

Simply smart:  
First choice for your applications

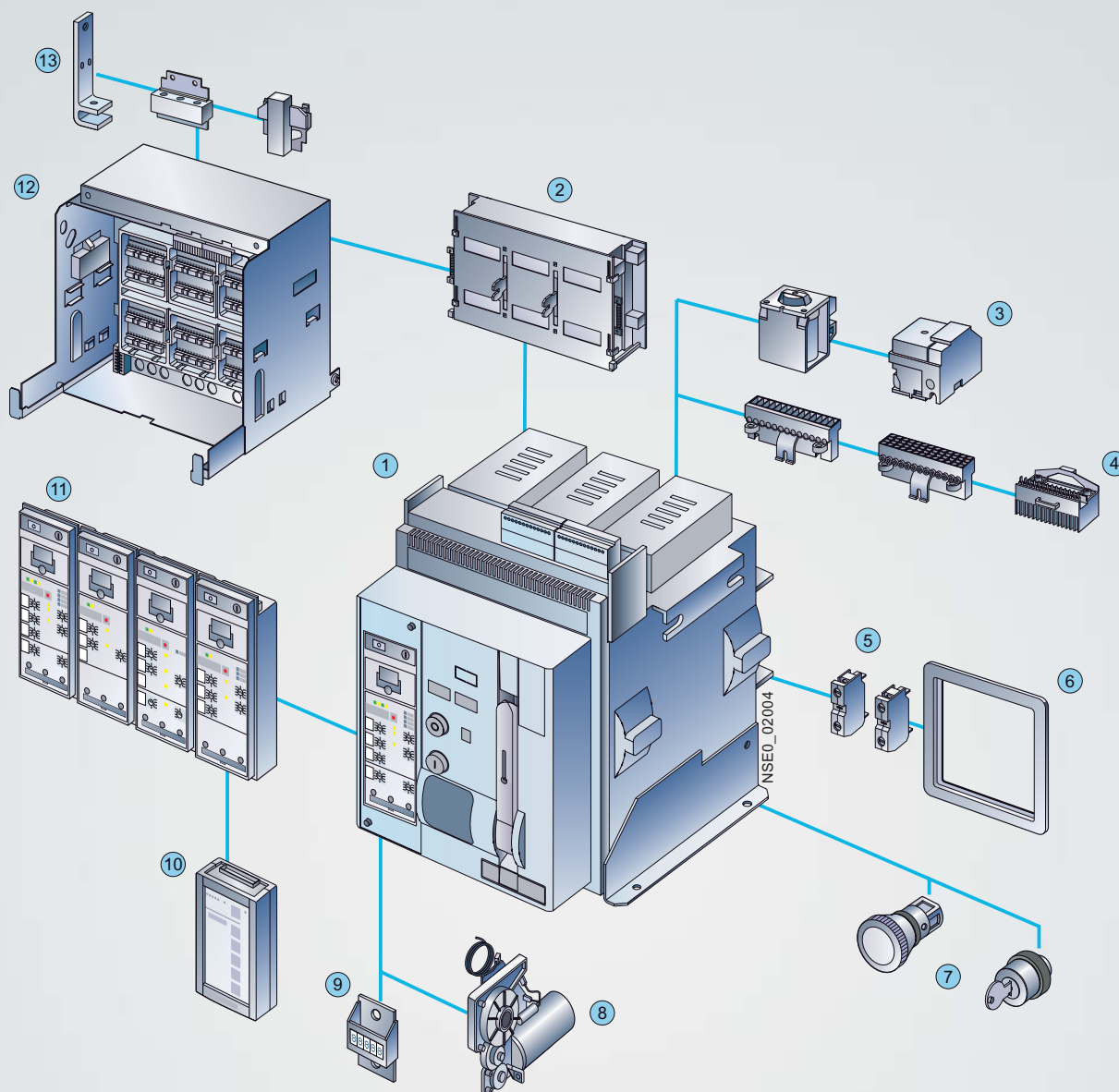


## 3WT Air Circuit Breaker

Answers for industry.

**SIEMENS**

# Overview



- ① Air circuit breaker
- ② Shutter
- ③ Closing solenoid, auxiliary trip unit
- ④ Auxiliary conductor plug-in system
- ⑤ Auxiliary switch block
- ⑥ Door sealing frame
- ⑦ EMERGENCY-STOP pushbutton, key-operated
- ⑧ Motorized operating mechanism
- ⑨ Operating cycles counter
- ⑩ Manual tester for electronic trip unit (ETU)
- ⑪ Microprocessor based electronic trip unit (ETU)
- ⑫ Guide frame
- ⑬ Main connection, front, horizontal, vertical

## Highlights at a glance

### Flexibility

- New electronic trip units (ETUs) with outstanding features
- Only two frame sizes cover a broad range of applications up to 66 kA at 500 V, 3- or 4-pole version, fixed-mounted or withdrawable design

### Ease of use

- User-friendliness in planning, configuration, installation and operation
- Wide range of same accessories for both frame sizes can be easily retrofitted
- Displays for all electronic trip units (ETUs)

### Safety and reliability

- Global and standardized processes ensure highest product quality
- Conforms to international standards and approvals

# 3WT Air Circuit Breakers

## Efficient and modular



The larger the plant, the greater the power distribution requirements. This is true for both industrial plants and infrastructure projects, which depend on high availability, performance and reliability of their machines and systems – today and over the entire life cycle. Siemens offers you an easy way to meet these challenges. Our 3WT Air Circuit Breakers cover the entire range with just two frame sizes and a broad range of modular accessories. Regardless of which version you choose, you will benefit from a cost-efficient and highly reliable solution.

### All ETUs with display and superior features

Type		ETU35WT	ETU37WT	ETU45WT	ETU47WT
Overload protection	L	✓	✓	✓	✓
Short-time delayed short-circuit protection	S	✓	✓	✓	✓
Instantaneous short-circuit protection	I	fixed	fixed	✓	✓
Ground fault protection	G	–	✓	–	✓
Neutral conductor protection (on/off)	N	–	✓	✓	✓
LC display for current and trip information		✓	✓	✓	✓
LED display status indication		✓	✓	✓	✓
Active, overload alarm, T.U. error indication		✓	✓	✓	✓
Motor protection		✓	✓	✓	✓
Internal self-test		✓	✓	✓	✓
Front connection of the test device		✓	✓	✓	✓
Current measuring with Rogowski coils		✓	✓	✓	✓

✓ : Available, – : Not available

### Technical features

- Fixed-mounted and withdrawable design
- 3- and 4-pole version
- High breaking capacity
- Wide range of same accessories
- Excellent electronic trip units (ETUs) with displays
- Ready-to-close indicator
- No derating up to 50 °C
- Conforms to IEC and CCC standards
- State-of-the-art appearance



# Technical specifications



Size Type	I					II				
	3WT8 06	3WT8 08	3WT8 10	3WT8 12	3WT8 16	3WT8 20	3WT8 25	3WT8 32		
Rated current $I_n$ at 50 °C at 50 / 60 Hz	Main conductor	A	630	800	1000	1250	1600	2000	2500	3200
	Neutral conductor (only on 4-pole version)	A	630	800	1000	1250	1600	2000	2500	3200
Rated operational voltage $U_e$	at 50 / 60 Hz	AC V	up to 500					up to 500		
Rated insulation voltage $U_i$	at 50 / 60 Hz	AC V	1000					1000		
Rated impulse withstand voltage $U_{imp}$	Main circuits	kV	8					8		
	Auxiliary circuits	kV	4					4		
Rated service short-circuit breaking capacity $I_{cs}$ (rms value)	up to 500 V AC	kA	66			66	66			
Rated short-time withstand current $I_{cw}$ at 50 / 60 Hz (1 s)	up to 500 V AC	kA	50			50	66			
Endurance	mechanical	Operating cycles	16000					12000		
	electrical		10000					4000		
Operating frequency		opn/hr	60					60		
Power Loss at $I_n$ (with 3 phase symmetrical load)	Fixed	W	40	60	90	120	140	170	325	420
	Withdrawable	W	80	130	205	255	310	310	535	760
Degree of protection			IP 40*					IP 40*		
Dimensions	A mm	3P /4P	320 / 420					410 / 540		
	B mm		470					470		
	C mm	Fix / DO	330 / 398					330 / 398		
Weights (weight of withdrawable breaker given here is exclusive of guide frame)	3-pole circuit breakers	Fixed-mounted circuit breaker approx. kg	34	34	34	34	36	57	57	61
		Withdrawable circuit breaker approx. kg	36	36	36	36	38	59	59	63
		Guide frame approx. kg	22	22	22	22	23	35	35	37
	4-pole circuit breakers	Fixed-mounted circuit breaker approx. kg	47	47	47	47	49	70	70	74
		Withdrawable circuit breaker approx. kg	49	49	49	49	51	72	72	76
		Guide frame approx. kg	27	27	27	27	28	46	46	48

\* IP 55 available on request

## Highly efficient and economical: 3WT Air Circuit Breakers

Today, the economic success of industrial and infrastructure projects more than ever depends on the power supply – a key aspect for availability, performance and productivity, and a lever to boost overall energy efficiency. That's why choosing the right circuit breakers is so crucial to keeping expenses down while, at the same time, optimizing performance.

With the new 3WT Air Circuit Breaker (ACB), Siemens offers an economic and smart solution to protect transformers, generators and low-voltage distribution systems. Both for infrastructure

applications as well as in the area of industrial switchgear technology, 3WT circuit breakers can be used as incoming and outgoing circuit breakers to distribute power in low-voltage switchgear. At the

same time it is highly user-friendly, while also offering a high degree of flexibility, safety and reliability.

**3WT – simply smart.**

# Ordering Information

## 3-Pole

### Fixed Mounted design

Size	Rated current In (A)	Standard Breaking Capacity	
		Ics=100%Icu	Order Code
Size I	400	66	3WT8041- _ _ _ _ 0 - 0 A A 2
	630		3WT8061- _ _ _ _ 0 - 0 A A 2
	800		3WT8081- _ _ _ _ 0 - 0 A A 2
	1000		3WT8101- _ _ _ _ 0 - 0 A A 2
	1250		3WT8121- _ _ _ _ 0 - 0 A A 2
	1600		3WT8161- _ _ _ _ 0 - 0 A A 2
Size II	2000	66	3WT8202- _ _ _ _ 0 - 0 A A 2
	2500		3WT8252- _ _ _ _ 0 - 0 A A 2
	3200		3WT8322- _ _ _ _ 0 - 0 A A 2

## 4-Pole

### Fixed Mounted design

Size	Rated current In (A)	Standard Breaking Capacity	
		Ics=100%Icu	Order Code
Size I	400	66	3WT8045- _ _ _ _ 0 - 0 A A 2
	630		3WT8065- _ _ _ _ 0 - 0 A A 2
	800		3WT8085- _ _ _ _ 0 - 0 A A 2
	1000		3WT8105- _ _ _ _ 0 - 0 A A 2
	1250		3WT8125- _ _ _ _ 0 - 0 A A 2
	1600		3WT8165- _ _ _ _ 0 - 0 A A 2
Size II	2000	66	3WT8206- _ _ _ _ 0 - 0 A A 2
	2500		3WT8256- _ _ _ _ 0 - 0 A A 2
	3200		3WT8326- _ _ _ _ 0 - 0 A A 2

### Withdrawable design with Guide Frame

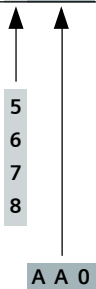
Size	Rated current In (A)	Standard Breaking Capacity	
		Ics=100%Icu	Order Code
Size I	400	66	3WT8041- _ _ _ _ 4 - 5 A B 2
	630		3WT8061- _ _ _ _ 4 - 5 A B 2
	800		3WT8081- _ _ _ _ 4 - 5 A B 2
	1000		3WT8101- _ _ _ _ 4 - 5 A B 2
	1250		3WT8121- _ _ _ _ 4 - 5 A B 2
	1600		3WT8161- _ _ _ _ 4 - 5 A B 2
Size II	2000	66	3WT8202- _ _ _ _ 4 - 5 A B 2
	2500		3WT8252- _ _ _ _ 4 - 5 A B 2
	3200		3WT8322- _ _ _ _ 4 - 5 A B 2

### Withdrawable design with Guide Frame

Size	Rated current In (A)	Standard Breaking Capacity	
		Ics=100%Icu	Order Code
Size I	400	66	3WT8045- _ _ _ _ 4 - 5 A B 2
	630		3WT8065- _ _ _ _ 4 - 5 A B 2
	800		3WT8085- _ _ _ _ 4 - 5 A B 2
	1000		3WT8105- _ _ _ _ 4 - 5 A B 2
	1250		3WT8125- _ _ _ _ 4 - 5 A B 2
	1600		3WT8165- _ _ _ _ 4 - 5 A B 2
Size II	2000	66	3WT8206- _ _ _ _ 4 - 5 A B 2
	2500		3WT8256- _ _ _ _ 4 - 5 A B 2
	3200		3WT8326- _ _ _ _ 4 - 5 A B 2

### Electronic Trip Units

- ETU35WT: protection function LSI + display
- ETU37WT: protection function LSING<sup>1)</sup> + display
- ETU45WT: protection function LSIN<sup>1)</sup> + display
- ETU47WT: protection function LSING<sup>1)</sup> + display



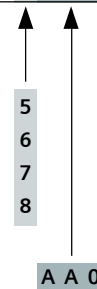
Manual operating Mechanism

A A 0

Motorized Operating Mechanism

(220VAC/DC Motor, 220V AC/DC shunt release, 220V AC/DC Closing solenoid included)

U A 3



A A 0

U A 3

<sup>1)</sup> CT for N-conductor shall be ordered separately

Order Codes given here are for HH terminal as standard. Standard accessories included: Safety Shutter(EDO/ MDO), sealing cap over OFF button(EDO/ MDO), door sealing frame, release transparent cover, trip signalling contact, ready to close signalling contact, auxiliary contacts 2NO+2NC

For further details please contact your nearest Siemens partner.

