

Contactor Relays

AC Operated



Ratings		Therm. Rated Current I_{th} A	Contacts		Distinc. Number acc. to	Additional Contact Blocks	Type	Coil voltage ¹⁾	
AC15	230V		Built-in						
A	400V	A	NO	NC	EN50011	Type		24	24V 50/60Hz
								110	110V 50Hz 110-120V 60Hz
								230	220-240V 50Hz 230-264V 60Hz
								400	380-415V 50Hz 400-440V 60Hz
									Pack Weight pcs. kg/pc.

4-pole, contacts suitable for electronic circuits according to EN947-5-4²⁾

4	2	10	4	-	40E	max. 4	K3-07ND40 ...	1	0,22
4	2	10	3	1	31E	HN..	K3-07ND31 ...	1	0,22
4	2	10	2	2	22E	max. 2	K3-07ND22 ...	1	0,22
4	2	10	-	4	04E	HB..	K3-07ND04 ...	1	0,22

Auxiliary Contact Blocks ³⁾



Ratings		Thermal Rated Current A	Contacts ²⁾		Type	Pack pcs.	Weight kg/pc.
AC15	230V		NO	NC			
A	400V	A			EM LB		

1-pole, contacts suitable for electronic circuits according to EN947-5-4²⁾

3	2	10	1	-	-	-	HN10	10	0,02
3	2	10	-	1	-	-	HN01	10	0,02
3	2	10	-	-	1	-	HN10U	10	0,02
3	2	10	-	-	-	1	HN01U	10	0,02

1-pole, for high switching capacity

6	3	25	1	-	-	-	HA10	10	0,03
6	3	25	-	1	-	-	HA01	10	0,03

Accessories see pages 52 - 55.

1) Other coil voltages see page 57
 2) Contacts suitable for electronic circuits, according to EN947-5-4 for rated voltage 24V DC (test ratings 17V DC, 5mA) Mirror contacts acc. IEC60947-4-1 Annex F.
 3) Technical Data see page 62

DC Operated

Type

Coil voltage ¹⁾
24 24V DC
48 48V DC
110 110V DC
220 220V DC



Contacts

Built-in

Distinc.
Number
acc. to

Additional
Contact
Blocks



NO NC

EN50011

Type

Pack
pcs.

Weight
kg/pc.

Wiring Diagrams

3W Coil power, for high switching capacity ³⁾

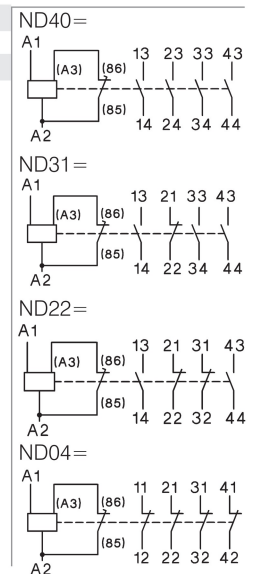
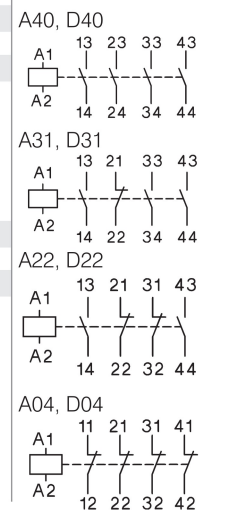
KG3-07A40 ...	4	-	40E	max. 4	1	0,53
KG3-07A31 ...	3	1	31E	HN..	1	0,53
KG3-07A22 ...	2	2	22E	or	1	0,53
KG3-07A04 ...	-	4	04E	HA..	1	0,53

3W Coil power, for electronic circuits ²⁾³⁾

KG3-07D40 ...	4	-	40E	max. 4	1	0,53
KG3-07D31 ...	3	1	31E	HN..	1	0,53
KG3-07D22 ...	2	2	22E		1	0,53
KG3-07D04 ...	-	4	04E		1	0,53

with double winding coil, for electronic circuits ²⁾

K3-07ND40= ...	4	-	40E	max. 3	1	0,25
K3-07ND31= ...	3	1	31E	HN..	1	0,25
K3-07ND22= ...	2	2	22E	max. 2	1	0,25
K3-07ND04= ...	-	4	04E	HB..	1	0,25



1) Other coil voltages on request

2) Contacts suitable for electronic circuits, according to EN947-5-4 for rated voltage 24V DC (test ratings 17V DC, 5mA) Mirror contacts acc. IEC60947-4-1 Annex F.

3) with integrated coil suppressor (Transient Voltage Suppressor Diode)

Contactor Relays

Data according to IEC 947-5-1, VDE 0660, EN 60947-5-1

			Type	K3-07ND	K3-07ND=	KG3-07A	KG3-07D
Rated insulation voltage $U_i^{1)}$			V AC	690	690	690	690
Thermal rated current I_{th} to 690V							
Ambient temperature	40°C	A		10	10	20	10
	60°C	A		6	6	16	6
Frequency of operations z			1/h	10000	10000	10000	10000
Mechanical life			S x 10 ⁶	10	10	10	50
Utilization category AC15							
Rated operational current I_e	220-240V	A		4	4	12	4
	380-415V	A		2	2	4	2
	440V	A		1,6	1,6	4	1,6
	500V	A		1,2	1,2	3	1,2
	660-690V	A		0,6	0,6	1	0,6
Utilization category DC13							
Rated operational current I_e per pole	24-60V	A		3,5	3,5	8	3,5
	110V	A		0,5	0,5	1	0,5
	220V	A		0,1	0,1	0,1	0,1
Power consumption of coils							
AC operated	inrush	VA		30 - 45	-	-	-
	sealed	VA		7 - 10	-	-	-
		W		2,6 - 3	-	-	-
DC operated	inrush	W		-	75	3	3
	sealed	W		-	2	3	3
Operation range of coils in multiples of control voltage U_s				0,85 - 1,1	0,8 - 1,1	0,8 - 1,1	0,8 - 1,1
Switching time at control voltage $U_s \pm 10\%$							
	make time	ms		8 - 16	8 - 16	65 - 85	65 - 85
	release time	ms		5 - 13	5 - 13	20 - 30 ³⁾	20 - 30 ³⁾
Maximum ambient temperature							
Operation	open	°C		-40 to +60 (+90) ²⁾			
	enclosed	°C					
Storage		°C		-40 to +90			
Short circuit protection short-circuit current 1kA, contact welding not accepted max. fuse size			gL (gG) A	20	20	25	20
Cable cross-section							
Connector	solid	mm ²		0,75 - 6 1 - 4 0,75 - 4			
	flexible	mm ²					
	flexible with multicore cable end	mm ²					
Magnet coil	solid	mm ²		0,75 - 2,5 0,75 - 2,5 0,5 - 1,5			
	flexible	mm ²					
	flexible with multicore cable end	mm ²					
Clamps per pole				2			
Connector	solid	AWG		18 - 10 18 - 10 2			
	flexible	AWG					
Clamps per pole							
Magnet coil	solid	AWG		14 - 12 18 - 12 2			
	flexible	AWG					
Clamps per pole							

Data according to UL508

Rated operational current "General Use"	A		10	10	20	10
Rated operational voltage	max.	V AC	600	600	600	600
Auxiliary Contacts	heavy pilot duty		A600	A600	A600	A600

1) Suitable at 690V for: earthed-neutral systems, overvoltage category I to IV, pollution degree 3 (standard-industry): $U_{imp} = 8kV$.
Data for other conditions on request.

2) With reduced control voltage range 0,9 up to 1,0 x U_s and with reduced thermal rated current I_{th} according to I_e /AC15

3) with built-in coil suppressor

Contactor Relays

Position of Terminals

AC operated

DC operated with double wound coil

K3-07ND22

K3-07ND31

K3-07ND40

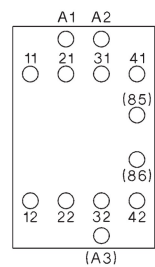
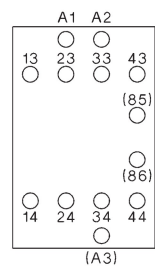
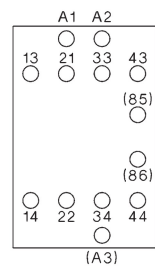
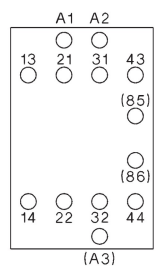
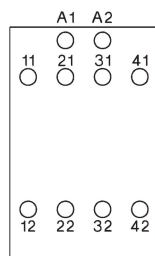
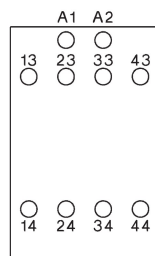
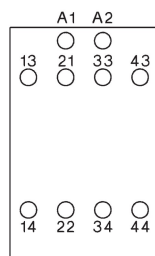
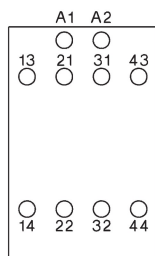
K3-07ND04

K3-07ND22=

K3-07ND31=

K3-07ND40=

K3-07ND04=



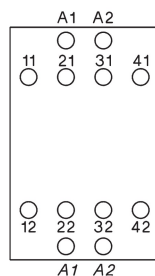
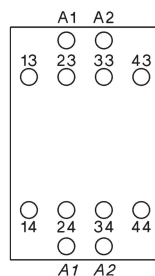
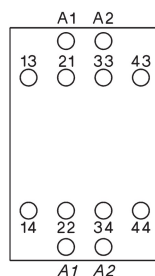
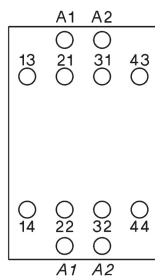
DC solenoid operated

KG3-07A22
KG3-07D22

KG3-07A31
KG3-07D31

KG3-07A40
KG3-07D40

KG3-07A04
KG3-07D04

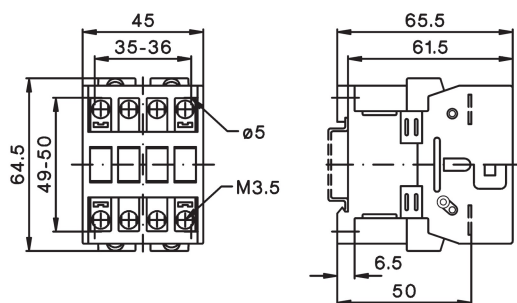


Contactor Relays

Dimensions

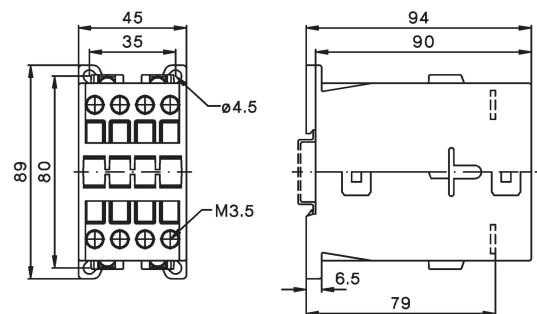
AC operated

K3-07ND..



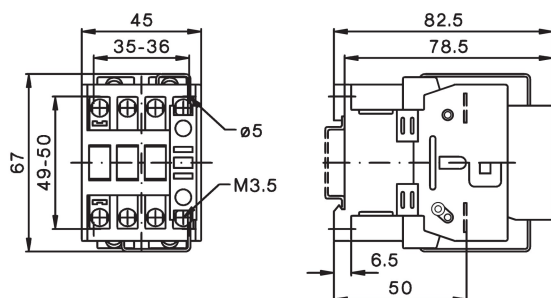
DC solenoid operated

KG3-07..



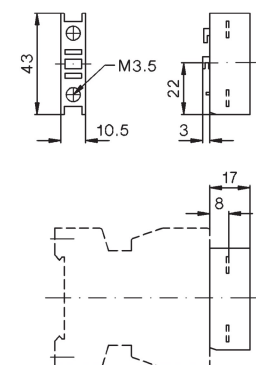
DC operated with double winding coil

K3-07ND.. =



Auxiliary contact blocks

HN10, HN01



HA10, HA01

