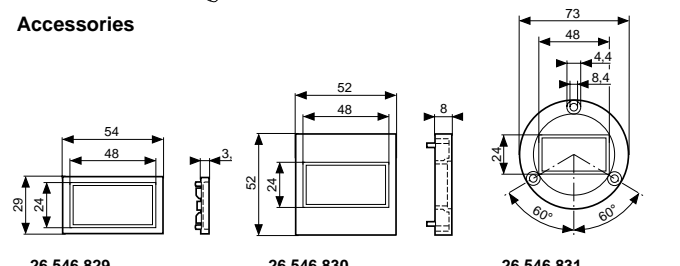
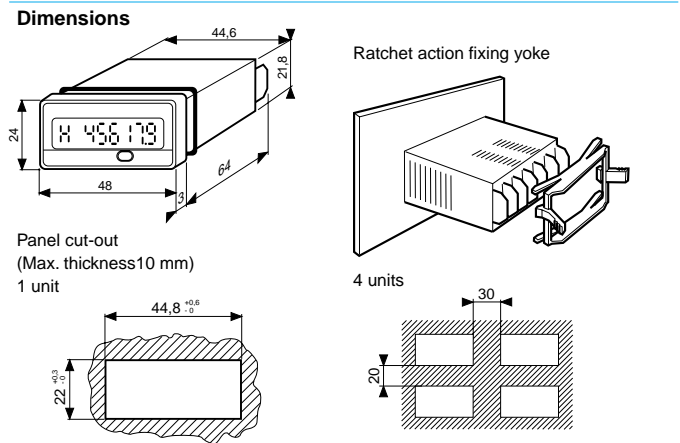
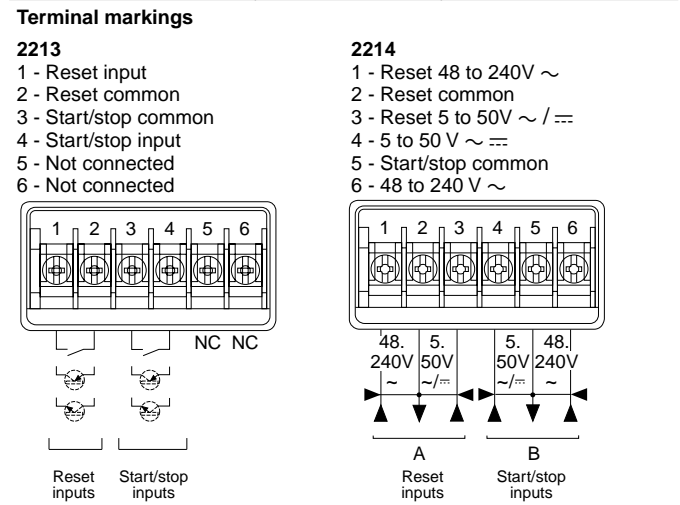


- Start input and zero reset : solid state (2213) or voltage (2214)
- Integral module for voltage inputs (5-50 VAC/VDC, 48-240 VAC)
- 4 time ranges 99,999.9 h, 99,999.9 min, 99,999.9 s, 99 h 59 min 59 s
- Possibility of loading the current value
- Lithium battery supply - 5-year life
- Reset to zero : front panel or external with inhibit facility
- Bezels for 25 x 50, 45 x 45, Ø 50



Characteristics		
Function		Hour counter
Display		6 digit LCD
Height of digits		7 mm
Time ranges		0 • 99,999.9 h 0 • 99,999.9 min 0 • 99,999.9 s 0 • 99 h 59 min 59 s
Time base : Crystal controlled (Accuracy ± 50)		●
Possibility of loading the current value		●
Inputs		
2213	One start/stop input by volt-free contact or NPN/PNP open-collector transistor (terminals 3 - 4)	●
	Minimum time closed	40 ms
2214	One start/stop input Two voltage levels terminals 4 - 5 terminals 5 - 6	●
	Minimum pulse time ~	50 ms
	Minimum pulse time ≐	35 ms
Reset		
Front panel	Switch no.2 to OFF	Inhibited
	Switch no.2 to ON	Allowed
	Volt-free contact or open-collector transistor (terminals 1-2)	●
	Minimum time closed	100 ms
External	2214 Voltage terminals 2 - 3	5 - 50 V ~ / ≐
	terminals 1 - 2	48 - 240 V ~
	Minimum pulse time	100 ms
	The reset is galvanically isolated from the counting input (2214 only)	●
Supply		
	2213 and 2214 - 1 lithium battery - Life (years)	5
	Supply can be switched off by dipswitch no.1 situated underneath the unit.	
General specifications		
Material		Self-extinguishing
Connection : by 6 screw terminals at rear of casing		●
Terminal capacity		2 x 1.5 mm ²
Fixing by yoke		●
Front panel protection		IP 66
Temperature Use		- 10 + 55 °C
limits Stored		- 20 + 70 °C
Conformity to standards VDE 0110 - IEC 664 - IEC 348 - IEC 255.4 - IEC 255.5 - IEC 801.2 - IEC 801.4		●
Weight	2213	60 g
	2214	65 g

Types	2213	2214
Part numbers		
Input, solid state	87 610 140	
Voltage input		87 610 150
Accessories		
Adaptor for 25x50 mm (dimensions 29x54 mm)		26 546 829
panel cut-out 45x45 mm (dimensions 52x52 mm)		26 546 830
Ø50 mm (dimensions Ø73 mm)		26 546 831




Other information	To order, specify :						
For connections see page 2/19	<table border="0"> <tr> <td>Standard products</td> <td>1 Part number</td> <td>2 Accessory</td> </tr> <tr> <td></td> <td>Example : Totalizer/counter 87 610 140 -</td> <td>Adaptor 26 546 829</td> </tr> </table>	Standard products	1 Part number	2 Accessory		Example : Totalizer/counter 87 610 140 -	Adaptor 26 546 829
Standard products	1 Part number	2 Accessory					
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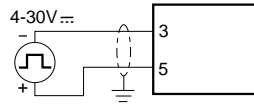
Connections 2231/32 - 2213/14 - 2293/94

2231 - 2213 - 2293

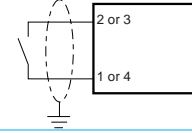
 High-speed counting input 2231

 Slow counting input or reset input - 2231
Start-stop input or reset input - 2213
Counting and general reset input - 2293

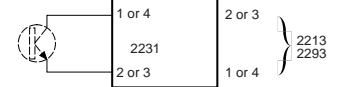
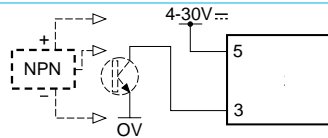
Voltage



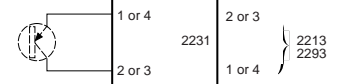
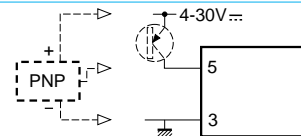
Volt-free contact



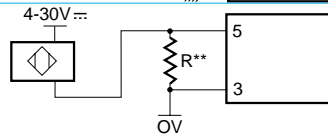
NPN transistor (2213-2293)
NPN transistor or 3-wire NPN proximity switch* (2231)



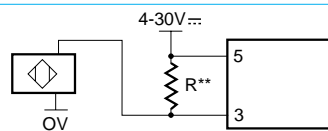
PNP transistor (2213-2293)
PNP transistor or 3-wire PNP proximity switch* (2231)




2-wire proximity switch




2-wire proximity switch

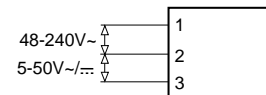
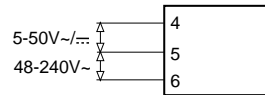


2232 - 2214 - 2294

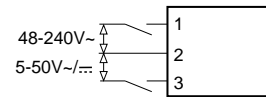
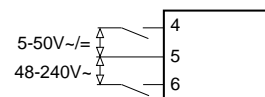
 Counting input 2232 - 2294
Start/stop input 2214

 Reset 2232 - 2214 - 2294

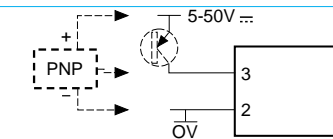
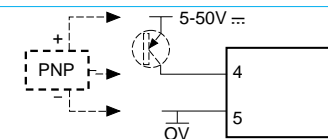
Voltage



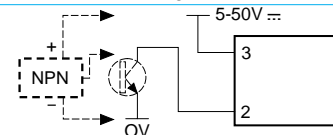
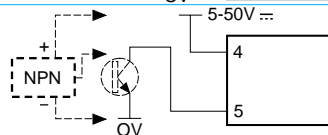
Live contact



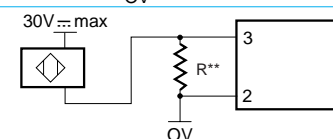
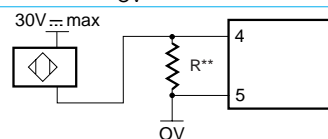
PNP transistor or 3-wire PNP proximity switch*



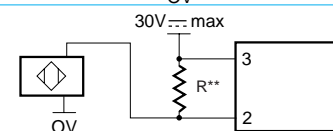
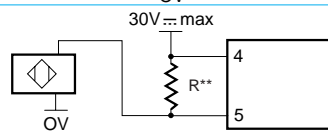
NPN transistor or 3-wire NPN proximity switch*



2-wire proximity switch



2-wire proximity switch



* For switch with leakage current ≤ 0.1 mA

** $R = 470 \Omega / 2 W$ for a 2-wire switch with leakage current ≤ 1.5 mA