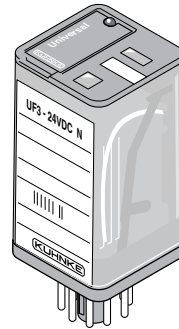




Relay Universal UF2/UF3

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



Order Code

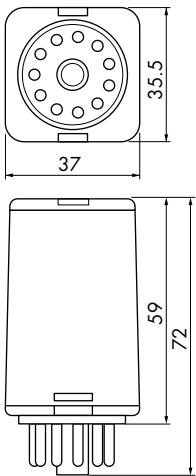
Order code	U	F	3		-	24 V	DC	N	
Type of relay	U								
Model									
F Plug in type for socket, international 8-pole socket or 11 pole socket resp.		F							
Contact arrangement									
2 C/O			2						
3 C/O			3						
Contact material, type of contact									
- Single contact AgNi (no code letter)				-					
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



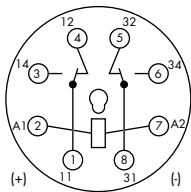
Contact Data

	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)

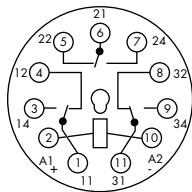


UF2 / UF3



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			Coil voltage AC			
UF2 / UF3			UF2/UF3			
Nom. operation coil power approx. 1.2 W Inrush current approx. 0.6 W			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

$\cos \varphi = 0.4 \dots 0.7$

Switching capacity DC

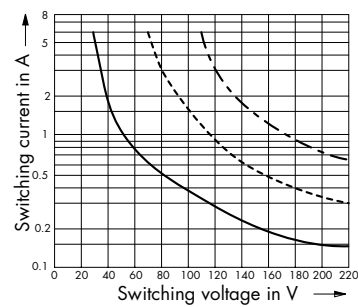
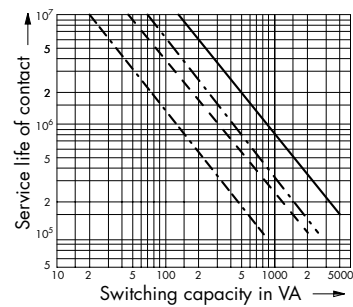
Below limiting characteristic: service life of contacts

1×10^6 switching cycles (90 % operating)

resistive load — 1 contact

· · · · · 2 contacts in series

— · — 3 contacts in series





Universal Standard Types

DC			AC		
UF2-12VDC1	UF3-12VDC1	UF2G-24VDC1	UF2-24VAC1	UF3-12VAC1	UF3B-230VACN
UF2-24VDC1	UF3-12VDCN	UF3B-24VDC1	UF2-24VAC1L	UF3-24VAC1	UF3F-24VACN
UF2-24VDC1FL	UF3-24VDC1	UF3B-24VDC1FL	UF2-24VACN	UF3-24VAC1L	UF3F-230VAC1
UF2-24VDCN	UF3-24VDC1FL	UF3B-24VDC1L	UF2-110VAC1	UF3-24VACN	UF3F-230VACN
UF2-110VDCN	UF3-24VDC1L	UF3B-24VDCN	UF2-120VAC1	UF3-48VAC1	UF3G-110VAC1
	UF3-24VDCN	UF3F-24VDC1	UF2-230VAC1	UF3-110VAC1	UF3G-230VAC1
	UF3-24VDCNF	UF3F-24VDCN	UF2-230VAC1L	UF3-110VACN	UF3G-230VACN
	UF3-24VDCNFL	UF3F-24VDCNF	UF2-230VACN	UF3-115VAC1L	
	UF3-24VDCNL	UF3F-60VDCN		UF3-120VAC1	
	UF3-48VDC1	UF3F-110VDCN		UF3-230VAC1	
	UF3-48VDCN	UF3G-24VDC1		UF3-230VAC1L	
	UF3-60VDCN	UF3G-24VDC1FL		UF3-230VACN	
	UF3-110VDC1	UF3G-24VDCN		UF3-230VACNL	
	UF3-110VDC1FL	UF3G-24VDCNL			
	UF3-110VDCN	UF3G-60VDCN			
	UF3-125VDCN	UF3G-110VDCN			
	UF3-220VDC1				
	UF3-220VDCN				

Order Specifications for Accessories UF

	UF2	UF3
Socket for		
Screw connection with quick-action fastening / retaining clip	Z392 / Z434 Z395	Z345 / Z441 Z393 / Z434 Z396
Screw connection with quick-action fastening and protection diode		Z345.12 / Z441
Screw connection with quick-action fastening and RC combination		Z345.32 / Z441
Modules for socket Z396 / Z395		
Protection diode for 6 - 220 VDC	Z396.50	Z396.50
Protection / luminous diode for 24 VDC	Z396.52	Z396.52
RC combination for 110 / 230 VAC	Z396.53	Z396.53
Protection module with varistor for 24 VAC	Z396.54	Z396.54
Protection module with varistor for 230 VAC	Z396.55	Z396.55
Luminous indicator 230 VAC	Z396.58	Z396.58
Multi-function time module	Z396.64	Z396.64
Retaining clip	Z441 / Z434	Z441 / Z434