SIEMENS

Data sheet 5SY4116-8



Miniature circuit breaker 230/400 V 10kA, 1-pole, D, 16A, D=70 mm

Model	
product brand name	SENTRON
product designation	Miniature circuit breaker
General technical data	
number of poles	1
design of pole	1P
tripping characteristic class	D
mechanical service life (switching cycles) / typical	10 000
overvoltage category	III
degree of pollution	3
Voltage	
type of voltage / of the operating voltage	AC
insulation voltage (Ui)	
● with single-phase operation / at AC / rated value	440 V
● with multi-phase operation / at AC / rated value	440 V
supply voltage / with single-phase operation / at AC / rated value	230 V
Supply voltage	
supply voltage	
● at AC / rated value	400 V
value range / of the supply voltage frequency	50/60 Hz
operating voltage / at DC / rated value / maximum	72 V
Protection class	
protection class IP	IP20, with connected conductors
Switching capacity	
switching capacity current	
● at DC / according to IEC 60947-2 / rated value	15 kA
● according to EN 60898 / rated value	10 kA
● according to IEC 60947-2 / rated value	20 kA
Dissipation	
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.6 W
Current	
operational current	
● at 35 °C / rated value	16 A
● at 40 °C / rated value	15.02 A
● at 45 °C / rated value	14.51 A
● at 50 °C / rated value	13.98 A
● at 55 °C / rated value	13.44 A

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● at 60 °C / rated value	12.86 A
● at AC / rated value	16 A
suitability for operation	Mechanical engineering / industry
Product details	
product component / neutral conductor switching	No
product feature / touch protection	Yes
product component	
● combined terminal top	Yes
● combined terminal bottom	Yes
product feature	
● properties for main switches in accordance with EN 60204-1	Yes
● halogen-free	Yes
● sealable	Yes
● silicon-free	Yes
product extension / installable / supplementary devices	Yes
Short circuit	
breaking capacity short-circuit current (Icn)	
● at AC / according to UL 1077 and CSA C22.2 No.235	5 kA
Connections	
connectable conductor cross-section / solid	
● minimum	0.75 mm²
● maximum	35 mm²
connectable conductor cross-section / stranded	
● minimum	0.75 mm²
● maximum	35 mm²
connectable conductor cross-section / finely stranded / with core end processing	
● minimum	0.75 mm²
● maximum	25 mm²
AWG number / as coded connectable conductor cross section	
● minimum	18
● maximum	4
tightening torque [lbf·in] / with screw-type terminals	
● minimum	22 lbf·in
● maximum	31 lbf·in
tightening torque / with screw-type terminals	
● minimum	2.5 N·m
● maximum	3.5 N·m
position / of power supply cord	Any
Mechanical Design	
height	90 mm
width	18 mm
depth	76 mm
installation depth	70 mm
number of modular width units	1
fastening method	Quick assembly system
mounting position	any
net weight	151 g
Environmental conditions	
influence of the surrounding temperature	max. 95% to 55°C, max. 55% to 70°C, max. 35% to 75°C
standard	IEC / EN 60898-1, IEC / EN 60947-2 / UL1077
vibration resistance / according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
ambient temperature / during operation	
● minimum	-40 °C
● maximum	70 °C
ambient temperature / during storage	
● minimum	-40 °C

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• maximum	75 °C
number of test cycles / for environmental testing / according to IEC 60068-2-30	6

Certificates

reference code	
• according to EN 61346-2	F
• according to IEC 81346-2	F

General Product Approval

Confirmation | Miscellaneous

General Product Approval | EMC | Declaration of Conformity | Test Certificates

Miscellaneous | Miscellaneous

Test Certificates | Marine / Shipping

Special Test Certificate

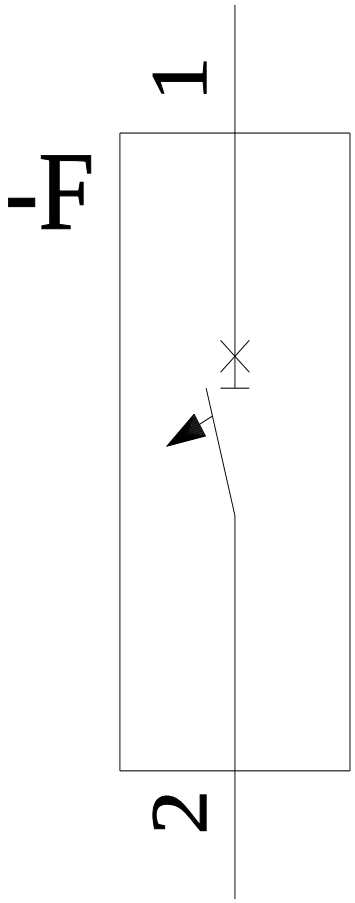
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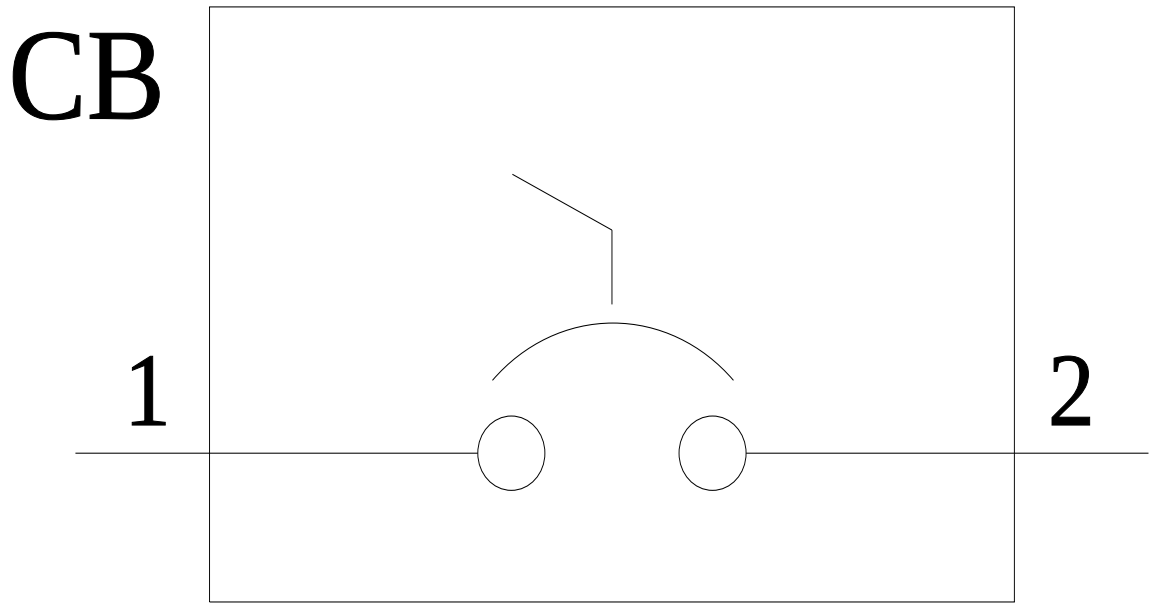
Environmental Confirmations | Miscellaneous | Vibration and Shock | Confirmation

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=5SY4116-8
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/5SY4116-8
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY4116-8
CAx-Online-Generator
http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications

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