

- 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 5 - 50 V ~ / ∞ terminals 5 - 6 48 - 240 V ~ 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 limits	- 10 + 55 °C
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

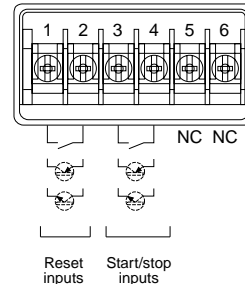
Accessories

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

Terminal markings

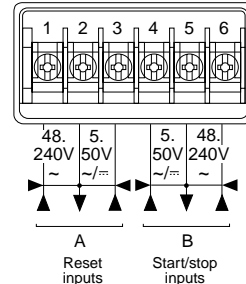
2213

- 1 - Reset input
- 2 - Reset common
- 3 - Start/stop common
- 4 - Start/stop input
- 5 - Not connected
- 6 - Not connected

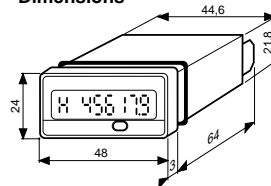


2214

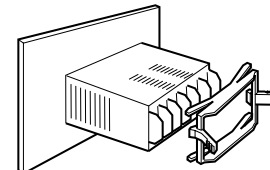
- 1 - Reset 48 to 240V ~
- 2 - Reset common
- 3 - Reset 5 to 50V ~ / ∞
- 4 - 5 to 50 V ~ ∞
- 5 - Start/stop common
- 6 - 48 to 240 V ~



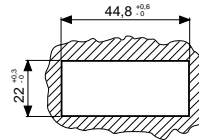
Dimensions



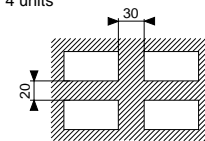
Ratchet action fixing yoke



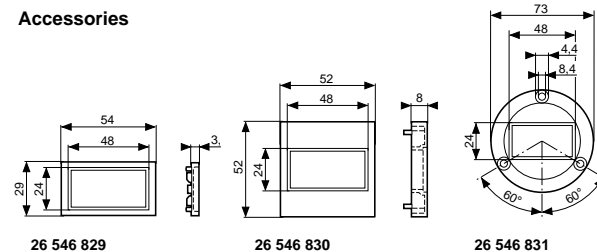
Panel cut-out (Max. thickness 10 mm)
1 unit



4 units



Accessories



Other information

For connections see page 2/19

To order, specify :


Standard products


1 Part number
Example : Totalizer/counter 87 610 140 -
Adaptor 26 546 829

2 Accessory

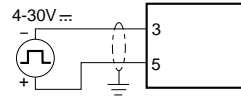
Connections 2231/32 - 2213/14 - 2293/94

2231 - 2213 - 2293

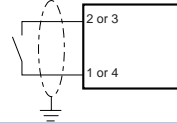
 High-speed counting input 2231

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

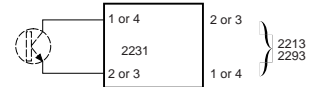
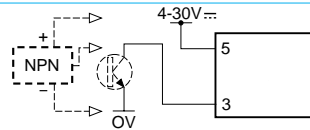
Voltage



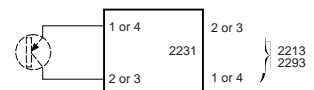
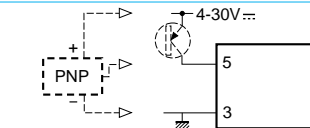
Volt-free contact



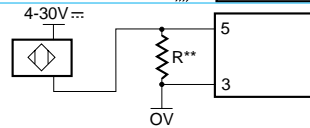
NPN transistor (2213-2293)
NPN transistor or 3-wire NPN proximity switch* (2231)



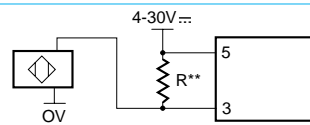
PNP transistor (2213-2293)
PNP transistor or 3-wire PNP proximity switch* (2231)




2-wire proximity switch




2-wire proximity switch

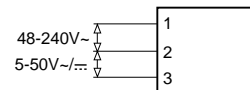
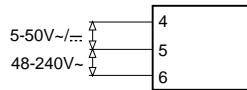


2232 - 2214 - 2294

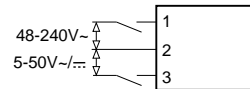
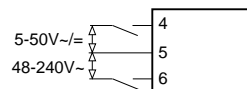
 Counting input 2232 - 2294
Start/stop input 2214

 Reset 2232 - 2214 - 2294

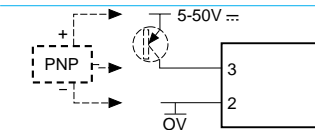
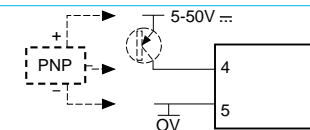
Voltage



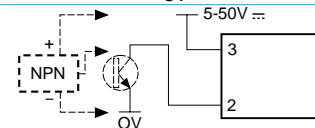
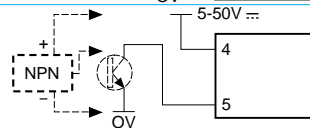
Live contact



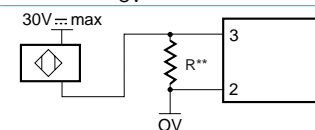
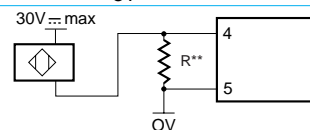
PNP transistor or 3-wire PNP proximity switch*



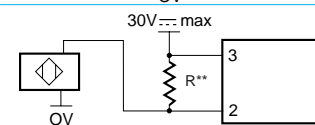
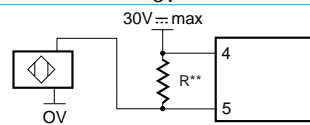
NPN transistor or 3-wire NPN proximity switch*



2-wire proximity switch



2-wire proximity switch



* For switch with leakage current ≤ 0.1 mA

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

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