

Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562



www.stahl.de



- > With residual current measurement and tripping device
- > With 2 pole switching miniature circuit-breaker for overload and short-circuit



12502E00

The FI/LS circuit-breaker is the perfect protection for
 – shorting to earth,
 – overload and
 – short-circuits.

The FI/LS circuit-breaker contains a residual current measurement and triggering device as well as the switching miniature circuit breaker with its proven design features and tripping characteristics. This therefore replaces the separate "FI circuit-breaker" and "miniature circuit-breaker", saving fitting cost and mounting space.

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

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WebCode 8562C

Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562

Selection Table

Version	Breaking capacity	No. of poles	Rated residual current $I_{\Delta N}$	Rated operational current	Module width	Order number	Weight	
	kA		mA		mm		kg	
Residual current circuit-breaker with integral overcurrent protection, B-Characteristic	6	2 pole	30	16 A	99.00	8562/54-2050-160	1.800	
	10	2 pole	30	16 A	99.00	8562/54-2250-160	1.800	
				20 A	99.00	8562/54-2250-200	1.800	
	10	2 pole	30	100	25 A	99.00	8562/54-2250-250	1.800
					32 A	99.00	8562/54-2250-320	1.800
					6 A	99.00	8562/54-2370-060	1.800
					99.00	8562/54-2374-060	1.800	
				99.00	8562/54-2375-060	1.800		
				99.00	8562/54-2376-060	1.800		
				10 A	99.00	8562/54-2370-100	1.800	
				99.00	8562/54-2374-100	1.800		
				99.00	8562/54-2375-100	1.800		
				99.00	8562/54-2376-100	1.800		
				13 A	99.00	8562/54-2370-130	1.800	
				99.00	8562/54-2374-130	1.800		
				99.00	8562/54-2375-130	1.800		
				99.00	8562/54-2376-130	1.800		
				16 A	99.00	8562/54-2370-160	1.200	
				99.00	8562/54-2374-160	1.800		
	99.00	8562/54-2375-160	1.800					
	99.00	8562/54-2376-160	1.800					
	20 A	99.00	8562/54-2370-200	1.800				
	99.00	8562/54-2374-200	1.800					
	99.00	8562/54-2375-200	1.800					
	99.00	8562/54-2376-200	1.800					
	25 A	99.00	8562/54-2370-250	1.800				
	99.00	8562/54-2374-250	1.800					
	99.00	8562/54-2375-250	1.800					
	99.00	8562/54-2376-250	1.800					
	32 A	99.00	8562/54-2370-320	1.800				
	99.00	8562/54-2374-320	1.800					
	99.00	8562/54-2375-320	1.800					
99.00	8562/54-2376-320	1.800						
40 A	99.00	8562/54-2370-400	1.800					
99.00	8562/54-2374-400	1.800						
99.00	8562/54-2375-400	1.800						
99.00	8562/54-2376-400	1.800						
300	2 pole	30	6 A	99.00	8562/54-2265-060	1.800		
			16 A	99.00	8562/54-2265-160	1.800		
			20 A	99.00	8562/54-2260-200	1.800		
10	1 pole + N	30	6 A	54.00	8562/52-5250-060	1.200		
			10 A	54.00	8562/52-5250-100	1.200		

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Selection Table

Version	Breaking capacity	No. of poles	Rated residual current $I_{\Delta N}$	Rated operational current	Module width	Order number	Weight		
	kA		mA		mm		kg		
Residual current circuit-breaker with integral overcurrent protection, B-Characteristic	10	1 pole + N	30	16 A	54.00	8562/52-5250-160	1.200		
					72.00	8562/53-5254-160	1.500		
					72.00	8562/53-5255-160	1.500		
				20 A	54.00	8562/52-5250-200	1.200		
					72.00	8562/53-5255-200	1.500		
				25 A	54.00	8562/52-5250-250	1.200		
					72.00	8562/53-5255-250	1.500		
				100	6 A	54.00	8562/52-5370-060	1.200	
						72.00	8562/53-537A-060	1.200	
						72.00	8562/53-5374-060	1.200	
						72.00	8562/53-5375-060	1.200	
						72.00	8562/53-5376-060	1.200	
						10 A	54.00	8562/52-5370-100	1.200
							72.00	8562/53-537A-100	1.500
				72.00	8562/53-5374-100		1.200		
				72.00	8562/53-5375-100		1.200		
				72.00	8562/53-5376-100		1.200		
				13 A	54.00	8562/52-5370-130	1.200		
					72.00	8562/53-537A-130	1.200		
					72.00	8562/53-5374-130	1.200		
					72.00	8562/53-5375-130	1.200		
				16 A	54.00	8562/52-5370-160	1.200		
					72.00	8562/53-537A-160	1.500		
					72.00	8562/53-5374-160	1.200		
					72.00	8562/53-5375-160	1.200		
					72.00	8562/53-5376-160	1.200		
				20 A	54.00	8562/52-5370-200	1.200		
					72.00	8562/53-537A-200	1.200		
					72.00	8562/53-5374-200	1.200		
					72.00	8562/53-5375-200	1.200		
					72.00	8562/53-5376-200	1.200		
				25 A	54.00	8562/52-5370-250	1.200		
72.00	8562/53-537A-250	1.500							
72.00	8562/53-5374-250	1.200							
72.00	8562/53-5375-250	1.200							
72.00	8562/53-5376-250	1.200							
32 A	54.00	8562/52-5370-320	1.200						
	72.00	8562/53-537A-320	1.200						
	72.00	8562/53-5374-320	1.200						
	72.00	8562/53-5375-320	1.200						
	72.00	8562/53-5376-320	1.200						

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Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562

Selection Table

Version	Breaking capacity	No. of poles	Rated residual current $I_{\Delta N}$	Rated operational current	Module width	Order number	Weight
	kA		mA		mm		kg
Residual current circuit-breaker with integral overcurrent protection, B-Characteristic	10	1 pole + N	100	40 A	54.00	8562/52-5370-400	1.200
					72.00	8562/53-537A-400	1.200
					72.00	8562/53-5374-400	1.200
					72.00	8562/53-5375-400	1.200
					72.00	8562/53-5376-400	1.200

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Selection Table

Version	Breaking capacity	No. of poles	Rated residual current $I_{\Delta N}$	Rated operational current	Module width	Order number	Weight	
	kA		mA		mm		kg	
Residual current circuit-breaker with integral overcurrent protection, C-Characteristic	6	2 pole	30	16 A	99.00	8562/54-2075-160	1.800	
				20 A	99.00	8562/54-2075-200	1.800	
				32 A	99.00	8562/54-2075-320	1.800	
	10	2 pole	30	6 A	99.00	8562/54-2270-060	1.800	
					99.00	8562/54-2274-060	1.800	
					99.00	8562/54-2275-060	1.800	
				10 A	99.00	8562/54-2270-100	1.800	
					99.00	8562/54-2274-100	1.800	
					99.00	8562/54-2275-100	1.800	
				13 A	99.00	8562/54-2270-130	1.800	
				16 A	99.00	8562/54-2270-160	1.800	
					99.00	8562/54-2274-160	1.800	
					99.00	8562/54-2275-160	1.800	
				99.00	8562/54-2475-160-4	1.800		
				20 A	99.00	8562/54-2270-200	1.800	
				25 A	99.00	8562/54-2270-250	1.800	
					99.00	8562/54-2275-250	1.800	
					99.00	8562/54-2270-320	1.800	
				32 A	99.00	8562/54-2270-320	1.800	
					99.00	8562/54-2275-320	1.800	
					100	6 A	99.00	8562/54-2380-060
				99.00			8562/54-2384-060	1.800
				99.00			8562/54-2385-060	1.800
				99.00		8562/54-2386-060	1.800	
				10 A		99.00	8562/54-2380-100	1.800
						99.00	8562/54-2384-100	1.800
						99.00	8562/54-2385-100	1.800
				99.00		8562/54-2386-100	1.800	
				13 A		99.00	8562/54-2380-130	1.800
					99.00	8562/54-2384-130	1.800	
99.00	8562/54-2385-130	1.800						
99.00	8562/54-2386-130	1.800						
16 A	99.00	8562/54-2380-160	1.800					
	99.00	8562/54-2384-160	1.800					
	99.00	8562/54-2385-160	1.800					
99.00	8562/54-2386-160	1.800						
20 A	99.00	8562/54-2380-200	1.800					
	99.00	8562/54-2384-200	1.800					
	99.00	8562/54-2385-200	1.800					
99.00	8562/54-2386-200	1.800						
25 A	99.00	8562/54-2380-250	1.800					
	99.00	8562/54-2384-250	1.800					
	99.00	8562/54-2385-250	1.800					
99.00	8562/54-2386-250	1.800						

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Selection Table

Version	Breaking capacity	No. of poles	Rated residual current $I_{\Delta N}$	Rated operational current	Module width	Order number	Weight
	kA		mA		mm		kg
Residual current circuit-breaker with integral overcurrent protection, C-Characteristic	10	2 pole	100	32 A	99.00	8562/54-2380-320	1.800
					99.00	8562/54-2384-320	1.800
					99.00	8562/54-2385-320	1.800
					99.00	8562/54-2386-320	1.800
				40 A	99.00	8562/54-2380-400	1.800
					99.00	8562/54-2384-400	1.800
					99.00	8562/54-2385-400	1.800
					99.00	8562/54-2386-400	1.800
		300	6 A	99.00	8562/54-2280-060	1.800	
				99.00	8562/54-2280-100	1.800	
				99.00	8562/54-2280-130	1.800	
				99.00	8562/54-2280-160	1.800	
			10 A	99.00	8562/54-2285-160	1.800	
				99.00	8562/54-2286-160	1.800	
				99.00	8562/54-2280-200	1.800	
				99.00	8562/54-2285-200	1.800	
	20 A	99.00	8562/54-2280-250	1.800			
			8562/54-2285-250	1.800			
			8562/54-2280-320	1.800			
			8562/54-2285-400	1.800			
		40 A	99.00	8562/54-2285-400	1.800		
			99.00	8562/54-2285-400	1.800		
			99.00	8562/54-2285-400	1.800		
			99.00	8562/54-2285-400	1.800		
	10	1 pole + N	30	6 A	72.00	8562/53-5274-060	1.500
					54.00	8562/52-5270-100	1.200
					54.00	8562/52-5270-160	1.200
				72.00	8562/53-5270-160-25	1.500	
				72.00	8562/53-5275-160	1.500	
				100	6 A	54.00	8562/52-5380-060
			72.00			8562/53-538A-060	1.500
			72.00			8562/53-5384-060	1.500
10 A			72.00		8562/53-5385-060	1.500	
			72.00		8562/53-5386-060	1.500	
			72.00		8562/53-5386-060	1.500	
13 A			10 A	54.00	8562/52-5380-100	1.200	
		72.00			8562/53-538A-100	1.800	
		72.00			8562/53-5384-100	1.500	
		72.00		8562/53-5385-100	1.500		
				8562/53-5386-100	1.500		
				8562/53-5386-100	1.500		
		13 A	54.00	8562/52-5380-130	1.200		
				72.00	8562/53-538A-130	1.500	
				72.00	8562/53-5384-130	1.500	
			72.00	8562/53-5385-130	1.500		
				8562/53-5385-130	1.500		
				8562/53-5386-130	1.500		

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Selection Table

Version	Breaking capacity	No. of poles	Rated residual current $I_{\Delta N}$	Rated operational current	Module width	Order number	Weight				
	kA		mA		mm		kg				
Residual current circuit-breaker with integral overcurrent protection, C-Characteristic	10	1 pole + N	100	16 A	54.00	8562/52-5380-160	1.200				
					72.00	8562/53-538A-160	1.500				
					72.00	8562/53-5384-160	1.500				
					72.00	8562/53-5385-160	1.500				
								20 A	54.00	8562/52-5380-200	1.200
							72.00		8562/53-538A-200	1.500	
							72.00		8562/53-5384-200	1.500	
							72.00		8562/53-5385-200	1.500	
							25 A	54.00	8562/52-5380-250	1.200	
								72.00	8562/53-538A-250	1.800	
								72.00	8562/53-5384-250	1.500	
								72.00	8562/53-5385-250	1.500	
							32 A	54.00	8562/52-5380-320	1.200	
								72.00	8562/53-538A-320	1.800	
								72.00	8562/53-5384-320	1.500	
								72.00	8562/53-5385-320	1.500	
							40 A	54.00	8562/52-5380-400	1.200	
								72.00	8562/53-538A-400	1.500	
								72.00	8562/53-5384-400	1.500	
								72.00	8562/53-5385-400	1.500	
							300	16 A	72.00	8562/53-5285-160	1.500

Note


Type: 8562/53-5270-160-25 with coupling relais
 Type: 8562/54-2475-160-4 with reset for fault indication contact

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Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562

Residual current circuit breaker with integral overcurrent protection 1-pole + N
Selection table Configuration according to order

Version		Order number	
B characteristic 	Enclosure size	Width 54 mm	Width 72 mm
		8562/52-5...-...	8562/53-5...-...

Order number supplement

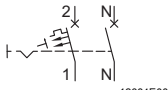
	Rated residual current in A / switching capacity	Switching capacity	Rated residual current in A		
		10 kA	0.01	8562/...-33-...	8562/...-33-...
			0.03	8562/...-25-...	8562/...-25-...
			0.3	8562/...-26-...	8562/...-26-...
Auxiliary contact	without			8562/...-0-..	--
	1 CO			--	8562/...-4-..
	1 CO, fault signal			--	8562/...-5-..
	2 CO			--	8562/...-A-..
	2 CO, 1 x fault signal			--	8562/...-6-..
	2 NO, 1 x fault signal			--	8562/...-8-..
Rated operating current in A	6			8562/...-...-060	8562/...-...-060
	10			8562/...-...-100	8562/...-...-100
(rated residual current 0.01 A only up to 20 A rated operating current)	13			8562/...-...-130	8562/...-...-130
	16			8562/...-...-160	8562/...-...-160
	20			8562/...-...-200	8562/...-...-200
	25			8562/...-...-250	8562/...-...-250
	32			8562/...-...-320	8562/...-...-320
	40			8562/...-...-400	8562/...-...-400

Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562



Residual current circuit breaker with integral overcurrent protection 1-pole + N Selection table Configuration according to order

Version		Order number	
C characteristic	Enclosure size	Width 54 mm	Width 72 mm
		8562/52-5...-...	8562/53-5...-...

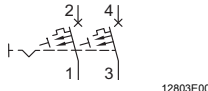
Order number supplement

	Rated residual current in A / switching capacity	Switching capacity	Rated residual current in A	Order number	
				Width 54 mm	Width 72 mm
		10 kA	0.01	8562/...-34-...	8562/...-34-...
			0.03	8562/...-27-...	8562/...-27-...
			0.3	8562/...-28-...	8562/...-28-...
Auxiliary contact	without			8562/...-0-..	--
	1 CO			--	8562/...-4-..
	1 CO, fault signal			--	8562/...-5-..
	2 CO			--	8562/...-A-..
	2 CO, 1 x fault signal			--	8562/...-6-..
	2 NO, 1 x fault signal			--	8562/...-8-..
Rated operating current in A (rated residual current 0.01 A only up to 20 A rated operating current)	6			8562/...-060	8562/...-060
	10			8562/...-100	8562/...-100
	13			8562/...-130	8562/...-130
	16			8562/...-160	8562/...-160
	20			8562/...-200	8562/...-200
	25			8562/...-250	8562/...-250
	32			8562/...-320	8562/...-320
	40			8562/...-400	8562/...-400

Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562

Residual current circuit breaker with integral overcurrent protection 2-pole
Selection table Configuration according to order

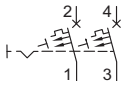
Version		Order number	
B characteristic	Enclosure size	Width 99 mm	
		8562/54-2-...-...	
Order number supplement			
Rated residual current in A / switching capacity	Switching capacity	Rated residual current in A	
		6 kA	0.03
		0.3	8562/...-06-...
	10 kA	Rated residual current in A	
		0.03	8562/...-25-...
		0.3	8562/...-26-...
Auxiliary contact	without		8562/...-0-..
	1 CO		8562/...-4-..
	1 CO, fault signal		8562/...-5-..
	2 CO, 1 x fault signal		8562/...-6-..
Rated operating current in A	6		8562/...-060
	10		8562/...-100
	13		8562/...-130
	16		8562/...-160
	20		8562/...-200
	25		8562/...-250
	32		8562/...-320
	40		8562/...-400

Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562



Residual current circuit breaker with integral overcurrent protection 2-pole Selection table Configuration according to order

Version		Order number
C characteristic	Enclosure size	Width 99 mm
		8562/54-2...-...

Order number supplement

Rated residual current in A / switching capacity	Switching capacity	Rated residual current in A	
	6 kA	0.03	8562/...-07-...
		0.3	8562/...-08-...
	10 kA	0.03	8562/...-27-...
		0.3	8562/...-28-...
Auxiliary contact	without		8562/...-0-..
	1 CO		8562/...-4-..
	1 CO, fault signal		8562/...-5-..
	2 CO, 1 x fault signal		8562/...-6-..
Rated operating current in A	6		8562/...-060
	10		8562/...-100
	13		8562/...-130
	16		8562/...-160
	20		8562/...-200
	25		8562/...-250
	32		8562/...-320
	40		8562/...-400

Explosion Protection

Marking

Global (IECEX)	Ex d e IIC Ex d e I
Europe (ATEX)	II 2 G Ex d e IIC Gb I M 2 Ex d e I Mb

Certificates and approvals

IECEX	IECEX PTB 06.0062U
Europe (ATEX)	PTB 02 ATEX 1049 U
other certificates	Belarus (Gospromnadzor)

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Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562

Technical Data

Electrical data				
Type	8562/5	8562/54-246.-... 8562/54-247.-... 8562/54-248.-...		
Rated operational voltage	127 ... 230 V AC	133 ... 230 V AC 125 V DC with 2 contact strips connected in series		
Frequency	50 / 60 Hz	50 / 60 Hz		
Rated working and leakage currents	$I_N = 6 \dots 40 \text{ A}$; $I_{\Delta N} = 10 / 30 / 100 / 300 \text{ mA}$	$I_N = 6 \dots 40 \text{ A}$; $I_{\Delta N} = 10 / 30 / 100 / 300 \text{ mA}$		
Breaking capacity	6 resp. 10 kA 2 pole; 10 kA 1 pole + N (25 kA to IEC)	10 kA 2 pole; 25 kA 2 pole (only Type 8562/54-2480-160)		
No. of poles	1 pole + N; 2 pole	2 pole		
Note	for AC and pulsed DC; the breaker has an external test button for checking earth fault function.			
Characteristics	Characteristic to IEC/EN 60898	B	C	
	Rated current range	6 ... 40 A	6 ... 40 A	
Loads	> Electric heatings > Lighting > Socket outlet circuits > Control circuits e.t.c.	> Operating equipment > Light fitting groups > Motors > Transformers e.t.c.		
Normal temperature	30 °C	30 °C		
Thermal overload trip	1.13 ... 1.45 I_n	1.13 ... 1.45 I_n		
Magnetic trip	3 ... 5 I_n	5 ... 10 I_n		
Short circuit protection	Back-up protection with preceding fuse			
	Miniature circuit-breaker	Preceding fuse type gG for tripping characteristic		
		C	B	B, C
	Type	Rated current I_N [A]	min. rated current [A]	max. rated current [A]
8562/5	1	4	--	--
	2	8	--	63
	3	10	--	80
	6	20	10	
	10	25	16	
	16	40	20	100*
	16*	--	--	
	20	50	32	
25	63	40	100	
*) Only types: 8562/54-2465-160-4; 8562/54-2475-160-4; 8562/54-2480-160				
Service life	10 ⁴ switching cycles			
Electrical	10 ⁴ switching cycles			
Mechanical	2x10 ⁴ switching cycles			
Auxiliary contact				
Type	8562/5	8562/54-246.-... 8562/54-247.-... 8562/54-248.-...		
Version	see circuit diagrams	see circuit diagrams		
Rated working current	5 A at 230 V AC 1 A at 60 V DC	2 A at 230 V AC 1 A at 400 V AC 2 A at 60 V DC		

Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562

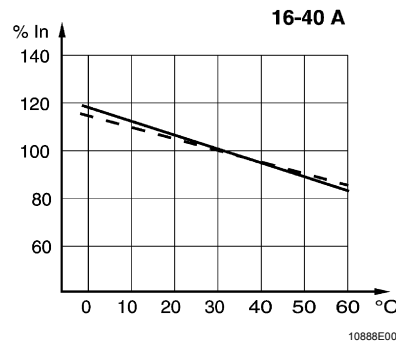
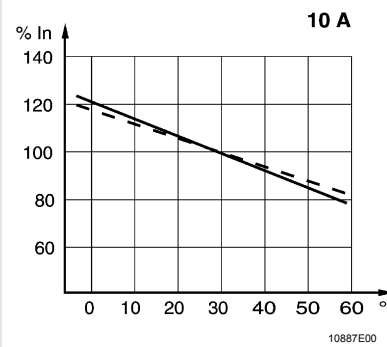
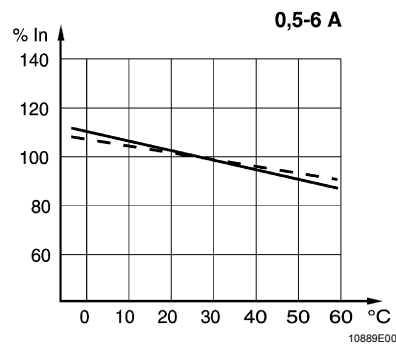


Technical Data

Coupling relays		
Coil tension U_B	220 V	--
Minimum switching current	10 mA	--
Minimum switching current	5 A	--
Switching capacity	min. 250 mW	--

Ambient conditions

Ambient temperature - 20 ... + 60 °C In case of different temperature range please consider correction factor!
 Correction factors **Correction factors for ambient temperatures other than 30 °C**



Mechanical data

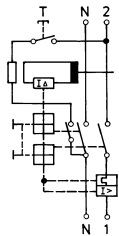
Degree of protection	Degree of protection acc. to IEC/EN 60526 Connecting terminals IP20
Material	
Enclosure	Epoxy resin

E9

Residual Current Circuit-Breaker with Integral Overcurrent Protection

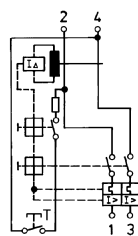
FI/LS Series 8562

Schematics



07606E00

1-pole+N



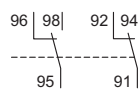
07621E00

2-pole



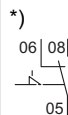
11536E00

Auxiliary contact 1 CO



15104E00

Auxiliary contact 2 CO



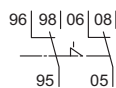
07618E00

Fault signalling contact
1 CO with reset function
for fault signal



12218E00

Auxiliary contact 1 NO
fault signalling contact
1 NO



12219E00

Auxiliary contact 1 CO
fault signalling contact
1 CO



12469E00

Connecting relay
Auxiliary contact 1 NO

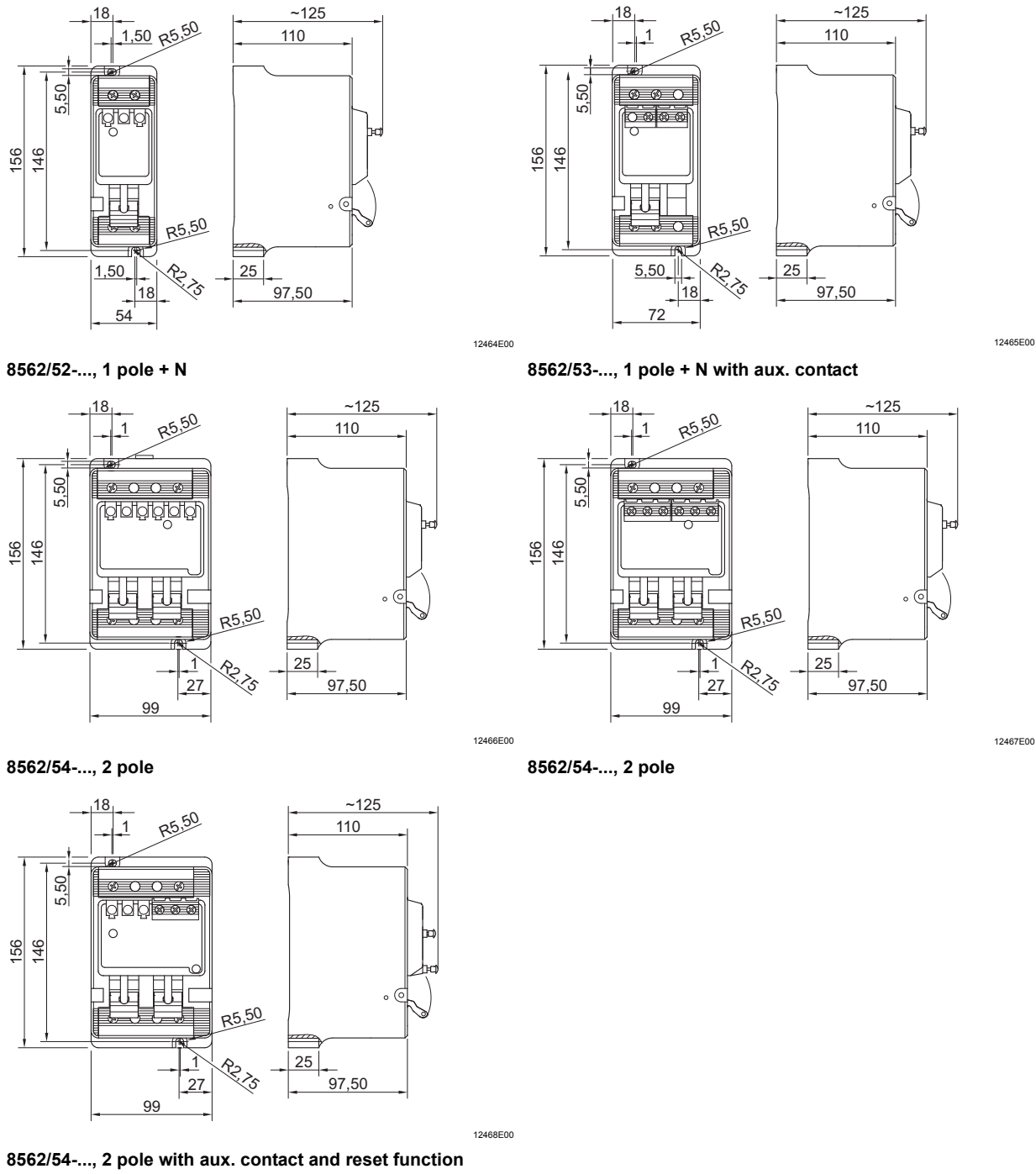
*) only for types 8562/54-2465-160-4 and 8562/54-2475-160-4: After the circuit breaker has been activated, the fault-contact can be reset manually.

Residual Current Circuit-Breaker with Integral Overcurrent Protection

FI/LS Series 8562



Dimensional Drawings (All Dimensions in mm) - 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.