

# Reliable, versatile and perfectly integrated

## Versatile and with communication capability

3WL air circuit breakers offer highly flexible application and consistent communication capability. They ideally fulfill the increased requirements for air circuit breakers, particularly with regard to the operation and monitoring of network events when using electronic control systems. The quality of this series is setting standards around the world.

## You need more information about 3WL air circuit breakers?

Then feel free to take advantage of our comprehensive support. From planning to commissioning to operation, we're happy to help you at any time.

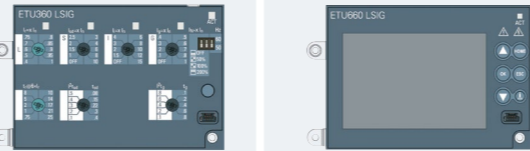
			
Information	Planning/ Ordering	Operation/ Service	Training



## 3WL1 air circuit breakers - Portfolio overview

	Frame size 0						Frame size I						Frame size II						Frame size III					
<b>Type</b>	3WL10						3WL11						3WL12						3WL13					
<b>Rated voltage</b>	up to 690 V						up to 1,000 V						up to 1,150 V						up to 1,150 V					
<b>Rated current</b>	630 A   800 A   1,000 A   1,250 A						630 A   800 A   1,000 A   1,250 A   1,600 A   2,000 A						800 A   1000 A   1,250 A   1,600 A   2,000 A   2,500 A   3,200 A   4,000 A						4,000 A   5,000 A   6,300 A					
<b>Mounting   Number of poles</b>	Withdrawable   3-/4-pole			Fixed-mounted   3-/4-pole			Withdrawable   3-/4-pole			Fixed-mounted   3-/4-pole			Withdrawable   3-/4-pole			Fixed-mounted   3-/4-pole			Withdrawable   3-/4-pole			Fixed-mounted   3-/4-pole		
<b>Dimensions in mm</b>	width	height	depth	width	height	depth	width	height	depth	width	height	depth	width	height	depth	width	height	depth	width	height	depth	width	height	depth
	278   348	363,5	271	210   280	296	183	320   410	468   518	471	320   410	462	357	460   590	468   518	471	460   590	462	357	704   914	468   518	471	704   914	462	357
<b>Breaking capacity <math>I_{cu} = I_{cs}</math> (440 V AC or 500 V AC)</b>	440 V AC 42 kA   55 kA   66 kA						500 V AC 55 kA   66 kA   85 kA						500 V AC 66 kA   85 kA   100 kA   130 kA						500 V AC 100 kA   150 kA (130 kA, 4 pole)					
<b>Breaking capacity <math>I_{cu} = I_{cs}</math> (690 V AC)</b>	up to 50 kA						up to 85 kA						up to 100 kA						up to 150 kA (130 kA, 4 pole)					
<b>Endurance (Operating cycles)</b> • Mechanical maintenance • Electrical maintenance	up to 20,000 up to 8,000						up to 25,000 up to 25,000						up to 17,500 up to 17,500						up to 10,000 up to 10,000					
<b>UL variants available</b>	-						✓						✓						✓					
<b>Direct communication connectivity <sup>1)</sup></b>	Modbus TCP, Modbus RTU, PROFIBUS, PROFINET						Modbus TCP, Modbus RTU, PROFIBUS, PROFINET						Modbus TCP, Modbus RTU, PROFIBUS, PROFINET						Modbus TCP, Modbus RTU, PROFIBUS, PROFINET					
<b>Optional integrated metering function <sup>1)</sup></b>	yes (incl. internal voltage tap)						yes (incl. internal voltage tap)						yes (incl. internal voltage tap)						yes (incl. internal voltage tap)					
<b>Comprehensive CAx Data and TIP Support (easy engineering)</b>	✓						✓						✓						✓					

### 3WL10 - Electronic trip units



### 3WL11 / 12 / 13 - Electronic trip units

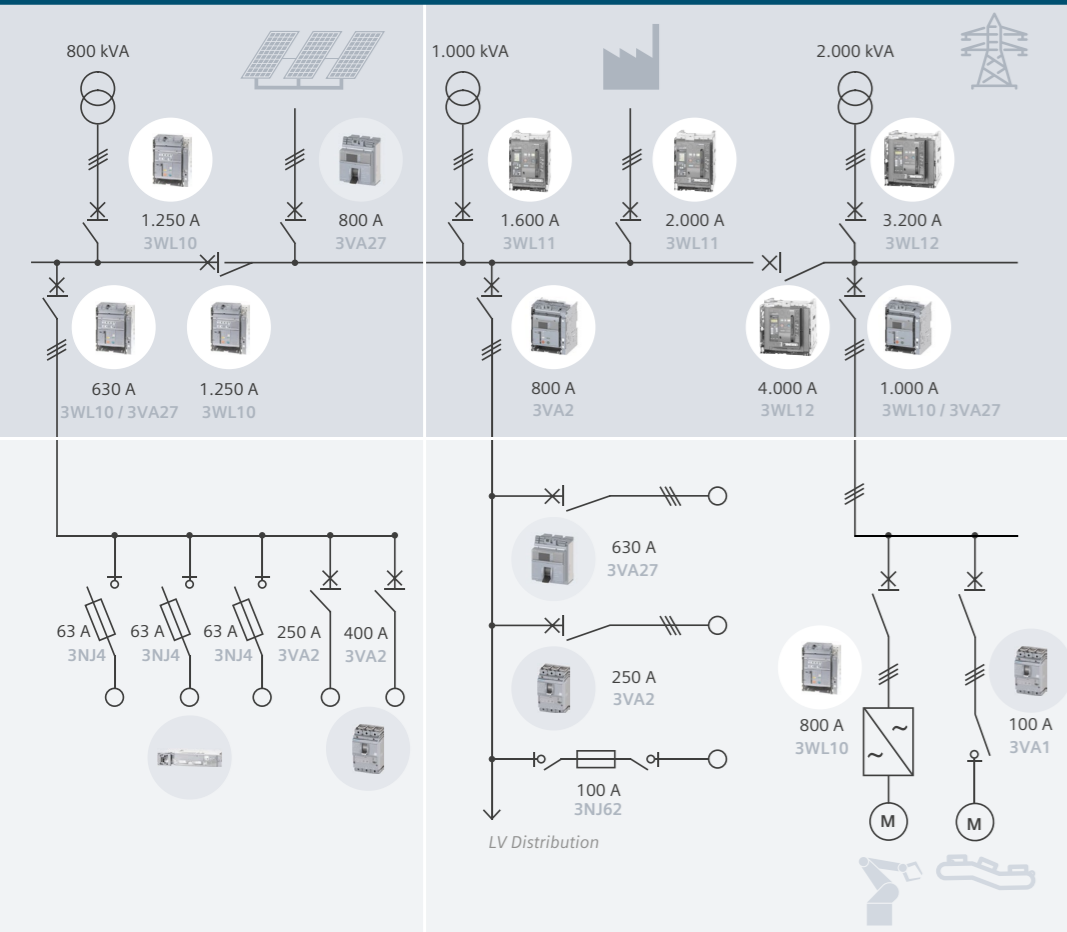


	ETU320	ETU350	ETU360	ETU650	ETU660	ETU15B	ETU25B	ETU27B	ETU45B	ETU45B	ETU76B
<b>Basic protection function</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>L Overload protection (long-time delay)</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>S Short-circuit protection (short-time delayed)</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>I Short-circuit protection (instantaneous)</b>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>N Neutral conductor protection</b>	✓	✓	✓	✓	✓			✓	optional	optional	✓
<b>G Ground fault protection</b>			✓		✓			✓	optional	optional	optional
<b>LCD display</b>				✓	✓					✓	✓
<b>Direct communication connectivity</b>				optional	optional				optional	optional	optional
<b>Measurement function</b>				optional	optional				optional	optional	optional

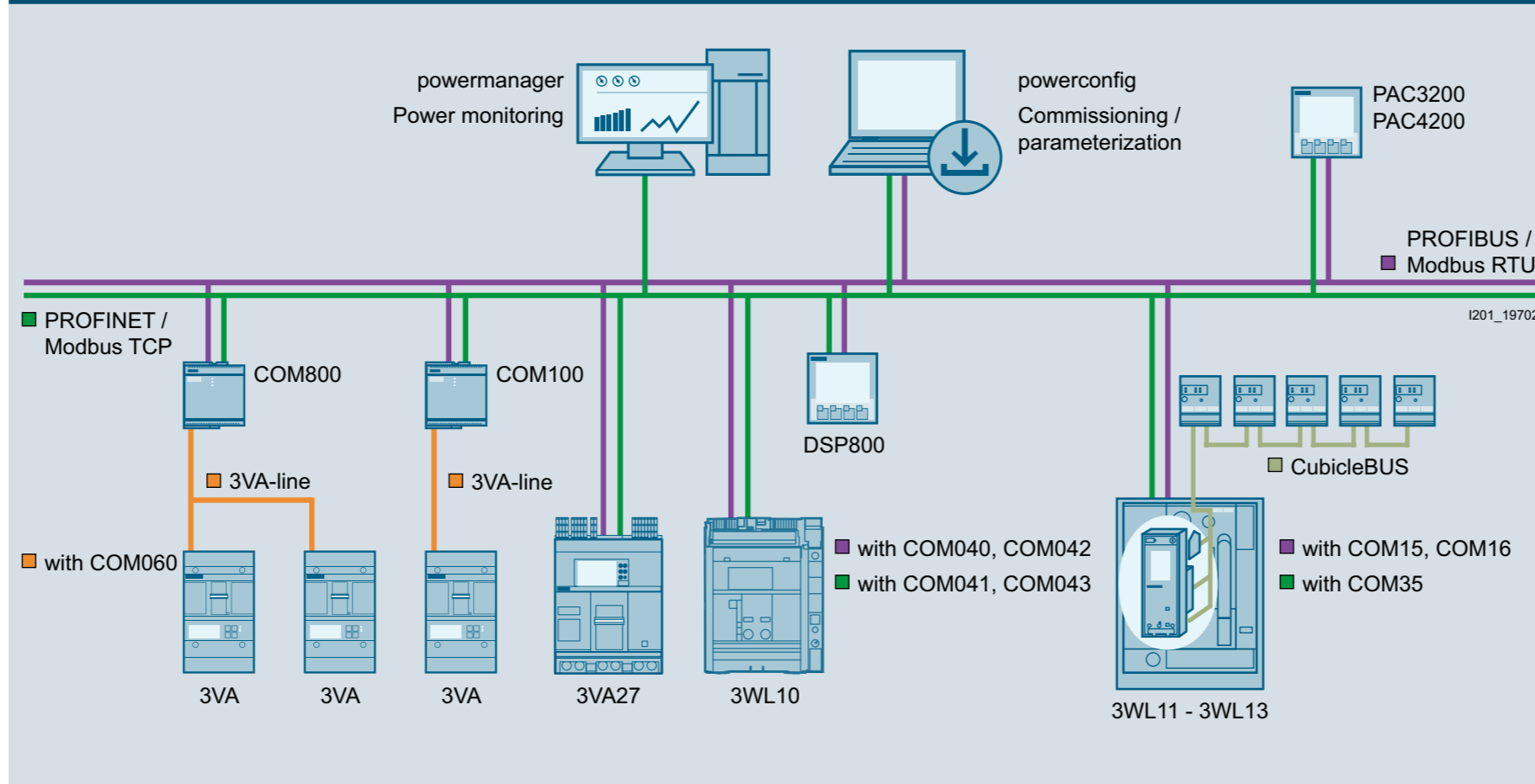
<b>Action item</b>	siemens.com/quickselect-3wl10					siemens.com/quickselect-3wl11		siemens.com/quickselect-3wl12			siemens.com/quickselect-3wl13	
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<sup>1)</sup> depending on the ETU (Overcurrent release (electronic trip unit)) ✓ integrated

# Applications



# Communication landscape



## 3WL – Highlights NEW

### 3WL11-13 – Mechanical Upgrades

- Frame size 1-3
- Increased short circuit performance ( $I_{cu}$ ,  $I_{cw}$ ,  $I_{cs}$ ) up to +30%
  - Longer endurance and lifecycle (up to 25,000 cycles) up to +25%
  - Increased operating temperature range -25°C → -40°C

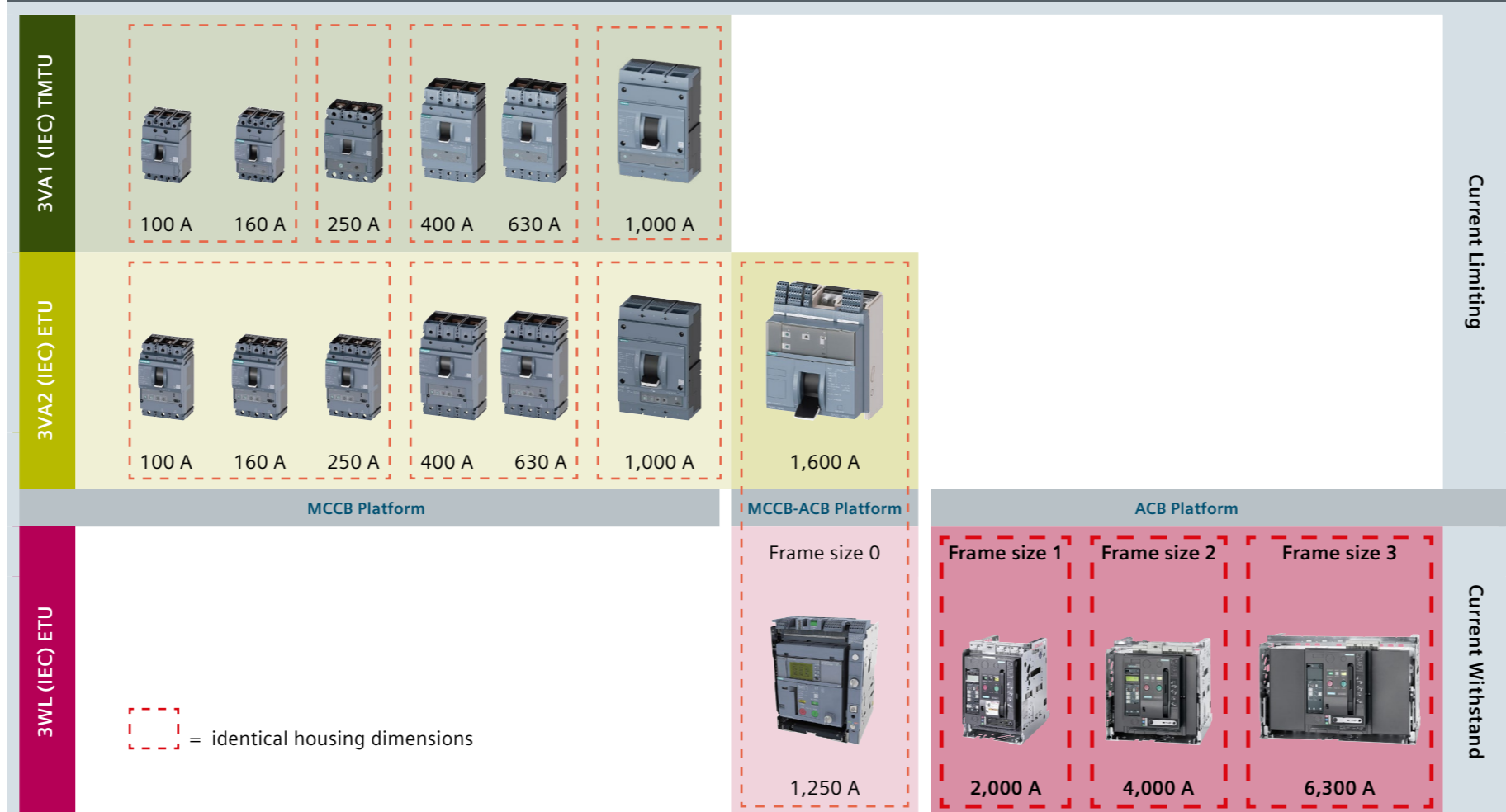
### 3WL11-13 – COM35

- PROFINET IO & Modbus TCP
- PNO certificated
- Switched Ethernet
- Highest performance (CC-C)

### 3WL11-13 – Metering function with internal voltage tap

- On the lower connection
- On the upper connection

### 3WL & 3VA – Low voltage circuit breaker system



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## 3WL air circuit breakers Quick Selection Guide