

K10P-11A15-24 Product Details




K10P-11A15-24

TE Internal Number: 4-1393144-1



Industrial Relays (General Purpose)

 [Converted to EU RoHS but not ELV Compliant](#)
(Statement of Compliance)

Product Highlights:

- K10 Series
- Contact - Current Class = 5A to 10A Class, Less Than 16A
- Contact - Rated Current = 10 A
- Terminal Type = Plug-in, Quick Connect, Solder
- Contact - Arrangement = 2 Form C (CO)

Documentation & Additional Information

Product Drawings:

- None Available

Catalog Pages/Data Sheets:

- [K10 15 Amp General Purpose Miniature Relay \(PDF, English\)](#)

Product Specifications:

- None Available

Application Specifications:

- None Available

Instruction Sheets:

- None Available

CAD Files: (CAD Format & Compression Information)

- [2D Drawing \(DXF, Version B\)](#)
- [3D Model \(IGES, Version B\)](#)
- [3D Model \(STEP, Version B\)](#)

Additional Information:

- [Product Line Information](#)

Additional Product Images:

- [Schematic](#)
- [PCB Layout](#)
- [Wiring Diagram](#)

Related Products:

- [Tooling](#)

Product Features (Please use the Product Drawing for all design activity)

Product Type Features:

- [Series](#) = K10
- Terminal Type = Plug-in, Quick Connect, Solder

Electrical Characteristics:

- Contact - Current Class = 5A to 10A Class, Less Than 16A
- [Contact - Rated Current \(A\)](#) = 10
- Contact - Limiting Continuous Current (A) = 10
- Contact - Limiting Making Current (A) = 10
- Contact - Limiting Breaking Current (A) = 10
- Insulation - Initial Dielectric Between Coil/Contact Class = 1000V to 1500VA Class
- Insulation - Initial Dielectric Between Open Contacts (V rms) = 1000
- Insulation - Initial Dielectric Between Contacts and Coil (V rms) = 1500
- Contact - Rated Voltage (VAC) = 120
- Contact - Limiting Short-Time Current (A) = 10
- Contact - Switching Recommended Load, Min. = 100mA at 12V
- Coil - Rated Voltage (VAC) = 24
- [Coil - Resistance \(Ω\)](#) = 160
- [Coil - Rated Power, AC \(VA\)](#) = 1.00
- Coil - Rated Power Class = 1.0VA to 2.0VA Class
- Insulation - Initial Dielectric Between Adjacent Contacts (V rms) = 1500
- Insulation - Initial Insulation Resistance (MΩ) = 1000000

Dimensions:

- Mechanical - Length Class = 25mm to 30mm Class
- Length (mm [in]) = 28.20 [1.111]
- Mechanical - Width Class = 20mm to 25mm Class
- Width (mm [in]) = 21.80 [0.858]
- Mechanical - Height Class = 30mm to 40mm Class
- Height (mm [in]) = 34.90 [1.374]

Body Features:

- Mount Type = Socket
- Weight (g [oz]) = 51.00 [1.799]

Contact Features:

- Contact Material = Ag
- Contact - Number of Poles = 2

Configuration Features:

- [Contact - Arrangement](#) = 2 Form C (CO)
- [Coil - Magnetic System](#) = Monostable, AC
- Coil - Special Features = UL Coil Insulation Class B

Industry Standards:

- [RoHS/ELV Compliance](#) = RoHS/Not ELV Compliant
- [Lead Free Solder Processes](#) = Not relevant for lead free process
- RoHS/ELV Compliance History = Converted to comply with RoHS not ELV directives
- Approved/Registered Standards = UL, CSA

Environmental:

- Environmental - Category of Protection = RTI
- Environmental - Ambient Temperature, Max. (°C [°F]) = 70 [158]
- Environmental - Ambient Temperature Class = 50°C to 70°C Class

Packaging Features:

- Packaging Method = Tray

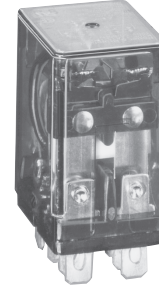
Other:

- Brand = Potter & Brumfield
- Accessories/Socket Type = Socket

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

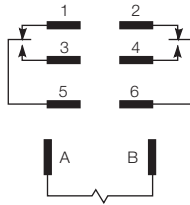
For details see datasheet Sockets and Accessories, K10 Relays

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)

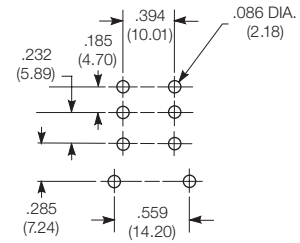
Terminal assignment

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



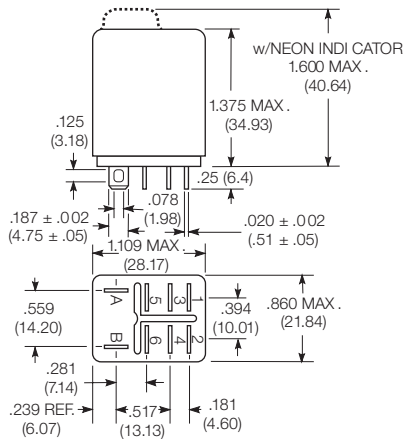
PCB layout

Bottom view on solder pins

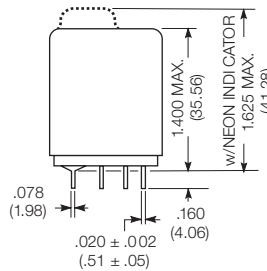


Dimensions

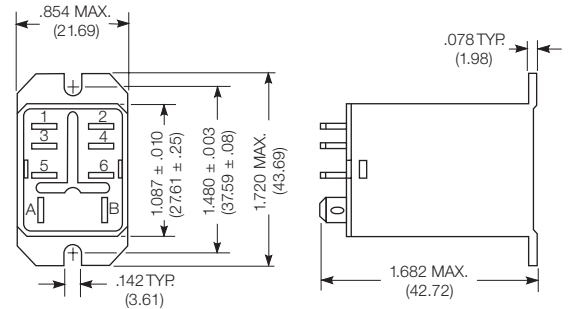
Mounting code 1
Socket mount



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)				
	11 2 form C (CO)		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						