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Hard copy product catalogues, and CDROMs have been published describing Kuhnke Pneumatics, Solenoids, Relays and Electronics; some divided into different books. A list of current publications is available on the main Kuhnke website www.kuhnke.co.uk or from our sales offices.

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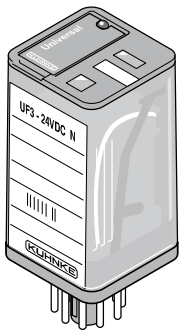
Important Note

Relay Universal UF2/UF3

- Standard type
- Twin contacts for high co ntact making reliability
- With LED and protection diode on request



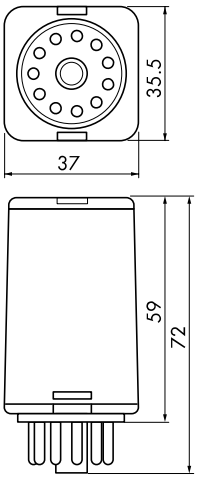
Order Code

Order code	U	F	3		–	24 V	DC	N	
Type of relay	U								
Model									
F Plug in type for socket, international 8-pole socket or 11pole socket resp.		F							
Contact arrangement									
2 C/O			2						
3 C/O			3						
Contact material, type of contact									
- Single contact AgNi (no code letter)				-					
B Single contact AgNi gold-plated				B					
F Twin contacts AgNi				F					
G Twin contacts AgNi gold-plated				G					
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		
Version									
N With position indicator, with manual override, without override lever								N	
1 With position indicator, with manual override, with override lever								1	
Extensions									
- None (no code letter)									-
F Protection diode (on request)									F
L Luminous indicator (on request)									L

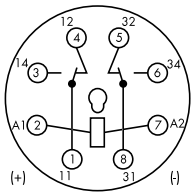
Contact Data

	UF2 / UF3			
Contact arrangement	2 or 3 C/O			
Type of contact	Single contact		Twin contact	
Contact material	AgNi	AgNi gold-plated	AgNi	AgNi gold-plated
Nominal contact current	10 A		4 A	
Inrush current	≤ 20 A		≤ 10 A	
Nominal contact voltage	250 VAC / DC		250 VAC	
Max. switching capacity (resistive)	3000 VA		1000 VA	
Min. switching capacity	50 mA / 20 VDC	1 mA /100 mVDC	20 mA / 10 VDC	1 mA /100 mVDC

Dimensions, Connection Diagram(s)

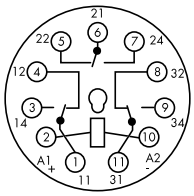


UF2 / UF3



Viewed on connector pins

UF2



Viewed on connector pins

UF3

General Data

	UF2 / UF3		
Pull-in-time	approx.12 ms		
Drop-out time	approx.10 ms		
Bounce time	approx. 5 ms		
Mechanical service life	> 20 x 10^6 switching cycles		
Test voltage			
Coil - contact	2500 VAC		
(C/O) - (C/O)	2500 VAC		
Contact - contact	1500 VAC		
Insulation group VDE 0110b/2.79	C250, B380		
Ambient temperature	-25 °C to +60 °C DC -25 °C to +40 °C AC		
Vibration resistance (30 - 100 Hz)	> 4 g		
Weight	approx. 90 g		
Operating range	DC Class 1 (0.8 – 1.1 U_N)	AC 50 Hz Class 1 (0.8 – 1.1 U_N)	AC 60 Hz Class 2 (0.85 – 1.1 U_N)
Pull-in after coil excitation with U_N at T_U	20 °C	20 °C	20 °C
Drop-out	> 0.05 U_N	> 0.15 U_N	> 0.15 U_N

Coil Data

Coil voltage DC	UF2 / UF3 Nom. operation coil power approx. 1.2 W Inrush current approx. 0.6 W		Coil voltage AC	UF2/UF3 Nom. operation coil power approx. 2.2 / 2.0 VA Inrush current approx. 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	96	125	24	74	107	91
24	384	63	60	474	43	36
60	2400	25	115	1710	23	19
110	7660	14	230	7500	17	10
220	30630	7.2				

Electrical Service Life

Electrical Service Life AC

90 % operating

——— resistive load Single contacts
- - - - - inductive load Single contacts
— - — resistive load Twin contacts
— — – inductive load Twin contacts
cos φ = 0.4 ... 0.7

Switching capacity DC

Below limiting characteristic: service life of contacts
1 x 10^6 switching cycles (90 % operating)
resistive load
——— 1 contact
- - - - - 2 contacts in series
— - — 3 contacts in series