

AMRM-41/00.1

The room controller is a simple, low-cost solution for the hotel rooms, which can be used to achieve a single room control, such as heating, cooling, ventilation, lighting, water/fire alarm, emergency buttons and the blinds etc. But also can be used in apartments, hospitals, office buildings, assisted living facilities etc.

The room controller compact design enables cover most requirements of the electrical installation of the residential and building control systems and integrate most inputs and output interfaces for a single room automatic control as well as covers all standard functions for a single room control. It offers the following functions:

- ◆ Dry contact input
- ◆ Switch output, Switching of electrical sockets and loads
- ◆ Dimming output
- ◆ Blind or shutter output
- ◆ Control fan speed
- ◆ Control heating/cooling valve

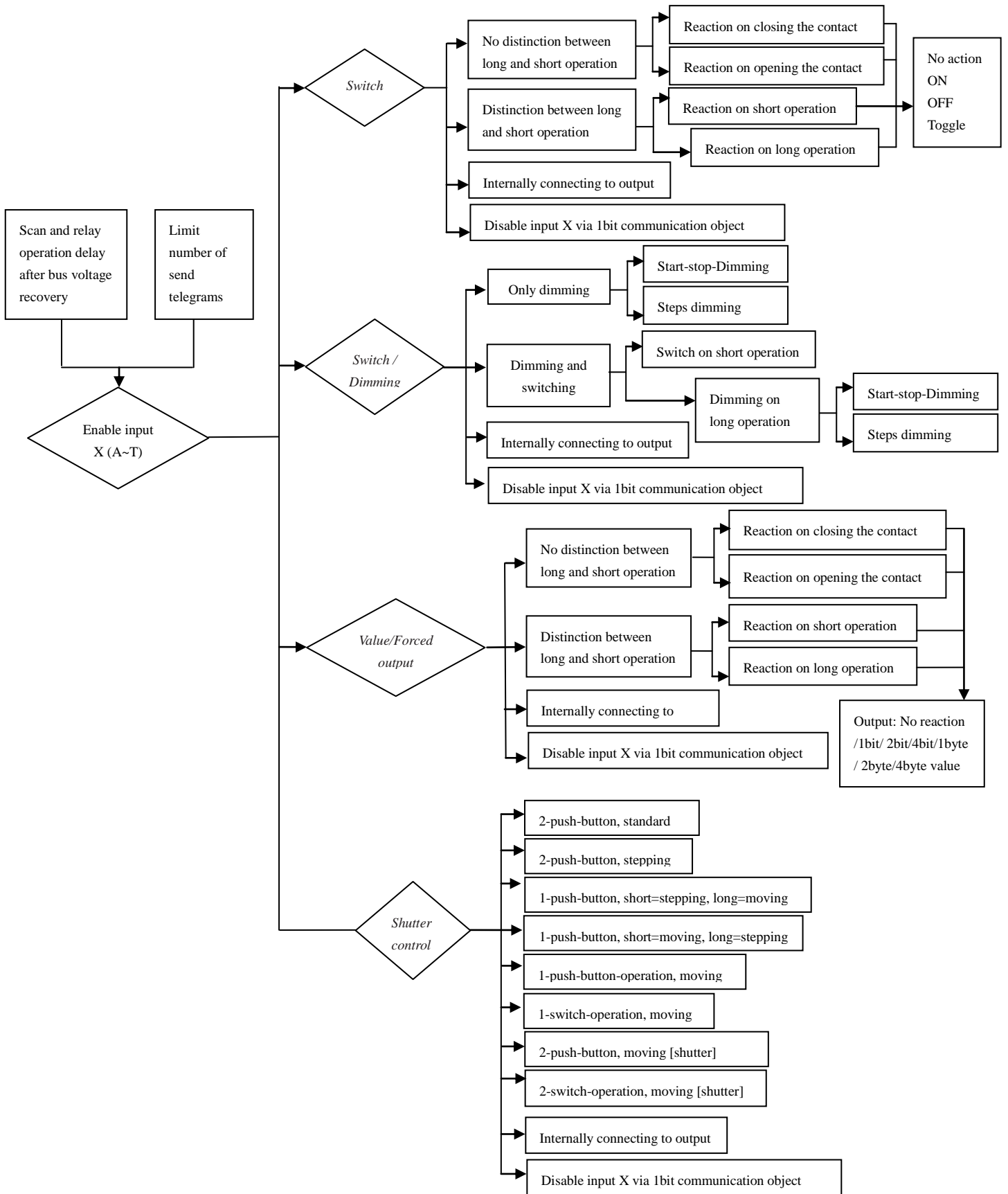
In addition to these basic functions, further automation functions can be implemented by a combination with various detectors, such as a presence detector, motion detector.

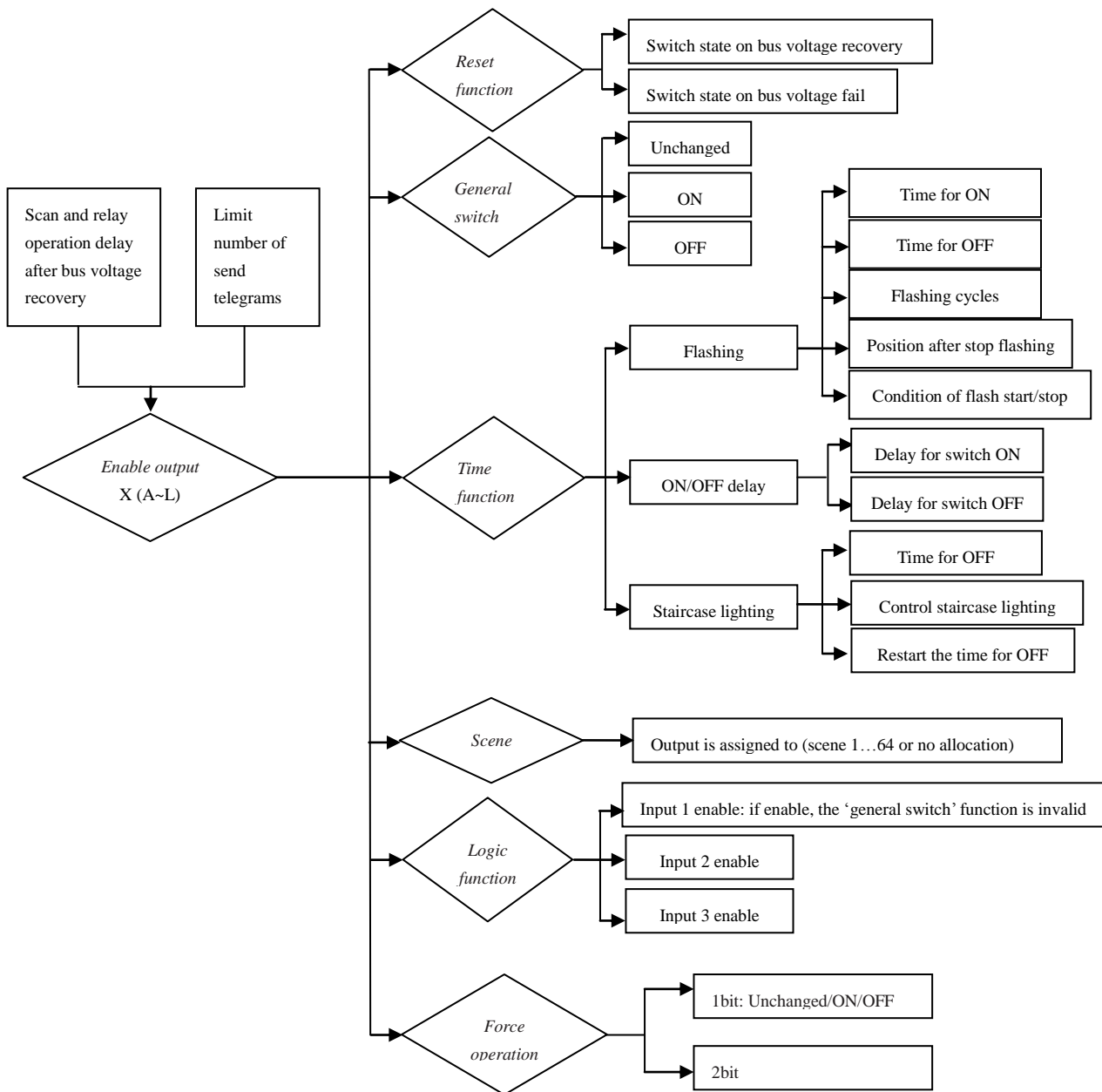
The communication of the devices via the KNX bus also enables control functions as well as sending of emergency signals from the rooms to a control centre.

The integrate into a hotel management system enables the efficient management and provision of rooms. For example, when a guest checks out, the room is automatically set to standby mode. Meanwhile the hotel managers can know the use of the room at any time and the service needs etc.

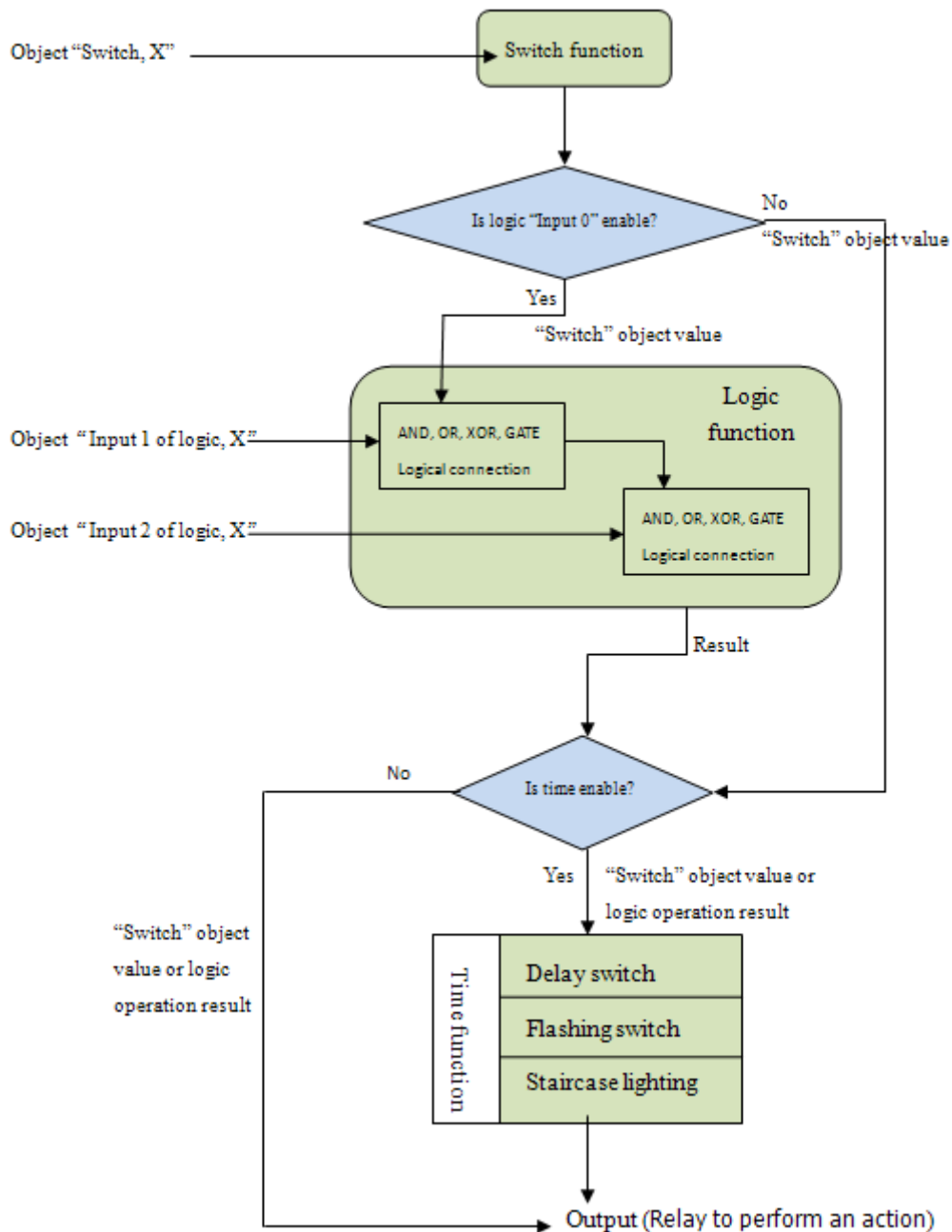
Function Overview-*Dry contact input*

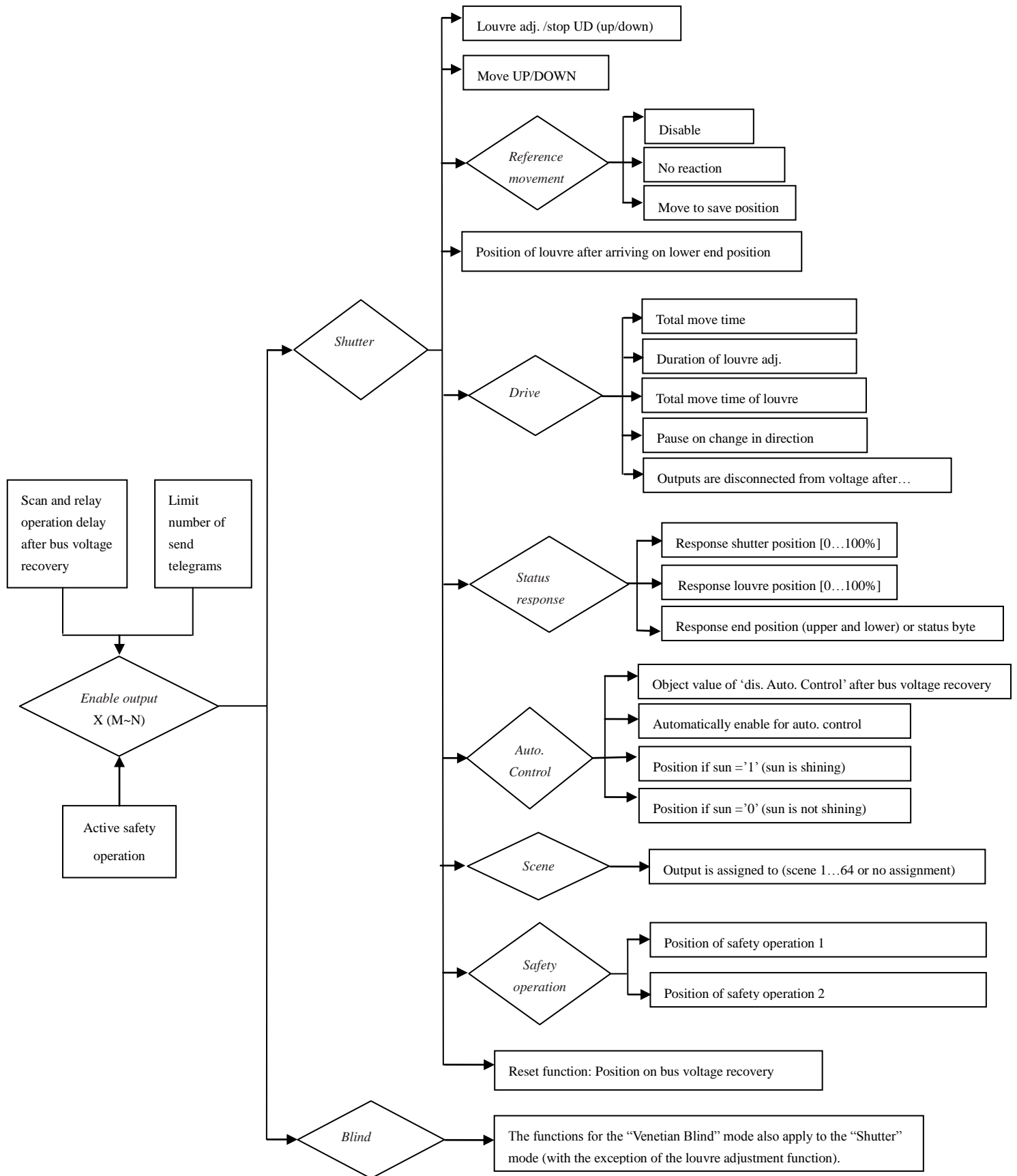
K-BUS®





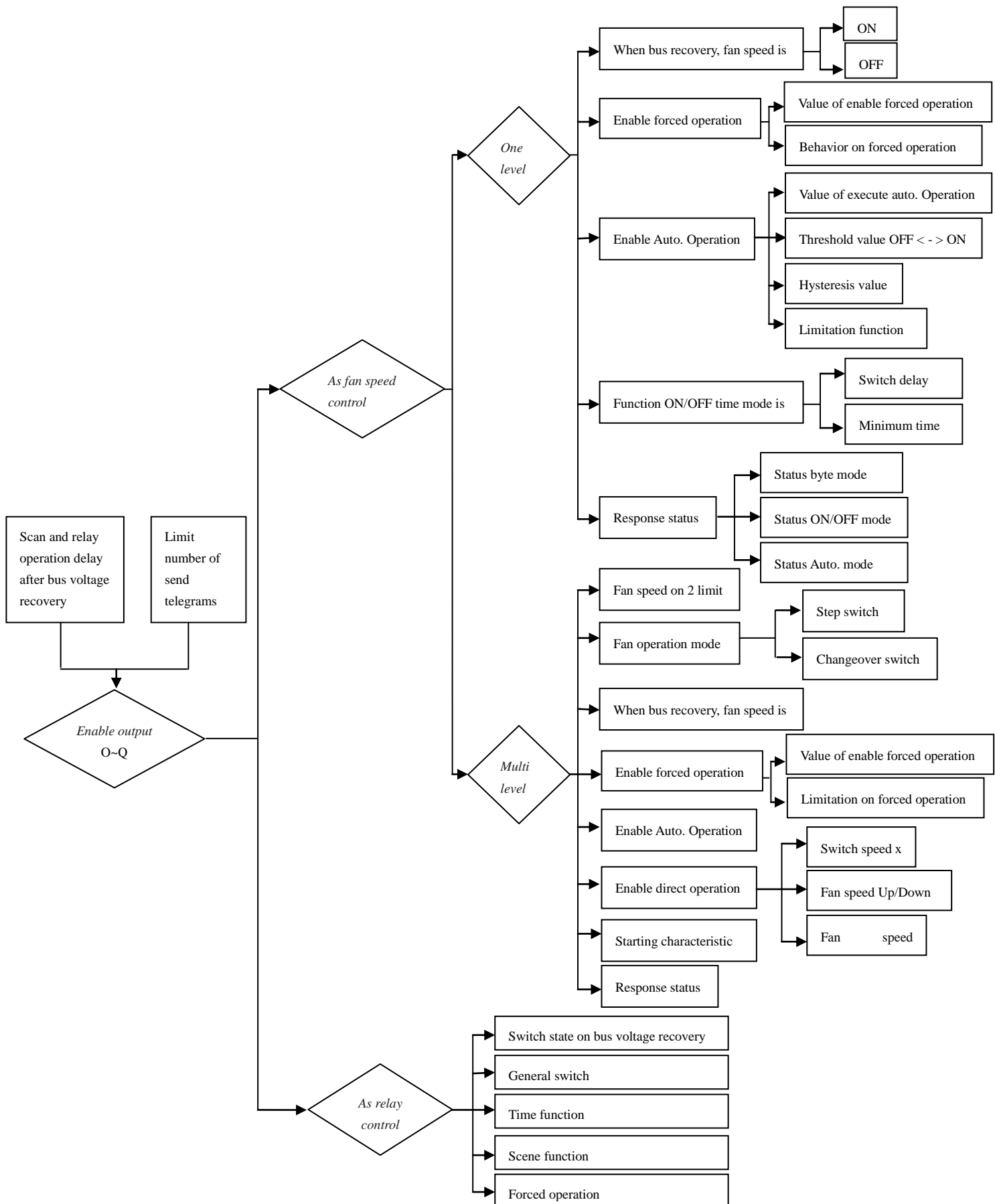
Switch, time and logical function diagram

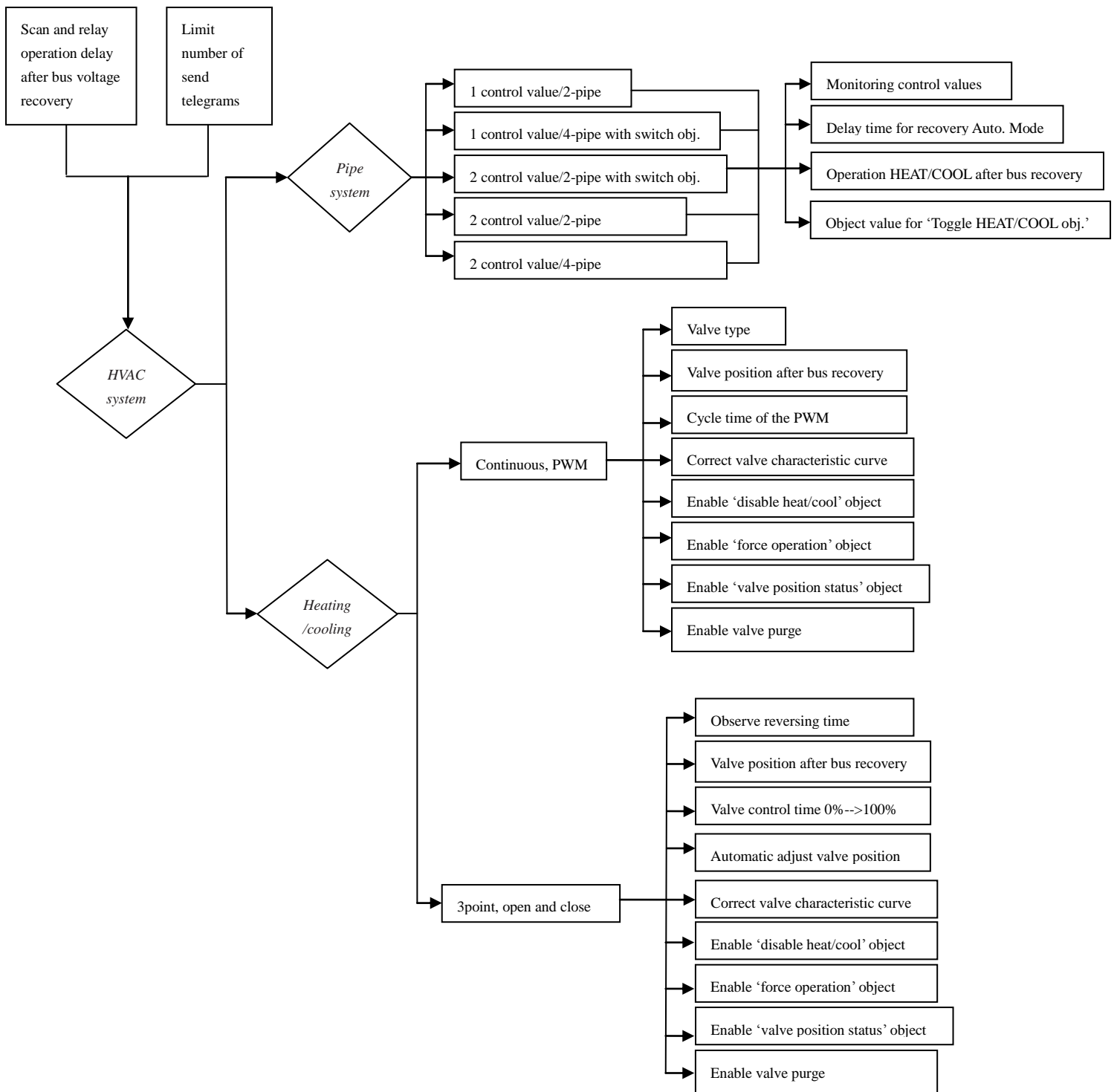


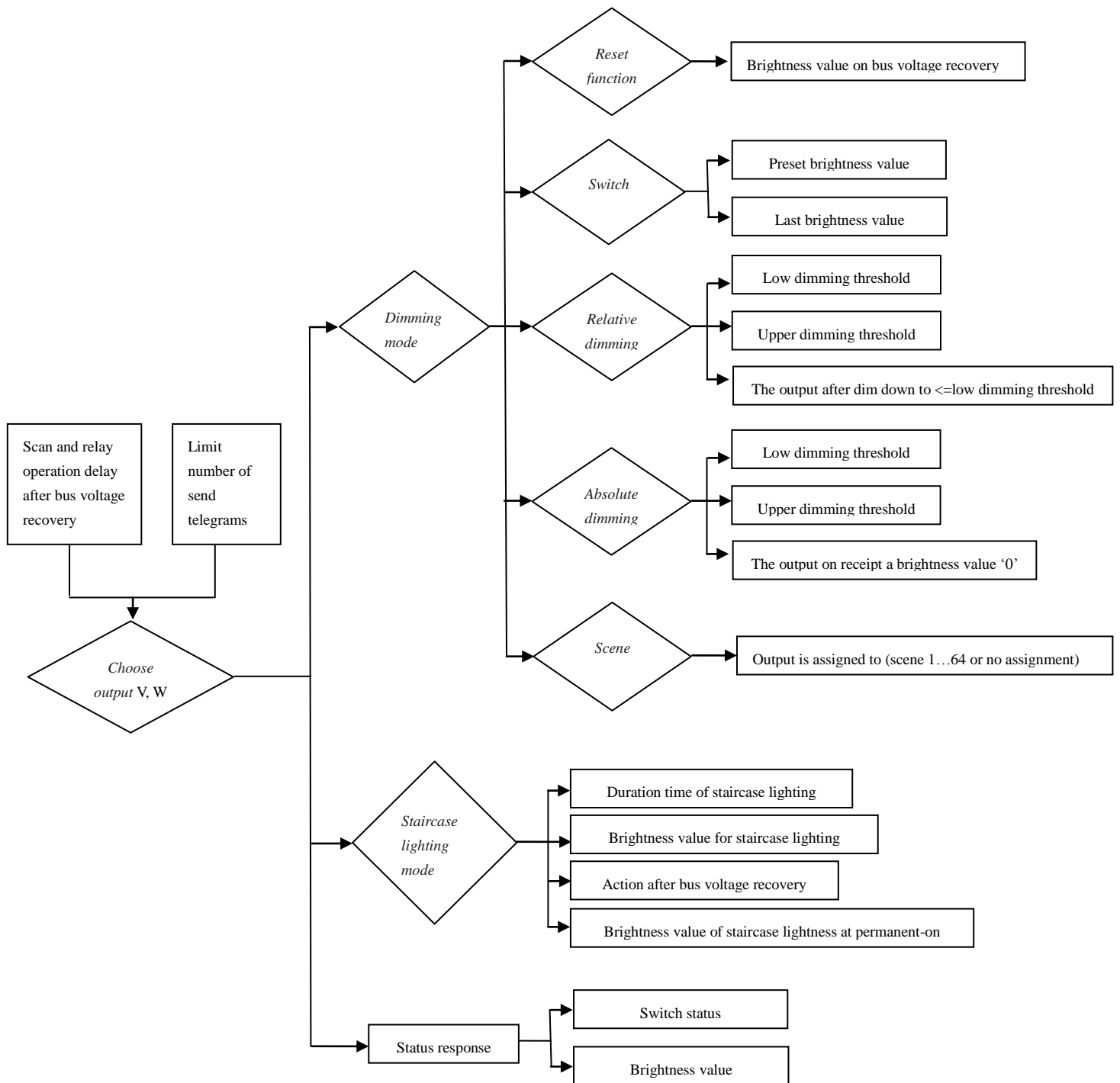


Function Overview - control Fan speed

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Supply	Bus voltage	21~30V DC
	Current consumption, EIB	<12mA
	Power consumption, EIB	<360mW
	Auxiliary supply	100~240V AC
	Power consumption of Auxiliary supply	<3W
	Power consumption, Output 16A	<2W
	Power consumption, Output 6A	<3W
	Power consumption, dimmer 1A	<2W
	Power consumption, HVAC 1A	<1W
	The max. power consumption of the device	<11.36W
Connections	EIB/KNX	Via bus connection terminals (red/black), 0.8 mm Ø
	Outputs, 16A	Screw terminals Wire Range 0.5-4mm ² Torque 0.8N-m
	The device of the upper Inputs/Output	Screw terminals Wire Range 0.5-1.5mm ² Torque 0.5N-m
	The device of the lower Inputs/Output (except Output 16A)	Screw terminals Wire Range 0.5-2.5mm ² Torque 0.5N-m
	Operation/display	Programming button/ red LED Green LED flashing
Housing	IP 20, EN 60 529	
Temperature range	Operation	-5°C+45°C
	Storage	-25°C+55°C
	Transport	-25°C+70°C
Ambient conditions	Max. air humidity	<93%, except dewing

Design	Modular installation device (MDRC)	
Housing/colour	Plastic housing, grey	
Installation	On 35mm DIN-Rail	To EN 60 715
Dimension	90 mm ×216 mm ×63mm	
Weight	1KG	
Input	20 channels	Can be individually parameterized per Input (all inputs are internally connected to the same potential)
	U _n scanning voltage	24V DC
	I _n scanning current	0.4mA
	Permissible cable length	≤10m
Output, Dimming	2 channels	Can be individually parameterized per Output
	U _n rated voltage	100~240 V AC
	I _n rated current	1A
Output, HVAC	HEAT Valve and COOL Valve	
	U _n rated voltage	85~265 V AC
	I _n rated current	0.5A
Output, 16A	4 channels	Can be individually parameterized per Output
	U _n rated voltage	250/440 V AC (50/60Hz)
	I _n rated current	16A
	Max. switching current	20A/250V AC
	Mechanical endurance	>2 × 10 ⁶
	Electrical endurance	>10 ⁵
	DC current switching capacity (resistive load)	16A/24V DC

Output, lamp load 16A

Incandescent lamp	2500 W
Fluorescent lamp, not compensated	2500W
Fluorescent lamp, Parallel compensated	1500W
Fluorescent lamp, DUO-combination	1500W
Halogen lamp (230 VAC)	2500W
Low-voltage halogen lamp with inductive transformer	1200W
Low-voltage halogen lamp with electronic transformer	1500W
Mercury arc/sodium discharge lamp not compensated	2000W
Mercury arc/sodium discharge lamp parallel compensated	2000W
Dulux lamp, not compensated	1100W
Dulux lamp, parallel compensated	1100 W

Output, 6A	13 channels	Can be individually parameterized per Output (including switch, shutter and fan)
	U _n rated voltage	240/400V AC (50/60Hz)
	I _n rated current	6A
	Max. switching current	10A/240V AC
	Mechanical endurance	> 2 x 10 ⁶
	Electrical endurance	>10 ⁵
	DC current switching capacity (resistive load)	8A/30V DC

Output, lamp load 6A

Incandescent lamp	1200 W
Fluorescent lamp, not compensated	800W
Fluorescent lamp, Parallel compensated	300W
Fluorescent lamp, DUO-combination	350W
Halogen lamp (230 VAC)	1000W
Low-voltage halogen lamp with inductive transformer	800W
Low-voltage halogen lamp with electronic transformer	1000W
Mercury arc/sodium discharge lamp not compensated	1000W
Mercury arc/sodium discharge lamp parallel compensated	800W
Dulux lamp, not compensated	800W
Dulux lamp, parallel compensated	800W

Note:

The above load is only for single lamps. In the case of several lamps in parallel, the load will be reduced, although the power is unchanged, but the instantaneous impact of current will increase, and easy to make the relay contacts melted. So, in normal use, subject to the measured current, the measured maximum inrush current must be within the allowable range.