SIEMENS

Data sheet



circuit breaker 3VA2 IEC frame 160 breaking capacity class C Icu=110kA @ 415V 4-pole, line protection ETU330, LIG, In=63A overload protection Ir=25A...63A short-circuit protection Ii=1.5...12 x In N conductor protection adjustable (OFF, 100%) ground-fault protection Ig=0.25...1 x In= tg=0.1/0.3s clamp connection

Model	
product brand name	SENTRON
product designation	Molded case circuit breaker
design of the product	Line protection
design of the overcurrent release	ETU330
protection function of the overcurrent release	LIG
number of poles	4
General technical data	
insulation voltage / rated value	800 V
operating voltage / at AC / rated value	690 V
power loss [W] / maximum	4 W
power loss [W] / for rated value of the current / at AC / in hot operating state / per pole	1.33 W
mechanical service life (operating cycles) / typical	25 000
electrical endurance (operating cycles) / at AC-1 / at 380/415 V	14 000
electrical endurance (operating cycles) / at AC-1 / at 690 V	9 800
product feature / for neutral conductors / upgradable/retrofittable / short-circuit and overload proof	No
ground-fault monitoring version	Summation current formation L + N conductor
product function	
 communication function 	No
 other measurement function 	No
Net Weight	3.2 kg
Current	
operational current	
• at 40 °C	63 A
• at 45 °C	63 A
• at 50 °C	63 A
● at 55 °C	63 A
• at 60 °C	63 A
• at 65 °C	63 A
• at 70 °C	63 A
Switching capacity according to IEC 60947	
switching capacity class of the circuit breaker	С
maximum short-circuit current breaking capacity (Icu)	
• at 240 V	150 kA
• at 415 V	110 kA
• at 440 V	110 kA
• at 500 V	85 kA
• at 690 V	2.5 kA
operating short-circuit current breaking capacity (lcs)	

● at 240 V	150 kA
● at 415 V	110 kA
● at 440 V	110 kA
● at 500 V	85 kA
● at 690 V	2.5 kA
short-circuit current making capacity (Icm)	
● at 240 V	330 kA
● at 415 V	242 kA
• at 440 V	242 kA
● at 500 V	187 kA
● at 690 V	3.7 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	25 A
• maximum	63 A
adjustable response value delay time (tr) / for L-tripping / with I2t characteristic	
• minimum	0.5 s
• maximum	17 s
adjustable response value setting current (li) / for I-tripping	
• minimum	95 A
• maximum	756 A
adjustable current response value current / for G-tripping / with standard characteristic	
initial value	16 A
full-scale value	63 A
adjustable response value delay time (tg) / for G-tripping / with I0t characteristic	
• maximum	0.3 s
adjustable setting current (InN) / for N-tripping	
• minimum	63 A
• maximum	63 A
design of the N-conductor protection	adjustable OFF; 100%
design of the N-conductor protection product function / grounding protection	
design of the N-conductor protection	adjustable OFF; 100%
design of the N-conductor protection product function / grounding protection Mechanical Design product component	adjustable OFF; 100%
design of the N-conductor protection product function / grounding protection Mechanical Design	adjustable OFF; 100%
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger	adjustable OFF; 100% Yes No No
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release	adjustable OFF; 100% Yes No No No
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger	adjustable OFF; 100% Yes No No
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger • trip indicator	adjustable OFF; 100% Yes No No No
design of the N-conductor protection product function / grounding protection Mechanical Design product component	adjustable OFF; 100% Yes No No No No 7.13 in
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] type of connectable conductor cross-sections / of the round conductor terminal / stranded	adjustable OFF; 100% Yes No No No T.13 in 181 mm 5.51 in 1 x (6-120 mm²)
design of the N-conductor protection product function / grounding protection Mechanical Design product component	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²)
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] type of connectable conductor cross-sections / of the round conductor terminal / stranded	adjustable OFF; 100% Yes No No No T.13 in 181 mm 5.51 in 1 x (6-120 mm²)
design of the N-conductor protection product function / grounding protection Mechanical Design product component	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²)
design of the N-conductor protection product function / grounding protection Mechanical Design product component	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in
design of the N-conductor protection product function / grounding protection Mechanical Design product component	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in
design of the N-conductor protection product function / grounding protection Mechanical Design product component	adjustable OFF; 100% Yes No No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm
design of the N-conductor protection product function / grounding protection Mechanical Design product component	Adjustable OFF; 100% Yes No No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm
design of the N-conductor protection product function / grounding protection Mechanical Design product component	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm Front terminal double-sided box terminal
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] type of connectable conductor cross-sections / of the round conductor terminal / stranded width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm Front terminal double-sided box terminal tin
design of the N-conductor protection product function / grounding protection Mechanical Design product component	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm Front terminal double-sided box terminal tin
design of the N-conductor protection product function / grounding protection Mechanical Design product component	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm Front terminal double-sided box terminal tin
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] type of connectable conductor cross-sections / of the round conductor terminal / stranded width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts	Adjustable OFF; 100% Yes No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm Front terminal double-sided box terminal tin
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] type of connectable conductor cross-sections / of the round conductor terminal / stranded width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories	adjustable OFF; 100% Yes No No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm Front terminal double-sided box terminal tin tin
design of the N-conductor protection product function / grounding protection Mechanical Design product component • undervoltage release • voltage trigger • trip indicator height [in] height width [in] type of connectable conductor cross-sections / of the round conductor terminal / stranded width depth [in] depth Connections arrangement of electrical connectors / for main current circuit type of electrical connection / for main current circuit design of the surface / of the connections / on the top of the switch (N, 1, 3, 5) design of the surface / of the connections / on the bottom of the switch (N, 2, 4, 6) Auxiliary circuit number of CO contacts / for auxiliary contacts Accessories product extension / optional / motor drive	adjustable OFF; 100% Yes No No No No 7.13 in 181 mm 5.51 in 1 x (6-120 mm²) 140 mm 3.39 in 86 mm Front terminal double-sided box terminal tin tin

ambient temperature -25 °C • during operation / minimum • during operation / maximum 70 °C -40 °C • during storage / minimum 80 °C • during storage / maximum

reference code / according to IEC 81346-2 Q

General Product Approval

EMC



Confirmation



Miscellaneous





Declaration of Conformity

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report

Special Test Certificate

Miscellaneous



Marine / Shipping

other





CCS / China Classification Society

Confirmation

Miscellaneous

Miscellaneous

Dangerous Good

Environment

Transport Information

Environmental Confirmations

Further information

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=3VA2163-7HM46-0AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3VA2163-7HM46-0/

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

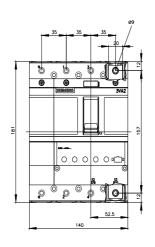
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3VA2163-7HM46-0AA0

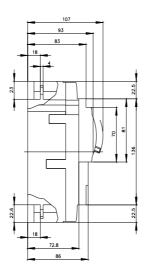
CAx-Online-Generator

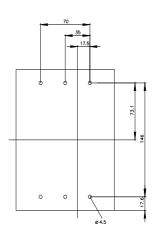
http://www.siemens.com/cax

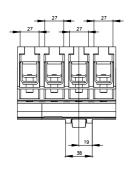
Tender specifications

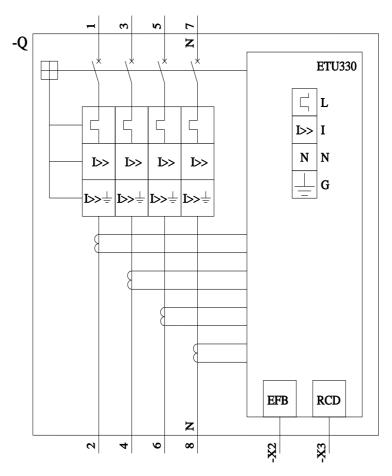
http://www.siemens.com/specifications











last modified: 7/19/2022 🖸



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3VA21637HM460AA0