ŘÍDÍCÍ JEDNOTKA LOGICA FM BEGHELLI

kód 21102

Řídící jednotka pro centralizované ovládání běžných a nouzových světelných systémů

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NÁVOD NA MONTÁŽ A
OVLÁDÁNÍ

Beghelli

TABLE OF CONTENTS

CO JE ŘÍDÍCÍ JEDNOTKA LOGICA FM BEGHELLI

Řídící jednotka Logica FM Beghelli (kód 21102) je zařízení navržené pro centralizované ovládání běžného a nouzového osvětlení: ovládá a dohlíží až na 992 svítidel řady Logica FM pomocí radiového signálu. Řídící jednotka Logica FM Beghelli sestává z:

- klávesnice a displej pro uživatelské operace;
- radiové rozhraní na frekvenci 2.4GHZ-2.4835GHz, (kód 12130) DSSS "širokospektrá" modulace pro připojení svítidel řady Logica FM;
- rozhraní RS485 pro přímé propojení s PC;
- rozhraní RS232 pro připojení k tiskárně Logica DIN RS232 Beghelli (kód 3284);
- rozhraní USB pro softwarové updaty, zálohu a obnovování konfiguračních dat;
- integrovaný 4G LTE modem pro dálkové ovládání přes Internet;
- rozhraní Ethernet pro LAN sítě;
- rozhraní Wi-Fi pro propojení s PC;

Pro ovládání systému ze vzdáleného PC potřebujete software Logica Visual (kód 12139) nebo SD Manager software (kód 20109).

FUNKCE

Řídící jednotka Logica FM provádí následující úkony:

MONITORING SYSTÉMU

Řídící jednotka Logica FM soustavně monitoruje svítidla k ní připojená a detekuje a upozorňuje na jakékoli poruchy.

OVLÁDÁNÍ SYSTÉMU

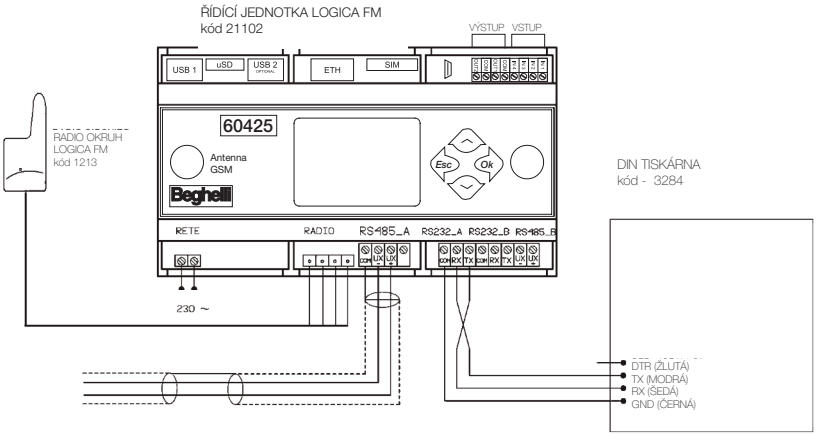
Řídící jednotka Logica FM umožňuje nastavovat jas svítidel, provádět testy funkčnosti a autonomie na nouzových svítidlech v systému, plánovat testy (datum, čas a časové intervaly) atd.

VEDENÍ DENÍKU

Řídící jednotka Logica FM Control Unit sleduje výsledky testů a obecně všechny relevantní operace v systému. Pokud je k dispozici tiskárna (kód 3284), lze tyto informace pravidelně tisknout na papír. Pokud je k dispozici připojení k počítači, lze tyto informace odeslat a uložit do počítače.

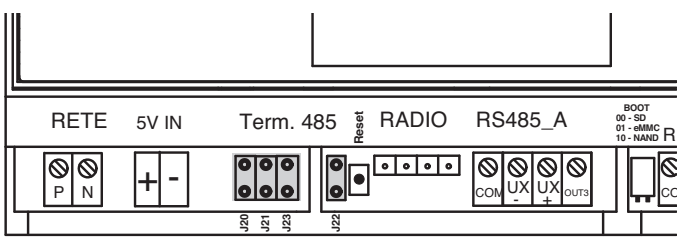
MONTÁŽ

Použijte nákres níže pro postup připojení řídící jednotky Logica FM k radiovému orkuhu Logica FM a volitelné DIN tiskárně (sběrnice RS232).
Propojení se systémem, za použití softwaru Logica Visual nebo SD Manager, může být provedeno skrze různé kanály:
- RS485-A;
- Ethernet;
- Modem 4G LTE;
- Wi-Fi



POUŽITÍ A ZAKONČENÍ LINEK RS 485

Řídící jednotka je vybavena dvěma nezávyslými linkami RS 485 (RS485_A and RS485_B), obě s přizpůsobením impedance linky vložením 2 jezdců s roztečí 2.54.
Přizpůsobení linky je nutné, když je řídící jednotka umístěna jako "koncový" prvek sběrnice 485 (začátek nebo konec trasy).
Pro adaptaci linky RS485_A, vložte Jumper do konektorů J22 a J23
Pro adaptaci linky RS485_B, vložte Jumper do konektorů J20 a J21



OPERACE VYŽADOVANÉ K OVLÁDÁNÍ ŘÍDÍCÍ JEDNOTKY LOGICA FM

FUNKCE KLÁVESNICE A DISPLEJE

Tlačítka umožňují navigaci skrze stránky na displeji, zobrazování informací a volbu operačních režimů.

Tři hlavní menu jsou SVÍTIDLA, ÚDRŽBA A STATUS:

- pro pohyb mezi jednotlivými menu použijte tlačítka "DOLŮ" and "nahoru"
- pro vstup do menu a podmenu použijte tlačítko "OK"
- pro návrat do předchozího menu použijte tlačítko "ESC"

Další funkce kláves jsou popsány níže:

Použijte tlačítka "DOLŮ" a "NAHORU" pro změnu hodnoty (např. v menu nastavení data a času s blikajícím ukazatelem hodiny stiskněte pro zvýšení hodnoty, nebo stiskněte pro snížení hodnoty) a stiskněte tlačítko "OK" pro potvrzení vložené hodnoty (na uvedeném příkladu úpravy hodnoty času se stiskem tlačítka zadaná hodnota uloží do řídící jednotky).

Poznámka: Pokud je jednotka nová nebo byla její paměť vymazána (řídící jednotka nemá žádná uložená svítidla), některá menu nebudou viditelná.

SCHEDULING FUNCTIONAL AND AUTONOMY TESTS

Functional and Autonomy Tests check the emergency luminaires. A Functional Test consists in turning on a luminaire for about 30 seconds during which time the luminaire light source and battery efficiency is checked; an Autonomy Test consists in turning on a luminaire over a longer time at the end of which the battery efficiency is checked. If a test reveals a luminaire is faulty, this information will be transferred from the luminaire to the Logica FM Control Unit: an error message will be displayed on screen and the error will be recorded in the Logbook.

For a correct operation of the system, the following must be set:

- Date and time of the next Functional Test;
- Date and time of the next Autonomy Test;
- Time interval between repeated Functional Tests;
- Time interval between repeated Autonomy Tests.

Example of how to set the date and time for the next Functional Test:

Assuming you start from the LUMINAIRES menu: press the keys shown on the right in sequence to go to the date&time settings menu for the next Functional Test. ("x 2" means you have to press the key twice)		LUMINAIRES
		MAINTENANCE
		Maintenance MANUAL TEST
	 x2	Maintenance MANAGEMENT TEST
		All NEXT FUNC TEST
Now press to show the date of the next Functional Test currently stored on the Control Unit. To set the time of the test, proceed as shown in section "Date and Time Settings".		Next Func Test 31-12-2099 00:00

GROUPS

Luminaires connected to each Logica Control Unit by Beghelli can be divided into groups to perform separate operations on system sections. Each luminaire can belong to a group, multiple groups or no group. The total number of groups available is 16.

ASSIGNING A LUMINAIRE TO A GROUP

Assuming you start from the LUMINAIRES menu: press the keys shown on the right in sequence to go to the menu to set the group of the first luminaire on the list ("x 4" means you have to press the key four times)		LUMINAIRES
		MAINTENANCE
		Maintenance MANUAL TEST
	x4	Maintenance GROUP MANAGEMENT
		Group Management ALL
		Group Management SA/PS F12345
Press and the following screen will appear on the display. The line below the name of the luminaire indicates whether it belongs to one of the sixteen groups or not: the first digit on the left refers to group 1, the last digit on the right refers to group 16: - 0: the luminaire does not belong to the group - 1: the luminaire belongs to the group Before the first configuration, the row has sixteen '0', i.e. the luminaire F12345 does not belong to any group; the cursor will flash on the last zero to the left that corresponds to group 1. Press: - to move to the next group - to move to the previous group - to include the luminaire in the group - to exclude the luminaire from the group		SA/PS F12345 0000000000000000

MENU

The system is organised in menus that allow you to access varied features of the system: turn luminaires on and off, perform Functional and Autonomy Tests, review information on malfunctions etc.

To understand how to navigate among screens using the keys, see section "Keyboard and Display Functions".

Most operations available can be applied to the entire system or to parts of it, as shown in the following table:

For:	go to (menu):
all luminaires in the system	ALL
a single luminaire (e.g. luminaire LOGICA SA code F01234)	SA/PS F01234
all luminaires in Group yy	GROUP 03

There are 3 menus: LUMINAIRES, MAINTENANCE AND STATUS.

LUMINAIRES MENU

Use this menu to adjust the brightness of the luminaires:

	go to (menu):
for a maximum brightness level	ON (MAX)
to turn them off	TO TURN THEM OFF
for an intermediate brightness level (e.g. level 5)	DIMMER STEP 05

MAINTENANCE MENU

MANUAL TEST

Functional and Autonomy Tests check the emergency luminaires. A Functional Test consists in turning on a luminaire for about 30 seconds during which time the luminaire tube and battery efficiency is checked; an Autonomy Test consists in turning on a luminaire over a longer time at the end of which the battery efficiency is checked.

Normally, Functional and Autonomy Tests are run automatically at regular intervals according to the schedule set by the user (see Scheduling Functional and Autonomy Tests"), but it is also possible to perform a Functional Test or an Autonomy Test directly from the keyboard: Manual Test. Manual Tests stop at the end of the set time or by sending a stop test command.

Manual Tests will not change the time intervals and durations set for automatic tests.

Use the MANUAL TEST menu to perform operations described in the following table:

To:	go to (menu):
run a Functional Test	FUNCTION
run an unlimited time test that will stop when the battery is completely discharged	ON INDEFINITELY
an Autonomy Test of 1 hour	1 h AUTONOMY TEST
stop any test	STOP TEST

EMERGENCY

Note: Commands in the EMERGENCY menu will only affect luminaires that are not powered from the mains, i.e. they are lit in a state of emergency.

When power from the mains to a luminaire is cut off, the luminaire will turn on and run on battery supply. As long as its battery still has energy stored, a luminaire can be sent the following commands:

- Disable the state of emergency: the luminaire turns off; it can be turned back on by enabling the state of emergency.
- Enable the state of emergency: the luminaire turns on
- Turn off: the luminaire is turned off permanently; it cannot be turned back on unless the luminaire itself detects power being fed from the mains. This feature can be useful to preserve battery power when, for instance, the power supply to the system needs to be cut off for a long period.

To:	go to (menu):
disable the state of emergency	EM. OFF
enable the state of emergency	EM. ON
permanently turn off the luminaire	TO TURN THEM OFF

MANAGEMENT TEST

This menu allows you to set:
- Date and time of the next Functional Test;
- Date and time of the next Autonomy Test;
- Time interval between repeated Functional Tests;
- Time interval between repeated Autonomy Tests.

For further details on how to set test dates, times and time intervals, see section "Scheduling Functional and Autonomy Tests".

Based on their unique identifying addresses, LOGICA luminaires are divided into EVEN-numbered and ODD-numbered luminaires. Using the EVEN-ODD TEST menu, you can decide whether to perform an autonomy test on all luminaires simultaneously or first on the odd-numbered luminaires, then, 7 days later, on the even-numbered luminaires.

To:	go to (menu):
set a single simultaneous test for all luminaires	SIMULTANEOUS
set a test for even-numbered luminaires 7 days after the test on odd-numbered luminaires	DELAY 7 DAYS

CONTROL UNIT MANAGEMENT

Date & Time Changes

To set the date and time on the Logica FM Control Unit,, see section "Date and Time Settings".

Printing

Note: Printing will be available if the Logica FM Control Unit is connected to a Logica DIN RS232 serial printer by Beghelli (code 3284).

The following data can be printed:

- **Configuration:** List of installed luminaires and their characteristics (model, even/odd-numbered, 1hr/3hrs autonomy etc.).
- **Scheduling:** Timetables for Functional and Autonomy Tests, time intervals for testing, staggered testing on odd- and even-numbered luminaires.
- **Errors:** For each faulty luminaire, a warning is given that specifies the type of fault (e.g. 8W neon tube error, battery charging error etc.).
- Reports: For this menu, you must enter a start date and an end date for the report. The printout will list significant actions that occurred over the set time frame involving the Logica Control Units by Beghelli installed in the system. The printout will report the start time and the end time of Functional or Autonomy Tests performed, be they manual or automatic tests, and a list of faulty luminaires.

The following controls are available in the PRINT menu:

To:	go to (menu):
print the Configuration	CONFIGURATION
print the Scheduling	SCHEDULING
print Errors	ERRORS
print Reports	REPORT

Language

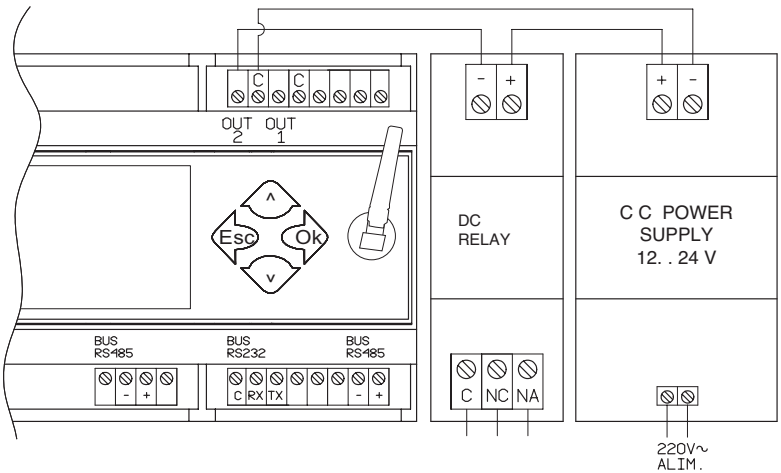
The user can set a different display language. Available languages: ITALIAN, GERMAN and ENGLISH.

Outputs OUT1 - OUT2 - OUT3 on/off

The user can enable or disable one or more outputs to signal errors in the system.

Outputs OUT1 - OUT2 - OUT3 Active Open/Closed

Once enabled, outputs can be set in N/C or N/A mode; "N/C" means the output will open if an error occurs; "N/A" means the output will close if an error occurs.



CONFIGURATION

This menu is usually used when installing the lighting system, when replacing or adding luminaires, when replacing the Logica FM Control Unit.

To:	go to (menu):
search for luminaires in the system	FIND NODES CONT.
delete all luminaires stored on the Control Unit	DELETE NODES
delete the communication network for tree-structured luminaires	DELETE RADIO NETWORK
create a radio network between the Control Unit and all luminaires in the system	CREATE RADIO NETWORK

At the first installation (see section "Searching for Logica FM Luminaires (Node searching)") and whenever luminaires are added to the system, run "FIND NODES CONT.".

If one or more luminaires are replaced or deleted from the system, run "DELETE NODES" and then "FIND NODES CONT.".

If there are communication troubles with some luminaires in the system, run "DELETE RADIO NETWORK" and then "CREATE RADIO NETWORK"..

STATUS MENU

This menu allows the user to access additional information about the CONTROL UNIT and LOGICA FM LUMINAIRES.

CONTROL UNIT

This menu allows the user to access additional information about the CONTROL UNIT and LOGICA FM LUMINAIRES.

LOGICA FM LUMINAIRES

Access this menu to display the software version of the Control Unit, the total number of nodes and the number of luminaires with errors.

TECHNICAL FEATURES

Code - 21102
- Battery: 2 x NiCd 3.6V - 750mAh
- Power supply voltage: 230V
- Max. input power: 12VA
- Operating ambient air temperature: -10°C - 55°C

334.902.273A

Features of the Radio Transmitter
- Frequency band: 2.4GHZ-2.4835GHz
- RF Power: <100mW e.i.r.

WARNINGS - WARRANTY

- Before connecting the device, make sure the data on the rating plate match the specifications of the mains.
- This device must be used according to its intended use. Any other use shall be deemed improper and, therefore, dangerous. The manufacturer shall not be held liable for any injury or damage caused to persons, animals or property as a result of improper, incorrect or unreasonable use.
- Before any cleaning or maintenance operations, disconnect the device from the mains.
- Warning: this product contains materials that may be harmful if disposed in the environment.
- The device must not be disposed of as municipal waste. It must be subjected to separate collection to avoid environmental pollution. In compliance with Directive 2002/96 and implementing national laws on end-of-life product disposal, a failure to comply with the above is sanctioned by law.
- For any repairs, contact an authorised technical service centre and ask them to use original spare parts. A failure to comply with the above may compromise the safety of the device.
- For details on interventions under warranty, please contact us at 800 626626 (toll-free) or contact your Authorized Reseller.

Beghelli S.p.A. declares that the radio transceiver complies with the 2014/53/EU European Directive. The full text of the EU Declaration of Conformity for the device is available on the website, at: www.beghelli.it/en/technical-area/tools/download.
The device may be used under the 'free use' policy.

ISO 9001

Beghelli

ISO 14001

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