# ABB TA25DU-1.8M 1SAZ211201R2025

## 01 Function and selected configuration

### Product function

ABB TA25DU-1.8M 1SAZ211201R2025 protects a compatible motor starter against sustained overload and phase failure through thermally operated bimetal elements.

### Selected configuration

The three bimetal elements respond to motor-current heating and change the auxiliary contact states when the overload mechanism trips. The 1.30–1.80 A setting range must be matched to the motor and starter application, not simply set to the highest available value.

### Functional path

| | | | |
|---|---|---|---|
| Motor phase currents | Bimetal mechanism | NC / NO contacts | Starter control |

| | |
|---|---|
| Current adjustment | 1.30–1.80 A |
| Overload behavior | Trip class 10A |
| Auxiliary circuits | Separate 1 NO and 1 NC contacts |

The 95–96 NC contact and 97–98 NO contact are electrically separate. Their functions in the contactor control and trip indication circuit must be checked independently, including the selected manual or automatic reset behavior.

# TA25DU-1.8M 1SAZ211201R2025

## 02 Technical operating envelope

| | |
|---|---|
| Current setting range | 1.30–1.80 A |
| Trip class | 10A |
| Main poles | 3 |
| Operational voltage | 690 V AC |
| Auxiliary contacts | 1 NO + 1 NC |
| Reset selection | Manual or automatic |

| | |
|---|---|
| Short-circuit fuse reference | 6 A gG or 4 A aM |
| Impulse withstand | 6 kV |
| Compensated ambient | -25 to +55°C |
| Main-terminal torque | 1.4–2.0 N·m |
| Auxiliary-terminal torque | 0.8–1.3 N·m |
| Main conductor range | 0.75–4 mm² for this current group |

Current setting, trip class and short-circuit coordination are different selection criteria. Auxiliary switching ratings must be checked for the actual control voltage.

### Signal interpretation

The main circuit has a 690 V AC operational rating. Auxiliary contact utilization ratings are separate and depend on voltage and switching category.

### Interface boundary

Use the correct terminal torque: 1.4–2.0 N·m for the main circuit and 0.8–1.3 N·m for auxiliary terminals.

### Can TA25DU-1.8M 1SAZ211201R2025 reset automatically?

Manual or automatic reset can be selected. Assess the motor restart behavior before enabling automatic reset.

# TA25DU-1.8M 1SAZ211201R2025

## 03 System integration and applications

### Small motor overload

Set thermal protection within the selected current adjustment range.

### Phase-failure protection

Use the phase-loss-sensitive mechanism in the compatible starter.

### Trip indication

Wire the NO auxiliary contact to the intended indication circuit.

### Contactor interruption

Use the NC contact in the approved control path to stop the motor.

### System and supply context

The relay forms part of a motor starter and operates its auxiliary control contacts when the thermal mechanism trips.

### Application boundary

Apply the exact 1.30–1.80 A range to the motor duty and preserve the coordinated starter circuit.

### Does TA25DU-1.8M 1SAZ211201R2025 provide short-circuit protection by itself?

No. Coordinate it with the appropriate short-circuit protective device; its main purpose is overload and phase-failure protection.

# TA25DU-1.8M 1SAZ211201R2025

## 04 Engineering selection decisions

### What current range can TA25DU-1.8M 1SAZ211201R2025 be set to?

The adjustment range is 1.30–1.80 A.

### Which auxiliary contact on TA25DU-1.8M 1SAZ211201R2025 is normally closed?

Terminals 95–96 are NC; terminals 97–98 provide the separate NO contact.

### Which torque is used on the main terminals of TA25DU-1.8M 1SAZ211201R2025?

For this current group, the main terminal torque is 1.4–2.0 N·m; auxiliary terminals use 0.8–1.3 N·m.

### How should the trip function of TA25DU-1.8M 1SAZ211201R2025 be accepted?

Exercise the test function, verify the NC control path stops the contactor, check NO trip indication and confirm the intended reset behavior.

| | |
|---|---|
| Contact assignment | Keep 95–96 and 97–98 functions distinct. |
| Terminal torque | Apply the separate main and auxiliary torque values. |

# TA25DU-1.8M 1SAZ211201R2025

## 05 Configuration boundary and references

### Lifecycle and support

The current production and factory-support status of TA25DU-1.8M 1SAZ211201R2025 is unconfirmed.

### Replacement assessment

Retain the motor setting, compatible contactor, coordinated short-circuit protection and auxiliary control logic.

### Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; it does not replace manufacturer instructions.

### Technical basis

ABB Motor Protection and Control Catalogue, 1SBC100179C0201; TA25DU-M technical data 2CDC106056C0201.

### Related product navigation

- ABB 3BHE005555R0101 LDSYN-101
- ABB 3BHB005245R0101

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries