SIEMENS

Data sheet 5SY8650-7



Miniature circuit breaker 400 V D=70 mm 25 kA according to EN 60947-2, 3P+N, C50 $\,$

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
/oltage	
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
operational current	
at 50 °C rated value	48.95 A
at 55 °C rated value	47.85 A
at AC rated value	50 A
Supply voltage	
supply voltage	
at AC rated value	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	
auditabies conseits aurent	
switching capacity current	
at DC according to IEC 60947-2 rated value	15 kA
	15 kA 25 kA
at DC according to IEC 60947-2 rated value	
at DC according to IEC 60947-2 rated valueaccording to IEC 60947-2 rated value	
at DC according to IEC 60947-2 rated value according to IEC 60947-2 rated value Dissipation power loss [W] for rated value of the current at AC in hot	25 kA
at DC according to IEC 60947-2 rated value according to IEC 60947-2 rated value Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole	25 kA
at DC according to IEC 60947-2 rated value according to IEC 60947-2 rated value Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details	25 kA
at DC according to IEC 60947-2 rated value according to IEC 60947-2 rated value Dissipation power loss [W] for rated value of the current at AC in hot operating state per pole Product details product component	3.8 W

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
Product function	
set values setting current (li) for I-tripping	6,5
reference value setting current (Ii) for I-tripping	x In
Short circuit	
short-circuit current breaking capacity (Icn)	
at AC according to UL 1077 and CSA C22.2 No.235	5 kA
Connections	
connectable conductor cross-section solid	
• minimum	0.75 mm ²
maximum	35 mm²
connectable conductor cross-section stranded	
• minimum	0.75 mm ²
maximum	35 mm²
connectable conductor cross-section finely stranded with core end processing	
• minimum	0.75 mm²
maximum	25 mm ²
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	2.5.N.m.
minimum maximum	2.5 N·m 3.5 N·m
position of power supply cord	Any
Mechanical Design	Ally
height	90 mm
width	72 mm
depth	76 mm
installation depth	70 mm
number of modular width units	4
fastening method	Quick assembly system
mounting position	any
net weight	658 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 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	-25 °C
maximum	55 °C
ambient temperature during storage	
• minimum	-40 °C
maximum	75 °C
number of test cycles for environmental testing according to IEC 60068-2-30	6
Approvals Certificates	
General Product Approval	





Confirmation





other	Environment

Confirmation **Miscellaneous Environmental Confirmations**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=5SY8650-7

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

https://support.industry.siemens.com/cs/ww/en/ps/5SY8650-7

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

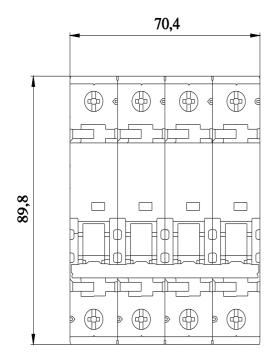
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=5SY8650-7

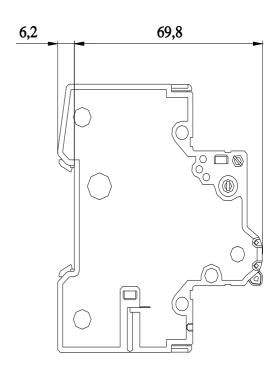
CAx-Online-Generator

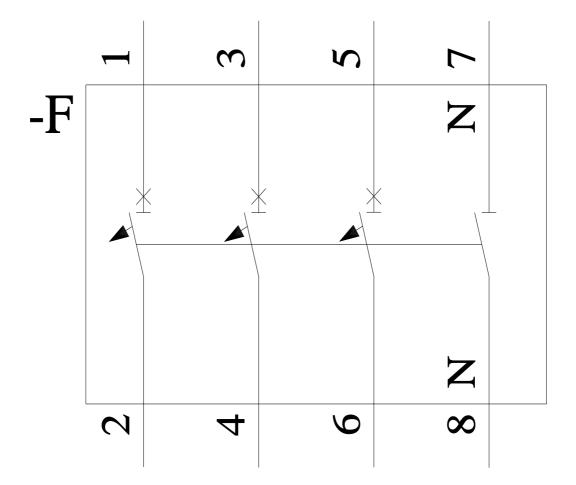
http://www.siemens.com/cax

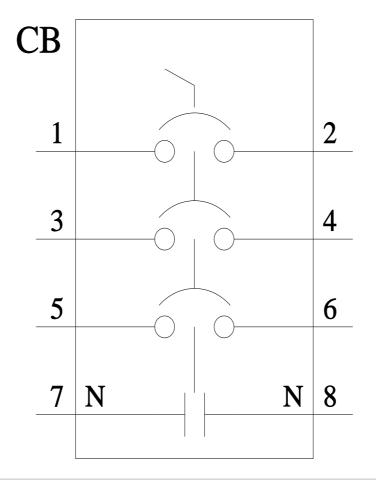
Tender specifications

http://www.siemens.com/specifications









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