#### The following instructions describe the programming of the ELS function.

While the basic programming can be carried out via LC display, the ELS function can exclusively be programmed via Web interface.

<b>7</b>	Sicher Emerge								
	overview te	st results	maps	configuration	administration				
miniControl plus	: myC 12375 > con	npact list			system			Language EN - English 🔹	
Click on a lam	np symbol next	to a systen	n to sho	w a detailed sta	subsystems	e	iem		
⊖o.k. ⊖not	available 🔇 e	rror			all circuits				
system	system	name			circuits		circuit	state	
master	<u>myC 12</u>	<u>2375</u>			tests		5 circuits	Operational	
					maps				

#### Select ELS menu:

[system IP]  $\rightarrow$  administration <sub>(drop-down menu)</sub>  $\rightarrow$  circuits

Upon delivery: 192.168.005.026

Sicherhei Emergeno overview test res	y lighting		Iministration				
	ad circuit						
circuit parameters ( DCM 12E HW.6 SW.7 ) operating mode   circuit number number of lamps position operating mode   1 • 0 • 0 Circuit Foyer Dauerlicht (ELS) •   stop delay supply duration circuit monitoring current reference value   1 min • • • 0 W							
circuit line monitors ( <u>hide / shor</u> SAM input S02.1: <u>MC-LM 2</u>		AM input	а	ctivated SAM	input	activated	
lamp monitoring ( <u>hide / show</u> ) lamp monitoring disabled	all	1 - 5	6 - 10	11 - 15	16 - 20		
lamp operation mode( <u>hide / sh</u>	ow) all	1 - 5	6 - 10	11 - <b>1</b> 5	16 - 20		
non-maintained maintained switched maintained	0 0 0						
lamp switching ( <u>show</u> ) lamps ( <u>show</u> )							

programme the number of luminaires the correct number of luminaires has to be configured to activate the ELS function

enter the position of the circuit (optional)



**Save circuit** the page will be reloaded after the saving process

Programming points 1 – 3 can be carried out via LC display. Please follow the documentation supplied with the system. Programming points 4 – 7 has to be done via Web interface.

# SLS - Single Luminaire Switching

ogramming						
miniControl plus : myC 12375 > administration > circ	uits					
circuit: (K1) 1 • save circuit reload circuit	0					
circuit parameters ( DCM 12E HW:6 SW:	7)					
circuit number number of lamps	positio	on		ор	erating mode	
1 • 20 •	Circuit	Foyer		Da	auerlicht (ELS) •	
stop delay supply duration	circuit	monitoring		cui	rrent reference value	
1 min • 💿 •	currer	nt window : off 🔹		0 \	N reset	
circuit line monitors ( <u>hide / show</u> )						
SAM input activate	ed S	AM input	ad ad	tivated SAM in	put	activated
S02.1: MC-LM 2						
lamp monitoring ( <u>hide / show</u> )						
	all	1 - 5	6 - 10	11 - 15	16 - 20	
lamp monitoring disabled						
lamp operation mode ( <u>hide / show</u> )						
	all	1 - 5	6 - 10	11 - 15	16 - 20	
non-maintained	$\odot$		00000	00000	00000	•
maintained	$\odot$	00000			$\circ \circ \circ \circ \circ$	5
switched maintained	0	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	$\bigcirc \bigcirc $	$\bigcirc \bigcirc $		
lamp switching ( <u>hide</u> )						
SAM input	sing	gle switching using	SAM			
□ hide unused inputs	all	1 - 5	6 - 10	11 - 15	16 - 20	
S01.1: <u>SAM 1 E1</u>					* * * * *	
S01.2: <u>SAM 1 E2</u>						
S01.3: <u>SAM 1 E3</u>						
S01.4: <u>SAM 1 E4</u>						
S03.1: <u>SAM 3 E1</u>						6
S03.2: <u>SAM 3 E2</u>						
S03.3: <u>SAM 3 E3</u>						
S03.4: <u>SAM 3 E4</u>						
S03.5: <u>SAM 3 E5</u>						
S03.6: <u>SAM 3 E6</u>						
S03.7: <u>SAM 3 E7</u>						
S03.8: <u>SAM 3 E8</u>				00000		

4 circuit mains monitor (optional) – switches the complete circuit to mod. BS

**5** programme luminaire operation mode

**6** Iuminaire switching – allocation of the SAM inputs

(optional and only possible with switched maintained lighting and installed SAM24)^1  $\,$ 

**Save Circuit** the page will be reloaded after the saving process

<sup>1</sup> A maximum of 6 different commands for the luminaire switching and circuit mains monitor are programmable

Below several examples for programming the ELS function are illustrated.

### 1. Programming example: Mixed operation circuit with maintained (DS) & nonmaintained luminaires (BS)

circuit: (K1) 1 ▼ sa	ve circuit reload circuit							
circuit parameters (	DCM 12E HW:6 SW:	7)						
circuit number	number of lamps	positio	n		ope	erating mode		
1 •	20 🔻	Circuit	Foyer		Da	uerlicht (ELS) V		
stop delay	supply duration	circuit	monitoring		cur	rent reference value		
1 min 🔻	∞ ▼	curren	t window : off 🔻		0 W	/ reset		
circuit line monitors	circuit line monitors (hide / show)							
SAM input	activa	ted S	AM input	a	ctivated SAM inp	out	activated	
S02.1: MC-LM 2								
lamp monitoring(上	<u>nide / show</u> )							
		all	1 - 5	6 - 10	11 - 15	16 - 20		
lamp monitoring disa	abled							
lamp operation mod	le( <u>hide / show</u> )							
		all	1 - 5	6 - 10	11 - 15	16 - 20		
non-maintained		$\bigcirc$		$\bigcirc \bigcirc $	$\bullet \bullet \bullet \bullet \bullet$	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$		
maintained		$\bigcirc$	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	$\textcircled{\ } \textcircled{\ } @$	$\circ \circ \circ \circ \circ$	${\scriptstyle \bullet \ \bullet $		
switched maintained	I	$\bigcirc$	$\bigcirc \bigcirc $	$\bigcirc \bigcirc $	$\bigcirc \bigcirc $	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$		

lamp switching (show)

lamps (<u>show</u>)

Mixed operation circuit: both maintained as well as non-maintained luminaires are operated in the circuit. The circuit is permanently energised, the maintained luminaires are permanently switched on, and the non-maintained luminaires are only switched on in testing or emergency operation (mod. BS/battery operation).

The circuit is configured as maintained lighting circuit.

In this programming example a switching of single luminaires or the complete circuit is not possible.

The circuit can only be switched on or off via BAS (0/1) or MCT (DS ON/OFF – not in emergency operation!). Both functions switch all circuits in the system.

# 2. Programming example: maintained lighting circuit with switchable maintained luminaires (gDS)

circuit: (K1) 1 ▼ sav	ve circuit reloa	d circuit						
circuit parameters (	DCM 12E HW	:6 SW:7	7)					
circuit number	number of lar	nps	positio	on		0	perating mode	
1 •	20 🔻		Circuit	Foyer		[	Dauerlicht (ELS) ▼	
stop delay	supply durati	on	circuit	monitoring		С	urrent reference value	
1 min 🔻	∞ ▼		curren	nt window : off 🔻		0	W reset	
circuit line monitors	( hide / show	)						
SAM input		activat	ed S	AM input	act	tivated SAM i	input	activated
S02.1: MC-LM 2								
lamp monitoring ( <u>h</u>	<u>ide / show</u> )							
			all	1 - 5	6 - 10	11 - 15	16 - 20	
lamp monitoring disa	bled							
lamp operation mod	e ( <u>hide/sho</u>	<u>N</u> )						
			all	1 - 5	6 - 10	11 - 15	16 - 20	
non-maintained			$\bigcirc$	$\circ \circ \circ \circ \circ$	00000	00000	$\circ \circ \circ \circ \circ$	
maintained			$\bigcirc$	$\circ \circ \circ \circ \circ$	$\circ \circ \circ \circ \circ$	$\circ \circ \circ \circ \circ$	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	
switched maintained			۲	$\bullet \bullet \bullet \bullet \bullet$			$\textcircled{\belowdelta}{\belowdelta}$	
lamp switching ( <u>hic</u>	le)							
SAM input			sing	gle switching using	SAM			
☐ hide unused inputs	5		all	1 - 5	6 - 10	11 - 15	16 - 20	
S01.1: <u>SAM 1 E1</u>				* * * * *	• • • •	• • • • •		

Maintained lighting circuit: the circuit is permanently energised, maintained luminaires are operated in the circuit. The circuit is configured as maintained lighting.

In this example all maintained luminaires are switched on or off through a SAM command (gDS). The circuit remains energised, the SAM command does not de-energise it.

When the gDS luminaires are switched off by the SAM, they function like a non-maintained luminaire – switched off in normal operation (ready-to-operate), switched on in testing or emergency operation (mod. BS/battery operation).

The circuit can only be switched on or off via BAS (0/1) or MCT (DS ON/OFF – not in emergency operation!). Both functions switch all circuits in the system.

# 3. Programming example: maintained lighting circuit with non-maintained luminaires (BS)

Circuit: (K1) 1 ▼ save circuit re	load circuit						
circuit parameters ( DCM 12E H	W:6 SW:7 )						
circuit number in number of	,	ositio	n		oper	ating mode	
1 •	С	ircuit F	Foyer		Dau	erlicht (ELS) ▼	
stop delay supply dura	ation ci	ircuit	monitoring		curre	ent reference value	
1 min 🔻 💿 🔻	C	urrent	t window : off 🔻		0 W	reset	
circuit line monitors (hide / sho	( wc						
SAM input	activated	I SA	AM input	ac	tivated SAM inpu	ıt	activated
S02.1: MC-LM 2							
lamp monitoring ( <u>hide / show</u> )							
, , , , , , , , , , , , , , , , , , , ,		all	1 - 5	6 - 10	11 - 15	16 - 20	
lamp monitoring disabled							
lamp operation mode (hide / sl	how )						
······································	/	all	1 - 5	6 - 10	11 - 15	16 - 20	
non-maintained		۲	${\scriptstyle \bullet \ \bullet $				
maintained		$\bigcirc$	$\circ \circ \circ \circ \circ$	$\circ \circ \circ \circ \circ$	$\circ \circ \circ \circ \circ$	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	
switched maintained		$\bigcirc$	$\bigcirc \bigcirc $	$\bigcirc \bigcirc $	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	
lamp switching (show)							
lamps ( <u>show</u> )							

Maintained lighting circuit: the circuit is permanently energised, the maintained luminaires are switched on only in testing or emergency operation (mod. BS/battery operation). This programming example does not show maintained luminaires. The circuit is configured as maintained lighting circuit.

The circuit can only be switched on or off via BAS (0/1) or MCT (DS ON/OFF – not in emergency operation!). Both functions switch all circuits in the system.

# 4. Programming example: maintained lighting circuit with maintained luminaires (DS)

circuit: (K1) 1 ▼ save	circuit reloa	d circuit						
circuit parameters ( DCM 12E HW:6 SW:7 )								
circuit number n	number of lan	nps	positio	on		oper	ating mode	
1 🔹	20 🔻		Circuit	Foyer		Dau	erlicht (ELS) ▼	
stop delay s	supply duration	on	circuit	monitoring		curre	ent reference value	
1 min 🔹	••• •		curren	nt window : off 🔻		0 W	reset	
circuit line monitors (	( hide / show	)						
SAM input		activat	ted S	AM input	ac	tivated SAM inpu	ıt	activated
S02.1: MC-LM 2		•						
lamp monitoring ( <u>hid</u>	<u>e / show</u> )							
			all	1 - 5	6 - 10	11 - 15	16 - 20	
lamp monitoring disabl	led							
lamp operation mode	( hide / show	v)						
	(	- /	all	1 - 5	6 - 10	11 - 15	16 - 20	
non-maintained			$\bigcirc$	00000	00000	00000	00000	
maintained			۲	$\bullet \bullet \bullet \bullet \bullet$	$\bullet \bullet \bullet \bullet \bullet$	${\scriptstyle \bullet \ \bullet $	${\scriptstyle \bullet \ \bullet $	
switched maintained			$\bigcirc$	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	$\circ \circ \circ \circ \circ$	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	$\bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc$	
lamp switching (show)								
lamps ( <u>show</u> )								

Maintained lighting circuit: the circuit is permanently energised, maintained luminaires are operated in the circuit. The circuit is configured as maintained lighting circuit. In this programming example the maintained luminaires are switchable neither individually nor completely.

The circuit can only be switched on or off via BAS (0/1) or MCT (DS ON/OFF – not in emergency operation!). Both functions switch all circuits in the system.

#### 5. Programming example: Mixed operation circuit with maintained (DS), nonmaintained (BS) and switched maintained luminaires (gDS)

circuit: (K1) 1 ▼ sav	e circuit reloa	d circuit							
circuit parameters (		6 SW-7 )							
circuit parameters (1	number of lan		ositio	n			oper	ating mode	
	20 •			Foyer				erlicht (ELS) V	
	supply duration			monitoring				ent reference value	
1 min T	∞ <b>▼</b>			t window : off •			0 W	reset	
		cu	men				0 11	Teser	
circuit line monitors	( hide / show	·							
SAM input		activated	S	AM input		activate	ed SAM inpu	ıt	activated
S02.1: <u>MC-LM 2</u>		4							
lamp monitoring ( hi	ide / show )								
			all	1 - 5	6 - 10	11 -	- 15	16 - 20	
lamp monitoring disa	bled								
lamp operation mode	• (hide/show	N )							
	• ( <u>Inde / Sho</u>		all	1 - 5	6 - 10	11 -	- 15	16 - 20	
non-maintained			0		00000	0 (	0000	00000	
maintained				00000		۲		00000	
switched maintained				00000	00000	0		$\bullet$ $\bullet$ $\bullet$ $\bullet$ $\bullet$	
lawa awitahina (hid									
Iamp switching ( <u>hid</u> SAM input	<u>e)</u>		sina	le switching using	SAM				
☐ hide unused inputs			-	1 - 5	6 - 10	11	- 15	16 - 20	
S01.1: SAM 1 E1								- 20 	
S01.2: <u>SAM 1 E2</u>									
S01.3: <u>SAM 1 E3</u>									
S01.4: <u>SAM 1 E4</u>									

Mixed operation circuit: both maintained and non-maintained luminaires are operated in the circuit. The circuit is permanently energised, the maintained luminaires are permanently switched on, the non-maintained luminaires are only switched on in testing or emergency operation (mod. BS/battery operation).

The circuit is configured as maintained lighting circuit.

In addition to the "simple" mixed operation mode, in this programming example selected luminaires can be switched individually (SAM 1 E2-E4) or as a group (SAM 1 E1). The maintained and non-maintained luminaires are not affected by these switch commands and remain in their programmed operation mode, as the circuit remains energised. The circuit is not de-energised through SAM commands.

Additionally, a mains monitoring function is programmed in this example. Irrespective of the programmed luminaire operation mode or the state of the gDS luminaires (SAM DS on/off), all luminaires are switched to emergency operation (mod. BS). If the circuit is switched via MCT DS OFF, the luminaires are also switched to emergency operation.

The circuit can only be switched on or off via BAS (0/1) or MCT (DS ON/OFF – not in emergency operation!). Both functions switch all circuits in the system.

## trouble shooting

luminaires cannot be switched	check system requirements (see preface) check switch voltage on the SAM input SAM24 not recognised/detected: • Addressing (double allocation of an address via turn coding switch is prohibited!) • check detection function of the SAM24
SAM24 cannot be detected	check voltage on the SAM24 (voltage range COM-Port +9V to +24V to GND, Error LED on the SAM24 must not shine, ONLY LED OK) check addressing of the SAM24 (double allocation of an address via turn coding switch is prohibited!)
input mask for ELS is not shown	built-in / detected DCM is not a DCM12E but DCM32/42/62
DCM12E are not detected correctly (some are missing)	module detection has to be carried out in charging operation, when using DCM12E
MLED/MU05 remains permanently in emergency operation	mains monitor function wrongly switched or set up