

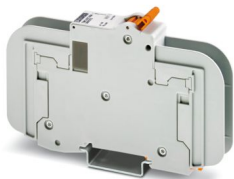
# TMC 81D 05A - Miniature Circuit Breaker



2907630

<https://www.phoenixcontact.com/us/products/2907630>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Thermal-magnetic Miniature Circuit Breaker, 1-position, use: Branch Circuit Protection (UL 489), for protection against overload with a breaking capacity of 10 kA, tripping characteristic: D, mounting type: NS 35/..., rated current: 5 A

## Your advantages

- Can be used worldwide due to international approvals
- Suitable for various grid types, as it is available in 1-, 2-, 3-pos. versions
- Ideally coordinated protection due to various tripping characteristics and a wide selection of nominal currents
- Reduced inventory because of suitability for AC and DC applications
- Optional accessories enable remote control and monitoring

## Commercial data

|                                      |               |
|--------------------------------------|---------------|
| Item number                          | 2907630       |
| Packing unit                         | 1 pc          |
| Minimum order quantity               | 1 pc          |
| Sales key                            | CL08          |
| Product key                          | CLA125        |
| GTIN                                 | 4055626215167 |
| Weight per piece (including packing) | 141 g         |
| Weight per piece (excluding packing) | 141 g         |
| Customs tariff number                | 85362010      |
| Country of origin                    | CN            |

# TMC 81D 05A - Miniature Circuit Breaker



2907630

<https://www.phoenixcontact.com/us/products/2907630>

## Technical data

### Product properties

|                         |                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------|
| Product type            | Circuit breakers                                                                                                       |
| Product family          | TMC 8                                                                                                                  |
| Type                    | DIN rail module, one-piece                                                                                             |
| Number of positions     | 1                                                                                                                      |
| Mechanical service life | 20000                                                                                                                  |
| Special properties      | Branch Circuit Protection (UL 489), for protection against overload with a breaking capacity of 10 kA Thermal-magnetic |

### Electrical properties

|                         |      |
|-------------------------|------|
| Service life electrical | 6000 |
|-------------------------|------|

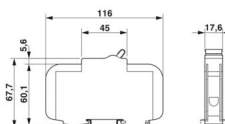
#### General

|                                                 |                                |
|-------------------------------------------------|--------------------------------|
| Operating voltage                               | 120 V AC (277 V AC)<br>60 V DC |
| Rated current $I_N$                             | 5 A                            |
| Tripping method                                 | TM (thermal-magnetic)          |
| Rated short-circuit switching capacity $I_{cn}$ | 10 kA (IC)                     |
| Fuse                                            | D                              |
| Contact switching type                          | none                           |

### Connection data

|                                       |                                          |
|---------------------------------------|------------------------------------------|
| Conductor cross-section rigid         | 1 mm <sup>2</sup> ... 35 mm <sup>2</sup> |
| Cross section AWG                     | 18 ... 2 (converted acc. to IEC)         |
| Conductor cross-section flexible      | 1 mm <sup>2</sup> ... 35 mm <sup>2</sup> |
| Connection method                     | Screw connection                         |
| Tightening torque, min                | 2 Nm                                     |
| Stripping length                      | 11 mm ... 12 mm                          |
| Conductor cross-section flexible max. | 35 mm <sup>2</sup>                       |
| Conductor cross-section, rigid max.   | 35 mm <sup>2</sup>                       |

### Dimensions

|                     |                                                                                      |
|---------------------|--------------------------------------------------------------------------------------|
| Dimensional drawing |  |
| Width               | 17.6 mm                                                                              |
| Height              | 116 mm                                                                               |
| Depth               | 75.9 mm (incl. DIN rail 7.5 mm)                                                      |

### Material specifications

|       |                       |
|-------|-----------------------|
| Color | light gray (RAL 7035) |
|-------|-----------------------|

# TMC 81D 05A - Miniature Circuit Breaker



2907630

<https://www.phoenixcontact.com/us/products/2907630>

|  |                 |
|--|-----------------|
|  | gray (RAL 7042) |
|--|-----------------|

## Environmental and real-life conditions

### Ambient conditions

|                                 |                                                                             |
|---------------------------------|-----------------------------------------------------------------------------|
| Ambient temperature (operation) | -35 °C ... 70 °C                                                            |
| Humidity test                   | 48 h, 95% RH, 40°C (IEC 60068-2-78)                                         |
| Shock (operation)               | 30g (11 ms) (IEC 60068-2-11)                                                |
| Vibration (operation)           | ±0.38 mm (10 Hz ... 57 Hz), 5g (57 Hz ... 500 Hz) (IEC 60068-2-6, Fc, sine) |

## Standards and regulations

|                          |             |
|--------------------------|-------------|
| Standards/specifications | UL 489      |
|                          | IEC 60947-2 |

## Mounting

|               |           |
|---------------|-----------|
| Mounting type | NS 35/... |
|---------------|-----------|

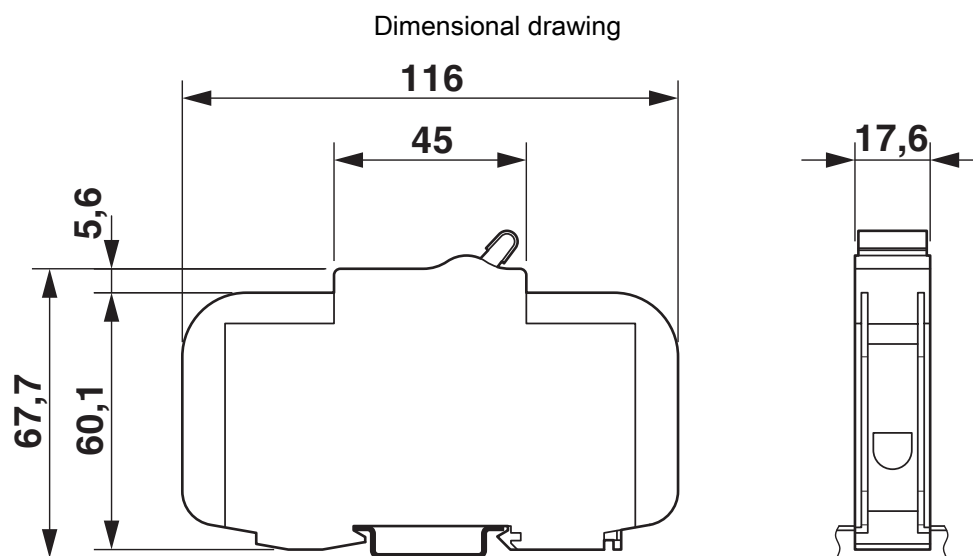
# TMC 81D 05A - Miniature Circuit Breaker

2907630

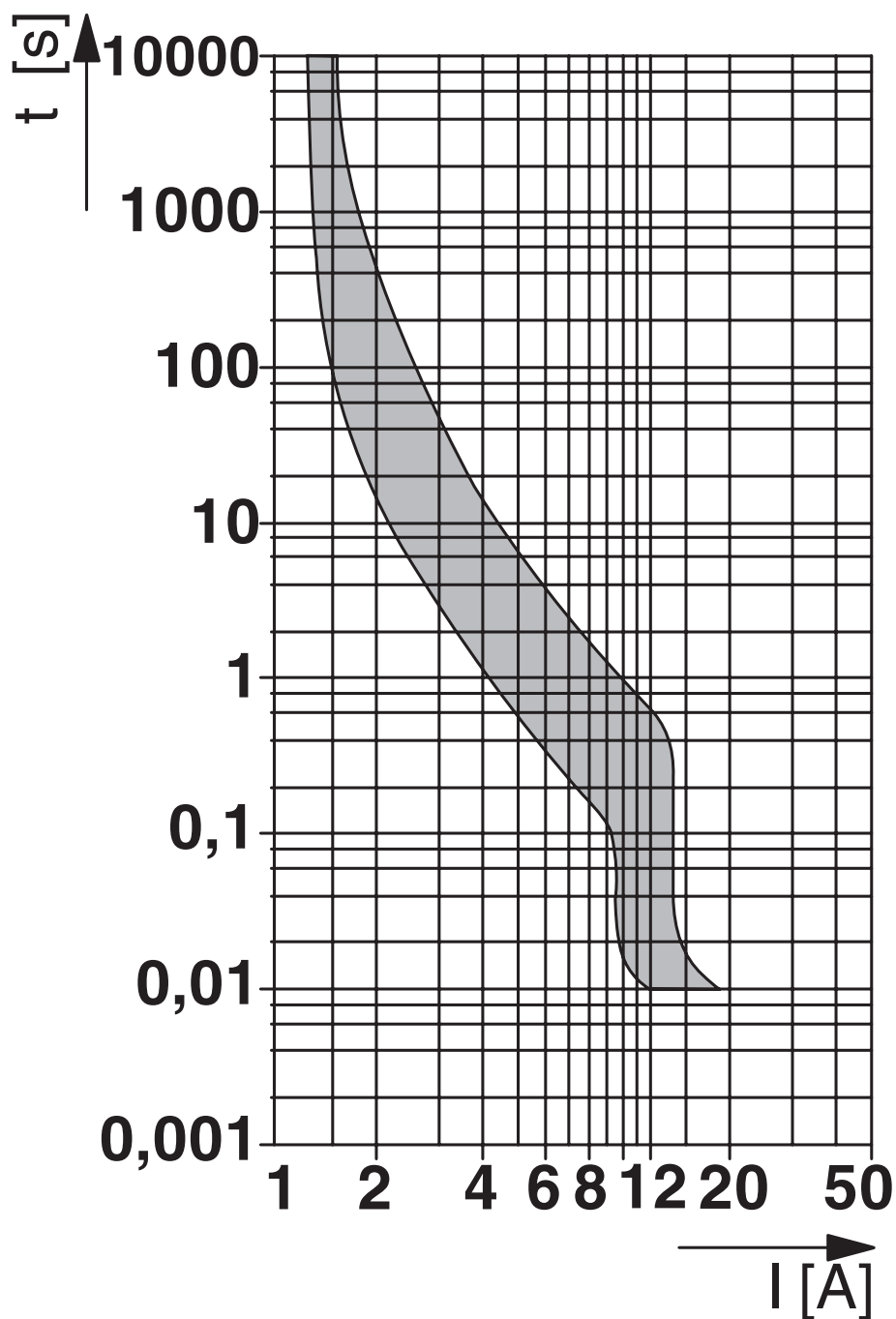
<https://www.phoenixcontact.com/us/products/2907630>



## Drawings



Diagram



# TMC 81D 05A - Miniature Circuit Breaker



2907630

<https://www.phoenixcontact.com/us/products/2907630>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2907630>



**UL Listed**

Approval ID: FILE E 320373



**cUL Listed**

Approval ID: FILE E 320373



**TÜV Rheinland**

Approval ID: R 50531587



**CCC**

Approval ID: 2024010307673885

# TMC 81D 05A - Miniature Circuit Breaker



2907630

<https://www.phoenixcontact.com/us/products/2907630>

## Classifications

### ECLASS

|             |          |
|-------------|----------|
| ECLASS-13.0 | 27140401 |
| ECLASS-15.0 | 27140401 |

### ETIM

|          |          |
|----------|----------|
| ETIM 9.0 | EC003538 |
|----------|----------|

### UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 21.0 | 39121410 |
|-------------|----------|

# TMC 81D 05A - Miniature Circuit Breaker



2907630

<https://www.phoenixcontact.com/us/products/2907630>

## Environmental product compliance

### EU RoHS

|                                         |                    |
|-----------------------------------------|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|-----------------------------------------|--------------------|

### China RoHS

|                                        |                                          |
|----------------------------------------|------------------------------------------|
| Environment friendly use period (EFUP) | EFUP-E                                   |
|                                        | No hazardous substances above the limits |

### EU REACH SVHC

|                                     |                            |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

Phoenix Contact 2025 © - all rights reserved

<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)