

Load disconnect switches and motor starters

Mlded case circuit breaker for motor protection



8146/5-V27-7-MCP-STA-4,00-0000-U08-0212 Art. No. 345109



- Conductor and system protection for Ex e and Ex d motors and transformers
- Robust enclosure made of glass fibre reinforced polyester resin
- Optional: Undervoltage release, shunt trip, auxiliary contact, trip indicator, short-circuit signalling contact
- New generation up to 32 A
- Standardised enclosure size
- Black or red/yellow actuator lever colour
- Application-specific cable glands

MY R. STAHL 8146X



R. STAHL Series 8146/5-V27 motor protection circuit breakers protect Ex e and Ex d motors as well as the associated conductors and systems. The standard versions feature an adjustable, phase-sensitive thermal overcurrent release up to 32 A and an electromagnetic quick-tripping mechanism. A wide selection of undervoltage releases is available. The range also includes circuit breakers solely for protection against short circuits and transformer circuit breakers up to 25 A. All switches feature an N rail and a PE rail.

Technical Data

Explosion Protection

Area of application	European Union (ATEX) IECEX
Application range (zones)	1, 2, 21, 22
IECEX gas certificate	IECEX PTB 06.0090
IECEX gas explosion protection	Ex db eb IIC T4 Gb
IECEX dust certificate	IECEX PTB 06.0090
IECEX dust explosion protection	Ex tb IIIC T130 °C Db
ATEX gas certificate	PTB 01 ATEX 1024
ATEX gas explosion protection	Ex II 2 G Ex db eb IIC T4 Gb
ATEX dust certificate	PTB 01 ATEX 1024
ATEX dust explosion protection	Ex II 2 D Ex tb IIIC T130 °C Db
Certificates	ATEX (PTB), IECEX (PTB)

Electrical Data

AC rated operational voltage	690 V
DC rated operational voltage	250 V
Frequency range	50 – 60 Hz
Electrical service life	50000 operating cycles
Mechanical service life	100000 operating cycles
Rated surge voltage	6 kV
Release	Undervoltage release
AC release voltage	400 V
Release frequency	50 Hz
Electromagnetic tripping	$\pm 20\% \times 12.5 \times I_e$
Current-setting range	2.5 – 4 A
Current-setting range note	Follow the operating instructions.

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Electrical Data

No. of poles	3
1st auxiliary function	without
2nd auxiliary function	without
3rd auxiliary function	Undervoltage release
Rated operational current I_e 1st auxiliary function	without AC-15 DC-13
Rated operational current I_e 2nd auxiliary function	without AC-15 DC-13

Ambient Conditions

Ambient temperature	-25°C ... +50°C
Ambient temperature	-13 °F ... +122 °F
Degree of pollution	3

Mechanical Data

Degree of protection (IP)	IP66
Enclosure material	Polyester resin, Glass fibre reinforced
Min. connection cross section, solid	1,5 mm ²
Max. connection cross section, solid	25 mm ²
Min. connection cross-section, finely stranded	1,5 mm ²
Max. connection cross-section, finely stranded	25 mm ²
Min. solid conn. cr.-sect. AWG	AWG 16
Max. connection cross section, solid AWG	AWG 4
Min. f.stra. con. cr.-sec. AWG	AWG 16
F.stranded conn. cr.-sect. AWG	AWG 4
Connection cross-section	0.5 ... 4 mm ²
Connection cross-section of auxiliary contact AWG	18 AWG ... 14 AWG
Seal	Silicone, foamed
Width	170 mm
Width, inches	6.69 in
Height	340.5 mm

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Mechanical Data

Height in inches	13.41 in
Depth	150 mm
Depth in inches	5.91 in
Handle colour	Red
Protective collar colour	Yellow
Rotary actuator labelling	0 - tripped - I
Lockable in	Three times in 0 position
Weight	2.5 kg
Weight	5.51 lb

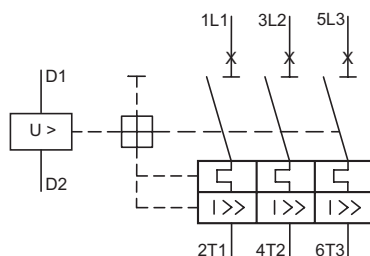
Mounting / Installation

Tightening torque main contact	0.4 ... 0.6 N · m
Tightening torque main contact lbf-in	0.4 ... 0.6 N · m
Tightening torque auxiliary contact	0.4 ... 0.6 N · m
Tightening torque auxiliary contact lbf in	3.5 lbf-in ... 5.3 lbf-in
Tightening torque of cover screw 1	4.5 N · m
Tightening torque of cover screw 1 lbf in	39.83 lbf in
Neutral rail tightening torque	2 N · m
Neutral rail tigh. tor. lbf in	17.7 lbf in
PE rail tightening torque	2 N · m
PE rail tight. torque lbf in	17.7 lbf in

Components

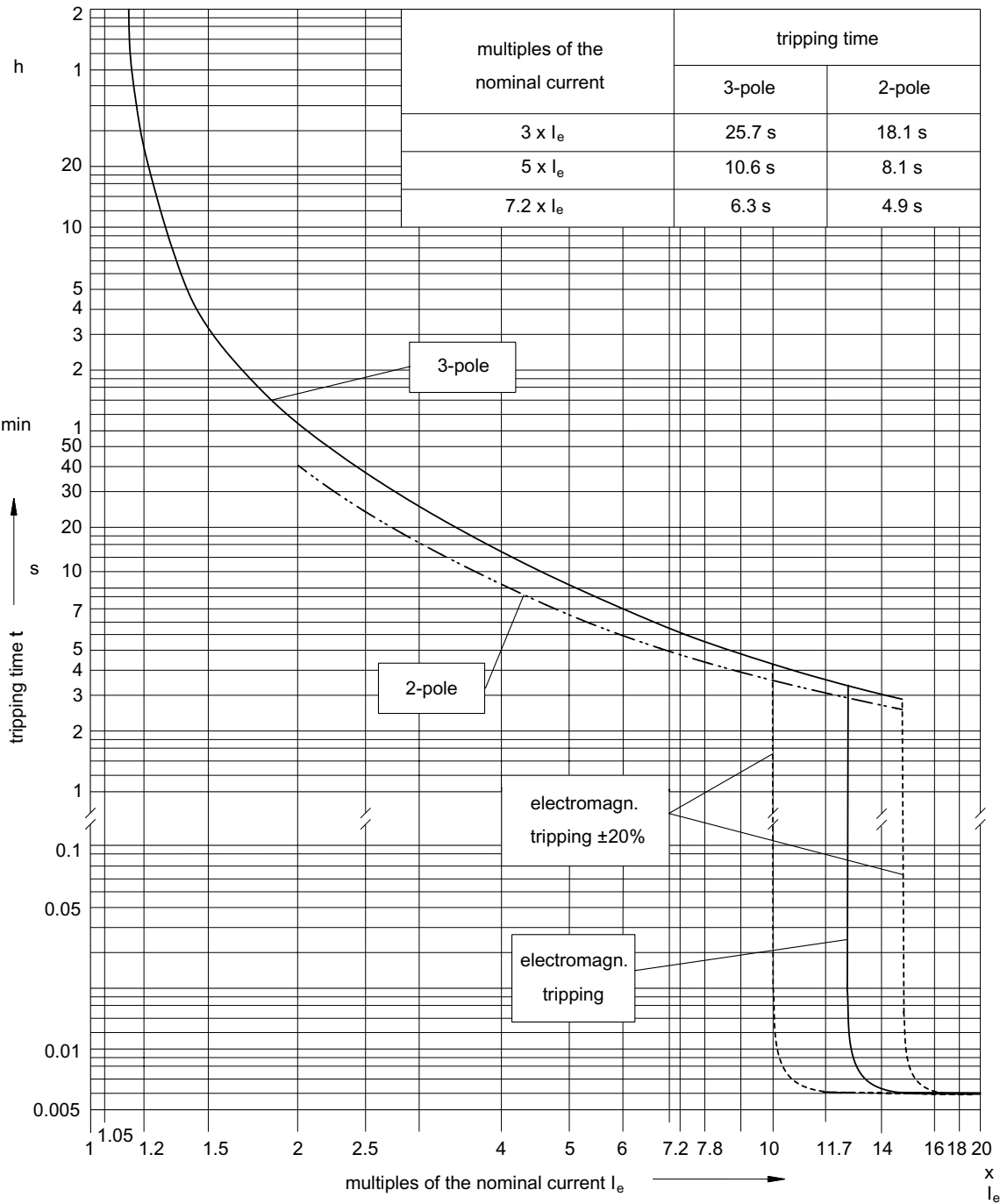
Built-in unit 1	1 x Motor protect. circuit breaker 8523/1-MCP-GLA-4,00-0000-U08-N-4
Cable glands and entries	3 x M25 Ø 7 ... 17 mm
Type of screw connection	8161
Material cable gland	Polyamide, black
Earth rail	5x10mm ² (1x)
Earth rail	2 x 10 mm ² 2 x 35 mm ² (1x)

Technical Drawings – Subject to Alterations



8523/1-CP-...-0000-U-...

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Tripping characteristic curve 2.5 to 4 A

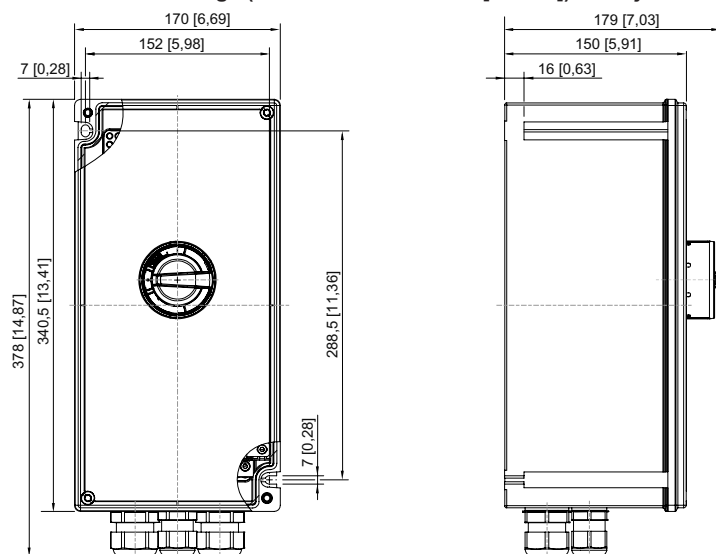
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Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.