

Combination contactor / motor protection relay max. 4 kW / 400 V

Series 8510

www.stahl.de



14307E00

- > For installation in an Ex e enclosure
- > Version with screw fastening
 - robust
 - vibration-proof
 - reliable
- > Readily accessible connection terminals for
 - reliable connection
 - easy installation



	ATEX / IECEx					
Zone	0	1	2	20	21	22
For use in		x	x			

Explosion Protection

Global (IECEx)	
Gas	IECEx BVS 07.0029U Ex d e IIC, Ex d e I
Europe (ATEX)	
Gas	DMT 00 ATEX E 073 U II 2 G Ex d e IIC I M2 Ex d e I
Certificates and approvals	
Certificates	ATEX, IECEx, Belarus (operating authorisation)

WebCode 8510 P

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Selection Table

Version	Schematic	Rated operating voltage	Current setting range A	Order number	Weight kg	
Combination contactor / motor protection relay		* AC: 110 V, 50 / 60 Hz	0.4 ... 0.6	8510/132-04-136-030-04	2.600	
		* AC: 110 V, 50 / 60 Hz	1.0 ... 1.6	8510/132-04-136-030-07	2.600	
		AC: 220 ... 230 V, 50 / 60 Hz	0.4 ... 0.6	8510/132-04-136-040-04	2.600	
		AC: 220 ... 230 V, 50 / 60 Hz	1.0 ... 1.6	8510/132-04-136-040-07	2.600	
		AC: 220 ... 230 V, 50 / 60 Hz	1.6 ... 2.4	8510/132-04-136-040-08	2.600	
		AC: 220 ... 230 V, 50 / 60 Hz	2.4 ... 4.0	8510/132-04-136-040-09	2.600	
		AC: 220 ... 230 V, 50 / 60 Hz	4.0 ... 6.0	8510/132-04-136-040-10	2.600	
		AC: 230 ... 240 V, 50 / 60 Hz	0.6 ... 1.0	8510/132-04-136-070-05	2.600	
		AC: 230 ... 240 V, 50 / 60 Hz	1.6 ... 2.4	8510/132-04-136-070-08	2.600	
		AC: 230 ... 240 V, 50 / 60 Hz	2.4 ... 4.0	8510/132-04-136-070-09	2.600	
		AC: 230 ... 240 V, 50 / 60 Hz	4.0 ... 6.0	8510/132-04-136-070-10	2.600	
		AC: 230 V, 50 / 60 Hz	0.6 ... 1.0	8510/132-04-136-130-05	2.600	
		AC: 230 V, 50 / 60 Hz	1.0 ... 1.6	8510/132-04-136-130-07	2.600	
		AC: 230 V, 50 / 60 Hz	1.6 ... 2.4	8510/132-04-136-130-08	2.600	
		AC: 230 V, 50 / 60 Hz	2.4 ... 4.0	8510/132-04-136-130-09	2.600	
		* DC: 24 V	0.6 ... 1.0	8510/132-04-136-210-05	2.600	
		* DC: 24 V	2.4 ... 4.0	8510/132-04-136-210-09	2.600	
		Please refer for it to the order number supplement and add it to the type				

Order Number Supplement

Rated control voltage	AC: 12 V, 50 / 60 Hz	8510/...-...-...-19.
	AC: 24 V, 50 / 60 Hz	8510/...-...-...-01.
	AC: 42 V, 50 / 60 Hz	8510/...-...-...-02.
	AC: 48 V, 50 / 60 Hz	8510/...-...-...-10.
	* AC: 110 V, 50 / 60 Hz	8510/...-...-...-03.
	AC: 115 V, 50 / 60 Hz	8510/...-...-...-52.
	AC: 127 V, 50 / 60 Hz	8510/...-...-...-53.
	AC: 120 V, 50 / 60 Hz	8510/...-...-...-55.
	AC: 220 ... 230 V, 50 / 60 Hz	8510/...-...-...-04.
	AC: 380 ... 400 V, 50 / 60 Hz	8510/...-...-...-05.
	AC: 440 V, 50 / 60 Hz	8510/...-...-...-18.
	AC: 500 V, 50 / 60 Hz	8510/...-...-...-06.
	AC: 230 ... 240 V, 50 / 60 Hz	8510/...-...-...-07.
	AC: 400 ... 415 V, 50 / 60 Hz	8510/...-...-...-08.
	AC: 660 ... 690 V, 50 / 60 Hz	8510/...-...-...-54.
	DC: 12 V	8510/...-...-...-22.
	* DC: 24 V	8510/...-...-...-21.
	* DC: 48 V	8510/...-...-...-23.
	DC: 60 V	8510/...-...-...-28.
	DC: 100 V	8510/...-...-...-33.
	DC: 110 V	8510/...-...-...-24.
	DC: 125 V	8510/...-...-...-34.
	DC: 220 V	8510/...-...-...-25.
DC: 230 V	8510/...-...-...-26.	
DC: 240 V	8510/...-...-...-27.	
Current setting range	0.1 ... 0.16 A	8510/132-04-.36-...0-01
	0.16 ... 0.24 A	8510/132-04-.36-...0-02
	0.24 ... 0.4 A	8510/132-04-.36-...0-03
	0.4 ... 0.6 A	8510/132-04-.36-...0-04
	0.6 ... 1.0 A	8510/132-04-.36-...0-05
	1.0 ... 1.6 A	8510/132-04-.36-...0-07
	1.6 ... 2.4 A	8510/132-04-.36-...0-08
	2.4 ... 4.0 A	8510/132-04-.36-...0-09
4.0 ... 6.0 A	8510/132-04-.36-...0-10	
* Preferred voltage		

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Technical Data

Electrical data

Main circuit

Rated operational voltage	max. 690 V				
Rated operational frequency	50 / 60 Hz				
Conventional thermal current I_{th}	20 A				
Short-circuit protection	for fuses, see tripping characteristic curves				
Switching capacity	Rated powers of three-phase motors 50 Hz / 60 Hz, according to AC-3				

U_e [V]	220 / 230	380 / 415	440 / 500	660/690
P [kW]	2.2	4	4	4

Tripping characteristics

10 A

Auxiliary contacts

Rated operational current I_e	AC 15	220 / 240 V	400 V	500 V
	NC	1.5 A	0.9 A	0.8 A
	NO	1.5 A	0.5 A	0.5 A

Conventional thermal current I_{th}

6 A

Short-circuit strength

6 A, gG

Switching capacity

AC-15: 6 A / 500 V

Control circuit

AC

Rated operating voltage	U_c 50 / 60 Hz: 12 ... 690 V
Operation range	Coil ($\theta \leq 50$ Hz) 50 Hz: 0.8 ... 1.15 U_c 60 Hz at 50 °C: 0.85 ... 1.1 U_c
Drop out value	Coil ($\theta \leq 50$ Hz) $\geq 0,2 U_c$
Average power input	at U_c and 20 °C Pick-up: 30 VA Hold: 4.5 VA

DC

Rated operating voltage	U_c : 12 ... 250 V
Operation range	Coil ($\theta \leq 50$ °C) 0.8 ... 1.15 U_c
Drop out value	Coil ($\theta \leq 50$ °C) $\geq 0.1 U_c$
Average power input	at U_c and 20 °C Pick-up: 3 W Hold: 3 W
Mechanical service life	at U_c : 10 Mio. switching cycles
Maximum switching frequency	3600 switching cycles per hour

Ambient conditions

Ambient temperature	
Storage	-50 ... +80 °C
Operation at U_c	-20 ... +40 °C

Mechanical data

Material

Enclosure material	Epoxy resin
Terminal cover	Polyamide; IP20, finger-contact safety according to IEC/EN 60529

Conductor cross-section

Main contacts	1,5 ... 6 mm ² flexible 1,5 ... 10 mm ² solid
Auxiliary contacts	0.75 ... 1.5 mm ² flexible 0.75 ... 2.5 mm ² solid

Phase-failure protection

yes

Temperature compensation

yes

Trip-free mechanism

also if the unlock button is pressed

Reset

can be operated from outside via button

Mounting orientation

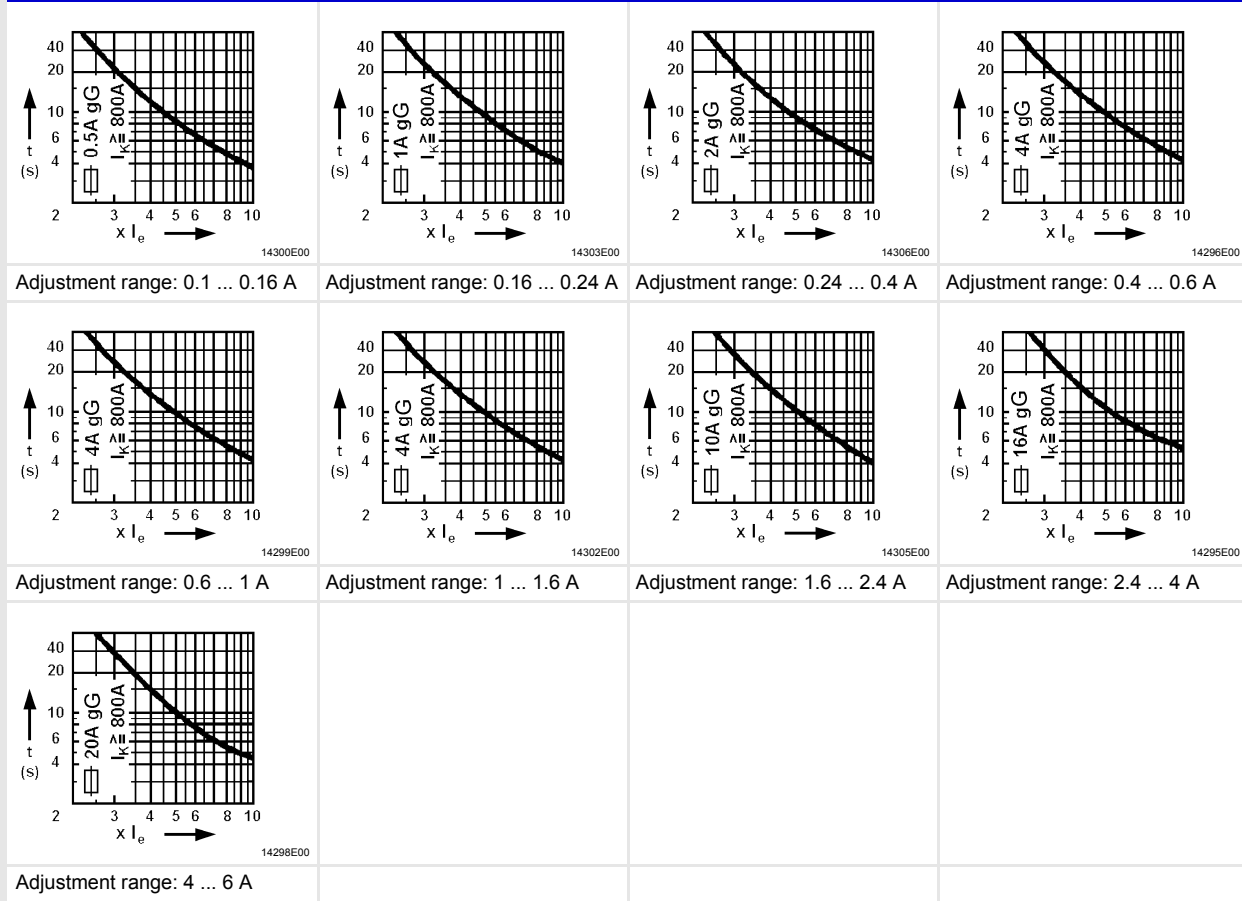
any

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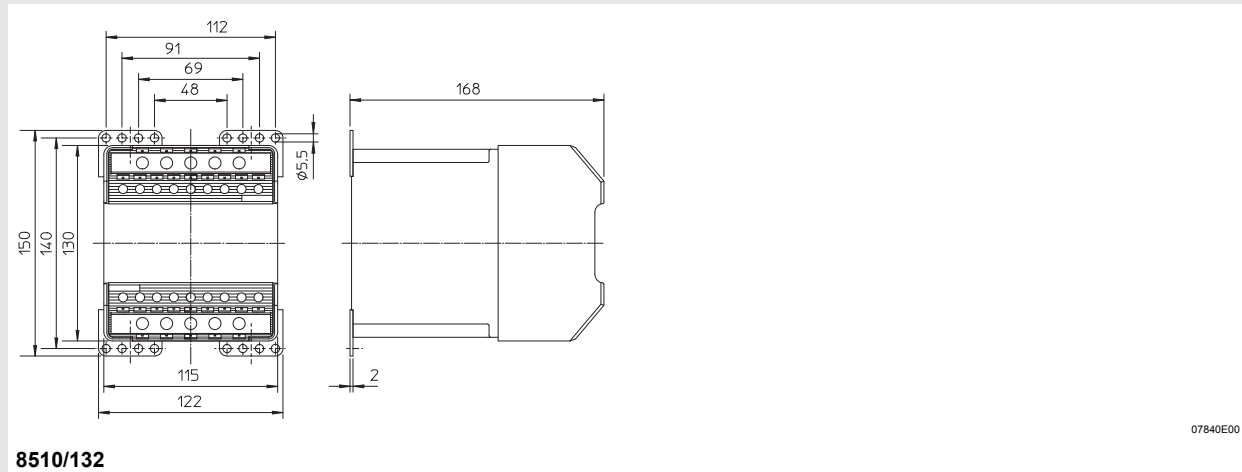
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Tripping characteristic curves



Dimensional Drawings (All Dimensions in mm) - Subject to Alterations



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