Exiway DALI

Integration of Ordinary and Emergency DALI Luminaires for remote monitoring, automatic test and report management

System configuration and commissioning

Rev. N 1.6





Legal Information

The Schneider Electric brand and any trademarks of Schneider Electric SE and its subsidiaries referred to in this guide are the property of Schneider Electric SE or its subsidiaries. All other brands may be trademarks of their respective owners.

This guide and its content are protected under applicable copyright laws and furnished for informational use only. No part of this guide may be reproduced or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise), for any purpose, without the prior written permission of Schneider Electric.

Schneider Electric does not grant any right or license for commercial use of the guide or its content, except for a non-exclusive and personal license to consult it on an "as is" basis. Schneider Electric products and equipment should be installed, operated, serviced, and maintained only by qualified personnel.

As standards, specifications, and designs change from time to time, information contained in this guide may be subject to change without notice.

To the extent permitted by applicable law, no responsibility or liability is assumed by Schneider Electric and its subsidiaries for any errors or omissions in the informational content of this material or consequences arising out of or resulting from the use of the information contained herein.

Important Information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

CAUTION indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Revision History

Rev number	Date of the release	Release note
1.4	May 2021	First release
1.5	May 2022	 Change of license activation procedure Bug correction for battery status Report for loss of mains power shows wrong values Report should show that there is no communication with the EL Next date of tests and interval should be read only parameters in Bacnet
1.6	June 2021	 Remapping of BACnet variables ETS Prototype project Battery info in KNX set as Update Automatic activation of all export towards bacnet Elimination of csv file necessity Simplification of Create Variable script

Introduction

This application note describes how to integrate the management of ordinary lighting and of emergency lighting inside the automation asset of the building. The advantage of this solution is, firstly, that ordinary lighting and emergency lighting luminaires are installed in the same bus DALI. In addition, all the lighting assets are included in the total asset of the building through the KNX bus. Thanks to the SpaceLYnk, the Emergency lighting system realizes a full automatic system able to execute the necessary automatic tests and reporting of the status according to the standards specific for Emergency Lighting installation.

The architecture is flexible and scalable up to Ecostruxure Building Operation (EBO).

NOTICE: To have the proper execution, SpaceLYnk must have access to internet to get current date and time after each restart. Otherwise, a dedicated KNX module must be used to provide the correct time to the system using a dedicated script to update the date and time of the SpaceLYnk.

The application note can be used for the following references Schneider-Electric Dicube:



Product Codes

Protection rating	Operation	Auton. (h)	Emergency flux (lm)*	Maintained flux (lm)	Model	Туре	Description	Reference
Dicube								
	NM	1	210		SL200	LiFePO4	Exiway Smartled IP65 Dic 210lm NM 1h	OVA48504
	NM	1	300		SL300	LiFePO4	Exiway Smartled IP65 Dic 300lm NM 1h	OVA48507
	NM	1	650		SL600	LiFePO4	Exiway Smartled IP65 Dic 650lm NM 1h	OVA48510
	NM	1	820		SL800	LiFePO4	Exiway Smartled IP65 Dic 820lm NM 1h	OVA48512
	NM	1	1000		SL1000	LiFePO4	Exiway Smartled IP65 Dic 1000lm NM 1h	OVA48521
IP65	NM	2	120		SL100	LiFePO4	Exiway Smartled IP65 Dic 120lm NM 2h	OVA48500
	NM	2	235		SL200	LiFePO4	Exiway Smartled IP65 Dic 235lm NM 2h	OVA48506
	NM	2	550		SL600	LiFePO4	Exiway Smartled IP65 Dic 550lm NM 2h	OVA48508
	NM	2	800		SL800	LiFePO4	Exiway Smartled IP65 Dic 800lm NM 2h	OVA48520
	NM	3	180		SL200	LiFePO4	Exiway Smartled IP65 Dic 180lm NM 3h	OVA48502
	NM	3	600		SL600	LiFePO4	Exiway Smartled IP65 Dic 600lm NM 3h	OVA48522
	M - NM	1	210	180	SL200	LiFePO4	Exiway Smartled IP65 Dic 210lm NM 180lm M 1h	OVA48505
	M - NM	1	650	300	SL600	LiFePO4	Exiway Smartled IP65 Dic 650lm NM 300lm M 1h	OVA48511
IP65	M - NM	2	120	180	SL100	LiFePO4	Exiway Smartled IP65 Dic 120lm NM 180lm M 2h	OVA48501
	M - NM	2	550	300	SL600	LiFePO4	Exiway Smartled IP65 Dic 550lm NM 300lm M 2h	OVA48509
	M - NM	3	180	180	SL200	LiFePO4	Exiway Smartled IP65 Dic 180lm NM 180lm M 3h	OVA48503
-25°C Activa	/Dicube**							
IP65	M - NM	1	400	180	SL400	LiFePO4	Exiway Smartled -25°C IP65 Act/Dic 400lm NM 180lm	OVA48523



<u>Exiway Smartbeam</u> Product Codes RECESSED

Protection rating	Operation	Auton. (h)	Installation	Flux NM (lm)*	Maintained flux (lm)	Description	Reference
Activa/Dicube							
	M - NM	1.5	Escape routes	220	220	Exw Smartbeam Recessed IP42 Act/Dic 220lm M/NM 1.5h Escape routes	OVA48952
	M - NM	1.5	Anti-panic areas	220	220	Exw Smartbeam Recessed IP42 Act/Dic 220lm M/NM 1.5h Anti-panic areas	OVA48953
IP42	M - NM	3	Escape routes	220	220	Exw Smartbeam Recessed IP42 Act/Dic 220Im M/NM 3h Escape routes	OVA48954
	M - NM	3	Anti-panic areas	220	220	Exw Smartbeam Recessed IP42 Act/Dic 220Im M/NM 3h Anti-panic areas	OVA48955
	M - NM	3	5 lux	220	220	Exw Smartbeam Recessed IP42 Act/Dic 220Im M/NM 3h 5lux	OVA48956

Surface product codes Exiway Smartbeam

Protection rating	Operation	Auton. (h)	Installation	Flux NM (lm)*	Maintained flux (lm)	Description	Reference
Dicube							
IDEE	M-NM	3	Escape routes	190	190	Exw Smartbeam Surface IP65 Dic 190Im M/NM 3h Escape routes	OVA48946
1600	M-NM	3	Anti-panic areas	220	220	Exw Smartbeam Surface IP65 Dic 220lm M/NM 3h Anti-panic	OVA48947



Product Codes Exiway Smartduo ي ا منبع I 1

Protection rating	Operation	Auton. (h)	Flux NM (lm)*	Battery type	Description	Reference
Dicube						
IP65	NM	1	2400	LiFePO4	Exiway Smartduo IP65 Dic 2X1200lm 1h	OVA48060



Product Codes

Exiway Smartexit

Protection rating	Operation	Autonomy (h)	Visibility distance (m)	Battery	Description	Reference
Dicube						
	M-NM	1.5	26	LiFePO4	Exiway Smartexit Dic M-NM 26m 1.5h	OVA48604
1040	M-NM	1.5	32	LIFePO4	Exiway Smartexit Dic M-NM 32m 1.5h	OVA48606
1P40	M-NM	3	26	LiFePO4	Exiway Smartexit Dic M-NM 26m 3h	OVA48605
	M-NM	3	32	LIFePO4	Exiway Smartexit Dic M-NM 32m 3h	OVA48607

Exiway Kitled



DiCube/Dali	Dimensions		Output	voltage	Output Pow.	LiFePO4	l battery	Description	0
Duration	circuit	accumulator	Min	Max	Max	v	Ah	Description	Code
3h	177x30xh21,5	200x19x19	12 V	55 V	3 W	3,2	4,5	Exiway Kitled DiCube/Dali 12-55VDC 3 W / 3 LFP	OVA43700
3h	177x30xh21,5	200x19x19	20 V	105 V	3 W	3,2	4,5	Exiway Kitled DiCube/Dali 20-105VDC 3 W / 3 LFP	OVA43701

Competencies

This document is intended for readers who have been certified on KNX and have experience on SpaceLYnk, Exiway Power and, optionally, Ecostruxure Building Operation (EBO) products.

The integration MUST not be attempted by someone who is new to the installation of each product. In addition, we recommend a basic knowledge of:

- Concepts of KNX technology
- BACnet, LUA scripting
- EBO product if part of the installation

System pre-requisites

This application note has been tested and validated with the following list of Hardware/Software. Before you begin, ensure you have the proper software/hardware.

Software/Hardware	Version
ETS	5.7.4
Spacelynk Cod. LSS100200	2.7
FileZilla Client	3.42.1

Table of Contents

Architecture Design	9
Cybersecurity Notices	10
DALI bus specification	12
ETS configuration	12
Offline preparation of DALI commissioning in ETS DALI commissioning	13 13
SpaceLYnk integration	15
FTP import Import of KNX objects Automatic test execution License Activation Test Report in SpaceLYnk FTP Logging of changes of status How to cancel installation of application note BACnet server preparation	15 16 18 17 19 19 20 20
Annex1: list of Variables	22
Annex2: ETS configuration	26
KNX DALI Devices Gateway level Group level ECG Level	26 26 28 28

Architecture Design

The system is based on Exiway Dicube luminaires. The gateway KNX/DALI is the translator between DALI and KNW environments. SpaceLYnk is the controller of the system, managing the automatic tests and the reporting. EBO can be optionally added to the system to integrate and monitor emergency Lighting installation at upper level.

SpaceLYnk and the gateway KNX/DALI are mandatory part of system to be compliant with the regulation, while EBO is not mandatory but it is recommended to provide higher level of supervision



The implementation of this application note is divided in steps. the correct completion of a step is necessary before moving to the next one.

Calculation of Bacnet variables per installation

Configuration is based on Bacnet object that contain system information System and its changes during the time. It is possible to create up to 2000 Bacnet objects that guarantee a complete system description and and optimal operational efficiency, that is quantifies in the reactivity of the system to follow the changes. Overall quantity of objects (standard and virtual) should be within the limit of 2000 for each SpaceLYnk. In case of more bacnet oobject more SpaceLYnks should be considered.

Object	Bacnet Variables need	KNX Variables needed
Widget	60	77
Gateway Knx/DALI	3	4
Emergency Lighting DALI	4	7
Gruppo DALI	4	4

Cybersecurity Notices

It is strongly recommended that only the following ports are activated for the communication between the installed components and other communication is blocked.

KNX/ DALI gateway

For the KNX/ DALI Gateway that must be connected to the LAN, the ports that will be used are presented.

Function	Connection type	Protocol (Default state)	Default port (TCP or UPD)	Configurable Port	Can be Disabled	Usage when enabled	Internet needed	Optional settings
Client to server comm.	IT	HTTP	80 (TCP)	No		On demand	No	-
Client to server comm.	IT	HTTPS	443 (TCP)	Yes	-	On demand	No	-
Server to Server comm		KNX	-	-	-	Persistent	No	-

Necessary ports of communication for this application note for KNX/ DALI Gateway

SpaceLYnk

SpaceLYnk, as control device, needs to be connected to the LAN. In the next table show the required port configuration

Function	Connection type	Protocol (Default state)	Default port (TCP or UPD)	Configurable Port	Can be Disabled	Usage when enabled	Internet needed	Optional settings
Client to server comm.	IT	HTTP	80 (TCP)	No		On demand	No	-
Client to server comm.	IT	HTTPS	443 (TCP)	Yes	-	On demand	No	-
Server to Server comm.	IT	FTPS	21	Yes	-	Persistent	No	-
Server to Server comm		KNX	-	-	-	Persistent	No	-
Server to Server comm	IT	BACnet		No	Yes	Persistent	No	-

Necessary ports of communication for this application note for SpaceLYnk

EBO

Finally, in case of EBO integration, the following ports are used

Function	Connection type	Protocol (Default state)	Default port (TCP or UPD)	Configurable Port	Can be Disabled	Usage when enabled	Internet needed	Optional settings
Client to server comm.	IT	HTTP	80 (TCP)	No		On demand	No	-
Client to server comm.	IT	HTTPS	443 (TCP)	Yes	-	On demand	No	-
Server to Server comm.	IT	BACnet		No	Yes	Persistent	No	-

Necessary ports of communication for this application note for EBO

Best practice for cybersecurity

For cybersecurity reasons it is suggested that:

- Default password of admin is changed in KNX DALI gateway after its activation
- If the web access to the gateway is not required, disable it.
- Strong password policy to be inserted is EBO

For further information on the cybersecurity of SpaceLYnk, please refer to: "AN002_107 System Hardening Guideline"

DALI bus specification

The solution support only DALI - DT1 Emergency lighting that have batteries on board. There is no constraint in term of DALI Ordinary lighting device type.

Device Type	Device/Application	Standard
DT0	Fluorescent lamps	IEC 62386-201
DT1	Emergency lighting	IEC 62386-202
DT2	Discharge lamps	IEC 62386-203
DT3	Low voltage halogen lamps	IEC 62386-204
DT4	Supply voltage controller for incandescent lamps	IEC 62386-205
DT5	Conversion from digital signal into d.c. voltage	IEC 62386-206
DT6	LED Modules	IEC 62386-207
DT7	Switching function	IEC 62386-208
DT8	Colour control	IEC 62386-209
DT9	Sequencer	IEC 62386-210
DT15	Load referencing	IEC 62386-216
DT16	Thermal gear protection	IEC 62386-217
DT17	Dimming curve selection	IEC 62386-218
DT19	Centrally supplied DC Emergency Operation	IEC 62386-220
DT20	Demand Response	IEC 62386-221
DT21	Thermal lamp protection	IEC 62386-222
DT22	Light-output compensation over lifetime (Draft)	IEC 62386-223
DT23	Integrated light source	IEC 62386-224
DT24	Colour Tc (Draft)	IEC 62386-225
DT25	Colour x,y (Draft)	IEC 62386-226

ETS configuration

The current solution is based on KNX and DALI products. For this reason, ETS is required to perform the configuration of the parameters and the commissioning of the devices used for the emergency lighting. This application note provides a "champion" project where all the parameters are configured for 8 Gateways full of Emergency Lights. KNX Expert should import the project and:

- 1) Remove the GWs not necessary by deleting them.
- 2) On the remaining GWs, change from Emergency Lights to normal lights the ECGs that are not used for Emergency lights or not used at all. You can perform this, by selecting the ECGs that will not be EL and change the ECG Type to another one. With this change many groups will be unlinked, since the ECGs are no longer Emergency Lights. (Figure 1)
- 3) Delete all the KNX groups that are not used so that they are not imported later in SpaceLYnk.

III ETS5™ - ExiwayDali_ChampionProject			
ETS Edit Workplace Commissioning I	Diagnostics Apps Window		
👩 Close Project 🧳 Undo 🛝 Redo	Reports Workplace *	Catalogs Diagnostics	
Buildings 🔻			
🕂 Add Buildings 👻 🗙 Delete 🛨 Downloa	ad 🛛 🔻 🔞 Help 🤌 Highlight Changes	Default Parameters Grant Customer Access	
📳 Buildings 🔹	1.1.1 SpaceLogic KNX DALI Gatew	av Pro > ECG >	
Dynamic Folders	1 5		
⊿ 🛍 test	+ G14,	Group Assignment	Not Assigned
4 💭 prova	+ 615		
🖻 🔲 1.1.1 SpaceLogic KNX DALI Gatewa	. 66,	ECG Type	Self Contained Battery Lamp (switchable)
I.1.2 SpaceLogic KNX DALI Gatewa	+ G16,		
I.1.3 SpaceLogic KNX DALI Gatewa		Operating Mode	Normal Mode
🖻 🖶 1.1.4 SpaceLogic KNX DALI Gatewa	- ECG	Function of Additional Object	No Object 👻
I.1.5 SpaceLogic KNX DALI Gatewa	General		
🖻 ┨ 1.1.6 SpaceLogic KNX DALI Gatewa	ochcha	ECG enabled for Panic Mode	No Yes
I.1.7 SpaceLogic KNX DALI Gatewa	+ ECG 1,	_	
▷ 🕕 1.1.8 SpaceLogic KNX DALI Gatewa	+ ECG 2,	Value on DALI Power Fail (System Failure Level)	100% -
💥 Trades	+ ECG 3,	Value on ECG Power Recovery	
	+ 506.4	(Power On Level)	Last Value 🔻
	+ ECG 5,	Calculation of Dimming Values	🗌 linear 🔘 logarithmic
	+ ECG 6,		
	+ ECG 7.		
	τ ECG 8,		
	+ ECG 9,		

Figure 1: Select with CTRL multiple ECG and change the ECG type to other then Self-contained Battery Lamp

Important notes:

- For each ECG a dedicated KNX group (variable) for the error has been created. This is necessary for the Emergency lights. For the normal lights, if this selection creates any issues the KNX operator in ETS can select to cancel them and handle the errors as they want.
- Furthermore, the ordinary lamps if they are not used can also be deleted to avoid confusion since they will not be used.
- In case an emergency light is added later, the KNX operator in ETS needs to select the specific type and perform the group creation and linking as described in Annex 2

In case someone wants to create the project from start, although it is not suggested, the parameters for the configuration are presented in Annex 2.

Offline preparation of DALI commissioning in ETS

For the offline preparation it is expected from the KNX system integrator to:

- 1) Add on description information that will help lamp identification
- 2) Link normal ECG lamps with necessary groups for a unique control

DALI commissioning

DALI commissioning is performed using the DCA tool of ETS5. Commissioning of the DALI lamps is performed after the offline preparation with the identification of the DALI lamps by the gateway and their assignment in the ECGs selected during the offline preparation. For more information about how to commission DALI lights with DCA read the: "KNX DALI-Gateway REG-K/1/16(64)/64/IP1 - Application

KNX DALI gatewa	y REG-K/1/16(64)/64	4/IP1		
O Commissioning	Scenes	Effects	Time Control 🙃 Report 🥊 Extras 🚯 About	
Restore	New Installat	tion 😸 Post Installation	💼 Easy Replace 👔 State Sync 📕 Download	
Group01	Type Flag	ECG No. Description	Group No. Group Description	Addr Automatic Blinking Of
Roup02		1		Device ECG00
R Group03	0 · ·	2		Davies FCC01
E Group04	1 C	4		II Device ECOUT
Group05		5		Device ECG02
Group06	1 · · ·	6		Device ECG03
Group07	1 · · ·	7		Device ECG04
Compos	1 · · ·	8		
Groupus	1 C 1	9		Device ECG05
Group09	<u> </u>	10		Device ECG06
Roup10	1 C	12		1
Roup11		13		
Roup12	8 · ·	14		
Roup13	1 · · ·	15		
E Group14		16		
. Group15	1 to 1	17		
Group16	1 · ·	18		
a coopie		19		
		21		
		22		
	1 · · ·	23		
	1 · · ·	24		
		25		
	1 · ·	26		
	1 T	27		
	0.1	28		
	1 C	29		
		31		
	8 · ·	32		
		33		
	1 · ·	34		
	÷ -	35		
		36		×

During the commissioning of DALI luminaires, the system integrator should separate the Emergency lights considering the following points:

- According to the EN 62034 regulation 2 Emergency lights close to each other should not perform the autonomy test together, for this reason we have the separation in 2 groups (NOT DALI GROUPS) using the scripts in SpaceLYnk.
- The scripts in SpaceLYnk assign group 1 (NOT DALI GROUP) to the first found emergency light and the group 2 (NOT DALI GROUP) to the next one. This alternation between group 1 and group 2 is applied for all the Emergency lights found in all KNX/ DALI GWs.
- After the identification of DALI Emergency lights using DCA the allocation in specific ECGs should be performed considering the 2 points above.

After the end of DALI commissioning, it is expected that the application of the Gateway is downloaded to the device.

Export of KNX project

The project after commissioned should be exported in *.esf format to be imported in SpaceLYnk. *.knxProj file format is not currently supported.

SpaceLYnk integration

Passwords

For Cybersecurity reasons, it is strongly proposed to use different passwords for different objects

FTP import

The SpaceLYnk file contains 2 folders:

Under ftp folder:

- SystemComposition.xlsx
- Custom_Report_image.png

Under scripts folder:

Scripting-DicubeDali.tar.gz

For configuration of FTP access, following the path:

|--|

The following figure is available:

FTP server	×
Free space	601.3M
Server status	Enabled
Require encryption (FTPS)	
Port	21
Username	ftp
Password	
Username	apps
Password	
External IP	
Passive mode min port	
Passive mode max port	
Leave password blank to ports must be set when FTP port and passive mo	o keep it unchanged. External IP and passive mode you want to access FTP behing NAT. Make sure both ode port range are forwarded on your router.
	OK Cancel

FTP server configuration

On FTP server configuration the user must enable: Server status as well Require encryption (FTPS). Finally, 2 different passwords need to be inserted for accessing user ftp and apps respectively.

Configuring the FTP server, the system integrator must load the necessary files under user ftp for the execution of automatic test and report creation.

Using FileZilla, the connection to the ftp server is established after having ftp server activated. Using username: ftp and relative password. The following files must be uploaded to SpaceLYnk:

- SystemComposition.xlsx
- Custom_Report_image.png

NOTICE1: The SystemComposition.xlsx file should be filled up with the site information BEFORE it is uploaded in the ftp server of SpaceLYnk On the same ftp connection after the commissioning of the system the ftp logs will be available for download. System integrator can change the Custom_Report_image.png with a custom one but it needs to replace the original one with the same name and same dimensions.

NOTICE2: If the above files are not loaded correctly in the ftp server of SpaceLYnk, the necessary scripts cannot run correctly.

Import of KNX objects and scripts

The esf file created from the export of the KNX project needs to be imported in SpaceLYnk.

Note: The discarded groups from Import about the Emergency lights are automatically created from the scripts

After the import of KNX objects the pre-configured scripts need to be imported. This is done using the following path:

Then, select the proper back up of scripts from the download folder.

spacetynk	17 theory									Select negroou	V Langsage: (Eng	sh v stationer Leane
Exercised	Chieflog: Scheduler: Trend log: 1 Reserved Scheduler	ionest We structure Venelization	Vis. graphics Scripting	User access Modbus Fail	Riter solute by catego	Error log Albout						
0	U B	ß	fx @) <u>%</u>	* All categories	<u>10</u>						
Script name +		Sleep interval (iccords)	Description			Calego	0		Etitor	Active Duplicate	Delete
Contral Baltery Br Vadable creation	marganey langu KOT82254	10								67	A 80	8
			€ ays C → y + (= 1 best Norse → (+ best bits P7 ≠ (+ 7 yes) → Foregoing (+ best bits → Foregoing (+ best bits)	Notes Batta mol () ne Batta fre () See Seas free () See Seas freese - (11 K3) () State Seas freese - (11 K3) State Seas () Seas freese - (11 K3) State Seas () Seas (non-milling worth and million and human grant of human grant and and human grant and and human grant and and human grant and and human grant a	port from backup a da data Vera Trace folder Trace folder Trace folder C2 File	x (0) Ster SHUE	Smeth Speedynk (C - •	× \$ 			
(+) Add new sorp												
/ersion: 2.4.0			Nonefil	 Scripting Easy35_Test 2020 	06:05-12.19.tar.gz			File 07 (* gr)	~	0.02 0.01 0.00, Men	ory 11% KNK/TP: ERROR	Spric project data

Import of necessary scripts

NOTICE: This procedure will restore only 2 resident scripts, 7 event scripts and a user script without visual content.

As seen during import of esf file in SpaceLYnk, some knx variables (*.TestResults) are not imported. These will be created automatically using the

"Variable Creation" script. For script to operate correctly, use the "Champion" ETS project or follow in detail what is written in Annex 2

Variable creation script

After the load of the scripts, the "variable creation" script needs to be activated. From the logs of the system the progress of the configuration can be seen. Furthermore, on the "Variable Creation" script, the user needs to define from which address and forward the script can create the variables. The addresses after this value should be free for usage

NOTE:

The first time of the execution the script will look for the parameters related the name of the site (*ReportNomelmpianto*) and a reference e-mail (*ReportMailImpianto*). By default, these variables are created blank and for this reason the procedure cannot be completed successfully and an error message will appear. System integrator should fill this information and activate again the "Variable Creation" resident script.

NOTE 2:

In case the system integrator needs to add in the script a new Emergency light, after doing the necessary work in ETS they need to stop the main script and reactivate the Variable creation script. This script will create the necessary objects and consider the new Emergency lights in the automatic test procedure.

License Activation

Only for the activation of the license, during application note start up (Variable Creation), SpaceLYnk MUST have access to the internet. Access to internet is required to browse necessary web pages and be able to send an email with the configuration. If internet access is not available, the application note cannot start. This means that:

- the necessary automatic tests will not run
- read of Emergency lights status and faults will not be possible

Before the activation of the script "Variable Creation", the System Integrator must compile correctly and upload to the ftp server with username ftp the file named "SystemComposition.xlsx", which will be sent, as attachment, automatically with the mail.

Attention: If the attachment is not added or the name is altered, the mail will not be sent, and the activation will not go ahead.

When the script "Variable Creation" the script will try to connect to the internet to verify the internet access and an e-mail will be sent automatically from the SpaceLYnk to El.tech-support@se.com containing:

- the attached excel file,
- the MAC address of the device
- the name of the installation

This information is necessary in case of request of support to our technical team

When the procedure is completed a dedicated file named "License_eval.txt" will be created and filled up inside with some characters, which are necessary for the validation that the information have been sent. This file must not be manually altered. If altered, the Variable Creation script must be activated again with Internet access for the SpaceLYnk.

After the creation of the file the main script will start automatically.

In case of failure in license activation is strongly suggested to check the following points:

- 1. Attachment uploaded correctly with the correct name: "SystemComposition.xlsx"
- 2. SpaceLYnk has access to the internet not only local intranet. To verify that internet is active try to access Marketplace page in the initial IP address of SpaceLYnk.
- 3. The imported csv file on ftp server should not have the default name of site and email address.

After finishing the automatic progress, the "Variable creation" script will be automatically disabled and "KIT 62034 Self battery" will be automatically enabled.

spacel.Ynk	Schnei	der																					Neighbox	Irs: Select neigh	hbour	۷
Utilities Object	i Object l	igs Schedule	rs Trend	logs Scene	s Vis. s	tructure	Visualiza	tion Vis	graphics	Scripting	User acc	ess Hod	bus En	Ocean	Verts Log	s Error log	a Abo	d.								
Evenilässed		Resident		cheduled		ß	15	Common	functions X	Start-u	(Init) script		Tools S	• Al	er scripts by categories	ategory:	×									
Script name +							Sleep inte	rval (secon	ds)			Description								Category				Editor		Active
Central Battery E	mergency lar	gs KIT62034					10																	1	1	>
Variable creation							60																	1		
																Current le stri Variab * stri Variab * stri	bigs ing: 5) ble cruing: 5)	stem contraction 23, stem conf ration 23, stem conf ration 23, stem conf ration 23, stem conf ration 23, stem conf ration 23, stem conf	1gurati 06.2020 1gurati 06.2020 1gurati 06.2020 1gurati 06.2020 1gurati 06.2020 1gurati 06.2020 1gurati	10011 COMP 0 14:28:2 10011 Codd 0 14:28:2 10011 Codd 0 14:28:2 10011 Comp 0 14:28:2 10011 Comp 0 14:28:2 10011 Comp 0 14:28:2 10011 Comp 0 14:28:2 10011 Comp 0 14:28:2 10011 Comp 0 14:28:2 10011 Comp	atted a ing of co a leted b tion of E s vetion of s leted	outh mmon fun boX unt scri 90% L Report main sr 100X	ctions pts ipt		*	
																Autom	atically a	croll contents	when new	loos appear					Clear	

Verification of proper execution of variable creation script.

Automatic test execution

The selection of virtual group 1 and Group 2 for the test execution is performed automatically for each EL found in the ETS loaded file. The system integrator can change the pre-selected group by changing the tag of **GWXX.ECGYY.TestStart** from *Group01* to *Group02* and vice versa. The location of the tag can be seen in the image bellow

GW01.ECG01.TestStart		1	05. 1 byte unsigned 2		Group01
GW01.ECG01.TestResults		1	245.600 6 byte DAL LTRF 0; LTRD 1; LT		Emergency lights, elTestResult
GW01.ECG01.CS		NE)	07. 2 byte unsigned 4177		Emergency lights, eICS
GW01.ECG01.Battery		1	07. 2 byte unsigned 105		Emergency lights, elBattery

The change of group can be performed after the successful finish of "Variable Creation"

Test Report in SpaceLYnk

For the correct report presentation, system integrator must update the variables related to the report as presented in the image bellow:

ReportNomeImpianto	VI.	250 byte string			Emergency lights, Report
ReportID_Spacelynk		250 byte string			Emergency lights, Report
ReportBrand		250 byte string			Emergency lights, Report
ReportUbicazione		250 byte string			Emergency lights, Report
ReportTotaleAppDALIinstallati	1	250 byte string	458		Emergency lights, Report
ReportDALIInDurationFailed	NE.	250 byte string	none		Emergency lights, Report
ReportDALIInFunctionalFailed	NE.	250 byte string	none		Emergency lights, Report
ReportDALIInDurationPending	NE.	250 byte string	none		Emergency lights, Report
ReportDALIInFunctionalPending	N=	250 byte string	none		Emergency lights, Report
ReportDALIInMissingPower	N=	250 byte string	none		Emergency lights, Report
ReportDALIGeneralFailure	N=	250 byte string	n 369: , GW01: EC		Emergency lights, Report
 ReportMailImpianto	E	250 byte string			Emergency lights, Report

To load the Test Report in SpaceLYnk in English, type the IP address of the SpaceLYnk followed by: "/user/Dicube_EL_report.lp". In full, the link for access the report is:

https://[IP-address]/user/Dicube_EL_report.lp



Figure 2: Report of status in SpaceLYnk level

At the end of the procedure, the user should check the error logs of SpaceLYnk.

FTP Logging of changes of status

SpaceLYnk supports FTP logs which are saved on the internal database. Using these ftp logs the user can monitor the historical operation of the

whole system to understand when and where problems have appeared. The logs are saved in daily files which are saved in monthly folders respectively. The information available are saved in csv format. Local timestamp is written and then the information that is reported. The available information is:

- Autonomy test has been requested/Functionality test has been requested
- Effort to start an autonomy test/ Effort to start a functional test
- Starting autonomy test/ Starting function test
- test command: true /test command: false
- test stopped and postponed
- Lamps returned to original state
- Automatic autonomy test failed/ completed successfully/ needs to be postponed
- Manual autonomy test failed/ completed successfully/ needs to be postponed
- Automatic functionality test failed/ completed successfully/ needs to be postponed
- Manual functionality test failed/ completed successfully/ needs to be postponed

The files are located under ftp server using username ftp and the appropriate password.

How to cancel installation of application note

To cancel the installation of this application note, a user with administration credentials need to perform the following steps:

- 1. Stop the execution of resident script in SpaceLYnk "KIT 62034 Self battery"
- 2. Delete the 2 resident scripts of SpaceLYnk (Variable Creation and "KIT 62034 Self battery" under Configurator/Scripts/Resident
- 3. Delete the 7 event scripts of SpaceLYnk under
 - Configurator/Scripts/Event Based
 - a. elGeneral.Failure
 - b. elBatteryScript
 - c. elCSScript
 - d. elFailureScript
 - e. elGroup01CMScript
 - f. elGroup01TestStart
 - g. elGroup02CMScript
 - h. elGroup02TestStart
 - i. testResultScript
 - j. elTime_ExcScript
- 4. Delete the user library "elFunctions_v2" under Configurator/Scripts/User-libraries
- 5. Delete all objects which are related to the application note
- 6. Connect to ftp server using "ftp" username and password and delete:
- 7. ftp logs folders and files
 - a. SystemComposition.xlsx
 - b. Custom_Report_image.png
 - c. License_eval.txt
- 8. Connect to ftp server using "apps" username and password and delete under folder "user":
 - a. Dicube_EL_report.lp

BACnet server preparation

Using:

Configurator \rightarrow System \rightarrow Network \rightarrow BACNet objects Download csv to verify the number of BACnet objects available.

Interfaces Routes ARP table											
Routes ARP table											
ARP table		(
KNY connection		BACnet of	jects			=					
Kitk connection		Name: Devel	Name: Development_125001 Device ID: 125001								
KNX statistics		Device ID: 1									
BACnet settings		Object prior	Object priority: 16								
BACnet objects BACnet COV settings		- Type	 Instance 	• Name	Current value						
·	L	2 (AV)	4865	GW03.General.Failure	0						
		2 (AV)	4866	GW03.Dali.Failure	0						
		5 (BV)	4869	GW03.GRP01.Switch	false						
		5 (BV)	4870	GW03.GRP01.SetSwitch	false						
		2 (AV)	4871	GW03.GRP01.SetValue	0						
		2 (AV)	4872	GW03.GRP01.Value	0						
		5 (BV)	4873	GW03.GRP02.Switch	false						
		5 (BV)	4874	GW03.GRP02.SetSwitch	false						
		2 (AV)	4875	GW03.GRP02.SetValue	0						
		2 (AV)	4876	GW03.GRP02.Value	0						
		5 (BV)	4877	GW03.GRP03.Switch	false						
		5 (BV)	4878	GW03.GRP03.SetSwitch	false						
E	AACnet settings BACnet objects BAACnet COV settings	AACnet settings BACnet COV settings	AACnet settings BACnet objects BACnet COV settings 2 (AV) 2 (AV) 2 (AV) 2 (AV) 3 (BV) 2 (AV) 3 (BV) 2 (AV) 3 (BV) 2 (AV) 3 (BV) 2 (AV) 3 (BV) 3 (BV) 3 (BV) 3 (BV) 5 (BV)	AACnets ettings BACnet objects BACnet COV settings Ype Instance 2 (AV) 4866 2 (AV) 4866 2 (AV) 4866 3 (BV) 4870 2 (AV) 4872 2 (AV) 4872 5 (BV) 4873 5 (BV) 4874 2 (AV) 4875 5 (BV) 4875 5 (BV) 4876 5 (BV) 4877 5 (BV) 4877 5 (BV) 4877 5 (BV) 4877 5 (BV) 4876 4	AACnet settings BACnet objects BACnet cOV settings • Type • Instance • Name 2 (AV) 4865 GW03.General.Failure 2 (AV) 4866 GW03.GR01.Selfure 5 (BV) 4869 GW03.GR01.Selfure 5 (BV) 4870 GW03.GR01.Selfure 2 (AV) 4871 GW03.GR01.Selfure 2 (AV) 4872 GW03.GR01.Selfure 2 (AV) 4873 GW03.GR02.Selfure 2 (AV) 4876 GW03.GR02.Selfure 3 (BV) 4876 GW03.GR02.Selfure 2 (AV) 4876 GW03.GR02.Selfure 3 (BV) 4878 GW03.GR03.Selfure 3 (BV) 4878 GW03.GR03.Selfure	SACnet stings Object priority: 2 Port 47802 • Type • Instance • Name • Current value 2 Kan's COV settings • Type • Instance • Wan • Current value 2 Kan's 4865 GW03.General-Failure 0 0 2 Kan's 4866 GW03.General-Failure 0 0 2 Kan's 4867 GW03.General-Failure 0 0 2 Kan's 4869 GW03.Genol-SetSwitch false 0 2 Kan's 4871 GW03.GR01.SetSwitch false 0 2 Kan's 4872 GW03.GR01.SetSwitch false 0 2 Kan's 4873 GW03.GR02.SetSwitch false 0 5 (BV) 4874 GW03.GR02.SetSwitch false 0					

Configurator \rightarrow System \rightarrow Network \rightarrow BACNet COV settings

Set Maximum COV subscriptions to a number equal or higher to the BACnet objects.

System Network Services Status Help					
	BACnet of	ojects			- x
	Name: Devel Device ID: 1 Object priori	- opment_125001 25001 i ty: 16			Download CSV
	• Type	✤ Instance	• Name	Current value	
	2 (AV)	4865	GW03.General.Failure	0	
	2 (AV) B	ACnet COV settings			×
	5 (BV) 5 (D)) Ma	ximum COV subscriptions	2420		
	2 (AV)	Changing COV values will values will be reset	cause all active COV subscriptions t	o be cancelled, priority arr	ау
	2 (AV) 5 (RV) GV	/03.General.Failure	1		
	5 (BV) GV	/03.Dali.Failure	1		
	2 (AV) GV	/03.GRP01.SetValue	1		
	2 (AV) GV	/03.GRP01.Value	1		
	5 (BV) GV	/03.GRP02.SetValue	1		
	5 (BV) GV	/03.GRP02.Value	1		
	GV	/03.GRP03.SetValue	1		
	GV	/03.GRP03.Value	1		
	GV	/03.GRP04.SetValue	1		
	GV	/03.GRP04.Value	1		
	GV	/03.GRP05.SetValue	1		
	GV	/03.GRP05.Value	1		
	GV	/03.GRP06.SetValue	1		
	GV	/03.GRP06.Value	1		
				ОК	Cancel

For our solution COV of 1 is ok for all objects.

Annex1: list of Variables

		_	Default	BACNET		
N.	Name	Туре	value	Exported	Explanation	Comment
		2 byte unsigned			Repetition interval of	order to respect the 62034
1	elAutonomyTestRepetition	integer	26	Yes	autonomy tests in weeks	normative
						Do not change manually in
2	olEunctionalityTestPonetition	2 byte unsigned	14	Voc	Repetition interval of functionality tests in days	order to respect the 62034
2		Integer	14	165		Do not change manually in
		2 byte unsigned			Day of month of next	order to respect the 62034
3	elGroup01_AutonomyTestDay	integer	0-31	No	autonomy test for group 1	normative
		2 bute unsigned			Month of year of next	Do not change manually in
4	elGroup01 AutonomyTestMonth	z byte unsigned	0-12	No	autonomy test for group 1	normative
		integer	0-12	110		Do not change manually in
		2 byte unsigned			Year of next autonomy test	order to respect the 62034
5	elGroup01_AutonomyTestYear	integer	20xx	No	for group 1	normative
		2 byte unsigned			Hour of next autonomy test	Do not change manually in order to respect the 62034
6	elGroup01 AutonomyTestHour	integer	0-24	No	for group 1	normative
						Do not change manually in
_		2 byte unsigned			Minute of next autonomy	order to respect the 62034
/	elGroup01_AutonomyTestMinute	Integer 2 byte upgigned	0-60	No	test for group 1	normative Read only value available on
8	elGroup01 AutonomvTestDav R	integer	0-31	Yes	autonomy test for group 1	BACNET level
		2 byte unsigned			Month of year of next	Read only value available on
9	elGroup01_AutonomyTestMonth_R	integer	0-12	Yes	autonomy test for group 1	BACNET level
10		2 byte unsigned	00	No.	Year of next autonomy test	Read only value available on
10	elGroup01_AutonomyTestYear_R	Integer 2 byte unsigned	20xx	Yes	for group 1 Hour of post autonomy test	BACINE I level
11	elGroup01 AutonomvTestHour R	integer	0-24	Yes	for group 1	BACNET level
		2 byte unsigned			Minute of next autonomy	Read only value available on
12	elGroup01_AutonomyTestMinute_R	integer	0-60	Yes	test for group 1	BACNET level
10		250 butes string		No	Full timestamp of next	
13	elGroupo1_nextDuration1estDate	250 bytes string		INO	Full timestamp of last	
14	elGroup01 LastDurationTestDate	250 bytes string		No	autonomy test for group 1	
						Do not change manually. It is
45		hasten		NI-	Indication that the autonomy	a variable for showing the
15	elGroupu1_AutonomyStarted	boolean		INO	test for group 1 has started	Do not change manually in
		2 byte unsigned			Day of month of next	order to respect the 62034
16	elGroup01_FunctionalityTestDay	integer	0-31	No	autonomy test for group 1	normative
						Do not change manually in
17	elGroup01 EunctionalityTestMonth	2 byte unsigned	0-12	No	Month of year of next	order to respect the 62034
		integer	0-12	110		Do not change manually in
		2 byte unsigned			Year of next autonomy test	order to respect the 62034
18	elGroup01_FunctionalityTestYear	integer	20xx	No	for group 1	normative
		2 byte unsigned			Hour of next autonomy test	Do not change manually in order to respect the 62034
19	elGroup01 FunctionalityTestHour	integer	0-24	No	for group 1	normative
						Do not change manually in
		2 byte unsigned	0.60	No	Minute of next autonomy	order to respect the 62034
20		2 byte unsigned	0-60	INO	Day of month of peyt	Read only value available on
21	elGroup01 FunctionalityTestDav R	integer	0-31	Yes	autonomy test for group 1	BACNET level
		2 byte unsigned			Month of year of next	Read only value available on
22	elGroup01_FunctionalityTestMonth_R	integer	0-12	Yes	autonomy test for group 1	BACNET level
22	elGroup01 EunctionalityTestVear P	2 byte unsigned	20xx	Ves	Year of next autonomy test	Read only value available on
25		2 byte unsigned	2011	103	Hour of next autonomy test	Read only value available on
24	elGroup01_FunctionalityTestHour_R	integer	0-24	Yes	for group 1	BACNET level
		2 byte unsigned			Minute of next autonomy	Read only value available on
25	elGroup01_FunctionalityTestMinute_R	Integer	0-60	Yes	test for group 1	BACNET level
21	elGroup01_nextFunctionTestDate	250 bytes string		No	autonomy test for group 1	
					Full timestamp of last	
22	elGroup01_LastFunctionTestDate	250 bytes string		No	autonomy test for group 1	
					Indication that the function	Do not change manually. It is
23	elGroup01 FunctionalStarted	boolean		No	test for group 1 has started	a variable for snowing the status of tests

24	elGroup01_SafePeriodHourStart	2 byte unsigned	0-23	Yes	Hour for starting period of test execution for group 1	
25		2 byte unsigned	0-23	Ves	Hour for ending period of	
20		2 byte unsigned	0-20	163	Minute for starting period of	
26	elGroup01_SatePeriodMinuteStart	2 byte unsigned	0-59	Yes	Minute for ending period of	
27	elGroup01_SafePeriodMinuteStop	integer	0-59	Yes	test execution for group 1 Indication that a duration	
28	elGroup01 DurationTestCentrallyPostponed	boolean		Yes	test of group 1 has been	
20		boolean		103	Indication that a postponed	
29	elGroup01_DurationTestCentrallyPostponeStop	boolean		Yes	now run	
					Indication that a functional test of group 1 has been	
30	elGroup01_FunctionalTestCentrallyPostponed	boolean		Yes	postponed due to safe hour	
31	elGroup01_FunctionalTestCentrallyPostponeSt	boolean		Ves	functional test of group 1 will	
		2 byte unsigned		165	Group 1 command to start a	
32	elGroup01_1estStart	Integer		No	Group 1 command to stop a	Do not change manually
33	elGroup01_StopTestManualy	boolean		No	test Internal variable to	Do not change manually
34	elGroup01_TypeOfTest	boolean		No	understand type of test	Do not change manually
35	elGroup01_CmdStartTestAutonomy	boolean		Yes	Duration test in Group 1	
36	elGroup01_CmdStartTestFunctionality	boolean		Yes	Manual command for Functional test in Group 1	
					Internal variable to understand if last test was	
37	elGroup01_LastTestRequestWasManual	boolean		No	manual	Do not change manually
		2 byte unsigned	0.01		Day of month of next	order to respect the 62034
38	elGroup02_AutonomyTestDay	Integer	0-31	NO	Autonomy test for group 2	Do not change manually in
39	elGroup02_AutonomyTestMonth	2 byte unsigned integer	0-12	No	Month of year of next Autonomy test for group 2	order to respect the 62034 normative
		2 byte unsigned			Year of next autonomy test	Do not change manually in order to respect the 62034
40	elGroup02_AutonomyTestYear	integer	20xx	No	for group 2	normative
11	alGroup02 AutonomyToetHour	2 byte unsigned	0.24	No	Hour of next autonomy test	order to respect the 62034
41			0-24			Do not change manually in
42	elGroup02_AutonomyTestMinute	integer	0-60	No	test for group 2	normative
43	elGroup02_AutonomyTestDay_R	2 byte unsigned integer	0-31	Yes	Day of month of next Autonomy test for group 2	Read only value available on BACNET level
44	elGroup02 AutonomyTestMonth R	2 byte unsigned integer	0-12	Yes	Month of year of next Autonomy test for group 2	Read only value available on BACNET level
45	elGroup02 AutonomyTestYear R	2 byte unsigned	20xx	Yes	Year of next autonomy test	Read only value available on BACNET level
16		2 byte unsigned	0.24	Vee	Hour of next autonomy test	Read only value available on
40		2 byte unsigned	0-24	165	Minute of next autonomy	Read only value available on
47	elGroup02_AutonomyTestMinute_R	integer	0-60	Yes	Full timestamp of next	BACNET level
43	elGroup02_nextDurationTestDate	250 bytes string		No	autonomy test for group 2 Full timestamp of last	
44	elGroup02_LastDurationTestDate	250 bytes string		No	autonomy test for group 2	Do not change manually, It is
45		hadlass		No	Indication that the autonomy	a variable for showing the
45	elGroupu2_AutonomyStarted	boolean		NO	test for group 2 has started	Do not change manually in
46	elGroup02_FunctionalityTestDay	2 byte unsigned integer	0-31	No	Day of month of next autonomy test for group 2	order to respect the 62034 normative
		2 byte unsigned			Month of vear of next	Do not change manually in order to respect the 62034
47	elGroup02_FunctionalityTestMonth	integer	0-12	No	autonomy test for group 2	normative Do not change manually in
40		2 byte unsigned	20.00	No	Year of next autonomy test	order to respect the 62034
40			20XX	NU		Do not change manually in
49	elGroup02_FunctionalityTestHour	2 byte unsigned integer	0-24	No	Hour of next autonomy test for group 2	order to respect the 62034 normative
		2 byte unsigned			Minute of next autonomy	Do not change manually in order to respect the 62034
50	elGroup02_FunctionalityTestMinute	integer 2 byte unsigned	0-60	No	test for group 2 Day of month of next	normative Read only value available on
51	elGroup02_FunctionalityTestDay_R	integer	0-31	Yes	autonomy test for group 2	BACNET level
52	elGroup02_FunctionalityTestMonth_R	z byte unsigned integer	0-12	Yes	autonomy test for group 2	BACNET level
<u>5</u> 3	elGroup02_FunctionalityTestYear_R	2 byte unsigned integer	20xx	Yes	Year of next autonomy test for group 2	Read only value available on BACNET level

54	elGroup02 FunctionalityTestHour R	2 byte unsigned integer	0-24	Yes	Hour of next autonomy test for group 2	Read only value available on BACNET level
55	elGroup02 FunctionalityTestMinute R	2 byte unsigned integer	0-60	Yes	Minute of next autonomy test for group 2	Read only value available on BACNET level
51		250 bytes string		No	Full timestamp of next	
		200 Bytoo ounig			Full timestamp of last	
52	elGroup02_LastFunctionTestDate	250 bytes string		No	autonomy test for group 2	Do not change manually. It is
53	elGroup02_FunctionalStarted			No	Indication that the functional test for group 2 has started	a variable for showing the status of tests
54	elGroup02 SafePeriodHourStart	2 byte unsigned integer	0-23	Yes	Hour for starting period of test execution for group 2	
55	olGroup02 SafaPariadHourStap	2 byte unsigned	0.23	Vos	Hour for ending period of	
		2 byte unsigned	0-23	165	Minute for starting period of	
56	elGroup02_SafePeriodMinuteStart	integer 2 byte unsigned	0-59	Yes	test execution for group 2 Minute for ending period of	
57	elGroup02_SafePeriodMinuteStop	integer	0-59	Yes	test execution for group 2	
					test of group 2 has been	
58	elGroup02_DurationTestCentrallyPostponed	boolean		No	postponed due to safe hour	
50					duration test of group 2 will	
59	elGroup01_DurationTestCentrallyPostponeStop	boolean		No	now run Indication that a functional	
60	alGroup02 EurotionalTactControllyPostponed	booloon		No	test of group 2 has been	
00		boolean			Indication that a postponed	
61	elGroup02_FunctionalTestCentrallyPostponeSt	boolean		No	functional test of group 2 will now run	
		2 byte unsigned		Na	Group 1 command to start a	De net eksene menselle
62		Integer		INO	Group 1 command to stop a	Do not change manually
63	elGroup02_StopTestManualy	boolean		Yes	test	Do not change manually
64	elGroup02_TypeOfTest	boolean		No	understand type of test	Do not change manually
65	elGroup02 CmdStartTestAutonomy	boolean		Yes	Manual command for Duration test in Group 2	
66	olCroup02 CmdStortTootEupotionolity	baalaan		Vee	Manual command for	
00	eloroupuz_chiustan restrunctionality	boolean		165	Internal variable to	
67	elGroup02 LastTestRequestWasManual	boolean		No	understand if last test was manual	Do not change manually
68	ReportNomeImpianto	250 bytes string		No	Report parameters.	Do not change manually
68 69	ReportNomeImpianto ReportID Spacelynk	250 bytes string 250 bytes string		No No	Report parameters. Report parameters.	Do not change manually Do not change manually
68 69 70	ReportNomeImpianto ReportID_Spacelynk ReportBrand	250 bytes string 250 bytes string 250 bytes string		No No No	Report parameters. Report parameters. Report parameters.	Do not change manually Do not change manually Do not change manually
68 69 70 71	ReportNomeImpianto ReportID Spacelynk ReportBrand ReportUbicazione	250 bytes string 250 bytes string 250 bytes string 250 bytes string		No No No	Report parameters. Report parameters. Report parameters. Report parameters.	Do not change manually Do not change manually Do not change manually Do not change manually
68 69 70 71 72	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati	250 bytes string 250 bytes string 250 bytes string 250 bytes string 250 bytes string		No No No No	Report parameters. Report parameters. Report parameters. Report parameters. Report parameters.	Do not change manually Do not change manually Do not change manually Do not change manually Do not change manually
68 69 70 71 72 73	ReportNomeImpianto ReportID Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed	250 bytes string 250 bytes string 250 bytes string 250 bytes string 250 bytes string 250 bytes string		No No No No No No	Report parameters.	Do not change manually Do not change manually
68 69 70 71 72 73 74	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed	250 bytes string 250 bytes string 250 bytes string 250 bytes string 250 bytes string 250 bytes string 250 bytes string		No No No No No No	Report parameters.	Do not change manually Do not change manually
68 69 70 71 72 73 74 75	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInDurationPending	250 bytes string 250 bytes string		No No No No No No No No	Report parameters.	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76	ReportNomeImpianto ReportID Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalFailed	250 bytes string250 bytes string		No No No No No No No No	Report parameters.	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInDurationPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending	250 bytes string250 bytes string		No No No No No No No No No	Report parameters.	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 77 78	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending	250 bytes string 250 bytes string		No No No No No No No No No No	Report parameters. See gateway user guide for more information	Do not change manually
68 69 70 71 72 73 74 75 76 77 77 78 70	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending	250 bytes string 250 bytes string 1 byte unsigned integer		No N	Report parameters. See gateway user guide for more information See gateway user guide for more information	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 77 78 79	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending	250 bytes string 250 bytes string 1 byte unsigned integer		No No No No No No No No No No	Report parameters. See gateway user guide for more information See gateway user guide for more information See gateway user guide for more information	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestResults	250 bytes string 250 bytes string		No	Report parameters. See gateway user guide for more information	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestStart GWXX.ECGYY.TestResults GWXX.ECGYY.CS	250 bytes string 250 bytes string 2 byte unsigned integer		No	Report parameters. See gateway user guide for more information	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestStart GWXX.ECGYY.TestResults GWXX.ECGYY.CS GWXX.ECGYY.Battery	250 bytes string 250 byte unsigned integer 2 byte unsigned integer		No	Report parameters. See gateway user guide for more information	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestResults GWXX.ECGYY.CS GWXX.ECGYY.Battery GWXX.ECGYY.Failure	250 bytes string 250 bytes string 2 byte unsigned integer 2 byte unsigned integer 1 byte unsigned integer		No	Report parameters. See gateway user guide for more information	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 81 82 83	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestStart GWXX.ECGYY.TestResults GWXX.ECGYY.S GWXX.ECGYY.Battery GWXX.ECGYY.Failure	250 bytes string 250 bytes string 1 byte unsigned integer 2 byte unsigned integer 1 byte unsigned integer		No	Report parameters. See gateway user guide for more information	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84	ReportNomeImpianto ReportID Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time Exc GWXX.ECGYY.TestStart GWXX.ECGYY.CS GWXX.ECGYY.Battery GWXX.ECGYY.Failure GWXX.ECGYY.HoursReset	250 bytes string 250 bytes string 2 byte unsigned integer 1 byte unsigned integer 1 byte unsigned integer		No	Report parameters. See gateway user guide for more information	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestResults GWXX.ECGYY.TestResults GWXX.ECGYY.Battery GWXX.ECGYY.Failure GWXX.ECGYY.HoursReset	250 bytes string 250 byte unsigned integer 2 byte unsigned integer 1 byte unsigned integer boolean 1 byte unsigned integer boolean		No	Report parameters. See gateway user guide for more information Bet Stet buration test in progress. Bit 5: Duration t	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time Exc GWXX.ECGYY.TestResults GWXX.ECGYY.TestResults GWXX.ECGYY.S GWXX.ECGYY.Failure GWXX.ECGYY.HoursReset	250 bytes string 250 bytes string 2 byte unsigned integer 2 byte unsigned integer 1 byte unsigned integer		No	Report parameters. See gateway user guide for more information	Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 84	ReportNomeImpianto ReportID Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time Exc GWXX.ECGYY.TestStart GWXX.ECGYY.CS GWXX.ECGYY.Battery GWXX.ECGYY.HoursReset GWXX.ECGYY.HoursReset	250 bytes string 250 bytes string 2 byte unsigned integer 1 byte unsigned integer 1 byte unsigned integer 2 byte unsigned integer		No No	Report parameters. See gateway user guide for more information Bit 0: Rest, Bit 1: Normal, Bit 2: Emergency, Bit 3: Extended Emergency, Bit 4: Extended Emergency, Bit 4: Extended inhibit is on, Bit 8: Lindrived inhibit is on,	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInMissingPower GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestResults GWXX.ECGYY.TestResults GWXX.ECGYY.Battery GWXX.ECGYY.HoursReset	250 bytes string 250 byte unsigned integer 2 byte unsigned integer 1 byte unsigned integer 2 byte unsigned integer 2 byte unsigned integer 2 byte unsigned integer 2 byte unsigned integer		No Yes	Report parameters. See gateway user guide for more information Bit 0: Rest, Bit 1: Normal, Bit 2: Emergency, Bit 4: Function Test in progress, Bit 4: Duration test in progress, Bit 5: Duration test in progress, Bit 5: Duration test in progress, Bit 5: Duration test in propreses, Bit 5: Duration test in propress, Bit	Do not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestResults GWXX.ECGYY.TestResults GWXX.ECGYY.Failure GWXX.ECGYY.HoursReset	250 bytes string 250 bytes string 2 byte unsigned integer 1 byte unsigned integer 2 byte unsigned integer 2 byte unsigned integer 2 byte unsigned		No Yes	Report parameters. See gateway user guide for more information Bit 0: Rest, Bit 1: Normal, Bit 2: Emergency, Bit 3: Extended Emergency, Bit 4: Function Test in progress, Bit 5: Duration test max delay, Bit 5: Duration test max delay, Bit 5: Duration test max delay, Bit 6: Duration test max delay, Bit 6: Duration test max delay, Bit 6:	Do not change manually Do not change manually Co not change manually Do not change manually
68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86	ReportNomeImpianto ReportID_Spacelynk ReportBrand ReportUbicazione ReportTotaleAppDALlinstallati ReportDALIInDurationFailed ReportDALIInFunctionalFailed ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending ReportDALIInFunctionalPending GWXX.ECGYY.Time_Exc GWXX.ECGYY.TestStart GWXX.ECGYY.TestResults GWXX.ECGYY.Battery GWXX.ECGYY.HoursReset GWXX.ECGYY.HoursReset GWXX.ECGYY.EmergencyMode	250 bytes string 250 bytes string 2 byte unsigned integer 1 byte unsigned integer 1 byte unsigned integer 2 byte unsigned integer 2 byte unsigned integer 2 byte unsigned integer 2 byte unsigned integer		No Yes Yes	Report parameters. See gateway user guide for more information Bit 0: Rest, Bit 1: Normal, Bit 2: Emergency, Bit 3: Extended Emergency, Bit 3: Extended improgress, Bit 6: Handwire inhibit is on, Bit 8: Light exceeded hours of operation Bit 0: Circuit failure, Bit 2: Eattery failure, Bit 3: Emergency lamp failure, Bit 4: Emergency lamp failure, Bit 4: Emergency lamp failure, Bit 4: Eintergency lamp failure, Bit 4: Eintergency lamp failure, Bit 4: Eintergency lamp failure, Bit 7: Hardwaire switch is on, Bit 6: Inhibit Mode, Bit 7: Linction test failed	Do not change manually Do not change manually

				test pending, Bit 5: Duration test pending	
88	GWXX.ECGYY.EmergencyCommand	2 byte unsigned integer	Yes	0: No Command, 1,2,3: Reserved, 4: Start functional test, 5: Start duration test, 6: Stop test, 7,8,9,10: Reserved, 11: Reset light hours	
89	GWXX.General.Failure		Yes	See gateway user guide for more information	
90	GWXX.Dali.Failure		Yes	See gateway user guide for more information	
91	GWXX.GRPYY.SetSwitch		Yes	See gateway user guide for more information	
92	GWXX.GRPYY.Switch		Yes	See gateway user guide for more information	
93	GWXX.GRPYY.SetValue		Yes	See gateway user guide for more information	
94	GWXX.GRPYY.Value		Yes	See gateway user guide for more information	

Annex2: ETS configuration

This ANNEX focuses only on the required objects of Emergency lights. In case of presence of other devices, refer to the proper datasheets. KNX integrator needs to take proper actions for the implementation and organisation of necessary KNX groups.

KNX DALI Devices

The supported KNX DALI gateway is MTN6725-0101. For each gateway, specific DALI and KNX parameters need to be adjusted. These parameters will affect the information available in SpaceLYnk and/or EBO level.

NOTICE: The groups addresses can be changed if required. However, the names of the group addresses should not be changed, because they are read by the scripts of SpaceLYnk

Gateway level

On MTN6725 – 0101 gateway level the following adjustments are required:

- GENERAL	Behaviour on KNX Failure	Switch to Panic-Value	•
General	Behaviour on KNX Voltage Recovery	Switch to Last Value	•
Behaviour	Senddelay for Status after KNX Recovery	immediately	•
Analysis and Service	Light Status Send Condition	Send on Change	•
Special Functions	Send Condition in Dimming Mode	If Change > 2 %	•
IP Network	Behaviour after Panic Mode	Switch to Last Value	•
h. Deve devel	Behaviour after Emergency Test	Switch to Last Value	•
- Broadcast			<u> </u>
+ G1,			

General Behaviour parameters of Gateway

- GENERAL General	Failure Status Send Condition Cycle Time for DALI Failure Requests	Send on Change	•
Behaviour	Type of Central ECG Failure Object	🗌 No Object 🔘 Dali Diagnose (1 Byte)	
Analysis and Service			
Special Functions	Function of Failue Object	Total Number of Failures Failure Rate 0100%	
IP Network	Threshold for Total Failures	1%	•
+ Broadcast	Threshold for Lamp Failures	1%	•
+ G1,	Threshold for ECG Failures	1%	•
+ G2,	Threshold for Converter Failures	1%	•

General Analysis and Service parameters of Gateway

- GENERAL	Manual Operation on Device	
General	Disable Manual Operation	No
Behaviour	Broadcast	
Analysis and Service	By enabling the Broadcast Function add	ditional objects can be used to Control the DALI -System
Special Functions	Broadcast enabled	No OYes
IP Network	Emergency	
+ Broadcast	Type of Objects for Emergency	Objects according new KNX Standard
— G1,		 Objects according legacy "old" style
General	System Diagnostic via IP Netwo	rk
Behaviour	Enable System Diagnostic	No Yes

General Special functions parameters of Gateway

- GENERAL	Access via Web Pages	enabeld 🛛 No 🔘 Y	es		
General	IP Address Assigment	Fix IP-Add	ress OHCP		
Behaviour	IP Address	192.168.1.2	3		
Analysis and Service	Subnet	255.255.255.0	4		
Special Functions	Gateway	192.168.1.1			
IP Network	HTTPS Port	443	*		
+ Broadcast	Hostname Resoluti	on (mDNS)			
+ G1,	Due to security care that router the entire system	Due to security reason this Service shall only be used in trusted internal networks. Please, take care that router are configured to block this Service. The selected host name must be unique in the entire system.			
+ G2,	Enable Hostname Reso	Enable Hostname Resolution (mDNS) O No Yes			
+ G3,	Converte Cotting				
+ G4,	Communication on loc	Security Settings Communication on local network, only ONO Yes			
+ G5,	1 The webserver a	The webserver accepts all incomming requests			
+ G6,					
+ G7,	Webpage Access	Webpage Access			
+ G8,	Set the Override ETS Download!	• Set the Override Option only if you want to reset password to ETS Default or during the first ETS Download!			
+ G9,	Override Username an Paramter	Override Username and Password with ETS No Ves			
+ G10,	Password has to	Password has to be changed on web page!			
+ G11,	Account L	ogin Name	Password		
+ G12,	Admin Account ad	Imin	dali		
+ (1)	User Account us	er	user		
τ UI5,			5		

General IP Settings parameters of Gateway

- 1. System needs to write in previous status after a test or after an emergency.
- 2. Failures should be sent every time there is changes on status
- 3. In case of Cyber-security request, the access to the Webpages can be disabled
- 4. IP address of Gateway can be in DHCP or Fix IP-Address
- 5. In case of Cyber-security request, the access to the Webpages can be under password

Group level

For each gateway the following, KNX objects will be available:

- General Failure
- DALI Failure
- Time

Date

•

These parameters need to be linked to KNX Groups that will be used for transferring the information to SpaceLYnk through KNX /TP. The name of the KNX Groups can be selected by KNX System integrator but it is strongly suggested to use a specific template which then can help the integration in EBO.

Warning: In case the default template is not selected the automatic widget of SpaceLYnk will not work.

Specific template of KNX Group names:

Ν.	KNX Parameter	KNX Group name
1	General Failure	GWXX.General.Failure
2	DALI Failure	GWXX.Dali.Failure
3	Time	Time
4	Date	Date

XX: Number of gateway (ex. 01, 02, ... 99)

For each group of DALI components, we need to adjust the following information:

- GENERAL	Group 1, Description		
General Behaviour Analysis and Service	Value on DALI Power Fail (System Failure Level) Value on ECG Power Recovery (Power On Level)	100% Last Value	• 1 •
Special Functions	Operating Mode Function of Additional Object	Normal Mode No Object	•
- Broadcast	Enable for Panic Mode	◎ No ○ Yes	
- G1,	Calculation of Dimming Values	🔵 linear 🔘 logarithmic	
General			
Behaviour			
Colour Control			

Parameters of each group to be adjusted

In parallel for each group the following KNX objects will be available:

Switching

Analysis and Service

- Status, On-Off
- Status, Value
- Set Value

These parameters need to be linked to KNX Groups that will be used for transferring the information to SpaceLYnk through KNX /TP. The name of the KNX Groups can be selected by KNX System integrator but it is strongly suggested to use a specific template which then can help the integration in EBO.

Warning: In case the default template is not selected the automatic widget of EBO will not work.

Specific template of KNX Group names:

Ν.	KNX Parameter	KNX Group name
1	Switching	GWXX.GRPYY.SetSwitch
2	Status, On – Off	GWXX.GRPYY.Switch
3	Set Value	GWXX.GRPYY.SetValue
4	Status, Value	GWXX.GRPYY.Value

- XX: Number of gateway (ex. 01, 02, ... 99)
- **YY**: Number of GROUP (ex. 01, 02, ... 16)

ECG Level

For management of the DALI lamps we need to know for each lamp if it is in fault (Failure status) and whether it has exceeded the operation hours (Life time exceeded). Also, in case it has exceeded the operating hours, and someone has replaced the lamp, a dedicated reset alarm command exists. Apart from this information, since it is an emergency luminaire with a battery on board, extra information are required such as:

- Converter Status
- Battery info
- Test results
- Commands to be sent

To have this information the following configuration is required for each ECG that will be used to have the following status.

- ECG 1,	ECG 1, Description			1
Emergency Setting	Group Assignment	Single ECG		
Behaviour	ECG Type	Self Contained Battery Lamp (switchable)	•	
Analysis and Service				
+ ECG 2,	Operating Mode	Normal Mode	•	
+ ECG 3,	Function of Additional Object	No Object	•	
+ ECG 4,	ECG enabled for Panic Mode	No Yes		
+ ECG 5,				
+ ECG 6,	Value on DALI Power Fail (System Failure Level)	100%	•	
+ ECG 7,	Value on ECG Power Recovery	Last Value	*	
+ ECG 8,	(Power On Level)			
+ ECG 9,	Calculation of Dimming Values	🔵 linear 🔘 logarithmic		
+ ECG 10,				

Parameters of each ECG to be adjusted

— ECG 1,	Value in Emergency Mode	100%	•
Emergency Setting	Delay on Mains Recovery	No Delay	•
Behaviour	Interval of Long Duration Test	No automatical testing	2 *
Analysis and Service	Interval of Functional Test	No automatical testing	•
+ ECG 2,	Test Execution Timeout (Days)	7	
+ ECG 3,			

Emergency setting of EL Dicube

 ECG 1, SmartLed Emergency Setting 	Type of Failure Object 1	bit 🔘 1 byte 3	
	Operation Hour Calculation O	lo 🔘 Yes 4	
Behaviour	Operating Hour Limit (hours) 4000	00	* *
Analysis and Servic	ce		

- Parameter written to identify our ECG during commissioning of system
- Test execution is managed by the SpaceLYnk scripts
- Failure information for EL should be passed in SpaceLYnk.
- Failure Object needs to be 1 byte to have multiple information per type of failure

By activating these parameters, the following KNX objects will be available for each ECG:

- Lifetime exceeded (bit)
- Failure status (byte)
- Hours Reset (bit)
- Test Start (byte)
- Converter Status (byte)
- Battery info (2 bytes)
- Test Results (6 bytes)

These parameters need to be linked to KNX Groups that will be used for transferring the information to SpaceLYnk through KNX /TP. The name of the KNX Groups can be selected by KNX System integrator but it is strongly suggested to use a specific template which then can help the integration in EBO.

Warning: In case the default template is not selected the automatic widget of EBO and SpaceLYnk will not work.

Specific template of KNX Group names:

Ν.	KNX Parameter	KNX Group name
1	Life time exceeded	GWXX.ECGYY.Time_Exc
2	Failure status	GWXX.ECGYY.Failure
3	Hours Reset	GWXX.ECGYY.HoursReset
4	Test Start	GWXX.ECGYY.TestStart
5	Test Results	GWXX.ECGYY.TestResults
6	Converter Status	GWXX.ECGYY.CS
7	Battery info	GWXX.ECGYY.Battery

XX: Number of gateway (ex. 01, 02, ... 99)

YY: Number of ECG (ex. 01, 02, ... 64)

Warning: GWXX.ECGYY.TestResults group address should be the next after GWXX.ECGYY.TestStart, for the widget to work correctly

Furthermore, it is expected that the KNX system integrator takes a note of the KNX ECG name and their group of the EL for each gateway. This information is necessary for the configuration of SpaceLYnk in further steps.

Schneider Electric

35 rue Joseph Monier 92500 Rueil Malmaison – France Phone: +33 (0) 1 41 29 70 00 www.se.com

As standards, specifications, and designs change from time to time, please ask for confirmation of the information given in this publication.

 $\ensuremath{\mathbb{C}}$ 2014-2020 Schneider Electric. All rights reserved.

