

Power PCB Relay EK

- 1 pole 16A, 1 form A (NO) contact, DC coil
- 5kV coil-contact dielectric voltage
- .187 quick connect terminals

Typical applications
Micro wave oven, washing machines



Approvals

UL E82292, TUV R50131044, CQC 08001024844
Technical data of approved types on request

Contact Data

Contact arrangement	1 form A (NO)
Rated voltage	250VAC
Max. switching voltage	250VAC
Rated current	16A
Limiting continuous current	16A
Limiting making current	16A
Limiting breaking current	16A
Contact material	AgSnO ₂
Min. recommended contact load	100mA at 5VDC
Frequency of operation	600 ops./h
Operate/release time max.	10/5ms
Electrical endurance	16A 250VAC res, -40°C to +85°C, 100x10 ³ ops.
Mechanical endurance, DC coil	10x10 ⁶ operations

Coil Data

Coil voltage range	5 to 48VDC
Operative range, IEC 61810	2
Max. coil power	130% of rated power
Max. coil temperature	155°C
Coil insulation system according UL	Class F

Coil Data (continued)

Coil versions, DC coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance $\Omega \pm 10\%$	Rated coil power mW
005	5	3.75	0.25	50	500
006	6	4.50	0.30	72	500
009	9	6.75	0.45	162	500
012	12	9.00	0.60	288	500
018	18	13.50	0.90	648	500
024	24	18.00	1.20	1150	500
048	48	36.00	2.40	4608	500

All figures are given for coil without pre-energization, at ambient temperature +23°C

Insulation Data

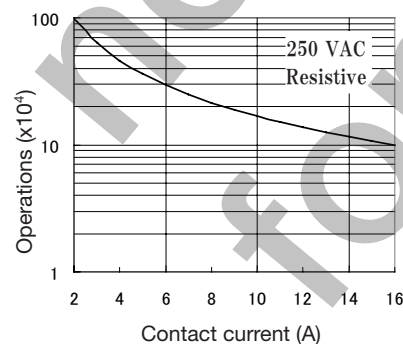
Initial dielectric strength	
between open contacts	1000V _{rms}
between contact and coil	4000V _{rms}
Clearance/creepage	
between contact and coil	>6.3/7.4mm

Other Data

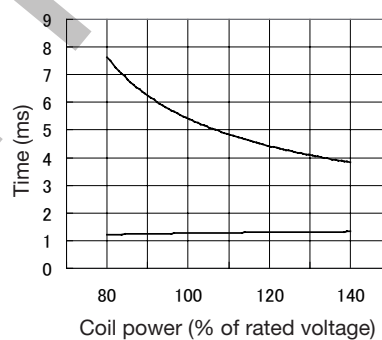
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter

Ambient temperature	-40 to 85°C
Category of environmental protection	RTII - flux proof
IEC 61810	
Shock resistance (functional)	10g
Shock resistance (destructive)	100g

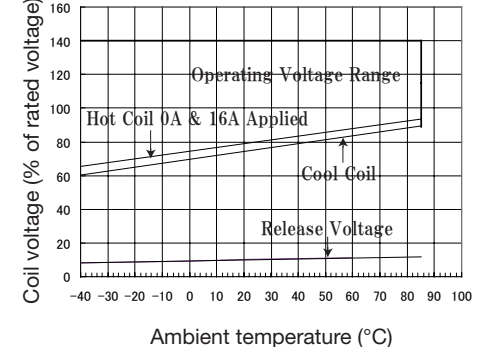
Electrical endurance



Operate time



Coil operative range



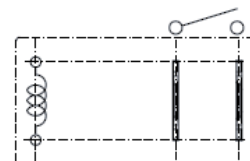
Power PCB Relay EK (Continued)

Other Data (continued)

Terminal type	PCB-THT, quick connect
Weight	13g
Resistance to soldering heat	THT
IEC 60068-2-20	RTIL: 270°C/10s
Packaging unit	tray/50 pcs., carton box/500 pcs.

Terminal assignment

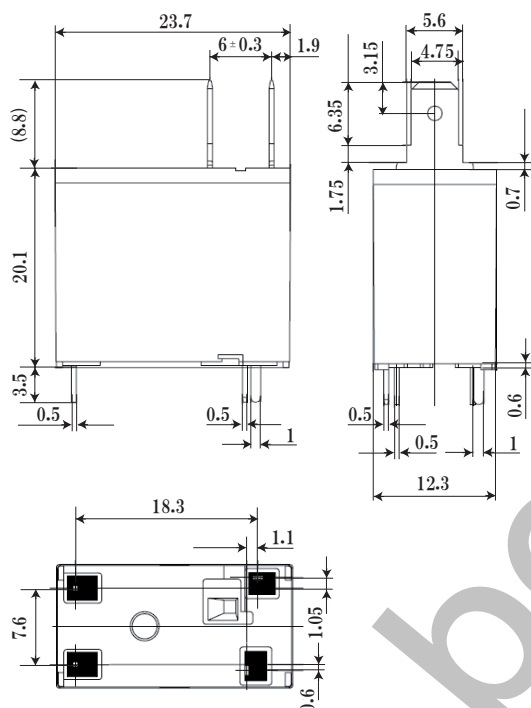
Bottom view on solder pins



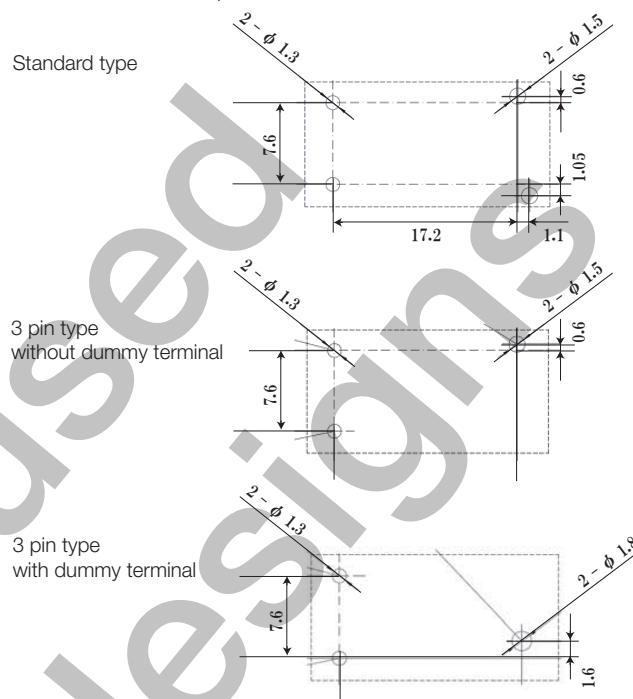
PCB layout

Bottom view on solder pins

Dimensions



Standard type



Product code structure

Typical product code

EK	00	-1A	3	-D	012
----	----	-----	---	----	-----

Type

EK Power PCB Relay **EK**

Version

00 Standard

01 3 pins, without dummy terminal

02 3 pins, with dummy terminal

Contact arrangement

1A 1 form A (NO) contact

Contact material

3 AgSnO_2

Coil input

D Standard

Coil voltage

Coil code: please refer to coil versions table (e.g. 05=5VDC)

Category protection

0 Flux proof

Blank Flux proof

Product code	Version	Arrangement	C.material	Coil input	Coil voltage	Enclosure	Part number
EK00-1A3-D005	Standard	1 form A (NO)	AgSnO	Standard	5VDC	Flux proof	1649741-1
EK00-1A3-D012	3 pins w/o dummy terminal 3 pins with dummy terminal				12VDC		1649741-4
EK00-1A3-D024					24VDC		1649741-6
EK01-1A3-D012					12VDC		1649742-4
EK02-1A3-D012							1649743-4