

## K10P-11D55-24 Product Details




**K10P-11D55-24**

TE Internal Number: 6-1393144-8



### Industrial Relays (General Purpose)

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

#### Product Highlights:

- K10 Series
- Contact - Current Class = 10A to 20A Class, Less Than 16A
- Contact - Rated Current = 15 A
- Terminal Type = PCB-THT
- 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 = PCB-THT

#### Electrical Characteristics:

- Contact - Current Class = 10A to 20A Class, Less Than 16A
- [Contact - Rated Current \(A\)](#) = 15
- Contact - Limiting Continuous Current (A) = 15
- Contact - Limiting Making Current (A) = 15
- Contact - Limiting Breaking Current (A) = 15
- 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) = 15
- Contact - Switching Recommended Load, Min. = 300mA at 12V
- Coil - Rated Voltage (VDC) = 24
- [Coil - Resistance \(Ω\)](#) = 650
- [Coil - Rated Power, DC \(mW\)](#) = 900
- Coil - Rated Power Class = 800mW to 1000mW 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 = PCB
- Weight (g [oz]) = 51.00 [1.799]

#### Contact Features:

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

#### Configuration Features:

- [Contact - Arrangement](#) = 2 Form C (CO)
- [Coil - Magnetic System](#) = Monostable, DC
- 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

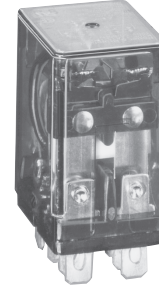
#### Other:

- Brand = Potter & Brumfield

**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
<b>UL 508</b>		
Ag	10A, 30VDC	6x10 <sup>3</sup>
	10A, 277VAC	6x10 <sup>3</sup>
AgCdO	15A, 120VAC	100x10 <sup>3</sup>
	10A, 277VAC	100x10 <sup>3</sup>
	15A, 30VDC	100x10 <sup>3</sup>
	15 FLA, 36 LRA, 120VAC	100x10 <sup>3</sup>
	1/3HP, 120VAC	1x10 <sup>3</sup>
AgSnInO	1/2HP, 250VAC	1x10 <sup>3</sup>
	15A, 240VAC	70x10 <sup>3</sup>
Mechanical endurance		10x10 <sup>6</sup> 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](http://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**

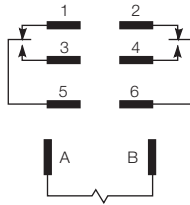
For details see datasheet                      Sockets and Accessories, K10 Relays

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)**

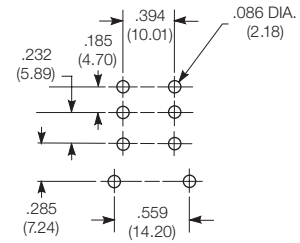
**Terminal assignment**

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



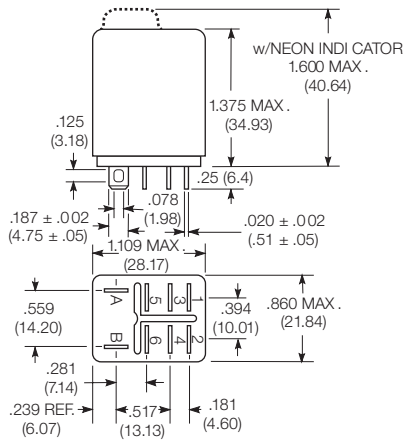
**PCB layout**

Bottom view on solder pins

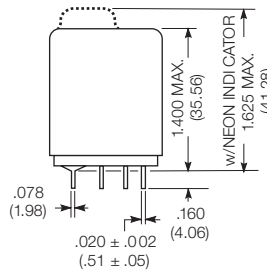


**Dimensions**

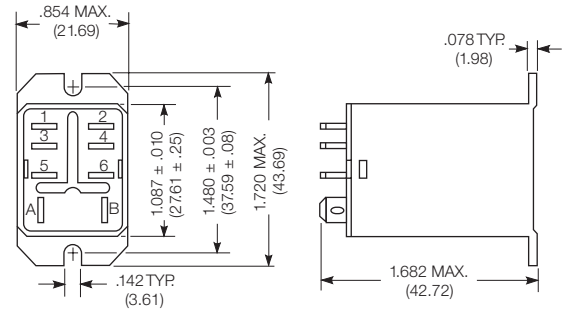
Mounting code 1  
Socket mount



Mounting code 5  
Printed circuit terminals



Mounting code T  
Flange mount



**Product code structure**

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

<b>Type</b>	K10 15A Miniature Relay, K10 Series					
<b>Cover</b>	P Polycarbonate (smoke color) L Neon or LED, polycarbonate dust cover (smoke color) Option without cover (open style) on request					
<b>Contact arrangement</b>	7 2 form A (NO)		8 2 form B (NC)		50 1 form A and 1 form B (NO and NC)	
<b>Coil input</b>	A 50/60Hz AC		D DC			
<b>Mounting &amp; termination</b>	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					
<b>Contact type</b>	1 Ag (10A)		5 AgCdO (15A)		P AgSnIn (15A)	
<b>Coil voltage</b>	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		PCB	6-1393144-6
K10P-11D55-24			24VDC					6-1393144-8
K10P-11D55-110			110VDC					6-1393144-5