SIEMENS

Product data sheet 3KD3442-2NE10-0



SWITCH-DISCONNECTOR 160A, FRAME SIZE 2, 4-POLE FRONT OPERATING LEFT COMPLETE ASSEMBLY WITH DIRECT HANDLE GREY BOX TERMINAL

Similar to image

General technical details:				
product brand name		SENTRON		
Product designation		Switching device		
Design of the product		3KD Switch Disconnectors		
Size of switch disconnector		2		
Number of poles		4		
Continuous current				
• rated value	Α	160		
• at 40 °C / rated value	Α	160		
• at 45 °C / rated value	Α	160		
• at 50 °C / rated value	Α	160		
• at 55 °C / rated value	Α	160		
• at 60 °C / rated value	Α	160		
• at 65 °C / rated value	Α	160		
• at 70 °C / rated value	Α	160		
• at DC / rated value	А	160		
Operating current				
• at AC-21 A				
• at 400 V / maximum	Α	160		

* at 600 V / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 600 V / at 50/60 Hz / rated value / maximum * at 50/60 Hz / rated value * v			
**at AC-22 A **at 400 V / at 50/60 Hz / rated value / maximum **at 500 V / at 50/60 Hz / rated value / maximum **at 600 V / at 50/60 Hz / rated value / maximum **at 600 V / at 50/60 Hz / rated value / maximum **at 600 V / at 50/60 Hz / rated value / maximum **at 600 V / at 50/60 Hz / rated value / maximum **at 600 V / at 50/60 Hz / rated value / maximum **at 600 V / at 50/60 Hz / rated value / maximum **at 600 V / at 50/60 Hz / rated value / maximum **at 600 V / at 50/60 Hz / rated value / maximum **at 50/60 Hz / for AC / rated value / maximum **at 50/60 Hz / rated value **with 3 current paths in series / with DC / rated value **with 3 current paths in series / with DC / rated value **vith 3 current paths in series / with DC / rated value **V	• at 500 V / maximum	Α	160
* at 400 V / at 50/60 Hz / rated value / maximum	• at 690 V / maximum	Α	160
** at 500 V / at 50/60 Hz / rated value / maximum	• at AC-22 A		
* at 690 V / at 50/60 Hz / rated value / maximum	• at 400 V / at 50/60 Hz / rated value / maximum	Α	160
* at AC-23 A * at 400 V / at 50/60 Hz / rated value / maximum * at 500 V / at 50/60 Hz / rated value / maximum * at 500 V / at 50/60 Hz / rated value / maximum * at 500 V / at 50/60 Hz / rated value / maximum * at 500 V / at 50/60 Hz / rated value / maximum * at 50/60 Hz / fated value / maximum * at 50/60 Hz / fated value * v	• at 500 V / at 50/60 Hz / rated value / maximum	Α	160
+ at 400 V / at 50/60 Hz / rated value / maximum	• at 690 V / at 50/60 Hz / rated value / maximum	А	160
- at 500 V / at 50/60 Hz / rated value / maximum	• at AC-23 A		
- at 690 V / at 50/60 Hz / rated value / maximum - at 50/60 Hz / for AC / rated value - at 50/60 Hz / for AC / rated value - with 3 current paths in series / with DC / rated value - with 3 current paths in series / with DC / rated value v	• at 400 V / at 50/60 Hz / rated value / maximum	Α	160
Operational voltage • at 50/60 Hz / for AC / rated value • with 3 current paths in series / with DC / rated value V 440 Insulation voltage / rated value Impulse voltage resistance / rated value V 1,000 Impulse voltage resistance / rated value V 8 Overvoltage class III Operating power / at AC-23 A • at 400 V / at 50/60 Hz / rated value • at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 400 V / maximum • at 500 V / maximum • at 500 V / maximum • for combination switch + gG fuse / maximum • for combination switch + gG fuse / maximum • for combination switch + fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 500 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch + fuse • at 400 V / maximum permissible • at 690 V • with combination switch + fuse / maximum permissible • at 690 V • with combination switch + fuse / maximum permissible • at 690 V / maximum permissible • at 69	• at 500 V / at 50/60 Hz / rated value / maximum	Α	160
* at 50/60 Hz / for AC / rated value	• at 690 V / at 50/60 Hz / rated value / maximum	Α	125
with 3 current paths in series / with DC / rated value	Operational voltage		
Insulation voltage / rated value Impulse voltage resistance / rated value Overvoltage class Uill Operating power / at AC-23 A • at 400 V / at 50/60 Hz / rated value • at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 400 V / maximum • at 500 V / maximum • for combination switch +gG fuse / maximum • for combination switch +gM fuse / maximum • for combination switch +tuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • at 600 V • with combination switch +gG fuse / maximum permissible • at 600 V • with combination switch +gG fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissi	• at 50/60 Hz / for AC / rated value	V	690
Impulse voltage resistance / rated value Overvoltage class Uill Operating power / at AC-23 A • at 400 V / at 50/60 Hz / rated value • at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 400 V / maximum • at 500 V / maximum • for combination switch + gG fuse / maximum • for combination switch + shaff fuse / maximum • for combination switch + shaff fuse / maximum • for combination switch + fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 600 V • with combination switch + gG fuse / maximum permissible • at 600 V • with combination switch + aM fuse / maximum permissible • with combination switch + aM fuse / maxim	• with 3 current paths in series / with DC / rated value	V	440
Overvoltage class Operating power / at AC-23 A • at 400 V / at 50/60 Hz / rated value • at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 400 V / maximum • at 400 V / maximum • at 500 V / maximum • for combination switch +gG fuse / maximum • for combination switch +aff tuse • at 400 V / maximum • for combination switch +aff tuse / for combination switch +gG fuse / maximum • for combination switch +gG fuse / maximum • for combination switch +aff fuse / for combination switch +aff fuse / maximum • for combination switch +fuse • at 400 V / maximum permissible • for combination switch +fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • at 500 V / maximum permissible • at 500 V / maximum permissible • A 17,900 • at 690 V • with combination switch +aff fuse / maximum permissible • with combination switch +aff fuse / maximum permissible • A 18,700 Short-time current resistance (icw) / limited to 1 s / rated value Making capacity short-circuit current (icm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value	Insulation voltage / rated value	V	1,000
Operating power / at AC-23 A • at 400 V / at 50/60 Hz / rated value • at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 400 V / maximum • at 500 V / maximum • for combination switch +gG fuse / maximum • for combination switch +aM fuse / maximum • at 400 V / maximum permissible • at 400 V / maximum permissible • at 400 V / maximum permissible • at 500 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • at 500 V / maximum permissible • at 500 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +aM fuse / maximum permissible • A 17,900 • A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value	Impulse voltage resistance / rated value	kV	8
• at 400 V / at 50/60 Hz / rated value • at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value **Example **Index **In	Overvoltage class		III
• at 500 V / at 50/60 Hz / rated value • at 690 V / at 50/60 Hz / rated value **to 400 V / at 50/60 Hz / rated value	Operating power / at AC-23 A		
* at 690 V / at 50/60 Hz / rated value I2t value / with closed switch	• at 400 V / at 50/60 Hz / rated value	kW	90
Let value / with closed switch	• at 500 V / at 50/60 Hz / rated value	kW	110
• for combination switch + fuse • at 400 V / maximum • at 500 V / maximum • at 690 V • for combination switch +gG fuse / maximum • for combination switch +aM fuse / maximum • for combination switch +aM fuse / maximum • for combination switch + fuse • for combination switch + fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value kA 100	• at 690 V / at 50/60 Hz / rated value	kW	110
at 400 V / maximum at 500 V / maximum at 500 V / maximum at 690 V for combination switch +gG fuse / maximum for combination switch +aM fuse / maximum at 400 V / maximum permissible at 400 V / maximum permissible at 500 V / maximum permissible at 690 V with combination switch +gG fuse / maximum permissible at 690 V with combination switch +gG fuse / maximum permissible with combination switch +aM fuse / maximum permissible with combination switch +aM fuse / maximum permissible with combination switch +aM fuse / maximum permissible A 17,600 A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection at 500 V / by gG fuse / rated value KA 100	I2t value / with closed switch		
at 500 V / maximum at 500 V for combination switch +gG fuse / maximum for combination switch +aM fuse / maximum for combination switch +aM fuse / maximum A²-s 201,200 Let-through current / with closed switch for combination switch + fuse at 400 V / maximum permissible at 500 V / maximum permissible at 690 V with combination switch +gG fuse / maximum permissible with combination switch +aM fuse / maximum permissible with combination switch +aM fuse / maximum permissible A 17,600 with combination switch +aM fuse / maximum permissible A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection at 500 V / by gG fuse / rated value kA 100	• for combination switch + fuse		
• at 690 V • for combination switch +gG fuse / maximum • for combination switch +aM fuse / maximum A²-s 201,200 Let-through current / with closed switch • for combination switch + fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • with combination switch +aM fuse / maximum permissible A 17,800 • with combination switch +aM fuse / maximum permissible A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value kA 100	• at 400 V / maximum	A ² ·s	135,600
• for combination switch +gG fuse / maximum • for combination switch +aM fuse / maximum A²-s 201,200 Let-through current / with closed switch • for combination switch + fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • with combination switch +aM fuse / maximum permissible A 17,600 • with combination switch +aM fuse / maximum permissible A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value A²-s 178,300 A²-s 201,200 A 17,900 A 17,900 A 17,600 A 18,700 KA 4 12	• at 500 V / maximum	A²-s	135,600
• for combination switch +aM fuse / maximum A²-s 201,200 Let-through current / with closed switch • for combination switch + fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible A 17,600 • with combination switch +aM fuse / maximum permissible A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value KA 100	• at 690 V		
Let-through current / with closed switch • for combination switch + fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • with combination switch +aM fuse / maximum permissible A 17,600 • with combination switch +aM fuse / maximum permissible A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value kA 100	• for combination switch +gG fuse / maximum	A²·s	178,300
• for combination switch + fuse • at 400 V / maximum permissible • at 500 V / maximum permissible • at 690 V • with combination switch +gG fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • with combination switch +aM fuse / maximum permissible • With combination switch +aM fuse / maximum permissible • With combination switch +aM fuse / maximum permissible • With combination switch +aM fuse / maximum permissible • A 17,600 • With combination switch +aM fuse / maximum permissible • A 18,700 Short-time current resistance (Icw) / limited to 1 s / rated value KA 4 Making capacity short-circuit current (Icm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value KA 100	• for combination switch +aM fuse / maximum	A²·s	201,200
 at 400 V / maximum permissible at 500 V / maximum permissible at 690 V with combination switch +gG fuse / maximum permissible with combination switch +aM fuse / maximum permissible A 17,600 with combination switch +aM fuse / maximum permissible A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value kA 4 Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection at 500 V / by gG fuse / rated value kA 100 	Let-through current / with closed switch		
 at 500 V / maximum permissible at 690 V with combination switch +gG fuse / maximum permissible with combination switch +aM fuse / maximum permissible at 17,600 with combination switch +aM fuse / maximum permissible A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value kA 4 Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection at 500 V / by gG fuse / rated value kA 100 	• for combination switch + fuse		
* at 690 V * with combination switch +gG fuse / maximum permissible * with combination switch +aM fuse / maximum permissible * with combination switch +aM fuse / maximum permissible * A 17,600 * With combination switch +aM fuse / maximum permissible * A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value * KA 4 Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection * at 500 V / by gG fuse / rated value KA 100	• at 400 V / maximum permissible	Α	17,900
 with combination switch +gG fuse / maximum permissible with combination switch +aM fuse / maximum permissible 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection at 500 V / by gG fuse / rated value 	• at 500 V / maximum permissible	Α	17,900
with combination switch +aM fuse / maximum permissible A 18,700 Short-time current resistance (lcw) / limited to 1 s / rated value	• at 690 V		
Short-time current resistance (lcw) / limited to 1 s / rated value Making capacity short-circuit current (lcm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value kA 4 12	• with combination switch +gG fuse / maximum permissible	Α	17,600
Making capacity short-circuit current (Icm) / for switch disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value kA 100	• with combination switch +aM fuse / maximum permissible	Α	18,700
disconnector / without fuse link / rated value / minimum Conditional short-circuit current / with line-side fuse protection • at 500 V / by gG fuse / rated value kA 100	Short-time current resistance (lcw) / limited to 1 s / rated value	kA	4
• at 500 V / by gG fuse / rated value kA 100		kA	12
	Conditional short-circuit current / with line-side fuse protection		
• at 690 V / by gG fuse / rated value kA 65	• at 500 V / by gG fuse / rated value	kA	100
	• at 690 V / by gG fuse / rated value	kA	65

Active power loss / with conventional rated thermal current / per pole	W	7
Product equipment / interlock		Yes
Type of the driving mechanism / motor drive		No
Product extension / optional / motor drive		No
Design of the electrical connection / for main current circuit		Box terminal
Type of connectable conductor cross-sections		
for copper conductor		
• solid		1x (2,5 16mm²)
• stranded		1x (10 70 mm²)
• finely stranded / with end sleeve		1x (2,5 70mm²)
with flexible busbar		3x (0,8x14mm²)
Number of connected NC contacts / for auxiliary contacts		0
Number of connected NO contacts / for auxiliary contacts		0
Number of connected changeover contacts / for auxiliary contacts		0
Product extension / auxiliary switch		Yes
Number of NC contacts / for auxiliary contacts		0
Number of NO contacts / for auxiliary contacts		0
Number of changeover contacts / for auxiliary contacts		4
Acceptability for application / switch disconnector		Yes
Acceptability for application		
emergency stop switch		No
• main switch		Yes
• safety cut-out switch		Yes
• maintenance/repair switch		Yes
Design of the operating mechanism		manual operating mechanism
Mounting type		Floor mounting and snap-on mounting to 35 mm standard mounting rail
Mounting type / rail mounting		Yes
Mounting type / front mounting with 4-hole attachment		No
Mounting type / front mounting with central attachment		No
Type from device		fixed mounting
mounting position		any
Position / of switch operating mechanism		at the left end
Design of handle		direct handle, grey
Width	mm	148
Height	mm	126
Depth	mm	97
Protection class IP		IP20

• on the front		IP20
• with closed switch / with cover or cable lug cover		IP20
Ambient temperature		
during operating	°C	-25 +70
during storage	°C	-50 +80
Degree of pollution		3
Mechanical operating cycles as operating time / typical		15,000
Electrical endurance (switching cycles)		
• at AC-23 A / at 690 V / at 50/60 Hz		1,500
• at DC-23 A		
• at 220 V		1,000
• at 440 V		1,000
Design of display		
 for switch position indicator manual operation 		ON-OFF-TEST
Net weight	g	1,250
Reference code / according to DIN EN 61346-2		Q
Item designation / according to DIN EN 81346-2		Q

Certificates/approvals:

General Product
Approval

Declaration of Conformity





Further information:

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

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

Industry Mall (Online ordering system)

 $\underline{\text{https://eb.automation.siemens.com/mall/en/WW/Catalog/Product/3KD3442-2NE10-0}}$

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

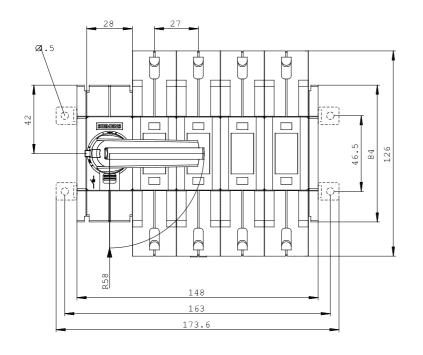
http://support.automation.siemens.com/WW/view/en/3KD3442-2NE10-0/all

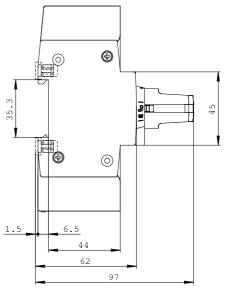
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ ...)$

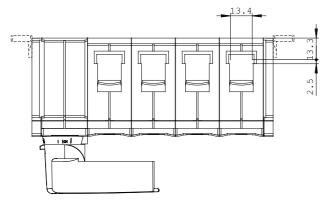
http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3KD3442-2NE10-0

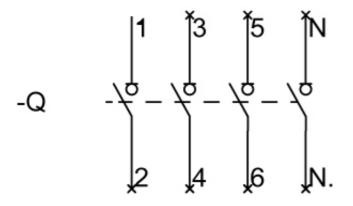
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last change: Apr 21, 2014