SIEMENS

Data sheet 3LD3454-1TK51



Load disconnector 3LD3, Iu 63 A Main switch 3-pole Rated operating capacity at AC-23 A at 400V 22.0 kW Front plate mounting Basic switch with Central hole mounting 22.5mm Toggle drive black 66x66 mm with auxiliary switch 1OE + 1S

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	front mounted
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	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	IP65
degree of protection NEMA rating	1, 3R, 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	4.5 W
Main circuit	
operational current	
● at AC-21 at 690 V rated value	63 A
● at AC-21 A at 240 V rated value	63 A
● at AC-21 A at 400 V rated value	63 A
● at AC-21 A at 440 V rated value	63 A
● at AC-23 A at 400 V rated value	43 A

Subject to change without notice
© Copyright Siemens

operating power	
● at AC-23 A at 240 V rated value	11 kW
● at AC-23 A at 400 V rated value	22 kW
● at AC-23 A at 440 V rated value	22 kW
● at AC-23 A at 690 V rated value	19 kW
● at AC-3 at 240 V rated value	11 kW
● at AC-3 at 400 V rated value	19 kW
● at AC-3 at 690 V rated value	15 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	
special product feature	Can be locked in zero position
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	4
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	
conditional short-circuit current with line-side fuse protection	
● at 440 V by gG fuse rated value	10 kA
● at 690 V by gG fuse rated value	6 kA
let-through current with closed switch	
● at 240 V for combination switch + gG fuse maximum	6 kA
● at 440 V for combination switch + gG fuse maximum	6 kA
● at 690 V for combination switch + gG fuse maximum permissible	6 kA
I2t value with closed switch	
● at 240 V for combination switch + gG fuse maximum	21 kA2.s
● at 440 V for combination switch + gG fuse maximum	21 kA2.s
● at 690 V for combination switch + gG fuse maximum	21 kA2.s
design of the fuse link	
● for short-circuit protection of the main circuit required	fuse gL/gG: 63 A
● for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
operational current of upstream fuse rated value	63 A
according UL	
operational current at AC according to UL 508/UL 60947-4-1 rated value	63 A
operating voltage at AC at 50/60 Hz according to UL 508/UL 60947-4-1 rated value	600 V
active power [hp] at AC at 480 V according to UL 508/UL 60947-4-1 rated value	25
active power [hp] at AC at 600 V according to UL 508/UL 60947-4-1 rated value	30

Subject to change without notice
© Copyright Siemens

short-time withstand current (SCCR) at 600 V according to UL 508/UL 60947-4-1	5 kA
continuous current of upstream fuse according to UL rated value	50 A
type of fuse according to UL	RK5
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 (2.5...16 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	114 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	Yes
● rail mounting	No
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

Approvals Certificates

General Product Approval

Confirmation

other		Environment
Miscellaneous	Confirmation	Environmental Con-firmations

Further information

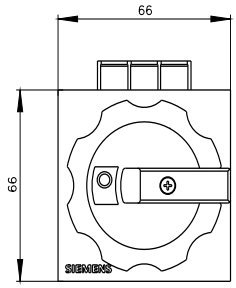
Siemens has decided to exit the Russian market (see here).
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

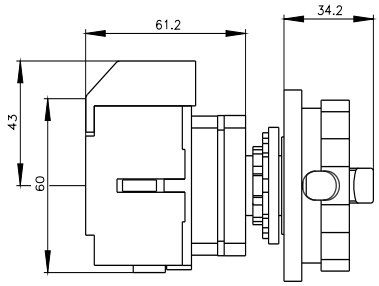
Siemens is working on the renewal of the current EAC certificates.
Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

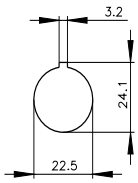
Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875

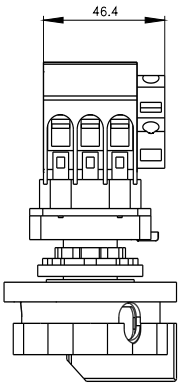
Subject to change without notice
© Copyright Siemens

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=3LD3454-1TK51
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3LD3454-1TK51
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD3454-1TK51
CAx-Online-Generator
http://www.siemens.com/cax
Tender specifications
http://www.siemens.com/specifications









last modified: 6/20/2023

Subject to change without notice
© Copyright Siemens

Subject to change without notice
© Copyright Siemens