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### Important Note

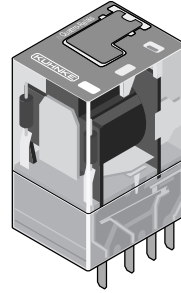
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## Quattro Relay 114A4

- Standard type  / 
- With LED and protection diode on request

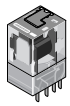


## Order Code

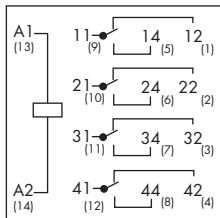
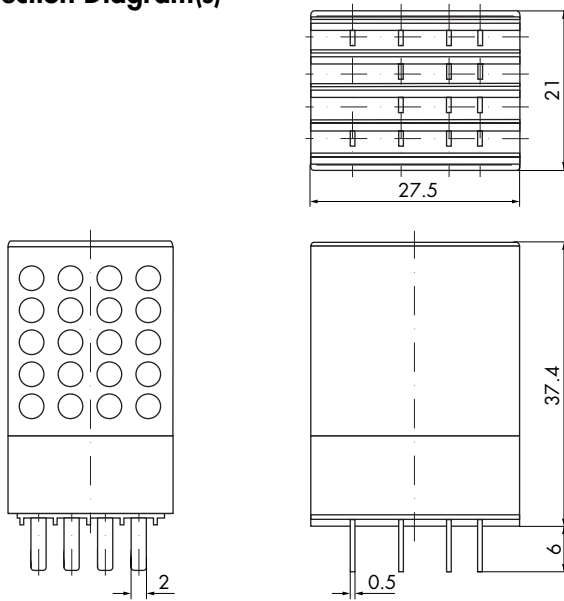
Order Code	Quattro Relay	114	A	4	-	24 V	DC	N
Type of relay	Quattro Relay	114						
Model								
A Plug-in type			A					
Contact arrangement								
4 C/O				4				
Contact material								
- AgNi (no code letter)					-			
B AgNi gold-plated					B			
Nominal operation coil voltage (see coil data)								
24 V						24 V		
Coil current type								
DC Direct current							DC	
AC Alternating current (50 / 60 Hz)							AC	
Versions								
N with position indicator with manual override without override lever								N
1 with position indicator with manual override with override lever								1

## Contact Data

	114 A4	
Contact arrangement	4 C/O	
Type of contact	Single contact	
Contact material	AgNi	AgNi gold-plated
Nominal contact current	10 A	
Inrush current	≤ 20 A	
Nominal contact voltage	110 VDC / 250 VAC	
Max. switching capacity (resistive)	144 W / 2000 VA	
Min. switching capacity	10 mA / 5 V	1 mA / 100 mV



## Dimensions, Connection Diagram(s)



Viewed on terminals

114 A4

Relay with protection diode	
Standard 114 ... F1	+ to A1 (13) - to A2 (14)
Special 114 ... F	- to A1 (13) + to A2 (14)

## General Data

	114 A4	
Pull-in-time	approx. 10 ms	
Drop-out time	approx. 10 ms	
Bounce time	approx. 5 ms	
Mechanical service life	> 20 x 10 <sup>6</sup> switching cycles	
Test voltage		
Coil - contact	2500 VAC	
(C/O) - (C/O)	2000 VAC	
Contact - contact	1000 VAC	
Insulation group VDE 0110b/2.79	B250	
Insulation coordination to DIN EN 61810-5/ VDE 0435 Part 140		
Operating voltage	250 V	
Overvoltage category	III	
Pollution degree	3	
Ambient temperature	-40 °C to +60 °C	
Vibration resistance (30 - 100 Hz)	> 2 g N/C > 10 g N/O	
Weight	approx. 33 g	
Operating range	DC Class 1 (0.8 - 1.1 U <sub>N</sub> )	AC Class 2 (0.85 - 1.1 U <sub>N</sub> )
Pull-in after coil excitation with U <sub>N</sub> , nominal current at T <sub>U</sub>	60 °C	20 °C
Drop-out	> 0.05 U <sub>N</sub>	> 0.15 U <sub>N</sub>



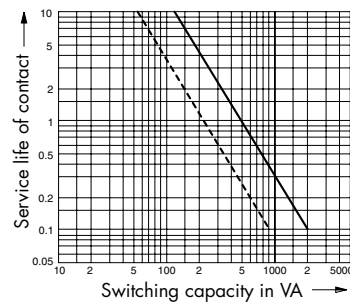
## Coil Data

Coil voltage DC			114A4 Pull-in power approx. 0.42 W Nom. operation power approx. 1 W			Coil voltage AC		114A4 Nom. operation power appr. 1.2/0.98 VA Inrush current appr. 1.5 x nominal current	
Nominal voltage (V)	Nominal resistance (Ω)	Nominal current (mA)	Nominal voltage (V)	Nominal resistance (Ω)	Nominal current 50 Hz (mA)	Nominal current 60 Hz (mA)			
12	143	84	12	46.5	100	81			
24	576	42	24	177	50	41			
48	2250	21	48	762	25	20			
110	12100	9	115	4570	10	8.5			
			120	4570	11	8.8			
			230	19040	5.2	4.2			

## Electrical Service Life

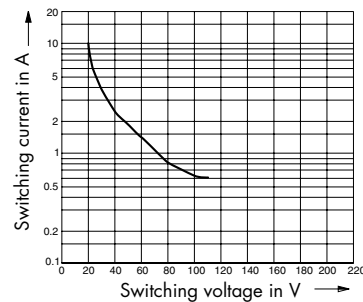
### Electrical Service Life AC

90 % operating  
 — resistive load  
 - - - - - conductive load  
 cos φ = 0.4 ... 0.7



### Switching Capability DC

Below limiting characteristic: service life of contacts  
 $2 \times 10^4$  switching cycles (90 % operating)  
 resistive load



## Quattro Relay Standard Types

DC		AC	
114 A4-12VDC1	114 A4B-24VDC1	114 A4-12VAC1	114 A4B-230VAC1
114 A4-12VDC1L	114 A4B-24VDCN	114 A4-24VAC1	114 A4B-230VACN
114 A4-12VDCN		114 A4-24VAC1L	
114 A4-24VDC1		114 A4-24VACN	
114 A4-24VDC1F1		114 A4-48VAC1	
114 A4-24VDC1FL		114 A4-115VAC1	
114 A4-24VDC1FL1		114 A4-115VAC1L	
114 A4-24VDC1L		114 A4-115VACN	
114 A4-24VDCN		114 A4-120VAC1	
114 A4-24VDCNF		114 A4-120VAC1L	
114 A4-24VDCNFL		114 A4-230VAC1	
114 A4-24VDCNFL1		114 A4-230VAC1L	
114 A4-48VDC1		114 A4-230VACN	
114 A4-48VDC1L		114 A4-230VACNL	
114 A4-48VDCN			
114 A4-110VDC1			
114 A4-110VDCN			