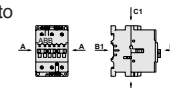


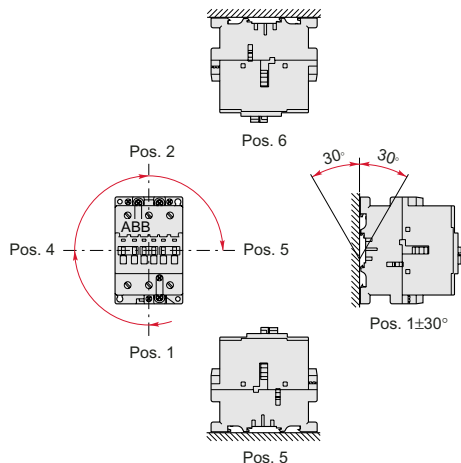
Technical data IEC

Control relays

Type	NE12, NE 21, NE 30	N22, N31, N40	N44, N53, N62, N71, N80	NL22, NL31, NL40	NL44, NL62
Number of poles	3	4	8	4	8
Insulation characteristics					
Rated insulation voltage U_i acc. to IEC947-5-1 and VDE0110 (Gr. C)	V	690			
acc. to UL/CSA	V	600			
Rated impulse withstand voltage U_{imp} acc. to IEC947-5-1	kV	8			
General technical data					
Standards	Devices complying with international standards IEC947-5-1/947-4-1 and European standards EN60 947-5-1/60 947-4-1 Electromagnetic compatibility (EMC) according to amendment A11 to IEC947-1; EN60 947-1 and amendment 2 to IEC947-4-1				
Air temperature near contactor — for operation in free air: — for storage:	°C °C	-40 to +55 (0.85 – 1.1 U_c) / +55 to +70 (U_c) -60 to +80			
Climatic withstand	according to IEC68-2-30 and 68-2-11 – UTE C63-100, Specification II				
Mounting positions (see diagrams below)	Positions 1 to 5 - $\theta \leq 55^\circ\text{C}$: 0.85 – 1.1 - $\theta = 55 - 70^\circ\text{C}$: — Position 6 - $\theta \leq 55^\circ\text{C}$: 0.95 – 1.1 - $\theta > 55^\circ\text{C}$: not acceptable			U_c U_c U_c	
Operating altitude	m	≤ 3000			
Shock withstand according to IEC 68-2-27 and EN 60068-2-27 Mounting pos. 1 (see below)			1/2 sinusoidal shock, 11ms: no change in contact position Shock direction: A, C1, C2 : 20 g B1 : 5 g B2 : 15 g		
Mounting — on mounting rail — with screws (not supplied)	35mm according to IEC715 and EN50022 2 x M4				
Connection terminals (delivered in open position, screws of unused terminals must be tightened)	M 3.5 (+,-) posidrive 2 screw with cable clamp				
Connection capacity Rigid solid	1 x AWG 2 x AWG	16 – 12 16 – 12			
Degree of protection according to IEC529, IEC947-1 and EN60529 — Pole terminals — Coil terminals	IP20 IP20		IP10 IP20		

7

Mounting positions



Electrical durability of contacts

utilization category AC – 15 according to IEC947-5-1
making current: 10 x I_e with $\cos \varphi = 0.7$ and U_e
breaking current: I_e with $\cos \varphi = 0.4$ and U_e

The curves opposite show the electrical durability of the control relays as well as the add-on auxiliary contact blocks in relation to the breaking current I_c . These curves have been drawn for resistive and inductive loads up to 690V, 40 – 60 Hz.

