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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!



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Electronic counters without preselection

→ Totalizers without preselection - LCD 24 x 48 - CTR24

- Display: 8-digit LCD, height 8 mm
- Powered by a lithium battery
- Counter inputs: solid state (4-30 V $\overline{\text{---}}$) or voltage (10 \rightarrow 260 V \sim)
- Reset on panel or external with inhibition option
- Backlit model (2341-2351-2342)
- Counting directions can be selected with input (2241-2341/2251-2351)
- Accessories for 50 x 25 mm cut-out



Part numbers

Type	Type	Functions	Code
CTR24 non-backlit model	2241	Solid state input, lithium battery PNP/NPN	87622061
	2251	Solid state input, lithium battery NPN/NPN	87622062
	2242	Voltage input, lithium battery	87622070
CTR24 model with orange backlighting	2341	Solid state input, lithium battery PNP/NPN	87622081
	2351	Solid state input, lithium battery NPN/NPN	87622082
	2342	Voltage input, lithium battery	87622090

Accessories

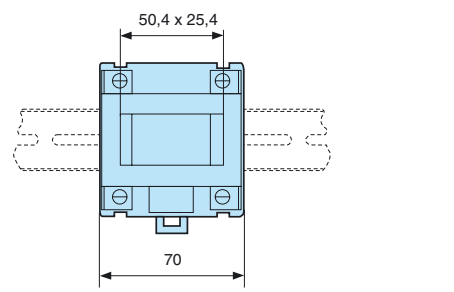
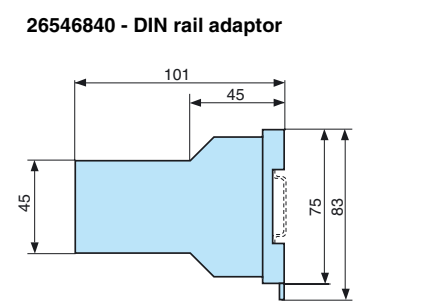
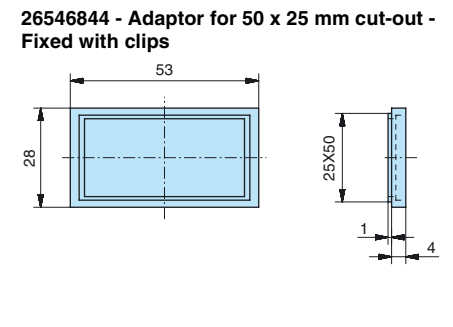
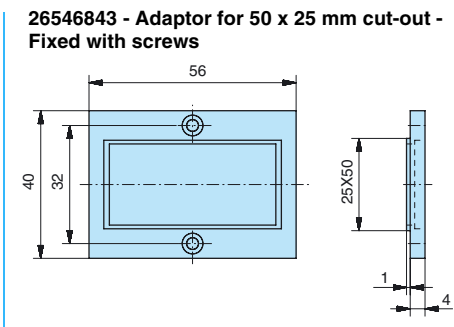
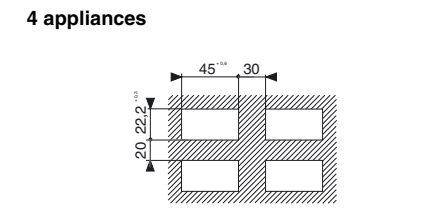
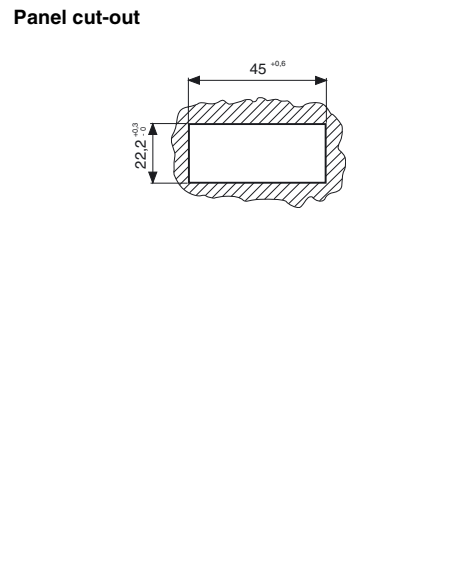
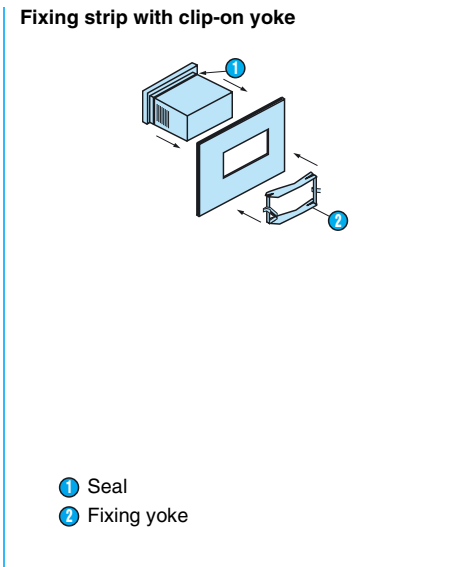
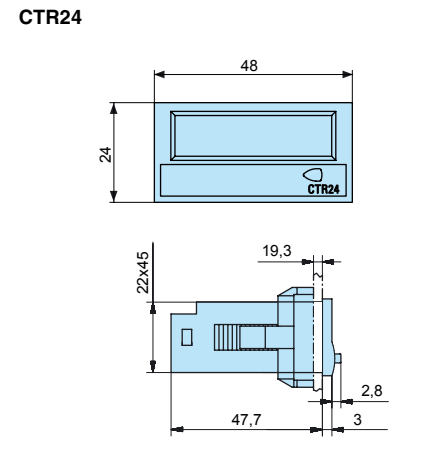
Description	Code
Adaptor for 50 x 25 mm cut-out - Fixed with screws	26546843
Adaptor for 50 x 25 mm cut-out - Fixed with clips	26546844
DIN rail adaptor	26546840
Clip-fixing kit (supplied with the product)	26546848

General characteristics

Environmental characteristics	
Consumption	Backlighting: 24 V $\overline{\text{---}}$ \pm 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 ($^{\circ}$ C)	-10 \rightarrow +60
Temperature limits stored ($^{\circ}$ C)	-20 \rightarrow +70
Breakdown voltage	Selon EN 61010-1: 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	Impulse counter
Display	8-digit LCD
Height digits (mm)	8
Counting capacity	-9.999.999 \rightarrow 99.999.999 with elimination of zeros
Inputs 2241-2341	
1 slow counting input for contact closure on NPN open-collector transistor input (terminals 2-6)	✓
1 input for high speed counting signal from voltage level (terminals 1-6)	4 \rightarrow 30 V $\overline{\text{---}}$
Low level	0 \rightarrow 0.7 V $\overline{\text{---}}$
High level	4 \rightarrow 30 V $\overline{\text{---}}$ PNP
High-speed counting	12 KHz max. 42 μ s PNP
Input impedance	100 K Ω PNP
Inputs 2251-2351	
1 slow counting input for contact closure on NPN open-collector transistor input (terminals 2-6)	✓
1 input for high speed counting signal from voltage level (terminals 1-6)	3 \rightarrow 30 V $\overline{\text{---}}$
Low level	0 \rightarrow 0.7 V $\overline{\text{---}}$
High level	3 \rightarrow 30 V $\overline{\text{---}}$
High-speed counting	7 KHz max. 70 μ s NPN
Input impedance	1 M Ω

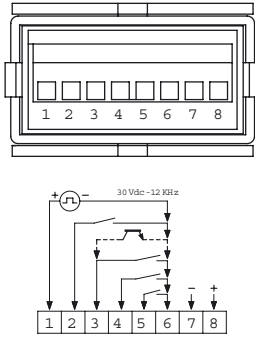
Reset - External 2241-2341 & 2251-2351	
Volt-free contact or open collector (terminals 3-6)	✓
Inputs 2242-2342	
1 input for slow counting 2 voltage levels	✓
Voltage - Terminals 1-2	10 → 260 V $\overline{\sim}$
Input impedance (k Ω)	160
Slow counting	30 Hz
Minimum pulse time	16 ms
Low level	0 → 2 V $\overline{\sim}$
High level	10 → 260 V $\overline{\sim}$
Reset - External 2242-2342	
Voltage - Terminals 2-3	✓
Minimum pulse time	16 ms
Low level	0 → 2 V $\overline{\sim}$
High level	10 → 260 V $\overline{\sim}$
Reset to zero - Panel	
Reset via	Inhibited: Terminals 4-6 not connected Active: Terminals 4-6 connected
Supply	
1 lithium battery - Life (years)	8

Dimensions (mm)



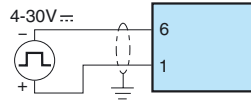
Accessory supplied with the counter

2241-2341



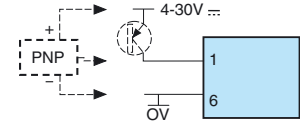
- 1 Fast count
- 2 Slow count
- 3 Reset input 12 ms
- 4 Enable panel reset
- 5 Mode count direction
- 6 0 V common/ (BL- only 23xx)
- 7 Backlighting option (only 2341)
- 8 Backlighting option + 24 V $\overline{\text{---}}$ (only 2341)

2241-2341



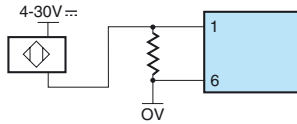
PNP fast count input - Voltage

2241-2341



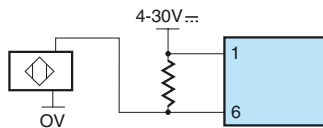
PNP fast count input Transistor or 3-wire PNP proximity sensor (for leakage current detector ≤ 1 mA)

2241-2341



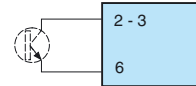
2-wire proximity sensor fast count input

2241-2341



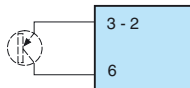
2-wire proximity sensor fast count input

2241-2341



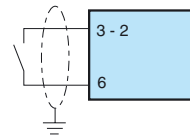
Slow count input (2) or reset input (3)

2241-2341



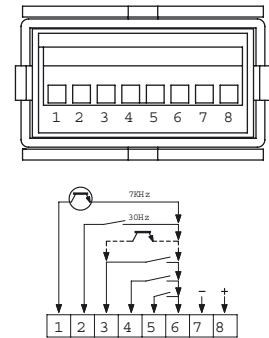
Slow count input (2) or reset input (3)

2241-2341



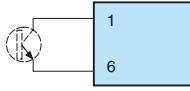
Slow count input (2) or reset input (3) - Contact not supplied with power

2251-2351



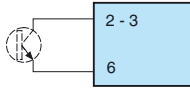
- 1 Fast count
- 2 Slow count
- 3 Reset input 12 ms
- 4 Enable panel reset
- 5 Mode count direction
- 6 0 V common/ (BL- only 23xx)
- 7 Backlighting option + (only 2351)
- 8 Backlighting option + 24 V $\overline{\text{---}}$ (only 2351)

2251-2351



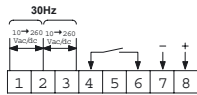
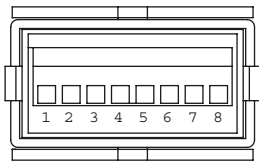
Fast count input NPN - Voltage

2251-2351



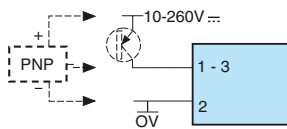
Slow count input (2) or reset input (3)

2242-2342



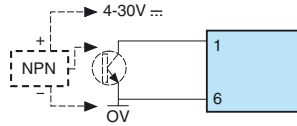
- 1 Fast count
- 2 AC/DC common
- 3 Reset input 12 ms
- 4 Enable panel reset
- 5 count direction
- 6 0 V common/ (BL- only 23xx)
- 7 Backlighting option - (only 2342)
- 8 Backlighting option + 24 V $\ddot{=}$ (only 2342)

2242-2342



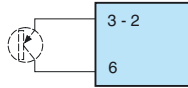
Counter or reset input PNP Transistor or 3-wire PNP proximity sensor (for leakage current detector < 1 mA)

2251-2351



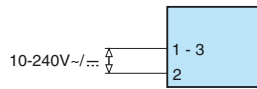
Fast count input NPN Transistor or 3-wire PNP proximity sensor (for leakage current detector \leq 1 mA)

2251-2351



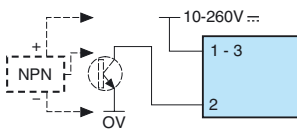
Slow count input (2) or reset input (3)

2242-2342



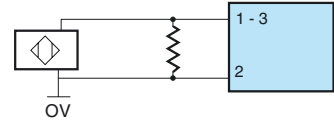
Counter or reset input - Voltage

2242-2342



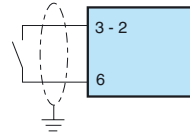
Counter or reset input NPN Transistor or 3-wire PNP proximity sensor (for leakage current detector < 1 mA)

2251-2351



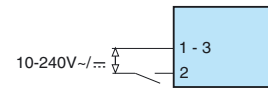
2-wire proximity sensor fast count input

2251-2351



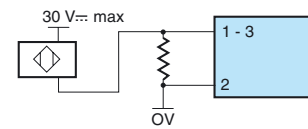
Slow count input (2) or reset input (3)
Contact not supplied with power

2242-2342



Counter or reset input -
Contact supplied with power

2242-2342



Start/Stop or reset input: 2-wire proximity sensor $R=470 \Omega/2 W$ for 2-wire leakage current detector \leq 1 mA