

5SV9 jordfeilautomater 5SV6 jordfeiautomat med lysbuevakt

5SV9 jordfeilautomat 6 kA for TN anlegg

SIEMENS

Jordfeilautomat kompakt 1MW for TN, C-karakteristikk - 6 kA

MLFB	El.nummer	Beskrivelse	Prisgruppe
5SV9316-7NK06	1613010	JFA TN 6 KA, 18MM, 30MA C6, EL	1BC
5SV9316-7NK10	1613011	JFA TN 6 KA, 18MM, 30MA C10, EL	1BC
5SV9316-7NK16	1613012	JFA TN 6 KA, 18MM, 30MA C16, EL	1BC
5SV9316-7FM16	1613013	JFA TN 6KA, 18MM, 30MA C16, EL, BOLIG	1BC
5SV9316-7NK20	1613014	JFA TN 6 KA, 18MM, 30MA C20, EL	1BC
5SV9316-7FM20	1613015	JFA TN 6KA, 18MM, 30MA C20, EL, BOLIG	1BC
5SV9316-7NK25	1613016	JFA TN 6 KA, 18MM, 30MA C25, EL	1BC
5SV9316-7NK32	1613017	JFA TN 6 KA, 18MM, 30MA C32, EL	1BC

Jordfeilautomat kompakt 1MW for TN, B-karakteristikk - 6 kA

MLFB	El.nummer	Beskrivelse	Prisgruppe
5SV9316-6NK10	1613018	JFA TN 6 KA, 18MM, 30MA B10, EL	1BC
5SV9316-6NK16	1613019	JFA TN 6 KA, 18MM, 30MA B16, EL	1BC
5SV9316-6FM16	1613020	JFA TN 6KA, 18MM, 30MA B16, EL, BOLIG	1BC
5SV9316-6NK20	1613021	JFA TN 6 KA, 18MM, 30MA B20, EL	1BC
5SV9316-6FM20	1613022	JFA TN 6KA, 18MM, 30MA B20, EL, BOLIG	1BC
5SV9316-6NK25	1613023	JFA TN 6 KA, 18MM, 30MA B25, EL	1BC
5SV9316-6NK32	1613024	JFA TN 6 KA, 18MM, 30MA B32, EL	1BC



5SV6 jordfeilautomat med lysbuevakt 6 kA for TN anlegg

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Jordfeilautomat med lysbuevakt kompakt 1MW, C-karakteristikk - 6kA

MLFB	El.nummer	Beskrivelse	Prisgruppe
5SV6316-7KK06	1613025	JFA+AFD, TN, 6KA, 18MM, C6	1BA
5SV6316-7KK10	1613026	JFA+AFD, TN, 6KA, 18MM, C10	1BA
5SV6316-7KK16	1613027	JFA+AFD, TN, 6KA, 18MM, C16	1BA
5SV6316-7FM16	1613028	JFA+AFD, TN, 6KA, 18MM, C16, BOLIG	1BA
5SV6316-7KK20	1613029	JFA+AFD, TN, 6KA, 18MM, C20	1BA
5SV6316-7FM20	1613030	JFA+AFD, TN, 6KA, 18MM, C20, BOLIG	1BA
5SV6316-7KK25	1613031	JFA+AFD, TN, 6KA, 18MM, C25	1BA
5SV6316-7KK32	1613032	JFA+AFD, TN, 6KA, 18MM, C32	1BA



5SV60 lysbuevakt

Settes sammen med Jordfeilautomater 5SV9316.../5SV1....

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Lysbuevakt for kompakt jordfeilautomat

MLFB	El.nummer	Beskrivelse	Prisgruppe
5SM6011-2	1613048	LYSBUEVAKT FOR 1MW JFA 16A	1BA
5SM6014-2	1613049	LYSBUEVAKT FOR 1MW JFA 40A	1BA



5SV9 jordfeilautomat + 5SM6 lysbuevakt 6 kA for TN anlegg

SIEMENS

- Jordfeilautomat 5SV9316... 6A til 32A
- Egne typer 16A og 20A for boliger med redusert I2
- Icn= 6kA / Icu= 6 kA
- 1 modulbredde (18mm)
- Benyttes i anlegg med lavere kortslutningsstrømmer – maks 6kA
- Benyttes for å spare plass og kostnader.
- Smarte løsninger med samleskinner der OV, lasbryter eller overspenningsvern settes i begynnelsen av samleskinnen.
- Kan påmonteres 5SM6.. lysbuevakt. Total bredde 2 moduler.
- Egne samleskinner for 5SV1316..+5SM6..



5SV1 jordfeilautomat + 5SM6 lysbuevakt

Icn=6 kA / Icu=10 kA for TN anlegg

SIEMENS

- Jordfeilautomat 5SV1316... 2A til 16A
- Icn= 6kA / Icu= 10 kA
- 1 modulbredde (18mm)
- Benyttes i anlegg med laver kortslutningsstrømmer – maks 6kA i bolig og 10 kA i næringsbygg.
- Ikke justert I2 for bolig.
- Benyttes for å spare plass og kostnader.
- Smarte løsninger med samleskinner der OV, lasbryter eller overspenningsvern settes i begynnelsen av samleskinnen.
- Kan påmonteres 5SM6.. lysbuevakt. Total bredde 2 moduler.
- Egne samleskinner for 5SV9616..+5SM6..

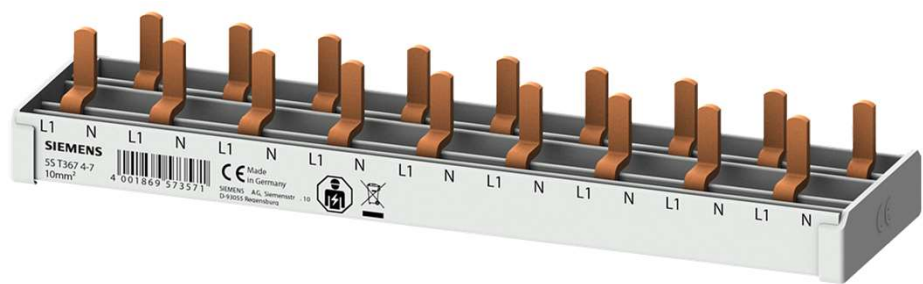


Samleskinner



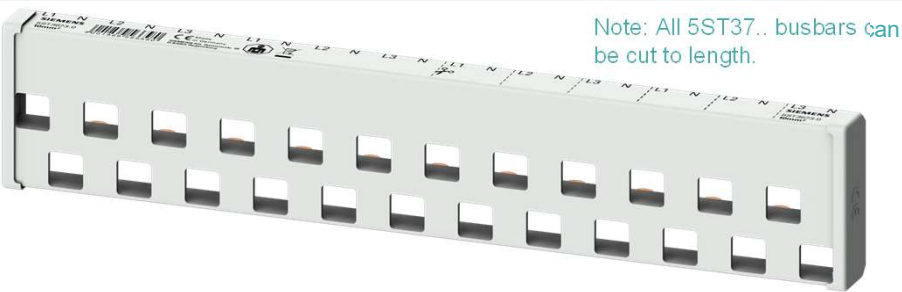
Compact busbars

Samleskinner 1+N for kompakt jordfeilautomater 1MW			
MLFB	El.nummer	Beskrivelse	Prisgruppe
5ST3674-0	1613038	2 FAS FOR 12STK 5SV1/6/9, 12MW	1AD
5ST3774-0	1613039	2 FAS FOR 56STK 5SV1/6/9, 1M	1AD
5ST3784-0	1613035	2 FAS, L1+N+10 JFA, 12MW	1AD
5ST3778-0	1613045	2 FAS FOR 36STK 5SV1/6/9+HJ.KO	1AD
Samleskinner 4 fas for kompakt jordfeilautomater 1MW			
5ST3673-0	1613036	4 FAS FOR 12STK 5SV1/6/9, 12MW	1AD
5ST3773-0	1613037	4 FAS FOR 56STK 5SV1/6/9, 1M	1AD
5ST3783-0	1613034	4 FAS, L1-L2-L3-N+8 JFA, 12MW	1AD
5ST3777-0	1613044	4 FAS FOR 36STK 5SV1/6/9+HJ.KO	1AD



Samleskinner for kompakt jordfeilautomater i kombinasjon med lysbyevakt 1+N			
5ST3676-0	1613042	2 FAS FOR 6STK 5SV1/9+AFD,12MW	1AD
5ST3776-0	1613043	2 FAS FOR 28STK 5SV1/9+AFD, 1M	1AD
5ST3685-0	1613033	2 FAS, L+N+5 JFA + 5 AFD, 12MW	1AD
5ST3780-0	1613046	2 FAS FOR 22STK JFA+AFD+HJ.KO	1AD
Samleskinner for kompakt jordfeilautomater i kombinasjon med lysbyevakt 4 fas			
5ST3675-0	1613040	4 FAS FOR 6STK 5SV1/9+AFD,12MW	1AD
5ST3775-0	1613041	4 FAS FOR 28STK 5SV1/9+AFD, 1M	1AD

Endekapper for 1 meter skinner			
5ST3788-0	1613047	ENDEKAPPE FOR KOMPAKT S.SKINN	1AD



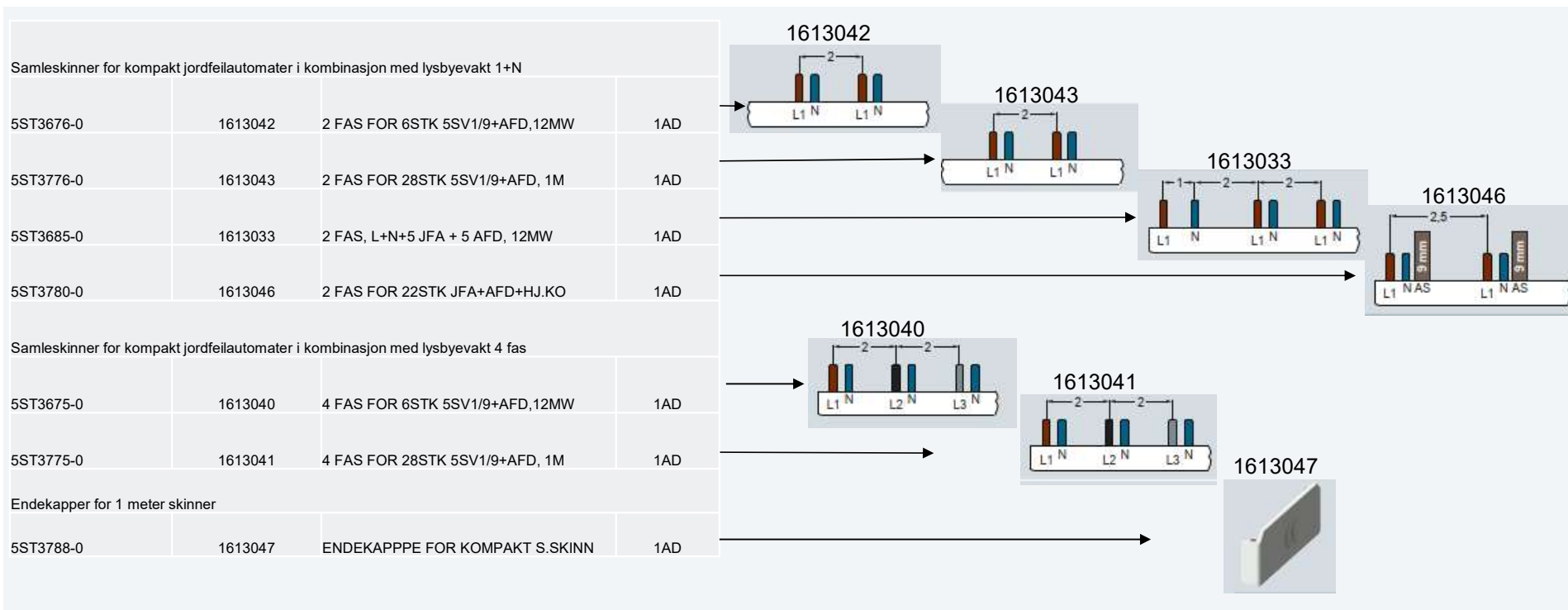
Note: All 5ST37.. busbars can be cut to length.

* Compact = 5SV1/5SV6/5S..0 compact devices
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Kompakte samleskinner

Samleskinner 1+N for kompakt jordfeilautomater 1MW					
MLFB	El.nummer	Beskrivelse	Prisgruppe		
5ST3674-0	1613038	2 FAS FOR 12STK 5SV1/6/9, 12MW	1AD		
5ST3774-0	1613039	2 FAS FOR 56STK 5SV1/6/9, 1M	1AD		
5ST3784-0	1613035	2 FAS, L1+N+10 JFA, 12MW	1AD		
5ST3778-0	1613045	2 FAS FOR 36STK 5SV1/6/9+HJ.KO	1AD		
Samleskinner 4 fas for kompakt jordfeilautomater 1MW					
5ST3673-0	1613036	4 FAS FOR 12STK 5SV1/6/9, 12MW	1AD		
5ST3773-0	1613037	4 FAS FOR 56STK 5SV1/6/9, 1M	1AD		
5ST3783-0	1613034	4 FAS, L1-L2-L3-N+8 JFA, 12MW	1AD		
5ST3777-0	1613044	4 FAS FOR 36STK 5SV1/6/9+HJ.KO	1AD		

Kompakte samleskinner



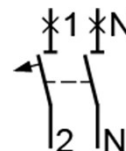
5SV9 RCBOs

Teknisk oversikt 6kA

NEW

SIEMENS

- Electronic RCD function
- Compliance with standards: IEC 61009 / GB16917
- Tripping characteristics: C
- Accessories as for 5SL4: AS, FC, AFD-Unit
- Rated current: 6A, 10A, 16A, 20A, 25A, 32A
- I_{cn} : 6kA
- Rated voltages: AC 230V
- $I_{\Delta n}$: 30mA, Type A
- Poles: 1P+N (switched N)
- Electrical and mechanical switching cycles: >10.000
- Ambient temperature range: -25°C to +55°C (derating above 30°C)
- Terminal conductor cross-sections:
 - Solid and stranded wire: 0.75 ... 16mm²
 - Finely stranded with end sleeve: 0.75 ... 10mm²
- Compliance with RoHs, CE conformity



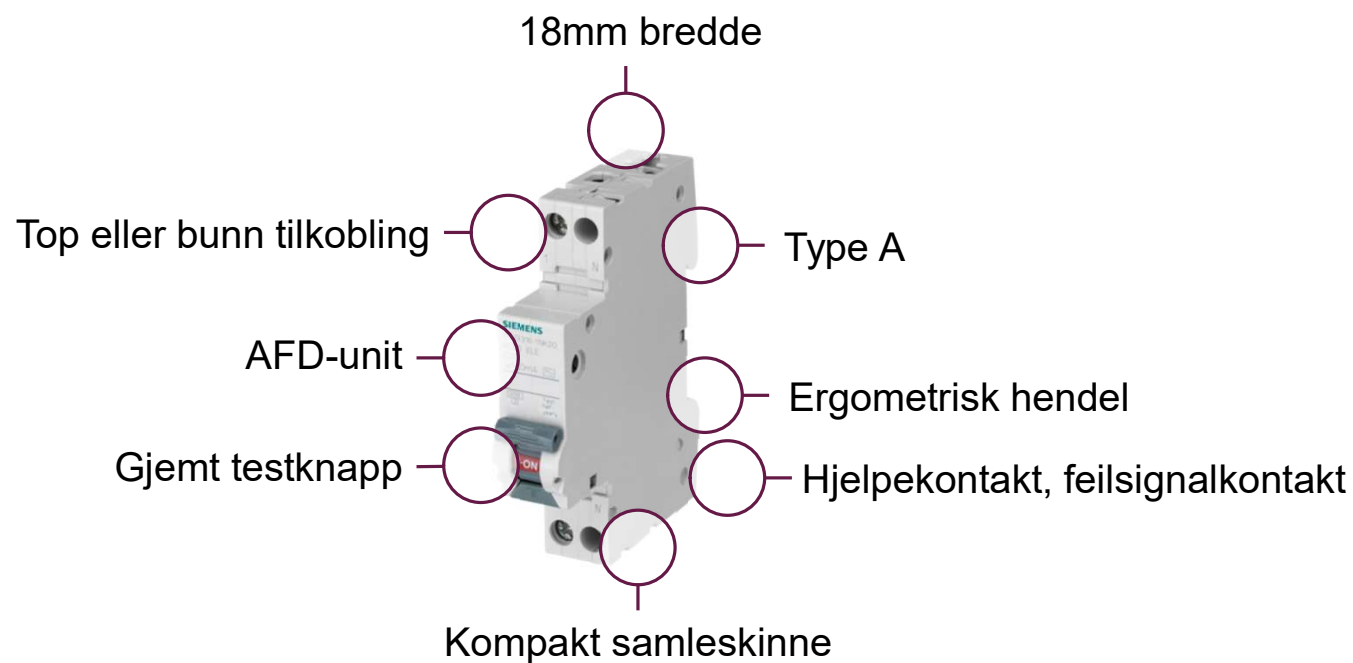
1P+N



5SV9 RCBOs

Feature overview

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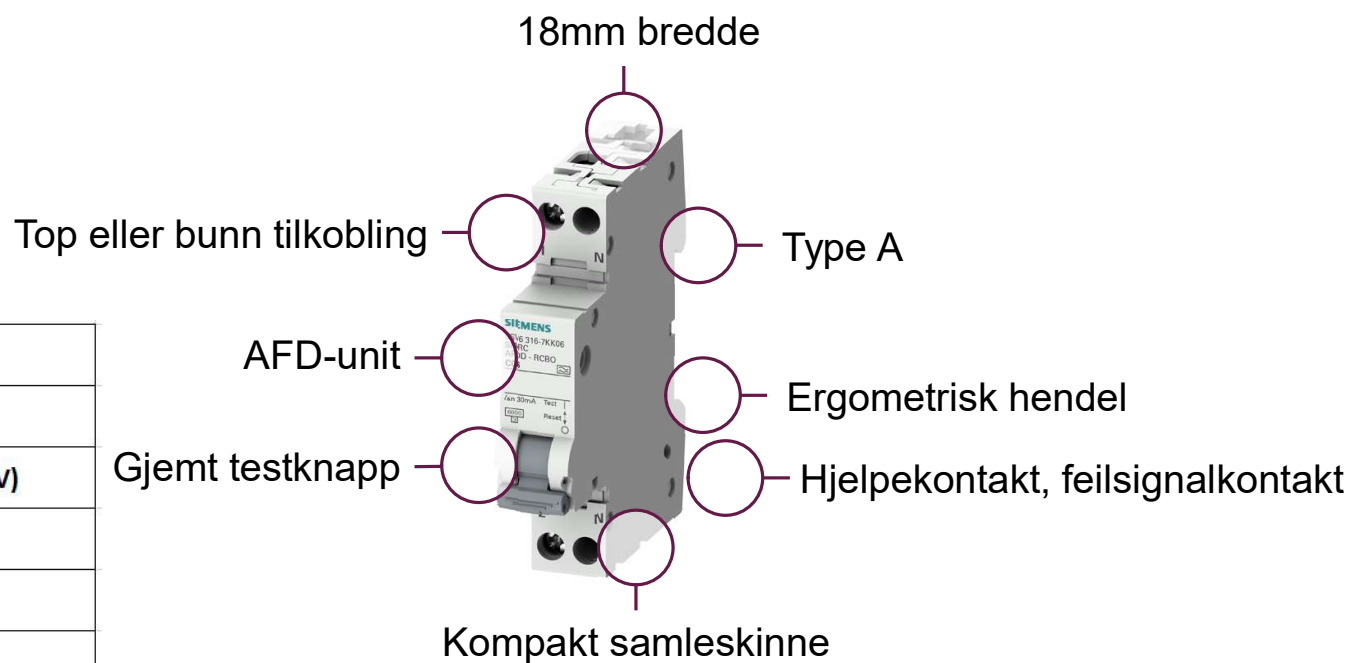


5SV6 jordfeilautomat med lysbuevakt

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		Normal
1 x		Lysbue detektert
2 x		Overspenning (over 285V)
3 x		Jordfeil detektert
		Seltest feilet
	☐	Ingen spenning



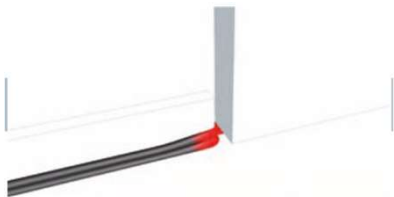
Mulige årsaker til lysbuer – Jordfeilautomater gir ingen beskyttelse for serielysbuer som er hyppigste årsak til elektrisk brann

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Parallel arcing fault
between phase and
neutral conductor/ground



Nails or screws



Crushed cables



Overtight clips



High temperature
of the arc



Ignitable
material



Serial arcing fault in
phase or neutral conductor



Loose contacts and terminals

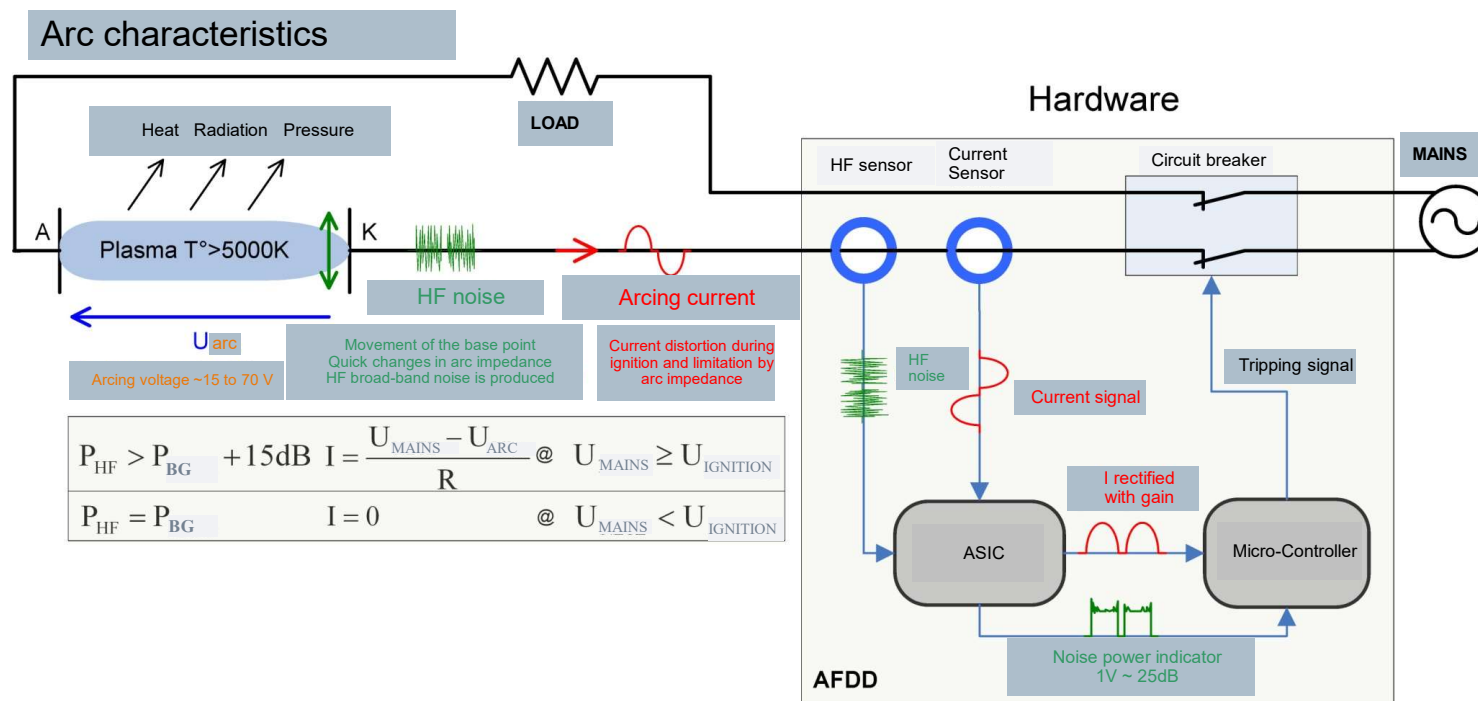


UV radiation / gnawing animals



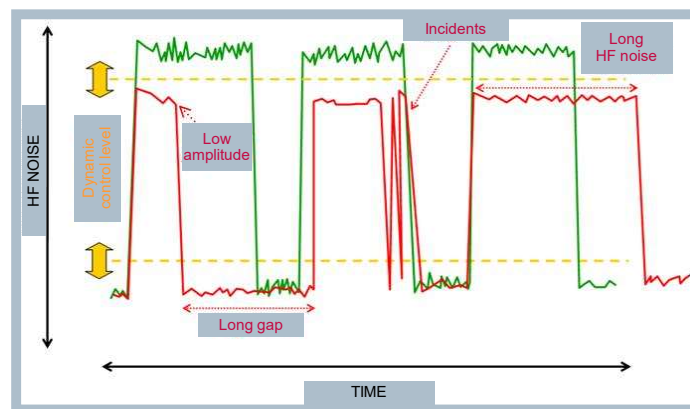
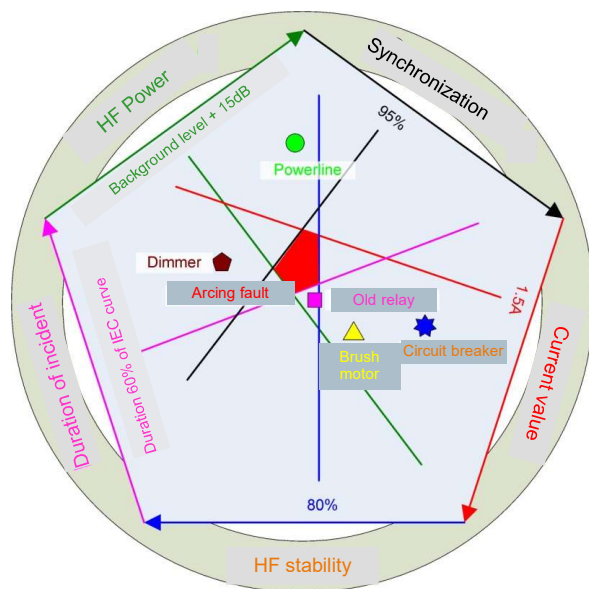
Kinks in connectors / cables

AFD units: Deteksjon



Lybuedeteksjon– Differensiering av feil

SIEMENS



Lybue deteksjon

Microprocessor og/eller ASIC

- 5 hoved kriterier for deteksjon av lysbuefeil og lysbue under normale forhold
- Forskjellige filtre og hysteres for å kun å detektere uønskede lysbuer

<https://www.youtube.com/watch?v=uAorINs1DAM>

<https://www.youtube.com/watch?v=gBTETHXGmvE>

5SV9 / 5SV6 RCBOs

Features

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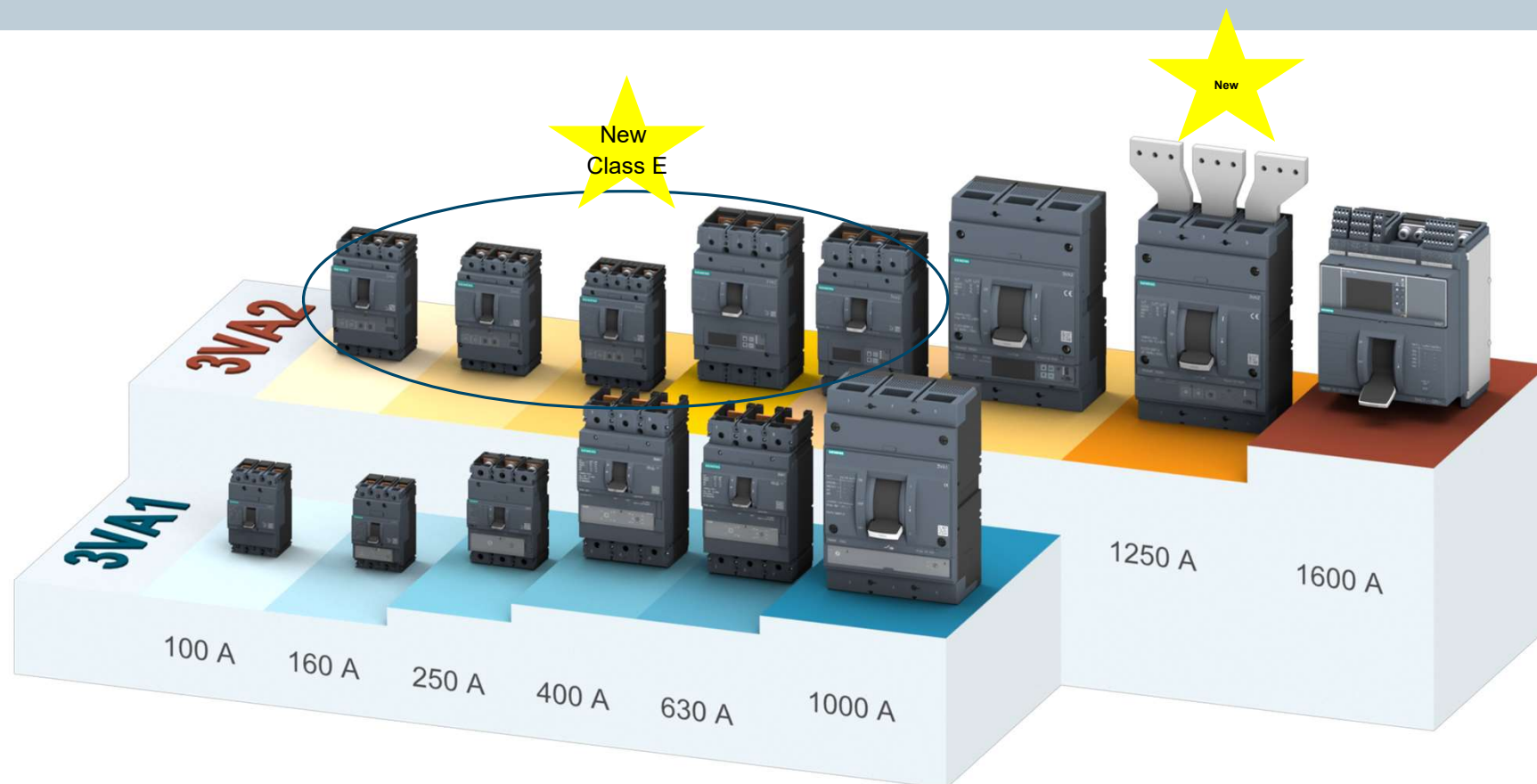
SIEMENS
Ingenuity for life

EM LP – 3VA effektbrytere

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[siemens.com/sentron](https://www.siemens.com/sentron)

3VA molded case circuit breaker



3VA2 bryterklasse E – 200kA ved 415V / 85kA ved 690V



SIEMENS

Verntyper

- ETU320 (LI)
- ETU330 (LIG)
- ETU350 (LSI)
- ETU850 (LSI)
- ETU860 (LSIG)
- 3VA21: 25A, 40A, 63A, 100A, 160A
- 3VA22: 250A
- 3VA23: 250A, 400A
- 3VA24: 630A

Vern for start og motorbeskyttelse

- ETU310M (I)
- ETU350M (LSI)
- ETU860M (LSIG)
- 3VA21: 25A, 40A, 63A, 100A
- 3VA22: 160A, 200A
- 3VA23: 250A
- 3VA24: 400A, 500A

	3VA21	3VA22	3VA23	3VA24		
M - 55 kA/415V	x	x	x	x	3VA2xxx-	5xxxx-xxxx
H - 85 kA/415V	x	x	x	x	3VA2xxx-	6xxxx-xxxx
C - 110 kA/415V	x	x	x	x	3VA2xxx-	7xxxx-xxxx
L - 150 kA/415V	x	x	x	x	3VA2xxx-	8xxxx-xxxx
E - 200 kA/415V	x	x	x	x	3VA2xxx-	0xxxx-xxxx
E - 85 kA/690V	x	x	x	x	3VA2xxx-	0xxxx-xxxx

3VA2 molded case circuit breaker

Breaking capacity classes – with new ‘E’ class

SIEMENS

3VA2 AC 50/60 Hz	100 A I_{cu} / I_{cs} 					160 A I_{cu} / I_{cs} 					250 A I_{cu} / I_{cs} 				
Breaking Capacity	M	H	C	L	E	M	H	C	L	E	M	H	C	L	E
220 V – 240 V	85 / 85	110 / 110	150 / 150	200 / 200		85 / 85	110 / 110	150 / 150	200 / 200		85 / 85	110 / 110	150 / 150	200 / 200	
380 V – 415 V	55 / 55	85 / 85	110 / 110	150 / 150	200 / 200	55 / 55	85 / 85	110 / 110	150 / 150	200 / 200	55 / 55	85 / 85	110 / 110	150 / 150	200 / 200
440 V	55 / 55	85 / 85	110 / 110	150 / 150		55 / 55	85 / 85	110 / 110	150 / 150		55 / 55	85 / 85	110 / 110	150 / 150	
500 V	36 / 36	55 / 55	85 / 85	100 / 100		36 / 36	55 / 55	85 / 85	100 / 100		36 / 36	55 / 55	85 / 85	100 / 100	
690 V	2 / 2	2 / 2	2 / 2	25 / 18	85 / 65	2.5 / 2.5	2.5 / 2.5	2.5 / 2.5	25 / 18	85 / 65	3 / 3	3 / 3	3 / 3	25 / 18	85 / 65
IT network	Bis 690 V														

3VA2 AC 50/60 Hz	400 A I_{cu} / I_{cs} 					630 A I_{cu} / I_{cs} 					1000 A I_{cu} / I_{cs}			1250 A I_{cu} / I_{cs}			
Breaking Capacity	M	H	C	L	E	M	H	C	L	E	M	H	C	M	H	C	
220 V – 240 V	85 / 85	110 / 110	150 / 150	200 / 200		85 / 85	110 / 110	150 / 150	200 / 200		85 / 85	110 / 110	200 / 200	85 / 85	110 / 110	200 / 200	
380 V – 415 V	55 / 55	85 / 85	110 / 110	150 / 150	200 / 200	55 / 55	85 / 85	110 / 110	150 / 150	200 / 200	55 / 55	85 / 85	110 / 110	55 / 55	85 / 85	110 / 110	
440 V / 50	55 / 55	85 / 85	110 / 110	150 / 150		55 / 55	85 / 85	110 / 110	150 / 150		55 / 55	85 / 70	110 / 70	55 / 55	85 / 70	110 / 70	
500 V / 50	36 / 36	55 / 55	85 / 85	100 / 100		36 / 36	55 / 55	85 / 85	100 / 100		36 / 36	55 / 55	85 / 65	36 / 36	55 / 55	85 / 65	
690 V / 50	5 / 5	5 / 5	5 / 5	25 / 18	85 / 65	6 / 6	6 / 6	6 / 6	25 / 18	85 / 65	25 / 19	35 / 19	35 / 19	25 / 19	35 / 19	35 / 19	
IT network	Bis 690 V ¹⁾											-	-	-	-	-	-

1) In 630 A IT network up to 500 V

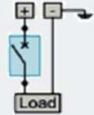
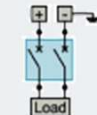
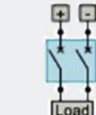
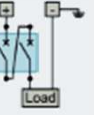
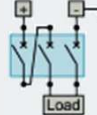
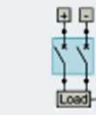
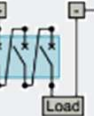
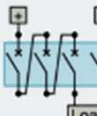
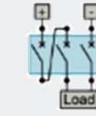
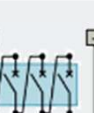
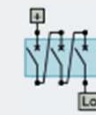
I_{cu} : Rated ultimate short – circuit breaking capacity

I_{cs} : Rated service short – circuit breaking capacity

3VA1 molded case circuit breaker

Breaking capacity classes DC

SIEMENS

3VA10			3VA11			3VA12			3VA13			3VA14			3VA15			DC single-pole disconnection			DC all-pole disconnection					
100 A (16 - 100 A)			160 A (16 - 160 A)			250 A (160 - 250 A)			400 A (320 - 400 A)			630 A (500 - 630 A)			1000 A (630 - 1000 A)			grounded *)			grounded *)	isolated				
DC breaking capacity acc. IEC 60947 I _{CU} = I _{CS} in kA																										
B	N	S	N	S	M	H	S	M	H	S	M	H	C	S	M	H	C	M	H	C						
125 V			125 V			125 V			125 V			125 V			250 V											
16	25	30	16	25	30	30	55	85	100	8	16	25	25	8	16	25	25	35	50	100						
250 V			250 V			250 V			250 V			250 V			500 V											
25	36	55	36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	35	50	100						
500 V			500 V			500 V			500 V			500 V			750 V											
25	36	55	36	55	85	100	55	85	100	8	16	25	25	8	16	25	25	35	50	100						
600 V			600 V			600 V			600 V			600 V			750 V						-					
															35			50	100							
																		1000 V***)								
8	16	25	16	25	36	55	25	36	55	8	16	25	25	8	16	25	25	25	35	50						

Hints:

Applies to MCCBs in line protection and MCS, if protected by a suitable overcurrent protection device.

With an non-grounded system, all poles must always be switched off.

The grounded pole must always be assigned to the single current path so that in the event of an ground fault at least...

- 2 current paths with a 3-pole circuit breaker or

- 3 current paths with a 4-pole molded case circuit breaker in series can take over the switch-off

Further wirings are available on request.

GF ground fault monitoring

*) Minus pole grounded

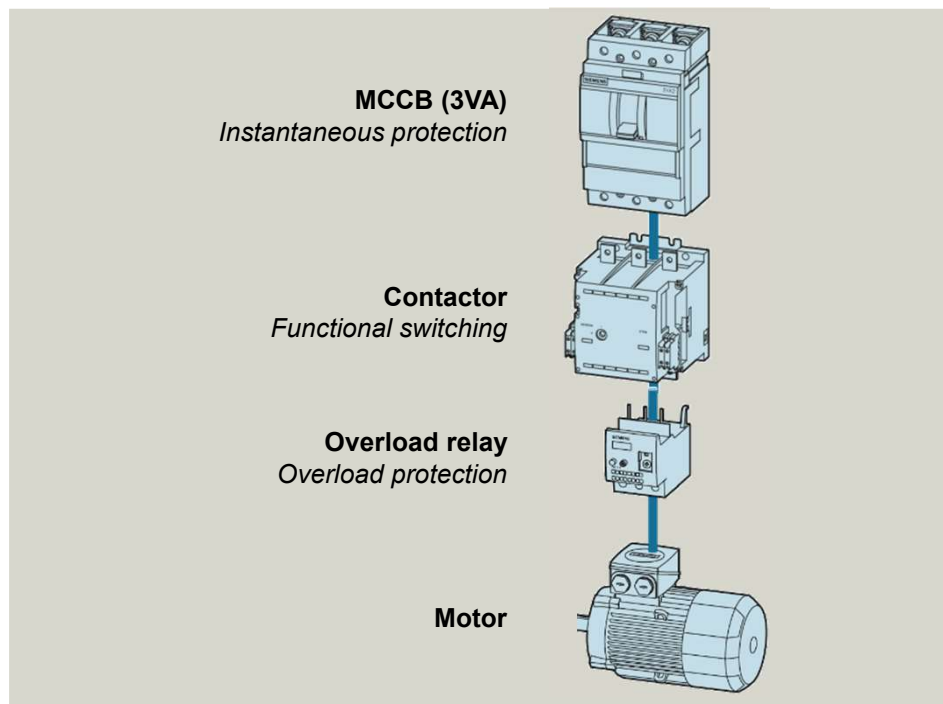
**) also covers 1-pole circuit breaker in 2-pole frame

***) only for $I_n = 630 \text{ A} / 800 \text{ A}$

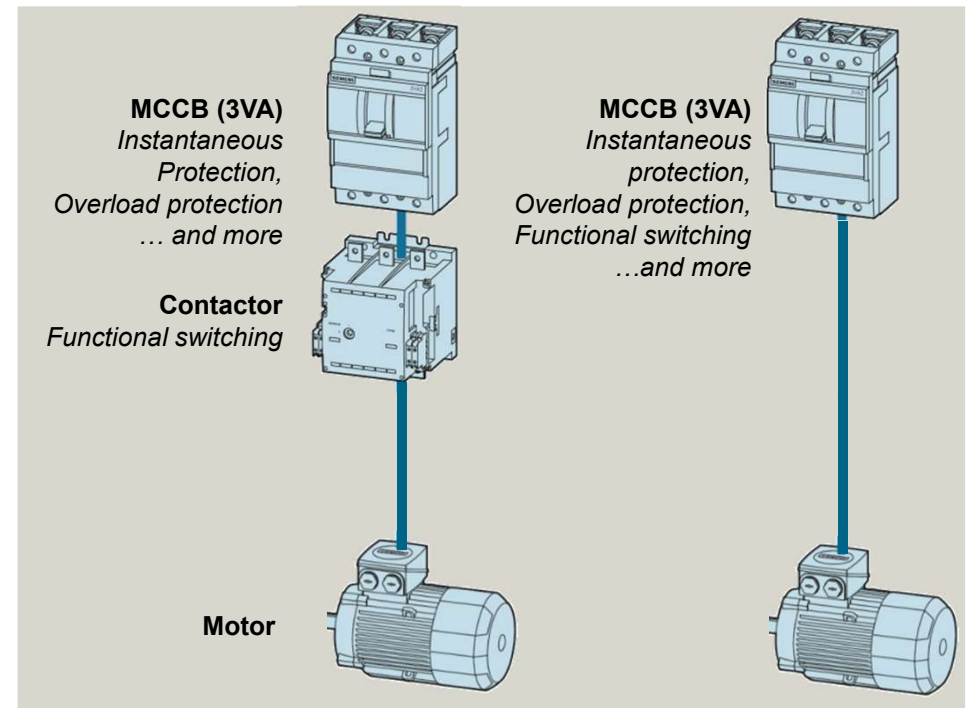
3VA molded case circuit breaker Starter protection vs. motor protection

SIEMENS

Starter protection



Motor protection



3VA molded case circuit breaker

Starter protection and motor protection

SIEMENS

	3VA1	3VA2	3VA2	3VA2	3VA2
	TM120M	ETU310M	ETU350M	ETU550M	ETU860M
	Starter protection	Starter protection	Motor protection	Motor Protection	Motor protection
Protection					
L overload (long time) I_r			✓	✓	✓
Thermal memory			✓	✓	✓
S short time delay short circuit I_{sd}			✓	✓	✓
I instantaneous short circuit I_i	✓	✓	✓	✓	✓
G ground fault I_g					✓
Additional features					
Prepared for higher inrush currents from IE3 motors	✓	✓	✓	✓	✓
Phase unbalance protection available			✓	✓	✓
Blocking protection					✓
Idle running protection					✓
Power metering integrated					✓
Communication as option				✓	✓

SIEMENS

3VA2 molded case circuit breaker



Power metering

Large ETU display

Very breaking capacity up to 200 kA

Integrated voltage tab

Rotary double contact system

Optimized connectivity

Communication function

Rogowski coil

External function box

Comm. RCD

S0 interface

Excellent selectivity

Compact and packed with innovations:
Our new 3VA2 molded case circuit breaker!

3VA2 molded case circuit breaker

Electronic Trip Units

SIEMENS

ETU 3er-series



- Rotary switch with absolute values in Amps

Line / generator protection:

- ETU320 LI
- ETU330 LIG
- ETU350 LSI

Line Protection

- ETU340 fuse characteristic (ELISA)

Motor protection:

- ETU350M LSI

Starter protection:

- ETU310M I

ETU 5er-series



- Display with menu
- Optional communication available
- Optional external N-CT

Line / generator protection:

- ETU550 LSI
- ETU560 LSIG

Motor protection:

- —

Starter protection:

- —

ETU 8er-series



- Display with menu
- Power metering
- Optional communication available
- Optional external N-CT

Line / generator protection:

- ETU850 LSI
- ETU860 LSIG

Motor protection

- ETU860M

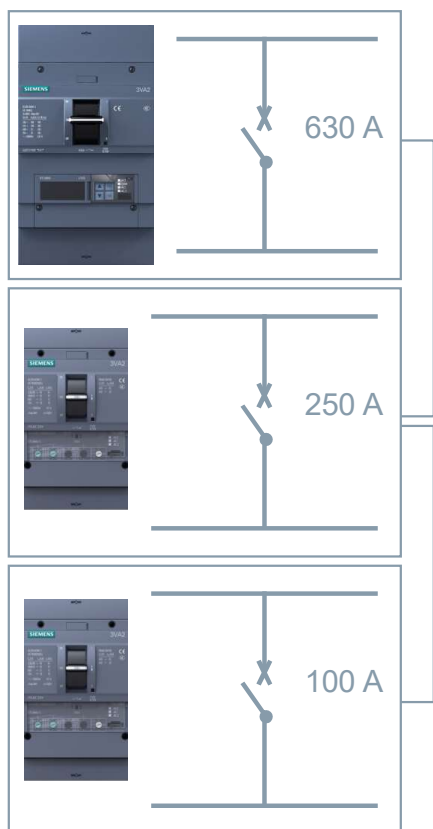
Starter protection:

- —

3VA2 molded case circuit breaker

Selectivity table

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1:2,5



1:2,5

Selectivity
table 380..415 VAC

	I_{cu} [kA]	
3VA2 100 A	25 A	55 / 85 / 110 kA
	40 A	
	63 A	
	100 A	
3VA2 160 A	25 A	
	40 A	
	63 A	
	100 A	
	160 A	
	250 A	
3VA2 250 A	160 A	
	250 A	

3VA2 250 A		3VA2 400 A		3VA2 630 A	
160 A	250 A	250 A	400 A	400 A	630 A
55 / 85 / 110 kA					
T(55)	T(55)	T(110)	T(110)	T(110)	T(110)
T(55)	T(55)	T(110)	T(110)	T(110)	T(110)
T(55)	T(55)	T(110)	T(110)	T(110)	T(110)
T(55)	T(55)	T(110)	T(110)	T(110)	T(110)
		T(110)	T(110)	T(110)	T(110)
		T(110)	T(110)	T(110)	T(110)
		T(110)	T(110)	T(110)	T(110)
		T(110)	T(110)	T(110)	T(110)
		T(110)	T(110)	T(110)	T(110)
				T(110)	T(110)
				T(110)	T(110)

Legend: Selective ratio 1:2,5 Selective ratio 1:1,6 T(55) Full selectivity(selectivity range in kA) No selective combination

Further selectivity tables are available in the service & support portal:

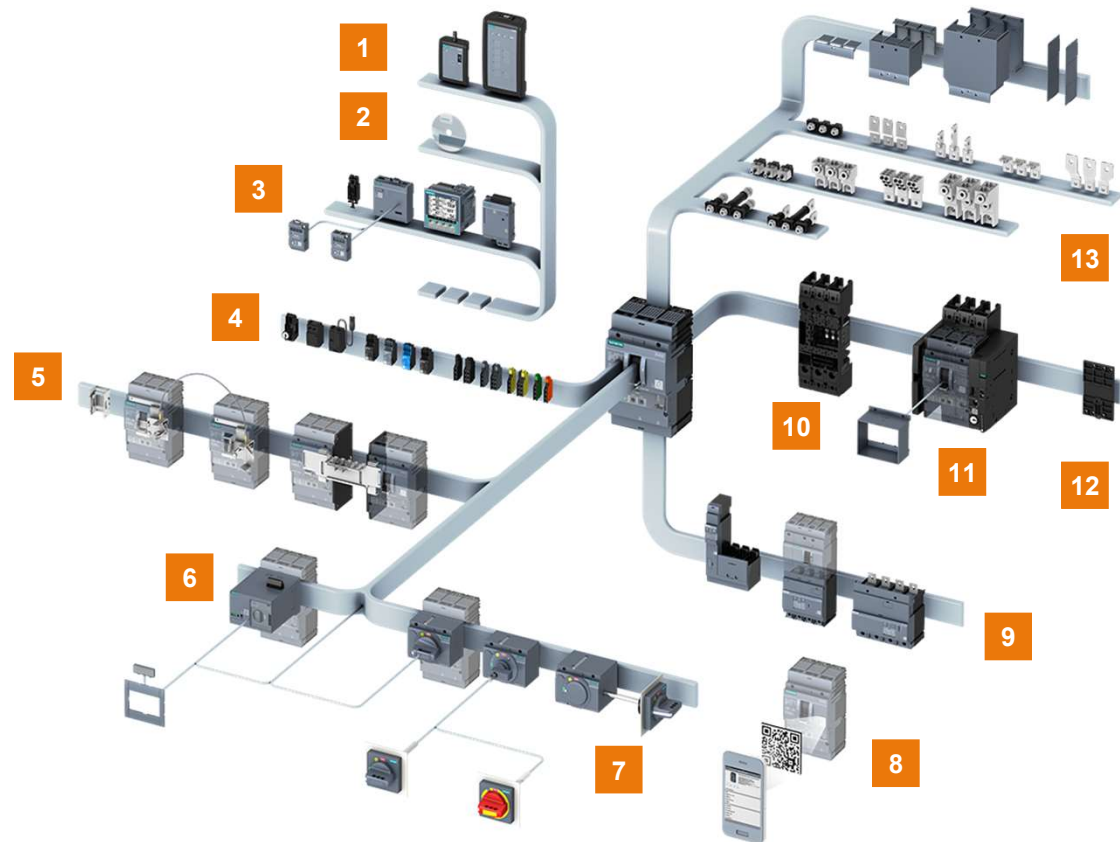
<https://support.automation.siemens.com/WW/llisapi.dll?aktprim=0&lang=en&referer=%2fWW%2f&func=cslib.csinfo&siteid=csius&treeLang=com&groupid=4000002&extranet=standard&viewreg=WW&nodeid0=54137692&objaction=csopen>

3VA molded case circuit breaker

Extensive and flexible accessories

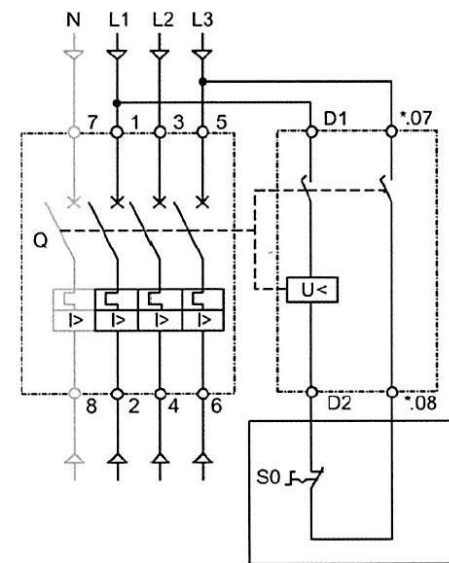
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- 1 Test devices
- 2 powerconfig software
- 3 Communication
- 4 Internal accessories
- 5 Locking and interlocking
- 6 Motor operator
- 7 Manual operators
- 8 Knowledge Manager
- 9 Residual current devices
- 10 Plug-in
- 11 Draw-out
- 12 DIN rail adapter
- 13 Connection technology



Manual operators Auxiliary switch module for rotary operators

SIEMENS



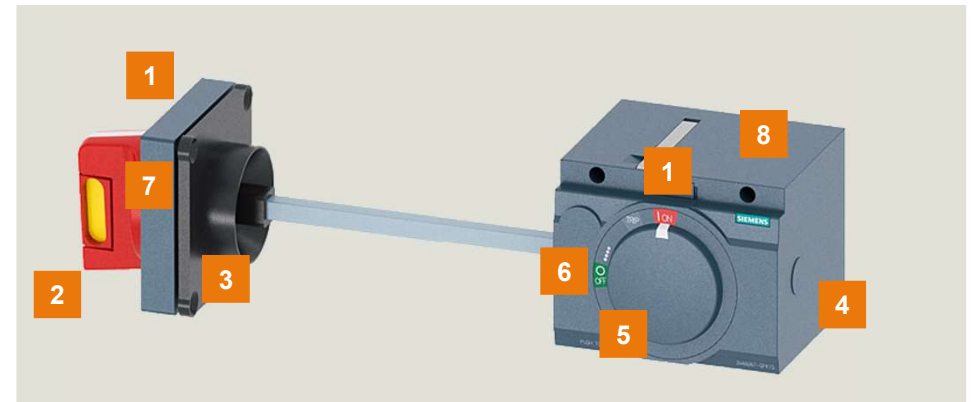
Early energizing of an UVR or other Control Circuit before closing of the main contacts of an 3VA MCCB or 3VA load break switch

Manual operators

Side wall mounted rotary operator

SIEMENS

- 1 Switch position indicator (ON, OFF, TRIP)
- 2 Handle, lockable in OFF
- 3 Tolerance compensation
- 4 Shaft can be used on right or left side
- 5 Test button (push-to-trip)
- 6 Option for attaching a cylinder lock (type Ronis)
- 7 Option for attaching a cylinder lock (type Kaba)
- 8 Additional locking option (padlocks)



Optional also with mounting plate (up to 250 A)



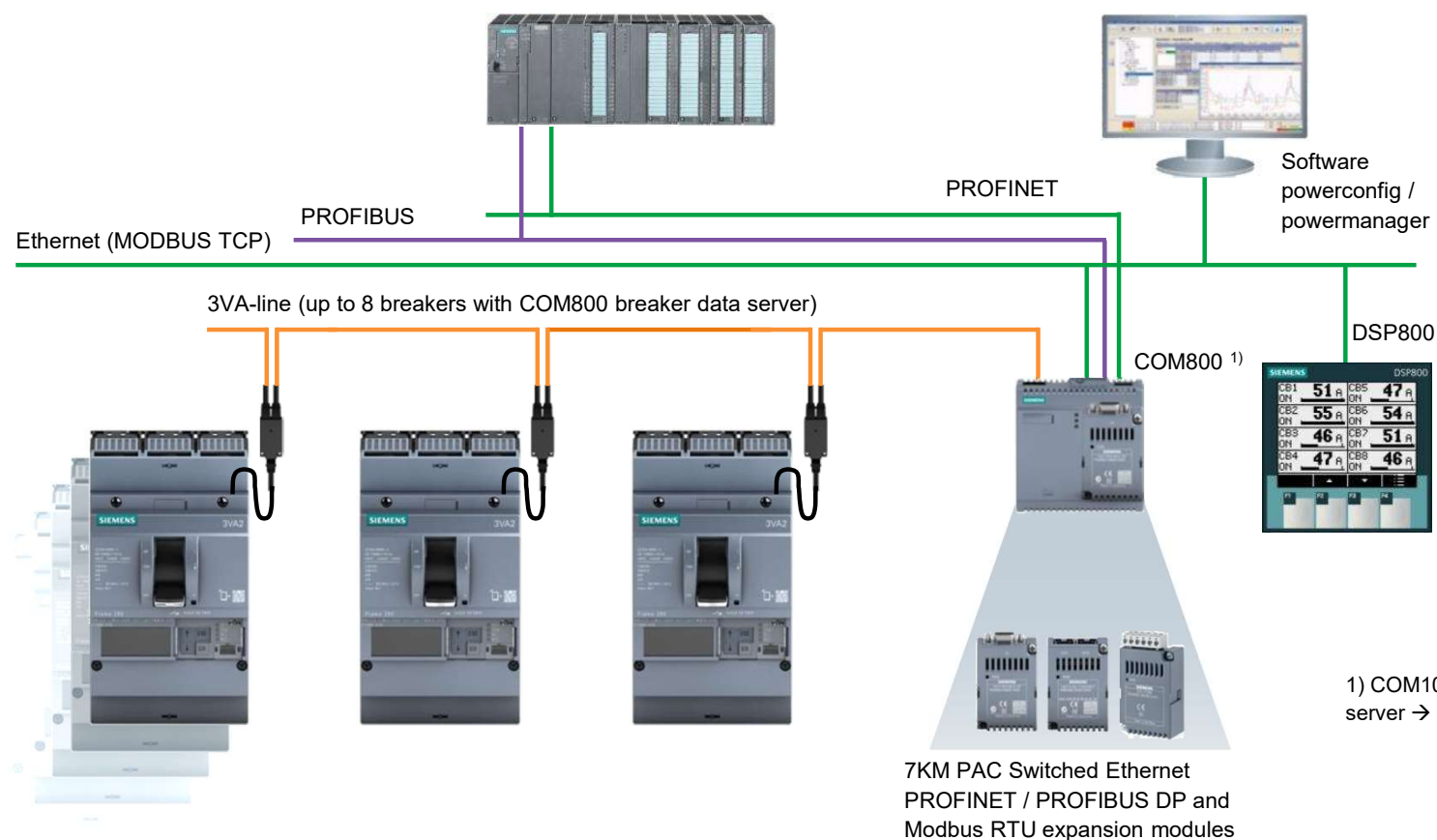
Manual operators Illumination kit

SIEMENS



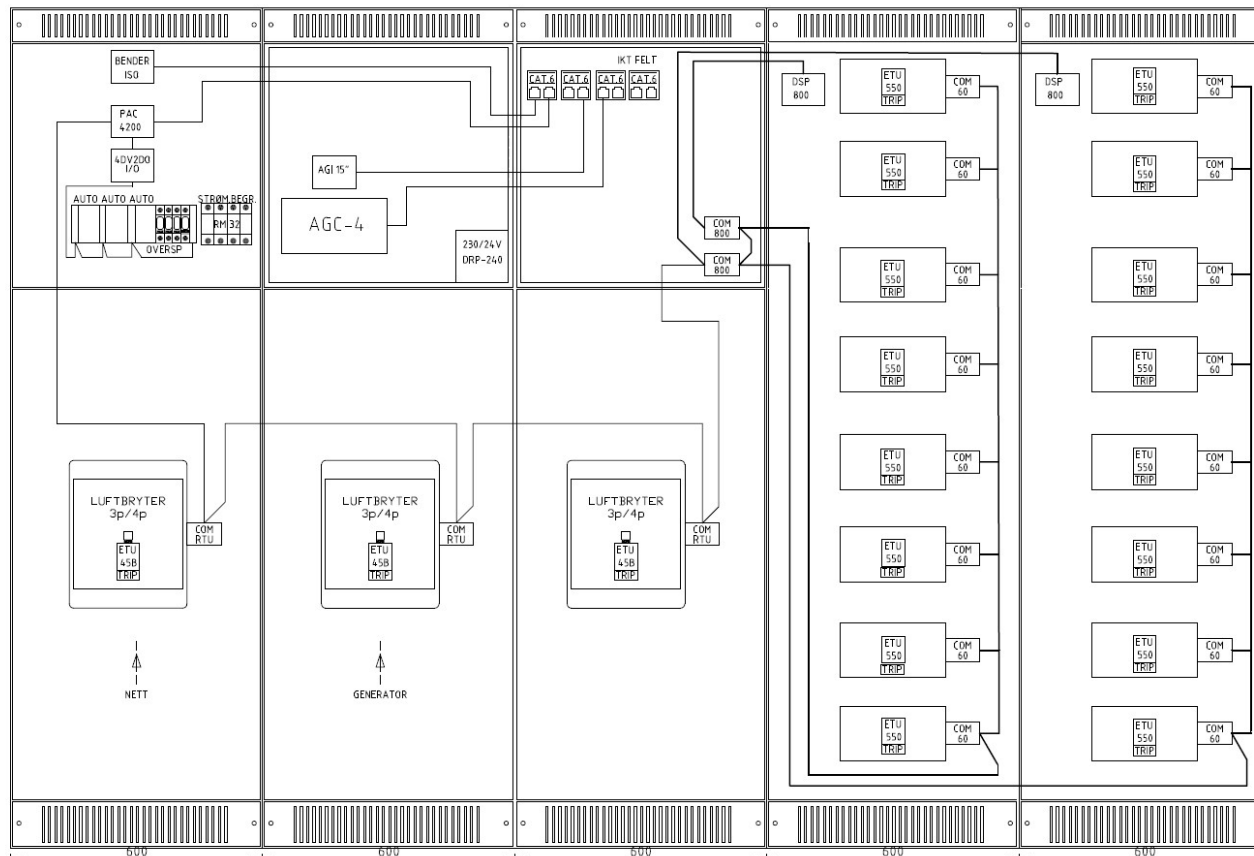
- Illumination of the handle for clearer view of the switch position even in poor visual conditions (color coding analogous to switch position indicator)
- Can be used for front, door coupling and side wall mounted rotary operator
- 24 V DC voltage

High transparency regarding usage data and system states



SENTRON Communication Technology

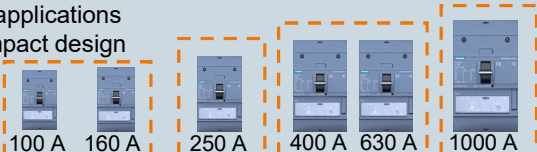
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3VA molded case circuit breaker

Main functions and frame sizes

SIEMENS

	3VA1 (standard applications)	3VA2 (selective applications)
Applications	Standard applications	For higher demands
Frame size	100 A / 160 A / 250 A / 400 A / 630 A / 1000 A	100 A / 160 A / 250 A / 400 A / 630 A / 1000 A / 1250 A
Trip Unit	Thermal-magnetic (TMTU)	Electronical (ETU)
Rated ultimate short – circuit breaking capacity I_{cu} 415 V 50/60 Hz 690 V 50/60 Hz	16 – 110 kA up to 10 kA	55 – 200 kA up to 85 kA
Selectivity	Restricted	Excellent 1 : 2.5 (energy selective)
Communication	No	Available (option)
Energy data acquisition	No	with ETU 8 series
Accessories	Extensive range	Extensive range
	- Standard applications up to I_{cu} 70 kA @ 415 V - DC applications - Compact design 	- High switching capacity - Selectivity - Communication and metering function 

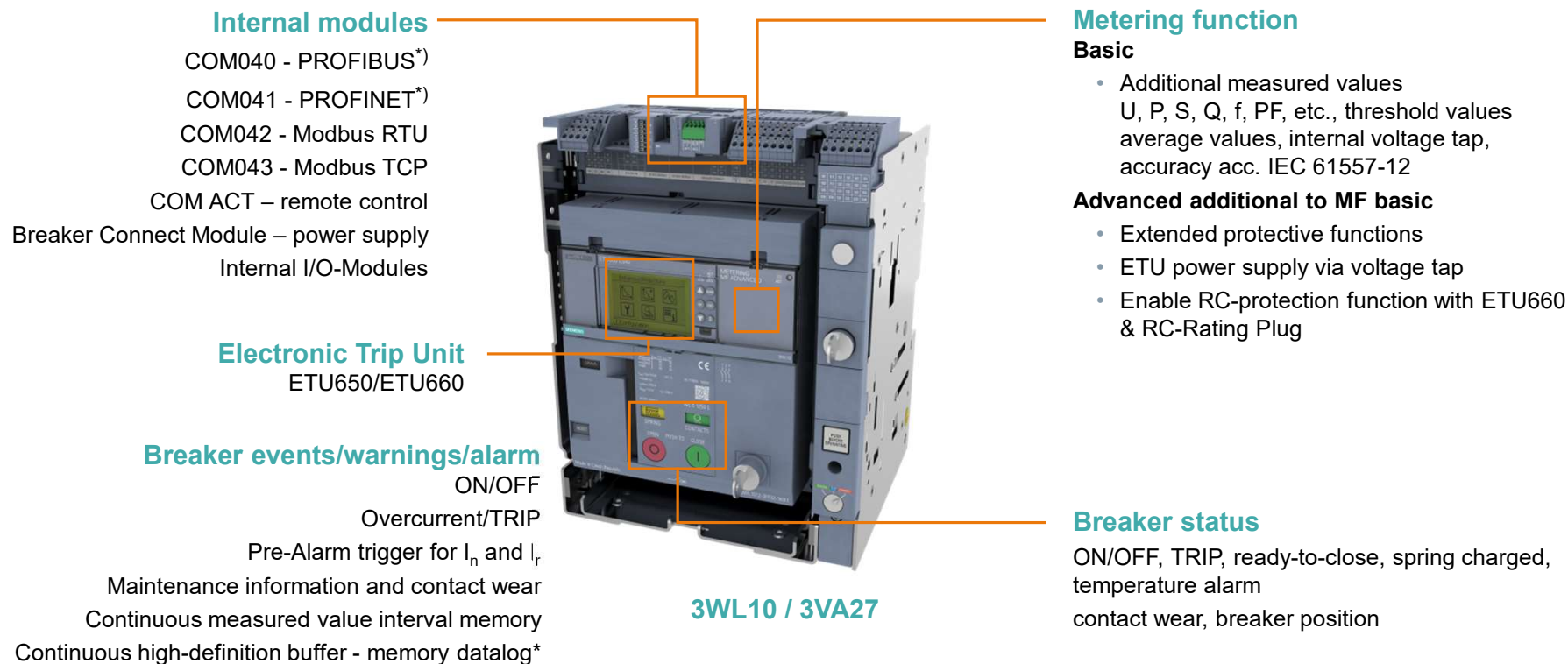
 Identical frame sizes

3VA2 molded case circuit breaker Differences

SIEMENS

	3VA2 25 – 1250 A 	 3VA27 800 – 1600 A 
Contact system – Utilization category	A Partially B with low I_{cw} values	B $I_{cw} = 20\text{kA} / 1\text{s}$
ETU – protection function	- ETU not interchangeable - LI / ELISA / LIG / LSI / LSIG / motor protection	- ETU interchangeable - LI / LSI / LSIG (motor protection) - Enhanced protective functions with metering function advanced - Short-circuit “early” detection (MCR) 2. parameter set
Metering function	Yes Voltage tap - bottom	Yes Voltage tap – bottom or top
Communication	via 3VA-Line (COM060+COM100/800) ➔ Modbus RTU, Modbus TCP, Profibus, Profinet	- Direct communications connection from COM-Module - two COM-Modules useable in parallel (Modbus RTU, Modbus TCP. Planned: Profibus, net, IEC 61850)
Behavior of the ACT-LED	- ON if normal status - Same behaviour like DF CP – products	- flashing if normal status - Same behaviour like ACB 3WL ➔ Requirement of UL standards
Internal accessories	One accessory range for 3VA20 to 3VA25	- Same accessory range like 3WL10, - Special accessories for toggle operating breakers (TAS, S25, S26)
Motor operator	Front mounted	Integrated in the breaker if ordered with stored energy mechanism

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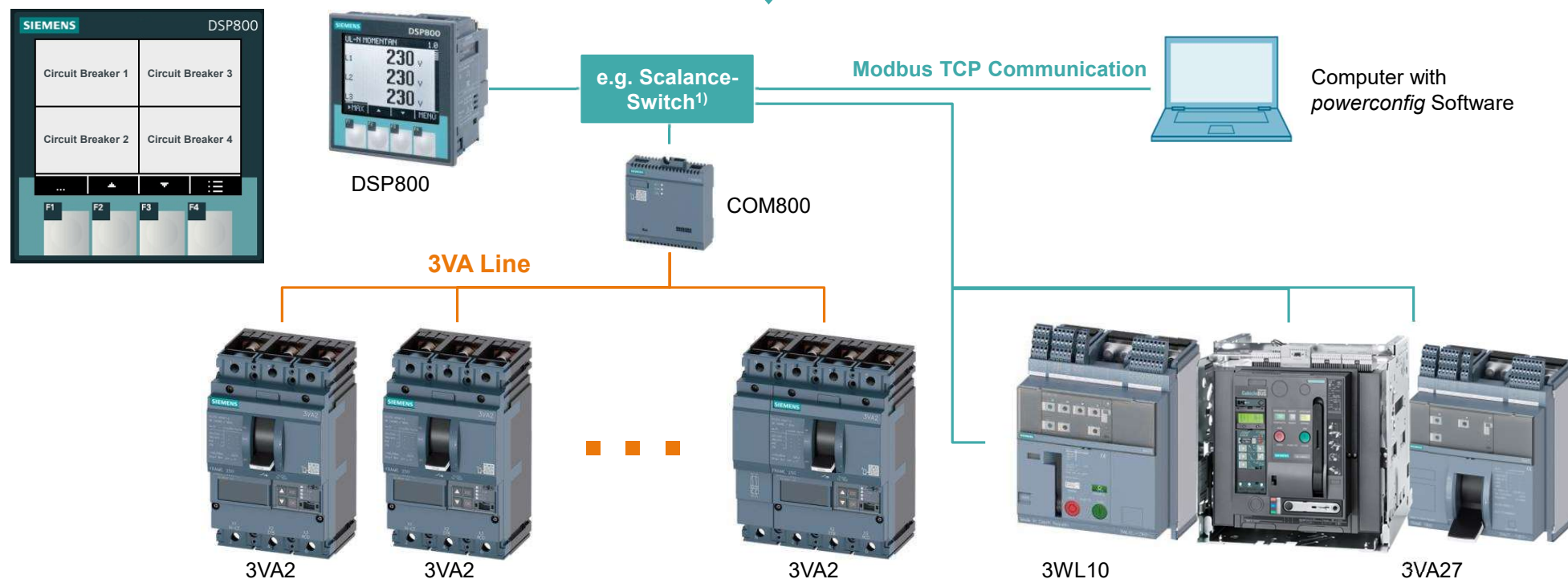
^{*)} expected 2019

Communication

Integration of panel display DSP800

SIEMENS

Maximum of eight circuit breakers, including a maximum of 3 x 3WL10/3VA27 breaker with ETU 650/660 and COM43 (Modbus TCP)



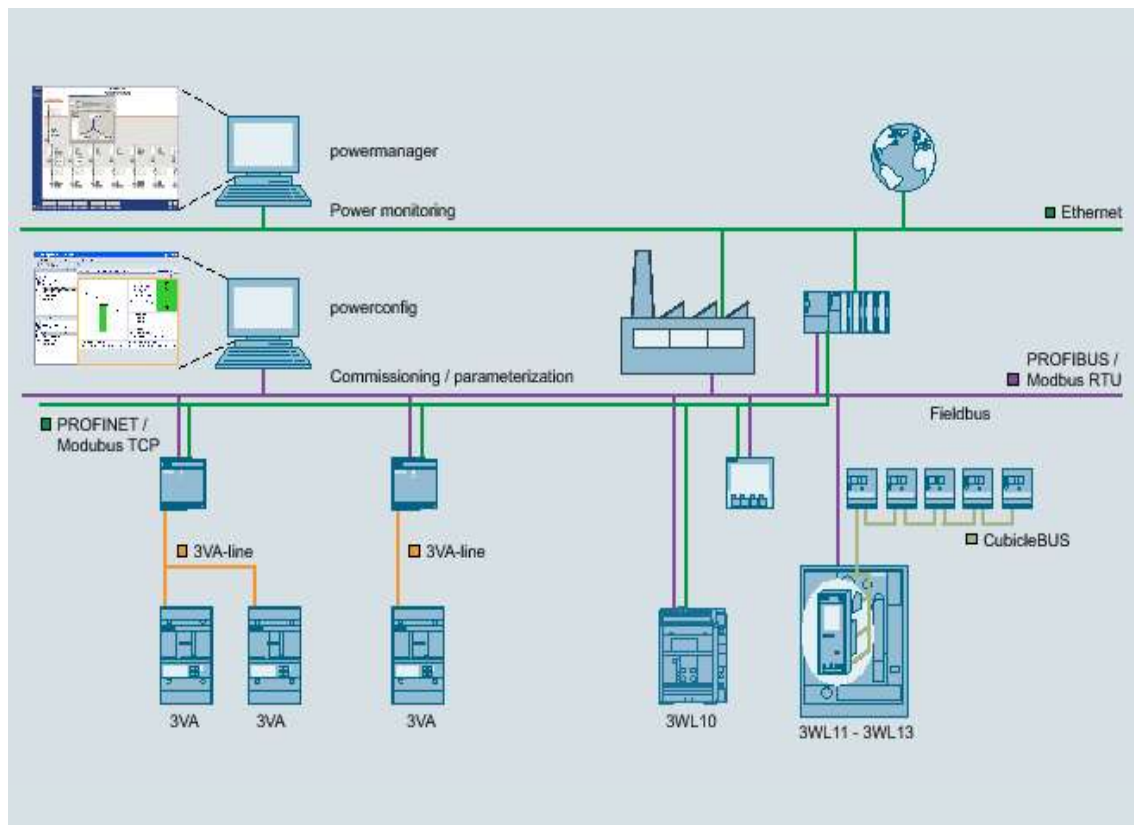
1) Available from Siemens

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Direct integration of the 3WL10 / 3VA27 in the Siemens communication landscape

SIEMENS



Communication (Modbus TCP, Modbus RTU, PROFIBUS*, PROFINET*)

- Direct connection without extra gateway
- Option of two different communication protocols at the same time
- Parameterization and configuration from Powerconfig V3.10
- Easy integration through 3VA/PAC data structure
- PROFINET and PROFIBUS integration into the TIA portal*)
- Integration into energy management: measurement functions
Integration into Powermanager*)
- Easy plug&play COM module installation
- Remote switching via COM ACT
- **All pre-assembled from factory !**

*) expected end 2018

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5SY miniature circuit breakers up to 80 A

Universal tilkobling av
samleskinne i topp eller bunn

Kabel opp til 35mm²

Samleskinne bak kabel

Berøringsbeskyttelse

Indikering av kontaktsett, uavhengig av hendel

Slider for rask montering og demontering uten
verktøy



Safety and security right along the line

Spørsmål ?

Safety and security right along the line