ABB TA25DU-M

01 Function and selected configuration

Product function

ABB TA25DU-M responds to sustained motor overload through bimetal elements and provides separate auxiliary contacts for the control-trip and signalling circuits.

Selected configuration

TA25DU-M identifies the relay family rather than a complete current-range selection. Available variants cover different setting ranges, so the actual range and motor full-load current must be established from the offered unit before setting the relay.

Functional path

Motor current	Three bimetal elements	95-96 trip contact	Contactor control

Sensing principle	Three-pole bimetal thermal overload
Trip class	10A
Phase-failure sensitivity	Yes

The relay provides one normally closed contact 95-96 and one normally open contact 97-98. Their thermal current ratings differ: 10 A for the NC contact and 6 A for the NO contact. Switching duty ratings must be checked for the actual control voltage and load category.

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02 Technical operating envelope

Sensing principle	Three-pole bimetal thermal overload
Trip class	10A
Phase-failure sensitivity	Yes
Reset mode	Manual or automatic
Auxiliary contacts	1 NC (95-96) + 1 NO (97-98)
Rated operational voltage	690 V AC

Rated insulation voltage	690 V
Impulse withstand	6 kV
Frequency range	0 to 400 Hz
NC conventional thermal current	10 A
NO conventional thermal current	6 A
Operating temperature	-25 to 55°C

These are TA25DU-M family characteristics. No individual current-range variant is inferred from the family-only model.

Signal interpretation

The relay provides one normally closed contact 95-96 and one normally open contact 97-98. Their thermal current ratings differ: 10 A for the NC contact and 6 A for the NO contact. Switching duty ratings must be checked for the actual control voltage and load category.

Interface boundary

The three-pole thermal mechanism is temperature compensated and suitable for the specified single- or three-phase applications. TEST, STOP and reset functions support functional checks; thermal overload protection must be coordinated with separate short-circuit protection.

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03 System integration and applications

Motor overload protection

Apply the selected current-range variant to the motor's rated current and starting duty.

Contactor control trip

Use the NC auxiliary contact in the designed contactor control circuit.

Overload trip indication

Use the separate NO contact for the appropriate signalling load.

Controlled reset integration

Select manual, automatic or compatible remote reset according to the machine restart strategy.

System and supply context

The overload relay is applied in the Motor current / Three bimetal elements / 95-96 trip contact / Contactor control arrangement. Select associated equipment for the actual channel or installation.

Application boundary

These are TA25DU-M family characteristics. No individual current-range variant is inferred from the family-only model. The examples below address the stated product function.

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04 Engineering selection decisions

Does TA25DU-M by itself identify a 32 A overload setting?

No. It is a family reference without a specified current-range suffix. Select the exact range from the unit marking and motor full-load current.

Are the NC and NO contacts of TA25DU-M rated for the same thermal current?

No. Conventional thermal current is 10 A for the NC contact and 6 A for the NO contact; switching ratings also depend on voltage and utilization category.

Does TA25DU-M replace a short-circuit protective device?

No. Its thermal overload function must be coordinated with the appropriate upstream short-circuit protection.

What control pulse limitation applies when remotely resetting TA25DU-M with DR25-A?

The DR25-A reset accessory uses a pulse of no more than 0.2 seconds. Use the correct accessory voltage and do not apply continuous energization.

Coordinate short-circuit protection	Retain the specified upstream protective device and coordination arrangement.
Distinguish trip and signal contacts	Trace 95-96 and 97-98 separately.

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05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of TA25DU-M is unconfirmed.

Replacement assessment

Preserve sensing principle Three-pole bimetal thermal overload, trip class 10A, phase-failure sensitivity Yes. Check sensing principle and trip class against the installed configuration.

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; use it together with the applicable manufacturer instructions.

Technical basis

ABB Motor Protection and Control catalogue 1SBC100179C0201.

Related product navigation

- ABB G2E140-PI32-10
- ABB MV570 1TNA928300R0001

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

Product enquiries