



# INTRODUCTION FLYER

## Power Relay F7 A Latching

TE Connectivity presents its first bistable automotive plug-in relay in the maxi class. The power relay F7 A latching is a bistable single-coil version realized with a permanent magnet. It expands the TE bistable relay portfolio with a plug-in version in the maxi class.

Bistable relays only need a short pulse of energy applied to the coil to change the switching state. It is not necessary for power to remain applied in order to maintain the switched state. Power consumption is very significantly reduced, especially for applications that must remain switched on over a long period of time. Power relay F7 A latching and other bistable relays offer several advantages over monostable (non-latching) variants. The decreased coil power requirement in bistable relays translates to reduced temperature rise. This means at the same ambient temperature a bistable relay can conduct higher continuous current than a monostable relay. If a bistable relay and a monostable relay are carrying equal continuous currents, the bistable relay may be used at higher ambient temperature. Additionally, the vehicle's energy consumption and thus the CO<sub>2</sub> emissions are considerably reduced.

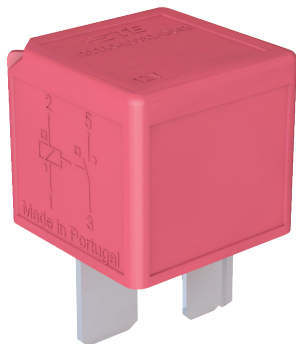
Given that relays consume up to 10% of a vehicle's electric power, the power relay F7 A latching offers considerable energy saving potential within the vehicle.



[www.te.com](http://www.te.com) • [relays.te.com](http://relays.te.com)  
<http://www.te.com/en/product-launch/f7-latching-relay.html>

 **TE** RELAY  
connectivity PRODUCTS

## Power Relay F7 A Latching



### KEY FEATURES

- Magnetically latched, ISO plug-in relay
- One coil with set and reset function
- Pin assignment similar to ISO 7588 part 1
- 60A continuous current at 85°C
- Customized versions available (color, parallel or serial components etc.)
- Mini version (40A with 6.3mm terminals) available on request

### MORE INFORMATION

Tyco Electronics AMP GmbH  
a TE Connectivity Ltd. company  
TE Relay Products  
AMPèstr. 12-14  
64625 Bensheim / Germany  
Phone: +49-(0)6251-133-0  
Fax: +49-(0)6251-133-1600

[www.te.com](http://www.te.com) • [relays.te.com](http://relays.te.com)  
<http://www.te.com/en/product-launch/f7-latching-relay.html>

#### Data Sheet Link

TE Connectivity (logo) and TE Connectivity are trademarks of the TE Connectivity group of companies and its licensors.

Other logos, product or company names mentioned herein may be trademarks of their respective owners.

Tyco Electronics AMP GmbH certified acc. ISO 14001 and ISO/TS 16949:2002

© 2012 Tyco Electronics AMP GmbH  
1308002-1 EVE 1 Issued 08-2012

### APPLICATIONS

- Cross carline, e.g.
  - Power outlet switch off
  - Start-stop
  - Energy management

### CONTACT DATA

- Contact arrangement: 1 form A (NO) contact
- Rated voltage: 12VDC
- Limiting continuous current: 80A at 23°C, 60A at 85°C, 35A at 125°C
- Limiting making/breaking current: 300/70A
- Limiting short-time current overload current, ISO 8820-3: 1.35 x 50A, 1800s; 2.00 x 50A, 5s; 3.50 x 50A, 0.5s; 6.00 x 50A, 0.1s
- Contact material: silver based
- Set/reset time: 2/1ms
- Mechanical endurance: >1x10<sup>7</sup> operations

### COIL DATA

- Magnetic system: bistable, single coil system
- Rated coil voltage/power: 12VDC
- Max. coil temperature: 155°C
- Polarity for set/reset energization: - pin 2, + pin 1/- pin 1, + pin 2

### INSULATION DATA

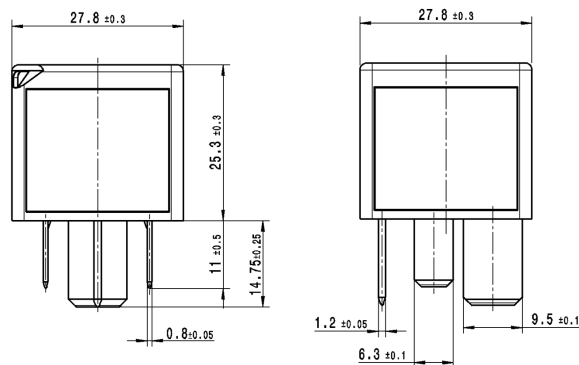
- Initial dielectric strength
  - between open contacts / contact and coil / adjacent contacts: 500Vrms

### OTHER DATA

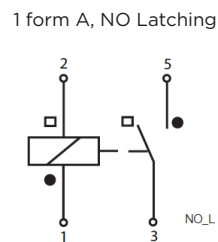
- Category of environmental protection, IEC 61810: RT1 – dustproof
- Degree of protection, IEC 60529: IP54 – dustproof
- Terminal type: Plug-in, quick connect

### DIMENSIONS AND TERMINAL ASSIGNMENT

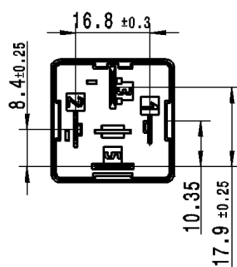
#### Dimensions



#### Terminal assignment



View of the terminals (bottom view)



While TE has made every reasonable effort to ensure the accuracy of the information in this product flyer, 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 product flyer 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.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)