

The following page(s) are extracted from multi-page Kuhnke product catalogues or CDROMs and any page number shown is relevant to the original document. The PDF sheets here may have been combined to provide technical information about the specific product(s) you have selected.

Hard copy product catalogues, and CDROMs have been published describing Kuhnke Pneumatics, Solenoids, Relays and Electronics; some divided into different books.

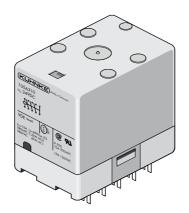
#### **Important Note**

The information shown in these documents is for guidance only. No liability is accepted for any errors or omissions. The designer or user is solely responsible for the safe and proper application of the parts, assemblies or equipment described.



### **Relay-Contactor 105**

- ٠
- Standard type **N**, **(b)**, **(c)** Mechanically guided contacts for security controls in accordance with DIN VDE 0113 part 1 •
- High switching capability through bridge contacts High contact making reliability .
- through twin contacts
- Version for printed circuit ٠



## **Order Code**

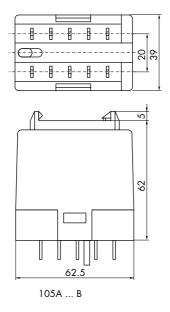
Order code	105	Α	400		-	24 V	DC	
Type of relay	105							
Model								
A Plug-in type for socket 6.3 mm or 2 x B 2.8 resp. in accordance with DIN 46247		A						
G For printed circuit		G						
Contact arrangement								
400 4 N/O			400					
310 3 N/O, 1 N/C			310					
220 2 N/O, 2 N/C			220					
Contact material, type of contact								
- Hard silver (no code letter)				-				
C AgCdO (model A only)				С				
F Twin contacts hard silver				F				
Nominal operation coil voltage (see coil data)								
24 V						24 V		
Coil current type								
DC Direct current							DC	
AC Alternating current 50 / 60 Hz with <b>bridge rectifier</b>							AC	
Extensions								
- None (no code letter)								-
B Quick-action fastening for rail EN50022-35 x 7.5								В
H Manual override (combination B and H not possible)								Н
S Screw mounting								S

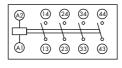


#### **Contact Data**

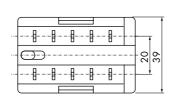
	105			
Contact arrangement	4 N/O 3 N/O and 1 N/C 2 N/O and 2 N/C			
Contact arrangement	Single contact	Control contact		
Type of contact	Bridge contact	Bridge contact as twin contact		
Contact material	Hard silver AgCdO	Hard silver		
Nominal contact current	16 A	10 A		
Inrush current	≤ 60 A	≤ 20 A		
Nominal contact voltage	400 VAC / DC			
Max. switching capacity (resistive)	6000 VA	3000 VA		
Min. switching capacity	200 mA / 60 VDC	50 mA / 20 VDC		
Switching capacity AC1 AC3	6 kW / 400 V 2.2 kW / 400 V	3 kW / 400 V 0.75 kW / 400 V		
DC1 AC4	100 W (for security circuit in accordance with professional association) not suitable			

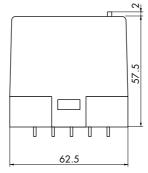
### Dimensions, Connection Diagram(s)



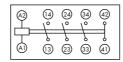


105 ... 400





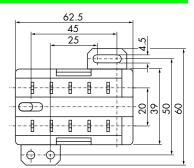
105G ... H

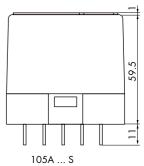


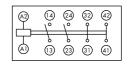
105 ... 310

Grid 2.5 mm

Viewed on connector pins Drillhole diameter 2.1 mm







105 ... 220



## **General Data**

	105		
Pull-in-time	approx. 25 ms		
Drop-out time	approx. 8 ms DC, approx. 35 ms AC		
Bounce time	approx. 5 ms		
Mechanical service life	> 10 x 10 <sup>6</sup> switching cycles		
Test voltage			
Coil - contact	2500	VAC	
Contact - contact	2500 VAC		
Insulation group VDE 0110b/2.79	C380		
Short-circuit protection VDE 0660 part 200	1000 A		
Ambient temperature	-25 °C to +60 °C		
Vibration resistance (30 - 100 Hz)	> 4 g		
Weight	арргох. 260 д		
Operating range	DC Class 2 (0.85 - 1.1 U <sub>N</sub> )	AC, 50 / 60 Hz Class 2 (0.85 - 1.1 U <sub>N</sub> )	
Pull-in			
after coil excitation with U <sub>N</sub> at T <sub>U</sub>	35 ℃		
Drop-out	> 0.05 U <sub>N</sub>	> 0.15 U <sub>N</sub>	

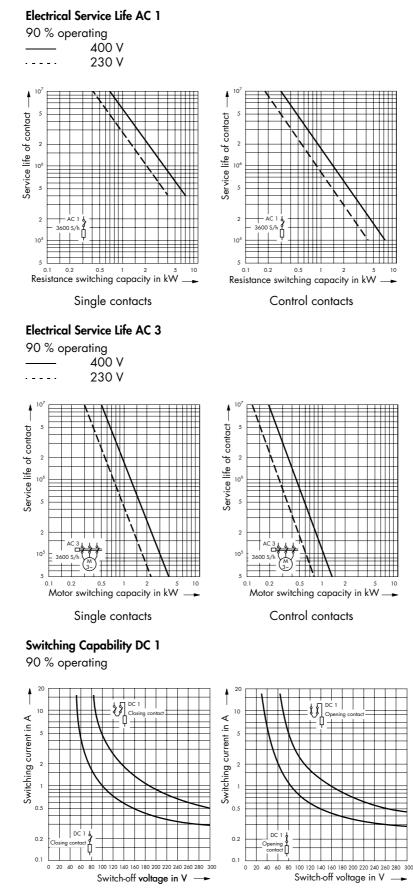
# Coil Data

Coil voltage DC*	105 Pull-in power approx. 1.3 W Nom. operation coil power approx. 3.6 W		Coil voltage AC*		05 approx. 1.5 VA oower approx 4.2 VA.
Nominal voltage (V)	Nom. resistance (Ω)	Nominal current (mA)	Nominal voltage (V)	Nom. resistance (Ω)	Nominal current (mA)
12	41	290	12	32	340
24	151	160	24	120	180
40	473	85	42	390	97
60	968	62	60	780	69
110	3370	33	110	2710	37
220	13700	16	230	13400	15

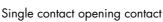
\* Other voltages on request



#### **Electrical Service Life**



Single contact closing contact

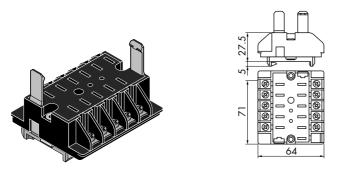




# Order Specifications for Accessories

Relay	105
Socket for scew connection with quick-action fastening	Z320.02

## Socket Z320.02



Socket	Z320.02
Terminal capacity solid conductor flexible conductor with ferrule	2 x 2.5 mm <sup>2</sup> 2 x 1.5 mm <sup>2</sup>
Terminal designation	in accordance with EN50005
Mounting	Rail EN50022-35 x 7.5/15
Screw terminals	Head screws metric M4
Torque in accordance with DIN EN 60999	1.2 Nm
Nominal current	16 A
Insulation group VDE 0110b/2.79	C380
Weight	110 g
Retaining clip	enclosed retaining clips