



- Cost-effective overload protection for motors
- The release is easy to adjust and reset
- Robust modules, easy and vibration-proof installation

E9

## MY R. STAHL 8510J



R. STAHL Series 8510 motor protection relays offer cost-effective overload protection for motors with adjustment ranges up to 45 A. The release is easy to adjust and reset. The relay modules in the corrosion-resistant enclosure are screwed into Ex e enclosures so that they are protected against vibrations. Easily accessible connection terminals enable a safe connection and simple installation.

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•			

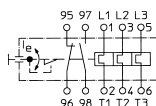
Selection Table						
Product description Certificates	Motor protection relay ATEX (BVS), Brazil (ULB), Canada (FM), China (CQST), IECEx (BVS), USA (FM)					
Figure	Current-setting range	Main contacts	Auxiliary contacts	Product Type	Art. No.	Weight
	0.11 – 0.16 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-010	328336	1.6 kg
	0.14 – 0.2 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-020	145989	1.6 kg
	0.18 – 0.25 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-030	328335	1.6 kg
	0.22 – 0.32 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-040	145993	1.6 kg
	0.28 – 0.4 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-050	328334	1.6 kg
	0.35 – 0.5 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-060	217534	1.6 kg
	0.45 – 0.5 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-070	217535	1.6 kg
	0.55 – 0.8 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-080	146001	1.6 kg
	0.7 – 1 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-090	217536	1.6 kg
	0.9 – 1.25 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-100	217537	1.6 kg
	1.1 – 1.6 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-110	217538	1.6 kg
	1.4 – 2 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-120	217539	1.6 kg
	1.8 – 2.5 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-130	217540	1.6 kg
	2.2 – 3.2 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-140	217541	1.6 kg
	2.8 – 4 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-150	217542	1.6 kg
	3.5 – 5 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-160	217543	1.6 kg
4.5 – 6.3 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-170	217544	1.6 kg	
5.5 – 8 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-180	217545	1.6 kg	
7 – 10 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-190	217546	1.6 kg	
9 – 11 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/141-05-335-200	146025	1.6 kg	

**Selection Table**

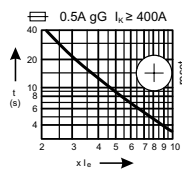
Product description		Motor protection relay				
Certificates		Canada (FM), USA (FM)				
Figure	Current-setting range	Main contacts	Auxiliary contacts	Product Type	Art. No.	Weight
	12.5 – 50 A	3-pole (3 NO)	2 (1 NO + 1 NC)	8510/132-05-335-301	259893	1.62 kg

**Technical Data**

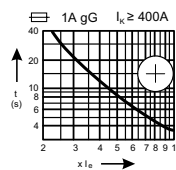
Variant	8510/141-05-335-...	8510/132-05-335-301
<b>Explosion Protection</b>		
IECEx gas explosion protection	Ex db eb IIC Gb	Ex db eb IIC Gb
IECEx firedamp protection	Ex db eb I Mb	Ex db eb I Mb
ATEX gas explosion protection	Ⓜ II 2 G Ex db eb IIC Gb	Ⓜ II 2 G Ex db eb IIC Gb
ATEX firedamp protection	Ⓜ I M2 Ex db eb I Mb	Ⓜ I M2 Ex db eb I Mb
Certificates	ATEX (BVS), Brazil (ULB), Canada (FM), China (CQST), IECEx (BVS), USA (FM)	Canada (FM), USA (FM)
<b>Electrical Data</b>		
Rated operational current AC-15, 230 V AC	NC: 3 A NO: 2 A	
Rated operational current AC-15, 400 V AC	NC: 1.5 A NO: 1 A	
Rated operational current AC-15, 690 V AC	NC: 0.6 A NO: 0.6 A	
Rated operational voltage 2	690 V AC	690 V AC
<b>Ambient Conditions</b>		
Ambient temperature	-20 °C ... +60 °C	-20 °C ... +60 °C
<b>Mechanical Data</b>		
Degree of protection (IP)	IP20	IP20
Enclosure material	Epoxy resin	Epoxy resin
Min. connection terminals	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>
Max. solid connection terminals	10 mm <sup>2</sup>	10 mm <sup>2</sup>
Max. finely stranded connection terminals	6 mm <sup>2</sup>	6 mm <sup>2</sup>
Max. auxiliary contact connection cross-section, solid	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
Max. auxiliary contact connection cross section, finely stranded	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>
Type of connection cable	Finely stranded Solid	Finely stranded Solid
Width	80 mm	48 mm
Height	130 mm	130 mm
Depth	110.5 mm	168 mm

**Technical Drawings – Subject to Alterations**


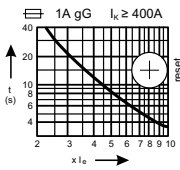
Schematic



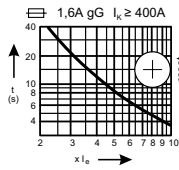
Adjustment range: 0.11 – 0.16 A



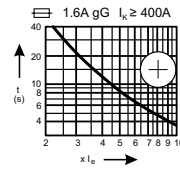
Adjustment range: 0.14 – 0.2 A



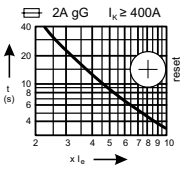
Adjustment range: 0.18 – 0.25 A



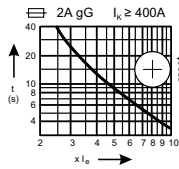
Adjustment range: 0.22 – 0.32 A



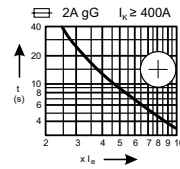
Adjustment range: 0.22 – 0.32 A



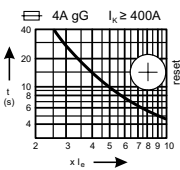
Adjustment range: 0.28 – 0.4 A



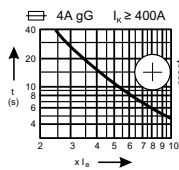
Adjustment range: 0.35 – 0.5 A



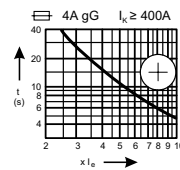
Adjustment range: 0.45 – 0.63 A



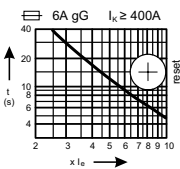
Adjustment range: 0.55 – 0.8 A



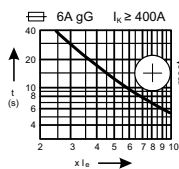
Adjustment range: 0.7 – 1.0 A



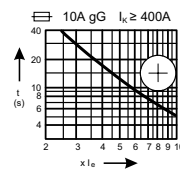
Adjustment range: 0.9 – 1.25 A



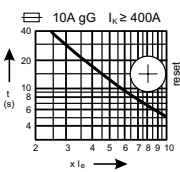
Adjustment range: 1.1 – 1.6 A



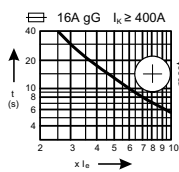
Adjustment range: 1.4 – 2.0 A



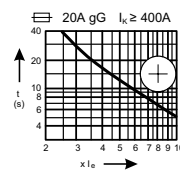
Adjustment range: 1.8 – 2.5 A



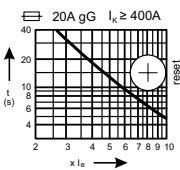
Adjustment range: 2.2 – 3.2 A



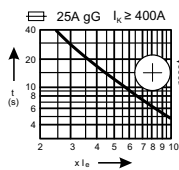
Adjustment range: 2.8 – 4.0 A



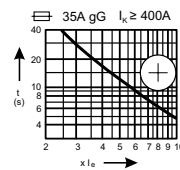
Adjustment range: 3.5 – 5.0 A



Adjustment range: 4.5 – 6.3 A

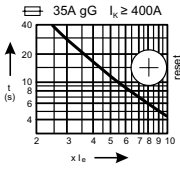


Adjustment range: 5.5 – 8.0 A

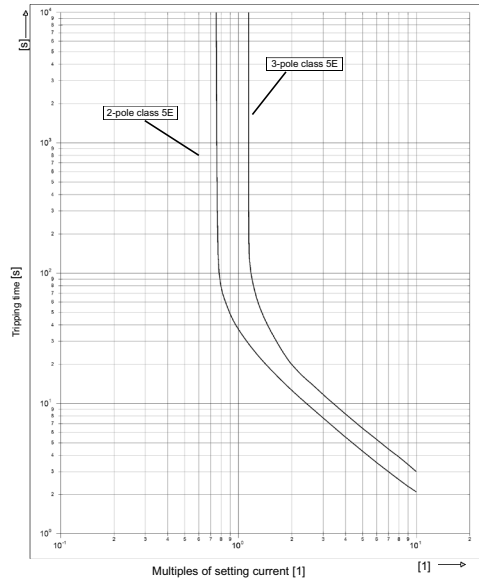


Adjustment range: 7.0 – 10.0 A

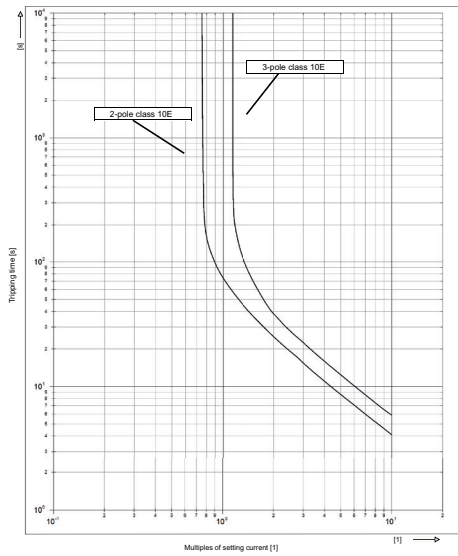
E9



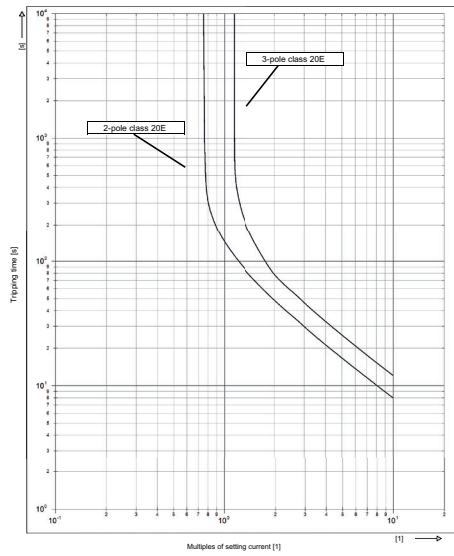
Adjustment range: 9.0 – 12.5 A



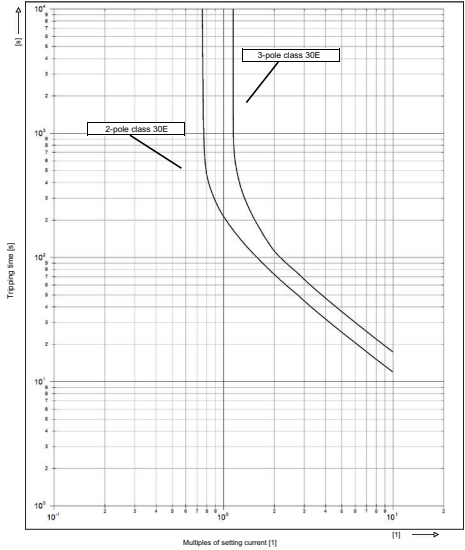
Tripping characteristic curve 8510/132-05-335-301, Class 5E



Tripping characteristic curve 8510/132-05-335-301, Class 10E

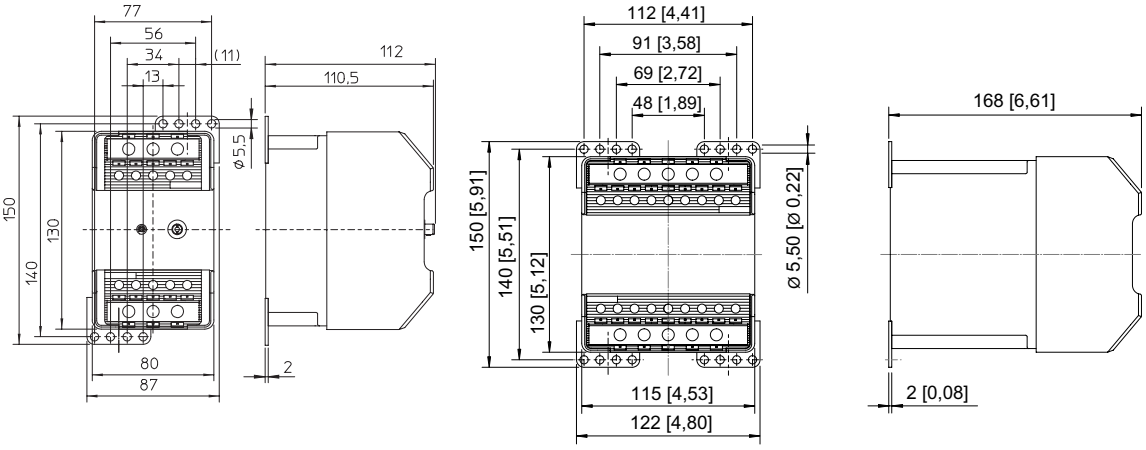


Tripping characteristic curve 8510/132-05-335-301, Class 20E



Tripping characteristic curve 8510/132-05-335-301,  
Class 30E

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



8510/132