

# DK series

## ■ Features

- Power relay specialized for controlling high-voltage equipment.
  - There are two types, direct mounting on case (panel or chassis) type and PCB mounting type.
  - For handling high-voltage, the contact circuit is equipped with a #250 tab terminal so that an insulated receptacle can be used.
- DK for type      ○ Ideal for switching the capacity of high-voltage capacitors corresponding to 50Hz/60Hz power frequency of microwave ovens.
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- DKH for type      ○ High insulation design  
                             Between coil and contact: AC5000V 1min  
                             Between open contact : AC5000V 1min
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- DKH-MG for type      ○ Compatible with maximum DC500V 30A cutoff  
                             ○ No mounting polarity on the contact side. (Compatible with charging/discharging.)

## ■ Model numbering system

DK or DKH       -     -  

Rated coil voltage: Numeric part indication	DC (V): 12, 17, 18, 24
Coil type	D: DC
Number of contact poles	1: 1 pole
Shape indication 1	O: PCB terminal F: Tab terminal (coil terminal: #187 tab terminal, contact terminal: #250 tab terminal), directly attached to panel or chassis
Contact configuration	(M): Make contact
Shape indication 2	MG: With magnet (DKH type only)

## ■ Safety standards

Electrical Appliances and Materials Safety Act	Conformable
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## ■ Coil ratings

AC / DC	Item Voltage	Rated current (mA)	Coil resistance (Ω)	Operate voltage (V)	Release voltage (V)	Maximum voltage (V)	Hold voltage (V)	Power consumption (W)
				Ratio to rated voltage				
DC	12	75	160	80% max.	10% min.	110%	※② 55% to 70% (DKH type only)	0.9 (Applied coil voltage 100%)
	17	51.5	330	※① 150% to 250% (Applied time 0.3 to 1s)				0.27 (Applied coil voltage 55%, DKH type only)
	18	50	360	DKH type only double voltage operation.				
	24	37.5	640					

- Notes: 1. Rated current and coil resistance are values at coil temperature of 20°C, tolerance is ±10%.
- 2. Operate voltage and release voltage are values at coil temperature of 20°C.
- 3. Maximum voltage is the maximum value of the allowable voltage fluctuation range of the relay coil operating power supply with the ambient temperature at 20°C.
- 4. For the DKH type, be sure to use the holding voltage of ※② after double voltage operation of ※①.
- 5. For the DKH type, please use a varistors to absorb surges from the coil.  
Please note that if a diode is used, the release time will be longer and the performance will not be guaranteed.

### ※Barista selection guideline

Varistor voltage: 1.5 times or more of coil rated voltage.

Please note that setting the varistor voltage high will affect the surge absorption effect.