SIEMENS

Data sheet 3LD3010-1TK05



Load disconnector 3LD3, lu 16 A Main switch 3-pole Rated operating capacity at AC-23 A at 400V 7.5kW Installation in distribution boards, Basic switch without Knob-operated mechanism with auxiliary switch 1OE + 1S

Model	
product brand name	SENTRON
product designation	Switch disconnector
design of the product	Switch
display version for switch position indicator manual operation	1 ON - 0 OFF
type of switch	DIN-rail mounting
design of the actuating element	Without handle
design of handle	without
type of the driving mechanism motor drive	No
General technical data	
number of poles	3
number of poles note	3
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	IP20
protection class IP on the front	IP20
Dissipation	
power loss [W] for rated value of the current at AC in hot operating state per pole	0.5 W
Main circuit	
operational current	
• at AC-21 at 690 V rated value	16 A
• at AC-21 A at 240 V rated value	16 A
• at AC-21 A at 400 V rated value	16 A
• at AC-21 A at 440 V rated value	16 A
at AC-23 A at 400 V rated value	16 A
operating power	
• at AC-23 A at 240 V rated value	3 kW

• at AC-23 A at 400 V rated value	8 kW
• at AC-23 A at 440 V rated value	7.5 kW
 at AC-23 A at 690 V rated value 	8 kW
 at AC-3 at 240 V rated value 	3 kW
 at AC-3 at 400 V rated value 	6 kW
at AC-3 at 690 V rated value	5.5 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 	Yes
 safety switch 	Yes
maintenance/repair switch	Yes
Product details	
special product feature	Basic Switch
product feature can be locked into OFF position	No
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	4
number of connectable CO contacts for auxiliary contacts attachable maximum	0
attachabic maximum	
Short circuit	
Short circuit	10 kA
Short circuit conditional short-circuit current with line-side fuse protection	10 kA 6 kA
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value	
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • at 690 V by gG fuse rated value	
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • at 690 V by gG fuse rated value let-through current with closed switch	6 kA
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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	6 kA 3 kA
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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	6 kA 3 kA 3 kA
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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	6 kA 3 kA 3 kA
conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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	6 kA 3 kA 3 kA
conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 I2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum	6 kA 3 kA 3 kA
conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s
conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 I2t value with closed switch • at 240 V for combination switch + gG fuse maximum • at 440 V for combination switch + gG fuse maximum	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 12t 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	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 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	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s
conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 I2t 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 design of the fuse link • for short-circuit protection of the main circuit required • for short-circuit protection of the auxiliary switch required	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A fuse gL/gG: 10 A
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 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	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A fuse gL/gG: 10 A
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 I2t 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 oat 690 V for combination switch + gG fuse maximum eat 690 V for combination switch + gG fuse maximum oat 690 V for combination switch + gG fuse maximum eat 690 V for combination switch + gG fuse maximum oberight of the fuse link operational current of upstream fuse rated value according UL operational current at AC according to UL 508/UL 60947-4-1	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A fuse gL/gG: 10 A 16 A
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 12t 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 oat 690 V for combination switch + gG fuse maximum eat 690 V for combination switch + gG fuse maximum oberight of the fuse link • for short-circuit protection of the main circuit 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	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A fuse gL/gG: 10 A 16 A
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 12t 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 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-	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A fuse gL/gG: 10 A 16 A
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 I2t 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 active power [hp] at AC at 480 V 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	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A fuse gL/gG: 10 A 16 A 16 A
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • 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 12t 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 active power [hp] at AC at 480 V 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 short-time withstand current (SCCR) at 600 V according to UL	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A fuse gL/gG: 10 A 16 A 16 A 10
Short circuit conditional short-circuit current with line-side fuse protection • at 440 V by gG fuse rated value • at 690 V by gG fuse rated value let-through current with closed switch • at 240 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 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 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 short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	6 kA 3 kA 3 kA 3 kA 2.5 kA2.s 2.5 kA2.s 3 kA2.s fuse gL/gG: 20 A fuse gL/gG: 10 A 16 A 16 A 600 V 7.5 10 5 kA

Connections	
AWG number as coded connectable conductor cross section solid	
• maximum	6
• minimum	14
type of connectable conductor cross-sections for copper conductor	
• solid	1x (2.5 to 16 mm²)
 finely stranded with core end processing 	1x (2.516 mm²)
• stranded	1x (2.5 to 16 mm²)
type of connectable conductor cross-sections for auxiliary contacts	
• solid	2x (0.75 2.5 mm²), 1x 4 mm²
 finely stranded with core end processing 	2x (0.75 1.5 mm²), 1x 2.5 mm²
• stranded	2x (0.75 2.5 mm²), 1x 4 mm²
type of electrical connection	
for main current circuit	box terminal
• for auxiliary contacts	Box terminals
Mechanical Design	
height	60 mm
width	47 mm
depth	64 mm
type of device	fixed mounting
fastening method	Built-in unit fixed-mounted version
fastening method	
 4-hole front mounting 	No
 front mounting with central attachment 	No
• rail mounting	Yes
net weight	200 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	Declaration of Conformity

Confirmation











other Environment

<u>Confirmation</u> <u>Miscellaneous</u>

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)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3LD3010-1TK05}$

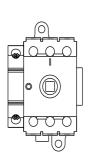
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3LD3010-1TK05

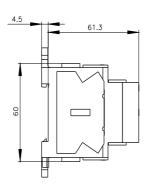
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax en.aspx?mlfb=3LD3010-1TK05

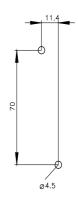
CAx-Online-Generator

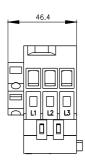
http://www.siemens.com/cax

Tender specifications
http://www.siemens.com/specifications









last modified:

6/20/2023