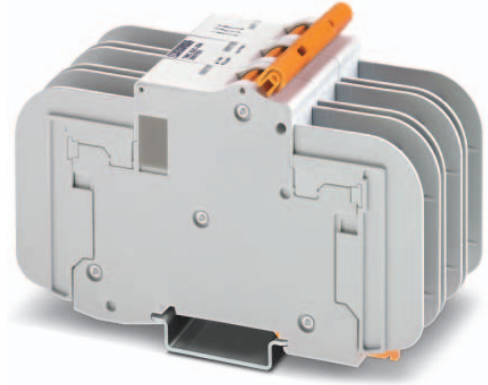


TMC 8...



Thermal magnetic UL 489 miniature circuit breakers



Data sheet
3644_en_A

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1 Description

TMC 8... miniature circuit breakers (MCB) are UL 489 listed and provide branch overload and short-circuit protection. An interrupt capacity of 10 kAIC at up to 277/480 V AC and 125 V DC makes the series ideal for a wide range of applications.

The circuit breakers are available in 1-, 2-, and 3-pole configurations with B, C, and D trip curve options. They are 17.6 mm wide (per pole) and mount on 35 mm NS35 rail. Available accessories include an auxiliary contact, bell alarm contact, shunt trips, lockout/tag out component and busbar. The TMC 8... is UL listed for the U.S. and Canada, TÜV listed, and carries the CE mark.

1.1 Typical applications

TMC 8... circuit breakers are suitable for protection of

- cables
- motors
- generators and transformers
- thyristors
- silicon rectifiers
- computers and peripheral equipment
- industrial process control systems
- telecommunications equipment
- power supplies.



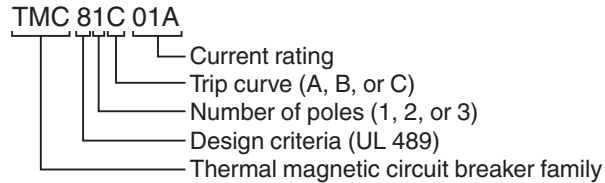
This document is valid for all products listed in the "Ordering data" on page 3.

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2 Ordering data

Order key



Products

| Description | Type | Order No. | Pcs./Pkt. |
|---|-------------|-----------|-----------|
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 1 A | TMC 81B 01A | 2907478 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 2 A | TMC 81B 02A | 2907479 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 3 A | TMC 81B 03A | 2907480 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 4 A | TMC 81B 04A | 2907481 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 5 A | TMC 81B 05A | 2907482 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 6 A | TMC 81B 06A | 2907483 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 7 A | TMC 81B 07A | 2907484 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 8 A | TMC 81B 08A | 2907485 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 10 A | TMC 81B 10A | 2907487 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 12 A | TMC 81B 12A | 2907488 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 13 A | TMC 81B 13A | 2907489 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 15 A | TMC 81B 15A | 2907490 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 16 A | TMC 81B 16A | 2907491 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 20 A | TMC 81B 20A | 2907492 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 25 A | TMC 81B 25A | 2907493 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 30 A | TMC 81B 30A | 2907494 | 1 |
| MCB, up to 60 V DC and 277 V AC, B curve 1-pole 32 A | TMC 81B 32A | 2907495 | 1 |
| MCB, up to 60 V DC and 120 V AC, B curve 1-pole 35 A | TMC 81B 35A | 2907496 | 1 |
| MCB, up to 60 V DC and 120 V AC, B curve 1-pole 40 A | TMC 81B 40A | 2907497 | 1 |
| MCB, up to 60 V DC and 120 V AC, B curve 1-pole 50 A | TMC 81B 50A | 2907498 | 1 |
| MCB, up to 60 V DC and 120 V AC, B curve 1-pole 60 A | TMC 81B 60A | 2907500 | 1 |
| MCB, up to 60 V DC and 120 V AC, B curve 1-pole 63 A | TMC 81B 63A | 2907501 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 1 A | TMC 82B 01A | 2907502 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 2 A | TMC 82B 02A | 2907503 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 3 A | TMC 82B 03A | 2907504 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 4 A | TMC 82B 04A | 2907505 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 5 A | TMC 82B 05A | 2907506 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 6 A | TMC 82B 06A | 2907507 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 7 A | TMC 82B 07A | 2907508 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 8 A | TMC 82B 08A | 2907510 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 10 A | TMC 82B 10A | 2907511 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 12 A | TMC 82B 12A | 2907512 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 13 A | TMC 82B 13A | 2907513 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 15 A | TMC 82B 15A | 2907514 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 16 A | TMC 82B 16A | 2907515 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 20 A | TMC 82B 20A | 2907516 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 25 A | TMC 82B 25A | 2907530 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 30 A | TMC 82B 30A | 2907531 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 2-pole 32 A | TMC 82B 32A | 2907532 | 1 |
| MCB, up to 125 V DC and 240 V AC, B curve 2-pole 35 A | TMC 82B 35A | 2907533 | 1 |

Products

| Description | Type | Order No. | Pcs./Pkt. |
|---|-------------|-----------|-----------|
| MCB, up to 125 V DC and 240 V AC, B curve 2-pole 40 A | TMC 82B 40A | 2907534 | 1 |
| MCB, up to 125 V DC and 240 V AC, B curve 2-pole 50 A | TMC 82B 50A | 2907535 | 1 |
| MCB, up to 125 V DC and 240 V AC, B curve 2-pole 60 A | TMC 82B 60A | 2907536 | 1 |
| MCB, up to 125 V DC and 240 V AC, B curve 2-pole 63 A | TMC 82B 63A | 2907537 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 1 A | TMC 83B 01A | 2907539 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 2 A | TMC 83B 02A | 2907540 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 3 A | TMC 83B 03A | 2907542 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 4 A | TMC 83B 04A | 2907543 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 5 A | TMC 83B 05A | 2907544 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 6 A | TMC 83B 06A | 2907545 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 7 A | TMC 83B 07A | 2907546 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 8 A | TMC 83B 08A | 2907547 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 10 A | TMC 83B 10A | 2907548 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 12 A | TMC 83B 10A | 2907549 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 13 A | TMC 83B 10A | 2907550 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 15 A | TMC 83B 10A | 2907551 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 16 A | TMC 83B 16A | 2907552 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 20 A | TMC 83B 20A | 2907553 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 25 A | TMC 83B 25A | 2907555 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 30 A | TMC 83B 30A | 2907556 | 1 |
| MCB, up to 125 V DC and 480 V AC, B curve 3-pole 32 A | TMC 83B 32A | 2907557 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 1 A | TMC 81C 01A | 2907558 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 2 A | TMC 81C 02A | 2907559 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 3 A | TMC 81C 03A | 2907560 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 4 A | TMC 81C 04A | 2907561 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 5 A | TMC 81C 05A | 2907562 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 6 A | TMC 81C 06A | 2907563 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 7 A | TMC 81C 07A | 2907564 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 8 A | TMC 81C 08A | 2907565 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 10 A | TMC 81C 10A | 2907566 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 12 A | TMC 81C 12A | 2907568 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 13 A | TMC 81C 13A | 2907569 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 15 A | TMC 81C 15A | 2907571 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 16 A | TMC 81C 16A | 2907572 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 20 A | TMC 81C 20A | 2907573 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 25 A | TMC 81C 25A | 2907574 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 30 A | TMC 81C 30A | 2907575 | 1 |
| MCB, up to 60 V DC and 277 V AC, C curve 1-pole 32 A | TMC 81C 32A | 2907576 | 1 |
| MCB, up to 60 V DC and 120 V AC, C curve 1-pole 35 A | TMC 81C 35A | 2907577 | 1 |
| MCB, up to 60 V DC and 120 V AC, C curve 1-pole 40 A | TMC 81C 40A | 2907578 | 1 |
| MCB, up to 60 V DC and 120 V AC, C curve 1-pole 50 A | TMC 81C 50A | 2907579 | 1 |
| MCB, up to 60 V DC and 120 V AC, C curve 1-pole 60 A | TMC 81C 60A | 2907580 | 1 |
| MCB, up to 60 V DC and 120 V AC, C curve 1-pole 63 A | TMC 81C 63A | 2907581 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 1 A | TMC 82C 01A | 2907582 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 2 A | TMC 82C 02A | 2907584 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 3 A | TMC 82C 03A | 2907585 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 4 A | TMC 82C 04A | 2907586 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 5 A | TMC 82C 05A | 2907587 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 6 A | TMC 82C 06A | 2907588 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 7 A | TMC 82C 07A | 2907589 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 8 A | TMC 82C 08A | 2907590 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 10 A | TMC 82C 10A | 2907591 | 1 |

Products

| Description | Type | Order No. | Pcs./Pkt. |
|---|-------------|-----------|-----------|
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 12 A | TMC 82C 12A | 2907592 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 13 A | TMC 82C 13A | 2907593 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 15 A | TMC 82C 15A | 2907594 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 16 A | TMC 82C 16A | 2907595 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 20 A | TMC 82C 20A | 2907597 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 25 A | TMC 82C 25A | 2907598 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 30 A | TMC 82C 30A | 2907599 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 2-pole 32 A | TMC 82C 32A | 2907600 | 1 |
| MCB, up to 125 V DC and 240 V AC, C curve 2-pole 35 A | TMC 82C 35A | 2907601 | 1 |
| MCB, up to 125 V DC and 240 V AC, C curve 2-pole 40 A | TMC 82C 40A | 2907602 | 1 |
| MCB, up to 125 V DC and 240 V AC, C curve 2-pole 50 A | TMC 82C 50A | 2907603 | 1 |
| MCB, up to 125 V DC and 240 V AC, C curve 2-pole 60 A | TMC 82C 60A | 2907604 | 1 |
| MCB, up to 125 V DC and 240 V AC, C curve 2-pole 63 A | TMC 82C 63A | 2907605 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 1 A | TMC 83C 01A | 2907607 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 2 A | TMC 83C 02A | 2907608 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 3 A | TMC 83C 03A | 2907609 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 4 A | TMC 83C 04A | 2907610 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 5 A | TMC 83C 05A | 2907611 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 6 A | TMC 83C 06A | 2907612 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 7 A | TMC 83C 07A | 2907613 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 8 A | TMC 83C 08A | 2907614 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 10 A | TMC 83C 10A | 2907615 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 12 A | TMC 83C 12A | 2907616 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 13 A | TMC 83C 13A | 2907617 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 15 A | TMC 83C 15A | 2907618 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 16 A | TMC 83C 16A | 2907620 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 20 A | TMC 83C 20A | 2907621 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 25 A | TMC 83C 25A | 2907623 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 30 A | TMC 83C 30A | 2907624 | 1 |
| MCB, up to 125 V DC and 480 V AC, C curve 3-pole 32 A | TMC 83C 32A | 2907625 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 1 A | TMC 81D 01A | 2907626 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 2 A | TMC 81D 02A | 2907627 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 3 A | TMC 81D 03A | 2907628 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 4 A | TMC 81D 04A | 2907629 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 5 A | TMC 81D 05A | 2907630 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 6 A | TMC 81D 06A | 2907631 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 7 A | TMC 81D 07A | 2907632 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 8 A | TMC 81D 08A | 2907633 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 10 A | TMC 81D 10A | 2907634 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 12 A | TMC 81D 12A | 2907636 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 13 A | TMC 81D 13A | 2907637 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 15 A | TMC 81D 15A | 2907638 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 16 A | TMC 81D 16A | 2907639 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 20 A | TMC 81D 20A | 2907640 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 25 A | TMC 81D 25A | 2907641 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 30 A | TMC 81D 30A | 2907642 | 1 |
| MCB, up to 60 V DC and 277 V AC, D curve 1-pole 32 A | TMC 81D 32A | 2907643 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 1-pole 35 A | TMC 81D 35A | 2907644 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 1-pole 40 A | TMC 81D 40A | 2907645 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 1-pole 50 A | TMC 81D 50A | 2907646 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 1-pole 60 A | TMC 81D 60A | 2907647 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 1-pole 63 A | TMC 81D 63A | 2907649 | 1 |

Products

| Description | Type | Order No. | Pcs./Pkt. |
|---|-------------|-----------|-----------|
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 1 A | TMC 82D 01A | 2907650 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 2 A | TMC 82D 02A | 2907652 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 3 A | TMC 82D 03A | 2907653 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 4 A | TMC 82D 04A | 2907654 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 5 A | TMC 82D 05A | 2907655 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 6 A | TMC 82D 06A | 2907656 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 7 A | TMC 82D 07A | 2907657 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 8 A | TMC 82D 08A | 2907658 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 10 A | TMC 82D 10A | 2907659 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 12 A | TMC 82D 12A | 2907660 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 13 A | TMC 82D 13A | 2907661 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 15 A | TMC 82D 15A | 2907662 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 16 A | TMC 82D 16A | 2907663 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 20 A | TMC 82D 20A | 2907665 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 25 A | TMC 82D 25A | 2907666 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 30 A | TMC 82D 30A | 2907667 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 2-pole 32 A | TMC 82D 32A | 2907668 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 2-pole 35 A | TMC 82D 35A | 2907669 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 2-pole 40 A | TMC 82D 40A | 2907670 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 2-pole 50 A | TMC 82D 50A | 2907671 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 2-pole 60 A | TMC 82D 60A | 2907672 | 1 |
| MCB, up to 125 V DC and 240 V AC, D curve 2-pole 63 A | TMC 82D 63A | 2907673 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 1 A | TMC 83D 01A | 2907674 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 2 A | TMC 83D 02A | 2907675 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 3 A | TMC 83D 03A | 2907676 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 4 A | TMC 83D 04A | 2907678 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 5 A | TMC 83D 05A | 2907679 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 6 A | TMC 83D 06A | 2907681 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 7 A | TMC 83D 07A | 2907682 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 8 A | TMC 83D 08A | 2907683 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 10 A | TMC 83D 10A | 2907684 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 12 A | TMC 83D 12A | 2907685 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 13 A | TMC 83D 13A | 2907686 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 15 A | TMC 83D 15A | 2907687 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 16 A | TMC 83D 16A | 2907688 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 20 A | TMC 83D 20A | 2907689 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 25 A | TMC 83D 25A | 2907690 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 30 A | TMC 83D 30A | 2907691 | 1 |
| MCB, up to 125 V DC and 480 V AC, D curve 3-pole 32 A | TMC 83D 32A | 2907692 | 1 |

Accessories¹

| Description | Type | Order No. | Pcs./Pkt. |
|---|---------------------|-----------|-----------|
| Auxiliary contact, one NO and one NC switch | TMC 7/8 AUX | 2908219 | 1 |
| Alarm contact, one NO and one NC | TMC 7/8 ALARM | 2908220 | 1 |
| Shunt trip, 12 V DC, one NO and one NC | TMC 7/8 12VDC SHNT | 2908221 | 1 |
| Shunt trip, 24 V DC, one NO and one NC | TMC 7/8 24VDC SHNT | 2908222 | 1 |
| Shunt trip, 48 V DC, one NO and one NC | TMC 7/8 48VDC SHNT | 2908224 | 1 |
| Shunt trip, 125 V DC, one NO and one NC | TMC 7/8 125VDC SHNT | 2908225 | 1 |
| Shunt trip, 120 V AC, one NO and one NC | TMC 7/8 120VAC SHNT | 2908226 | 1 |
| Shunt trip, 240 V AC, one NO and one NC | TMC 7/8 240VAC SHNT | 2908227 | 1 |
| Shunt trip, 277 V AC, one NO and one NC | TMC 7/8 277VAC SHNT | 2908228 | 1 |
| Busbar, cut to length, for 1-pole applications, up to 57 positions | TMC 8 B1 80 57 C | 2907991 | 1 |
| Busbar, cut to length, for 1-pole plus auxiliary applications, up to 37 positions | TMC 8 B1 80 37 CA | 2907992 | 1 |
| Busbar, cut to length, for 2-pole applications, up to 56 positions | TMC 8 B2 80 56 C | 2907993 | 1 |
| Busbar, cut to length, for 2-pole plus auxiliary applications, up to 46 positions | TMC 8 B2 80 46 CA | 2907995 | 1 |
| Busbar, cut to length, for 3-pole applications, up to 57 positions | TMC 8 B3 80 57 C | 2907996 | 1 |
| Busbar, cut to length, for 3-pole plus auxiliary applications, up to 48 positions | TMC 8 B3 80 48 CA | 2907997 | 1 |
| Busbar terminal, for incoming connections | TMC 8 B TERM PIN | 2907998 | 1 |
| Busbar, end cap, protects open busbar positions | TMC 8 B END CAP | 2907999 | 1 |
| Busbar, bus cap, protects three open busbar positions | TMC 8 B BUS CAP | 2908000 | 1 |

¹ For additional information on accessories, see "Accessories" on page 10.

3 Technical data**General data**

| | |
|--------------------------------------|--|
| Ambient temperature, operating | -35°C ... 70°C (-31°F ... 158°F) |
| Permissible humidity | 95% |
| Degree of protection | IP20 |
| Weight | 134 g per pole (approximate) |
| Installation | NS35 rail (EN 60715) |
| Conductor cross section | 1 ... 35 mm ² /18 ... 2 AWG |
| Connection type | Screw-clamp terminals |
| Conductor tightening torque, maximum | 2 Nm (17.7 lb _F -in.) |

Electrical data

| | |
|--|---|
| Nominal voltage, U _N ¹ | 24 V DC ... 125 V DC 120 V AC ... 277 V AC |
| Nominal current ¹ | 1 A ... 63 A |
| Service life | |
| Mechanical | 20,000 cycles |
| Electrical | 6,000 cycles |
| Interrupt capacity I _C | |
| UL 489 (SCCR) | 10 kA |
| IEC/EN 60947-2 (I _{CU}) | 10 kA |
| IEC/EN 60947-2 (I _{CS}) | 7.5 kA |

¹ See order key for specifics for each model

Conformance

| | |
|--------------------------------------|---|
| IEC 60068-2-6 (Sinusoidal vibration) | ±0.38 mm (10-57 Hz), 5g (57-500 Hz) 10 frequency cycles per axis |
| IEC 60068-2-27 (Shock) | 30g, 11 ms |
| IEC 60068-2-11 (Corrosion) | 96 h in 5% salt mist |
| IEC 60068-2-75 (Humidity) | 48 h at 95% relative humidity, 40°C |

Approval

| Test center | Standard | Rated voltage | Nominal current range |
|-------------|------------------------|-----------------------------------|-----------------------|
| UL | UL 489/CSA-C22.2 No. 5 | 277 V AC, 60 V DC (TMC 81...) | 1 ... 32 A |
| UL | UL 489/CSA-C22.2 No. 5 | 120 V AC, 60 V DC (TMC 81...) | 35 ... 63A |
| UL | UL 489/CSA-C22.2 No. 5 | 480 V AC, 125 V DC (TMC 82/83...) | 1 ... 32 A |
| UL | UL 489/CSA-C22.2 No. 5 | 240 V AC, 125 V DC (TMC 82/83...) | 35 ... 63A |
| TÜV | IEC/EN 60947-2 | 230/400 V AC | 1 ... 63 A |

3.1 Trip curve

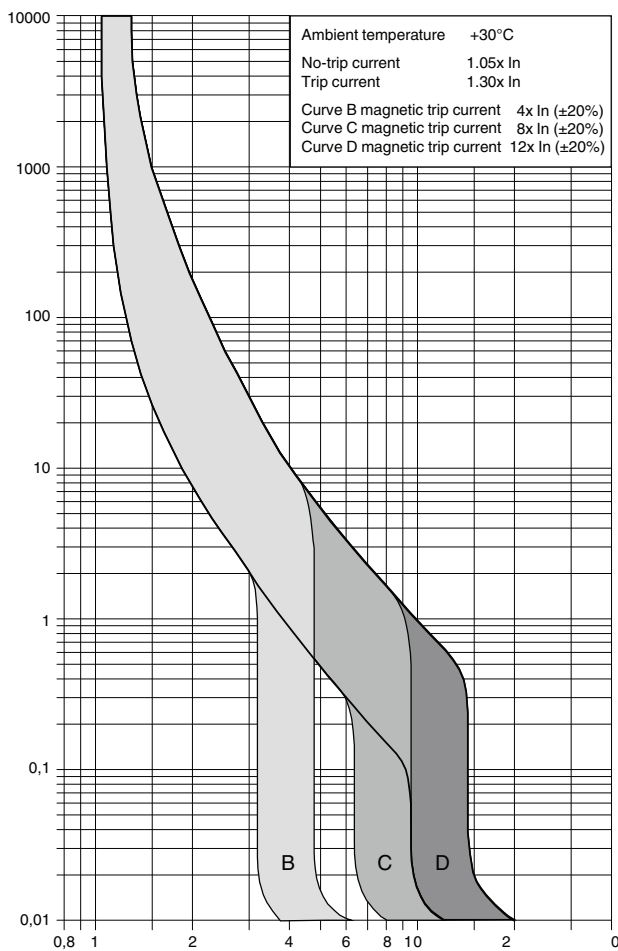


Figure 1 Trip curves

i Magnetic tripping currents are increased by 30% on DC supplies at ambient temperature 30°C

3.2 Dimensions

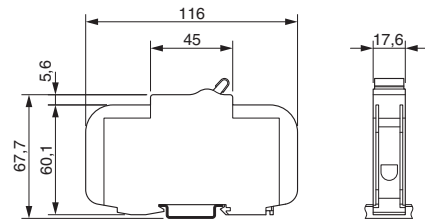


Figure 2 TMC 81... dimensions (mm)

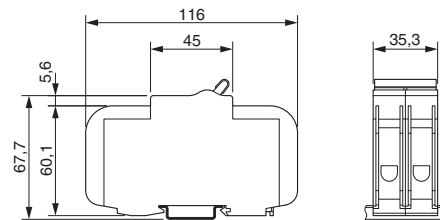


Figure 3 TMC 82... dimensions (mm)

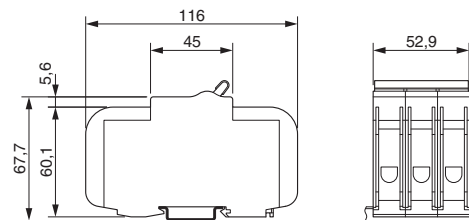


Figure 4 TMC 83... dimensions (mm)

3.3 Environmental influences

The following correction factors must be considered when selecting the appropriate nominal current rating for the circuit breaker.

| I_N (A) | Maximum operating currents (A) depending on ambient temperature (°C) | | | | | | | | | | | | | | | | | | | | | |
|--------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | +5 | +10 | +15 | +20 | +25 | +30 | +35 | +40 | +45 | +50 | +55 | +60 | +65 | +70 |
| 1 | 1.27 | 1.25 | 1.23 | 1.21 | 1.19 | 1.17 | 1.15 | 1.13 | 1.10 | 1.08 | 1.06 | 1.05 | 1.02 | 1.00 | 0.97 | 0.94 | 0.91 | 0.89 | 0.86 | 0.83 | 0.80 | 0.77 |
| 2 | 2.54 | 2.50 | 2.46 | 2.42 | 2.38 | 2.34 | 2.30 | 2.26 | 2.20 | 2.16 | 2.12 | 2.10 | 2.04 | 2.00 | 1.94 | 1.88 | 1.82 | 1.78 | 1.72 | 1.66 | 1.60 | 1.54 |
| 3 | 3.89 | 3.83 | 3.76 | 3.70 | 3.64 | 3.57 | 3.50 | 3.44 | 3.37 | 3.30 | 3.22 | 3.14 | 3.06 | 3.00 | 2.92 | 2.84 | 2.76 | 2.67 | 2.58 | 2.49 | 2.38 | 2.27 |
| 4 | 5.08 | 5.00 | 4.92 | 4.84 | 4.76 | 4.68 | 4.60 | 4.52 | 4.40 | 4.32 | 4.24 | 4.20 | 4.08 | 4.00 | 3.88 | 3.76 | 3.64 | 3.56 | 3.44 | 3.32 | 3.20 | 3.08 |
| 5 | 6.68 | 6.56 | 6.44 | 6.32 | 6.19 | 6.07 | 5.94 | 5.81 | 5.68 | 5.54 | 5.40 | 5.25 | 5.12 | 5.00 | 4.82 | 4.66 | 4.50 | 4.34 | 4.17 | 3.99 | 3.81 | 3.62 |
| 6 | 7.70 | 7.58 | 7.46 | 7.34 | 7.21 | 7.09 | 6.96 | 6.83 | 6.70 | 6.56 | 6.42 | 6.27 | 6.14 | 6.00 | 5.84 | 5.68 | 5.52 | 5.36 | 5.19 | 5.01 | 4.83 | 4.64 |
| 7 | 8.78 | 8.66 | 8.54 | 8.42 | 8.29 | 8.17 | 8.04 | 7.91 | 7.78 | 7.64 | 7.50 | 7.35 | 7.22 | 7.00 | 6.92 | 6.76 | 6.60 | 6.44 | 6.27 | 6.09 | 5.91 | 5.72 |
| 8 | 9.80 | 9.68 | 9.56 | 9.44 | 9.31 | 9.19 | 9.06 | 8.93 | 8.80 | 8.66 | 8.52 | 8.37 | 8.24 | 8.00 | 7.94 | 7.78 | 7.62 | 7.46 | 7.29 | 7.11 | 6.93 | 6.74 |
| 10 | 13.89 | 13.62 | 13.35 | 13.07 | 12.81 | 12.53 | 12.23 | 11.93 | 11.63 | 11.33 | 11.01 | 10.67 | 10.34 | 10.00 | 9.63 | 9.24 | 8.85 | 8.45 | 8.01 | 7.55 | 7.06 | 6.55 |
| 12 | 15.91 | 15.64 | 15.37 | 15.09 | 14.83 | 14.55 | 14.25 | 13.95 | 13.65 | 13.35 | 13.03 | 12.69 | 12.36 | 12.00 | 11.65 | 11.26 | 10.60 | 10.47 | 10.03 | 9.57 | 9.08 | 8.57 |
| 13 | 16.92 | 16.65 | 16.38 | 16.10 | 15.84 | 15.56 | 15.26 | 14.96 | 14.66 | 14.36 | 14.04 | 13.70 | 13.37 | 13.00 | 12.66 | 12.27 | 11.61 | 11.48 | 11.04 | 10.58 | 10.09 | 9.58 |
| 15 | 19.77 | 19.42 | 19.07 | 18.74 | 18.39 | 18.04 | 17.69 | 17.32 | 16.95 | 16.57 | 16.19 | 15.79 | 15.39 | 15.00 | 14.54 | 14.10 | 13.65 | 13.19 | 12.70 | 12.20 | 11.69 | 11.64 |
| 16 | 20.78 | 20.43 | 20.08 | 19.75 | 19.40 | 19.05 | 18.70 | 18.33 | 17.96 | 17.58 | 17.20 | 16.80 | 16.40 | 16.00 | 15.55 | 15.11 | 14.66 | 14.20 | 13.71 | 13.21 | 12.70 | 12.75 |
| 20 | 25.67 | 25.28 | 24.88 | 24.47 | 24.06 | 23.64 | 23.22 | 22.78 | 22.34 | 21.89 | 21.43 | 20.96 | 20.47 | 20.00 | 19.47 | 18.95 | 18.42 | 17.87 | 17.30 | 16.71 | 16.10 | 15.47 |
| 25 | 32.21 | 31.72 | 31.22 | 30.70 | 30.18 | 29.65 | 29.10 | 28.55 | 27.98 | 27.41 | 26.82 | 26.22 | 25.61 | 25.00 | 24.33 | 23.67 | 23.00 | 22.28 | 21.56 | 20.80 | 20.02 | 19.21 |
| 30 | 39.00 | 38.42 | 37.78 | 37.13 | 36.47 | 35.80 | 35.11 | 34.43 | 33.71 | 32.99 | 32.26 | 31.50 | 30.73 | 30.00 | 29.13 | 28.30 | 27.44 | 26.56 | 25.65 | 24.71 | 23.74 | 22.73 |
| 32 | 41.04 | 40.46 | 39.82 | 39.17 | 38.51 | 37.84 | 37.15 | 36.47 | 35.75 | 35.03 | 34.30 | 33.54 | 32.77 | 32.00 | 31.17 | 30.34 | 29.48 | 28.69 | 27.69 | 26.75 | 25.78 | 24.77 |
| 35 | 44.08 | 43.50 | 42.86 | 42.21 | 41.55 | 40.88 | 40.19 | 39.51 | 38.79 | 38.07 | 37.34 | 36.58 | 35.81 | 35.00 | 34.21 | 33.38 | 32.52 | 31.64 | 30.73 | 29.79 | 28.82 | 27.81 |
| 40 | 51.63 | 50.86 | 50.04 | 49.21 | 48.37 | 47.51 | 46.63 | 45.74 | 44.83 | 43.90 | 42.95 | 41.98 | 40.99 | 40.00 | 38.93 | 37.85 | 36.75 | 35.61 | 34.43 | 33.21 | 31.95 | 30.63 |
| 50 | 64.92 | 63.97 | 62.92 | 61.86 | 60.77 | 59.67 | 58.54 | 57.40 | 56.23 | 55.05 | 53.81 | 52.56 | 51.23 | 50.00 | 47.82 | 46.24 | 44.81 | 43.33 | 41.81 | 40.23 | 38.58 | 35.77 |
| 60 | 80.45 | 79.03 | 77.61 | 76.16 | 74.69 | 73.19 | 71.67 | 70.11 | 68.51 | 66.88 | 65.21 | 63.50 | 61.75 | 60.00 | 57.08 | 55.16 | 53.18 | 51.13 | 49.00 | 46.78 | 44.47 | 40.47 |
| 63 | 83.48 | 82.06 | 80.64 | 79.19 | 77.72 | 76.22 | 74.70 | 73.14 | 71.54 | 69.91 | 68.24 | 66.53 | 64.78 | 63.00 | 60.11 | 58.19 | 56.21 | 54.16 | 52.03 | 49.81 | 47.50 | 43.05 |

4 Installation

4.1 Mounting

1. Hook the device over the top edge of the DIN rail and rotate it down until it snaps onto the bottom edge of the rail.
2. Repeat for any additional devices.
3. Slide the devices together into the desired configuration.

4.2 Removal

1. Slide the device away to gain sufficient clearance from the next device.
2. Use a screwdriver to raise the latch and release the unit from the bottom edge of the DIN rail.
3. Rotate the device up and lift off of the top edge of the rail.

5 Accessories

Several accessories are available for use with the TMC 8... circuit breakers. The accessory modules are mounted on the left side (when facing the device in a mounted position) of the circuit breaker. A variety of busbars are also available.

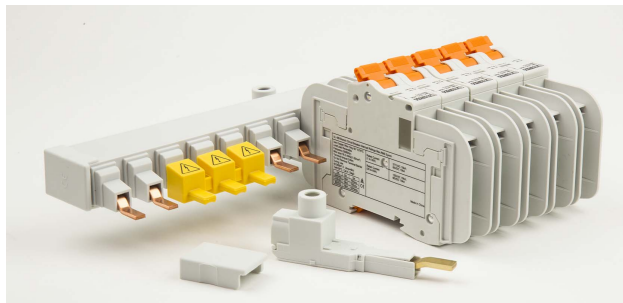


Figure 5 Busbar and other accessories

5.1 Technical data for accessories

General data (TMC 7/8 AUX and TMC 7/8 ALARM)

| | |
|--------------------------------------|--|
| Ambient temperature, operating | -35 ... 70°C (-31 ... 158°F) |
| Permissible humidity | 95% |
| Degree of protection | IP20 |
| Weight | 29 g (approximate) |
| Width | 9 mm |
| Installation | Left side of circuit breaker |
| Conductor cross section | 1 ... 35 mm ² /18 ... 2 AWG |
| Connection type | Screw-clamp terminals |
| Conductor tightening torque, maximum | 1 Nm (8.9 lb _f -in.) |
| Service life, mechanical | 20,000 cycles |

Electrical data (TMC 7/8 AUX and TMC 7/8 ALARM)

| | |
|---------------------------------|---|
| Nominal voltage, U _N | 24 V DC ... 125 V DC 120 V AC ... 277 V AC |
| Rated current (UL 489) | |
| 12 ... 240 V AC | 6 A |
| 277 V AC | 3 A |
| 12 ... 24 V DC | 6 A |
| 48 V DC | 2 A |
| 130 V DC | 1 A |

General data (TMC 7/8...SHNT)

| | |
|--------------------------------------|--|
| Ambient temperature, operating | -35 ... 70°C (-31 ... 158°F) |
| Permissible humidity | 95% |
| Degree of protection | IP20 |
| Weight | 60 g (approximate) |
| Width | 18 mm |
| Installation | Left side of circuit breaker |
| Conductor cross section | 1 ... 35 mm ² /18 ... 2 AWG |
| Connection type | Screw-clamp terminals |
| Conductor tightening torque, maximum | 1 Nm (8.9 lb _f -in.) |
| Service life, mechanical | 20,000 cycles |

Electrical data (TMC 7/8...SHNT)

| | |
|------------------------|---|
| Nominal voltage, U_N | 24 V DC ... 125 V DC 120 V AC ... 277 V AC |
|------------------------|---|

Trip voltage, minimum

| | |
|----------|----------|
| 415 V AC | 200 V AC |
| 277 V AC | 160 V AC |
| 240 V AC | 160 V AC |
| 120 V AC | 80 V AC |
| 125 V DC | 125 V DC |
| 48 V DC | 24 V DC |
| 24 V DC | 16 V DC |
| 12 V DC | 8 V DC |

Rated current of auxiliary contact

| | |
|----------|-------|
| 415 V AC | 3 A |
| 277 V AC | 3 A |
| 240 V AC | 6 A |
| 120 V AC | 6 A |
| 125 V DC | 1.5 A |
| 48 V DC | 2 A |
| 24 V DC | 6 A |
| 12 V DC | 6 A |

Power consumption/minimum response power

| | |
|----------|-------------|
| 415 V AC | 240 W/35 W |
| 277 V AC | 240 W/35 W |
| 240 V AC | 200 W/35 W |
| 120 V AC | 200 W/35 W |
| 125 V DC | 200 W/30 VA |
| 48 V DC | 200 W/30 VA |
| 24 V DC | 200 W/30 VA |
| 12 V DC | 200 W/30 VA |

Trip time

<10 ms

General data (TMC 8 B...)

| | |
|--------------------------------|------------------------------|
| Ambient temperature, operating | -35 ... 70°C (-31 ... 158°F) |
| Permissible humidity | 95% |
| Degree of protection | IP20 |
| Step size | 17.8 mm |
| Busbar cross section | 18 mm ² |

Electrical data (TMC 8 B...)

| | |
|--------------------------------|-------------|
| Maximum voltage | 480 V AC/DC |
| Rated current at 35°C (UL 489) | |
| Power supply at the end | 80 A |
| Power supply in the middle | 160 A |
| SCCR I_{CC} | 10 kA |

Electrical data (TMC 8 B TERM PIN)

| | |
|----------------------------|----------------------------------|
| Maximum voltage | 480 V AC/DC |
| Maximum current | 115 A |
| Connection type | Screw clamp |
| Tightening torque, maximum | 5.5 Nm (50 lb _F -in.) |

5.2 Auxiliary contact (TMC 7/8 AUX)

The TMC 7/8 AUX is an auxiliary contact with one normally open and one normally closed contact. The status of the contacts are switched when the breaker on/off state changes.

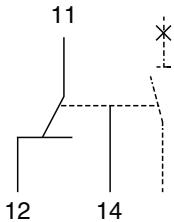


Figure 6 TMC 7/8 AUX schematic



After the TMC 7/8 AUX module is attached to the TMC 8... circuit breaker, terminals 11 and 14 are connected when the circuit breaker is in the "on" condition. Terminals 11 and 12 are connected when the circuit breaker is in the "off" condition.

5.3 Alarm contact (TMC 7/8 ALARM)

The TMC 7/8 ALARM provides an additional contact which can be connected to a bell, light or other alarm. If the TMC 8... trips, the alarm contact switches power to the load.

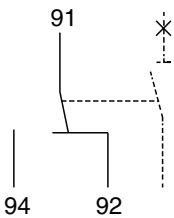


Figure 7 TMC 7/8 ALARM schematic



After the TMC 7/8 ALARM module is attached to the TMC 8... circuit breaker:

- Terminals 91 and 92 are connected when the circuit breaker is in the "on" condition.
- Terminals 91 and 94 are connected when the circuit breaker is tripped electronically.
- Terminals 91 and 92 are connected when the circuit breaker is tripped manually.
- At the same time, terminals 91 and 94 do not make contact.

5.4 Shunt trip (TMC...SHNT)

The TMC 7/8...SHNT provides an electrically operated remote trip for the circuit breaker.

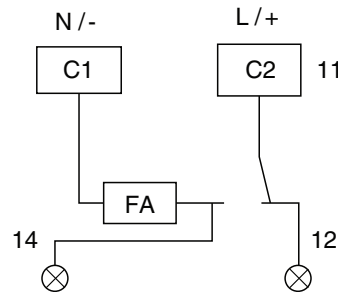


Figure 8 TMC 7/8 SHNT schematic

5.5 Accessory installation



Installation is the same for all types of accessories.

1. Remove the end pieces (1) from the TMC 8... by sliding it up and away from the center section (2) of the circuit breaker.

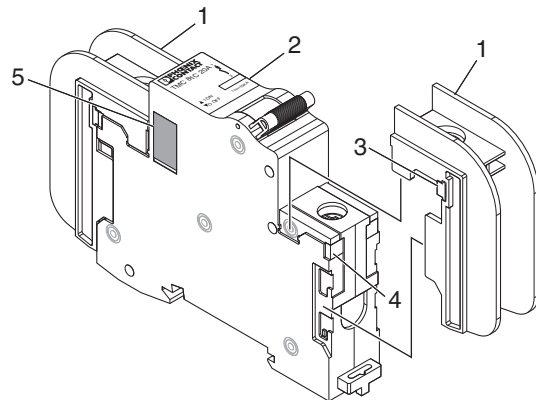


Figure 9 Removing tabs for accessory installation

2. Use a small pliers and remove the end piece tabs (3) and the center section tabs (4).
3. Remove the tape seal (5) covering the electrical interface.

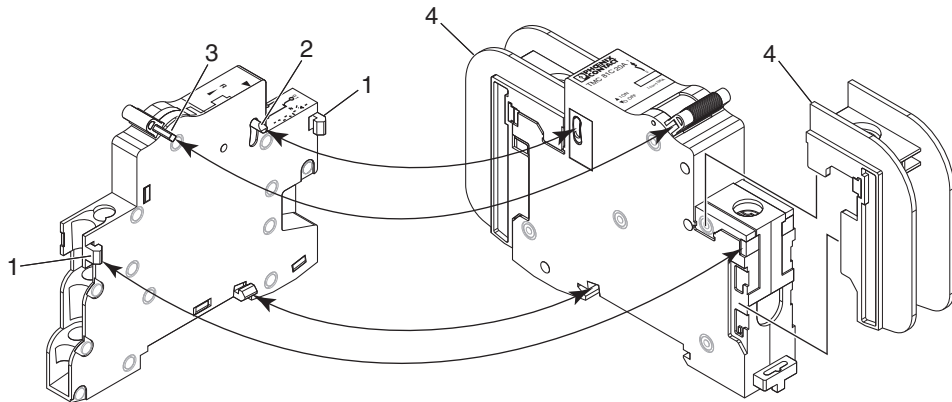


Figure 10 Accessory installation

4. Place the accessory in position on the left side of the TMC 8... making sure to align the locking clips (1), latch (2), and switch handle (3) with the TMC 8....
5. Reinstall the end pieces (4) previously removed.



NOTE:
The end pieces must be installed to maintain UL 489 compliance.

6. Install on the mounting rail, and connect wires, as required.

5.6 Busbars and related accessories

Busbars can be purchased for 1-, 2-, and 3-pole circuit breakers. They are also available to accommodate the circuit breakers if either the TMC 7/8 AUX or TMC 7/8 ALARM is used.

connection to the busbar without increasing the installation space on the mounting rail.

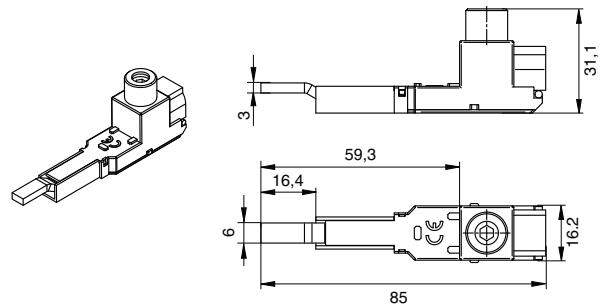


Figure 12 TMC 8 B TERM PIN dimensions

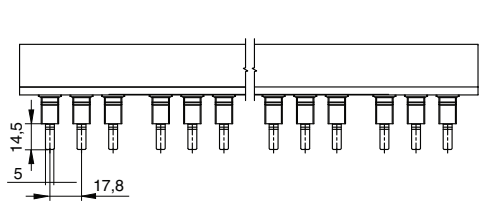


Figure 11 TMC 8 B1... dimensions

Busbars come in lengths of approximately 1 m and can be cut to the desired length. Optional supply terminal allows

单击下面可查看定价，库存，交付和生命周期等信息

[>>Phoenix Contact\(菲尼克斯\)](#)