



RELAYS

INSTANTANEOUS MONOSTABLE RELAYS WITH 4-8-12 CONTACTS

OK SERIES

USER SECTORS



Power generation



Nuclear



Power transmission



Rolling stock



Fixed railway installations



Shipbuilding



Petroleum industry



Heavy industry



OKUIC

PRODUCT ADVANTAGES

- Plug-in monostable instantaneous relay
- Solid and rugged construction for heavy or intensive duty
- Very long electrical life expectancy and exceptional endurance
- Patent operating mechanism, designed to ensure high contact pressure
- Ample clearance between open contact elements (from 1.2 to 4 mm)
- Independent and self-cleaning contacts with high breaking capacity
- Magnetic arc blow-out for higher breaking capacity
- Excellent shock and vibration resistance
- Wide variety of configurations and customizations
- Option for use in geothermal sites available
- Wide range of sockets
- Retaining clip for secure locking of relay on socket
- Transparent cover, pull-out handle
- Positive mechanical keying for relay and socket

DESCRIPTION

The **OK series** is made up of 7 basic models, created from a **patented common operating mechanism equipped** with 4 contacts. Solutions with 8 or 12 contacts are obtainable by using 2 or 3 relays in combination.

The construction of the relays and careful choice of the materials are such that they ensure long life and considerable ruggedness even in harsh operating environments and when subject to strong thermal shocks. A **specific treatment (P5GEO or P6GEO)** combining coil tropicalization with gold-plated contacts allows the use of these items in geothermal electric power stations, as final relays for controlling field devices and for all power circuits.

The relays in the OK Series use a patented switching mechanism designed to minimize friction, resulting in a **mechanical life expectancy of at least 100,000,000 operations**.

This is made possible thanks to:

- The use of a solenoid with a core drawn in toward the main air gap, located at the centre of the coil, the only position in which the available magnetic flux can be exploited to the full
- The core motion being limited to the minimum, thereby optimizing mechanical forces and reducing friction. The motion is amplified by means of a W linkage, which allows an appreciable displacement of the contact (> 4 mm in the case of the version with NO contacts)

- The coil of elongated cylindrical geometry, best able to ensure high efficiency and effective dissipation of the heat produced.

Each contact is mounted on individual and independent blades, which are able to provide optimum shock and vibration resistance.

In particular, this generates pressure of around 0.8...1N on the make and break contacts, which is unparalleled by other products.

The common contact slides against the fixed poles (NO and NC contacts) both when opening and when closing, which ensures a notably effective self-cleaning action.

With ample clearance between the open contact elements, it becomes possible to **guarantee an impulse withstand voltage of 5 kW** between the poles of the single contact.

Excellent electrical and mechanical performance levels allow the product to be used in the most demanding of sectors such as, for example, control and signalling functions in electricity generating stations, electrical transformer stations, rail transport or in industries with continuous production processes (chemical industry, petroleum industry, rolling mills, cement factories, etc.).

Above all, the excellent ability to withstand shock and vibration allow their use in seismic environments or on rolling stock.



Description of models

There are 7 relay models in the OK Series (OK, OKS, OKFC, OKSFC, OKSCD, OKSGcCd and OKUIC). The outputs are available on 16 terminals of standard dimensions 5x0.8mm, evenly and symmetrically divided into 4 rows spaced 10mm apart, in both directions. Internal connections are ordered symmetrically. Turning the relay through 180° on its connector has the effect simply of changing the contacts, without affecting operation (except in the case of relays with a polarized power input).

OK – OKS

The OK relay offers ruggedness, easy installation, high breaking capacity (with magnetic arc blow-out, model OKS), safe operation and adaptability to any kind of circuit, making it suitable for all heavy duty applications in the field of remote control systems and automation. The distance between contacts is 2.2mm. Superior shock and vibration resistance ensures that contacts are able to hold their operating position even when exposed to a shock force of 30g - 1ms. No opening of break contacts up to 3g.

On the OKS model, a powerful magnetic arc blow-out located between the 4 change-over contacts has the effect of generating a permanent magnetic field. When an inductive load circuit is broken, the resulting arc is swiftly extended and finally extinguished through the action of the magnetic field created by the blow-out.

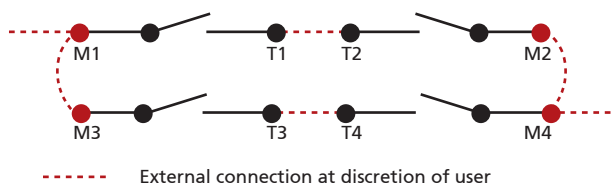
OKFC - OKSFC - OKUIC

The OKFC relay is an energy saving component. The distance between contacts is 1.2mm. Contact pressures and shock and vibration resistance are the same as specified for OK/OKS models. In the case of d.c. loads, the breaking capacity is reduced from that of the OK relay, although the addition of the magnetic arc blow-out (model OKSFC) provides breaking capacity of up to 15 A at 120Vdc (see example of electrical life expectancy). On the OKSFC model, a powerful magnetic arc blow-out located between the 4 change-over contacts has the effect of generating a permanent magnetic field. When an inductive load circuit is broken, the resulting arc is swiftly extended and extinguished through the action of the magnetic field created by the blow-out. With direct current, breaking capacity is doubled. For d.c. and a.c. currents that can be broken without the blow-out, the effect of having this feature available will be to reduce wear on the contacts, doubling electrical life expectancy.

The connection of 2 contacts in series increases electrical life expectancy and doubles breaking capacity when handling direct current.

The connection of 2 contacts in parallel likewise increases electrical life expectancy.

In the event that the 4 contacts are all available for breaking purposes, it is possible to use a series/parallel connection arrangement as illustrated below. In the case of high voltages, from 250V upwards, it is best to avoid breaking opposite polarities on adjacent contacts.



The use of the OKFC or OKSFC relay is advisable whenever the requirement is for detecting loss of voltage, hence where relays are permanently powered up, or when the ambient temperature may reach 70 °C. These relays can be powered up permanently, even at the maximum voltage of the specified operating range; they can also handle wide fluctuations in voltage and consequently are able to respond, for example, to standards for rolling stock, as in the case of the OKUIC model, which has a coil with a wide operating range.

OKSCD

The silver-coated contacts of normal relays can fuse together when closed if exposed to a peak current of 50 A for at least 5 ms. Using cadmium oxide contacts, the surfaces will fuse only at currents higher than 150 A. With magnetic arc blow-out fitted as standard to these relays, there is no possibility of the arc creating a hot spot between the contacts that could cause them to become welded together.

This relay is especially suitable for handling highly inductive direct current loads, and circuits with filament lamps where the closing of contacts can produce current peaks of up to 10 or 15 times the nominal strength (public or industrial lighting systems). It can also be used for starting small electric motors and other appliances that produce high transient currents. The OKSCD relay has an electrical life expectancy equal to that of the OKS relay, but is also suitable for use with circuits generating high transient currents, given the factors indicated above. Controlling a circuit with 600W filament lamps connected to a 110Vac supply, for example, the OKSCD relay is capable of 1,500,000 operations.

OKSGcCd

The OKSGcCd relay has a longer electrical life expectancy than the OKSCd model. It has 4 normally open contacts, and a distance between contacts of > 4mm. Magnetic arc blow-out is fitted as a standard feature. The OKSGcCd relay can be used with heavily inductive d.c. loads, where there is no need for change-over contacts.

OKB184

The OKB184 models are equipped as standard with a blow-out magnet and have low coil consumption. As these relays are K3-qualified, they are the relays of reference in the nuclear sector.



Models	Number of contacts	Continuous duty	Magnetic arc blow-out	AgCdO contacts	Long travel	Rolling stock application
OK	4 ⁽¹⁾					
OKS			•			
OKFC		•				
OKSFC		•	•			
OKSCd			•	•		
OKSGcCd			•	•	•	
OKUIC		•	•			•
OKB184			•			

1. Versions with 8 and 12 contacts available (excluding OKUIC, OKSCd and OKSGcCd).



FOR CONFIGURATION OF PRODUCT CODE, SEE "ORDERING SCHEME" TABLE



Coil specifications	OK - OKS	OKFC - OKSFC	OKSCd - OKSGcCd	OKUIC	OKB184
Nominal voltages Un ⁽¹⁾	DC: 12-24-36-48-72-110-125-132-144-220 AC: 12-24-48-110-115-127-220-230-380				48, 125 Vdc
Max. consumption at Un (DC/AC) ⁽²⁾	4.5 W / VA	3.5 W / VA	5 W / VA	3.5 W	3.5 W
Operating range ⁽¹⁾	DC: 80...110% Un AC: 85...115% Un	DC: 80...120% Un AC: 85...115% Un	DC: 80...110% Un AC: 80...110% Un	DC: 70...125% Un ⁽³⁾	DC: 80...110% Un
Type of duty	Continuous at Un ⁽⁴⁾	Continuous	Continuous at Un ⁽⁴⁾	Continuous	Continuous
Drop-out voltage ⁽⁵⁾	DC: > 5% Un AC: > 15% Un				

1. Other values on request.

2. For versions with 8 and 12 contacts, double and treble the value respectively.

3. For operating ranges different to that specified by EN60077, refer to table "OKUIC - Special Ranges".

4. Continuous duty is possible at the maximum voltage of the operating range at Tmax: 40 °C.

5. Limit value for supply voltage, expressed as % of the nominal value, beneath which the relay is certain to be de-energized.



Contact specifications		OK - OKS - OKFC - OKSFC - OKUIC - OKB184			OKSCd	OKSGcCd	
Number and type ⁽¹⁾		4 CO, form C			4 CO, form C	4 NO	
Current	Nominal ⁽²⁾	10 A			10 A		
	Maximum peak (1 min) ⁽³⁾	20 A			20 A		
	Maximum pulse (10 ms) ⁽³⁾	150 A			250 A		
Example of electrical life expectancy ⁽⁴⁾ 1,800 operations/hour		OK	0,7 A – 120 Vdc – L/R 0 ms: 5,5 x 10 ⁵ operations				
		OKS	1 A – 120 Vdc – L/R 40 ms: 5 x 10 ⁵ operations				
		OKFC	0,5 A – 110 Vdc – L/R 40 ms: 10 ⁵ operations				
		OKSFC - OKUIC	0,7 A – 132 Vdc – L/R 40 ms: 10 ⁵ operations				
		OKSCd	1 A – 120 Vdc – L/R 40 ms: 5 x 10 ⁵ operations				
		OKSGcCd	5 A – 110 Vdc – L/R 20 ms: 2 x 10 ⁵ operations				
Minimum load	Standard contacts	500 mW (20V, 20 mA)					
	Gold-plated contacts ⁽⁵⁾	200 mW (20V, 5 mA)					
Maximum breaking voltage		350 Vdc / 440 Vac					
Contact material		AgCu			AgCdO		
Operating time at Un (ms) ^{(6) (7)}		OK-OKS-OKSCd	OKFC-OKSFC	OKB184	OKSGcCd	OKUIC	
		DC – AC					
		Pick-up (NO contact closing)	≤ 28 - ≤ 40	≤ 38 - ≤ 40	≤ 30	≤ 30 - ≤ 45	≤ 40
		Drop-out (NC contact closing)	≤ 20 - ≤ 70	≤ 18 - ≤ 80	≤ 20	-	≤ 18

1. Versions with 8 and 12 CO contacts available, excluding OKUIC, OKSCd and OKSGcCd.

2. On all contacts simultaneously.

3. The max. peak and pulse currents are those currents that can be handled, for a specified time, by the contact. They do not refer to steady or interrupted currents.

4. For other values, see electrical life expectancy curves.

5. Specifications of contacts on new relay

a. Plating material: P4GEO: gold-nickel alloy (>6µ).

b. When the gold-plated contact is subject to heavy loads, it will be degraded on the surface. In such case, the characteristics of the standard contact should be taken into consideration. This does not impair relay operation.

6. Unless specified otherwise, the operating time signifies until stabilization of the contact (including bounces).

7. Addition of a flyback diode connected in parallel with the coil (DC version only) causes an increase in operating time when the relay drops out.



Insulation

Insulation resistance (at 500Vdc)	
between electrically independent circuits and between these circuits and ground	> 1,000 MΩ
between open contact parts	> 1,000 MΩ
Withstand voltage at industrial frequency	
between electrically independent circuits and between these circuits and ground	2 kV (1 min) - 2.2 kV (1 s)
between open contact parts	2 kV (1 min) - 2.2 kV (1 s)
between adjacent contacts	2 kV (1 min) - 2.2 kV (1 s)
mpulse withstand voltage (1.2/50μs - 0.5J)	
between electrically independent circuits and between these circuits and ground	5 kV
between open contact parts	5 kV

MONOSTABLE
INSTANTANEOUS

INSTANTANEOUS
MONOSTABLE WITH
FORCIBLY GUIDED
CONTACTS

BISTABLE



Mechanical specifications

Mechanical life expectancy			100 x 10 ⁶ operations			
Maximum switching rate		Mechanical	3,600 operations / hour			
Degree of protection (with relay mounted)			IP20 / IP40 or IP50 as option ⁽³⁾			
Type of power supply, n°CO	VDC, 4 CO	VAC, 4 CO	VDC, 8 CO	VAC, 8 CO	VDC, 12 CO	VAC, 12 CO
Dimensions (mm) ^{(1) (2)}	45x97x45	45x109x45	91.5x97x45	91.5x109x45	138x97x45	138x109x45
Poids (g)	~ 280	~ 280	~ 590	~ 590	~ 890	~ 890

1. Output terminals excluded.

2. OKUIC relay: H 109mm for standard version, H 97mm for version with LED, DIODE, VARISTOR.

3. To order the relay with IP40 or IP50 protection, configure the ordering code by the "Keying position" column in "Ordering scheme".

FAST-ACTING
MONOSTABLE
(AND BISTABLE)

TIME DELAY
(ON PICK-UP
OR DROP-OUT)



Environmental specifications

Operating temperature	OKUIC	-25° to +55°C
Storage and shipping temperature		-25° to +70°C
Relative humidity		-40° to +85°C
Resistance to vibrations		Standard: 75% RH - Tropicalized: 95% RH
Resistance to shock		5g - 10 to 60 Hz - 1 min
Fire behavior		30g - 11 ms V0

TIME DELAY WITH
FORCIBLY GUIDED
CONTACTS

MEASUREMENT



Standards and reference values

EN 61810-1, EN 61810-2, EN 61810-7 EN 60695-2-10 EN 50082-2 EN 60529	Electromechanical elementary relays Fire behavior Electromagnetic compatibility Degree of protection provided by enclosures
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Unless otherwise specified, products are designed and manufactured according to the requirements of the European and International standards indicated above.

In accordance with EN 61810-1, all items of technical data are referred to ambient temperature 23 °C, atmospheric pressure 96kPa and 50% humidity.

Tolerance for coil resistance, nominal electrical input and nominal power is ±7%.

SOCKET
NUMBERING
EXPLANATIONS



Railways, rolling stock - Standards

EN 60077 EN 50155 EN 61373 EN 45545-2 ASTM E162, E662	Electric equipment for rolling stock - General service conditions and general rules Electronic equipment used on rolling stock Shock and vibration tests, Cat 1, Class B Fire behavior, Cat E10, Requirement R26, V0 Fire behavior
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FRONT
CONNECTION

BACK
CONNECTION



Railways, rolling stock - Special operating ranges for OKUIC relay

Nominal voltage	Minimum pick-up voltage	Maximum operating voltage
24 Vdc	18	33
36 Vdc	28	48
72 Vdc	55	110
110 Vdc	77	144
128 Vdc	85	160

PCB MOUNT

RETAINING CLIPS



Configurations - Options

P2	Tropicalisation de la bobine avec une résine époxy pour une utilisation en cas d'HR à 95 % (à T 50 °C). Ce traitement protège également la bobine contre la corrosion qui pourrait résulter d'une réaction entre l'humidité et certains agents chimiques présents dans des atmosphères acides (typiques des centrales géothermiques) ou salines.
P4GEO	Gold plating of contacts with gold-nickel alloy, thickness $\geq 6\mu$. This treatment ensures long-term capacity of the contact to conduct lower currents in harsh ambient conditions such as acid atmospheres (typical of geothermal power stations) or saline atmospheres.
P5GEO	P4GEO gold-plating of contacts + P2 coil tropicalization.
P6GEO	P4GEO type gold-plating, but applied to contacts, contact terminals and output terminals + P2 coil tropicalization.
LED	LED indicator showing presence of power supply, wired in parallel with the coil.
DIODE DE ROUE LIBRE	Polarized component connected in parallel with the coil (type 1N4007 or BYW56 for rolling stock version) designed to suppress overvoltages generated by the coil when de-energized.
VARISTANCE	Non-polarized component connected in parallel with the coil, designed to suppress overvoltages higher than the clamping voltage, generated by the coil when de-energized.
TRANSIL	Non-polarized component connected in parallel with the coil. Behaviour is similar to that of a varistor, with faster operating times.
IP40	IP40 protection with "6" handle or closure with screws.
IP50	IP50 protection with "6" handle (only for 4 CO version).
8 CONTACTS	Version with 8 change-over contacts, obtained using 2 x 4 CO relay, coils connected in series.
12 CONTACTS	Version with 12 change-over contacts, obtained using 3 x 4 CO relay, coils connected in series.



To order

Product code	Number of contacts	Application ⁽¹⁾	Configuration A	Configuration B	Label	Type of power supply	Nominal voltage (V) ⁽²⁾	Keying position code ⁽³⁾
OK OKS OKFC OKSFC OKUIC OKSCd OKSGcCd	4: CO ⁽⁴⁾ 8: 8 CO 12: 12 CO	E: Energy Railway Fixed Equipment R: Railway Rolling Stock	1: Standard 2: Diode // 3: Varistor 4: Led 5: Diode // + Led 6: Varistor + Led 7: Transil 8: Transil + Led	0: Standard 2: P2 4: P4 GEO 5: P5 GEO 6: P6 GEO 7: P7 8: P8	F	C: Vdc A: Vac 50 Hz H: Vac 60 Hz	012 - 024 - 036 048 - 072 - 100 110 - 115 - 125 127 - 132 - 144 220 - 230 - 380	XXX A: IP50 B: IP40

Example

OKSFC		E	2	0	F	C	110	
OKSFCE20F-C110 - OKSFC relay, ENERGY series, nominal voltage 110 Vdc, equipped with a flyback diode								

(1) E = ENERGY: all applications, except for railways rolling stock.

Suitable on energy production, transport and distribution plants, railways fixed equipment, petrolchemical and heavy industry.

R = RAILWAYS, ROLLING STOCK: Application on board rolling stock (rail-tram-trolley vehicles). Electrical characteristics according to EN60077.

Other product series available:

RAILWAYS, FIXED EQUIPMENT: Approved and conforming relays and products to RFI (FS Group) specification no. RFI DPRIM STF IFS TE 143 A

For the list of RFI approved and conforming products, consult dedicated catalog "RAILWAY SERIES – RFI APPROVED".

STATIONS: ENEL approved material meeting LV15/LV16 specifications.

For the list of ENEL approved and conforming products, consult the dedicated catalog "STATIONS SERIES – LV15-LV16-LV20".

(2) Other values on request. Voltage 380V available as Vac only.

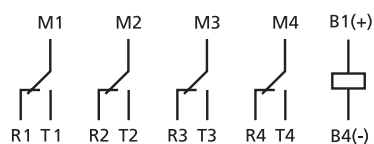
(3) Optional value. The positive mechanical keying is applied according to the manufacturer's model.

(4) For the standard version with 4 contacts, the field must be left empty.

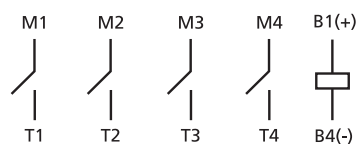
Coded products

	OKB 184	OK SFC UIC
48 Vdc	please contact us	-
72 Vdc	-	P01 4561 93
125 Vdc	please contact us	-

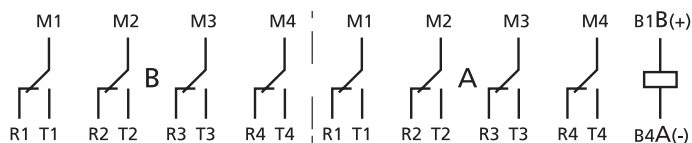
Wiring diagram



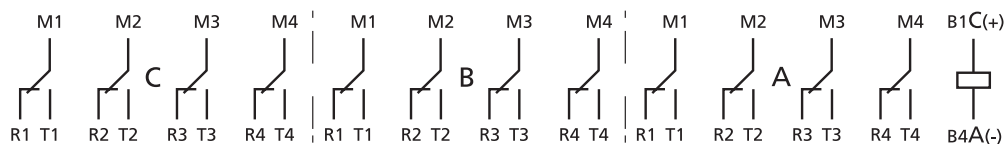
OK-OKS-OKFC-OKSFC-OKSCd-OKUIC-OKB184



OKSGcCd

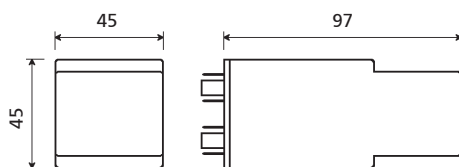


Version with 8 contacts



Version with 12 contacts

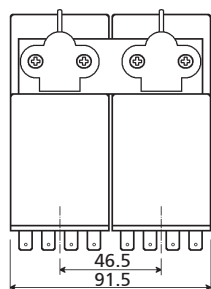
Dimensions



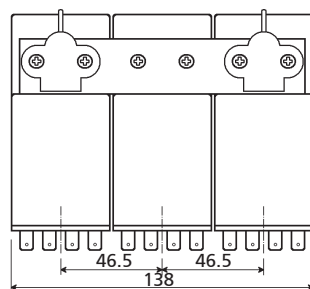
All OK d.c. relays and OKUIC
with Diode and/or Led option



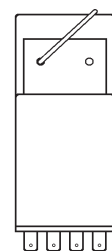
All a.c. OK and OKUIC relays



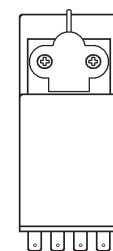
Version with 8 contacts



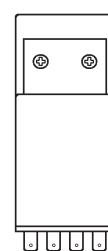
Version with 12 contacts



6B handle IP20
(standard)



6 handle IP40 ⁽¹⁾
(OKUIC)



Closure with
screws IP40 ⁽¹⁾

6 handle IP50 ⁽¹⁾

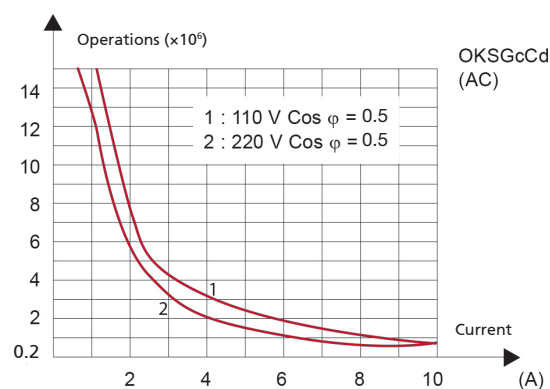
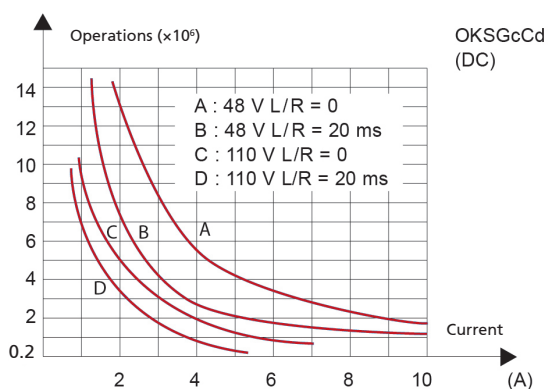
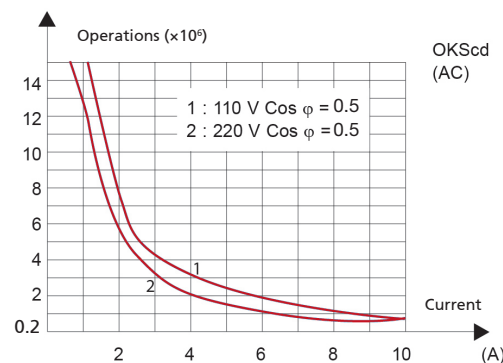
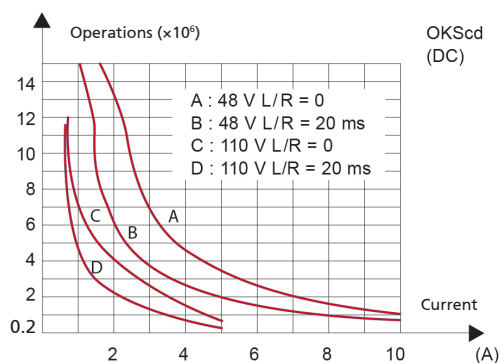
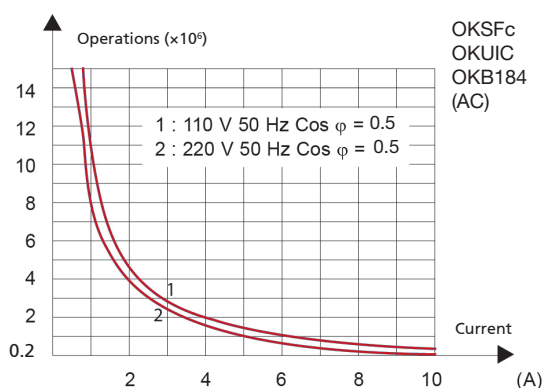
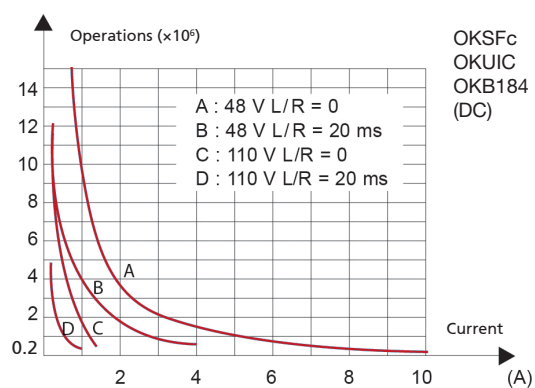
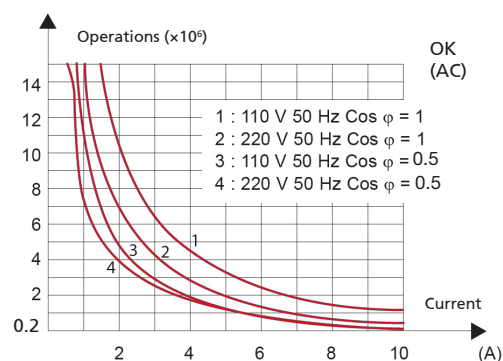
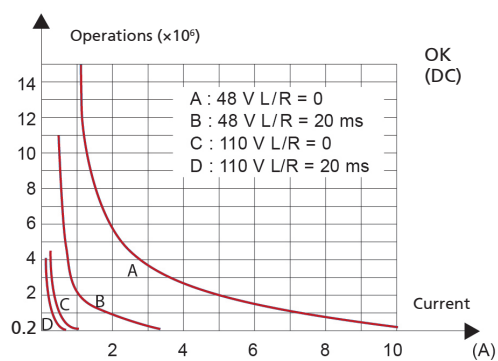
(1) IP40 or IP50 protection can requested as an option. See "Ordering scheme" for code details.

Examples of electrical life expectancy

	U (Contact)	I (A)	L/R (ms) cosφ	Operations	Notes		U (Contact)	I (A)	L/R (ms) cosφ	Operations	Notes
OK	540 Vac	3	cosφ = 0.5	15,000	②	OKFC	220 Vac	10	cosφ = 0.7	500,000	
	380 Vac	15	cosφ = 1	10,000	②		110 Vdc	0.5	L/R = 5	1,000,000	
		10	cosφ = 1	200,000			80 Vdc	1	L/R = 0	2,000,000	
		3x3.3	cosφ = 0.8	200,000			48 Vdc	5	L/R = 0	1,000,000	
	220 Vac	20	cosφ = 1	20,000	② ②	OKSFC OKUIC	120 Vdc	15	L/R = 0	100	② ③ ②
		15	cosφ = 0.5	20,000				8	L/R = 0	2,000,000	
		10	cosφ = 1	400,000				6	L/R = 10	500,000	
		3x6	cosφ = 0.8	200,000				3	L/R = 10	100,000	
		5	cosφ = 1	1,500,000				1	L/R = 10	500,000	
		5	cosφ = 1	3,000,000							
		2.5	cosφ = 0.25	2,000,000							
		2	cosφ = 1	15,000,000							
1.25	cosφ = 1	30,000,000									
120 Vdc	1.5	L/R = 0	550,000		80 Vdc		25	L/R = 0	100	② ②	
48 Vdc	10 1.5	L/R = 0 L/R = 5	1,000,000 18,000,000				15	L/R = 20	100		
							10	L/R = 0	400,000		
						7.5	L/R = 0	1,500,000			
						5	L/R = 10	400,000			
OKS	400 Vdc	6	L/R = 10	100	③	OKSCd	400 Vdc	6	L/R = 10	100	③
	250 Vdc	15	L/R = 0	1,000	② ②		250 Vdc	15	L/R = 0	1,000	② ② ② ②
		3	L/R = 20	300,000				3	L/R = 20	300,000	
		1	L/R = 10	30,000				1	L/R = 10	30,000	
		0.1	L/R = 15	3,500,000				1	L/R = 0	1,000,000	
	120 Vdc	30	L/R = 0	100	③ ② ②		120 Vdc	20	L/R = 0	10,000	② ②
		20	L/R = 0	10,000				10	L/R = 10	1,000	
		10	L/R = 10	1,000				10	L/R = 0	300,000	
		10	L/R = 0	300,000				5	L/R = 10	60,000	
		5	L/R = 10	60,000				1	L/R = 40	500,000	
		2	L/R = 100	50,000				1	L/R = 10	1,000,000	
		1	L/R = 40	500,000							
1		L/R = 10	1,000,000								
48 Vdc	10 1.5	L/R = 0 L/R = 5	2,600,000 25,000,000			48 Vdc	10 3 1.5	L/R = 0 L/R = 30 L/R = 5	2,600,000 400,000 25,000,000		
24 Vdc	30	L/R = 50	200,000				24 Vdc	30	L/R = 50	200,000	④

Notes :

- ② 2 contacts connected in series
- ③ 3 contacts connected in series
- ② 2 contacts connected in parallel
- ③ 3 contacts connected in parallel
- ④ 4 contacts connected in parallel



(1) Switching frequency 1,200 operations/hour, 50% cycle.

Sockets	OK series, 4 CO ⁽¹⁾
For wall or rail mounting	
Spring clamp, wall or DIN H35 rail mounting	PAIR160
Screw, wall or DIN H35 rail mounting	48BIP20-I DIN
Screw, wall mounting	48BL
Double faston, wall mounting	48L
For flush mounting	
Double faston (4.8 × 0.8 mm)	ADF2
Screw	43IL
For mounting on PCB	
	65

1) For version with 8 and 12 contacts, assume 2 and 3 sockets respectively for each relay. In this instance, the mounting distance between centres of the sockets must be 45mm. The ADF socket cannot be used.

For more details, see specifications of mounting accessories.

Retaining clips Correspondence with sockets	OK series - $V_{supply} = V_{DC}$	OK series - $V_{supply} = V_{AC}$ OKUIC	OKUIC with LED / VR / DIODE
Number of clips per relay	1, 2 for version with 8-12 CO contacts	1, 2 for version with 8-12 CO contacts and OKUIC	2
SOCKET MODEL	CLIP MODEL		
For wall or rail mounting			
PAIR160, 48BIP20-I DIN, 48BL, 48L	RC48	RL48	RC48
For flush mounting			
ADF2	RC48	RL48	RC48
43IL ⁽¹⁾	RC43	RL43	RC43
For mounting on PCB			
65	RC43	RL43	RC43

(1) Insert the clip before fastening the socket on the panel.

Mounting tips

The preferred mounting position is on the wall, with the relay positioned horizontally in the reading direction on the nameplate. For correct use of the relays, they should be spaced apart by at least 5 mm in the horizontal direction and 20 mm in the vertical direction. This is to allow correct upward dissipation of the heat generated by the coil. Set these distances according to the socket used. Distances can be reduced depending on the environmental application conditions and on the relay duty cycle. For safe and secure operation, it is advisable to use retaining clips. No special maintenance is required. Condensation can form inside the relay when powered up and the outside ambient temperature is cold; this is quite normal and does not affect the operation of the relay. The plastic materials of the relay do not possess hygroscopic properties.