3LD2866-1GP51-0US2

Data sheet



SENTRON, Switch disconnector 3LD, main switch, 3-pole, lu: 125 A, Operating power / at AC-23 A at 400 V: 45 kW, molded-plastic encapsulation for inch cable gland, 1 NC, 1 NO, rotary operating mechanism, black

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	Main switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	Molded-plastic enclosure for inch threaded joint
design of the actuating element	Short rotary knob
color of the actuating element	black
design of handle	rotary operating mechanism, black
type of the driving mechanism motor drive	No
General technical data	
number of poles	3
number of poles note	PE
size of switch disconnector	4
mechanical service life (operating cycles) typical	100 000
electrical endurance (operating cycles)	
• at AC-23 A at 690 V	6 000
operating frequency maximum	50 1/h
degree of pollution	3
Voltage	
insulation voltage rated value	690 V
surge voltage resistance rated value	6 kV
operating voltage	
at AC rated value	690 V
operating frequency rated value	
• minimum	50 Hz
• maximum	60 Hz
Protection class	
protection class IP	IP65
degree of protection NEMA rating	1, 4X, 12
protection class IP on the front	IP65
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	12 W
Main circuit	
operational current	
• at AC-21 at 690 V rated value	125 A
• at AC-21 A at 240 V rated value	125 A
• at AC-21 A at 400 V rated value	125 A
 at AC-21 A at 440 V rated value 	125 A

a at AC 33 A at 400 \/ mate d value	90 A
at AC-23 A at 400 V rated value	80 A
operating power	22 144
at AC-23 A at 240 V rated value	22 kW
• at AC-23 A at 400 V rated value	45 kW
• at AC-23 A at 440 V rated value	45 kW
• at AC-23 A at 690 V rated value	37 kW
at AC-3 at 240 V rated value	22 kW
at AC-3 at 400 V rated value	37 kW
• at AC-3 at 690 V rated value	30 kW
Auxiliary circuit	
number of CO contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
operating voltage of auxiliary contacts at AC maximum	500 V
continuous current of the auxiliary contact rated value	10 A
insulation voltage of the auxiliary switch rated value	500 V
Suitability	
suitability for use	
main switch	Yes
switch disconnector	Yes
EMERGENCY OFF switch	No
• safety switch	Yes
maintenance/repair switch	Yes
Product details	
product feature can be locked into OFF position	Yes
accessories	
product extension optional	
 motor drive 	No
voltage trigger	No
number of connectable NC contacts for auxiliary contacts attachable maximum	2
number of connectable NO contacts for auxiliary contacts attachable maximum	3
number of connectable CO contacts for auxiliary contacts attachable maximum	0
number of bracket locks maximum	3
hasp thickness of the bracket locks	4 8 mm
Short circuit	
Short circuit conditional short-circuit current with line-side fuse protection	
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value	20 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch	20 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum	10 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum	10 kA 10 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum	10 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	10 kA 10 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible	10 kA 10 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch	10 kA 10 kA 10 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum	10 kA 10 kA 10 kA
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum	10 kA 10 kA 10 kA 104 kA2.s
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	10 kA 10 kA 10 kA 104 kA2.s
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum design of the fuse link	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s 104 kA2.s
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum design of the fuse link • for short-circuit protection of the main circuit required • for short-circuit protection of the auxiliary switch required	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s 104 kA2.s fuse gL/gG: 125 A fuse gL/gG: 10 A
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum design of the fuse link • for short-circuit protection of the main circuit required • for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s 104 kA2.s fuse gL/gG: 125 A fuse gL/gG: 10 A
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum design of the fuse link • for short-circuit protection of the main circuit required • for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s 104 kA2.s fuse gL/gG: 125 A fuse gL/gG: 10 A
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum design of the fuse link • for short-circuit protection of the main circuit required • for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s 104 kA2.s fuse gL/gG: 125 A fuse gL/gG: 10 A 125 A
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum design of the fuse link • for short-circuit protection of the main circuit required • for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value active power [hp] at AC at 480 V according to UL 508/UL 60947-	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s 104 kA2.s fuse gL/gG: 125 A fuse gL/gG: 10 A 125 A
conditional short-circuit current with line-side fuse protection • at 690 V by gG fuse rated value let-through current with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum permissible l2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum • at 690 V for combination switch + gG fuse maximum design of the fuse link • for short-circuit protection of the main circuit required • for short-circuit protection of the auxiliary switch required operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1 rated value operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	10 kA 10 kA 10 kA 104 kA2.s 104 kA2.s 104 kA2.s fuse gL/gG: 125 A fuse gL/gG: 10 A 125 A 125 A

508/UL 60947-4-1	
continuous current of upstream fuse according to UL rated value	200 A
type of fuse according to UL	RK5
Connections	KNO
AWG number as coded connectable conductor cross section	
solid	
• maximum	1
• minimum	12
type of connectable conductor cross-sections for copper conductor	
• solid	1x (450mm²)
 finely stranded with core end processing 	1x (435mm²)
• stranded	1x (450mm²)
type of connectable conductor cross-sections for auxiliary contacts	
• solid	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
• finely stranded with core end processing	lateral auxiliary switch 2x (0,75 1,5mm²), 1x 2,5mm²; front auxiliary switch 1x 2,5mm²
• stranded	lateral auxiliary switch 2x (0,75 2,5mm²), 1x 4mm²; front auxiliary switch 1x (0,75 2,5mm²)
type of electrical connection	
for main current circuit	box terminal
for auxiliary contacts	connection terminals
Mechanical Design	
height	302 mm
width	212 mm
depth	181 mm
type of device	fixed mounting
fastening method	Complete unit in enclosure
fastening method	
 4-hole front mounting 	No
 front mounting with central attachment 	Yes
rail mounting	No
net weight	1 856 g
Environmental conditions	
ambient temperature during operation	
• minimum	-25 °C
• maximum	55 °C
ambient temperature during storage	
• minimum	-25 °C
maximum	55 °C
General Product Approval	





Confirmation





Miscellaneous

General Product Approval

Declaration of Conformity

Test Certificates

Marine / Shipping

EAC

(E



Miscellaneous

Special Test Certificate



other

Environment

Miscellaneous

Confirmation

Environmental Confirmations

Further information

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

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

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=3LD2866-1GP51-0US2

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

https://support.industry.siemens.com/cs/ww/en/ps/3LD2866-1GP51-0US2

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

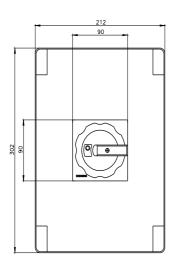
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2866-1GP51-0US2

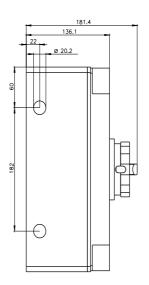
CAx-Online-Generator

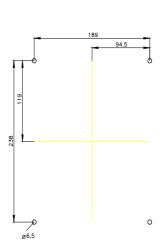
http://www.siemens.com/cax

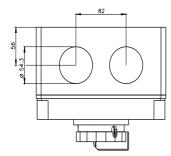
Tender specifications

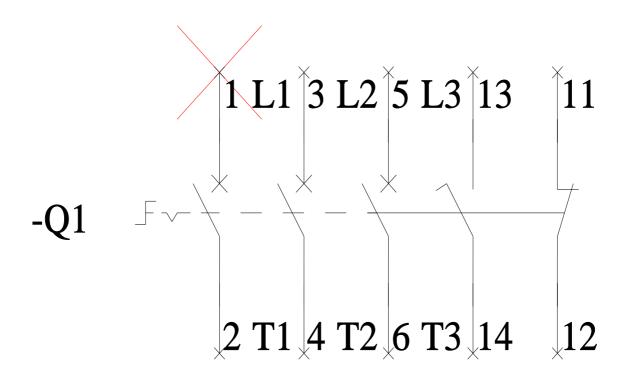
http://www.siemens.com/specifications



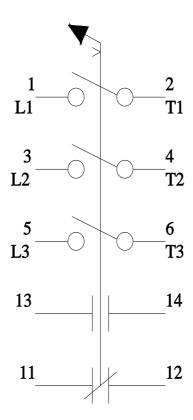












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