

K10 Series Miniature Relay

- 2 Form C contact arrangement
- AC and DC coils
- Socket, PCB and top flange mounting options

Typical applications
Industrial controls, medical, motor controls



Approvals

UL E22575; CSA L15734
Technical data of approved types on request

Contact Data

| | |
|-------------------------------|---|
| Contact arrangement | 2 form C (CO), 2 from A (NO), 2 form B (NC), 1 form A (NO) + 1 form B (NC) |
| Rated voltage | 120VAC |
| Rated current | 15A |
| Contact material | Ag, AgCdO, AgSnInO |
| Min. recommended contact load | |
| Ag contacts | 100mA, 12VDC |
| AgCdO and AgSnInO contacts | 300mA, 12VDC |
| Initial contact resistance | 100mΩ |
| Frequency of operation | 360 ops./hour |
| Operate/release time max. | 13/10 ms |
| Bounce time max. | 10ms |

Contact ratings

| Type | Load | Operations |
|----------------------|------------------------|-------------------------------|
| UL 508 | | |
| Ag | 10A, 30VDC | 6x10 ³ |
| | 10A, 277VAC | 6x10 ³ |
| AgCdO | 15A, 120VAC | 100x10 ³ |
| | 10A, 277VAC | 100x10 ³ |
| | 15A, 30VDC | 100x10 ³ |
| | 15 FLA, 36 LRA, 120VAC | 100x10 ³ |
| | 1/3HP, 120VAC | 1x10 ³ |
| AgSnInO | 1/2HP, 250VAC | 1x10 ³ |
| | 15A, 240VAC | 70x10 ³ |
| Mechanical endurance | | 10x10 ⁶ operations |

Coil Data

| | |
|-------------------------------------|----------------------------|
| Coil voltage range | 6 to 110VDC 6 to 240VAC |
| Coil insulation system according UL | Class B |

Coil versions, DC coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-----------------------|---------------------|
| 006 | 6 | 4.5 | 0.6 | 40 | 900 |
| 012 | 12 | 9.0 | 1.2 | 160 | 900 |
| 024 | 24 | 18.0 | 2.4 | 650 | 900 |
| 048 | 48 | 36.0 | 4.8 | 2600 | 900 |
| 110 | 110 | 82.5 | 11.0 | 11000 | 1100 |

All figures are given for coil without preenergization, at ambient temperature +23°C.

Coil Data (continued)

Coil versions, AC coil

| Coil code | Rated voltage VAC | Operate voltage VAC | Release voltage VAC | Coil resistance Ω±15% | Rated coil power VA |
|-----------|-------------------|---------------------|---------------------|-----------------------|---------------------|
| 006 | 6 | 5.1 | 0.6 | 10.5 | 1.20 |
| 012 | 12 | 10.2 | 1.2 | 43 | 1.20 |
| 024 | 24 | 20.4 | 2.4 | 160 | 1.25 |
| 048 | 48 | 40.8 | 4.8 | 668 | 1.25 |
| 120 | 120 | 102.0 | 12.0 | 3900 | 1.35 |
| 240 | 240 | 204.0 | 24.0 | 12000 | 1.50 |

All figures are given for coil without preenergization, at ambient temperature +23°C, 60Hz.

Insulation Data

| | |
|---------------------------------|------------------|
| Initial dielectric strength | |
| between open contacts | 1000Vrms |
| between contact and coil | 1500Vrms |
| between adjacent contacts | 1500Vrms |
| between coil and frame | 1500Vrms |
| Initial surge withstand voltage | |
| between adjacent contacts | 1000MΩ at 500VDC |

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 | -45°C to 70°C |
| Category of environmental protection | IEC 61810 |
| | RT0 - open relay RTI - dust protected |
| Terminal type | quick connect (QC) .187 PCB .120" and .160" long |
| Weight | 51g |
| Packaging/unit | box/250 pcs., tray/50 pcs. |

Accessories

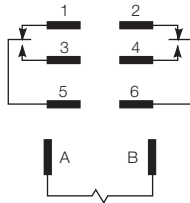
For details see datasheet Sockets and Accessories, K10 Relays

| Product Code | Description |
|--------------|----------------------------|
| 27E895 | DIN socket |
| 27E487 | Track mount socket |
| 20C426 | Clip for 27E895 and 27E487 |
| 27E488 | Chassis/solder socket |
| 27E489 | PCB socket |
| 20C217 | Clip for 27E488 and 27E489 |

K10 Series Miniature Relay (Continued)

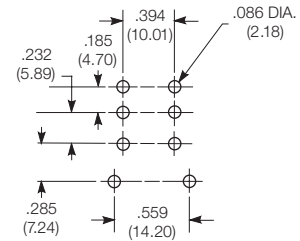
Terminal assignment

2 Form C
2 Form A (delete 1 and 2)
2 Form B (delete 3 and 4)



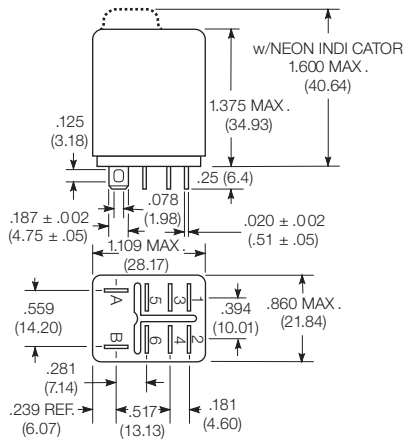
PCB layout

Bottom view on solder pins

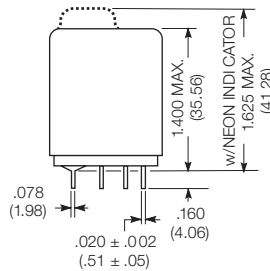


Dimensions

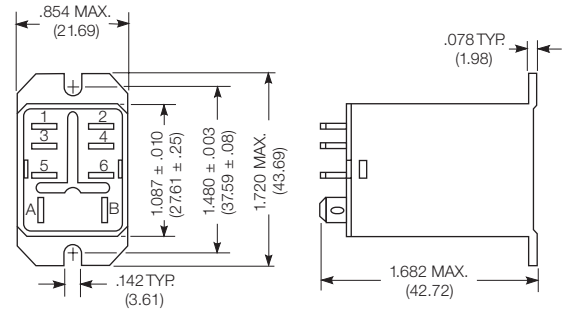
Mounting code 1
Socket mount



Mounting code 5
Printed circuit terminals



Mounting code T
Flange mount



Product code structure

Typical product code **K10 P -11 D 1 5 -6**

| | | | | | | |
|-----------------------------------|---|--|-----------------|--|--------------------------------------|--|
| Type | K10 15A Miniature Relay, K10 Series | | | | | |
| Cover | P Polycarbonate (smoke color) L Neon or LED, polycarbonate dust cover (smoke color) Option without cover (open style) on request | | | | | |
| Contact arrangement | 7 2 form A (NO) | | 8 2 form B (NC) | | 50 1 form A and 1 form B (NO and NC) | |
| Coil input | A 50/60Hz AC | | D DC | | | |
| Mounting & termination | 1 Socket mount; .187" (4.75mm) quick connect/solder terminals 5 Printed circuit terminals; .160" (4.1mm) length. T Mounting bracket on end of cover; .187" (4.75mm) quick connect/solder terminals Options with mounting plates on narrow side or on end cover and shorter (.120" (3.05mm)) PCB terminals on request | | | | | |
| Contact type | 1 Ag (10A) | | 5 AgCdO (15A) | | P AgSnIn (15A) | |
| Coil voltage | Coil code: please refer to coil versions table | | | | | |

K10 Series Miniature Relay (Continued)

| Product Code | Arrangement | Cont. material | Coil | Coil | Terminals | Mounting | Part number | |
|----------------|----------------|----------------|---------|--------|--------------------|----------|-------------|-------------|
| K10P-11A15-6 | 2 form C, 2 CO | AgCdO | AC coil | 6VAC | Quick connect (QC) | Socket | 4-1393144-4 | |
| K10P-11A15-12 | | | | 12VAC | | | 3-1393144-9 | |
| K10P-11A15-24 | | | | 24VAC | | | 4-1393144-1 | |
| K10P-11AT5-24 | | | | | | | Bracket | 3-1393144-5 |
| K10P-11A15-120 | | | | 120VAC | | | Socket | 4-1393144-0 |
| K10P-11AT5-120 | | | | | | | Bracket | 3-1393144-3 |
| K10P-11D15-6 | | | DC coil | | 6VDC | | Socket | 6-1393144-0 |
| K10P-11D15-12 | | | | 12VDC | 5-1393144-5 | | | |
| K10P-11DT5-12 | | | | | Bracket | | 5-1393144-0 | |
| K10P-11D15-24 | | | | 24VDC | Socket | | 5-1393144-7 | |
| K10P-11DT5-24 | | | | | Bracket | | 5-1393144-1 | |
| K10P-11D15-48 | | | | 48VDC | Socket | | 5-1393144-9 | |
| K10P-11D15-110 | | | | 110VDC | | | 5-1393144-4 | |
| K10P-11D55-12 | | | | 12VDC | PCB | | PCB | 6-1393144-6 |
| K10P-11D55-24 | 24VDC | 6-1393144-8 | | | | | | |
| K10P-11D55-110 | 110VDC | 6-1393144-5 | | | | | | |