# **SIEMENS**

Data sheet

## 3WT8161-6UA34-5AB2

withdrawable circuit breaker 3-pole, size 1 In=1600A to 500V, 50/60Hz AC Icu=66kA at 500V with mechanical lockout device with tripped signaling switch with tripped indicators with guide frame Overcurrent release ETU37WT LSING Setting range according to FS with display Motorized/manual operating mechanism with memory with electrical and mechanical activation Motor and electr. calling for 220...240 V AC, 220...250 V DC Activation solenoid 220...250 V DC without 1st auxiliary release With 2nd auxiliary release Shunt release "F", F2 220...240 V AC, 220...250 V DC switch position-depending Auxiliary current switch 2 NC+2 NO 2-piece shutter with sealing cap against unauthorized switching off with door sealing frame

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	ETU37WT		
General technical data			
Number of poles	3		
Field of application	CIRCUIT BREAKER		

Field of application	CIRCUIT BREAKER
Size of the circuit-breaker	1
Electrical endurance (switching cycles) / typical	10 000
Usage category	В
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	Q
according to IEC 204-2 / acc. to IEC 750	

Voltage	
Rated operational voltage Ue / max.	500 V
Rated insulation voltage Ui	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	
at AC / at 50/60 Hz / rated value	500 V
Protection class	
Protection class IP	IP20
Protective function of the overcurrent release	LSING
Current	
rated current In	
• 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	
<ul> <li>of the current-dependent overload release / Full-scale value</li> </ul>	1 600 A
<ul> <li>of instantaneous short-circuit trip unit / initial value</li> </ul>	32 000 A
<ul> <li>of instantaneous short-circuit trip unit / Full- scale value</li> </ul>	32 000 A
Short-time withstand current (Icw)	
<ul> <li>limited to 1 s / rated value</li> </ul>	50 kA
<ul> <li>limited to 2 s / rated value</li> </ul>	30 kA
• at AC / at 415 V / limited to 0.5 s / rated value	50 kA
• at AC / at 415 V / limited to 3 s / rated value	25 kA
Main circuit	
Operating frequency / 1 / rated value	50 Hz
Operating current	
<ul> <li>at 40 °C / rated value</li> </ul>	1 600 A
<ul> <li>at 50 °C / rated value</li> </ul>	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	0
Number of NC contacts / for auxiliary contacts	2
Number of NO contacts / for auxiliary contacts	2
Operating current / of auxiliary contacts / at AC-15 /	6 A
at 230 V	
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	2 000 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		
<ul> <li>undervoltage release</li> </ul>	No		
Product function			
Product function			
<ul> <li>of thermal overload trip unit</li> </ul>	adjustable		
<ul> <li>Ground fault protection</li> </ul>	Yes		
<ul> <li>for neutral conductors / Short-circuit and overload proof</li> </ul>	Yes		
Overload protection	Yes		
Accessories			
accessories	Shutter + sealing cap via OFF		
Chart size.it			
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	Horizontal on rear (IEC 947-2 standard)		
current circuit			
Type of connection, main circuit	REAR HORIZONTAL; STANDARD IEC		

Type of electrical connection / for main current circuit

busbar connection

Type of electrical connection / for main (		busbar connection			
Mechanical Design					
Type of mounting		WITHDRAWABL	WITHDRAWABLE UNIT		
Mounting type		drawer unit	drawer unit		
Mounting position		with vertical mounting surface +/-180° rotatable, with vertical mounting surface +/- 30° tiltable to the front and back			
Environmental conditions					
Ambient temperature / during operation					
• minimum		-20 °C			
• maximum	• maximum		70 °C		
Ambient temperature / during storage		_			
• minimum		-40 °C			
• maximum		80 °C	80 °C		
Certificates					
Reference code					
• acc. to DIN EN 61346-2		Q			
• acc. to DIN EN 81346-2		Q			
General ProductDeclarationApprovalformity	of Con- Te	st Certificates	other		
CCC CCC CCC CCC	Spe	cial 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=3WT8161-6UA34-5AB2

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3WT8161-6UA34-5AB2

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3WT8161-6UA34-5AB2

## CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications http://www.siemens.com/specifications