SIEMENS

Data sheet

3WT8161-6GH54-5AA2

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 24 V DC Activation solenoid 24 V DC With 1st auxiliary release Undervoltage release "R", F3 24 V DC instantaneous With 2nd auxiliary release Shunt release "F", F2 24 V DC switch position-depending 1st + 2nd auxiliary current switch block 2 NO + 2 NC - 2 CO With door sealing frame with sealing cap against unauthorized switching off

Model	
product brand name	SENTRON
product designation	3WT air circuit breaker
design of the product	IEC 60947-2
design of the actuating element	Pushbutton
type of the driving mechanism	Motorized operating mechanism 24 V DC, activation solenoid 24 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
size of the circuit-breaker	
mechanical service life (operating cycles) typical	10 000
electrical endurance (operating cycles) typical	6 000
utilization category	В
Diken-export Let-through current	DS_3WT8
Country code	EN
circuit-breaker Design	3WT8
reference code according to DIN 40719 extended	Q
according to IEC 204-2 according to IEC 750	
Voltage	
Rated operational voltage Ue max.	500 V
Rated insulation voltage Ui	1 000 V
 insulation voltage rated value 	690 V
 insulation voltage (Ui) 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
protection function of the overcurrent release	LSING
Main circuit	
operating frequency 1 rated value	50 Hz
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
operational current of auxiliary contacts at AC-15 at 230 V	6 A
Suitability	
suitability for use	Line / motor protection
disconnecting means	Yes
Adjustable parameters	
adjustable current response value current of the current- dependent overload release initial value	640 A

Product details			
product component			
auxiliary switch	Yes		
 voltage trigger 	No		
 undervoltage release 	Yes		
product extension optional motor drive	No		
Product function			
product function			
 of thermal overload trip unit 	adjustable		
 grounding protection 	Yes		
 for neutral conductors short-circuit and overload 	Yes		
proof			
overload protection	Yes		
Short circuit			
operating short-circuit current breaking capacity (lcs)			
• 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	Main connection horizontal on rear (IEC 947-2 standard)		
type of connectable conductor cross-sections for auxiliary contacts			
• solid	1x (0.5 2.5) mm2; 1x AWG 14		
finely stranded with core end processing	2x 1.0 mm2		
type of electrical connection for main current circuit	busbar connection		
Mechanical Design			
fastening method	drawer unit		
mounting position	with vertical mounting surface +/-180 $^\circ$ rotatable, with vertical mounting surface +/- 30 $^\circ$ tiltable to the front and back		
Environmental conditions			
ambient temperature during operation			
• minimum	-20 °C		
• maximum	70 °C		
ambient temperature during storage			
• minimum	-40 °C		
• maximum	80 °C		
Certificates			
reference code			
• according to EN 61346-2	Q		
according to IEC 81346-2	Q		
General Product Approval	Declaration of Conformity		



Confirmation









Test Certificates	other		Dangerous Good	Environment
Special Test Certificate	Confirmation	<u>Miscellaneous</u>	Transport Informa- tion	Environmental Con- firmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3WT8161-6GH54-5AA2

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

https://support.industry.siemens.com/cs/ww/en/ps/3WT8161-6GH54-5AA2

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3WT8161-6GH54-5AA2

CAx-Online-Generator

http://www.siemens.com/cax

Tender specifications

http://www.siemens.com/specifications

