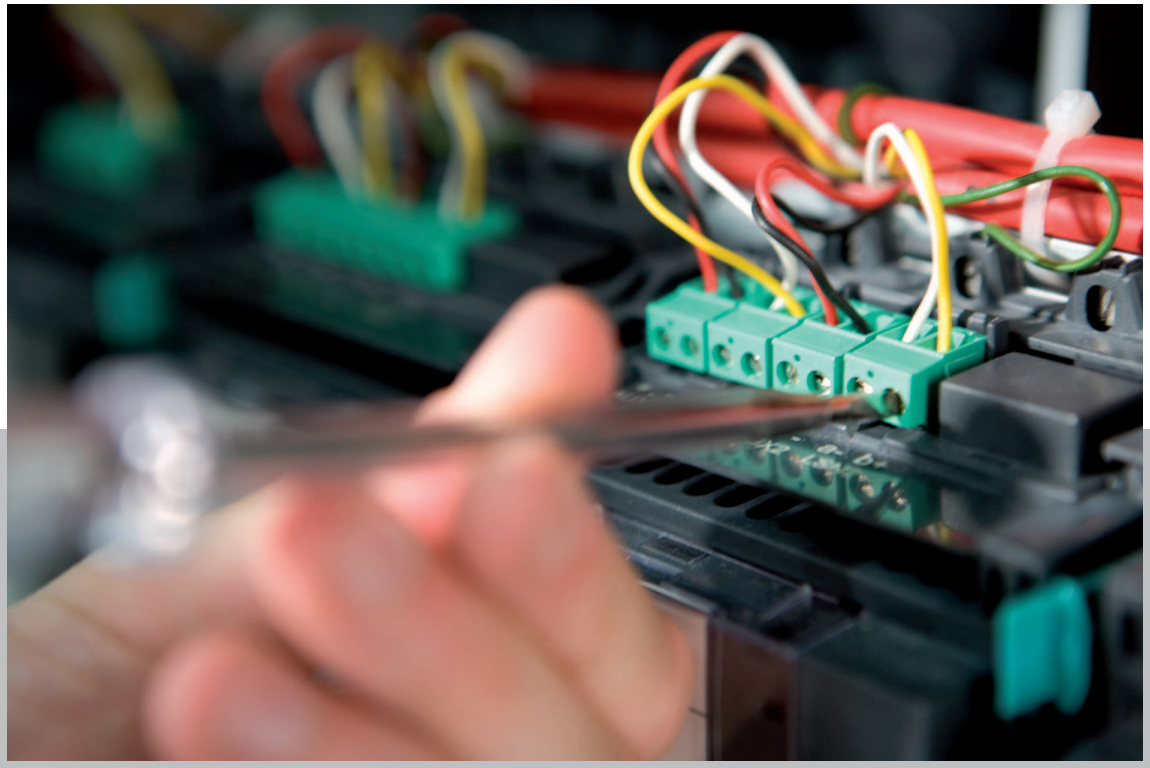
Modular Fire Panel

FPA-5000



en Wiring Guide

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1 History

1.1 12.0 -> 12.1

Changes

Analog-Modem -> FPA-500, CPA 0000 A added
Modem Teleservice -> FPA-500, CPA 0000 A added
FCP-500/FCP-520 ->CZM 0004 A CTN changed
4-wire -> LSN 0300 A, EN54-13 changed
IOP 008 A, max. length changed to 3m
FCP-500/FCP-520 -> FLM-420/4-CON CTN changed
FMC-300-RW -> FLM-420/4-CON CTN changed
Plena -> FLM-420-RLV1 feedbackline added
Plena -> FLM-420-RLV8 feedbackline added
Fray5000 -> CZM 0004 A Reset added
Fray5000 -> FLM-420/4-CON Reset added
Fireray 2000 -> CZM 0004 A, EN54-13 - Reset added
Fireray 2000 -> FLM-420/4-CON EN54-13 - Reset added
FCS-320-TP -> CZM 0004 A EN54-13 - Reset added
FCS-320-TP -> FLM-420/4-CON EN54-13 - Reset added
FCS-320-TM -> CZM 0004 A EN54-13 - Reset added
FCS-320-TM -> FLM-420/4-CON EN54-13 - Reset added
EN54-13: Symbol for 2-wire and 4-wire added

Deleted

FPP-5000 ->FLM420-I2-D 2xFPP-5000 ->FLM420-I2-EW 2x
MSS 400 LSN -> LSN 0300 A (EN54-13) 4x

Outphased

SM 210 LSN RW -> LSN 0300 A
BL1 -> NZM 0002 A 2x
BL200 -> NZM 0002 A 2x
SG200 -> NZM 0002 A 2x
F732 -> FLM-420/4-CON
ORM130 -> FLM-420/4-CON
MS94 -> FLM-420/4-CON
S/Z 2406 -> FLM-420/4-CON
DKM/SKM -> FLM-420/4-CON
BL200 -> FLM-420-NAC 2x
SG200 -> FLM-420-NAC
DKM 120/SKM 120 -> CZM 0004 A
NMS 100 LSN -> LSN 0300 A

New

FMC-420RW -> LSN 0300 A
MPC-xxx-B -> AT2000 + CPA 0000 A
FNS-320 -> NZM 0002 A 2x
FNM-320 -> NZM 0002 A 2x
FNS-320 -> FLM-420-NAC 2x
FNM-320 -> FLM-420-NAC
FNM-320V -> FLM-420-NAC
FNM-320V -> NZM 0002 A
FNM-320V -> FLM-420-RLV1
FCS-320-TM -> CZM 0004 A
FCS-320-TM -> FLM-420/4-CON

FCS-320-TP -> CZM 0004 A
FCS-320-TP -> FLM-420/4-CON
ATG 100 LSN -> LSN 0300 A EN54-13 2x
FAS-420 -> LSN 0300 A EN54-13
FAS-420-TM -> LSN 0300 A EN54-13
FAS-420-TM -> LSN 0300 A BCM-AUX EN54-13
FBF 100 LSN -> LSN 0300 A EN54-13 2x
FK 100 LSN -> LSN 0300 A EN54-13 2x
FLM-420/4-CON -> LSN 0300 A EN54-13 2x
FLM-420-NAC -> LSN 0300 A EN54-13 2x
MSS 400 LSN -> LSN 0300 A EN54-13 2x
FCA-500-EU -> FLM-420/4-CON EN54-13
ADW 511 A -> FLM-420/4-CON EN54-13
FCS-320-TM -> FLM-420/4-CON EN54-13
FCS-320-TP1 -> FLM-420/4-CON EN54-13
FCS-LWM-1 -> FLM-420/4-CON EN54-13
Fireray50RV/100RV -> FLM-420/4-CON EN54-13
Fireray2000 -> FLM-420/4-CON EN54-13
FRay5000-50 -> FLM-420/4-CON EN54-13
DCA1192_SB3/DM_1103B-X/DO1101A-EX/DF1101A-EX/Typ_K -> FLM-420-4-CON EN54-13
FCA-500-EU -> CZM 0004 A EN54-13
FCS-320-TM -> CZM 0004 A EN54-13
FCS-320-TP1 -> CZM 0004 A EN54-13
FCS-LWM-1 -> CZM 0004 A EN54-13
Fireray50RV/100RV -> CZM 0004 A EN54-13
Fireray2000 -> CZM 0004 A EN54-13
FRay5000 -> CZM 0004 A EN54-13
DS 10 -> NZM 0002 A EN54-13 2x
FNM-320 -> NZM 0002 A EN54-13
FNS-320 -> NZM 0002 A EN54-13
MSS 300-SA -> NZM 0002 A EN54-13
PB 2005 -> NZM 0002 A EN54-13
DS10 -> FLM-420-NAC-D EN54-13
FNM-320 -> FLM-420-NAC-D EN54-13
FNM-320V -> FLM-420-NAC-D EN54-13
FNM-320V -> NZM 0002 A EN54-13
FNS-320 -> FLM-420-NAC-D EN54-13
FPP-5000 -> FLM-420-NAC-D EN54-13
MSS 300-SA -> FLM-420-NAC-D EN54-13
PB 2005 -> FLM-420-NAC-D EN54-13
FPP-500-TI13 -> LSN
MPC-xxx-B + EKS d-light DL-CAN 2x

1.2 12.1 -> 12.2

Changes

Contact -> FLM-420-4-CON-DS
ADW_511 -> FLM-420-4-CON-D
DCA1192_SB3/DM_1103B-X/DO1101A-EX/DF1101A-EX/Typ_K -> FLM-420-4-CON-DS
FCS-320-TM-Series -> CZM_0004_A EN54-13
FCS-320-TM-Series -> FLM-420-4-CON-D EN54-13
FCS-320-TP1-Series -> CZM_0004_A EN54-13
FCS-320-TP1-Series -> FLM-420-4-CON-D EN54-13

FCS-LWM-1 -> CZM_0004_A EN54-13
FCS-LWM-1 -> FLM-420-4-CON_D EN54-13
Fireray_50RV/100RV -> CZM_0004_A EN54-13
Fireray_50RV/100RV -> FLM-420-4-CON_D EN54-13
Fireray_2000 -> CZM_0004_A EN54-13
Fireray_2000 -> FLM-420-4-CON-D EN54-13
FRay5000 -> CZM_0004_A EN54-13
FRay5000 -> FLM-420-4-CON-D EN54-13
TSZ_0400 -> FLM-420-4-CON-DS
TSZ_0400 -> FLM-420-I2-E-W
TSZ_0400 -> FLM-420-O1I1-E
TSZ_0400 -> LSN_0300_A
TSZ_0400 -> MS400
FNM-420-A_-B -> LSN_030_A_EN54-13
FNM-420-A_-B -> LSN_030_A_EN54-13
FNM-420-A_-B -> LSN_030_A
FNM-420-A-BS (without detector) -> LSN_030_A EN_54-13
FNM-420-A-BS (without detector) -> LSN_030_A EN_54-13
FNM-420-A-BS (without detector) -> LSN_030_A
FNM-420-A-BS -> LSN_030_A EN54-13
FNM-420-A-BS -> LSN_030_A EN54-13
FPC-500 -> FLM-420-I8R1-S EN54-13
FNM-420-A-BS -> LSN_030_A
LA -> FLM-420-RLE
LWL_Networking_EKS_d-light_MPC-xxxx-B_(FMR-5000)
LWL_Networking_EKS_d-light_MPC-xxxx-B_(FMR-5000)
MSS_300-WH-EC -> CZM_0004_A/FLM-420-NAC-D EN54-13
MSS_300-WH-EC -> CZM_0004_A/NZM_0002_A EN54-13

Deleted

FLM-420-4-CON-D -> LSN_0300_A EN54-13
FLM-420-4-CON-D -> LSN_0300_A EN54-13

Outphased

AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B
AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B_RML_0008_A
AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B_RML_0008_A
AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B_RML_0008_A
AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B_RML_0008_A
AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B_RML_0008_A
AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B
AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B
AT_2000+ISDN+ATE_ISDN -> ENO_0000_A/B
AT_2000+ISDN+ATE_ISDN -> MPC-xxxx-B
LA -> FLM-420-RLE

New

FPC-500 -> FLM-420-I8R1-S_EN54-13
FPC-500 -> FLM-420-O1I1_EN54-13
AT_3000 -> ENO_0000_B
UniVario, WMX-5000, KMX-5000 -> FLM-420-4-CON_EN54-13
N4387A -> CZM 0004 A
N4387A -> CZM 0004 A EN54-13
N4387A -> FLM-420-4-CON
N4387A -> FLM-420-4-CON EN54-13

0165X9 -> CZM 0004 A
0165X9 -> CZM 0004 A EN54-13
0165X9 -> FLM-420-4-CON
0165X9 -> FLM-420-4-CON EN54-13

1.3 12.2 -> 12.3

New

FNM-420V-A -> LSN 0300 A
FNM-420V-A -> LSN 0300 A EN 54-13
SOL-LX -> FLM-420-NZM 0002 A
SOL-LX -> FLM-420-NZM 0002 A EN 54-13
SOL-LX -> FLM-420-NAC-D
SOL-LX -> FLM-420-NAC-D EN 54-13
ROLP-W-LX, ROLP-R-LX -> NZM 0002 A
ROLP-W-LX, ROLP-R-LX -> NZM 0002 A EN 54-13
ROLP-W-LX, ROLP-R-LX -> FLM-420-NAC-D
ROLP-W-LX, ROLP-R-LX -> FLM-420-NAC-D EN 54-13
FIRERAY3000 -> CZM 0004 A
FIRERAY3000 -> CZM 0004 A EN 54-13
FIRERAY3000 -> FLM-420/4-CON-D
FIRERAY3000 -> FLM-420/4-CON-D EN 54-13
FIRERAY5000 -> CZM 0004 A
FIRERAY5000 -> CZM 0004 A EN 54-13
FIRERAY5000 -> FLM-420/4-CON-D
FIRERAY5000 -> FLM-420/4-CON-D EN 54-13
Reset action
TS 4000 E, TS 4000 E-IS, TS 4000 EFS, TS 5000 E, TS 5000 E-IS, TS 5000 E-ISM, TS 550 E, TSA 160 NT F, TSA 160 NT F-IS, TSA 160 F-IS/TS, Slimdrive EMD-F, Slimdrive EMD-F-IS -> FAA-MSR 420 (DIBT)
TS 4000 E, TS 4000 E-IS, TS 4000 EFS, TS 5000 E, TS 5000 E-IS, TS 5000 E-ISM, TS 550 E, TSA 160 NT F, TSA 160 NT F-IS, TSA 160 F-IS/TS, Slimdrive EMD-F, Slimdrive EMD-F-IS -> FLM-420-RHV (DIBT)

Changed

MPC -> MPC (FMR 5000): MPC-xxx-C added
MPC (FMR 5000) + EKS d-light DL-CAN (LWL): MPC-xxx-C added
Analog Modem 56k -> BCM-0000-B: MPC-xxx-C added
Microlink ISDN I -> BCM-000-B: MPC-xxx-C added
FPP-5000-TI13 -> BCM-000-B: PRS-0002-C
UGM 2020 -> FPE-5000-UGM: MPC-xxx-C added
FLM-420-NAC-D -> FPP-5000
FLM-420-NAC-D -> FPP-5000 EN54-13
FLM-420-NAC-D -> LSN 0300 A
FLM-420-NAC-D -> LSN 0300 A EN 54-13
ED 200 -> FAA-MSR 420 (DIBT)
ED 200 -> FLM-420-RHV (DIBT)
GT xx R, 8 xx -> FAA-MSR 420 (DIBT)
GT xx R, 8 xx -> FLM-420-RHV (DIBT)
TS 73 EMF, TS 93 EMF, TS 93 GSR, BTS 80 EMB, BTS 80 FLB-> FAA-MSR 420 (DIBT)
TS 73 EMF, TS 93 EMF, TS 93 GSR, BTS 80 EMB, BTS 80 FLB-> FLM-420-RHV (DIBT)
0165X9 Flame Detector: IR3 added
User Notes changed, Editorial changes (EN)

Outphased

Fireray 2000 -> CZM 0004 A
Fireray 2000 -> CZM 0004 A EN 54-13
FAY5000-series -> CZM 0004 A
FRAY5000-series -> CZM 0004 A EN 54-13
Fireray2000 -> FLM-420/4-CON-D
Fireray2000 -> FLM-420/4-CON-D EN 54-13
FRAY5000-series -> FLM-420/4-CON-D
Fireray5000-series -> FLM-420/4-CON-D EN 54-13

1.4 12.3 -> 12.4

New

ATB 420 LSNi -> LSN 0300 A, ATB 420 LSNi -> LSN 0300 A (EN 54-13)
ATG 420 LSNi -> LSN 0300 A, ATG 420 LSNi -> LSN 0300 A (EN 54-13)
FAT-T-G/FAT-G-G -> FPE-5000-UGM
FAT-T-G/FAT-G-G -> IOS 0020 A
FAT5 -> FPE-5000-UGM
FAT5 -> IOS 0020 A
ED 100/ED 250 -> FAA-MSR-420, ED 100/ED 250 -> FLM-420-RHV

Changed

User Notes updated (CS, DE, EL, ES, FR, HR, HU, IT, NL, PL, PT, RO, RU, SL, TR)
User Notes updated (DE, EN)
TS 4000 E, TS 4000 E-IS, TS 4000 EFS, TS 5000 E, TS 5000 E-IS, TS 5000 E-ISM, TS 550 E, TSA 160 NT F, TSA 160 NT F-IS, TSA 160 F-IS/TS, Slimdrive EMD-F, Slimdrive EMD-F-IS -> FAA-MSR 420 (DIBT)
TS 4000 E, TS 4000 E-IS, TS 4000 EFS, TS 5000 E, TS 5000 E-IS, TS 5000 E-ISM, TS 550 E, TSA 160 NT F, TSA 160 NT F-IS, TSA 160 F-IS/TS, Slimdrive EMD-F, Slimdrive EMD-F-IS -> FLM-420-RHV (DIBT)
FIBS -> LSN 0300
FAA-420-RI -> FAA-MSR-420 (FAA-420-RI-DIN/FAA-420-ROW new)
FCP-500 -> CZM 0004 A, Sample wiring, FCP-500 -> FLM-420-4-CON-DS (MPA deleted, FAA-420-RI-DIN new)
DF 1192 -> FLM-420-4-CON (MPA deleted, FAA-420-RI-DIN new)
FAA-MSR-420 -> LSN 0300 A (MPA deleted, FAA-420-RI-DIN new)
FAA-500 + FAA-500-R -> LSN 0300 A (MPA deleted, FAA-420-RI-DIN new)
FAD 0420 -> LSN 0300 A (MPA/FAA-420-RI-DIN not possible)
FCS-LWM-1 -> CZM 0004 A, FCS-LWM-1 ->FLM-420-4-CON (MPA deleted, FAA-420-RI-DIN/ FAA-420-RI-ROW new)
FNM-420-A-BS, FNM-420U-A-BS -> LSN 0300 A (MPA deleted, FAA-420-RI-DIN new)
MSS-300-WH-EC, MSS-300-WS -> CZM 0004 A (MPA deleted, FAA-420-RI-DIN new)
MSS-300, MS-400, MSF-400 -> FLM-420/4-CON (MPA deleted, FAA-420-RI-DIN new),
MS-400 -> LSN 0300 (MPA deleted, FAA-420-RI-DIN new)
MS-400 -> CZM 0004 A (MPA deleted, FAA-420-RI-DIN/FAA-420-RI-ROW new)
FPC-500 -> FLM-420-I8R1-S, FPC-500 -> FLM-420-O1I1-E deleted

Outphased

BS ATG 100 LSN -> LSN 0300 A, BS ATG 100 LSN -> LSN 0300 A EN 54-13
ED 200 -> FAA-MSR-420, ED 200 -> FLM-420-RHV
MSR 320 -> CZM 0004 A, MSR 320 -> FLM-420-4-CON

1.5 12.4 -> 12.5

New

ASD 535-2 -> FLM-420-4-CON
FAT4000, FBF4000, ADP4000 (FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3, FMF-ADP) -> IOS 0020 A 2x
FAT4000, FBF4000, ADP4000 (FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3, FMF-ADP) -> UEZ2000
FAT4000, FBF4000, ADP4000 (FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3, FMF-ADP) -> BZ500
FCS-320-TP2 -> FLM-420-4-CON 2x, FCS-320-TP2 -> CZM 0004 A 2x

Changed

AT3000 -> ENO 0000 A/B (product name AT3000)
FLM-420-NAC-DS -> LSN 0300 A, FPP-5000 -> FLM-420-NAC-D,
Plena -> FLM-420-RLV1-E, Plena -> FLM-420-RLV8-S, Plena -> IOS_0020_A (product name FPA)
FAA-MSR-420 -> LSN 0300 A, FAA-420-RI -> FAA-MSR-420 (C point connection not allowed)
FAT 2002 RE -> IOS 0020 A + MPC-xxxx-B, FAT 2002 RE -> IOP 0008 A + IOS 0020 A, FAT 2002 RE -> FLM-420-I2-D + IOS 0020 A (power supply)
FAT5 -> FPE-5000-UGM, FAT5 -> IOS 0020 A (fault relay, polarity)
FAT-T-G/FAT-G-G -> FPE-5000-UGM, FAT-T-G/FAT-G-G -> IOS 0020 A (TTY-interface)
FCA-500-EU -> CZM 0004 A 2x, FCA-500-EU -> FLM-420-4-CON 2x (labeling connections)
FLM-420-4-CON-D -> LSN 0300 3x (delete unnecessary lines)
FLM-420-NAC-DS -> LSN 0300 6x, FPP-5000 -> FLM-420-NAC (FLM-420-NAC labeling: a + b -)
FMR-5000 -> BCM-0000-B (redundancy symbol added)
Fireray 50RV/100RV -> FLM-420/4-CON-D 2x, Fireray 50RV/100RV -> CZM 2x (key switch -> reset)
User Notes updated, order of chapters

Deleted

FPC-500 -> FLM-420-I8R1-S EN54-13, FPC-500 -> FLM-420-O1I1 EN54-13

Outphased

ADW 511 A -> CZM 0004 A
ADW 511 A -> FLM-420/4-CON-D/S
ADW 511 A -> FLM-420/4-CON-D/S (EN 54-13)
BGÜ 40/30 -> ENO 000 A/ENO 000 B
BGÜ 40 -> ENO 000 A/ENO 000 B
TUS 35 -> ENO 000 A/ENO 000 B
SD 3, FSD 2003, FNSK -> ENO 0000 A/ENO 000 B
SD 12 V, FNSK -> ENO 0000 A/ENO 000 B/
SD 3, SD 24 V, FNSK -> ENO 0000 A/ENO 000 B
SD 3, SD 24 V, FSE -> ENO 0000 A/ENO 000 B
SD 12 V, FSE -> ENO 0000 A/ENO 000 B
SD 3, SD 24 V, FSE -> ENO 0000 A/ENO 000 B
FAT 2002 -> IOS 0020 A
FIBS -> LSN 0300 A 3x

1.6 12.5 -> 12.6

Changed

FAT4000, FBF4000, ADP4000 (FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3, FMF-ADP) -> IOS 0020 A (EN 54-13) 2x
FAT4000, FBF4000, ADP4000 (FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3, FMF-ADP) -> FPE-5000-UGM (EN 54-13)

FAT4000, FBF4000, ADP4000 (FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3, FMF-ADP) -> FMF-ADP-FBF/FMF-ADP-TTY (EN 54-13) 2x
AT3000 IP/GSM, AT3000 IP/GSM/Analog, AT3000 IP/GSM/ISDN -> ENO 0000 A/B (name)

Outphased
FAT4000, FBF4000, ADP4000 (FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3, FMF-ADP) -> UEZ2000 (EN 54-13) 2x
FAT4000, FBF4000, ADP4000 (FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3, FMF-ADP) -> BZ500 (EN 54-13) 2x

1.7 12.6 -> 12.7

Changed
EN 54-13 symbol deleted, ELS symbol new
User notes updated, Merge symbols for Power supply via the panel and External power supply (EN)
Order of chapters Chapter EN 54-13 -> EOL, Loop wirings without EOL modules moved
0165X9 -> 016519, 016589
ASD 535-2 -> FLM-420/4-CON (ELS)
3 x FLM-420-O8I2-S -> LSN 0300
2 x DC1192, SB3 -> FLM-420-4-CON-DS (OOH740-A9-Ex added)
3 x FLM-420-O1I1 series -> LSN 0300
FLM-420-NAC-D -> BCM-0000-B, MSS 300-SA -> FLM-420-NAC-D (erroneus 2k2 relais indication)
FLM-420-NAC-D/S -> LSN 0300 A (Flush symbol added)
Fireray 50RV & 100RV -> FLM-420/4-CON/D (LSN AUX added)
2 x FCP-500 > FLM-420-NAC (switched wires)

Deleted
3 x FLM-420-O8I2-S (use cases) -> LSN 0300, 1 x FLM-420-I8R1-S (use case)-> LSN 0300
4 x FLM-420-O2 -> LSN 0300
1 x FLM-420-O1I1-E -> LSN-0300-A

New
ADW 535-1 -> FLM-420/4-CON (ELS), ADW 535-2 -> FLM-420/4-CON (ELS)
ASD 535-1 -> FLM-420/4-CON (ELS)
FCS-LHD-2 -> CZM 0004 A, FCS-LHD-2 -> CZM 0004 A (ELS)
FCS-LHD-2 -> FLM-420/4-CON, FCS-LHD-2 -> FLM-420/4-CON (ELS)
OSID -> FLM-420/4-CON (ELS)
thefirebeam -> FLM-420/4-CON (ELS)
ASD 532 -> FLM-420/4-CON (ELS)

1.8 12.7 -> 12.8

New
AT5000 ->ENO 0000 B

Changed
Editorial changes: Index, VdS 2489 added (ELS wirings)
Naming:
- 2x DCA1192 -> DC1192
- 2x DKM Typ K Ex-97 -> 2014/2 Ex, 2014/2 GLU-Ex
- 11x Base name, graphic -> Detector name, graphic
- Delete FCP-520
- FMC-420RW -> FMC-420RW-HSGRD FMC-420RW-HSRRD FMC-420RW-GFGRD FMC-420RW-GFRRD FMC-420RW-GSGRD FMC-420RW-GSRRD
- UniVario WMX-5000 -> UniVario WMX5000

– UniVario KMX-5000 -> UniVario KMX5000
– UniVario FMX5000 added
ELS descriptions in 2.4.2 (DE, EN)
2x DS 10->NZM 0002 A (connection B->L- corrected)

ADW-535-2 | ASD-535-2 -> FLM-420/4-CON (correction, shield correction)
ADW 535-1 | ASD-532 | ASD 535-1 | OSID | thefirebeam -> FLM-420/4-CON (shield correction)
FAS-420 | FAS-420-TM-> LSN 0300 A (shield correction)
FCS-320-TM | FCS-320-TP | FCS-320-TP1 | FBF 100 -> LSN 0300 A (shield correction)
Fireray50RV/100RV | FIRERAY3000 | FIRERAY5000 (shield deleted)
FLM-420-O1I1 -> LSN 0300
FCS-320-TP2 -> FLM-420/4-CON, CZM 0004 A (power supply)
FCS-LHD-2 (Alarmline II) -> FLM-420/4-CON (power supply)
DS 10 -> NZM 0002 A (ELS), FCS-320-TP2 + FLM-320-EOL4W-> CZM 0004 A, UniVario -> FLM-420/4-CON, 3 x ELS principle (correction of swapped wires)
Editorial changes: FCS-320-TM series, FCS-320-TP1 series (symbols), User notes updated, 3 duplicates removed
Loeschanlage -> RMH 0002 A (VKA2 + Montagesatz 10DA added)
Reset action
5 x FAT4000 (shield)
MSS 300-WS -> FLM-420/4-CON, MSS 300-WS -> CZM 0004 A (3k92 according installation guide)

Deleted
Löschanlage -> FB1 (of RMH 000 2 A, application discontinued since Wiring Guide 12.2)
Section Networking (see Networking guide)
Section Operating and display panels (see Installation guide of remote keypad)
AT3000 IP/GSM/ISDN -> ENO 0000 A/B
37 x 2-wire cabling -> CZM 0004 A

1.9 12.8 -> 12.9

New
FWI-270 -> LSN 0300 A 4x
ADW-535 4x, ASD-532 2x, ASD-535 4x, FCS-LHD-2EN 2x, Xtralis VESDA VLS-304 1x -> FLM-420-RHV

Changed
AT5000 ->ENO 0000 B
Loeschanlage -> FLM-420-RLE-S 2x, FLM-420-RLE-S -> LSN 0300 A 1x
MSS 300 -> CZM 0004 A 2x, MSS 300 -> FLM-420-4-CON 2x (CTN corrected)
FNS-P400RTH, HPW 11 -> RMH 0002 A
PB 2005 -> FLM-420-NAC-D 2x, PB 2005 ->NZM 0002 A
FNM-320V -> FLM-420-NAC-D (ext. power supply) 2x
FNS-320 -> NZM 0002 A 4x
DS 10 -> NZM 0002 A 2x, DS 10 -> FLM-420-NAC-D
FCS-LHD-2 -> FLM-420-4/CON 2x
LSN 1500 notice, ELS description in User notes, title page

Deleted
FK 100 -> LSN 0300 A 3x
MSS300-SA 4x

2 Notes

2.1 Content

This Wiring Guide shows how peripheral devices are connected to the fire panel.
Peripheral devices that are no longer included in the product range are covered in "Part 2 - Discontinued Products" of the Wiring Guide.

Notice!
The connections laid out in this document also apply to the FPA-1200 Fire Panel, provided that the individual components are Bosch Sicherheitssysteme GmbH approved extensions of the FPA-1200 Fire Panel.

Notice!
The LSN 0300 A connections laid out in this document also apply to the LSN 1500 A module. Consider for the LSN 1500 A module, that for installations in Germany, where compliance to VdS 2540 is required, the AUX line and the LSN line have to be in separate cables.

2.2 Product Information

– You can find datasheets and installation manuals of the individual devices at: www.boschsecurity.com

2.3 Important Notes

– Only use installation materials as recommended by Bosch Security Systems.
– Only perform conversion and soldering work wearing a grounding wrist strap.
– Assembly and installation must only be performed by qualified personnel.
– Note connection criteria of the regional authorities/institutions.

Danger!
Touching live components can be fatal.
Disconnect the power supply before carrying out installation.

Cable shield wire
A cable shield wire is necessary for all two wire connections to CZM 0004 A and for connecting the following products:
– FBF 100 LSN
– FMF-ADP, FMF-FAT, FMF-FBF-FAT, FMF-FIBS-A4, FMF-FIBS-A3
The sample wiring following shows how to apply a cable shield wire.

Notice!
If a cable shield wire for the LSN cable has to be connected, then proceed according to LSN specifications.
- Connect LSN cable shield on panel side to designated functional earth connector:
two connections at start and end of a loop
one connection at the start of a stub
- Loop through cable shield at all LSN peripheral devices using provided terminals
- No additional connection of LSN cable shield is permitted, neither to earth connectors at any location nor to other electrical potential

2.4 User Notes

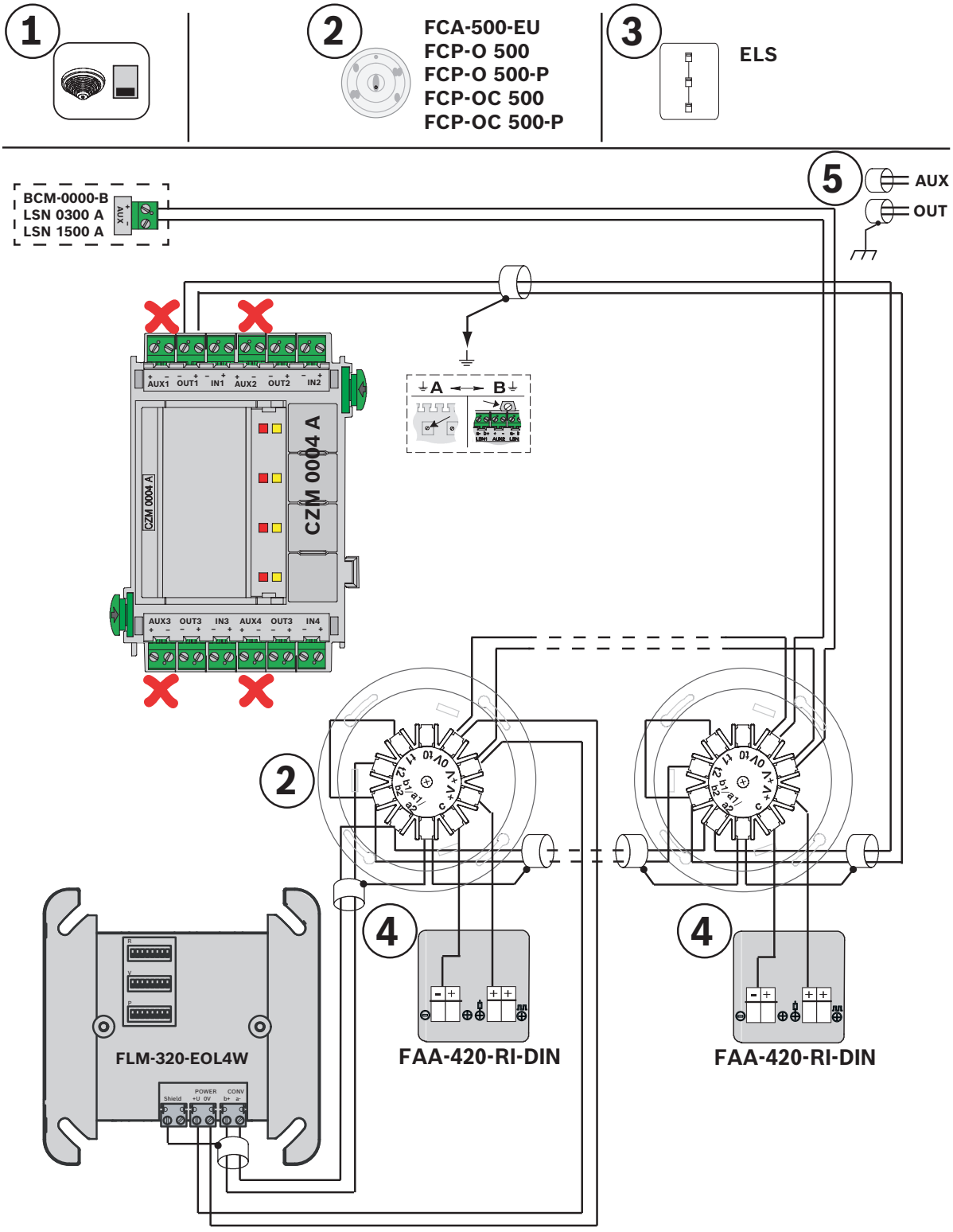
The wiring guide is structured as follows:

– Chapter *Wiring, page 17* is sorted by the device to which a peripheral device is connected. A wiring shows the direct connection of one device to another device (no cascading connections).
– Find a collection of all wirings which are enriched with additional EOL modules for creeping open monitoring in the section EOL.

To find the required wiring also use:

– the table of contents at the beginning of the chapter *Wiring, page 17* and at the beginning of the sections *Functional Modules, page 49*, *Interface Modules, page 135*, and EOL.
– the Index (language neutral),
– and the full-text search.

See the following sample wiring:



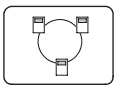
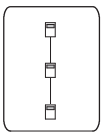
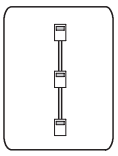
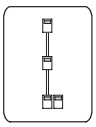
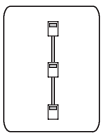
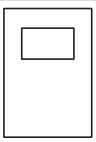
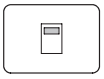
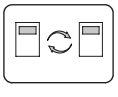
1	Chapter symbols (*Chapter Symbols, page 14*)
2	Connectable peripheral device
3	Connection symbols (*Connection Symbols, page 14*)
4	Optional components
5	Power Supply and Wiring (*Power Supply and Wiring, page 15*)

Refer to
– *EOL, page 172*

2.4.1 Chapter Symbols

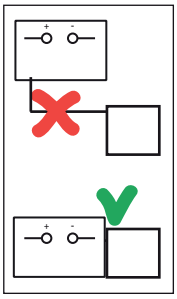
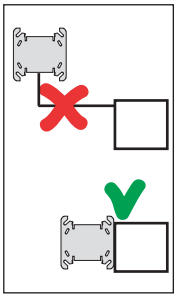
	Automatic detectors		Operating and display panels		Printer
	Power supply		Functional modules		Fire service equipment
	Interface modules		Extinguishing systems		Manual call points
	Signaling devices		Door controls		Transmission units

2.4.2 Connection Symbols

	Mandatory wiring	- - - - -	Optional wiring		Not allowed
	Redundancy		Loop wiring		Loop wiring with redundant element
	Stub wiring		Redundant stub wiring		Stub wiring with redundant element
	Redundant stub wiring with redundant element	ELS	This wiring is compliant with VdS 2489 / VdS 2540 / VdS 2541 / VdS 2543. ELS stands for Extended Line Supervision, which means creeping short circuit and creeping open monitoring. This wiring offers ELS. A creeping short circuit is detected by the following modules: LSN 0300 A, LSN 1500 A, and BCM-0000-B when using FPP-5000-TI13.		This loop wiring is compliant with VdS 2489 / VdS 2540 / VdS 2541 / VdS 2543. It offers ELS. Additional EOL modules are not necessary.
	Synchronization		Areas with danger of explosion		Panel
	Standalone panel		Standalone panel with redundancy		For detector bases: The wiring is valid solely for the detector base in which the detector is installed.

EN 54-2, DIBT etc.	If compliance with this standard is required, then use the specified wiring.					

2.4.3 Power Supply and Wiring

	Cable, 2-wire is required.
	Shielded cable, 2-wire is required.
	The housing of the product containing the power supply must be mounted flush with the element.
	Flush mounting is required for the interface module.
 **Reset action**	See the wiring in this manual. To provide automatically resetting of the device you have to implement the reset action.

2.5 Resistance Values

The following table provides an overview of resistor color coding. The metal film resistors delivered with the product have 5 color bands, which indicate the resistance value.

Color	1. band	2. band	3. band	4. band (multiplicator)	5. band (tolerance)
Silver				10^{-2}	±10%
Gold				10^{-1}	±5%
Black		0	0	10^{0}	
Brown	1	1	1	10^{1}	±1%
Red	2	2	2	10^{2}	±2%
Orange	3	3	3	10^{3}	±0.05%
Yellow	4	4	4	10^{4}	±0.02%
Green	5	5	5	10^{5}	±0.5%
Blue	6	6	6	10^{6}	±0.25%

Color	1. band	2. band	3. band	4. band (multiplicator)	5. band (tolerance)
Violet	7	7	7	10^7	±0.1%
Gray	8	8	8	10^8	±0.01%
White	9	9	9	10^9	

In accordance with DIN EN 60062:2017

Orange — white — black — brown — brown: 3.9 k Ohm resistor with 1% tolerance,

Red — red — black — brown — brown: 2.2 k Ohm resistor with 1% tolerance.

3 Wiring



FPP-5000 Power supply, page 18

DIBT, page 20

Functional Modules, page 49

BCM-0000-B, page 50

CZM 0004 A, page 52

ENO 0000 A/B, page 66

LSN 0300 A, page 73

NZM 0002 A, page 107

RMH 0002 A, page 116

IOS 0020 A, page 117

FPE-5000-UGM, page 131

Interface Modules, page 135

FLM-420/4-CON-D/S, page 136

FLM-420-NAC-D/S, page 159

FLM-420-RHV

FLM-420-RLE-S, page 168

FLM-420-RLV1-E, page 169

FLM-420-RLV8-S, page 170

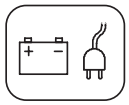
FMF-ADP-FBF/FMF-ADP-TTY, page 171

EOL, page 172

LSN 0300 A, page 173

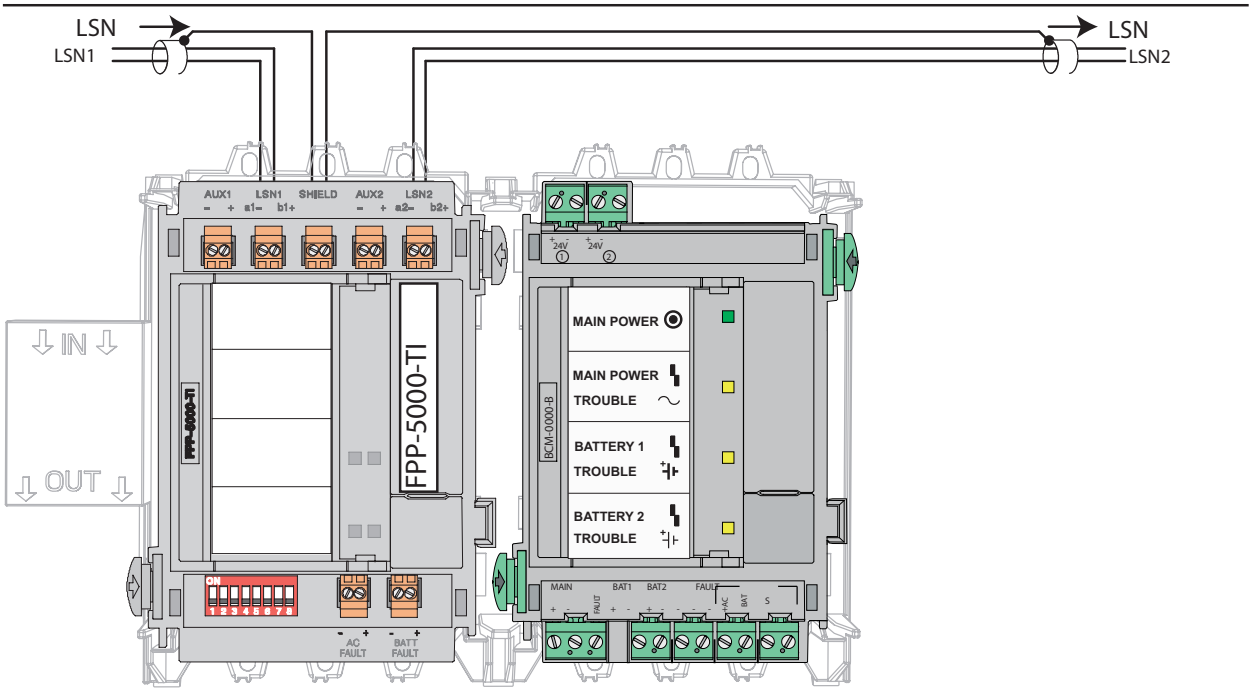
FLM-420/4-CON-S/D, page 216

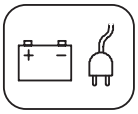
3.1 FPP-5000 Power supply





FPP-5000-TI

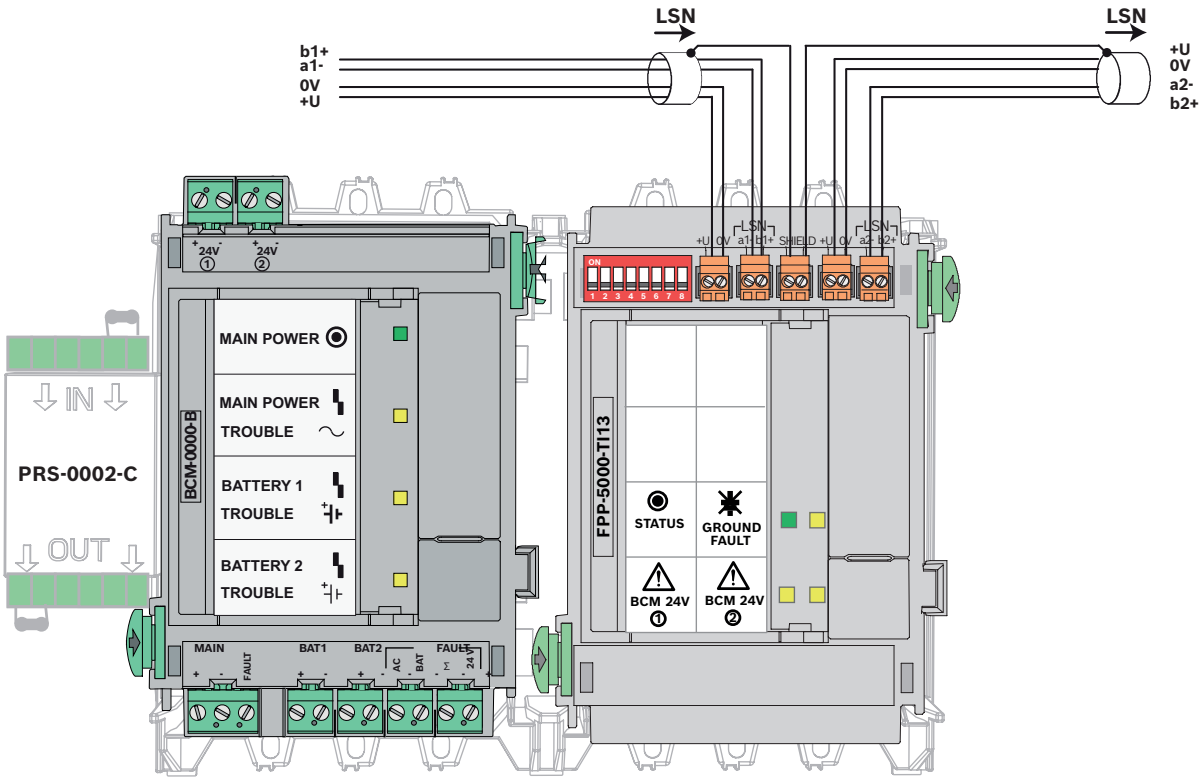




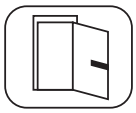


FPP-5000-TI13

ELS



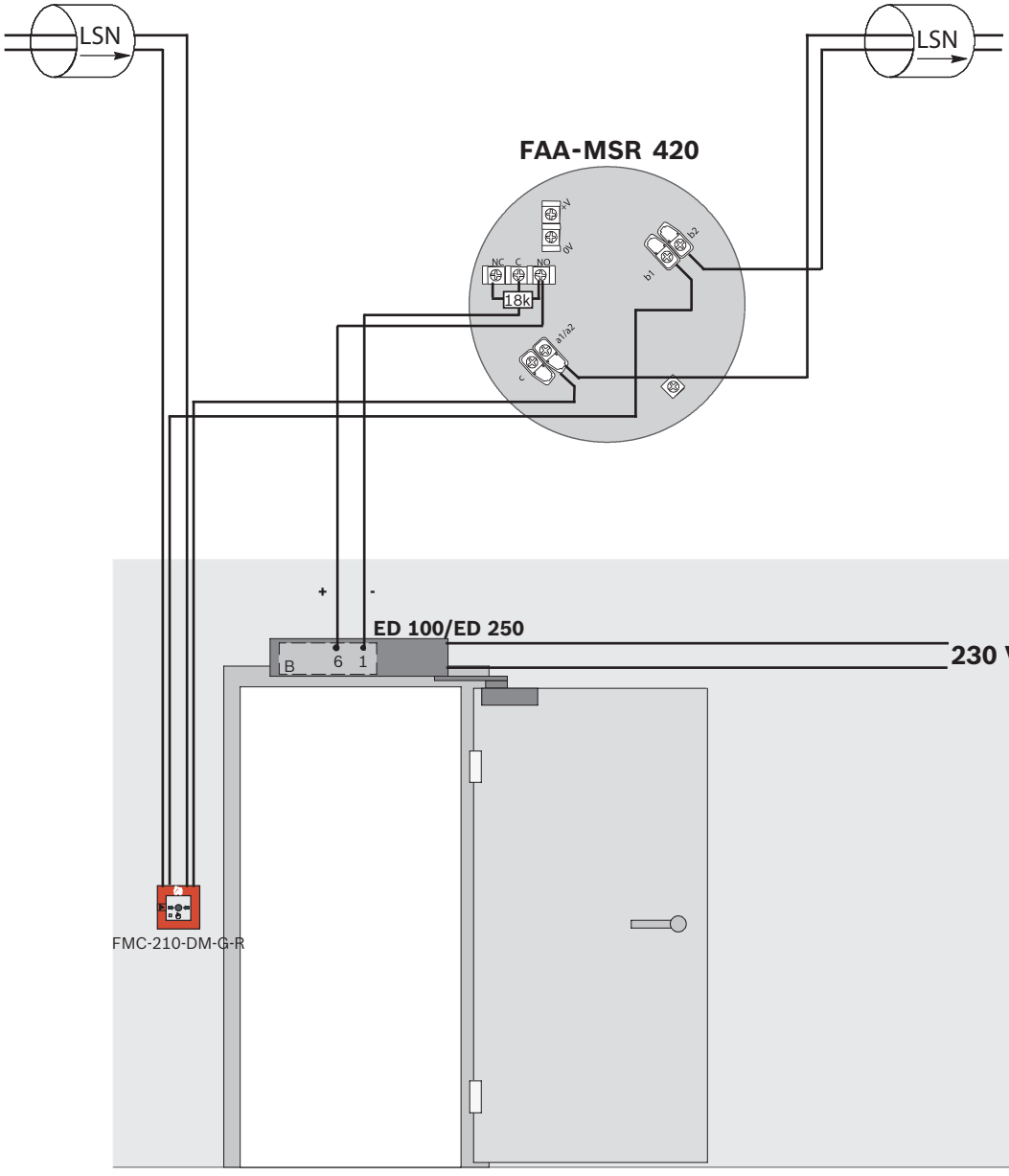
3.2 DIBT

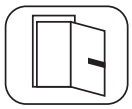




ED 100
ED 250
(+Upgrade Card B)

DIBT

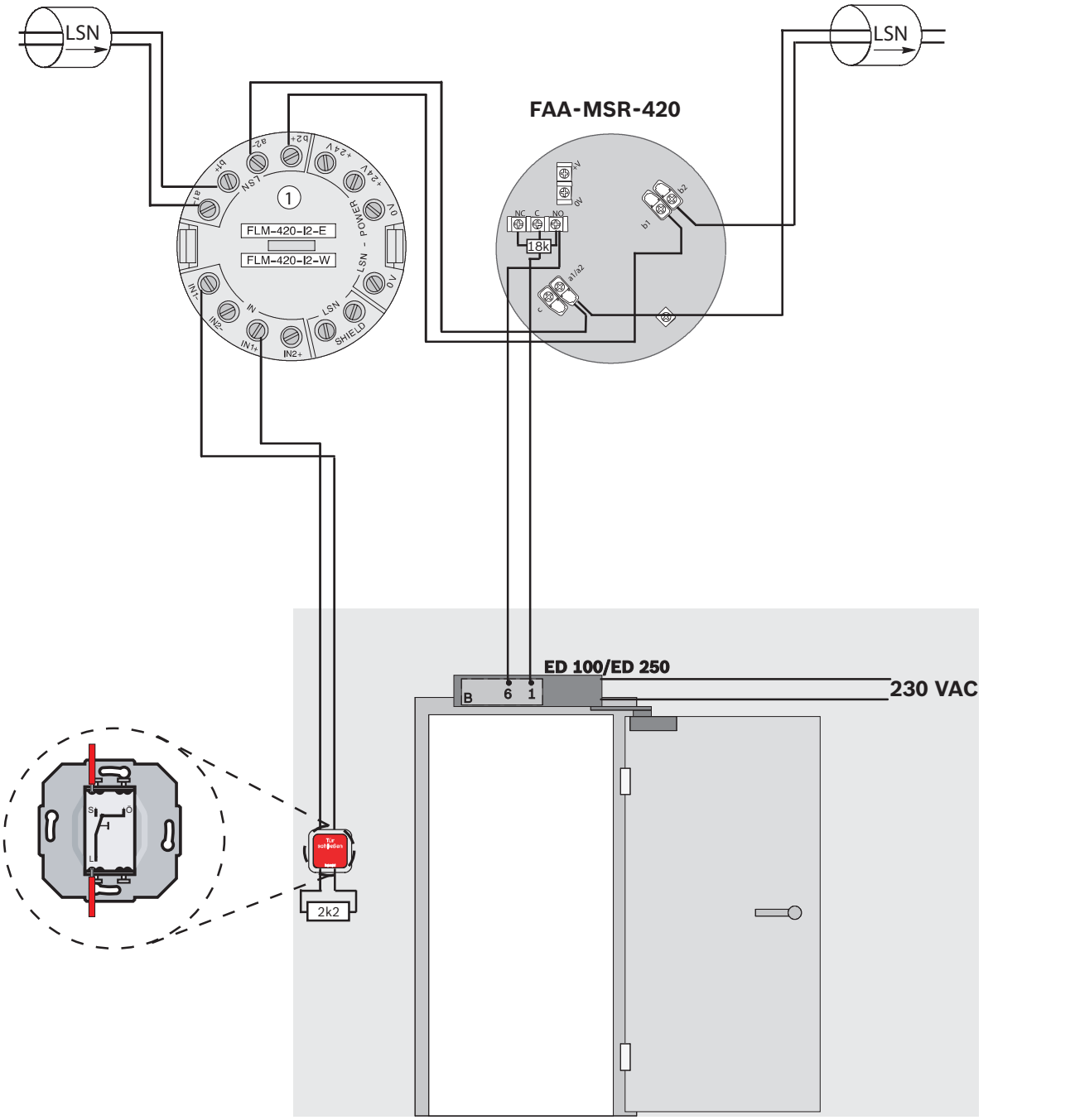


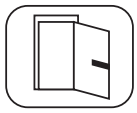




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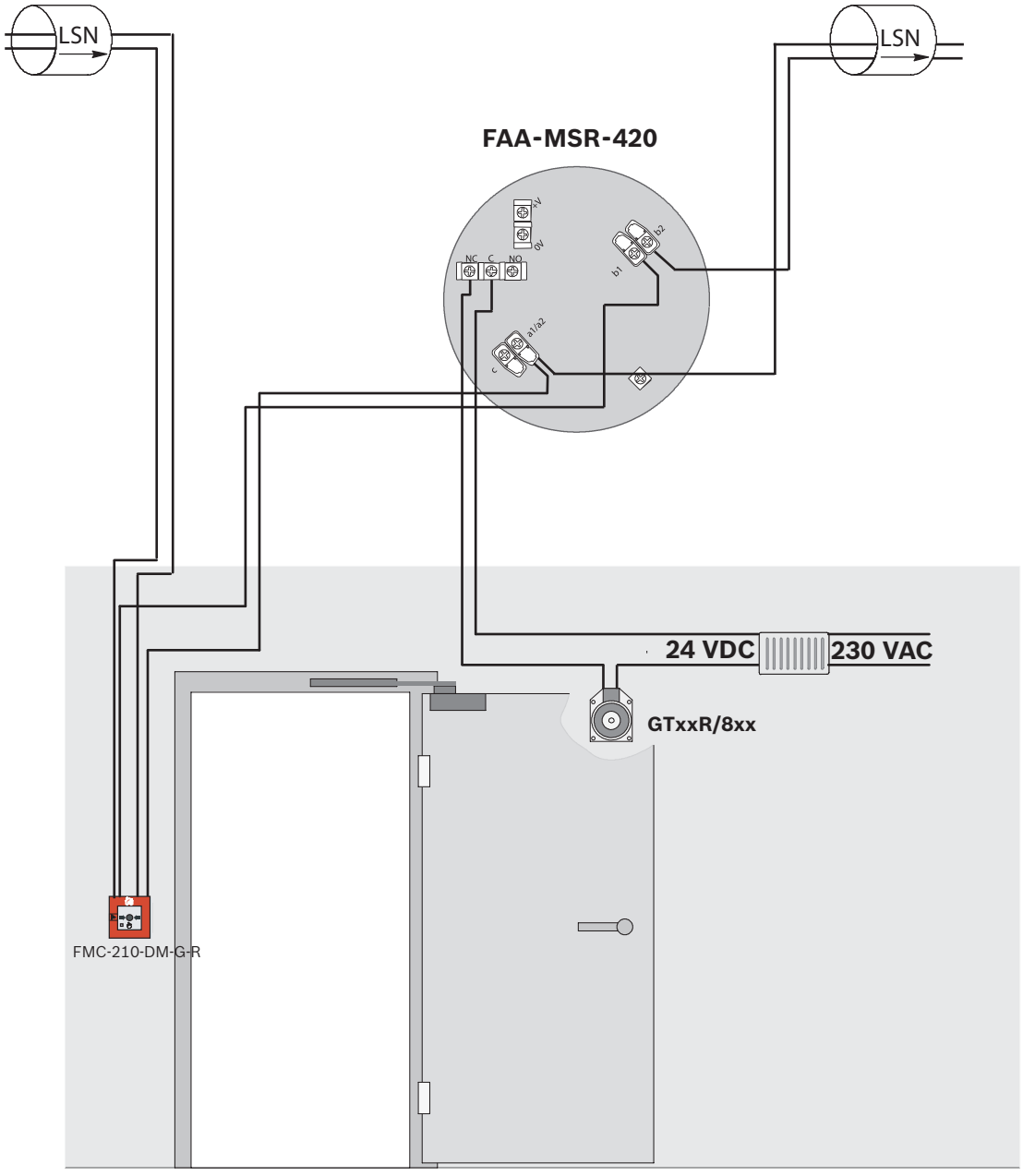


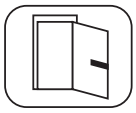


GT xx R

8 xx

DIBT



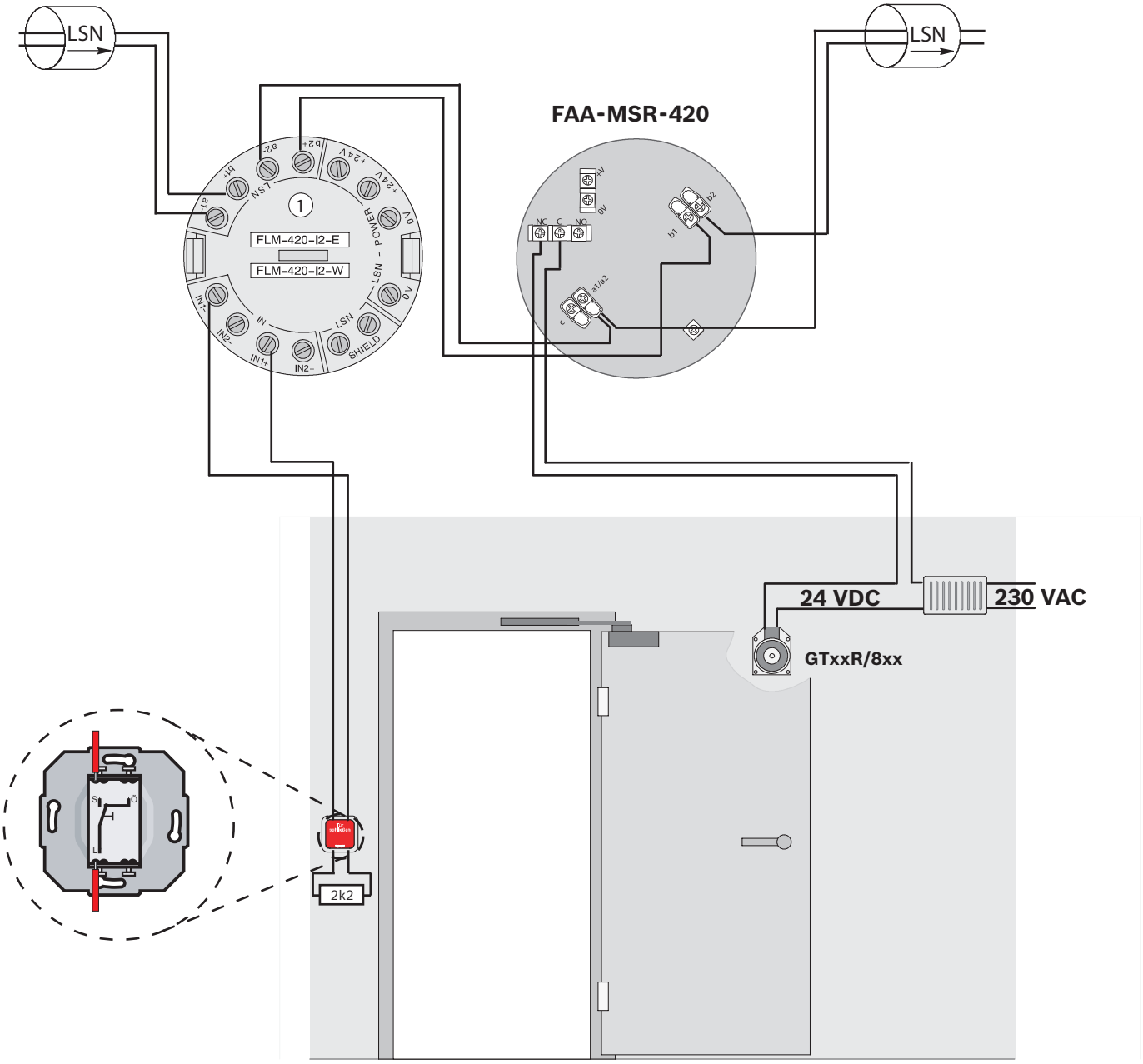


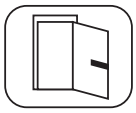


GT xx R

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DIBT

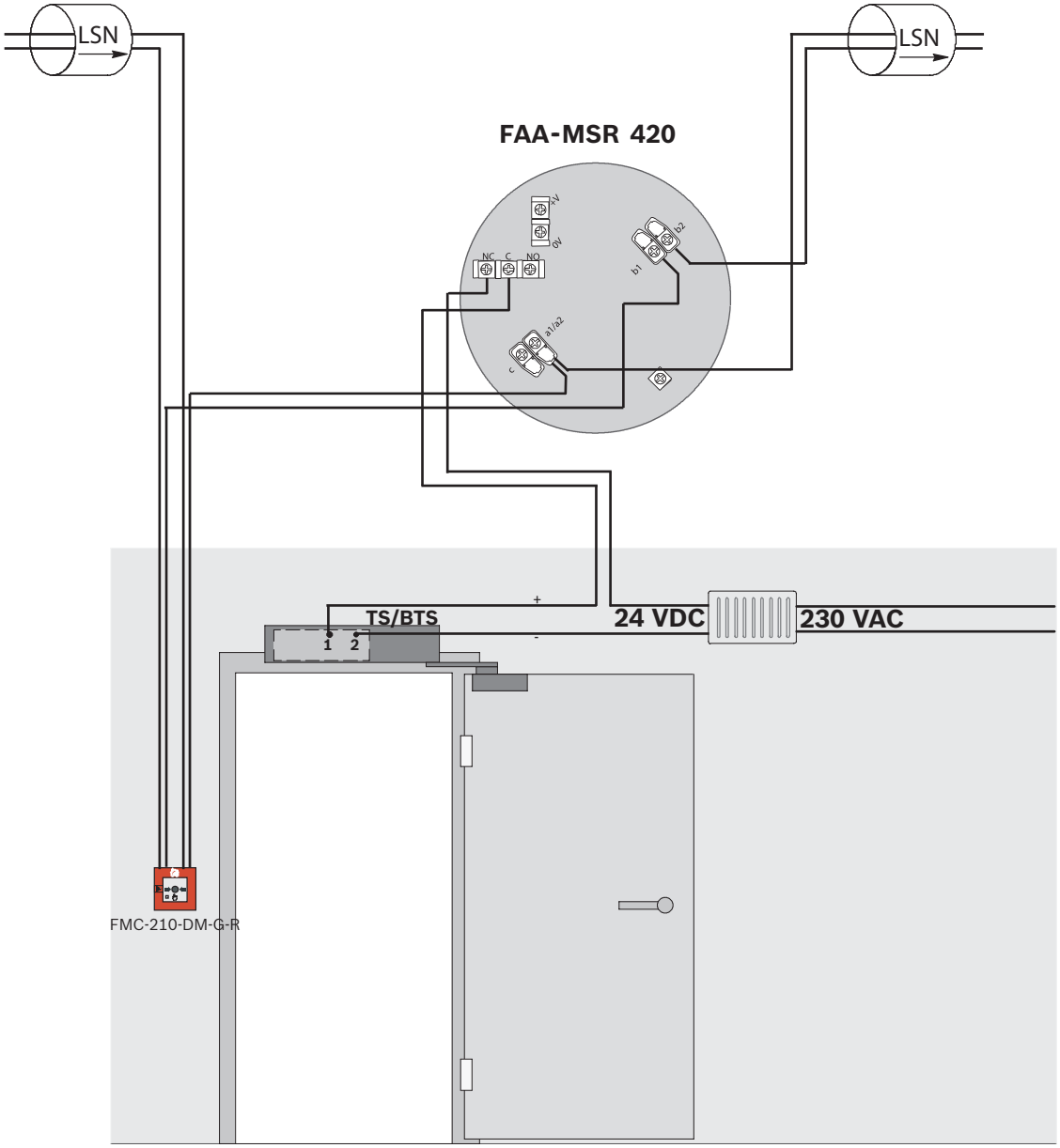


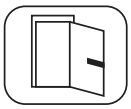




TS 73 EMF
TS 93 EMF
TS 93 GSR
BTS 80 EMB
BTS 80 FLB

DIBT

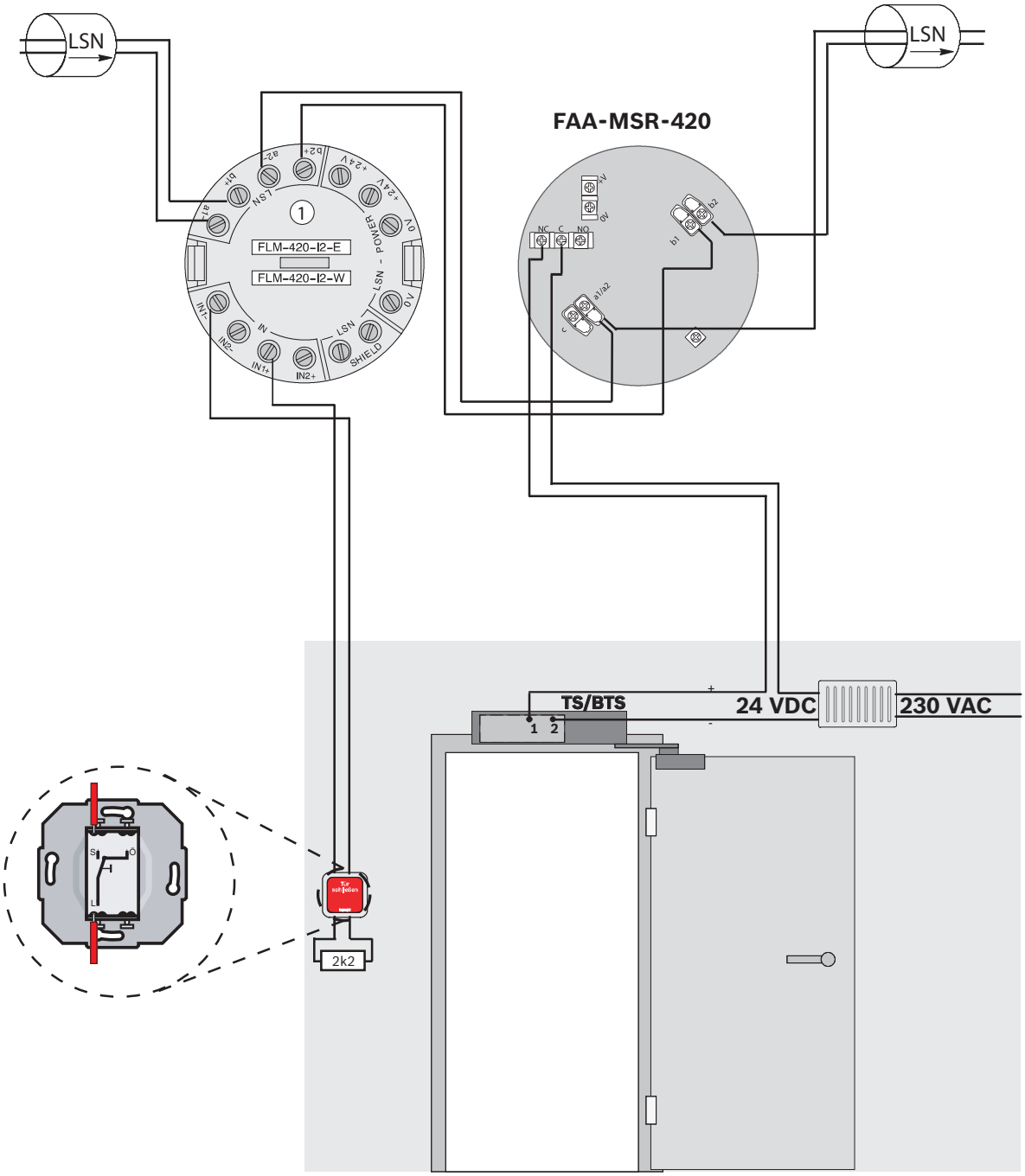


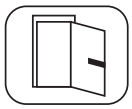




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BTS 80 FLB

DIBT

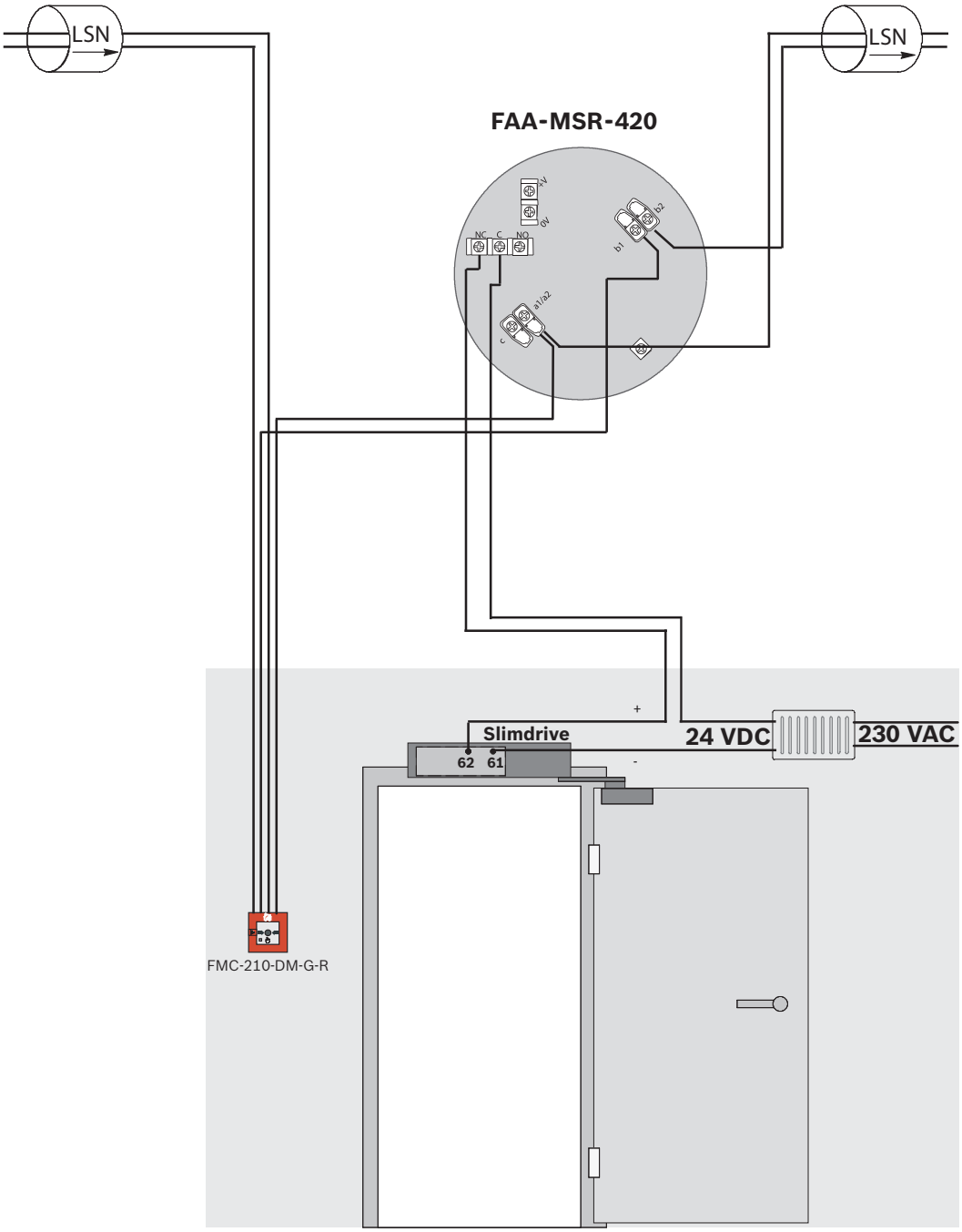


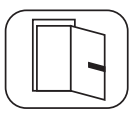




Slimdrive EMD-F/EMD F-IS

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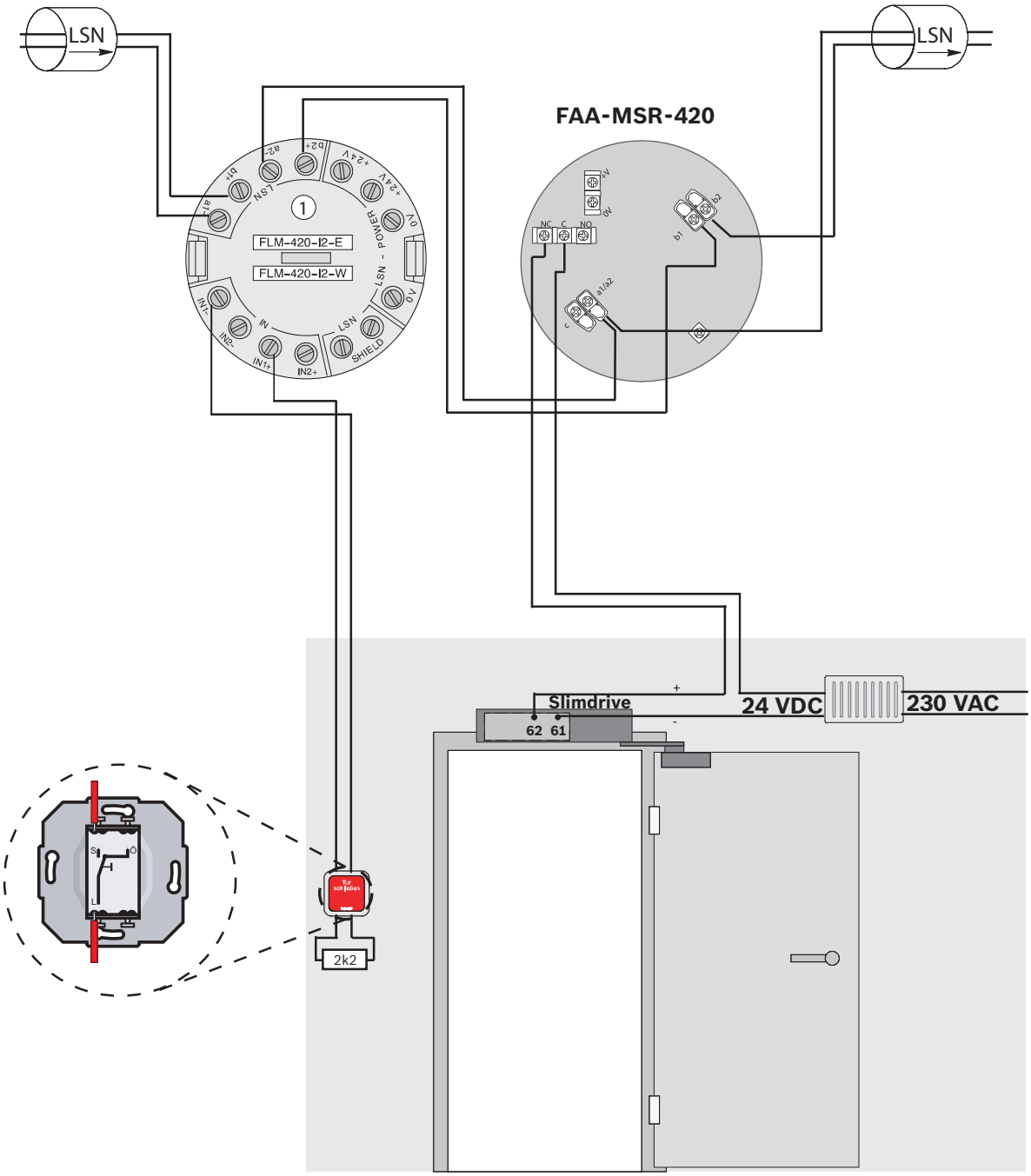


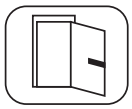




Slimdrive EMD-F/EMD F-IS

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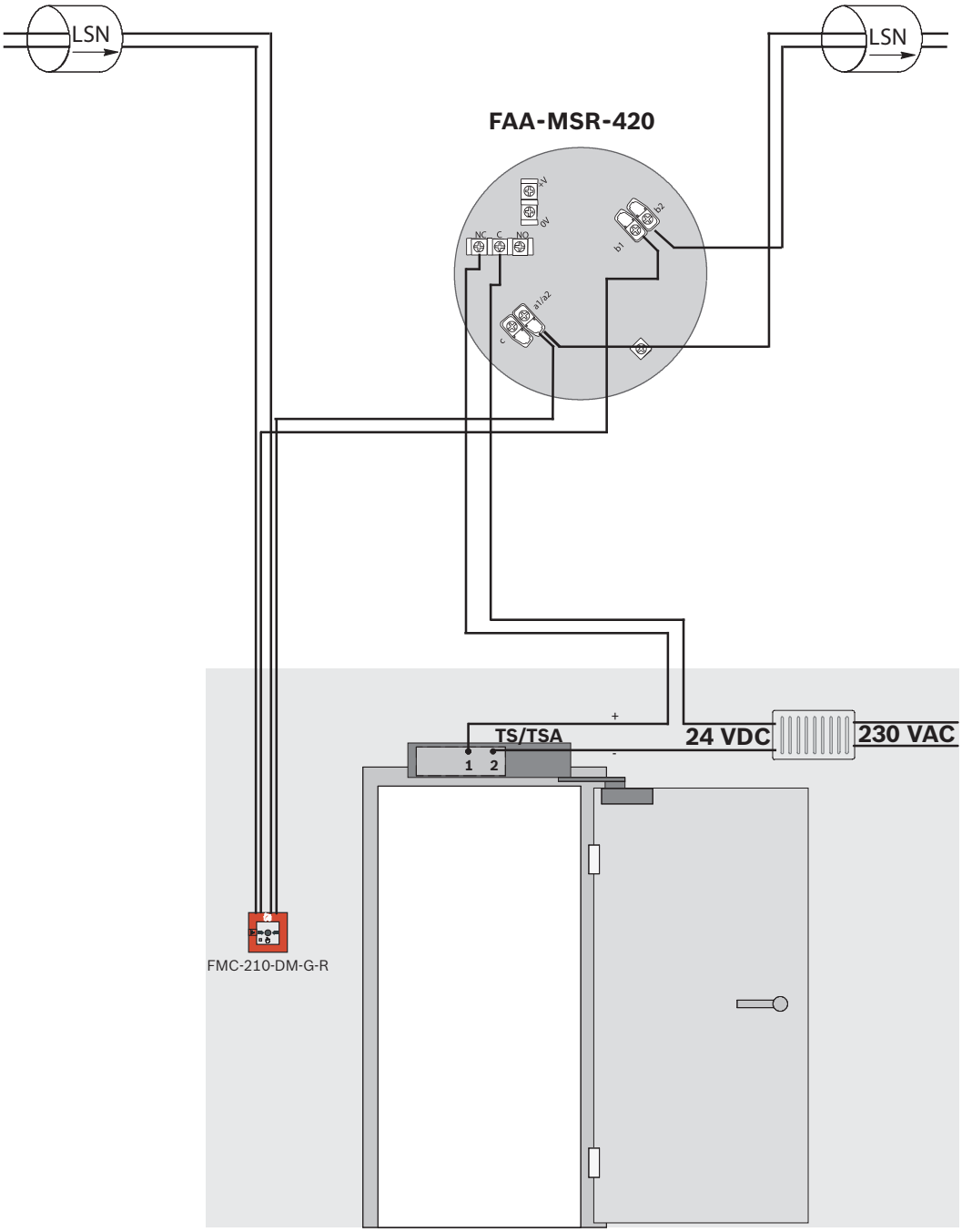






TS 4000 E/E-IS/EFS
TS 5000 E/E-IS/E-ISM
TS 550 E
TSA 160 NT F/F-IS/F-IS/TS

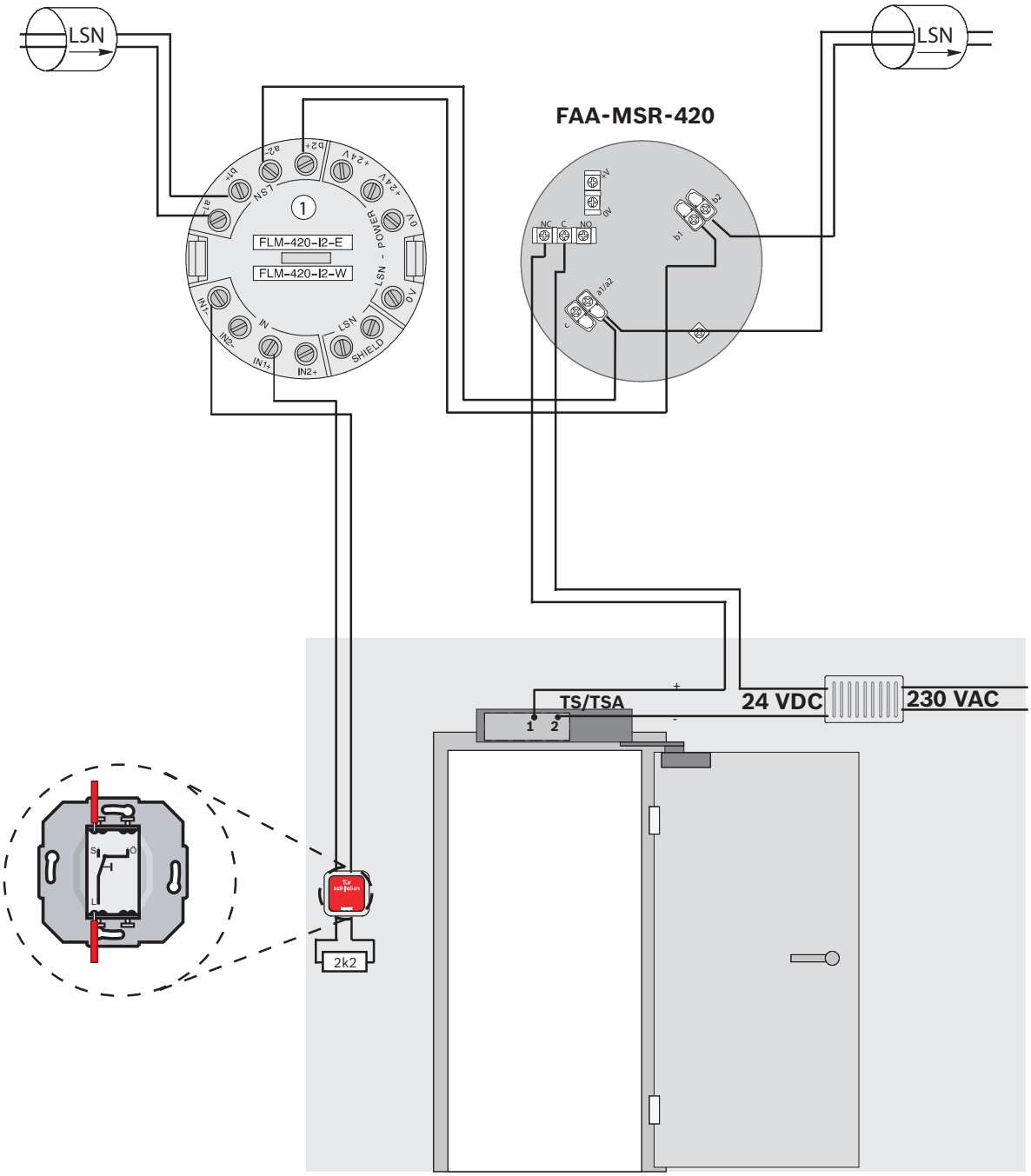
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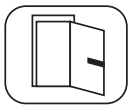




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TS 550 E
TSA 160 NT F/F-IS/F-IS/TS

DIBT

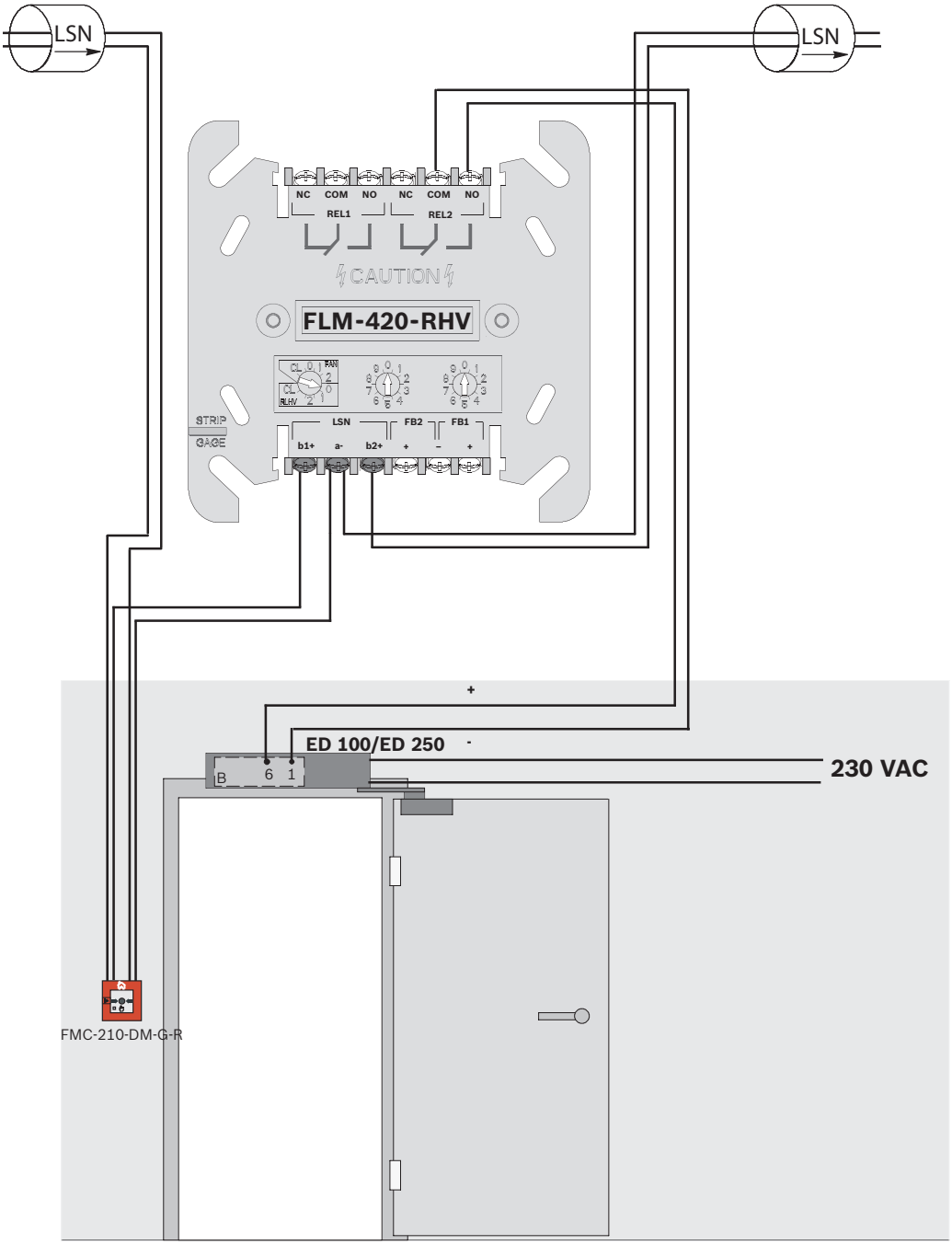


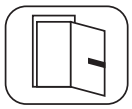




ED 100
ED 250
(+Upgrade Card B

DIBT

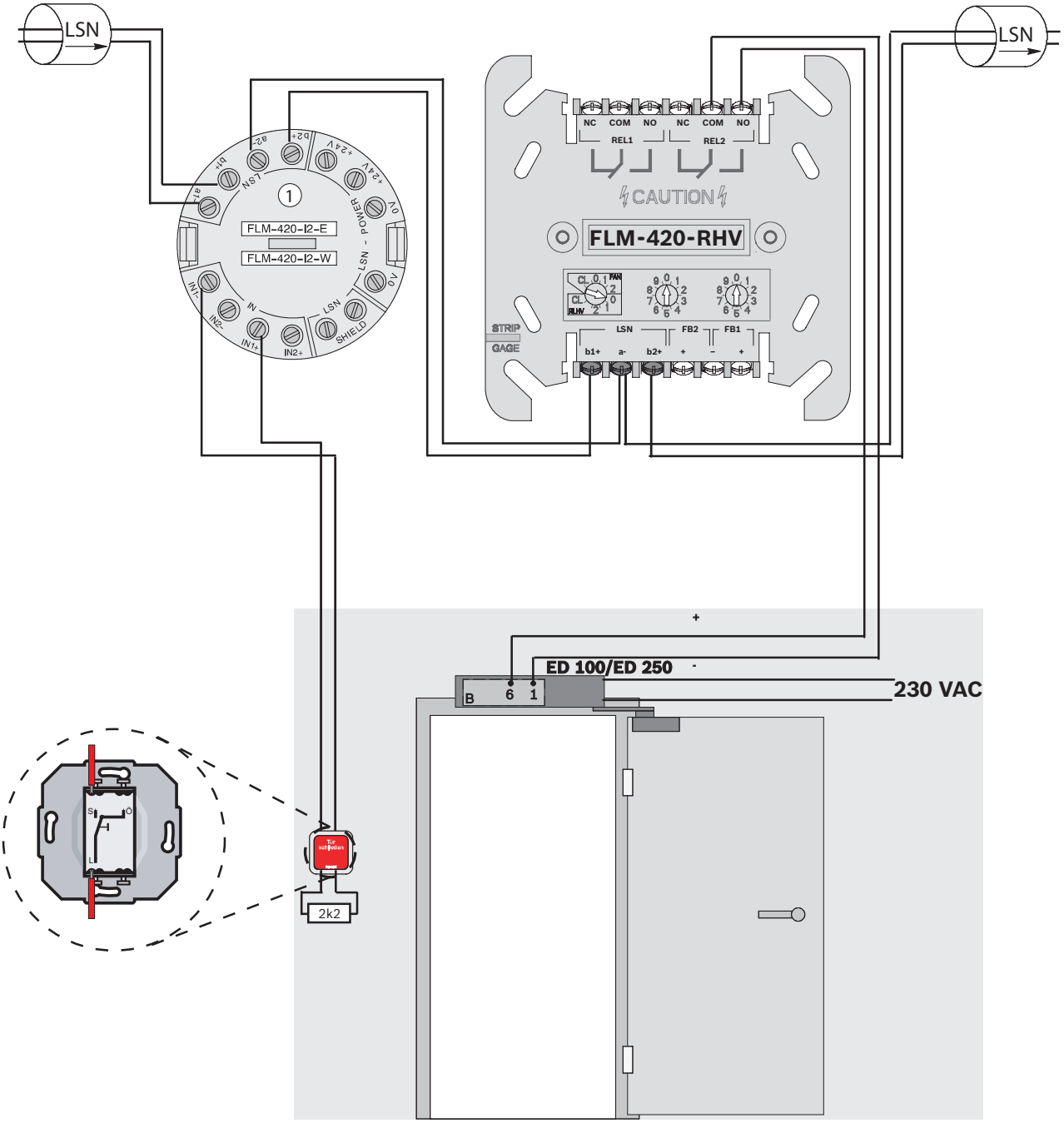


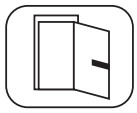




ED 100
ED 250
(+Upgrade Card B)

DIBT



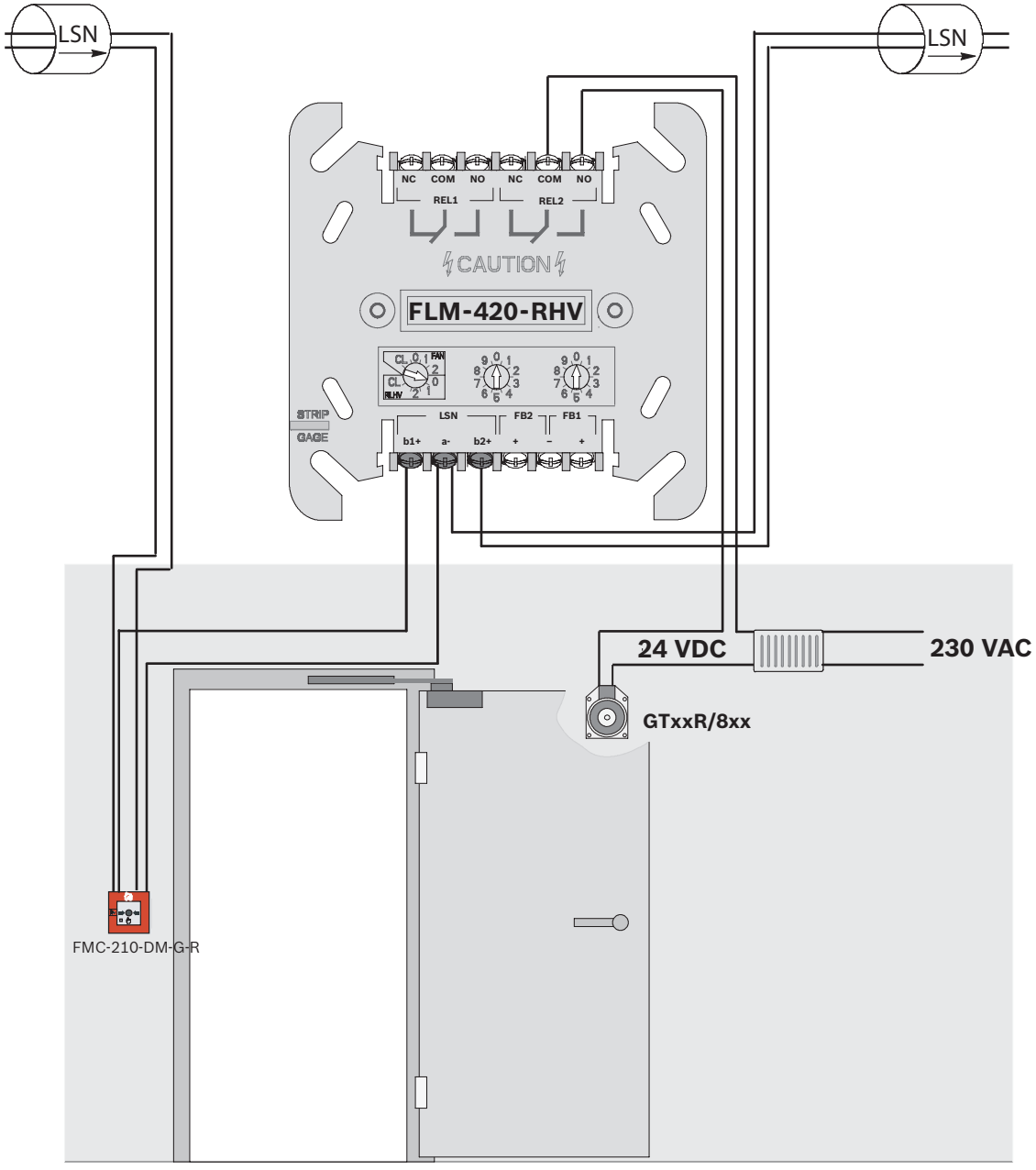


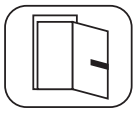


GT xx R

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DIBT



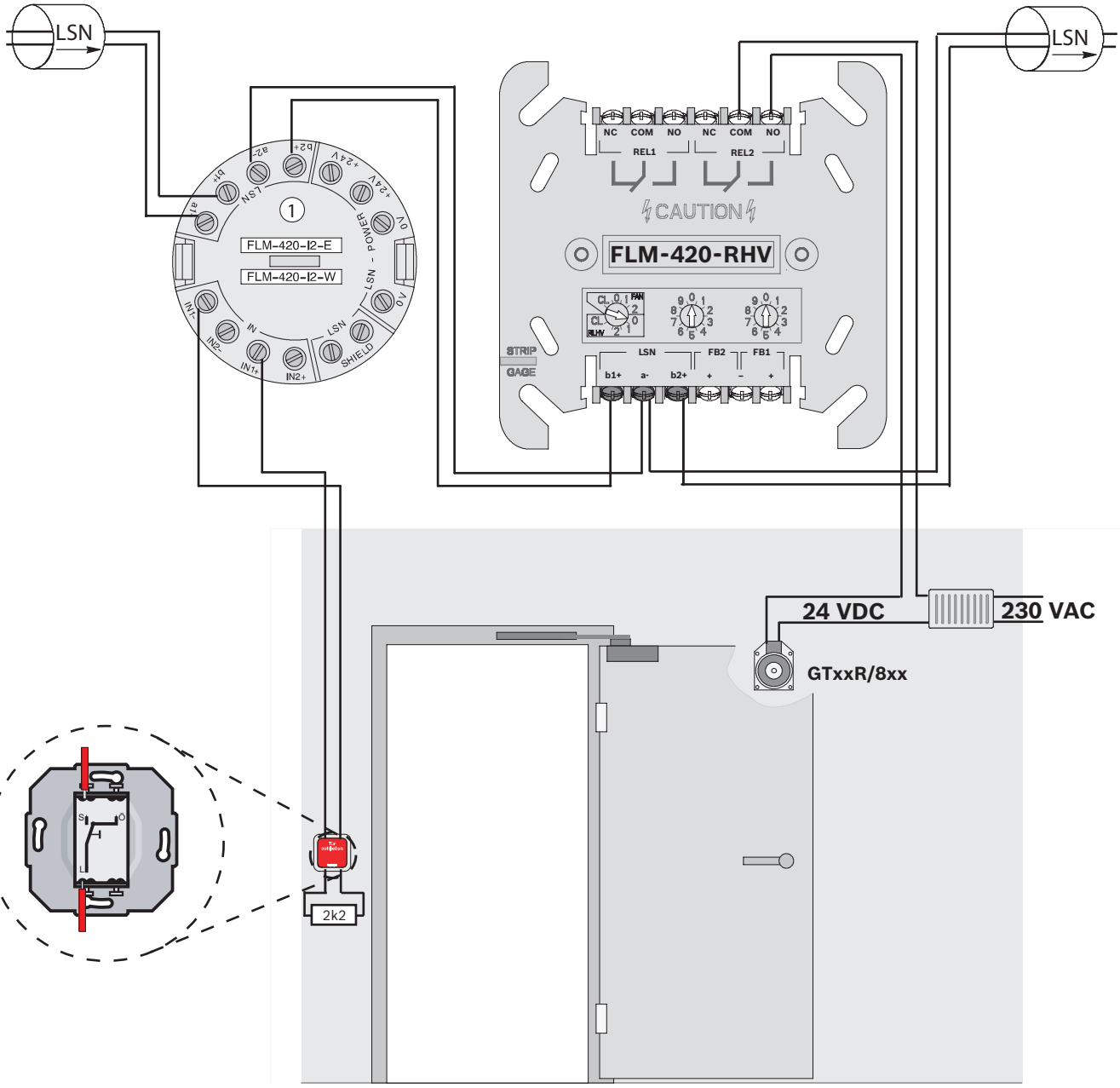


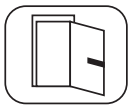


GT xx R

8 xx

DIBT

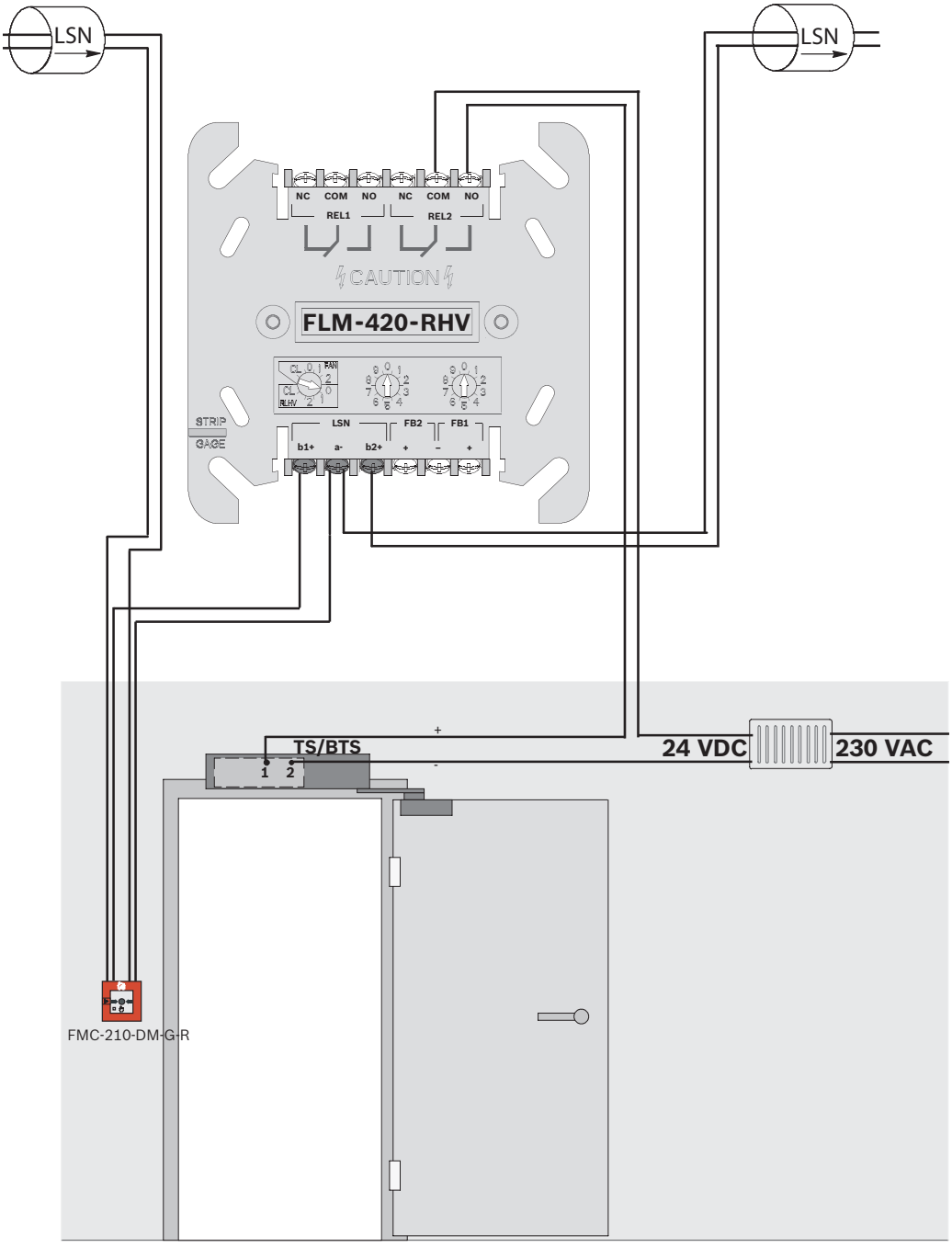


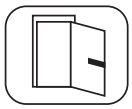




TS 73 EMF
TS 93 EMF
TS 93 GSR
BTS 80 EMB
BTS 80 FLB

DIBT

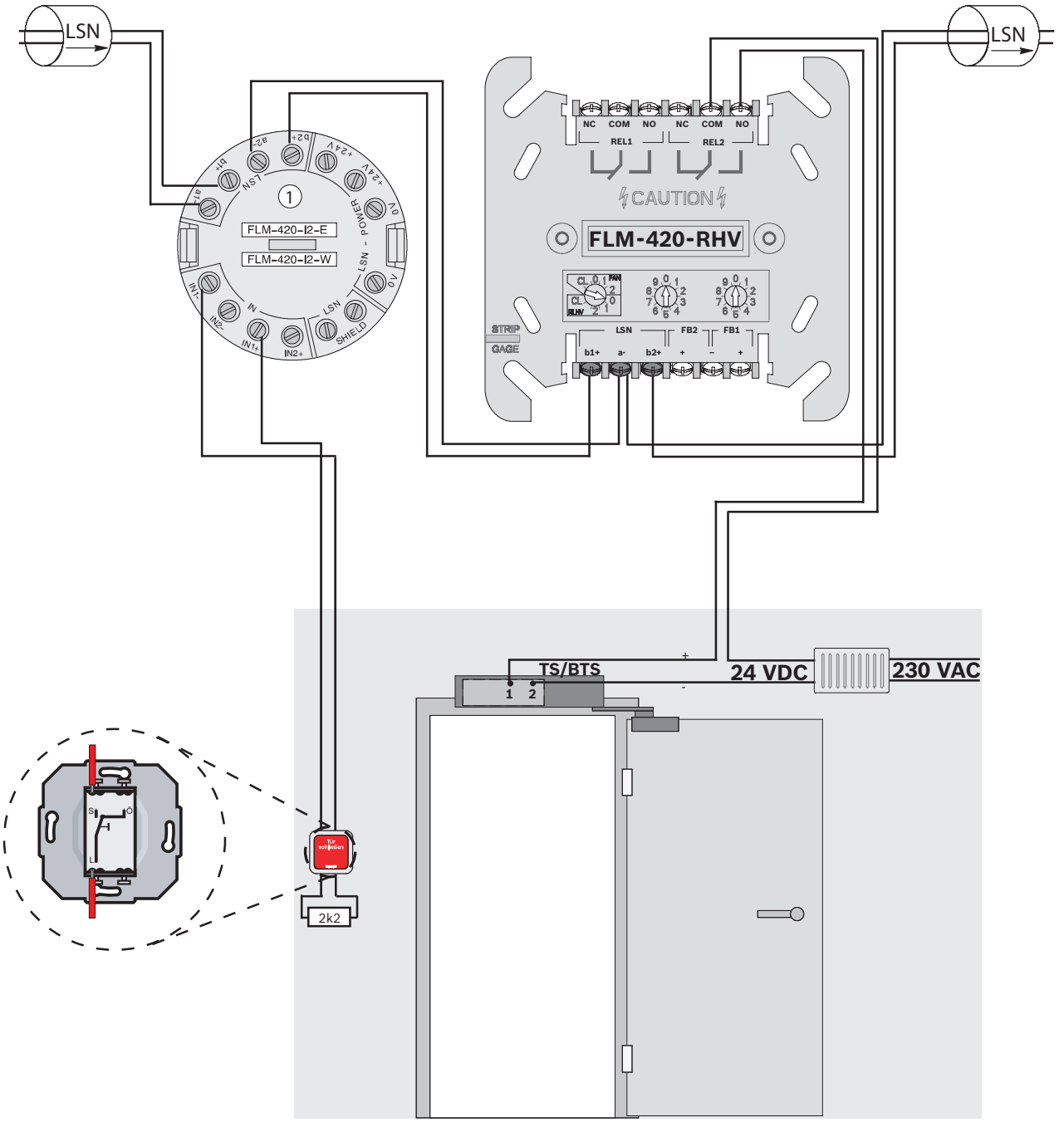


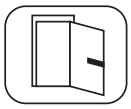


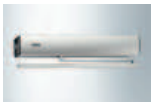


TS 73 EMF
TS 93 EMF
TS 93 GSR
BTS 80 EMB
BTS 80 FLB

DIBT

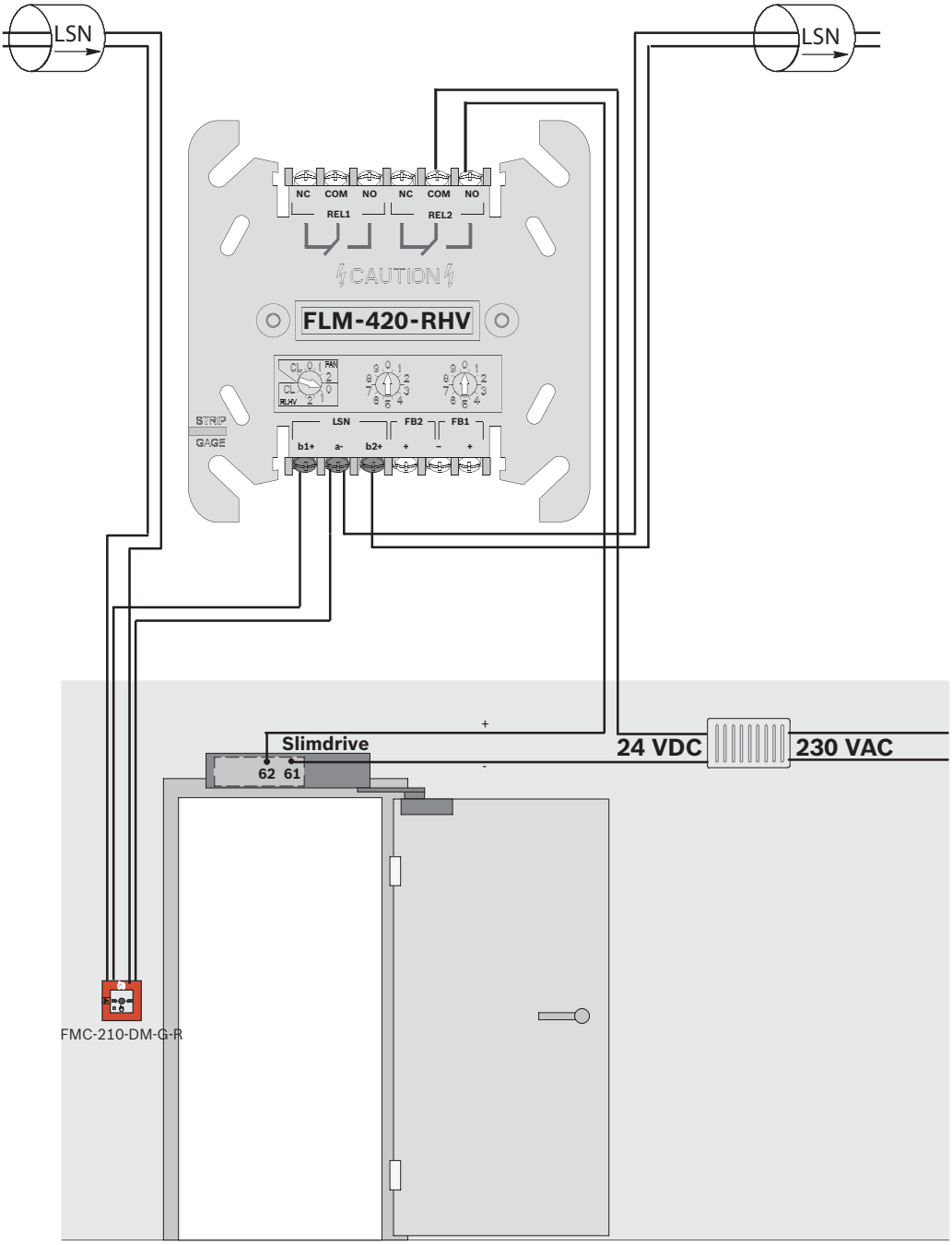


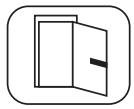




Slimdrive EMD-F/EMD F-IS

DIBT

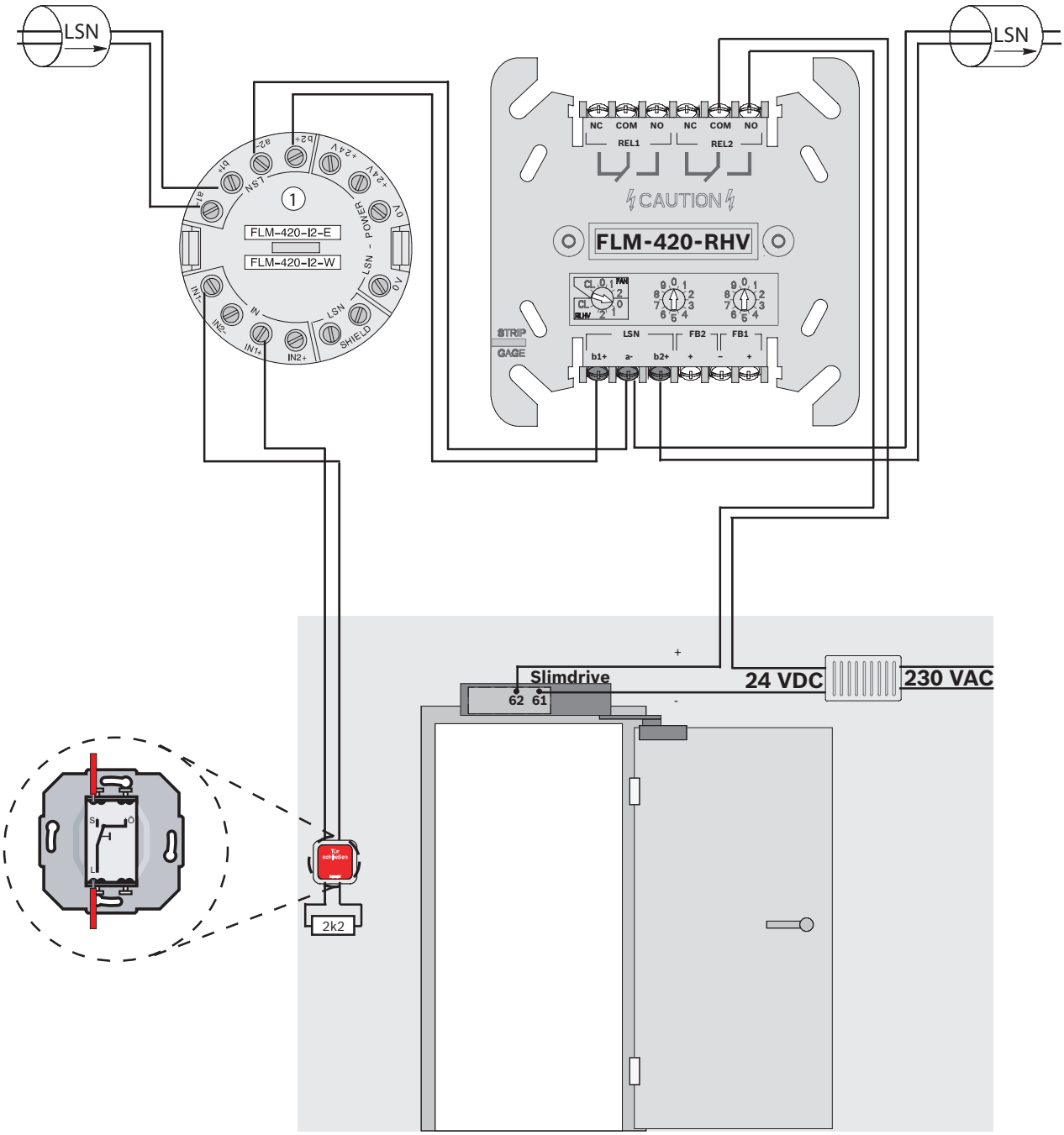


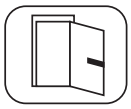


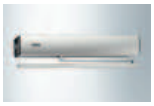


Slimdrive EMD-F/EMD F-IS

DIBT

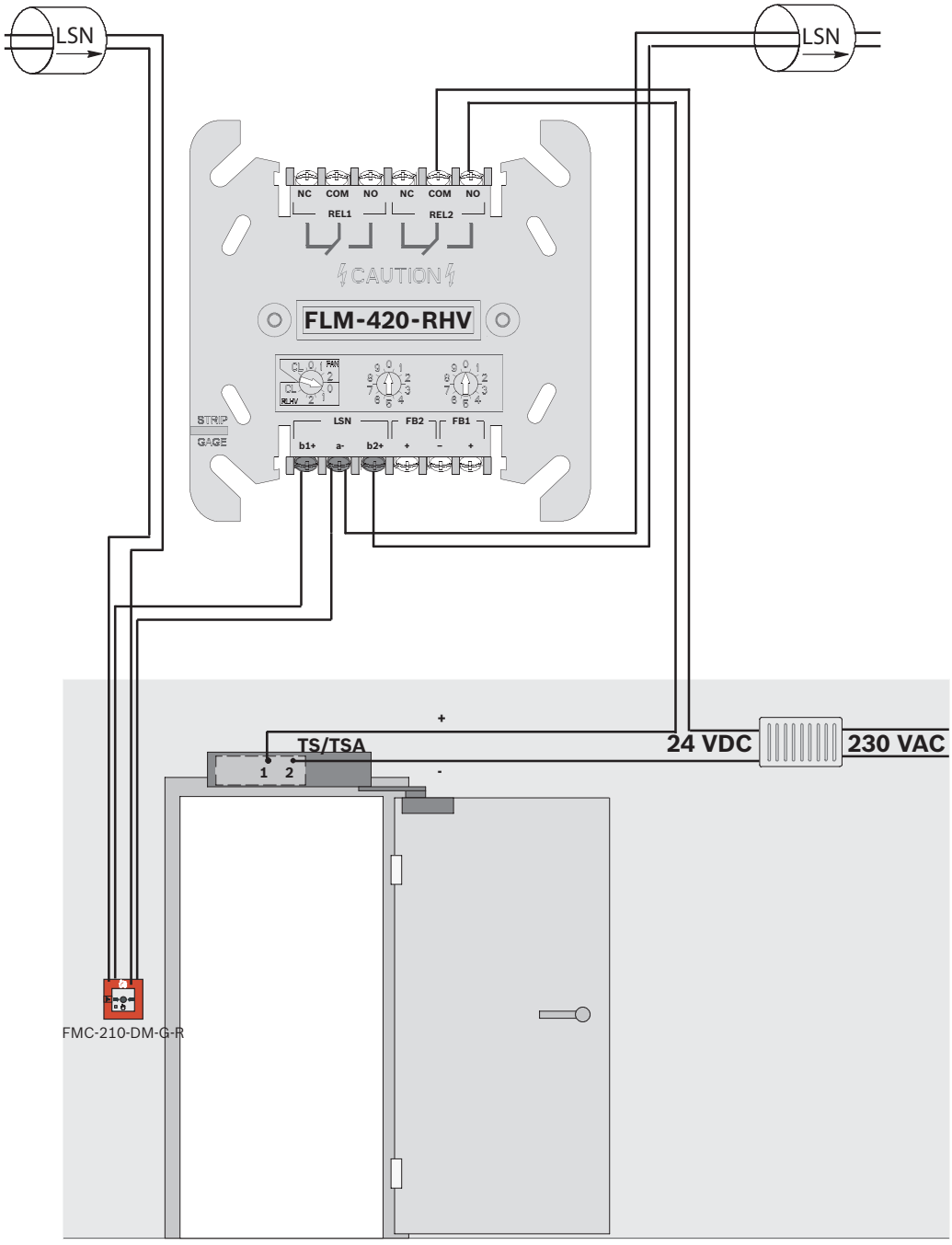






TS 4000 E/E-IS/EFS
TS 5000 E/E-IS/E-ISM
TS 550 E
TSA 160 NT F/F-IS/F-IS/TS

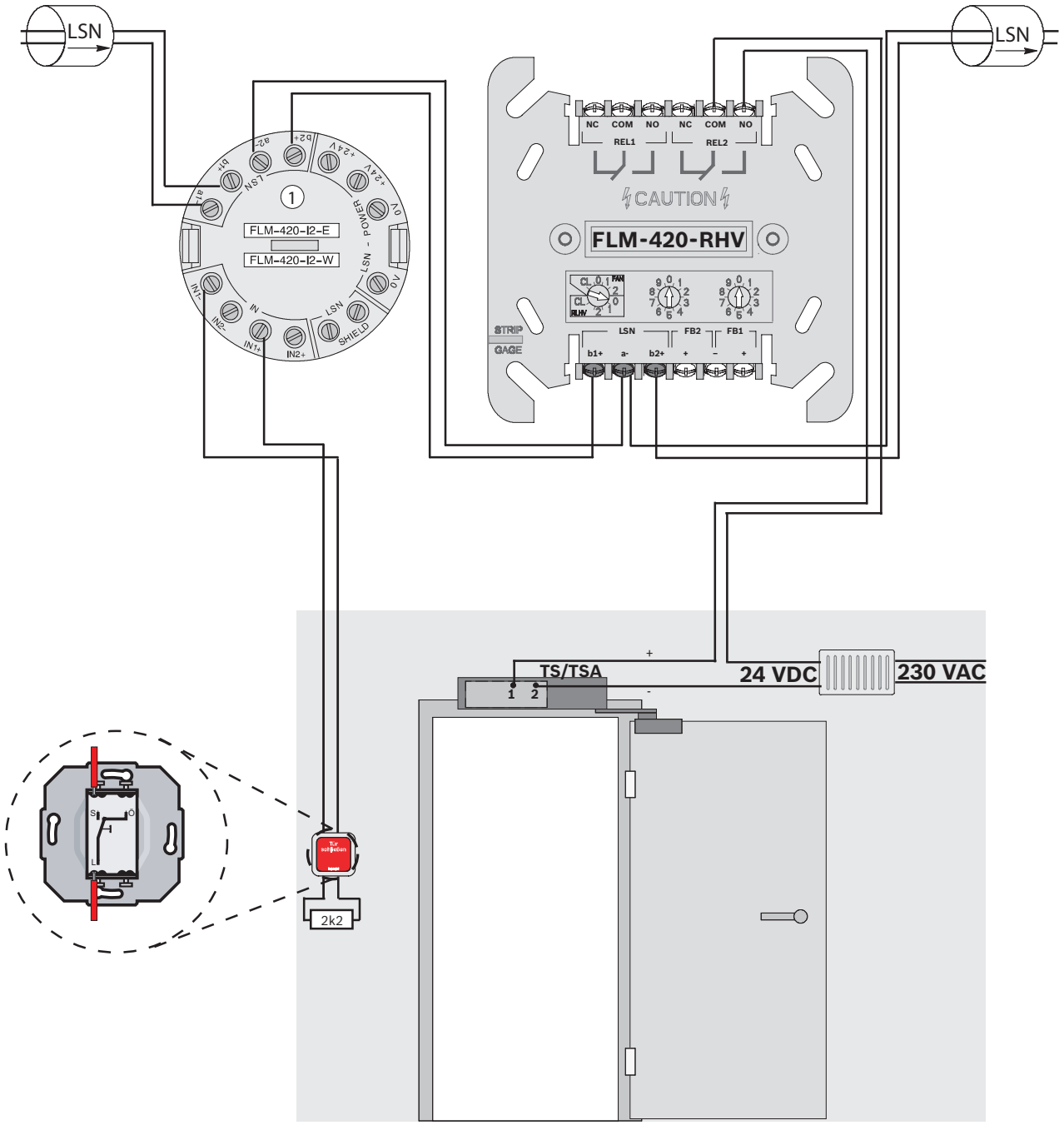
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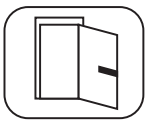




TS 4000 E/E-IS/EFS
TS 5000 E/E-IS/E-ISM
TS 550 E
TSA 160 NT F/F-IS/F-IS/TS

DIBT

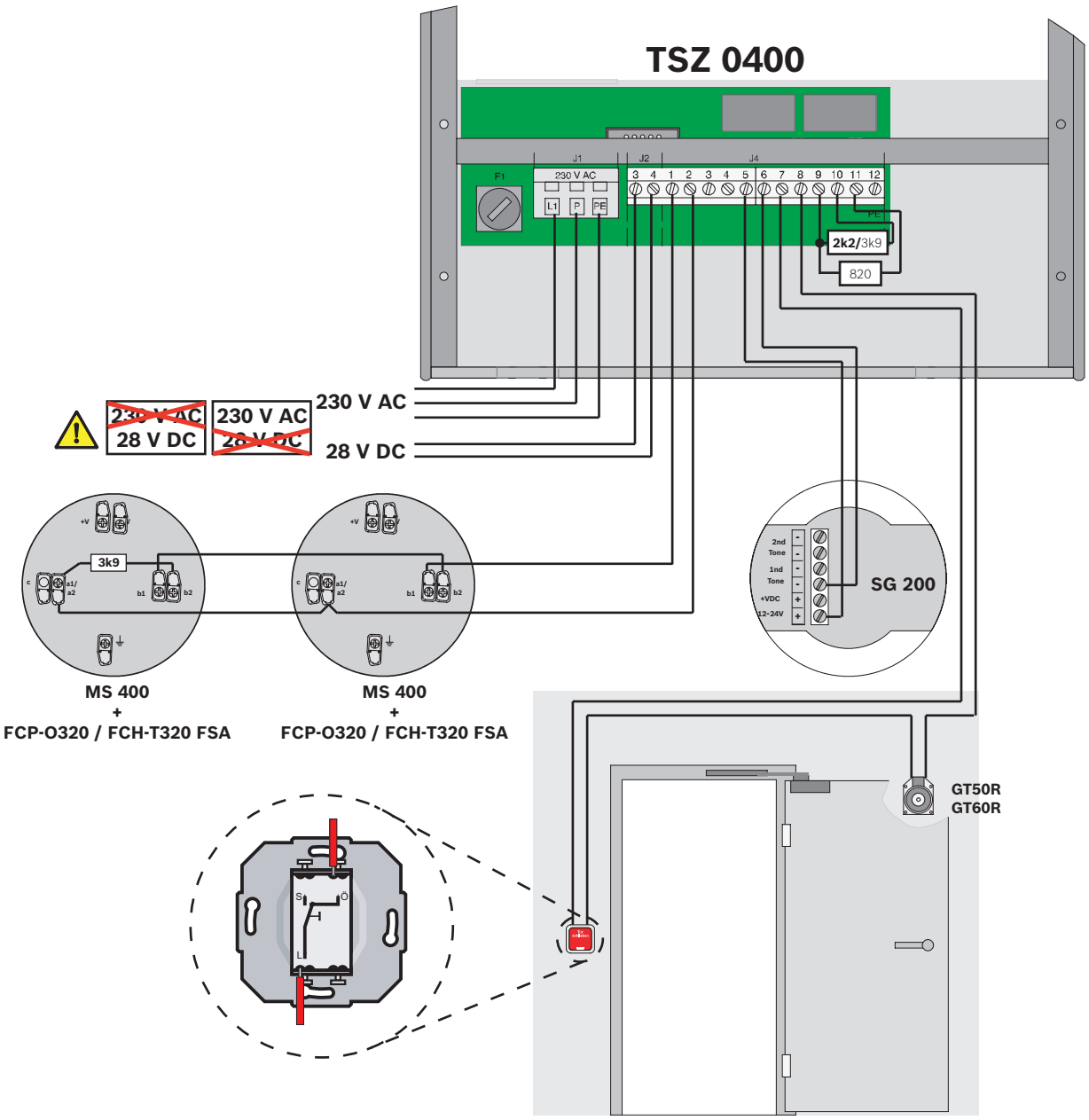


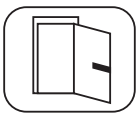




TSZ 0400

DIBT

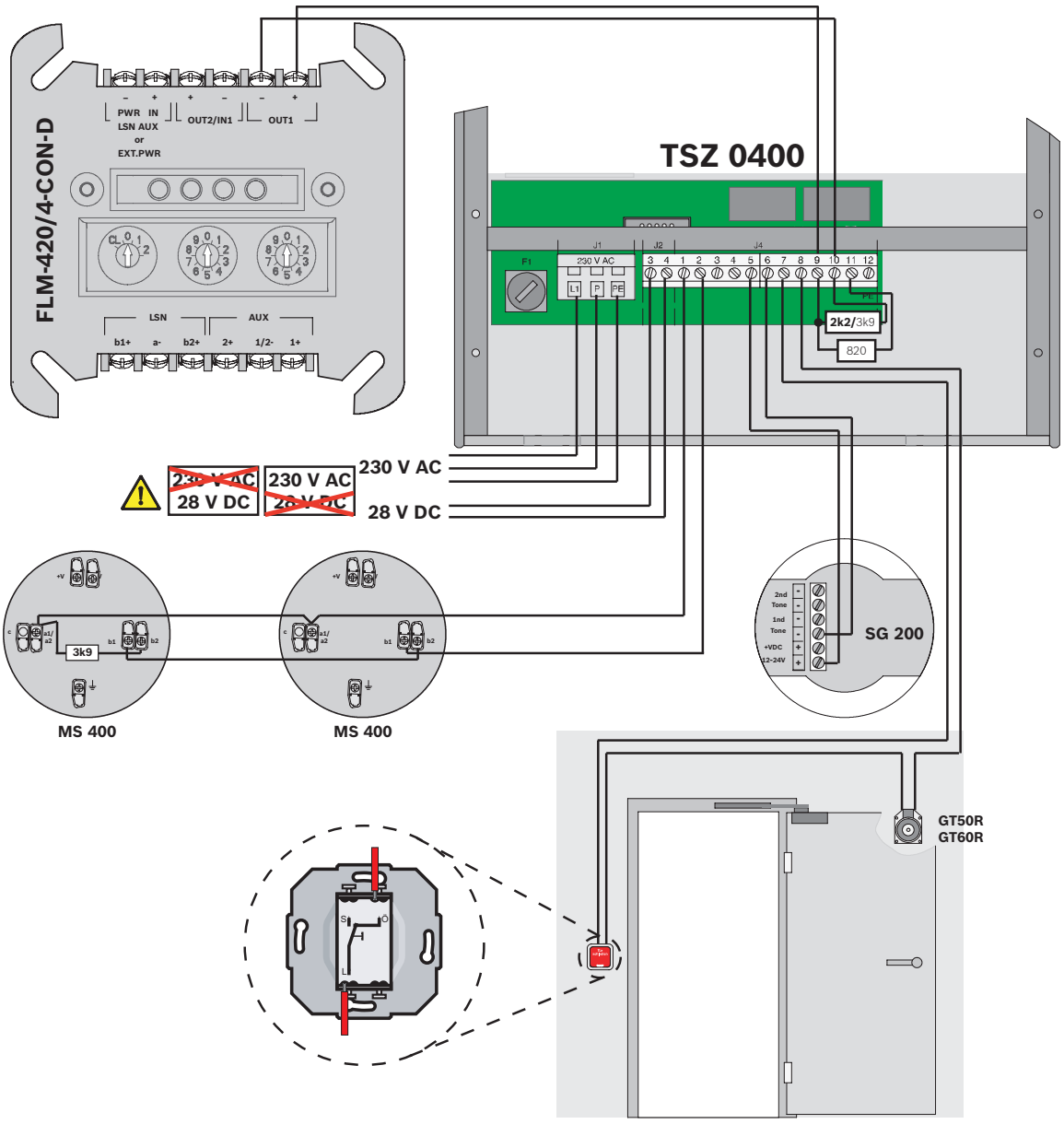






TSZ 0400

DIBT

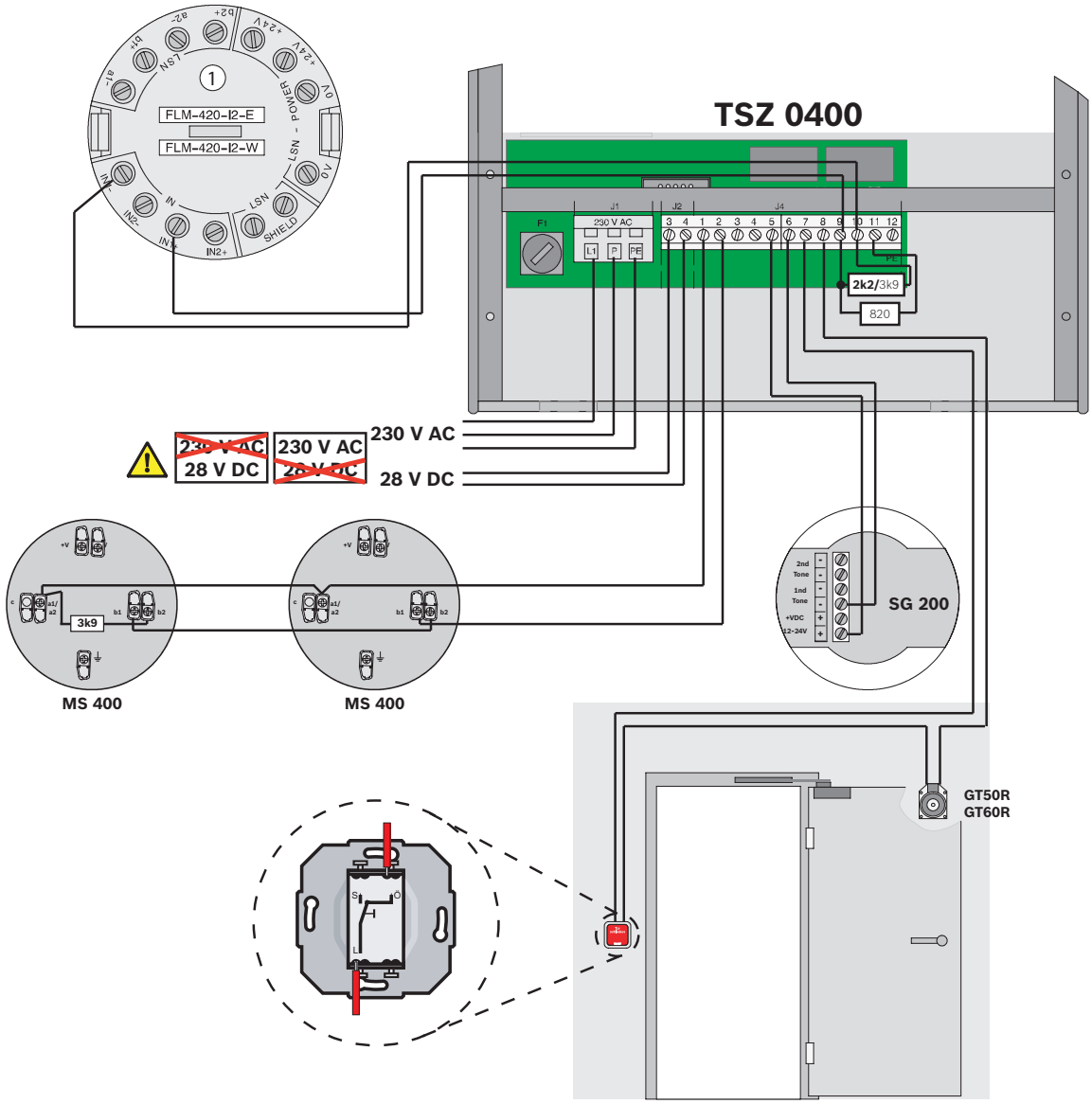


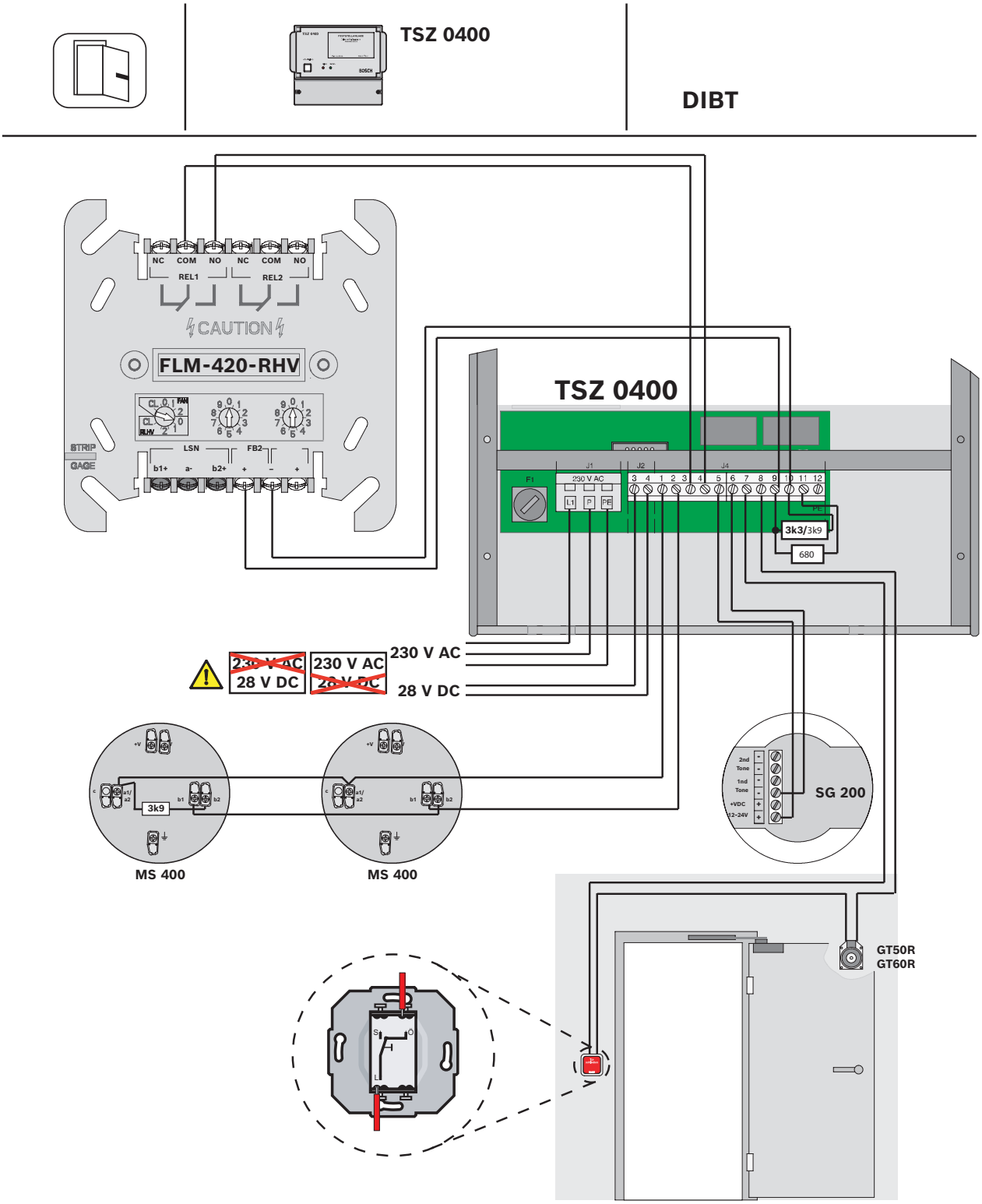


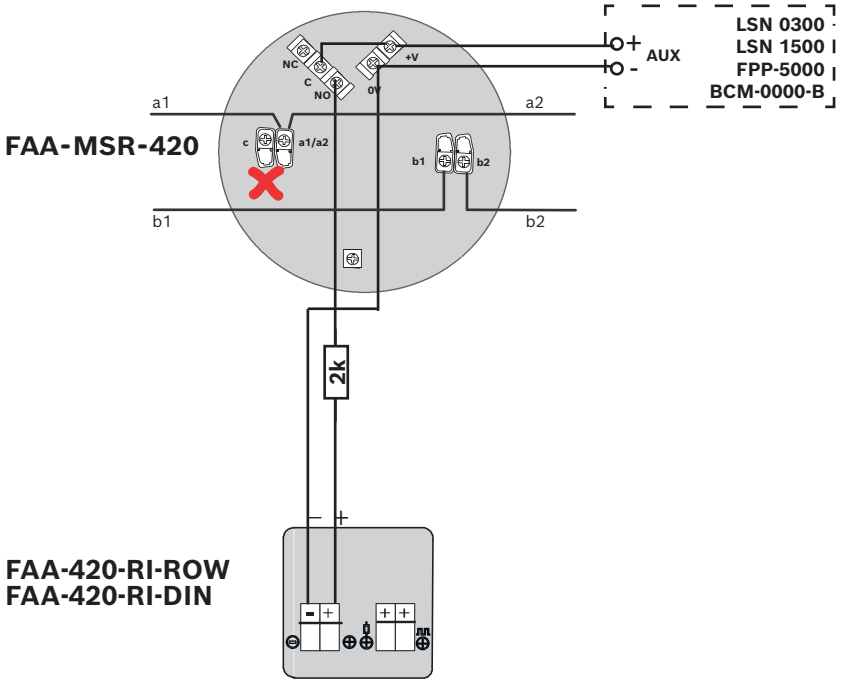


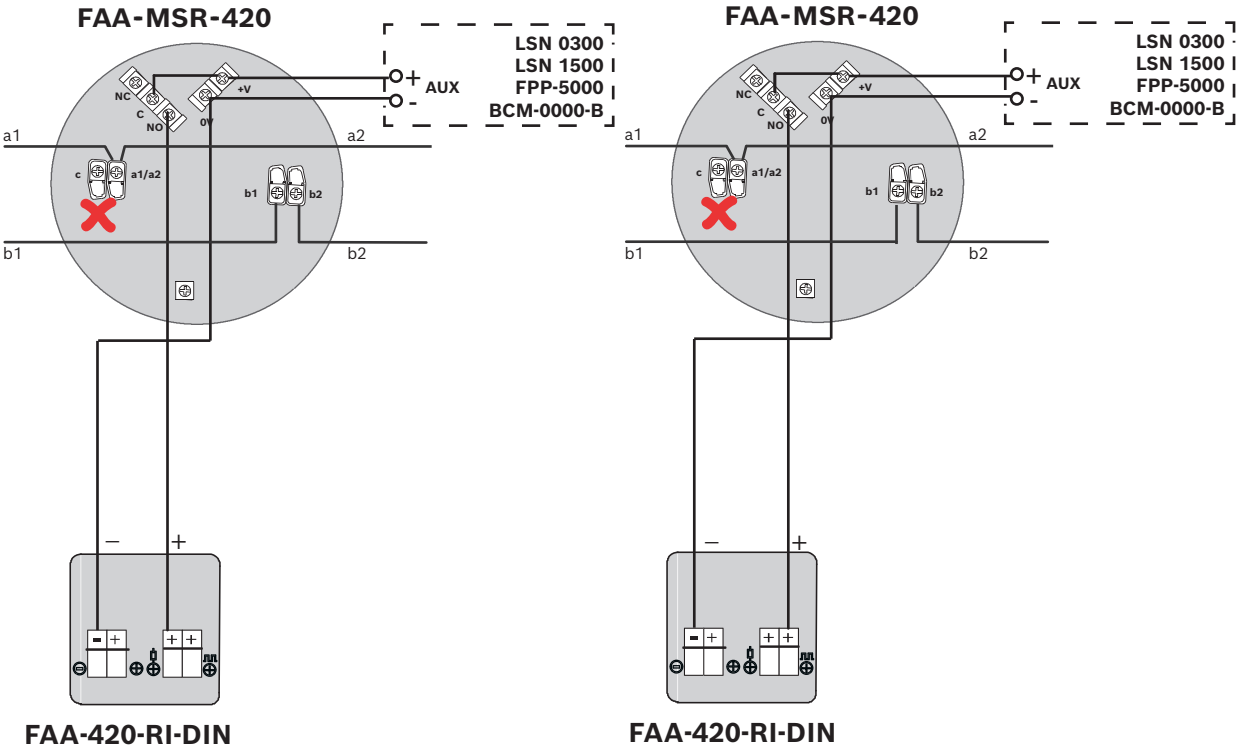
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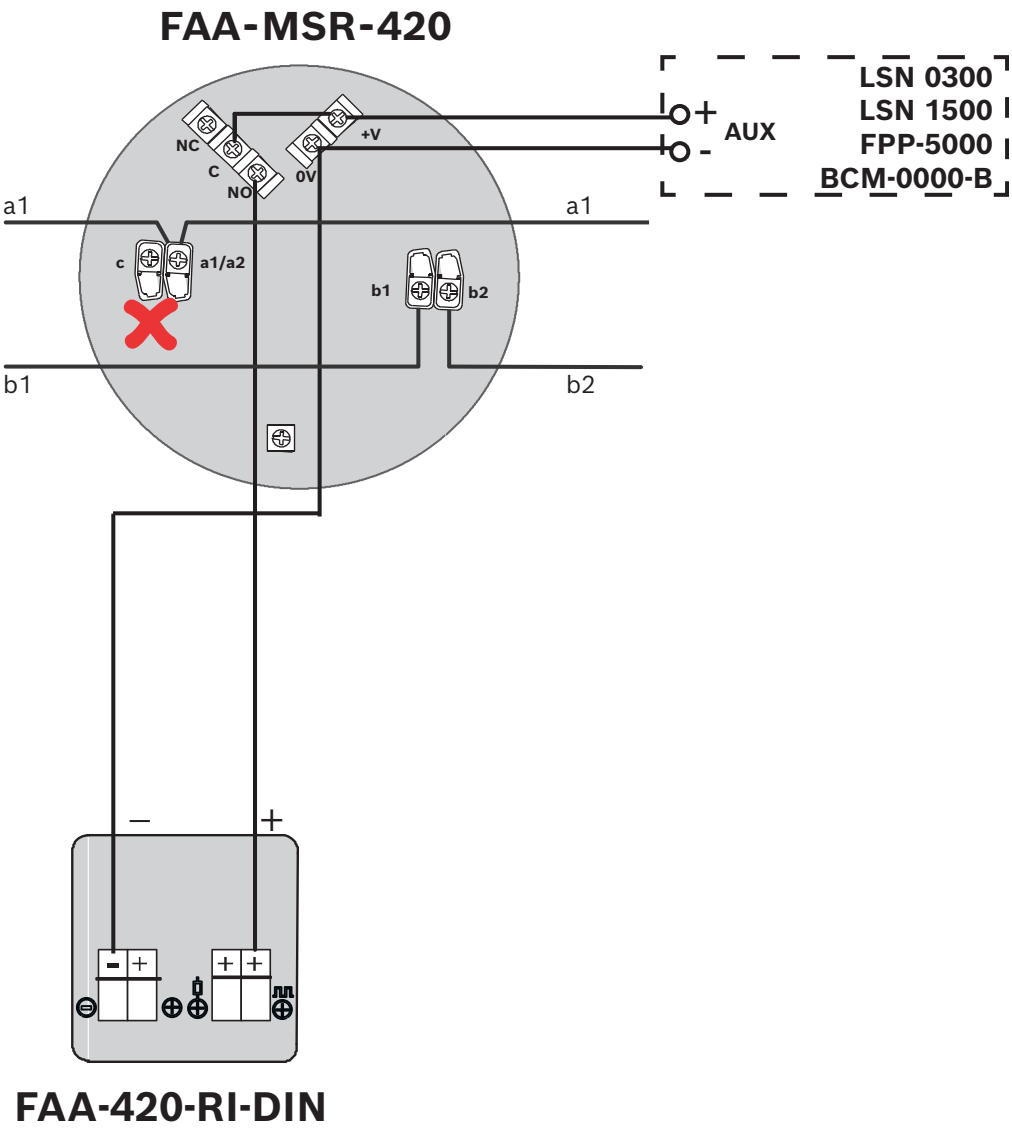
DIBT



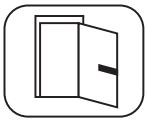

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DIBT
NC COM NO NC COM NO
REL1
REL2
CAUTION
FLM-420-RHV
STRIP
GAGE
LSN
FB2
b1+ a- b2+ + - +
TSZ 0400
J1
J2
J4
F1
230 V AC
L1 P PE
3 4 1 2 3 4 5 6 7 8 9 10 11 12
3k3/3k9
680
230 V AC
28 V DC
MS 400
MS 400
3k9
SG 200
2nd Tone
1nd Tone
+VDC
12-24V
GT50R
GT60R


LSN 0300
LSN 1500
FPP-5000
BCM-0000-B
AUX
+
-
NC
C
NO
+V
0V
a1
a2
b1
b2
c
a1/a2
2k
FAA-MSR-420
FAA-420-RI-ROW
FAA-420-RI-DIN


FAA-MSR-420
LSN 0300
LSN 1500
FPP-5000
BCM-0000-B
AUX
+
-
NC
C
NO
+V
0V
a1
a2
b1
b2
c
a1/a2
FAA-420-RI-DIN
FAA-MSR-420
LSN 0300
LSN 1500
FPP-5000
BCM-0000-B
AUX
+
-
NC
C
NO
+V
0V
a1
a2
b1
b2
c
a1/a2
FAA-420-RI-DIN


FAA-MSR-420
LSN 0300
LSN 1500
FPP-5000
BCM-0000-B
+
-
AUX
NC
C
NO
+V
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a1
a1
c
a1/a2
b1
b2
b1
b2
–
+
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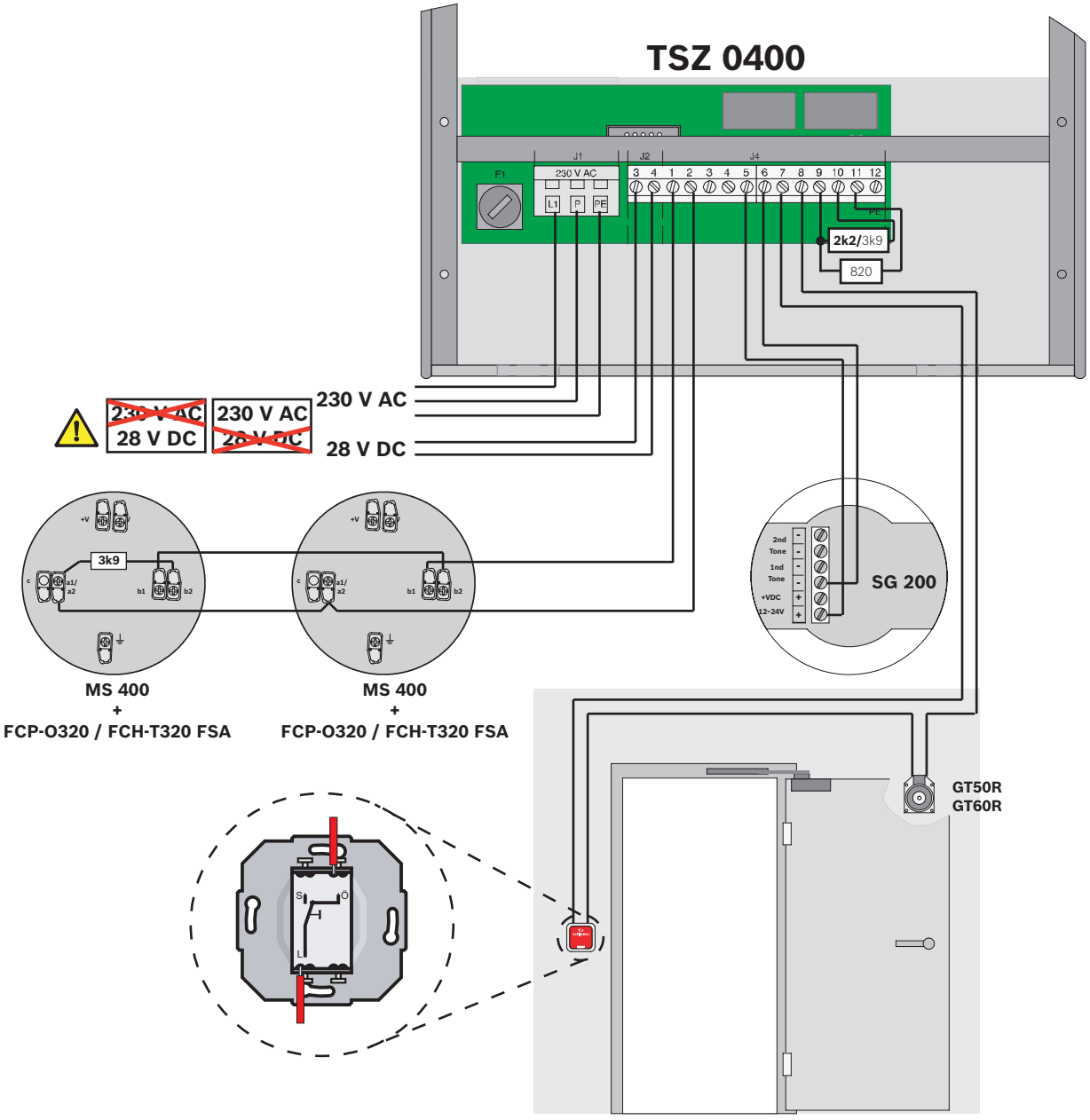
3.3 TSZ 0400

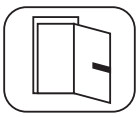




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DIBT

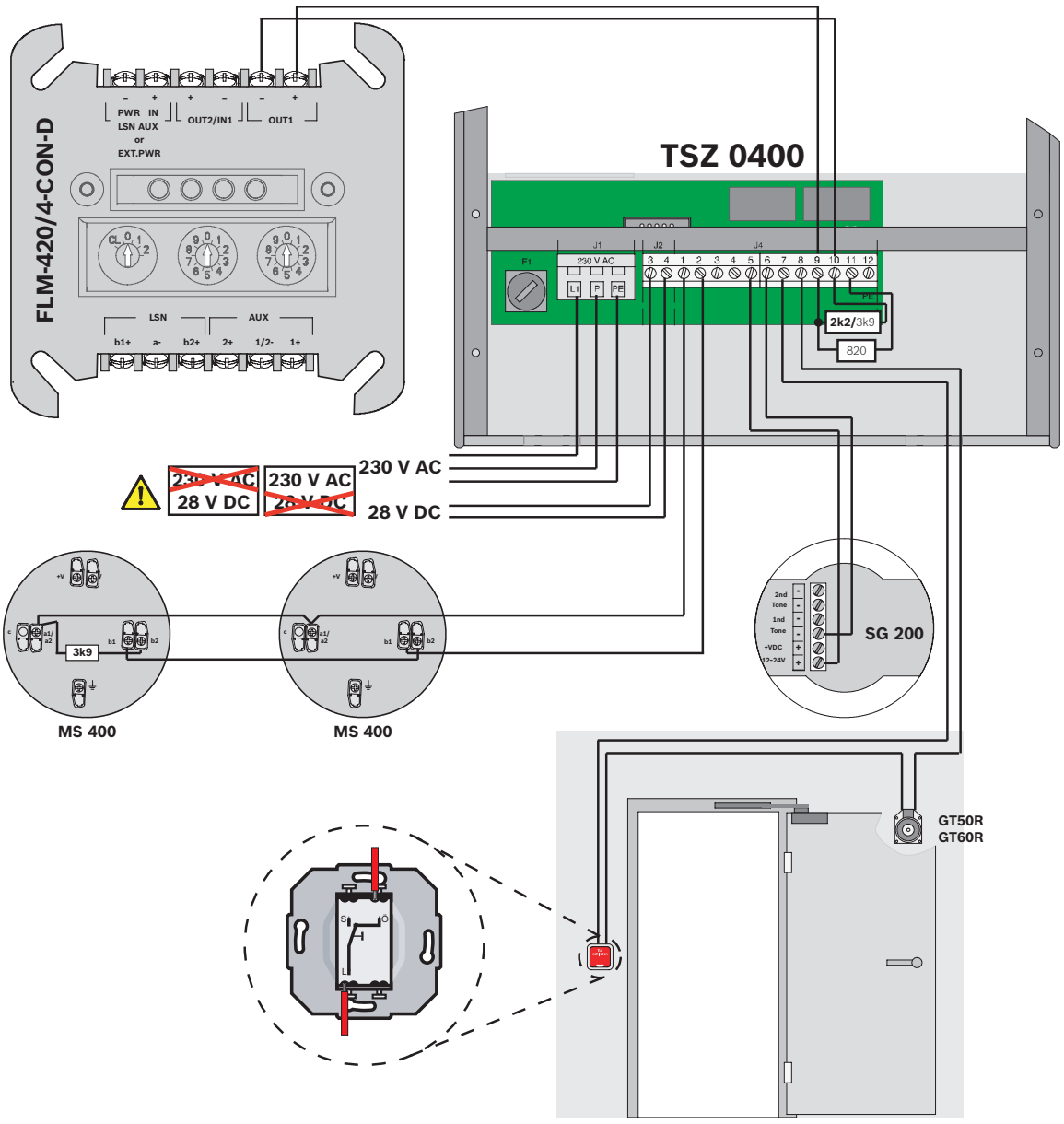






TSZ 0400

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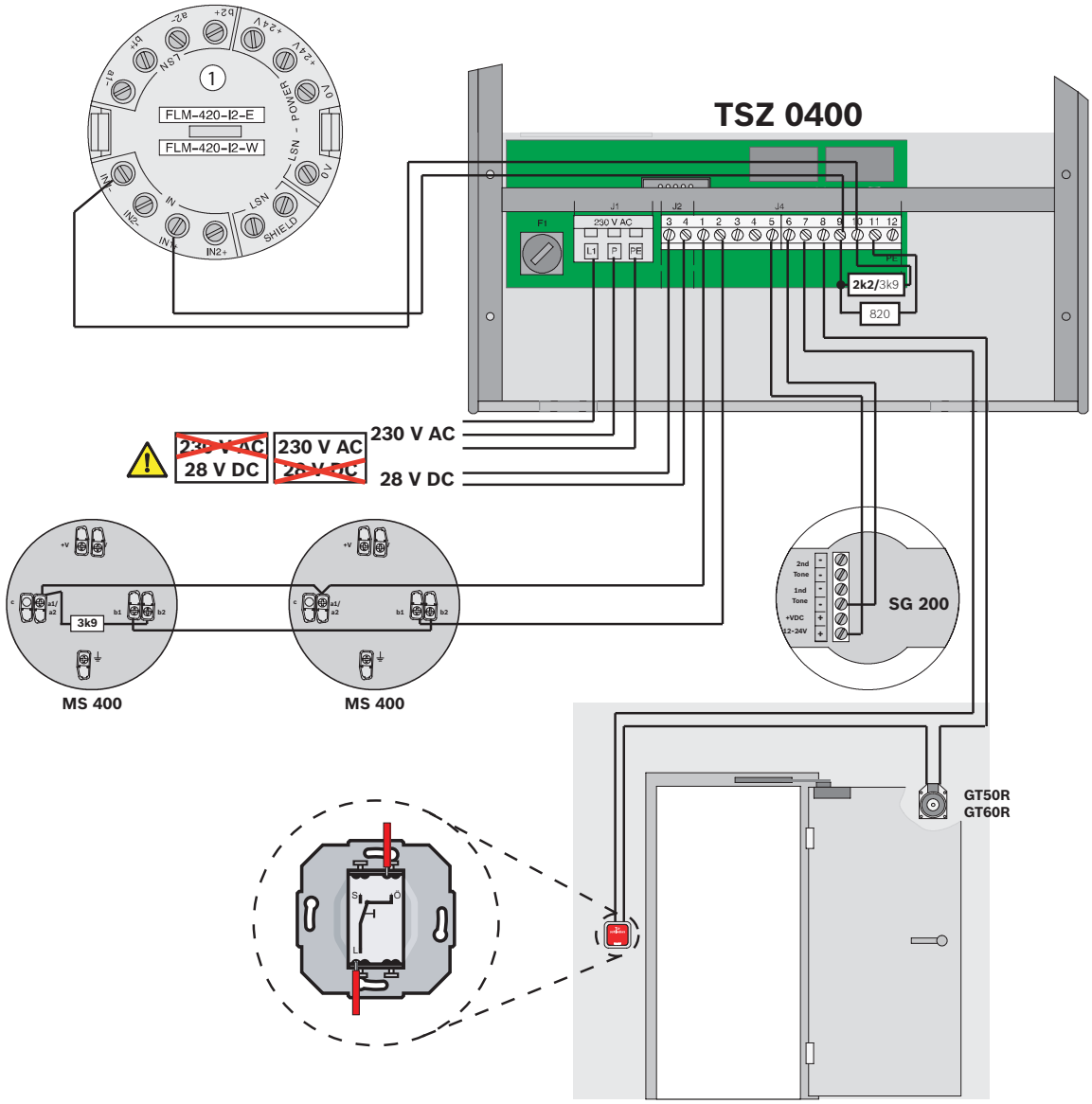


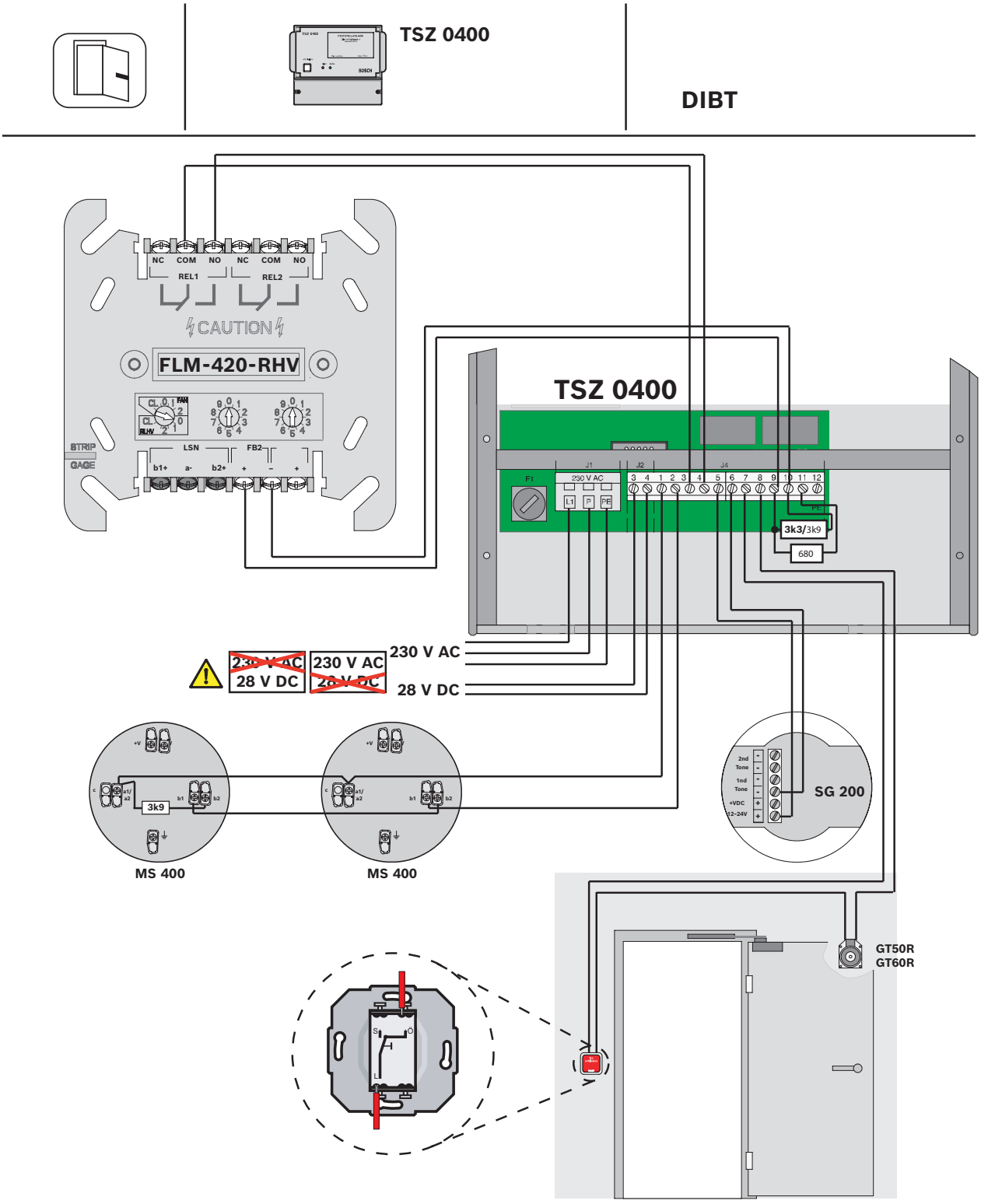




TSZ 0400

DIBT





3.4 Functional Modules

BCM-0000-B, page 50

CZM 0004 A, page 52

ENO 0000 A/B, page 66

LSN 0300 A, page 73

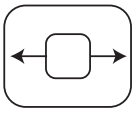
NZM 0002 A, page 107

RMH 0002 A, page 116

IOS 0020 A, page 117

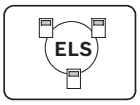
FPE-5000-UGM, page 131

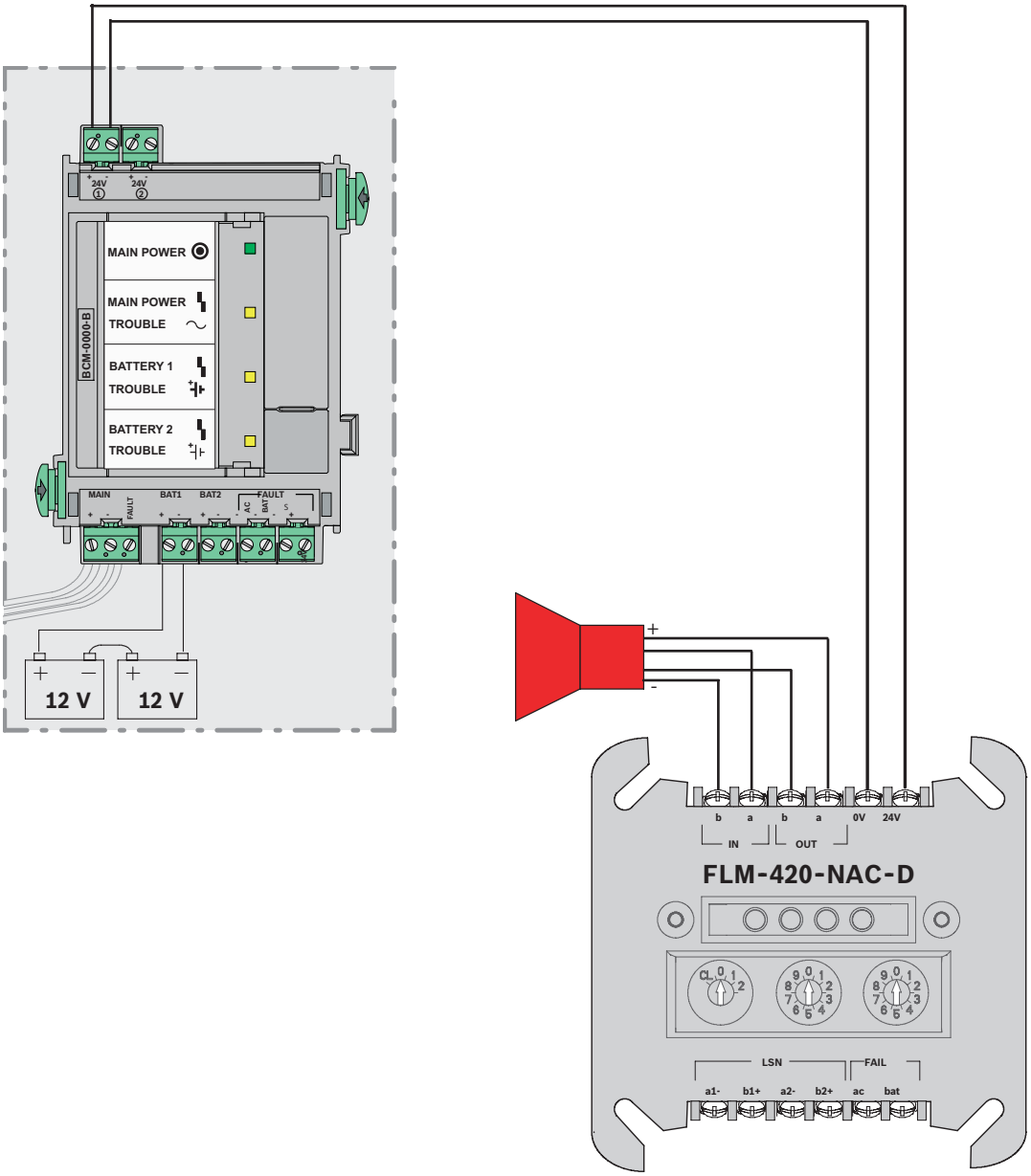
3.4.1 BCM-0000-B

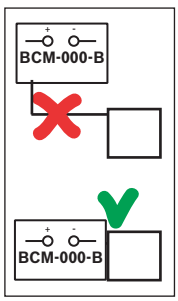


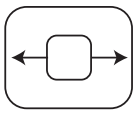


FLM-420-NAC-D



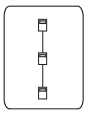


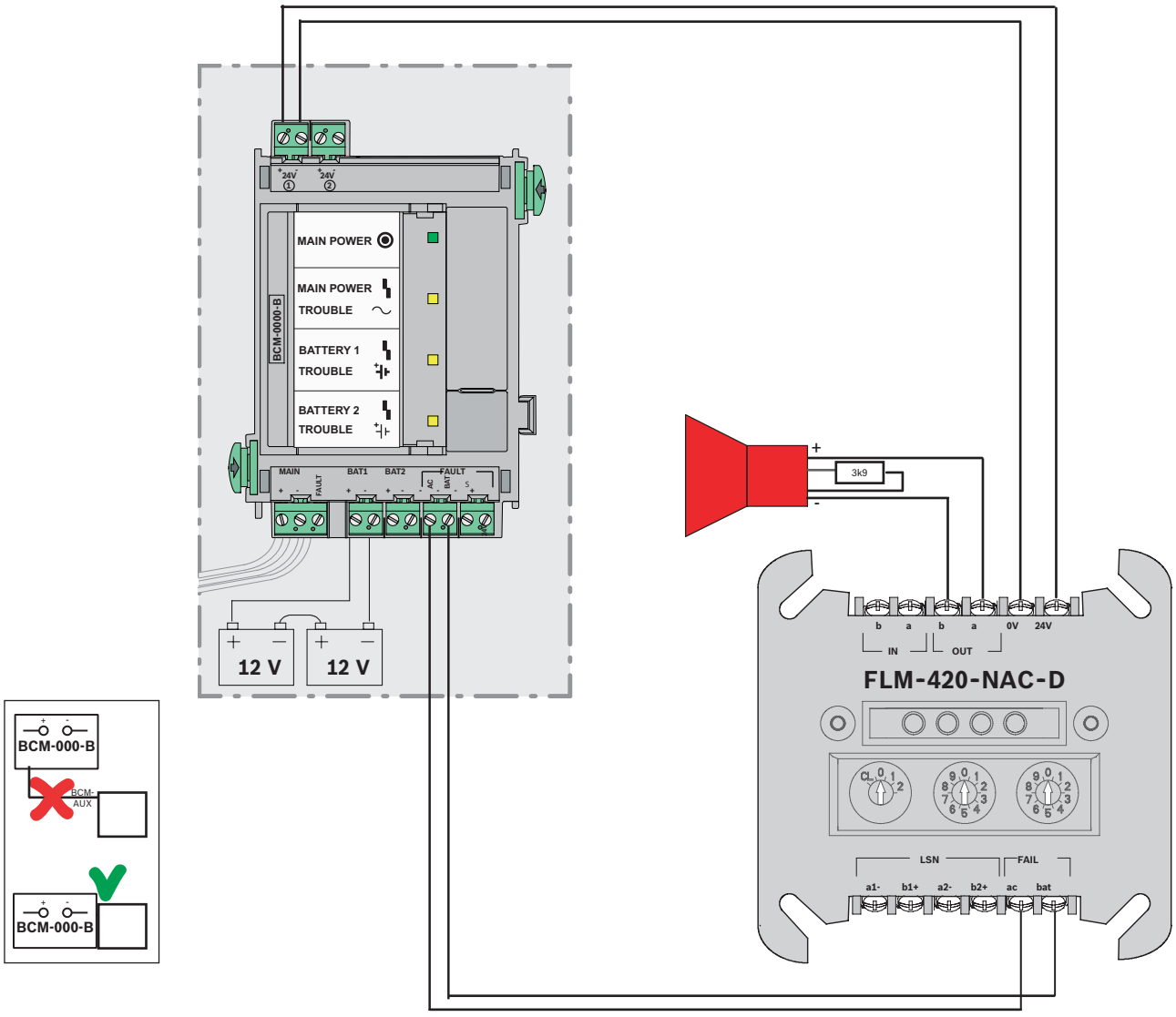






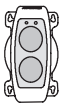
FLM-420-NAC-D



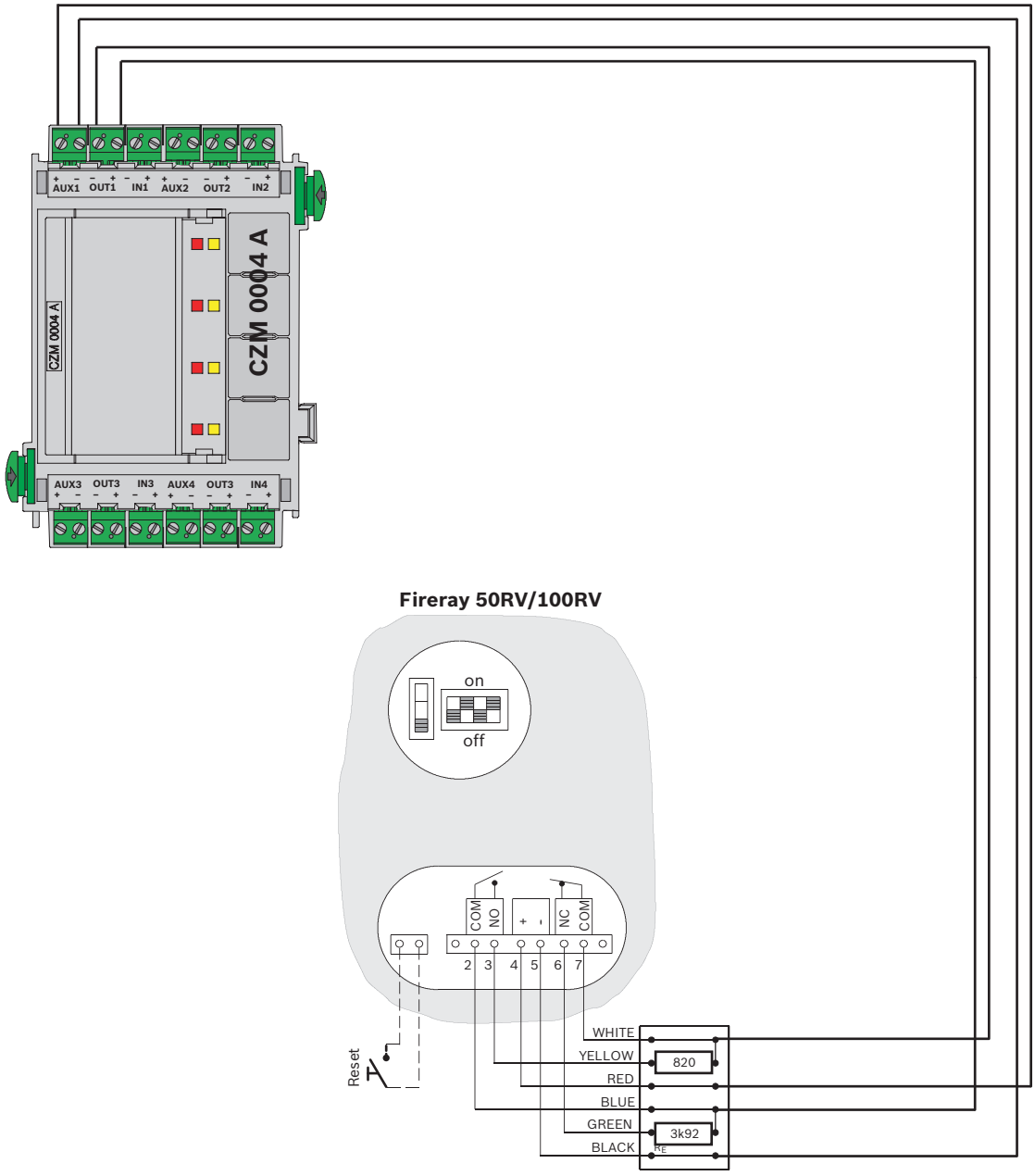

MAIN POWER
MAIN POWER TROUBLE
BATTERY 1 TROUBLE
BATTERY 2 TROUBLE
BCM-0000-B
MAIN
BAT1
BAT2
FAULT
12 V
12 V
3k9
b a b a 0V 24V
IN
OUT
FLM-420-NAC-D
LSN
FAIL
a1- b1+ a2- b2+ ac bat
BCM-000-B
BCM-AUX
BCM-000-B

3.4.2 CZM 0004 A

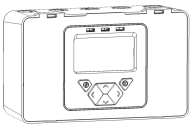




Fireray 50RV
Fireray 100RV



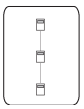


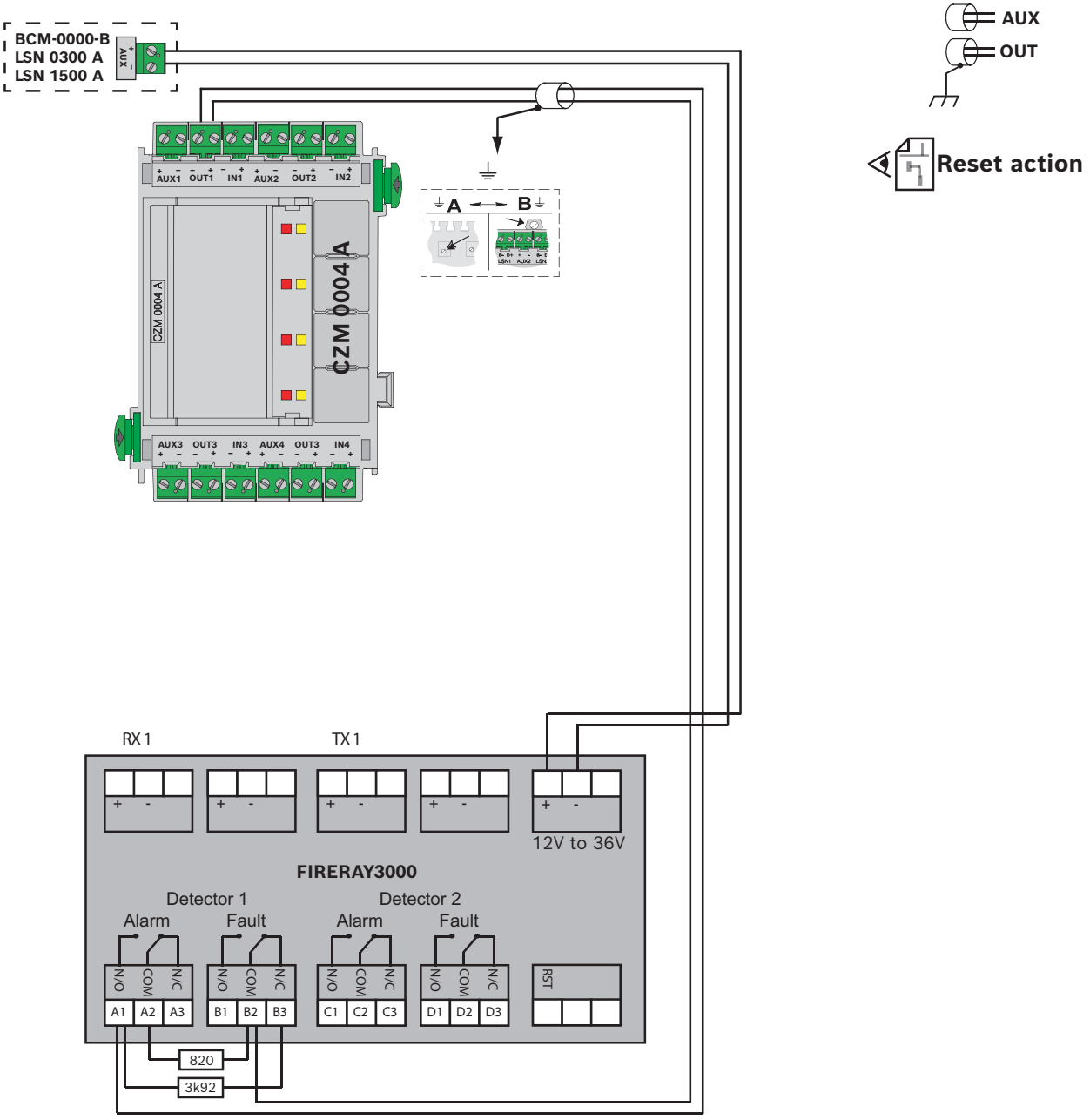


FIRERAY3000

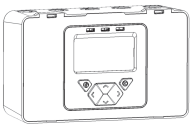
1 x





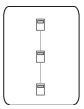


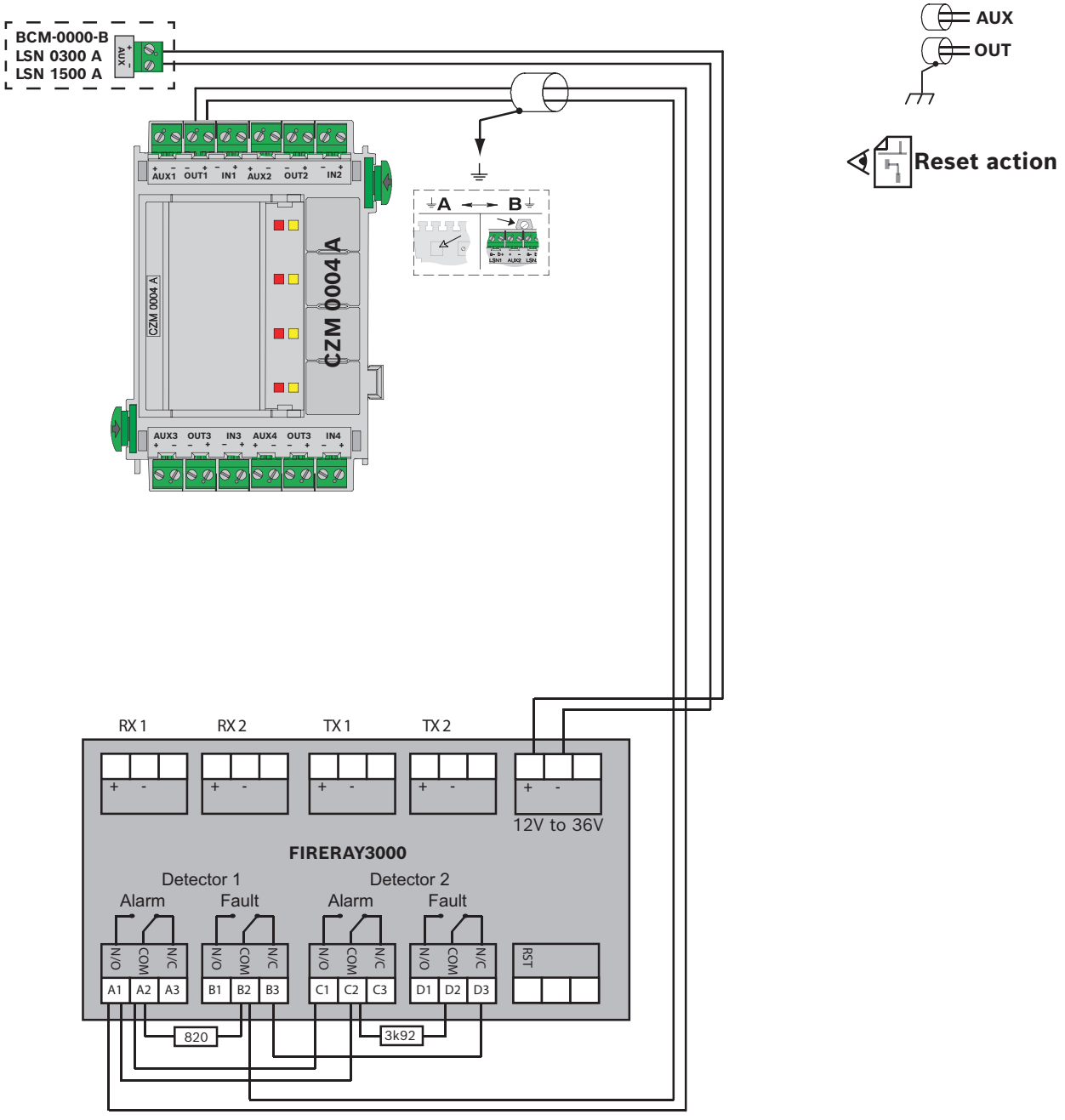




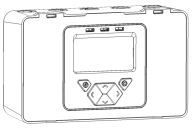
FIRERAY3000

2 x  **OUT1**



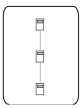


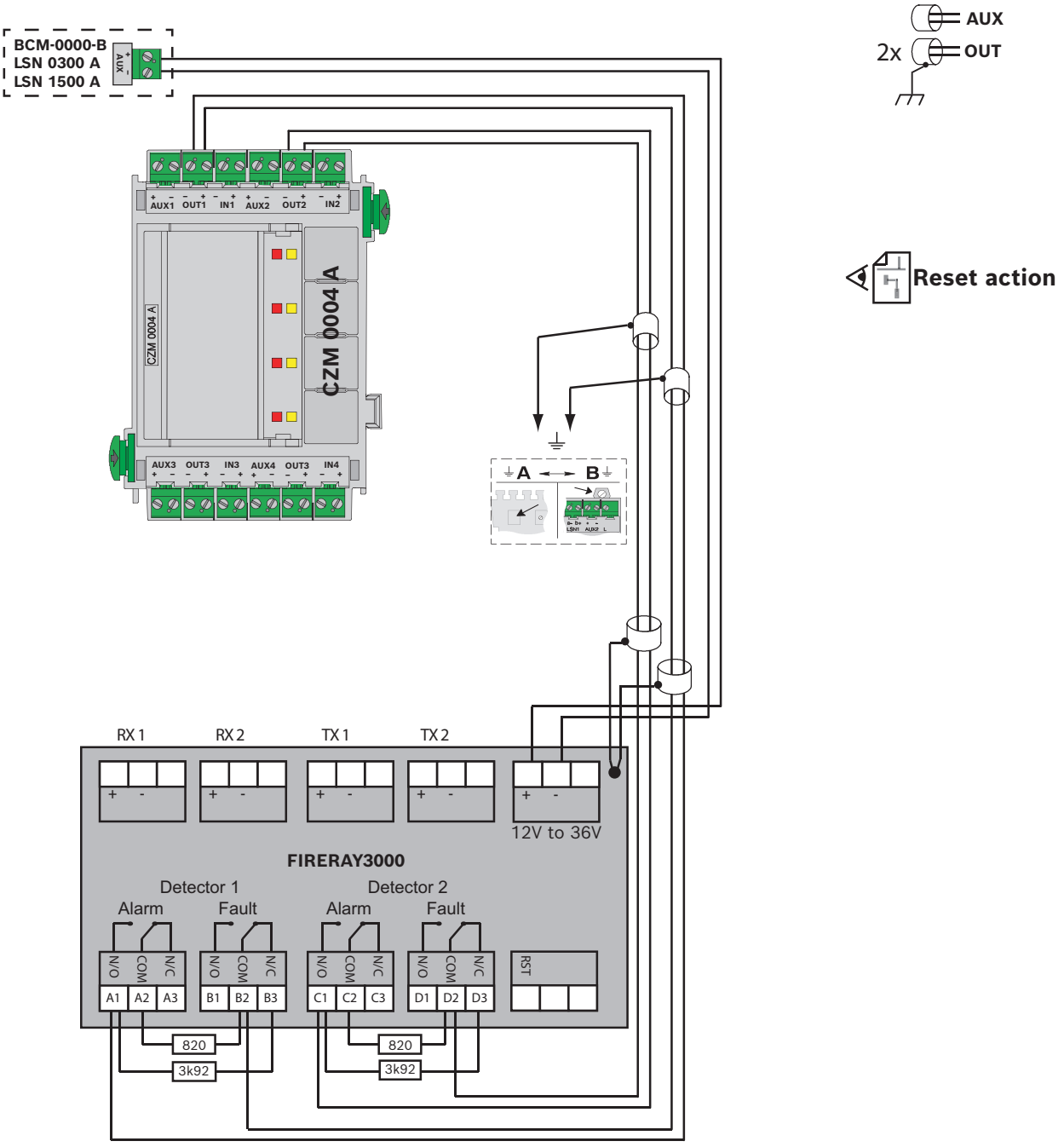




FIRERAY3000

2 x  **OUT1+2**



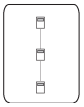


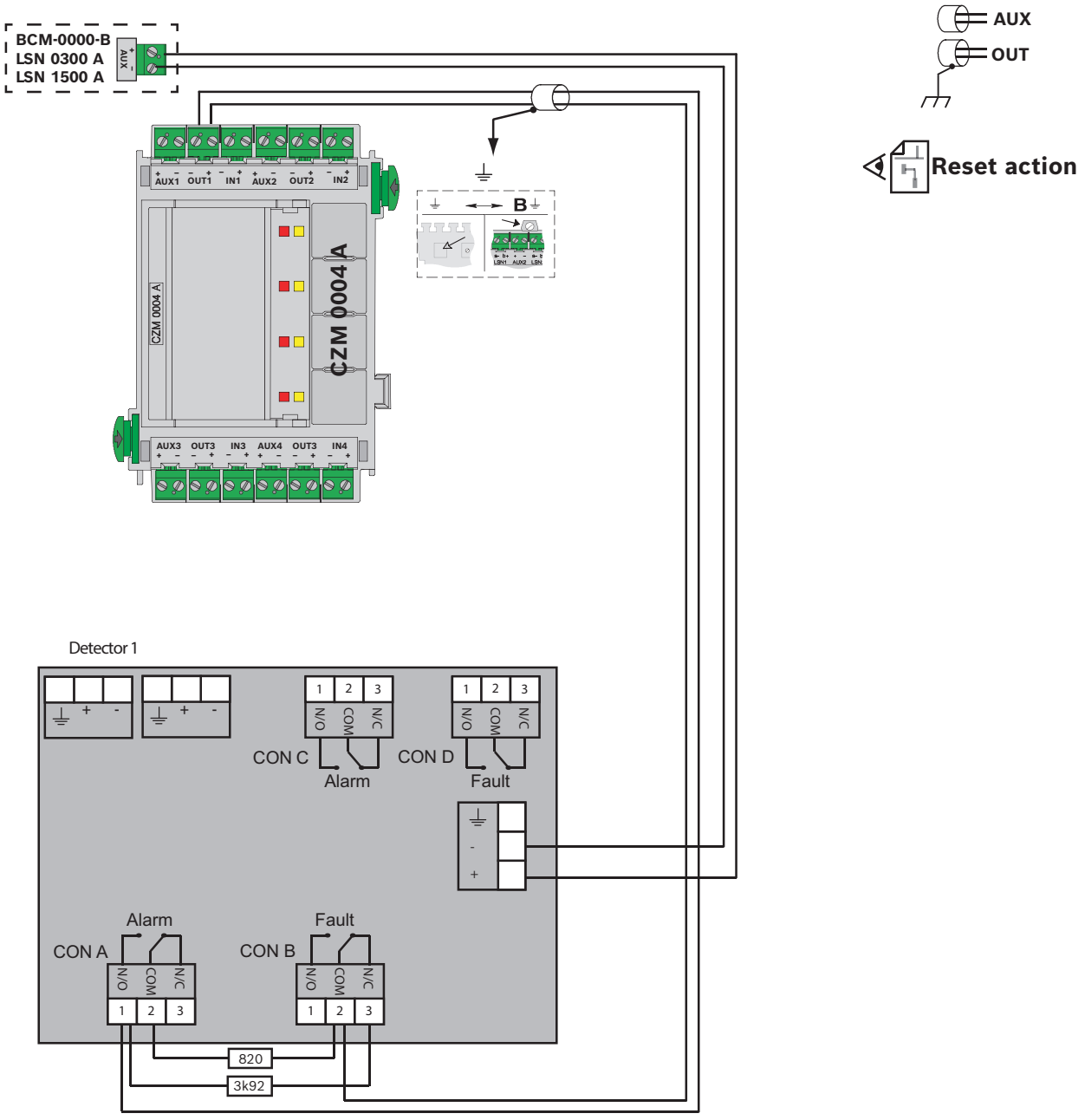




FIRERAY5000

1 x



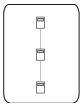


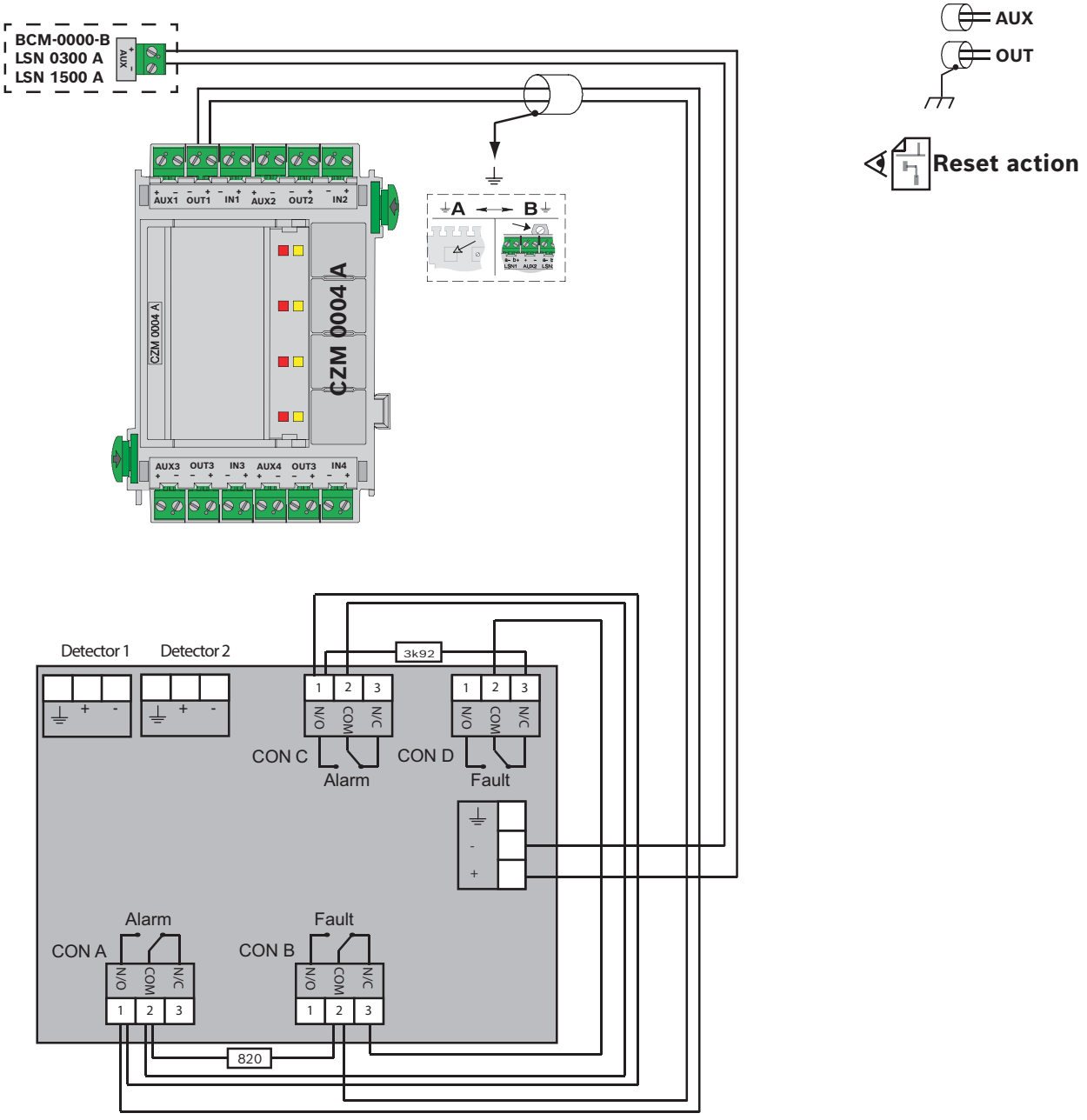




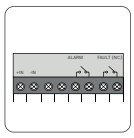
FIRERAY5000

2 x OUT1

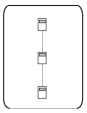


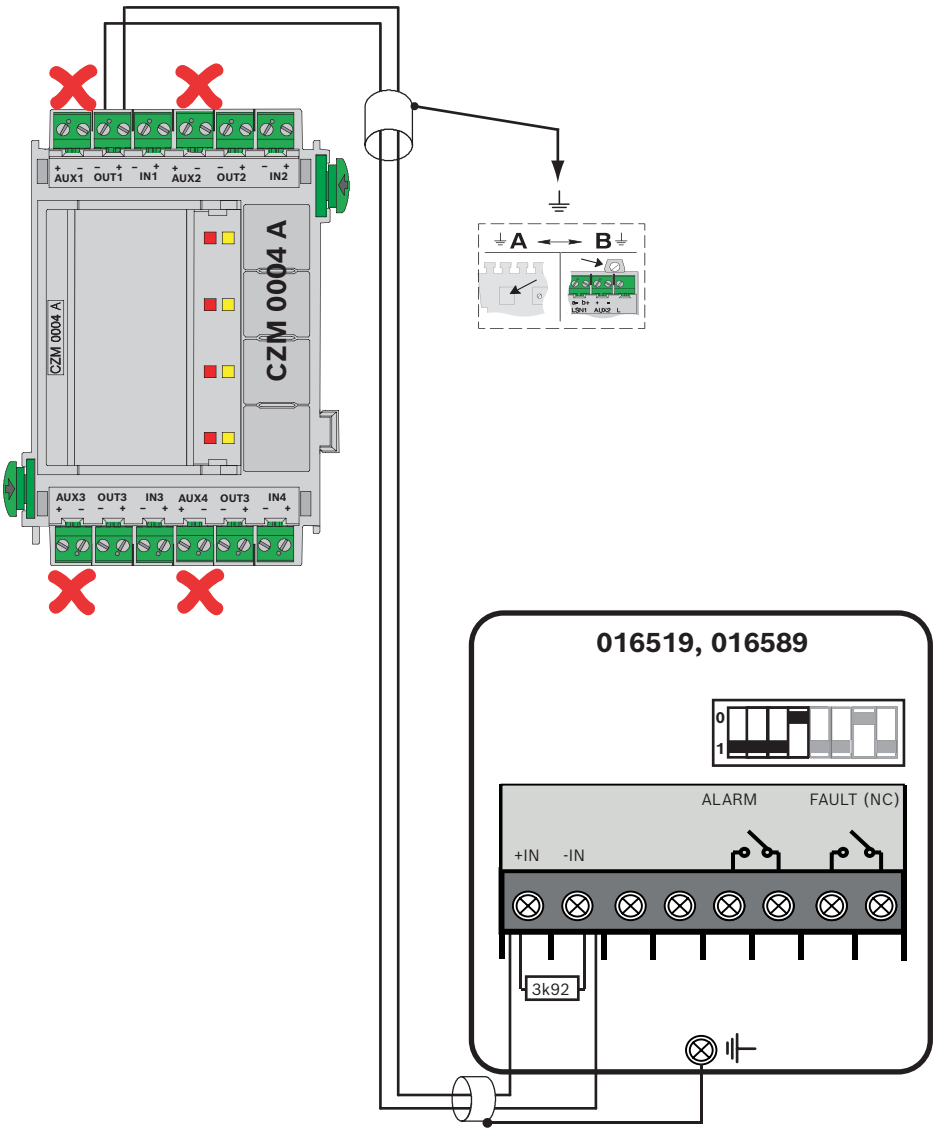




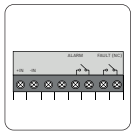


016519, 016589
IR3 Flame Detector

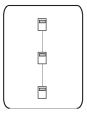


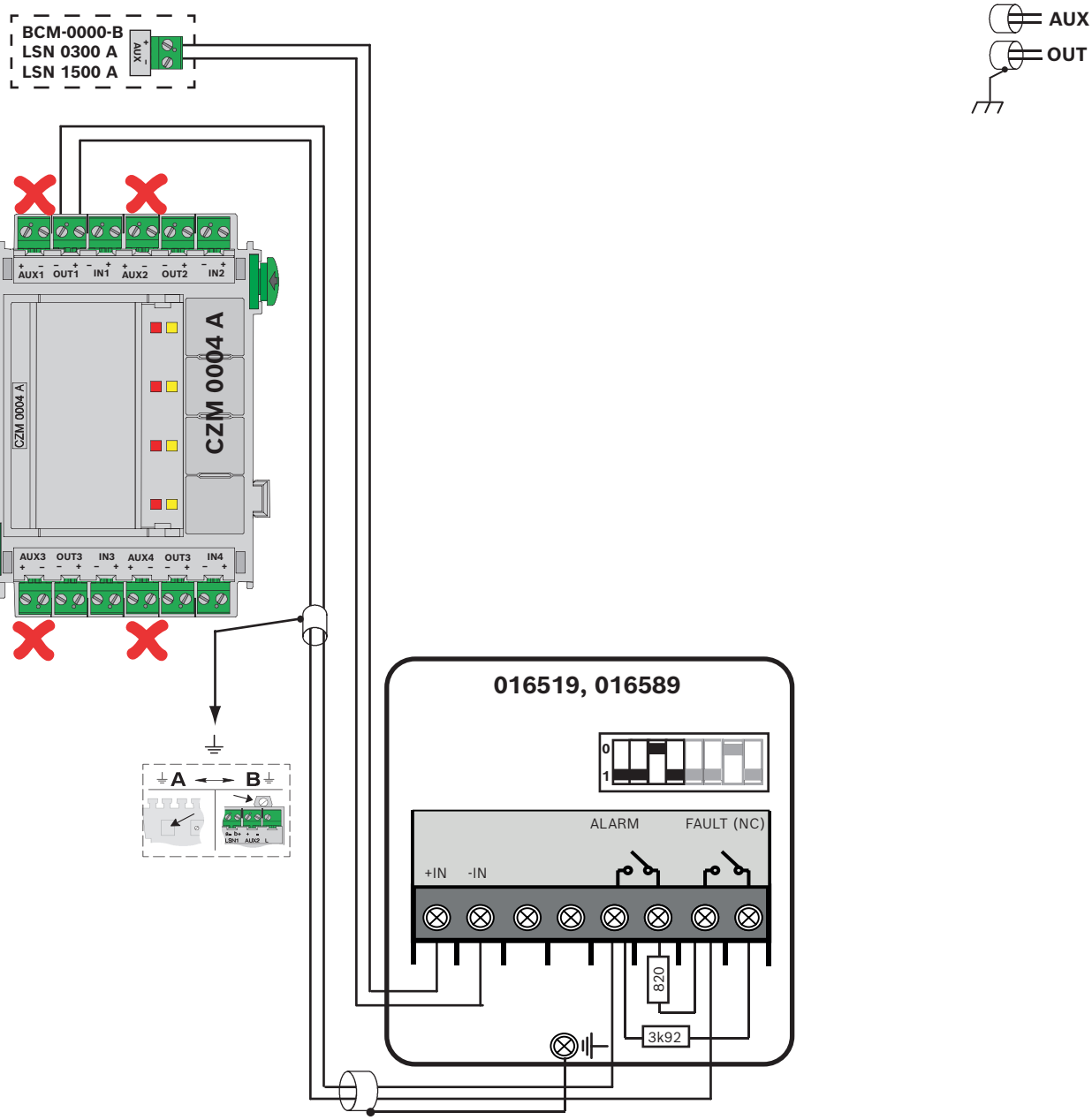




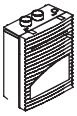


016519, 016589
IR3 Flame Detector

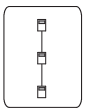


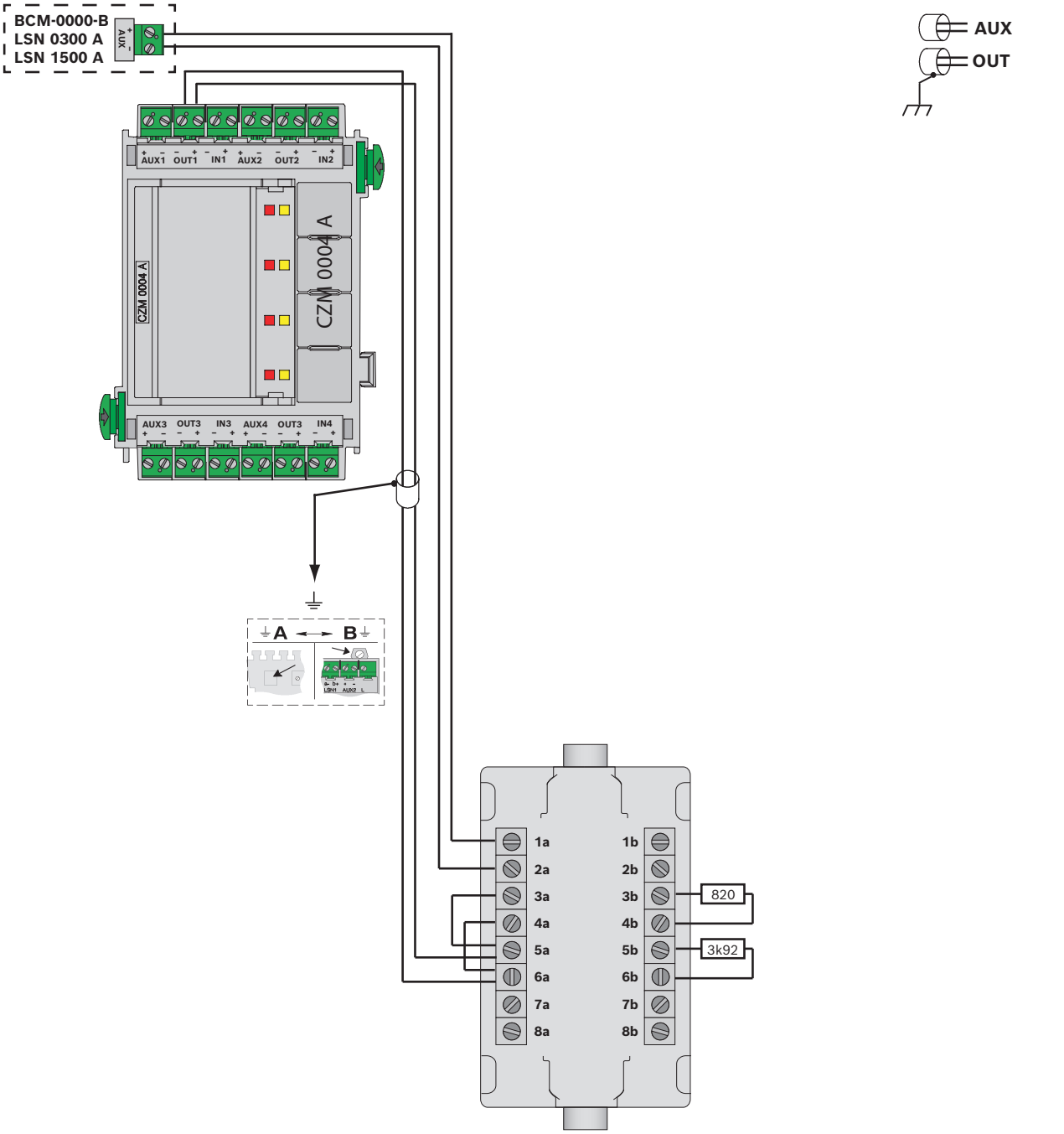


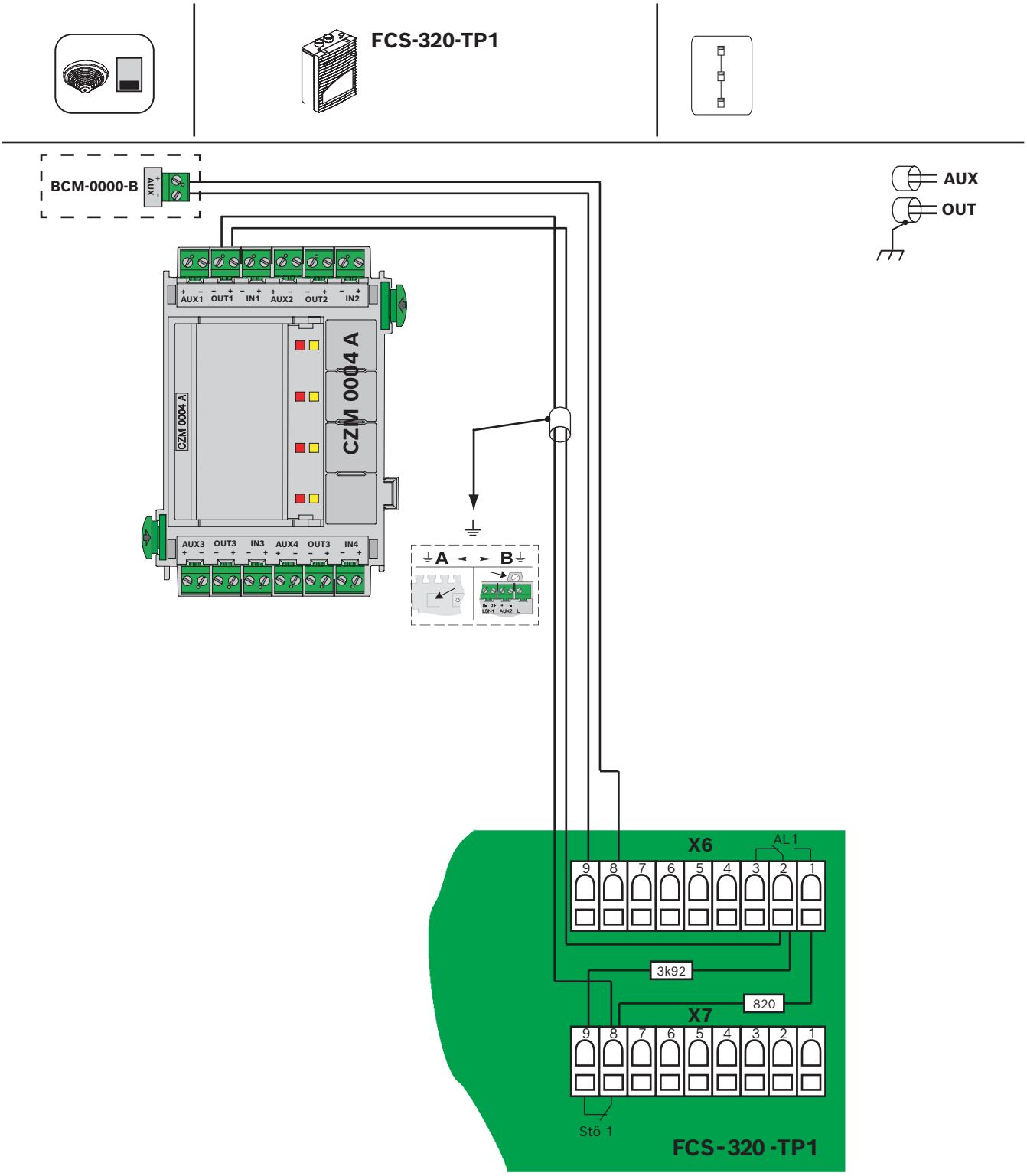


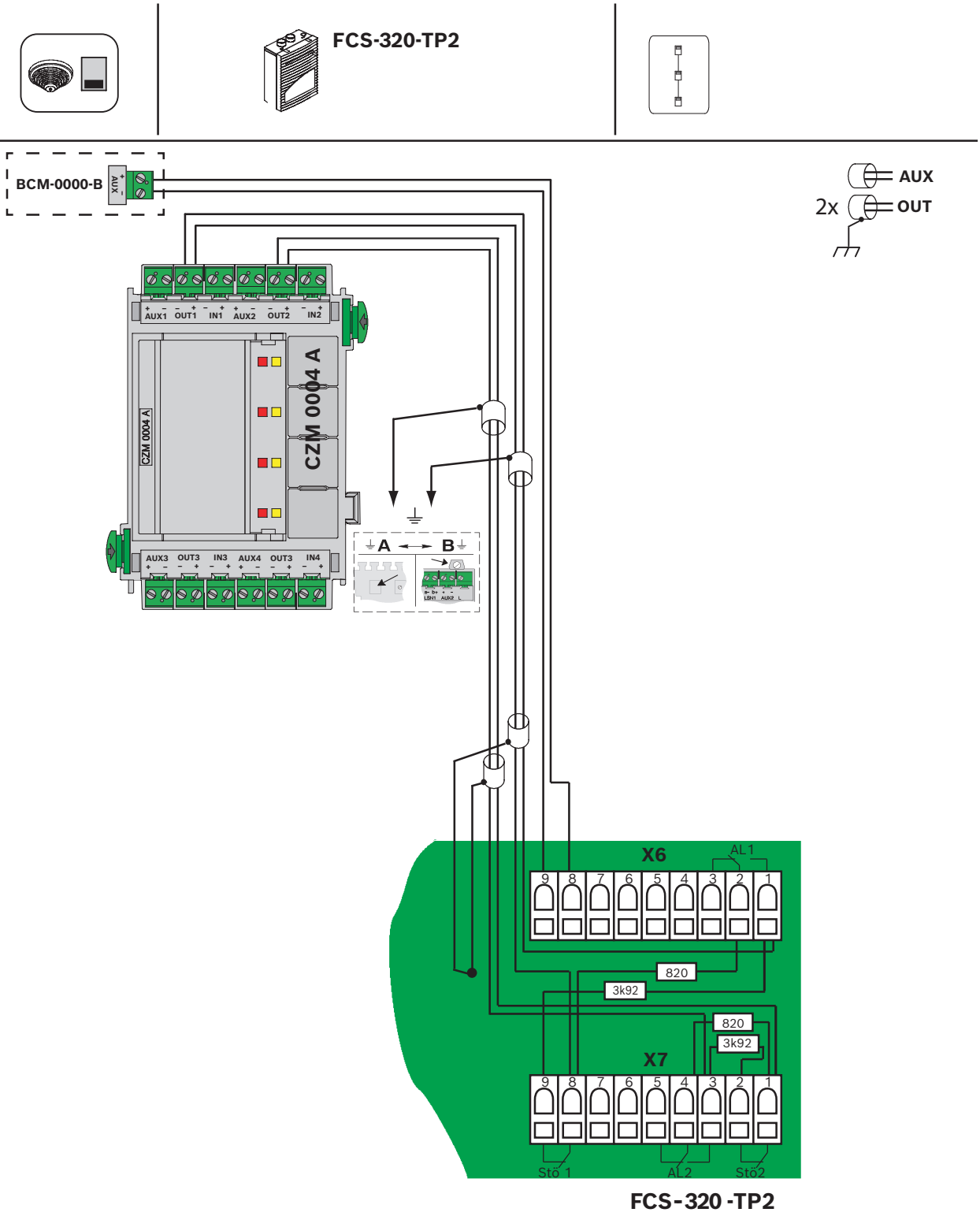


FCS-320-TM Series

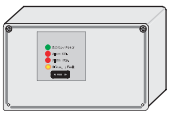




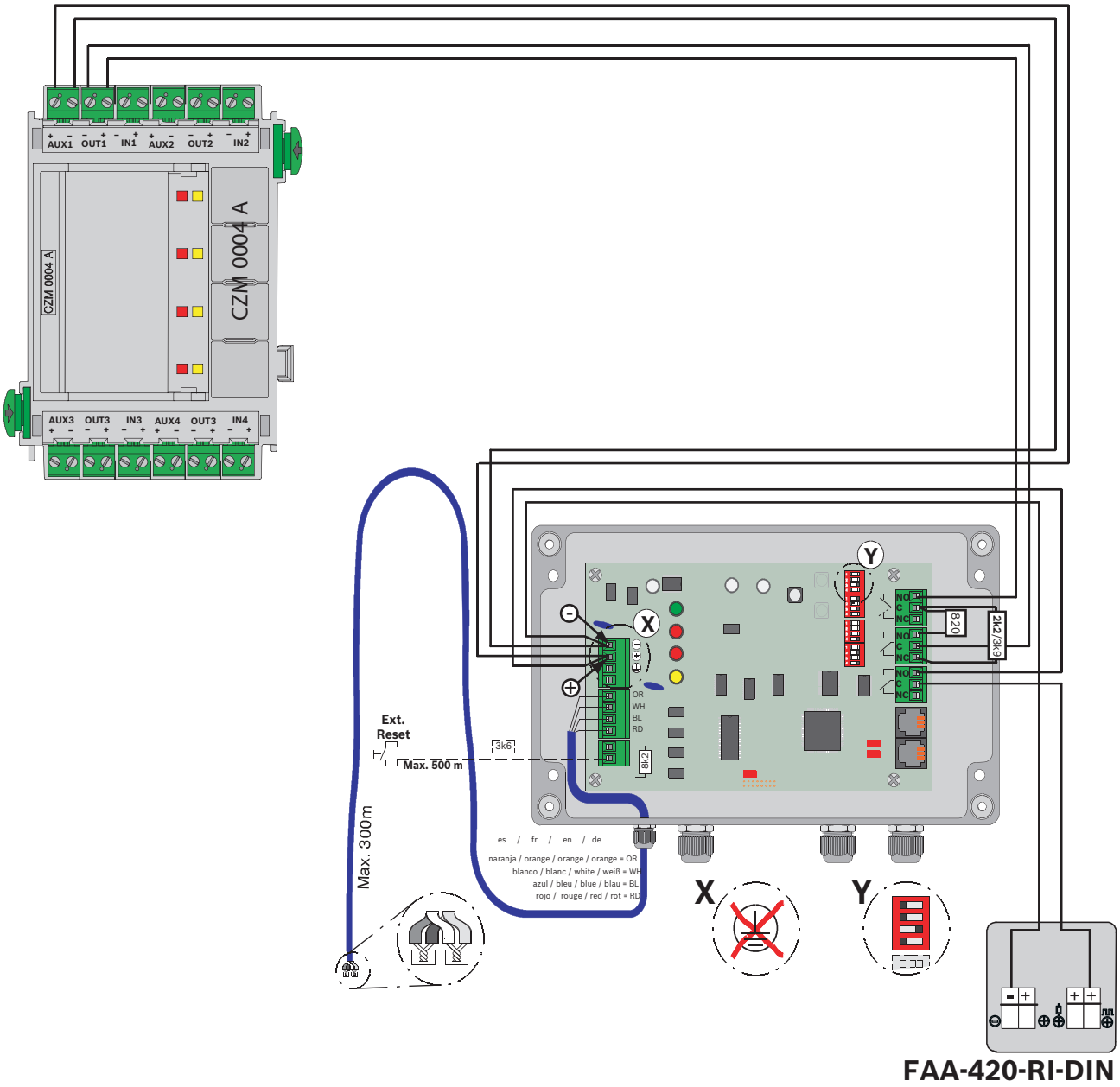

FCS-320-TP1
BCM-0000-B
AUX
AUX
OUT
AUX1 OUT1 IN1 AUX2 OUT2 IN2
CZM 0004 A
AUX3 OUT3 IN3 AUX4 OUT3 IN4
A
B
X6
AL1
9 8 7 6 5 4 3 2 1
3k92
820
X7
9 8 7 6 5 4 3 2 1
Stö 1
FCS-320-TP1


FCS-320-TP2
BCM-0000-B
AUX
2x
AUX
OUT
AUX1 OUT1 IN1 AUX2 OUT2 IN2
CZM 0004 A
AUX3 OUT3 IN3 AUX4 OUT3 IN4
A
B
X6
AL1
9 8 7 6 5 4 3 2 1
820
3k92
820
3k92
X7
9 8 7 6 5 4 3 2 1
Sto 1
AL2
Sto2
FCS-320-TP2

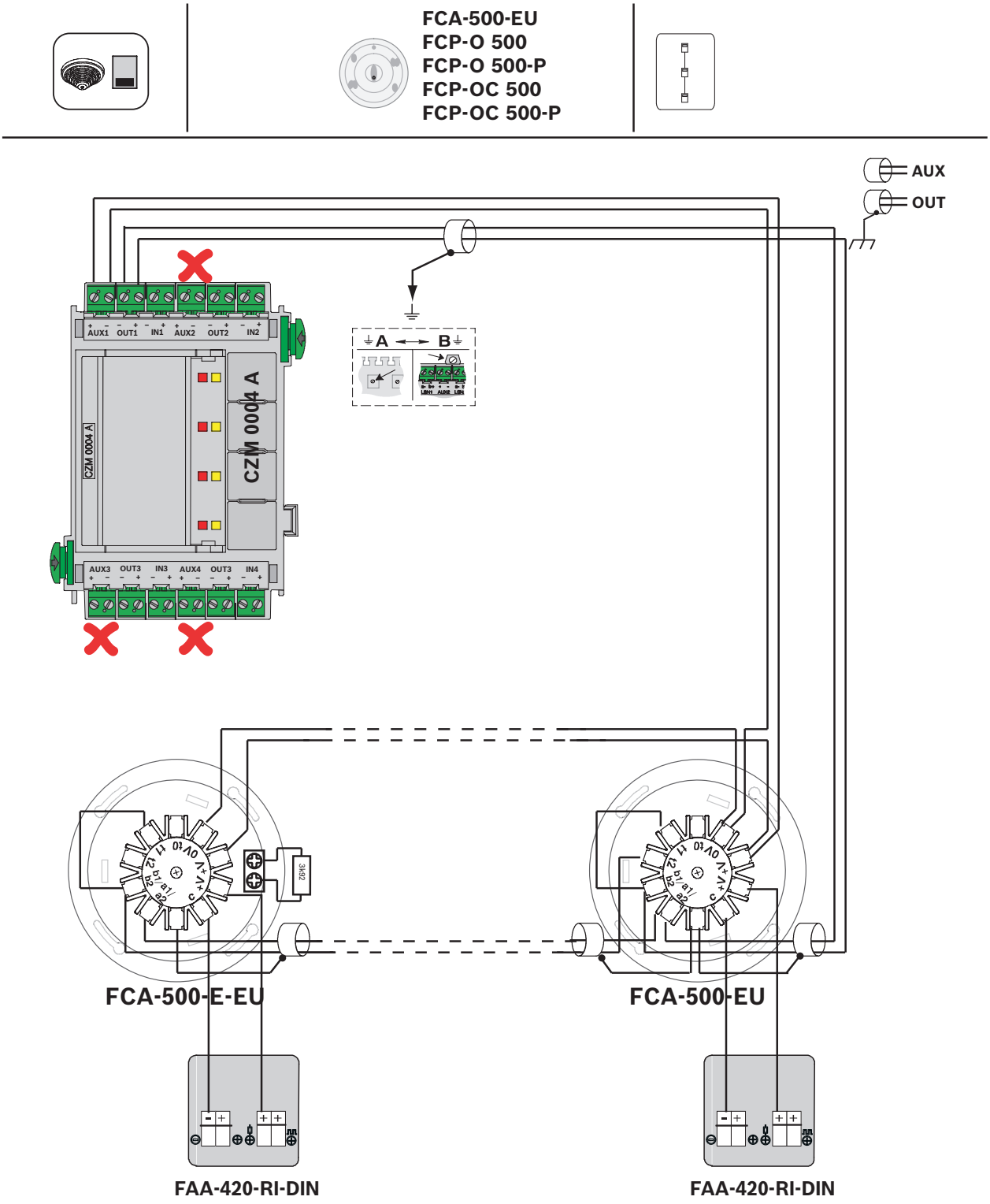


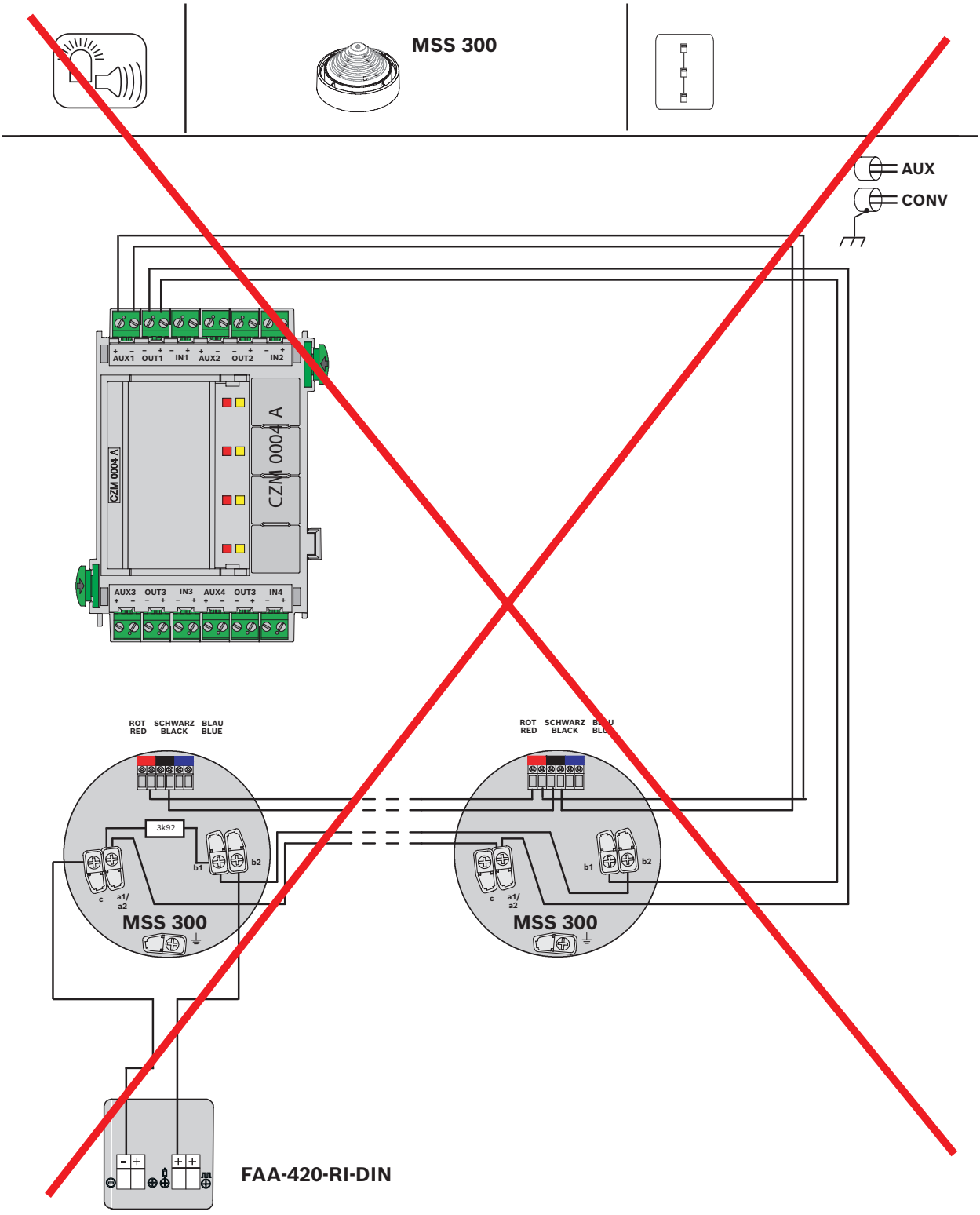


FCS-LWM-1



FAA-420-RI-DIN


FCA-500-EU
FCP-O 500
FCP-O 500-P
FCP-OC 500
FCP-OC 500-P
AUX
OUT
AUX1 OUT1 IN1 AUX2 OUT2 IN2
CZM 0004 A
AUX3 OUT3 IN3 AUX4 OUT3 IN4
A
B
FCA-500-E-EU
FCA-500-EU
FAA-420-RI-DIN
FAA-420-RI-DIN

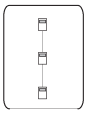

MSS 300
AUX
CONV
AUX1 OUT1 IN1 AUX2 OUT2 IN2
CZM 0004 A
AUX3 OUT3 IN3 AUX4 OUT3 IN4
ROT RED
SCHWARZ BLACK
BLAU BLUE
3k92
b1
b2
c
a1/ a2
MSS 300
MSS 300
FAA-420-RI-DIN

3.4.3 ENO 0000 A/B

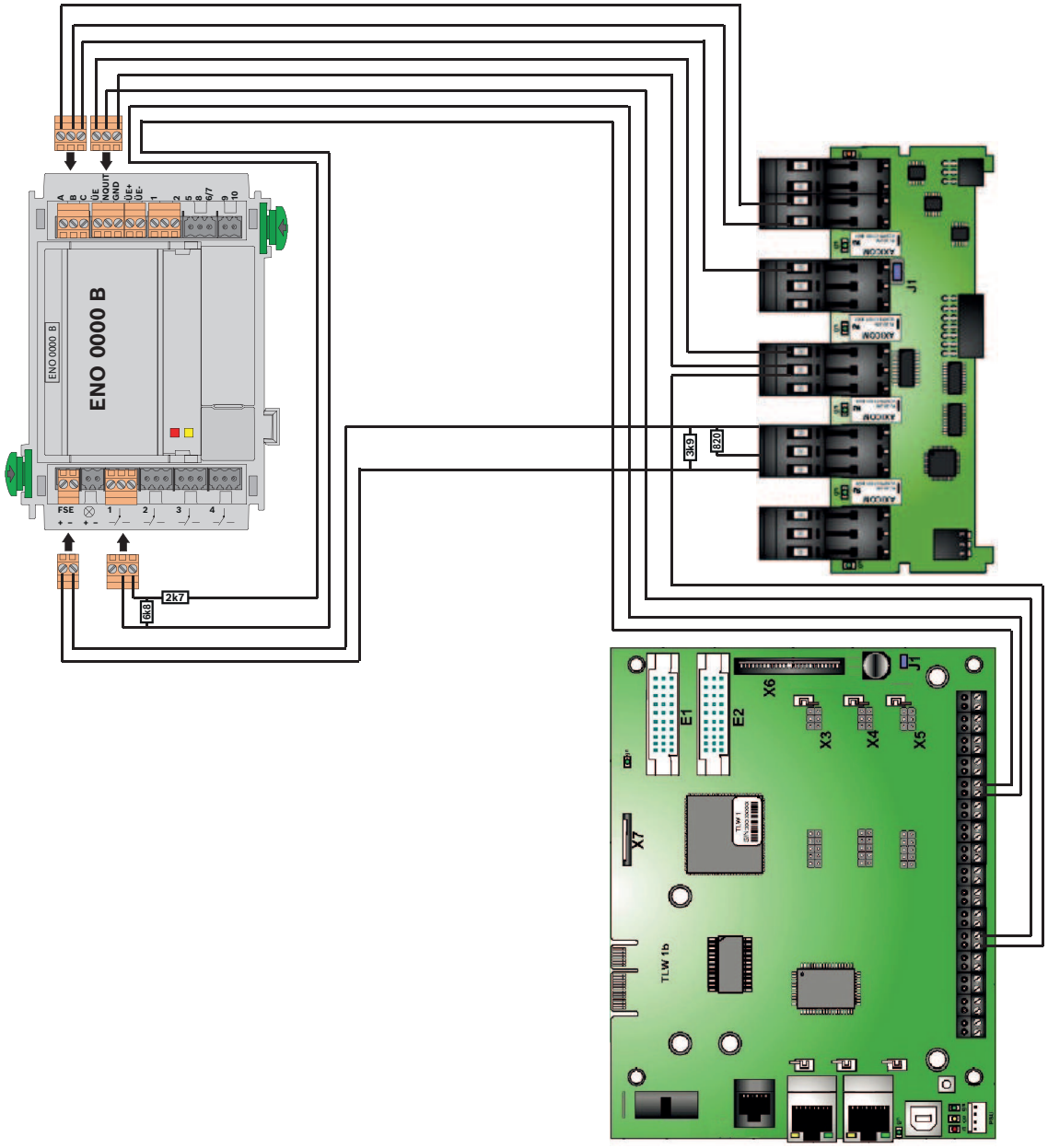


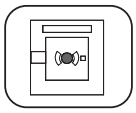


AT5000 IP/GPRS



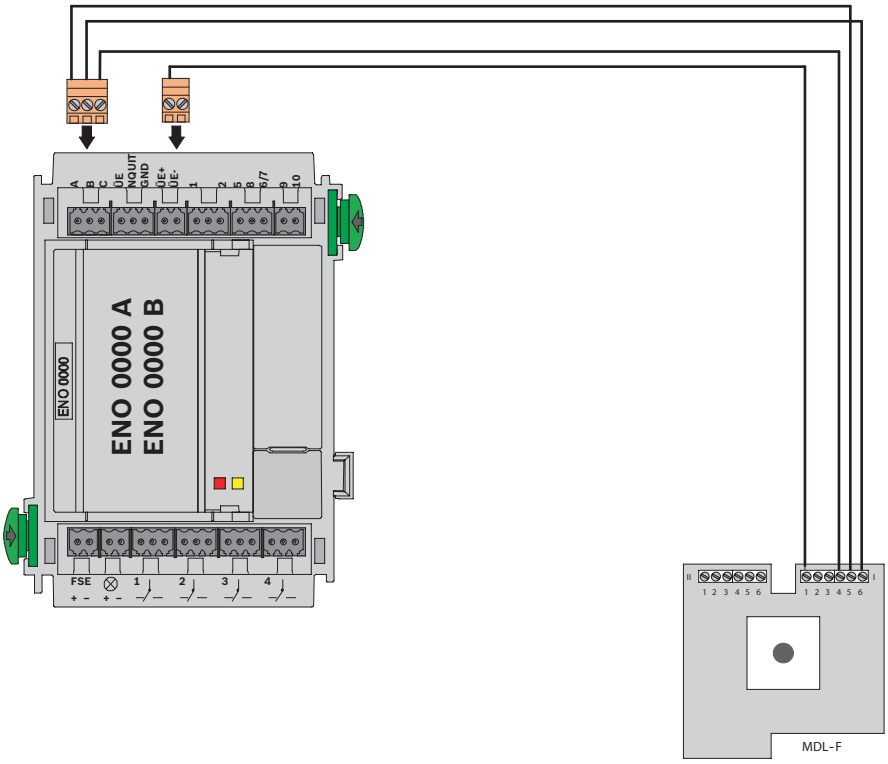
EN 54-2

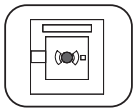






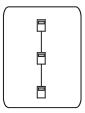
MDL-F

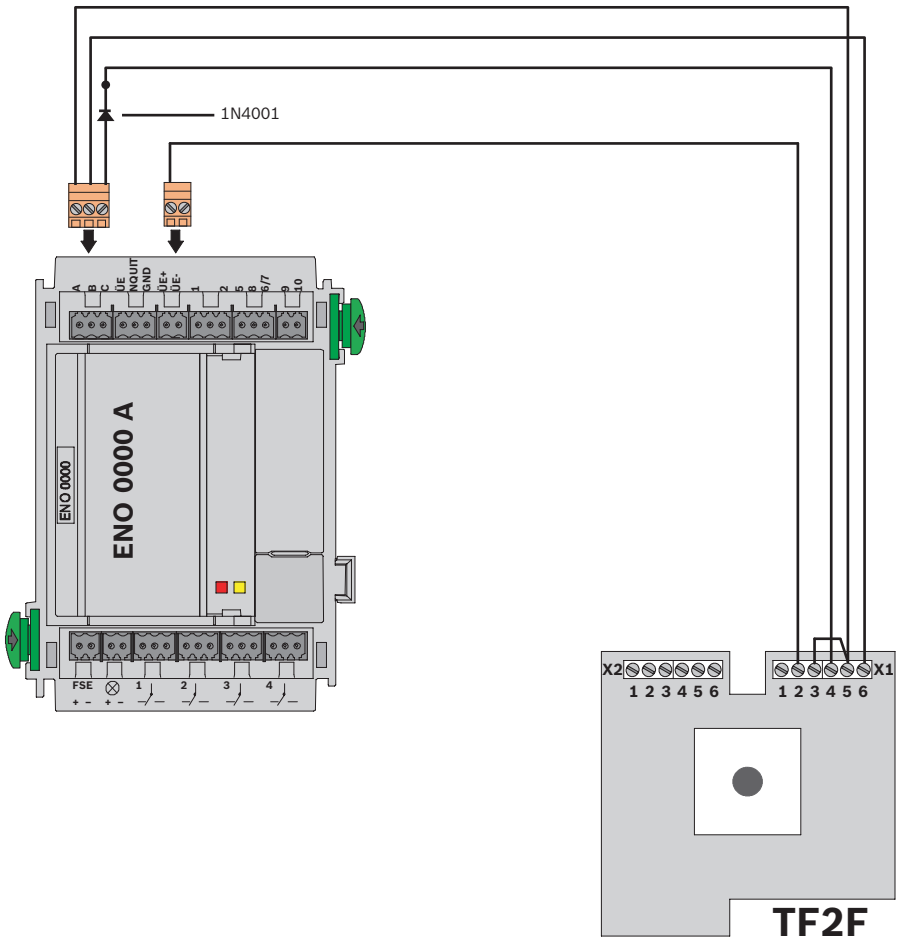

A
B
C
VE
VOUT
GND
UE+
UE-
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6/7
9
10
ENO 0000 A
ENO 0000 B
ENO 0000
FSE
+ -
+ -
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3
4
II
1 2 3 4 5 6
1 2 3 4 5 6
I
MDL-F

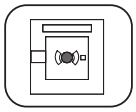




TF2F

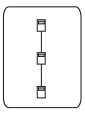


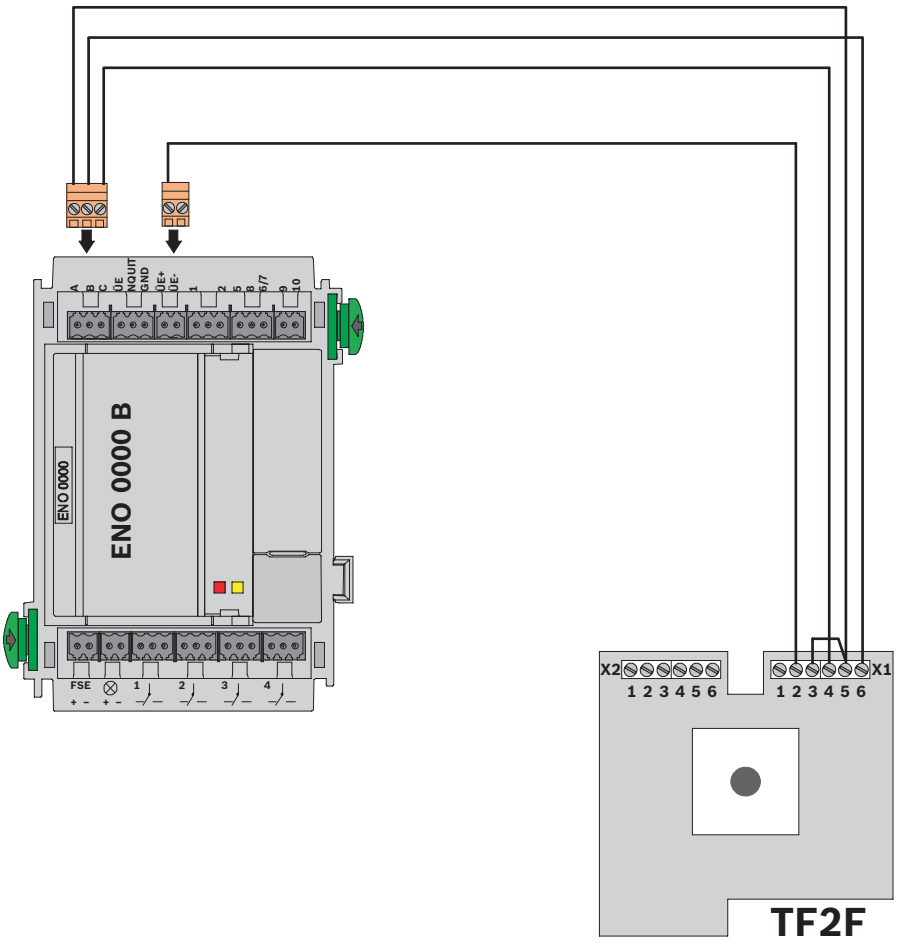

1N4001
A
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C
UE
NOUT
GND
UE+
UE-
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2
5
B
6/7
9
10
ENO 0000 A
ENO 0000
FSE
+ -
+ -
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2
3
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X2
1 2 3 4 5 6
X1
1 2 3 4 5 6
TF2F

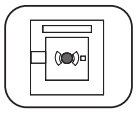




TF2F

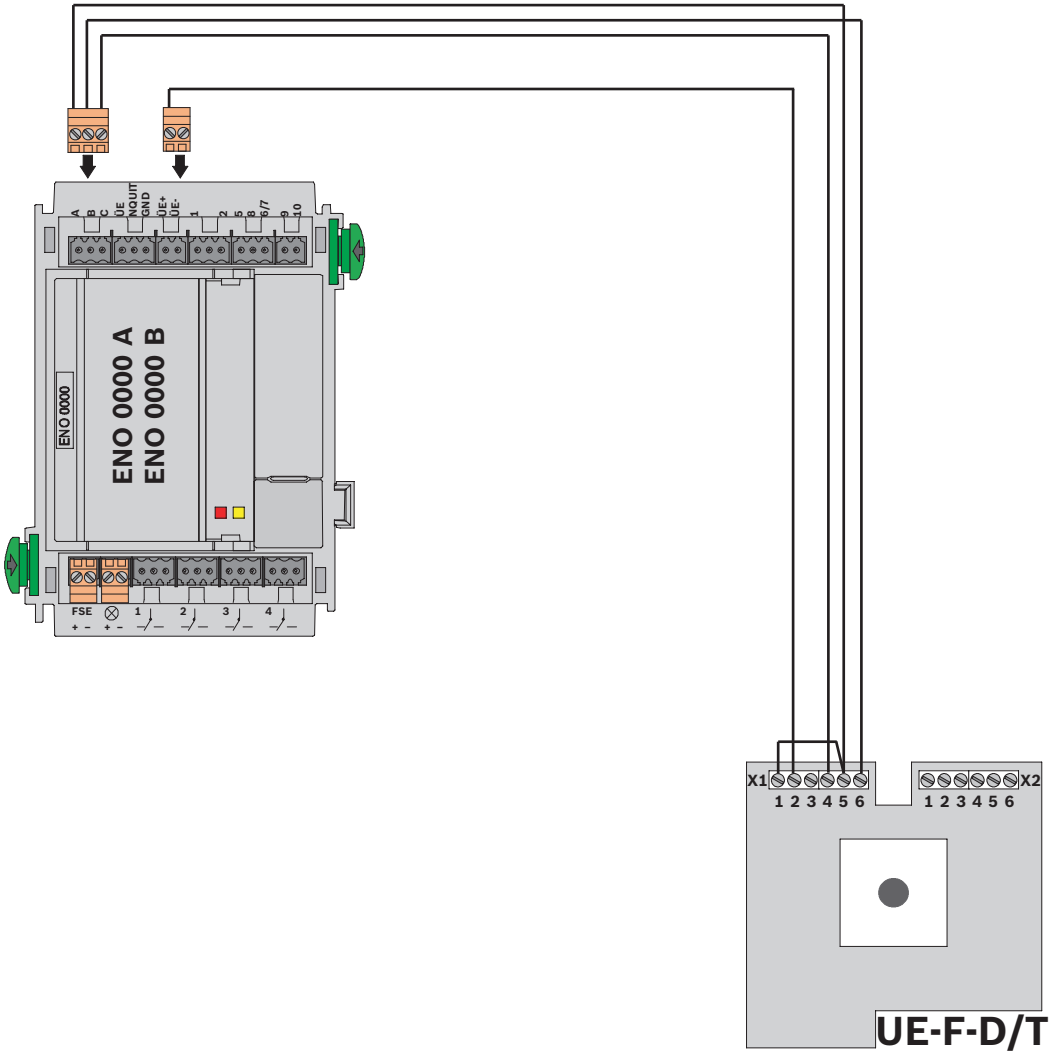



A
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UE-
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ENO 0000
FSE
+ -
+ -
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X2
1 2 3 4 5 6
X1
1 2 3 4 5 6
TF2F

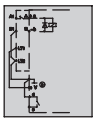




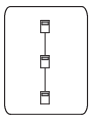
UE-F-D/T

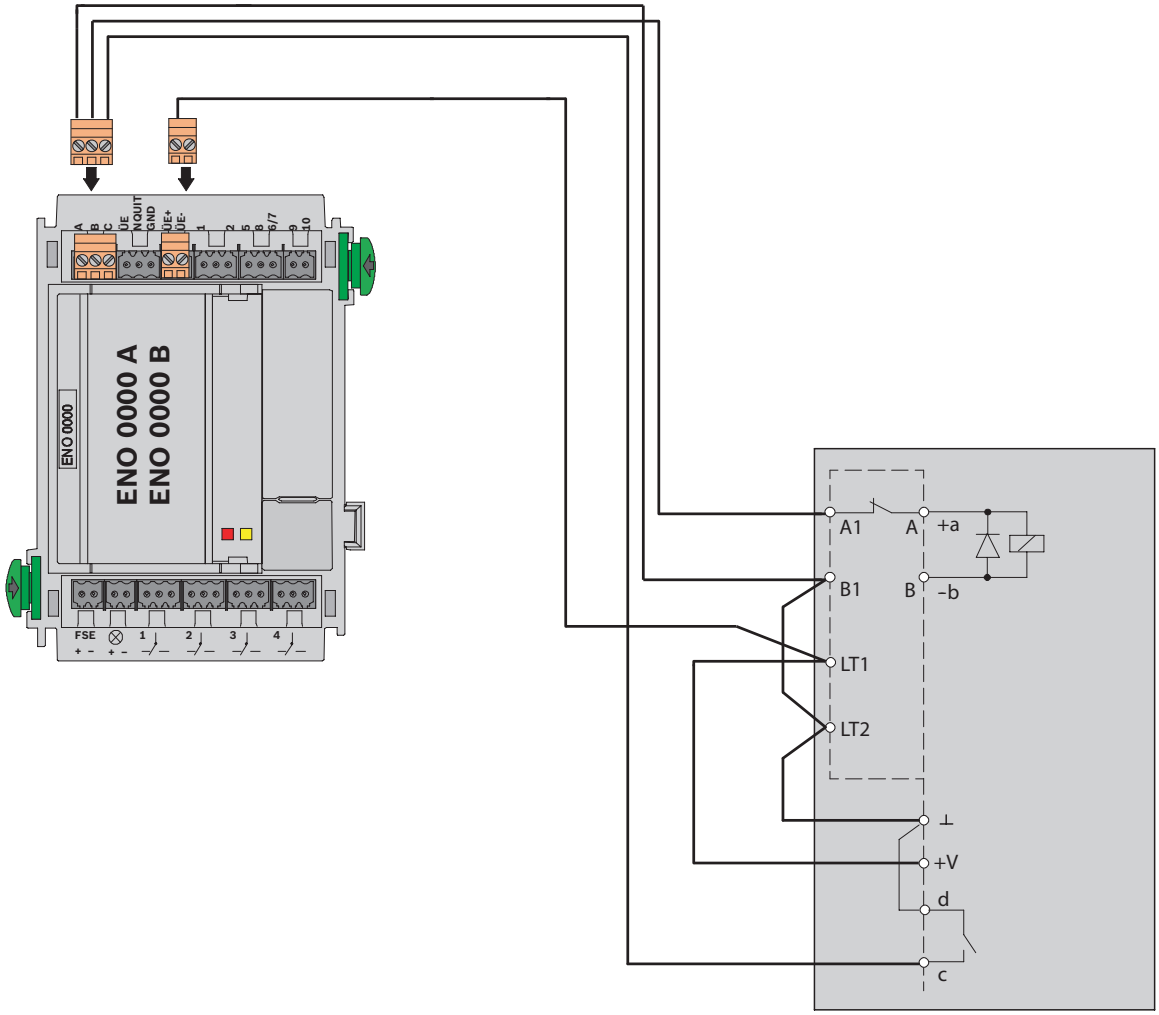

A
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ENO 0000 B
ENO 0000
FSE
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+ –
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X1
1 2 3 4 5 6
X2
1 2 3 4 5 6
UE-F-D/T





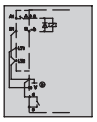
GÜ 101-B



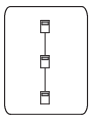


GÜ 101-B

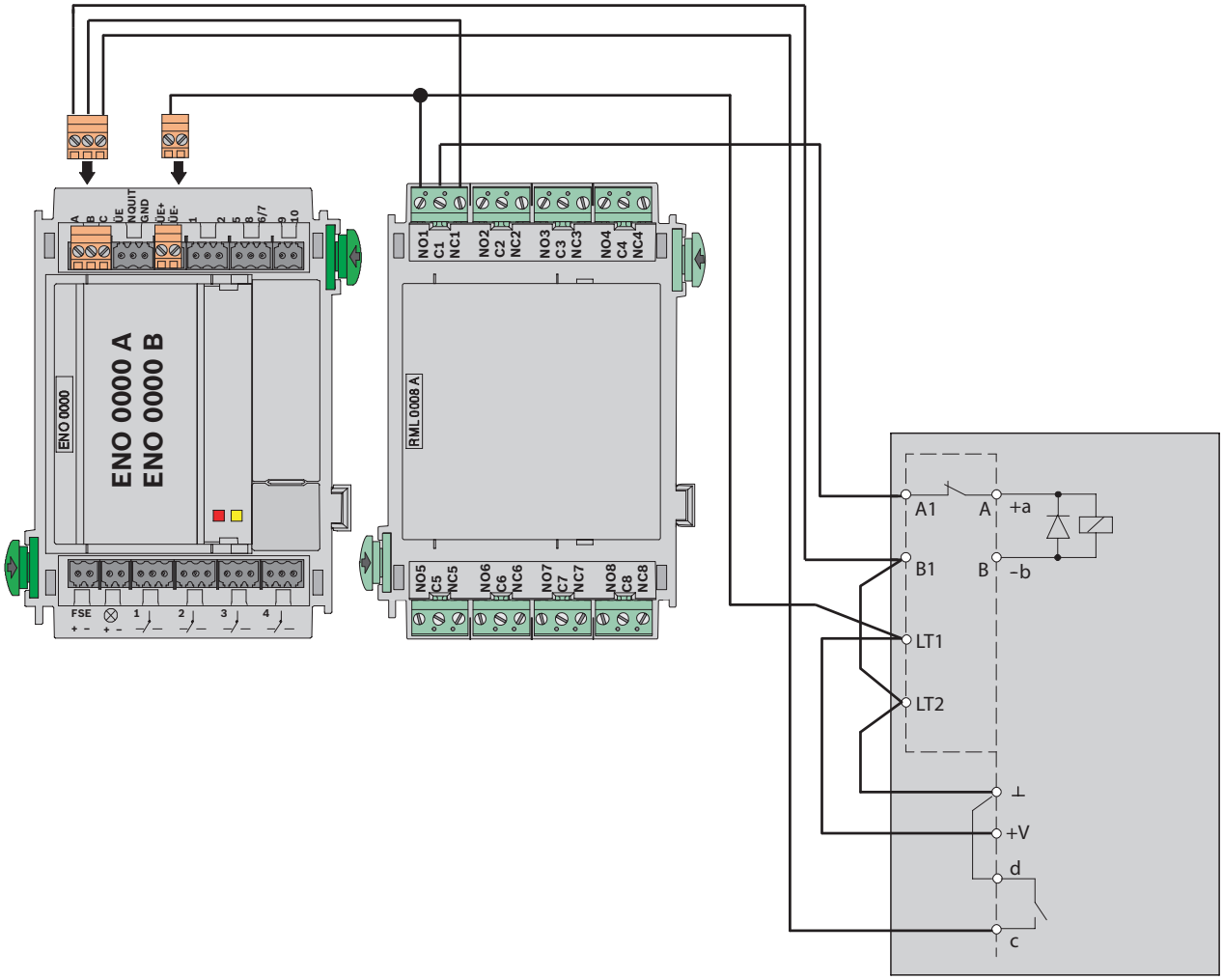




GÜ 101-B

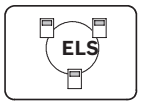


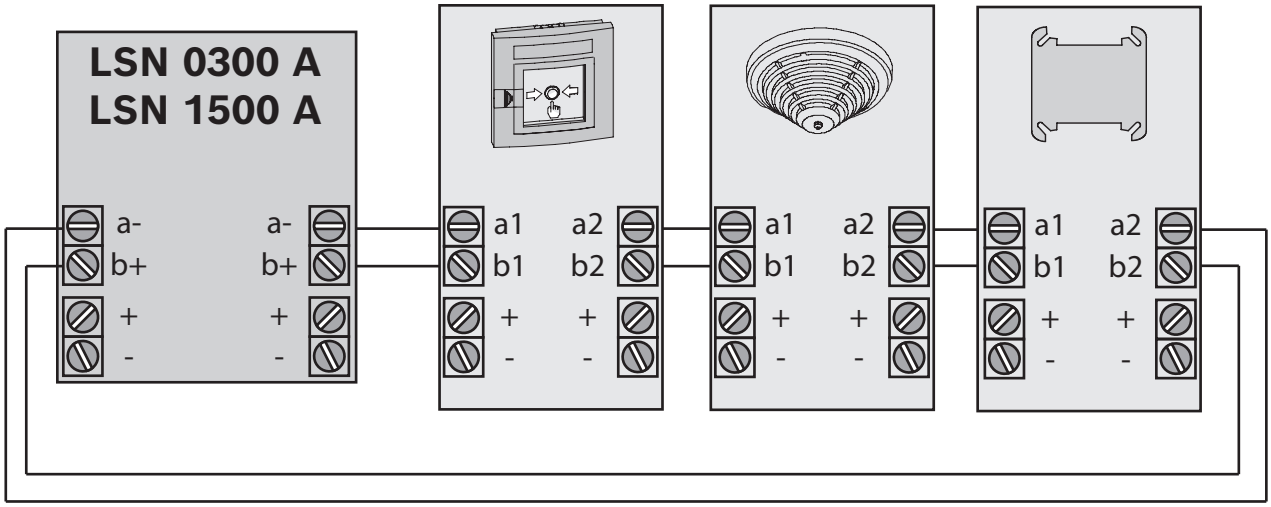




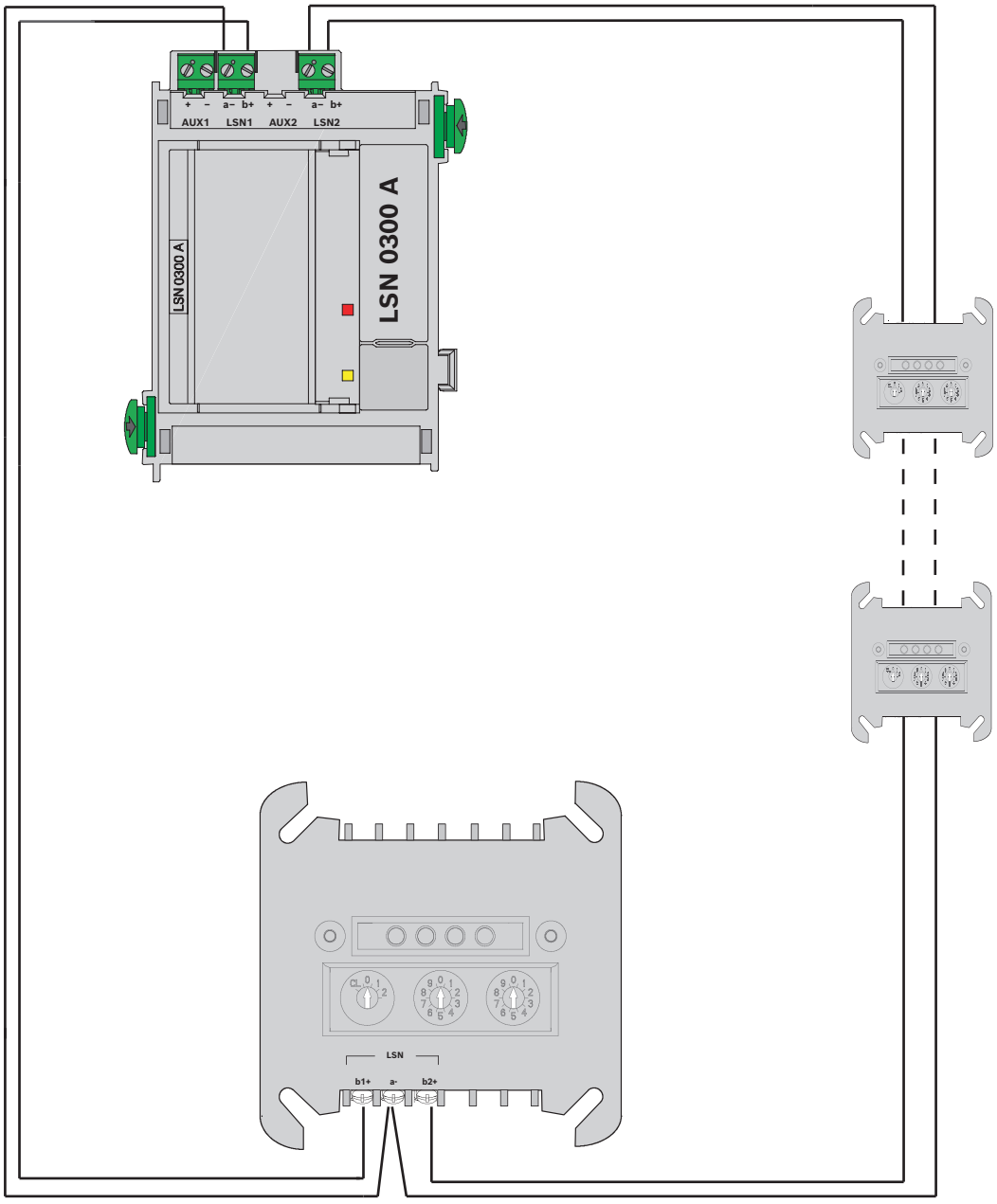
GÜ 101-B

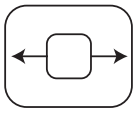
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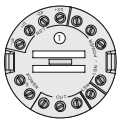
		



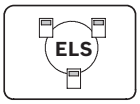
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FLM-420-I2-D
FLM-420-O1I1-D
FLM-420-RHV-D/S
FLM-420-RLV1-D

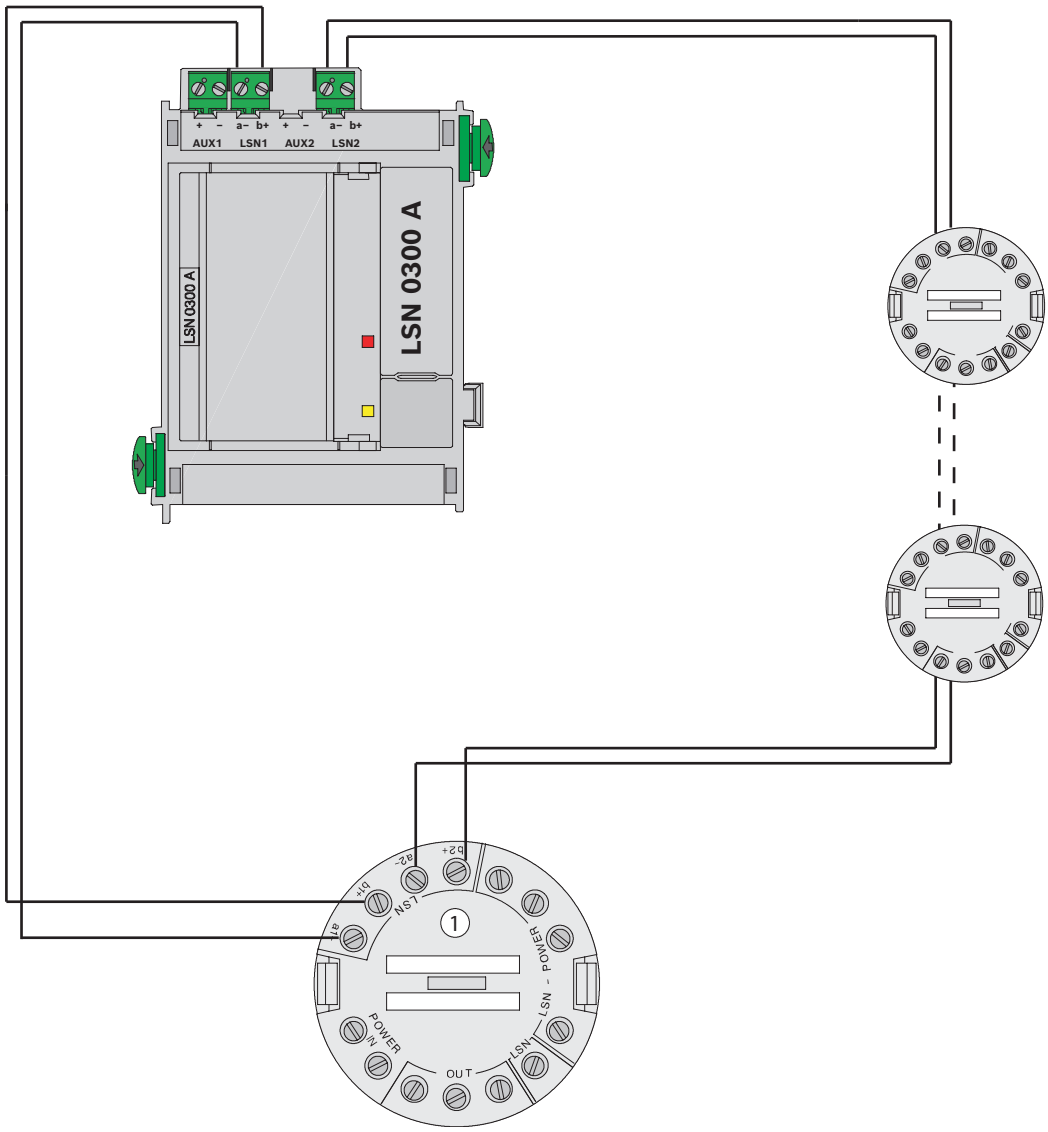


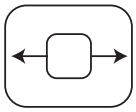


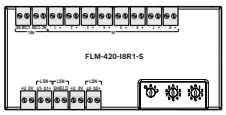


FLM-420-I2-E/W
FLM-420-RLV1-E

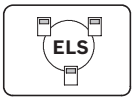


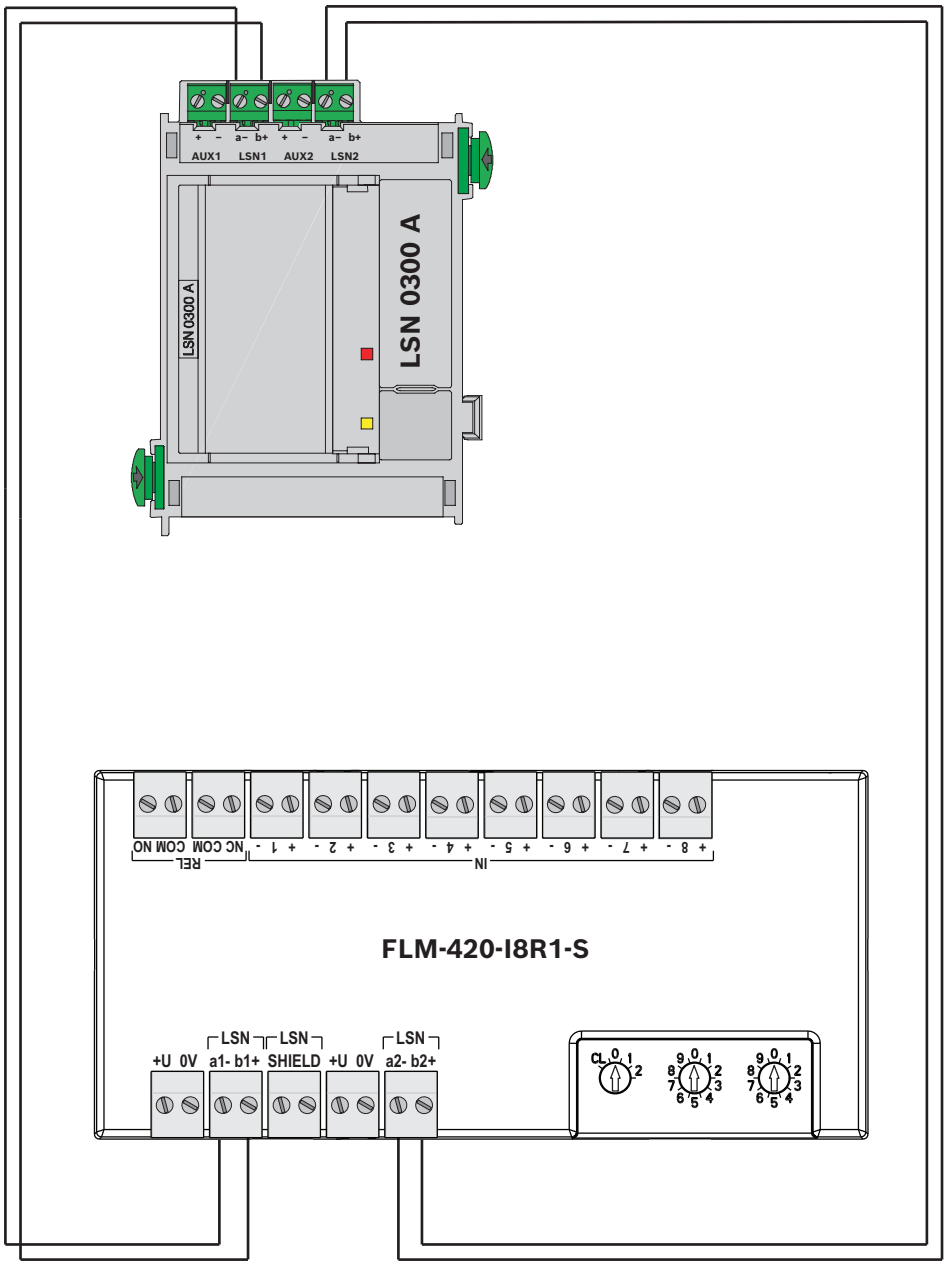


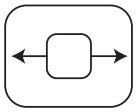


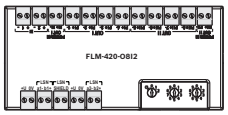


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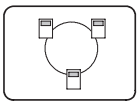


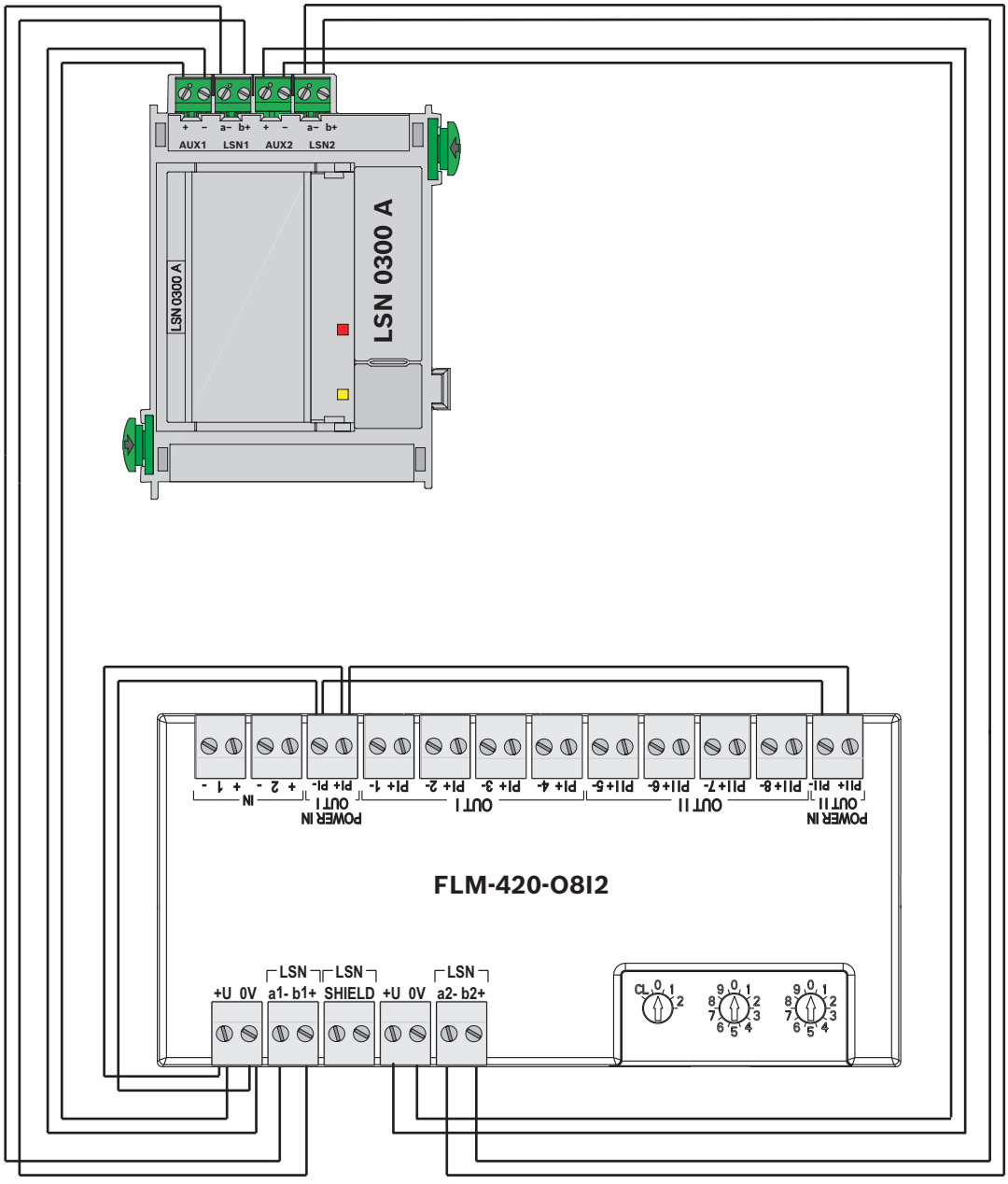


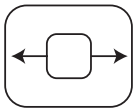


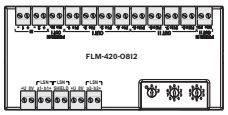


FLM-420-O8I2-S

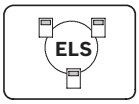


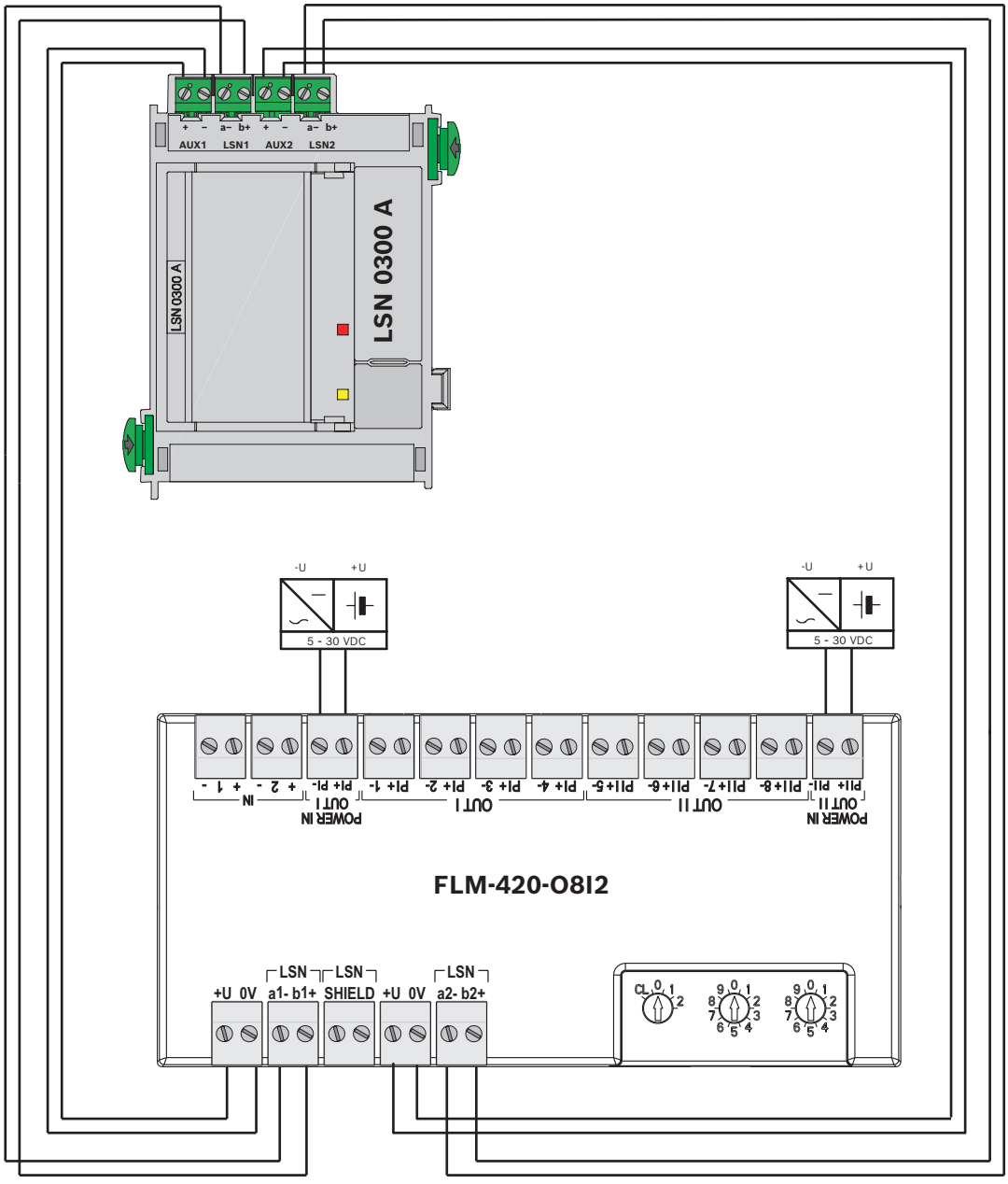


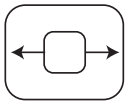




FLM-420-O8I2-S

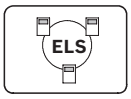


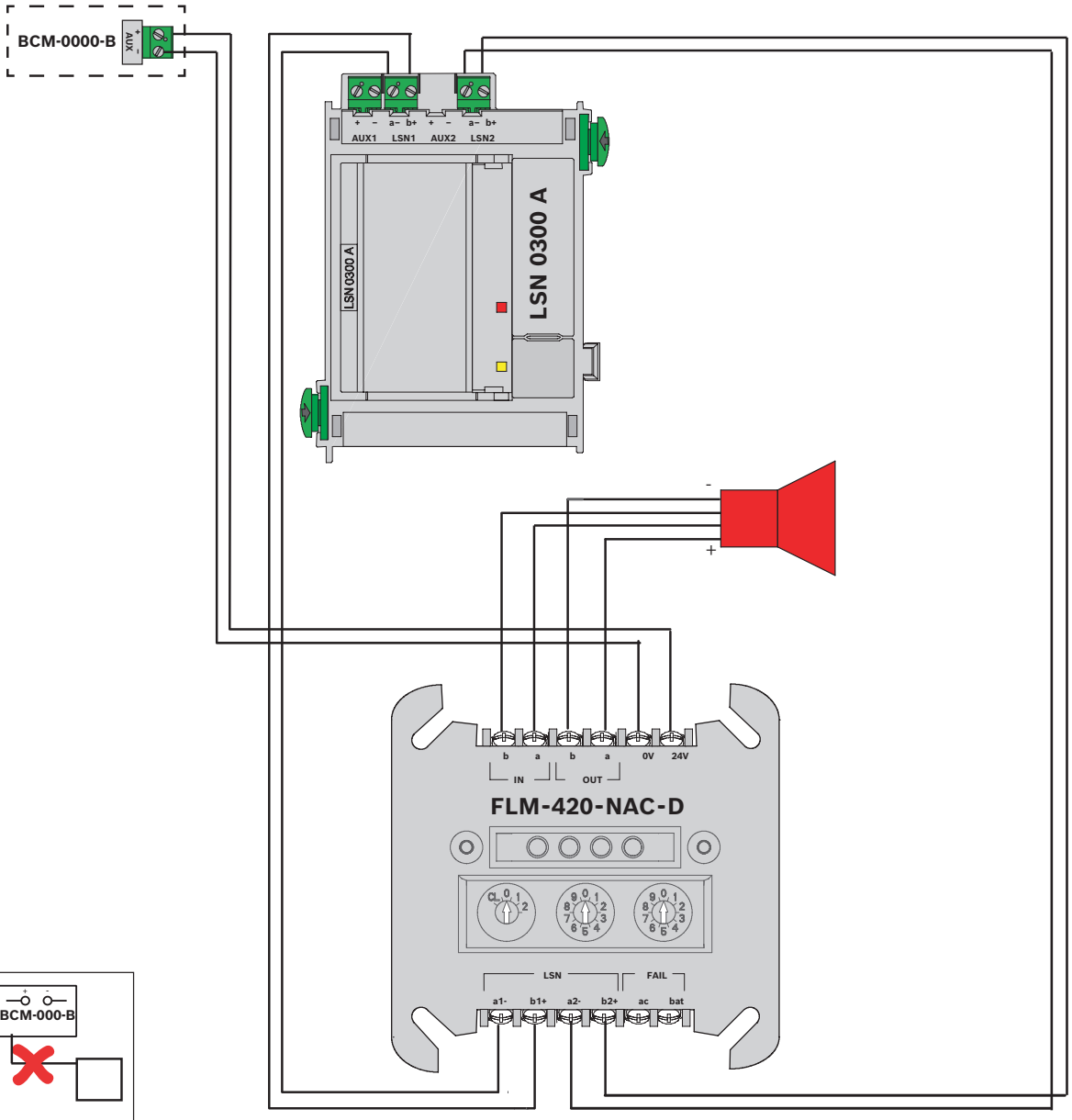


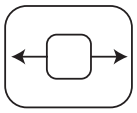




FLM-420-NAC-D/S

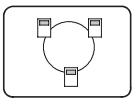




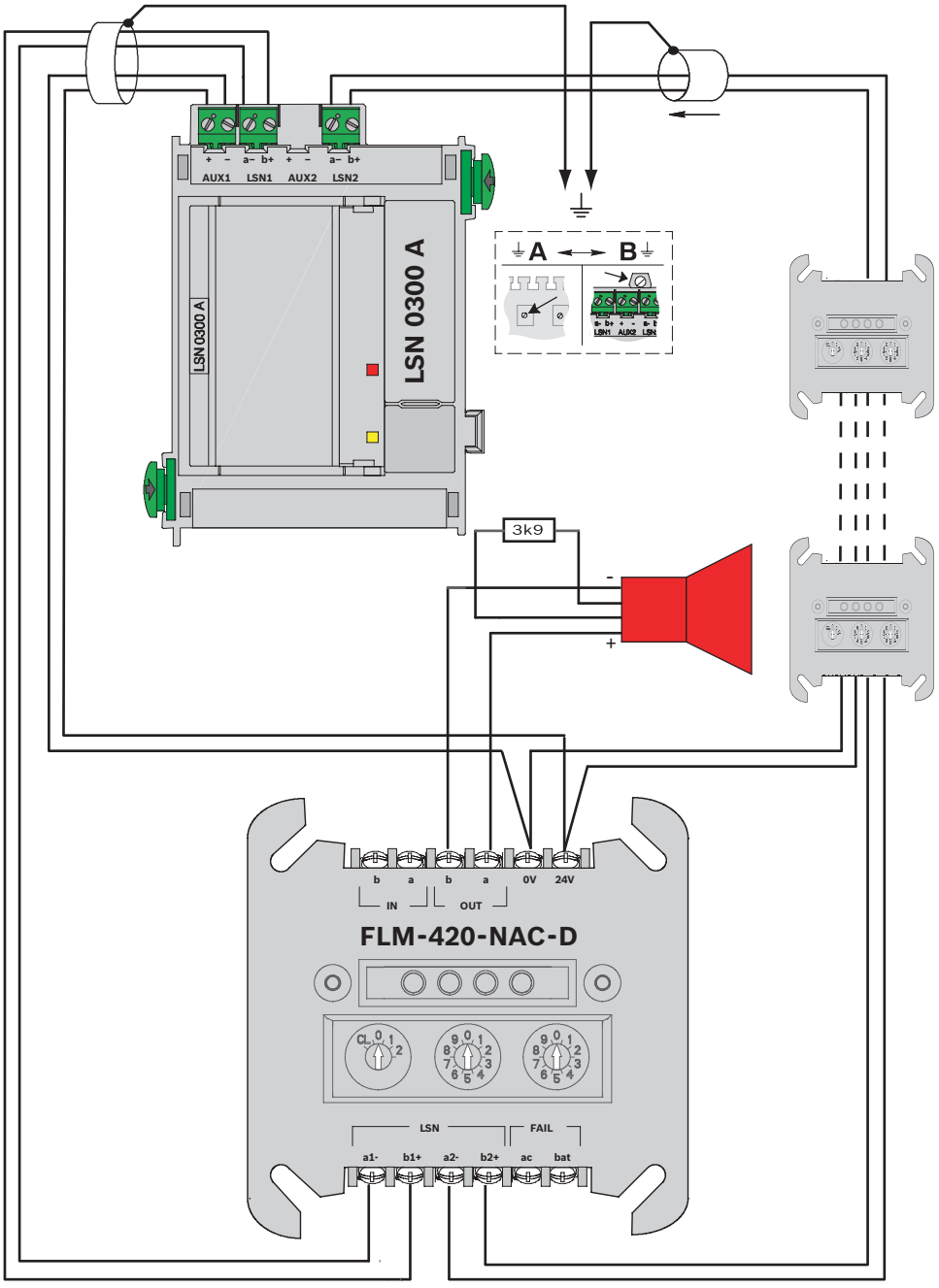


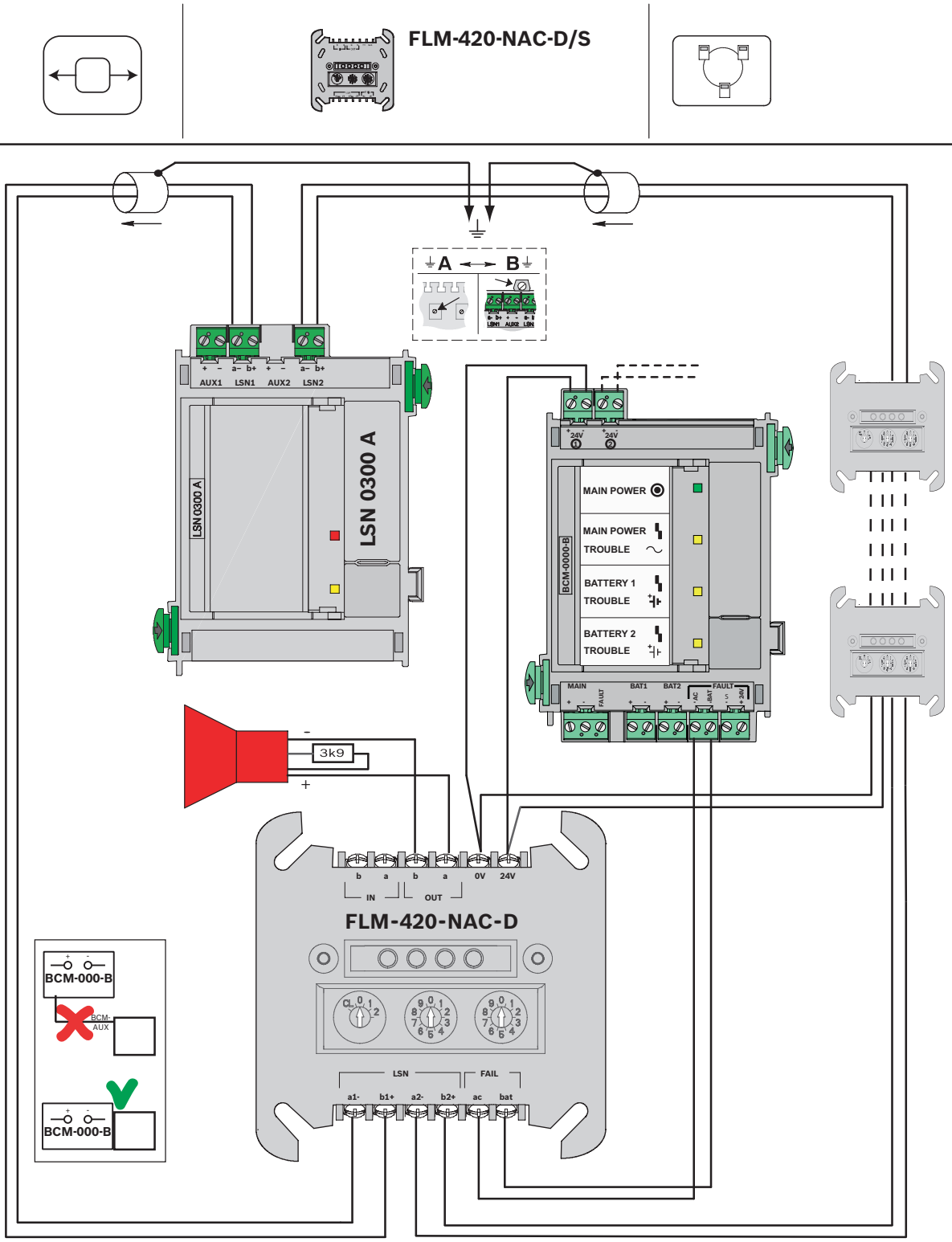


FLM-420-NAC-D/S

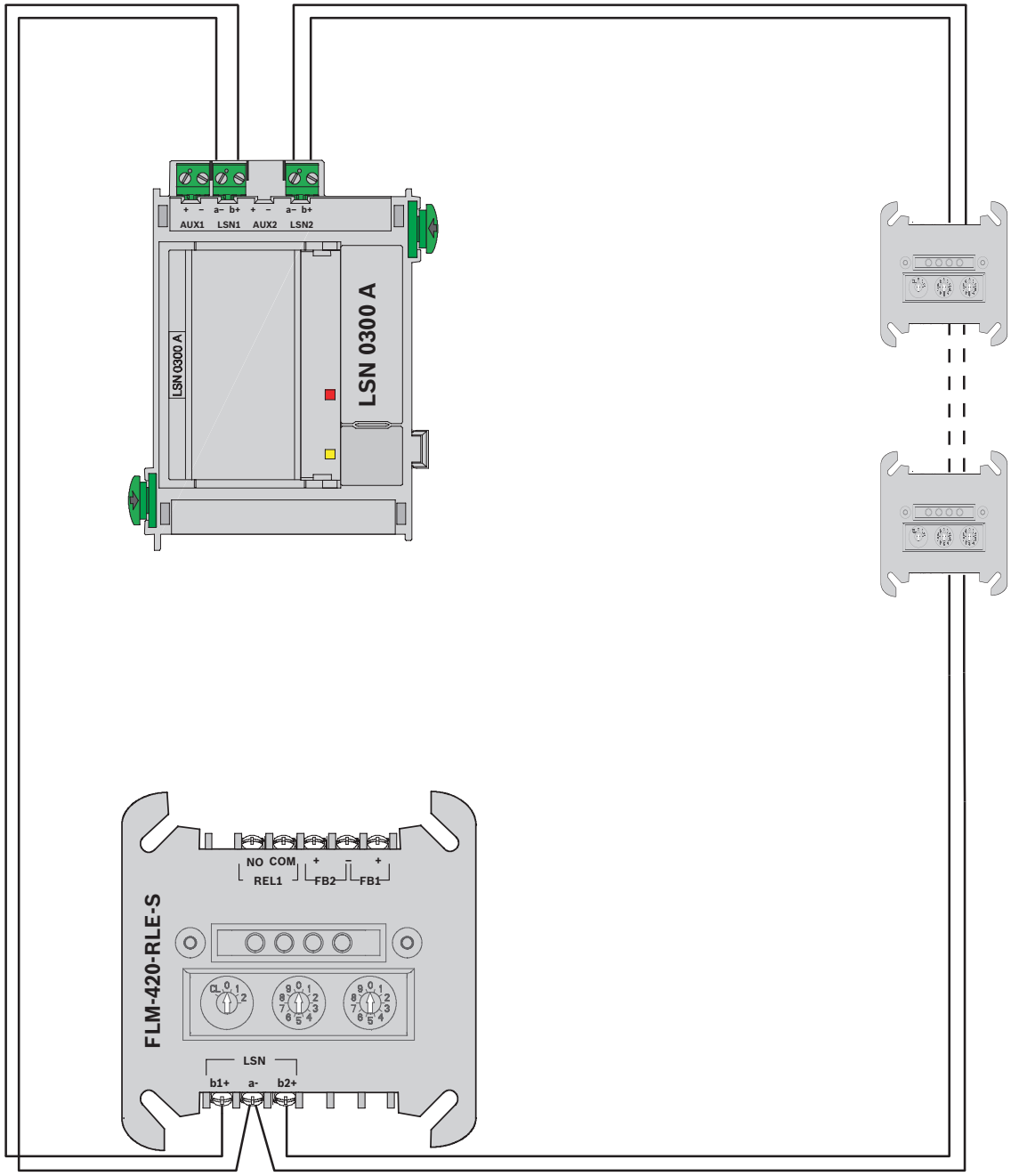


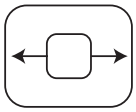
EN 54-2




FLM-420-NAC-D/S
A
B
AUX1
LSN1
AUX2
LSN2
LSN 0300 A
MAIN POWER
MAIN POWER TROUBLE
BATTERY 1 TROUBLE
BATTERY 2 TROUBLE
BCM-0000-B
MAIN
BAT1
BAT2
FAULT
3k9
b a b a 0V 24V
IN
OUT
FLM-420-NAC-D
LSN
FAIL
a1- b1+ a2- b2+ ac bat
BCM-000-B
BCM-AUX
BCM-000-B

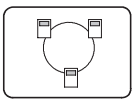
FLM-420-RLE-S

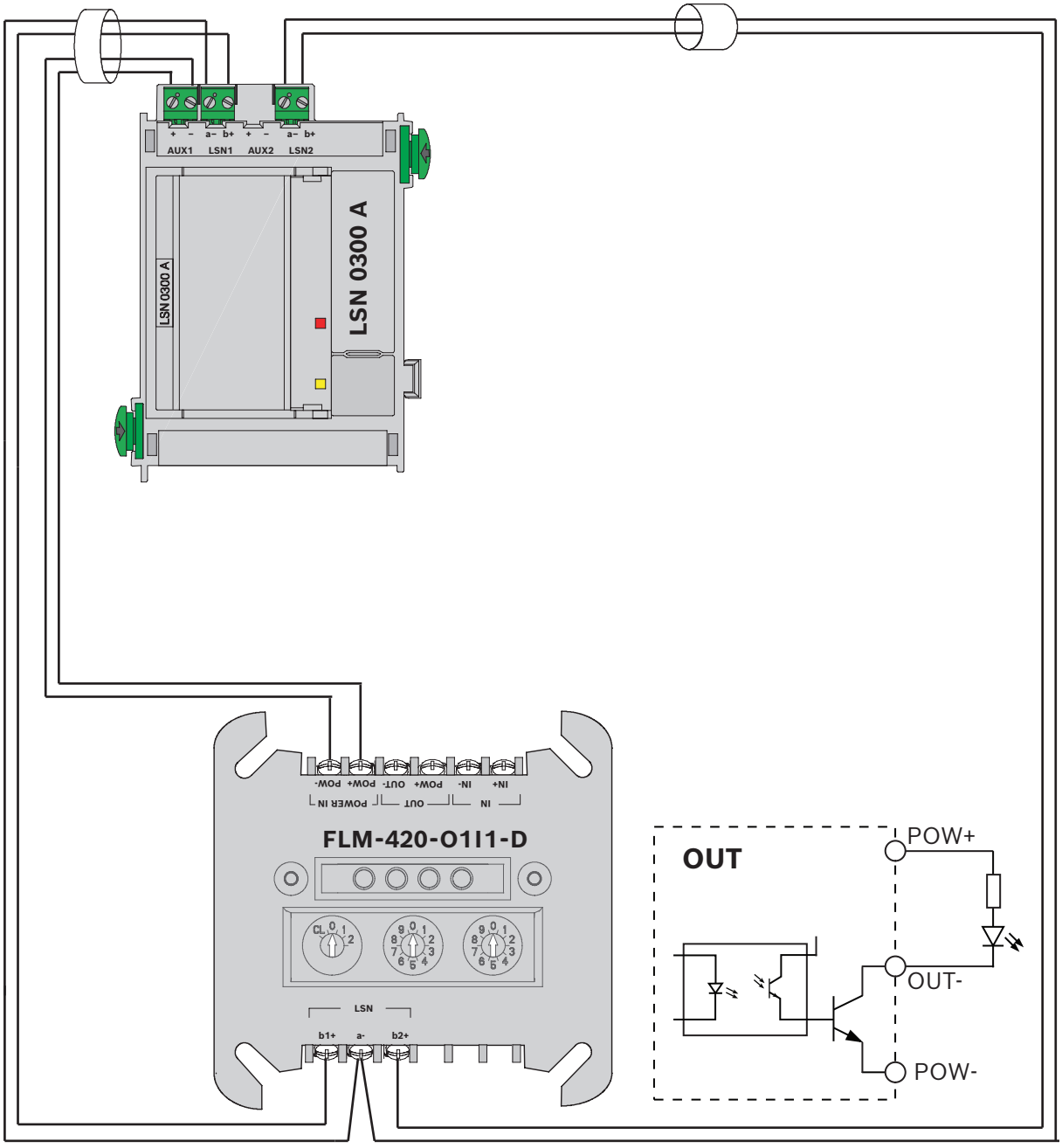

+ – a– b+ + – a– b+
AUX1 LSN1 AUX2 LSN2
LSN 0300 A
LSN 0300 A
NO COM
REL1
+
FB2
–
+
FB1
FLM-420-RLE-S
LSN
b1+ a- b2+

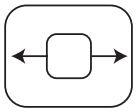




FLM-420-O1I1-D

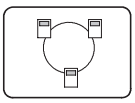


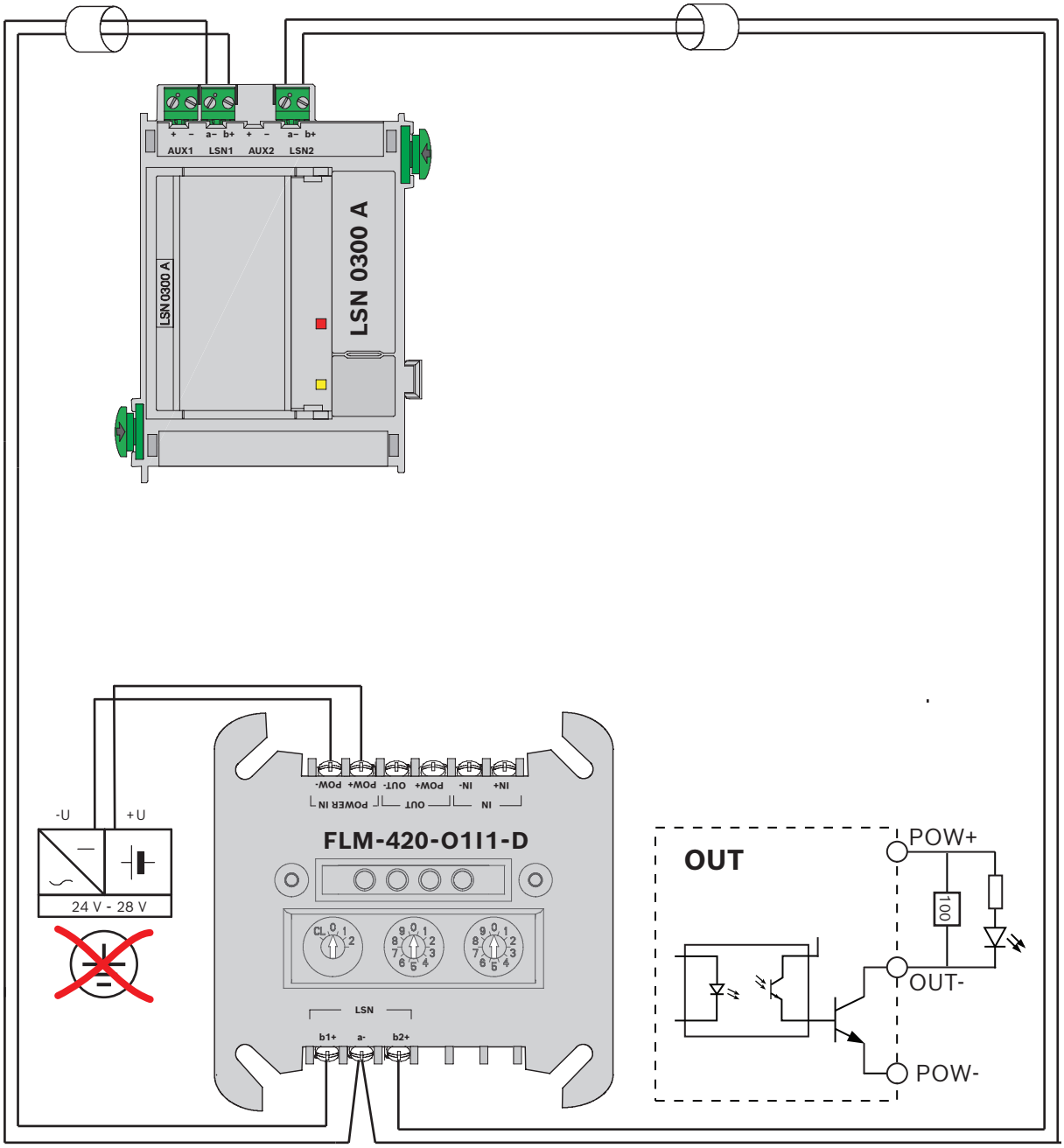


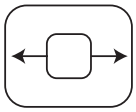


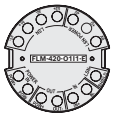


FLM-420-O1I1-D

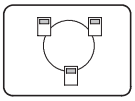


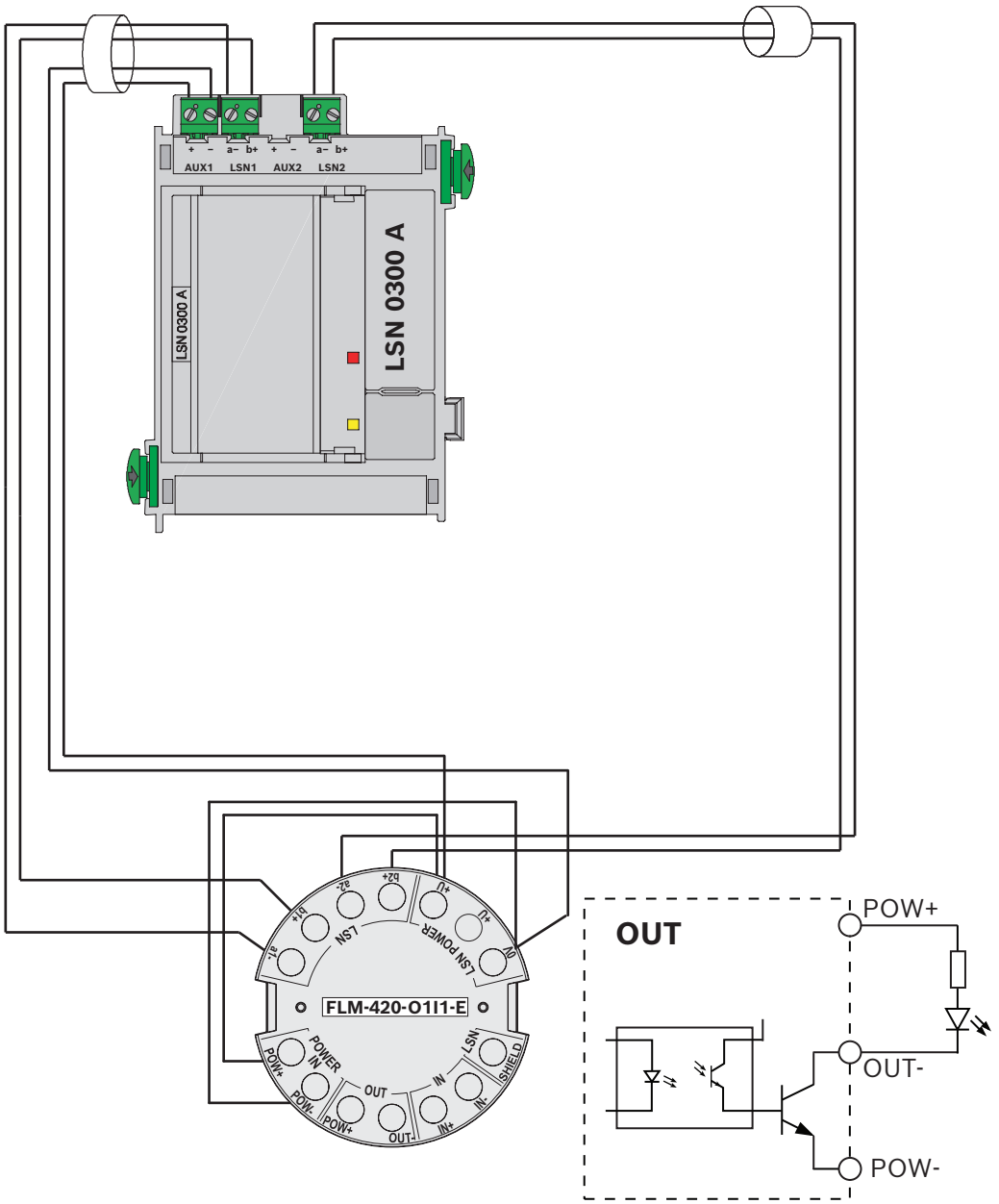


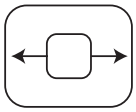


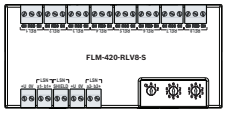


FLM-420-O1I1-E

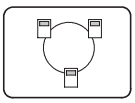


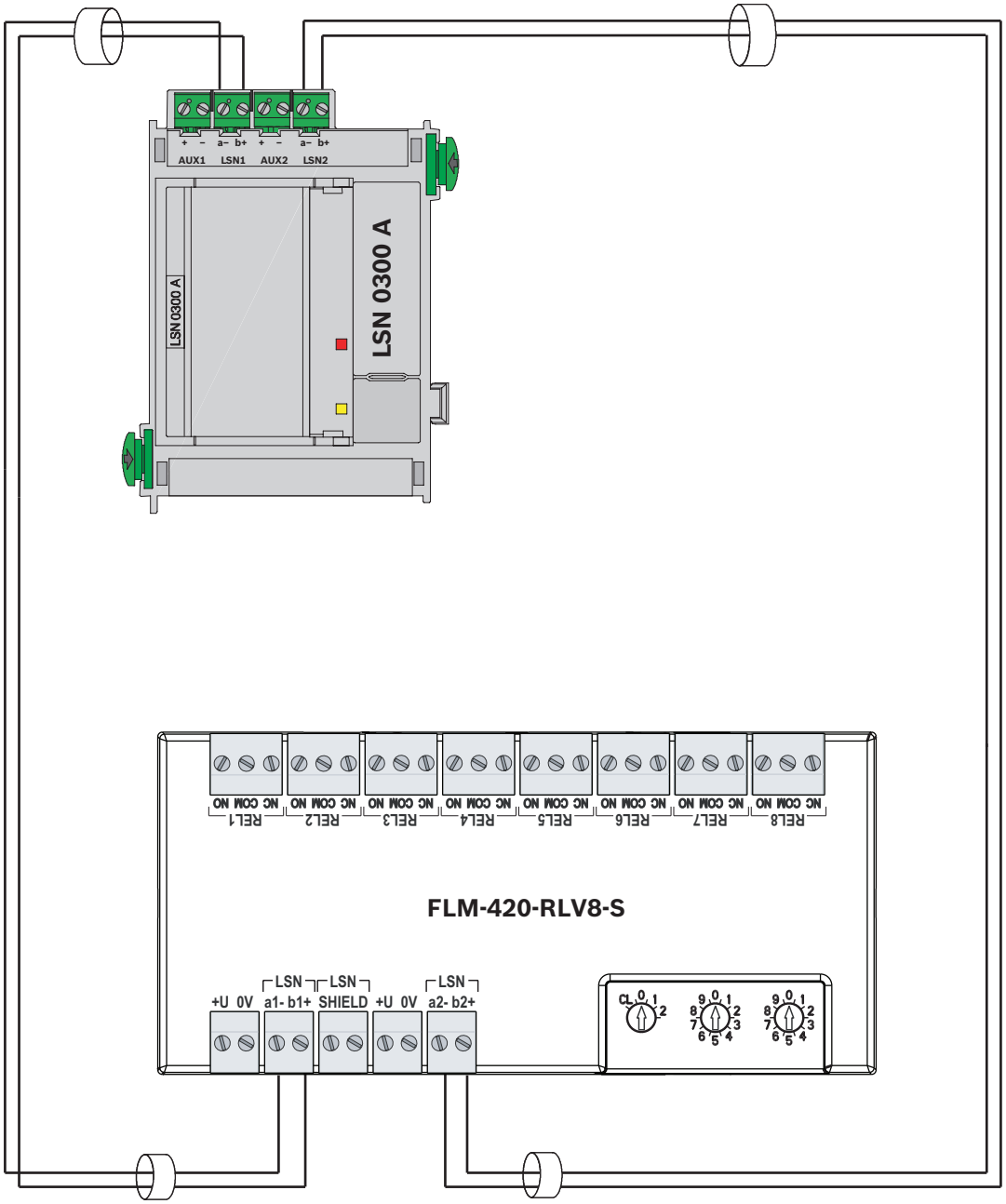






FLM-420-RLV8-S

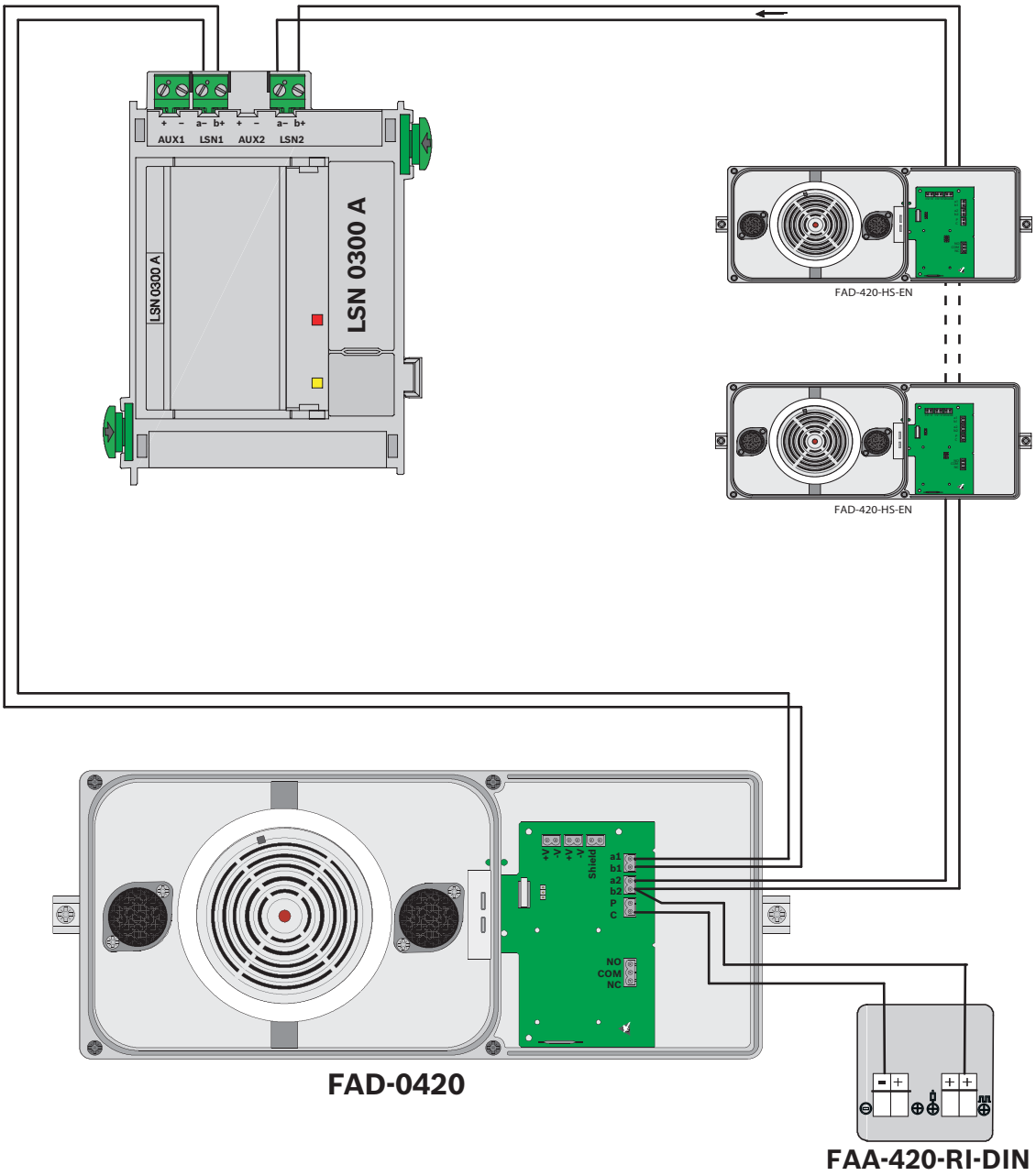








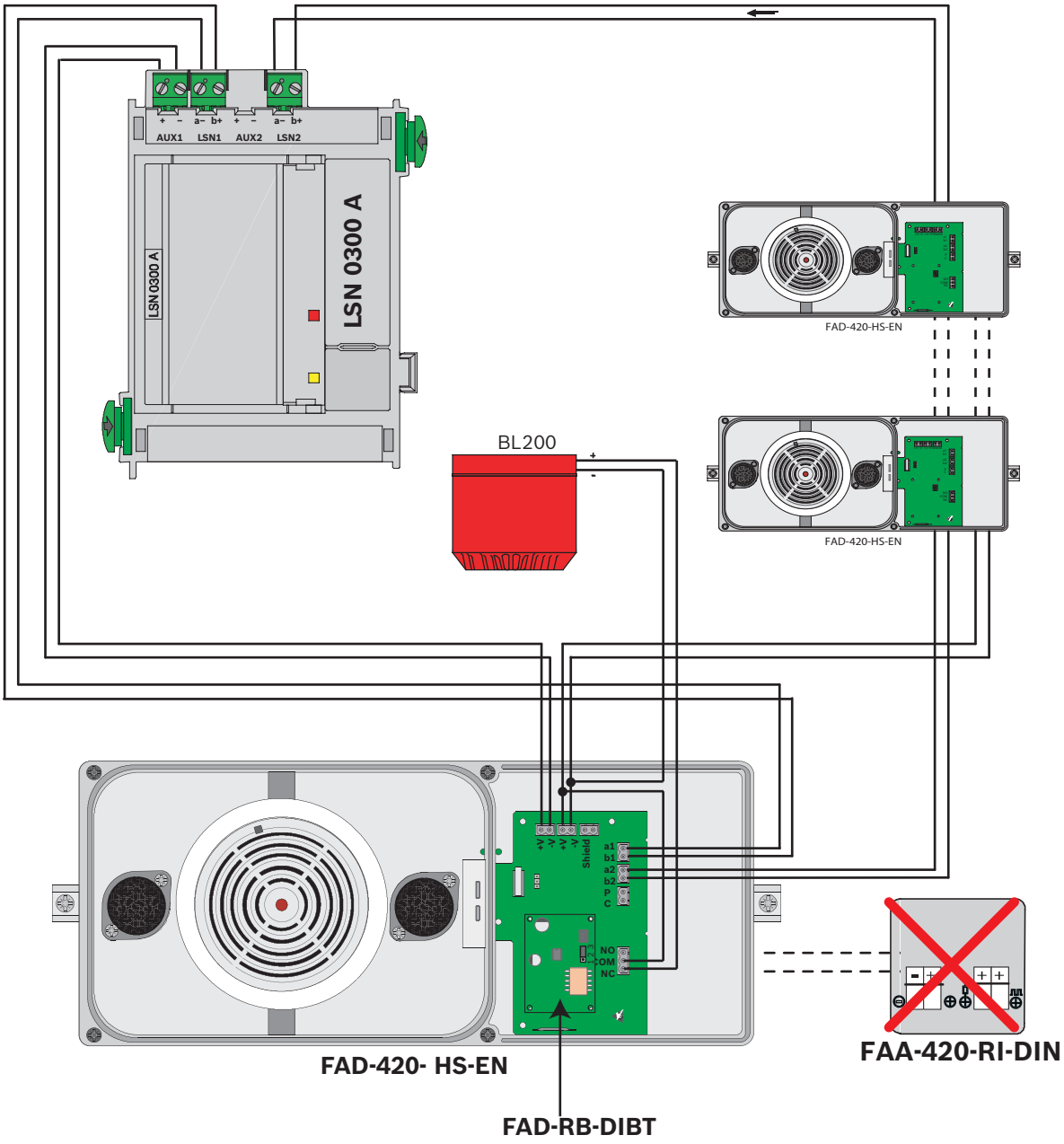
FAD-0420


+ – a– b+ + – a– b+
AUX1 LSN1 AUX2 LSN2
LSN 0300 A
LSN 0300 A
FAD-420-HS-EN
FAD-420-HS-EN
+V +V +V +V
Shield
a1
b1
a2
b2
P
C
NO
COM
NC
FAD-0420
FAA-420-RI-DIN

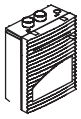




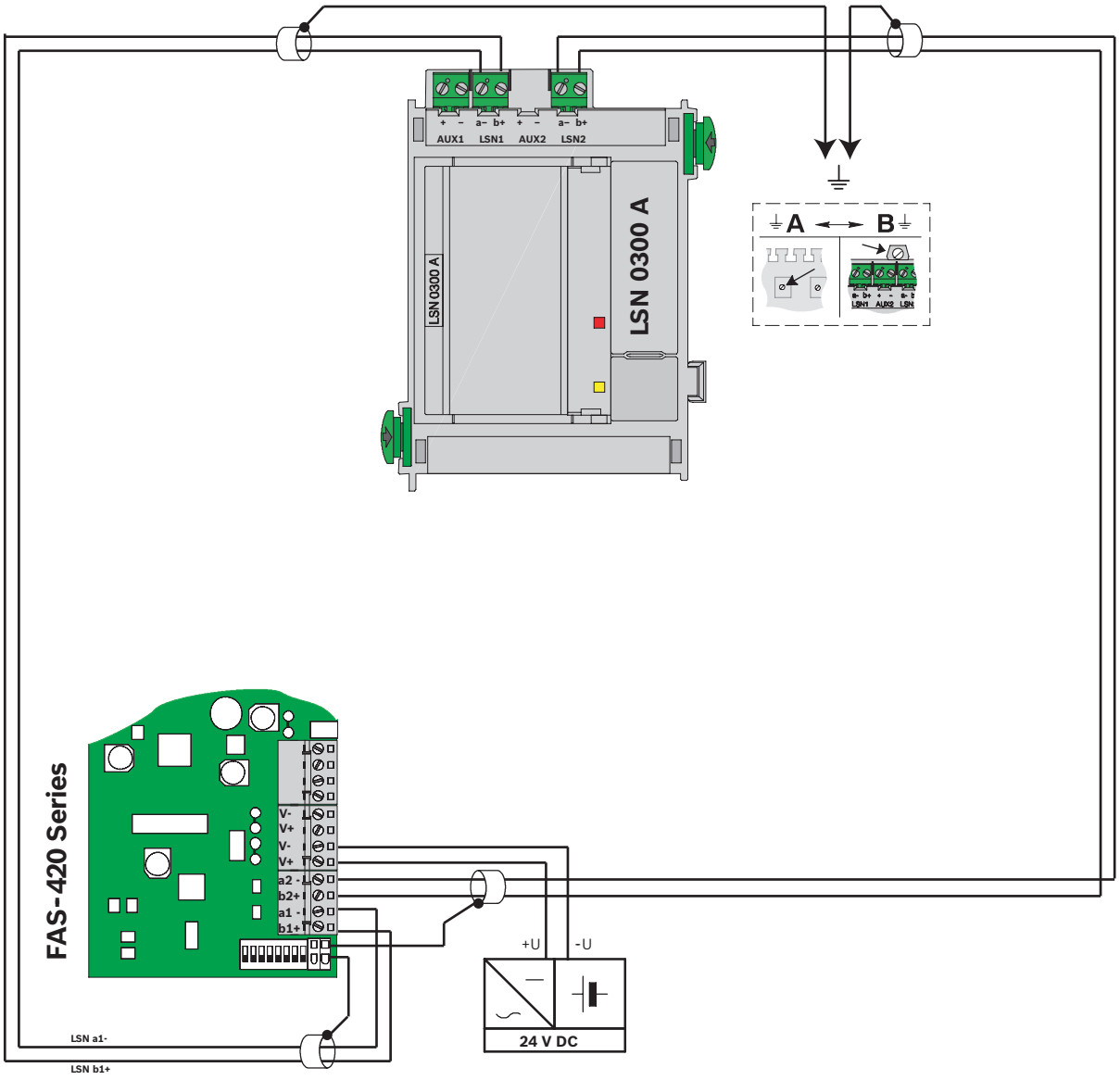
FAD-420-HS-EN


AUX1
LSN1
AUX2
LSN2
LSN 0300 A
LSN 0300 A
FAD-420-HS-EN
FAD-420-HS-EN
BL200
Shield
NO
COM
NC
FAD-420- HS-EN
FAA-420-RI-DIN
FAD-RB-DIBT

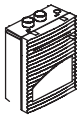




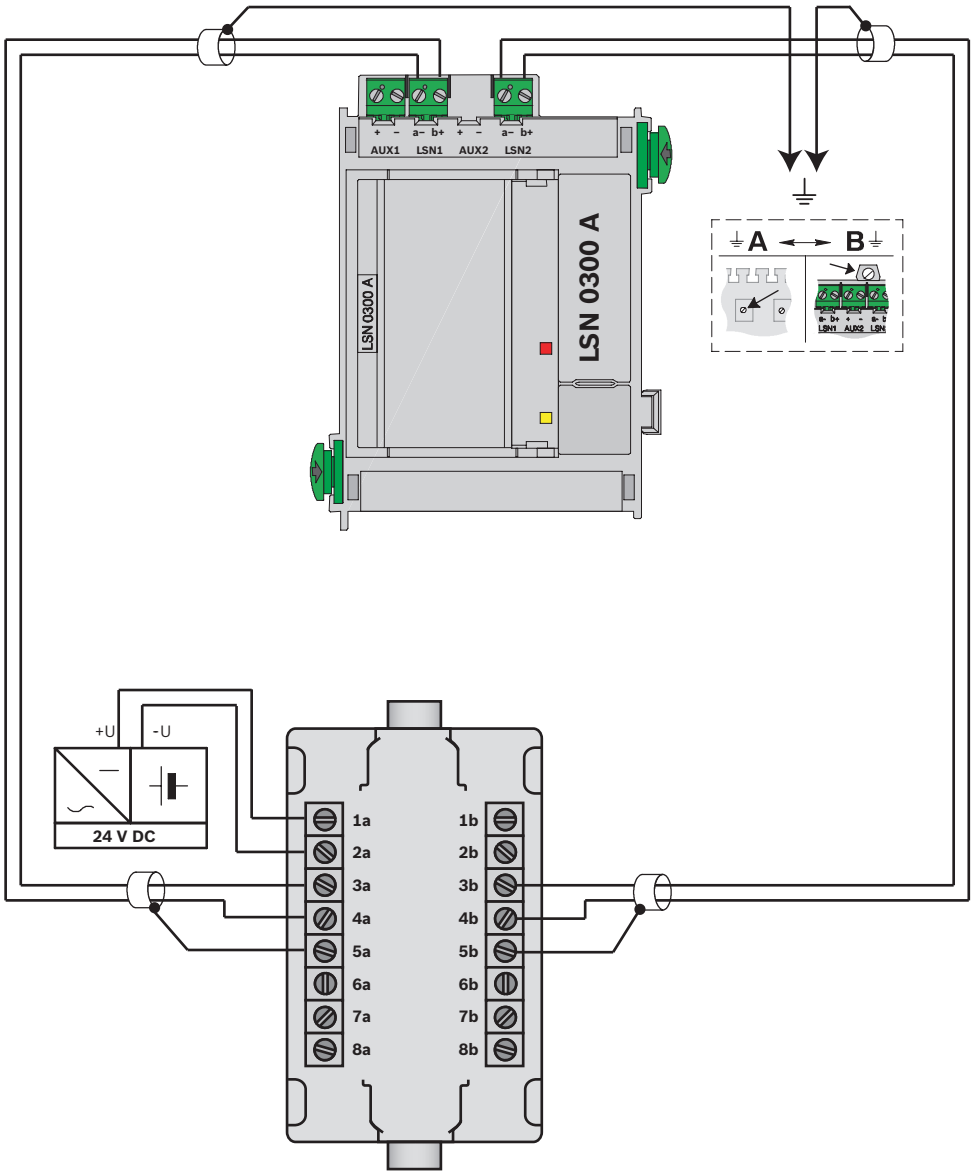
FAS-420 Series



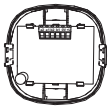




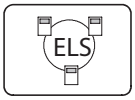
FAS-420-TM Series

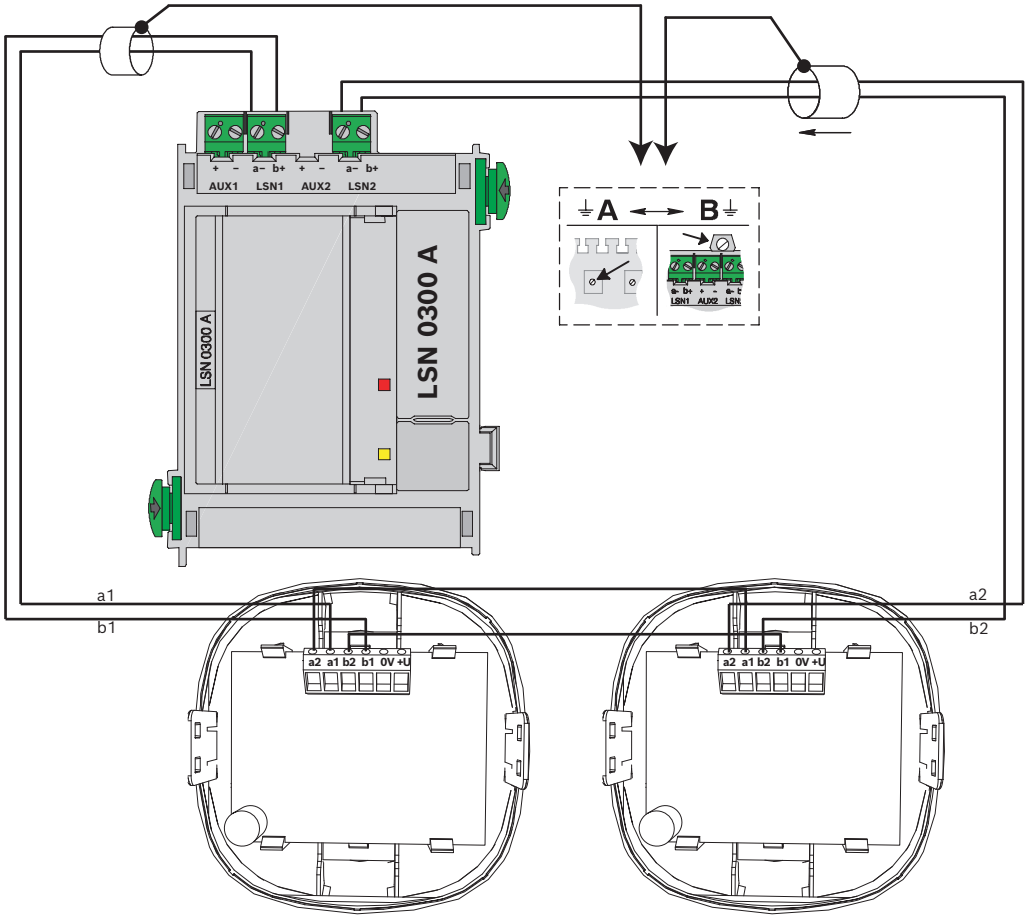






FNM-420-A / -B
FNM-420U-A / -B
FNM-420V-A





FNM-420-A/-B
FNM-420U-A/-B
FNM-420V-A

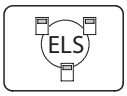
FNM-420-A/-B
FNM-420U-A/B
FNM-420V-A

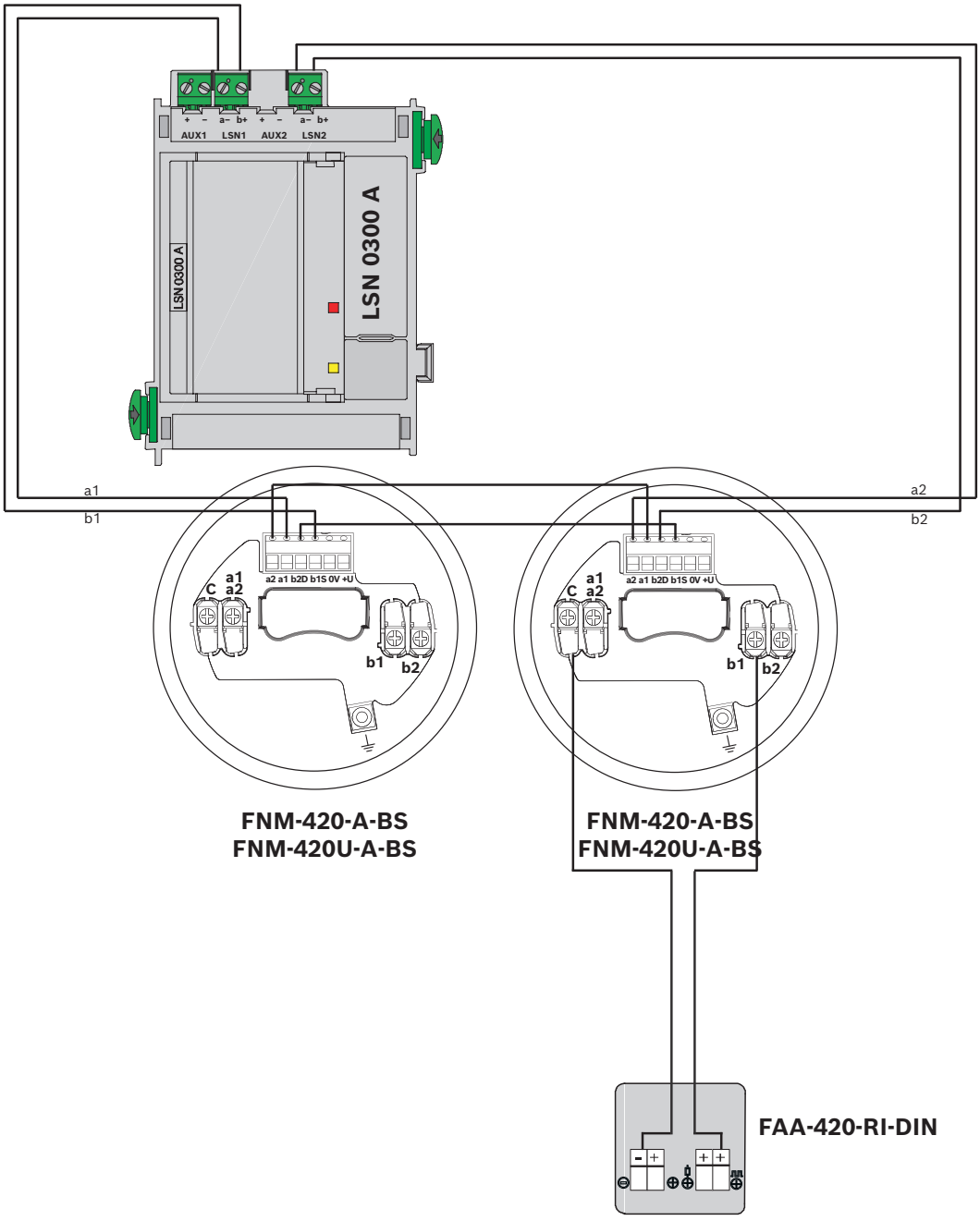




FNM-420-A-BS
FNM-420U-A-BS



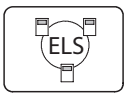


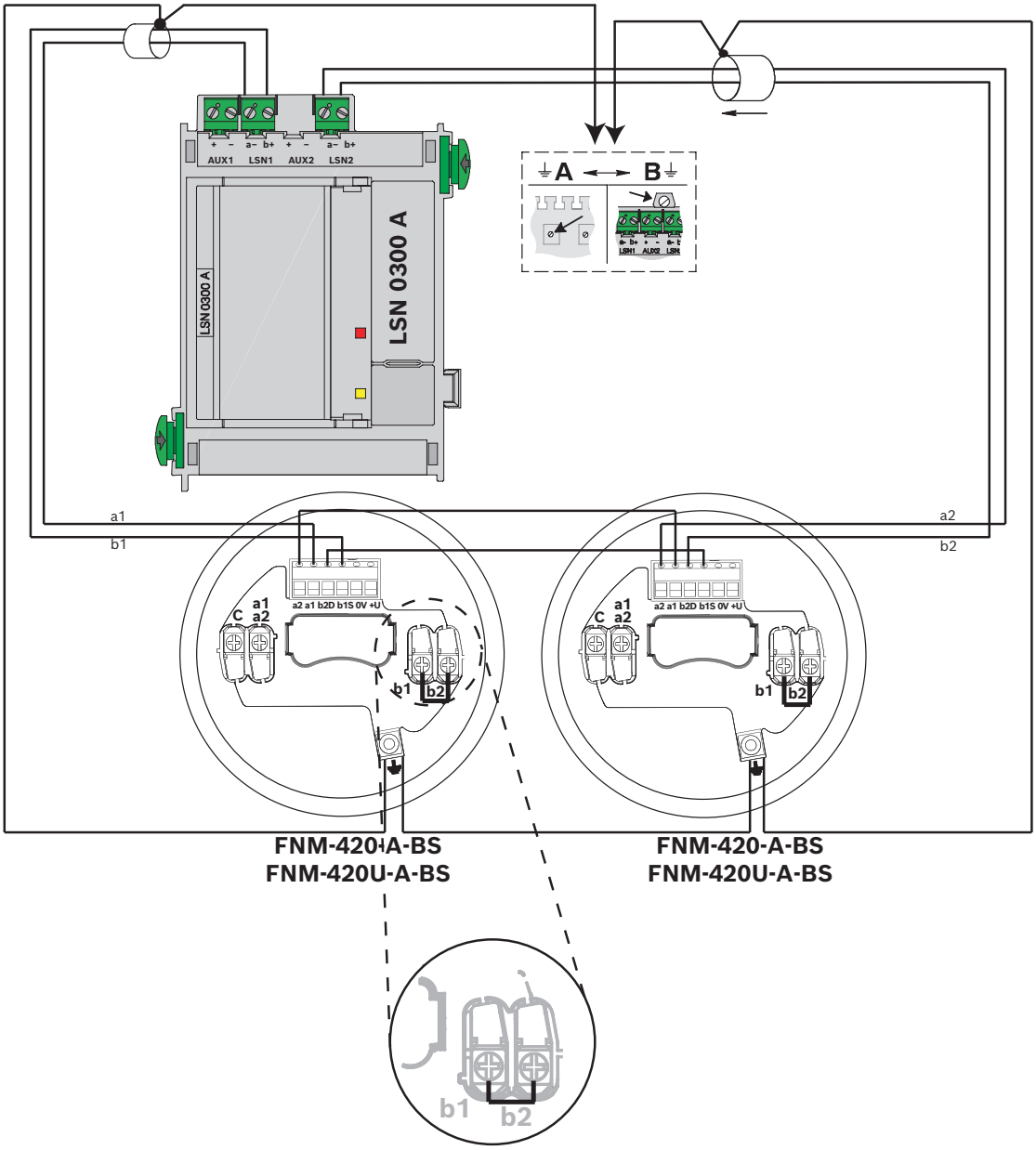




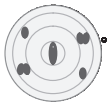


FNM-420-A-BS
FNM-420U-A-BS

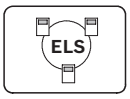


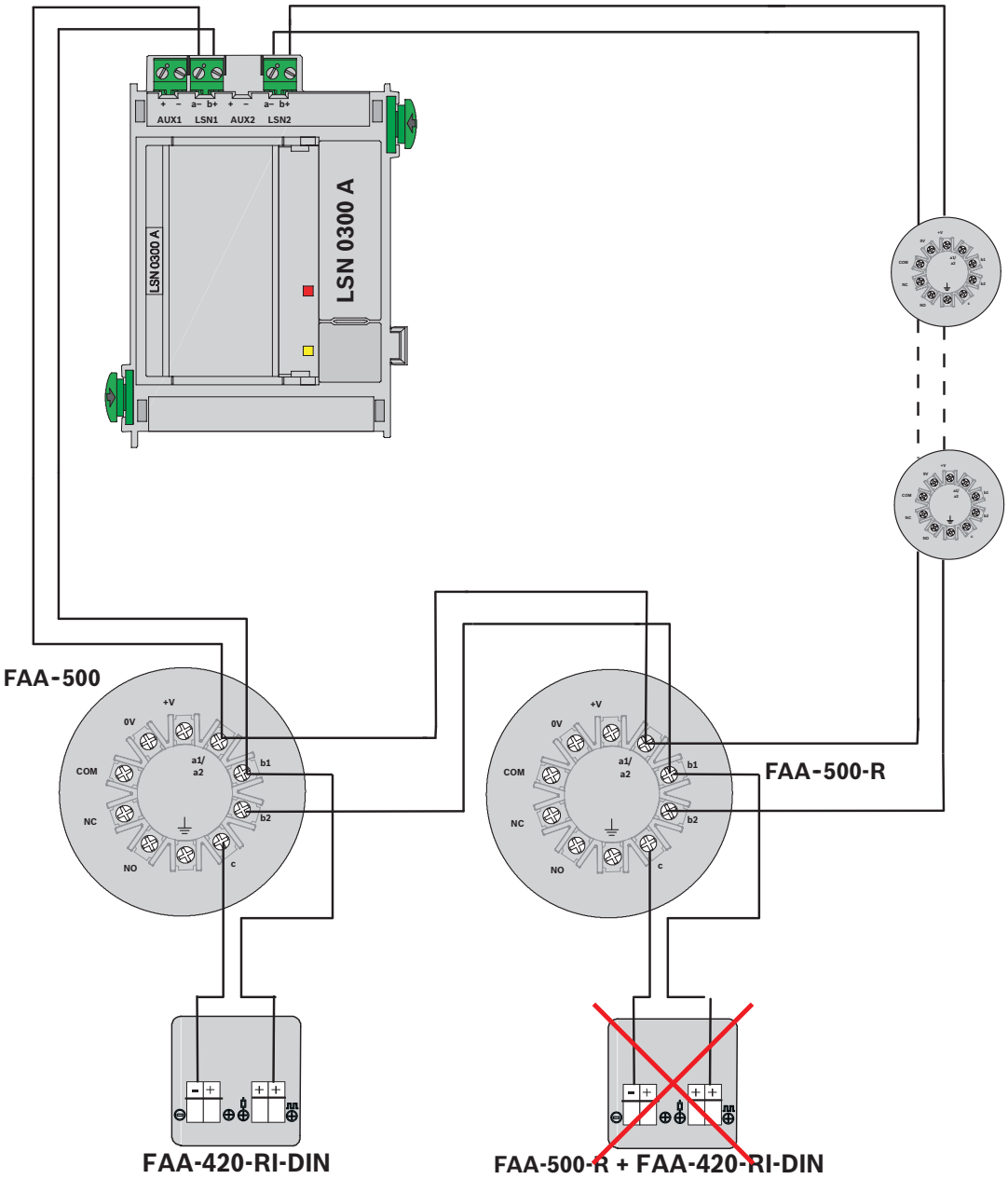




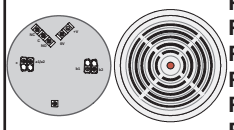


FAP-0520
FAP-0520-P
FAP-OC520
FAP-OC-520-P

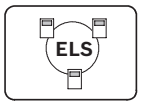


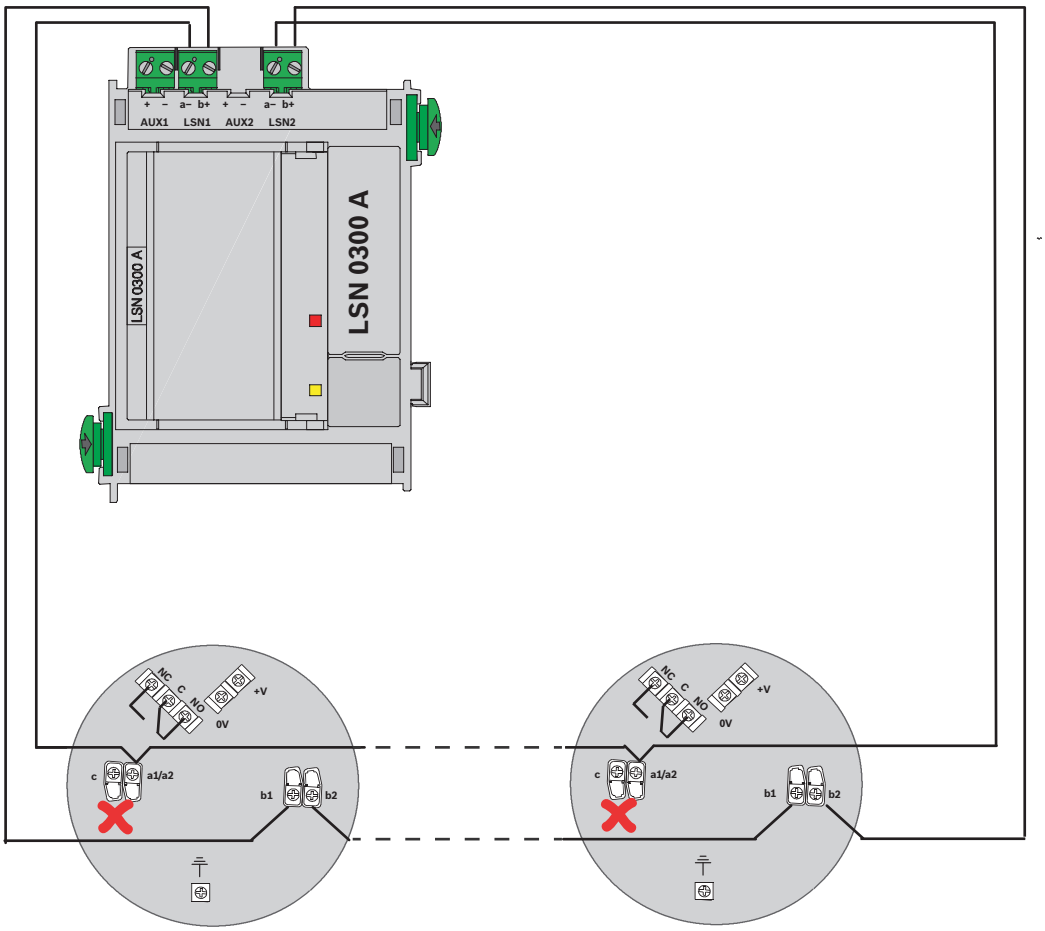




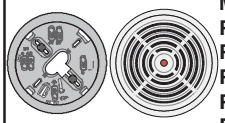


FAA-MSR-420
FAP-425-O, FAP-425-O-R
FAP-425-OT, FAP-425-OT-R
FAP-425-T-R
FAP-425-DO-R, FAP-425-DOT-R
FAP-425-DOTC-R, FAP-425-DOTCO-R

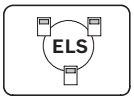


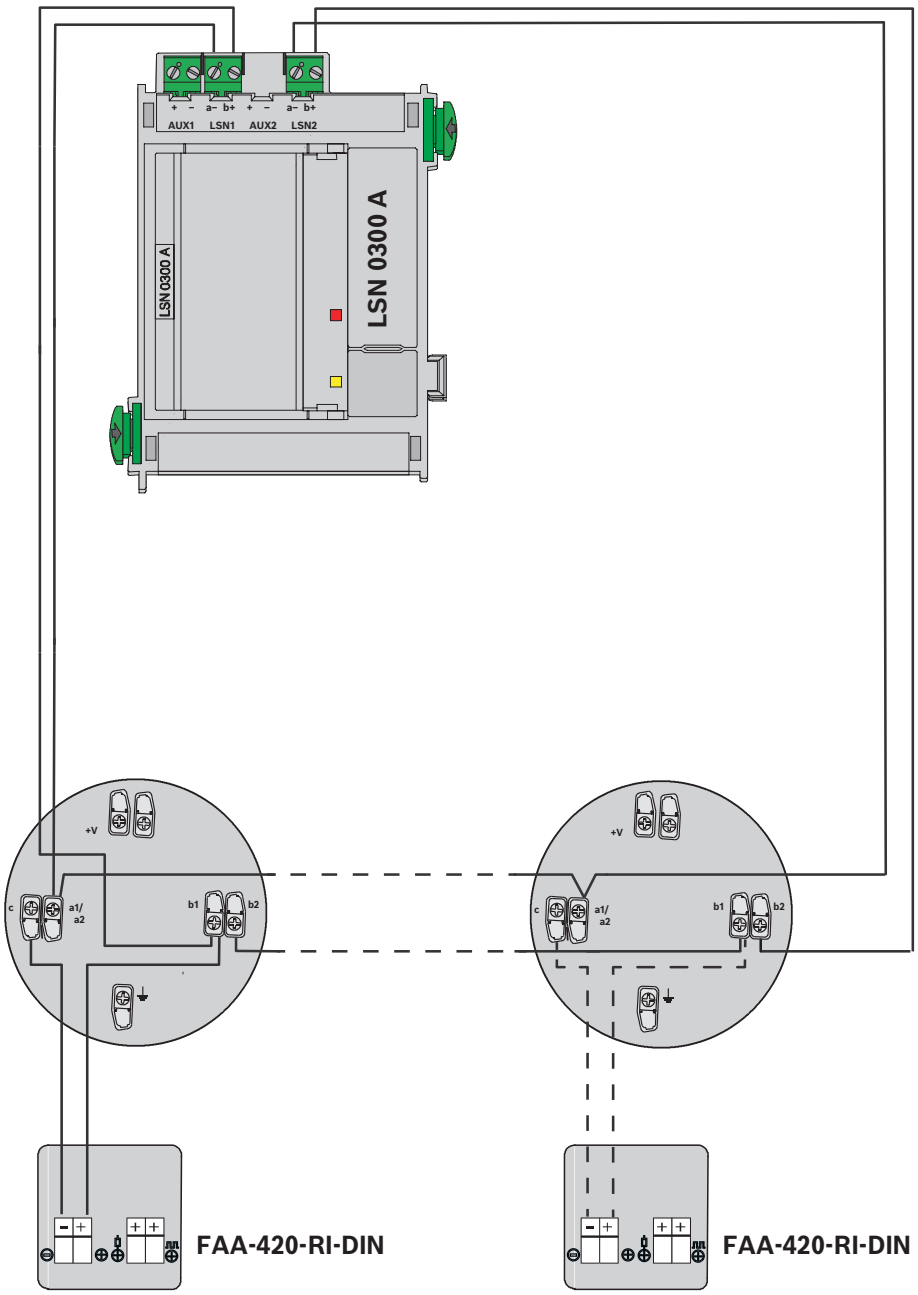


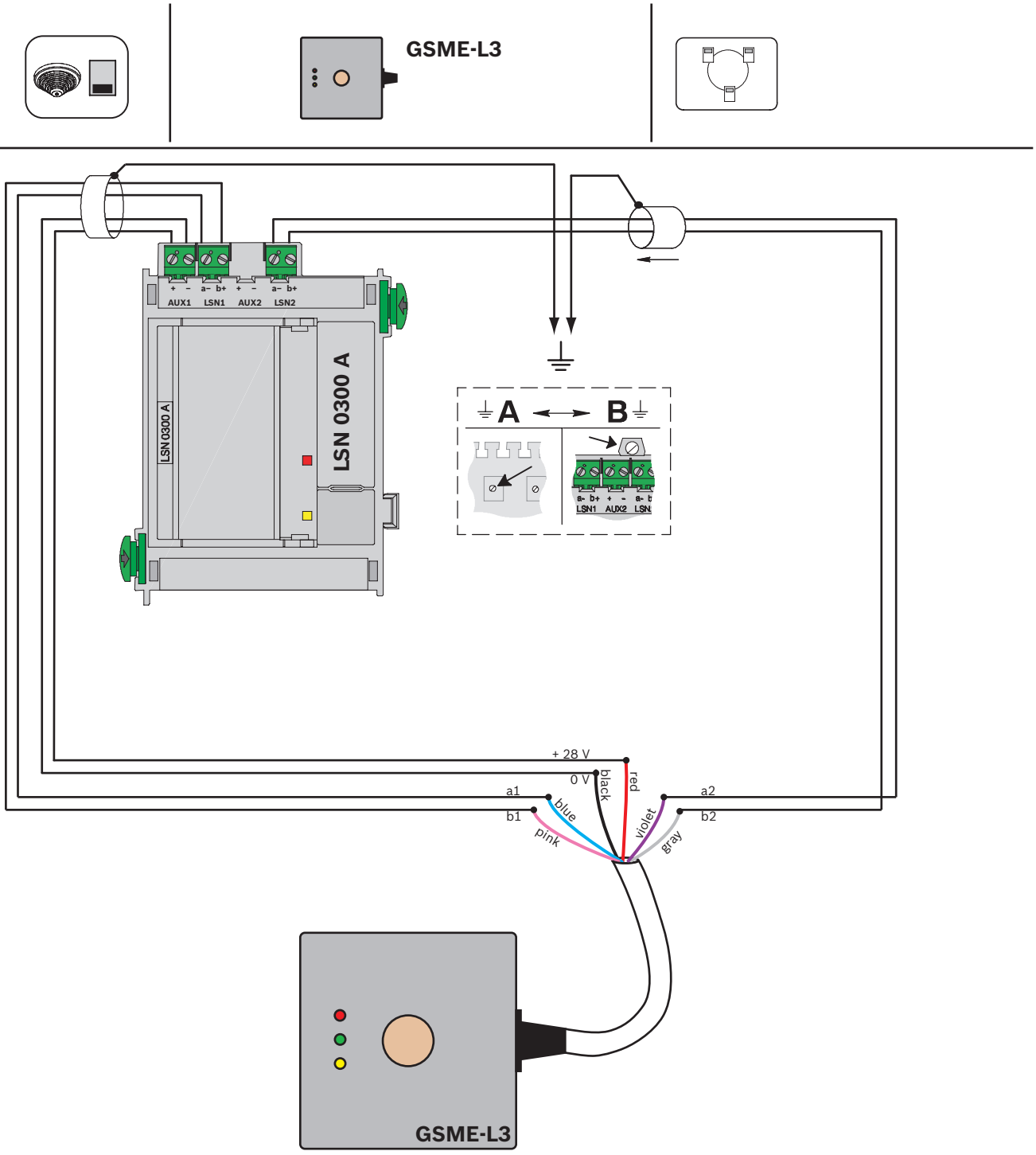


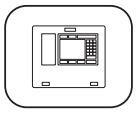


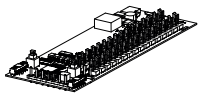
MS 400, MS 400 B
FAP-425-O, FAP-425-O-R
FAP-425-OT, FAP-425-OT-R
FAP-425-T-R
FAP-425-DO-R, FAP-425-DOT-R
FAP-425-DOTC-R, FAP-425-DOTCO-R



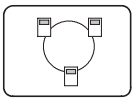


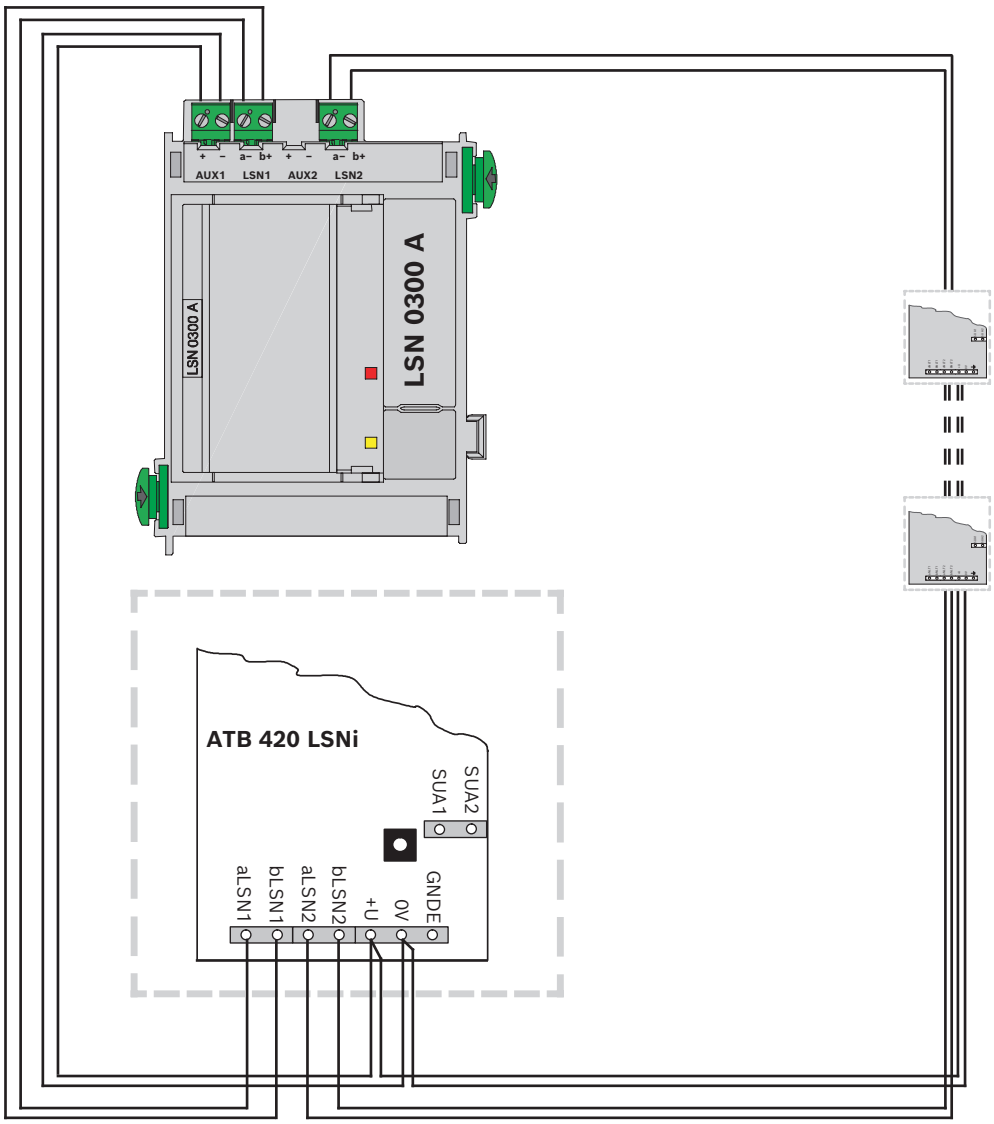

GSME-L3
AUX1
LSN1
AUX2
LSN2
LSN 0300 A
A
B
+ 28 V
0 V
black
red
a1
b1
blue
pink
violet
gray
a2
b2
GSME-L3

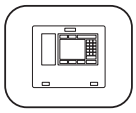




ATB 420 LSNi

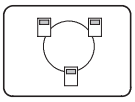


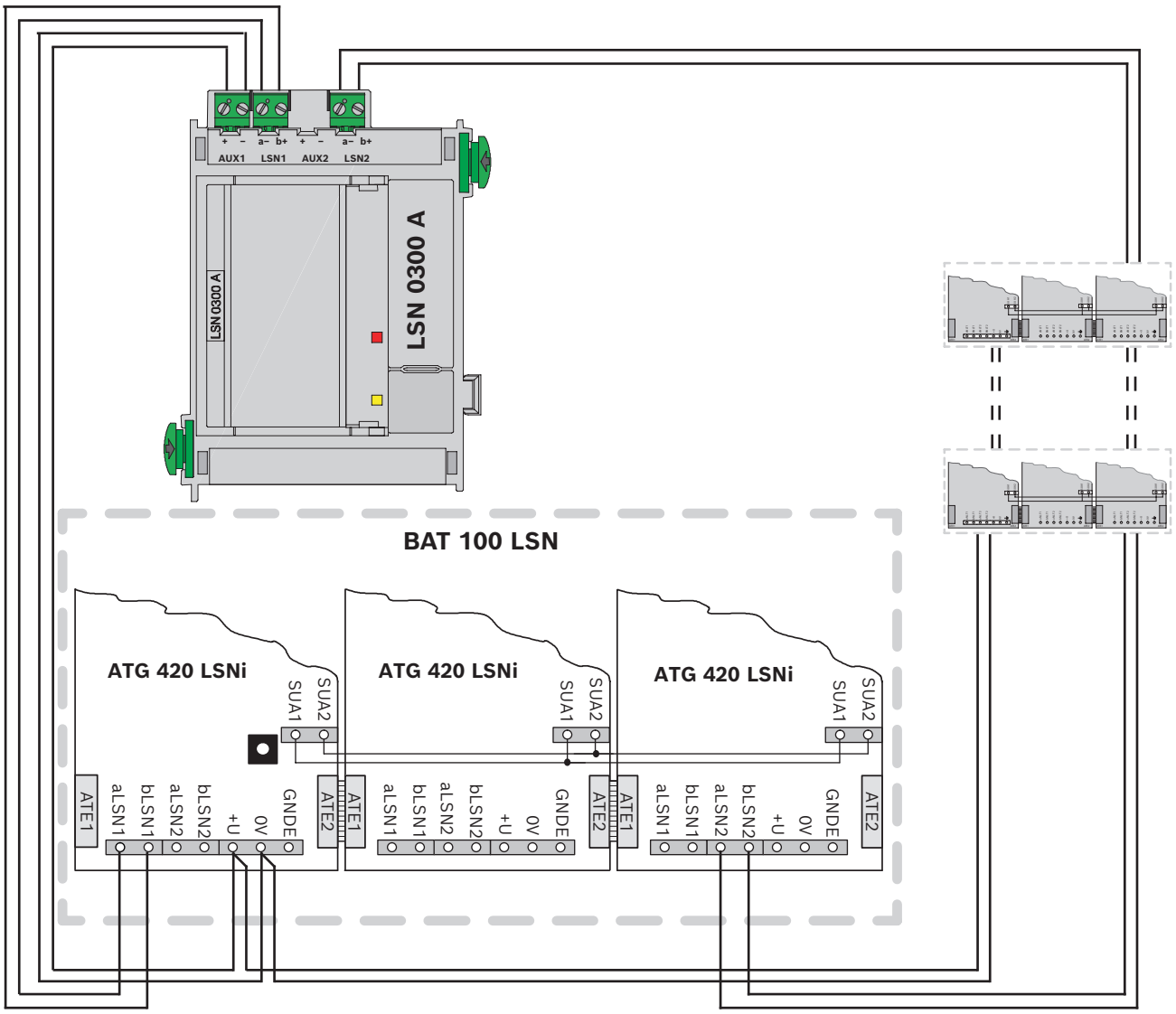

+ – a– b+ + – a– b+
AUX1 LSN1 AUX2 LSN2
LSN 0300 A
LSN 0300 A
ATB 420 LSNi
SUA2
SUA1
aLSN1
bLSN1
aLSN2
bLSN2
+U
0V
GNDE

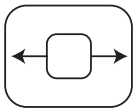




BAT 100 LSN
ATG 420 LSNi

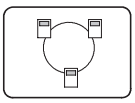




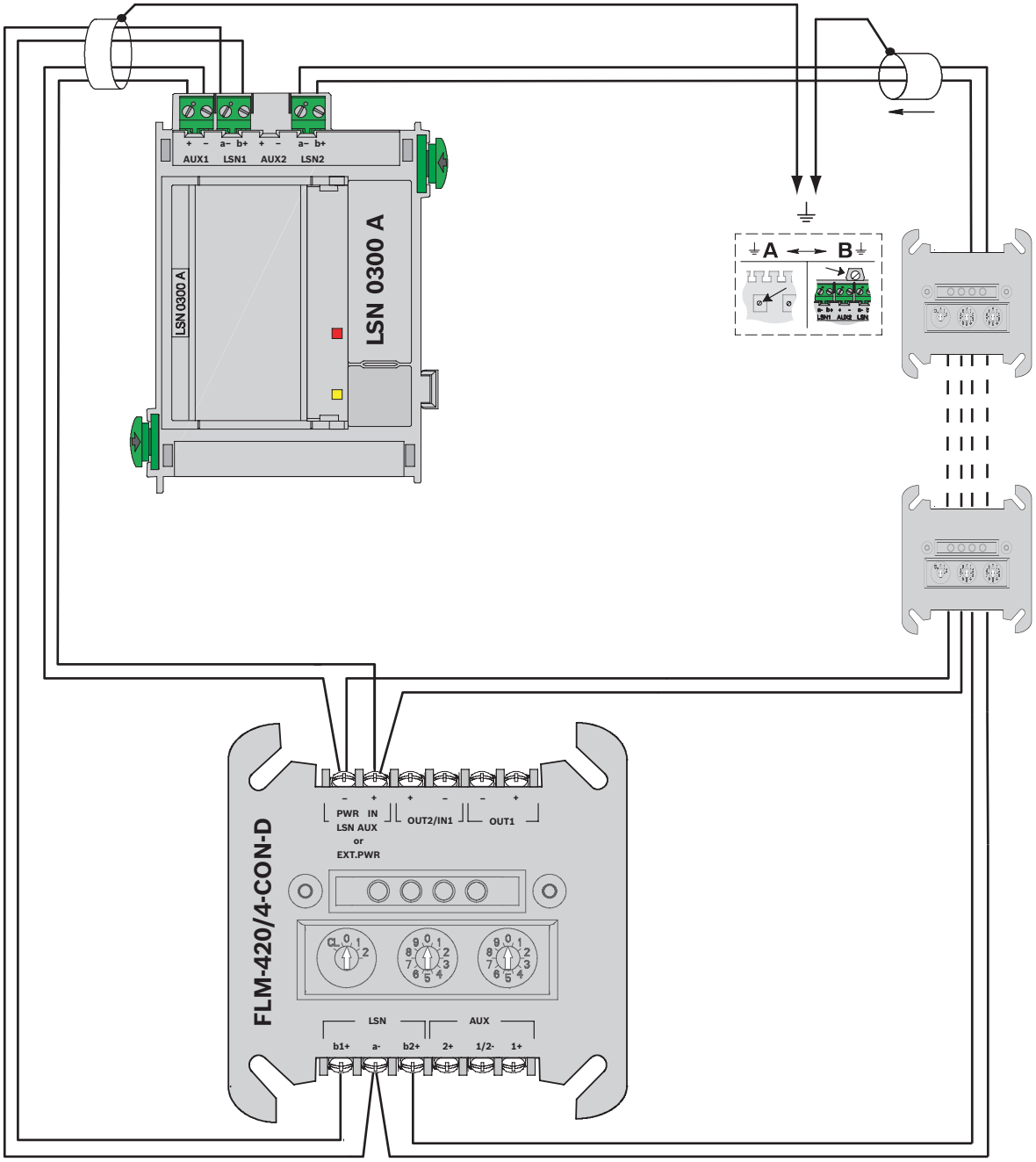




FLM-420/ 4-CON-D



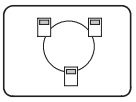


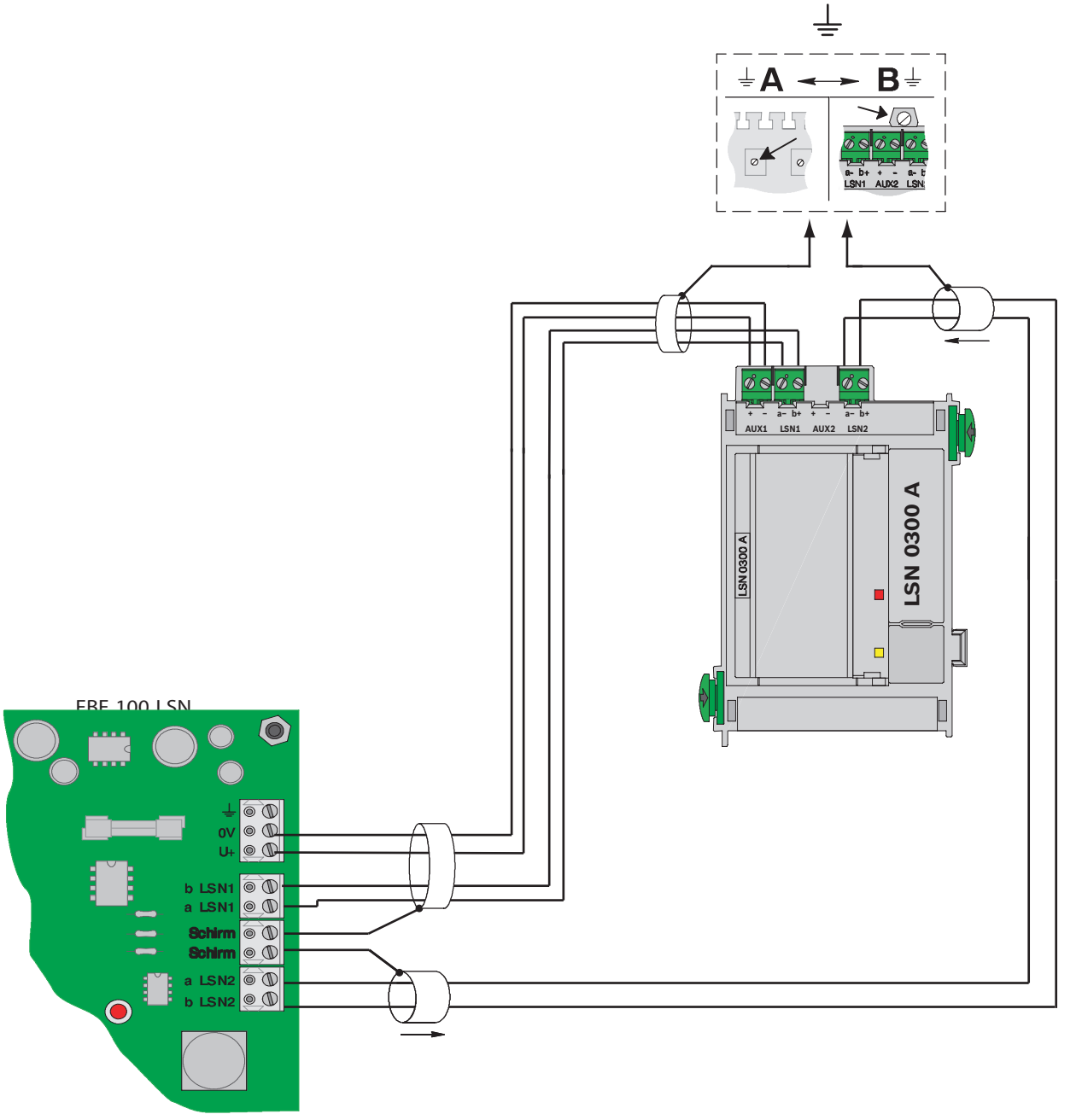


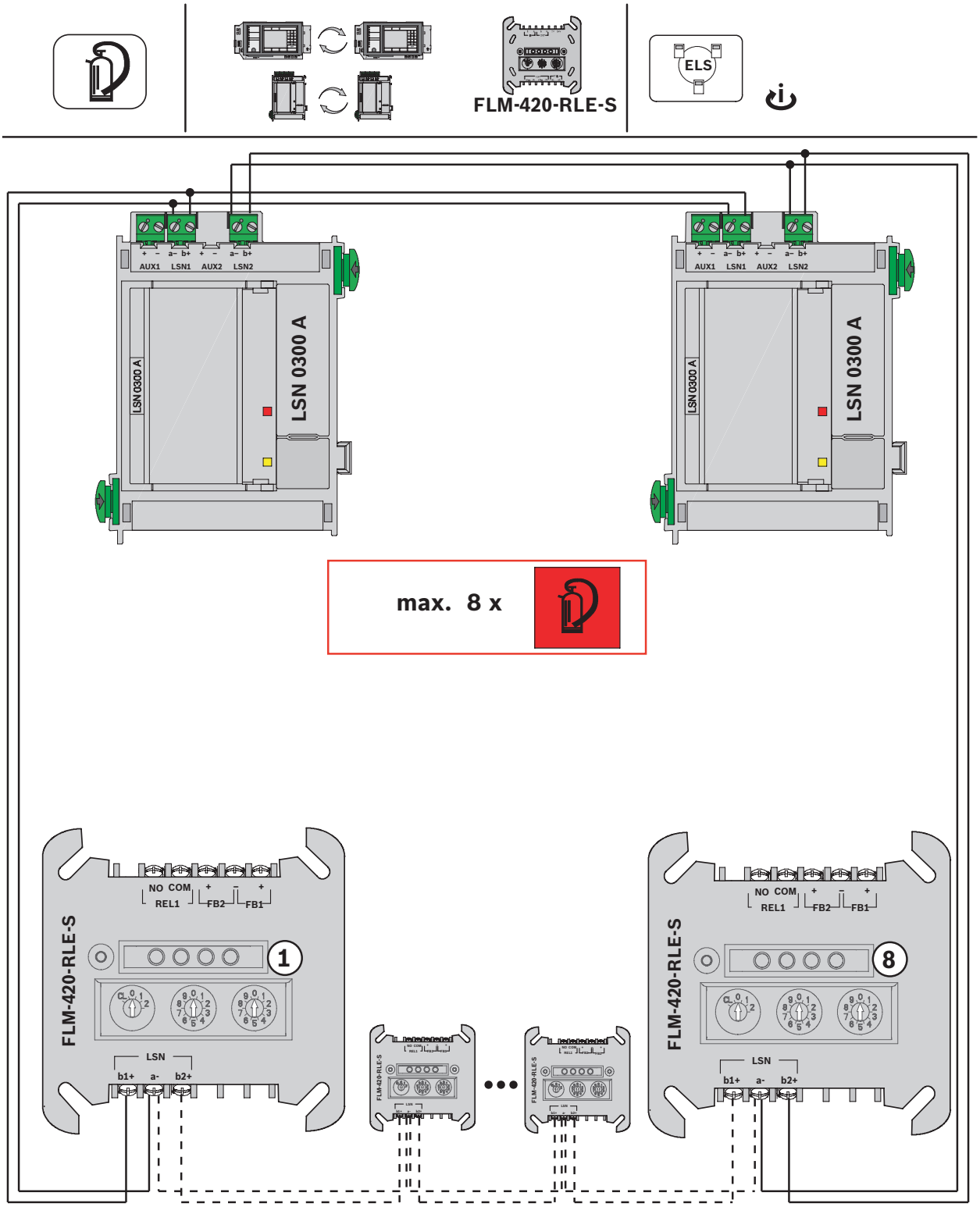


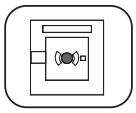


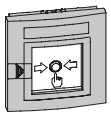
FBF 100 LSN



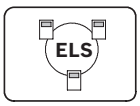

A
B
LSN1
AUX2
LSN
AUX1
LSN1
AUX2
LSN2
LSN 0300 A
LSN 0300 A
FBF 100 LSN
0V
U+
b LSN1
a LSN1
Schirm
Schirm
a LSN2
b LSN2

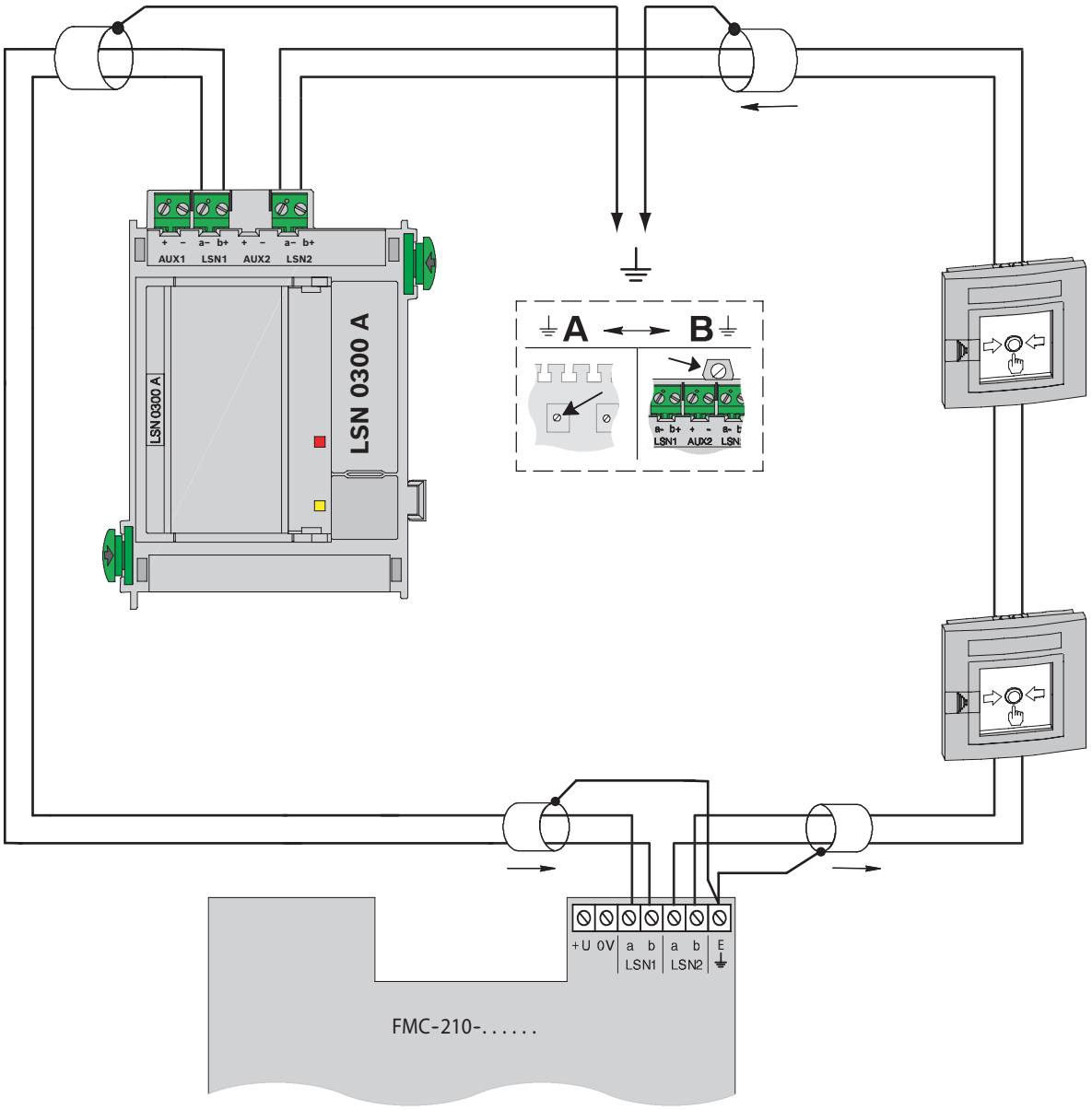

FLM-420-RLE-S
ELS
AUX1 LSN1 AUX2 LSN2
LSN 0300 A
max. 8 x
NO COM
REL1
FB2
FB1
1
8
LSN
b1+ a- b2+

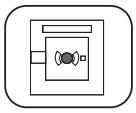


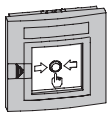


FMC-210-...

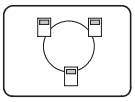

ELS

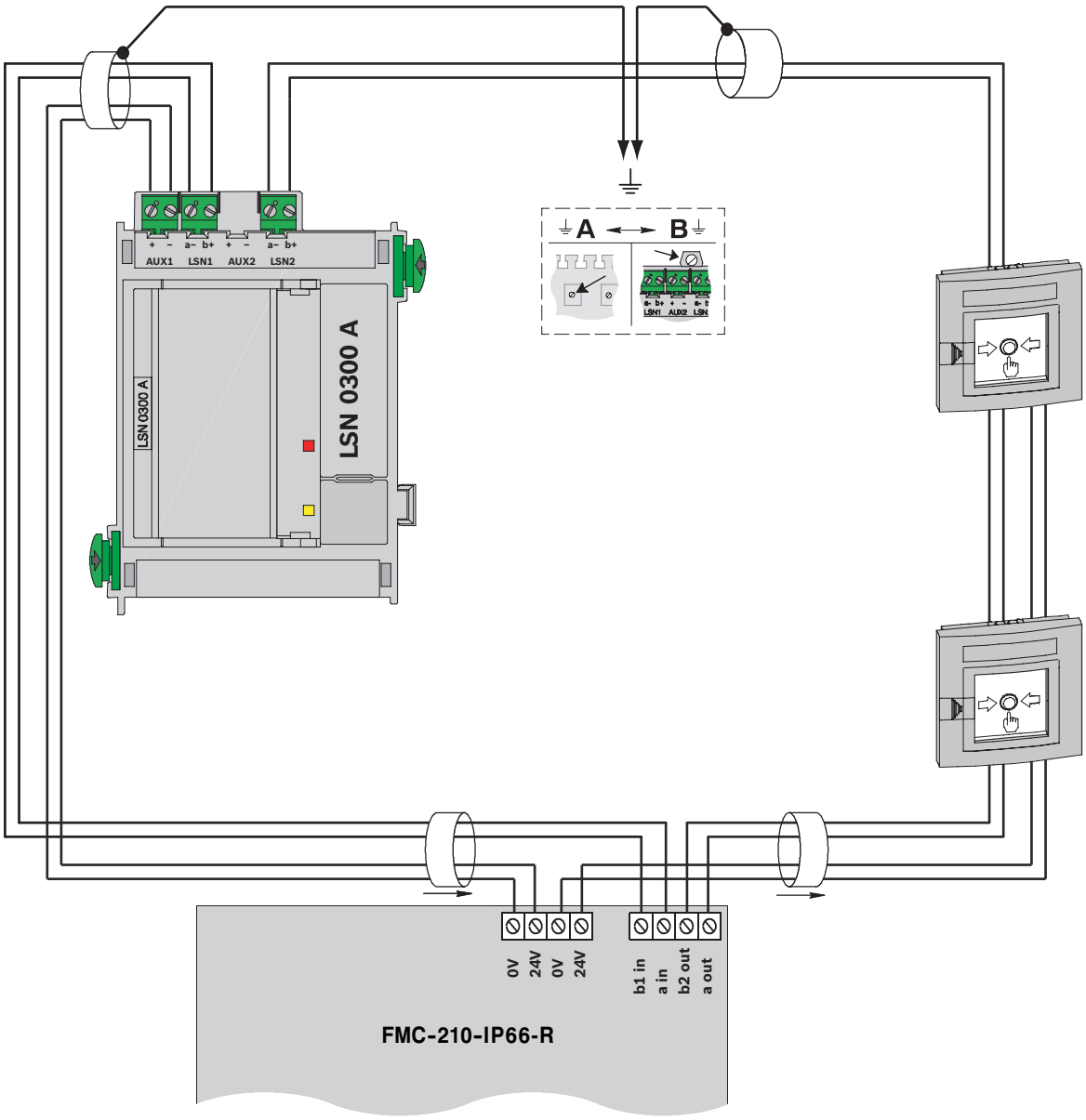

+ – a– b+ + – a– b+
AUX1 LSN1 AUX2 LSN2
LSN 0300 A
LSN 0300 A
A
B
a– b+ + – a– b
LSN1 AUX2 LSN
+U 0V a b LSN1 a b LSN2 E
FMC-210-.....

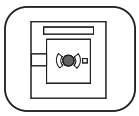


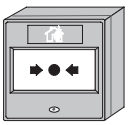


FMC-210-IP66-R

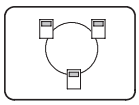


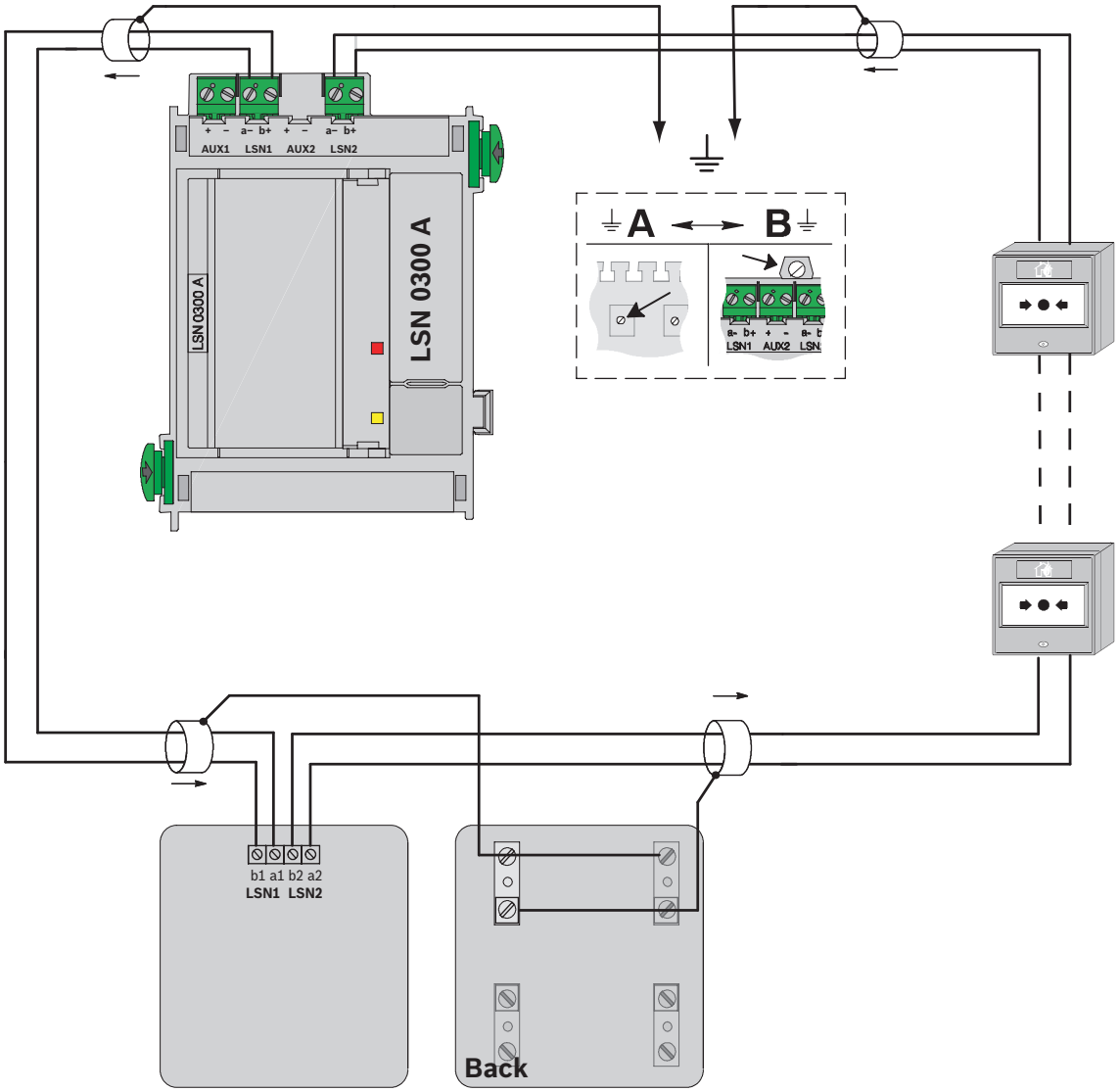






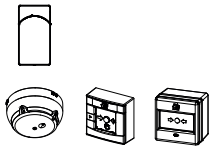
FMC-420RW-HSGRD
FMC-420RW-HSRRD
FMC-420RW-GFGRD
FMC-420RW-GFRRD
FMC-420RW-GSGRD
FMC-420RW-GSRRD





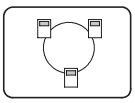
FMC-420RW

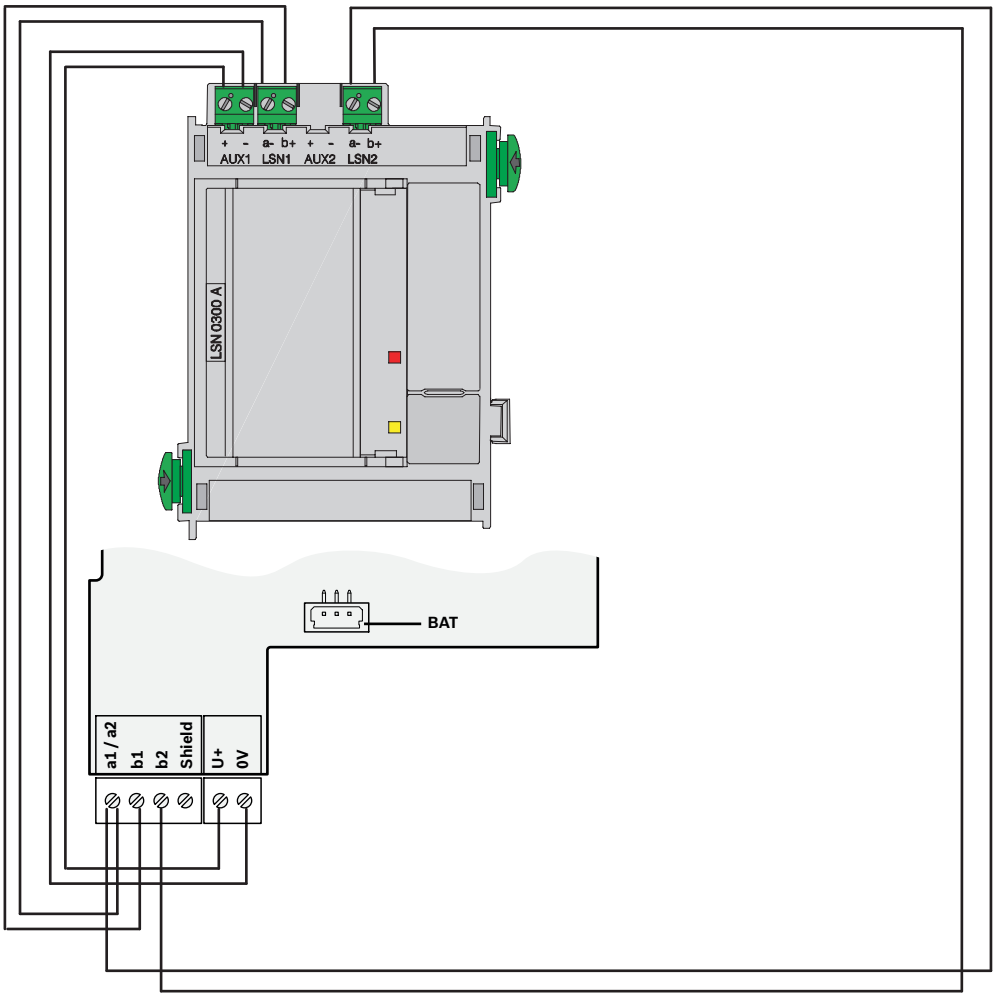




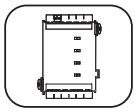
FWI-270

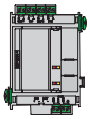
FDOOT271-O
FDM275-O
FDM273-O





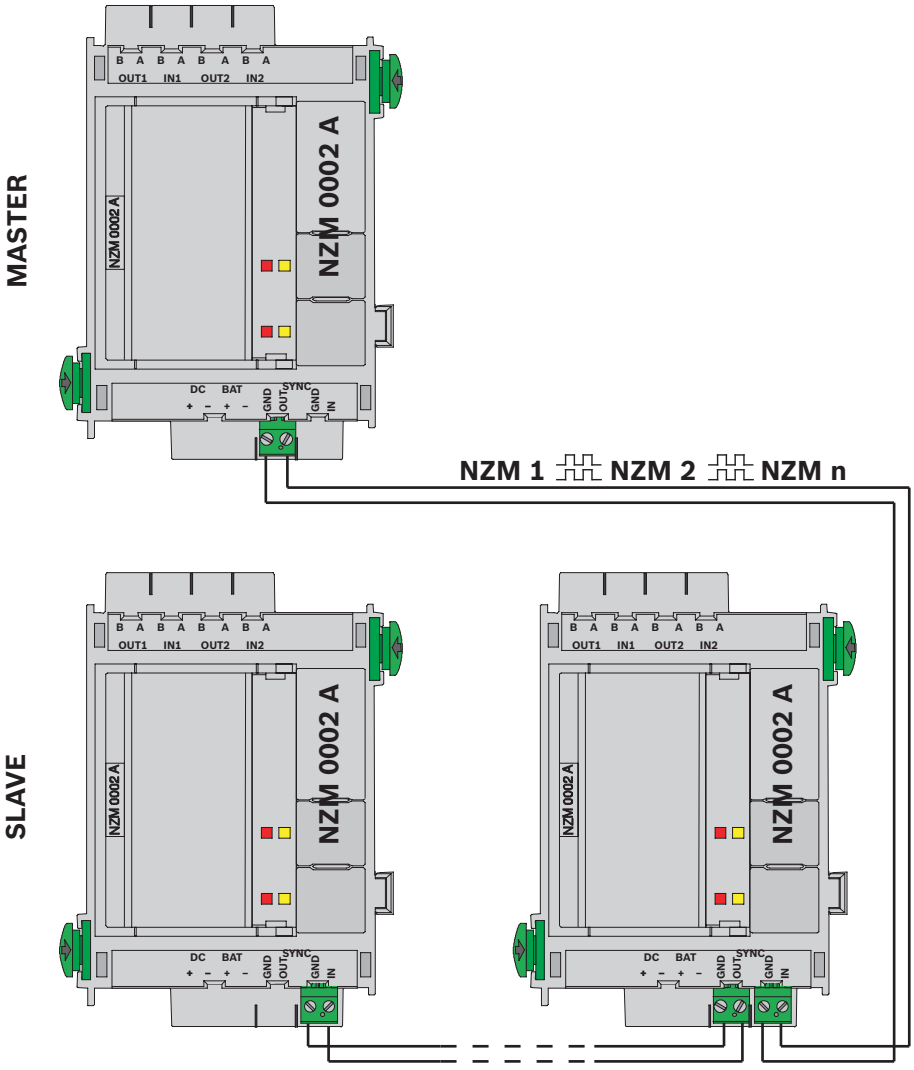
3.4.5 NZM 0002 A



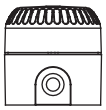


NZM 0002 A

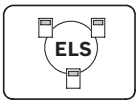


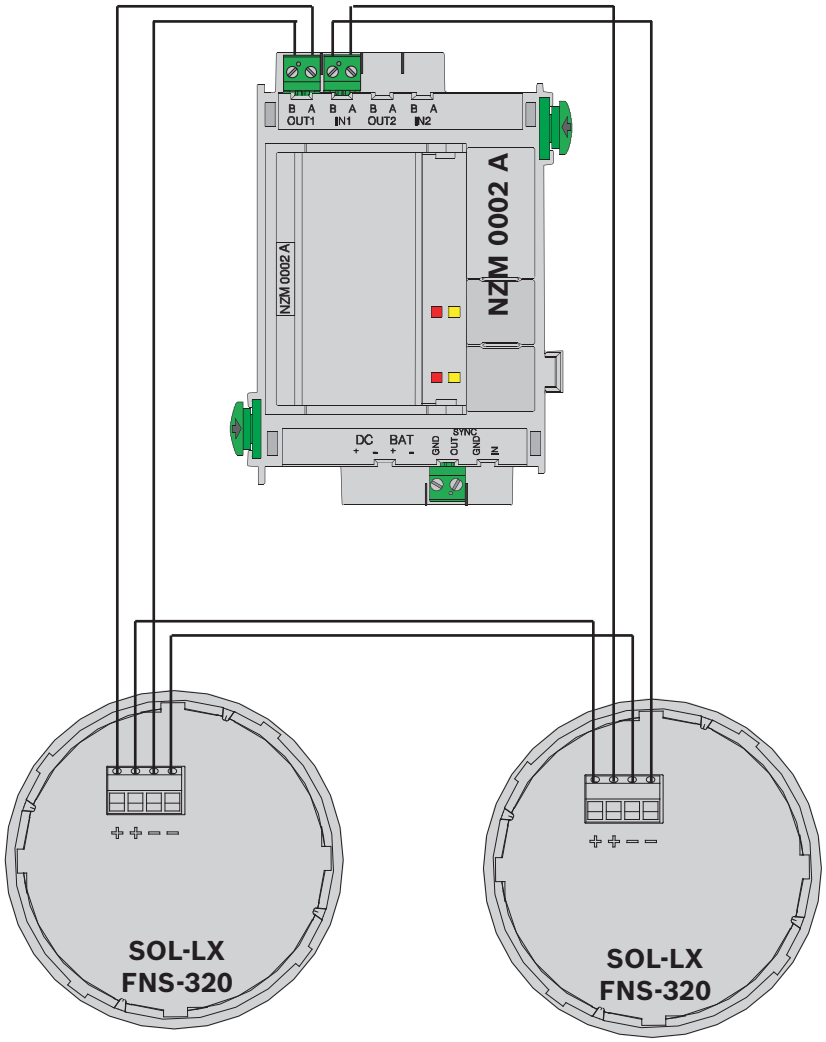




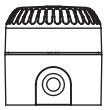


SOL-LX
FNS-320

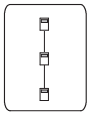




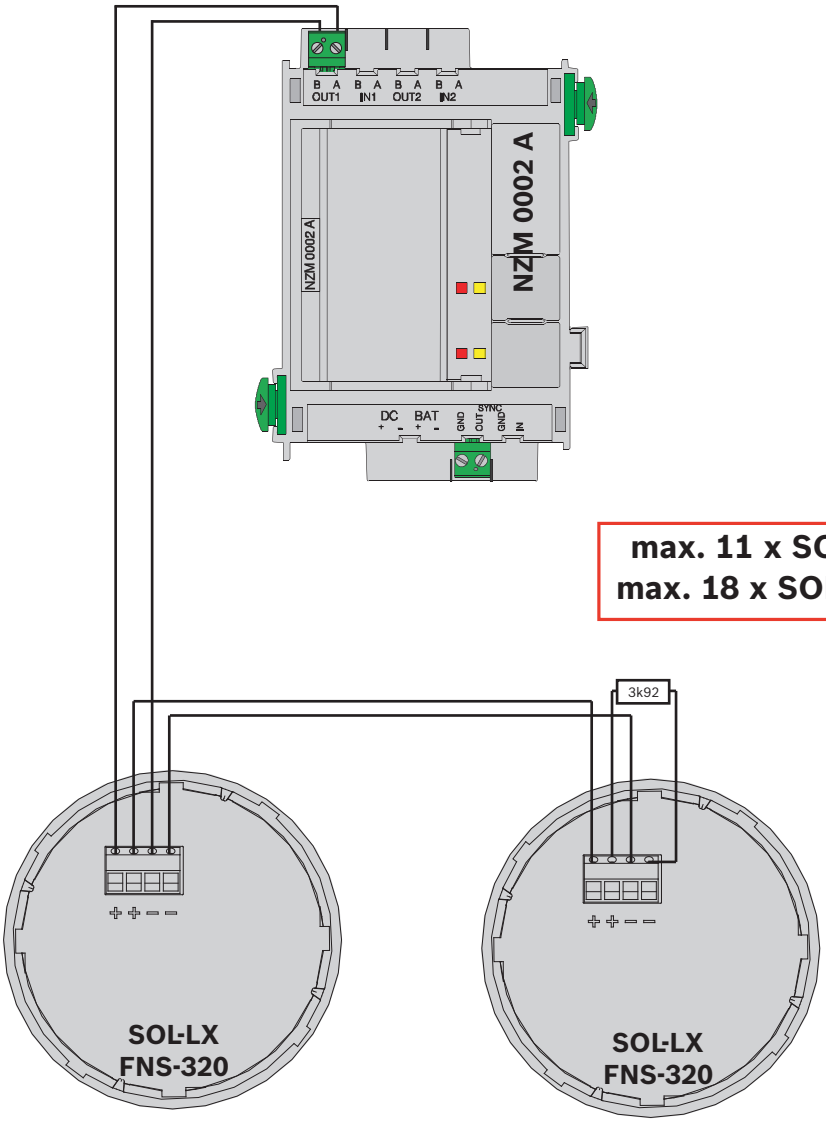




SOL-LX
FNS-320

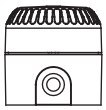




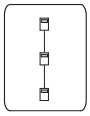


max. 11 x SOL-LX/1Hz
max. 18 x SOL-LX/0.5Hz



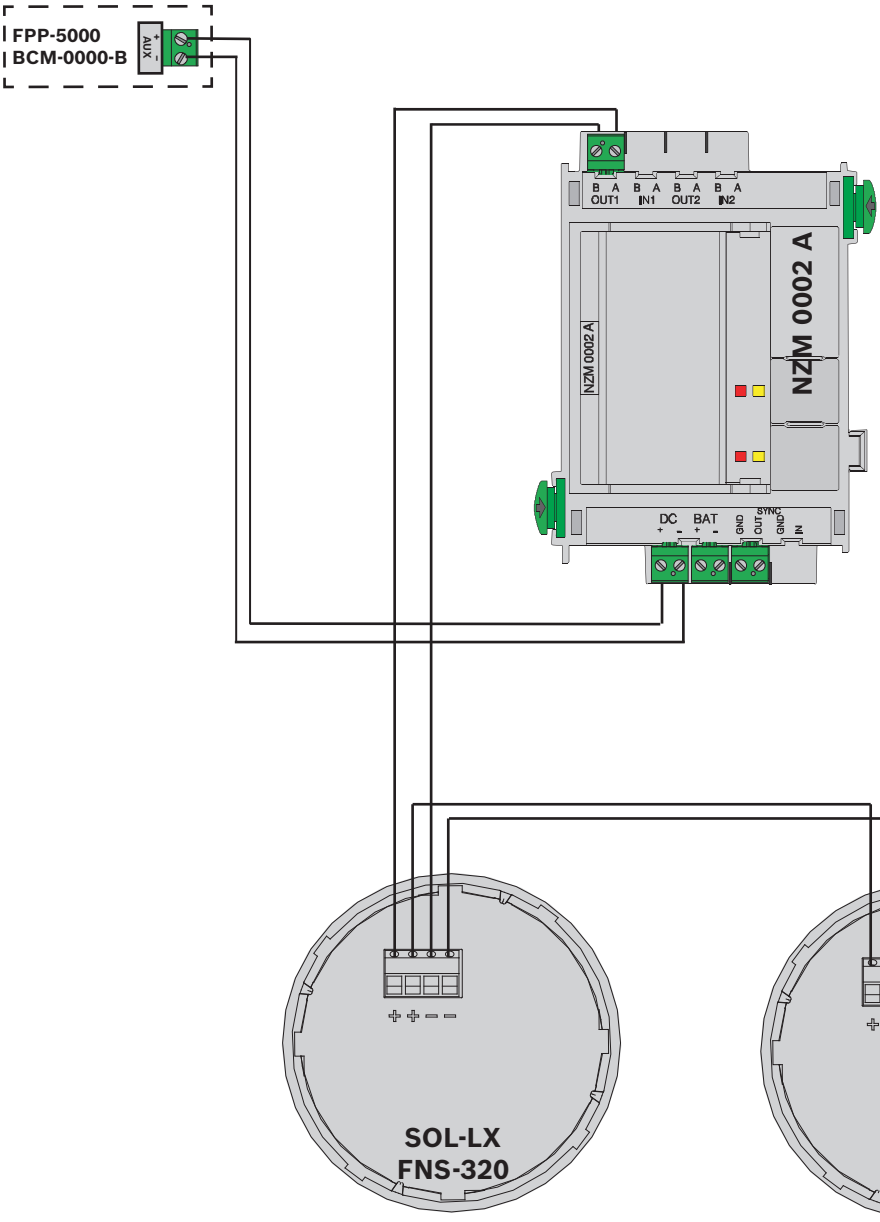


SOL-LX
FNS-320

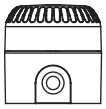




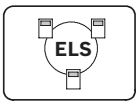


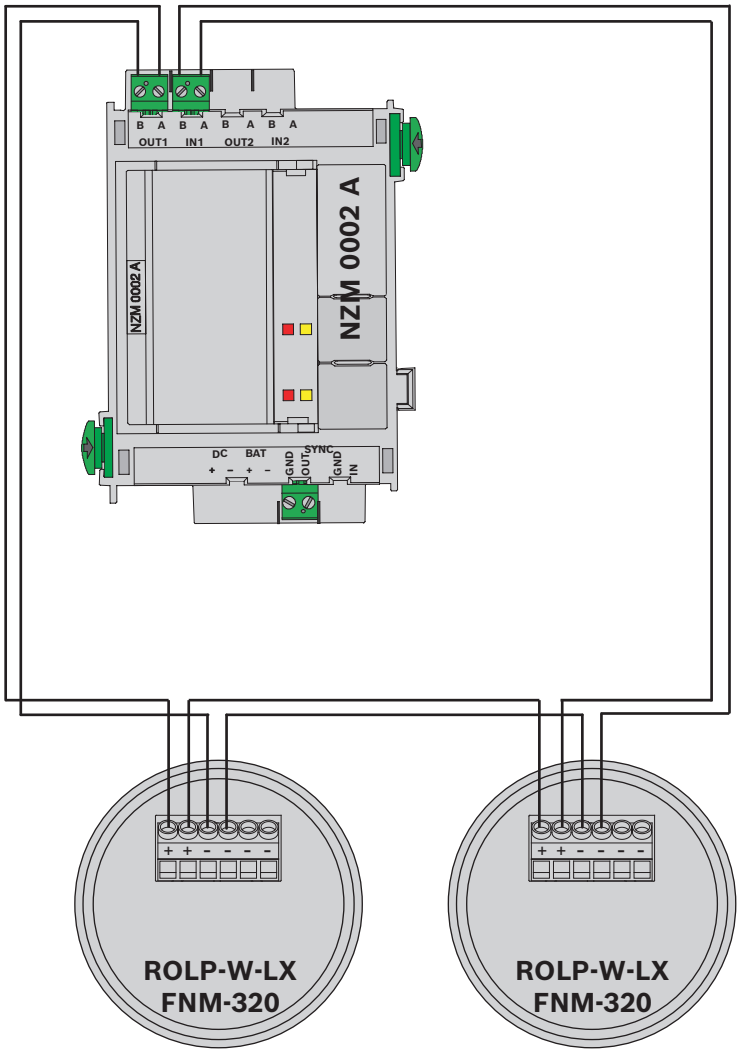




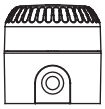


ROLP-W-LX
FNM-320

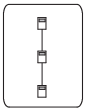




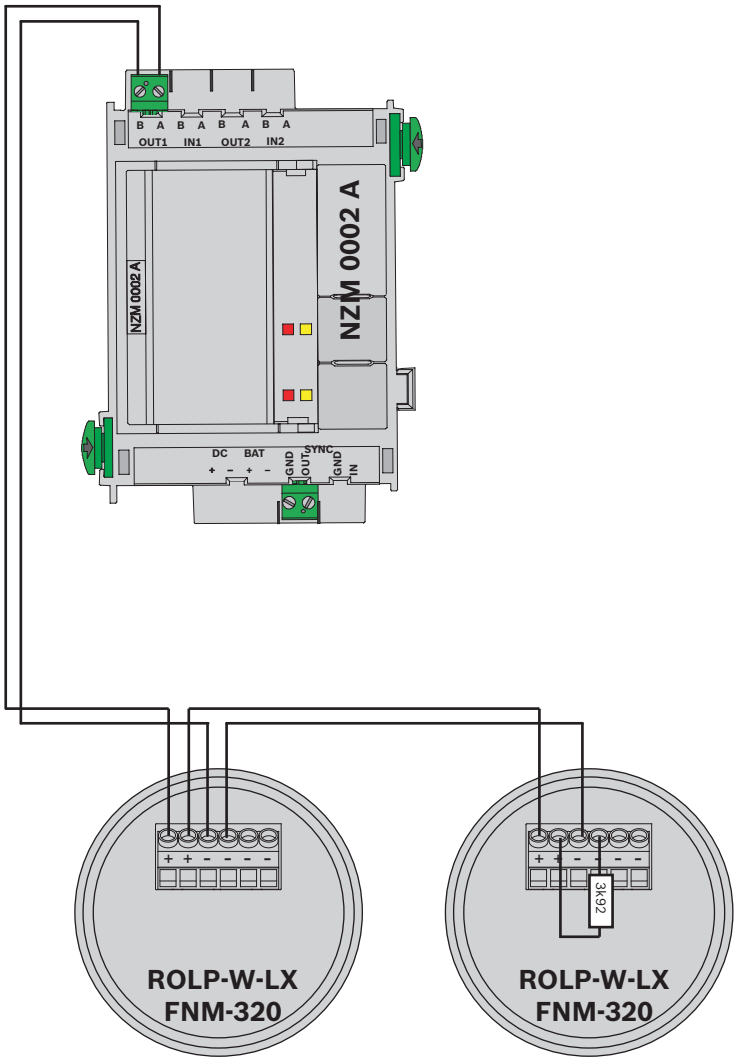




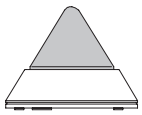
ROLP-W-LX
FNM-320



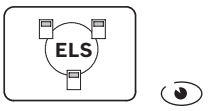


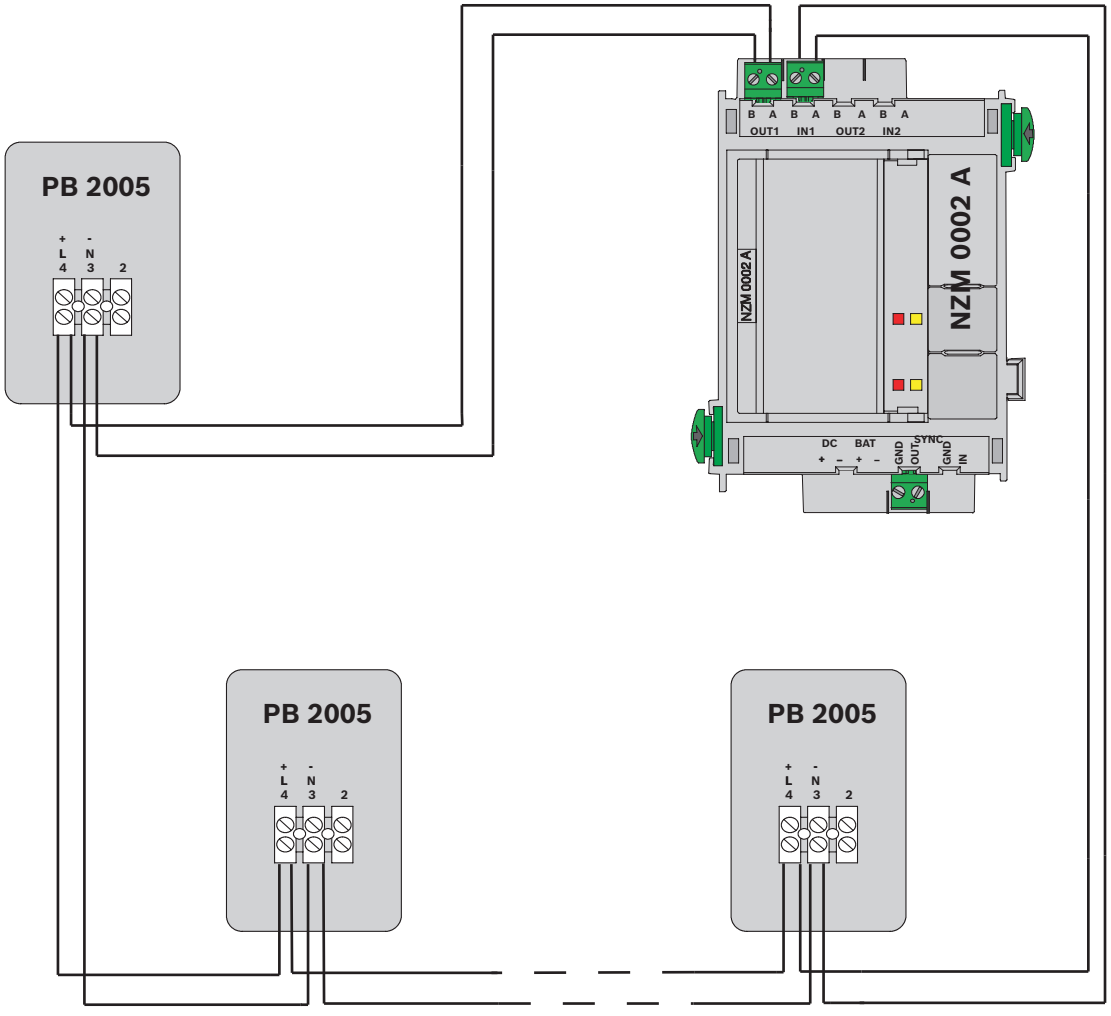




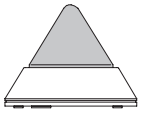


PB 2005

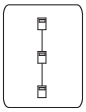

ELS


PB 2005
+ L 4
- N 3
2
B A B A B A B A
OUT1 IN1 OUT2 IN2
NZM 0002 A
NZM 0002 A
DC BAT
+ - + -
GND OUT SYNC GND IN
PB 2005
PB 2005

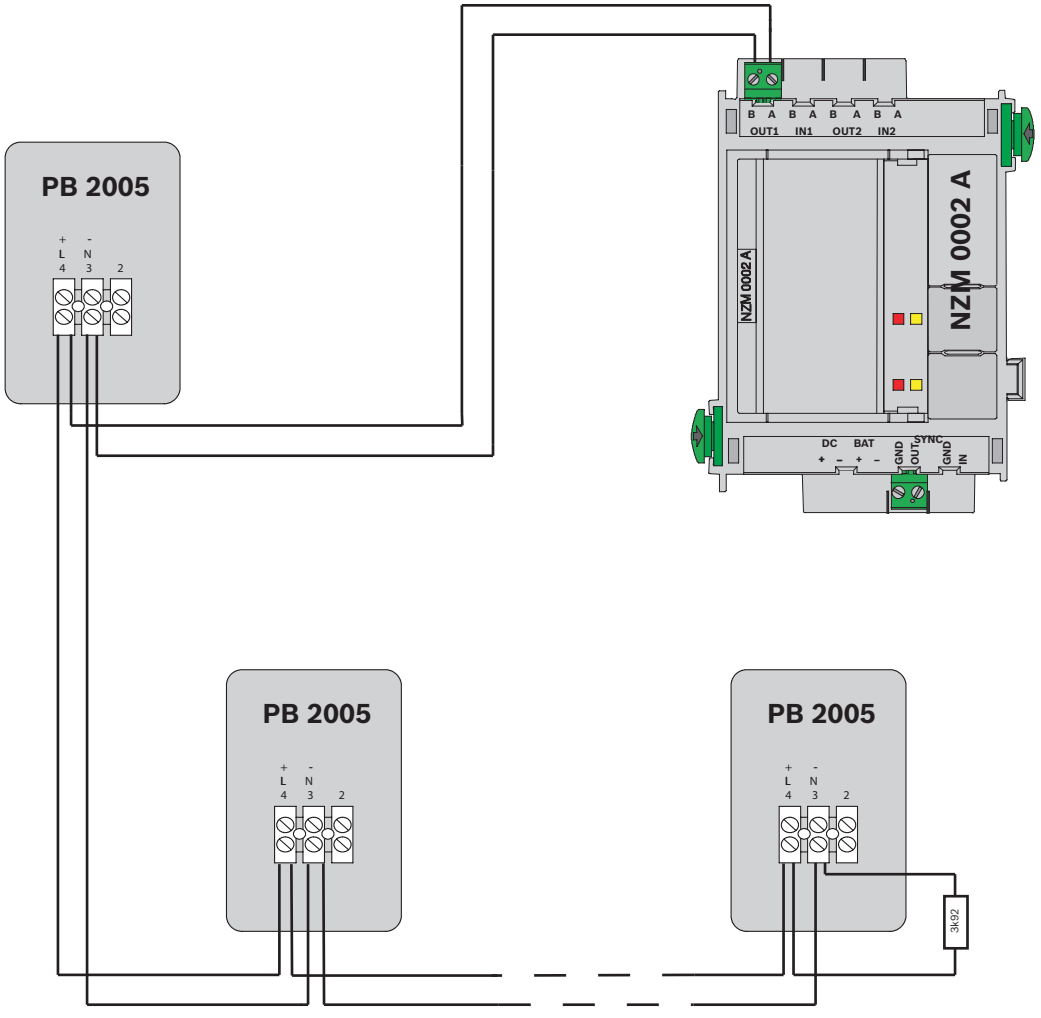




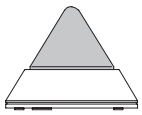
PB 2005



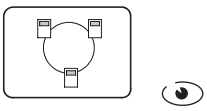


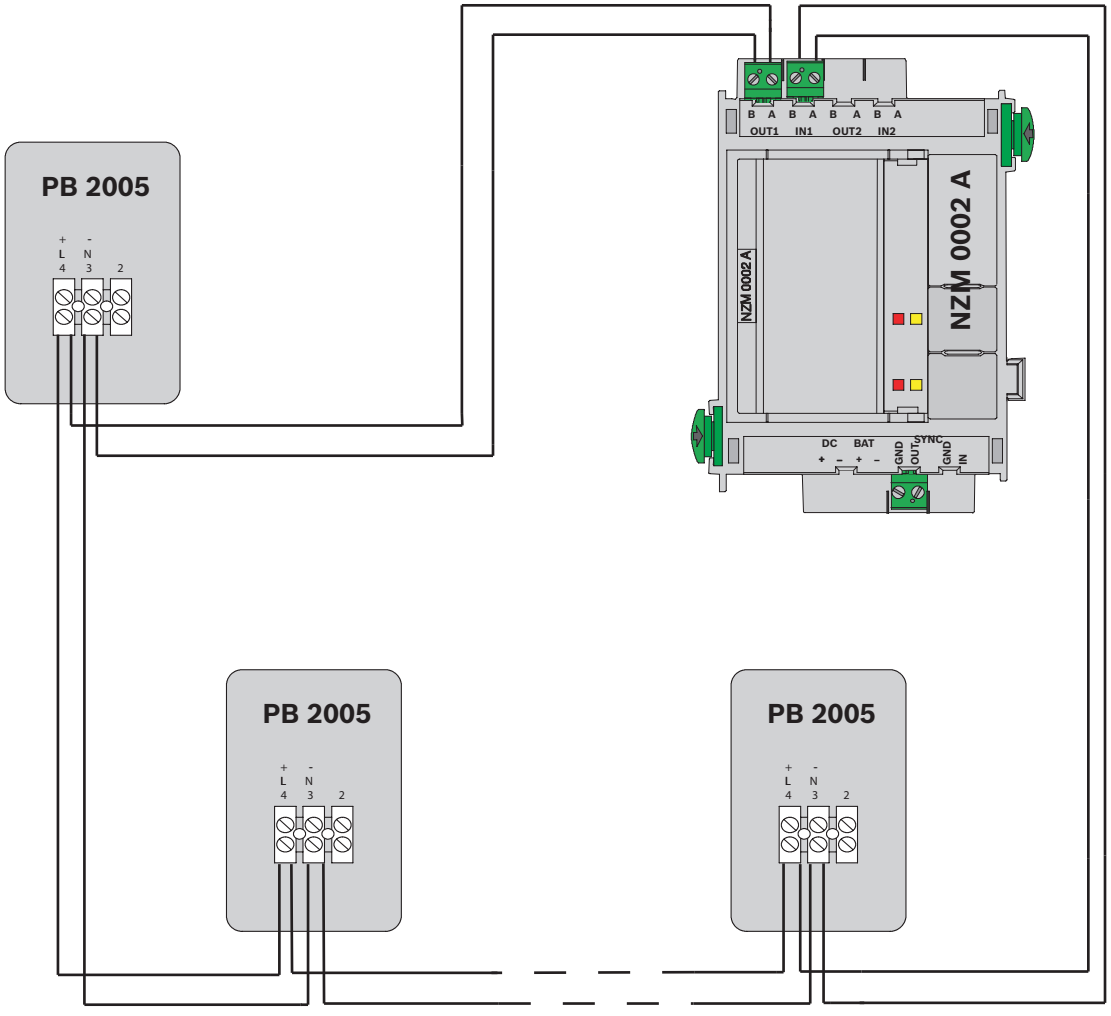

PB 2005
+ -
L N
4 3 2
B A B A B A B A
OUT1 IN1 OUT2 IN2
NZM 0002 A
NZM 0002 A
DC BAT
+ - + -
GND OUT SYNC GND IN
PB 2005
+ -
L N
4 3 2
PB 2005
+ -
L N
4 3 2
3k92





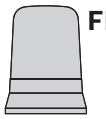
PB 2005



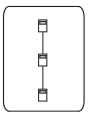

PB 2005
+ L 4
- N 3
2
B A B A B A B A
OUT1 IN1 OUT2 IN2
NZM 0002 A
NZM 0002 A
DC BAT
+ - + -
GND OUT SYNC GND IN
PB 2005
PB 2005

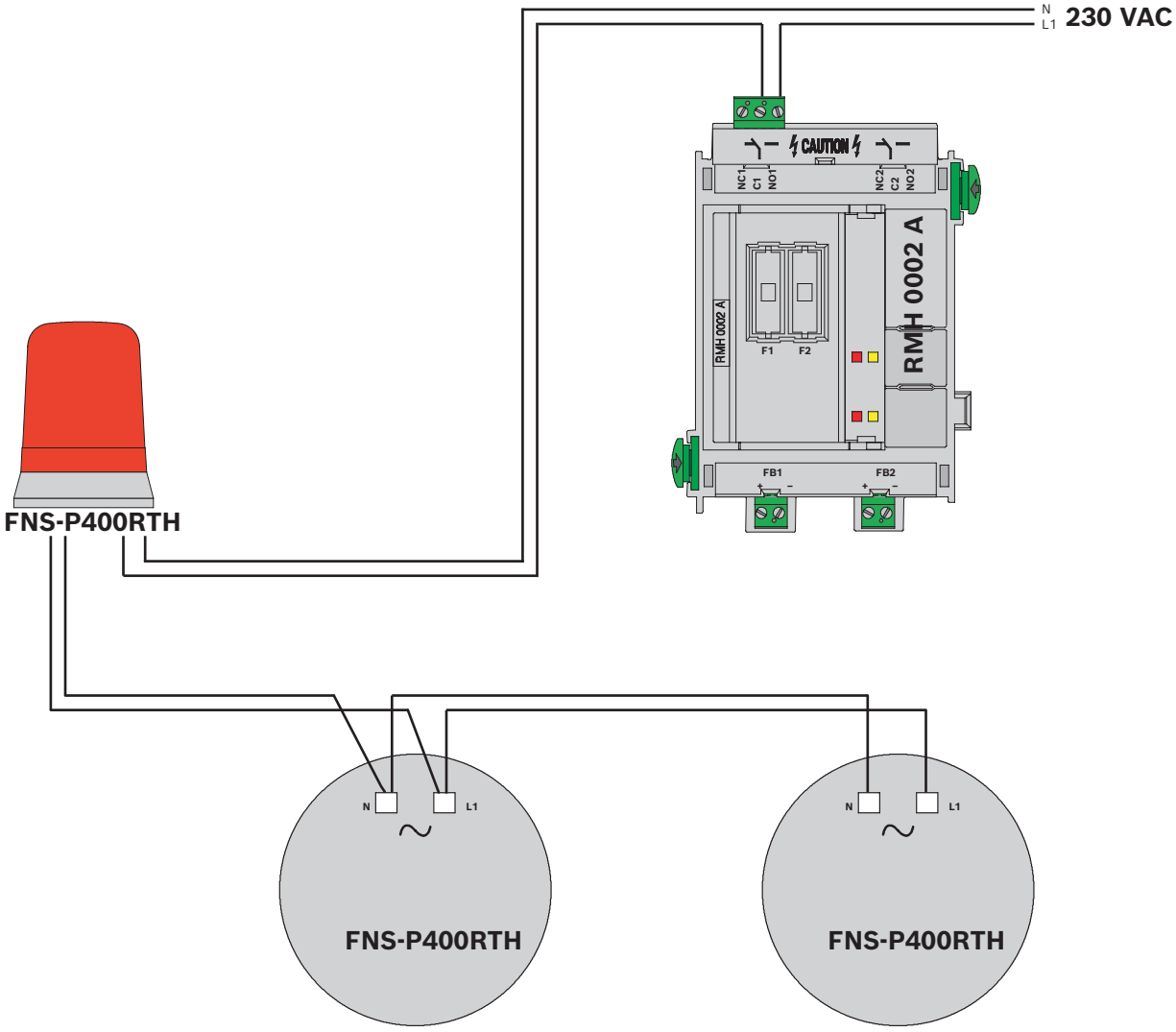
3.4.6 RMH 0002 A





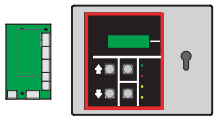
FNS-P400RTH



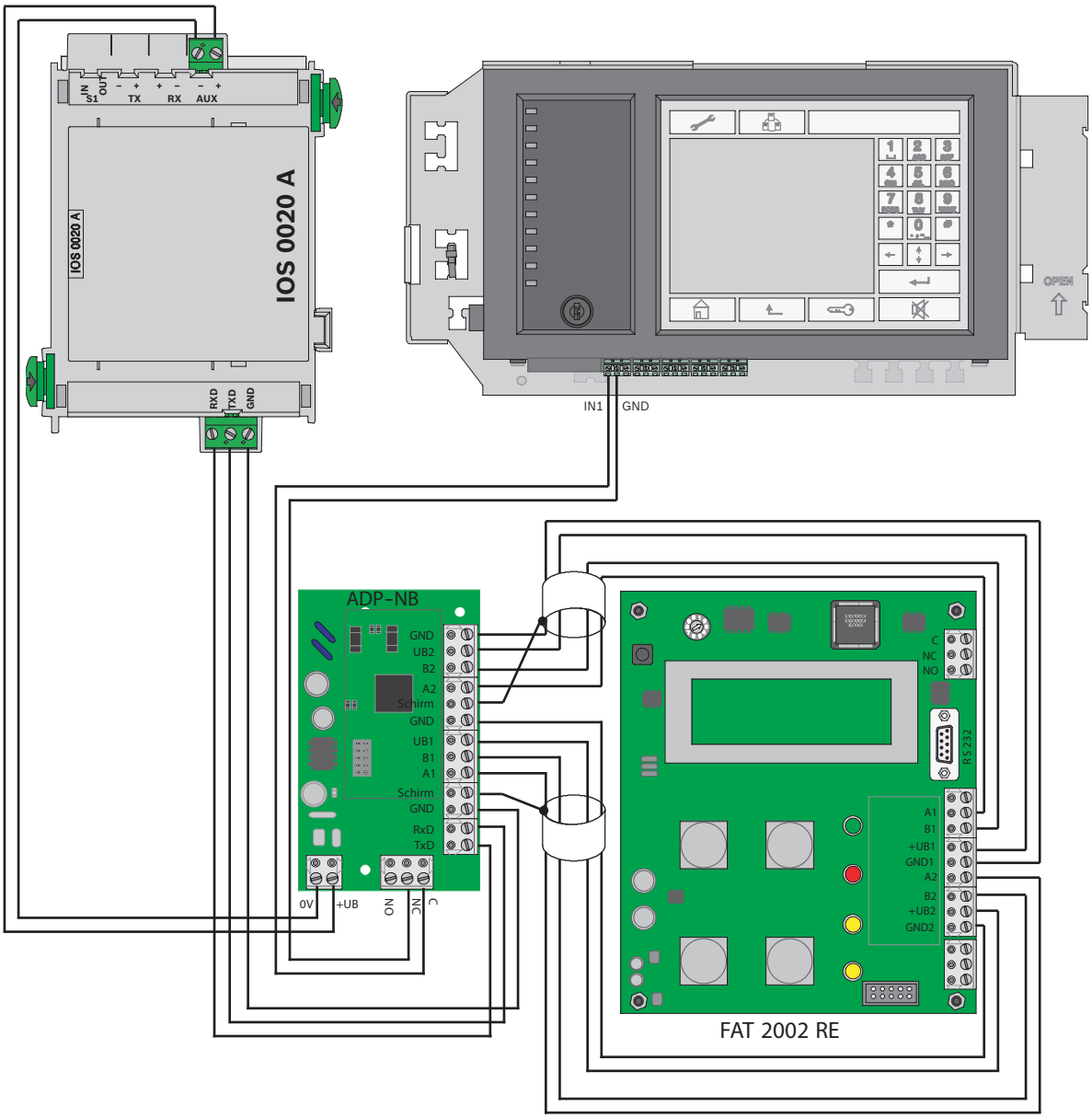


3.4.7 IOS 0020 A

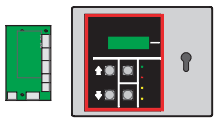




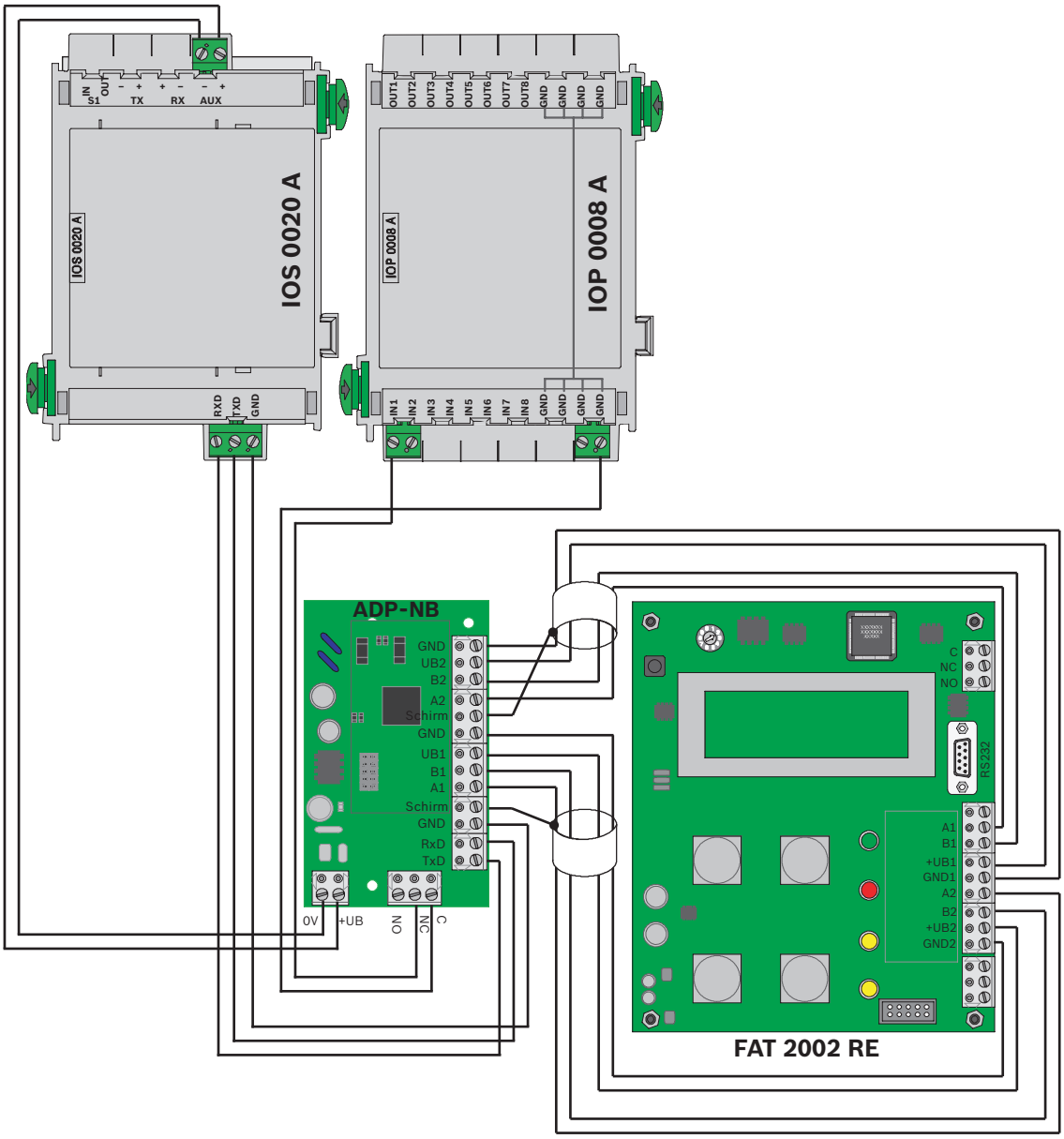
FAT 2002 RE
ADP-NB



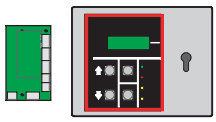




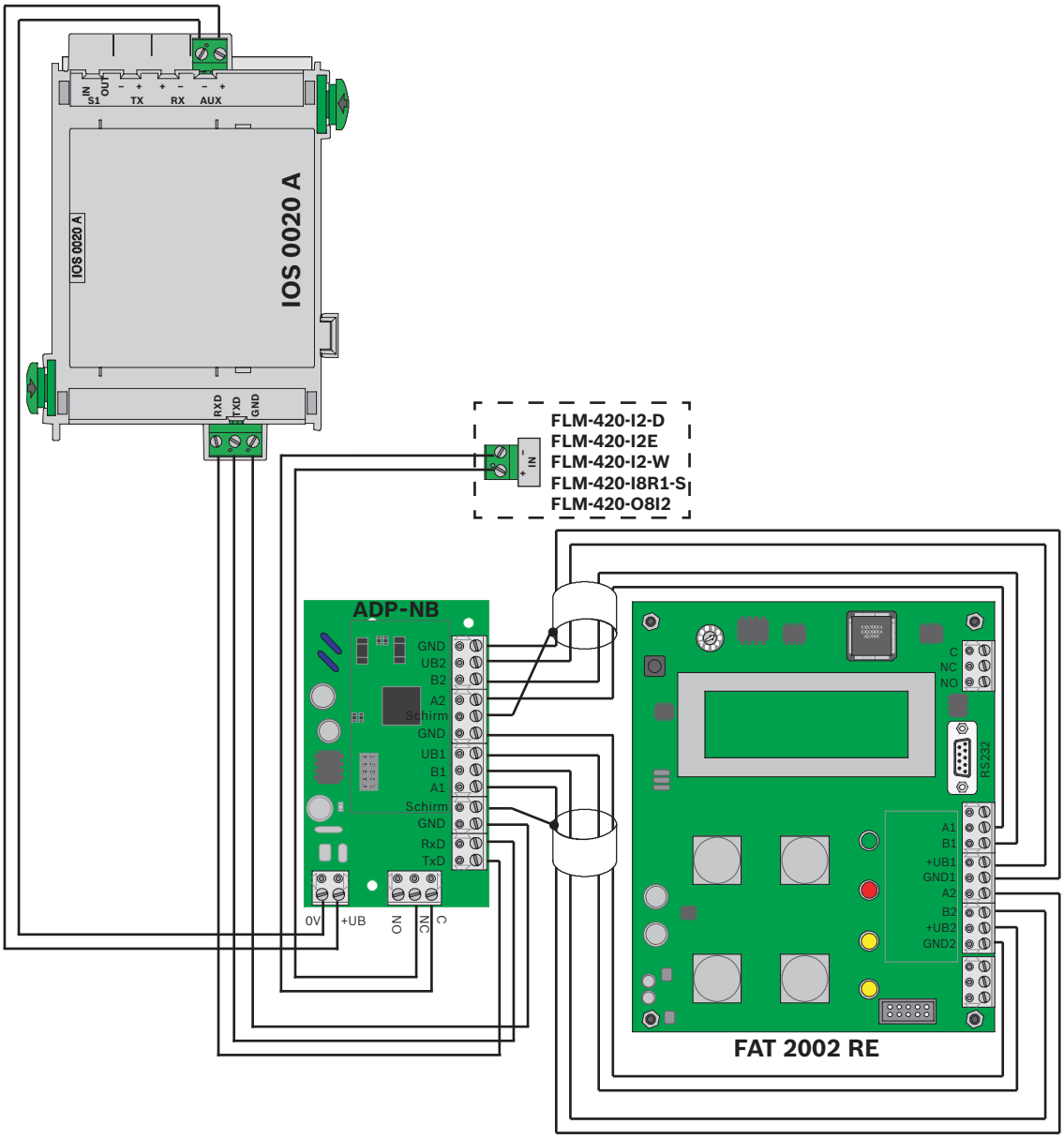
FAT 2002 RE
ADP-NB



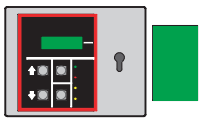


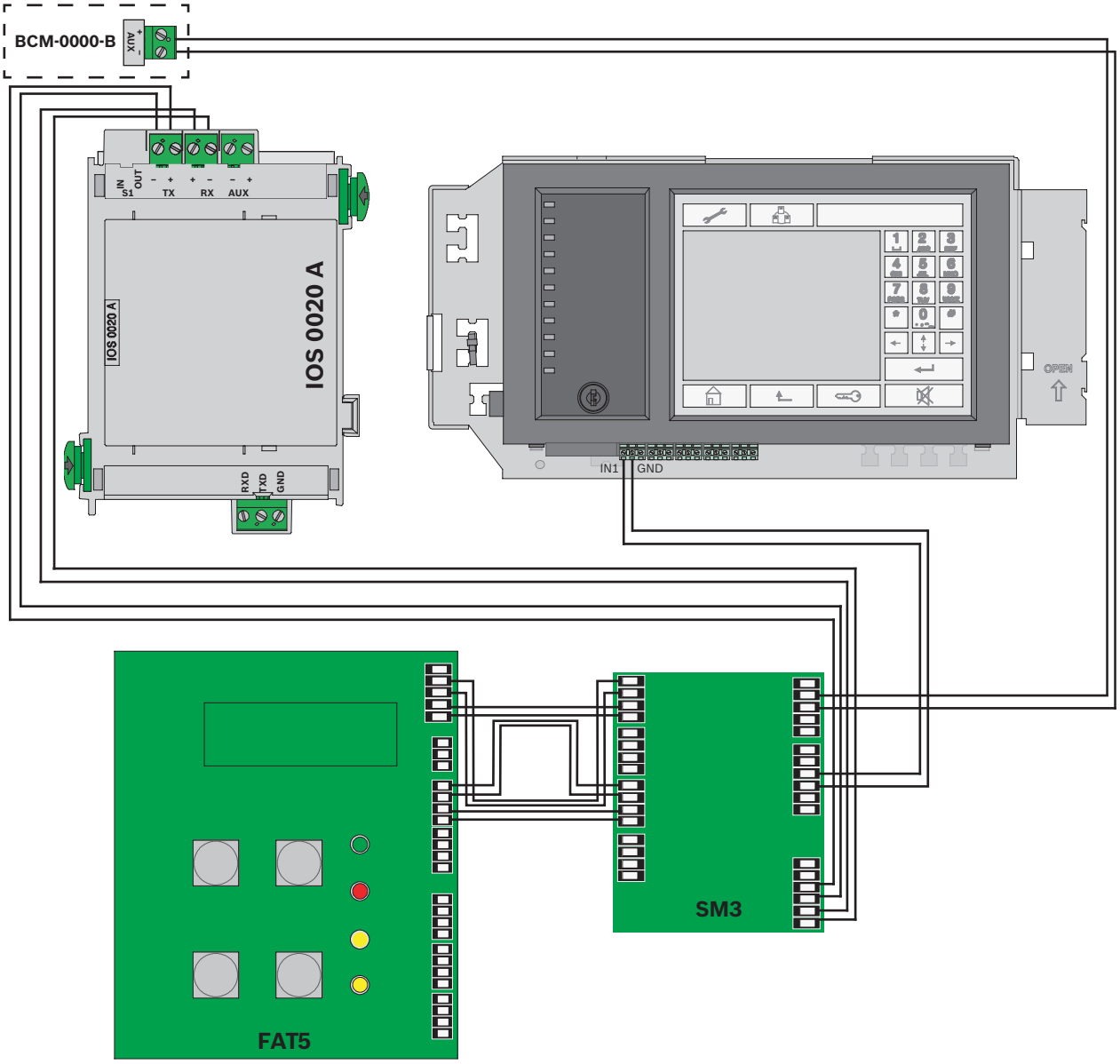


FAT 2002 RE
ADP-NB

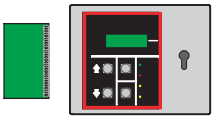




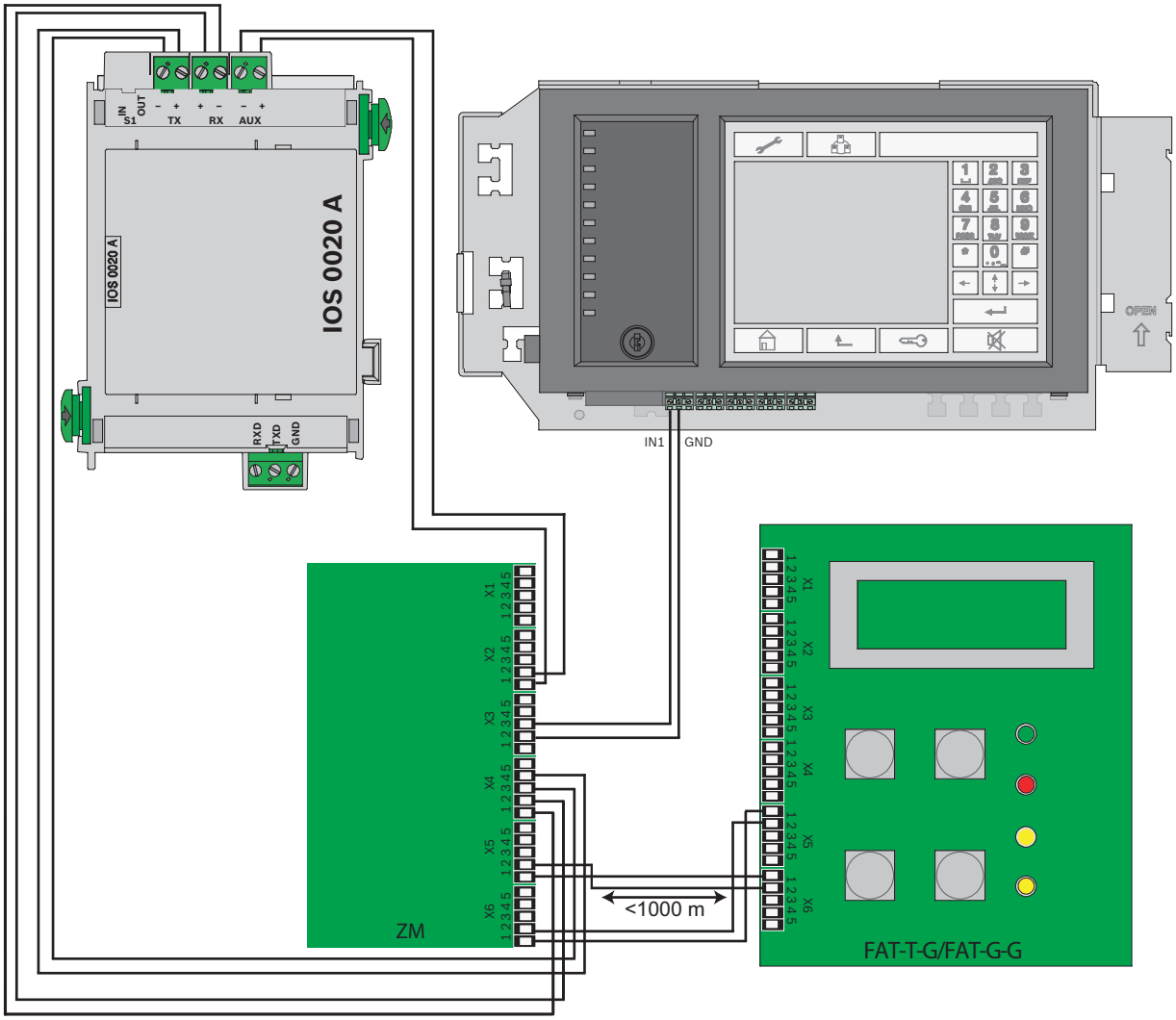

FAT5
SM3


BCM-0000-B
AUX
IN
OUT
S1
TX
RX
AUX
IOS 0020 A
IOS 0020 A
RXD
TXD
GND
IN1
GND
OPEN
SM3
FAT5

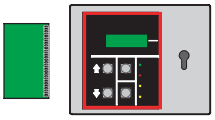




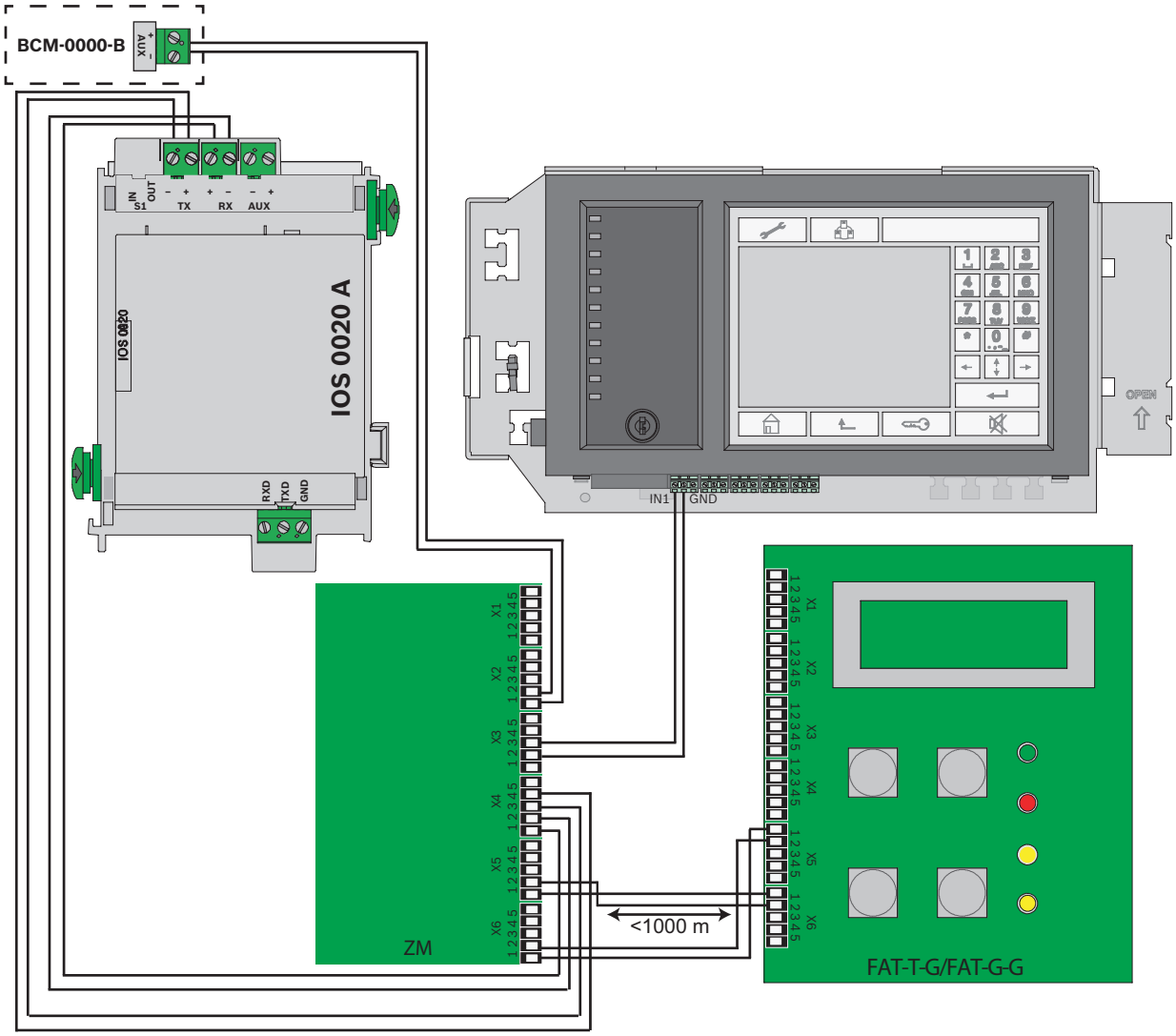
FAT-T-G/FAT-G-G ZM



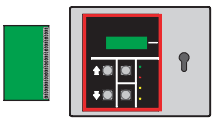




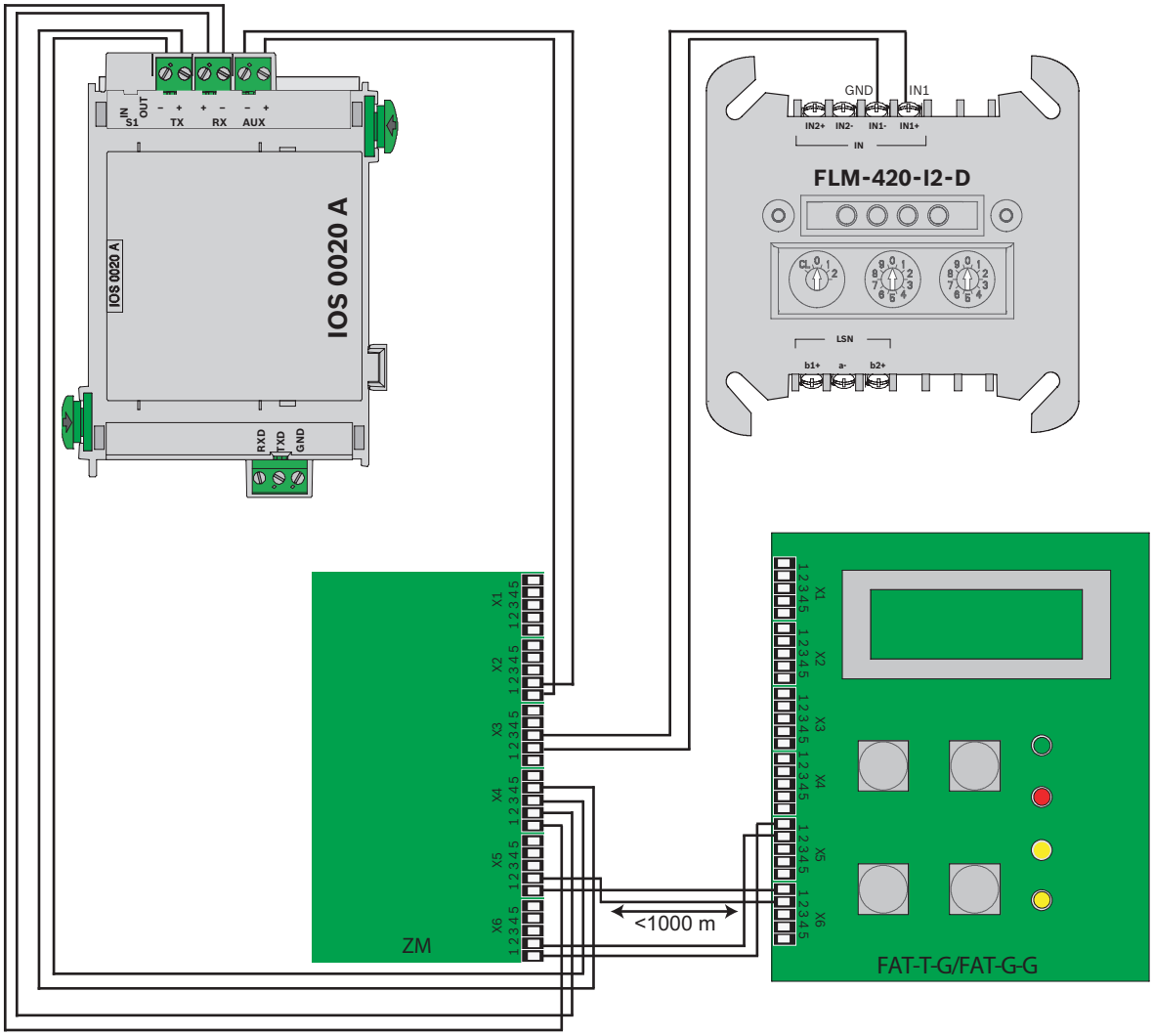
FAT-T-G/FAT-G-G ZM



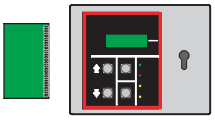




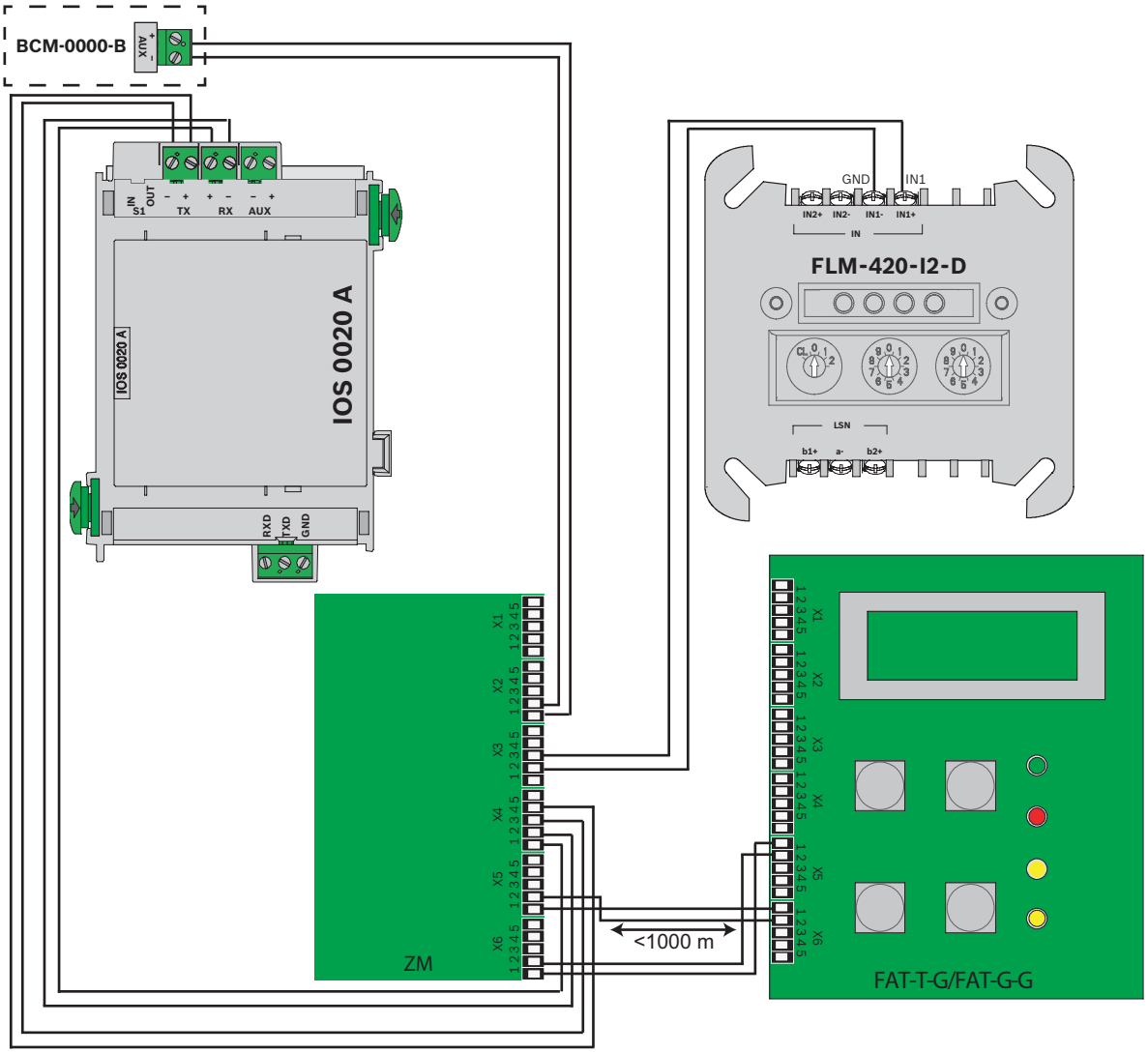
FAT-T-G/FAT-G-G ZM



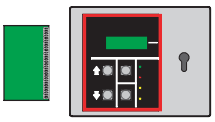




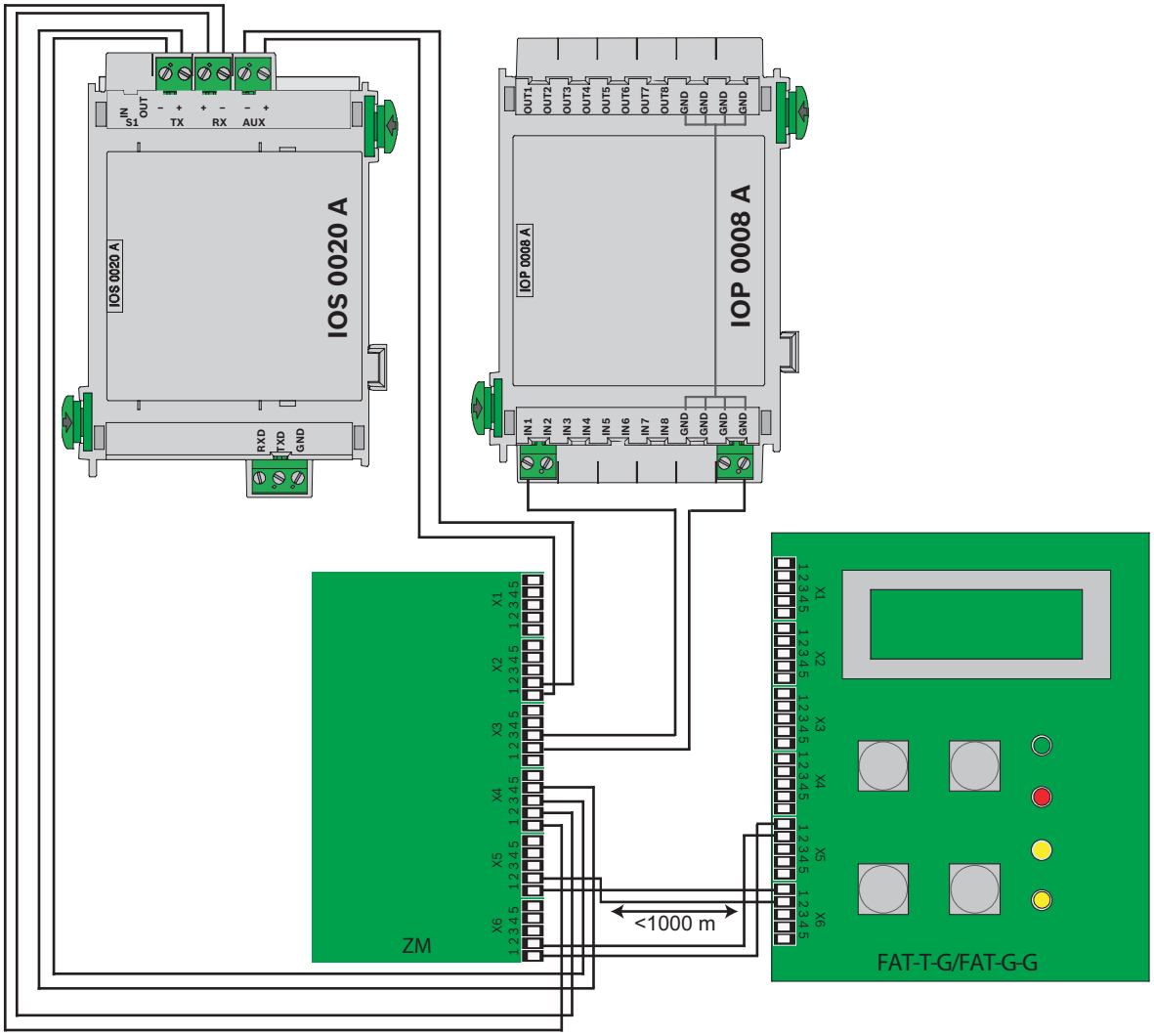
FAT-T-G/FAT-G-G ZM



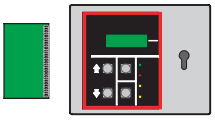




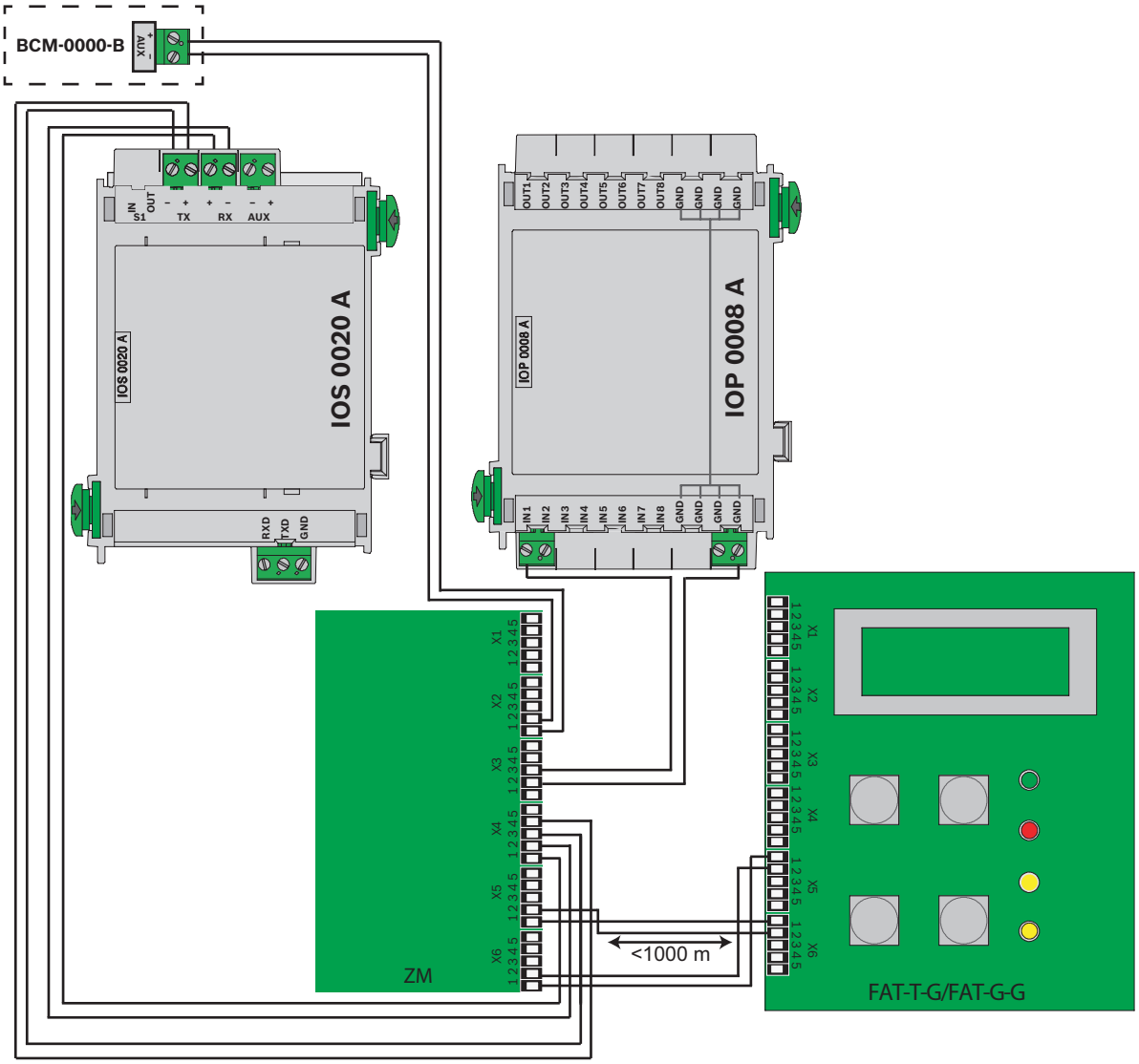
FAT-T-G/FAT-G-G ZM

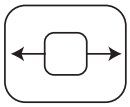


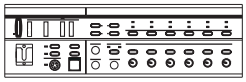




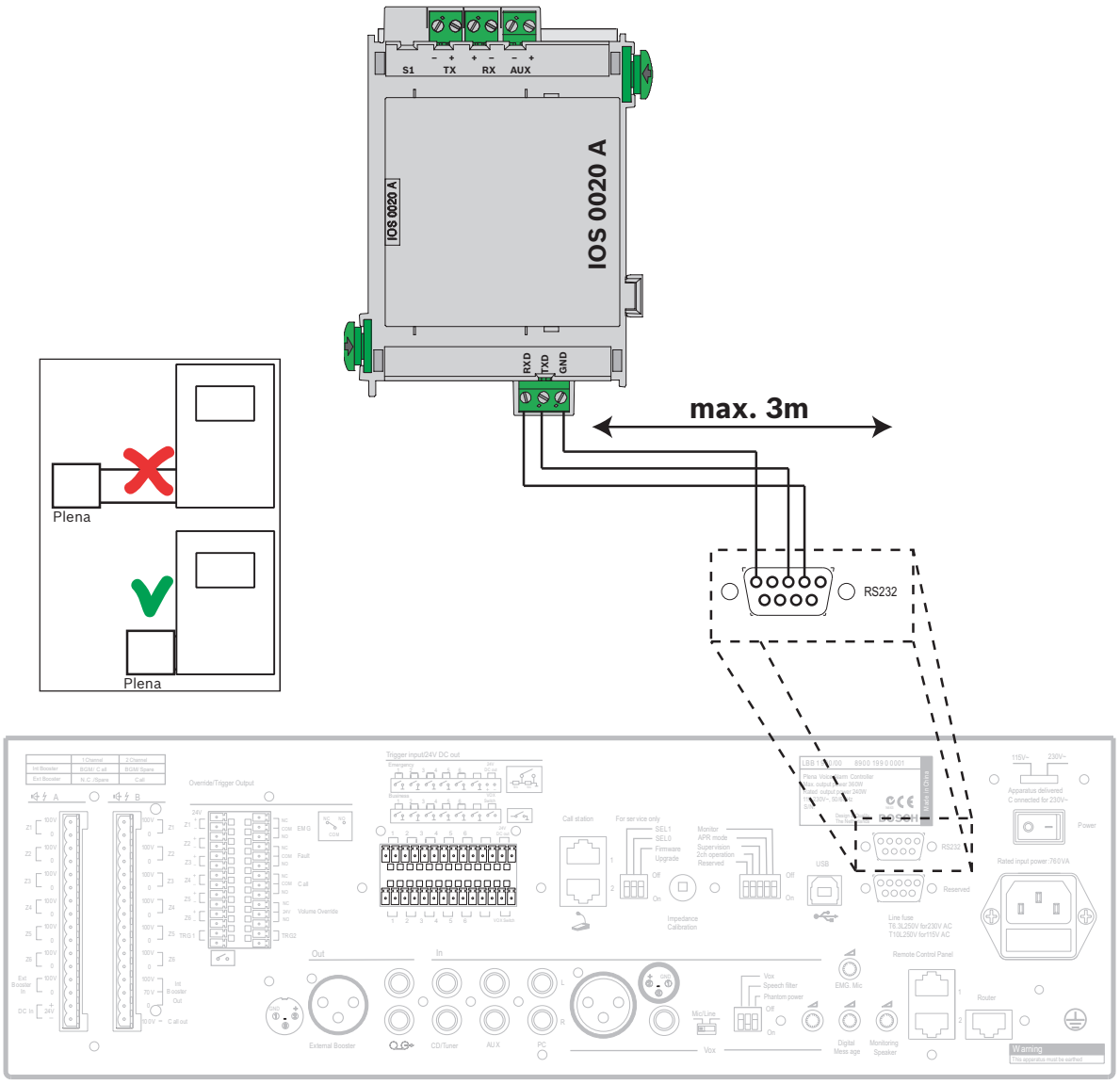
FAT-T-G/FAT-G-G ZM







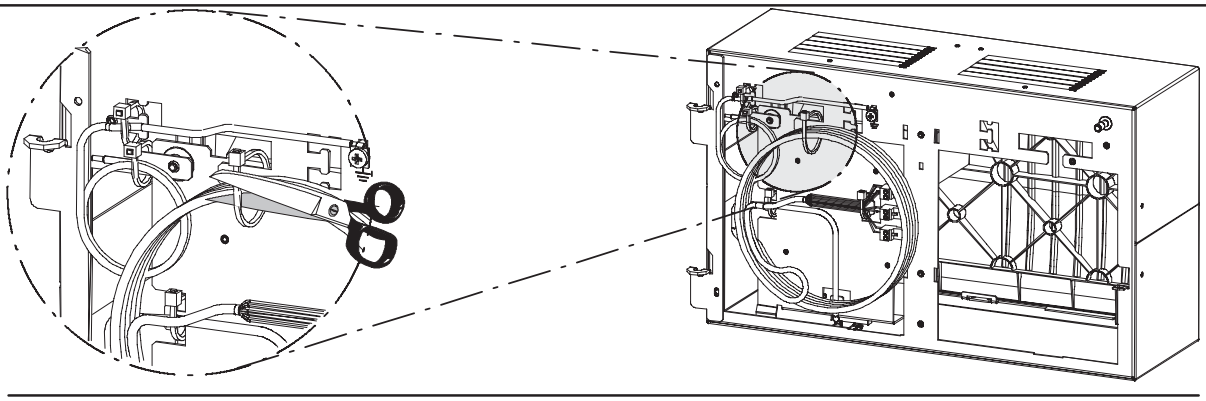
Plena

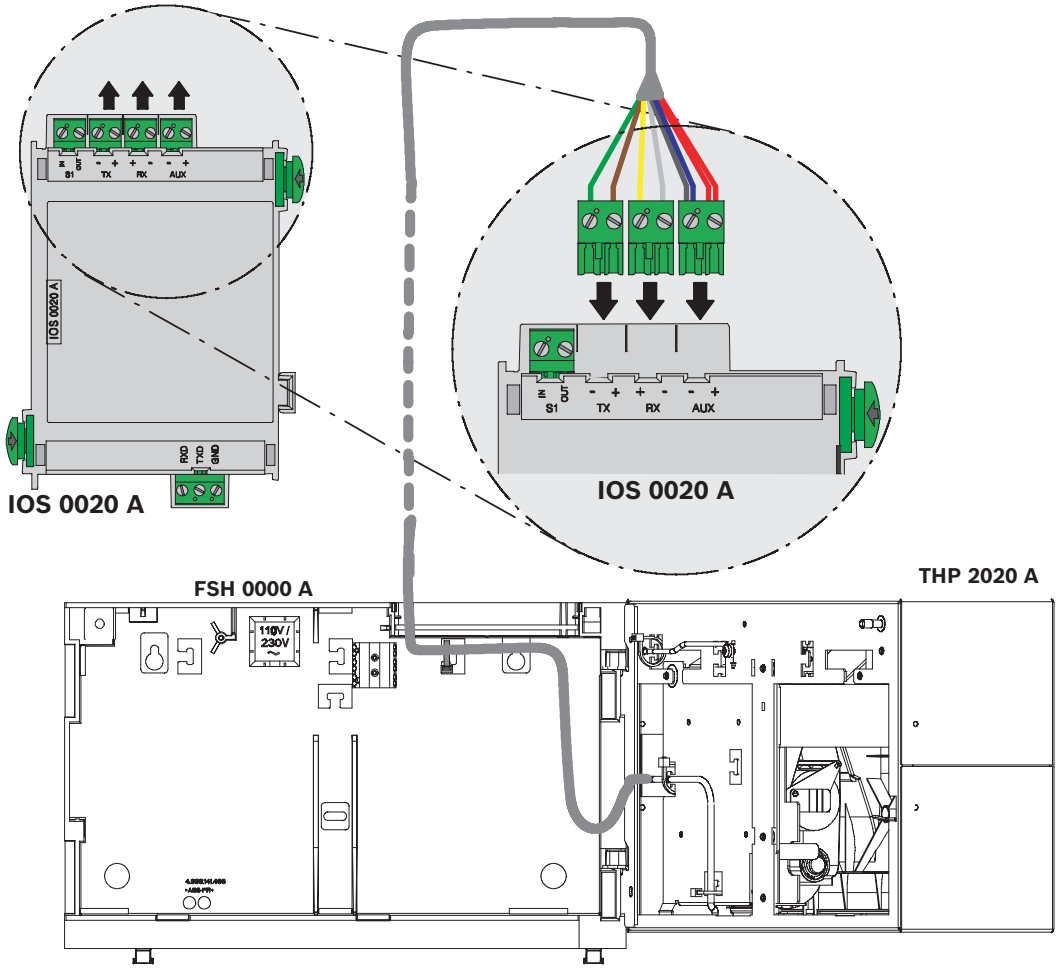

S1
TX
RX
AUX
IOS 0020 A
IOS 0020 A
RXD
TXD
GND
max. 3m
RS232
Plena
Plena

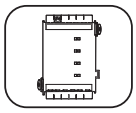




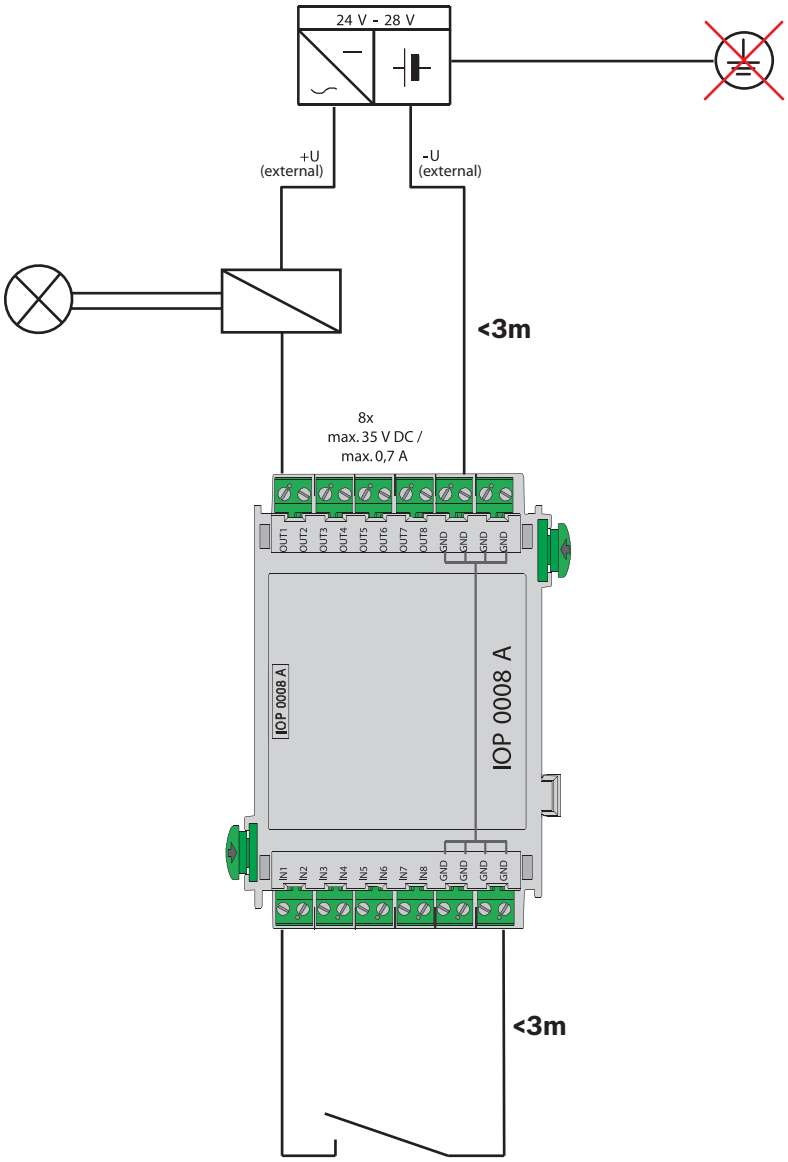
THP 2020 A










24 V - 28 V
+U
(external)
-U
(external)
<3m
8x
max. 35 V DC /
max. 0,7 A
OUT1
OUT2
OUT3
OUT4
OUT5
OUT6
OUT7
OUT8
GND
GND
GND
IOP 0008 A
IOP 0008 A
IN1
IN2
IN3
IN4
IN5
IN6
IN7
IN8
GND
GND
GND
GND
<3m

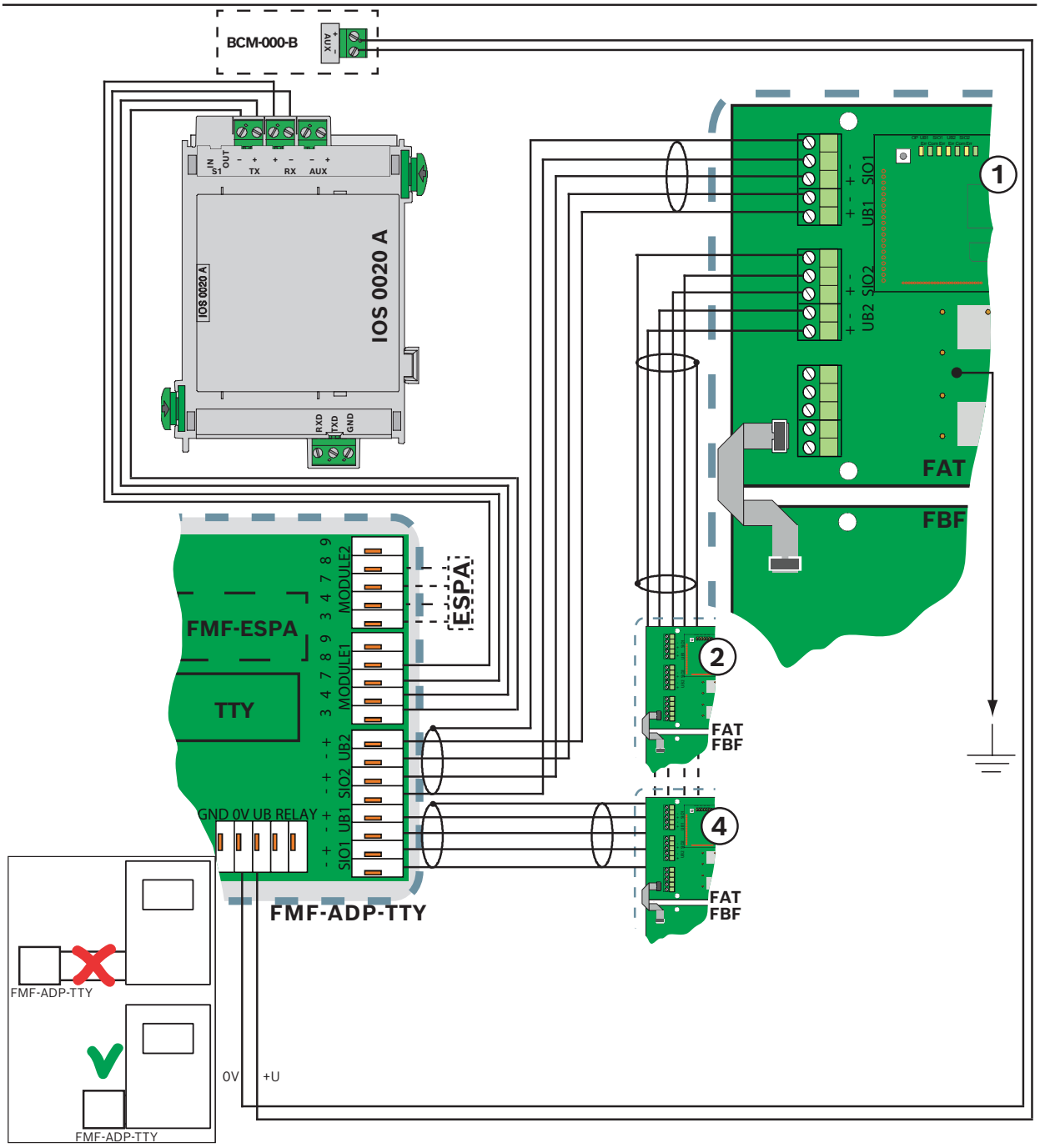




FAT4000 FBF4000 ADP4000

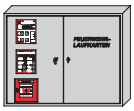
FMF-FAT FMF-FBF-FAT
FMF-FIBS-A4/-A3
FMF-ADP

ELS



3.4.8 FPE-5000-UGM

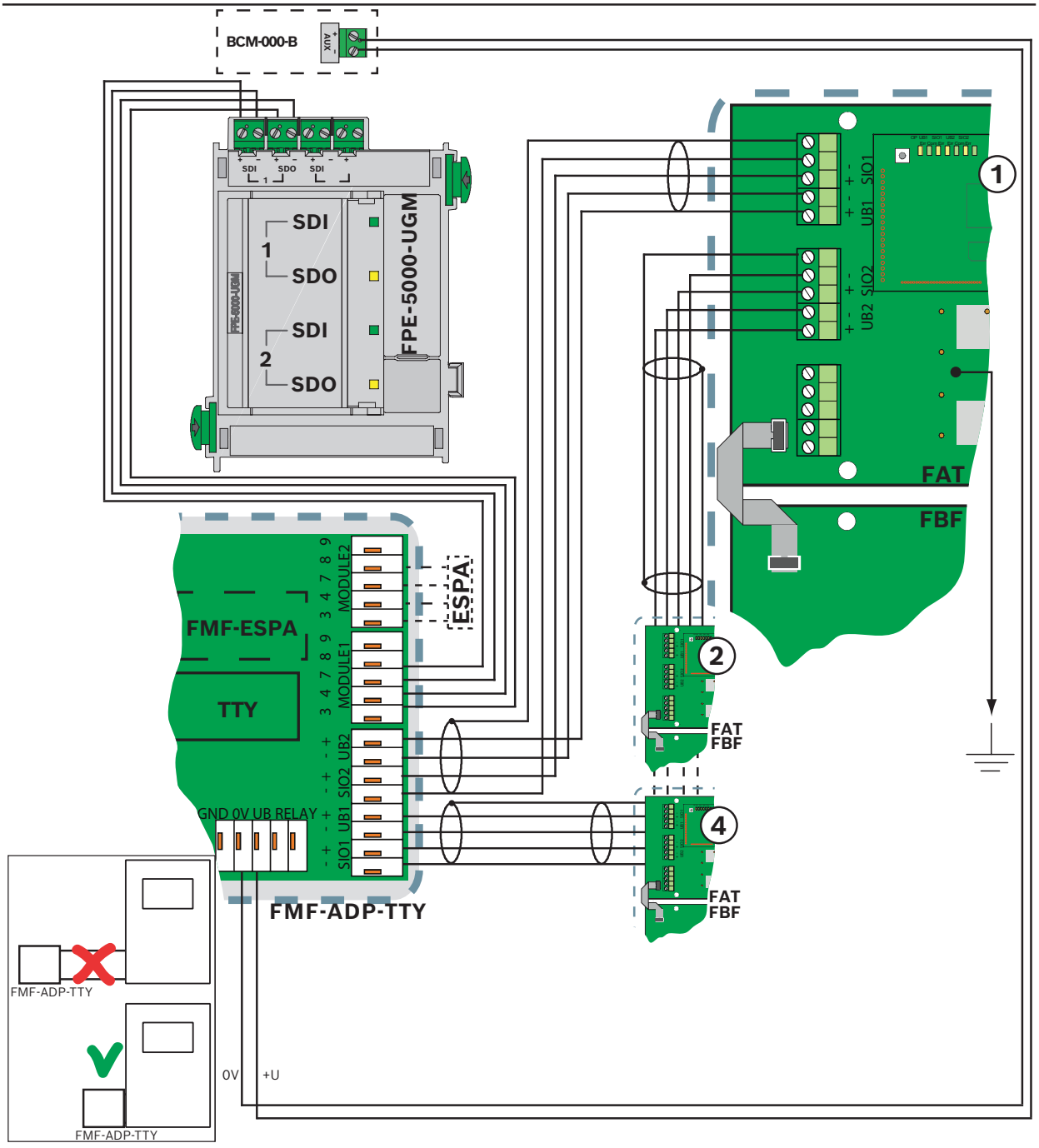




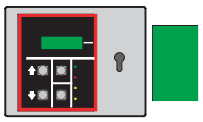
FAT4000 FBF4000 ADP4000

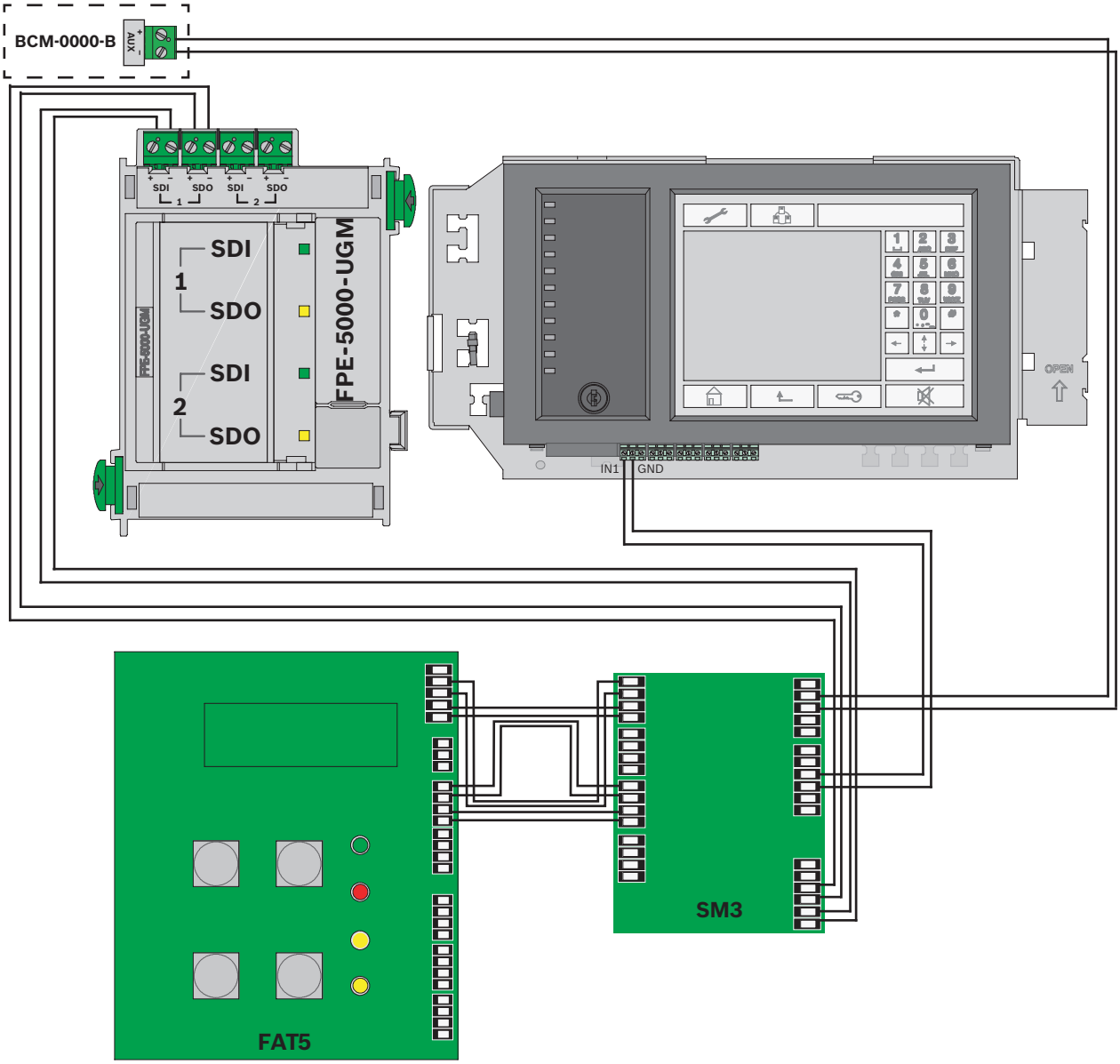
FMF-FAT FMF-FBF-FAT
FMF-FIBS-A4/-A3
FMF-ADP

ELS

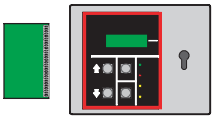




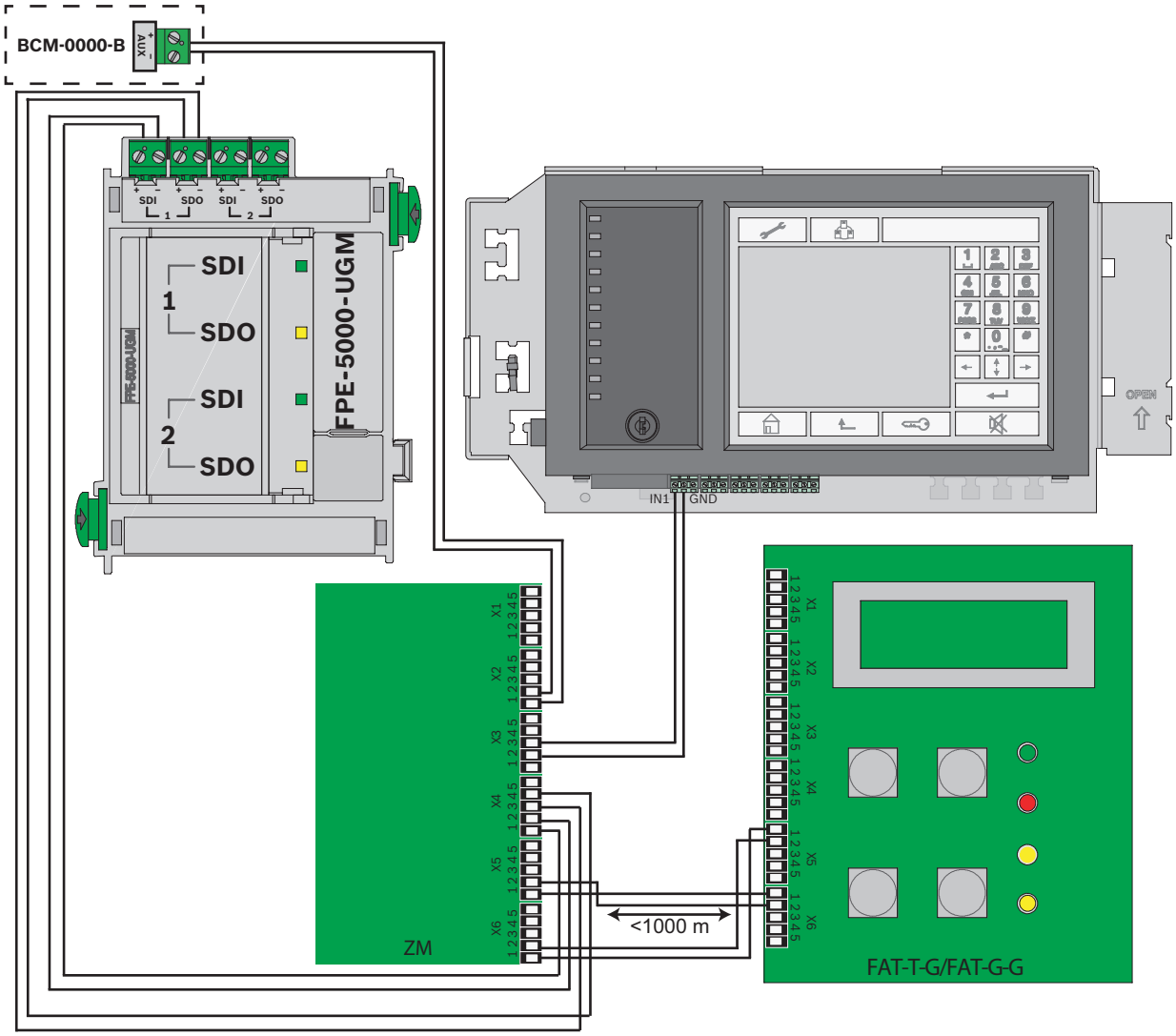

FAT5
SM3


BCM-0000-B
AUX
SDI
SDO
SDI
SDO
1
2
SDI
1
SDO
SDI
2
SDO
FPE-5000-UGM
IN1
GND
OPEN
SM3
FAT5

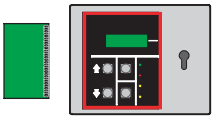




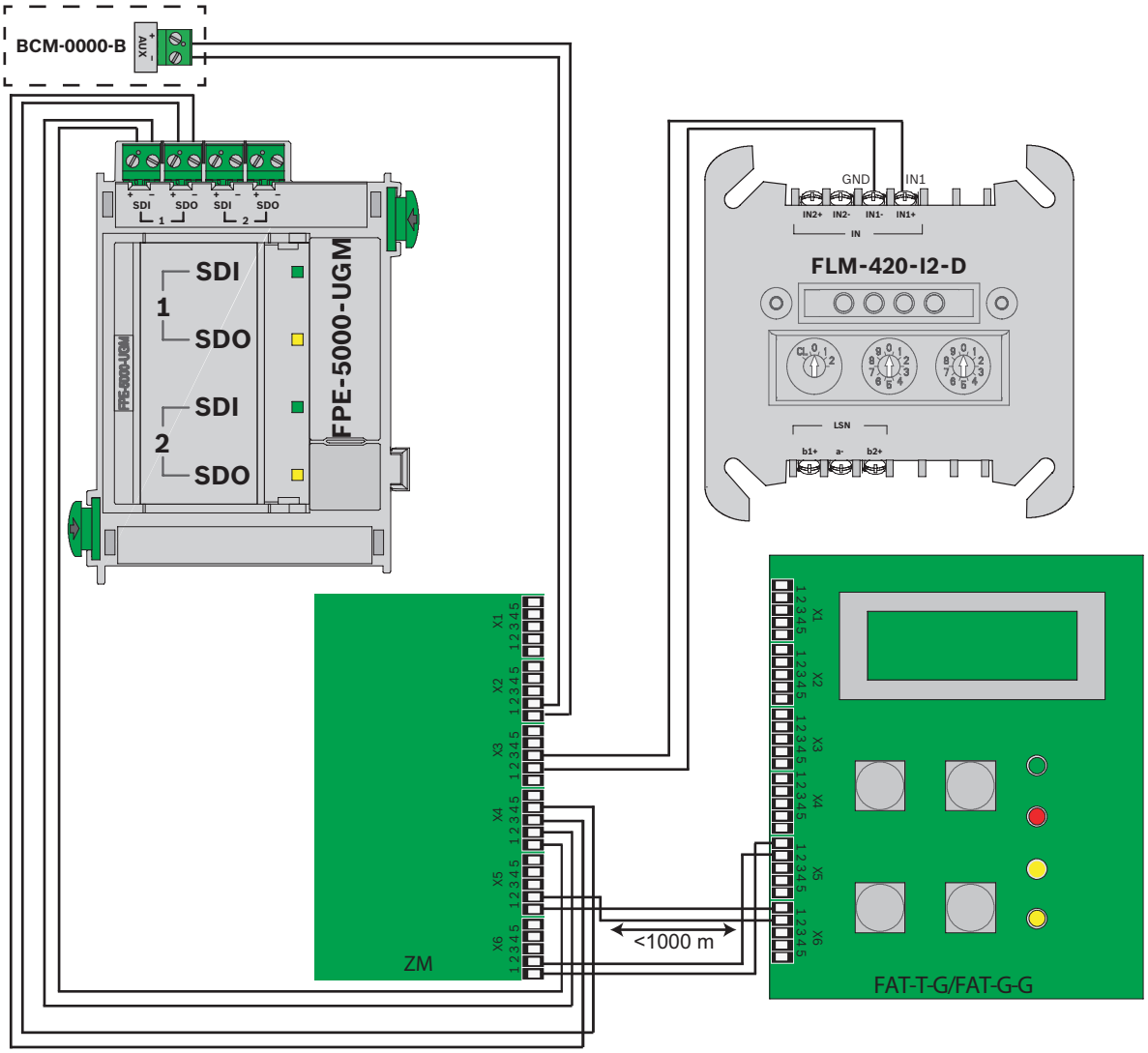
FAT-T-G/FAT-G-G
ZM

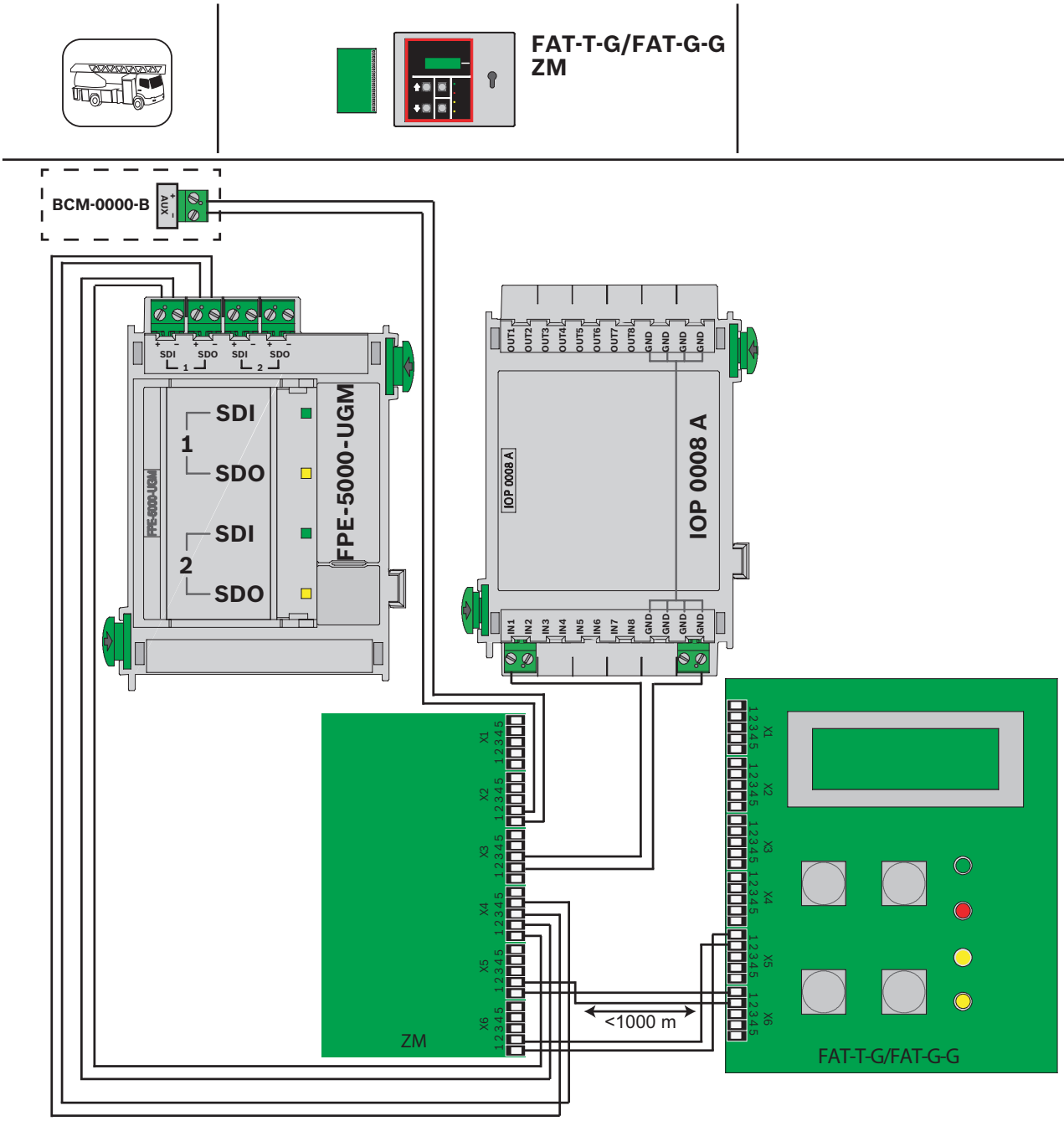






FAT-T-G/FAT-G-G ZM





3.5 Interface Modules

FLM-420/4-CON-D/S, page 136

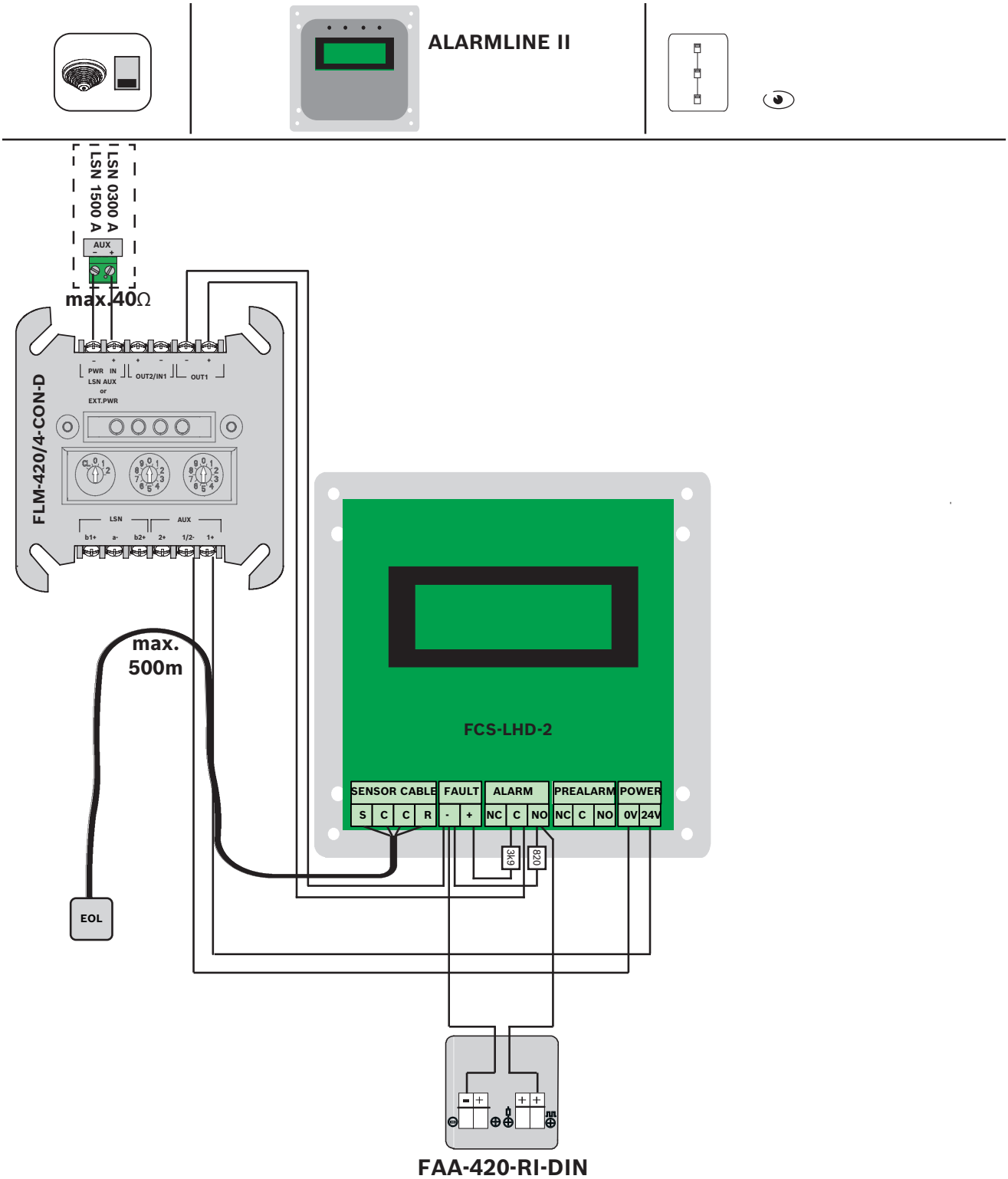
FLM-420-NAC-D/S, page 159

FLM-420-RLE-S, page 168

FLM-420-RLV1-E, page 169

FLM-420-RLV8-S, page 170

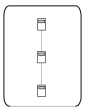
3.5.1 FLM-420/4-CON-D/S



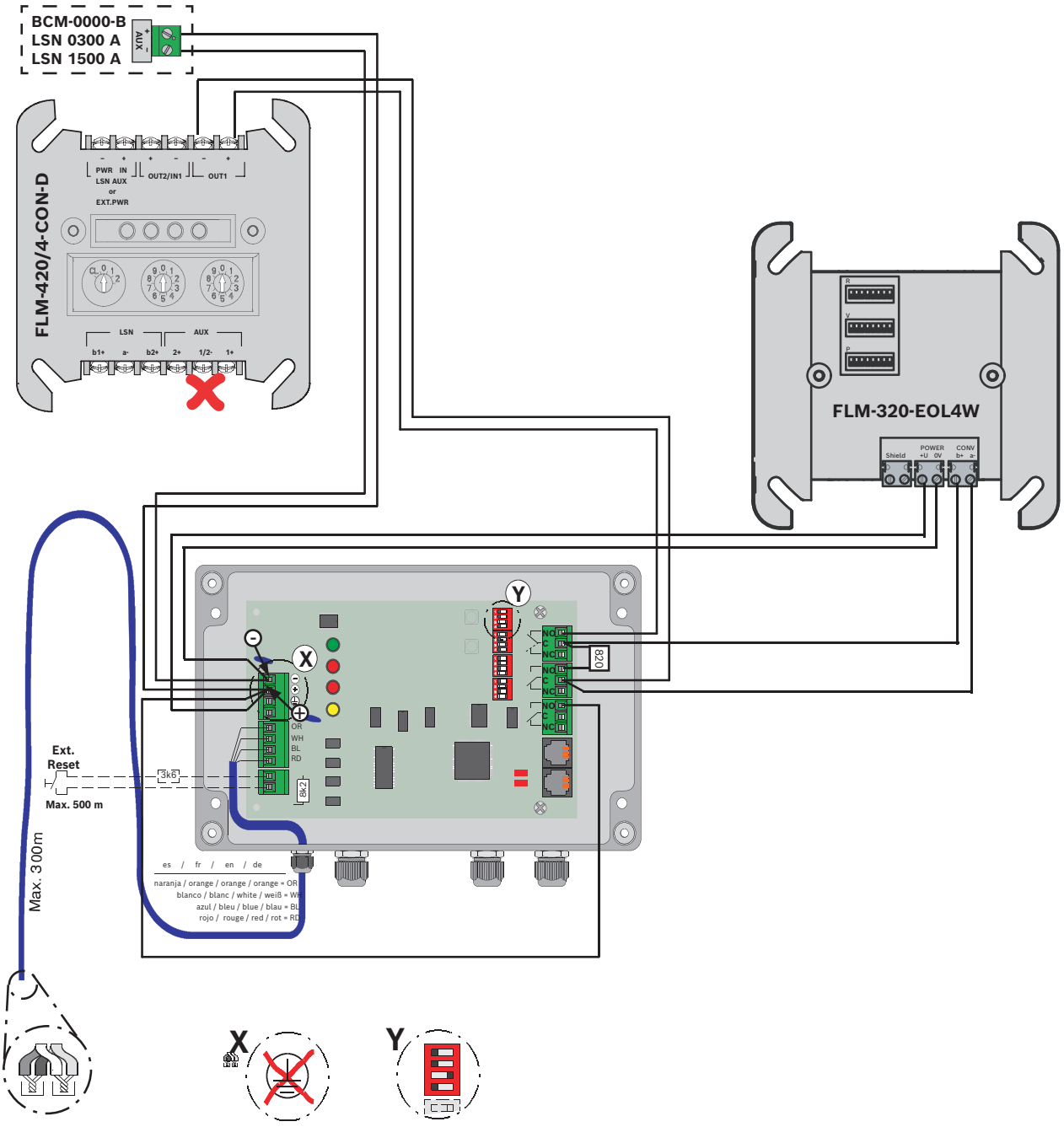




FCS-LWM-1



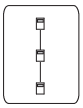
ELS


BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
FLM-320-EOL4W
POWER
+U
0V
CONV
b+
a-
Shield
Y
X
820
Ext.
Reset
3k6
8k2
Max. 500 m
Max. 300m
OR
WH
BL
RD
es / fr / en / de
naranja / orange / orange / orange = OR
blanco / blanc / white / weiß = WH
azul / bleu / blue / blau = BL
rojo / rouge / red / rot = RD
X
Y

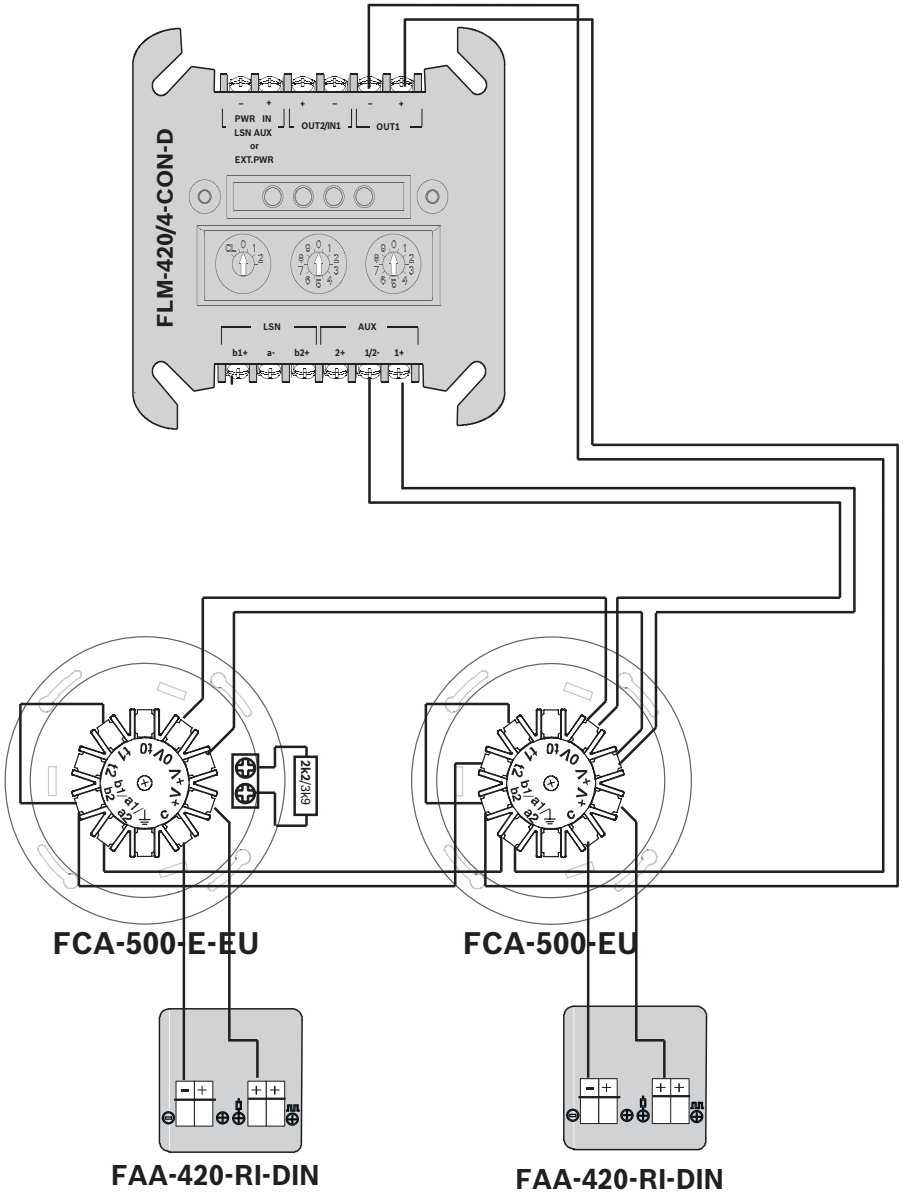




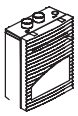
FCP-500



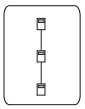



FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
FCA-500-E-EU
FCA-500-EU
FAA-420-RI-DIN
FAA-420-RI-DIN

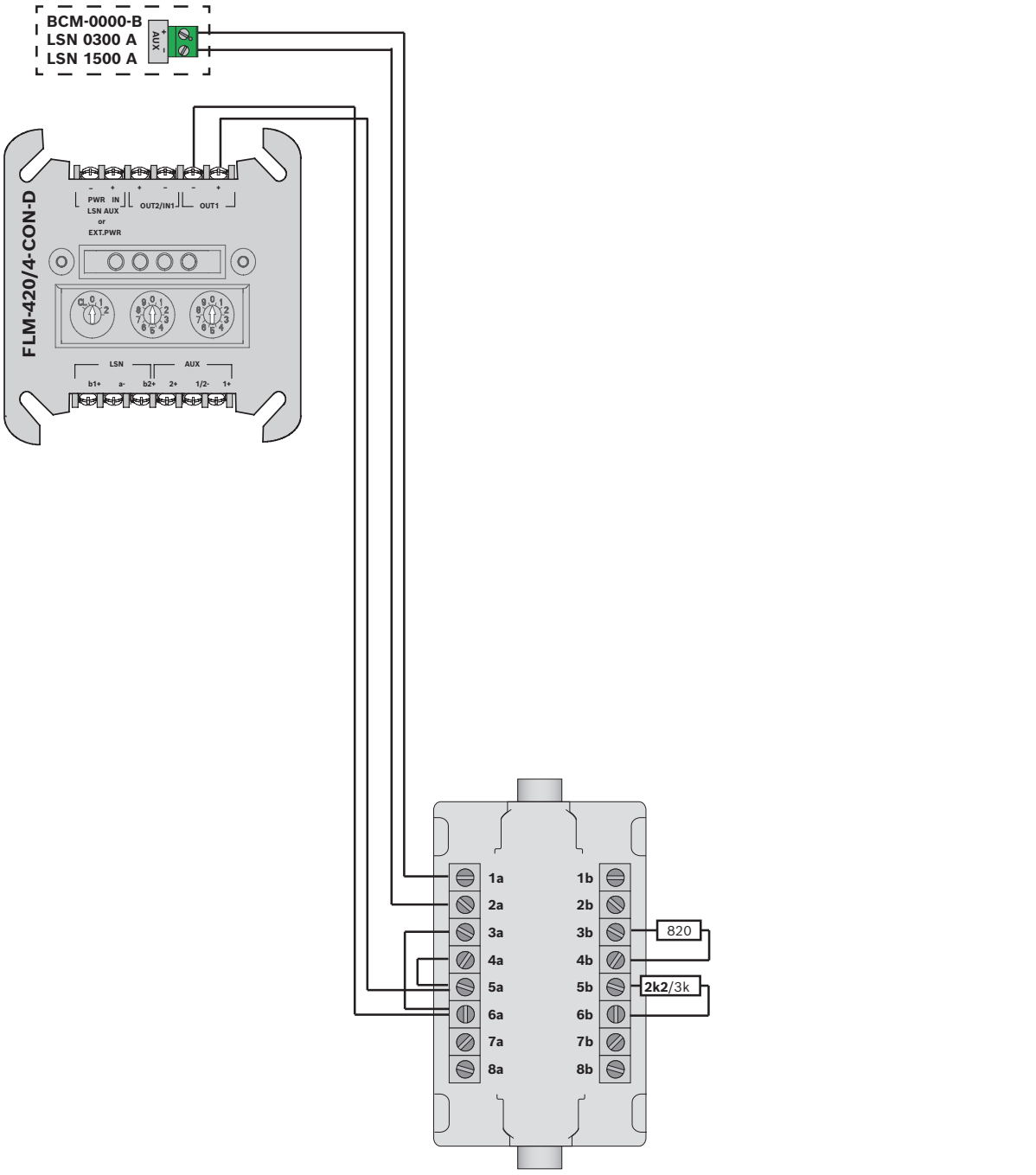




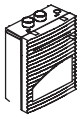
FCS-320-TM Series



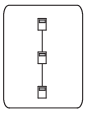




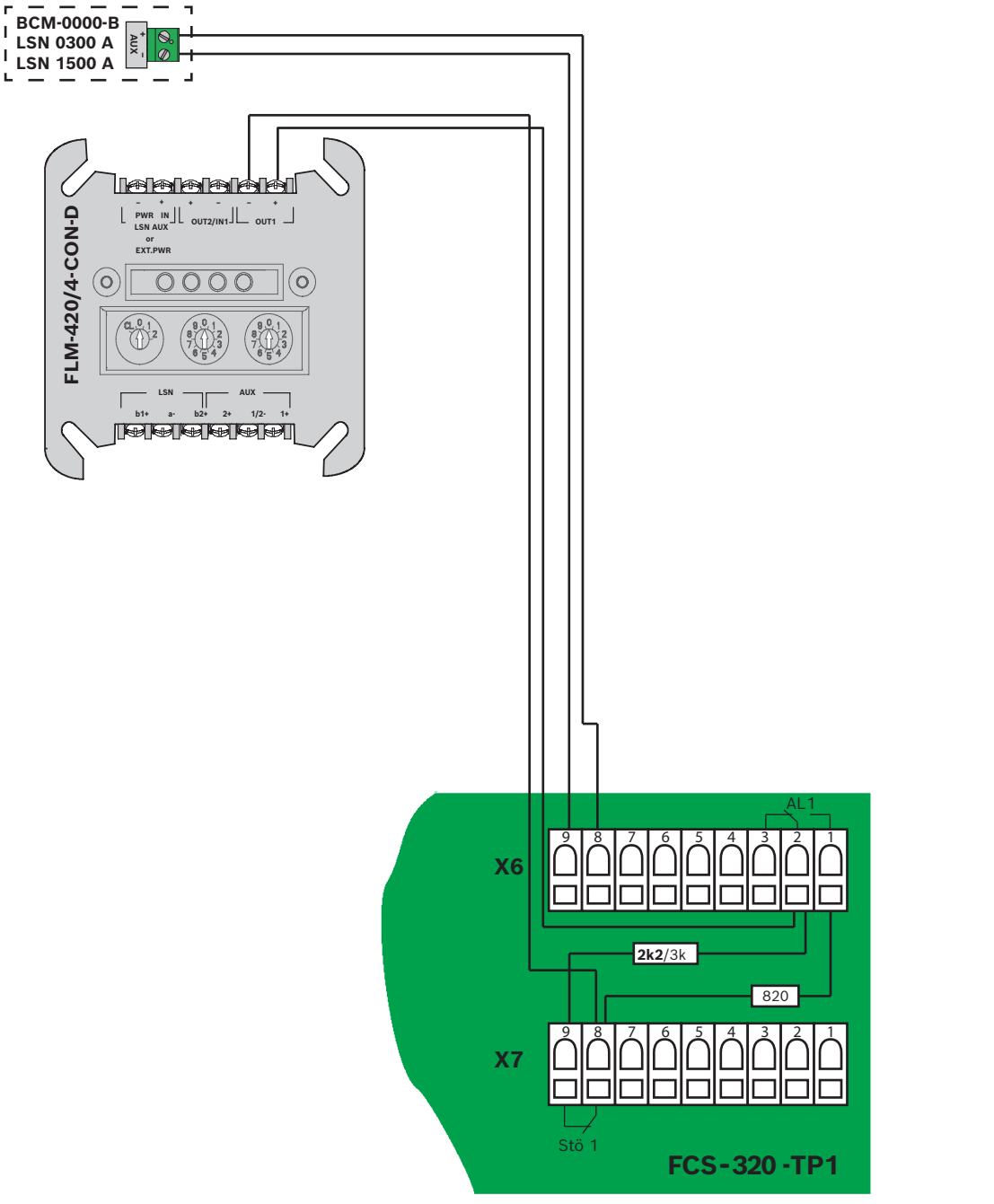


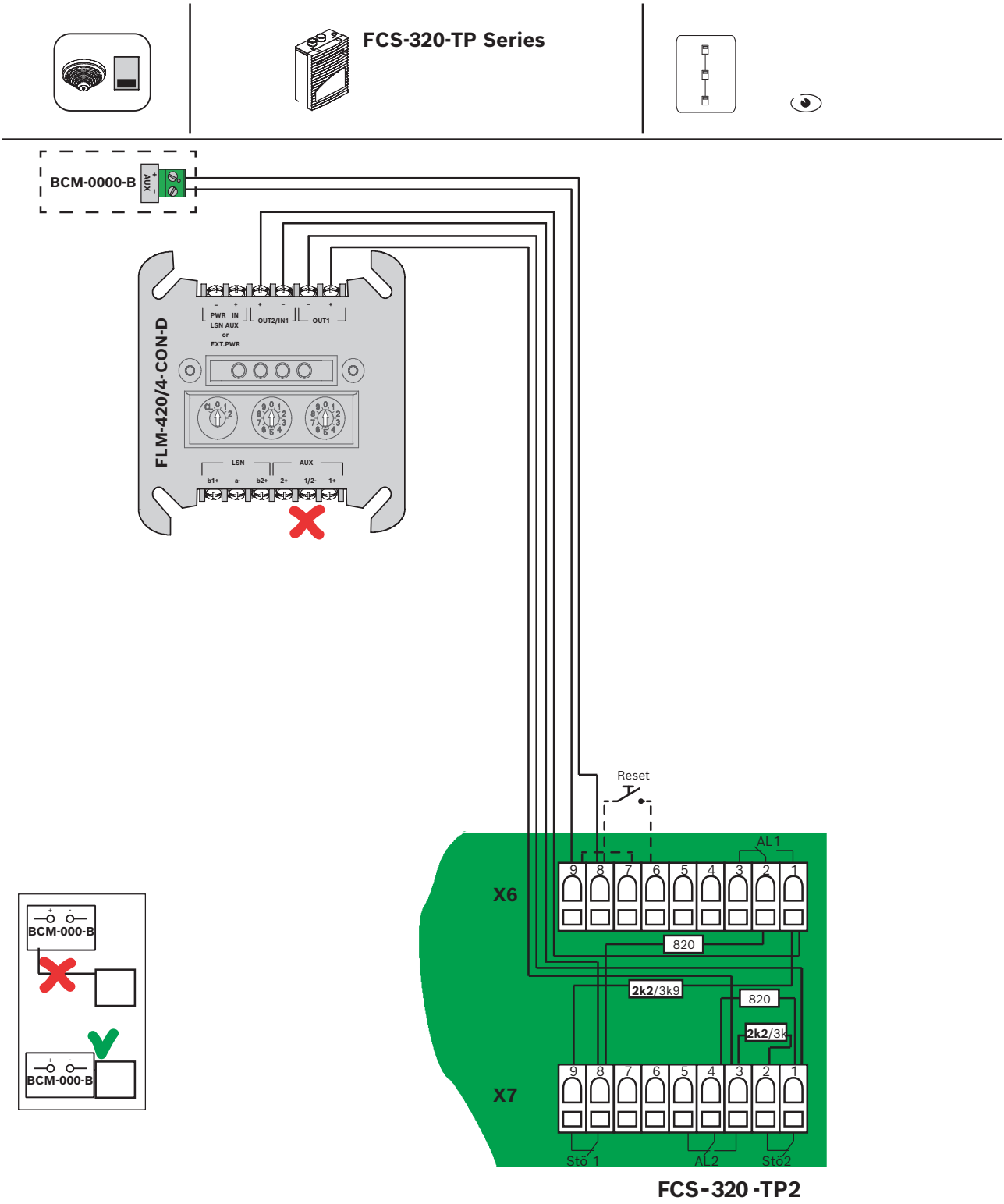


FCS-320-TP Series

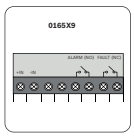




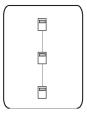


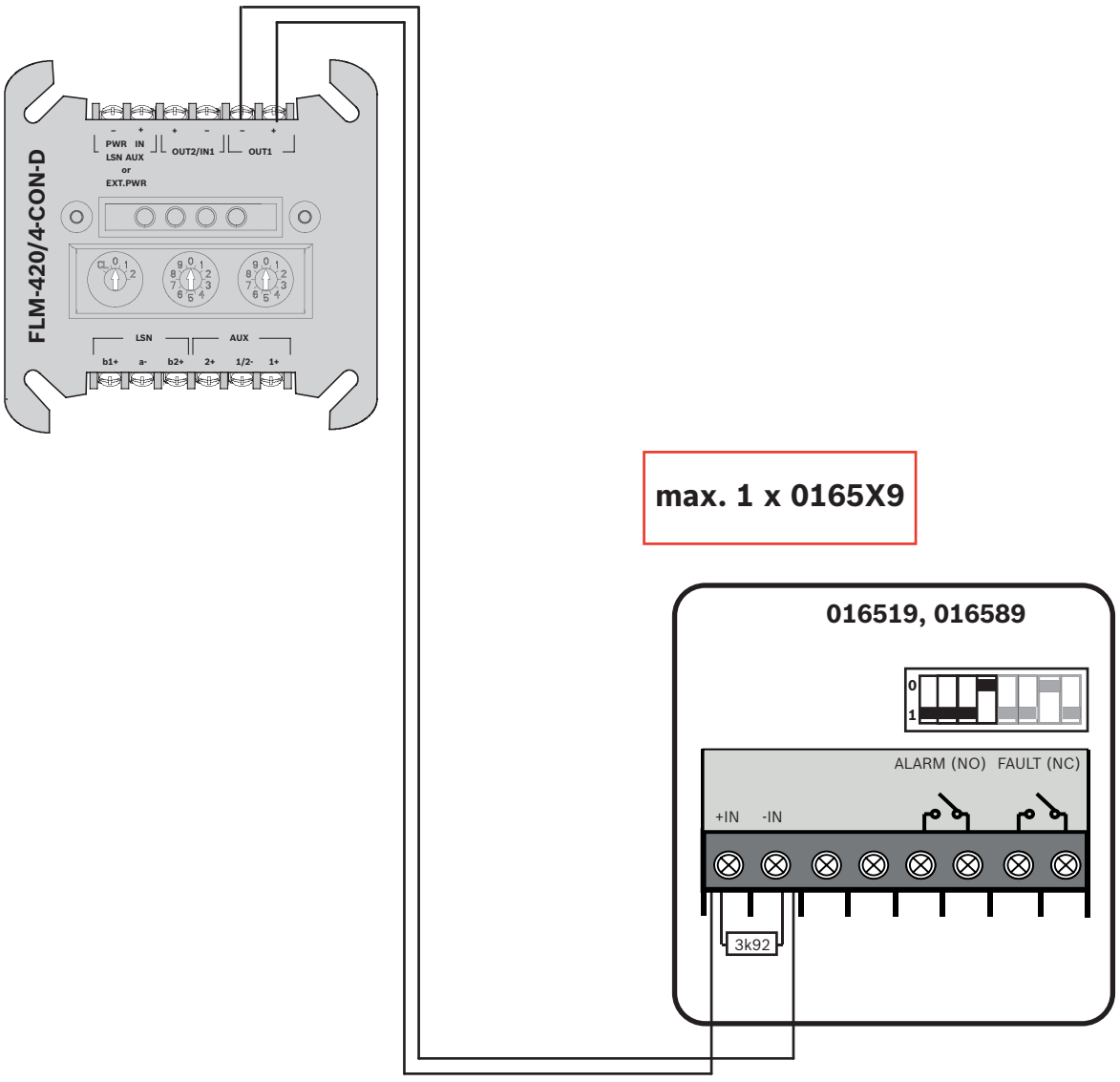

FCS-320-TP Series
BCM-0000-B
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
Reset
AL1
X6
9 8 7 6 5 4 3 2 1
820
2k2/3k9
820
2k2/3k
X7
9 8 7 6 5 4 3 2 1
Sto 1
AL2
Sto2
BCM-000-B
BCM-000-B
FCS-320-TP2



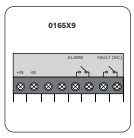


016519, 016589
IR3 Flame Detector

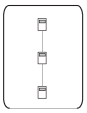


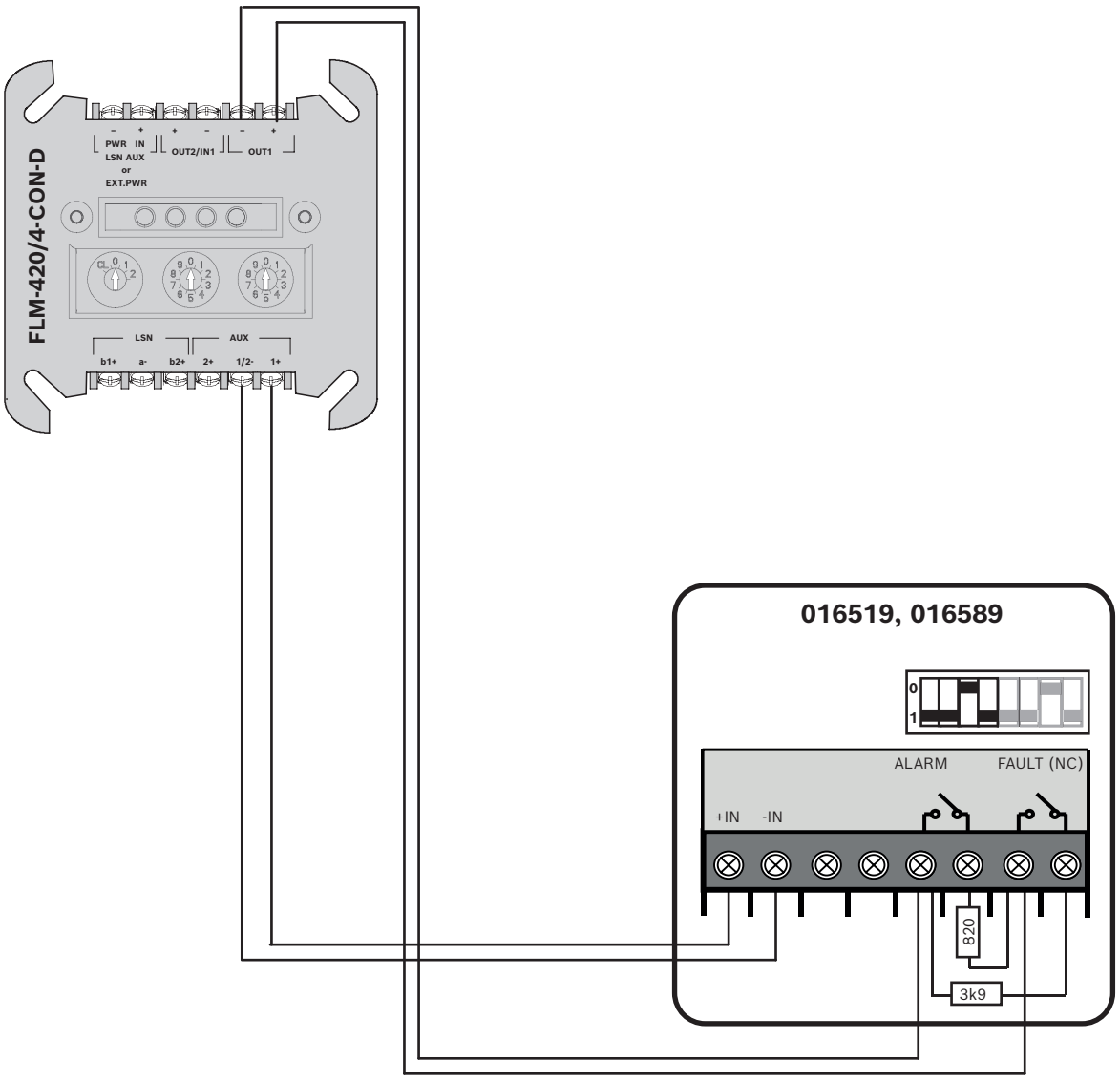




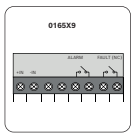


016519, 016589
IR3 Flame Detector

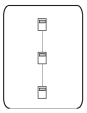


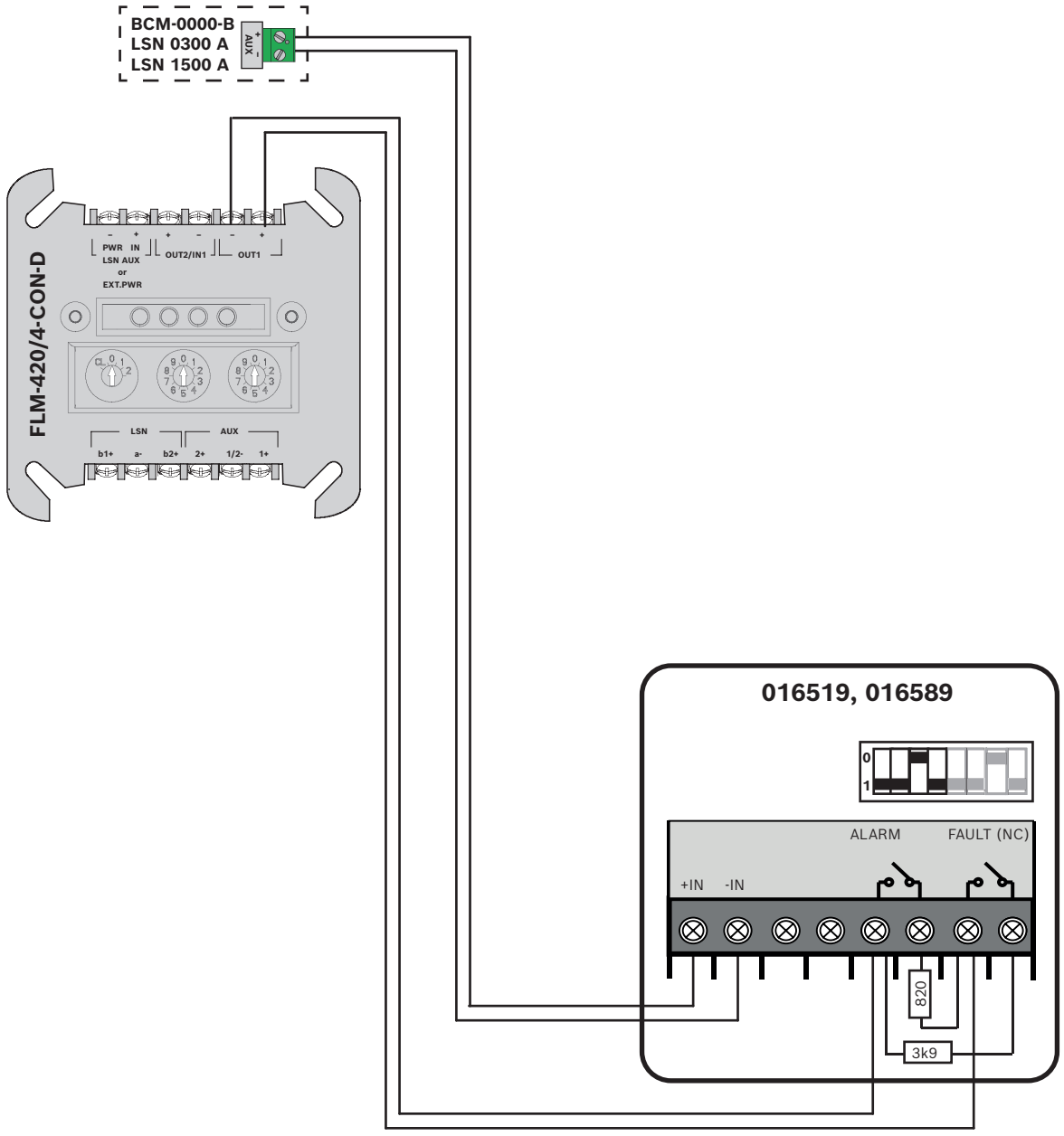




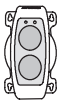


016519, 016589
IR3 Flame Detector

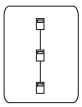




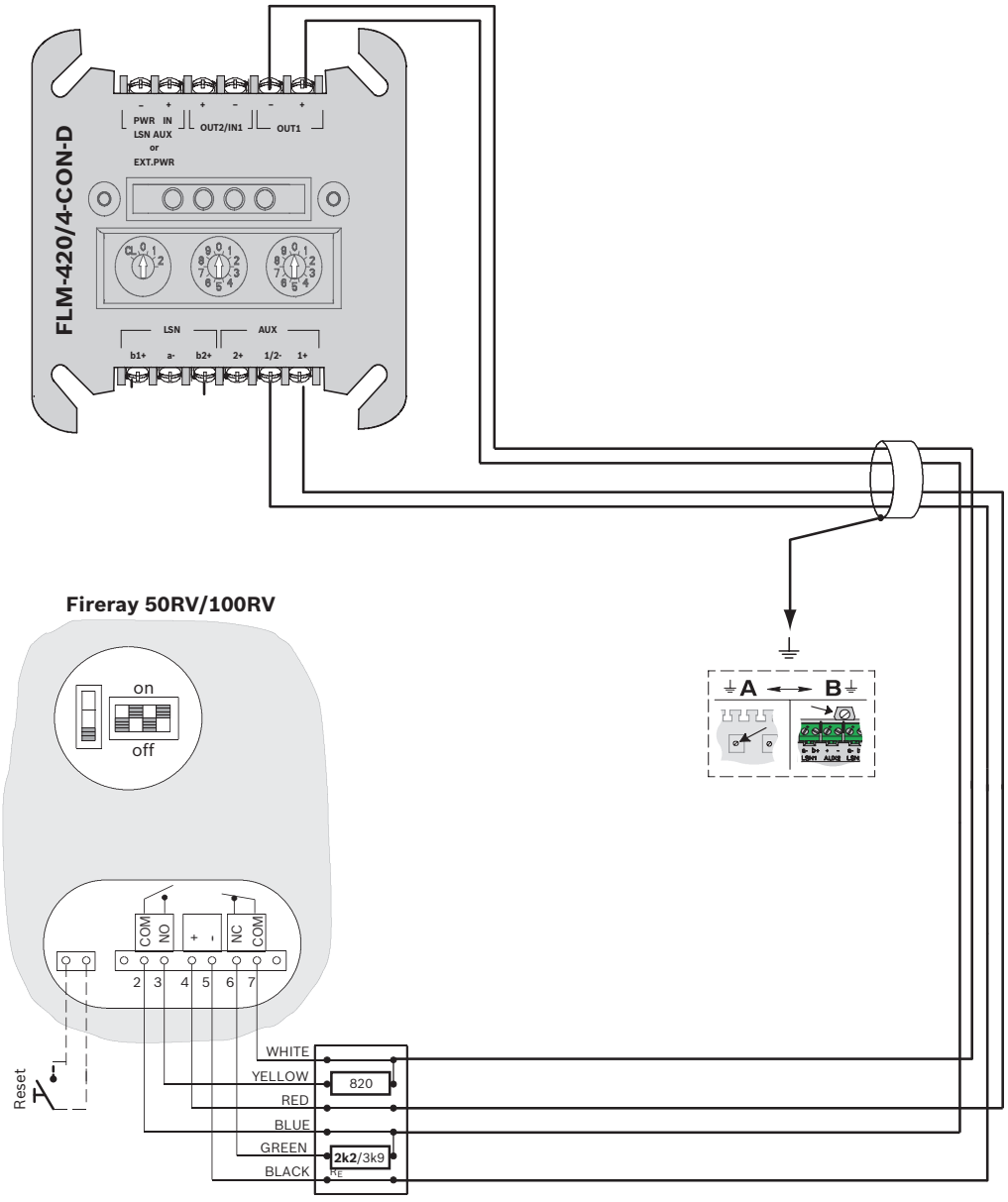




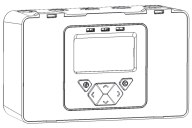
Fireray 50RV
Fireray 100RV







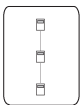




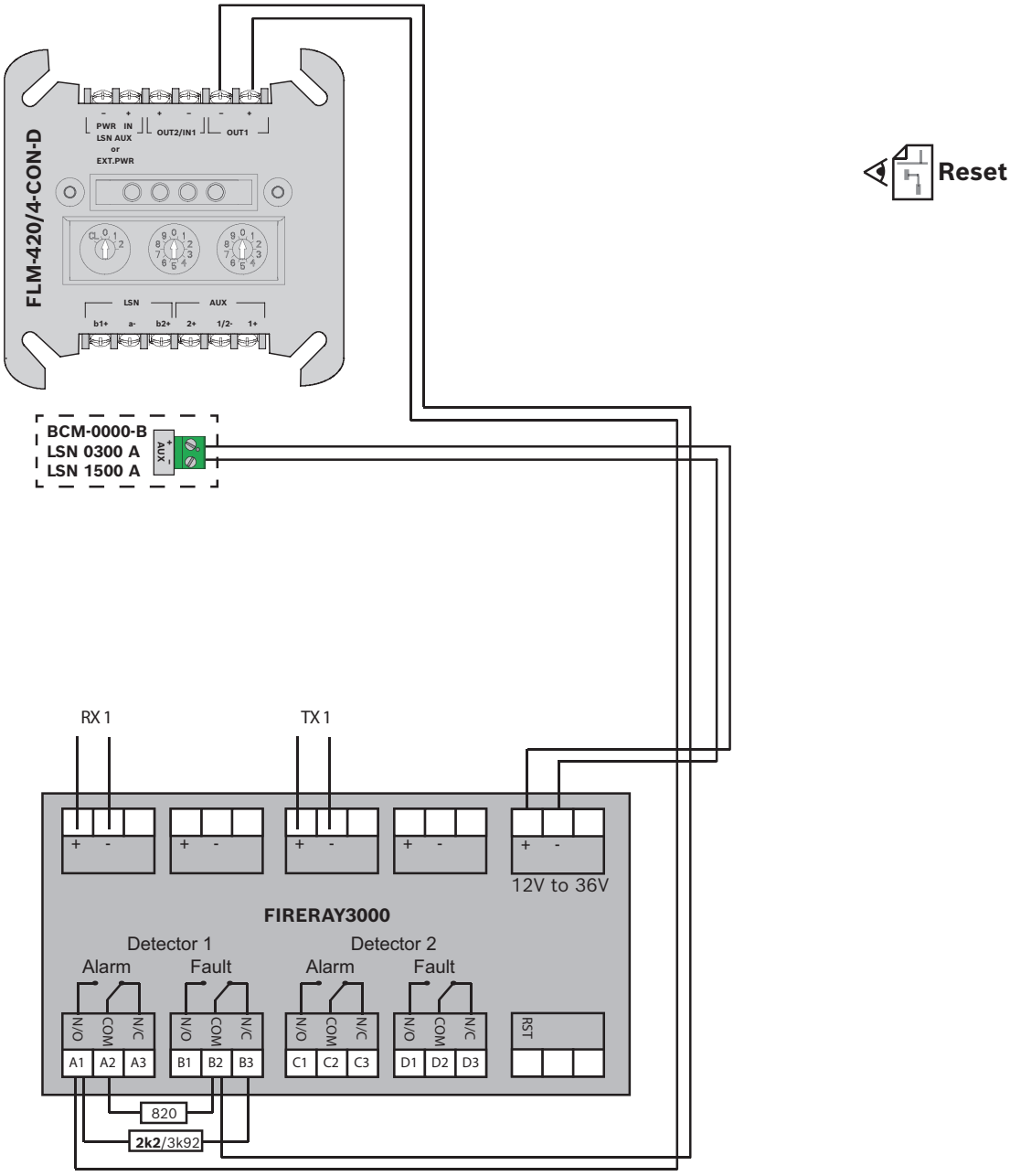
FIRERAY3000

1 x

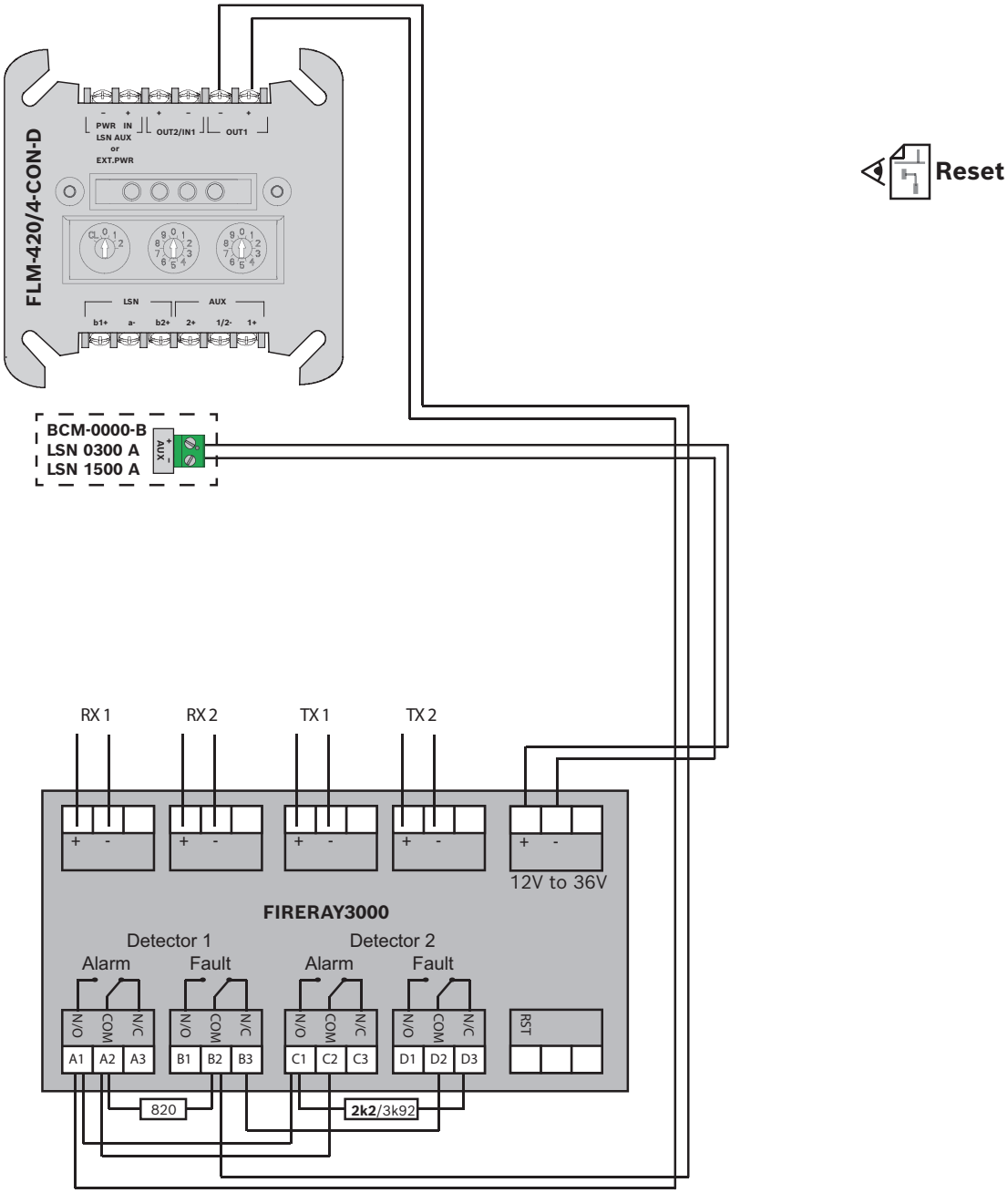




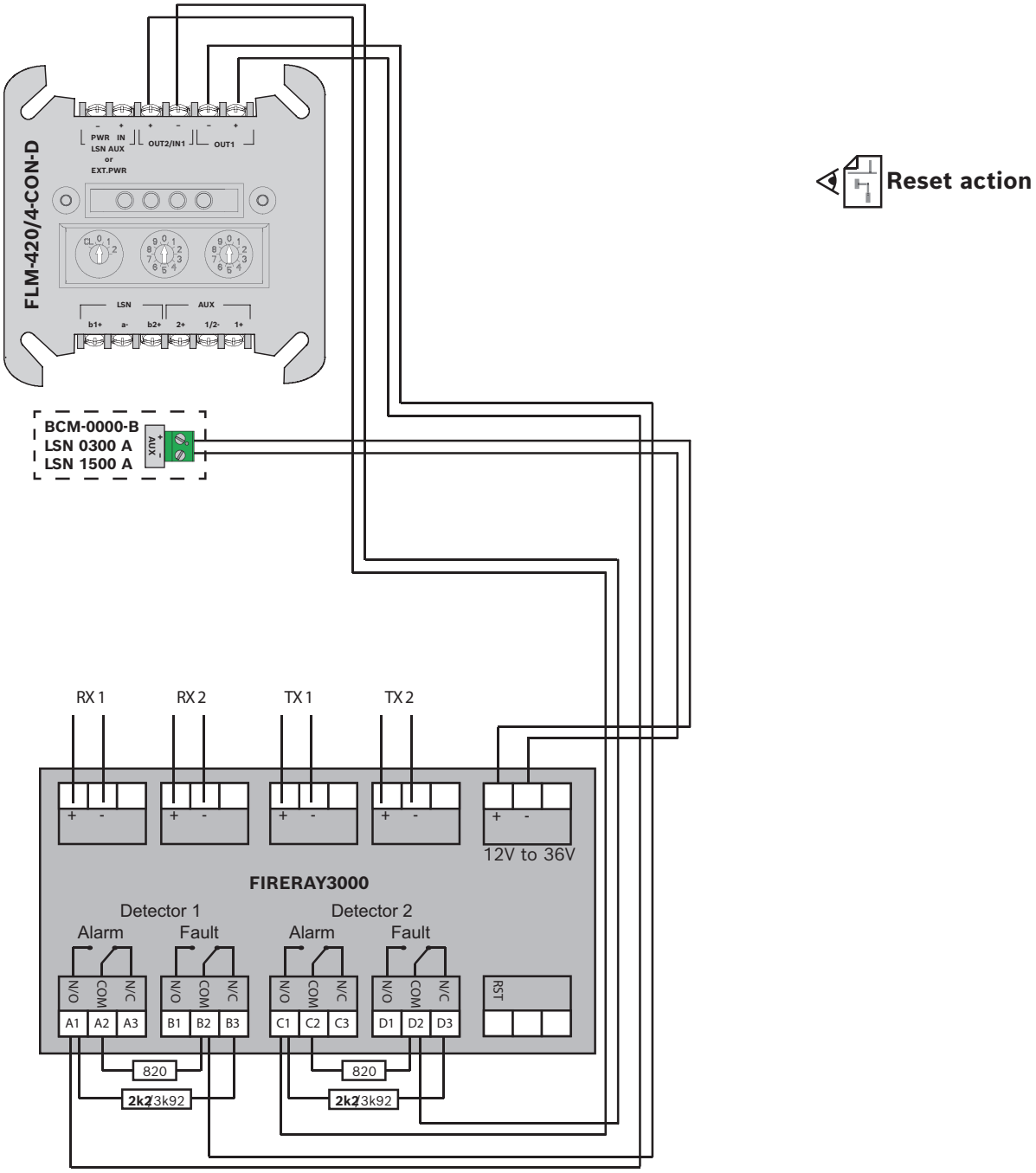





FIRERAY3000
2 x
OUT1


FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
Reset
RX 1
RX 2
TX 1
TX 2
12V to 36V
FIRERAY3000
Detector 1
Alarm
Fault
Detector 2
Alarm
Fault
N/O
COM
N/C
A1
A2
A3
B1
B2
B3
C1
C2
C3
D1
D2
D3
RST
820
2k2/3k92


FIRERAY3000
2 x
OUT1+2

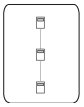

FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
Reset action
RX 1
RX 2
TX 1
TX 2
12V to 36V
FIRERAY3000
Detector 1
Alarm
Fault
Detector 2
Alarm
Fault
N/O
COM
N/C
A1
A2
A3
B1
B2
B3
C1
C2
C3
D1
D2
D3
RST
820
2k2
3k92



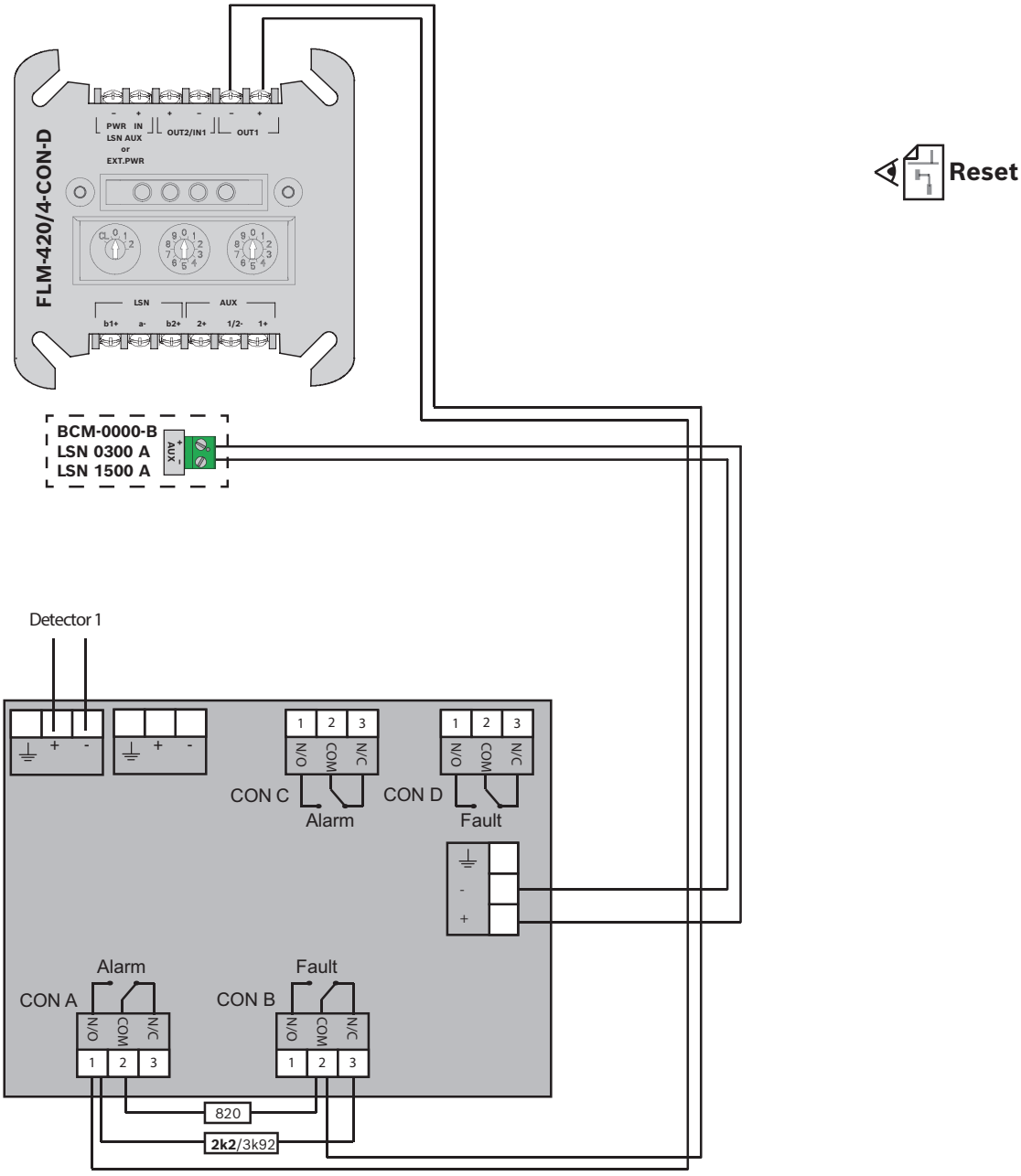


FIRERAY5000

1 x





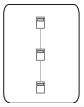




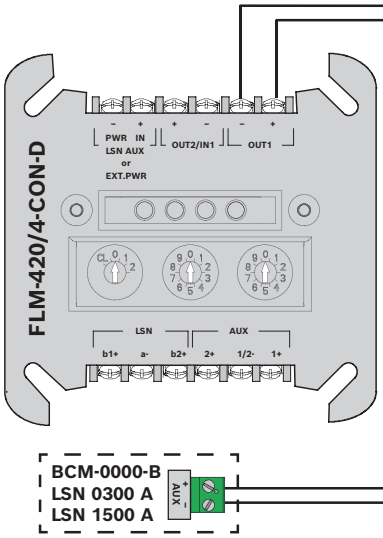


FIRERAY5000

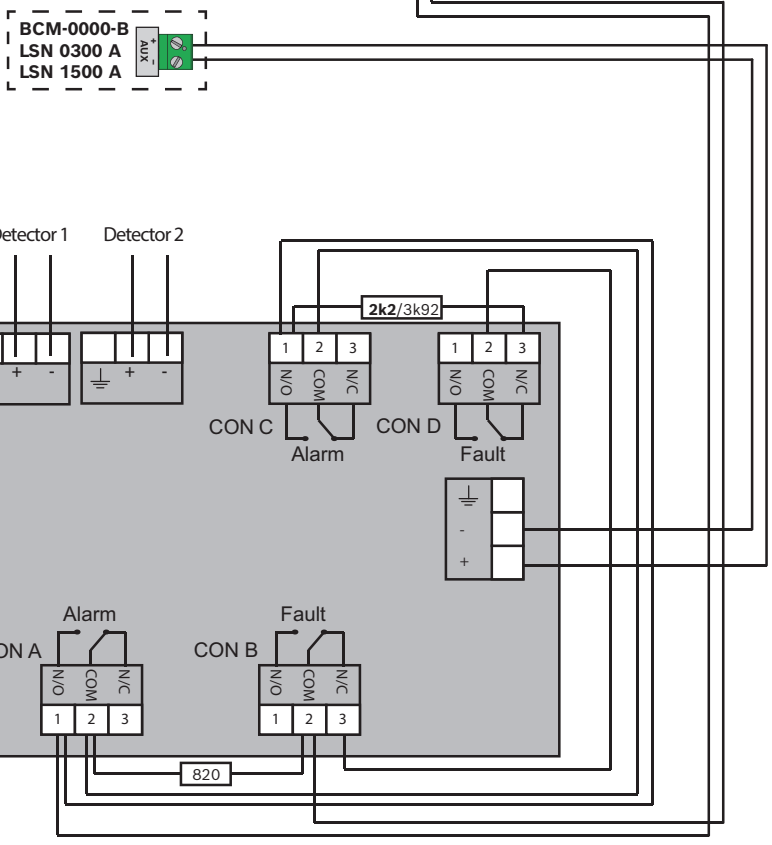
2 x **OUT1**



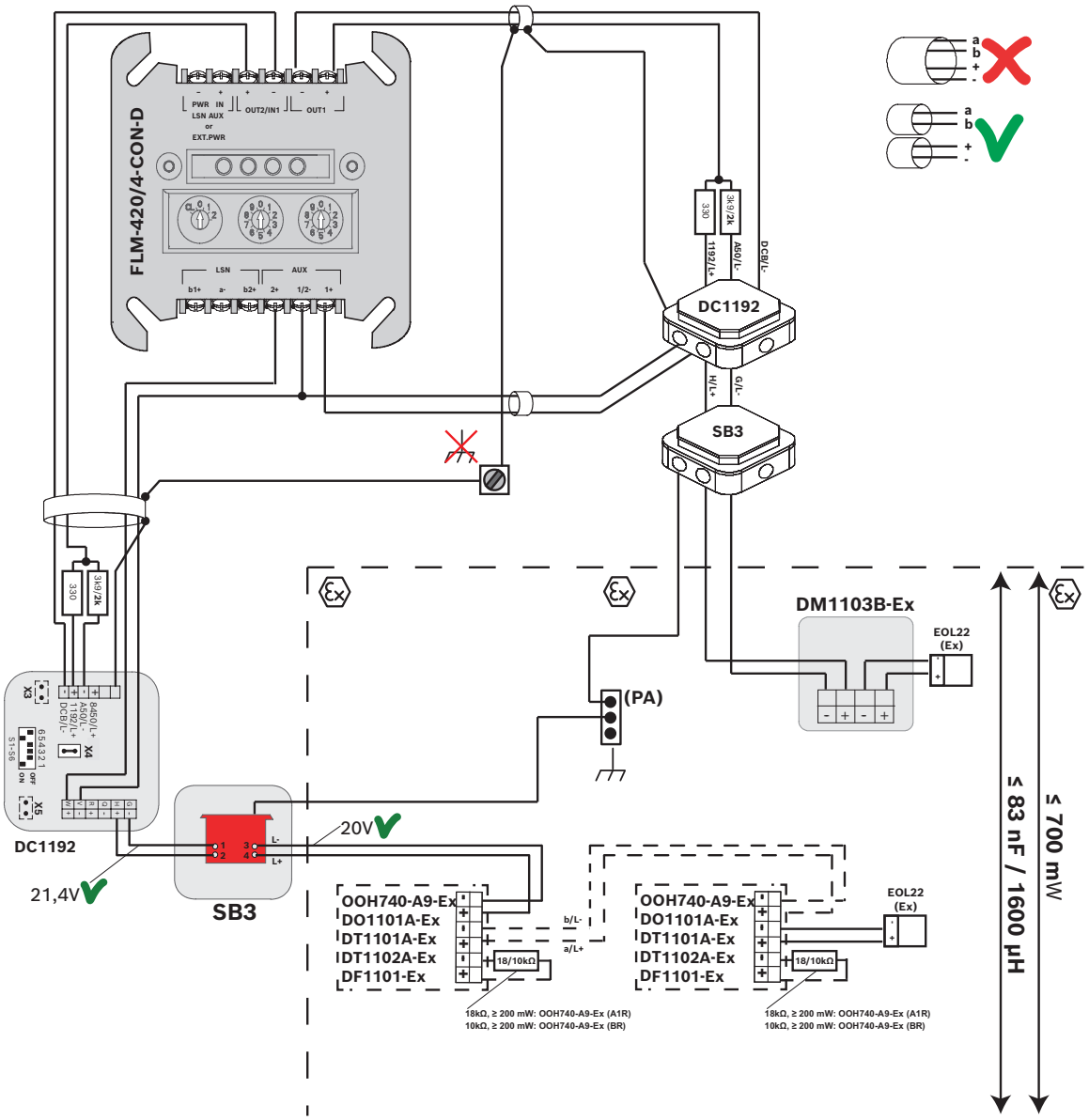


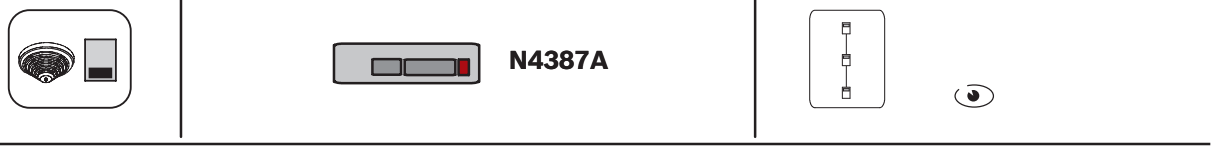


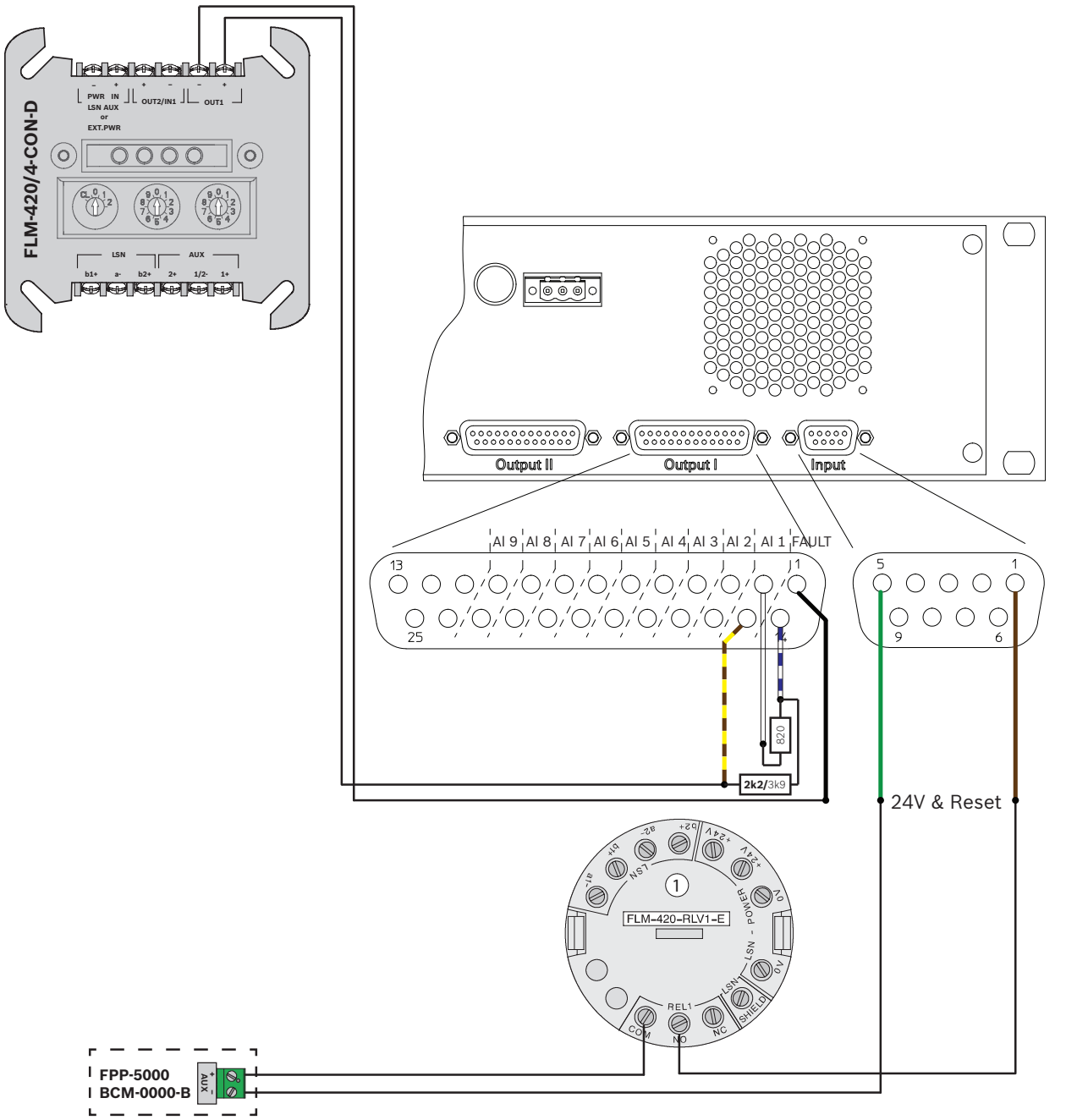




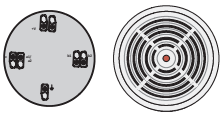
DC1192, SB3
OOH740-A9-Ex
DO1101A-Ex
DT1101A-Ex-
/DT1102A-Ex
DF1101-Ex



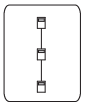

N4387A

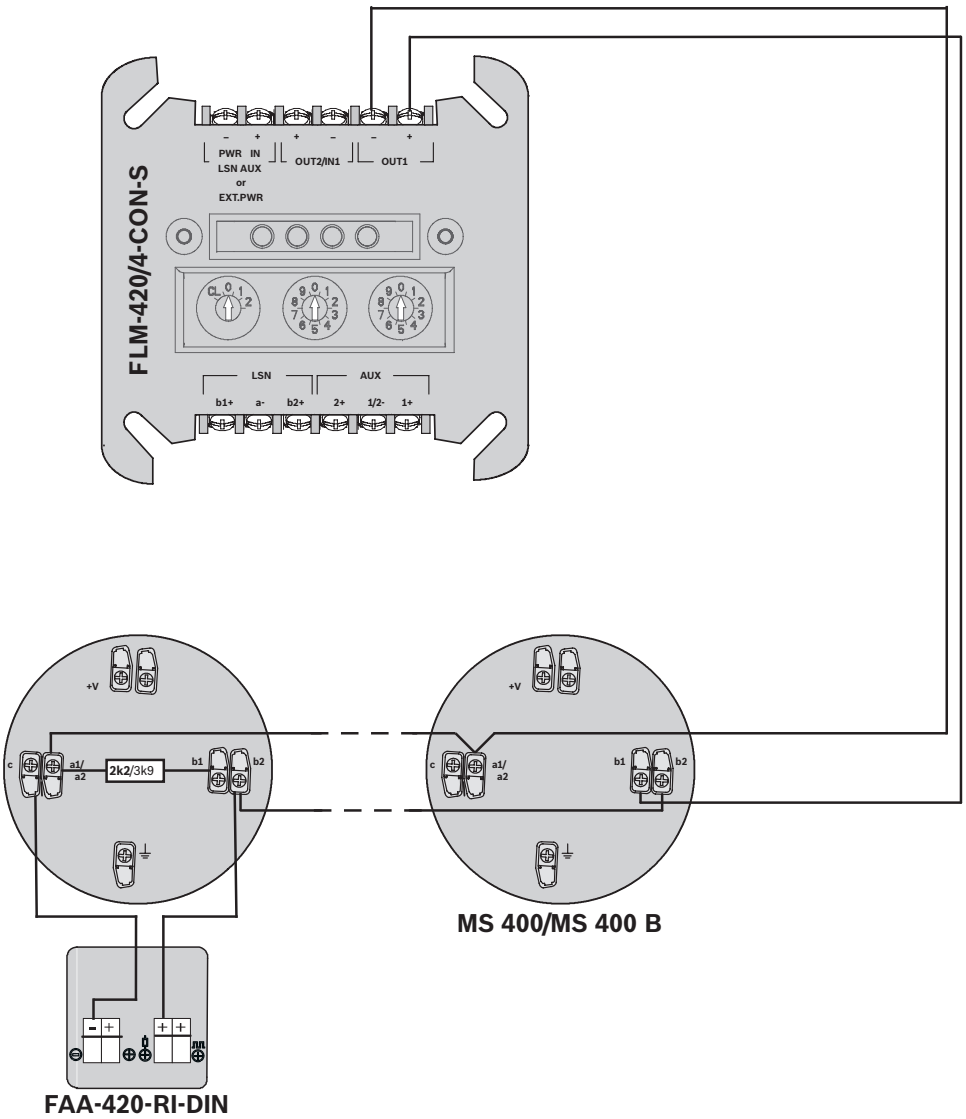

FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
Output II
Output I
Input
AI 9 AI 8 AI 7 AI 6 AI 5 AI 4 AI 3 AI 2 AI 1 FAULT
13
1
25
14
5
1
9
6
820
2k2/3k9
24V & Reset
FLM-420-RLV1-E
POWER
LSN
REL1
COM
NO
NC
SHIELD
FPP-5000
BCM-0000-B
AUX

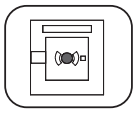




MSS 400, MSS 400 B
FCH-320-T320
FCH-T320-R470, FCH-T320-FSA
FCP-O320, FCP-O320-R470
FCP-OC320, FCP-OC320-R470
FCP-OT320, FCP-OT320-R470

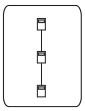


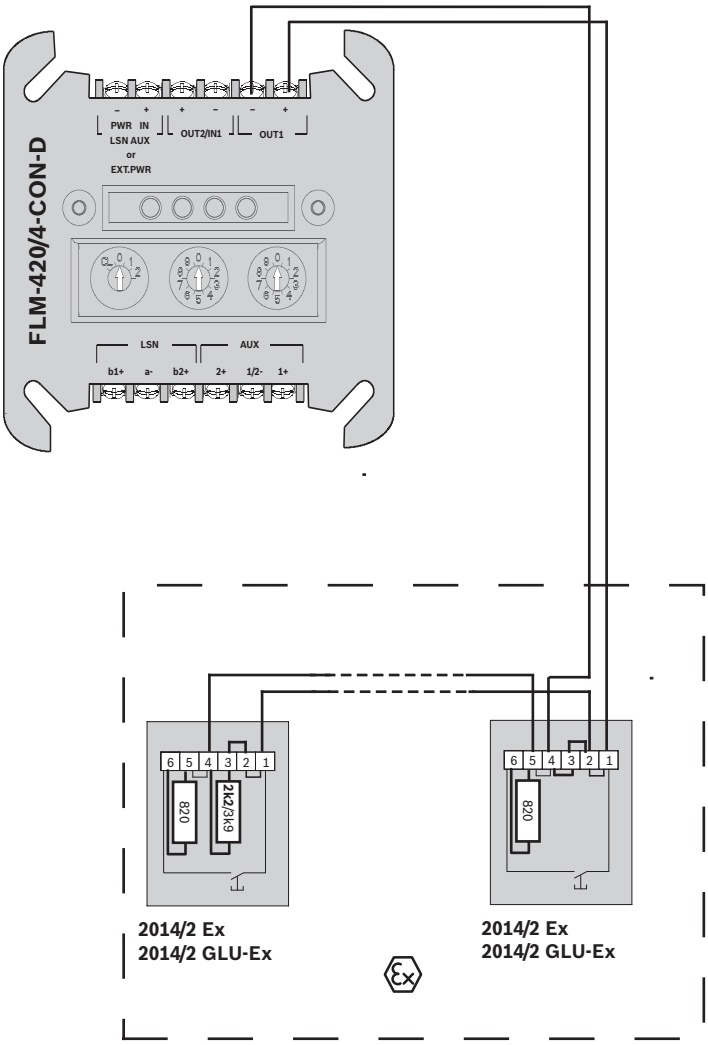


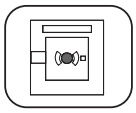


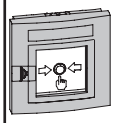


2014/2 Ex
2014/2 GLU-Ex

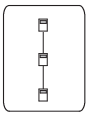


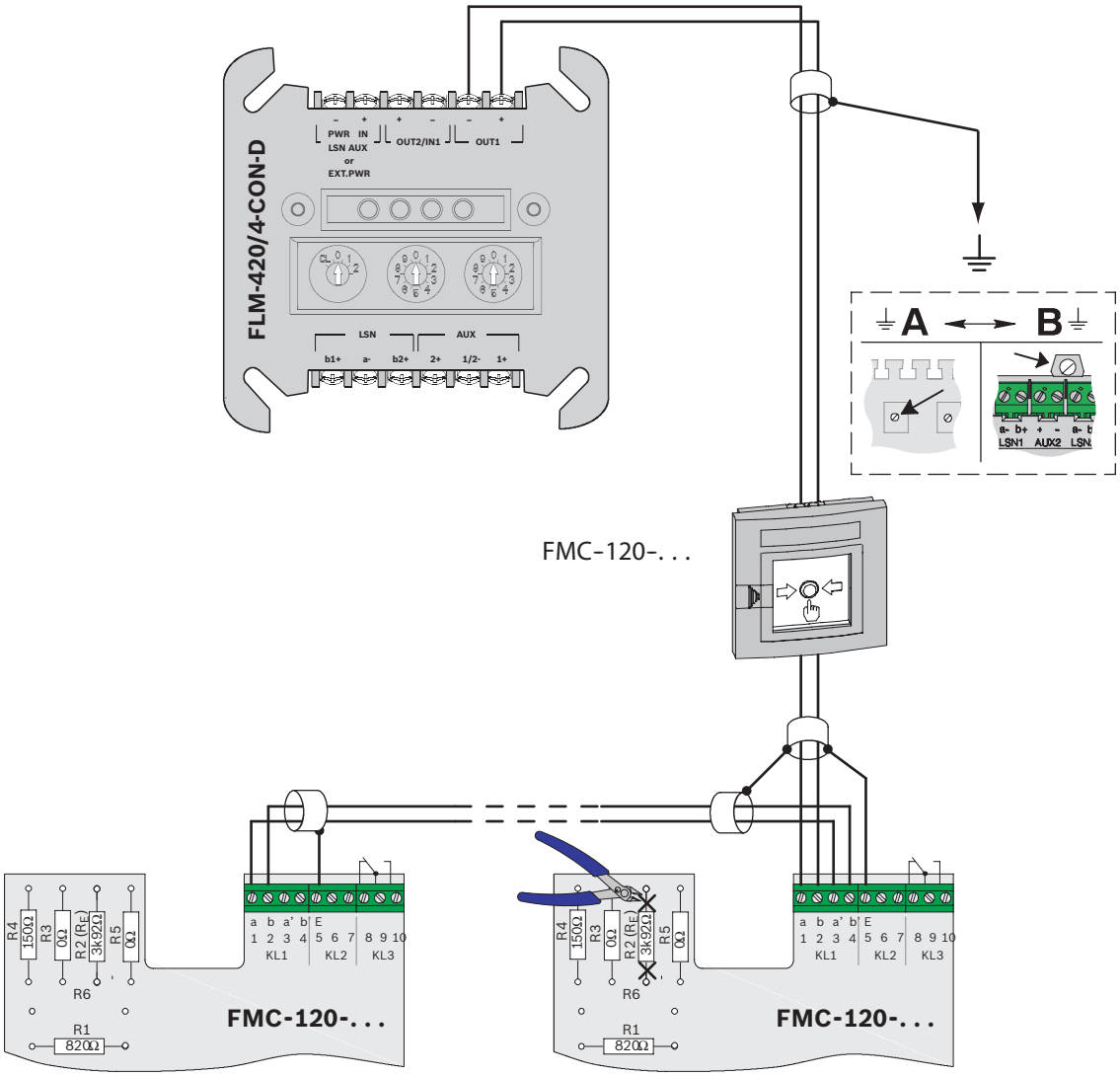


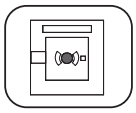




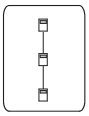
FMC-120-DKM-G-R FMC-120-DKM-G-Y
FMC-120-DKM-H-R FMC-120-EST-G-B
FMC-120-DKM-G-B
FMC-120-DKM-H-B

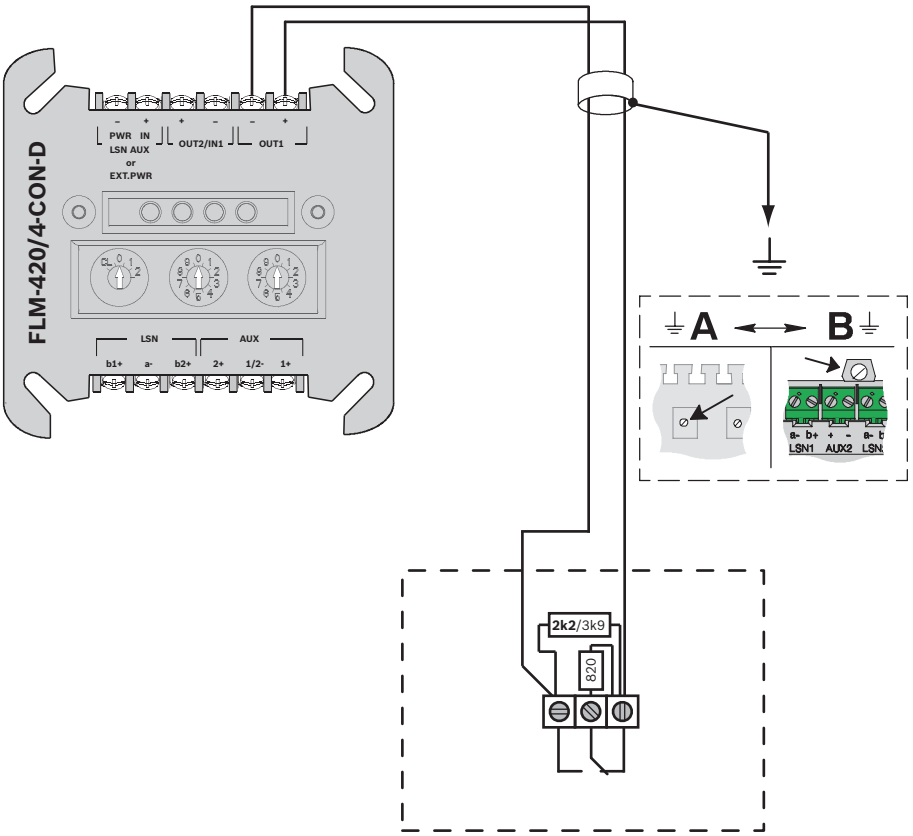




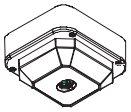


NO

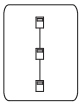



FLM-420/4-CON-D
PWR LSN AUX or EXT.PWR
IN
OUT2/IN1
OUT1
LSN
AUX
b1+ a- b2+ 2+ 1/2- 1+
A
B
a- b+ + - a- b
LSN1 AUX2 LSN
2k2/3k9
820

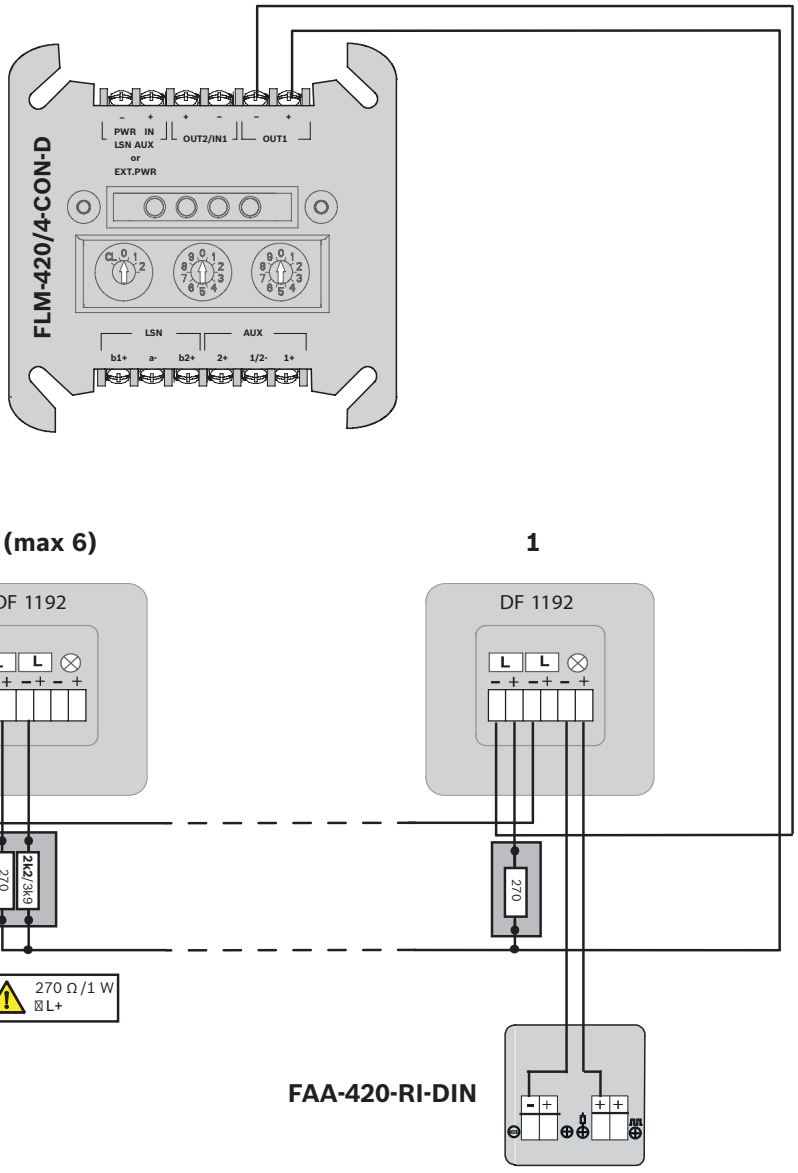


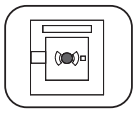


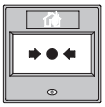
DF 1192



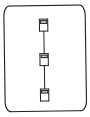



FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
n (max 6)
1
DF 1192
DF 1192
L
L
270
2K2/3K9
270
270 Ω/1 W
L+
FAA-420-RI-DIN

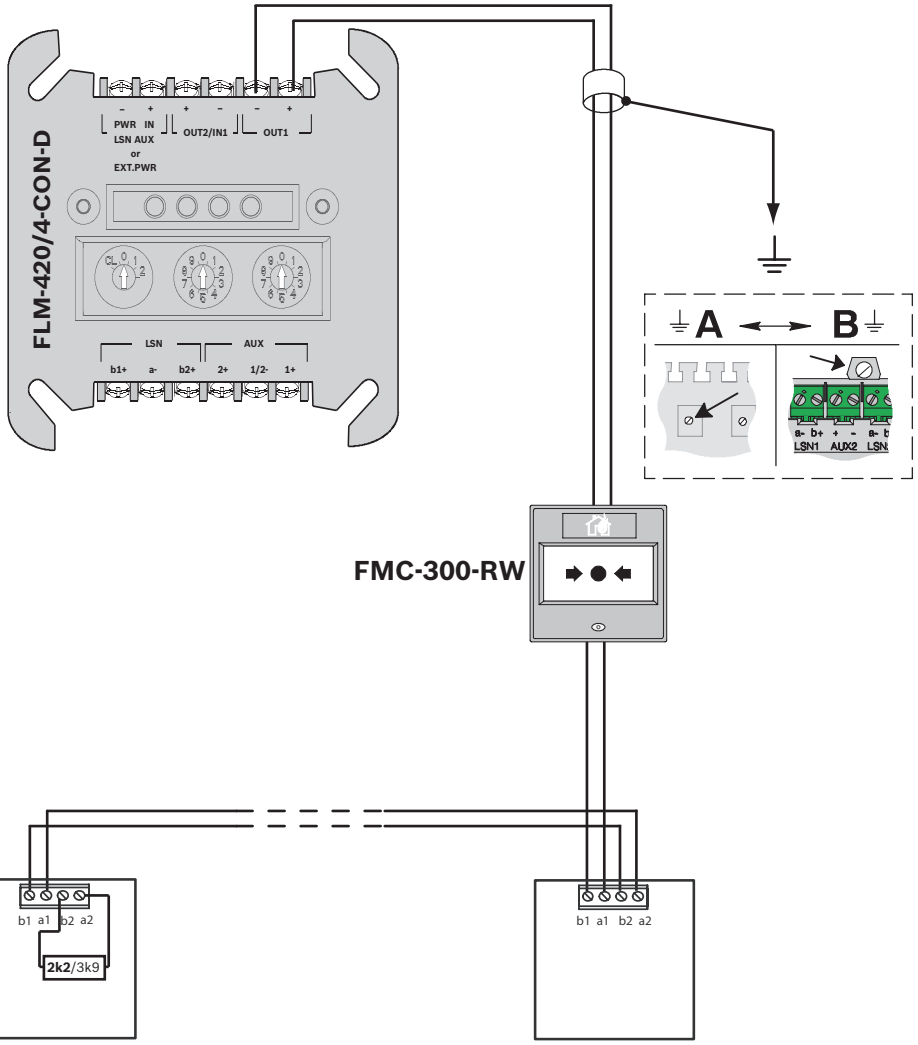




FMC-300-RW

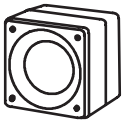




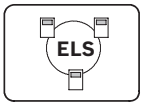

FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+ a- b2+ 2+ 1/2- 1+
A
B
a- b+ + - a- b-
LSN1 AUX2 LSN
FMC-300-RW
b1 a1 b2 a2
2k2/3k9
b1 a1 b2 a2

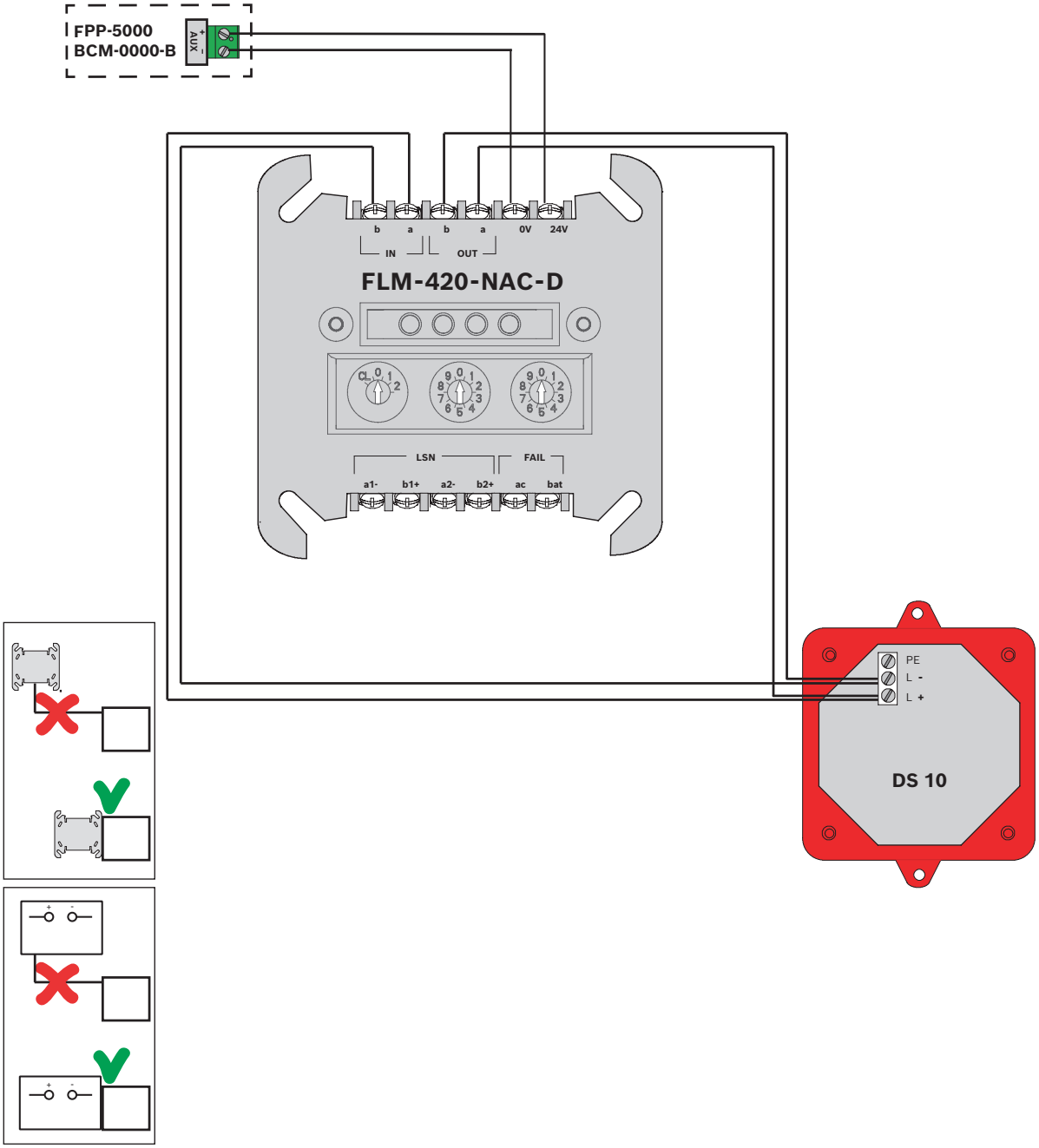
3.5.2 FLM-420-NAC-D/S



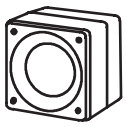


DS 10

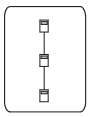


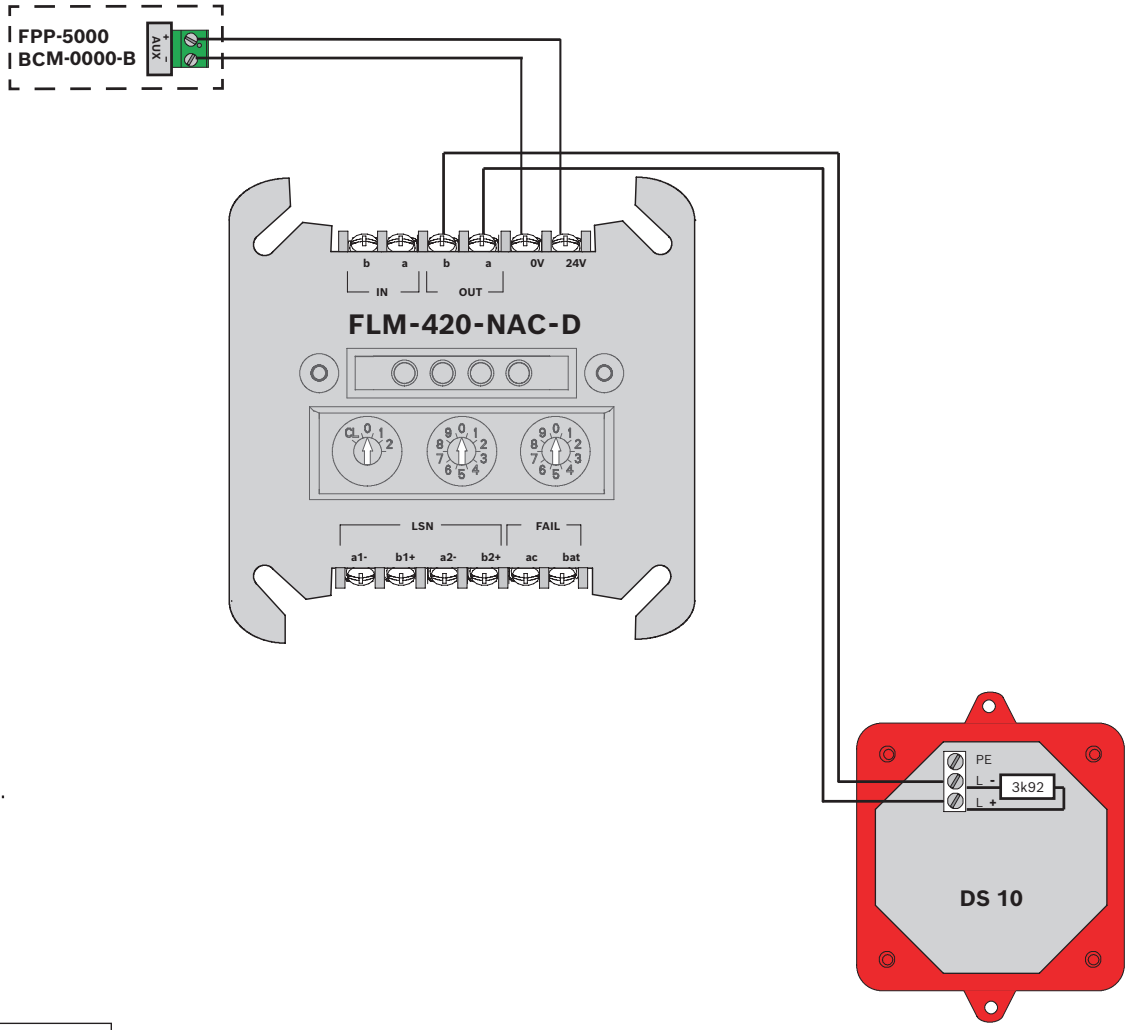


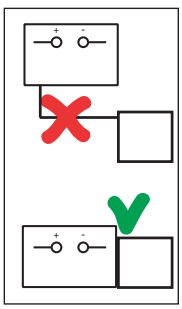




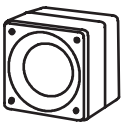
DS 10



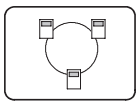

FPP-5000
BCM-0000-B
AUX
+
-
b
a
b
a
0V
24V
IN
OUT
FLM-420-NAC-D
LSN
FAIL
a1-
b1+
a2-
b2+
ac
bat
PE
L -
L +
3k92
DS 10

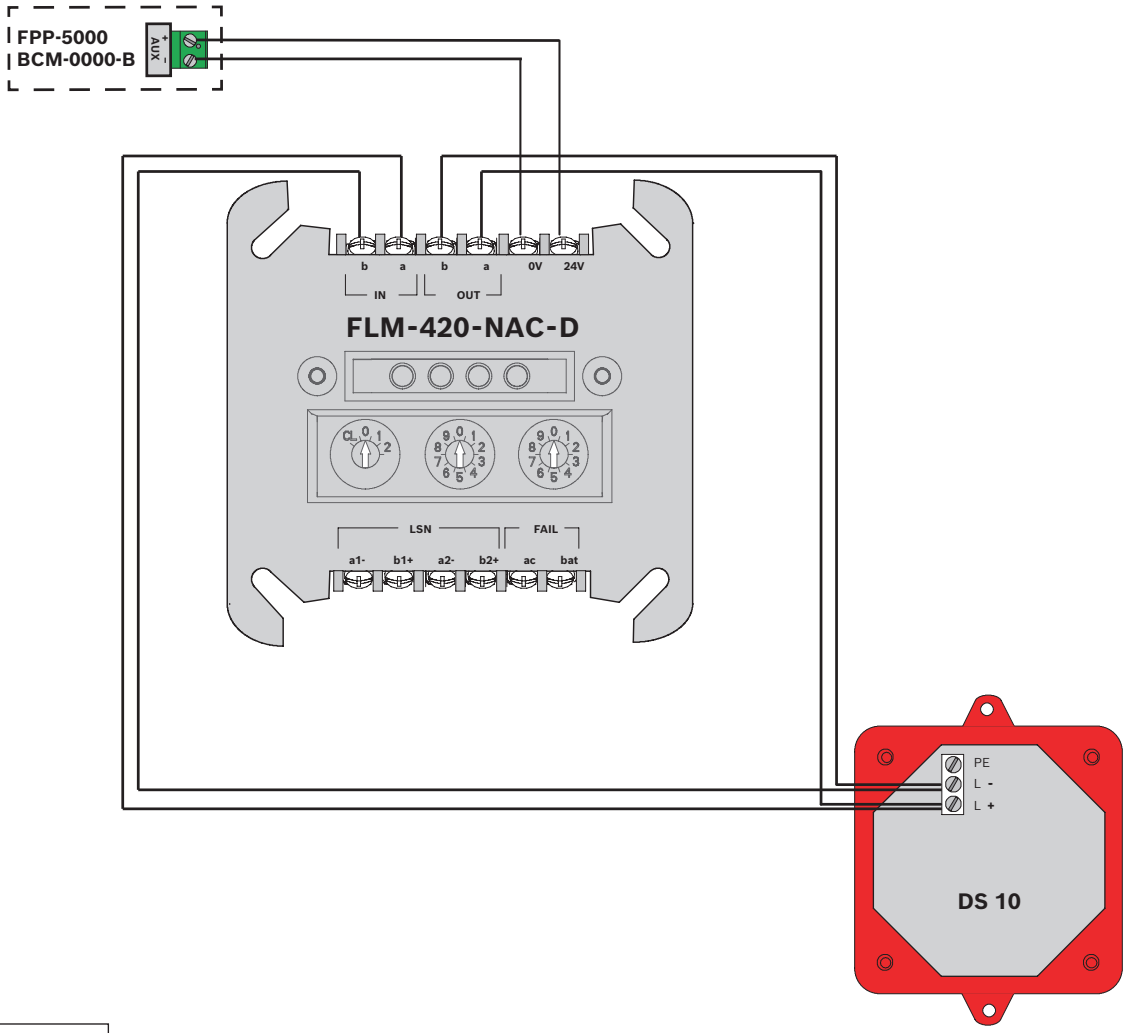


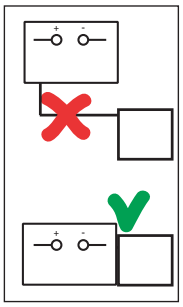


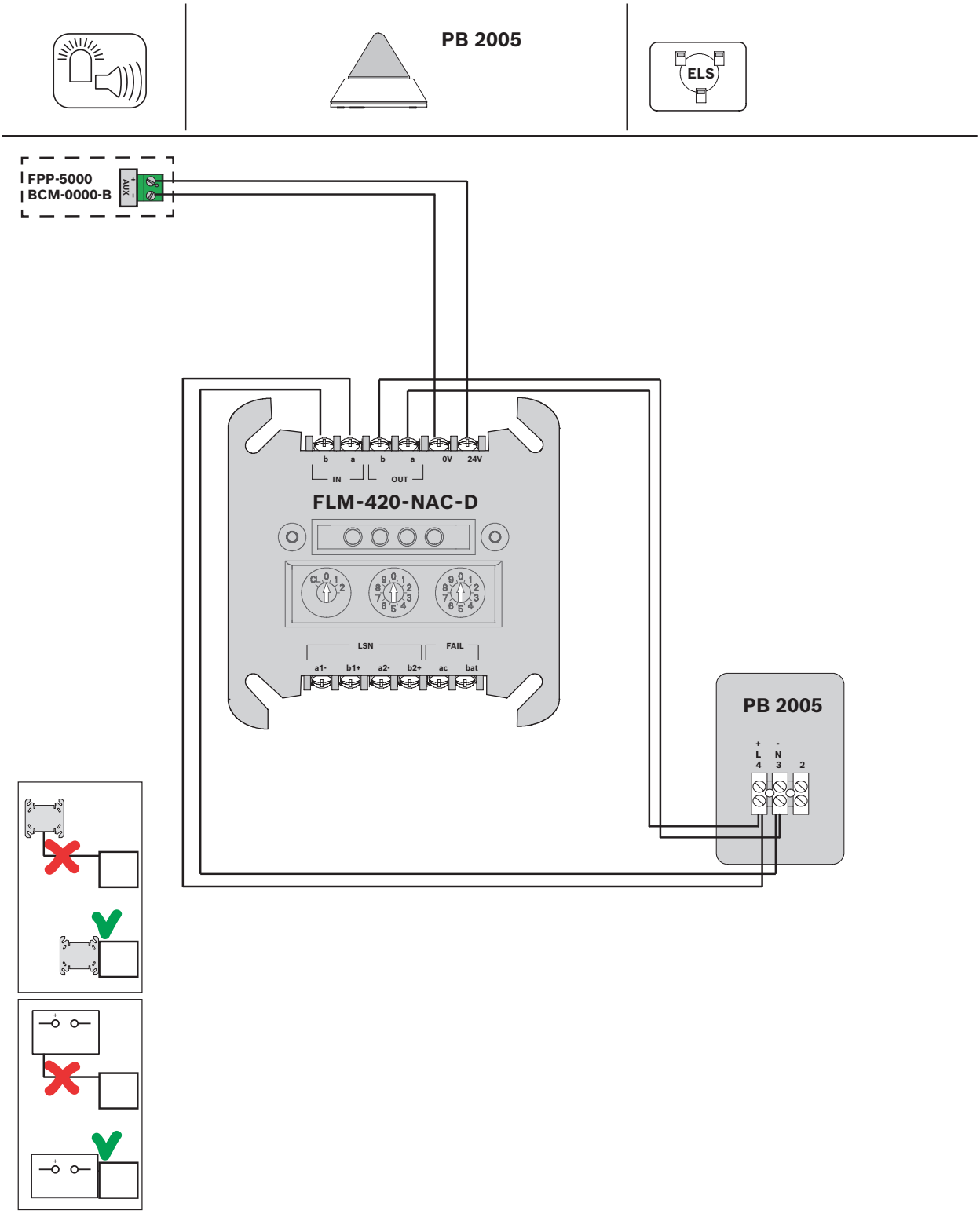


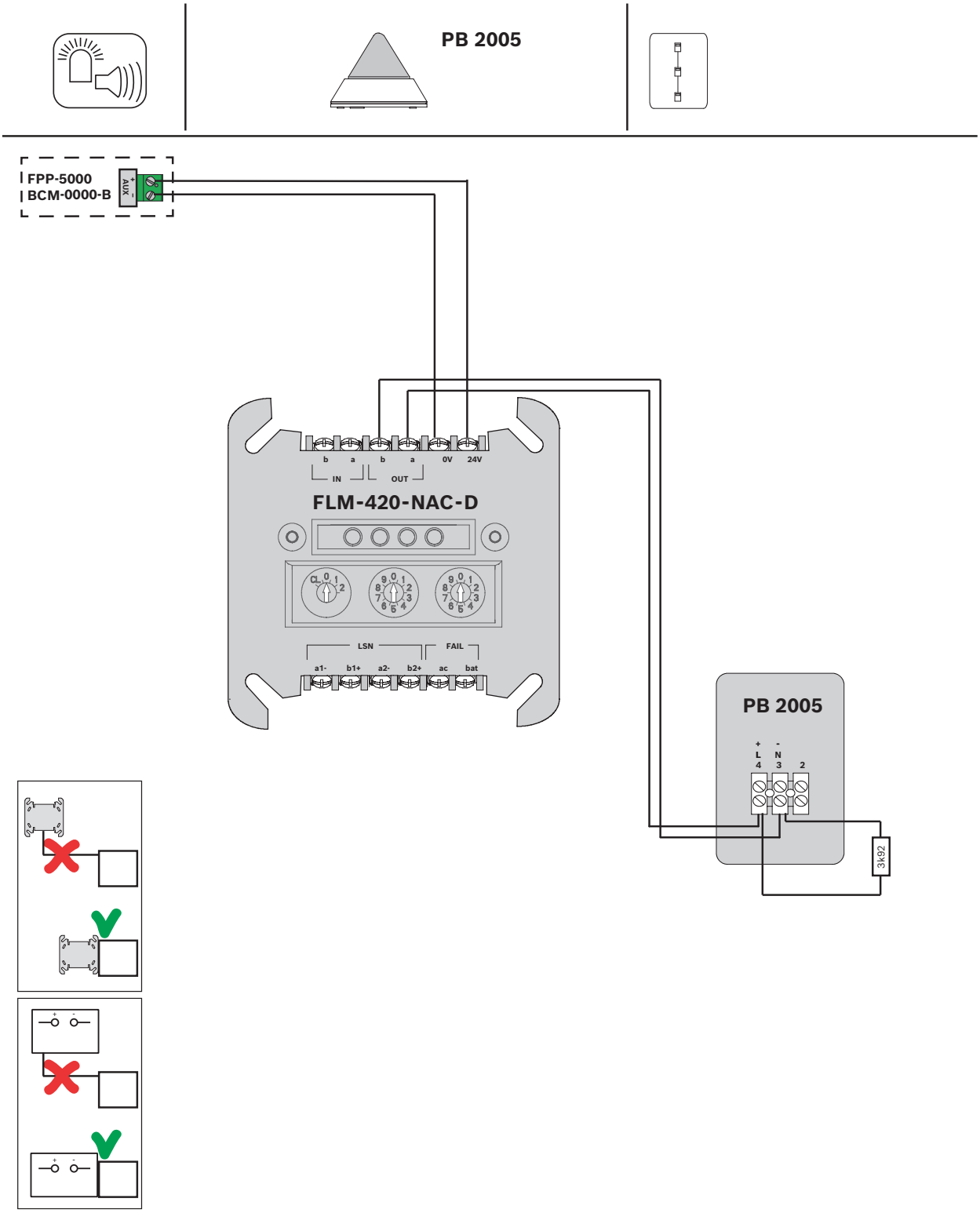
DS 10



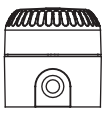

FPP-5000
BCM-0000-B
AUX
b
a
b
a
0V
24V
IN
OUT
FLM-420-NAC-D
LSN
FAIL
a1-
b1+
a2-
b2+
ac
bat
PE
L -
L +
DS 10



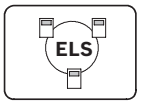

PB 2005
ELS
FPP-5000
BCM-0000-B
AUX
b a b a 0V 24V
IN OUT
FLM-420-NAC-D
LSN FAIL
a1- b1+ a2- b2+ ac bat
PB 2005
+ - L N 4 3 2

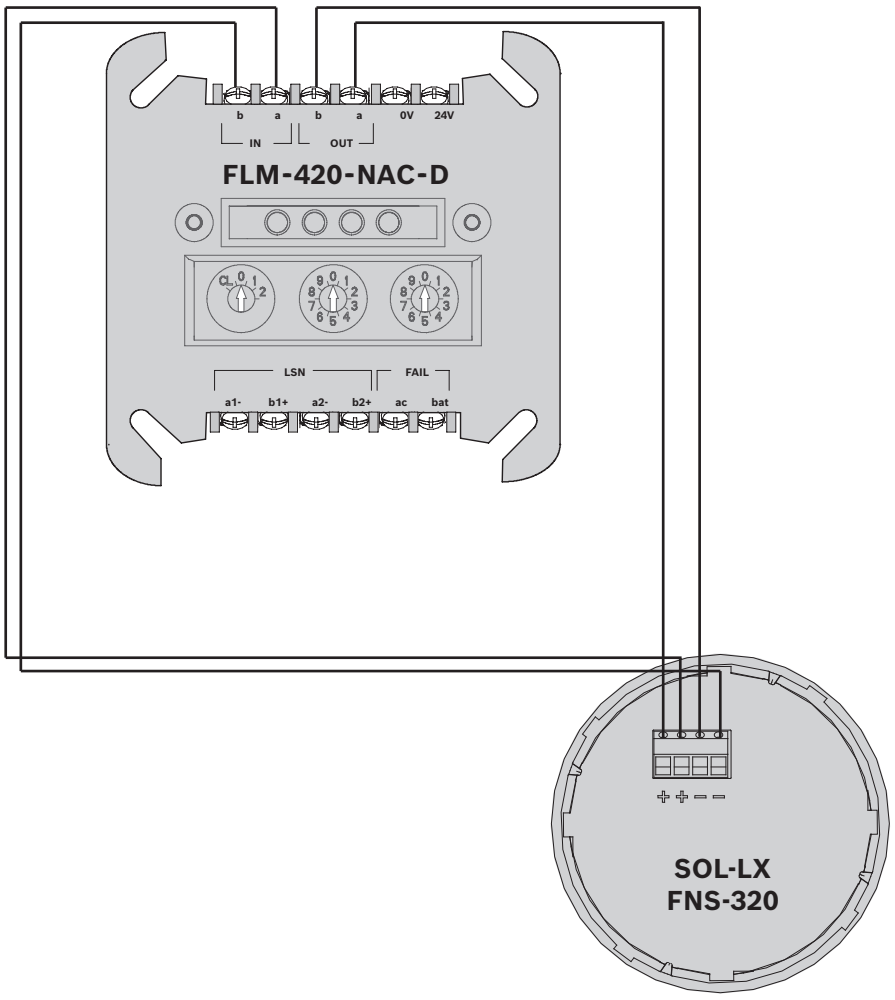

PB 2005
FPP-5000
BCM-0000-B
AUX
b a b a 0V 24V
IN
OUT
FLM-420-NAC-D
LSN
FAIL
a1- b1+ a2- b2+ ac bat
PB 2005
+ - L N
4 3 2
3k92



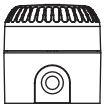


SOL-LX
FNS-320

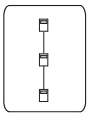


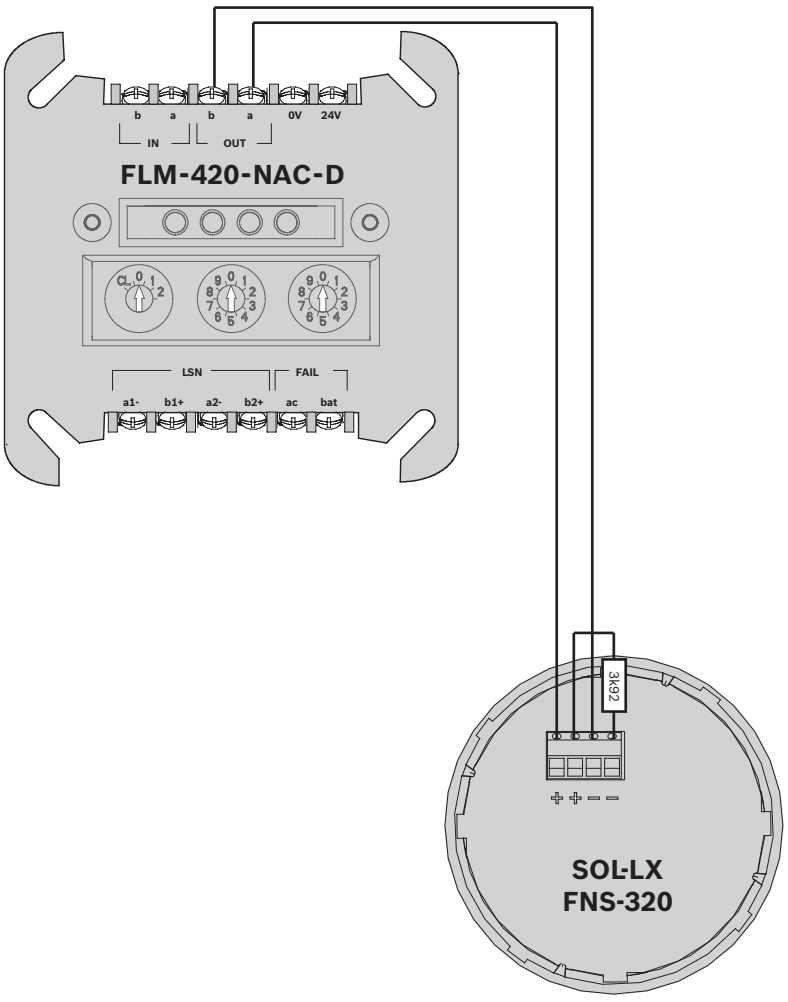




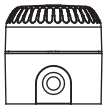


SOL-LX
FNS-320

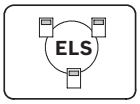


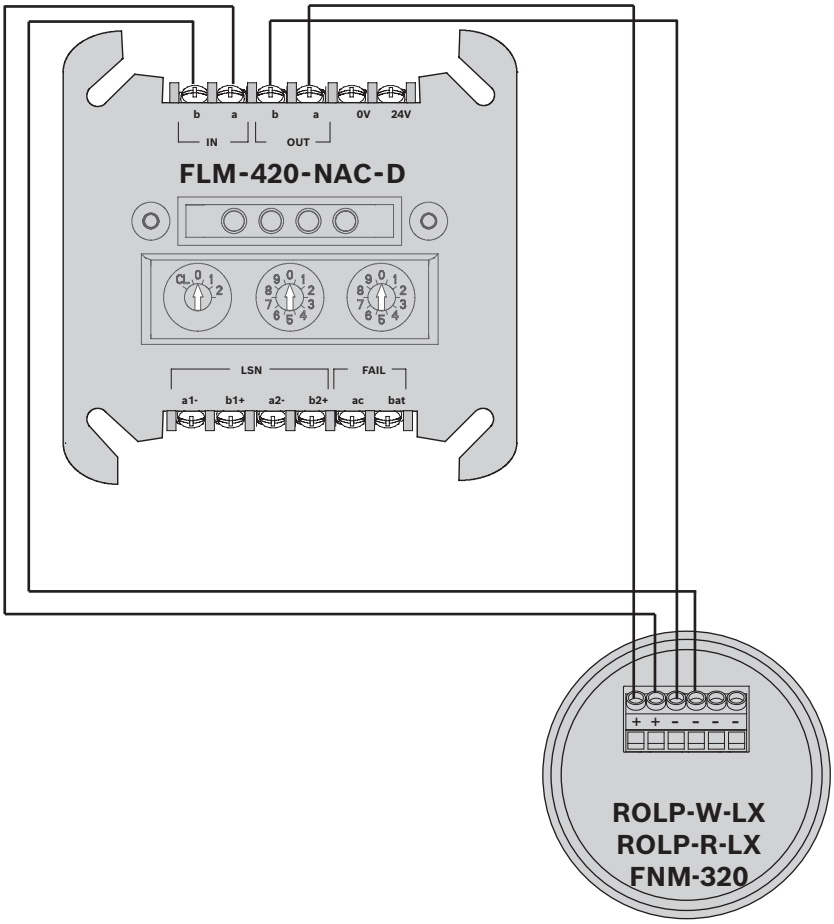




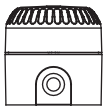


ROLP-W-LX
ROLP-R-LX
FNM-320

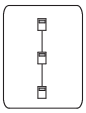


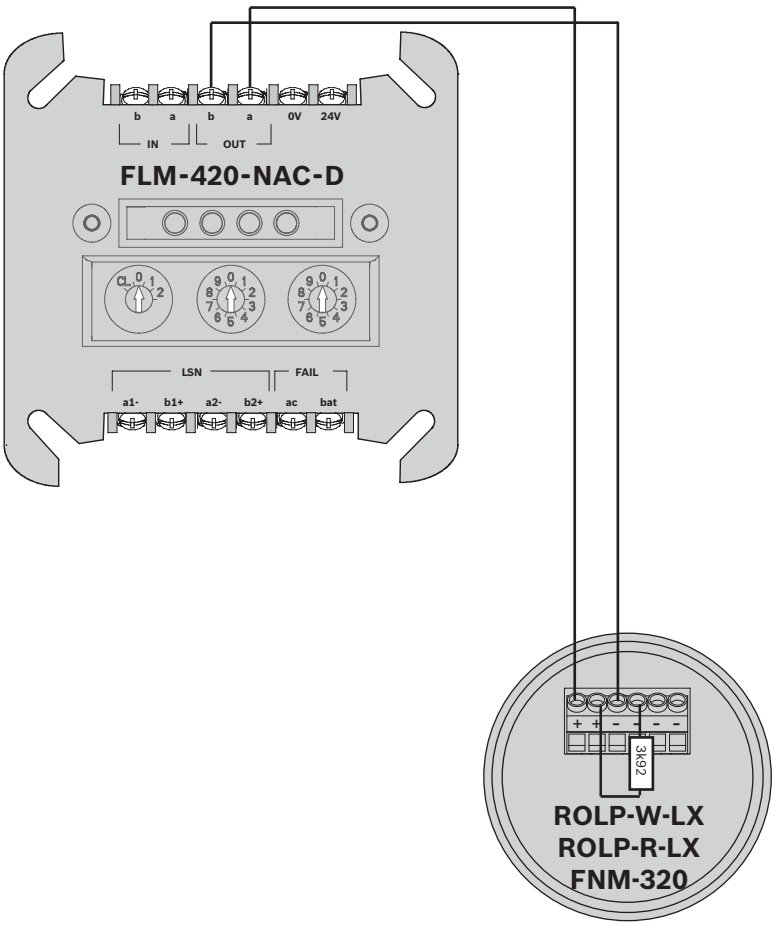






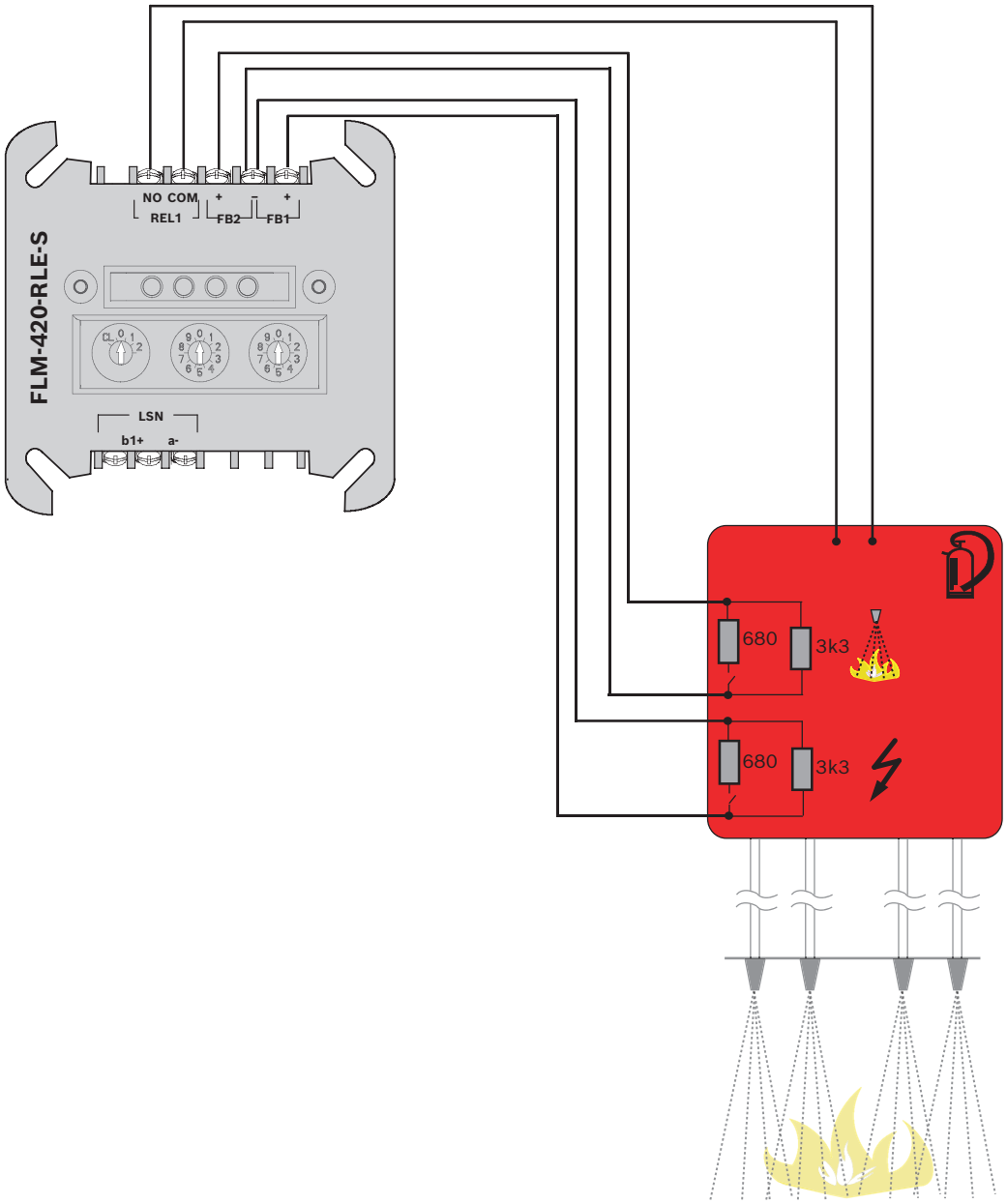
ROLP-W-LX
ROLP-R-LX
FNM-320



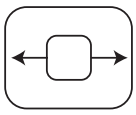


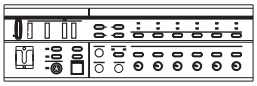
3.5.3 FLM-420-RLE-S

VdS 2496

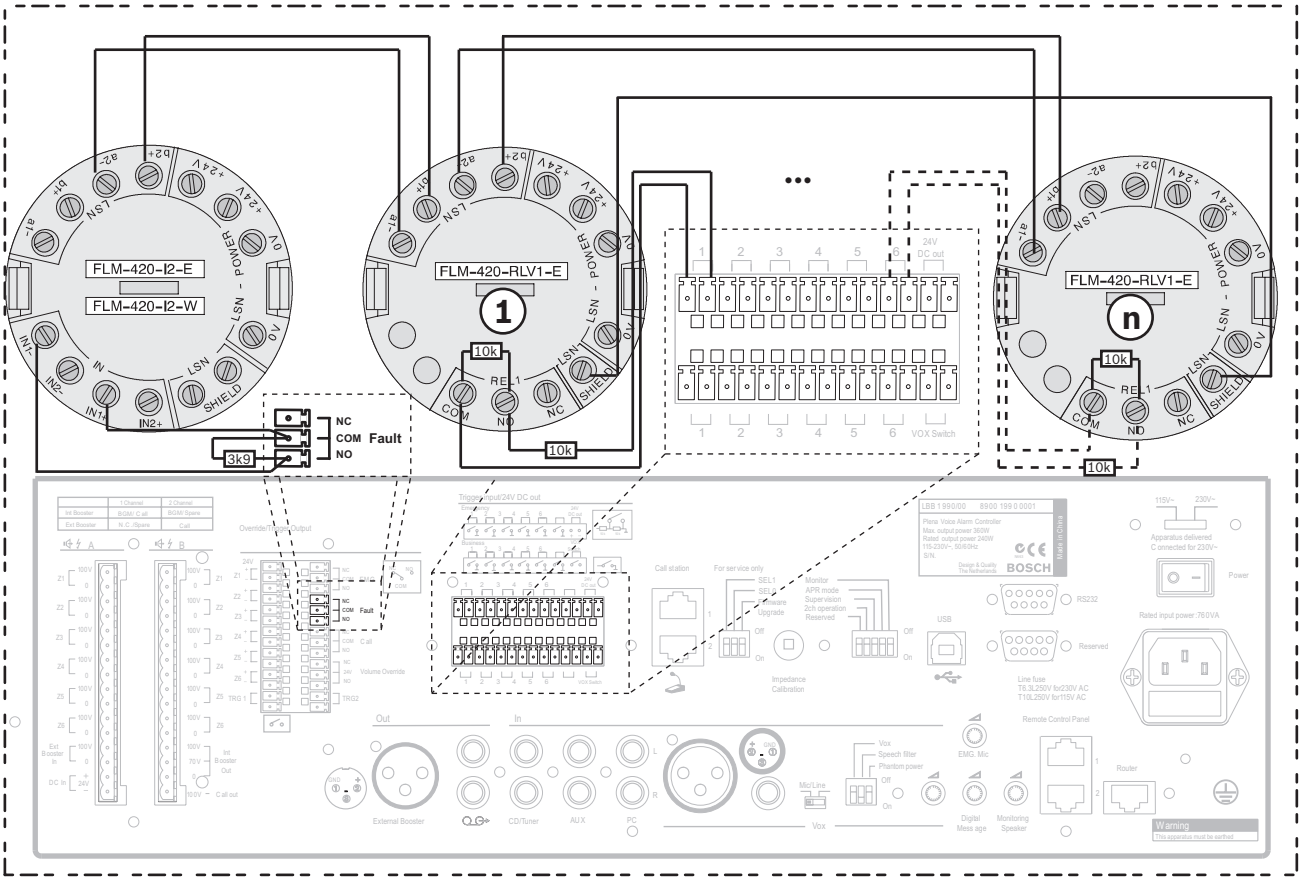


3.5.4 FLM-420-RLV1-E

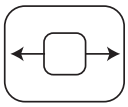


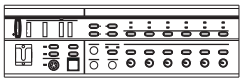


Plena

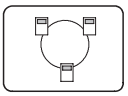


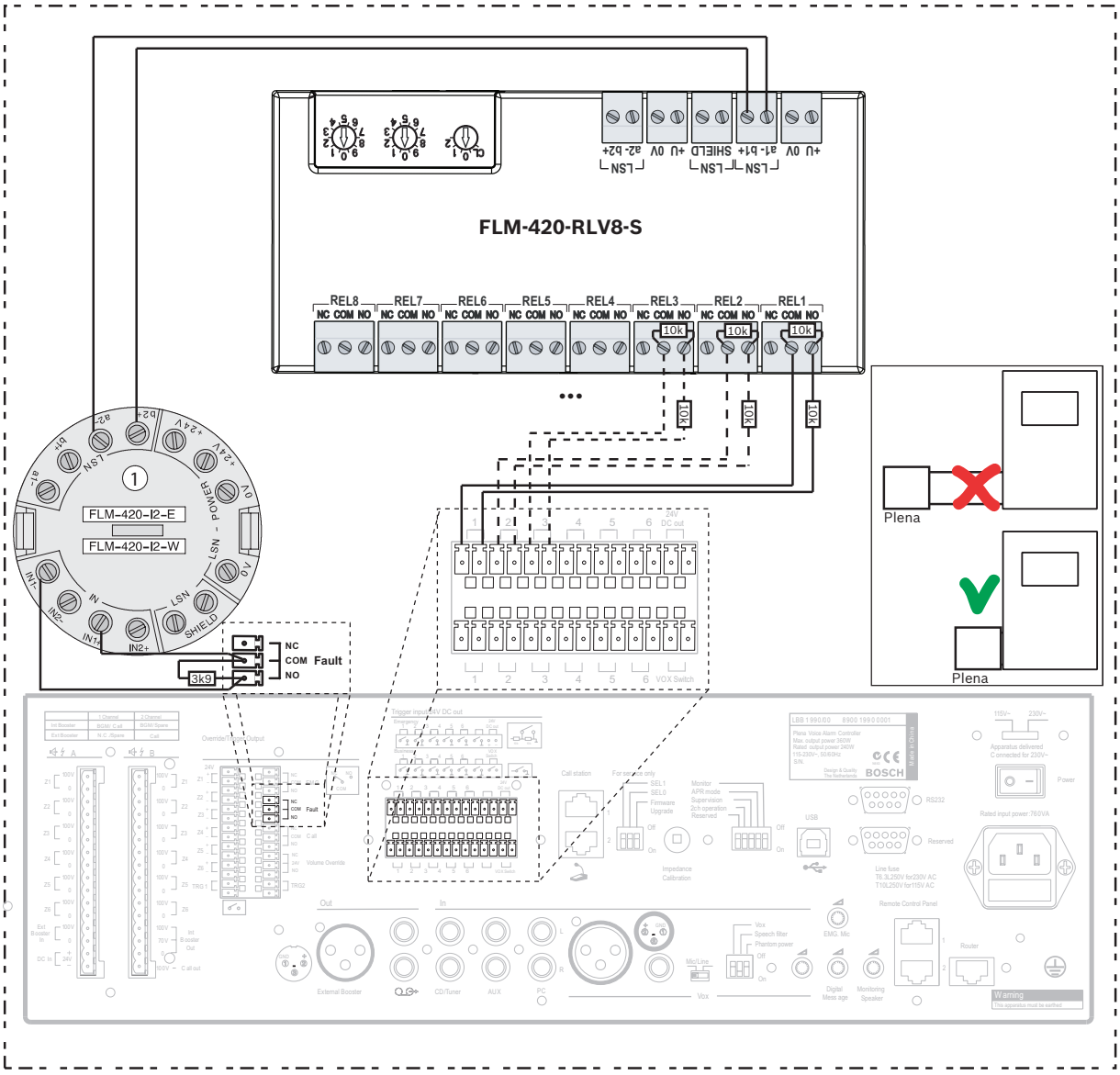
3.5.5 FLM-420-RLV8-S





Plena





3.5.6 FMF-ADP-FBF/FMF-ADP-TTY

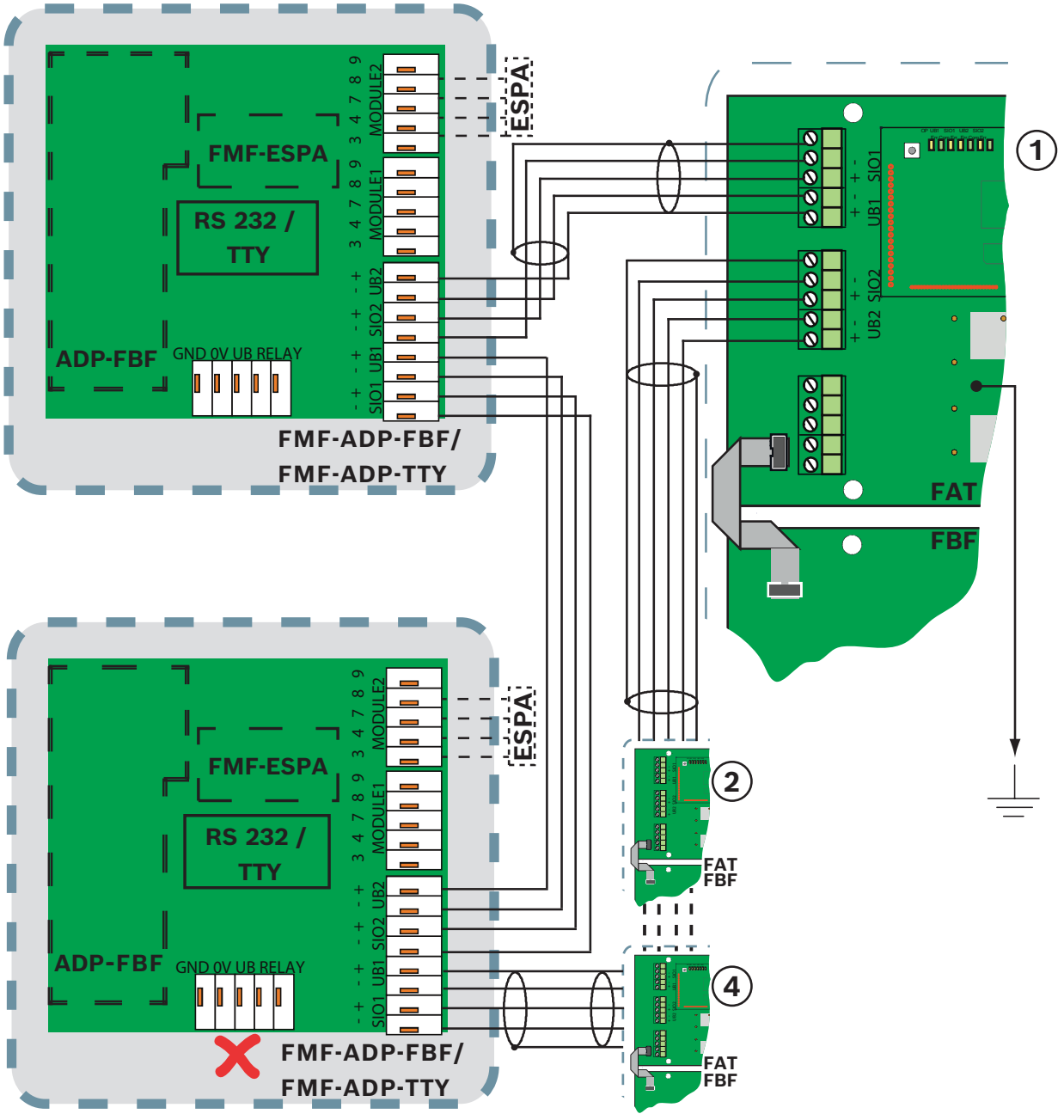




FAT4000 FBF4000 ADP4000

FMF-FAT FMF-FBF-FAT
FMF-FIBS-A4/-A3
FMF-ADP

ELS



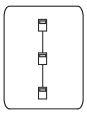
3.6 EOL

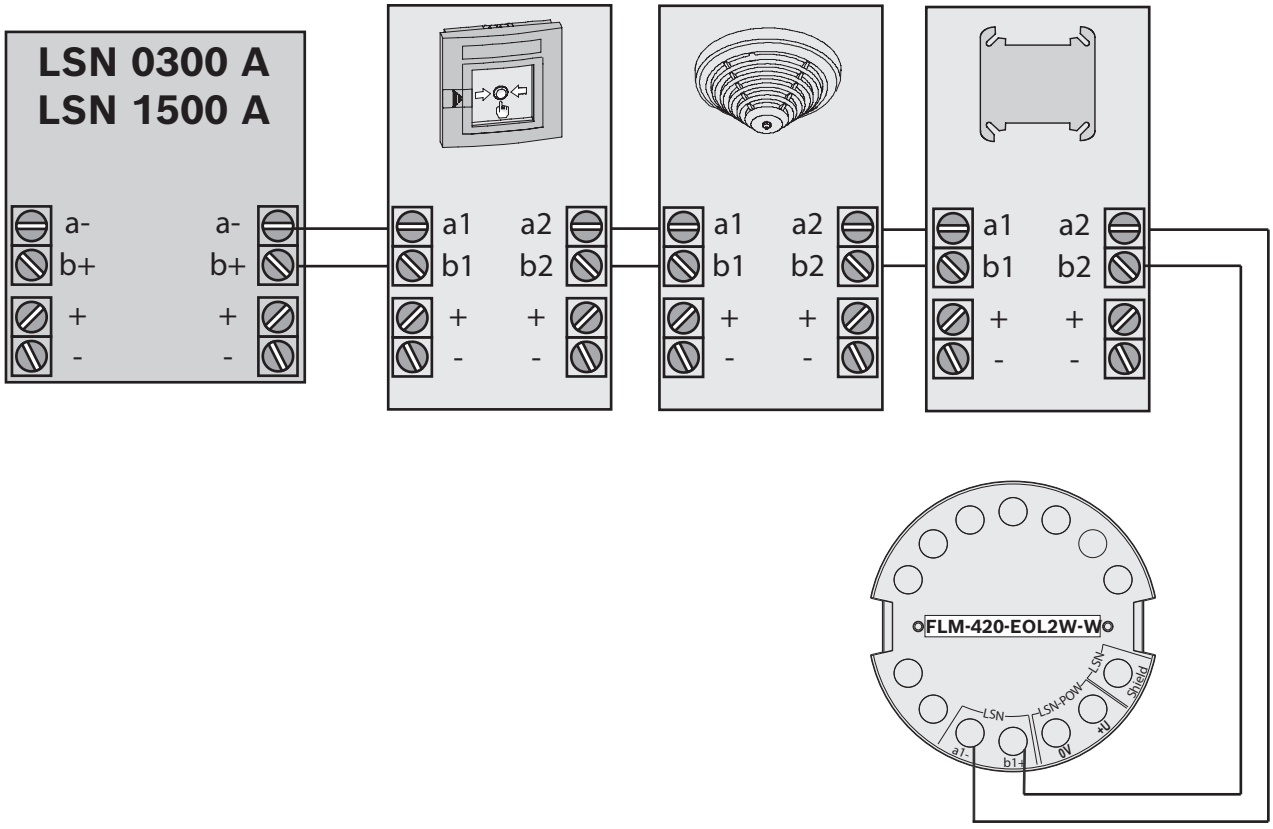


LSN 0300 A, page 173

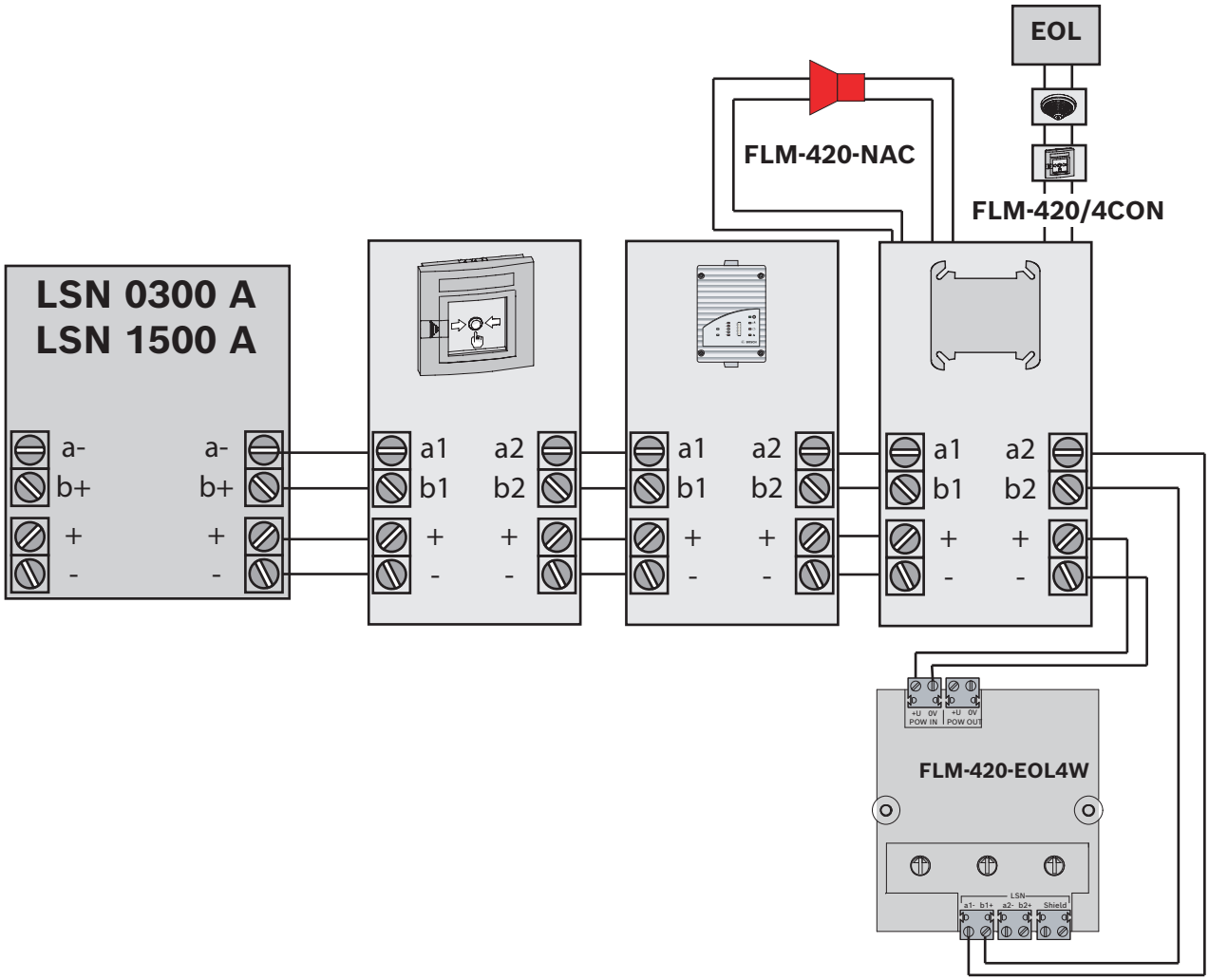
FLM-420/4-CON-S/D, page 216

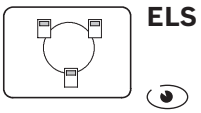
3.6.1 LSN 0300 A

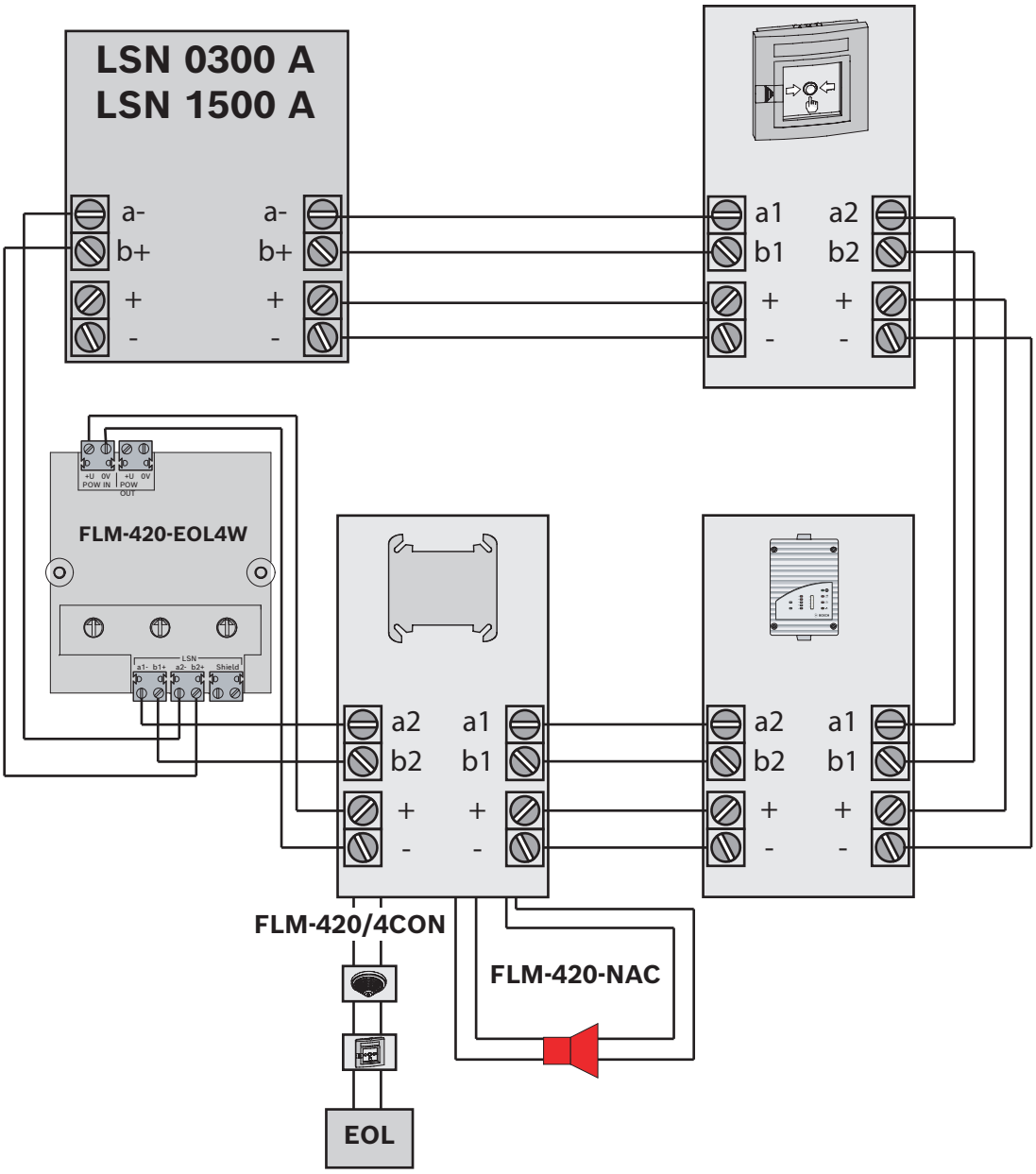
			**ELS**



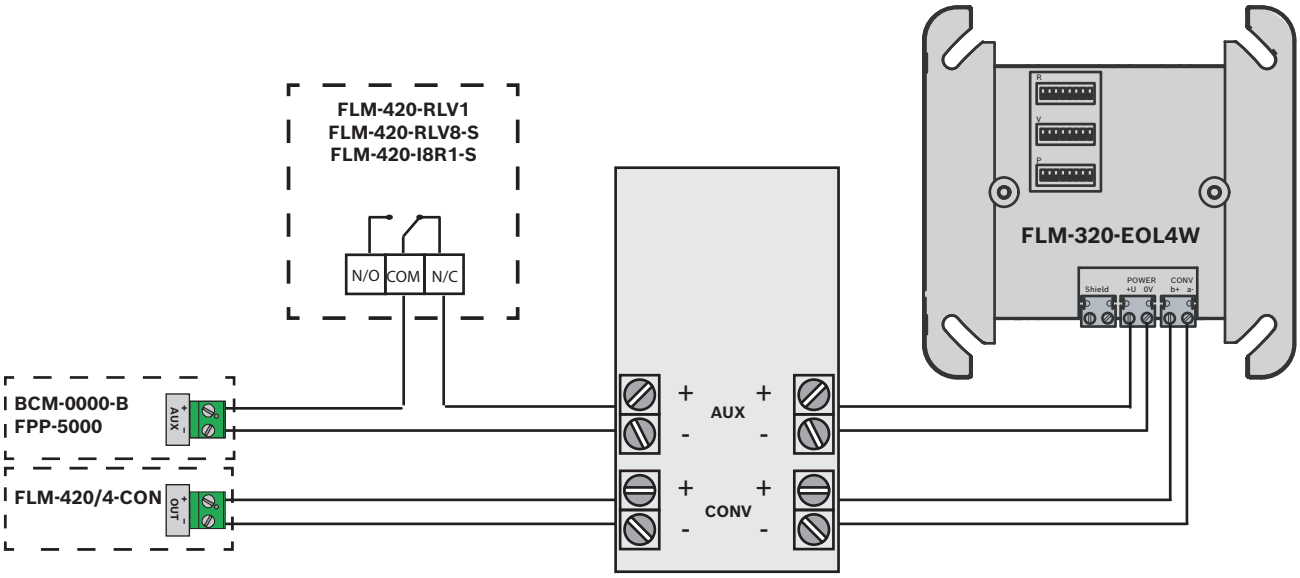
ELS


EOL
FLM-420-NAC
FLM-420/4CON
LSN 0300 A
LSN 1500 A
a-
b+
+
-
a1
b1
a2
b2
FLM-420-EOL4W


ELS

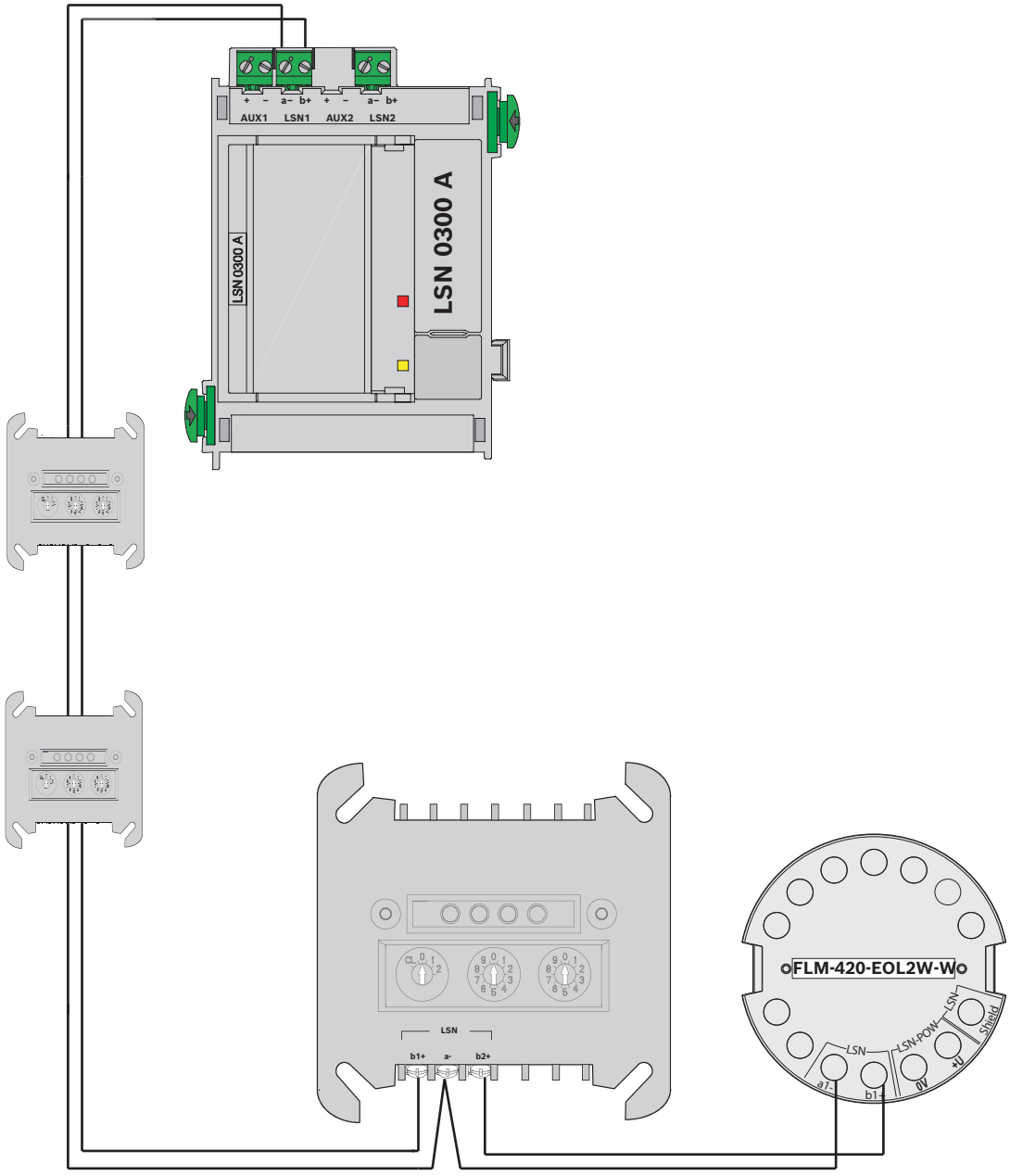

LSN 0300 A
LSN 1500 A
a-
b+
+
-
a-
b+
+
-
a1
b1
+
-
a2
b2
+
-
FLM-420-EOL4W
a2
b2
+
-
a1
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FLM-420/4CON
FLM-420-NAC
EOL

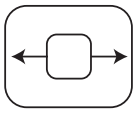
	Reset action	ELS



FLM-420-I2-D
FLM-420-O1I1-D
FLM-420-RHV-D/S
FLM-420-RLV1-D

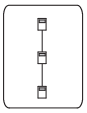
ELS



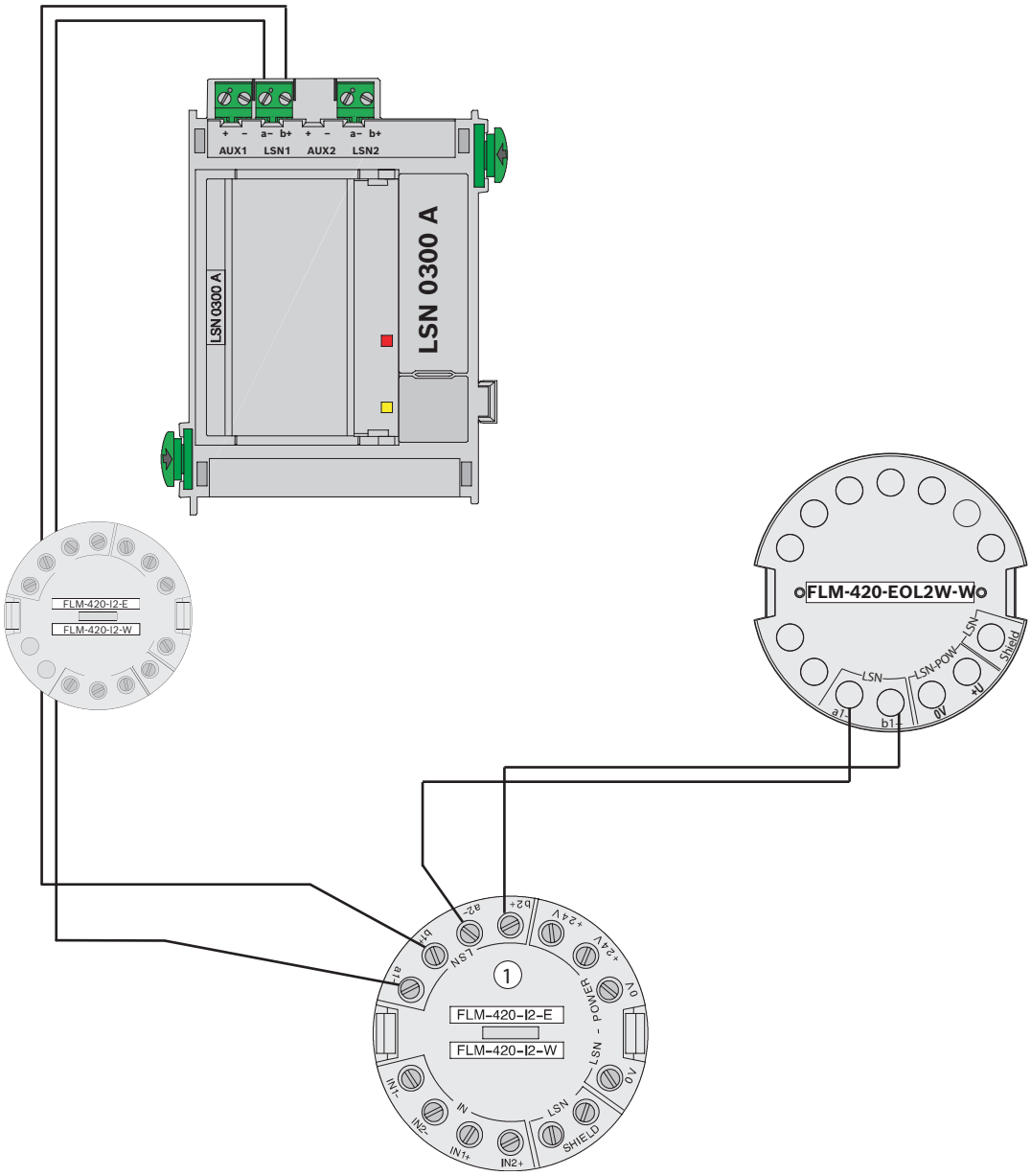


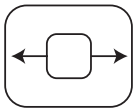


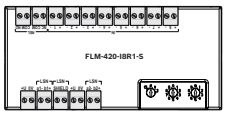
FLM-420-I2-E/W



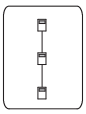
ELS



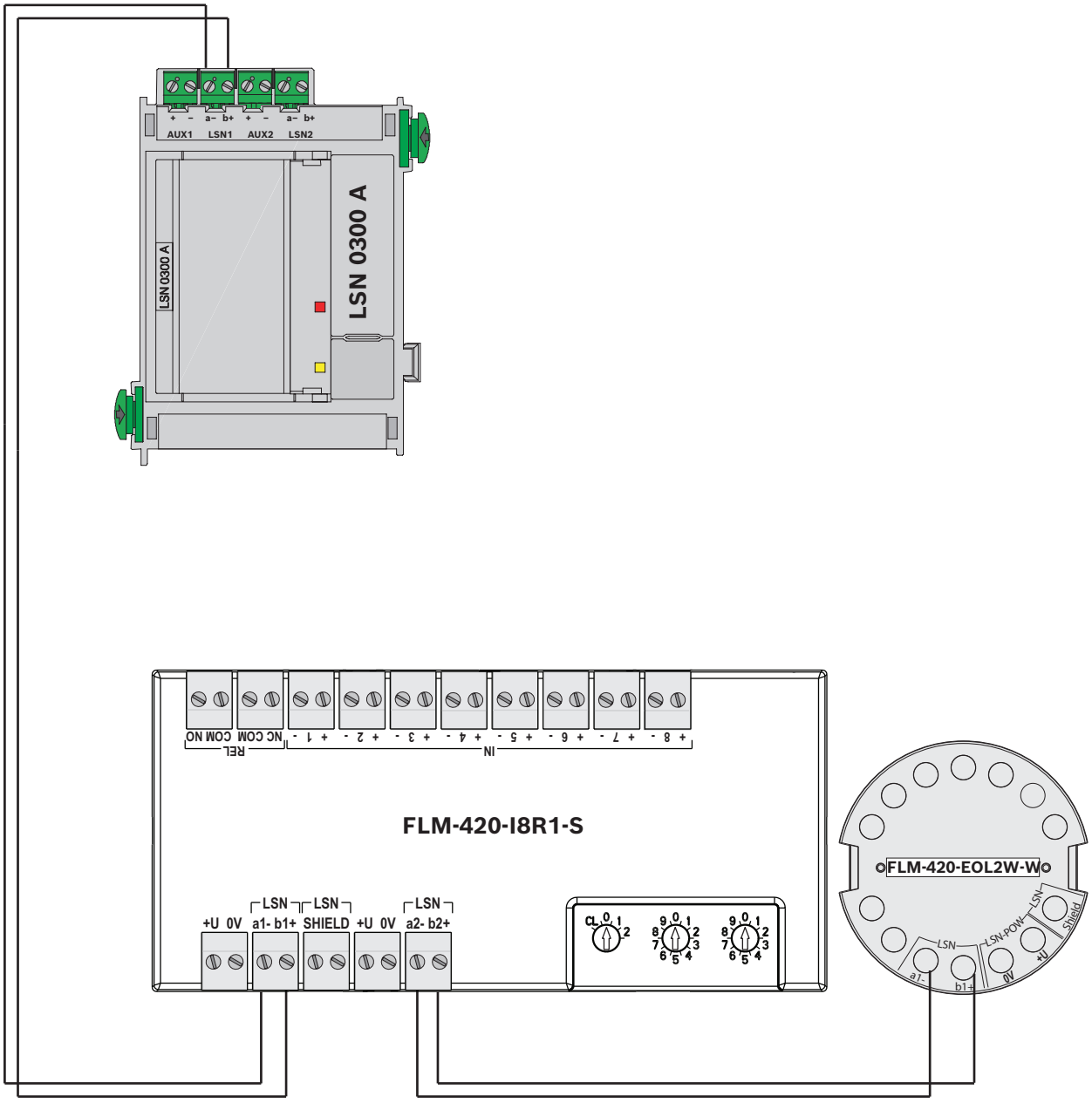


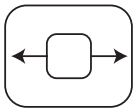


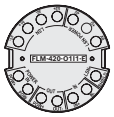
FLM-420-I8R1-S



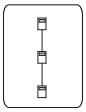
ELS



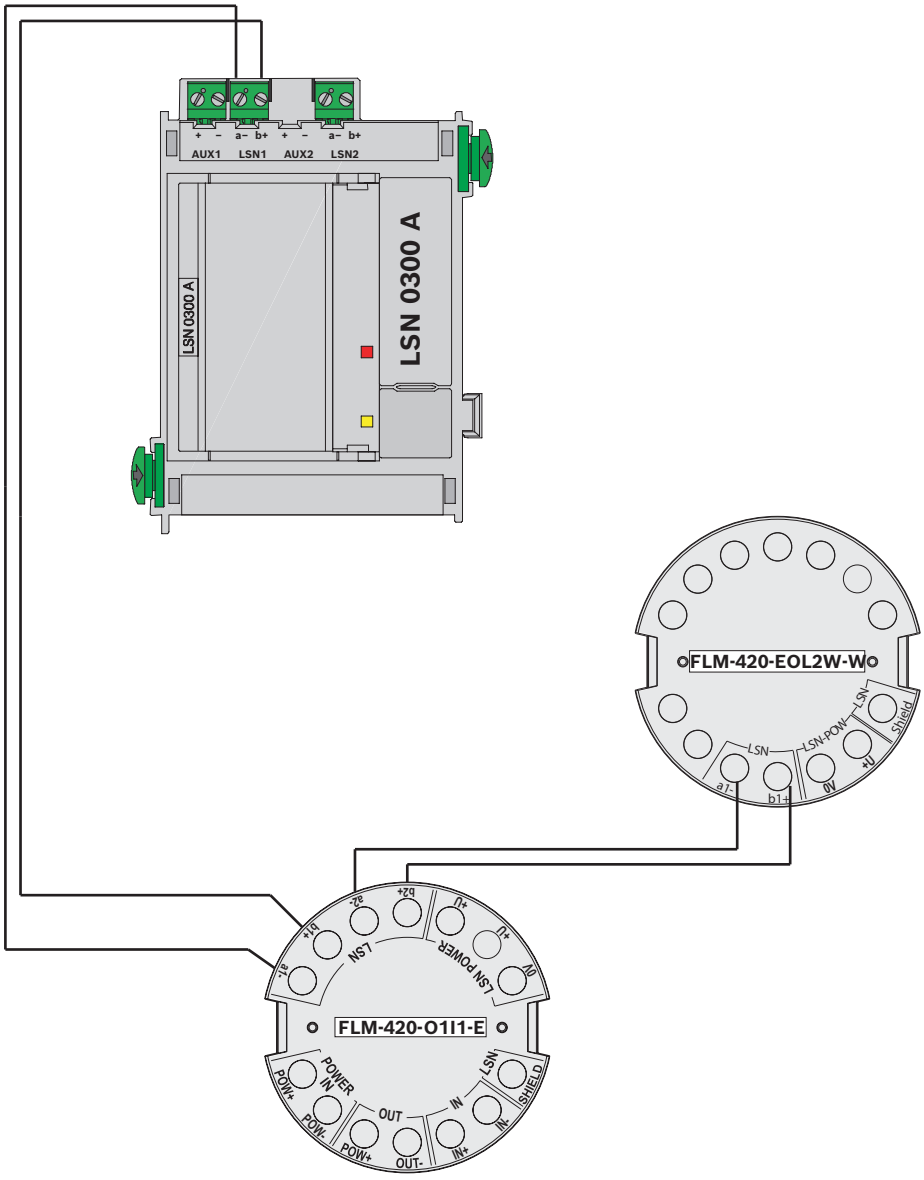


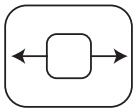


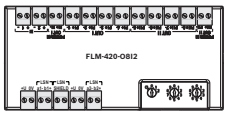
FLM-420-O1I1-E



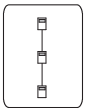
ELS



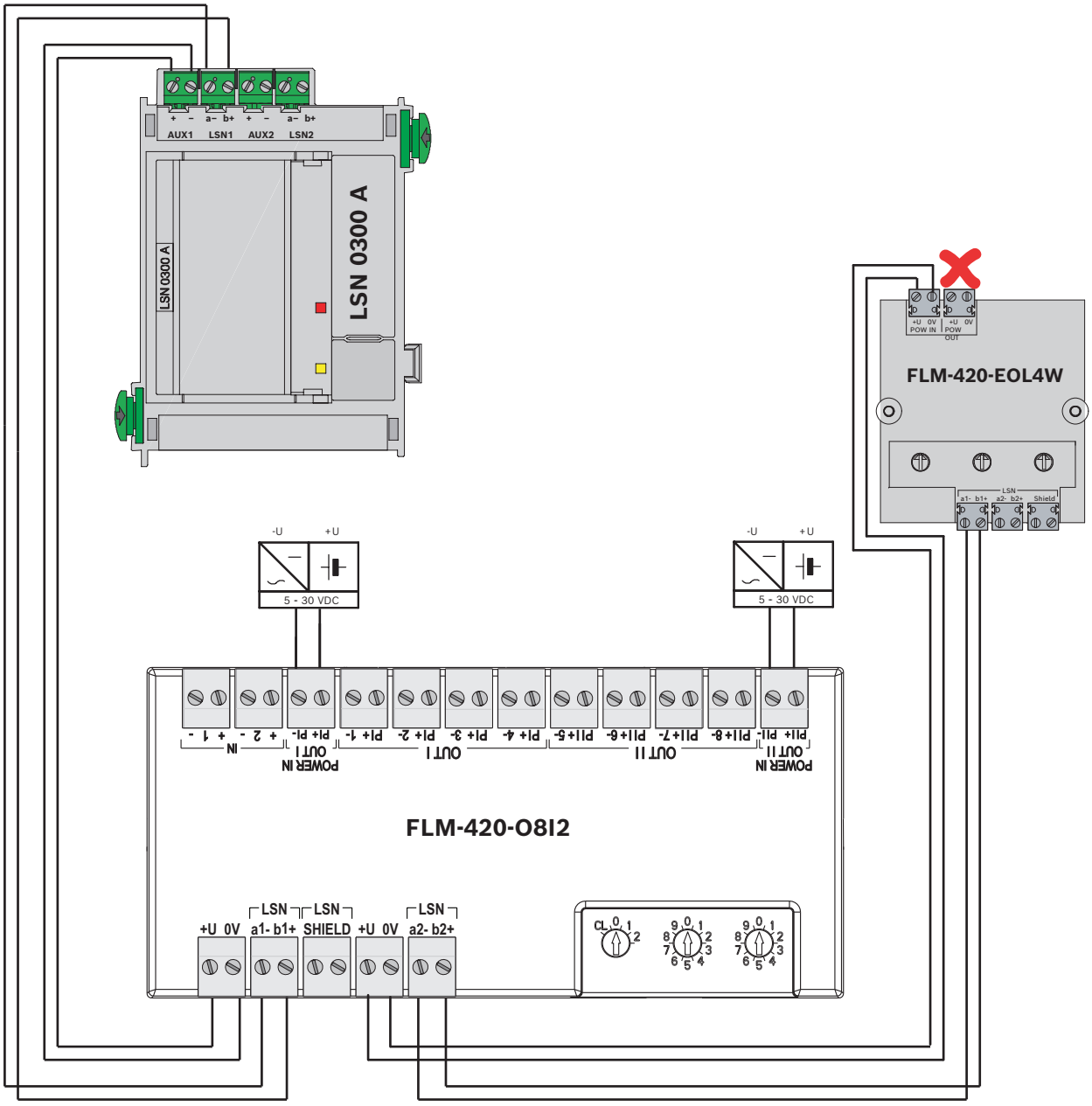


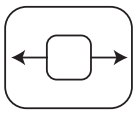


FLM-420-O8I2-S



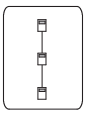
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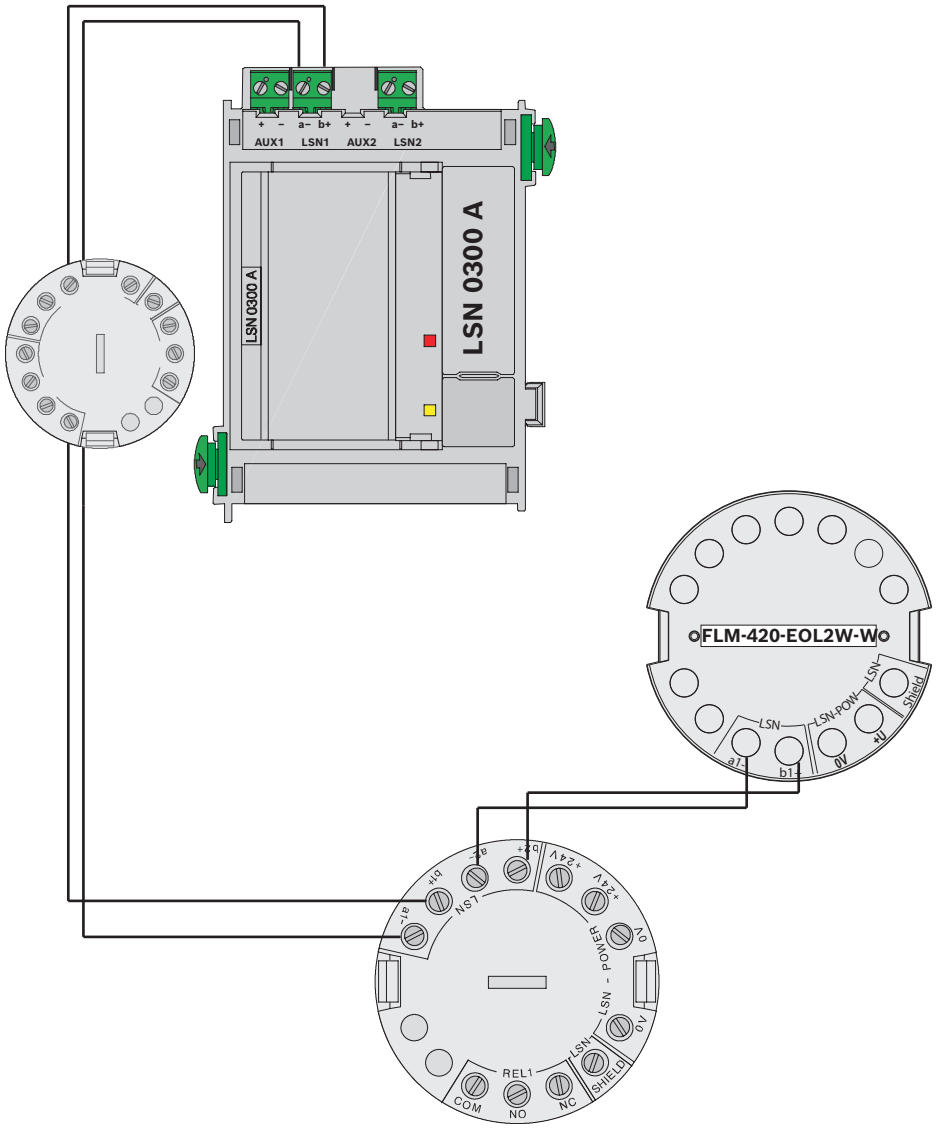


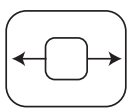


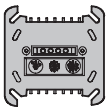
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FLM-420-RLV1-E



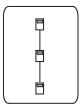
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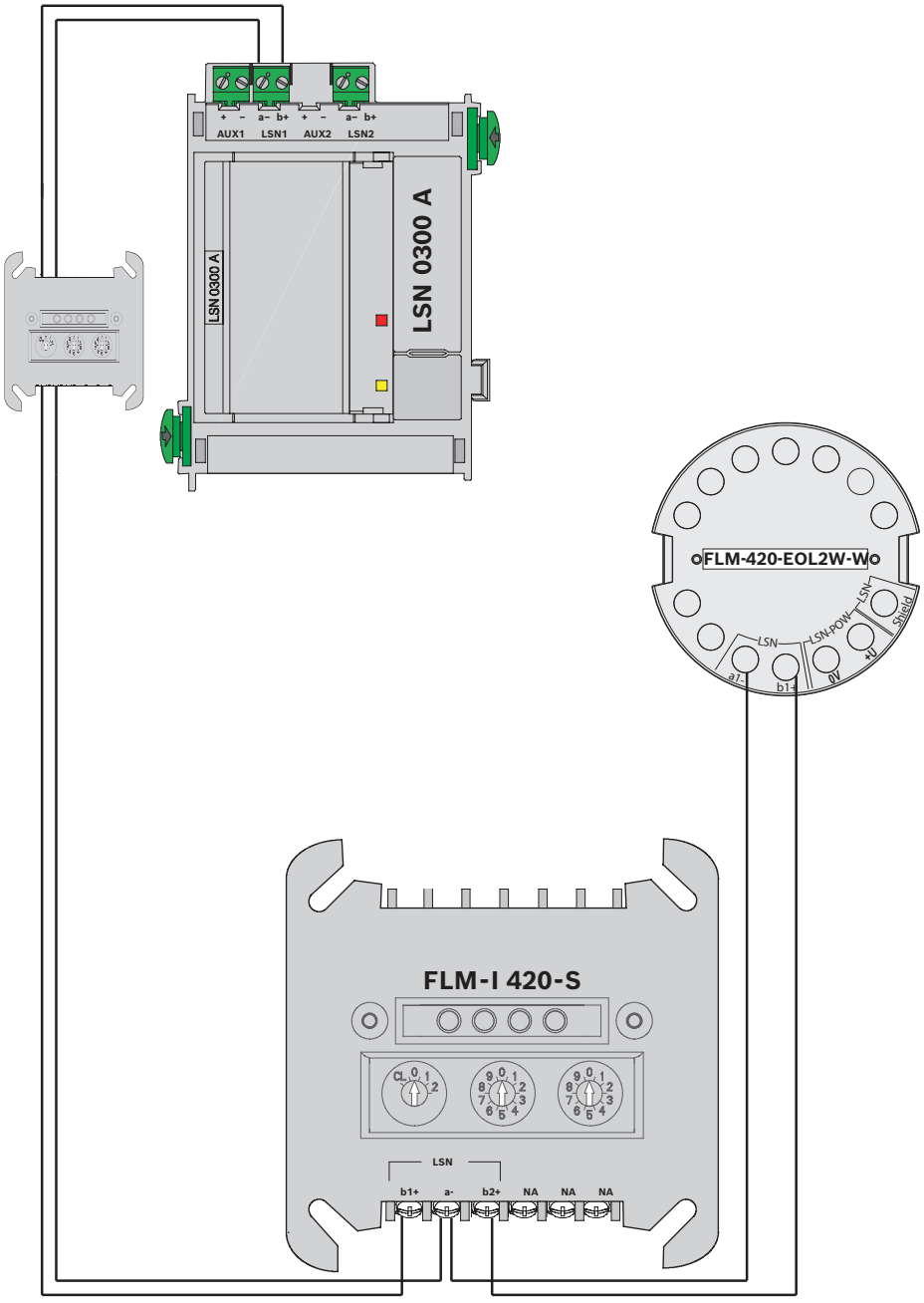


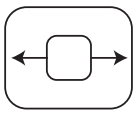


FLM-I 420-S



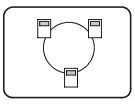
ELS



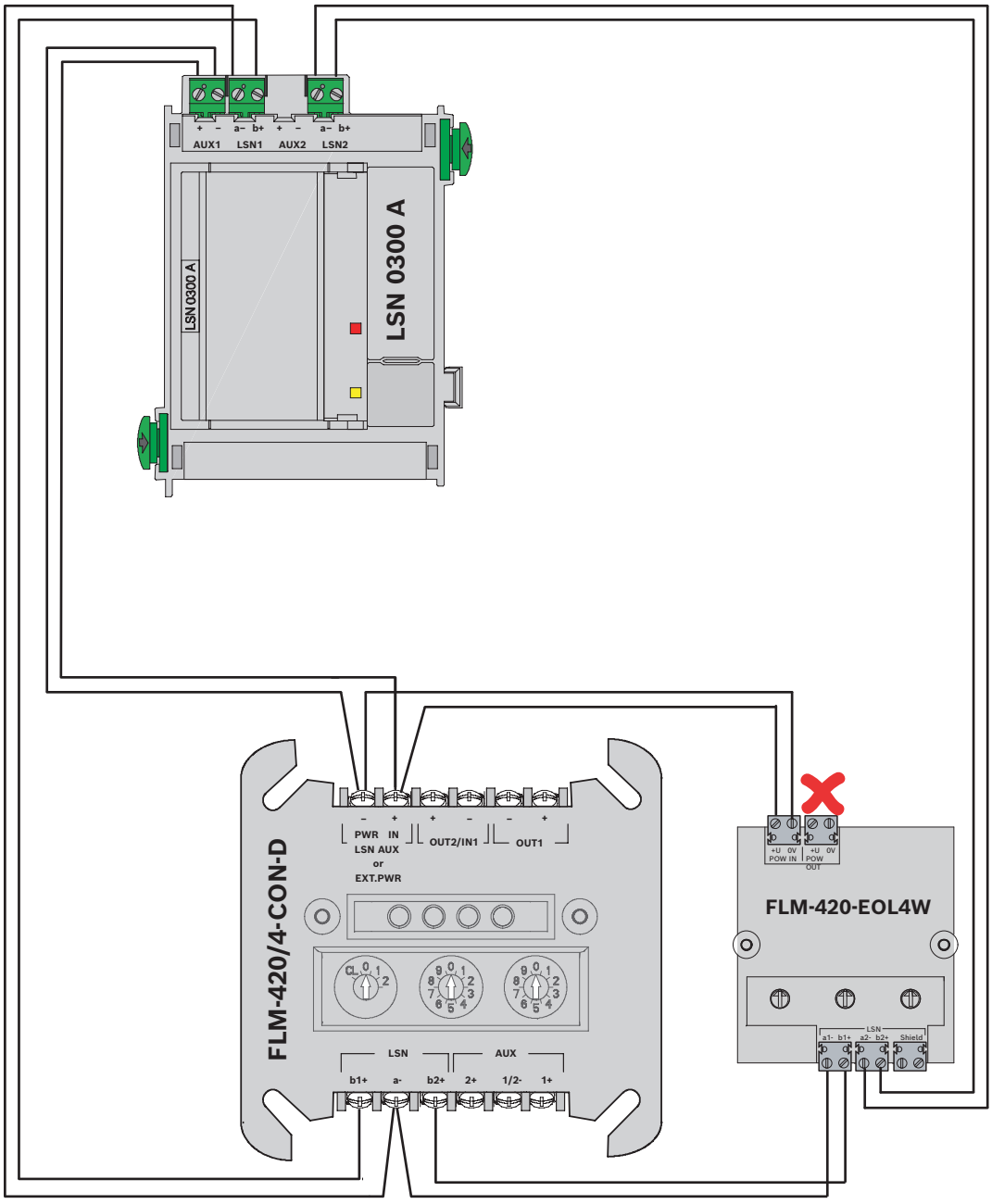


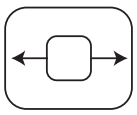


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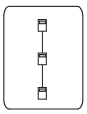
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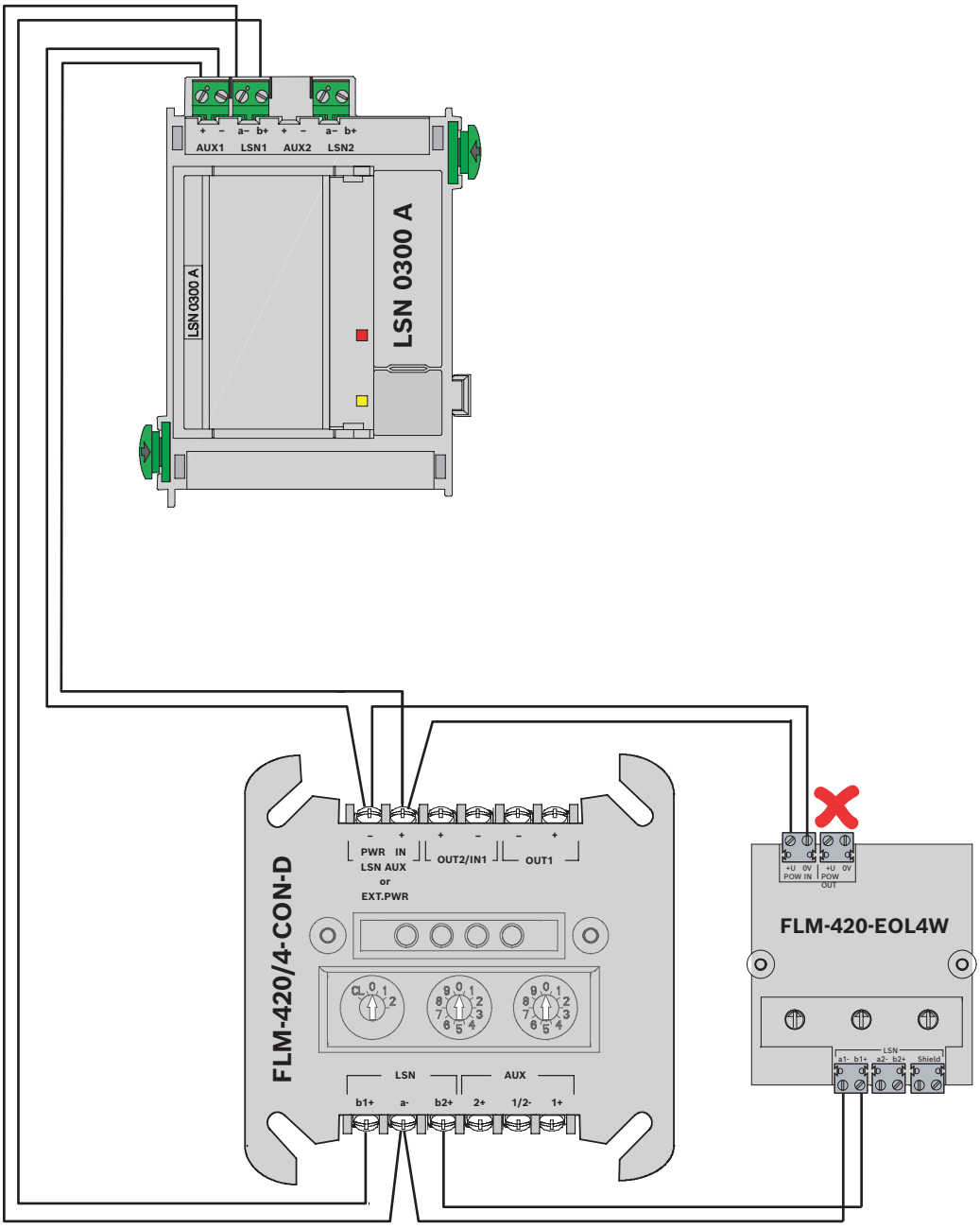


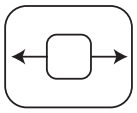


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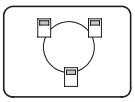
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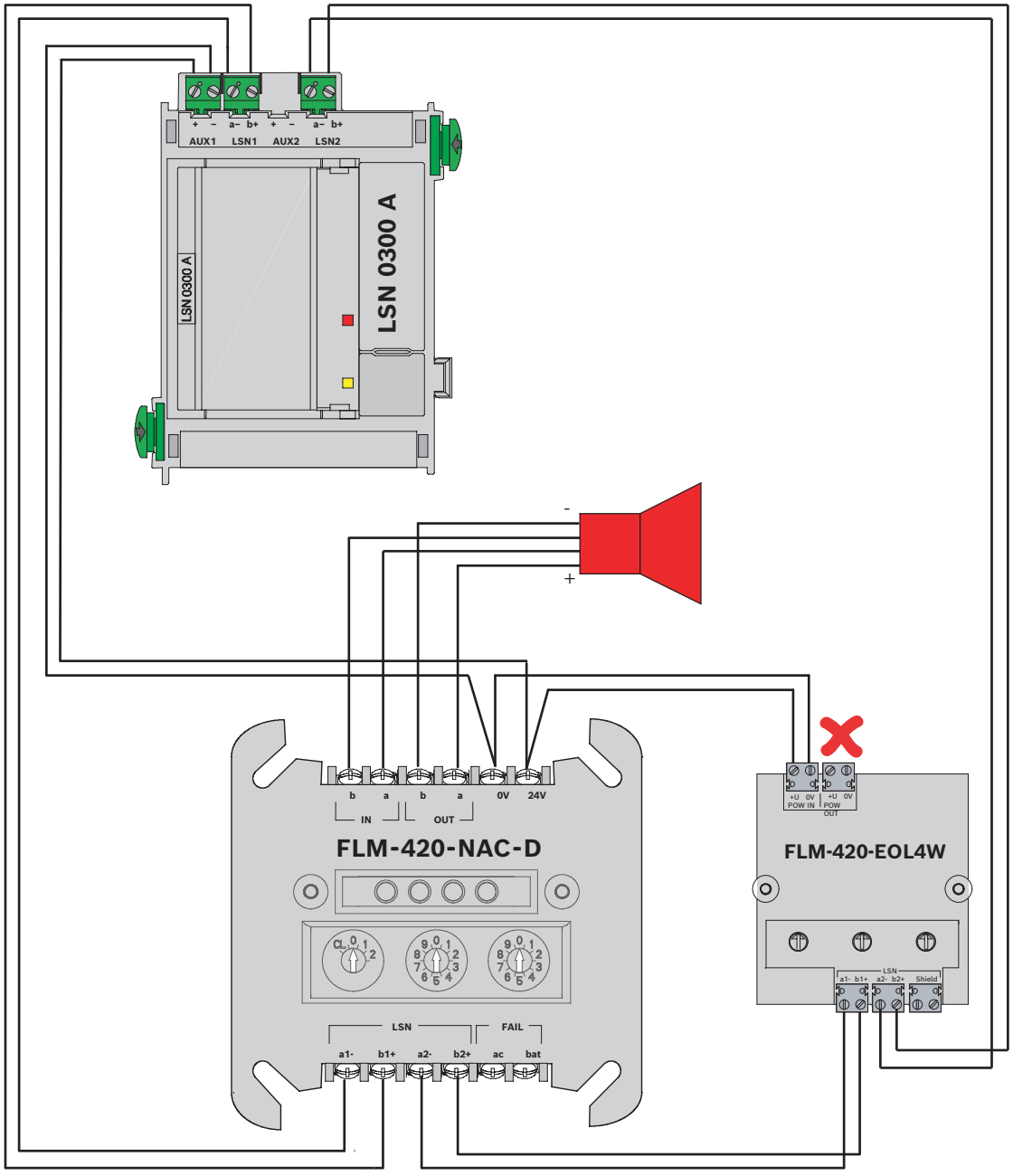


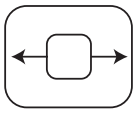


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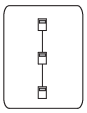
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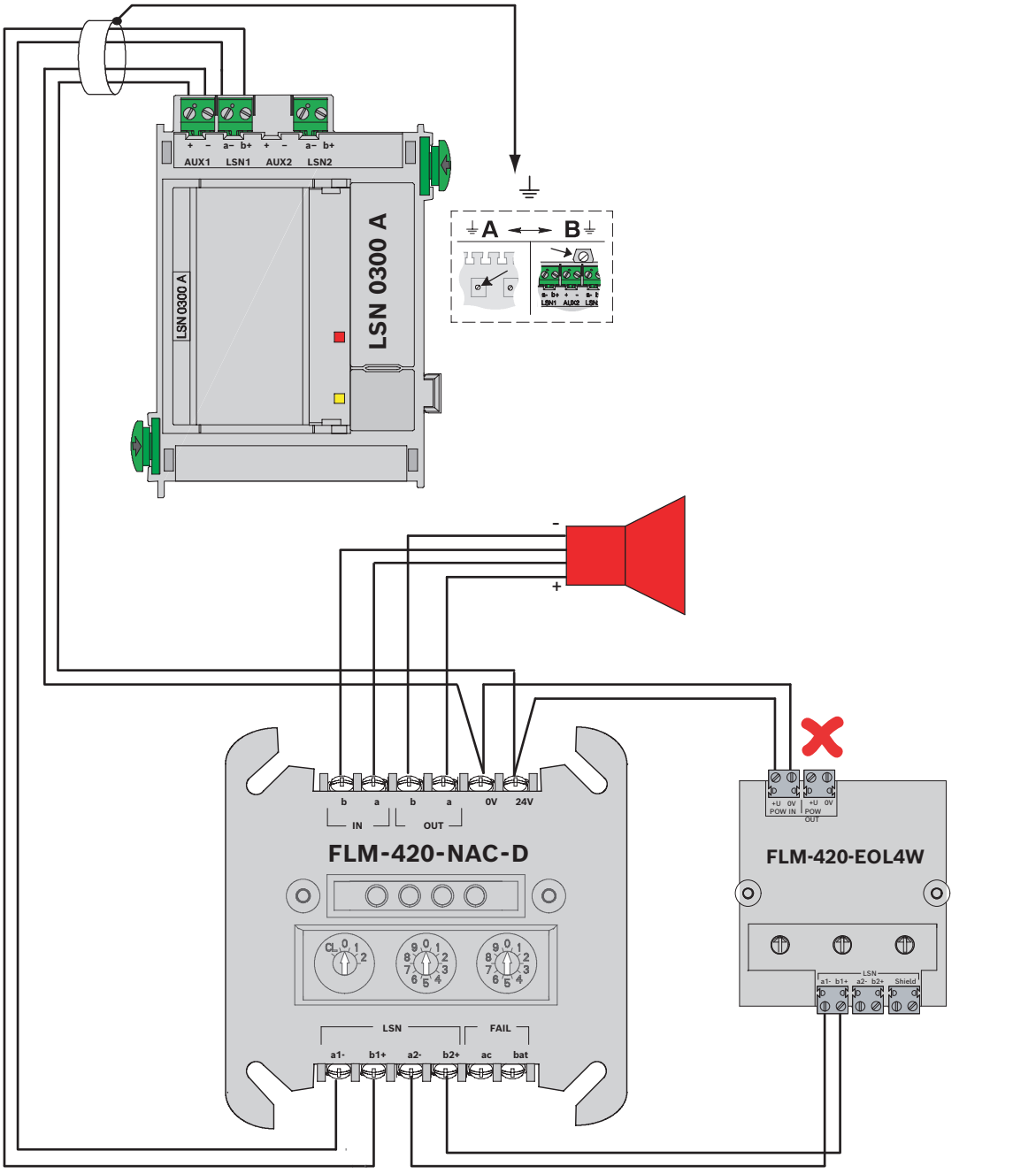


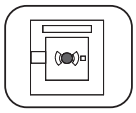


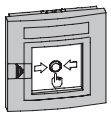
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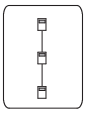
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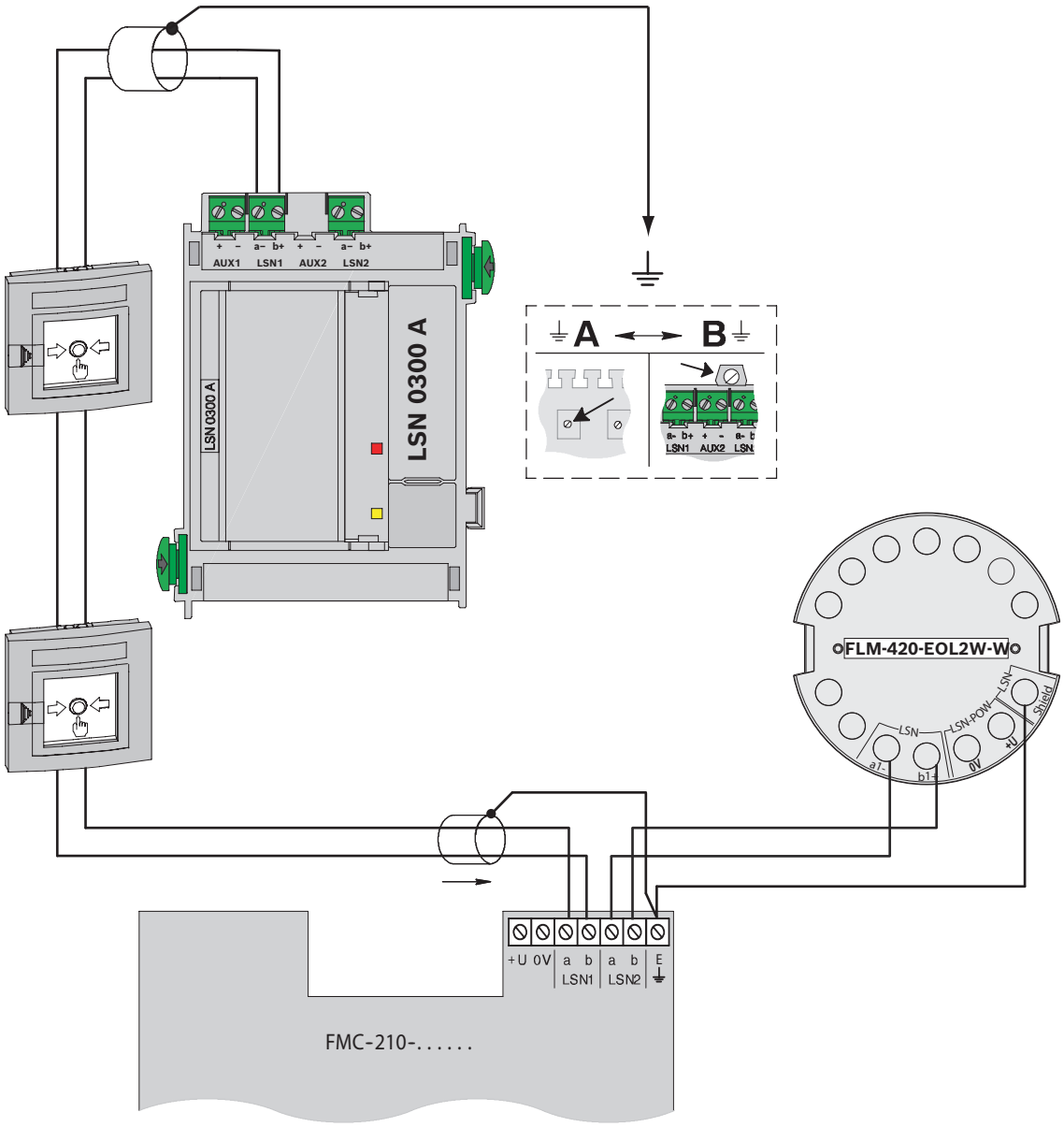




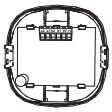
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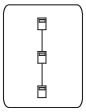
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AUX1
LSN1
AUX2
LSN2
LSN 0300 A
A
B
FLM-420-EOL2W-W
LSN
LSN-POW
Shield
0V
+U
+U 0V a b LSN1 a b LSN2 E
FMC-210-.....

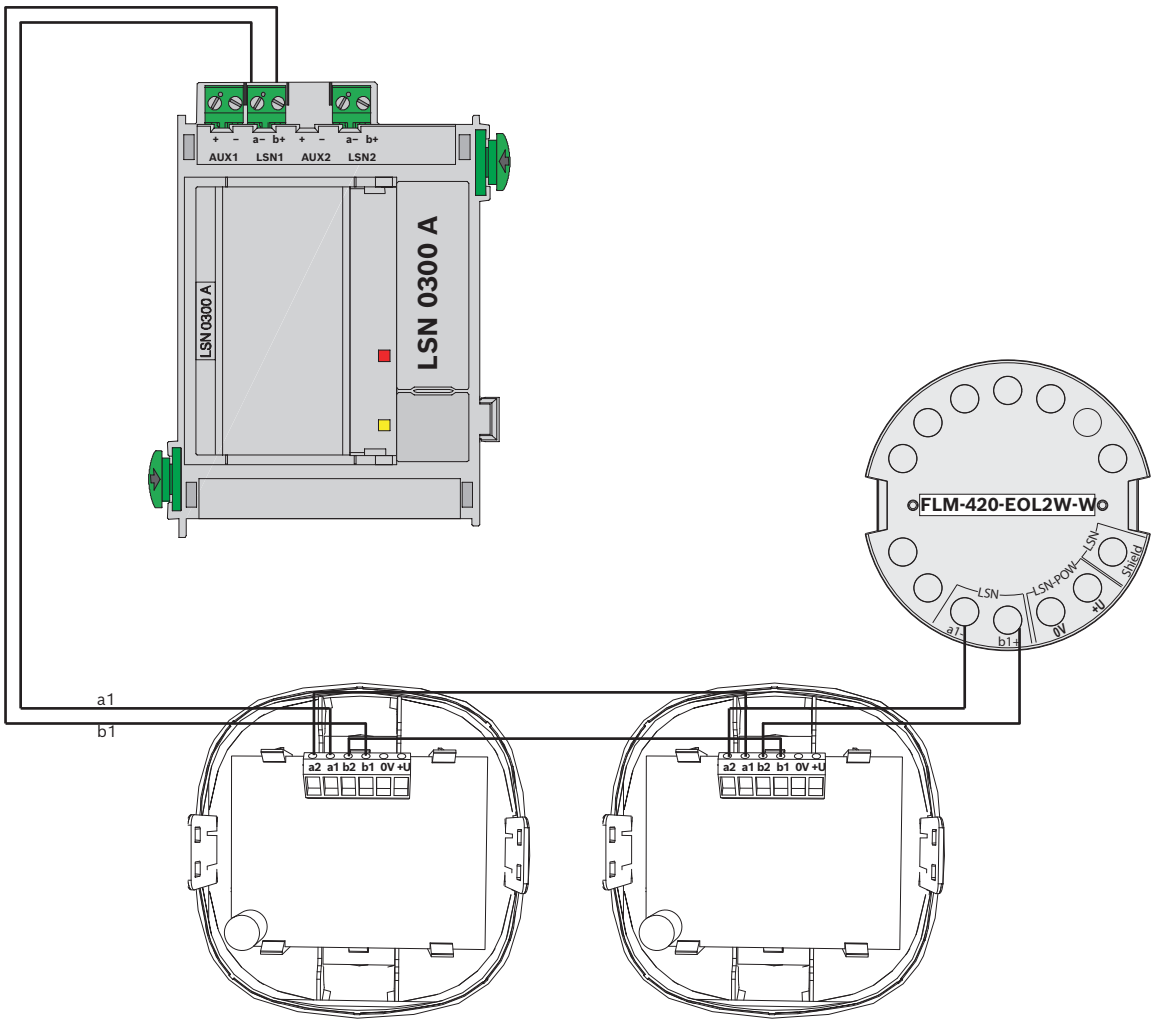




FNM-420-A /-B
FNM-420U-A /-B
FNM-420V-A



ELS



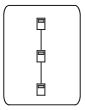
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FNM-420V-A

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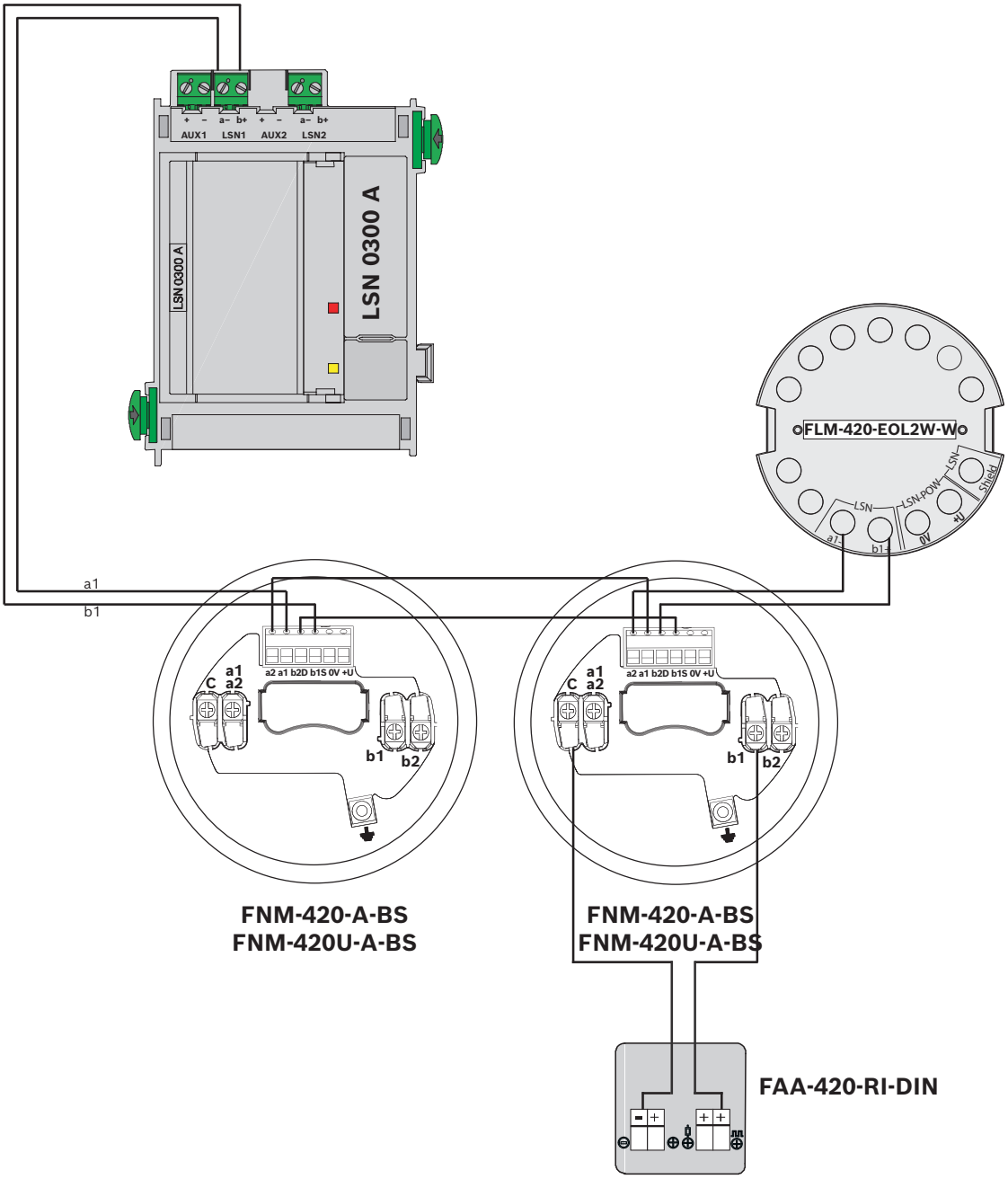




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FNM-420U-A-BS



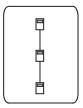
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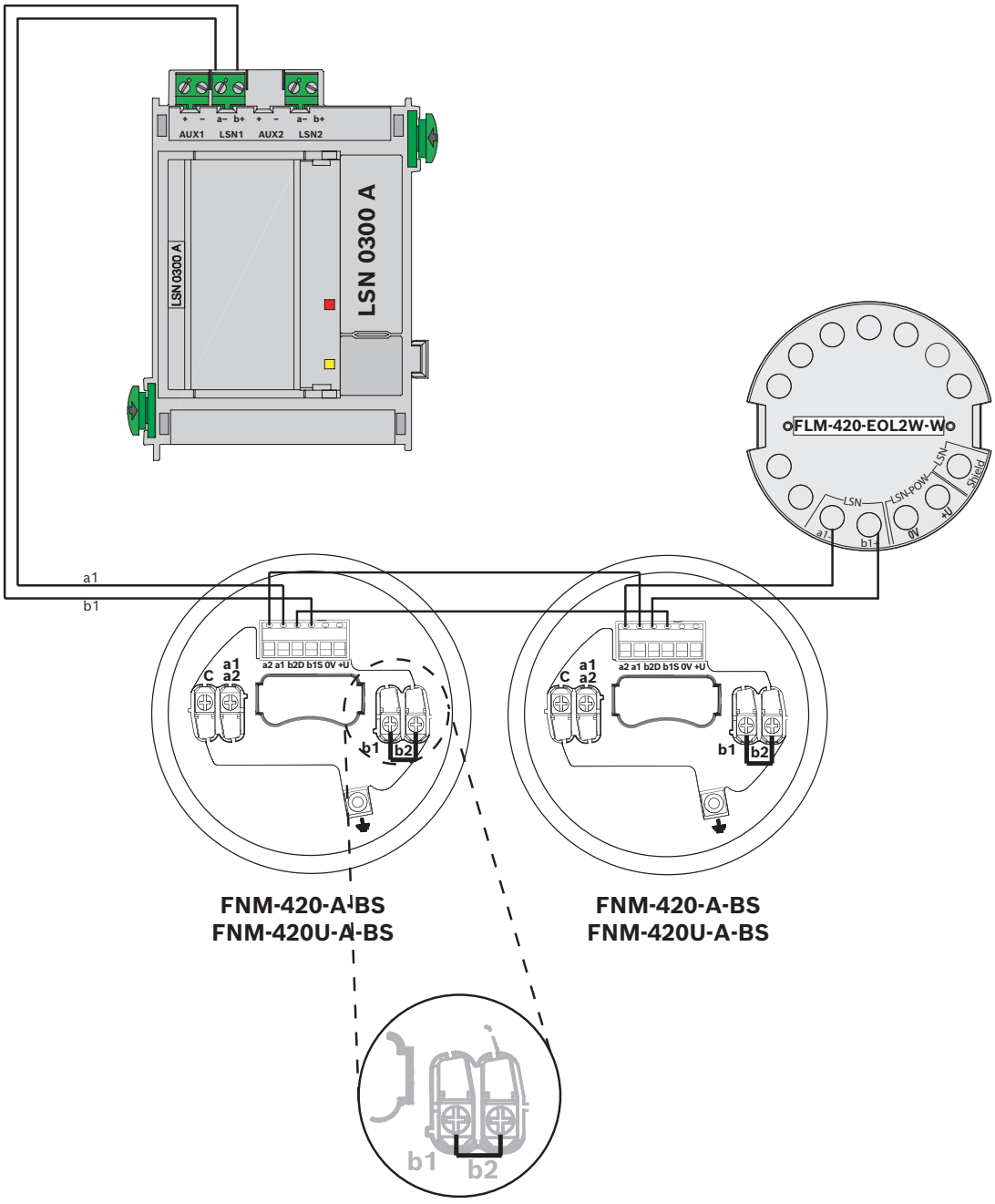




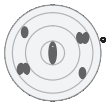
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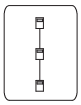
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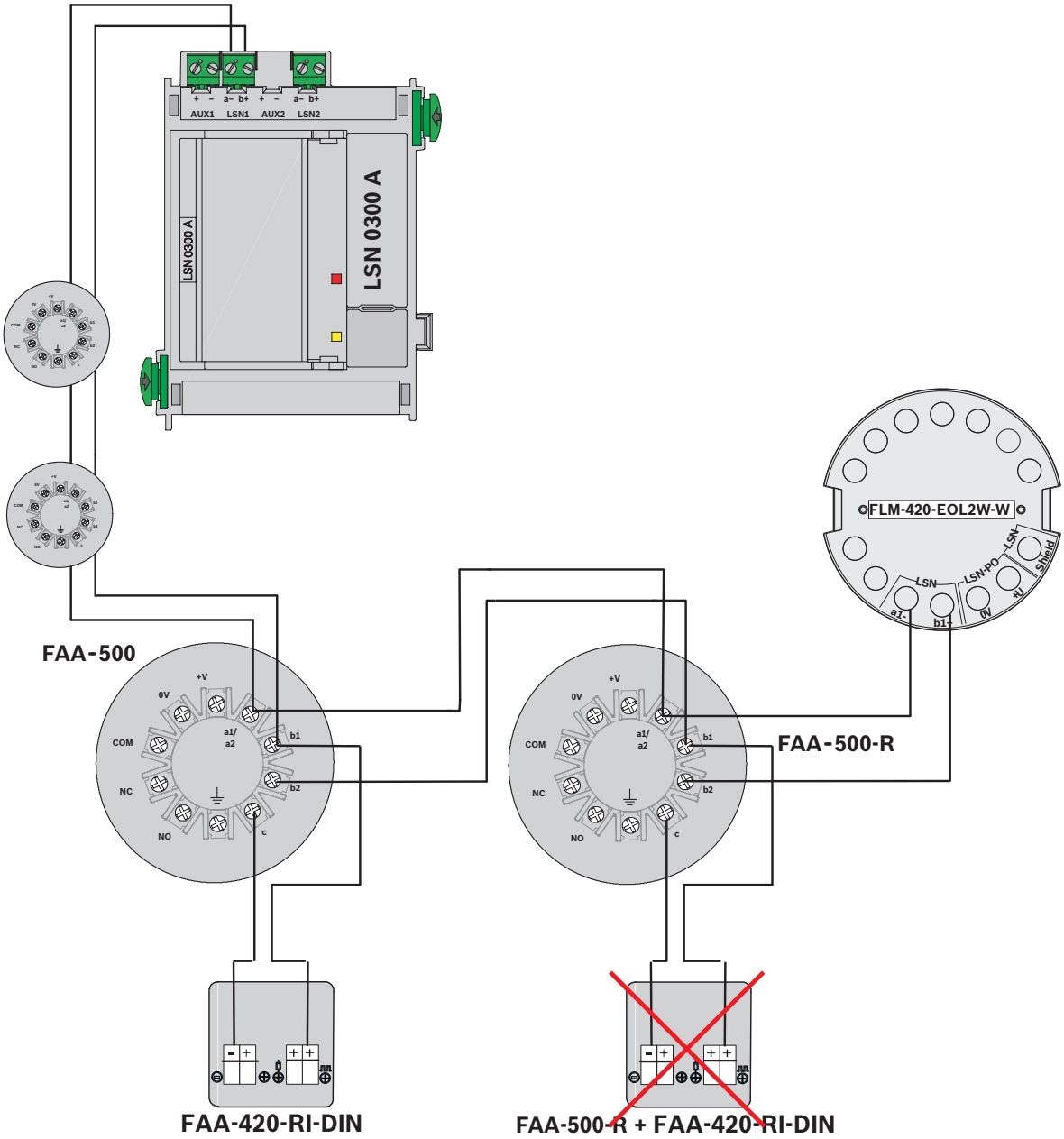




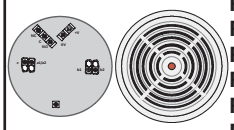
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FAP-OC520
FAP-OC-520-P



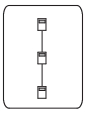
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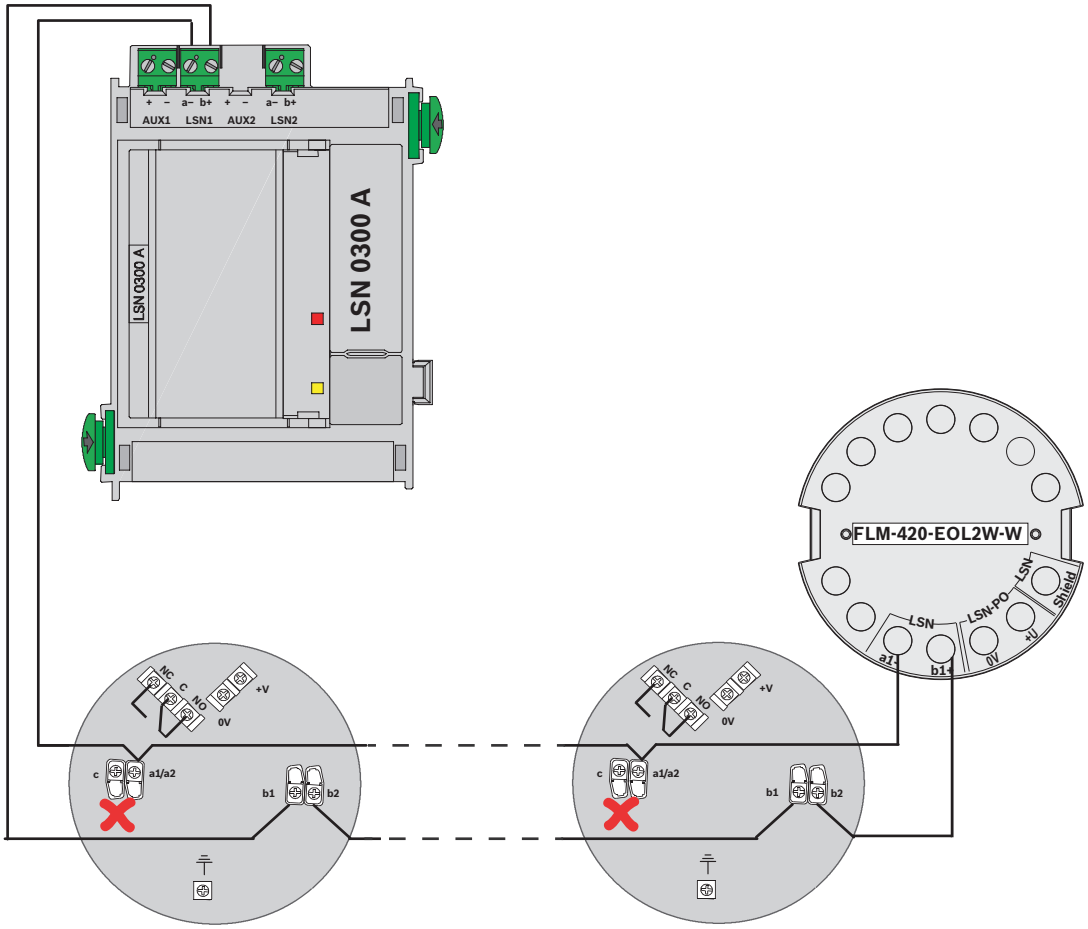




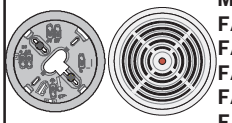
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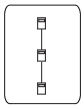
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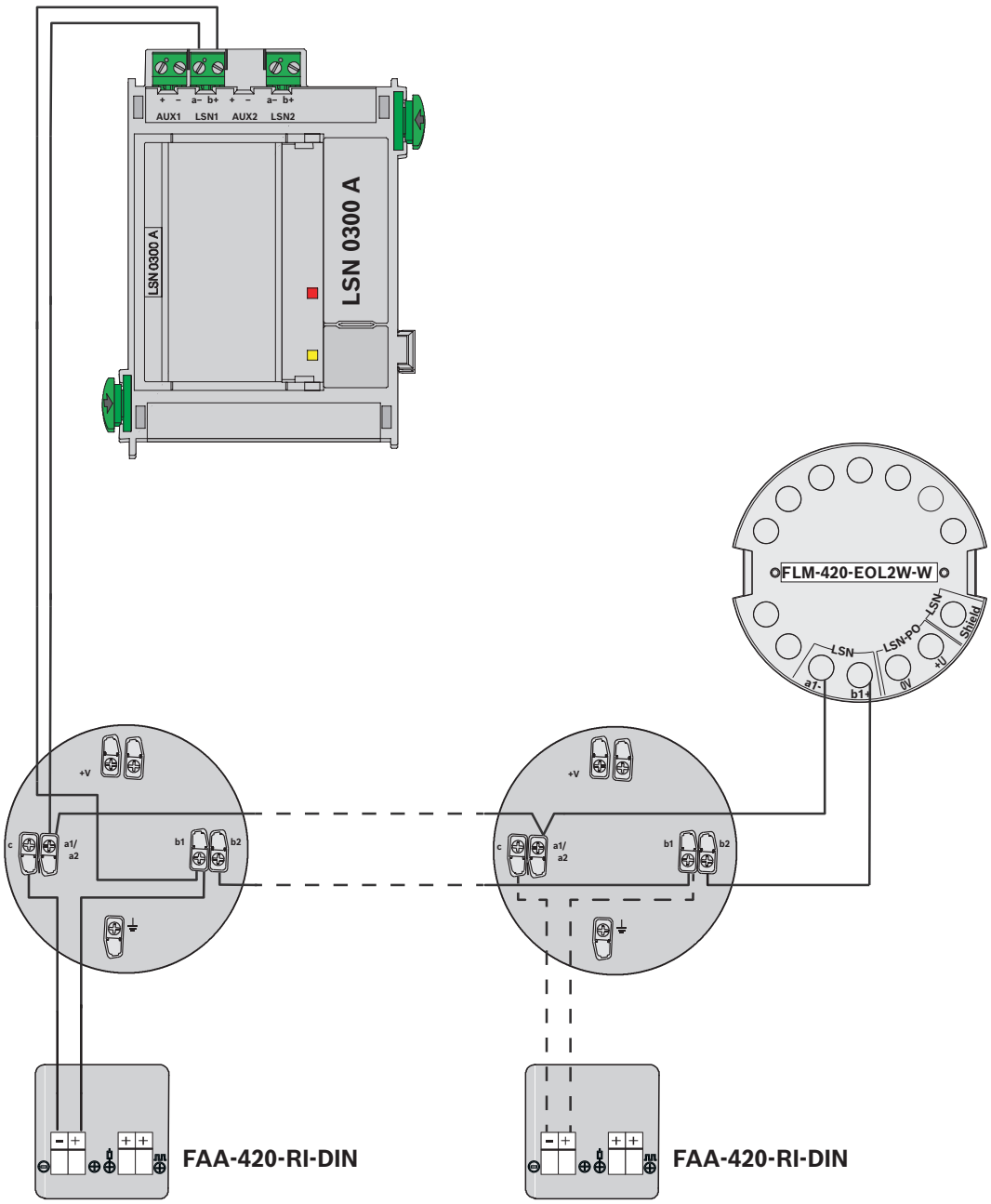




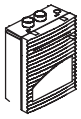
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FAP-425-OT, FAP-425-OT-R
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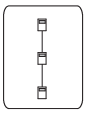
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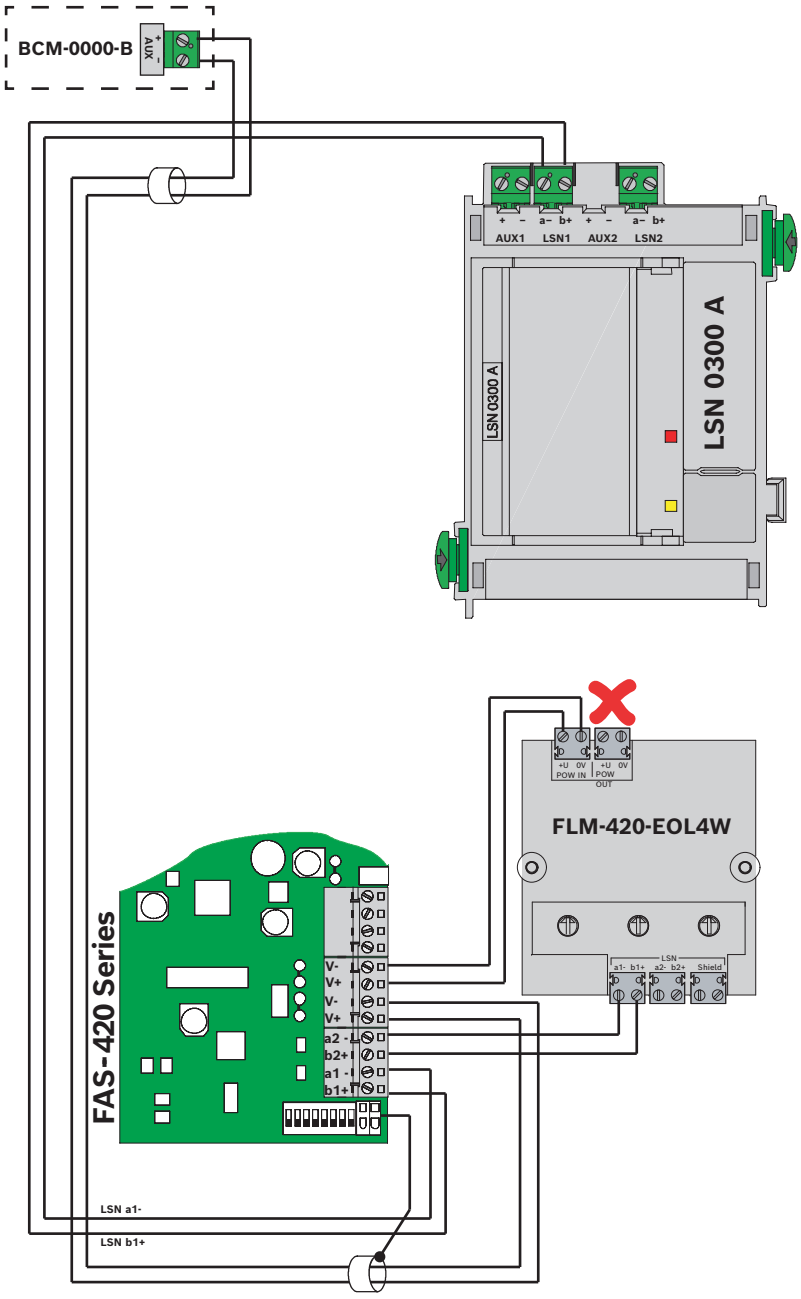




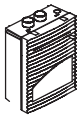
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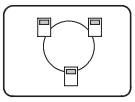
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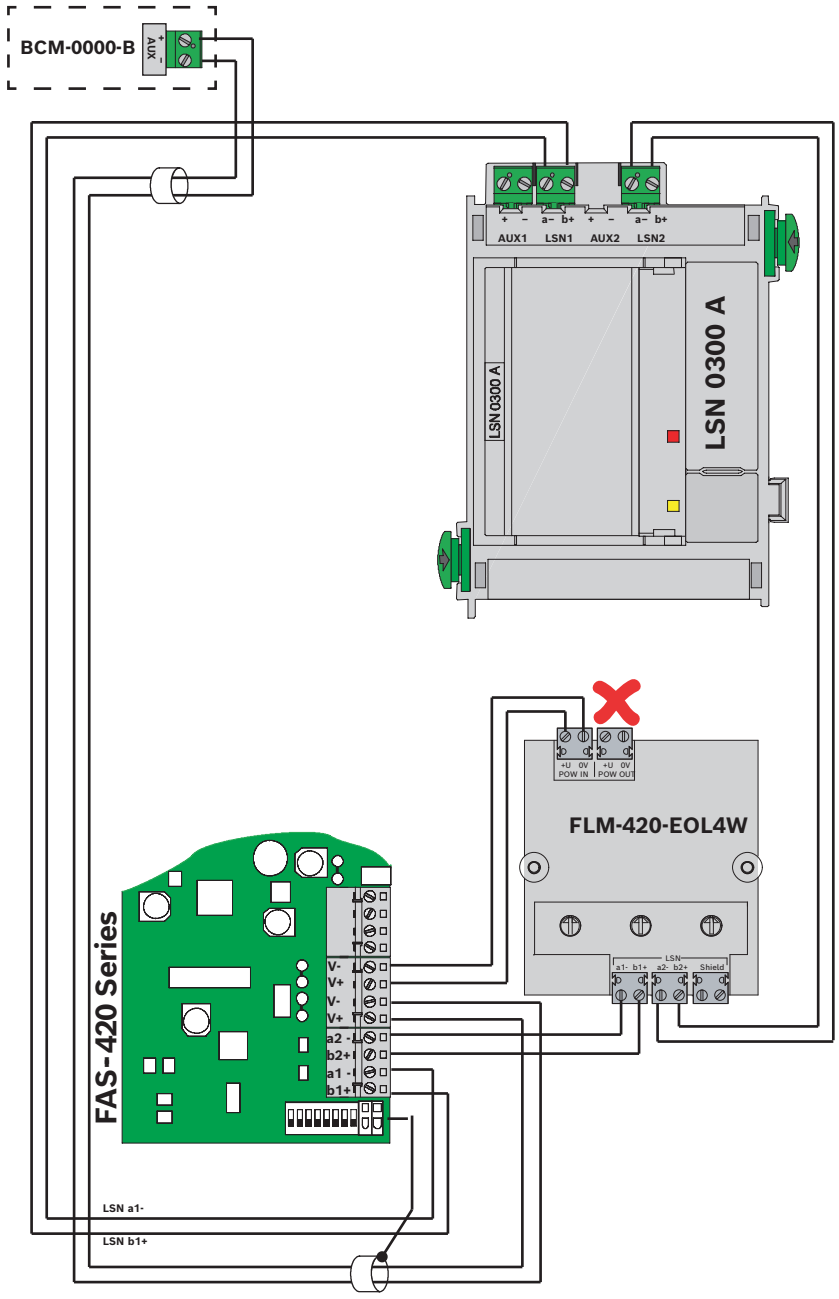




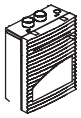
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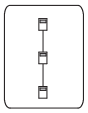
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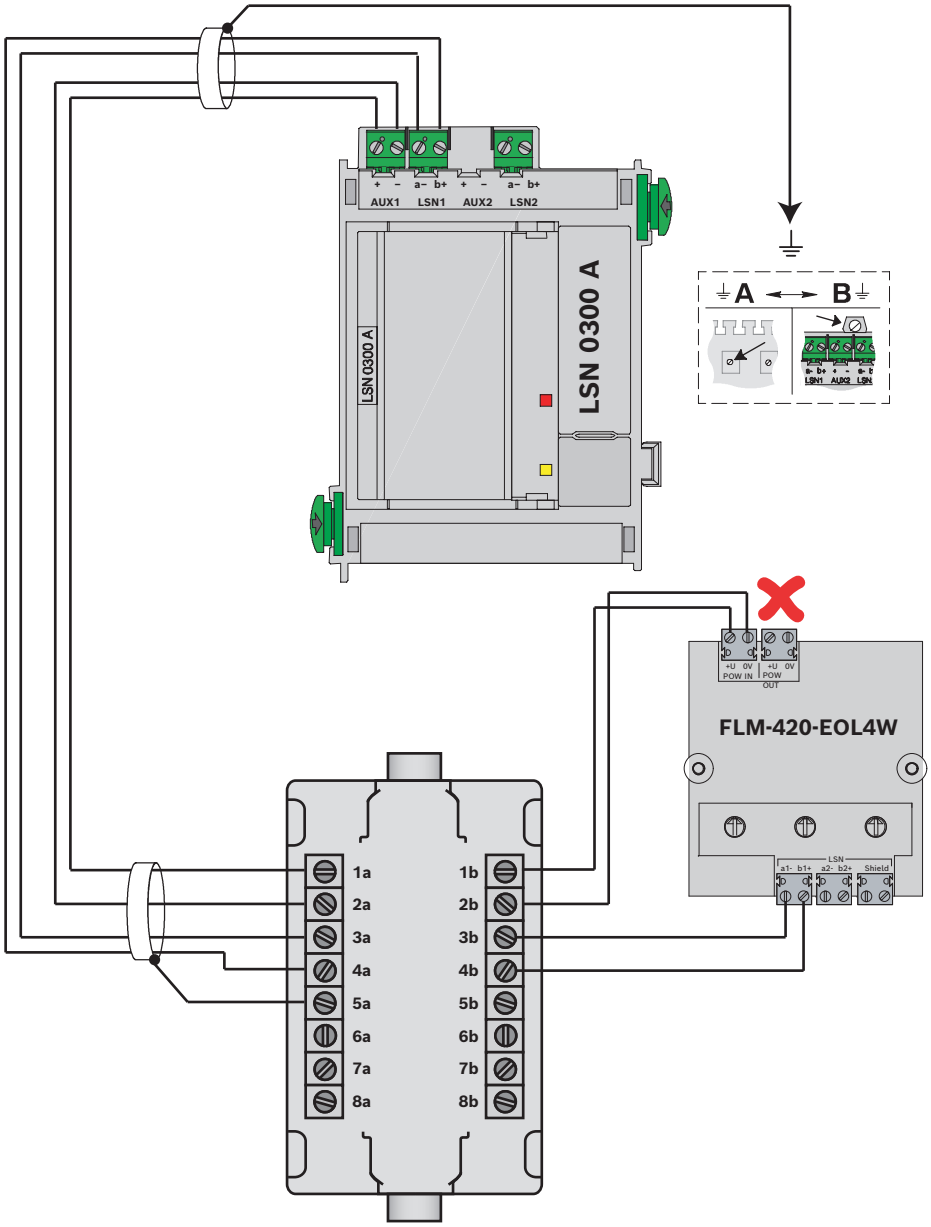




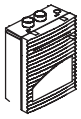
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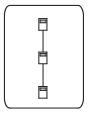
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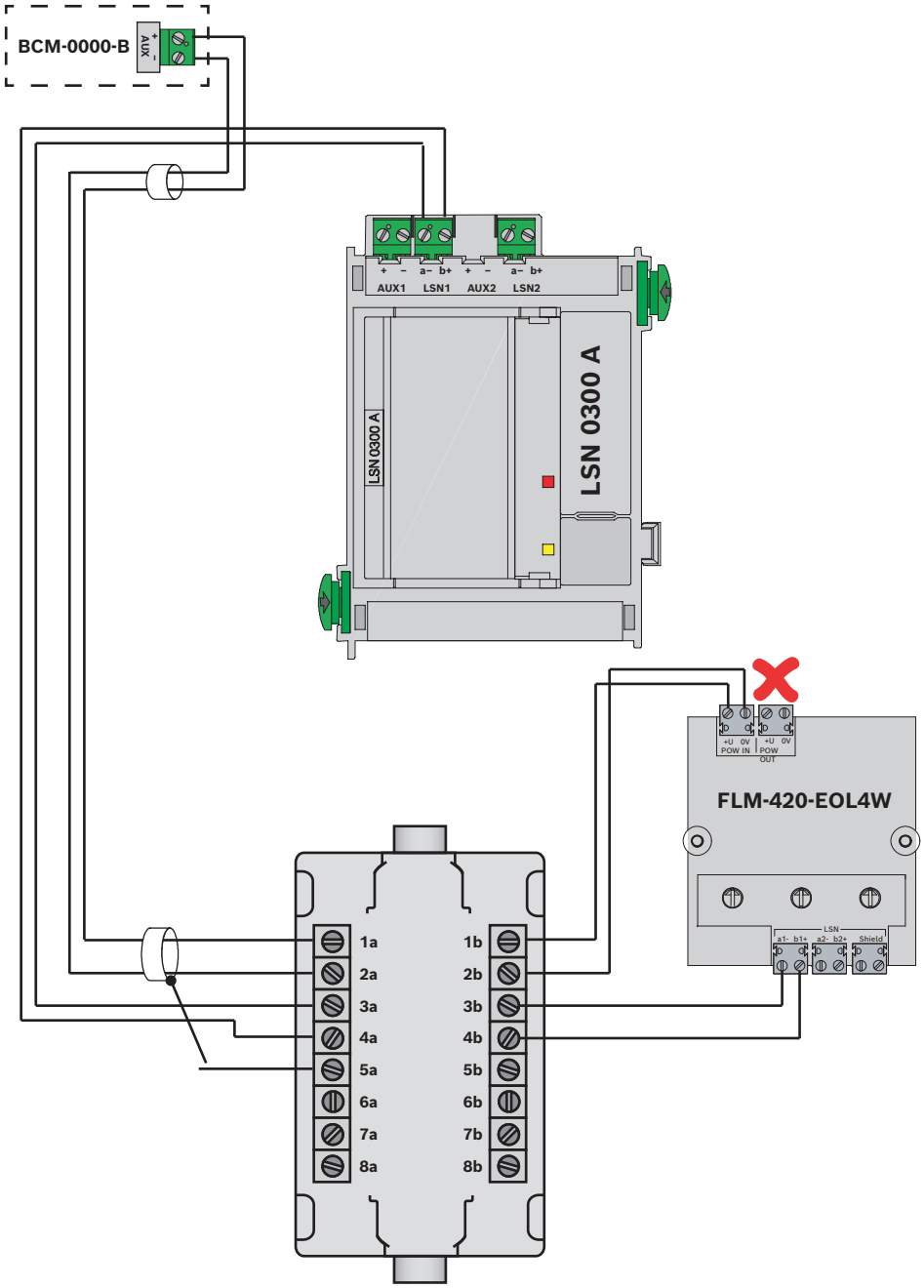




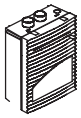
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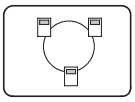
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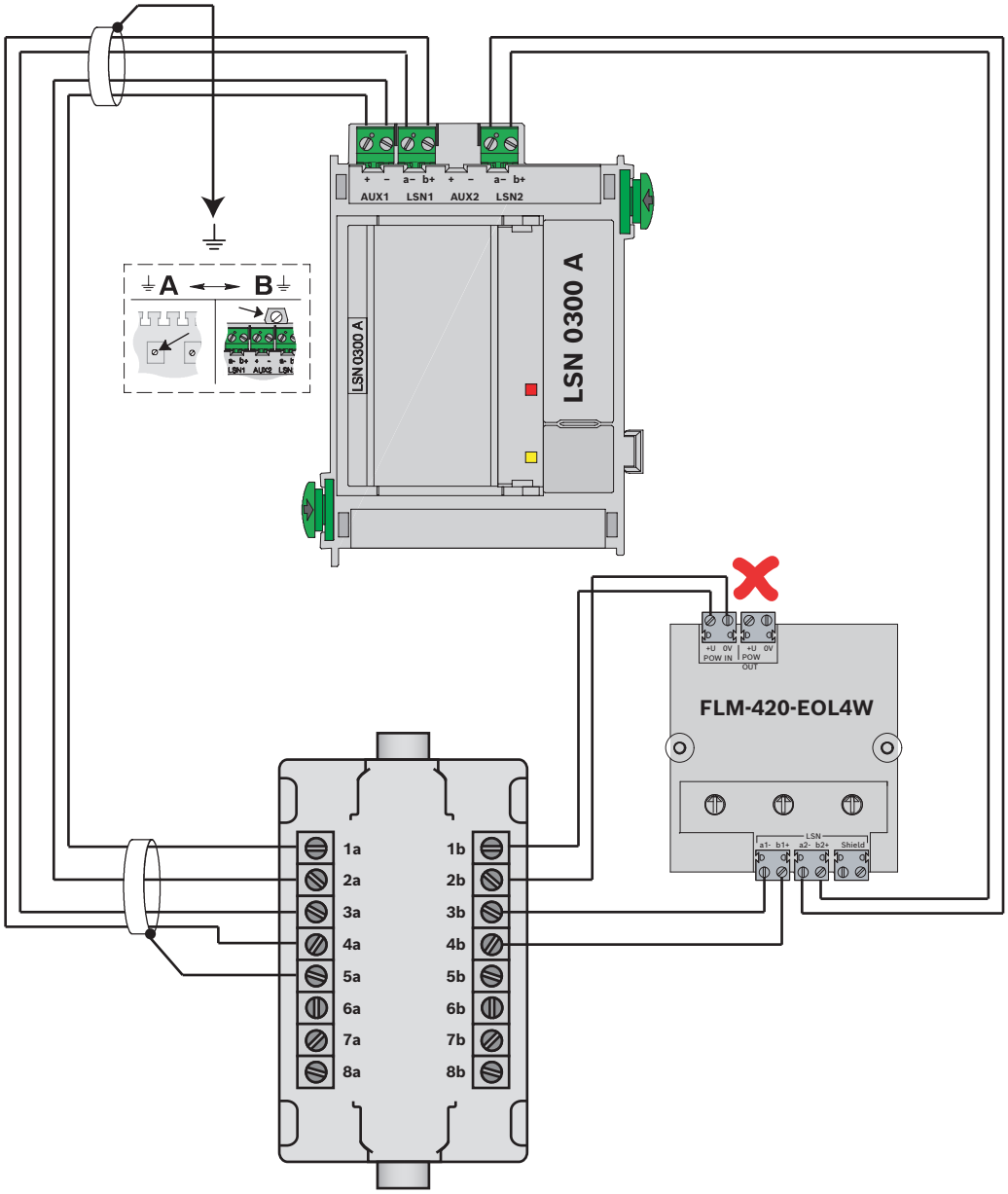




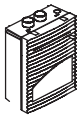
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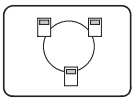
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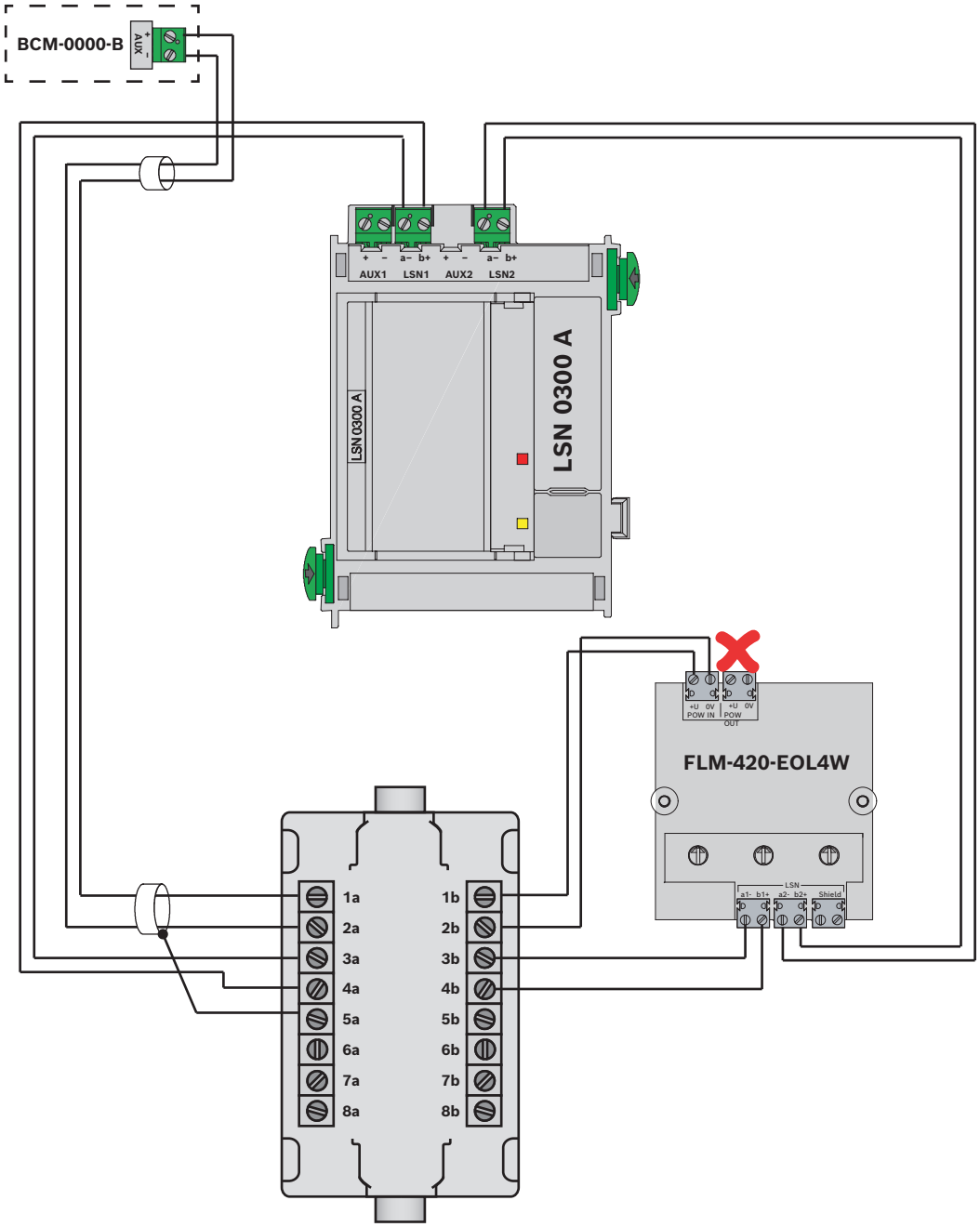




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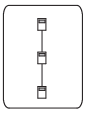
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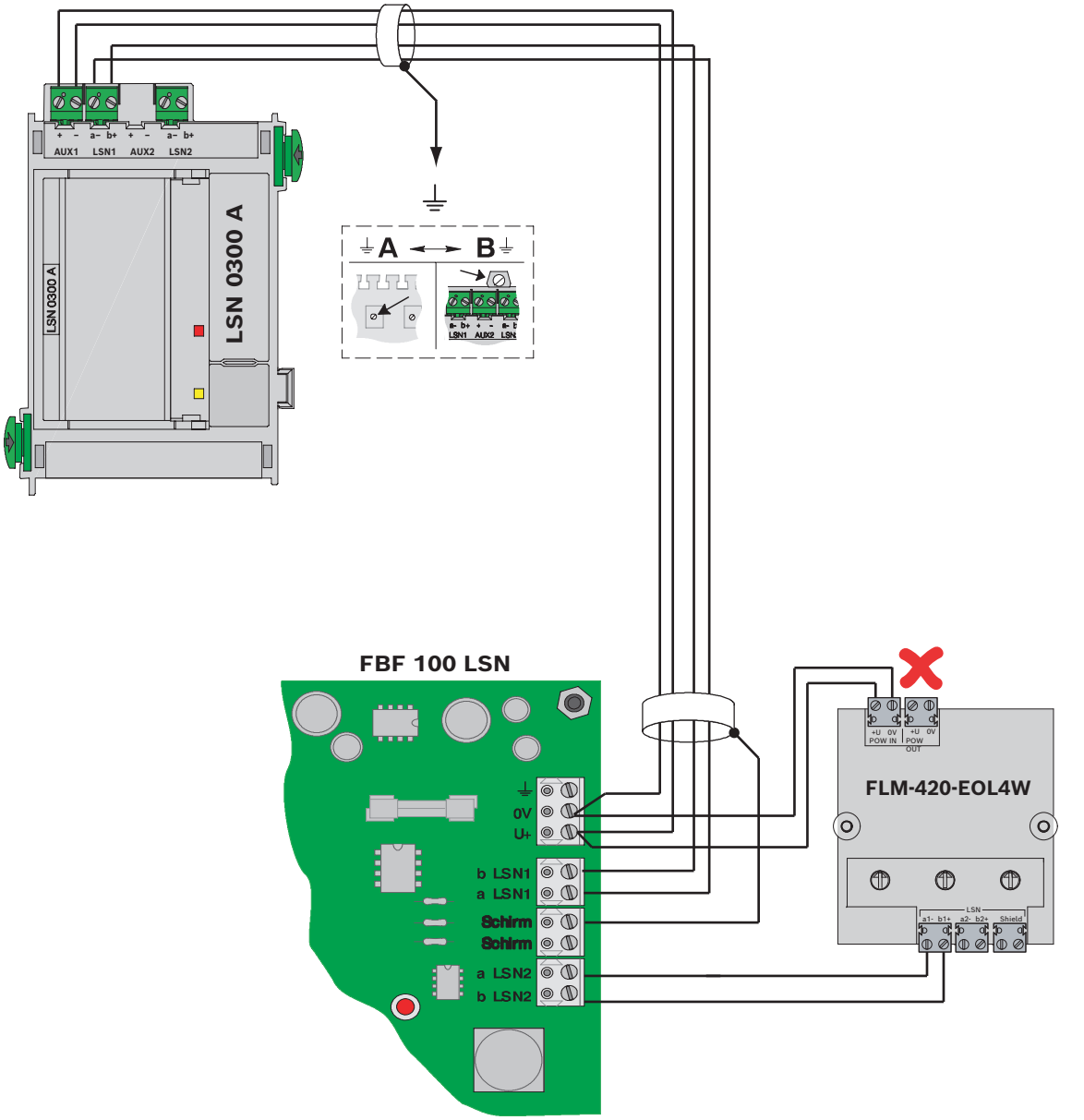




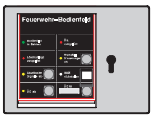
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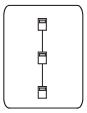
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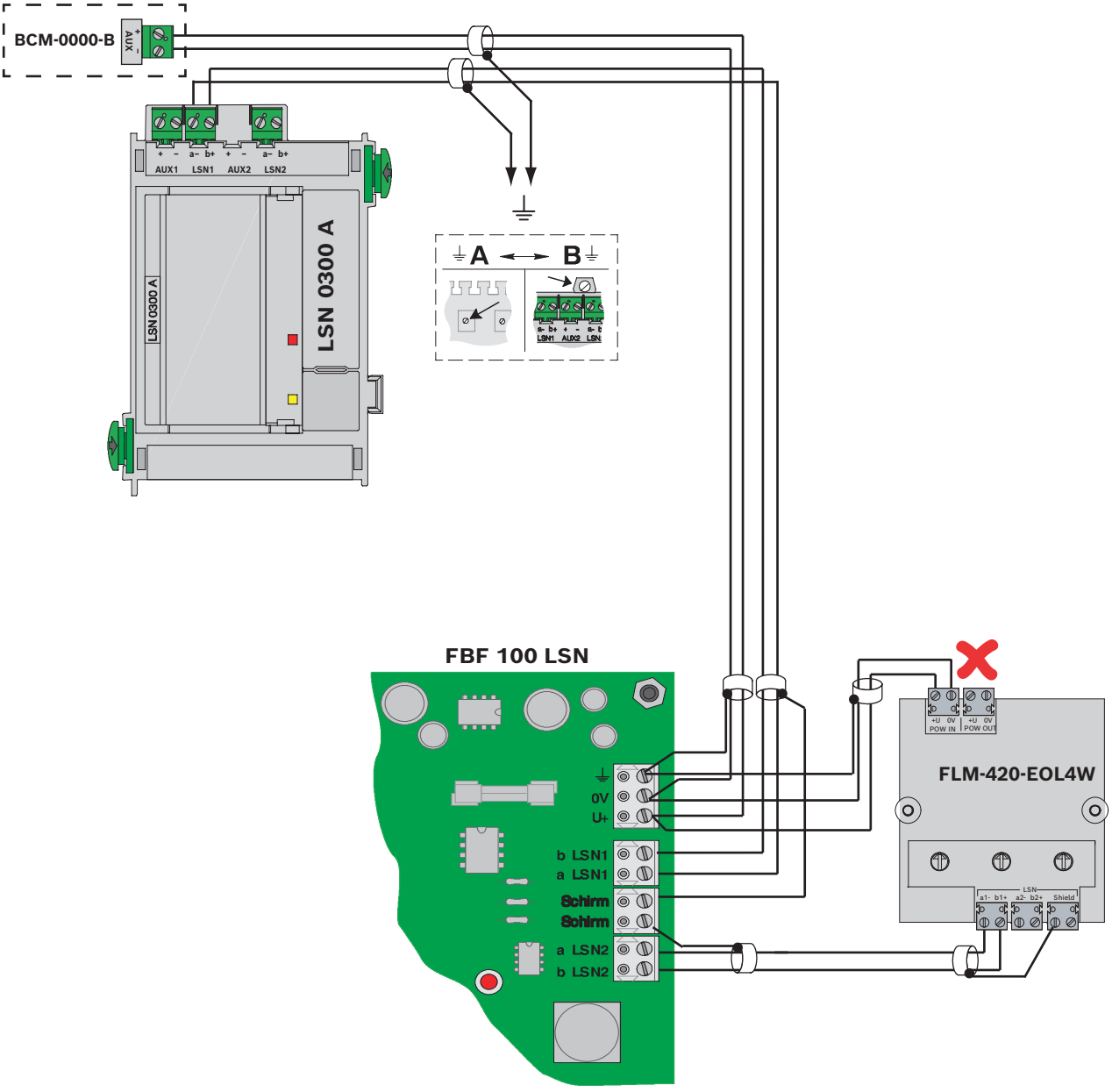




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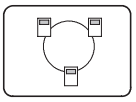
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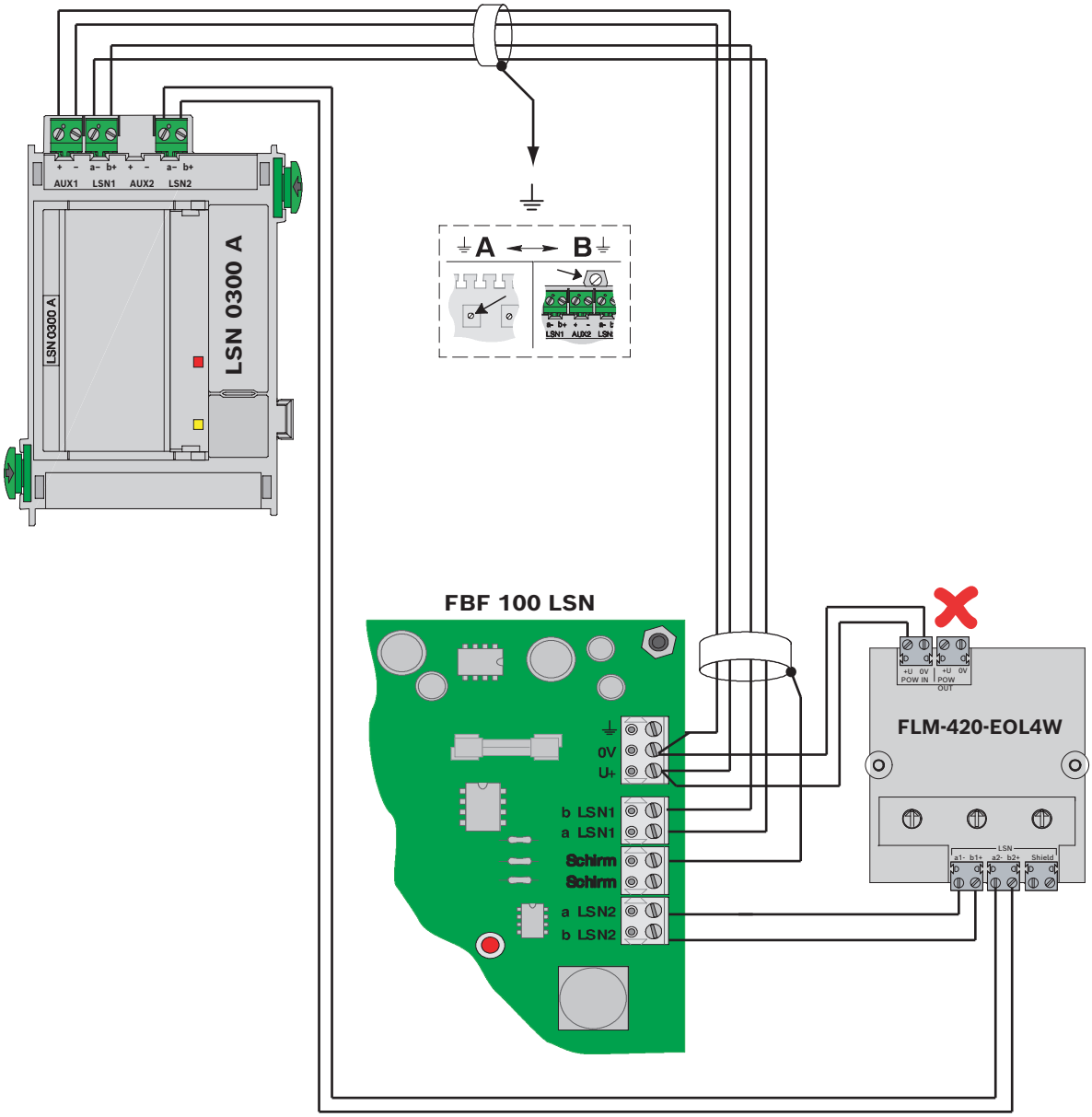




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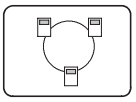
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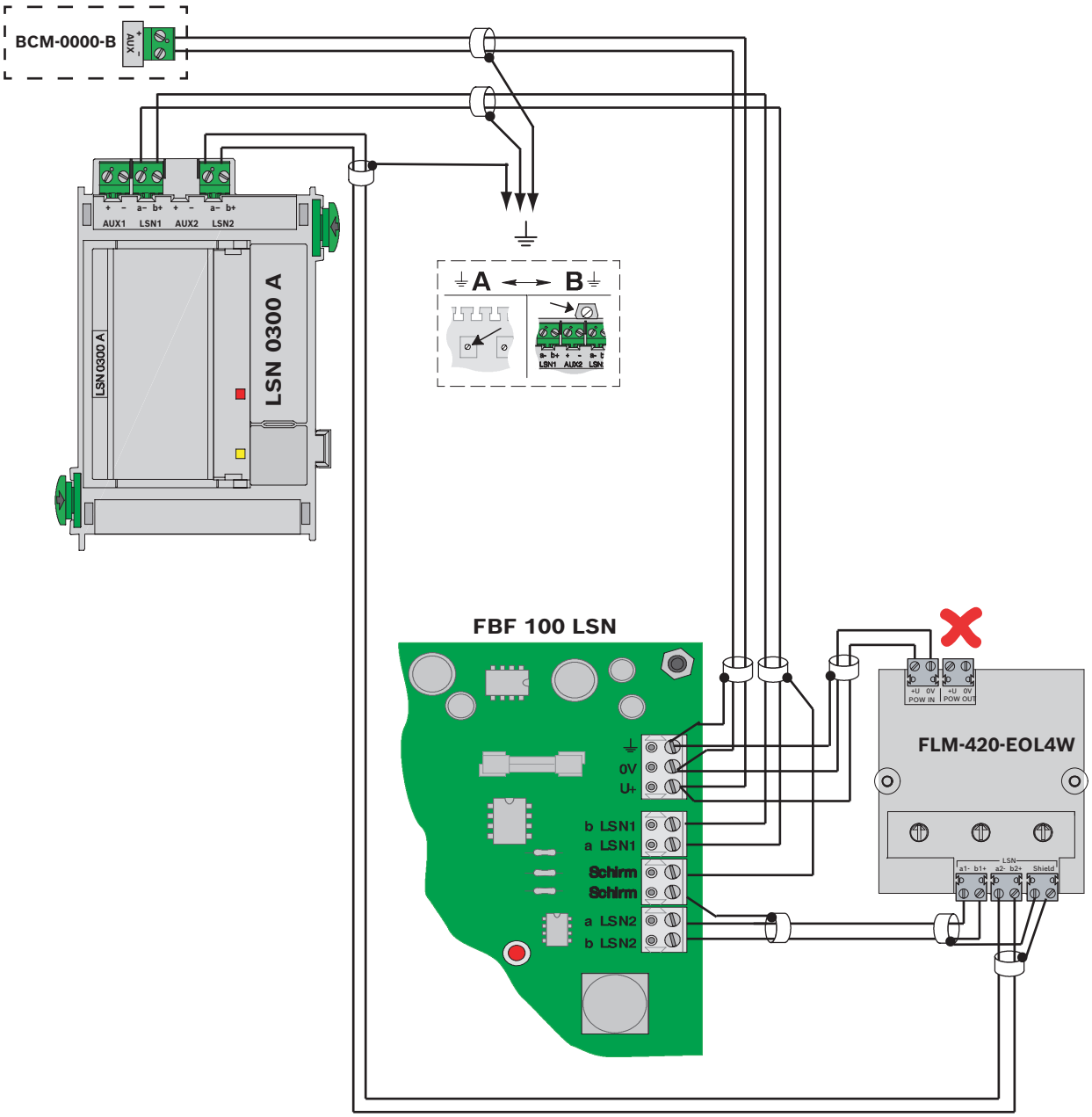


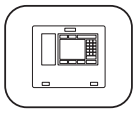


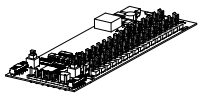
FBF 100 LSN



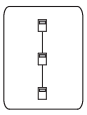
ELS



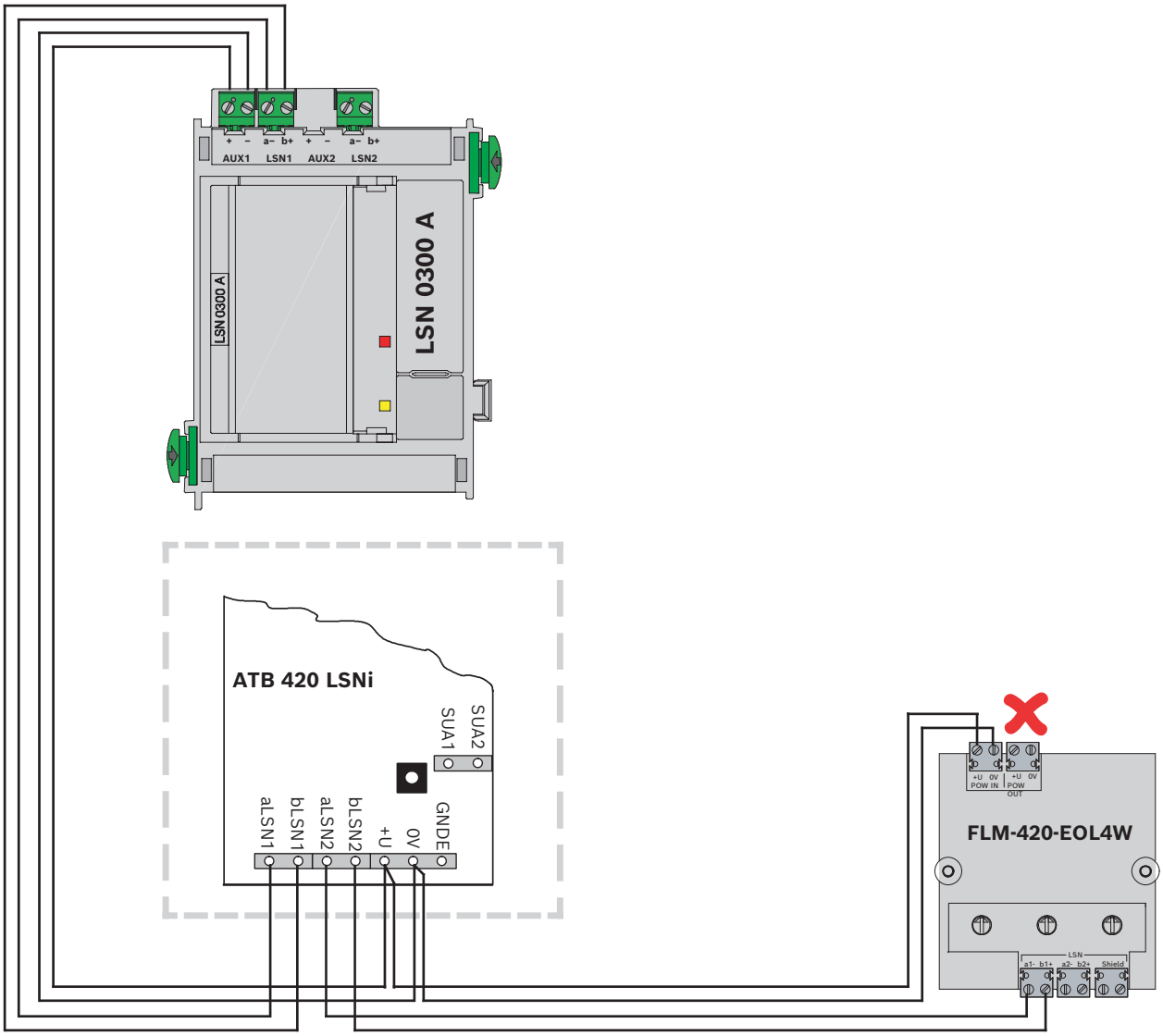


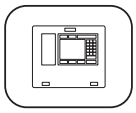


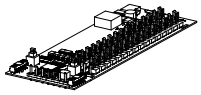
ATB 420 LSNi



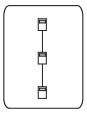
ELS



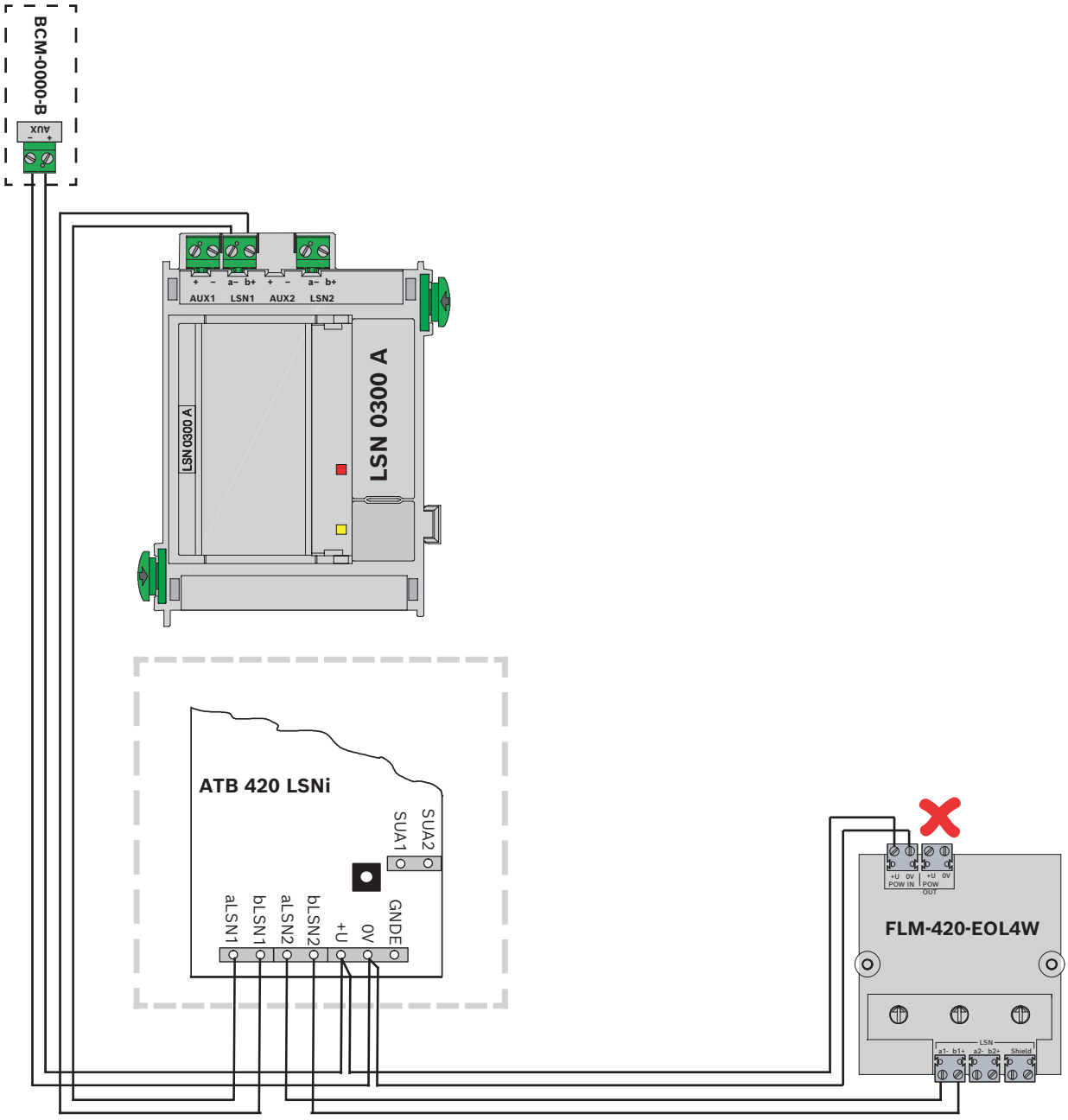


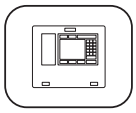


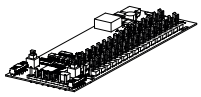
ATB 420 LSNi



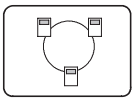
ELS



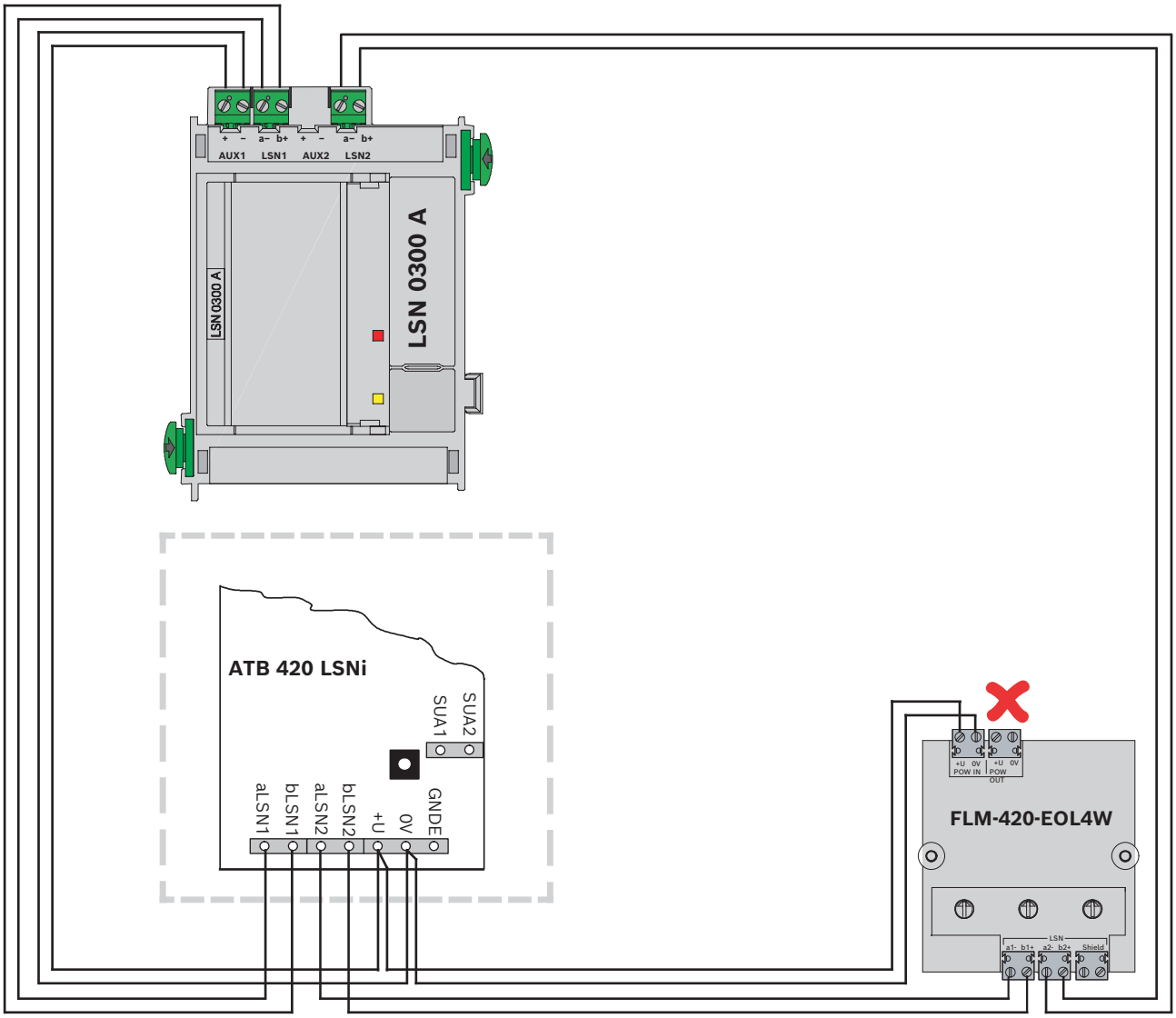


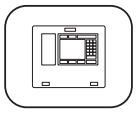


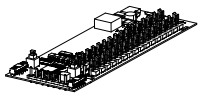
ATB 420 LSNi



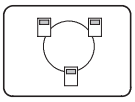
ELS



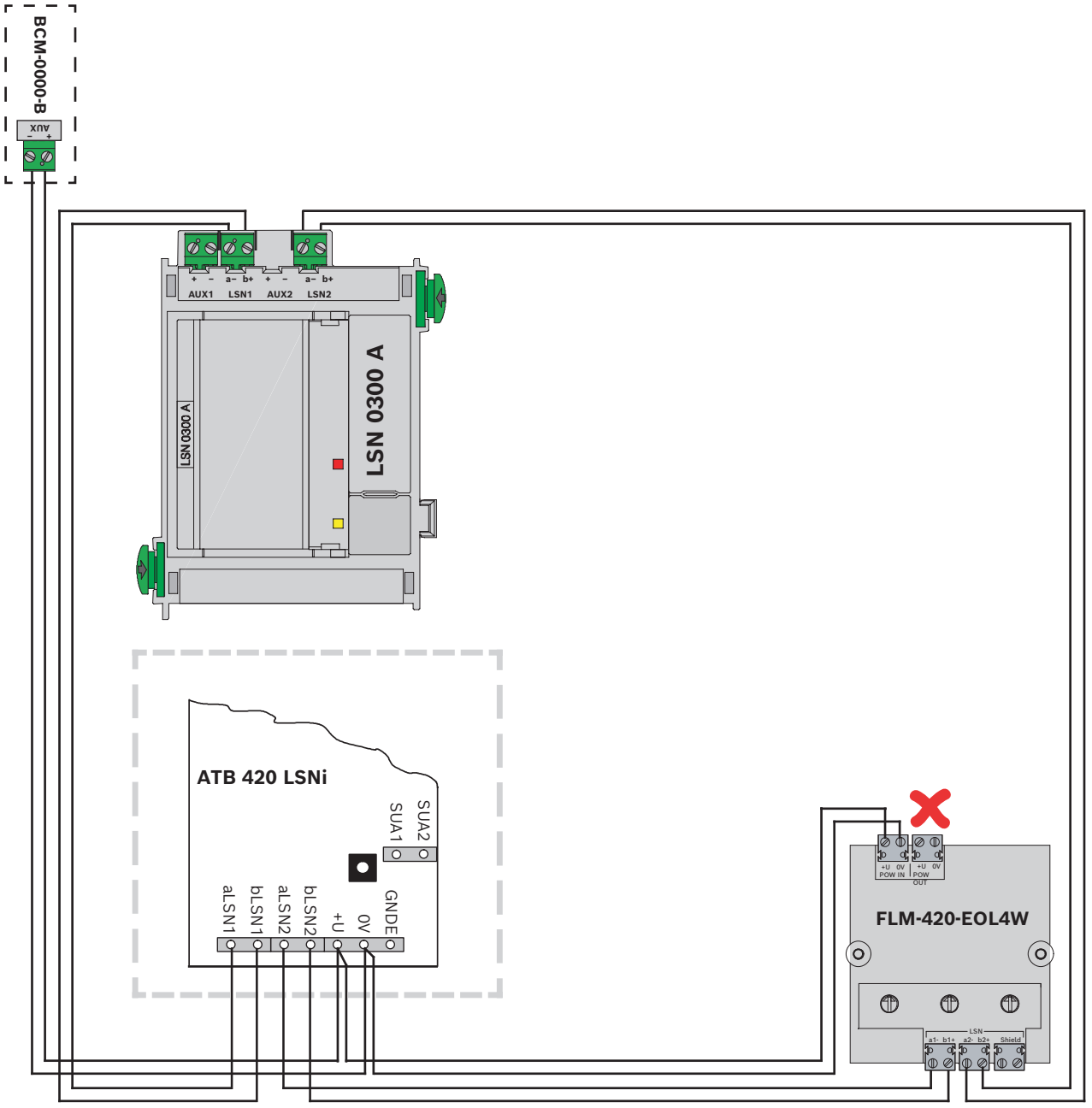


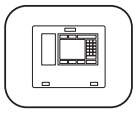


ATB 420 LSNi



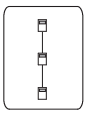
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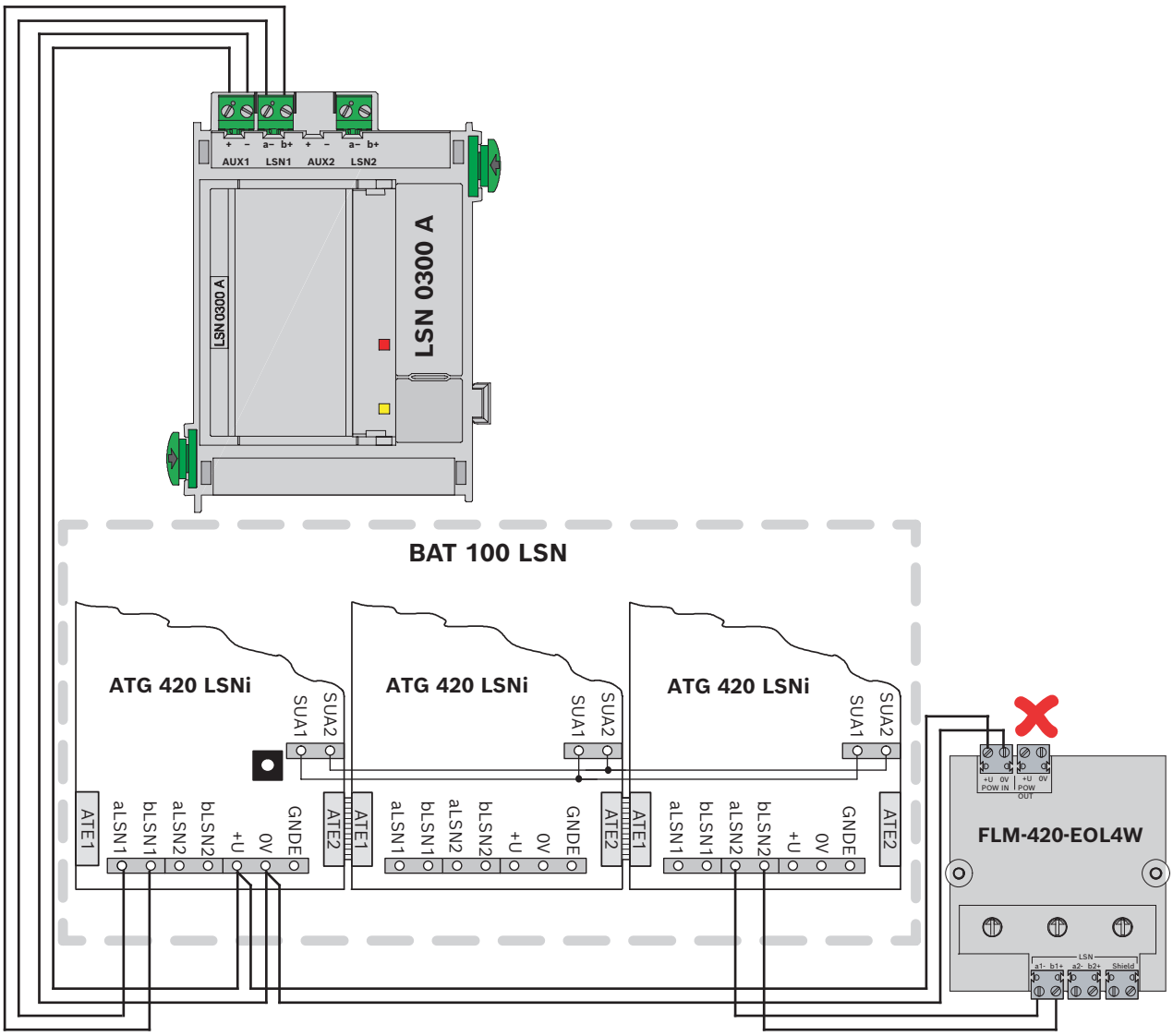


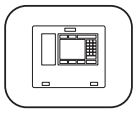


BAT 100 LSN
ATG 420 LSNi



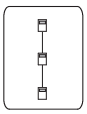
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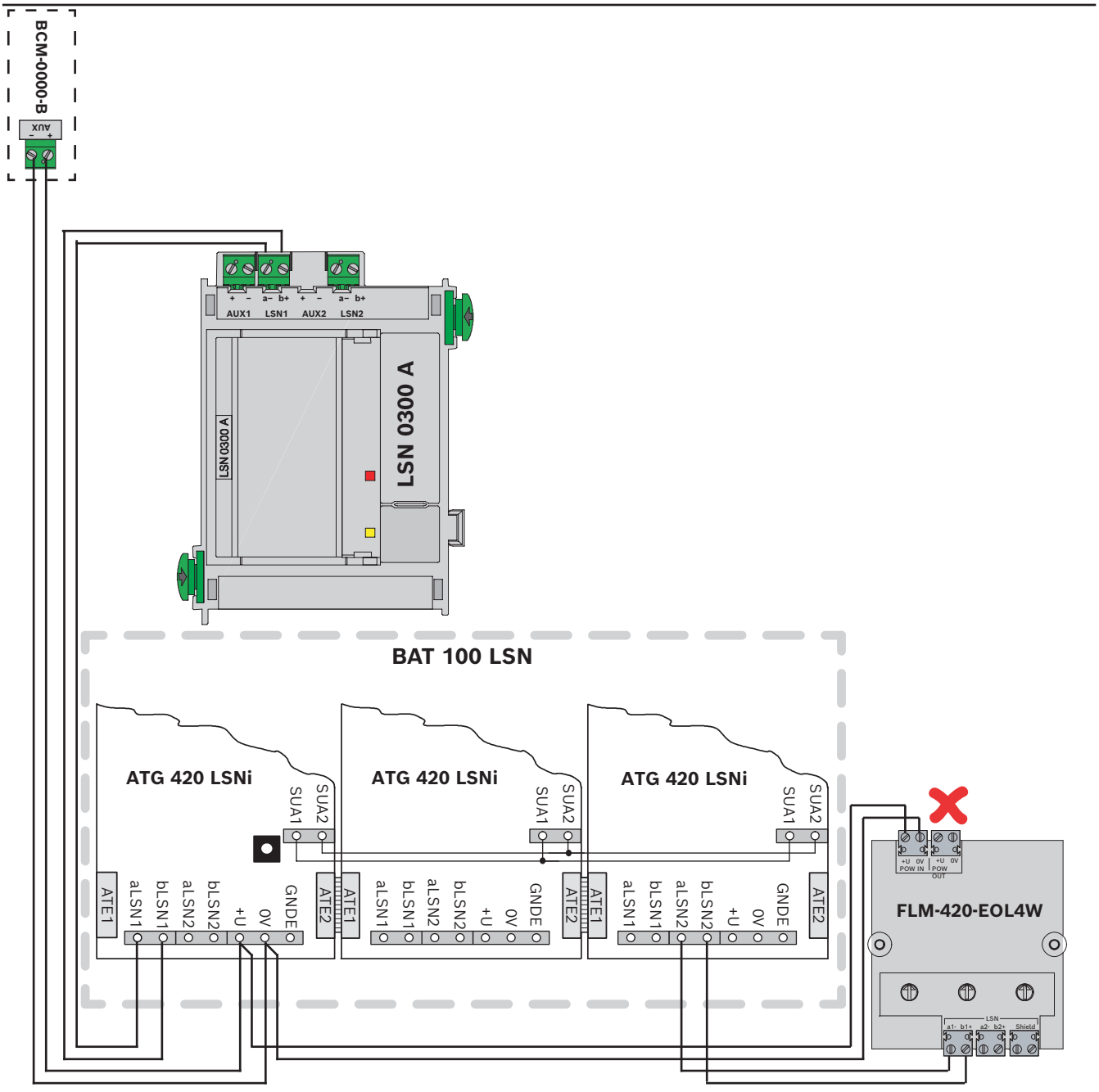


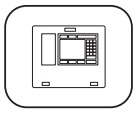


BAT 100 LSN
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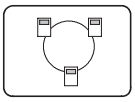
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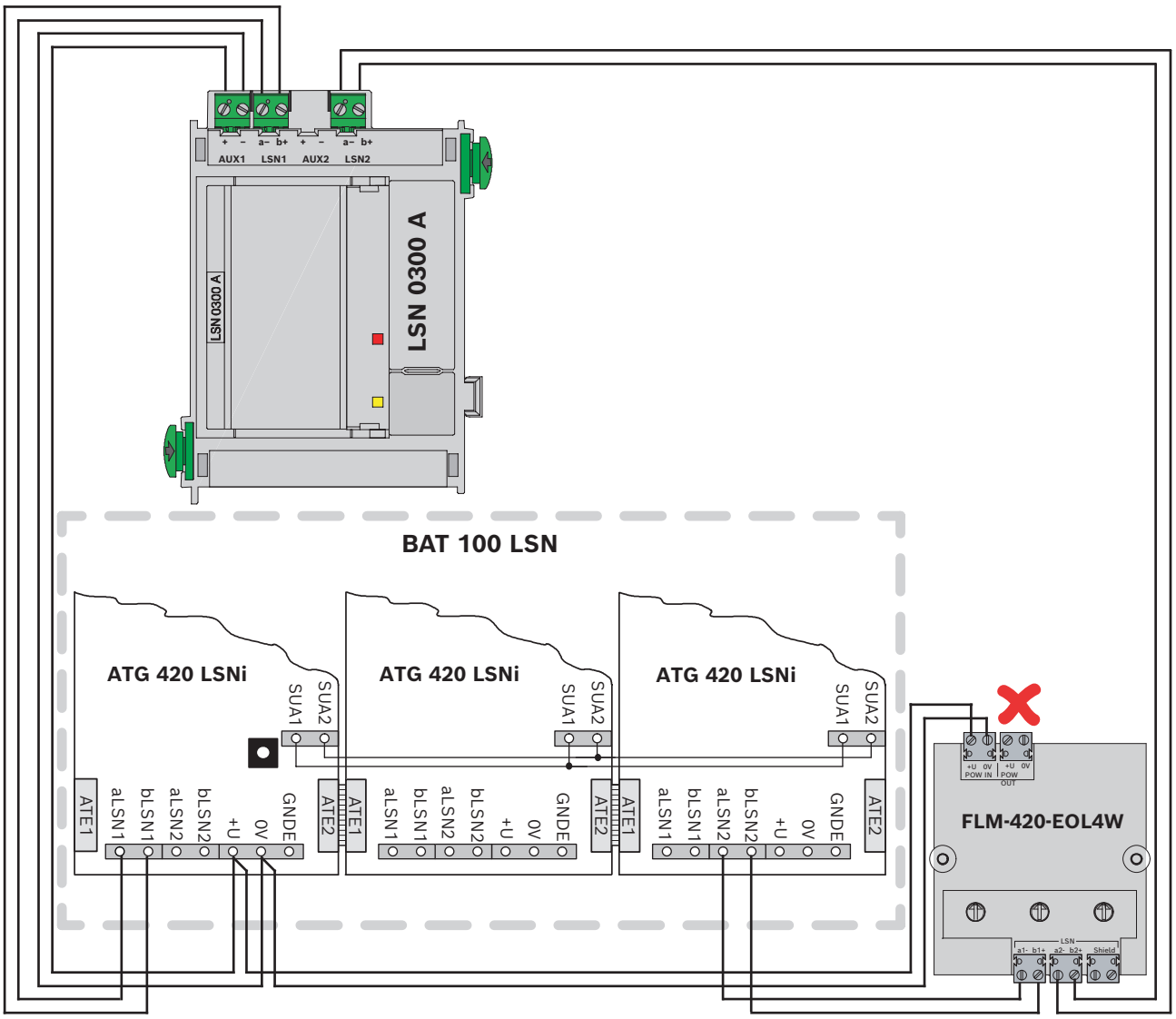


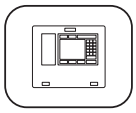


BAT 100 LSN
ATG 420 LSNi



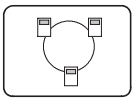
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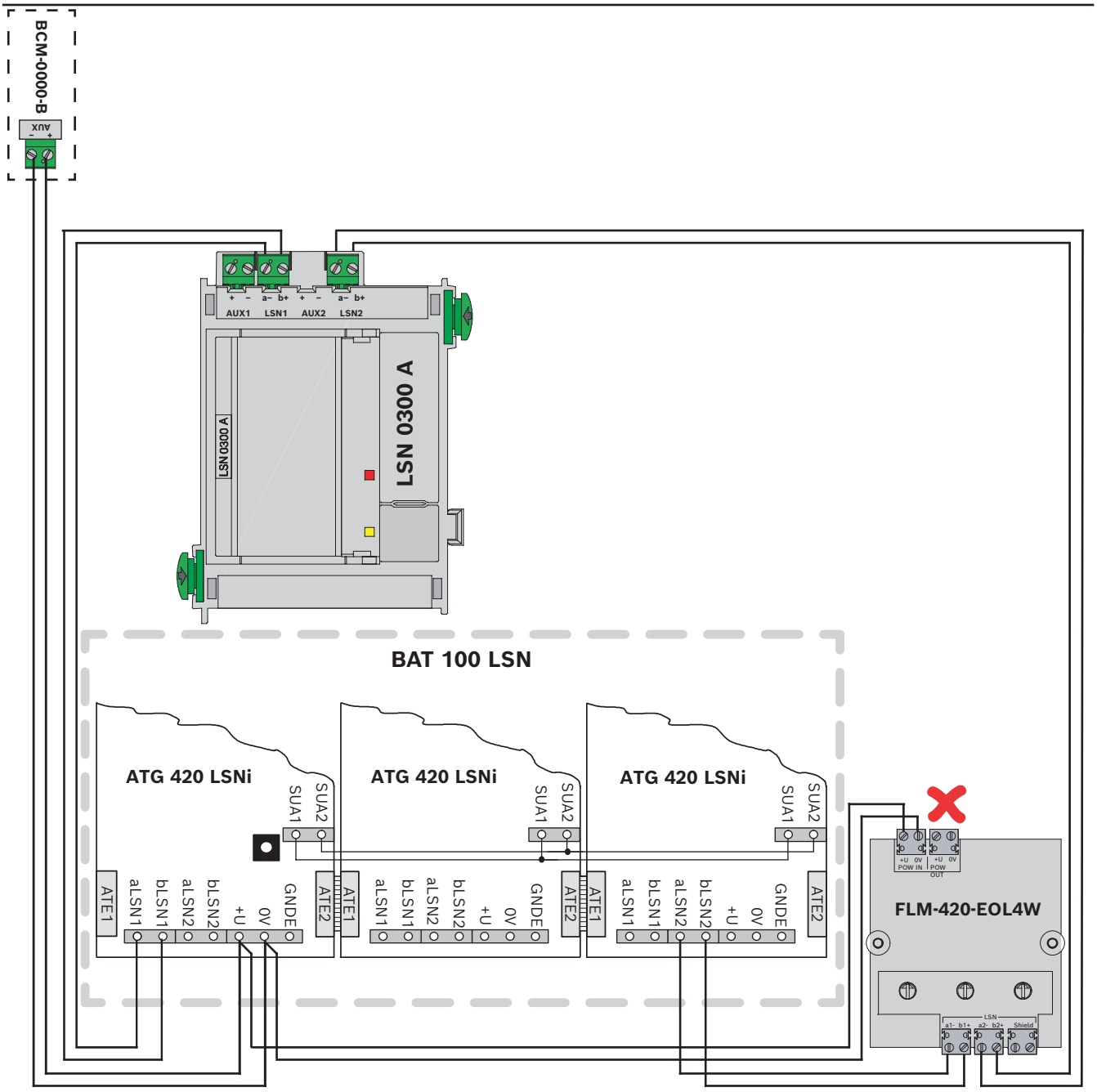




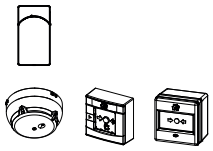
BAT 100 LSN
ATG 420 LSNi



ELS

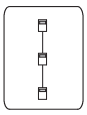




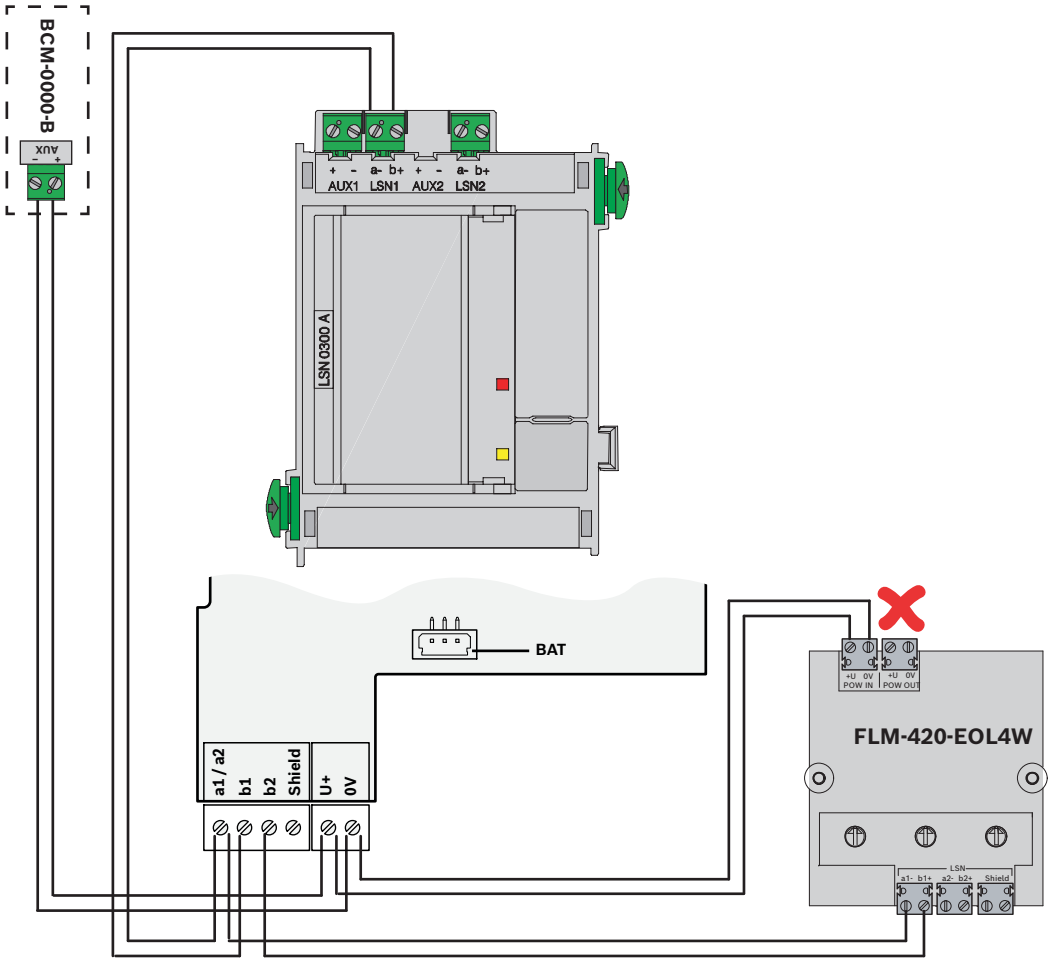


FWI-270

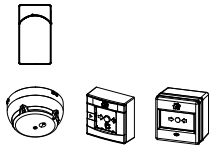
FDOOT271-O
FDM275-O
FDM273-O



ELS

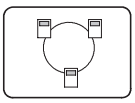




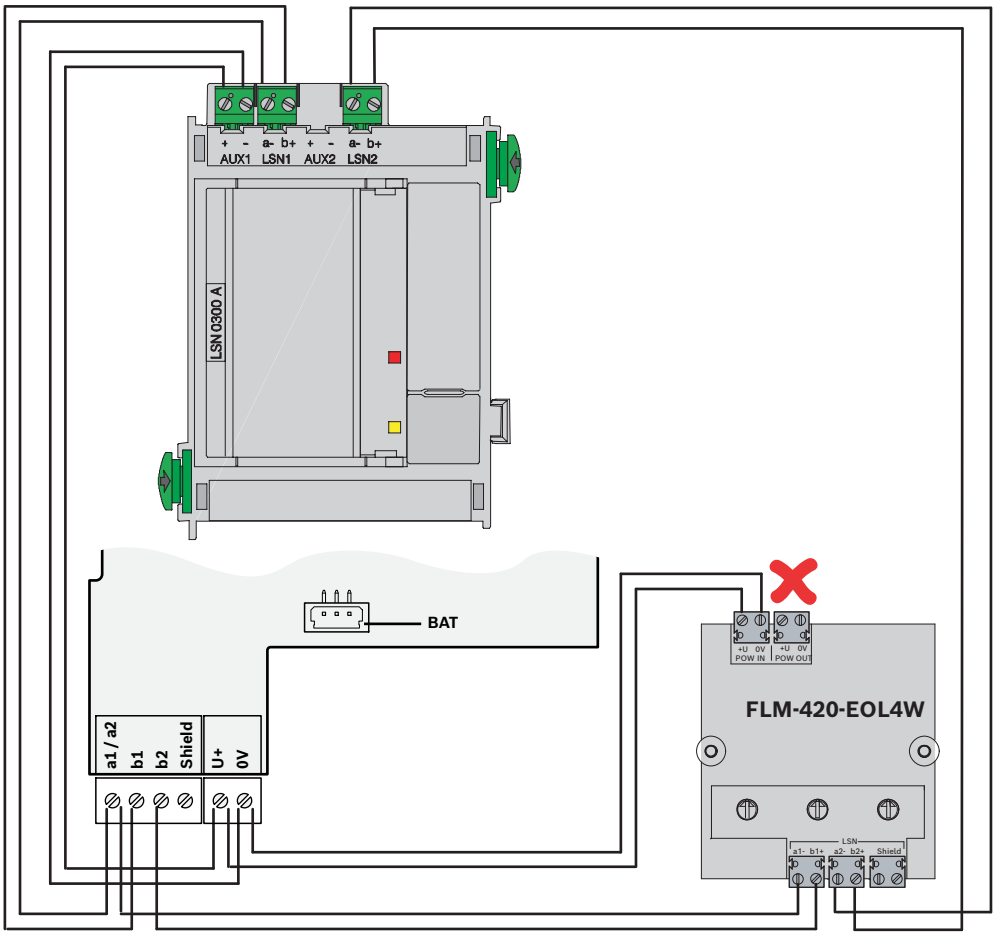


FWI-270

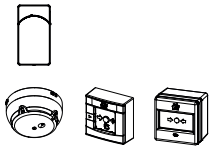
FDOOT271-O
FDM275-O
FDM273-O



ELS

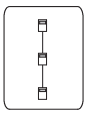




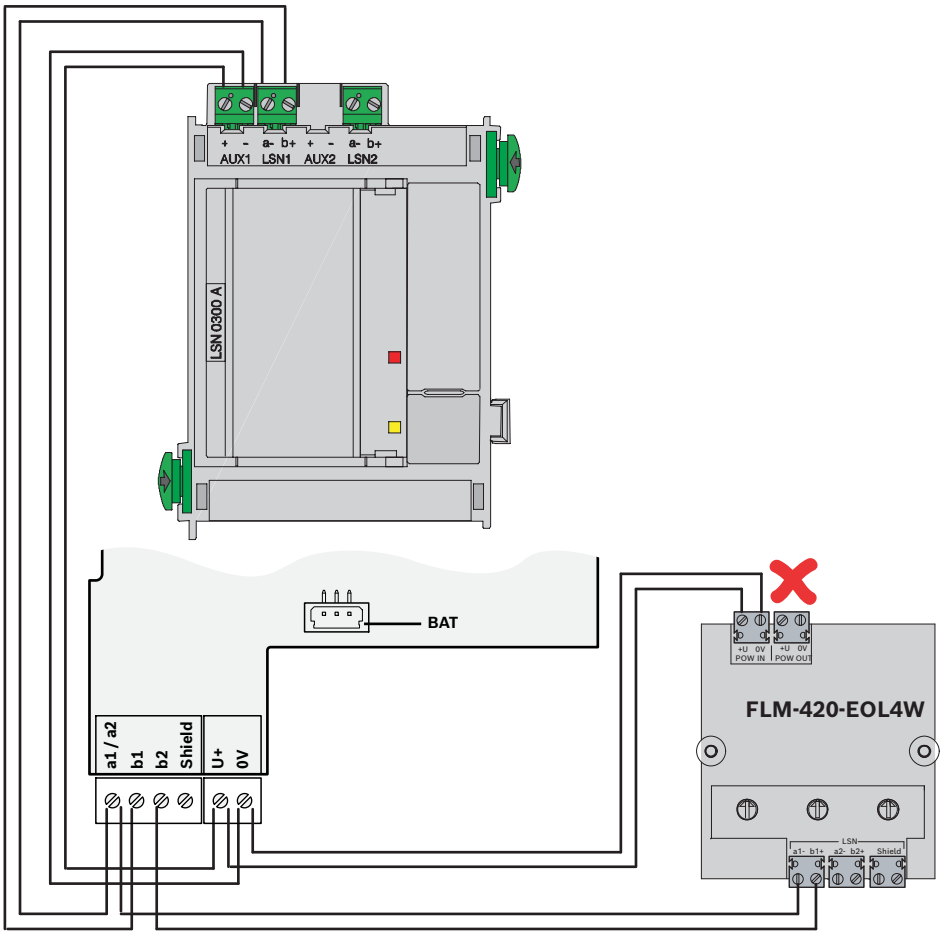


FWI-270

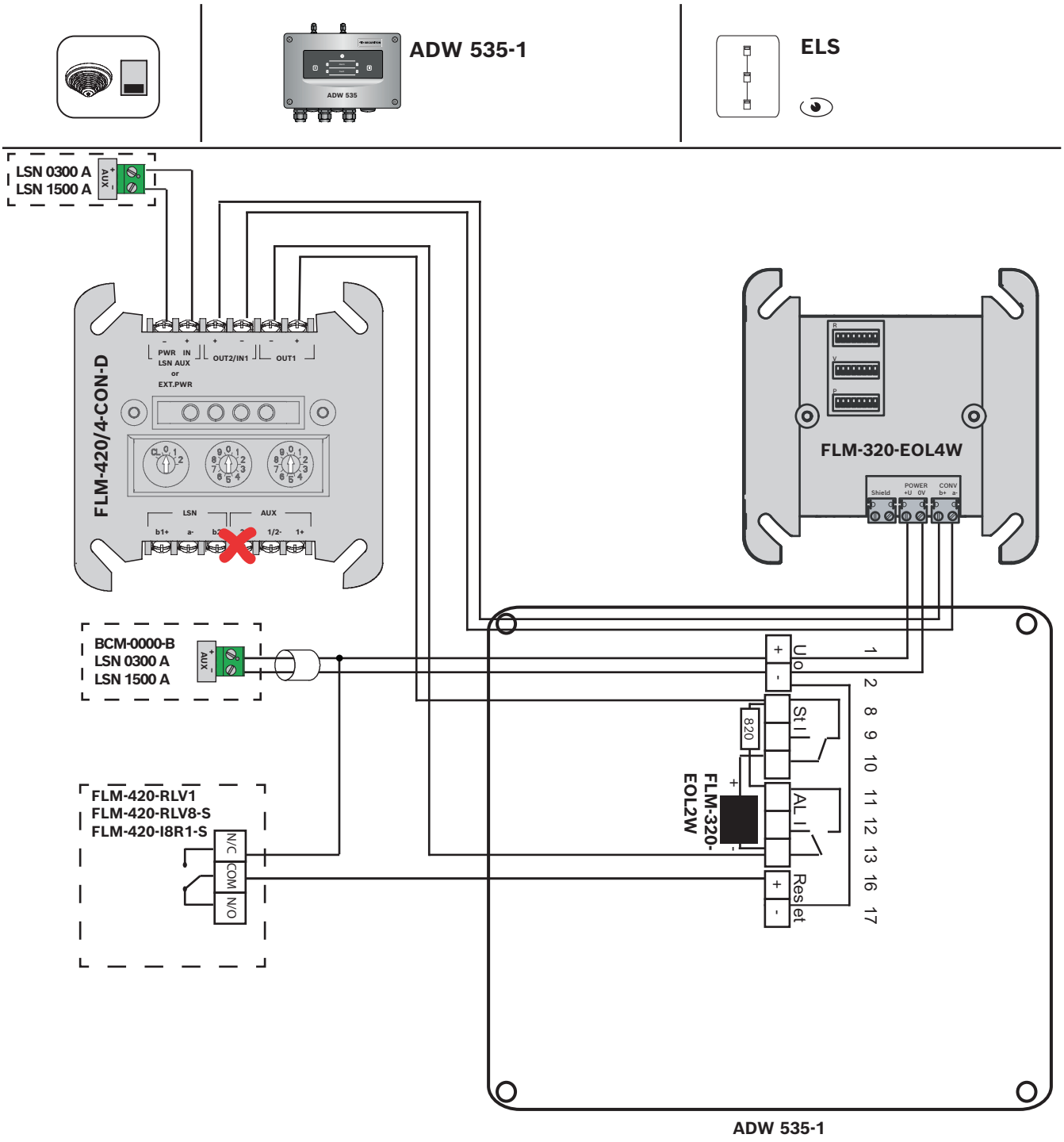
FDOOT271-O
FDM275-O
FDM273-O

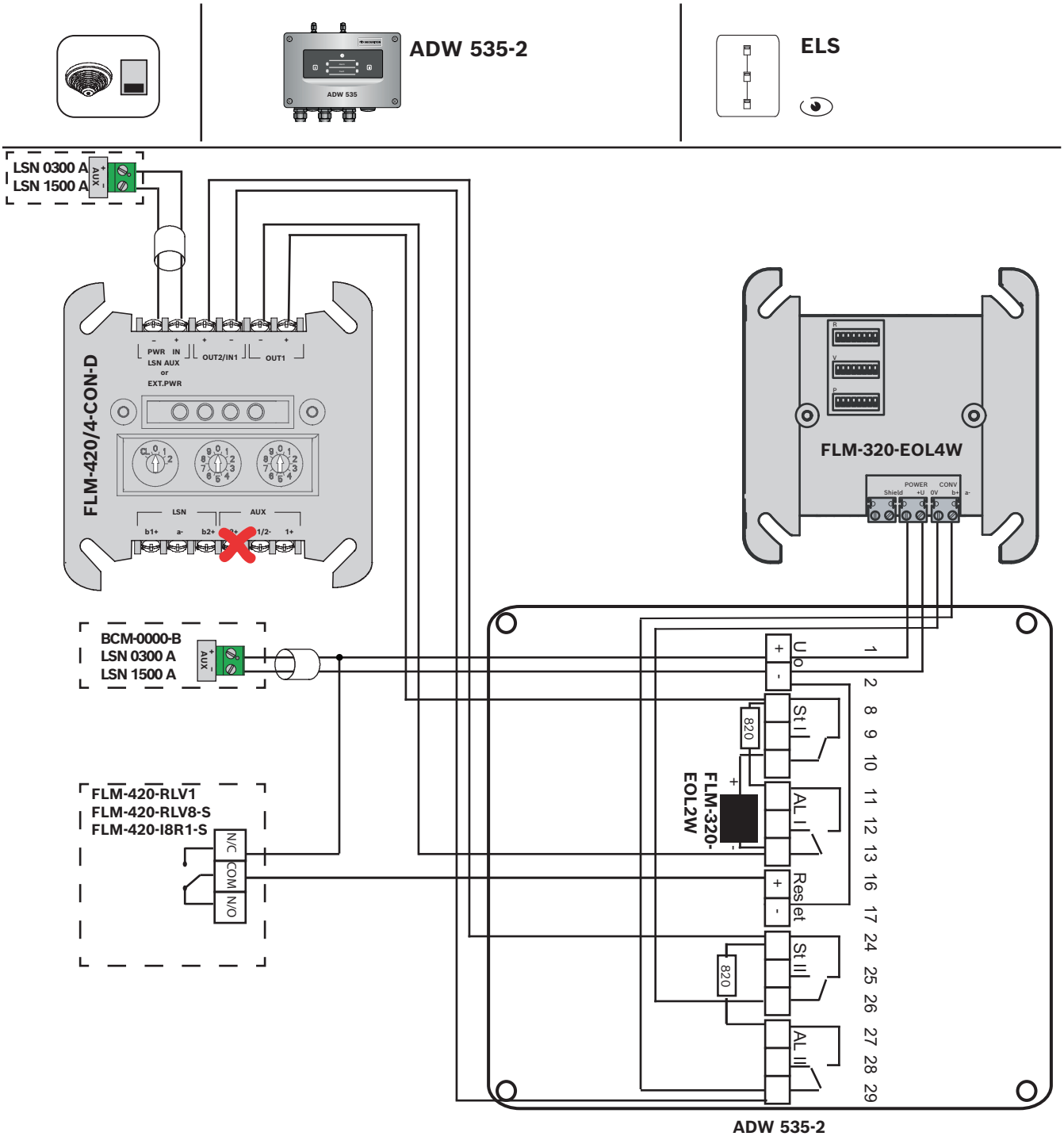


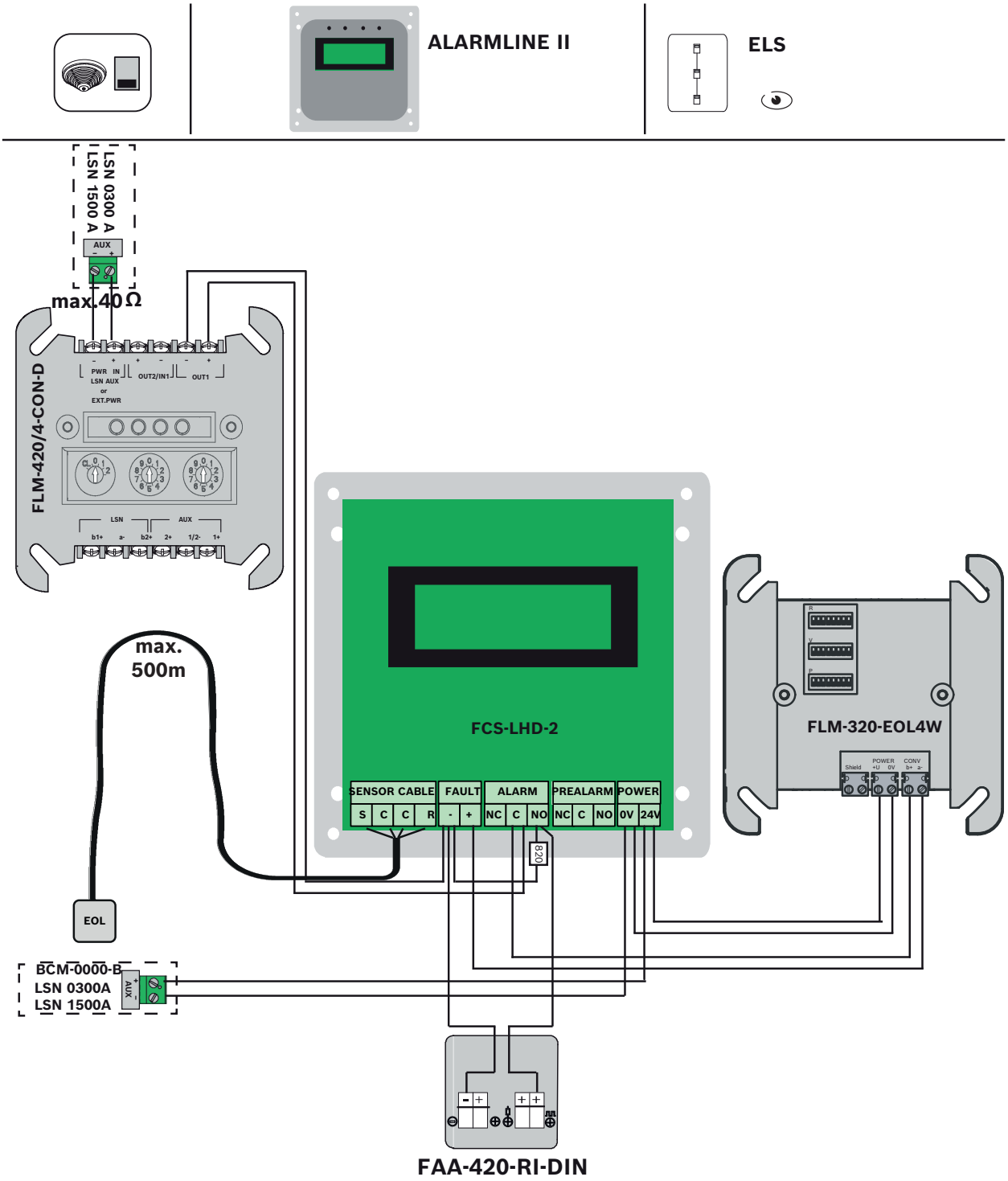
ELS

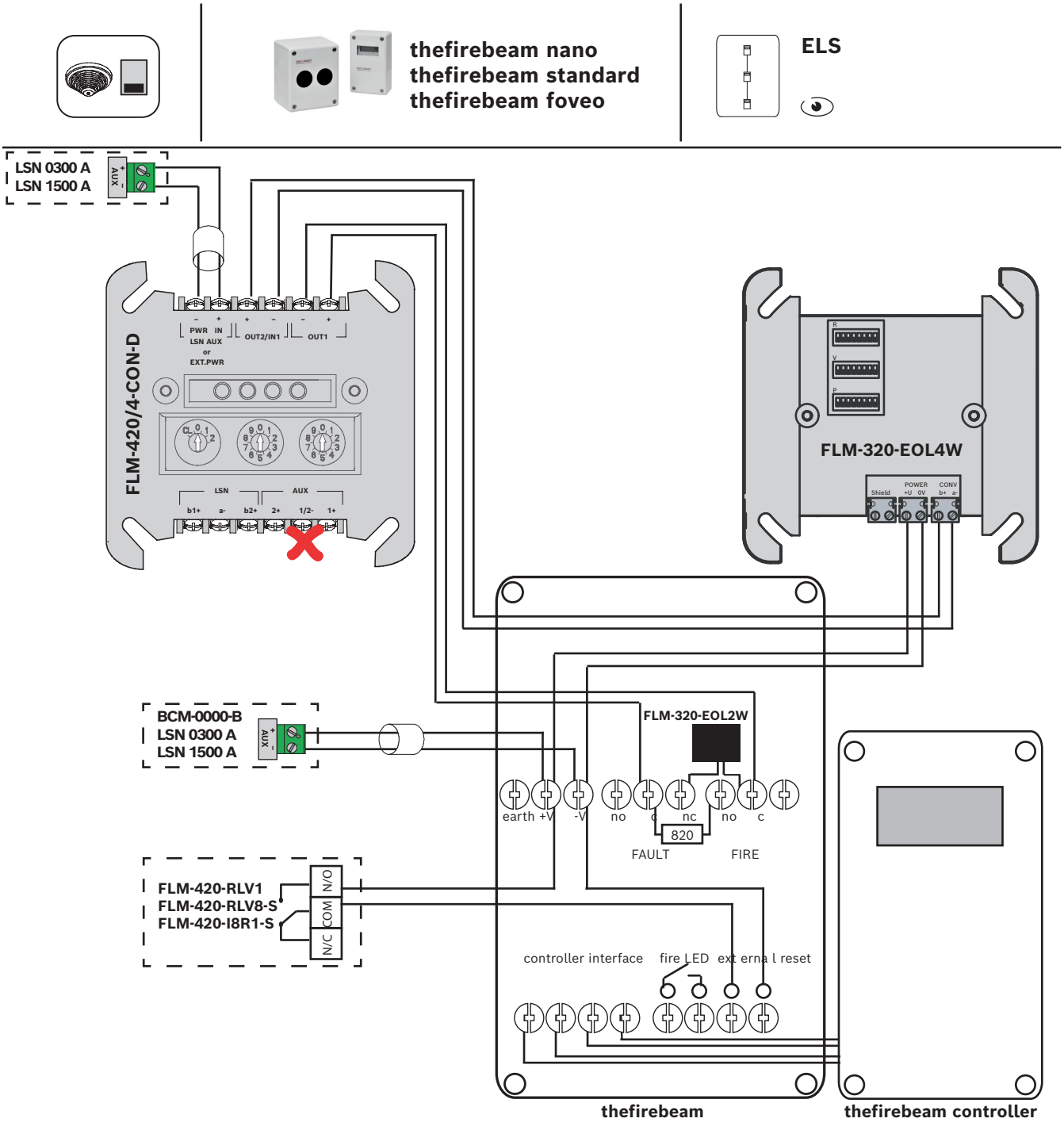


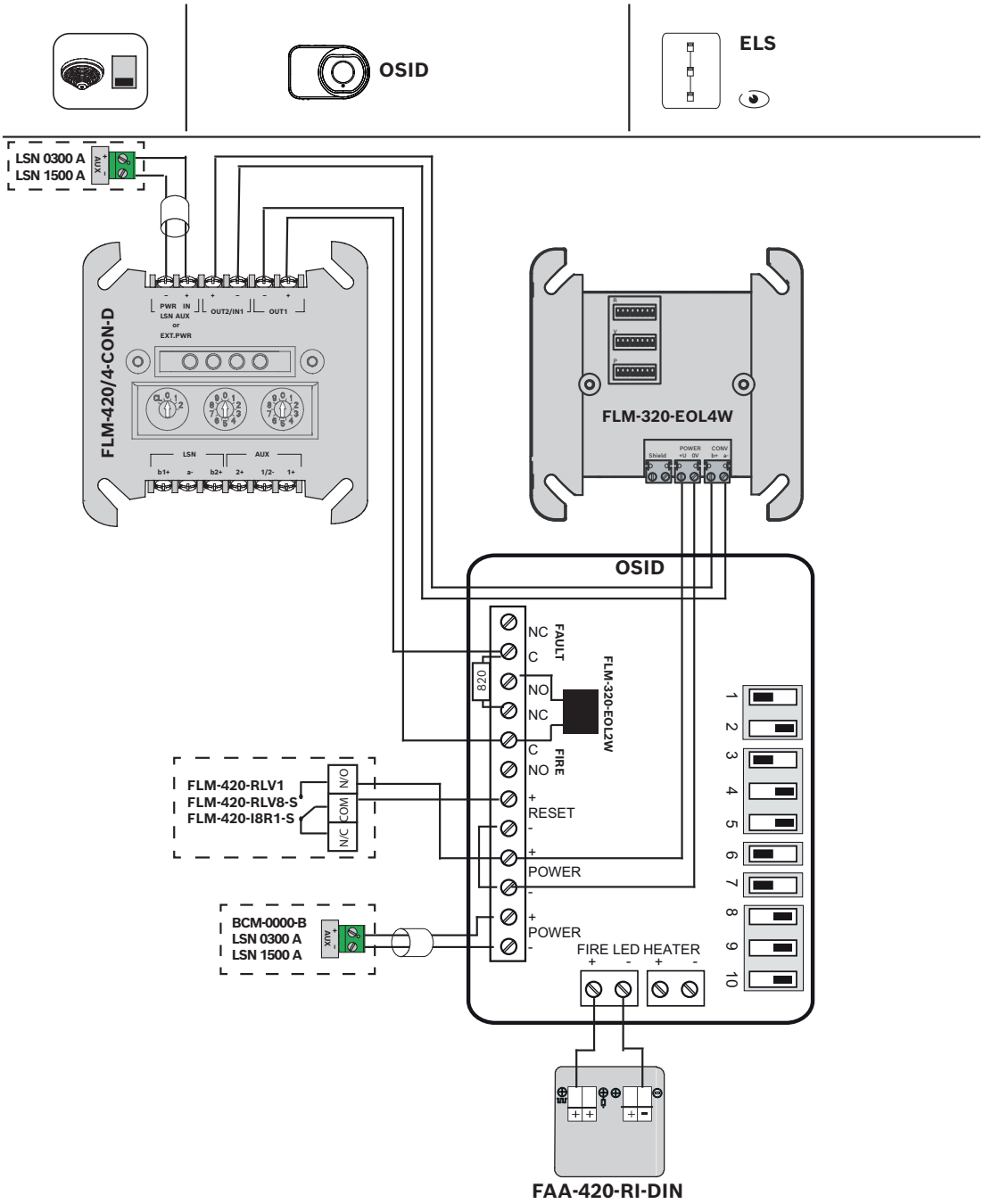
3.6.2 FLM-420/4-CON-S/D




ADW 535-2
ELS
LSN 0300 A
LSN 1500 A
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
FLM-320-EOL4W
POWER
CONV
Shield
+U
0V
BCM-0000-B
LSN 0300 A
LSN 1500 A
FLM-420-RLV1
FLM-420-RLV8-S
FLM-420-I8R1-S
N/C
COM
N/O
FLM-320-EOL2W
820
Uo
St I
AL I
Reset
St II
AL II
1
2
8
9
10
11
12
13
16
17
24
25
26
27
28
29
ADW 535-2


ALARMLINE II
ELS
LSN 0300 A
LSN 1500 A
AUX
max. 40 Ω
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+ a- b2+ 2+ 1/2- 1+
FCS-LHD-2
SENSOR CABLE
FAULT
ALARM
PREALARM
POWER
S C C R - + NC C NO NC C NO 0V 24V
820
FLM-320-EOL4W
max.
500m
EOL
BCM-0000-B
LSN 0300A
LSN 1500A
AUX
FAA-420-RI-DIN

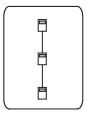

thefirebeam nano
thefirebeam standard
thefirebeam foveo
ELS
LSN 0300 A
LSN 1500 A
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
FLM-320-EOL4W
Shield
POWER
+U 0V
CONV
b+ a-
BCM-0000-B
LSN 0300 A
LSN 1500 A
FLM-320-EOL2W
earth +V
-V
no
c
nc
820
no
c
FAULT
FIRE
FLM-420-RLV1
FLM-420-RLV8-S
FLM-420-I8R1-S
N/O
COM
N/C
controller interface
fire LED
ext erna l reset
thefirebeam
thefirebeam controller


OSID
ELS
LSN 0300 A
LSN 1500 A
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+ a- b2+ 2+ 1/2- 1+
FLM-320-EOL4W
Shield
POWER
+U 0V
CONV
b+ a-
OSID
NC
C
NO
NC
FAULT
820
FLM-320-EOL2W
C
NO
FIRE
+
RESET
-
+
POWER
-
+
POWER
-
FIRE LED HEATER
+ - + -
1 2 3 4 5 6 7 8 9 10
FLM-420-RLV1
FLM-420-RLV8-S
FLM-420-I8R1-S
NO
COM
NC
BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
FAA-420-RI-DIN

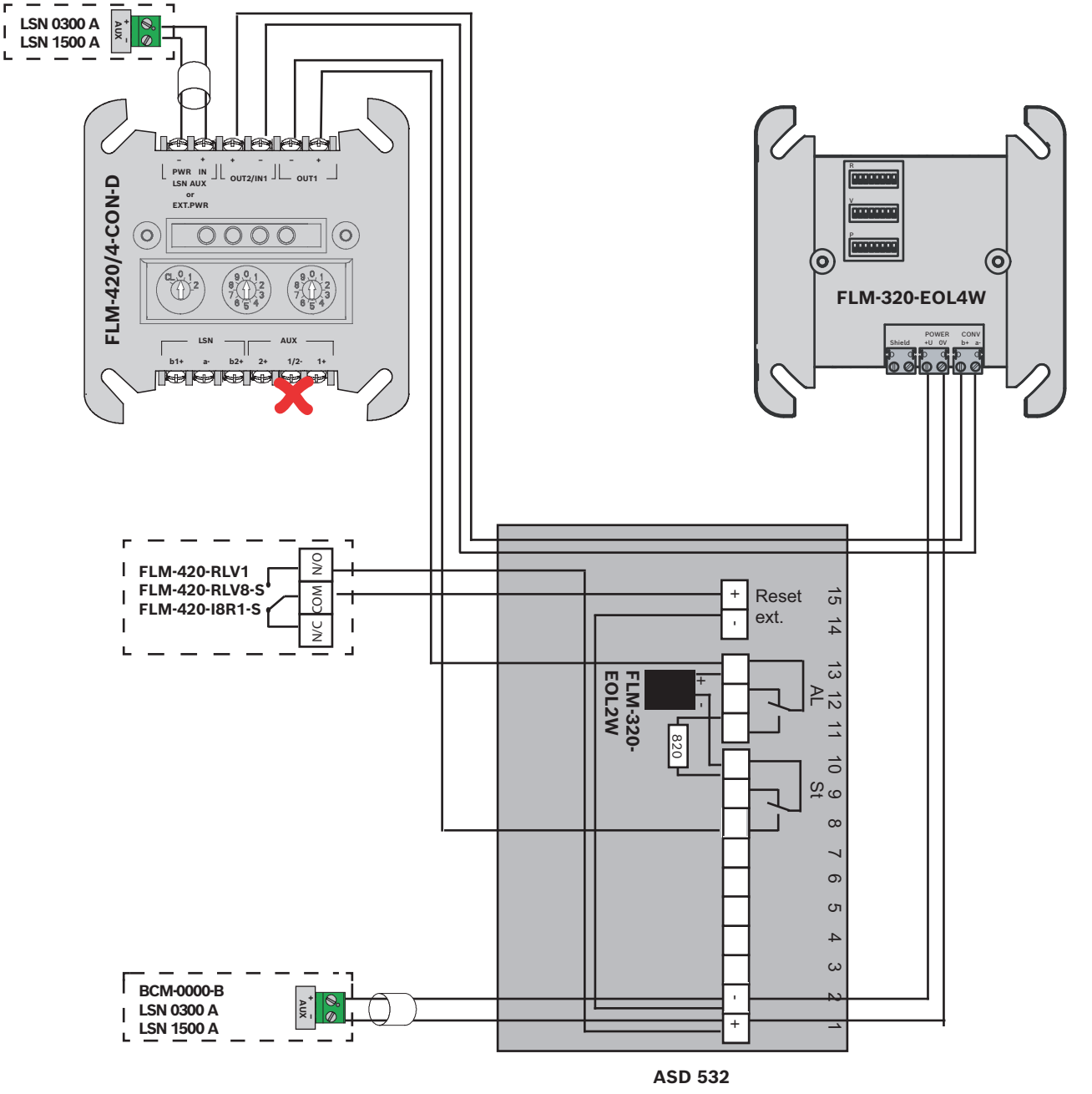




ASD 532



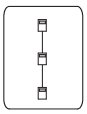
ELS


LSN 0300 A
LSN 1500 A
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
FLM-320-EOL4W
Shield
POWER
+U 0V
CONV
b+ a-
FLM-420-RLV1
FLM-420-RLV8-S
FLM-420-I8R1-S
NO
COM
NC
Reset
ext.
FLM-320-
EOL2W
820
AL
St
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
BCM-0000-B
LSN 0300 A
LSN 1500 A
ASD 532

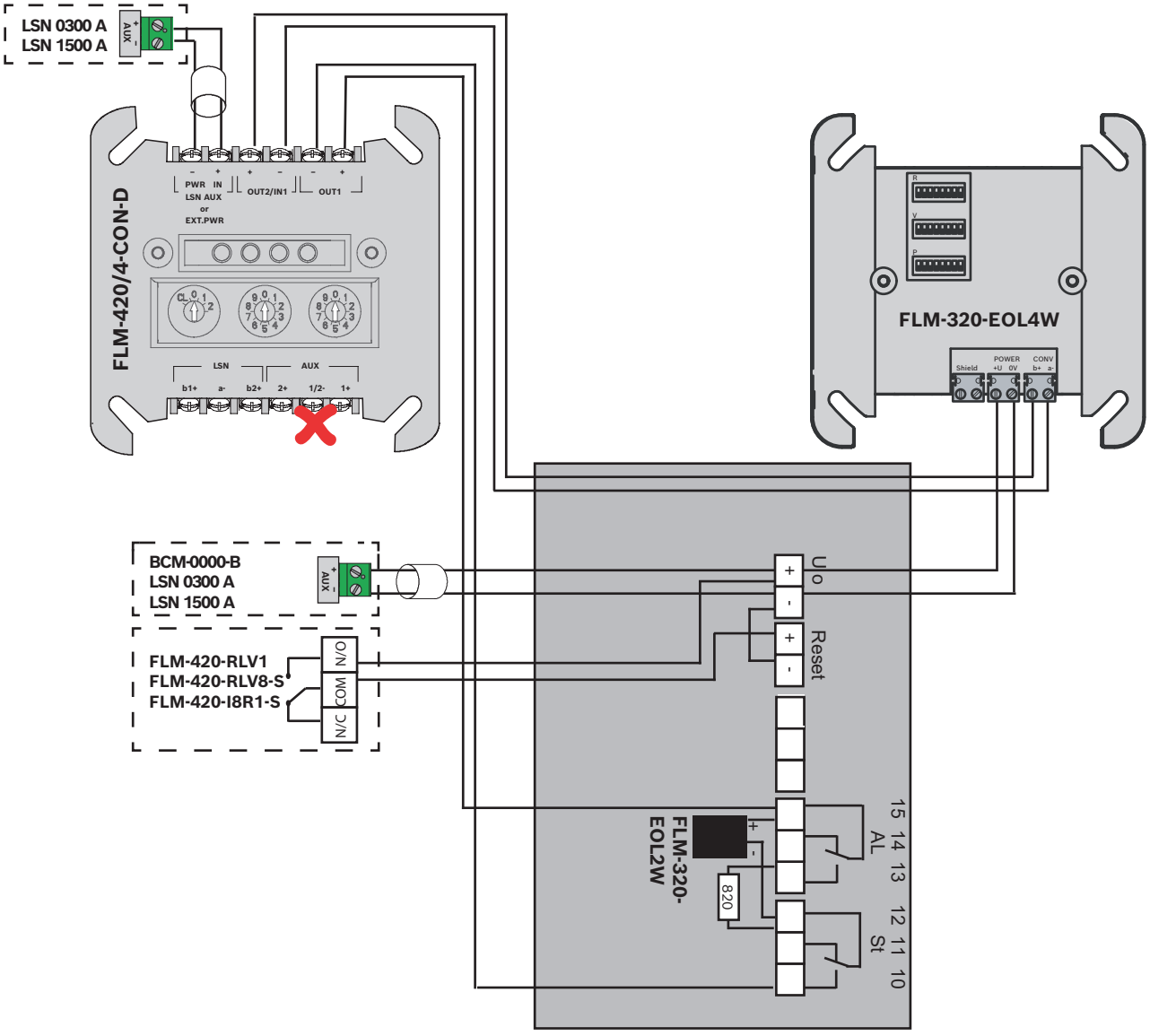




ASD 535-1



ELS

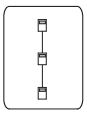


ASD 535-1

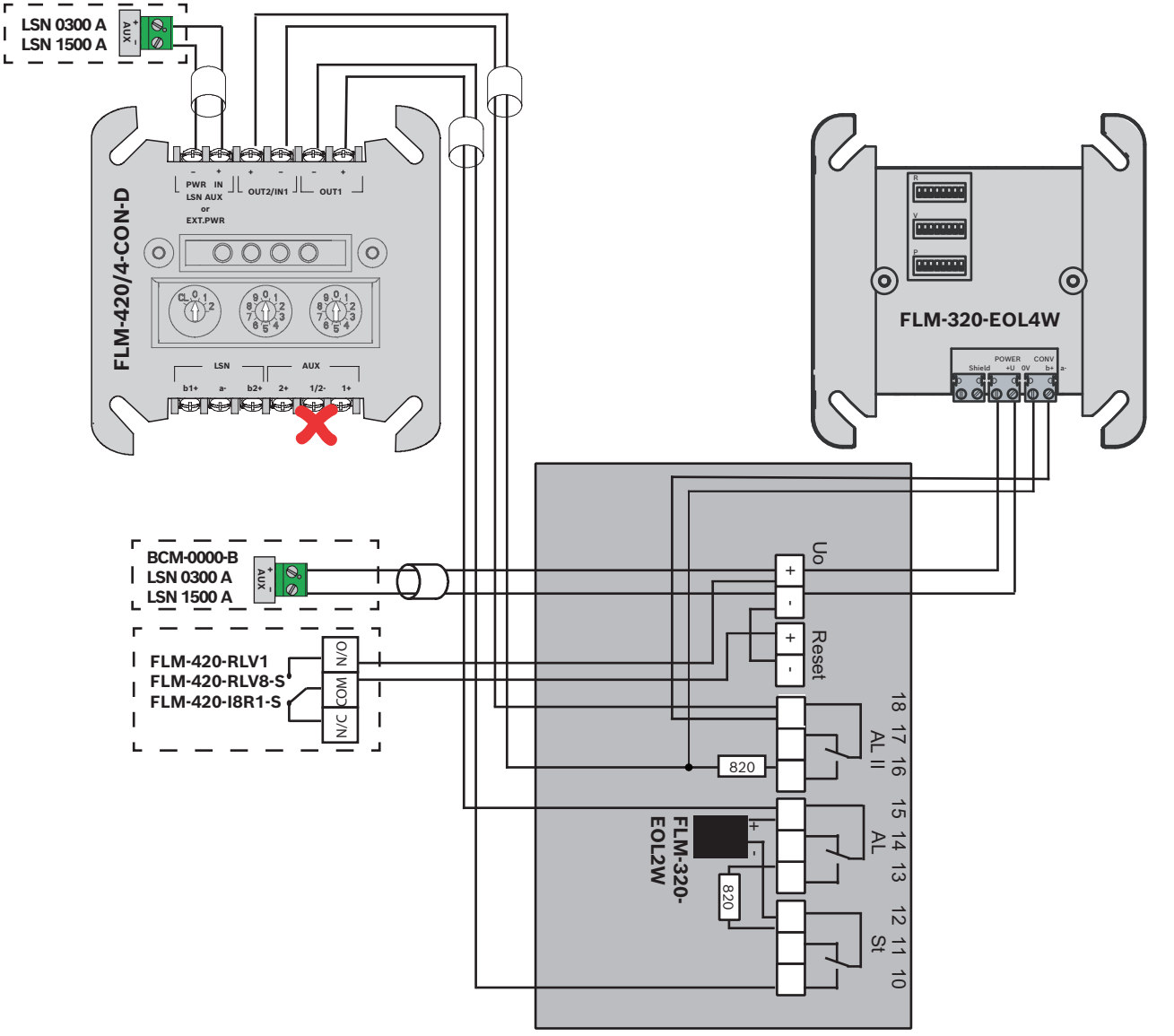




ASD 535-2



ELS

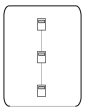


ASD 535-2

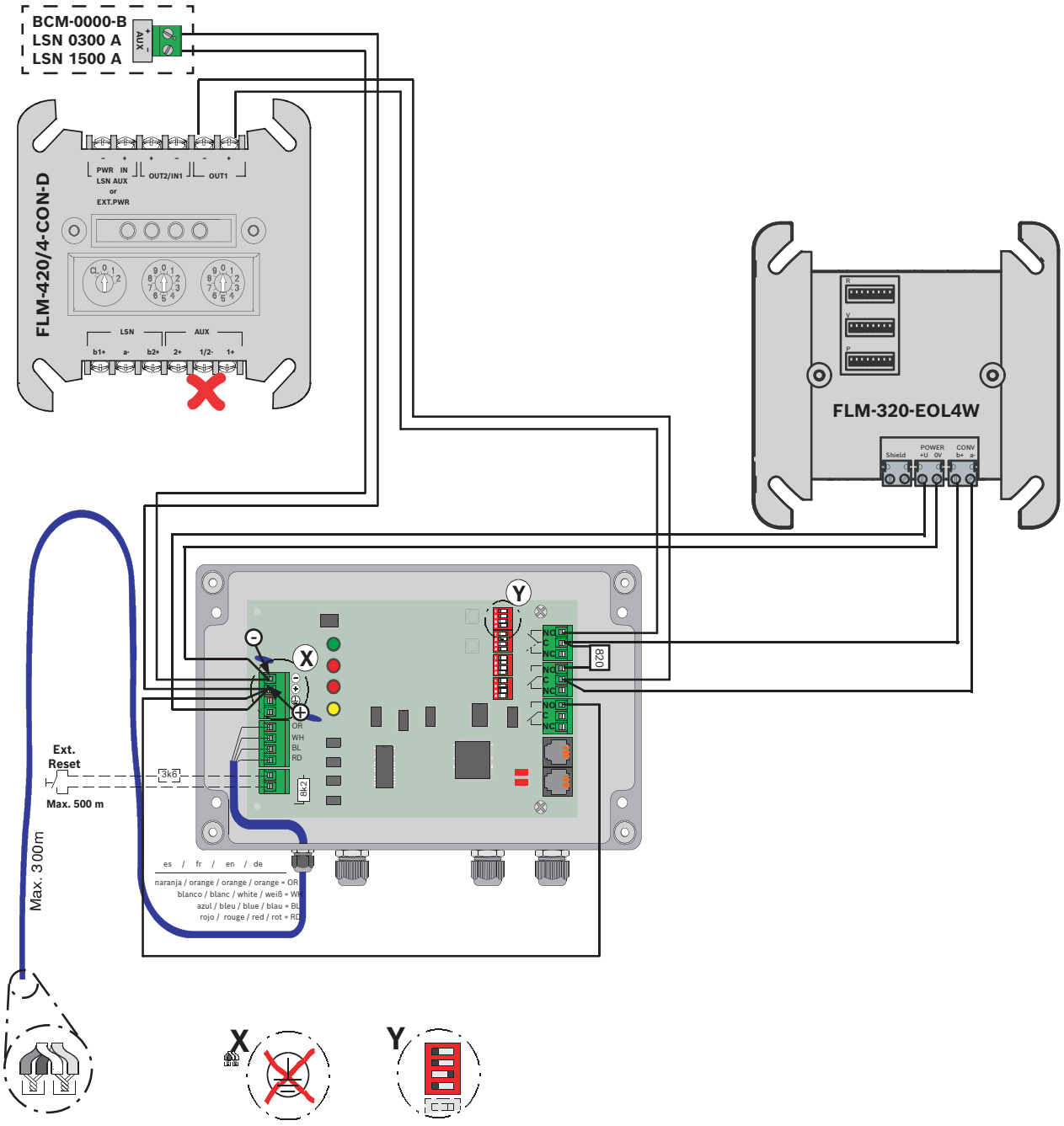


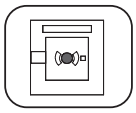


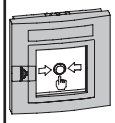
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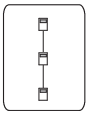
ELS


BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
FLM-320-EOL4W
POWER
+U
0V
CONV
b+
a-
Shield
Y
X
820
OR
WH
BL
RD
Ext.
Reset
3k6
8k2
Max. 500 m
Max. 300m
es / fr / en / de
naranja / orange / orange / orange = OR
blanco / blanc / white / weiß = WH
azul / bleu / blue / blau = BL
rojo / rouge / red / rot = RD
X
Y



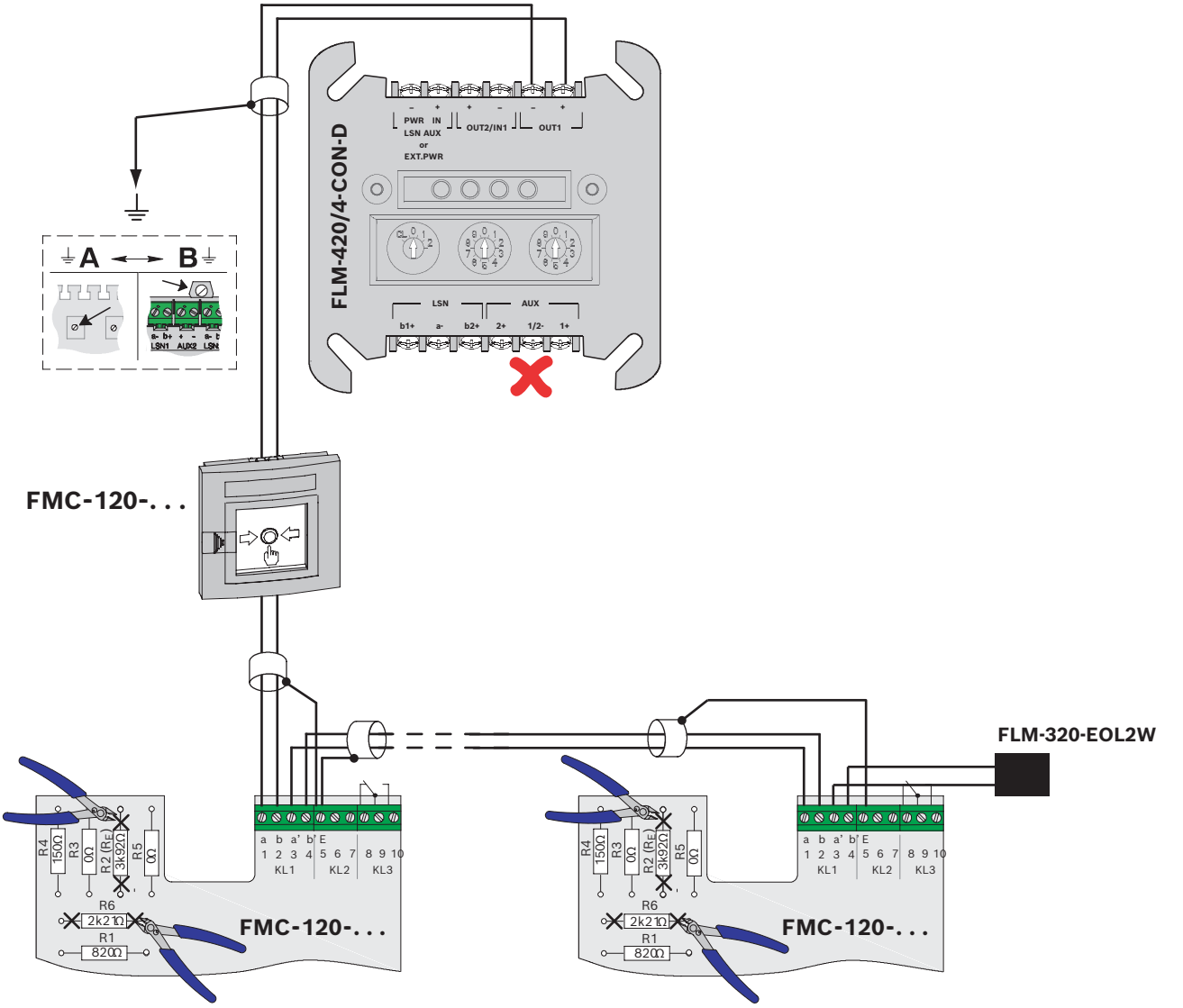


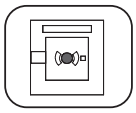
FMC-120-DKM-G-R FMC-120-DKM-G-Y
FMC-120-DKM-H-R FMC-120-EST-G-B
FMC-120-DKM-G-B
FMC-120-DKM-H-B

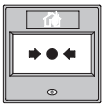


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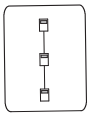




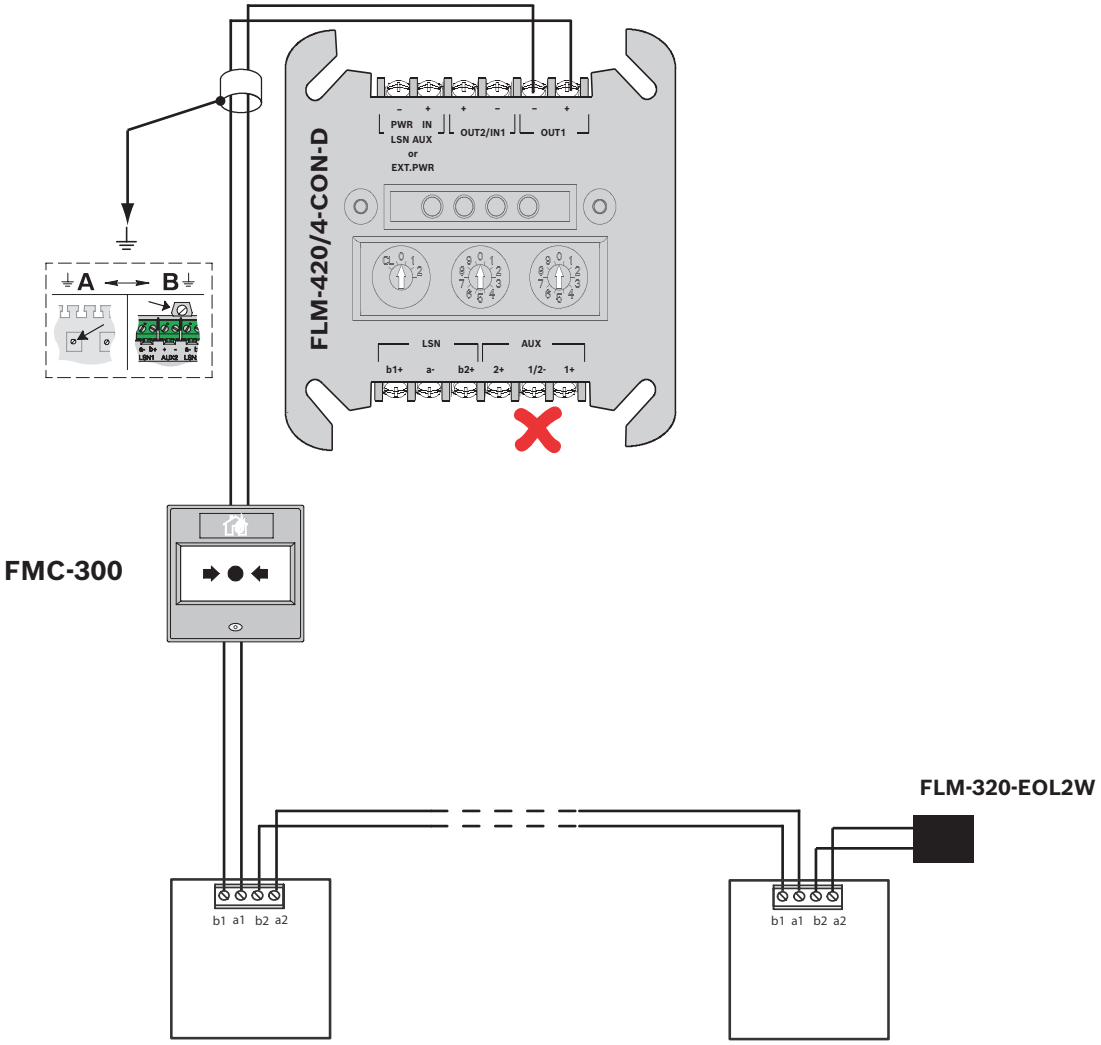




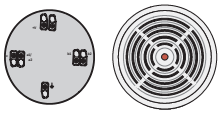
FMC-300



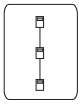
ELS


FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
A
B
FMC-300
FLM-320-EOL2W
b1 a1 b2 a2
b1 a1 b2 a2

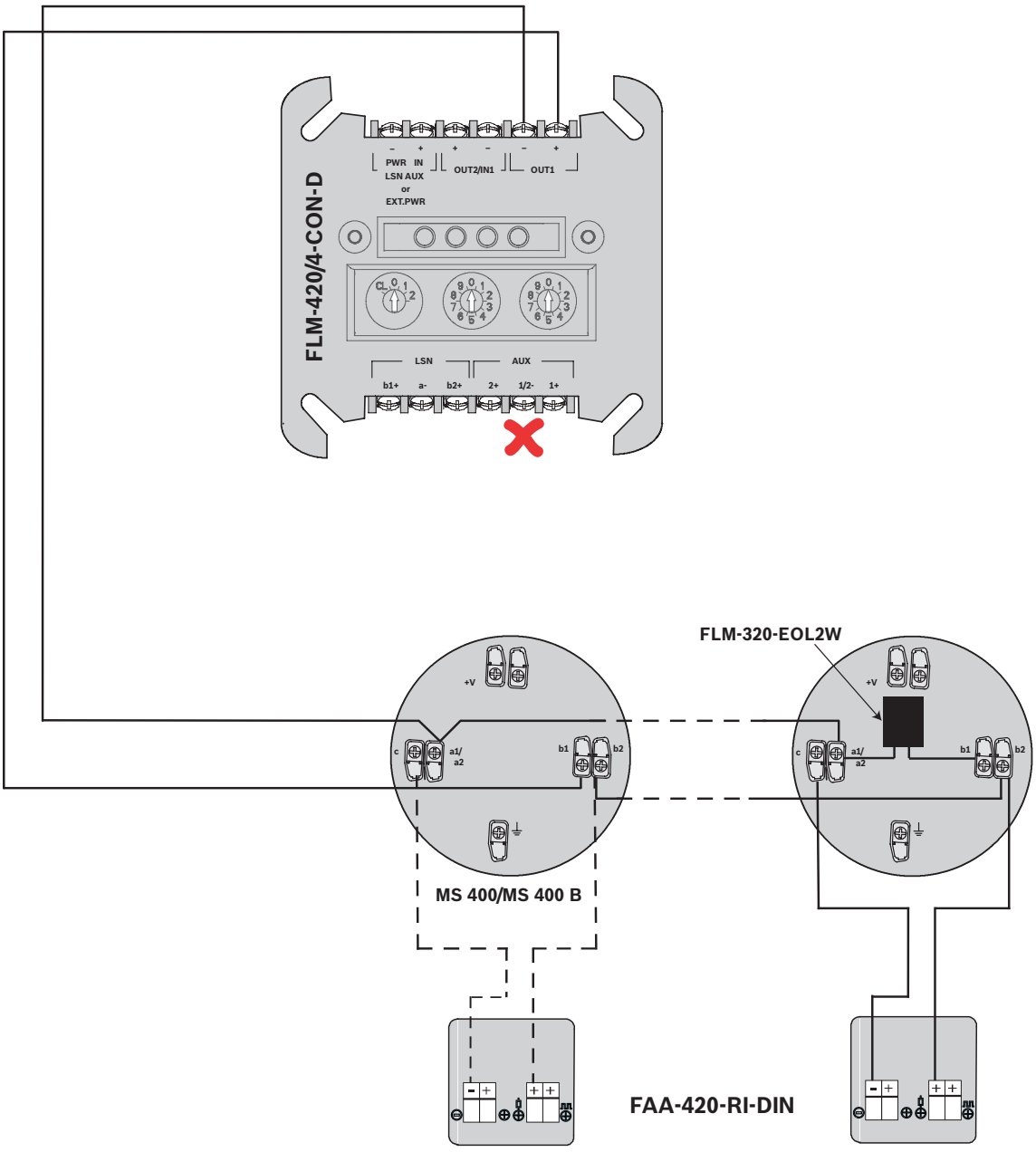


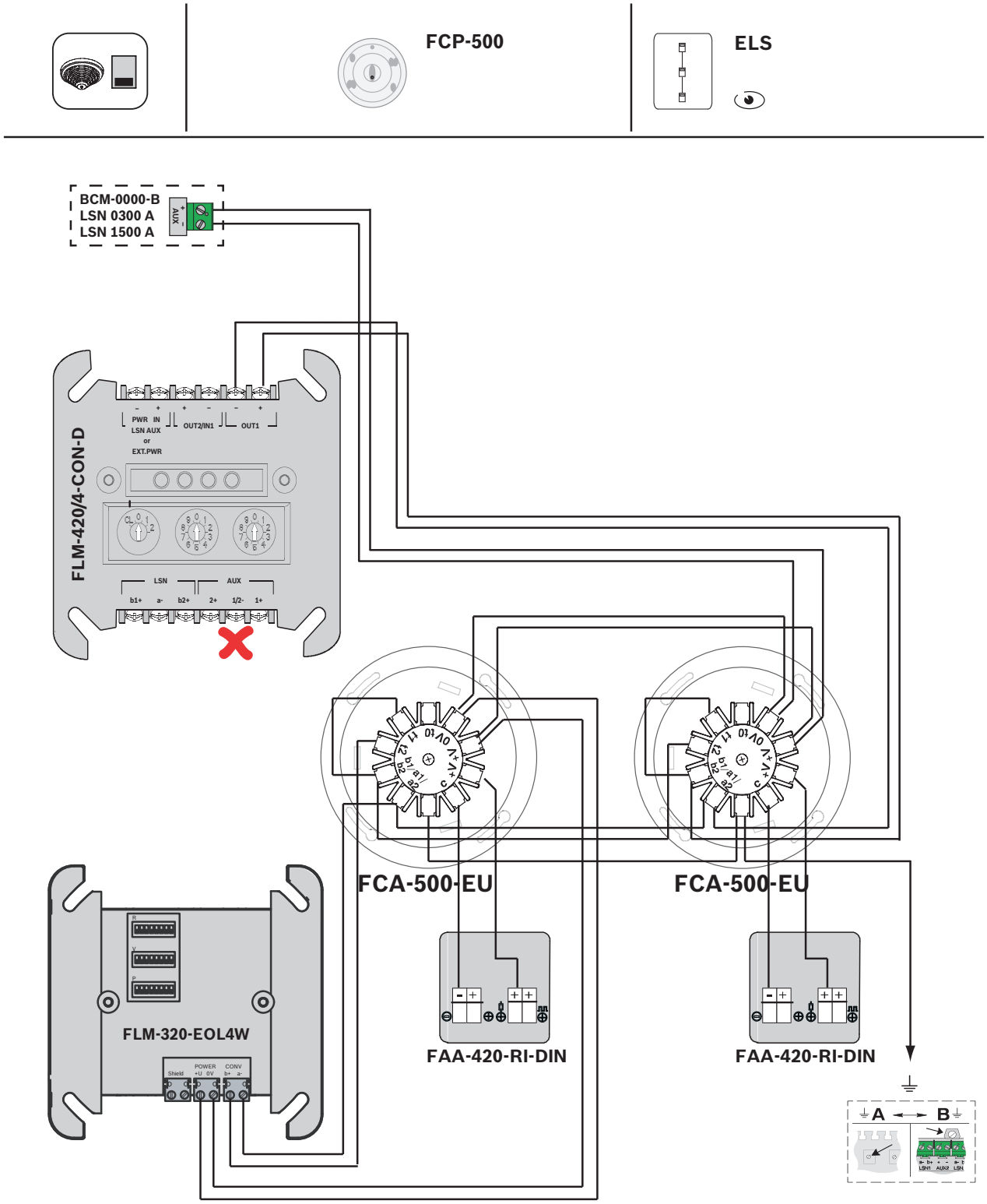


MSS 400, MSS 400 B
FCH-320-T320
FCH-T320-R470, FCH-T320-FSA
FCP-O320, FCP-O320-R470
FCP-OC320, FCP-OC320-R470
FCP-OT320, FCP-OT320-R470

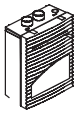


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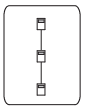



FCP-500
ELS
BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
FCA-500-EU
FCA-500-EU
FAA-420-RI-DIN
FAA-420-RI-DIN
FLM-320-EOL4W
Shield
POWER
+U
0V
CONV
b+
a-
A
B

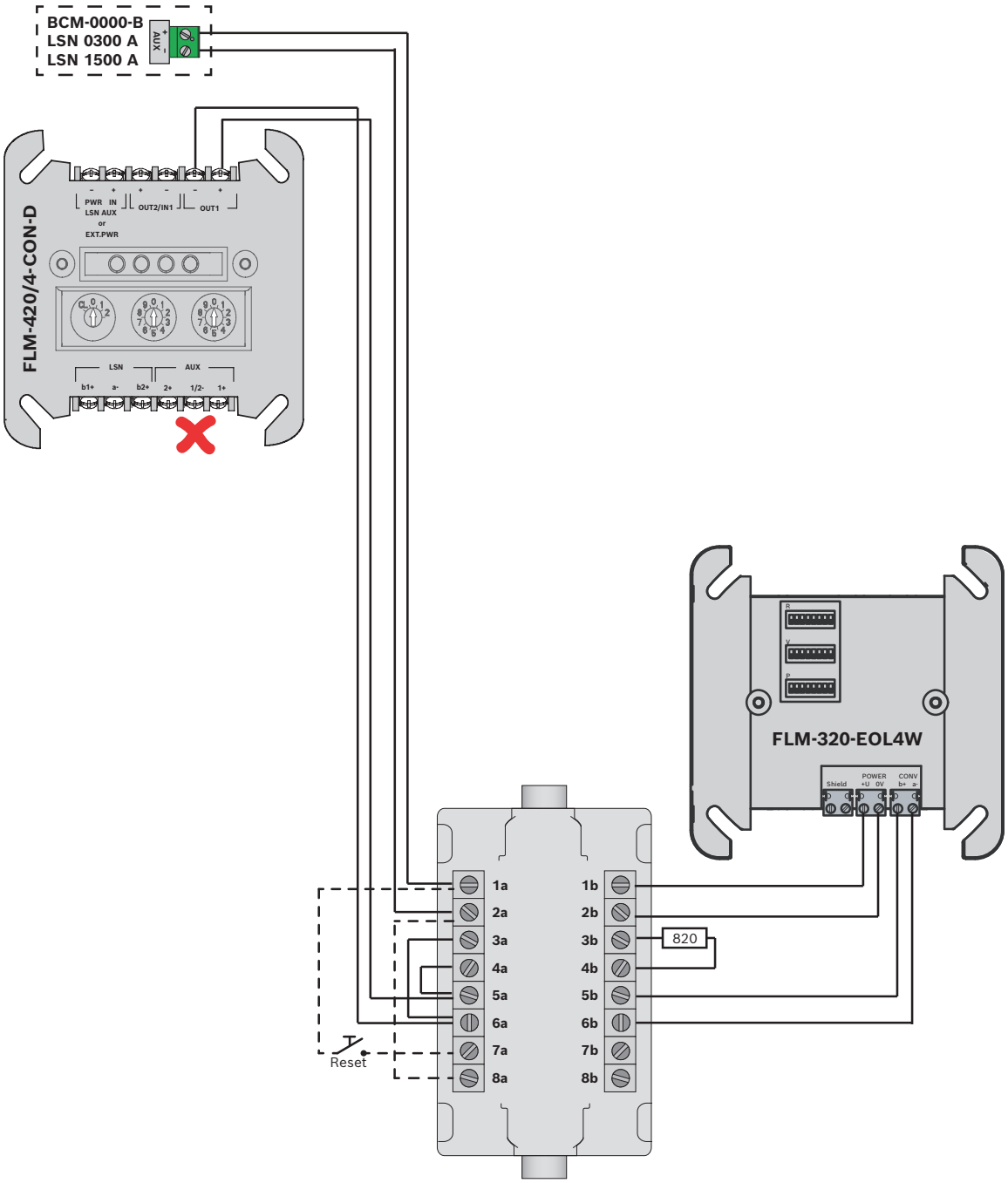




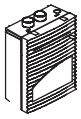
FCS-320-TM Series



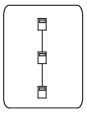
ELS



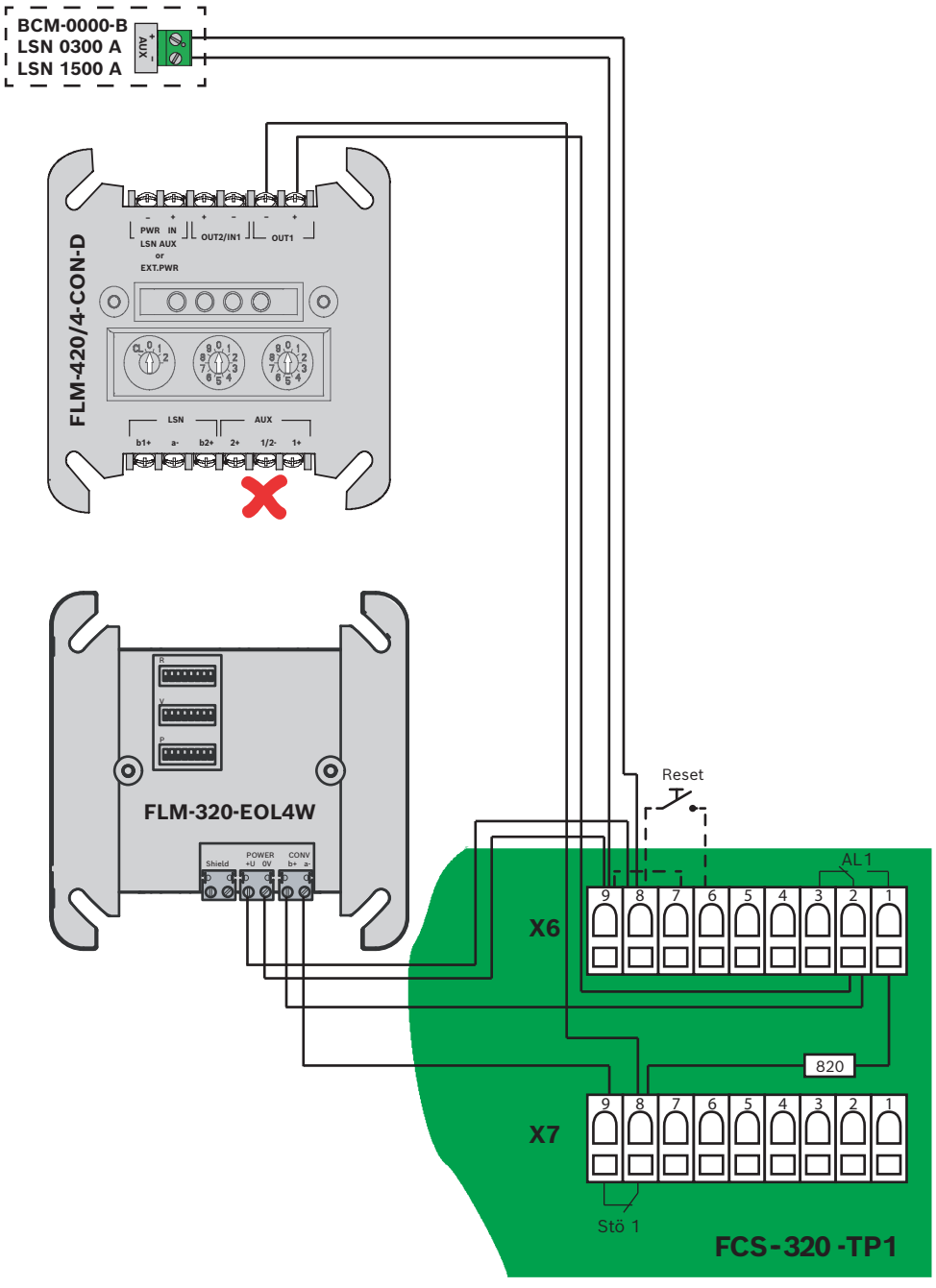


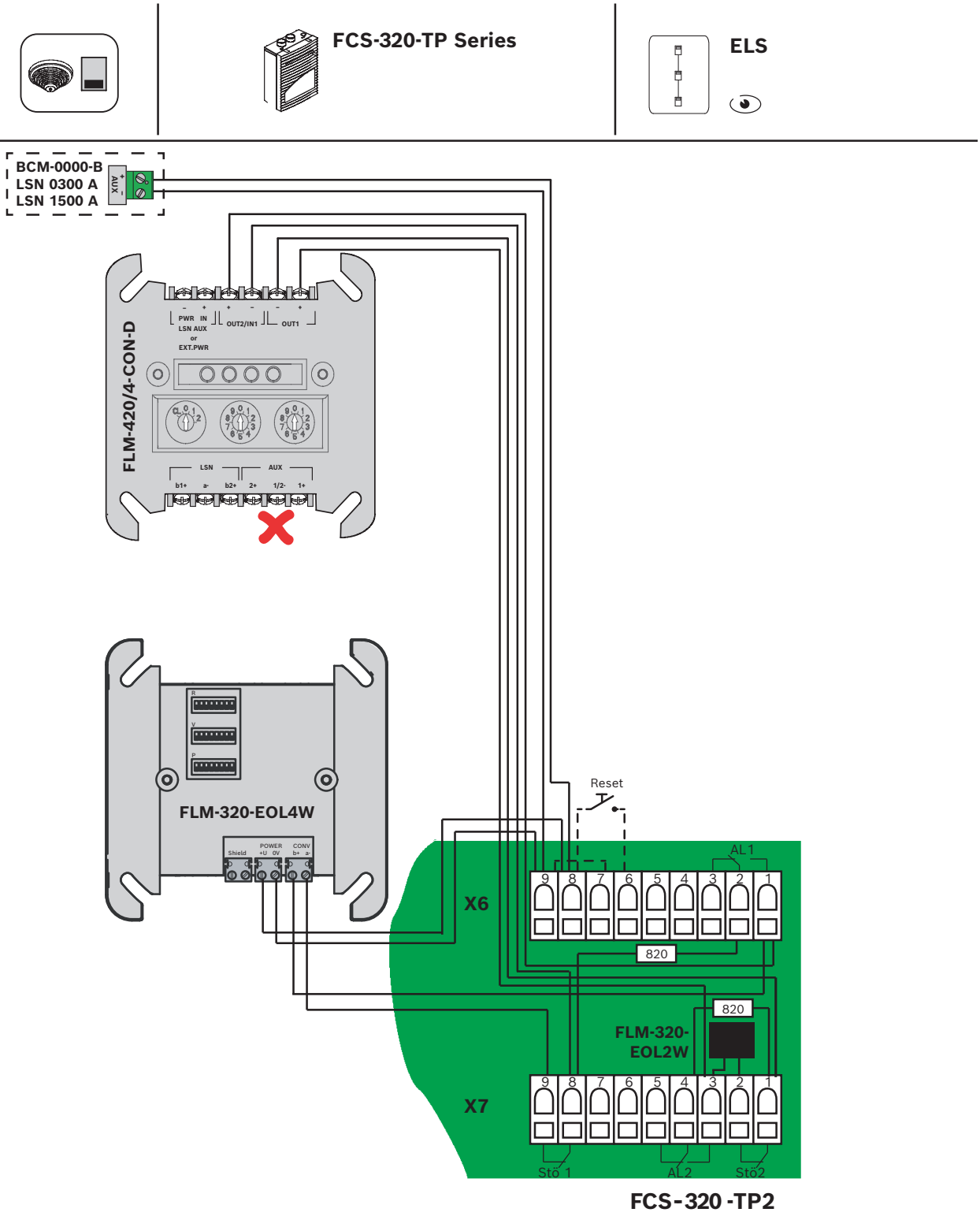


FCS-320-TP Series



ELS

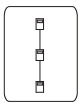



FCS-320-TP Series
ELS
BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
FLM-320-EOL4W
Reset
AL1
X6
820
820
FLM-320-
EOL2W
X7
Sto 1
AL2
Sto2
FCS-320-TP2

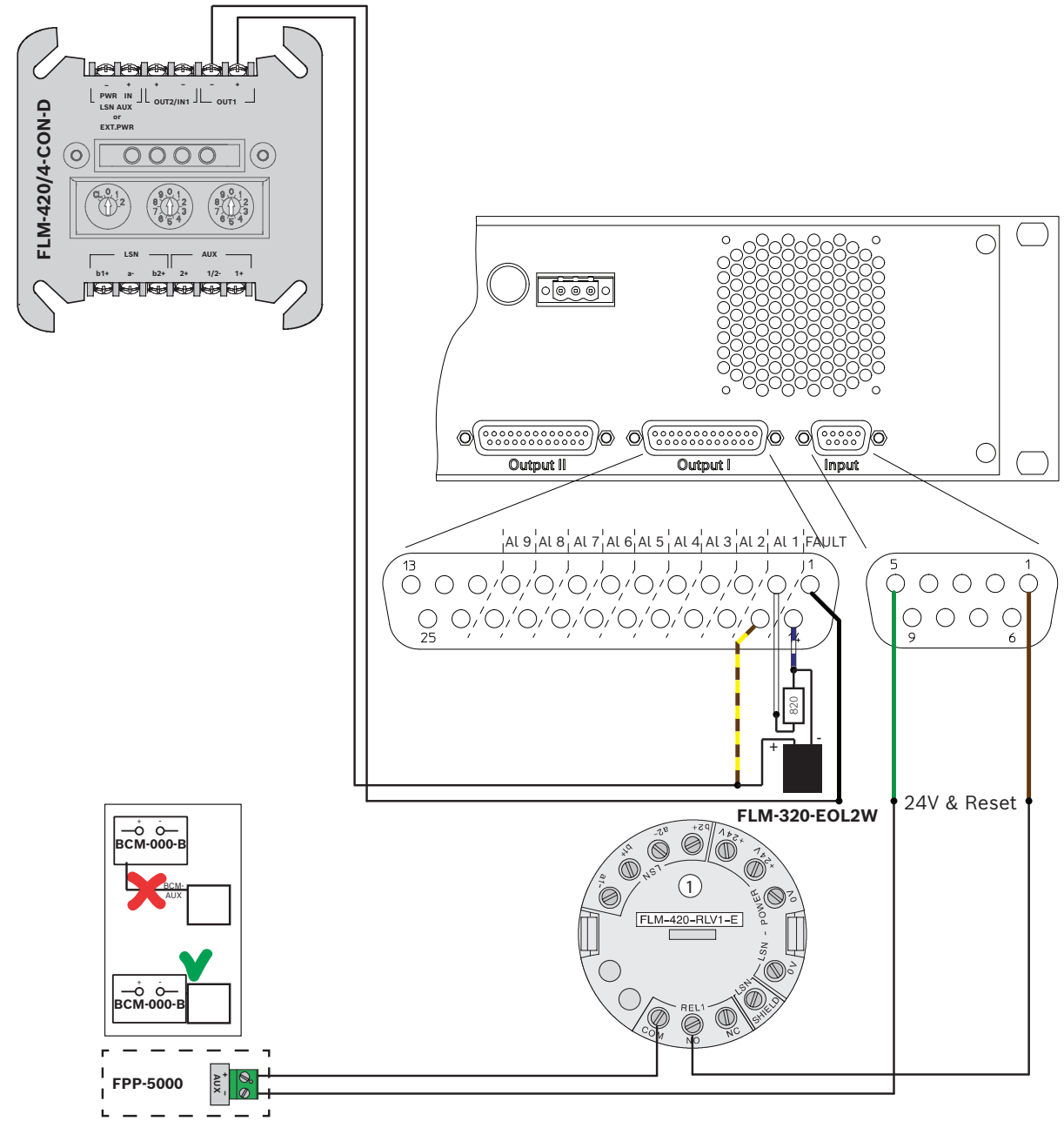




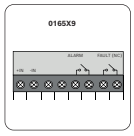
N4387A



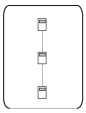
ELS


FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
Output II
Output I
Input
Al 9 Al 8 Al 7 Al 6 Al 5 Al 4 Al 3 Al 2 Al 1 FAULT
13
1
25
4
5
1
9
6
820
+
-
FLM-320-EOL2W
24V & Reset
BCM-000-B
BCM-AUX
BCM-000-B
FPP-5000
AUX
FLM-420-RLV1-E
REL1
COM
NO
NC
SHIELD
LSN
POWER

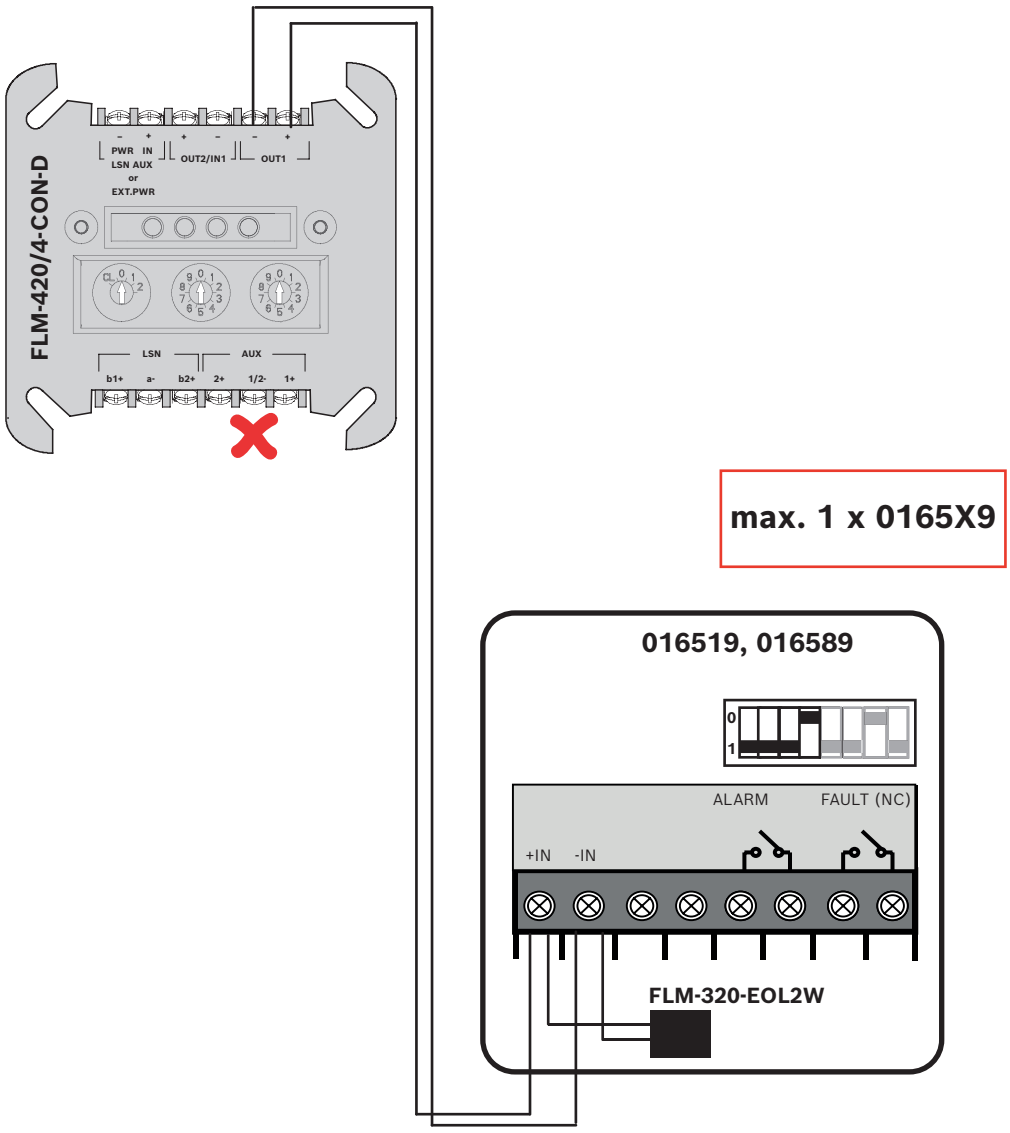




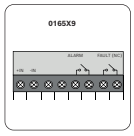
016519, 016589
IR3 Flame Detector



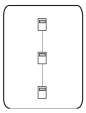
ELS





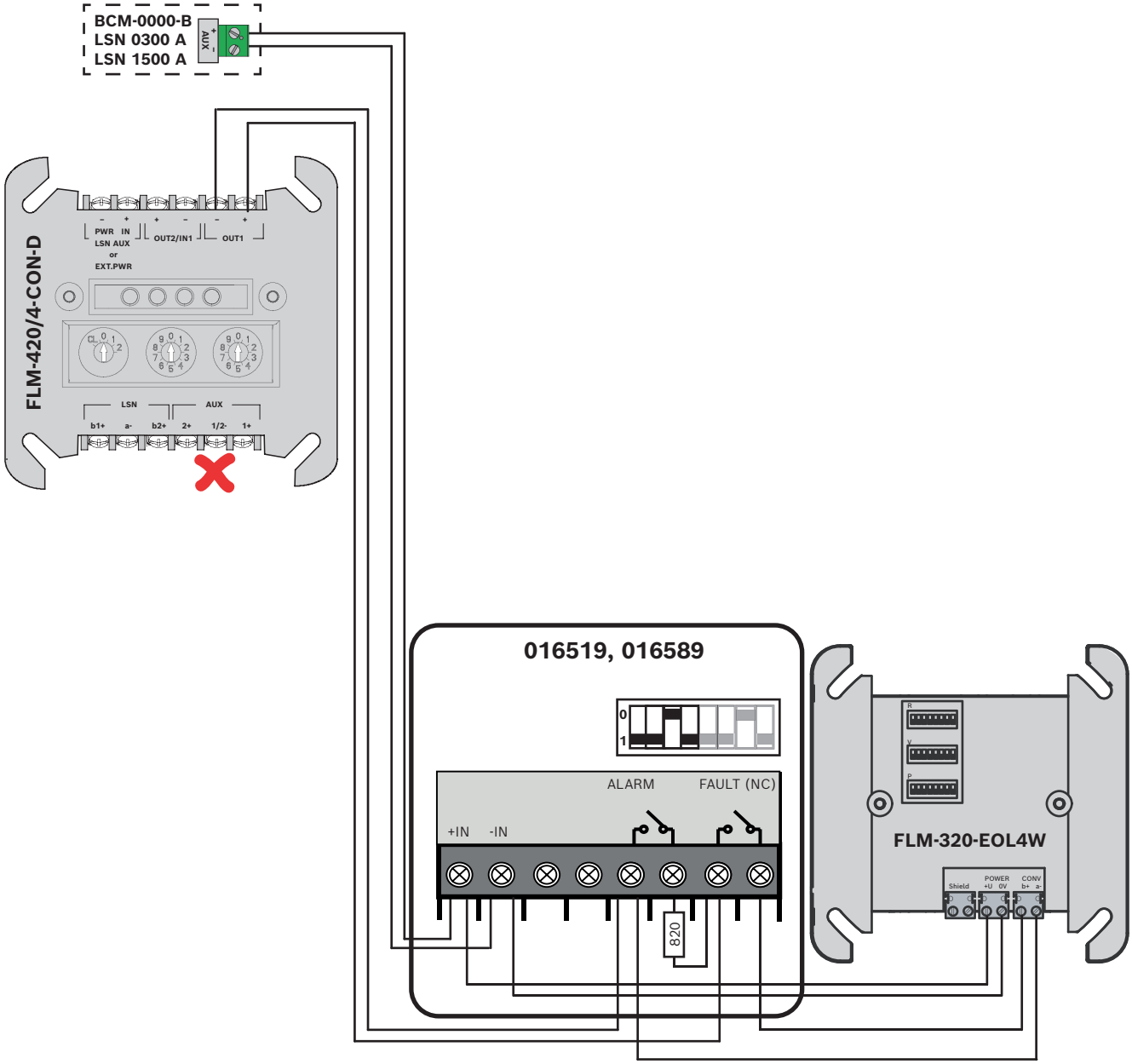


016519, 016589
IR3 Flame Detector

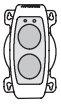


ELS

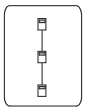






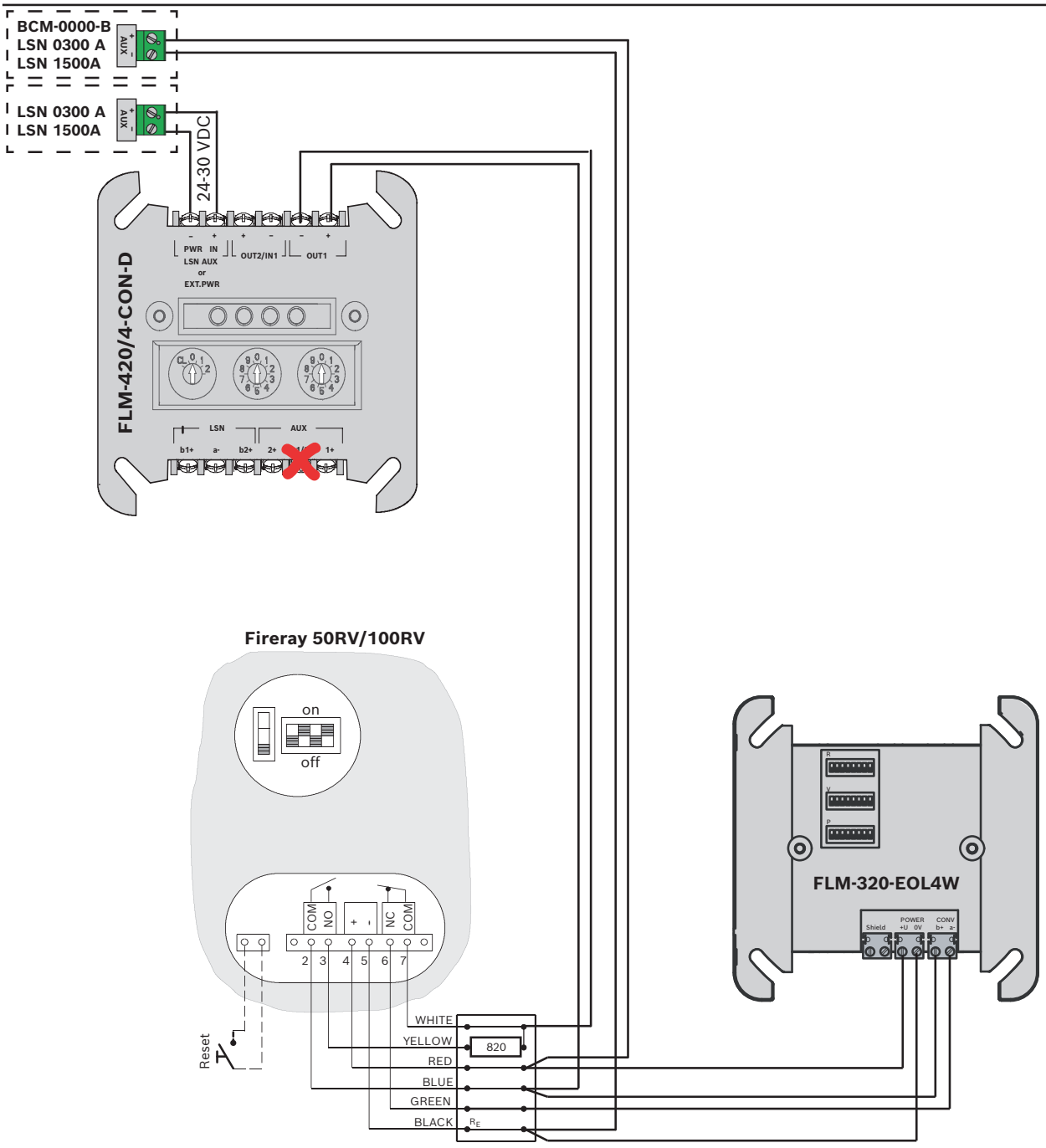


Fireray 50RV
Fireray 100RV

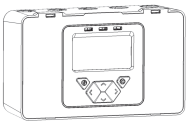


ELS









FIRERAY3000

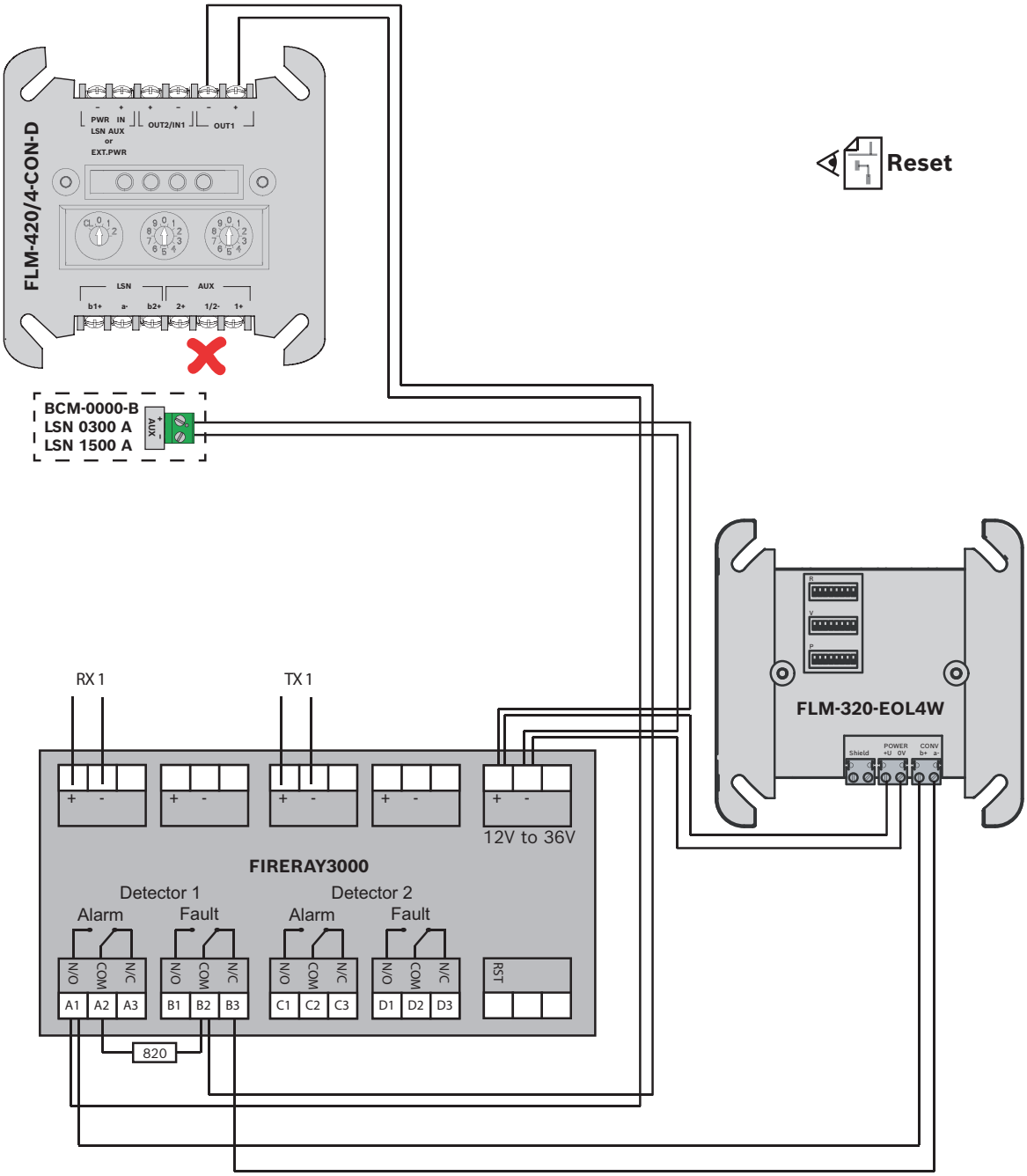
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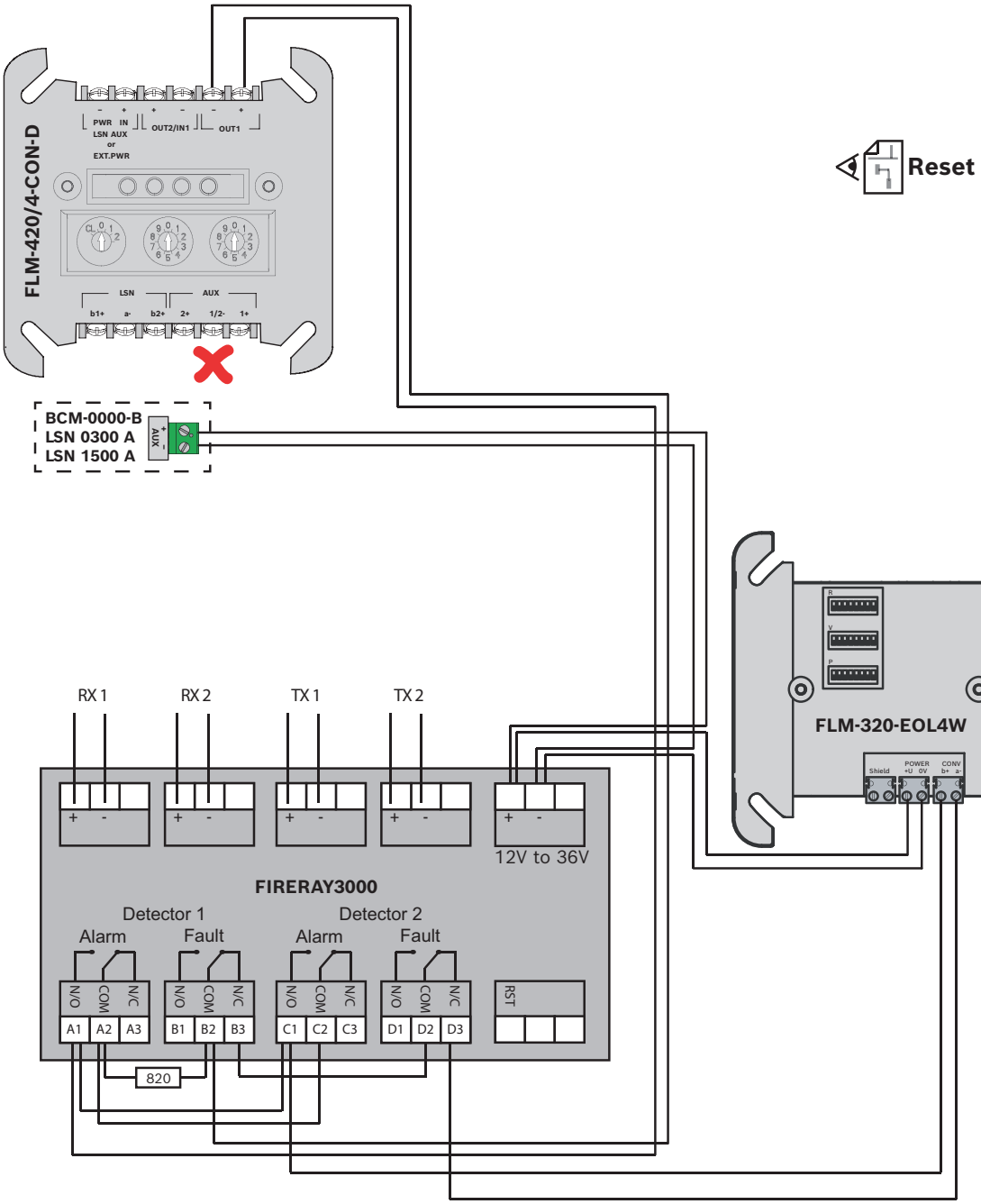


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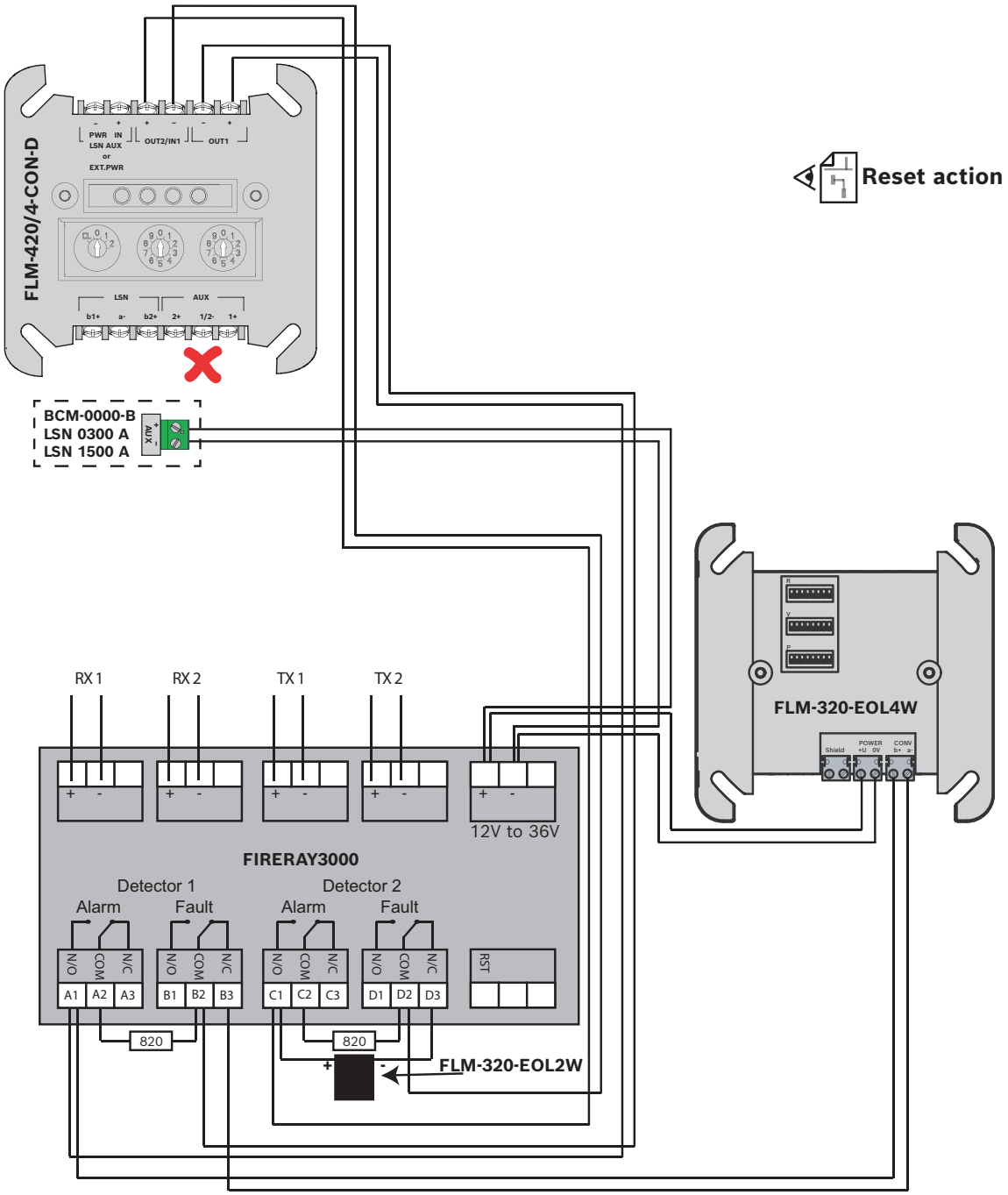





FIRERAY3000
2 x
OUT1
ELS


FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
b1+
a-
b2+
2+
1/2-
1+
Reset
BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
FLM-320-EOL4W
Shield
POWER
+U 0V
CONV
b+ a-
RX 1
RX 2
TX 1
TX 2
12V to 36V
FIRERAY3000
Detector 1
Alarm
Fault
Detector 2
Alarm
Fault
N/O
COM
N/C
A1
A2
A3
B1
B2
B3
C1
C2
C3
D1
D2
D3
RST
820


FIRERAY3000
2 x
OUT1+2
ELS

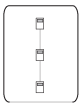

FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
Reset action
BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
FLM-320-EOL4W
Shield
POWER
+U 0V
CONV
b+ a-
RX 1
RX 2
TX 1
TX 2
12V to 36V
FIRERAY3000
Detector 1
Alarm
Fault
Detector 2
Alarm
Fault
N/O
COM
N/C
RST
A1 A2 A3
B1 B2 B3
C1 C2 C3
D1 D2 D3
820
820
FLM-320-EOL2W





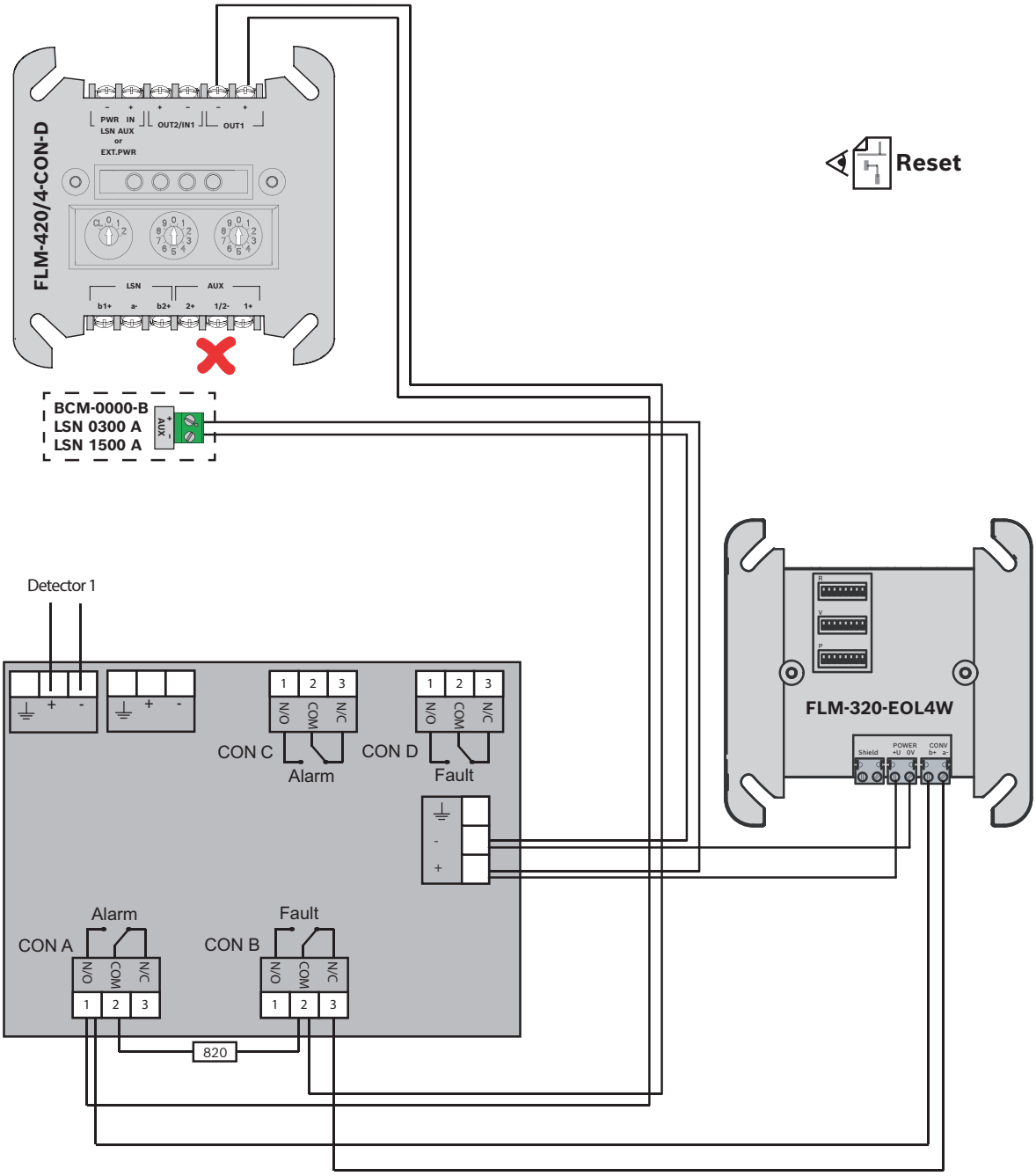
FIRERAY5000

1 x



ELS



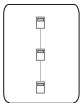






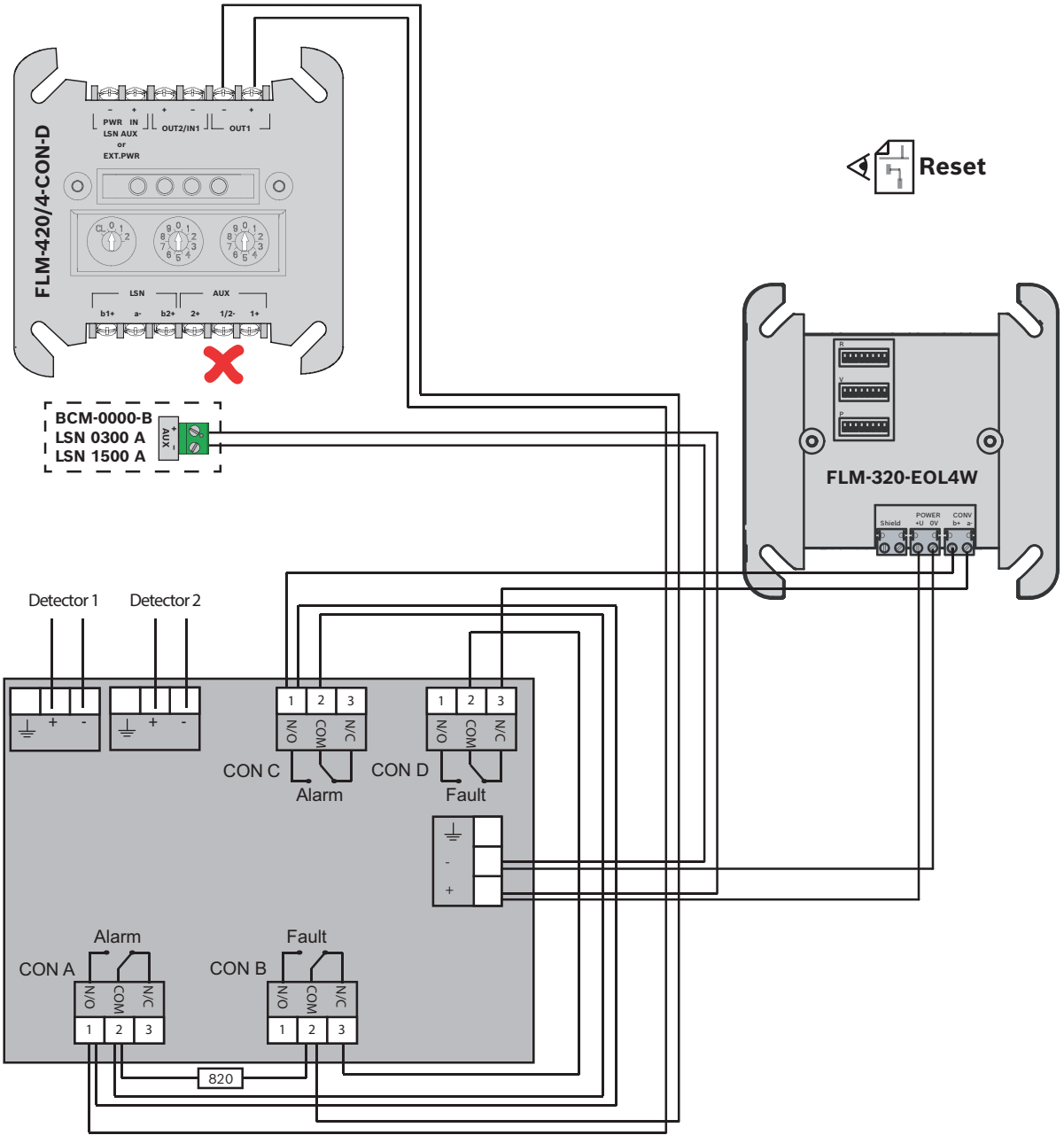
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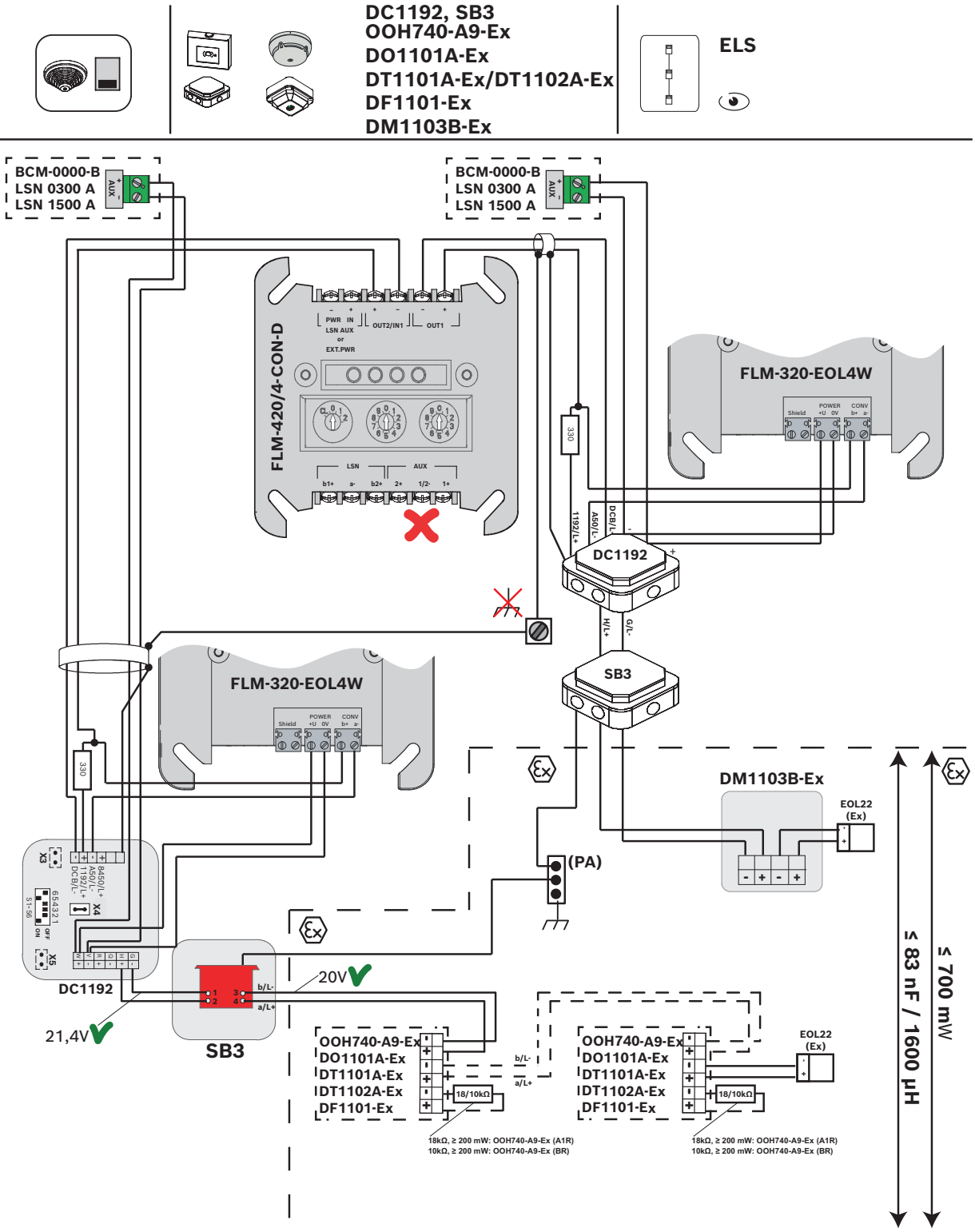
2 x OUT1



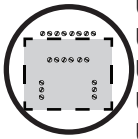
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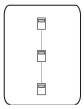



DC1192, SB3
OOH740-A9-Ex
DO1101A-Ex
DT1101A-Ex/DT1102A-Ex
DF1101-Ex
DM1103B-Ex
ELS
BCM-0000-B
LSN 0300 A
LSN 1500 A
AUX
FLM-420/4-CON-D
PWR IN
LSN AUX
or
EXT.PWR
OUT2/IN1
OUT1
LSN
AUX
FLM-320-EOL4W
Shield
POWER
+U 0V
CONV
b+ a-
330
DC1192
SB3
DM1103B-Ex
EOL22
(Ex)
(PA)
DC1192
SB3
20V
21,4V
b/L-
a/L+
OOH740-A9-Ex
DO1101A-Ex
DT1101A-Ex
DT1102A-Ex
DF1101-Ex
18/10kΩ
18kΩ, ≥ 200 mW: OOH740-A9-Ex (A1R)
10kΩ, ≥ 200 mW: OOH740-A9-Ex (BR)
≤ 83 nF / 1600 µH
≤ 700 mW

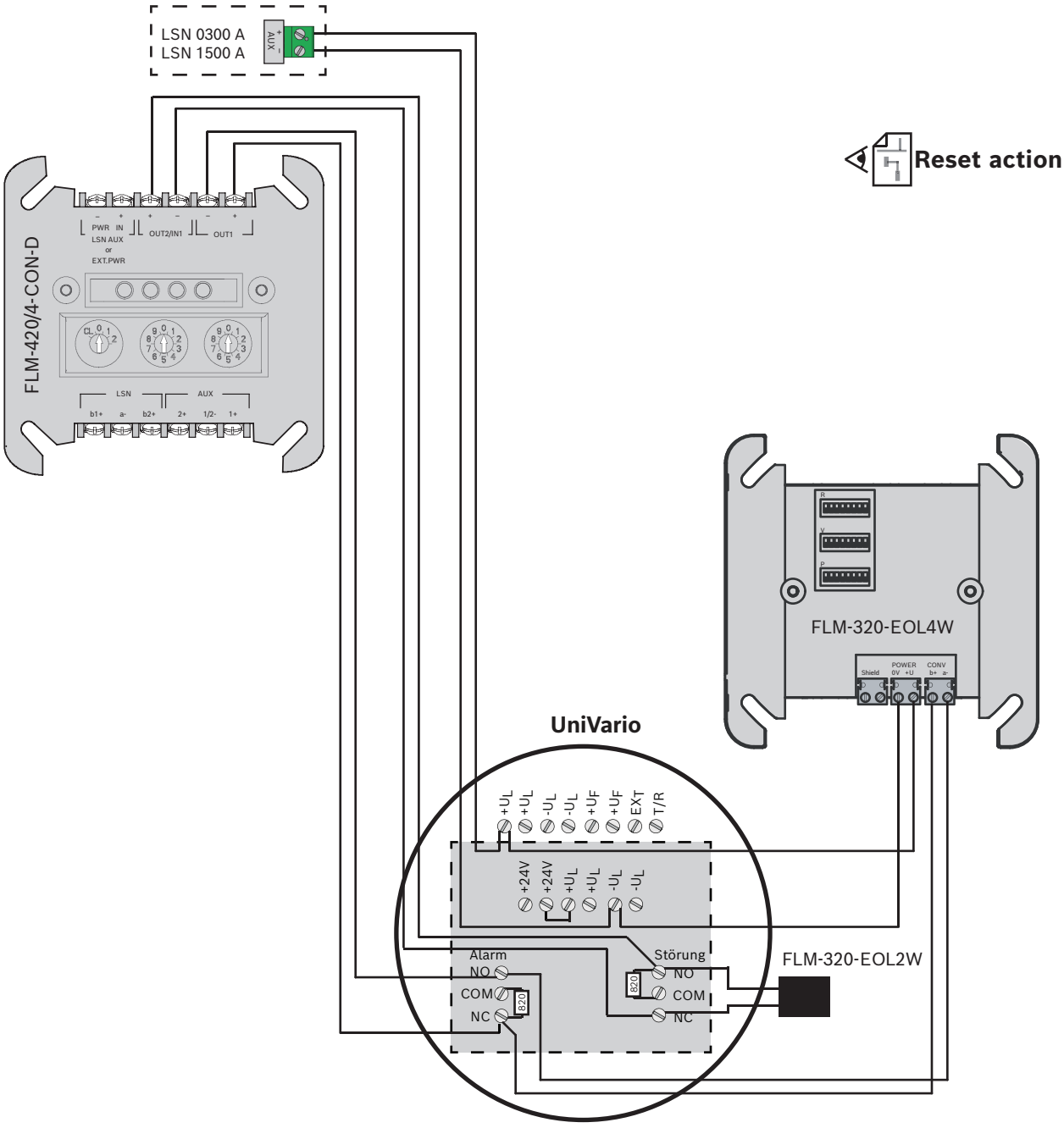




UniVario FMX5000 IR
UniVario FMX5000 IR 3GD
UniVario FMX5000 IR HR
UniVario KMX5000 RK
UniVario KMX5000 RK 3GD



ELS



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