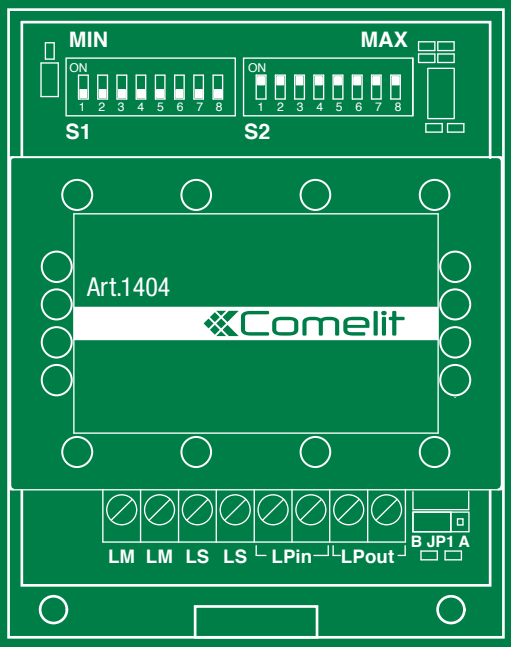
EN

TECHNICAL
MANUAL



Technical Manual for Switching Device Art. 1404

Comelit®
Passion. Technology. Design.

Warning

- Install the equipment by carefully following the instructions given by the manufacturer and in compliance with the standards in force.
- All the equipment must only be used for the purpose it was designed for. **Comelit Group S.p.A.** does not assume responsibility for improper use of the apparatus, for modifications made by third parties for any reason or purpose, or for the use of non-original accessories and materials.
- All the products comply with the requirements of the 2014/30/EU and 2014/35/EU directives. This is proved by the **CE** mark on the products themselves.
- Do not route the riser wires in proximity to power supply cables (230/400V).
- Installation, mounting and assistance procedures for electrical devices must only be performed by specialised electricians.
- Cut off the power supply before carrying out any maintenance work.

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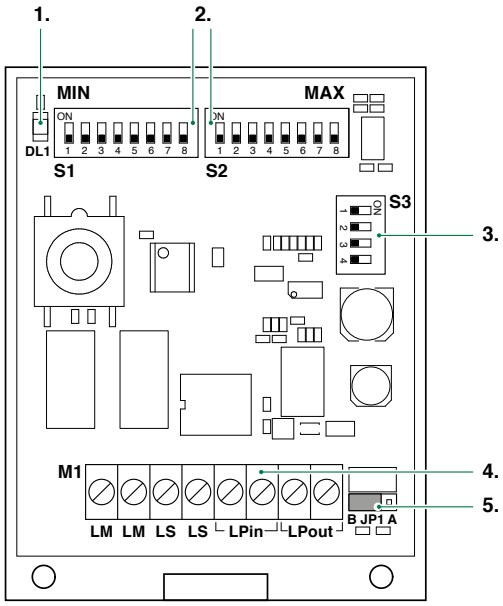
Description



1. **DL1** indicator LED

off: switching device on secondary external unit

lit steadily: switching device on main external unit

flashing: LP line missing or shorted/reset (only with R.I. 002)

2. Microswitches **S1**, **S2** for setting the range of user or zone addresses

3. Microswitches **S3**

DIP 1, 2 for selecting the operating mode

Mode	DIP1	DIP2
Standard (default)	OFF	OFF
TOP1	ON	OFF
TOP2	ON	ON
TOP3	OFF	ON

DIP3 for zone address management

- **OFF** for zone addresses from 1 to 250 (default)
- **ON** for zone addresses from 251 to 500

DIP4 for managing connection on the LS line

- **OFF** external unit on the LS section (default)
- **ON** no external unit on the LS section (power supply unit Art. 1209 or Art. 1210 required)

If there is no secondary external unit, set DIP4 to ON.

4. Terminal block **M1**

LM LM riser Bus line output

LS LS secondary Bus line input normally switched to LM LM (with DIP4 of S3 to OFF) or power supply Art. 1209/1210 input (with DIP4 of S3 to ON)

LPin LPin main Bus line input (normally open on LM LM)

LPout LPout main Bus line for cascade distribution

5. **JP1** video closing jumper (see diagrams from page 7)

in position A for all Art. 1404 if star type system configuration is used

in position A for only the last Art. 1404 if cascade type system configuration is used

in position B in all other cases

Art. 1404 must be wired with Art. 1209/1210 or exiting the mixer Art. 4888C.

The maximum number of switching devices Art. 1404 that can be connected to Art. 1210 or Art. 4888C is 40 units.

Operating mode

Switching device Art. 1404 includes 4 operating modes; the mode should be selected based on the type and position of the switching device in that same system:

STANDARD (for use in kit systems which require the addition of extra external units and in "**non**-TOP" systems).

TOP 1 (single zone switching in systems with no switchboard or with only one switchboard).

TOP 2 (single zone switching in multi-switchboard systems).

TOP 3 (multi-zone switching).

Standard mode (default)

To set STANDARD mode:

1. Set DIP1 and DIP2 of S3 to **OFF**.
2. Define the range of codes managed by each riser:

   S1 defines the minimum value MIN of the range (see table on page 6).

   S2 defines the maximum value MAX of the range (see table on page 6).

CAUTION! Separate switching devices must manage code ranges which are not overlapping.

TOP 1 mode

To set TOP 1 mode:

1. Position the **DIP switches of S3** as follows: DIP1-**ON** and DIP2-**OFF**.
2. Define the system area (called ZONE), using **S1** and **DIP3 of S3**:

   S1 defines the address (in accordance with the table on page 6). The address is a number between 1 and 500 inclusive, and cannot be a range.

   DIP3 of S3 defines the zone addresses managed:

   - **OFF** for zone addresses from 1 to 250 (default)
   - **ON** for zone addresses from 251 to 500

The LM-LM output of each switching device can be wired (as for a normal Simplebus Color system) with up to 240 users and with accessories (Art. 1256, Art. 1409, Art. 1257); **NOT the porter switchboard Art. 1998A or Art. 1998VC**.

The LS-LS input of the switching device can be wired with ports in STANDARD mode and accessories (Art. 1256, Art. 1409, Art. 1257).

On the LPin-LPin input, the ports wired directly or indirectly via mixer 4888C must be set to TOP mode. Mixer 4888C allows installation of a single switchboard **Art. 1998A or Art. 1998VC** in SERIES or PARALLEL (see MT/SB/01). All switchboard calls from door-entry phones or monitors are addressed only to the switchboard in the system.

Internal ignition CANNOT be managed via wired ports on the LPin-LPin input of switching device Art. 1404.

CAUTION! There cannot be 2 switching devices Art. 1404 with the same ZONE address in the same system.

TOP 2 mode

Mode not yet available.

TOP 3 mode

To set TOP 3 mode:

1. Position the **DIP switches of S3** as follows: DIP1-**OFF** and DIP2-**ON**.
2. Define the range of ZONES managed by the switching device, via **S1**, **S2** and **DIP3 of S3**:

   S1 defines the minimum value MIN of the range (see table on page 6).

   S2 defines the maximum value MAX of the range (see table on page 6).

DIP3 of S3 defines the zone addresses managed:

- **OFF** for zone addresses from 1 to 250 (default)
- **ON** for zone addresses from 251 to 500

The switching device should be used to wire all the main ports in the part of the system feeding into the terminals **LPin-LPin** of switching devices Art. 1404 in TOP 1 or TOP 2 mode. Switching device Art. 1404 in TOP 3 mode manages the ZONES falling within the set range.

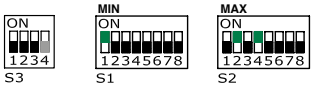
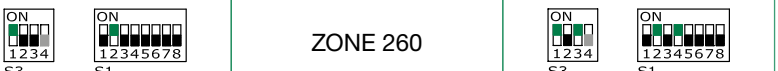
The range can be **EXTENDED** (**from 1 to 500** by setting the dip switches of S1 to OFF, the dip switches of S2 to ON and DIP 3 of S3 to OFF) or **LIMITED** but only in intervals **between 1 and 250** (by setting the MIN range on S1, the MAX range on S2 and DIP 3 of S3 to OFF) **or from 251 to 500** (by setting the MIN range on S1, the MAX range on S2 and DIP 3 of S3 to ON).

Only external units in TOP mode can be wired to the TOP 3 switching device.

Internal ignition CANNOT be managed via wired ports on the LPin-LPin input of switching device Art. 1404.

CAUTION! Separate switching devices must manage code ranges which are not overlapping.

Examples:

MODE	EXAMPLES	
STANDARD	RANGE 1-10	
TOP 1	ZONE 2	
TOP 3	EXTENDED RANGE 1-500	
	ZONE 2-10	
	ZONE 300-400	

Special functions

For each of the previous 4 modes the following is also possible:

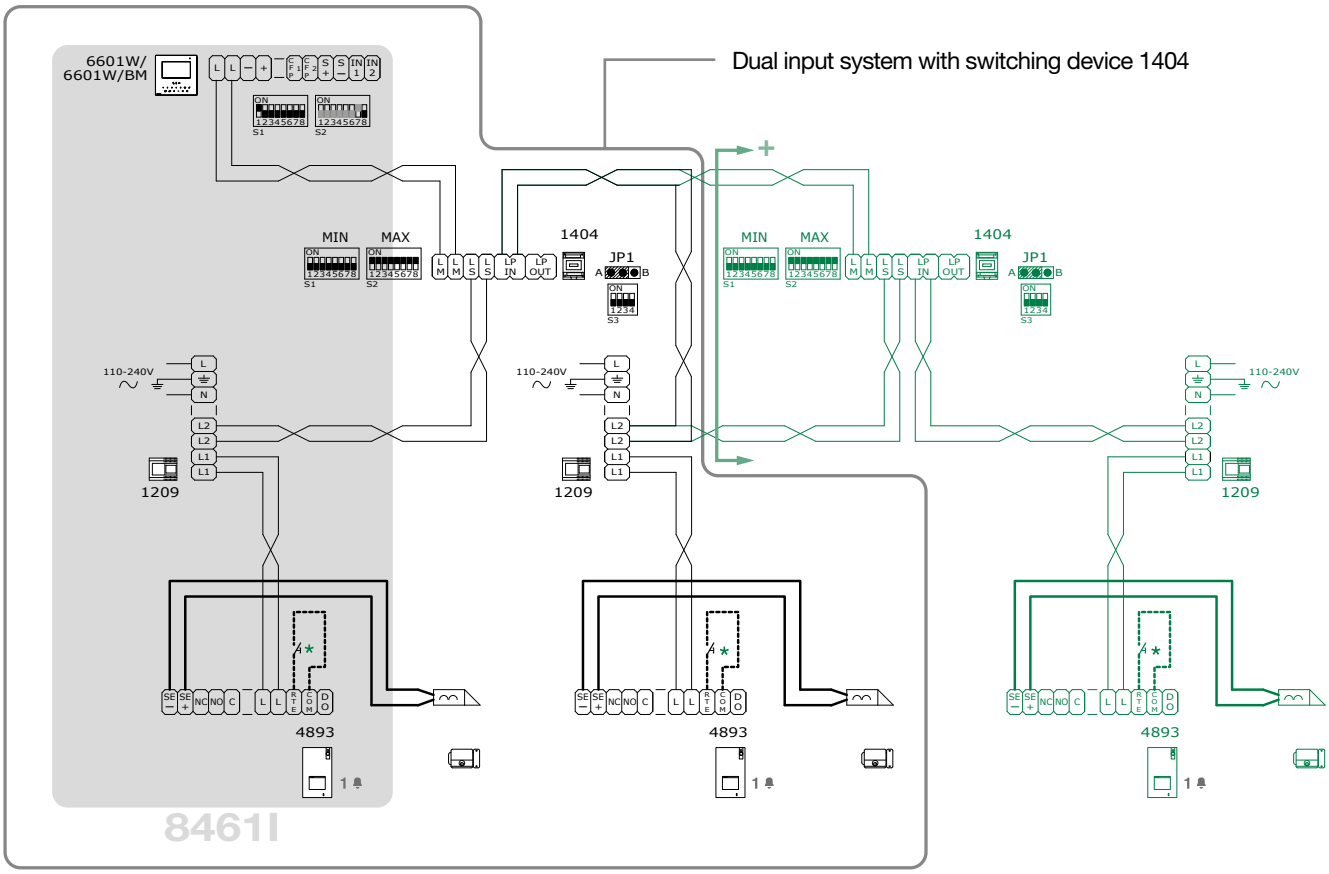
- **Bus line cascade distribution**
  - ▶ **JP1** should be left in position **A** only on the last switching device (see diagrams, page 14 - 15).
- **Management of connection on the LS line,** useful for distributing the video signal in cascade over TOP systems, also without requiring one or more secondary external units.
  - ▶ If there is no secondary external unit, set **DIP4 of S3 to ON** provide power over LS via Art. 1209 or 1210 (see diagram, page 16).

Programming table for dip-switches and S3 setting

User code/ zone		DIP SWITCH ON	User code/ zone		DIP SWITCH ON	User code/ zone		DIP SWITCH ON	User code/ zone		DIP SWITCH ON
 S3	 S3		 S3	 S3		 S3	 S3		 S3	 S3	
1	**251**	1	**64**	**314**	7	**127**	**377**	1,2,3,4,5,6,7	**190**	**440**	2,3,4,5,6.8
2	**252**	2	**65**	**315**	1.7	**128**	**378**	8	**191**	**441**	1,2,3,4,5,6,8
3	**253**	1.2	**66**	**316**	2.7	**129**	**379**	1.8	**192**	**442**	7.8
4	**254**	3	**67**	**317**	1,2,7	**130**	**380**	2.8	**193**	**443**	1,7,8
5	**255**	1.3	**68**	**318**	3.7	**131**	**381**	1,2,8	**194**	**444**	2,7,8
6	**256**	2.3	**69**	**319**	1,3,7	**132**	**382**	3.8	**195**	**445**	1,2,7,8
7	**257**	1,2,3	**70**	**320**	2,3,7	**133**	**383**	1,3,8	**196**	**446**	3,7,8
8	**258**	4	**71**	**321**	1,2,3,7	**134**	**384**	2,3,8	**197**	**447**	1,3,7,8
9	**259**	1.4	**72**	**322**	4.7	**135**	**385**	1,2,3,8	**198**	**448**	2,3,7,8
10	**260**	2.4	**73**	**323**	1,4,7	**136**	**386**	4.8	**199**	**449**	1,2,3,7,8
11	**261**	1,2,4	**74**	**324**	2,4,7	**137**	**387**	1,4,8	**200**	**450**	4,7,8
12	**262**	3.4	**75**	**325**	1,2,4,7	**138**	**388**	2,4,8	**201**	**451**	1,4,7,8
13	**263**	1,3,4	**76**	**326**	3,4,7	**139**	**389**	1,2,4,8	**202**	**452**	2,4,7,8
14	**264**	2,3,4	**77**	**327**	1,3,4,7	**140**	**390**	3,4,8	**203**	**453**	1,2,4,7,8
15	**265**	1,2,3,4	**78**	**328**	2,3,4,7	**141**	**391**	1,3,4,8	**204**	**454**	3,4,7,8
16	**266**	5	**79**	**329**	1,2,3,4,7	**142**	**392**	2,3,4,8	**205**	**456**	1,3,4,7,8
17	**267**	1.5	**80**	**330**	5.7	**143**	**393**	1,2,3,4,8	**206**	**456**	2,3,4,7,8
18	**268**	2.5	**81**	**331**	1,5,7	**144**	**394**	5.8	**207**	**457**	1,2,3,4,7.8
19	**269**	1,2,5	**82**	**332**	2,5,7	**145**	**395**	1,5,8	**208**	**458**	5,7,8
20	**270**	3.5	**83**	**333**	1,2,5,7	**146**	**396**	2,5,8	**209**	**459**	1,5,7,8
21	**271**	1,3,5	**84**	**334**	3,5,7	**147**	**397**	1,2,5,8	**210**	**460**	2,5,7,8
22	**272**	2,3,5	**85**	**335**	1,3,5,7	**148**	**398**	3,5,8	**211**	**461**	1,2,5,7,8
23	**273**	1,2,3,5	**86**	**336**	2,3,5,7	**149**	**399**	1,3,5,8	**212**	**462**	3,5,7,8
24	**274**	4.5	**87**	**337**	1,2,3,5,7	**150**	**400**	2,3,5,8	**213**	**463**	1,3,5,7,8
25	**275**	1,4,5	**88**	**338**	4,5,7	**151**	**401**	1,2,3,5,8	**214**	**464**	2,3,5,7,8
26	**276**	2,4,5	**89**	**339**	1,4,5,7	**152**	**402**	4,5,8	**215**	**465**	1,2,3,5,7.8
27	**277**	1,2,4,5	**90**	**340**	2,4,5,7	**153**	**403**	1,4,5,8	**216**	**466**	4,5,7,8
28	**278**	3,4,5	**91**	**341**	1,2,4,5,7	**154**	**404**	2,4,5,8	**217**	**467**	1,4,5,7,8
29	**279**	1,3,4,5	**92**	**342**	3,4,5,7	**155**	**405**	1,2,4,5,8	**218**	**468**	2,4,5,7,8
30	**280**	2,3,4,5	**93**	**343**	1,3,4,5,7	**156**	**406**	3,4,5,8	**219**	**469**	1,2,4,5,7.8
31	**281**	1,2,3,4,5	**94**	**344**	2,3,4,5,7	**157**	**407**	1,3,4,5,8	**220**	**470**	3,4,5,7,8
32	**282**	6	**95**	**345**	1,2,3,4,5.7	**158**	**408**	2,3,4,5,8	**221**	**471**	1,3,4,5,7.8
33	**283**	1.6	**96**	**346**	6.7	**159**	**409**	1,2,3,4,5.8	**222**	**472**	2,3,4,5,7.8
34	**284**	2.6	**97**	**347**	1,6,7	**160**	**410**	6.8	**223**	**473**	1,2,3,4,5,7,8
35	**285**	1,2,6	**98**	**348**	2,6,7	**161**	**411**	1,6,8	**224**	**474**	6,7,8
36	**286**	3.6	**99**	**349**	1,2,6,7	**162**	**412**	2,6,8	**225**	**475**	1,6,7,8
37	**287**	1,3,6	**100**	**350**	3,6,7	**163**	**413**	1,2,6,8	**226**	**476**	2,6,7,8
38	**288**	2,3,6	**101**	**351**	1,3,6,7	**164**	**414**	3,6,8	**227**	**477**	1,2,6,7,8
39	**289**	1,2,3,6	**102**	**352**	2,3,6,7	**165**	**415**	1,3,6,8	**228**	**478**	3,6,7,8
40	**290**	4.6	**103**	**353**	1,2,3,6,7	**166**	**416**	2,3,6,8	**229**	**479**	1,3,6,7,8
41	**291**	1,4,6	**104**	**354**	4,6,7	**167**	**417**	1,2,3,6,8	**230**	**480**	2,3,6,7,8
42	**292**	2,4,6	**105**	**355**	1,4,6,7	**168**	**418**	4,6,8	**231**	**481**	1,2,3,6,7.8
43	**293**	1,2,4,6	**106**	**356**	2,4,6,7	**169**	**419**	1,4,6,8	**232**	**482**	4,6,7,8
44	**294**	3,4,6	**107**	**357**	1,2,4,6,7	**170**	**420**	2,4,6,8	**233**	**483**	1,4,6,7,8
45	**295**	1,3,4,6	**108**	**358**	3,4,6,7	**171**	**421**	1,2,4,6,8	**234**	**484**	2,4,6,7,8
46	**296**	2,3,4,6	**109**	**359**	1,3,4,6,7	**172**	**422**	3,4,6,8	**235**	**485**	1,2,4,6,7.8
47	**297**	1,2,3,4,6	**110**	**360**	2,3,4,6,7	**173**	**423**	1,3,4,6,8	**236**	**486**	3,4,6,7,8
48	**298**	5.6	**111**	**361**	1,2,3,4,6.7	**174**	**424**	2,3,4,6,8	**237**	**487**	1,3,4,6,7.8
49	**299**	1,5,6	**112**	**362**	5,6,7	**175**	**425**	1,2,3,4,6.8	**238**	**488**	2,3,4,6,7.8
50	**300**	2,5,6	**113**	**363**	1,5,6,7	**176**	**426**	5,6,8	**239**	**489**	1,2,3,4,6,7,8
51	**301**	1,2,5,6	**114**	**364**	2,5,6,7	**177**	**427**	1,5,6,8	**240**	**490**	5,6,7,8
52	**302**	3,5,6	**115**	**365**	1,2,5,6,7	**178**	**428**	2,5,6,8	**241**	**491**	1,5,6,7,8
53	**303**	1,3,5,6	**116**	**366**	3,5,6,7	**179**	**429**	1,2,5,6,8	**242**	**492**	2,5,6,7,8
54	**304**	2,3,5,6	**117**	**367**	1,3,5,6,7	**180**	**430**	3,5,6,8	**243**	**493**	1,2,5,6,7.8
55	**305**	1,2,3,5,6	**118**	**368**	2,3,5,6,7	**181**	**431**	1,3,5,6,8	**244**	**494**	3,5,6,7,8
56	**306**	4,5,6	**119**	**369**	1,2,3,5,6.7	**182**	**432**	2,3,5,6,8	**245**	**495**	1,3,5,6,7.8
57	**307**	1,4,5,6	**120**	**370**	4,5,6,7	**183**	**433**	1,2,3,5,6.8	**246**	**496**	2,3,5,6,7.8
58	**308**	2,4,5,6	**121**	**371**	1,4,5,6,7	**184**	**434**	4,5,6,8	**247**	**497**	1,2,3,5,6,7,8
59	**309**	1,2,4,5,6	**122**	**372**	2,4,5,6,7	**185**	**435**	1,4,5,6,8	**248**	**498**	4,5,6,7,8
60	**310**	3,4,5,6	**123**	**373**	1,2,4,5,6.7	**186**	**436**	2,4,5,6,8	**249**	**499**	1,4,5,6,7.8
61	**311**	1,3,4,5,6	**124**	**374**	3,4,5,6,7	**187**	**437**	1,2,4,5,6.8	**250**	**500**	2,4,5,6,7.8
62	**312**	2,3,4,5,6	**125**	**375**	1,3,4,5,6.7	**188**	**438**	3,4,5,6,8			
63	**313**	1,2,3,4,5.6	**126**	**376**	2,3,4,5,6.7	**189**	**439**	1,3,4,5,6.8			

Wiring diagrams

Single-family KIT 8461I: with switching devices in STANDARD mode and 2 or more inputs

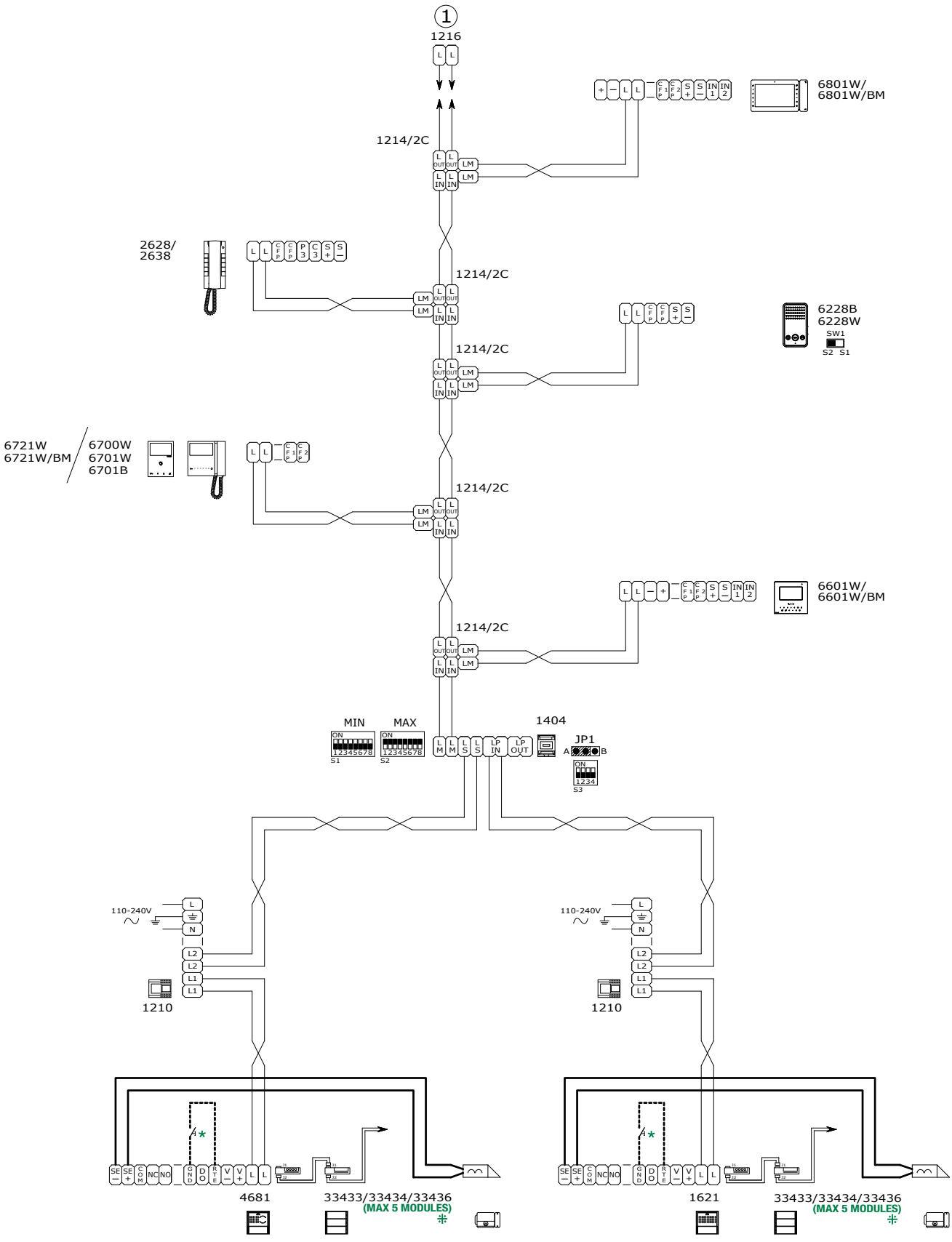


* Local door-opener button

The function "External unit (Porter) with switching device (secondary)" is activated by default. The door open indication function is not available. The self-ignition function is available (with toggle function between 2 external units).

IK/017QC

System with Art. 1210: switching device in STANDARD mode and 2 inputs

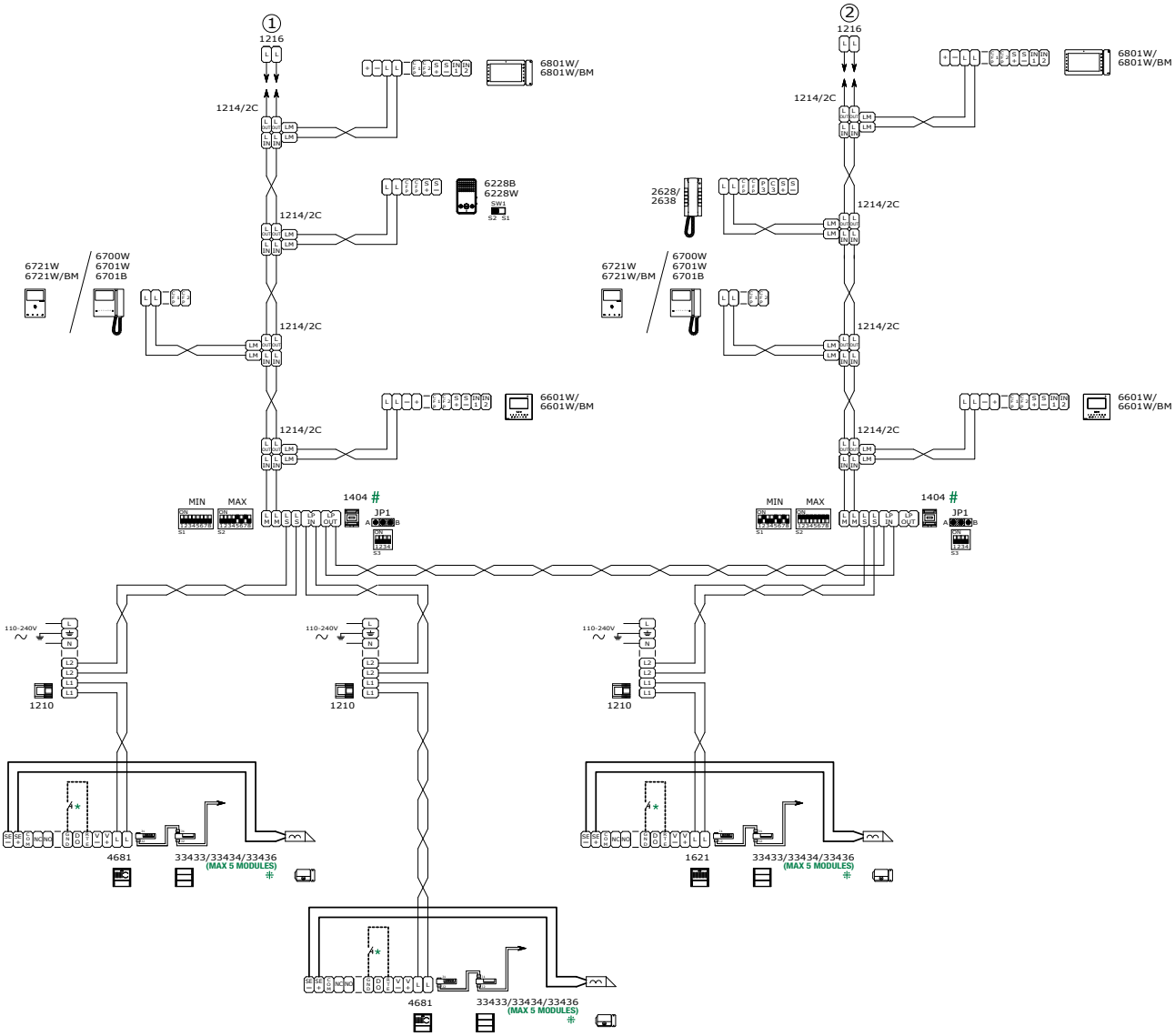


✱ Local door-opener button

⁜ For configurations other than those indicated in the diagram, please refer to the "CONSUMPTION TABLE" in the full manual for Art. 4681 and Art. 1621

S2W/004MI

System with Art. 1210: switching devices in STANDARD mode, 1 main input and 2 secondary inputs



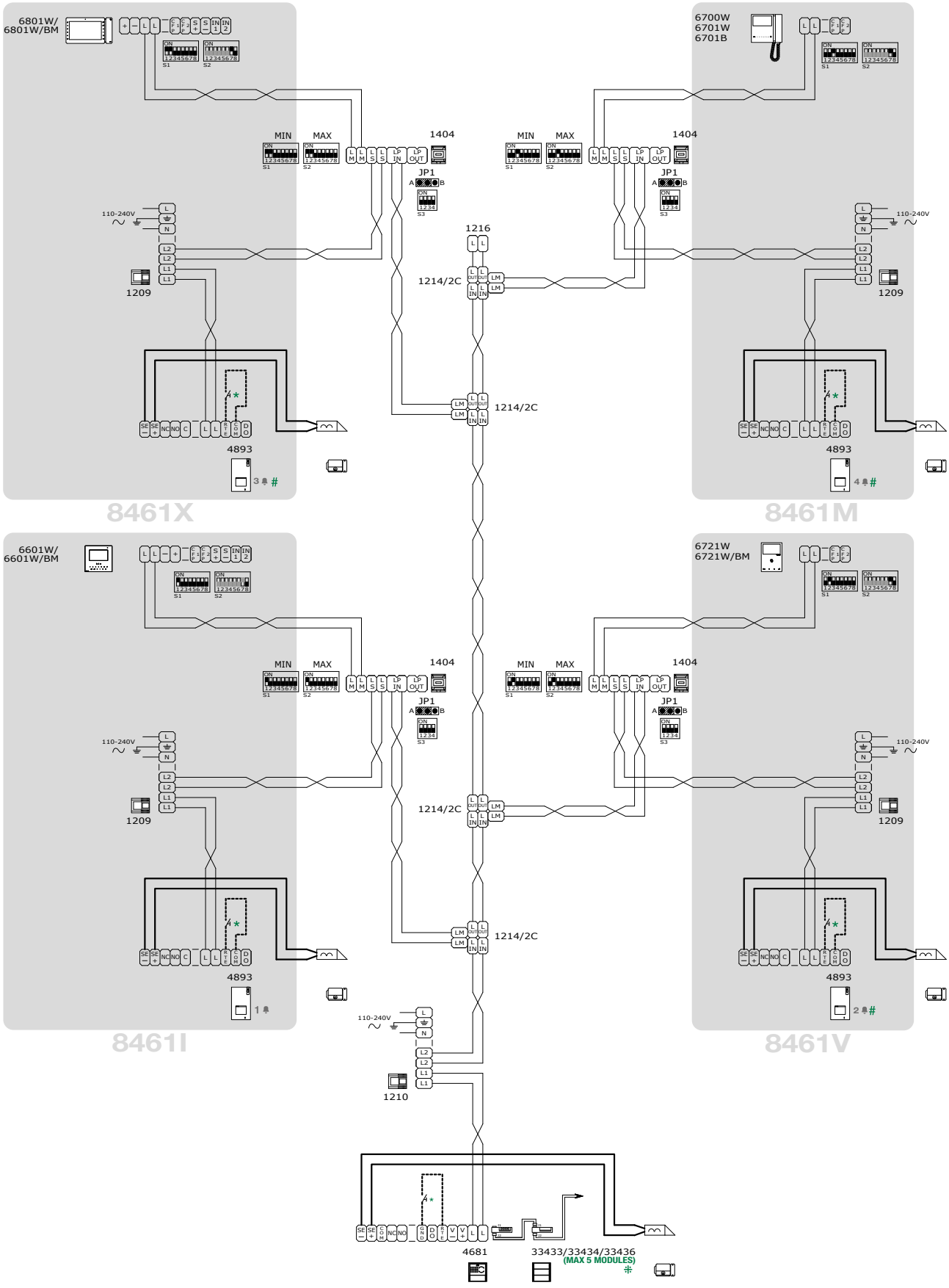
* Local door-opener button

\# CAUTION! Separate switching devices must manage code ranges which are not overlapping

⁜ For configurations other than those indicated in the diagram, please refer to the "CONSUMPTION TABLE" in the full manual for Art. 4681 and Art. 1621

S2W/005MI

System with Art. 1210: switching devices in STANDARD mode, branched 8461 KIT



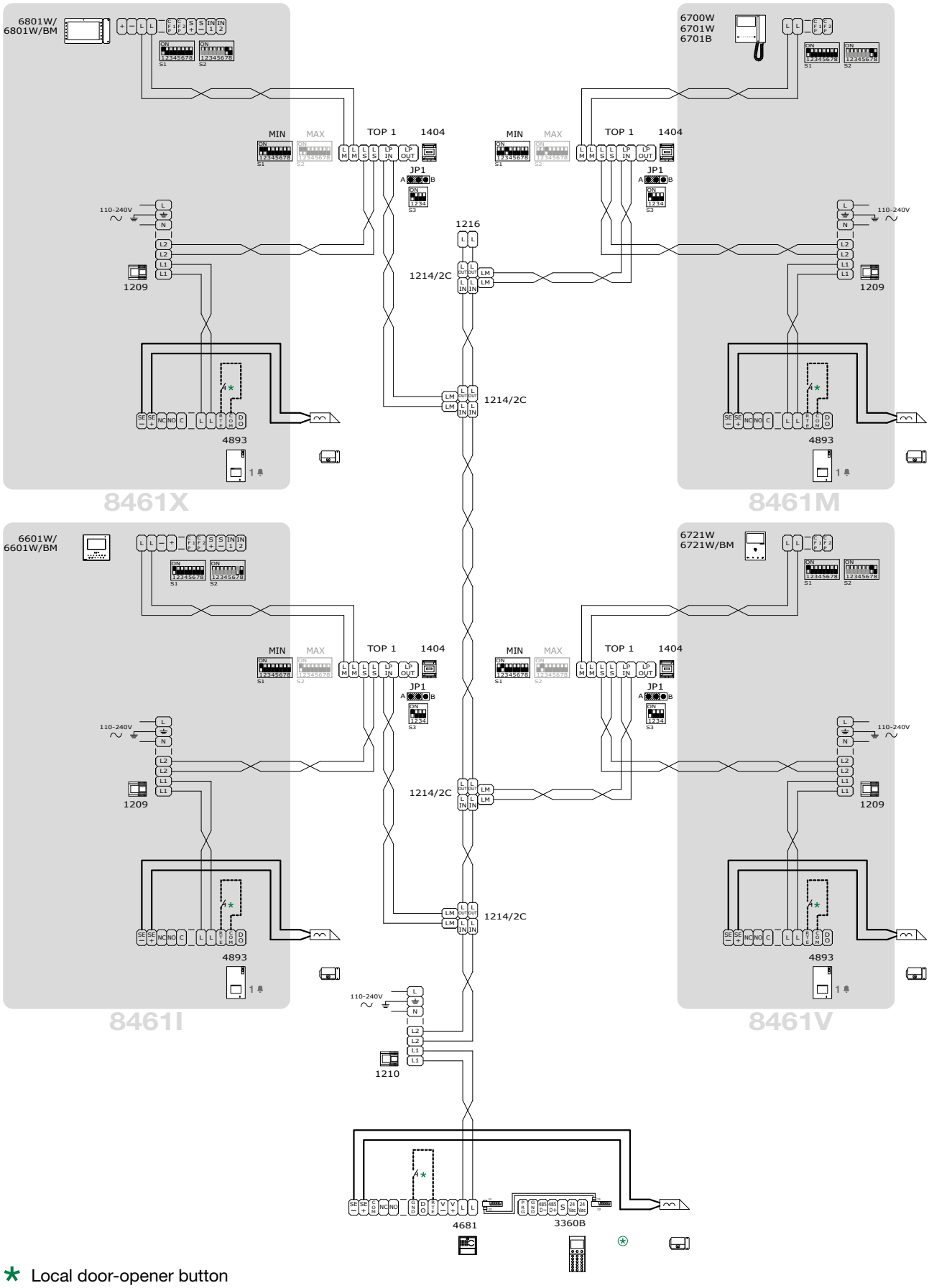
* Local door-opener button

⁜ For configurations other than those indicated in the diagram, please refer to the "CONSUMPTION TABLE" in the full manual for Art. 4681

\# For call address programming, please refer to the full manual for Art. 4893

IK/EN/005QC

System with Art. 1210: switching devices in TOP1 mode, branched 8461 KIT, external unit in TOP mode

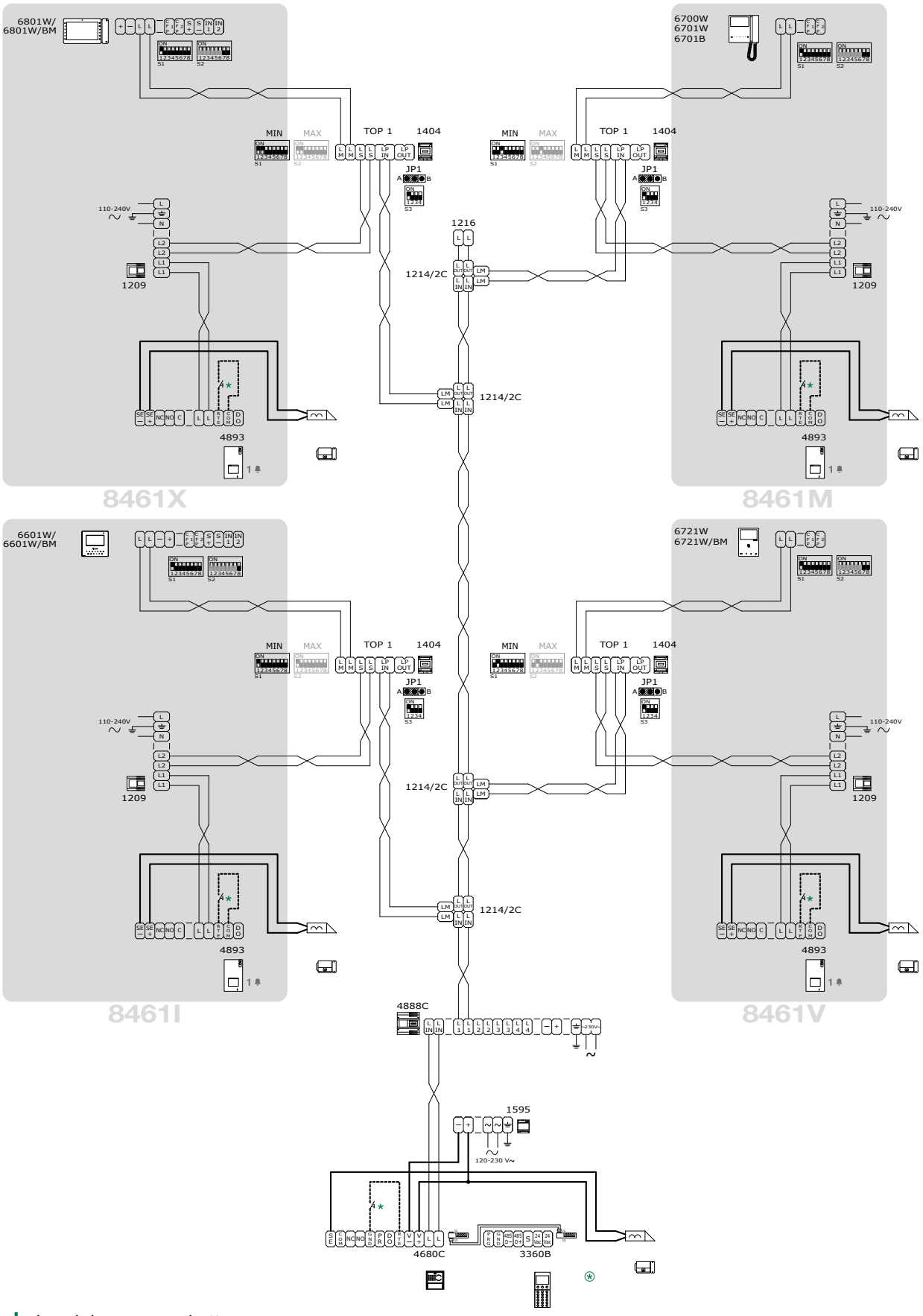


* Local door-opener button

Main port in TOP mode

IK/EN/005TOPQC

System with Art. 4888C: switching devices in TOP1 mode, branched KIT 8461, external unit in TOP mode

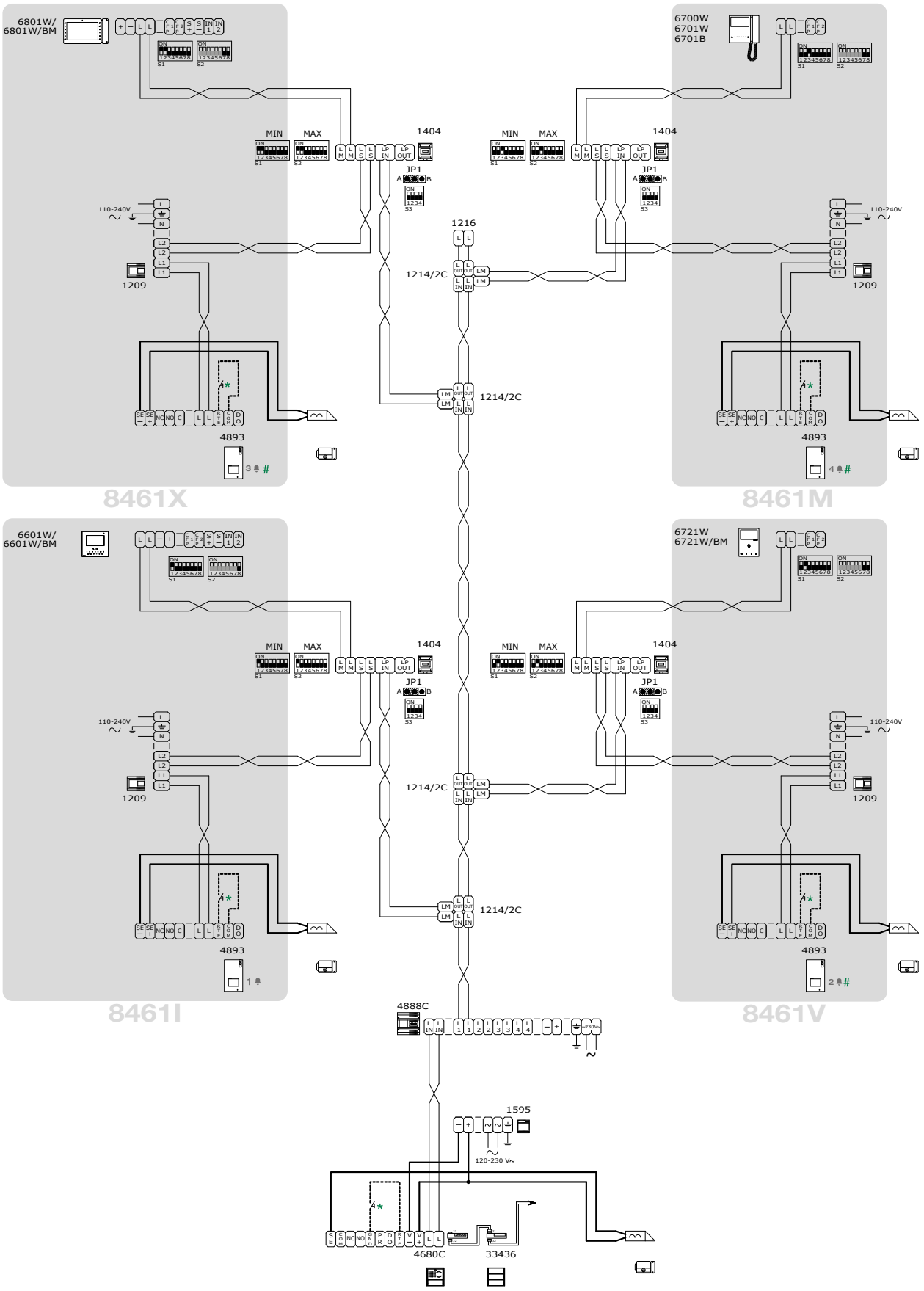


* Local door-opener button

Main port in TOP mode

IK/EN/005TOPQCA

System with Art. 4888C: switching devices in STANDARD mode, branched 8461 KIT

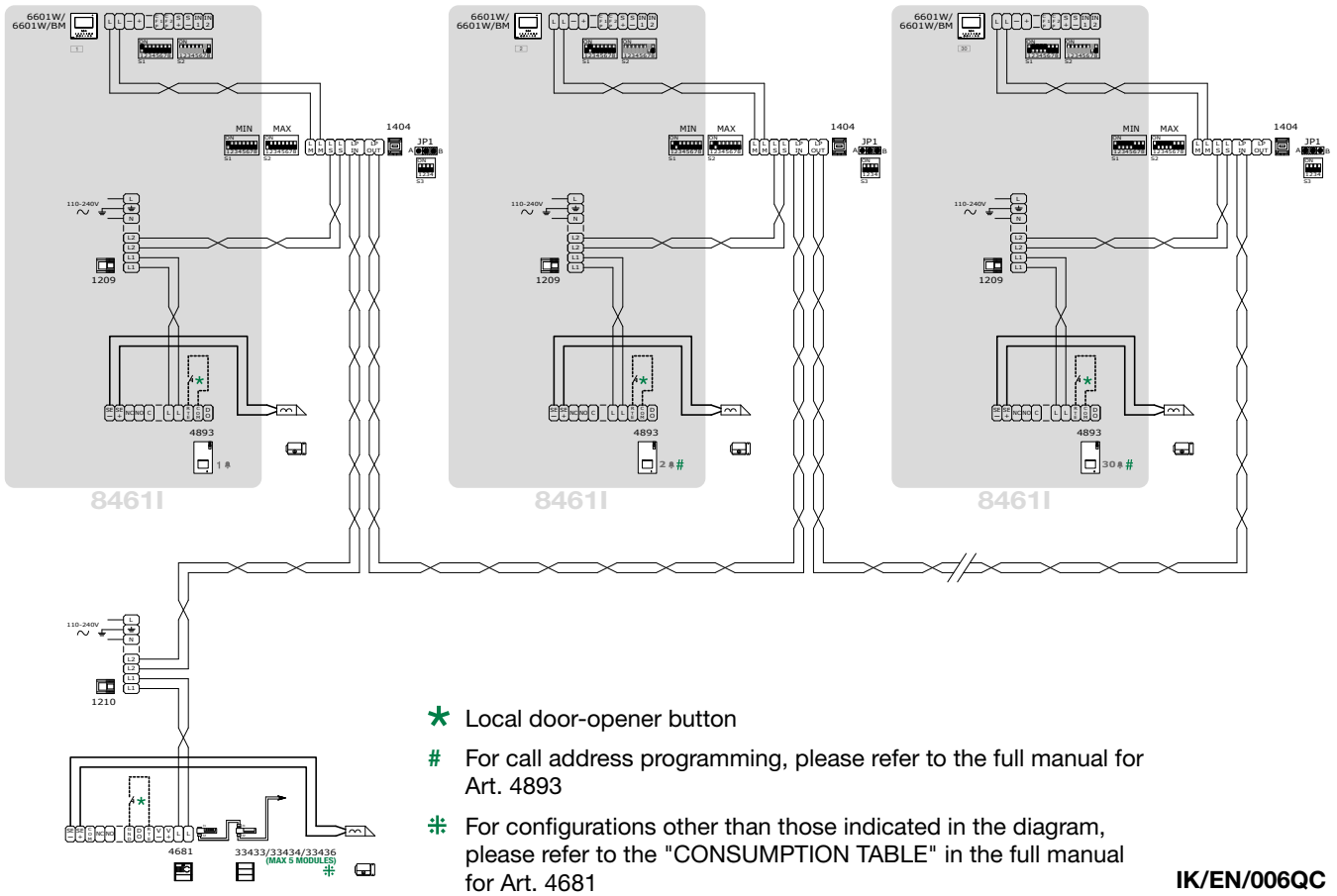


✱ Local door-opener button

\# For call address programming, please refer to the full manual for Art. 4893

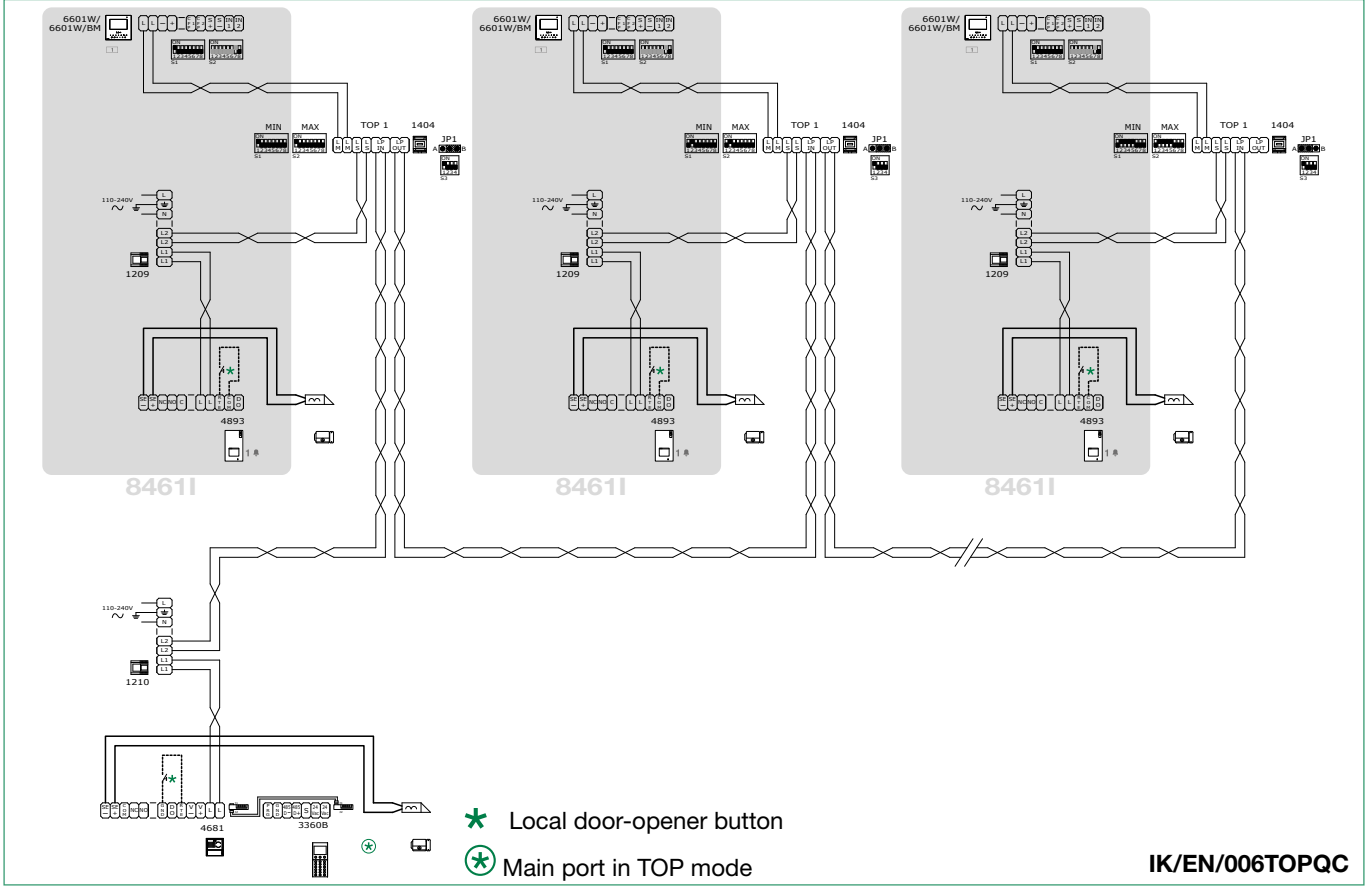
IK/EN/005QCA

System with Art. 1210: switching devices in STANDARD mode and 8461 KIT in cascade



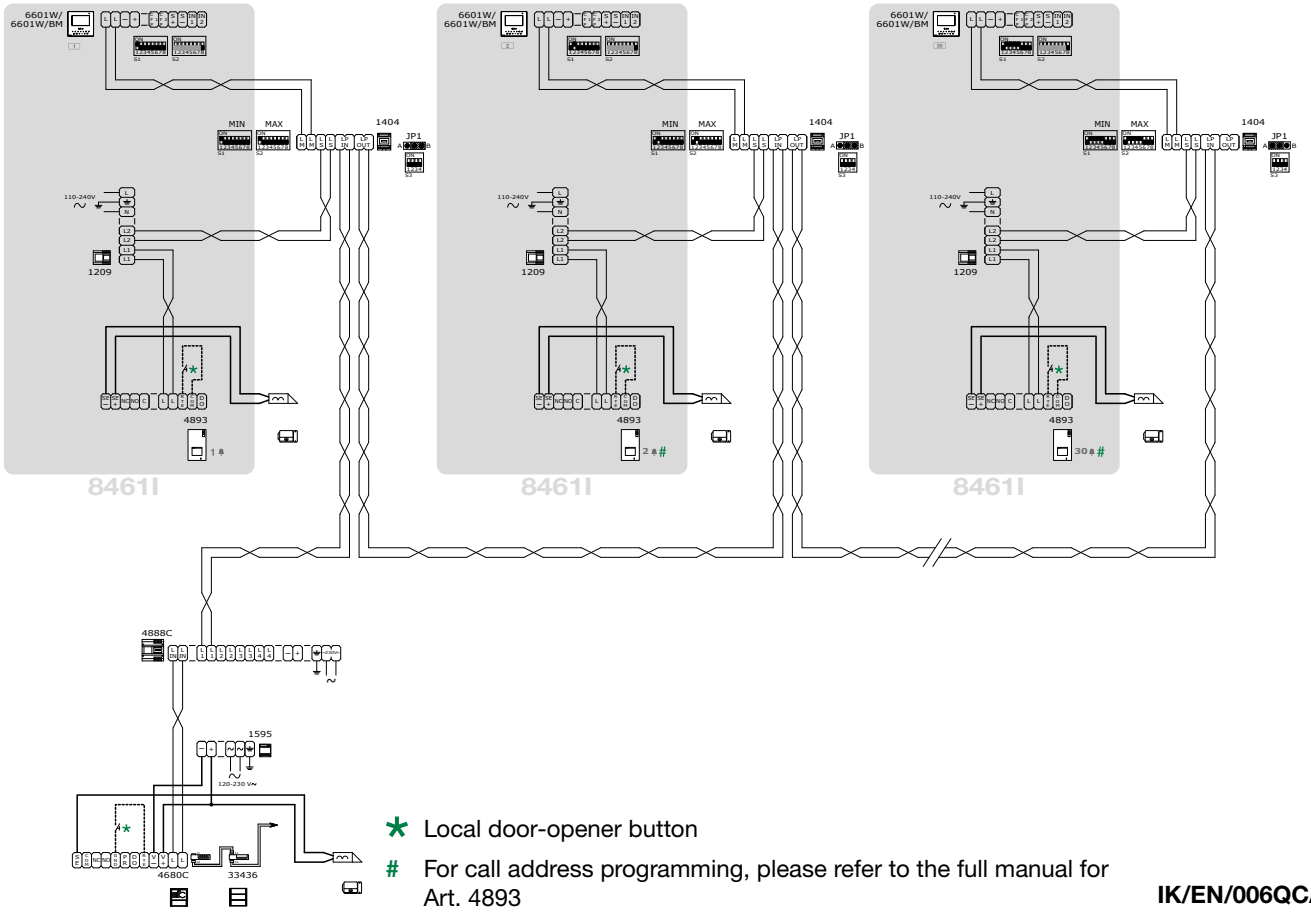
IK/EN/006QC

System with Art. 1210: switching devices in TOP1 mode and 8461 KIT in cascade, with external unit in TOP mode



IK/EN/006TOPQC

System with Art. 4888C: switching devices in STANDARD mode and 8461 KIT in cascade

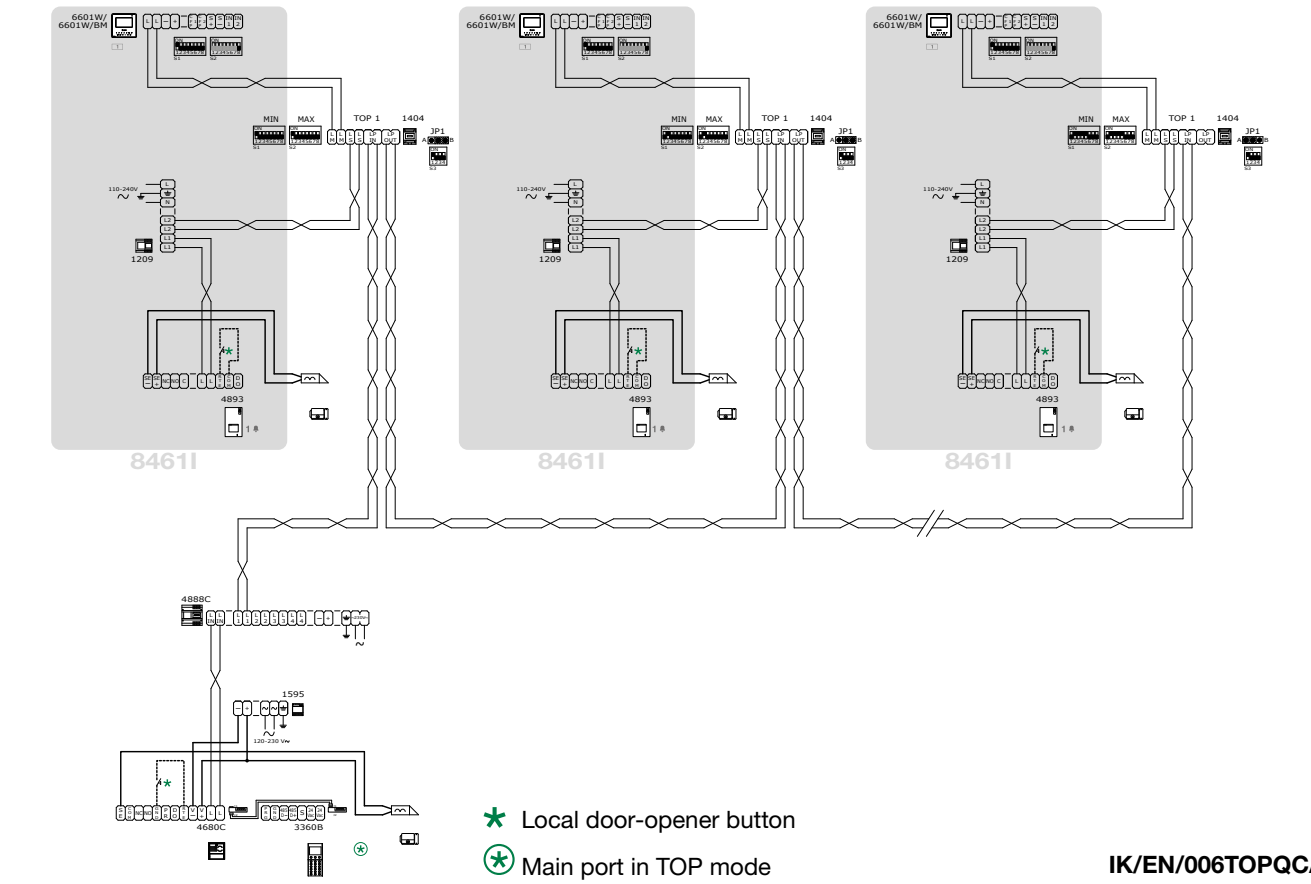


* Local door-opener button

For call address programming, please refer to the full manual for Art. 4893

IK/EN/006QCA

System with Art. 4888C: switching devices in TOP1 mode and 8461 KIT in cascade, with external unit in TOP mode

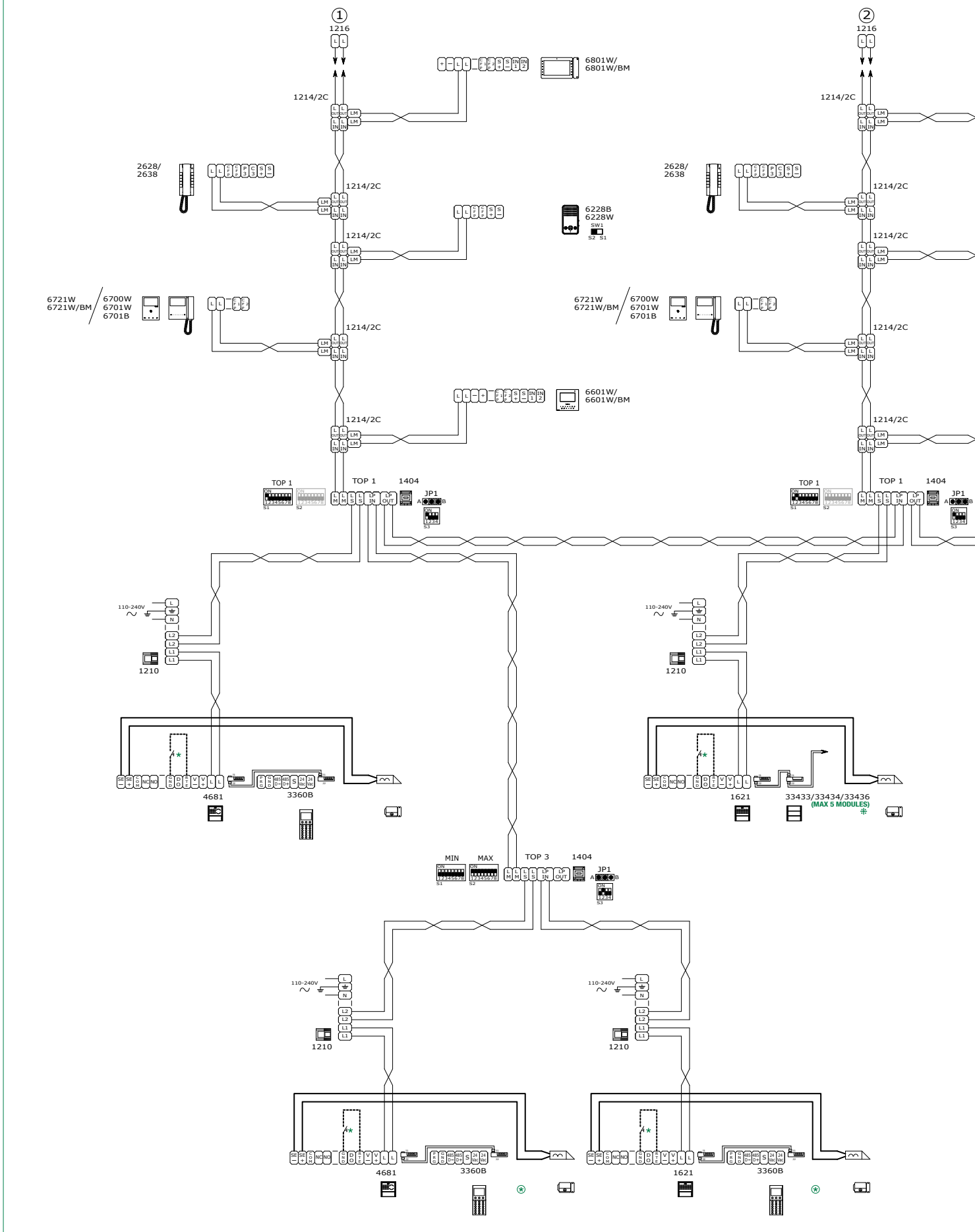


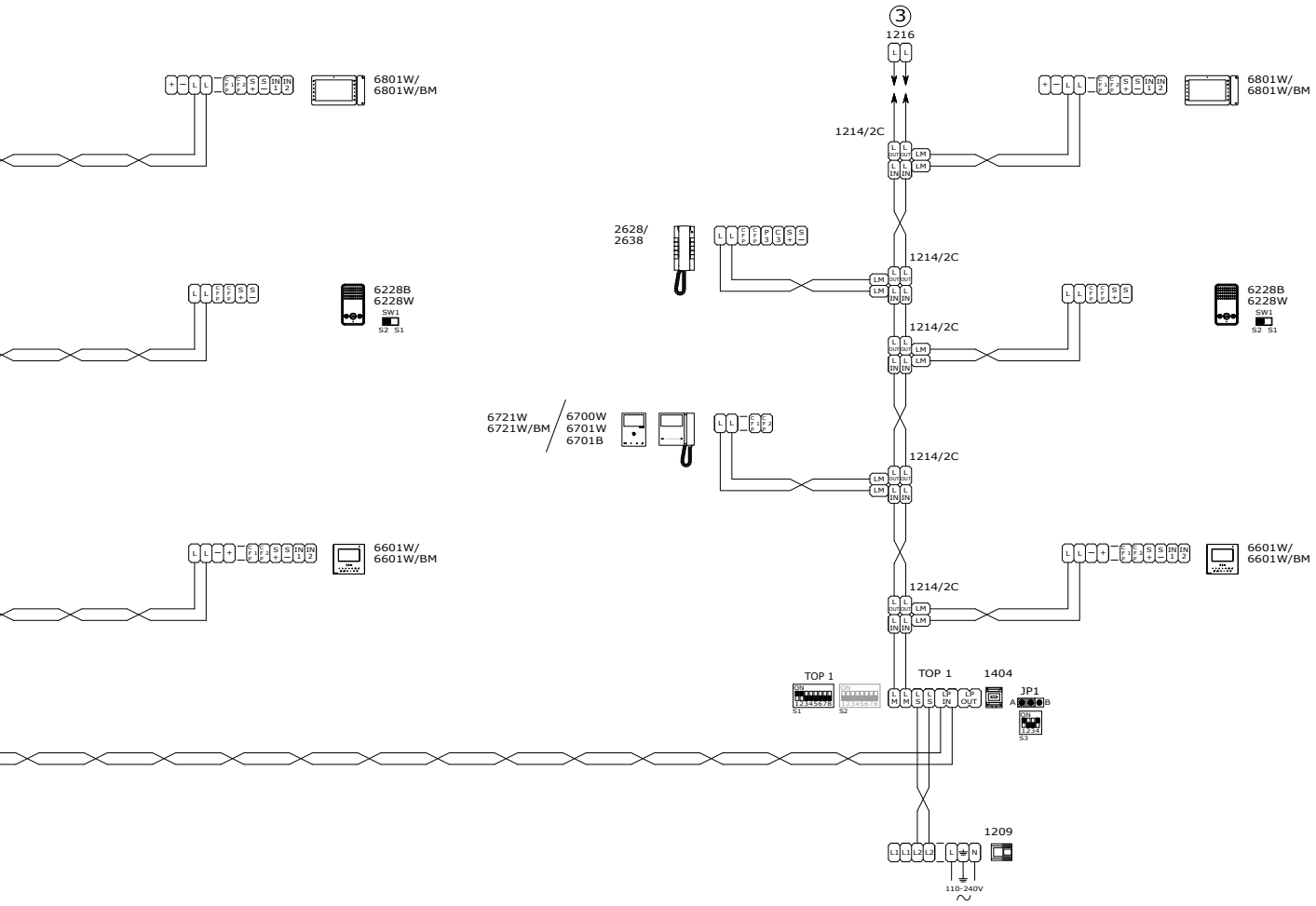
* Local door-opener button

⊛ Main port in TOP mode

IK/EN/006TOPQCA

System with Art. 1210: 2 main external units with switching device in TOP3 mode and switching devices in cascade in TOP1 mode, with one switching device without external unit on LS





✱ Local door-opener button

Ⓐ Main port in TOP mode

⌗ For configurations other than those indicated in the diagram, please refer to the "CONSUMPTION TABLE" in the full manual for Art. 1621

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