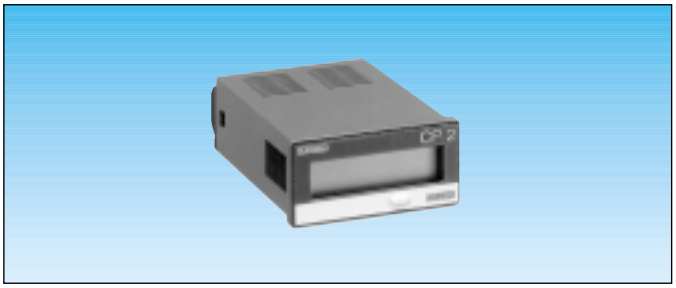
- **Start input and zero reset : solid state (2213) or voltage (2214)**
- **Integral module for voltage inputs (5-50 VAC/VDC, 48-240 VAC)**
- **4 time ranges 99,999.9 h, 99,999.9 min, 99,999.9 s, 99 h 59 min 59 s**
- **Possibility of loading the current value**
- **Lithium battery supply - 5-year life**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



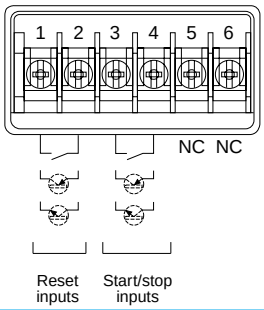
Characteristics

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
External	2213 Volt-free contact or open-collector transistor (terminals 1-2)		●
	Minimum time closed		100 ms
	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 mm²
Fixing by yoke			●
Front panel protection			IP 66
Temperature limits	Use		- 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

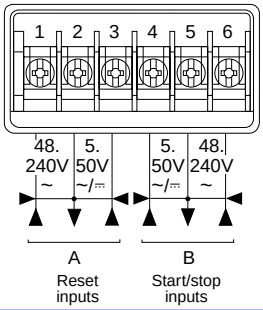
Types	2213	2214
Part numbers		
Input, solid state	87 610 140	
Voltage input		87 610 150
Accessories		
Adaptor for panel cut-out 25x50 mm (dimensions 29x54 mm)		26 546 829
Adaptor for panel cut-out 45x45 mm (dimensions 52x52 mm)		26 546 830
Adaptor for panel cut-out Ø50 mm (dimensions Ø73 mm)		26 546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

Terminal markings

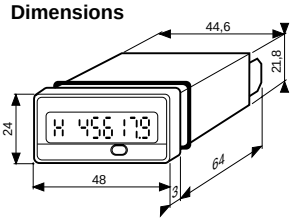
2213
1 - Reset input
2 - Reset common
3 - Start/stop common
4 - Start/stop input
5 - Not connected
6 - Not connected



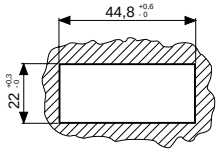
2214
1 - Reset 48 to 240V ∼
2 - Reset common
3 - Reset 5 to 50V ∼ / ⎓
4 - 5 to 50 V ∼ ⎓
5 - Start/stop common
6 - 48 to 240 V ∼



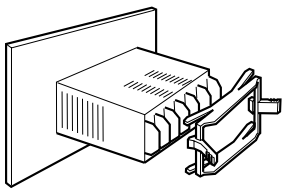
Dimensions



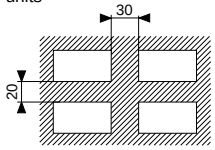
Panel cut-out
(Max. thickness10 mm)
1 unit



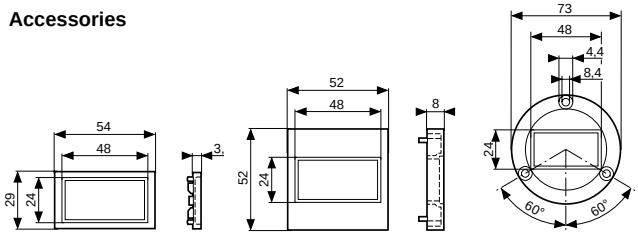
Ratchet action fixing yoke



4 units



Accessories



26 546 829 **26 546 830** **26 546 831**

Other information

For connections see page 2/19

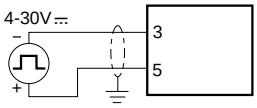
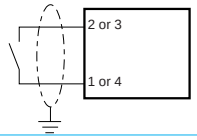
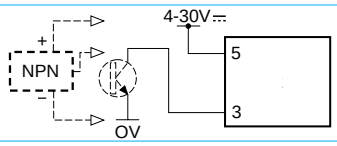
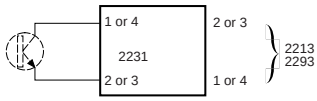
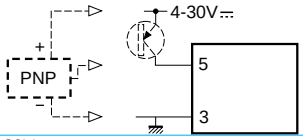
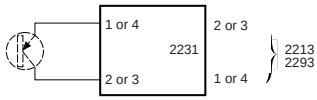
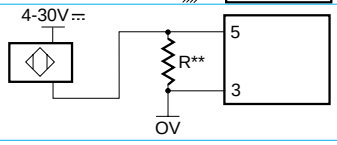
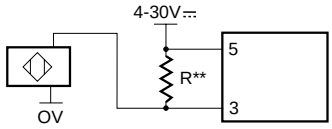
To order, specify :

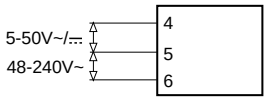
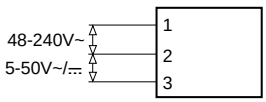
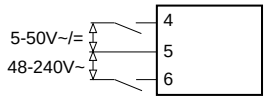
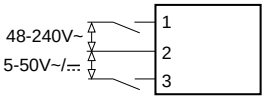
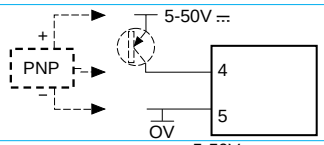
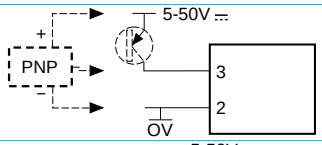
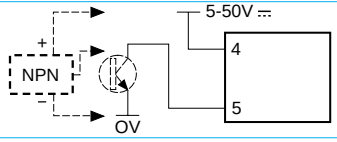
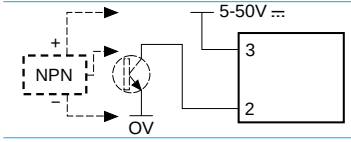
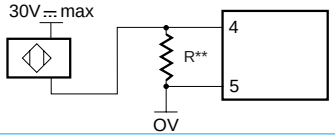
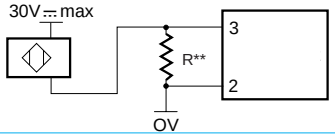
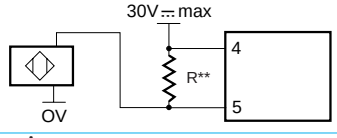
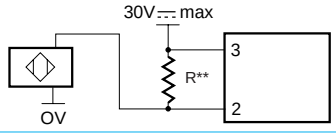
Standard products

1 Part number 2 Accessory

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

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