SIEMENS

Product data sheet 3LD2003-0TK51



3-P. MAIN CTR. SWITCH IU=16, P/AC-23A AT 400V=7.5KW FRONT MOUNTING 4-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		3
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 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 IEC 759 Main circuit: Continuous current / rated value Operating current / rated value Operating current / rated value Operating requency Operating requency Operating voltage / at 50/80 Hz / for AC / rated value **A 16 Service power / at AC-3 **at 400 V / rated value **at 690 V / rated v	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 EN 61346-2 Item designation / according to DIN 40719 extendable after IEC 204-2 / according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 Main circuit: Continuous current / rated value A 16 Operating current / at AC-21 / rated value A 16 Short-time current resistance (lew) / at 690 V / limited to 1 s / rated value 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 - a	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 circuits Continuous current / rated value Operating current / at AC-21 / rated value A 16 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 - at 690 V / rated value -	Active power loss / per conductor / typical	W	0.5
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 16 Short-time current resistance (icw) / 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 • AVW 7.5 Operating cycles / maximum 1/h 50 Auxiliary circuit: Number of NC contacts / for auxiliary contacts Operating voltage / of the auxiliary contacts Operating voltage / of the auxiliary contact / rated value Operating voltage / of the auxiliary contact / rated value Operating voltage / of the auxiliary contact / rated value Operating voltage / of the auxiliary contact / rated value Operating voltage / of the auxiliary contact / rated value Operating voltage / of the auxiliary contact / rated value Operating voltage / of the auxiliary contact / rated value Operating voltage / of the auxiliary contact / rated value 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 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 main circuit / necessary Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Type of mounting	Protection against electrical shock		finger-safe
Main circuit: Continuous current / rated value Operating current / at AC-21 / rated value A 16 Short-time current resistance (Icw) / at 690 V / limited to 1 s / rated value Operating frequency 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 690 V / rated value • at 690 V / rated value * AV 5.5 Service power / at AC-23 A • at 400 V / rated value • at 690 V / rated value * AV 7.5 Operating cycles / maximum 1/h 50 Auxiliary circuit: Number of NC contacts / for auxiliary contacts Number of NC contacts / for auxiliary contacts Operating voltage / of the auxiliary contact / rated value Continuous current / of the auxiliary contact / rated value Operating voltage / of the auxiliary contact / rated value Design of the fuse link / for short-circuit protection of the main circuit / recessary Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Type of mounting Installation/mounting/dimensions: Type of mounting	Item designation / according to DIN EN 61346-2		S
Continuous current / rated value Operating current / at AC-21 / rated value Short-time current resistance (lcw) / at 690 V / limited to 1 s / rated value Operating frequency 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 * Autou / rated value Autou / rated value Operating voltage / of the auxiliary contacts Ocontinuous 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 front 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 frequency 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 * Aut 400 V / rated value Operating volrace / for auxiliary contacts O 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 front mounting	Main circuit:		
Short-time current resistance (lcw) / 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 * at 690 V / rated value * by * 7.5 Operating cycles / maximum * 50 * Auxiliary circuit: Number of NO contacts / for auxiliary contacts * 0 Operating voltage / of the auxiliary contact / rated value 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 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	Continuous current / rated value	Α	16
Contacts / for auxiliary contacts Number of NC contacts / for auxiliary contacts Number of NC contacts / for auxiliary contacts Number of NC contacts / for auxiliary contacts Continuous current / of the auxiliary contact / for AC / maximum Coperating voltage / of the auxiliary switch / rated value Short-circuit: Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Type of mounting FW	Operating current / at AC-21 / rated value	Α	16
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 * 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 / recessary Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Type of mounting front mounting	• • •	А	340
Service power / at AC-3 * at 400 V / rated value * at 690 V / rated value * at 690 V / rated value * at 400 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 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 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 front 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 * at 690 V / rated value * 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 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 front mounting	Operating voltage / at 50/60 Hz / for AC / rated value	V	690
service power / at AC-23 A * at 400 V / rated value * at 690 V / rated value * 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 contact / 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	Service power / at AC-3		
Service power / at AC-23 A • 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 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	• at 400 V / rated value	kW	5.5
• at 400 V / rated value • at 690 V / rated value 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 V 500 Short-circuit: Design of the fuse link / for short-circuit protection of the auxiliary switch / required Installation/mounting/dimensions: Type of mounting #W 7.5 #W 7.5 #W 7.5 O #W 7.5 O O O O O O O O O O	• at 690 V / rated value	kW	5.5
• at 690 V / rated value Operating cycles / maximum Auxiliary circuit: Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts O 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 V 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	Service power / at AC-23 A		
Operating cycles / maximum Auxiliary circuit: Number of NC contacts / for auxiliary contacts O Number of NO contacts / for auxiliary contacts O 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 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	• at 400 V / rated value	kW	7.5
Auxiliary circuit: Number of NC contacts / for auxiliary contacts Number of NO contacts / for auxiliary contacts 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	• at 690 V / rated value	kW	7.5
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 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	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 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 for auxiliary contacts 0 10 10 10 10 10 10 10 10 10	Auxiliary circuit:		
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 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	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 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 Type of mounting	Number of NO contacts / for auxiliary contacts		0
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 for AC / maximum V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500 Insulation voltage / of the auxiliary switch / rated value V 500	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 fuse gL/gG: 20 A	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 fuse gL/gG: 20 A fuse gL/gG: 10 A fuse gL/gG: 10 A	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 fuse gL/gG: 20 A fuse gL/gG: 10 A fuse gL/gG: 10 A	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	Short-circuit:		
Installation/mounting/dimensions: Type of mounting front mounting			fuse gL/gG: 20 A
Type of mounting front mounting	-		fuse gL/gG: 10 A
	Installation/mounting/dimensions:		
• front mounting Yes	Type of mounting		front mounting
	• front mounting		Yes
• front mounting with central fixation No	• front mounting with central fixation		No

• front mounting with 4-hole fixation		Yes
• series installation		Yes
Rail installation		No
Width	mm	67
Height	mm	84
Depth	mm	92.5

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	
• solid	1 6 mm2
finely stranded / with conductor end processing	4 mm²
stranded	1 6 mm2
Type of connectable conductor cross section / for auxiliary contacts	
• solid	2x (0.75 to 2.5 mm2), 1x 4 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
Conductor cross section that can be connected / for main contacts / solid / maximum	mm²	6
Conductor cross section that can be connected / for main contacts / stranded / minimum	mm²	1
Conductor cross section that can be connected / for main contacts / stranded / maximum	mm²	6
Conductor cross-section that can be connected / for main contacts / stranded wire / with conductor end processing / maximum	mm²	4
Conductor cross section that can be connected / for auxiliary contacts / solid / minimum	mm²	0.75
Conductor cross section that can be connected / for auxiliary contacts / solid / maximum	mm²	4
Conductor cross-section that can be connected / for auxiliary contact / stranded wire / with conductor end processing / minimum	mm²	0.75
Conductor cross-section that can be connected / for auxiliary contact / stranded wire / 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.

 $\,\mathrm{mm^2}$

4

Certificates/approvals:

General Product Approval







Test Certificates

Special Test Certificate

Shipping Approval





GL



Declaration of Conformity

other

other



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,...)

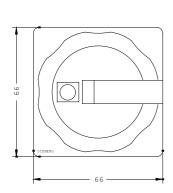
http://support.automation.siemens.com/WW/view/en/3LD2003-0TK51/all

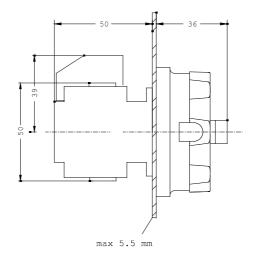
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...)

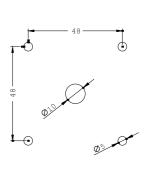
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3LD2003-0TK51

CAx-Online-Generator

http://www.siemens.com/cax







last change:

Apr 9, 2012