# **SIEMENS**

Data sheet 3LD2113-0TK51

MAIN CONTROL SWITCH 3-POLE IU=25, P/AC-23A AT 400V=9,5KW BASE MOUNTING MOUNTING RAIL/TWO-HOLE MOUNTING ROTARY ACTUATOR BLACK



Model		
product brand name		SENTRON
Product designation		Main and EMERGENCY-STOP switches
Design of the operating mechanism		rotary actuator, black
Type of the driving mechanism / motor drive		No
General technical data		
Number of poles		3
Type of device		fixed mounting
Protection against electrical shock		finger-safe
Mechanical service life (switching cycles) / of the main contacts / typical		100 000
Operating frequency / maximum	1/h	50
Voltage		
Insulation voltage / Rated value	V	690
Surge voltage resistance / Rated value	V	6 000
Protection class		
Protection class IP		IP65
Electricity		

Short-time current resistance (lcw) / at 690 V / limited to 1 s / Rated value  Main circuit  Operating frequency  • initial value  • Full-scale value  Operating power  • at AC-23 A / at 400 V / Rated value  • at AC-23 A / at 690 V / Rated value  • at AC-34 A / at 690 V / Rated value  • at AC-3 A / at 690 V / Rated value  • at AC-3 A / at 690 V / Rated value  • at AC-3 A / at 690 V / Rated value  • at AC-3 A / at 900 V / Rated value  • at AC-3 A /	Continuous current / Rated value	Α	25
Main circuit  Operating frequency  initial value  Full-scale value  Accas A / at 400 V / Rated value  at Accas A / at 400 V / Rated value  intal value  intal case value  Accas A / at 400 V / Rated value  intal case value  Accas A / at 400 V / Rated value  intal case value  Accas A / at 400 V / Rated value  intal case value  intal case value  Accas A / at 690 V / Rated value  interval value  interval value  Accas A / at 50 l60 Hz / Rated value  Accas A / at 60 l60 Hz / Rated value  Accas A / at 60 l60 Hz / Rated value  Accas A / at 60 l60 Hz / Rated value  Accas A / at 60 l60 Hz / Rated value  Accas A / at 60 l60 Hz / Rated value  Accas A / at 60 l60 Hz / Rated value  Accas A / at 60 l60 l60 l60 l60 l60 l60 l60 l60 l60	Short-time current resistance (Icw) / at 690 V / limited	Α	640
Operating frequency			
Operating frequency	Main circuit		
Operating power		Hz	50
• at AC-23 A / at 400 V / Rated value     • at AC-23 A / at 690 V / Rated value     • at AC-3 / at 400 V / Rated value     • at AC-3 / at 400 V / Rated value     • at AC-3 / at 400 V / Rated value     • at AC-3 / at 400 V / Rated value     • at AC-3 / at 690 V / Rated value     • at AC-3 / at 500 V / Rated value     • at AC-3 / at 500 W / Rated value     • at AC-3 / at 500 W / Rated value     • at AC-3 / at 500 Mz / Rated value     • A 25    Operating current / at AC-21 / Rated value     • A 25    Auxiliary circuit   Number of CO contacts / for auxiliary contacts   Number of NC contacts / for auxiliary contacts   Operating voltage / of the auxiliary contacts   Operating voltage / of the auxiliary contacts / AC / waxiliary contacts / Contacts	Full-scale value	Hz	60
• at AC-23 A / at 400 V / Rated value     • at AC-23 A / at 690 V / Rated value     • at AC-3 / at 400 V / Rated value     • at AC-3 / at 400 V / Rated value     • at AC-3 / at 400 V / Rated value     • at AC-3 / at 400 V / Rated value     • at AC-3 / at 690 V / Rated value     • at AC-3 / at 500 V / Rated value     • at AC-3 / at 500 W / Rated value     • at AC-3 / at 500 W / Rated value     • at AC-3 / at 500 Mz / Rated value     • A 25    Operating current / at AC-21 / Rated value     • A 25    Auxiliary circuit   Number of CO contacts / for auxiliary contacts   Number of NC contacts / for auxiliary contacts   Operating voltage / of the auxiliary contacts   Operating voltage / of the auxiliary contacts / AC / waxiliary contacts / Contacts	Operating power	_	
at AC-3 / at 400 V / Rated value kW 7.5  at AC-3 / at 690 V / Rated value kW 7.5  Operating voltage at AC / at 50/60 Hz / Rated value V 690  Operating current / at AC-21 / Rated value A 25  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts 0  Operating voltage / of the auxiliary contacts A AC / v 500  maximum  Continuous current / of the auxiliary contact / Rated value  Insulation voltage / of the auxiliary switch / Rated value  V 500  Suitability  Suitability  Suitability for use  Main switch Yes  Main switch Yes  EMERGENCY OFF switch No  safety switch Yes  Product details  Product feature / interlock Yes  Product expansion / optional  motor drive  Voltage trigger  Connections  Connections  Connections  Connections		kW	9.5
at AC-3 / at 690 V / Rated value  Operating voltage at AC / at 50/60 Hz / Rated value  Operating current / at AC-21 / Rated value  Operating current / at AC-21 / Rated value  A 25  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts  V 500  Suitability  Suitability for use  • Main switch  • switch disconnector  • EMERGENCY OFF switch  • safety switch  Ves  Product details  Product details  Product feature / interlock  Product feature / interlock  Product expansion / optional  • motor drive  • Voltage trigger  Onnectable conductor cross-section  • for main contacts	at AC-23 A / at 690 V / Rated value	kW	9.5
Operating voltage  • at AC / at 50/60 Hz / Rated value  Operating current / at AC-21 / Rated value  A 25  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts  Operating voltage / of the auxiliary contacts / at AC / maximum  Continuous current / of the auxiliary contact / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability for use  • Main switch  • switch disconnector  • EMERGENCY OFF switch  • maintenance/repair switch  • maintenance/repair switch  Product details  Product feature / interlock  Product expansion / optional  • motor drive  • Voltage trigger  Connectable conductor cross-section  • for main contacts	■ at AC-3 / at 400 V / Rated value	kW	7.5
at AC / at 50/60 Hz / Rated value  Operating current / at AC-21 / Rated value  A 25  Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts  Operating voltage / of the auxiliary contacts / at AC / waxiliary contacts / at AC / voltage / of the auxiliary contact / Rated value  Continuous current / of the auxiliary switch / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability  Suitability  Suitability  Suitability  See Product desides  Product details  Product details  Product detaire / interlock  Product expansion / optional  motor drive  Voltage trigger  Connections  Connectable conductor cross-section  for main contacts	• at AC-3 / at 690 V / Rated value	kW	7.5
Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts / at AC / maximum  Continuous current / of the auxiliary contact / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability  Suitability  Suitability  Suitability  Froduct details  Product details  Product feature / interlock  Product expansion / optional  • motor drive • Voltage trigger  Connectable conductor cross-section • for main contacts	Operating voltage		
Auxiliary circuit  Number of CO contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts / at AC / maximum  Continuous current / of the auxiliary contact / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability  Suitability  Suitability  Suitability  Suitability  Froduct details  Product details	at AC / at 50/60 Hz / Rated value	V	690
Number of CO contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts / at AC / maximum  Continuous current / of the auxiliary contact / Rated value  Continuous current / of the auxiliary switch / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability  Suitability / Yes  • Main switch	Operating current / at AC-21 / Rated value	Α	25
Number of CO contacts / for auxiliary contacts  Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts / at AC / maximum  Continuous current / of the auxiliary contact / Rated value  Continuous current / of the auxiliary switch / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability  Suitability / Yes  • Main switch	A 110 1 10		
Number of NC contacts / for auxiliary contacts  Number of NO contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts / at AC / maximum  Continuous current / of the auxiliary contact / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability  Suitability  Suitability  Froduct details  Product details  Product details  Product detaire / interlock Product expansion / optional  motor drive Voltage rigger  Connectable conductor cross-section for main contacts			0
Number of NO contacts / for auxiliary contacts  Operating voltage / of the auxiliary contacts / at AC / maximum  Continuous current / of the auxiliary contact / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Yes  Product descendance of yes  maintenance/repair switch  Product details  Product details  Product details  Product expansion / optional  motor drive  Voltage trigger  No  Connections  Connections  Connectable conductor cross-section  for main contacts	•		
Operating voltage / of the auxiliary contacts / at AC / maximum  Continuous current / of the auxiliary contact / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability  Suitability or use  • Main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch  Product details  Product details  Product expansion / optional • motor drive • Voltage trigger  Connections  Connectable conductor cross-section • for main contacts			
maximum  Continuous current / of the auxiliary contact / Rated value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability  Suitability for use  • Main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch  Product details  Product details  Product expansion / optional • motor drive • Voltage trigger  Connectable conductor cross-section • for main contacts	<del>-</del>	\/	
value  Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability  Suitability for use  • Main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch  Product details  Product details  Product expansion / optional • motor drive • Voltage trigger  Connectable conductor cross-section • for main contacts		V	500
Insulation voltage / of the auxiliary switch / Rated value  Suitability  Suitability for use  Main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch  Product details  Product details  Product expansion / optional motor drive Voltage trigger  Connections  Connectable conductor cross-section for main contacts	Continuous current / of the auxiliary contact / Rated	Α	10
Value  Suitability  Suitability for use  Main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch  Product details  Product details  Product expansion / optional motor drive Voltage trigger  Connectable conductor cross-section for main contacts			
Suitability  Suitability for use  Main switch switch disconnector EMERGENCY OFF switch safety switch maintenance/repair switch  Product details  Product details  Product expansion / optional motor drive Voltage trigger  Connections  Connectable conductor cross-section for main contacts	-	V	500
Suitability for use  • Main switch • switch disconnector • EMERGENCY OFF switch • safety switch • maintenance/repair switch  Product details  Product feature / interlock  Product expansion / optional • motor drive • Voltage trigger  Connections  Connectable conductor cross-section • for main contacts	value		
<ul> <li>Main switch</li> <li>switch disconnector</li> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> <li>Yes</li> </ul> Product details Product feature / interlock <ul> <li>Product expansion / optional</li> <li>motor drive</li> <li>Voltage trigger</li> </ul> Connectable conductor cross-section <ul> <li>for main contacts</li> </ul> Yes No	Suitability		
<ul> <li>switch disconnector</li> <li>EMERGENCY OFF switch</li> <li>safety switch</li> <li>maintenance/repair switch</li> <li>Yes</li> </ul> Product details Product feature / interlock Product expansion / optional <ul> <li>motor drive</li> <li>Voltage trigger</li> </ul> Connections Connectable conductor cross-section <ul> <li>for main contacts</li> </ul> Yes No No Connectable conductor cross-section <ul> <li>for main contacts</li> </ul>	Suitability for use		
EMERGENCY OFF switch     safety switch     maintenance/repair switch  Product details  Product feature / interlock  Product expansion / optional     motor drive     Voltage trigger  Connections  Connectable conductor cross-section     for main contacts	Main switch		Yes
safety switch     maintenance/repair switch  Product details  Product feature / interlock  Product expansion / optional     motor drive     No     Voltage trigger  Connections  Connectable conductor cross-section     for main contacts  Yes  No	switch disconnector		Yes
* maintenance/repair switch  Product details  Product feature / interlock  Product expansion / optional      * motor drive     * Voltage trigger  Connections  Connectable conductor cross-section     * for main contacts  Yes  Yes  No	<ul> <li>EMERGENCY OFF switch</li> </ul>		No
Product details  Product feature / interlock  Product expansion / optional  • motor drive  • Voltage trigger  Connections  Connectable conductor cross-section  • for main contacts	safety switch		Yes
Product feature / interlock Product expansion / optional  • motor drive • Voltage trigger  Connections  Connectable conductor cross-section • for main contacts  Yes  No	maintenance/repair switch		Yes
Product expansion / optional	Product details		
<ul> <li>motor drive</li> <li>Voltage trigger</li> <li>No</li> <li>Connections</li> <li>Connectable conductor cross-section</li> <li>for main contacts</li> </ul>	Product feature / interlock		Yes
Voltage trigger     No  Connections  Connectable conductor cross-section     for main contacts	Product expansion / optional		
Connections  Connectable conductor cross-section  • for main contacts	• motor drive		No
Connectable conductor cross-section  ● for main contacts	Voltage trigger		No
• for main contacts	Connections		
	Connectable conductor cross-section		
— single or multi-stranded / minimum mm² 1.5	• for main contacts		
	— single or multi-stranded / minimum	mm²	1.5

— single or multi-stranded / maximum	mm²	16
— finely stranded / with core end processing /	mm²	10
maximum		
— stranded / minimum	mm²	1.5
— stranded / maximum	mm²	16
<ul> <li>for auxiliary contacts</li> </ul>		
— single or multi-stranded / minimum	mm²	0.75
— single or multi-stranded / maximum	mm²	4
<ul><li>finely stranded / with core end processing / minimum</li></ul>	mm²	0.75
<ul><li>finely stranded / with core end processing / maximum</li></ul>	mm²	2.5
— stranded / minimum	mm²	0.75
— stranded / maximum	mm²	4
Type of connectable conductor cross-section		
• for main contacts / finely stranded / with core		10
end processing		
<ul> <li>for auxiliary contacts</li> </ul>		
— solid		50
— finely stranded / with core end processing		2x (0.75 1.5 mm2), 1x 2.5 mm2
Type of electrical connection		
for main current circuit		connection terminals
• for auxiliary contacts		connection terminals

Requirements	
Design of the fuse link	
<ul> <li>for short-circuit protection of the main circuit / required</li> </ul>	fuse gL/gG: 25 A
<ul><li>for short-circuit protection of the auxiliary switch / required</li></ul>	fuse gL/gG: 10 A

Mechanical Design			
Height	mm	84	
Width	mm	67	
Depth	mm	429.5	
Mounting type		floor mounting	
Mounting type			
• front mounting		No	
<ul> <li>front mounting with 4-hole attachment</li> </ul>		Yes	
<ul> <li>front mounting with central attachment</li> </ul>		No	
Side-by-side mounting		Yes	
• rail mounting		No	
Net weight	g	410	

## Environmental conditions

#### Ambient temperature

- during operation / minimum
- during operation / maximum

°C -25

°C

## Certificates

### **Equipment marking**

• acc. to DIN EN 61346-2

S

55

## **General Product Approval**











sonstig

Declaration of	Test	Shipping Approval	other
Conformity	Certificates		



spezielle Prüfbescheinigunge n







Umweltbestätigung

## Further information

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

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

Industry Mall (Online ordering system)

https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3LD21130TK51

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

http://support.automation.siemens.com/WW/view/en/3LD21130TK51/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3LD21130TK51

**CAx-Online-Generator** 

http://www.siemens.com/cax

**Tender specifications** 

http://ausschreibungstexte.siemens.com/tiplv

