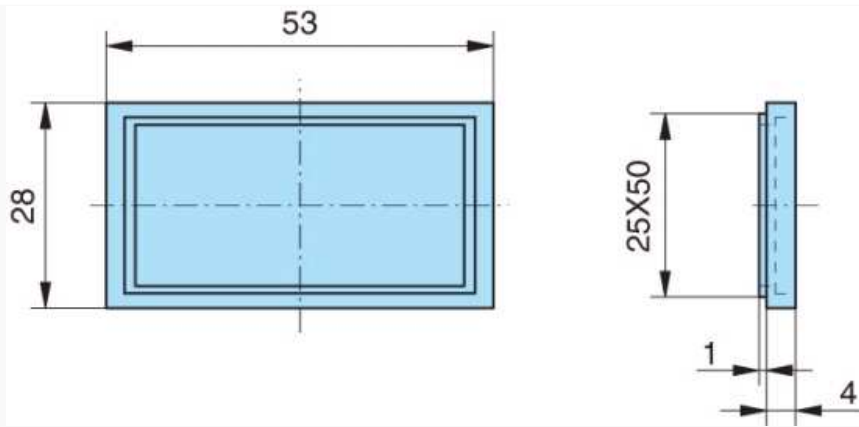
Accessory supplied with the counter

Dimensions (mm)
26546840 - DIN rail adaptor
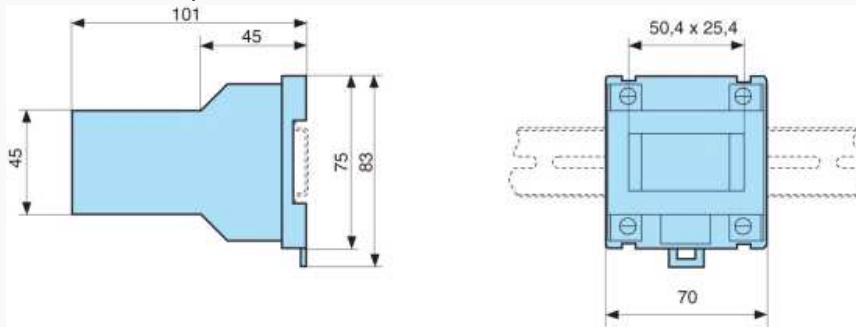
Accessory supplied with the counter

Connections
2223-2323

Nº	Legend
❶	NC
❷	Start/Stop input
❸	Reset input 100 ms
❹	Enable panel reset
❺	Mode 1 (Time selection)
❻	0 V common/ (BL- only 23xx)
❼	Mode 2 (Time selection)
❽	Backlighting option + 24 VDC (only 2323)

Connections
2223-2323
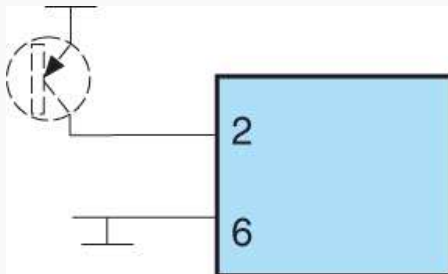
Start/Stop input Transistor PNP

Connections
2223-2323

Unless otherwise specified, the characteristics given are applicable to all or part of the product range selected
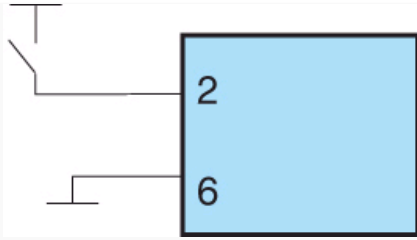
Start/Stop input PNP
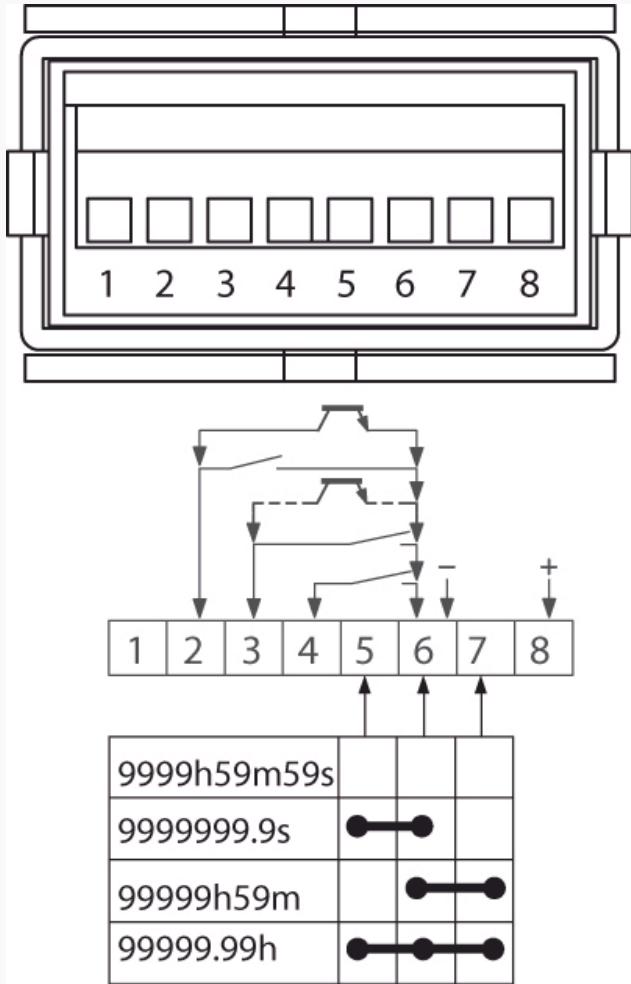
Start/Stop input PNP

Nº	Legend
①	NC
②	Start/Stop input
③	Reset input 100 ms
④	Enable panel reset
⑤	Mode 1 (Time selection)
⑥	0 V common/ (BL- only 23xx)
⑦	Mode 2 (Time selection)
⑧	Backlighting option + 24 VDC (only 2333)
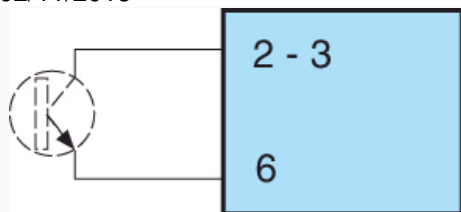
Unless otherwise specified, the characteristics given are applicable to all or part of the product range selected

Start/Stop or reset input NPN - Transistor

Connections
2233-2333
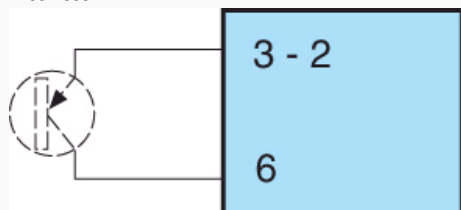
Start/Stop or reset input PNP - Transistor

Connections
2233-2333
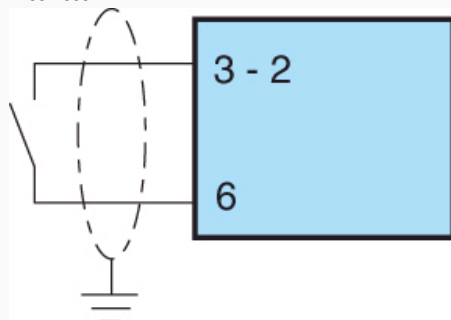
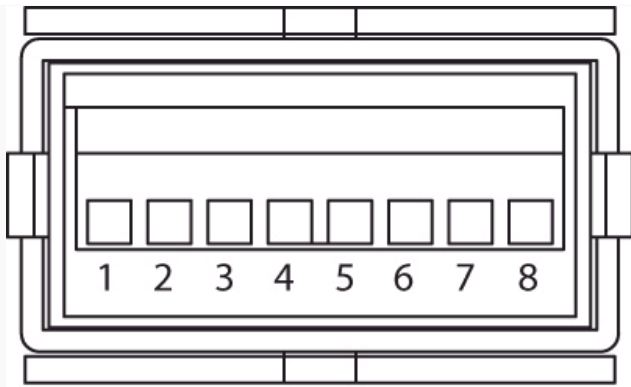
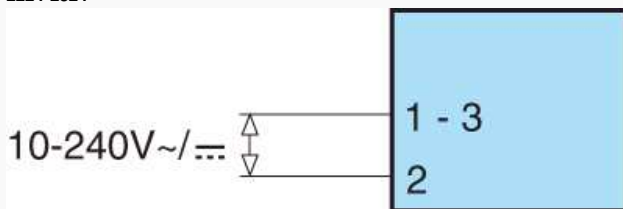Start/Stop or reset input NPN - Transistor

Connections
2224-2324
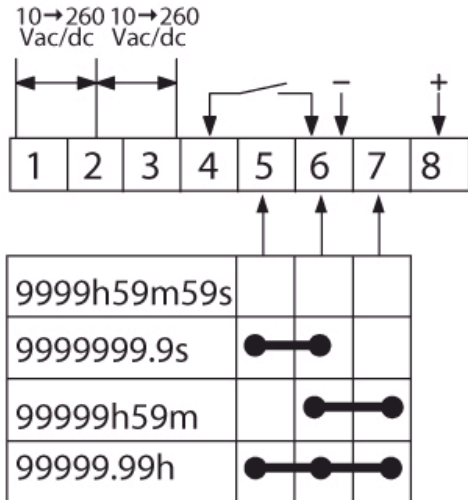
Start/Stop or reset input NPN - Transistor

Nº	Legend
❶	Start/Stop input
❷	AC/DC common
❸	Reset input
❹	Enable panel reset
❺	Mode 1 (Time selection)
❻	0 V common/ (BL- only 23xx)
❼	Mode 2 (Time selection)
❽	Backlighting option +24 VDC (only 2324)

Connections
2224-2324

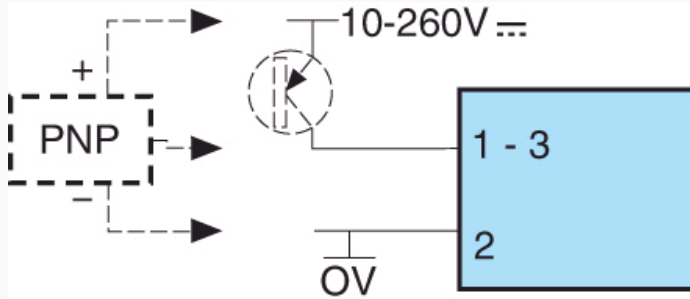Start/Stop or reset input - Contact supplied with power

Connections
2224-2324

10-240V~/⎓

1 - 3

2
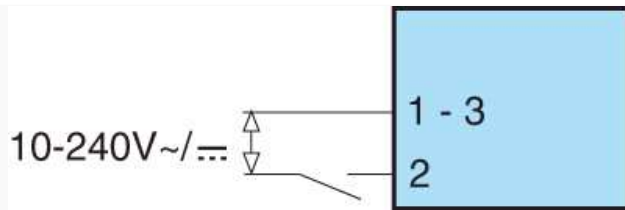
Start/Stop or reset input PNP Transistor or 3-wire PNP proximity sensor for leakage current detector < 1 mA

10-260V ⎓

PNP

1 - 3

2

OV

Start/Stop or reset input NPN Transistor or 3-wire NPN proximity sensor for leakage current detector < 1 mA

Connections
2224-2324
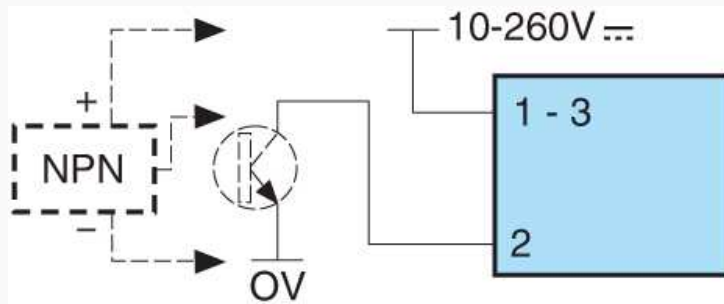

10-260V ⎓

NPN

1 - 3

2

OV

Start/Stop or reset input : 2-wire proximity sensor R=470 ö/2 W for 2-wire leakage current detector ≤ 1 mA
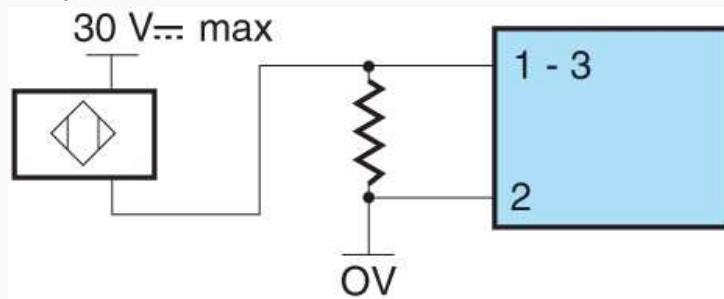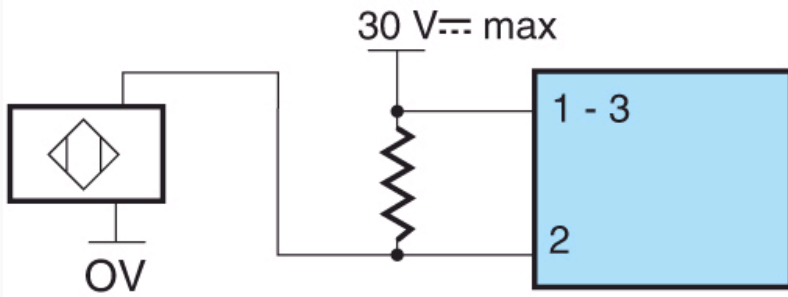
Connections
2224-2324

30 V⎓ max

1 - 3

2

OV

Start/Stop or reset input : 2-wire proximity sensor R=470 ö/2 W for 2-wire leakage current detector ≤ 1 mA

Connections
2224-2324

Start/Stop or reset input : 2-wire proximity sensor R=470 ö/2 W for 2-wire leakage current detector ≤ 1 mA