



2-6500

Bimetal-operated, automatically resetting, single-pole overcurrent protection relay in a space-saving design. Reliable switching behaviour through trip-free mechanism.



TYPICAL FEATURES

- Self-resetting, automatic on-switching after overcurrent tripping and cooling
- Single pole
- Screw mounting

TYPICAL APPLICATIONS

Protection of motors and transformers against harmful overcurrents

WEB LINKS

[Further information](#), [International approvals](#), [Technical basics](#), [REACH](#), [RoHS](#), [Contact](#)

YOUR BENEFITS

- The automatically resettable 2-6500 can be used in all applications in which a reset or fuse change is not or hardly possible.
- Long-lasting reliable snap-action mechanism
- Space-saving design
- Low operational costs: No procurement-, storage- and service costs for fuses
- Reduced costs: the circuit breaker saves components and reduces mounting and wiring efforts as well as material planning and storage costs.

APPROVALS / CERTIFICATIONS



COMPLIANCE



GENERAL INFORMATION

SAFETY AND INSTALLATION INSTRUCTIONS



For unmonitored operation, protection is ensured for at least 18 days permanent blocking when the motor is blocked at $I_k \leq 6 I_n$ max. 30 A.



Caution: Can only be used as motor protection when automatic restart after overload disconnection does not pose any danger.

TECHNICAL DATA

ELECTRICAL DATA

Rated voltage and rated current range acc. to UL 244	AC 250 V (50/60 Hz); 0.1...10 A DC 28 V; 0.1...10 A
Dielectric strength	Test voltage AC 2,000 V (according to IEC 60730), mounting area
Current ratings	0.2 A; 0.3 A; 0.4 A; 0.5 A; 0.6 A; 0.7 A; 0.8 A; 1 A; 1.2 A; 1.5 A; 1.8 A; 2 A; 2.5 A; 3 A; 3.5 A; 4 A; 4.5 A; 5 A; 6 A; 7 A; 8 A; 9 A; 10 A;

RATED CURRENTS AND TYPICAL INTERNAL RESISTANCE VALUES

Rated current I_n [A]	Internal resistance [Ω]
0.2	46
0.3	20.3
0.5	7.147
0.6	5.18
0.7	3.74
0.8	2.8
1	1.83
1.2	1.26
1.5	0.8
1.8	0.497
1.9 / 2	0.441
2.4 / 2.5	0.288
3	0.176
3.5	0.116
4	0.084
4.5	0.07
5	0.056
6	0.039
7	0.03
8	0.02
8,5	< 0.02
10	< 0,02

Insulation co-ordination (EN IEC 60664)	2.5kV/3
Insulation resistance	> 100 M Ω at DC 500 V
Interrupting capacity	8 x I_n , low-inductance (CO-CO-CO)

MECHANICAL DATA

Mass	approx. 20 g
Mechanical endurance	100,000 cycles at 2 I_n

AMBIENT CONDITIONS

Ambient temperature	-10...+60 °C
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Damp heat	Test according to IEC 60068-2-78, test Cab 240 hrs in 95 % RH Temperature +40 °C
Vibration	Test according to IEC 60068-2-6, test Fc 5 g (57...500 Hz) ± 0.38 mm (10...57 Hz), 10 frequency cycles/axis
Shock	Test according to IEC 60068-2-27, test Ea 15 g / 11 ms
Corrosion	Test according to DIN IEC 60068-2-11, test Ka 48 hours in 5 % salt mist
IP code standard	IEC 60529, DIN VDE 0470
IP code (standard)	IP30 (Housing)
Terminal area IP code (standard)	IP00

ORDERING NUMBER CODE

2	-	6	5	0	0	-	P	1	0	-	6	A
1							2				3	

1 TYPE NUMBER

2-6500 Motor protection relay

2 TERMINAL DESIGN

P10 Blade terminals 6.3 x 0.8mm (IEC 61210)

3 RATED CURRENT

0,2...10 A for increments see indication in the rated current series

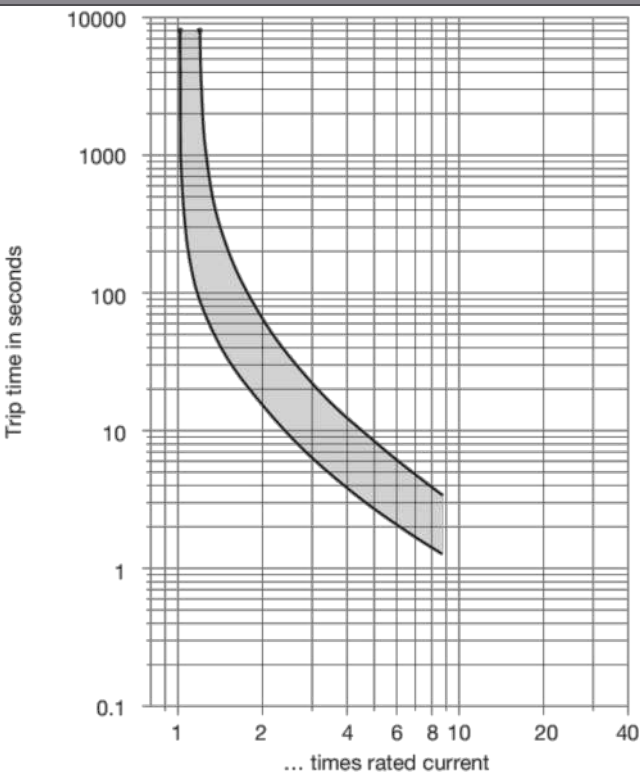
APPROVALS

APPROVALS			
Approval authority	Test standard	Rated voltage [V]	Rated current range [A]
UL	UL 244A	AC 250 DC 28	AC: 0.2...10 DC: 0.2...10
CSA	C22.2 No. 235	AC 250 DC 28	AC: 0.2...10 DC: 0.2...10

Find further information about approvals here: https://www.e-t-a.de/approvals_en

TIME-/CURRENT CHARACTERISTICS

TIME/CURRENT CHARACTERISTICS



AMBIENT TEMPERATURE-DEPENDENT TRIP CURVE

Ambient temperature [°C]	Temperature correction factor
-10	0.84
0	0.92
10	1
23	1
30	1
40	1.08
50	1.16
60	1.24

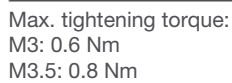
The time/current characteristics depend on the ambient temperatures. In order to eliminate nuisance or delayed tripping, please multiply the rated current of the circuit breaker with a temperature factor (see Technical Information chapter).

Example: $I_n = 5 \text{ A}$ at 50°C means $5 \text{ A} \times 1.16 = 5.8 \text{ A}$.

A circuit breaker with a rated current at $I_N = 6 \text{ A}$ must be selected.

Reset time at $23^\circ\text{C} \geq 30 \text{ sec}$ and $\leq 70 \text{ sec}$

DIMENSIONS



SCHEMATIC DIAGRAM


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