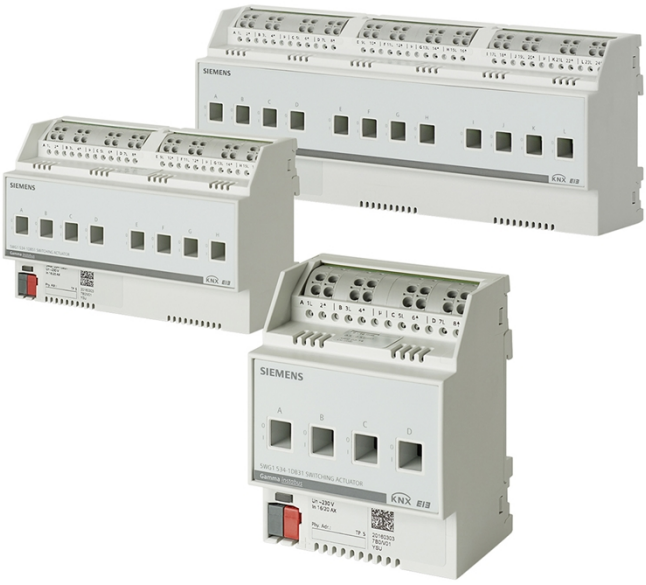
Output devices



Overview and selection tools		66
Binary output devices	Switching actuators/DIN rail mounted devices	76
	Modular switching actuators/DIN rail mounted devices	85
	Switching actuators/Modular installation system	87
	Combination switching actuators	94

The binary output devices from Siemens can be flexibly used in many applications. The extensive product range for all standard loads (AC1, AC3, AX, C-Load) includes modular extensible switching actuators with integrated load current detection.

Usage of load types AC1, AC3, AX and C load

The industrial and building control sector have seen the establishment of a range of different switching capacities and outputs. These tend to be specific to the respective applications and are specified in the corresponding national and international standards. The tests are defined such that they reproduce typical applications, such as motor loads (industry) or fluorescent lamps (buildings).

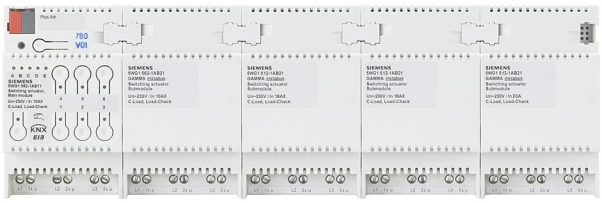
The AC1 and AC3 details are switching capacity specifications which have become established in the industrial sector:
- AC1: refers to the switching of predominantly resistive loads (p.f. = 0.8)
- AC3: refers to an (inductive) motor load (p.f. = 0.45)

These switching capacities are defined in the standard EN 60947-4-1. „Contactors and motor starters – Electromechanical contactors and motorstarters". The standard describes starters and/or contactors, which are originally used in industrial applications.

The designation AX has become established in building controls:
- AX: refers to a (capacitive) fluorescent lamp load

Switchable capacitive loads (200 µF, 140 µF, 70 µF or 35 µF), at a load of 200µF "C load", and are mentioned in conjunction with fluorescent lamp loads. This switching capacity refers to the standard EN 60669 „Switches for household and similar fixed electrical installations – Particular requirements", which is primarily implemented for applications in building control. For 6A devices a test with 70 µF and for 10A devices a test with 140 µF is required. The switching capacity declarations AC and AX are directly comparable with each other.

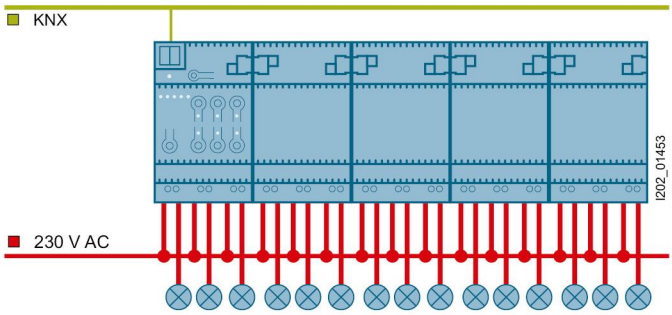
Modular switching actuators



The modular design of the GAMMA instabus switching actuators guarantees the flexible design for each case of application. Up to four switching actuator extensions can be connected to the 6-pin interface on the main module using a jumper. In this manner, a 3-fold switching actuator can be extended to 6/9/12 or 15-fold switching actuators and flexibly adapted to the number and size of loads to be switched. The variety of the functionality of the application software covers a broad spectrum: Ranging from multistage fan control, operating hours and switching cycle counters to scene control, thermal actuator control up to load recognition and monitoring of load current per channel.

The extensive application program controls both the outputs of the main units and the outputs of all connected expansions. This includes:
- Recording and monitoring of load current per output for load failure or overload
- Detection of a significant equipment failure
- Preventive detection of failures due to continuous monitoring of the current
- Detection of load circuit interruption
- Simultaneous switching of all three outputs
- Implementation of a rotational speed stated as a percentage, in 1 to 3-stage switching commands (fan speed control)
- Implementation of a valve position stated as a percentage in a pulse width modulated switching command (thermal drive control)
- Switching operation and operating hours counter with limit monitoring per output
- Integrated 8-bit scene control, with each output assignable to up to 8 scenes

Diagram of 15-fold switching actuator



The depicted diagram is an example of schematic interconnection and connection of individual switching actuator modules. All modules labeled 10 AX, 16 AX and 20 AX are compatible and therefore can be used together. Detailed information is available on our Internet page with technical documentation: www.siemens.de/gamma-td

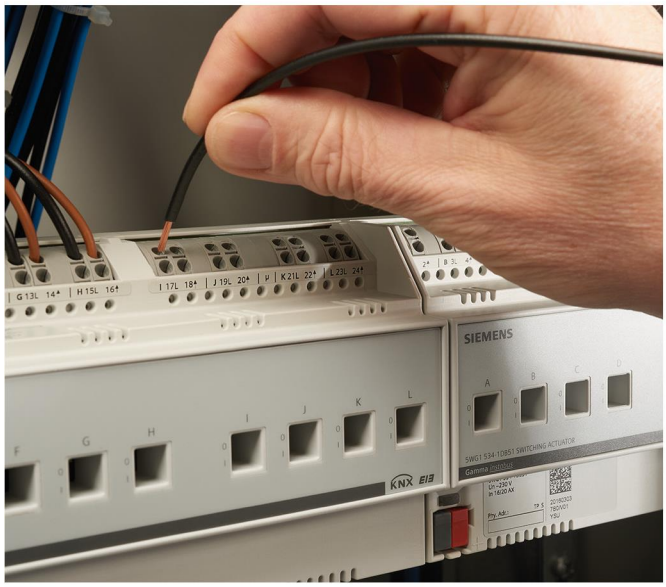


Switching Actuators N 53x

The new DIN Switching Actuators N 53x are intended for installation in distribution boxes or small cabinets and are installed by snapping onto a 35 mm top hat rail according to EN 60715-TH35.

All nine switching actuators have the following common features.

- The rated contact operating voltage of the switching actuators is AC 230 V
- The products are equipped with maintenance-free terminals
- The terminals are designed for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5 ... 2.5 mm². Stranded and multi-core conductors can be pushed into the terminals without ferrules
- One relay contact per output as switching element (ON/OFF)
- Per output there is a mechanical display of the switching status via a slide switch, which can also be used for direct manual operation (ON/OFF switching) of the switching output
- The electronics of the devices are powered via the bus voltage
- All switching actuators are connected to the bus via bus terminal block
- The device has a red LED for indicating activation of addressing mode or device operation
- The housing is of plastic, N-system
- Color RAL 7035 (light grey)
- DIN rail mounted device for mounting on rail TH35 according to DIN EN 60715
- Type of protection: IP 20





Automation functions

The switching actuators provide many control functions per output. The basic function of the new DIN rail mounted devices is switching with status feedback. Very powerful relays are also employed for switching capacitive loads. Via ETS configuration the basic function can be expanded by control functions (logic, timer, scenes, central switching control), override functions (manual ON, continuous OFF, blocking, forced control) up to diagnostic functions (counting of operating hours and switching cycles without and with threshold monitoring).
The extent of the control, override and diagnostic functions is illustrated in detail below.

Control functions

The new switching actuators provide automation of lighting or control of motors. These control functions are available for that purpose:
- Switching input: control input for ON respectively OFF commands
- Control value input: A control value input with configurable thresholds for On and Off switching can be used as an alternative to a switching input. The control value input is a control input for an analog control value e.g. temperature, percent value, power, illuminance and integer numbers. The control value input is transformed via an upper and a lower threshold into an ON respectively an OFF command.
- Alternatively available operating types:
  - Normal operation
  - Timer operation
  - Flashing operation
- Logic operations (AND, OR, NAND, XOR, NOR, FILTER, TRIGGER)
- Central switching
- 8-bit scene control
- day / night operation

Each output of the actuator can be individually set to one of these operating modes:
- Normal operation
- Timer operation
- Flashing operation

In the operation mode „normal operation" the timer functions for delayed On and Off switching and timer night mode operation are available.
In the operation mode „timer operation" the functions timer day operation and timer night operation are available. In the operation mode „Flashing" the output is cyclically turned on and off with configurable on and off duty cycles. In timer day or night operation switching On of the output can be time limited (e.g. for cleaning lighting), if applicable with warning before switching off via off and on switching of the output (single flashing).

Per output there is an integrated 8-bit scene control with each output assignable to up to 8 scenes.

Override control functions

To realize special functions wich have a higher priority than standard control functions. Up to seven different override function blocks can be activated to override the control functions.

Per actuator output up to seven different override functions (1 to 7) can be freely selected. The override control function 7 has the highest priority, the override function 1 the lowest. For each one of the activated override functions one of the following functions can be chosen:
- Manual override ON
- Permanent OFF
- Blocking function
- Central override
- User-defined override function
- Forced control

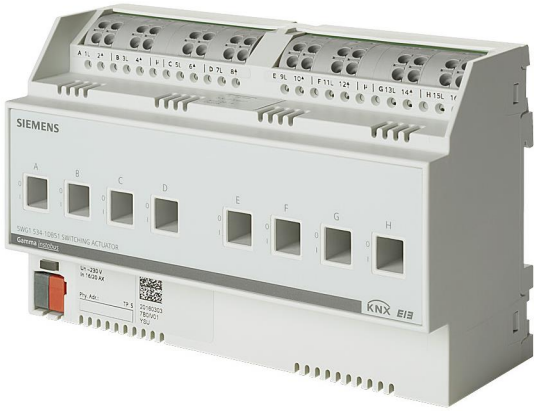
This allows to flexibly configure a different priority dependent override for each actuator output. For the override functions a control valve input can be selected instead of a switching control input. Override functions can be used to address special cases in room and building control like fire alarm, evacuation or maintenance work.
For instance, in case of a fire by switching off loads the ignition respectively support energy for the fire is removed. In case of evacuation the evacuation route lighting can be force controlled switched on.
To avoid person and property damage during maintenance work an output can be switched off and switching on of the output can be blocked during maintenance.

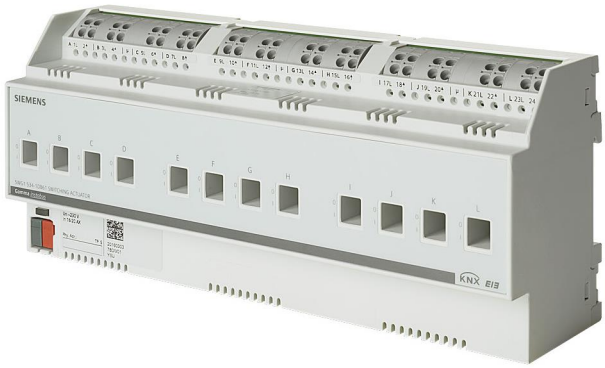
Diagnostic functions

The diagnostic functions support supervisory systems with their display, monitoring and archiving functions. For this purpose these diagnostic functions are available:
- Device function: The switching actuator cyclically sends a function signal allowing a supervisory system to control its function.
- Status indication: Sending of the switching status can be activated per output. The current status can be read via the bus or transmitted cyclically.
- Status retrieval: For all outputs sending the current status can be triggered via a central status retrieval object. With a single message a visualization (e.g. IP Control Center) can update its status information and display.
- Switching cycle count with or without threshold monitoring: The switching cycle count can be activated per output. The number of switching cycles can be read via the bus. This allows for monitoring of the switching cycles and a switching cycle dependent maintenance. If the threshold monitoring is activated the device sends a signal onto the bus when the set threshold is reached. The exceedance of the threshold is automatically signaled respectively this can be sent as an email by the IP Control Center or can be displayed by a warning light.
- Operating hour count with or without threshold monitoring: The operating hour count can be activated per output. The number of operating hours can be read via the bus. This allows for monitoring of the operating hours and an operating hour dependent maintenance, e.g. if after 10,000 hours of operation lamps shall be replaced. If the threshold monitoring is activated the device sends a signal onto the bus when the set threshold is reached. The exceedance of the threshold is automatically signaled respectively this can be sent as an email by the IP Control Center or can be displayed by a warning light.
- Load Check (only Type N 535)
  With switching actuators of type N 535, the load check can optionally be measured and the status sent via the bus. The load check can also be monitored with regard to exceedance or falling short of load check limit values. An adjustment factor and offset value can be specified.

The control, override and diagnostic functions can be realized in the device itself without additional control modules or a controller. With these functions the switching actuators are getting into the functional class of a micro-PLC with powerful relays.







Switching actuators													Modular switching actuators					
													Main modules			Expansions		
																		
Type	N 530D31	N 530D51	N 530D61	N 532D31	N 532D51	N 532D61	N 534D31	N 534D51	N 534D61	N 535D31	N 535D51	N 535D61	N 562/11	N 512/11	N 513/11	N 562/21	N 512/21	N 513/21
Enclosure data																		
Design	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
Modular installation devices for mounting on TH35 EN 60715 mounting rail	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Interface for connection of a switch actuator expansion													■	■	■	■	■	■
Dimensions																		
Width (1 MW = 18 mm) [MW]	4	8	12	4	8	12	4	8	12	4	8	12	3	3	3	3	3	3
Display/control elements																		
Direct operation (local operation)													■	■	■	■[1)]	■[1)]	■[1)]
Mechanical local operation	■	■	■	■	■	■	■	■	■	■	■	■						
Mechanical switching position indication	■	■	■	■	■	■	■	■	■	■	■	■						
LED for indicating direct operation													■	■	■			
LED for indicating the selected device													■	■	■			
LED for status indication per output													■	■	■	■[1]	■[1)]	■[1)]
Power supply																		
Bus-powered electronics	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■[1)]	■[1)]	■[1)]
Bus connection																		
Integrated bus coupling units	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			
Bus connection via bus terminal	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■			
Outputs																		
Load output																		
Floating relay contacts	4	8	12	4	8	12	4	8	12	12	8	12	3	3	3	3	3	3
Rated contact voltage, AC [V]	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230	230
Rated contact current																		
• AX (200 µF) acc. to EN 50428 [AX]	6[3)]	6[3)]	6[3)]	10[2)]	10[2)]	10[2)]	16	16	16	16	16	16	10[2)]	16	20	10[2)]	16	20
• AC1 (p.f. = 0.8) acc. to EN 50428 [A]	10	10	10	16	16	16	20[4)]	20[4)]	20[4)]	20[4)]	20[4)]	20[4)]	16	16	20	16	16	20
• AC3 (p.f. = 0.45) acc. to DIN EN 60497-4-1 [A]	6	6	6	8	8	8	16	16	16	16	16	16	10	16	16	10	16	16
• DC 24 V (resistive load) [A]	10	10	10	10	10	10	10	10	10	10	10	10	10	16	20	10	16	20
Three-phase switching (3 outputs simultaneously)													■	■	■	■	■	■

[1)] Via main module
[2)] 140 µF
[3)] 70 µF
[4)] 20 A only up to 35 °C ambient temperature and neighboring channel current-free

Continuation of the table	Switching actuators												Modular switching actuators					
													Main modules			Expansions		
Type	N 530D31	N 530D51	N 530D61	N 532D31	N 532D51	N 532D61	N 534D31	N 534D51	N534D61	N 535D31	N 535D51	N 535D61	N 562/11	N 512/11	N 513/11	N 562/21	N 512/21	N 513/21
Application program[1]	9A0101	9A0201	9A0301	9A0101	9A0201	9A0301	9A0101	9A0201	9A0301	9A0803	9A0903	9A0A03	982002			[2]		
Output functions																		
Max. number of group addresses	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	511	511	511			
Max. number of assignments	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	511	511	511			
Max. number of expansion modules that can be butt-mounted													4	4	4			
Blocking function	■	■	■	■	■	■	■	■	■	■	■	■						
Configurable behavior in the event of a bus voltage failure	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Configurable behavior in the event of a bus voltage recovery	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Behavior in the event of mains voltage failure																		
Unchanged switching state of outputs	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Heating control																		
Controlling electrothermal actuators													■	■	■	■	■	■
Scene control																		
Integrated 8-bit scene control	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Scenes to be integrated per channel	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Time functions																		
OFF delay	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
ON delay	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Timer mode (automatic stairwell switch)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Night mode (lighting for cleaning)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Warning of impending OFF	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Logical functions																		
Positively driven operation	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Logic function (1 object)	■	■	■	■	■	■	■	■	■	■	■	■						
Logic function (2 objects)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Can be inverted per output (NO contact/NC contact)	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Status																		
Transmitting status per channel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Operating hours counter with limit monitoring per channel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Switching cycle counter with limit monitoring per channel	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Load current recording / monitoring per channel										■	■	■	■	■	■	■	■	■

[1] For current application programs, see www.siemens.com/gamma-td.
[2] Via main module

Binary output devices

Type	N 567/22	N 512C01	N 502/02	UP 510/03	UP 510/13	RS 510/23	RL 512/23	RL 513D23	UP 511S32	UP 562S32
Enclosure data										
Design	N	N	N	UP	UP	RS	RL	RL	UP	UP
Modular installation devices for mounting on TH35 EN 60715 mounting rail	■	■	■							
For installation in flush-mounting switch and socket boxes with Ø 60 mm				■	■				■	■
Modular installation device for mounting in AP 118[1] automation module box, AP 641[1] room control box or M 590/01[1] DIN-rail housing						■[6]	■	■		
Modular installation in mounting case M 592/01[2]									■	■
10-pole BTI socket (BTI - Bus Transceiver Interface) for plugging of bus terminal devices with BTI connector				■						
Dimensions										
• Width/Ø [mm] (1 MW = 18 mm)	8 MW	8 MW	8 MW	71	50	50.2	47.8	47.8	48	48
• Height [mm]				71	50.9	48.8	86.5	86.5	50	50
• Depth [mm]				42	41.3	35.5	36.2	36.2	28	28
Mounting type										
Screw fixing				■						
Display/control elements										
Direct operation (local operation)	■		■							
Mechanical local operation		■								
Mechanical switching position indication		■								
LED for status indication per output	■		■							
LED for indicating direct operation	■		■							
Power supply										
Bus-powered electronics		■		■	■	■	■	■	■	■
Electronics powered via an integrated power supply unit for supply voltage AC 230 V	■		■							
Bus connection										
Integrated bus coupling units	■	■	■	■	■	■	■	■	■	■
Bus connection via bus terminal	■	■	■	■	■	■	■	■	■	■
Bus connection via contact system to data rail	■	■	■							
Outputs										
Load output										
Floating relay contacts	16[3]	8	8[3]	2	2	2	1	2	1	2
Rated contact voltage, AC [V]	230	230[4]	230	230	230	230	230	230	230	230
Rated contact current [A]	10	16	16	10	10	10	16	20	16	∑ 16[5]
Inputs										
Max. cable length, unshielded, twisted [m]			100						10	10
Pushbutton inputs										
For signal input (floating contacts)			8						3	3
For voltage input AC/DC 12...230 V			8							

[1] The AP 641 room control box, AP 118 automation module box or DIN-rail housing M 590/01 must be ordered separately, see Chapter Quick-assembly system - Room control box - Module boxes
[2] The M 592/01 mounting device must be ordered separately, see Chapter Combination devices
[3] Except channel A
[4] Also available as cUL version: AC 120 V / AC 277V / AC 347 V, 20 A, Order No.: 5WG1512-1CB01
[5] The sum applies to both load outputs
[6] Only for installation in AP 118 automation module box and AP 641 room control box.

...Continuation of the table

Type	N 567/22	N 512C01	N 502/02	UP 510/03	UP 510/13	RS 510/23[2]	RL 512/23[3]	RL 513/23[4]	UP 511S32	UP 562S32
Application program[1]	981C01	908301	981601	982E01	982E01	982E01	982D01	982F02	20DF22	20DE22
Output functions										
Max. number of group addresses	106	49	120	120	120	120	120	120	1600	1600
Max. number of assignments	106	49	120	120	120	120	120	120	1600	1600
Blocking function									■	■
Configurable behavior in the event of a bus voltage failure			■	■	■	■	■	■	■	■
Configurable behavior in the event of a bus voltage recovery		■	■	■	■	■	■	■	■	■
Configurable behavior in the event of a mains voltage recovery	■		■							
Behavior in the event of mains voltage failure										
• Unchanged switching state of outputs	■	■	■	■	■	■	■	■	■	■
Scene control										
Integrated 8-bit scene control	■		■	■	■	■	■	■	■	■
Scenes to be integrated per channel	8		8	8	8	8	8	8	64	64
Time functions										
OFF delay	■	■	■	■	■	■	■	■	■	■
ON delay	■	■	■	■	■	■	■	■	■	■
Timer mode (automatic stairwell switch)	■	■	■	■	■	■	■	■	■	■
Night mode (lighting for cleaning)	■		■	■	■	■	■	■		
Warning of impending OFF	■	■	■	■	■	■	■	■		
Logical functions										
Positively driven operation		■		■	■	■	■	■	■	■
Logic function (1 object)	■	■	■						■	■
Logic function (2 objects)				■	■	■	■	■	■	■
Can be inverted per output (NO contact/NC contact)		■	■	■	■	■	■	■	■	■
Status										
Transmitting status per channel	■	■	■	■	■	■	■	■	■	■

[1] For current application programs, see www.siemens.com/gamma-td
[2] Identical functions as JB 510C23
[3] Identical functions as JB 512C23
[4] Identical functions as JB 513C23

Load data for switching actuators per channel

Type	N 530D31 N 530D51 N 530D61	N 532D31 N 532D51 N 532D61	N 534D31 N 534D51 N 534D61 N 535D31 N 535D51 N 535D61	N 562/11 N 562/21	N 512/11 N 512/21	N 513/11 N 513/21	N 512C01 [1]
Contact current							
Rated current, AC [A]	6 AX	10 AX	16/20 AX	10 AX [3]	16 AX	20 AX	16
AC1 operation (p.f. = 0.8) [A]	10	16	16	16	16	20	16
AC3 operation (p.f. = 0.45) [VA]	2300	2500	3680	2300	3680	3680	3680
24 V DC (resistive load) [A]	6	10	10	10	16	20	10
Maximum switch-on peak current • t = 150 µs [A] • t = 250 µs [A] • t = 600 µs [A]	 400 320 200	 400 320 200	 600 480 300	 450 350 220	 450 350 220	 450 350 2200	 600 480 300
Contact voltage							
Rated voltage, AC [V]	230	230	230	230	230	230	230
Service life							
Mechanical service life Switching operations in millions	1	1	1	1	1	1	1
Electrical service life Switching operations in millions	[2]	[2]	[2]	0.1	0.1	0.1	[2]
Power loss							
Maximum power loss per device at rated power [W]	1 | 2 | 2	2 | 4 | 6	3 | 6 | 8	3	3	3	9
Switching capacities/load types, loads							
Resistive load [W]	2300	3680	3680	3680	3680	4600	3680
Minimum switching capacity [V/mA]	12/100	12/100	12/100	12/100	12/100	12/100	12/100
DC switching capacity [VA]	24/6	24/10	24/10	24/10	24/16	24/20	24/10
Maximum capacitive load [µF]	70	140	200	200	200	200	200
Incandescent lamps							
Incandescent lamps [W]	2300	3680	3680	2300	3680	3680	3680
Halogen lamp 230 V [W]	2300	3680	3680	2300	3680	3680	3680
LV halogen lamp with conventional transformer (inductive) [VA]	500	500	2000	1200	2000	2000	2000
T5/T8 fluorescent lamps							
Uncorrected [VA]	1380	2300	3680	2300	3680	3680	3680
Parallel corrected (at max. possible C) [W]	1300 (140 µF)	1300 (140 µF)	2500 (200 µF)	1500	2500	2500	2500 (200 µF)
DUO circuit [VA]	1380	2300	3680	1500	3680	3680	3680
Compact lamps							
Uncorrected [VA]	1380	1600	3680	1600	3680	3680	3680
Parallel corrected (at max. possible C) [W]	1100 (140 µF)	1100 (140 µF)	3000 (200 µF)	1100	2500	2500	3000 (200 µF)

[1] Also available as UL version: 120 V AC, 20 A, Stock no.: 5WG1512-1CB01
[2] On request
[3] Further information see chapter Output devices
[4] The number of ECG types takes into account the use of miniature circuit breakers with characteristic B
For complete technical specifications, see: www.siemens.com/gamma-td

... Continuation of the table

Type	N 567/22	N 502/02	UP 510/03 UP 510/13 RS 510/23	RL 512/23	RL513D23	UP 511S32	UP 562S32
Contact current							
Rated current, AC [A]	10	16	10	16 AX	10	16	∑ 16[2]
AC1 operation (p.f. = 0.8) [A]	[1]	[1]	[1]	[1]	[1]	10	∑ 10[2]
AC3 operation (p.f. = 0.45) [VA]	500	500	500	3680	500	1380	∑ 1380[2]
DC 24 V (resistive load) [A]	10	[1]	[1]	[1]	[1]	[1]	[1]
Maximum switch-on peak current • t = 150 µs [A] • t = 200 µs [A] • t = 250 µs [A] • t = 600 µs [A] • t = 20 ms [A]	200 160 100	200 160 100	200 160 100	450 320 220	200 160 100	800 165	800 165
Contact voltage							
Rated voltage, AC [V]	230	230	230	230	230	230	230
Service life							
Mechanical service life Switching operations in millions	30	30	10	1	10	3	3
Electrical service life Switching operations in millions	0.1	0.1	0.1	0.1	0.1		
Power loss							
Maximum power loss per device at rated power [W]	9	13	3	3	3		
Switching capacities/load types, loads							
Resistive load [W]	2300	3680	2300	3680	2300	2500	∑ 2500[2]
Minimum switching capacity [V/mA]	24/100	24/100	24/10	12/100	24/10		
DC switching capacity [VA]	24/10	24/16	30/10	24/16	30/10		
Maximum capacitive load [µF]	35	35	35	200	35	140	∑ 140[2]
Incandescent lamps							
Incandescent lamps [W]	1000	1000	1000	3680	1000	2300	∑ 2300[2]
Halogen lamp 230 V [W]	1000	1000	1000	3680	1000	2300	∑ 2300[2]
LV halogen lamp with conventional transformer (inductive) [VA]	500	500	200 ... 500	2000	200 ... 500	1200	∑ 1200[2]
T5/T8 fluorescent lamps							
Uncorrected [VA]	500	500	500	3680	500		
Parallel corrected (at max. possible C) [W]	2 x 58	2 x 58	2 x 58	2500	2 x 58		
DUO circuit [VA]	1000	1000	1000	3680	1000		
Compact lamps							
Uncorrected [VA]	500	500	500	3680	500	1000	∑ 1000[2]
Parallel corrected (at max. possible C) [W]	300 (35 µF)	300 (35 µF)	300 (35 µF)	2500	300	1160	∑ 1160[2]

[1] On request
[2] The sum applies to both load outputs
For complete technical specifications, see: www.siemens.com/gamma-td

N 53x/..

Switching actuator

- One relay contact per output as switching element
- Rated contact operating voltage AC 230 V
- Rated contact frequency: 50/60 Hz
- Per output with mechanical display of the switching status via slide switches, which can also be used for direct manual operation of the switching output
- Maintenance-free terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5 ... 2.5 mm²
- One phase terminal per output
- Bus-powered electronics
- Integrated bus coupling unit, bus connection via bus terminal block
- Red LED for display of the activation of the addressing mode as well as the operational readiness
- Housing: plastic, color RAL 7035 (light grey), N-system
- DIN rail mounted device for mounting on rail TH35 according to DIN EN 60715
- Type of protection: IP 20

Per output
- Selectable operating mode (normal mode, time switch mode, flashing mode)
- Selectable relay mode (NC/NO)
- Variable On and Off delay times
- Two selectable logic operations (AND, OR, NAND, NOR, XOR, FILTER, TRIGGER)
- Selectable sending of status objects on request, cyclically and/or automatically after a change
- Selectable switching state on bus voltage failure
- Selectable start value of the switching object on bus voltage recovery
- Optional addition of a night mode object for time-limited switching On of the output, i.e. the illumination, at night
- Variable On period at night or time switch mode
- Selectable addition of an object to change the On period at night or time switch mode
- Selectable post-triggering (1x, 2x, 3x, 4x, 5x) of the On period in time switch mode
- Selectable warning signal prior to imminent switching-off by brief off and on switching (flashing) at night or in time switch mode and/or via an optional warning object

Per output selectable functions:
- For manual override ON
- For permanent OFF switching
- Blocking of the output
- For switching on or off in forced mode
- Counting of operating hours and threshold monitoring
- Counting of load cycles and threshold monitoring
- Integrated 8-bit scene control with up to 8 scenes per output

- Construction site function switching
- Object for monitoring of device function
- Object for targeted retrieval of status values

KNX Switching actuator 4 x AC 230 V, 6 AX, C-Load

N 530D31



Rated contact current according to DIN EN 60669: 6 AX (70 µF fluorescent lamp load), 10 A (resistive load)

Data sheet	A6V11252211
Dimensions (W x H x D)	72 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	4 MW

Stock no.	Product no.
5WG1530-1DB31	**N 530D31**

KNX Switching actuator 8 x AC 230 V, 6 AX, C-Load

N 530D51



Rated contact current according to DIN EN 60669: 6 AX (70 µF fluorescent lamp load), 10 A (resistive load)

Data sheet	A6V11252211
Dimensions (W x H x D)	144 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	8 MW

Stock no.	Product no.
5WG1530-1DB51	**N 530D51**

KNX Switching actuator 12 x AC 230 V, 6 AX, C-Load

N 530D61



Rated contact current according to DIN EN 60669: 6 AX (70 µF fluorescent lamp load), 10 A (resistive load)

Data sheet	A6V11252211
Dimensions (W x H x D)	216 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	12 MW

Stock no.	Product no.
5WG1530-1DB61	**N 530D61**

N 532D31

KNX Switching actuator 4 x AC 230 V, 10 AX, C-Load



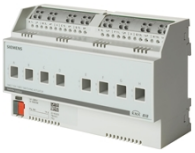
Rated contact current according to DIN EN 60669: 10 AX (140 µF fluorescent lamp load), 10 A (resistive load)

Data sheet	A6V11252211
Dimensions (W x H x D)	72 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	4 MW

Stock no.	Product no.
5WG1532-1DB31	**N 532D31**

N 532D51

KNX Switching actuator 8 x AC 230 V, 10 AX, C-Load



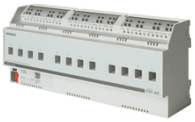
Rated contact current according to DIN EN 60669: 10 AX (140 µF fluorescent lamp load), 10 A (resistive load)

Data sheet	A6V11252211
Dimensions (W x H x D)	144 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	8 MW

Stock no.	Product no.
5WG1532-1DB51	**N 532D51**

N 532D61

KNX Switching actuator 12 x AC 230 V, 10 AX, C-Load



Rated contact current according to DIN EN 60669: 10 AX (140 µF fluorescent lamp load), 10 A (resistive load)

Data sheet	A6V11252211
Dimensions (W x H x D)	216 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	12 MW

Stock no.	Product no.
5WG1532-1DB61	**N 532D61**

KNX Switching actuator 4 x AC 230 V, 16/20 AX, C-Load

N 534D31



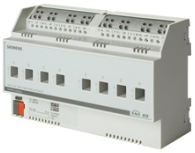
Rated contact current according to DIN EN 60669: 16 AX / 20 AX (200 µF fluorescent lamp load)

Data sheet	A6V11252211
Dimensions (W x H x D)	72 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	4 MW

Stock no.	Product no.
5WG1534-1DB31	**N 534D31**

KNX Switching actuator 8 x AC 230 V, 16/20 AX, C-Load

N 534D51



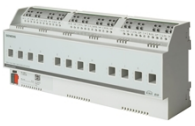
Rated contact current according to DIN EN 60669: 16 AX / 20 AX (200 µF fluorescent lamp load)

Data sheet	A6V11252211
Dimensions (W x H x D)	144 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	8 MW

Stock no.	Product no.
5WG1534-1DB51	**N 534D51**

KNX Switching actuator 12 x AC 230 V, 16/20 AX, C-Load

N 534D61



Rated contact current according to DIN EN 60669: 16 AX / 20 AX (200 µF fluorescent lamp load)

Data sheet	A6V11252211
Dimensions (W x H x D)	216 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	12 MW

Stock no.	Product no.
5WG1534-1DB61	**N 534D61**

N 535D..1

Switching actuator with load current detection

- One relay contact per output as switching element with load current measurement
- Rated contact operating voltage AC 230 V
- Rated contact frequency: 50/60 Hz
- Per output with mechanical display of the switching status via slide switches, which can also be used for direct manual operation of the switching output
- Maintenance-free terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5 ... 2.5 mm²
- One phase terminal per output
- Fluorescent lamp load according to DIN EN 60669: 16 AX / 20AX (200 µF) at AC 230 V
- Bus-powered electronics
- Housing: plastic, color RAL 7035 (light grey), N-system
- DIN rail mounted device for mounting on rail TH35 according to DIN EN 60715
- Type of protection: IP 20

- One switching and status object per output
- Selectable operating mode (normal mode, time switch mode, flashing mode),
- Selectable relay mode NC contact / NO contact, On and Off delay times, control value input object
- Logic operation (AND/OR/NAND/NOR/EXOR/FILTER/TRIGGER)
- Selectable sending of status objects on request, cyclically and/or after a change
- Selectable switching state on bus voltage failure and value of the switching object on bus voltage recovery
- Night mode for time-limited switching On of the output, and hence the illumination, at night
- Variable On period at night or time switch mode, time limit in timer switch mode, warning signal prior to imminent switching-off
- Manual override, permanent OFF switching, forced control, locking mode
- Counting of operating hours and counting of load cycles with threshold monitoring
- Measurement of load current values with threshold monitoring and monitoring of contact faults
- Integrated 8-bit scene control and linking of each output into up to 8 scenes
- Surveillance of device function

Rated current	20 A

N 535D31

KNX Switching actuator, 4 x AC 230 V, 16/20 AX, C-Load, Load Check



- Rated contact current according to DIN EN 60669: 16 AX / 20 AX (200 µF fluorescent lamp load)

- all functions as N 535D..1

Data sheet	A6V11252209
Dimensions (W x H x D)	72 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	4 MW

Stock no.	Product no.
5WG1535-1DB31	**N 535D31**

KNX Switching actuator, 8 x AC 230 V, 16/20 AX, C-Load, Load Check — N 535D51



- Rated contact current according to DIN EN 60669: 16 AX / 20 AX (200 µF fluorescent lamp load)
- all functions as N 535D..1

Data sheet	A6V11252211
Dimensions (W x H x D)	144 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	8 MW

Stock no.	Product no.
5WG1535-1DB51	**N 535D51**

KNX Switching actuator, 12 x AC 230 V, 16/20 AX, C-Load, Load Check — N 535D61



- DIN rail mounted device for mounting on rail TH35 according to DIN EN 60715
- all functions as N 535D..1

Data sheet	A6V11252209
Dimensions (W x H x D)	216 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	12 MW

Stock no.	Product no.
5WG1535-1DB61	**N 535D61**

N 568/81

KNX Room actuator 24-fold, 24 x AC 230 V, 10 A, multifunctional



- One relay contact per output as switching element
- For controlling drives with AC motor for AC 230 V or DC motor for DC 30 V
- For controlling electrothermal/electromotive actuators for AC 230 V
- For controlling ventilation motors via up to 3 stages
- Rated contact operating voltage: AC 230 V
- Rated contact frequency: 50/60 Hz
- Rated contact current: 10 A
- Rated contact operating voltage: DC 30 V
- Screw terminals for connecting stranded wires or single-wire conductors with a conductor cross-section of 0.2 to 5.2 mm²
- Direct operation per channel on the device for activating the switching output, moving the solar protection up/down, stop command, slat adjustment, opening/closing the valve, setting the fan speed
- Status LEDs on the device for each channel to display the switching status, moving time up/down and upper/lower end position, valve open/closed, fan level
- Button on the front of the device for activating/deactivating direct operation and LED for status display
- Bus-powered electronics
- Housing: plastic, color light grey, N dimension
- DIN rail mounting device for mounting on TH35 DIN EN 60715 mounting rail
- Protection class: IP 20
- Max. width 12 MU

- Selectable operating mode (24 channel switching output/12 solar protection channels AC 230 V/2 solar protection channels DC 30 V/24 channel valve control/6 fan controls)
- One switching/status object per output
- Adjustable relay operating mode, switch-on/switch-off delay, staircase function, flashing, central function, scene control, logic operations, forced control, operating hours counting
- Selectable blind/shutter operating mode
- Per channel move commands, stop shading/slat adjustment
- Per channel direct movement to a position of the sunblind/blind slats
- Per channel central movement, scene control
- Differentiation between manual/automatic operation with automatic sunshine function
- Adjustable behavior for safety functions
- Per fan control adjustable 3 fan stages, fan operating mode, switch-off delay, start behavior, forced control, automatic function, control value monitoring
- Per valve control selectable 2-/3-point valve
- Per valve control, adjustable heating/cooling operating mode, direction of valve control, control via two-point-/continuous control, control value monitoring
- Per valve control, parameterizable valve flushing
- Surveillance of device function

Data sheet	A6V13469668
Dimensions (W x H x D)	216 × 90 × 64 mm
Warranty	24 Months

Stock no.	Product no.
5WG1568-1AB81	**N 568/81**

KNX Switch actuator, 16 x AC 230 V, 10 A

N 567/22



- One potential-free relay contact per output channel
- Electronics powered via an integrated power supply unit for AC 230 V
- Pushbutton for switching between bus operation and local operation
- A yellow LED indicating local operation
- 1 red LED per output channel to indicate switch status
- One pushbutton per output channel to activate the output through a UM-function in local operating mode
- Operational with an AC 230 V supply, (even with no bus voltage and faulty or not activated bus communication)
- Choice between identical or individually parameterized outputs
- Operating mode selectable for each channel (normal operation, time switch operation)
- Adjustable switching on/off delay
- Selectable logic link (AND/OR) between two communication objects and presettable logic operator for bus voltage return
- Possibility to add an additional night operation object per output channel for time limited activation of output (lighting) at night
- Selectable warning signal prior to imminent switching off in form of three times short off/on switching (flashing)
- Possibility to add one additional status indicator object per output channel, sending of status objects on request and/or automatically after change
- Possibility to add additional object to drive the integrated 8-bit scene controller, integrated 8 bit scene control and linking each output channel to up to 8 scenes
- Unchanged switch state for all output channels in case of power failure
- Selectable switch state after return of power for each output channel
- Integrated bus coupling units, bus connection via bus terminal or contact system to data rail, only 50% of standard busload
- Modular installation devices for mounting on TH35 EN 60715 mounting rail
- 16 Floating relay contacts
- Rated contact current 10 A

Data sheet	A6V10416196
Rated voltage	AC 230 V
Rated current	10 A
Number of channels	16
Dimensions (W x H x D)	144 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	8 MW
Warranty	24 Months

Stock no.	Product no.
5WG1567-1AB22	**N 567/22**

The optional data rail must be ordered separately. See chapter System Products and Accessories - Data rails.

N 510/03



KNX Load switch, 4 x AC 230 V, 16 A

- 4 Floating relay contacts
- Switching contacts can also be operated manually via slide switches
- Can be inverted per output (NO contact/NC contact)
- Configurable timer mode with configurable on/off delay
- Logic operation (AND/OR) of two communication objects and adjustable start value of operation
- Status object
- Positively driven operation
- Configurable behavior in the event of a bus voltage failure
- Bus-powered electronics
- Integrated bus coupling units, Bus connection via bus terminal or contact system to data rail
- Rated contact current 16 A

Data sheet	A6V10416149
Rated voltage	AC 230 V
Rated current	16 A
Number of channels	4
Dimension width (1 MW = 18 mm)	4 MW
Warranty	24 Months

Stock no.	Product no.
5WG1510-1AB03	**N 510/03**

The optional data rail must be ordered separately. See chapter System Products and Accessories - Data rails.

N 512..01



Load switch

- 8 Floating relay contacts
- Switching contacts can also be operated manually via slide switches
- Can be inverted per output (NO contact/NC contact)
- Configurable timer mode with configurable on/off delay
- Logic operation (AND/OR) of two communication objects and adjustable start value of operation in the event of bus voltage recovery
- Status object
- Positively driven operation
- Switching option on bus voltage failure and bus voltage recovery
- Bus-powered electronics
- Integrated bus coupling units, Bus connection via bus terminal or contact system to data rail
- Modular installation devices for mounting on TH35 EN 60715 mounting rail

Data sheet	A6V11786005

Range overview N 512..01

Product Title	Dimensions (WxHxD) [mm]	Dimension width (1 MW = 18 mm)	Stock no.	Product no.
KNX Load switch, 8 x AC 230 V, 16 A, C load		8 MW	5WG1512-1AB01	**N 512/01**
KNX Load switch, 8 x AC 120 V / AC 277 V / AC 347 V, 20 A, C load (cUL listed)	144 x 90 x 60	8 MW	5WG1512-1CB01	**N 512C01**

Switch actuator, main module

N 5../11



- 3 Floating relay contacts
- Rated contact voltage, AC 230 V
- Interface for connecting a switching actuator submodule and software for controlling up to 4 switching actuator submodules
- Selectable 3-phase switching function (simultaneous switching of 3 outputs)
- Direct operation (local operation)
- LED for indicating direct operation
- LED for indicating the selected device
- LED for status indication per output
- Selectable 1- to 3-stage fan speed control function
- Function for controlling thermo-electrical drives
- Integrated 8-bit scene control
- Time functions: off delay, on delay, timer mode (automatic stairwell switch), night mode (lighting for cleaning), Warning of impending off
- Logical functions: Positively driven operation, Logic function (2 objects), Can be inverted per output (NO contact/NC contact)
- Per channel: transmitting status, Operating hours counter with limit monitoring, Switching cycle counter with limit monitoring, Load current recording, Load current monitoring
- Power supply for its own electronics and for the electronics of the connected switching actuator submodules via the bus voltage
- Bus connection via bus terminal

Range overview N 562/11, N 512/11, N 513/11

Product Title	Dimensions (WxHxD) [mm]	Dimension width (1 MW = 18 mm)	Stock no.	Product no.
KNX Switch actuator, main module, 3 x AC 230/400 V, 10 AX, C load, Load-check	54 x 90 x 60	3 MW	5WG1562-1AB11	**N 562/11**
KNX Switch actuator, main module, 3 x AC 230/400 V, 16 AX, C load, Load-check	54 x 90 x 60	3 MW	5WG1512-1AB11	**N 512/11**
KNX Switch actuator, main module, 3 x AC 230/400 V, 20 AX, C load, Load-check	54 x 90 x 60	3 MW	5WG1513-1AB11	**N 513/11**

N 5../21



Switch actuator, submodule

- 3 Floating relay contacts
- Rated contact voltage, AC 230 V
- Interface for connecting a switching actuator submodule and software for controlling up to 4 switching actuator submodules
- Selectable 3-phase switching function (simultaneous switching of 3 outputs)
- Direct operation (local operation via main module)
- LED for indicating direct operation for each output via main module
- Selectable 1- to 3-stage fan speed control function
- Function for controlling thermo-electrical drives
- Integrated 8-bit scene control
- Time functions: off delay, on delay, Timer mode (automatic stairwell switch), Night mode (lighting for cleaning), Warning of impending off
- Logical functions: Positively driven operation, Logic function (2 objects), Can be inverted per output (NO contact/NC contact)
- Per channel: transmitting status, Operating hours counter with limit monitoring, Switching cycle counter with limit monitoring, Load current recording, Load current monitoring
- Power supply for its own electronics and for the electronics of the connected switching actuator submodules via the bus voltage
- Bus connection via bus terminal

Range overview N 562/21, N 512/21, N 513/21

Product Title	Dimensions (WxHxD) [mm]	Dimension width (1 MW = 18 mm)	Stock no.	Product no.
KNX Switch actuator submodule, 3 x AC 230/400 V, 10 AX, C load, Load-check	54 x 90 x 60	3 MW	5WG1562-1AB21	**N 562/21**
KNX Switch actuator submodule, 3 x AC 230/400 V, 16AX, C load, load-check	54 x 90 x 60	3 MW	5WG1512-1AB21	**N 512/21**
KNX Switch actuator submodule, 3 x AC 230/400 V, 20 AX, C load, load-check	54 x 90 x 60	3 MW	5WG1513-1AB21	**N 513/21**

Binary Output 2 x AC 230 V, 10 A

UP 510/..3





- Rated contact voltage AC 230 V
- 2 floating relay contacts
- Rated contact current 10 A
- Screwless terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5...2.5 mm²
- Bus-powered electronics
- Integrated bus coupling units, bus connection via bus terminal
- For insertion in flush-mounting switch and socket boxes 60 mm in diameter and 60 mm deep

- Configurable behavior in the event of a bus voltage failure/recovery
- Unchanged switching state of outputs in the event of system voltage failure
- Integrated 8-bit scene control
- Time functions: off delay, on delay, timer mode (automatic stairwell switch), night mode (lighting for cleaning), Warning of impending off
- Logical functions: Positively driven operation, logic function (1 object), logic function (2 objects), can be inverted per output (NO contact/NC contact)
- Transmitting status per channel

Range overview UP 510/..3

Product Title	Dimensions (WxHxD) [mm]	Stock no.	Product no.
KNX Binary Output 2 x AC 230 V, 10 A, with mounting frame and BTI interface	71 x 71 x 42	5WG1510-2AB03	**UP 510/03**
KNX Binary Output 2 x AC 230 V, 10 A	50 x 50.9 x 41.3	5WG1510-2AB13	**UP 510/13**

RL 512/23

KNX Switching actuator 1 x AC 230 V, 16 AX, C load



- One relay contact as switching element
- Bus-powered electronics
- Integrated bus coupling unit, Bus connection via bus terminal block
- Type of protection: IP 20
- Rated contact voltage AC 230 V
- Rated contact frequency: 50/60 Hz
- Rated contact current 16 AX / 20 A
- Screw-less terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5...2.5 mm^2
- For mounting in AP 118 automation module box or AP 641 room control box

- Selectable operating mode (normal mode, time switch mode)
- Selectable relay mode (NO contact / NC contact)
- Status object as an optional addition
- Variable On and Off delay times
- Selectable logic operation (AND/OR) of two communication objects
- Selectable switching state at bus voltage failure and recovery
- Optional addition of a night mode object for time-limited switching On of the output (and hence the illumination) at night
- Variable On period at night or time switch mode
- Selectable post-triggering of the On period (On period extension) in time switch mode
- Selectable warning signal prior to imminent switching-off by means of three-times short off and on switching (flashing) at night or in time switch mode
- Selectable function:
  - Including additional communication object for manual override of an output
  - Selectable forced control, including additional communication object for switching an output on or off in forced mode
  - Selectable counting of operating hours with threshold monitoring of the operating hours
  - Selectable counting of load cycles with threshold monitoring of the load cycles
- Integrated 8-bit scene control and linking of each output into up to 8 scenes

The AP 641 room control box and AP 118 automation module box must be ordered separately.
See chapter Modular Installation System - Room control box - Module boxes.

Data sheet	A6V10416159
Rated voltage	AC 230 V
Rated current	16 A
Number of channels	1
Dimensions (W x H x D)	48 x 87 x 36 mm
Warranty	24 Months

Stock no.	Product no.
5WG1512-4AB23	**RL 512/23**

KNX Binary Output 3 x 6 A, AC 230 V

RL 513D23



- 3 floating relay contact
- One relay contact per output as switching element
- Contact rated current according to DIN EN 60669-1: 6 A (resistive load)
- Bus-powered electronics
- Integrated bus coupling unit, bus connection via bus terminal block
- Type of protection: IP 20
- Rated contact operating voltage AC 230 V
- Rated contact frequency: 50/60 Hz
- Screw-less terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5...2.5 mm^2
- For mounting in AP 118 automation module box or AP 641 room control box

- For each output:
  - Selectable operating mode (normal mode, time switch mode)
  - Selectable relay mode (NO contact / NC contact)
  - Status object as an optional addition
  - Variable On and Off delay times
  - Selectable logic operation (AND/OR) of two communication objects
  - Selectable switching state at bus voltage failure and recovery
  - Optional addition of a night mode object for time-limited switching On of the output (and hence the illumination) at night
- Variable On period at night or time switch mode
- Selectable post-triggering of the On period (On period extension) in time switch mode
- Selectable warning signal prior to imminent switching-off by means of three-times short off and on switching (flashing) at night or in time switch mode
- Selectable function:
  - Including additional communication object for manual override of an output
  - Selectable forced control, including additional communication object for switching an output on or off in forced mode
  - Selectable counting of operating hours and with threshold monitoring of the operating hours
  - Selectable counting of load cycles and with threshold monitoring of the load cycles
- Integrated 8-bit scene control and linking of each output into up to 8 scenes

The AP 641 room control box and AP 118 automation module box must be ordered separately.
See chapter Modular Installation System - Room control box - Module boxes.

Data sheet	A6V11375522
Rated voltage	AC 230 V
Rated current	6 A
Number of channels	3
Dimensions (W x H x D)	48 x 87 x 36 mm
Warranty	24 Months

Stock no.	Product no.
5WG1513-4DB23	**RL 513D23**

JB 510C23



KNX Binary Output, 2 x AC 120...277 V, 10 A (resistive load)

- 2 floating relay contacts
- Rated contact frequency: 50/60 Hz
- Contact rated current according to DIN EN 60669-1: 10 A (resistive load)
- Bus-powered electronics
- Integrated bus coupling unit, bus connection via bus terminal
- Type of protection: IP 20
- Rated contact operating voltage AC 120...277 V
- As built-in device with 1/2 inch thread connection for mounting to or in a UL/NEMA Junction Box with feedthrough of the function wires through the 1/2 inch threaded connector

- For each output:
  - Selectable operating mode (normal mode/time switch mode)
  - Selectable relay mode (NO contact/NC contact)
  - Status object as optional addition
  - Variable On and Off delay times
  - Selectable logic operation (AND/OR) of two communication objects
  - Selectable switching state at bus voltage failure and recovery
  - Optional addition of night mode object for time-limited switching On of the output (and hence the illumination) at night
- Variable On period at night or time switch mode
- Selectable post-triggering of the On period (On period extension) in time switch mode
- Selectable warning signal prior to imminent switching-off by means of three-times short off and on switching (flashing) at night or in time switch mode
- Selectable function:
  - Including additional communication object for manual override of an output
  - Forced control, including additional communication object for switching an output on or off in forced mode
  - Counting of operating hours and with threshold monitoring of the operating hours
  - Counting of load cycles and with threshold monitoring of the load cycles
- Integrated 8-bit scene control and linking of each output into up to 8 scenes

Data sheet	A6V11786004
Dimensions (W x H x D)	70 x 90 x 44.6 mm
Warranty	24 Months

Stock no.	Product no.
5WG1510-4CB23	**JB 510C23**

KNX Switching actuator 1 x AC 120...277 V, 20 A or 1 x AC 347 V, 15 AX, C load

JB 512C23



- One relay contact as switching element
- Bus-powered electronics
- Integrated bus coupling unit, Bus connection via bus terminal block
- Type of protection: IP 20
- Rated contact operating voltage AC 120...277 V, AC 347 V
- Rated contact frequency: 50/60 Hz
- Fluorsecent lamp load acc. to DIN EN 60669-1: 20 AX (200 µF) at AC 120/277 V, 15 AX (200 µF) at AC 347 V
- As built-in device with 1/2 inch thread connection for mounting to or in a UL/NEMA Junction Box with feedthrough of the function wires through the 1/2 inch threaded connector

- Selectable operating mode (normal mode, time switch mode)
- Selectable relay mode (NO contact / NC contact)
- Status object as an optional addition
- Variable On and Off delay times
- Selectable logic operation (AND/OR) of two communication objects
- Selectable switching state at bus voltage failure and recovery
- Optional addition of a night mode object for time-limited switching On of the output (and hence the illumination) at night
- Variable On period at night or time switch mode
- Selectable post-triggering of the On period (On period extension) in time switch mode
- Selectable warning signal prior to imminent switching-off by means of three-times short off and on switching (flashing) at night or in time switch mode
- Selectable function:
  - Including additional communication object for manual override of an output
  - Selectable forced control, including additional communication object for switching an output on or off in forced mode
  - Selectable counting of operating hours with threshold monitoring of the operating hours
  - Selectable counting of load cycles with threshold monitoring of the load cycles
- Integrated 8-bit scene control and linking of each output into up to 8 scenes

Data sheet	A6V11786007
Dimensions (W x H x D)	70 x 90 x 44.6 mm
Warranty	24 Months

Stock no.	Product no.
5WG1512-4CB23	**JB 512C23**

JB 513C23



KNX Binary Output 3 x 6 A, AC 120...277 V

- 3 floating relay contact
- One relay contact per output as switching element
- Contact rated current according to DIN EN 60669-1: 6 A (resistive load)
- Bus-powered electronics
- Integrated bus coupling unit, bus connection via bus terminal block
- Type of protection: IP 20
- One relay contact per output as switching element
- Rated contact operating voltage AC 120...277 V
- Rated contact frequency: 50/60 Hz
- As built-in device with 1/2 inch thread connection for mounting to or in a UL/NEMA Junction Box with feedthrough of the function wires through the 1/2 inch threaded connector

- For each output:
  - Selectable operating mode (normal mode, time switch mode)
  - Selectable relay mode (NO contact / NC contact)
  - Status object as an optional addition
  - Variable On and Off delay times
  - Selectable logic operation (AND/OR) of two communication objects
  - Selectable switching state at bus voltage failure and recovery
  - Optional addition of a night mode object for time-limited switching On of the output (and hence the illumination) at night
- Variable On period at night or time switch mode
- Selectable post-triggering of the On period (On period extension) in time switch mode
- Selectable warning signal prior to imminent switching-off by means of three-times short off and on switching (flashing) at night or in time switch mode
- Selectable function:
  - Including additional communication object for manual override of an output
  - Selectable forced control, including additional communication object for switching an output on or off in forced mode
  - Selectable counting of operating hours and with threshold monitoring of the operating hours
  - Selectable counting of load cycles and with threshold monitoring of the load cycles
- Integrated 8-bit scene control and linking of each output into up to 8 scenes

Data sheet	A6V11786008
Dimensions (W x H x D)	70 x 90 x 44.6 mm
Warranty	24 Months

Stock no.	Product no.
5WG1513-4CB23	**JB 513C23**

KNX Binary Output, 2 x AC 230 V, 10 A (resistive load)

RS 510/23



- Rated contact frequency: 50/60 Hz
- 2 floating relay contacts
- Contact rated current according to DIN EN 60669-1: 10 A (resistive load)
- Bus-powered electronics
- Integrated bus coupling unit, bus connection via bus terminal
- Type of protection: IP 20
- Rated contact voltage AC 230 V
- Screw-less terminals for connection and through-wiring of untreated single-core, stranded or multi-core conductors, 0.5 ... 2.5 mm²
- With bus connection module
- Modular installation device for mounting in AP 118 automation module box or AP 641 room control box

- For each output:
  - Selectable operating mode (normal mode/time switch mode)
  - Selectable relay mode (NO contact/NC contact)
  - Status object as optional addition
  - Variable On and Off delay times
  - Selectable logic operation (AND/OR) of two communication objects
  - Selectable switching state at bus voltage failure and recovery
  - Optional addition of night mode object for time-limited switching On of the output (and hence the illumination) at night
- Variable On period at night or time switch mode
- Selectable post-triggering of the On period (On period extension) in time switch mode
- Selectable warning signal prior to imminent switching-off by means of three-times short off and on switching (flashing) at night or in time switch mode
- Selectable function:
  - Including additional communication object for manual override of an output
  - Forced control, including additional communication object for switching an output on or off in forced mode
  - Counting of operating hours and with threshold monitoring of the operating hours
  - Counting of load cycles and with threshold monitoring of the load cycles
- Integrated 8-bit scene control and linking of each output into up to 8 scenes

The AP 641 room control box and AP 118 automation module box must be ordered separately.
See chapter Modular Installation System - Room control box - Module boxes.

Data sheet	A6V10416153
Rated voltage	AC 230 V
Rated current	10 A
Number of channels	2
Dimensions (W x H x D)	50.2 x 48.8 x 35.5 mm
Warranty	24 Months

Stock no.	Product no.
5WG1510-2AB23	**RS 510/23**

N 502/02



KNX Combi switching actuator 8 x AC 230 V, 16 A, 8 x binary inputs

- 8 inputs AC/DC 12...230 V
- 8 relay contact outputs
- Rated contact voltage AC 230 V
- Rated contact operating current 16 A, p.f. = 1
- Electronics power supply via an integrated power supply unit for AC 230 V
- Device functional even without bus connection or if bus voltage absent or bus communication interrupted or not yet activated
- Push button to switch between bus and direct mode
- Push button for each output to switch the output in direct mode via a toggling function by a short actuation and for changing the output mode between remote control relay and time switch relay by holding down the push button for some seconds
- Device preset at the factory for direct switching of an output through a toggling function via the input of the same name
- Selectable function for each input when using the Engineering Tool Software (ETS):
  - Switching status / binary value transmission
  - Switching, short / long operation
  - Single button dimming, single button sun protection control, 1-button group control (sequence control)
  - 1-bit scene control
  - 8-bit scene control, 8-bit value, edge-triggered, 8-bit value, short / long operation
  - 16-bit floating point value, edge-triggered, 16-bit value, short / long operation, 16-bit value, edge-triggered, 16-bit floating point value, short / long operation
- Selectable function for each pair of inputs:
  - 2-button dimming with stop telegram or with cyclical sending
  - 2-pushbutton shutter/blind control
- Selectable blocking / releasing of each input via a corresponding blocking object
- Sending of the input objects after a change of status
- Selectable logic operation (AND/OR) for one input with a further communication object and with variable start value of the logic operation at bus voltage recovery
- Setting by means of the ETS, whether all outputs are to be configured identically or individually
- Selectable mode for each output (normal mode, time switch mode)
- Optional addition of a night mode object for each output for time-limited switching On of the output (and hence the illumination) at night
- Variable On and Off delay times for each output
- Variable On period in night mode or in time switch mode
- Selectable warning signal prior to imminent switching-off by means of three-times short off and on switching (flashing) in night mode or in time switch mode
- Optional status object per output for status reporting
- Sending of status objects on request and/or automatically after a change
- Integrated 8-bit scene control and linking of each output with up to 8 scenes
- Selectable switching state for each output at mains or bus power failure as well as after bus or mains voltage recovery
- Integrated bus coupling unit with only half a standard bus load
- Bus connection via bus terminal or contact system to data rail
- Modular installation devices for mounting on TH35 EN 60715 mounting rail

Data sheet	A6V10416148
Rated voltage	AC 230 V
Rated current	16 A
Number of channels	8
Number of inputs potentialfree	8
Dimensions (W x H x D)	144 x 90 x 60 mm
Dimension width (1 MW = 18 mm)	8 MW
Warranty	24 Months

Stock no.	Product no.
5WG1502-1AB02	**N 502/02**

KNX Switch actuator 1 x AC 230 V, 16 A

UP 511S32



- One relay contact per output
- Rated contact operating voltage: AC 230 V
- Rated contact frequency: 50/60 Hz
- Rated contact current: 16 A
- Screw terminals for connection of untreated single-core conductors, stranded without conductor sleeve 0.5 to 4 mm², stranded with conductor sleeve 0.5 to 2.5 mm²
- 3 binary inputs for potential-free contacts, determination of switching status via voltage generated in the device
- Poll voltage of the inputs: approx. 5 V
- Max. 10 m length of connecting cables, preferably J-Y(St)Y, pre-assembled YY6x0.6
- Bus-powered electronics
- Integrated bus coupling unit
- Mounting in appliance boxes according to DIN 49073 or in mounting case M 592/01 (accessories)

- KNX Data Secure compatible
- Updateable with Siemens Firmware Download Tool
- Switching output optionally directly operable via input 1 or input 1 and 2
- Adjustable functions of switching output: status feedback, active status signalling function, adjustable as NO or NC contact, adjustable preferred position after download, adjustable preferred position in case of bus voltage failure and recovery, cyclical monitoring of switching output, adjustable switch-on and switch-off delay, staircase function, 8-bit scene control, logic operations, operating hours counting with limit value monitoring, disabling function or forced control, central switching function
- Adjustable functions of each input: switching, dimming, colour temperature control, solar protection control, sending values (1 byte, 2 byte, 3 byte, 6 byte), scene control, pair of inputs operation, controller extension (operating mode switchover, presence function, setpoint shift)
- Adjustable debounce time per input
- Adjustable locking of each input via locking object
- 8 logic functions (logic gate, value converter, disabling element, comparator, limit value switch)

Data sheet	A6V12632887
Rated current	16 A
Number of channels	1
Dimensions (W x H x D)	48 x 50 x 28 mm
Warranty	24 Months

Stock no.	Product no.
5WG1511-2SB32	**UP 511S32**

UP 562S32



KNX Switch/solar protection actuator 2 x AC 230 V, ∑ 16 A

- One relay contact per output
- Rated contact operating voltage: AC 230 V
- Rated contact frequency: 50/60 Hz
- Rated contact current: ∑ 16 A
- Screw terminals for connection of untreated single-core conductors, stranded without conductor sleeve 0.5 to 4 mm², stranded with conductor sleeve 0.5 to 2.5 mm²
- 3 binary inputs for potential-free contacts, determination of switching status via voltage generated in the device
- Poll voltage of the inputs: approx. 5 V
- Max. 10 m length of connecting cables, preferably J-Y(St)Y, pre-assembled YY6x0.6
- Bus-powered electronics
- Integrated bus coupling unit
- Mounting in appliance boxes according to DIN 49073 or in mounting case M 592/01 (accessories)

- KNX Data Secure compatible
- Updateable with Siemens Firmware Download Tool
- Adjustable functions per switching output: status feedback, adjustable as NO or NC contact, cyclical monitoring, adjustable switch-on and switch-off delay, staircase function, scene control, logic operations, operating hours counting, disabling function or forced control, central switching function
- Adjustable functions of solar protection channel: adjustable operating modes: venetian blind with slats, shutter/awning, venting louver/roof window, direct movement to a position of the sunblind and the slats, status feedback, adjustable behaviour in case of alarm (wind, rain, frost), adjustable solar protection or heating/cooling automatic, scene control, disabling function, forced control
- Adjustable preferred position after download, in case of bus voltage failure and recovery
- Adjustable functions of each input: switching, dimming, colour temperature control, solar protection control, sending values, scene control, pair of inputs operation, controller extension (operating mode switchover, presence function, setpoint shift), adjustable debounce time, locking of each input
- 8 logic functions

Data sheet	A6V12632892
Rated current	16 A
Number of channels	2
Dimensions (W x H x D)	48 x 50 x 28 mm
Warranty	24 Months

Stock no.	Product no.
5WG1562-2SB32	**UP 562S32**

Accessories for UP 5..S32

M 592/01



Mounting case

- One mounting location for a flush-mounted actuator type UP 511S32, UP 562S32 or UP 525S32
- Separate wiring space and strain relief for function wiring
- Housing for mounting on DIN rail TH35 DIN EN 60715
- Housing with screw fastening for installation in cable ducts, under raised floors or for surface mounting under a ceiling
- Housing: plastic
- Type of protection: IP 20

Dimensions (W x H x D)	97 x 53 x 36 mm
Warranty	24 Months

Stock no.	Product no.
5WG1592-8AB01	**M 592/01**