



**THE DATASHEET OF
BK1/TDC180-13A**



TDC180

1/4" x 1.0" Fast/medium British plug top fuse



Product features

- 1/4" x 1.0" Fast/medium British plug top fuse
- Patent protected: GB2410626
- High breaking capacity
- 240 Vac rated voltage
- Designed to BS1362, IEC60269-3, GB13539.3, GB13539.5
- Ceramic tube fuse
- Single end cap construction
 - 1 A: Nickel-plated copper
 - 2 A - 5 A: Nickel-plated brass
 - 7 A: Silver-plated copper
 - 10 A - 13 A: Nickel-plated copper

Applications

Primary circuit protection:

- British/UK BS1363 plug top commonly used for, but not limited to,
 - Hairdryers
 - Microwaves
 - Blenders
 - Crock pots
 - Kettles
 - Toasters
 - Baby bottle warmers
 - Televisions
 - Computers
 - Lamps

Agency information

- ASTA: 658,
- CCC: 2003010308039745

Ordering

- Use ordering number (see page 6 for details)

Packaging prefixes

- Blank (10 parts in a plastic bag)
- BK- (100 parts in a plastic bag)
- BK1- (1000 parts in plastic bag and box)

Electrical characteristics

| I_n | 100% Rated Current | 160% Rated Current | 190% Rated Current |
|------------------|--------------------|--------------------|--------------------|
| TDC180-1A - 13 A | 1000 hours minimum | 30 minutes minimum | 30 minutes maximum |

Product specifications

| Part number ⁴ | Current rating (A) | Voltage rating (V _{AC}) | Interuppting rating ¹ at 50 Hz and rated voltage (A) | Typical DC cold resistance ² (mΩ) | Typical pre-arcing ³ I ² t (A ² s) | Maximum power dissipation (W) | Print color | Agency approvals | |
|--------------------------|--------------------|-----------------------------------|---|--|---|-------------------------------|-------------|------------------|-----|
| | | | | | | | | ASTA | CCC |
| TDC180-1A | 1.0 | 240 | 6000 | 169 | 0.9 | 1.0 | Black | | X |
| TDC180-2A | 2.0 | 240 | 6000 | 105.6 | 9.1 | 1.0 | Black | X | X |
| TDC180-3A | 3.0 | 240 | 6000 | 44.4 | 34.3 | 1.0 | Red | X | X |
| TDC180-5A | 5.0 | 240 | 6000 | 42.3 | 135 | 1.0 | Black | X | X |
| TDC180-7A | 7.0 | 240 | 6000 | 12.5 | 114 | 1.0 | Black | X | X |
| TDC180-10A | 10 | 240 | 6000 | 7.42 | 345 | 1.0 | Black | X | X |
| TDC180-13A | 13 | 240 | 6000 | 4.41 | 870 | 1.0 | Brown | X | X |

1. Breaking Capacity tested at 264 Vac, 50 Hz, Power factor (PF) 0.3-0.4

2. DC cold resistance measured at <10% of rated current at ambient temperature of +20 °C

3. Typical pre-arcing I²t measured at 10I_n and rated voltage

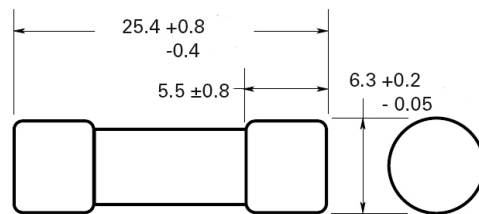
1. Part Number Definition: TDC180-xxA

TDC180 = Product code

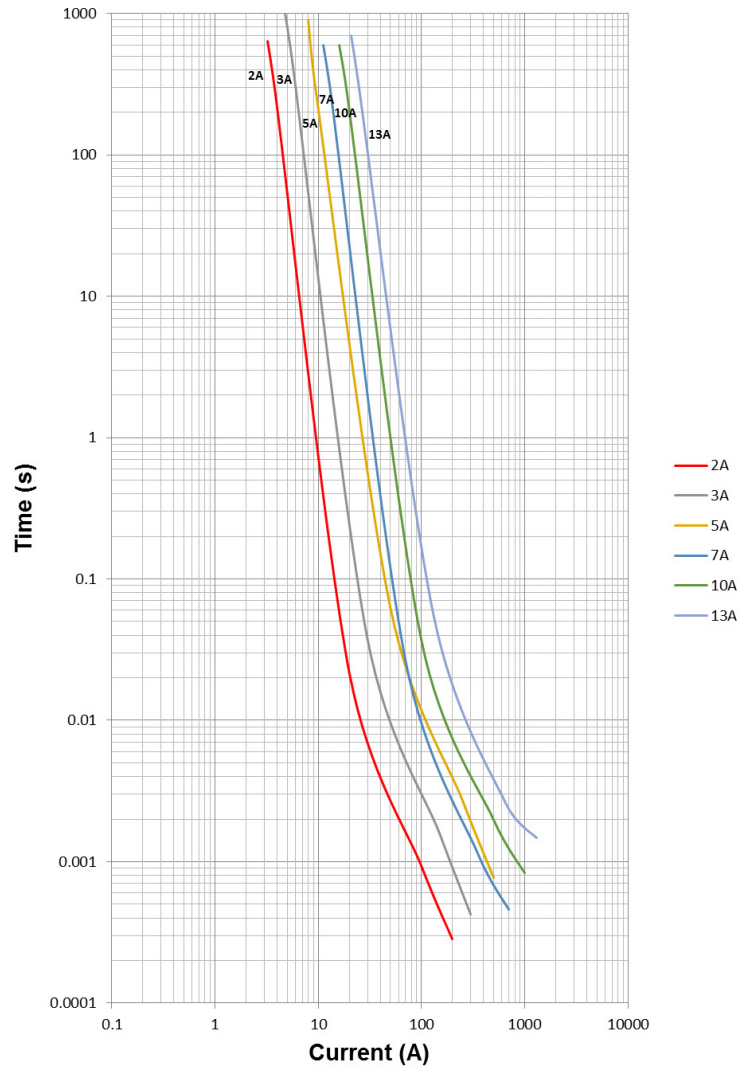
-xx = Ampere rating

-A = Ampere

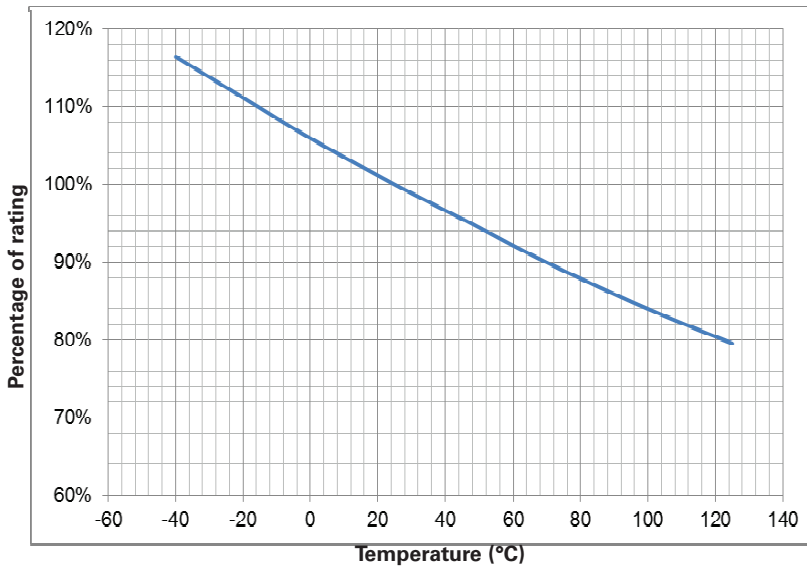
Dimensions—mm



Time vs. current curve



Temperature derating curve



Environmental data

Operating ambient temperature: -5 °C to +35 °C

Storage temperature: -5 °C to +35 °C

Temperature inside an enclosure: < 15k of ambient temperature

Altitude: < 2000 feet above sea level

Atmospheric conditions: 50% relative humidity at maximum temperature of +40 °C,

Frequency range: 45 Hz to 62 Hz

Ordering codes

The ordering code is the part number plus adding the packaging prefix.

Packaging suffixes

- Blank (10 parts in a plastic bag)
- BK- (100 parts in a plastic bag)
- BK1- (1000 parts in plastic bag and box)

| Part number | Ordering codes | | |
|-------------|----------------|---------------|----------------|
| | Blank option | BK- option | BK1- option |
| TDC180-1A | TDC180-1A | BK-TDC180-1A | BK1-TDC180-1A |
| TDC180-2A | TDC180-2A | BK-TDC180-2A | BK1-TDC180-2A |
| TDC180-3A | TDC180-3A | BK-TDC180-3A | BK1-TDC180-3A |
| TDC180-5A | TDC180-5A | BK-TDC180-5A | BK1-TDC180-5A |
| TDC180-7A | TDC180-7A | BK-TDC180-7A | BK1-TDC180-7A |
| TDC180-10A | TDC180-10A | BK-TDC180-10A | BK1-TDC180-10A |
| TDC180-13A | TDC180-13A | BK-TDC180-13A | BK1-TDC180-13A |

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