

# Type TNL 4 Pole & 8 Pole



TNL22E

### 4 Pole, 1 stack

Number of contacts		Weight	Catalog number	List price
1st stack				
N.O.	N.C.	N.O.	N.C.	
2	2	-	-	
3	1	-	-	
4	-	-	-	
		0.540	TNL22E-Δ	<b>\$ 121</b>
		0.540	TNL31E-Δ	
		0.540	TNL40E-Δ	

### 8 Pole, 2 stack

Number of contacts		Weight	Catalog number	List price
1st stack				
N.O.	N.C.	N.O.	N.C.	
4	-	-	4	
4	-	2	2	
		0.600	TNL44E-Δ	<b>\$ 180</b>
		0.600	TNL62E-Δ	

Δ - Substitute the Δ for the coil voltage code. See the Type TNL Coil voltage Selection chart beneath the photos.

### Coil characteristics

No extra tolerances applicable to the  $U_c$  min. ... max. values quoted in the Coil voltage selection table

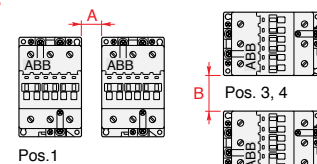
- Coil consumption at  $U_c$  max.  $q = 20^\circ\text{C}$ : 9 W pull-in/holding
- Replacement coils: consult us (standard coils used on NL control relays are not suitable for TNL control relays).

### Coil voltage selection

Min.	$U_c$	Max	Voltage
17	-	32	51
24	-	45	52
36	-	65	54
42	-	78	58
50	-	90	55
77	-	143	62
90	-	150	66
152	-	264	68

### Mounting distance – for coil operating limits $U_c$ min. ... $U_c$ max.

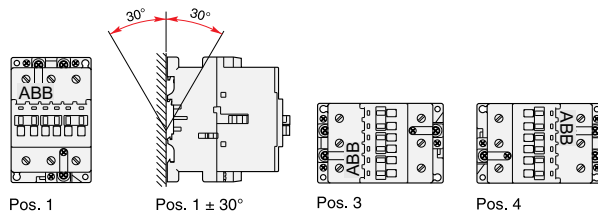
A mm	B mm	Ambient temp. $^\circ\text{C}$	Max. switching frequency Operating cycles/h
2	20	$\leq 20$	1200
5	20	$\leq 55$	1200



### Add-on accessories

Control relays	Max. number of auxiliary contact blocks						Timer TP	Mechanical interlock	Label marker
	CA5-10	CA5-01	CA5-40	CA5-31	CA5-22	CA5-04			
Pos. 1, 3 or 4 TNL 40-E	4	2	1	1	1	-	-	VBC 30	BA 5-50
Pos. 1, 3 or 4 TNL 31-E	4	1	1	1	-	-	-	VBC 30	BA 5-50
Pos. 1, 3 or 4 TNL 22-E	4	-	1	-	-	-	-	VBC 30	BA 5-50
Pos. 1 $\pm 30^\circ$ TNL - all types	-	-	-	-	-	-	-	VBC 30	BA 5-50

### Mounting positions



# General information

## Type NL & TNL, DC operated

### Type NL

#### Description

- Magnetic circuit variants: NL types: d.c. operated with solid magnetic circuits.
- 2 versions: 4 pole or 8 pole  
The width of 8 pole devices is identical to that of 4 pole devices; only the depth is increased.
- Bifurcated auxiliary contacts.
- Alone or mounted with a 4 pole CA5 auxiliary contact block, these devices offer "positive safety" between their auxiliary contacts.

#### Application

Type NL relays are used for switching auxiliary circuits and control circuits.

### Type TNL

#### Description

- Magnetic circuit variants
  - NL types: D.C. operated with solid magnetic circuits.
  - TNL types: D.C. operated with solid magnetic circuit and large coil voltage range.
- 2 versions
  - 4-pole/1-stack or 8-pole/2-stack
  - The width of 8-pole devices is identical to that of 4 pole devices; only the depth is increased.
- Double sharp auxiliary contacts.
- Alone or mounted with a 4-pole CA 5 auxiliary contact block, these devices offer "positive safety" between their auxiliary contacts.

#### Application

Type NL and TNL control relays are used for switching auxiliary circuits and control circuits.

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Location of surge suppressors.

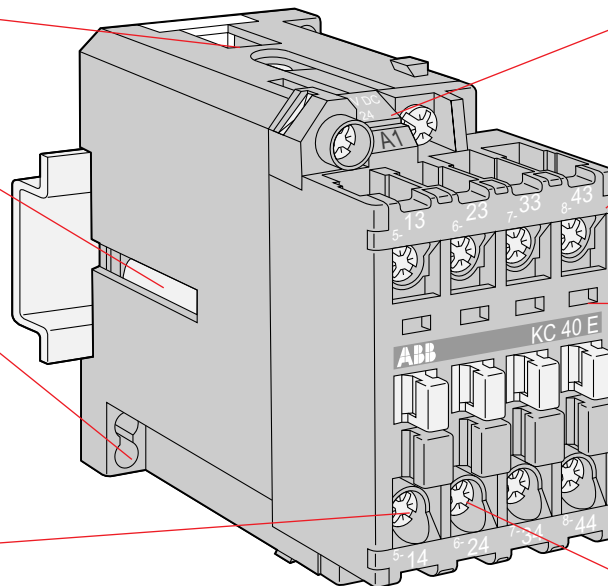
Quick mounting on 35 x 7.5mm or 35 x 15mm DIN mounting rail according to IEC947-5-1 and EN50022.

Holes for screw mounting (screws not supplied). Distances between holes according to EN50002.

Terminals delivered in open position with captive screws (screws of unused terminal should be tightened).

Screwdriver guidance for all screws makes it possible to use motorized screwdrivers.

All terminals provide protection against accidental direct contact with live parts according to VDE0106 – Part. 100.



Clear marking of coil voltages.

Terminal marking according to IEC947-5-1 and EN50 011.

Location of function marker and surge suppressor.

Stops for attaching front mounted accessories.

All terminal screws: M 3.5, posidrive (+,-) N° 2

### Catalog number explanation

**(T)NL 44E-84**

Frame type

Coil voltage

(see coil voltage chart below.)

Contact configuration

### Coil voltage selection chart

Hz	Relay type	Volts															
		12	24	48	110	120	125	208	220	240	277	380	415	440	480	500	600
60	N		81	83	84	84		34	36	80	42		86	86	51	53	55
50	N		81	83	84				80				85	86			55
DC	NE, NL	80	81	83	86		87		88	89							