## **SIEMENS**

Data sheet 5SY4680-7



Miniature circuit breaker 400 V 10kA, 3+N-pole, C, 80 A, D=70 mm

Model		
product brand name	SENTRON	
product designation	Miniature circuit breaker	
General technical data		
number of poles	4	
design of pole	3P+N	
tripping characteristic class	С	
mechanical service life (operating cycles) typical	10 000	
overvoltage category	III	
degree of pollution	3	
Voltage		
type of voltage of the operating voltage	AC	
insulation voltage (Ui)		
<ul> <li>with single-phase operation at AC rated value</li> </ul>	440 V	
with multi-phase operation at AC rated value	440 V	
operational current		
<ul> <li>at 40 °C rated value</li> </ul>	76.84 A	
<ul> <li>at 50 °C rated value</li> </ul>	73.52 A	
• at 55 °C rated value	71.84 A	
<ul> <li>at 60 °C rated value</li> </ul>	70.08 A	
at AC rated value	80 A	
Supply voltage		
supply voltage		
• at AC	400 V	
at DC rated value	60 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	
Breaking Capacity		
switching capacity current		
<ul> <li>at DC according to IEC 60947-2 rated value</li> </ul>	15 kA	
according to EN 60898 rated value	10 kA	
Dissipation		
power loss [W] for rated value of the current at AC in hot operating state per pole	6.7 W	
suitability for operation	Infrastructure / Industry	
Product details		
product feature touch protection	Yes	
product component		

<ul> <li>combined terminal top</li> </ul>	Yes
<ul> <li>combined terminal bottom</li> </ul>	Yes
neutral conductor switching	Yes
product feature	
<ul> <li>properties for main switches in accordance with EN 60204-1</li> </ul>	Yes
<ul><li>halogen-free</li></ul>	Yes
• sealable	Yes
• silicon-free	Yes
product extension installable supplementary devices	Yes
Short circuit	
short-circuit current breaking capacity (Icn)	
<ul> <li>at AC according to UL 1077 and CSA C22.2 No.235</li> </ul>	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 mm <sup>2</sup>
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	72 mm
depth	76 mm
installation depth	70 mm
number of modular width units	4
fastening method	DIN rail
mounting position	any
net weight	664 q
Environmental conditions	004 9
standard	IEC / EN 60898-1, IEC / EN 60947-2
vibration resistance according to IEC 60068-2-6	±1mm at 5 to 25Hz; 50m/s² at 25 to 150Hz
ambient temperature during operation	2 mm at 0 to 20112, 0011110 at 20 to 100112
minimum	-40 °C
maximum	70 °C
	10 0
ambient temperature during storage	-40 °C
• minimum	-40 ℃ 75 °C
maximum  number of test cycles for environmental testing according	6
number of test cycles for environmental testing according to IEC 60068-2-30	O
Approvals Certificates	
General Product Approval	Test Certificates
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**Miscellaneous** 



<u>Miscellaneous</u> <u>Special Test Certificate</u>

 Other
 Railway
 Environment

 Confirmation
 Miscellaneous
 Special Test Certificate
 Confirmation
 Environmental Confirmations

Environment

Environmental Confirmations

## 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=5SY4680-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY4680-7

https://support.industry.siemens.com/cs/ww/en/ps/3314000-1

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

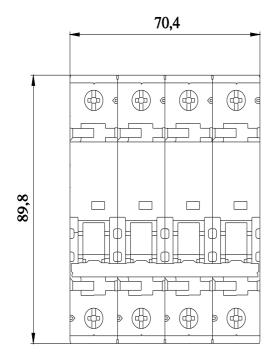
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=5SY4680-7

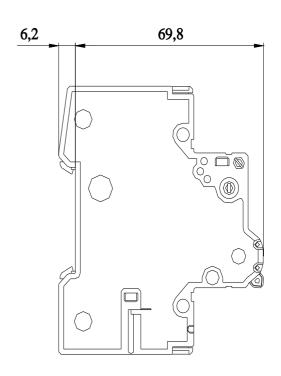
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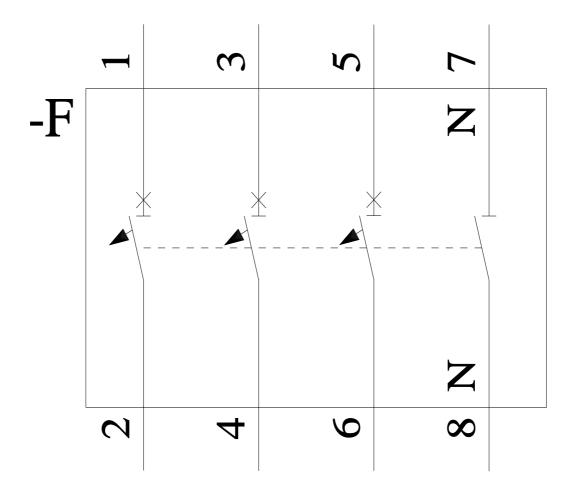
http://www.siemens.com/cax

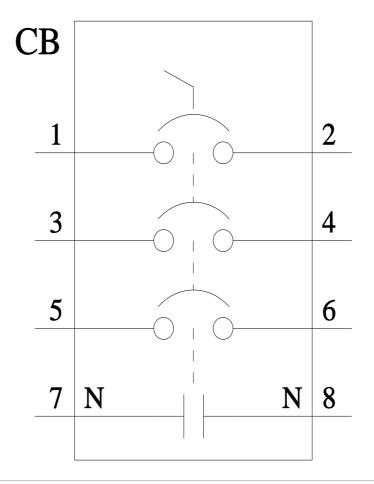
Tender specifications

http://www.siemens.com/specifications









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