

## Global switching.

Internationally certified circuit-breakers  
from 30 A to 5000 A.



# sentron

## SWITCHING DEVICES



**SIEMENS**

## **SENTRON 3WL5 and 3VL UL circuit-breakers:** Unlimited applicability.

**The IEC and UL standards place different requirements upon the technical dimensioning and application of circuit-breakers, which leads to considerable additional time and cost expenditures when implementing international projects or adapting existing solutions. Internationally operating customers call for uniform solutions complying with various standards.**

As a both cost-favorable as well as reliable alternative, the new SENTRON 3WL5 and 3VL UL circuit-breakers are now available, which equally correspond with both standards – IEC and UL.

The design of the new combined range is almost identical with the proven IEC breakers – same dimensions, same operation. However, the new versions offer a decisive advantage: Thanks to the combination of IEC and UL in a single circuit-breaker, these devices are fit for global applications. This way, you can now also export your systems to UL-dominated markets while even saving conversion, development, handling, storage and service costs.





### **Safety with maximum reliability**

The application options of the SENTRON 3WL5 and 3VL UL circuit-breakers are unlimited in the true sense of the word. This is not only guaranteed by their manifold international approvals – also your technical specifications are complied with, thereby assuring integrated safety throughout the low-voltage power distribution system.

- Consistent offer from 30 A to 5000 A
- Extremely compact and modular design
- Reduced storage costs thanks to a large number of uniform components
- Easily retrofittable accessories
- Communication-capable via various communication protocols
- Remote diagnostics via Ethernet/Internet

# SENTRON 3VL UL molded-case circuit-breakers:

Less expenditures.  
More possibilities.

From 30 A to 1600 A – this is the broad spectrum over which the SENTRON 3VL UL molded-case circuit-breakers assure safety. Their versatility and space-saving design ease the devices' installation in distribution boards. When employed as incoming or outgoing feeder circuit-breakers, they protect systems, lines and generators against short-circuit and overload. In short – there are many reasons in favor of the SENTRON 3VL UL:

#### ■ Consistent offer from 30 A to 1600 A

- 3-pole circuit-breakers
- Fixed-mounted, plug-in or withdrawable design
- AC or DC

The three switching capacity classes 35/40, 65/70 and 100 kA up to 480/415 V AC (depending on whether UL or IEC is applied). Higher voltages are subject to reduced values.

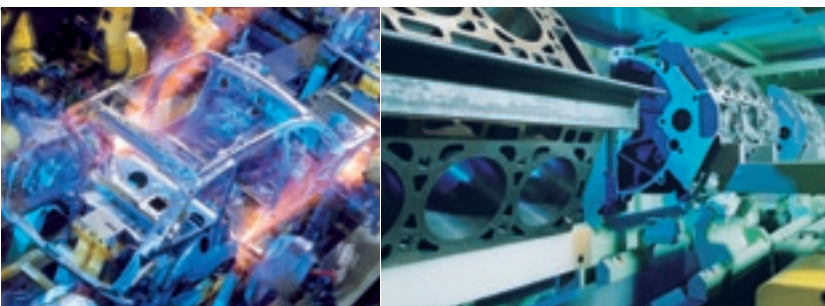
#### ■ Maximum application options

From system and generator protection to starter combinations down to the use as nonautomatic circuit-breakers – the devices' application options are almost unlimited. And all this with only two ranges of internal accessories.

#### SENTRON 3VL UL installation variants:

Type	Nominal current	Size	Set current $I_R$	NEMA switching capacity acc. with 480 V
VL 150 UL DG Frame	150 A	2	30–150 A	35 65 100
VL 250 UL FG Frame	250 A	3	40–250 A	35 65 100
VL 400 UL JG Frame	400 A	4	70–400 A	35 65 100
VL 400 X UL LG Frame	600 A	4x	150–600 A	35 65 100
VL 800 UL MG Frame	800 A	6	200–800 A	35 65 100
VL 1200 UL NG Frame	1200 A	7	300–1200 A	35 65 100
VL 1600 UL PG Frame	1600 A	8	400–1600 A	35 65 100

Further information is available in the LV1 catalog, Add-On online at [www.siemens.com/lowvoltage/kataloge](http://www.siemens.com/lowvoltage/kataloge)





Switching capacity to UL489 AC [kA]	IEC switching capacity I <sub>cu</sub> [kA]	Order number
	40	3VL21..-1...
	70	3VL21..-2...
	100	3VL21..-3...
	40	3VL31..-1...
	70	3VL31..-2...
	100	3VL31..-3...
	40	3VL41..-1...
	70	3VL41..-2...
	100	3VL41..-3...
	40	3VL45..-1...
	70	3VL45..-2...
	100	3VL45..-3...
	40	3VL61..-1...
	70	3VL61..-2...
	100	3VL61..-3...
	40	3VL71..-1...
	70	3VL71..-2...
	100	3VL71..-3...
	40	3VL81..-1...
	70	3VL81..-2...
	100	3VL81..-3...

The SENTRON 3VL UL molded-case circuit-breakers (with combined IEC and UL standard) are available in the following versions:

- Rated current up to 1600 A
- Switching capacity 35 kA/65 kA/100 kA at up to 480 VAC
- Fixed-mounted, plug-in and withdrawable design
- Thermomagnetic and electronic tripping versions for all rated currents

■ **Minimum space requirements**

The compact and modular design facilitates an optimum utilization of valuable storage and control cabinet space.

■ **Cost-favorable and reliable**

An effective and efficient solution is either offered by the thermomagnetic tripping units or, from 30 A upwards, additionally by the electronic versions.

**Reduce your space requirements and benefit from an extended freedom of your power distribution system.**

# SENTRON 3WL5

## air circuit-breakers:

Perfect technology.

Whether in the incoming or outgoing feeder – air circuit-breakers can be employed everywhere, for example for the protection of:

- Systems
- Motors
- Cables
- Busbar trunking systems
- Generators
- Transformers

Be on the safe side in relying on the characteristics offered by the SENTRON 3WL5:

### ■ **Consistent offer from 100 A to 5000 A**

- 3 sizes
- Fixed-mounted or withdrawable design;
- 2 different tripping variants
- Switching capacity 65–100 kA at up to 480 VAC, depending on size

### ■ **Optimum protection also with partial loads**

With the rating plug module, the circuit-breakers can be adjusted to the suitable nominal current within seconds – already from 100 A upwards.

### ■ **Uniform communication solution**

A uniform software is available for the parameterization and operating state control of air circuit breaker and molded-case circuit breaker.

### ■ **High thermal load capacity**

The 3WL5 has a thermal load capacity of up to 70°C, which is particularly important when installed in control cabinets.

**Profit from these manifold advantages and opt for a highly flexible power distribution.**

**The SENTRON 3WL5 air circuit-breakers (with combined IEC and UL standard) are available in the following variants:**

- Three sizes up to 5000 A
- Switching capacity 65 kA/100 kA at up to 480 VAC
- Fixed-mounted/withdrawable design
- Horizontal, vertical, front or flange connection
- Two tripping unit variants (ETU25B and ETU45B)



**SENTRON 3WL5 – installation versions:**

Nominal current	Size	Set current	NEMA switching capacity acc. to UL489 with 480 V AC [kA]	Switching capacity acc. to IEC 60947-2 ( $I_{cs}$ ) at AC 500 V [kA]	Order number
1000 A	I	250–1000 A	65	65	3WL5110-3...
1600 A	I	250–1600 A	65	65	3WL5116-3...
2000 A	II	250–2000 A	100	100	3WL5220-4...
2500 A	II	250–2500 A	100	100	3WL5225-4...
3000 A	II	250–3000 A	100	100	3WL5230-4...
4000 A	III	1250–4000 A	100	100	3WL5340-4...
5000 A	III	1250–5000 A	100	100	3WL5250-4...

*All versions are listed in the LV1 catalog,  
Order number: E86060-K1002-A101-A6-7600*

**Fax order +49 911 978-3321 – CD/Z1329**

**Information material**

Please send the selected information material to the following address

\_\_\_\_\_  
Company/department

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Name

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For further information, please contact your local Siemens sales partner

**For technical questions, please contact:**  
**Technical Assistance**  
**Tel.: +49 911 895-5900**  
**E-mail: technical-assistance@siemens.com**

- |                             |  |
|-----------------------------|--|
| MANAGING                    | <input type="checkbox"/> Power management system   |
| DISTRIBUTING                | <input type="checkbox"/> SIVACON power distribution boards<br><input type="checkbox"/> SIVACON busbar trunking systems<br><input type="checkbox"/> SIVACON cubicle systems |
| SWITCHING & PROTECTING      | <input type="checkbox"/> SENTRON circuit breakers<br><input type="checkbox"/> SENTRON switch disconnectors   |
| POWER DISTRIBUTION SOFTWARE | <input type="checkbox"/> Dimensioning with SIMARIS design<br><input type="checkbox"/> Configuration, visualization and control with SIMATIC powercontrol                   |
|                             | <input type="checkbox"/> Totally Integrated Power  |

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