

Following developments report state of EPROM-version 910.

For set-ups are made continuously several functions may be available in earlier versions too. This is to note if function is available in parametrization.

to: **EKM64-Description (part I)**

new basical functions:

Security chain items 2.2.3 /**Control of drive** item 2.3.2

- $\square\square \sim \square\square\square\square$ intermediate grip to security chain (050E) **E**
 Parametrition: SK0-Test-Modus: no
 with SK0-grip
 SK1 becomes SK0

Without signal at SK0 the control is blocked (stop at once) and enables no automatic restart after that.

Lowering travel (item 2.3.7.5) remains.

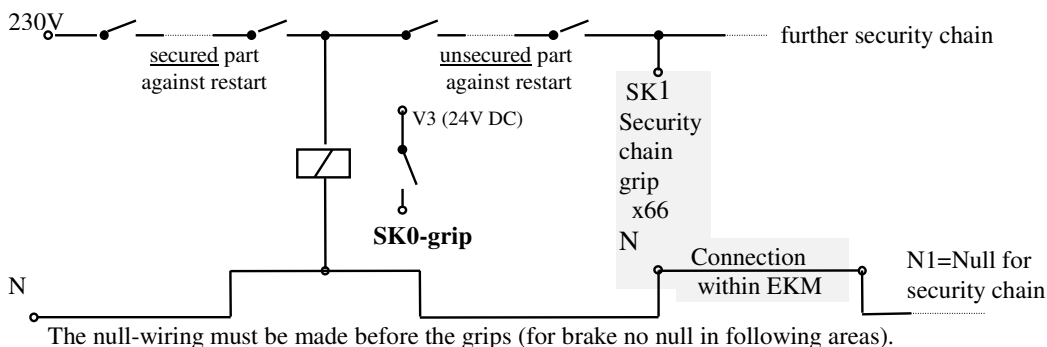
With inspection/re-levelling+direction of travel a RESET is done.

By SK0-grip the security chain could be separated into

„secured part against restart“ (for example emergency switch acc. EN81)

and „unsecured part against restart“ (for example disturbance of regulator)

according principle wiring:



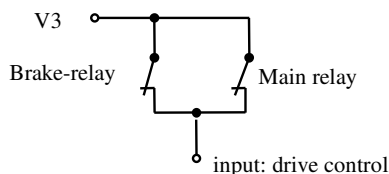
For parametrization „SK1 becomes SK0“ total part before SK1 is protected against restart and SK0-grip is not applicable.

- □□□□ □□□□□□ Drive-control for operation of regulator (0509) E

Deviating from supervising-signal „drive is off“ (see item 2.2.3) this input as a real indicator of travel should evaluate travel-outputs behind regulator.

This avoids control an attraction of trip-time monitoring which could be possible for unfavourable interface of regulator. It is suitable to control the input via auxiliary contacts of main relays and of brake-relay as follows.

If this input is without voltage, EKM64 notes that the lift has a complete travel signal and would travel therefore.



- □□□□□□□□□□, □□, □ Coded control of regulator (B014-B017) **A**

Parametritition: *Drive coded: no / yes – with HEX-values

Via these max 4 outputs a nominal speed could be given coded to regulators.
(per speed a HEX-value could be parametered)

- □□□ ~ □□□□□□□□) (espec. for export) (050A) **E**
- □□□ ~ □ ~ □□□□□□□□) (espec. for export) (050B) **E**

Parametritition: *SIS-test: no
, simple (1 test-grip only: SIS-control)
double (2 test-grips: SIS→SIS-2.control)

This function is not allowed acc. TRA200/EN81 !

With help of these inputs the operation of a reduced security circuit (SIS) is possible.
This is to layout with double security as usual. Noting of first fault and referring shut-down
accords to software only while evaluation of these control-inputs.
Fault-display: SIS-test-stop

- □□□ ~ □□□□□□□□) (espec. for export) (050C) **E**
- □□□ ~ □ ~ □□□□□□□□) (espec. for export) (050D) **E**

Parametritition: *SK2-test: no
, simple (1 test-grip only: SK2-control)
double (2 test-grips: SIS→SIS-2.control)

This function is not allowed acc. TRA200/EN81 !

In case the security chain is operated with an other voltage than 230V AC, the voltage is to transfer
directly before SK2 with 2 relais (double security) to 230V AC. Report of a relay-fault (1.fault) and
referring shut-down accords to software only while evaluation of these control-inputs.
Fault-display: „SK2-test-stop“

Door operation item 2.3.3

- □□□□□ ~ □□□□□□ ~ □□□□, □□ Limit switch – door 1 is open (0208) **E**
 - □□□□□ ~ □□□□□□ ~ □□□□, □□ Limit switch – door 2 is open (0209) **E**
- Parametritition: *Mode of limit switches: with 150ms repressing (standard)
without repressing

Inputs will stop signals „Door-open Tx“ and „Door-close Tx“ with or without repressing.
Signals „Door-permanent-Open/Close“ and „Locking“ will not be influenced by this.
These inputs enable evaluation of door-limit switches on 24V area and therefore save of wires in
travelling cable. Repressing is done for it is not possible to adjust limit switches and security chain
switches exactly corresponding.

- □ ~ □□□□ ~ □□□□, □□ Shaft door 1 is open (020A) **E**
- □ ~ □□□□ ~ □□□□, □□ Shaft door 2 is open (020B) **E**

The inputs serve to control of cabin-door for „manual operated shaft doors“
- Signal is get: Cabin-door remains open, after 2minutes fault „Shaft door“
- no signal: Cabin-door closes.

Update to description EKM64 Elevator control	REKOB A	page 2 of 2
---	----------------	----------------

(Special functions of parametritition for doors)

* Forced door-opening: yes/no

For „yes“ the door opens even after special traves as stop-correction, lowering, parking travel and orientation travel once by arrival. This is for support of persons who travel in cabin without setting car-call.

ref. function of input: Light-barrier T1/T2

* Light-barrier active: standard always (as before)

with HK1 only (with sence only if these are given in all floors)

in door-zone only

With these parameters the validity of light-barrier is limited.

Light-barriers mounted between doors of cabin and shaft are normally attracted by mechanics of shaft-doors outside door-areas.

Without restriction of light-barrier a start out of these locations (after unnormal stop) wouldn't be possible sometimes.

* Resting time addition: [s] (0,1,...,12)

Enlarging of resting time for hall-calls (for input of aim-floor in cabin).

Calls (item 2.3.4):

- □□□□(to Hand4) ~ □□□ ~ □□(to H64) (Handicap call-input) (3000-333F) **E**
- □□□□(to Hand4) ~ □□□□ ~ □□(to H64) (Handicap call-output) (D000-D33F) **A**
- □□□□(to Hand4) ~ □□□ ~ □□(to H64) (Handicap call-uni-terminal) (6000-633F) **U**

Parametritition: *Handicap calls (special functions) : no (or)

for Uni (1-wire) : type (call-function), time(window);
Limit (amount); Limit-mode (exact or at least)

for E/A (2-wires) : as Uni but additionally

Display-mode: standard, with start-sign, blinking

This type of call allows „coded calls“ for informed user without key. Call-button will cause any EKM64 call-function accord. a parametered operation-cycle.

for Uni:(1-wire) Button could be parametered in a time-window at least/exact to be operated for a certain amounts. For each operation it will be confirmed by „light“ and demanded for next operation while light off.

for in/outputs(separated 2-wires) as for Uni, but

signal/confirmation depends on parametritition:

standard: light in button only after overstep of handicap

with start-signal: as standard, additionally short lightning-signal for 1.operation.

blinking mode: as standard, additionally blinking after 1. operation.

Indications item 2.3.5:

- □□□□ ~ □□□□□□ ~ □ ~ □□ next travel direction, type of indication: E (8508) **E**
- □□□□ ~ □□□□□□ ~ □ ~ □□□□ (8508) **E**

Additionally indicator-type „E“ is given which responds to typical direction-indication

in cabin: while travel: indication of travel direction

while approach: evtl. next-travel direction

while inching: no indication

(new parameters)

Durance of gong: [s] (0.2, 0.3,...,4,...5)

Frequency of blinking [s] (1, 2,4,8) Location-indications are blinking while fault (if lift is not ready for operation).

Update to description EKM64 Elevator control	REKOBÄ	page 3 of 3
---	---------------	----------------

For external signalisations or evaluations signals at outputs are now provided:

• □□□□□, □□□□□□□□□□ (8610) A

• □□□□□, □□□, □□□□□ (full readiness for all types of calls) (8611) A

In case of following operation-states resp. fault-indications (collective signals too) the possible attractions are listed in schedule.

• □□□□ ~ □□□□, □□□□□ (8600) A

• □□□□, □□□□□ (8601) A

• □□□□□□□□□□, □□□□□ (8602) A

• □□□□□□□□, □□□□□□□□□□ (8603) A

• □□□□□□□□□□, □□□□□□□□ (8604) A

• □□□□ ~, □□, □□□□□ (state of EKM-thermo inputs) (8605) A

Faults and exeptions of EKM64 with signal at display:

	Exeptions						Readyness ready for calls *)
	Trip- time	Door- fault	Collective fault	Special operation	Pref. travel	Temp. of motor	
Test of system							
Lift attendant							
Stop-correction (travel)							x
Call operation							x
SIS fault			x	x			
Inching fault			x	x			
Call blockade							
Overload							
Hall-call blockade					x		
Full load							
Lowering travel							x
Parking travel							x
Warm-up travel							x
Preference travel					x		
Light-barrier fault		x	x	x			
Door fault		x	x	x			
Shut-down				x			
Learning travel				x			
Evacuation				x			
Firemens travel				x			
Thermostop-travel			x	x		x	
(for fault): lowering			x	x			
Light-barrier (permanent)		x	x	x			
Shaft door (permanent open)		x	x	x			
Open-door button (permanent)		x	x	x			
Light-barrier stop				x			
no shaft (signals)			x	x			
Drive braked			x	x			
SK2-test-stop			x	x			
SIS-test-stop			x	x			
EN81-overload			x	x			
Travel blockade				x			
Trip-time fault	x		x	x			
Security chain(SK1-open)			x	x			
SK0-fault			x	x			
Inspection				x			
Re-levelling				x			
Thermostop2			x	x		x	
Thermostop1			x	x		x	

Update to description EKM64 Elevator control	REKOBA	page 4 of 4
---	---------------	--------------------

Special call control and measure of loading (item 2.3.8.)

(new function of input)

- □□□□ ~ □□□□□□□□ (0405) E

Consequences as input „overload“, but additionally:
All travels except inspection/re-levelling will be suppressed. Travels which have started will end.
Measure of loading is active while resting only.

additional variants of parametrition:

*Reversion for call: (Effect on hall-call to several lifts of group)
(which rest in this floor.)

at once and all: leaving lifts (closing started) re-open first
(free choise of entrance)
one lift only: operation lift will be selected first (delay <1sec)
and one lift only will react
blocked leaving lift (closing started) is not regarded.
Selection is done between remaining lifts.

*Misuse cabin: No / Yes with limit: misuse for: 2,3,...5
Operation of many car-calls without intention of travel should become without effect.
For each car-call an operation of light-barrier in referring floor is expected. Otherwise
remaining car-calls will be erased if limit of allowed operations is overstepped.

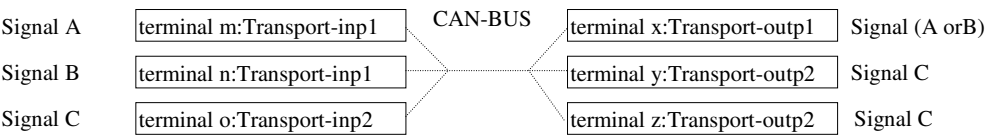
*Misuse hall: No
standard (all floors)
in area: request: (upper / lower stop in area)
Common operation of hall-call buttons „UP“ and „DOWN“ should be ignored. „Simultaneousness“
„kind of ignorance“ are evaluated from:
(min.)pause for call inputs: [s] (0, 0.1,...,10)
and misuse cancel-mode: -first call remains
-preference to base-floor (effects delay of operation)
-cancel of both calls (effects delay of operation)
-hard blockade (first operation will block 2.button)

2.3.10. Special functions (new block of function)

- □□□□□□□□ ~ □□□□ (to 8) (0501-0508) E
- □□□□□□□□ ~ □□□□ (to 8) (8701-8708) A

These functions allow transmission in couples any signal (24V DC) via CAN-BUS
(for example from cabin to machine room etc.)

Allowed multiple-parametrition to terminals effects:
for inputs: an „OR=-coupling of signals
for outputs: a multiplication of signal-output



- □□□□□□□□ ~ □□□□□□ ~ □ (to 7) (3500-3506) E
- □□□□□□□□ ~ □□□□□□ ~ □ (to 7) (D400-D406) A
- □□□□□ ~ □□□□□ (to 4) ~ □□ (to H64) (6800-6B3F) U

Parametritition: Special-software: no; yes
amount of special parameters (1...8) with numeric value

Rare required special functions will be realized with an installation-specific EPROM if necessary. For according I/O-parametrization the special functions exist as frame (8 inputs / outputs each and 4 types of call for Uni-inputs). Concrete meaning of this special functions depends on description of special EPROM. With parametrization „no“ these special functions could be switched-off for facilitation of re-start.

Operation-indications: (item 5.1)

Following display-indications (states) were implemented:

in normal mode	in restricted mode with call-blockades	while average or blockade of use
□□□□□□□□□□□□□□	□□□□. □□□□□□□□□□	□□□□□□□□. □□□□□□
	□□□□□□□□. □□□□□□□□□□	. □□□□□□□~ □□□□□□~. □□□□□□
	□□□□□□□□□□□□□□	. □□□□□□□~ □□□□□□□□□□.
	□□□□□□□□~ □□□□□. □□□□□□□~ □	. □□□□□□□□□□□□□□.
	□□□□□□□□□. □□□□□□□□	. □□□□□□□~ □□□□□. □□□□□□□□.
	. □□□□□□~ □□□□□□□□□□	. □□□□. □□□□□□□□.
		. □□□□□□□□□□. □□□□□□□□.
		. □□□□□□~ □□□□□□~ □□□□□□.
		. □□□□□□~ □□□□□□~ □□□□□□.
		. □□□□□□□□□. □□□□□□□□□□.

Following additional main-parameters (explained in part I) were implemented in parametritition:

Drive:

SK0-Test-mode
Re-levelling speed
*Softstop-re-level.
*Drive coded
*SIS-control
*SK2-control

Special functions

Shut-down
Lift attendant
Light-barrier stop
*Reversion for call
*Misuse cabin
*Misuse hall
*Forced opening of door
*Inspect.-mode
*Handicap calls
*Resting time addition.
Special software

Doors

*Limit-switch mode
*Light-barrier active

Indications

Durance of gong
Frequency of blinking

Additional hints on parametritition-level: (to set-up while basical parametritition)

Special parametritition-functions marked with „ * “ are to view and are available in parametritition-level „Insider“. Backstep to parametritition-level „Standard“ may cause change of insider-functionen into basical set-ups.

I/O -parametritition:

For entering the I/O-parametritition the request

?I/O-change: yes / no

is done.

For „no“ and to avoid operation-faults, in following steps only changes in I/O-parametritition are shown and input is blocked.

In choise of input-type the parameter

Negate logic: (yes / no) was inplemented.

For „yes“ a choise is offered for each terminal: normal=NO-contact / negate=NC-contact.

This enables: each input-signal to set-up could also be used negated
each output-signal to set-up could also be used negated.