

Siemens
EcoTech



circuit breaker 3VA2 IEC Frame 250 breaking capacity class H $I_{cu}=85\text{ kA @ }415\text{ V}$
3-pole, line protection ETU850, LSI, $I_n=160\text{ A}$ overload protection $I_r=63\text{ A...160 A}$
short-circuit protection $I_{sd}=0.6..10\times I_n$, $I_i=1.5..12\times I_n$ neutral conductor protection
optionally with external current transformer, up to 160% nut keeper kit



Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	ETU850
protection function of the overcurrent release	LSI
number of poles	3
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	19.7 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	6.57 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	12 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	8 400
product feature / for neutral conductors / upgradable/retrofitable / short-circuit and overload proof	Yes
ground-fault monitoring version	Without
product function	
• communication function	Yes
• other measurement function	Yes
Net Weight	2.287 kg
Current	
operational current	
• at 40 °C	160 A
• at 45 °C	160 A
• at 50 °C	160 A
• at 55 °C	160 A
• at 60 °C	160 A
• at 65 °C	160 A
• at 70 °C	160 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	H
maximum short-circuit current breaking capacity (I_{cu})	
• at 240 V	110 kA

• at 415 V • at 440 V • at 500 V • at 690 V	85 kA 85 kA 55 kA 3 kA
operating short-circuit current breaking capacity (Ics) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	110 kA 85 kA 85 kA 55 kA 3 kA
short-circuit current making capacity (Icm) • at 240 V • at 415 V • at 440 V • at 500 V • at 690 V	242 kA 187 kA 187 kA 121 kA 4.5 kA
Adjustable parameters	
product feature / for L-tripping / can be switched on/off	No
adjustable response value setting current (Ir) / of the L-trip / with I2t characteristic • minimum • maximum	64 A 160 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic • minimum • maximum	0.5 s 25 s
adjustable response value setting current (Isd) / of S-trip / with I0t characteristic • minimum • maximum	96 A 1 600 A
adjustable response value setting current (Isd) / of S-trip / with I2t characteristic • minimum • maximum	96 A 1 600 A
adjustable response value delay time (tsd) / for S-tripping / with I0t characteristic • minimum • maximum	0.05 s 0.5 s
adjustable response value delay time (tsd) / for S-tripping / with I2t characteristic • minimum • maximum	0.05 s 0.5 s
adjustable response value setting current (Ii) / for I-tripping • minimum • maximum	240 A 1 920 A
adjustable setting current (InN) / for N-tripping • minimum • maximum	32 A 256 A
design of the N-conductor protection	adjustable OFF; 20% to 160%
product function / grounding protection	No
Mechanical Design	
product component • undervoltage release • voltage trigger • trip indicator	No No No
height [in]	7.13 in
height	181 mm
width [in]	4.13 in
width	105 mm
depth [in]	3.39 in
depth	86 mm

Connections						
arrangement of electrical connectors / for main current circuit	Front terminal					
type of electrical connection / for main current circuit	on both sides nut keeper kit					
type of connectable conductor cross-sections / for flat-bar terminal connection / minimum	13 x 1 mm					
type of connectable conductor cross-sections / for flat-bar terminal connection / maximum	25 x 8 mm					
design of the surface / of the connections / on the top of the switch (N, 1, 3, 5)	silver					
design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6)	tin					
Auxiliary circuit						
number of CO contacts / for auxiliary contacts	0					
Accessories						
product extension / optional / motor drive	Yes					
Environmental conditions						
protection class IP / on the front	IP40					
ambient temperature						
• during operation / minimum	-25 °C					
• during operation / maximum	70 °C					
• during storage / minimum	-40 °C					
• during storage / maximum	80 °C					
Environmental footprint						
Environmental Product Declaration (EPD)	Yes					
global warming potential [CO2 eq] / total	251 kg					
global warming potential [CO2 eq] / during manufacturing	20.4 kg					
global warming potential [CO2 eq] / during operation	235 kg					
global warming potential [CO2 eq] / after end of life	-3.75 kg					
Siemens Eco Profile (SEP)	Siemens EcoTech					
reference code / according to IEC 81346-2	Q					
Approvals / Certificates						
General Product Approval						
 CCC  EG-Konf. Confirmation  VDE Miscellaneous 						
General Product Approval	EMV	Test Certificates	Maritime application			
	 RCM	Miscellaneous	Type Test Certificates/Test Report	Special Test Certificate	 ABS	
Maritime application				other		
 BUREAU VERITAS	 DNV	 LRS	 RMRS	CCS (China Classification Society)	 产品合格 QC PASS	
other		Dangerous goods		Environment		
Confirmation	Miscellaneous	Transport Information			Environmental Confirmations	

Further information

Information on the packaging

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

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/lowvoltage/catalogs>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3VA2216-6KP32-0AA0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3VA2216-6KP32-0AA0>

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

https://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2216-6KP32-0AA0

CAX-Online-Generator

<https://www.siemens.com/cax>

Tender specifications

<https://www.siemens.com/specifications>



