

NON-WITHDRAWABLE CIRCUIT BREAKER 3-POLE, SIZE I
 IN=1600A TO 500V, AC50/60HZ ICU=66KA AT 500V WITH
 MECHANICAL RECLOSING LOCK-OUT WITH TRIPPED
 SIGNALLING SWITCH WITH TRIPPED INDICATORS

Model	
Product brand name	SENTRON
Product designation	3WT air circuit breaker
Design of the product	IEC 60947-2
Design of the operating mechanism	Pushbutton
Type of the driving mechanism	Motorized operating mechanism 220 - 240 V AC / 220 - 250 V DC, activation solenoid 220 - 240 V AC / 220 - 250 V DC
Type of the driving mechanism / motor drive	Yes
Design of the overcurrent release	ETU35WT

General technical data	
Number of poles	3
Field of application	CIRCUIT BREAKER
Size of the circuit-breaker	I
Electrical endurance (switching cycles) / typical	10 000
Usage category	B
Diken-export / Let-through current	DS_3WT8
Country code	EN
circuit-breaker / Design	3WT8
Mechanical service life (switching cycles) / typical	16 000
Reference code / acc. to DIN 40719 extended according to IEC 204-2 / acc. to IEC 750	Q

Voltage	
Rated operational voltage U_e / max.	500 V
Rated insulation voltage U_i	1 000 V
Insulation voltage	
• rated value	690 V
• at AC / rated value	1 000 V
Surge voltage resistance / rated value	12 kV
Operating voltage	
• for main current circuit / at AC / at 50 Hz / maximum	500 V
• for main current circuit / at AC / at 60 Hz / maximum	500 V

Protection class

Protection class IP	IP20
Protective function of the overcurrent release	LSI
Current	
rated current I _n	
• max.	1 600 A
• at 40 Cel	1 600 A
• at 50 Cel	1 600 A
Diken-export / Let-through energy	I2T_3WT8
Continuous current / rated value	1 600 A
Derating temperature / for the rated value of the continuous current	50 °C
Adjustable pick-up value current	
• of the current-dependent overload release / Full-scale value	1 600 A
• of instantaneous short-circuit trip unit / initial value	32 000 A
• of instantaneous short-circuit trip unit / Full-scale value	32 000 A
Short-time current resistance (I _{cw})	
• limited to 0.5 s / rated value	50 kA
• limited to 1 s / rated value	50 kA
• limited to 2 s / rated value	30 kA
• limited to 3 s / rated value	25 kA
Main circuit	
Operating frequency / 1 / rated value	50 Hz
Operating current	
• at 40 °C / rated value	1 600 A
• at 50 °C / rated value	1 600 A
• at 60 °C / rated value	1 500 A
• at 70 °C / rated value	1 350 A
Auxiliary circuit	
Number of CO contacts / for auxiliary contacts	2
Number of NC contacts / for auxiliary contacts	2
Number of NO contacts / for auxiliary contacts	2
Operating current / of auxiliary contacts / at AC-15 / at 230 V	6 A
Suitability	
Suitability for use	System protection
• Disconnecting means	Yes
Adjustable parameters	

Adjustable pick-up value current / of the short-time delayed short-circuit release	
• initial value	2 400 A
• Full-scale value	19 200 A
Adjustable pick-up value current / of the current-dependent overload release / initial value	640 A

Product details

Product component	
• Trip indicator	No
• Auxiliary switch	Yes
• Voltage trigger	No
• undervoltage release	No
Product extension / optional / motor drive	No

Product function

Product function	
• of thermal overload trip unit	adjustable
• Ground fault protection	No
• for neutral conductors / Short-circuit and overload proof	No
• Overload protection	Yes

Accessories

accessories	No further Z accessories
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Short circuit

Operational short-circuit current breaking capacity (Ics)	
• at 240 V / rated value	66 kA
• at 415 V / rated value	66 kA
• at 500 V / rated value	66 kA
Maximum short-circuit current breaking capacity (Icu)	
• at 240 V / rated value	66 kA
• at 400 V / rated value	66 kA
• at 415 V / rated value	66 kA
• at 440 V / rated value	66 kA
• at 480 V / rated value	66 kA
• at 500 V / rated value	66 kA

Connections

Arrangement of electrical connectors / for main current circuit	Horizontal on rear (IEC 947-2 standard)
Type of connection, main circuit	REAR HORIZONTAL; STANDARD IEC
Type of connectable conductor cross-sections / for auxiliary contacts	

<ul style="list-style-type: none"> • solid 	1x (0.5 ... 2.5) mm ² ; 1x AWG 14
<ul style="list-style-type: none"> • finely stranded / with core end processing 	2x 1.0 mm ²
Type of electrical connection / for main current circuit	busbar connection

Mechanical Design

Type of mounting	fixed mounted
Mounting type	fixed mounting
Mounting position	with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back
<ul style="list-style-type: none"> • during operation • during storage 	-20 ... +70 °C -40 ... +80 °C

Certificates

Reference code	
<ul style="list-style-type: none"> • acc. to DIN EN 61346-2 	Q
<ul style="list-style-type: none"> • acc. to DIN EN 81346-2 	Q

General Product Approval	Declaration of Conformity	Test Certificates	other
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[Special Test Certificate](#)

[Miscellaneous](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3WT8161-5UA70-0AA2>

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3WT8161-5UA70-0AA2>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WT8161-5UA70-0AA2

CAX-Online-Generator

<http://www.siemens.com/cax>

Tender specifications

<http://www.siemens.com/specifications>