



## Introducing High Voltage Pre-Charge Relays Mini K HV

TE Connectivity (TE) has been making and supporting relays around the world for almost 80 years selling approximately 1 billion each year to the automotive, aerospace, defense, marine and industrial markets. TE is leveraging its experience in the automotive and high-voltage industries to advance hybrid and electric mobility with safe, reliable, efficient solutions for hybrid, electric fuel cell vehicle batteries.

TE high voltage pre-charge relays are a cost-effective, safe, light-weight and reliable solution for pre-charging the DC high voltage power system in hybrid, full battery electric vehicles and fuel-cell vehicles.

High voltage pre-charge relays, Mini K HV, operates safely with two arc extinguishing magnets. Its small package and PCB mount or plug-in terminals make it an easy choice for voltage levels up to 450VDC and pre-charge currents and limiting break currents up to 20 Amps.



## High Voltage Pre-Charge Relay Mini K HV



### Mini K HV KEY FEATURES

- Safe - magnetic arc suppression
- Prevents contact welds
- Form X (NO DM) contact arrangement
- Suitable for voltage levels up to 450 VDC
- Pre-charge currents up to 20A
- Limiting break currents up to 20A
- Small package size - low profile
- Light weight
- Available with PCB mount and plug-in terminals
- Base product, Mini K relay, has been in the market for approx. 20 years

### TE Technical Support Center

Canada:	+1.905.470.4425
C. America:	+52.0.55.1106.0814
China:	+86.0.400.820.6015
France:	+33.0.1.3420.8686
Germany:	+49.0.6251.133.1999
Great Britain:	+44.0.8706.080208
India:	+91.80.285.40800
Japan:	+81.44.844.8111
Korea:	+82.2.3415.4500
Mexico:	+52.0.55.1106.0814
Netherlands:	+31.0.73.6246.999
South America:	+55.0.11.2103.6000
USA:	+1.800.522.6752

te.com

© 2012 Tyco Electronics Corporation,  
a TE Connectivity Ltd. Company. All Rights Reserved.  
3-1773464-9 GAD TB 4M 05/2012  
TE Connectivity, TE connectivity (logo) and AMP+are  
trademarks. Other logos, product and/or company names  
might be trademarks of their respective owners.

## APPLICATIONS

- DC high voltage pre-charge in hybrid, battery electric and fuel cell vehicles

## MECHANICAL

- Available in a PCB mount or plug-in configuration
- Mechanical endurance:  $> 10^7$  ops

## ELECTRICAL

- Contact arrangement: 1 form X (NO DM)
- Rated voltage: 450VDC
- Switching current - normal operation: 20A on / 0A off: min  $10^5$  ops.
- Switching current - fault break operation: 20A on / 20A off: min 10
- Nominal coil voltage: 12V

## STANDARDS AND SPECIFICATIONS

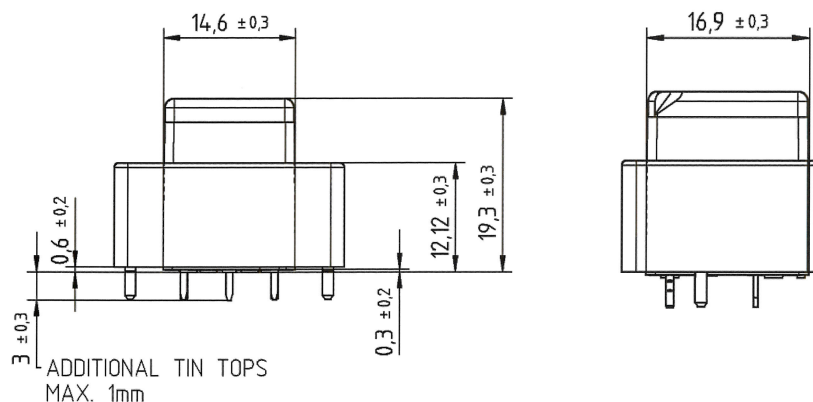
- RoHS
- UL94-HB
- IEC 60068

## AVAILABLE DATE

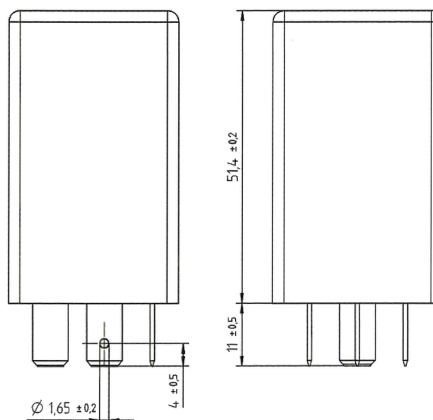
- Q4 2012

## PRODUCT DIMENSIONS

- PCB version



- Plug-in version



While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.