# **SIEMENS**

Product data sheet 3LD2113-1TL51



MAIN CONTROL SWITCH 4-POLE IU=25, P/AC-23A AT 400V=9,5KW BASE MOUNTING MOUNTING RAIL/TWO-HOLE MOUNTING ROTARY ACTUATOR BLACK

Similar to image

General technical details:			
product brand name		SENTRON	
product designation		main and EMERGENCY-OFF switches	
Type from device		fixed mounting	
Design of the operating mechanism		rotary actuator, black	
Protection class IP		IP65	
Number of poles		4	
Acceptability for application			
• switch disconnector		Yes	
• main switch		Yes	
safety cut-out switch		Yes	
emergency stop switch		No	
maintenance/repair switch		Yes	
Product equipment / interlock		Yes	
Type of the driving mechanism / motor drive		No	
Product extension / optional			
• motor drive		No	
voltage trigger		No	
Ambient temperature / during operating	°C	-25 +55	

Impulse voltage resistance / rated value  Active power loss / per conductor / typical  Mechanical operating cycles as operating time / of the main contacts / typical  Protoction against electrical shock  Item designation / according to DIN EN 61346-2  Bern designation / according to DIN EN 61346-2  Solution of the main contacts / typical  Main circuit:  Continuous current / rated value  Operating current / at Ac-21 / rated value  Operating frequency  Operating frequency  Operating rother / at Ac-23 A  - at 400 V / rated value  Service power / at Ac-23 A  - at 400 V / rated value  Operating cycles / maximum  Autiliary circuit:  Number of NC contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Continuous current / of the auxiliary contacts / for auxiliary contacts  Continuous current / of the auxiliary contacts / for Ac / maximum  Number of change-over switches / for auxiliary contacts  Continuous current / of the auxiliary switch / rated value  Number of In contacts / for auxiliary contacts  Continuous current / of the auxiliary contacts / for auxiliary contacts / for auxiliary contacts  Continuous current / of the auxiliary contacts / for Ac / maximum  Number of thing contact / for auxiliary contacts  Continuous current / of the auxiliary contacts / for auxiliary contact	Insulation voltage / rated value	V	690
Mechanical operating cycles as operating time / of the main contacts / typical Protection against electrical shock Item designation / according to DIN 40719 extendable after IEC 204-2 / according to EC 750  Main circuit:  Continuous current / rated value Operating current / at AC-21 / rated value Operating frequency Operating requency Operating requency Operating value / a 50	Impulse voltage resistance / rated value	V	6,000
contacts / typical Protection against electrical shock Item designation / according to DIN 40719 extendable after IEC 204-2 / according to IEC 750  Main circuit:  Continuous current / rated value Operating current / at AC-21 / rated value A	Active power loss / per conductor / typical	W	1.1
Item designation / according to DIN EN 61346-2   S			100,000
Item designation / according to DIN 40719 extendable after IEC 204-2 / according to IEC 750  Main circuit:  Continuous current / rated value  A 25  Short-time current resistance (Icw) / at 690 V / limited to 1 s / rated value  Operating frequency  Hz 50 60  Operating requency  Hz 50 60  Operating voltage / at 50/60 Hz / for AC / rated value  V 690  Service power / at AC-3  • at 400 V / rated value  • at 690 V / rated value  • by 5  Operating cycles / maximum  1/h 50  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts  Continuous current / of the auxiliary contacts  Continuous current / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contact / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/climensions:  Type of mounting  • front mounting  • front mounting	Protection against electrical shock		finger-safe
Main circuit:  Continuous current / rated value  A 25  Operating current / at AC-21 / rated value  A 25  Short-time current resistance (icw) / at 690 V / limited to 1 s / rated value  Operating frequency  Hz 50 60  Operating voltage / at 50/60 Hz / for AC / rated value  V 690  Service power / at AC-3  - at 400 V / rated value  A 26  Service power / at AC-3  - at 400 V / rated value  Service power / at AC-3  - at 400 V / rated value  A 25  Service power / at AC-3  - at 400 V / rated value  KW 7.5  Service power / at AC-23 A  - at 400 V / rated value  A 290  Operating cycles / maximum  In b 50  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Operating voltage / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contact / for AC / maximum  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  floor mounting  floor mounting  floor mounting  floor mounting  floor mounting	Item designation / according to DIN EN 61346-2		S
Continuous current / rated value  Operating current / at AC-21 / rated value  A 25  Short-time current resistance (lcw) / at 690 V / limited to 1 s / rated value  Operating frequency  Operating voltage / at 50/60 Hz / for AC / rated value  Operating voltage / at 50/60 Hz / for AC / rated value  Service power / at AC-3  • at 400 V / rated value  • at 690 V / rated value  • by 5.  Operating cycles / maximum  1 //h 50   Auxiliary circuit:  Number of NC contacts / for auxiliary contacts  O 0  Number of NC contacts / for auxiliary contacts  O 0  Continuous current / of the auxiliary contact / rated value  Operating voltage / of the auxiliary contact / rated value  Operating voltage / of the auxiliary switch / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / racessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • foor mounting  • foor mounting			S
Operating current / at AC-21 / rated value  Short-time current resistance (lcw) / at 690 V / limited to 1 s / rated value  Operating frequency  Operating voitage / at 50/60 Hz / for AC / rated value  V 690  Service power / at AC-3  - at 400 V / rated value - at 690 V / r	Main circuit:		
Short-time current resistance (lcw) / at 690 V / limited to 1 s / rated value  Operating frequency  Operating requency  Operating voltage / at 50/60 Hz / for AC / rated value  V 690  Service power / at AC-3  • at 400 V / rated value • at 690 V / rated value • by 55  Operating cycles / maximum  1 /h 50  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Continuous current / of the auxiliary contact / rated value  Operating voltage / of the auxiliary contact / rated value  Operating voltage / of the auxiliary contact / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting • foor mounting • foor mounting	Continuous current / rated value	А	25
Operating frequency Operating voltage / at 50/60 Hz / for AC / rated value V 690 Service power / at AC-3  • at 400 V / rated value • at 690 V / rated value • kW 9.5  Operating cycles / maximum  In 50  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts  Number of Ange-over switches / for auxiliary contacts  Continuous current / of the auxiliary contact / rated value A 10 Operating voltage / of the auxiliary contact / rated value  Operating voltage / of the auxiliary switch / rated value V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting • front mounting	Operating current / at AC-21 / rated value	Α	25
Operating voltage / at 50/60 Hz / for AC / rated value  Service power / at AC-3  • at 400 V / rated value  • at 690 V / rated value  • at 690 V / rated value  • at 690 V / rated value  • at 400 V / rated value  • at 400 V / rated value  • at 690 V / rated value  • Auxiliary circuit:  Number of NC contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  0  Number of NO contacts / for auxiliary contacts  0  Continuous current / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contact / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  • floor mounting  • floor mounting  No		А	640
Service power / at AC-3  • at 400 V / rated value • at 690 V / rated value • at 690 V / rated value  • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • at 690 V / rated value • by 9.5  Operating cycles / maximum  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Number of change-over switches / for auxiliary contacts  Continuous current / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contacts / for AC / maximum  V 500  Insulation voltage / of the auxiliary switch / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting • front mounting  • floor mounting • floor mounting	Operating frequency	Hz	50 60
• at 400 V / rated value • at 690 V / rated value  Service power / at AC-23 A • at 400 V / rated value • at 690 V / rated value  Number of NC contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  O  Continuous current / of the auxiliary contacts / 0  Operating voltage / of the auxiliary contact / rated value  Operating voltage / of the auxiliary contact / rated value  Operating voltage / of the auxiliary contact / rated value  V  So  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  If loor mounting  Installation/mounting/dimensions:	Operating voltage / at 50/60 Hz / for AC / rated value	V	690
- at 690 V / rated value	Service power / at AC-3		
Service power / at AC-23 A  • at 400 V / rated value • at 690 V / rated value  • at 690 V / rated value    Number of NC contacts / for auxiliary contacts   O	• at 400 V / rated value	kW	7.5
• at 400 V / rated value  • at 690 V / rated value    Number of NC contacts / for auxiliary contacts   Number of NC contacts / for auxiliary contacts   Number of NC contacts / for auxiliary contacts   Number of NO contacts / for auxiliary contacts   Number of change-over switches / for auxiliary contacts   O	• at 690 V / rated value	kW	7.5
• at 690 V / rated value  Operating cycles / maximum  1/h 50  Auxiliary circuit:  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  O 0  Number of change-over switches / for auxiliary contacts  Continuous current / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contacts / for AC / maximum  V 500  Insulation voltage / of the auxiliary switch / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  Insulation voltage / of the auxiliary switch / required  Installation/mounting/dimensions:	Service power / at AC-23 A		
Auxiliary circuit:	• at 400 V / rated value	kW	9.5
Auxiliary circuit:  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Number of change-over switches / for auxiliary contacts  Continuous current / of the auxiliary contact / rated value  Operating voltage / of the auxiliary contacts / for AC / maximum  Insulation voltage / of the auxiliary switch / rated value  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  Insulation / No	• at 690 V / rated value	kW	9.5
Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Number of change-over switches / for auxiliary contacts  Continuous current / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contacts / for AC / maximum  V 500  Insulation voltage / of the auxiliary switch / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  Installation / No	Operating cycles / maximum	1/h	50
Number of NO contacts / for auxiliary contacts  Number of change-over switches / for auxiliary contacts  Continuous current / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contacts / for AC / maximum  V 500  Insulation voltage / of the auxiliary switch / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  No	Auxiliary circuit:		
Number of change-over switches / for auxiliary contacts  Continuous current / of the auxiliary contact / rated value  A 10  Operating voltage / of the auxiliary contacts / for AC / maximum  V 500  Insulation voltage / of the auxiliary switch / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  floor mounting  No	Number of NC contacts / for auxiliary contacts		0
Continuous current / of the auxiliary contact / rated value  Operating voltage / of the auxiliary contacts / for AC / maximum  V 500  Insulation voltage / of the auxiliary switch / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  No	Number of NO contacts / for auxiliary contacts		0
Operating voltage / of the auxiliary contacts / for AC / maximum  Insulation voltage / of the auxiliary switch / rated value  V 500  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  No	Number of change-over switches / for auxiliary contacts		0
Insulation voltage / of the auxiliary switch / rated value  Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  No	Continuous current / of the auxiliary contact / rated value	Α	10
Short-circuit:  Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  No	Operating voltage / of the auxiliary contacts / for AC / maximum	V	500
Design of the fuse link / for short-circuit protection of the main circuit / necessary  Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  No	Insulation voltage / of the auxiliary switch / rated value	V	500
Design of the fuse link / for short-circuit protection of the auxiliary switch / required  Installation/mounting/dimensions:  Type of mounting  • front mounting  No	Short-circuit:		
Installation/mounting/dimensions:  Type of mounting  • front mounting  No			fuse gL/gG: 25 A
Type of mounting  • front mounting  No			fuse gL/gG: 10 A
• front mounting No	Installation/mounting/dimensions:		
	Type of mounting		floor mounting
• front mounting with central fixation No	• front mounting		No
	front mounting with central fixation		No

• front mounting with 4-hole fixation		No
• series installation		Yes
Rail installation		No
Width	mm	67
Height	mm	84
Depth	mm	429.5

Connection type:	
Design of the electrical connection / for main current circuit	connection terminals
Design of the electrical connection / for auxiliary contact	connection terminals
Type of the connectable conductor cross-section / for main contacts	
finely stranded / with conductor end processing	10 mm²
Type of connectable conductor cross section / for auxiliary contacts	
• solid	2x (0.75 to 2.5 mm2), 1x 4 mm2
finely stranded / with conductor end processing	2x (0.75 1.5 mm2), 1x 2.5 mm2
• stranded	2x (0.75 2.5 mm2), 1x 4 mm2

Certificates/approvals:		
Verification of suitability		CSA / UL / CCC / GL / LRS / DNV / PRS
Conductor cross section that can be connected / for main contacts / solid / minimum	mm²	1.5
Conductor cross section that can be connected / for main contacts / solid / maximum	mm²	16
Conductor cross section that can be connected / for main contacts / stranded / minimum	mm²	1.5
Conductor cross section that can be connected / for main contacts / stranded / maximum	mm²	16
Conductor cross-section that can be connected / for main contacts / stranded wire / with conductor end processing / maximum	mm²	10
Conductor cross-section that can be connected / for auxiliary contact / solid / minimum	mm²	0.75
Conductor cross-section that can be connected / for auxiliary contact / solid / maximum	mm²	4
Conductor cross-section that can be connected / for auxiliary contact / finely stranded / with conductor end processing / minimum	mm²	0.75
Conductor cross-section that can be connected / for auxiliary contact / finely stranded / with conductor end processing / maximum	mm²	2.5
Conductor cross section that can be connected / for auxiliary contacts / stranded / min.	mm²	0.75
Conductor cross section that can be connected / for auxiliary contacts / stranded / max.	mm²	4

# Certificates/approvals:

## **General Product Approval**









other

Special Test Certificate

**Test Certificates** 

#### **Shipping Approval**









Declaration of Conformity

Environmental Confirmations

## Further information:

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

http://www.siemens.com/lowvoltage/catalogs

## Industry Mall (Online ordering system)

http://www.siemens.com/lowvoltage/mall

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

http://support.automation.siemens.com/WW/view/en/3LD2113-1TL51/all

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

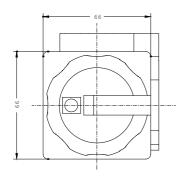
http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD2113-1TL51

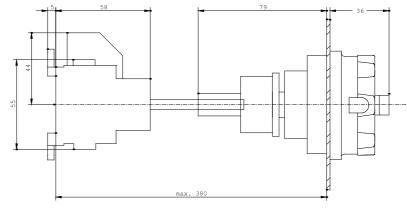
#### **CAx-Online-Generator**

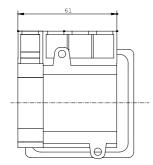
http://www.siemens.com/cax

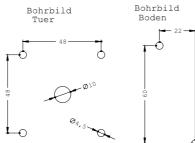
## **Tender specifications**

Datanorm GAEB81 GAEB83 RTF TXT









last change:

Mar 4, 2013