

UK Installation instructions

FI Asennusohje

LV Instalācijas instrukcija

DE Montageanleitung

FR Notice de montage

NO Monteringsanvisning

CZ Montážní návod

HU Szerelési útmutató

PL Instrukcja montażu

DK Monteringsvejledning

IT Istruzioni di montaggio

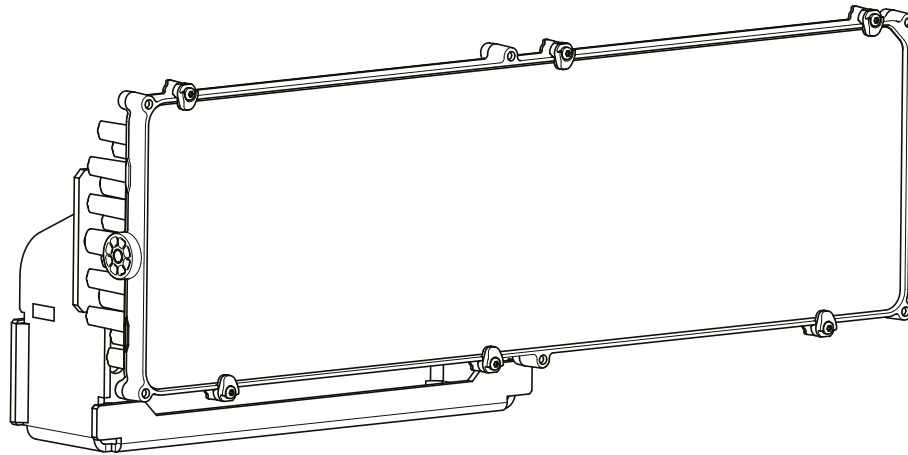
SE Installationsanvisning

EE Paigaldusjuhend


LT Montavimo Instrukcijos

RU ИНСТРУКЦИЯ ПО МОНТАЖУ

TYPE : ALG5 - 144L
- 168L



IP66 / IK08

 = 9.3 kg



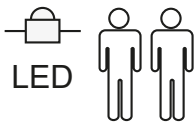
The luminaire with clear optic should be positioned so that prolonged staring into the luminaire at a distance <2m is not expected



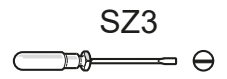
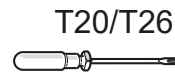
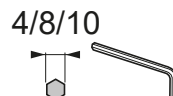
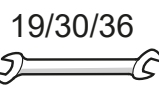
Caution, risk of electric shock
Danger, risque de chocs électriques

Extreme caution : Do not connect any LED CONNECTION wire (high voltage) inside NTC connector !! It could result in a critical failure and damage irreversibly the ALTIS luminaire

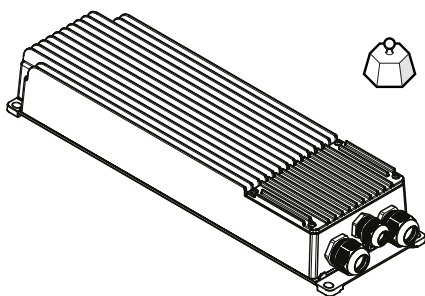
The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.




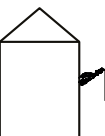
CLASS I   



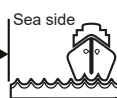
1 GEAR BOX : ALG5 GB LE



 = 5.6 kg

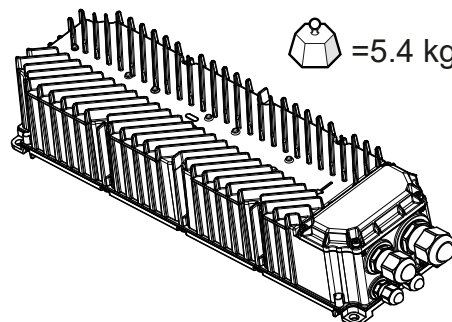


>5 km



$T_{a_{MIN}} = -40^{\circ}C$ / $T_{a_{MAX}} = +50^{\circ}C$
(up to 50°C with driving current derating)
IP66 / IK08

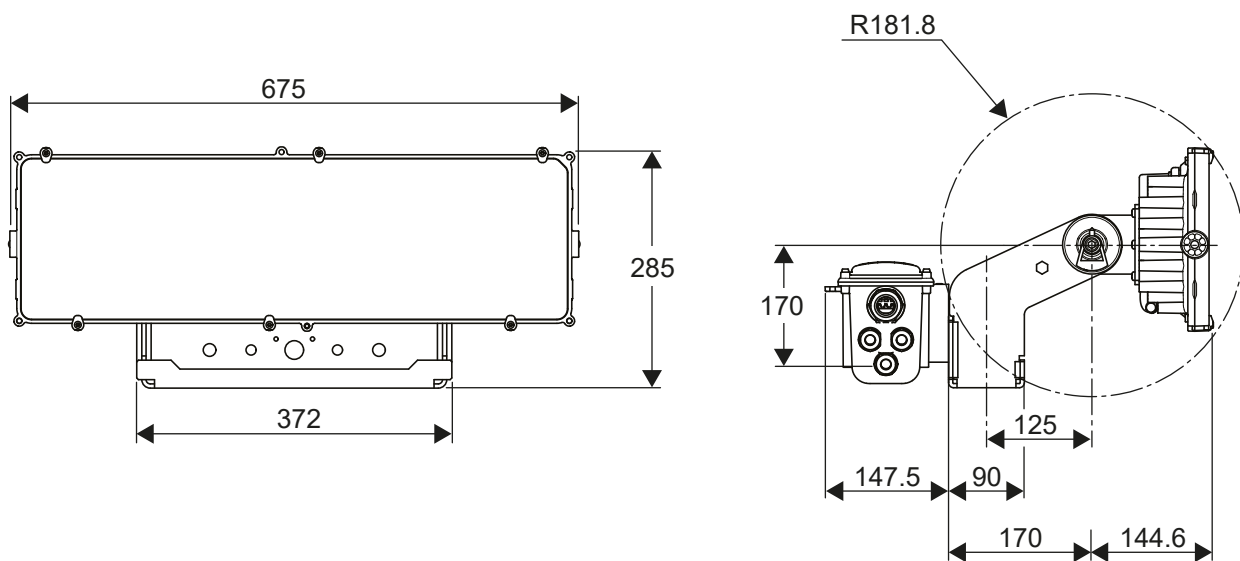
ALG5 GB 2CH / ALG5 GB 3CH



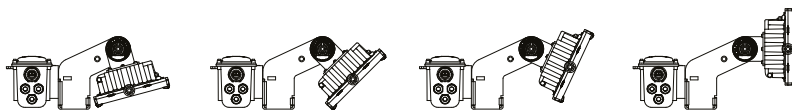
 = 5.4 kg / 6.1 kg

$T_{a_{MIN}} = -40^{\circ}C$ / $T_{a_{MAX}} = +55^{\circ}C$
(up to 55°C with driving current derating)
IP66 / IK08

ALG5 - 144L
- 168L

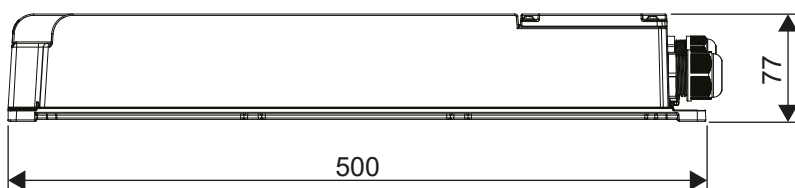
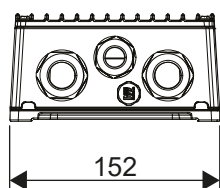


		S _C X15° *	S _C X45° *	S _C X65° *	S _C X90° *
ALG5	1 BRICK	0.072	0.112	0.16	0.17

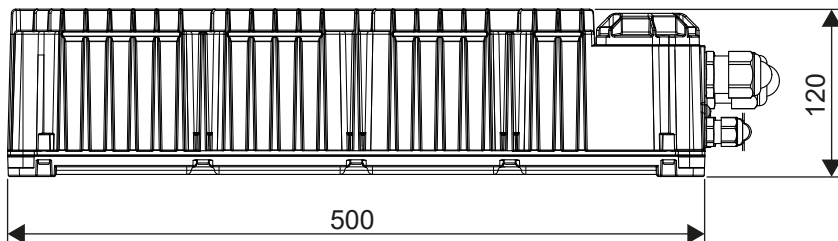
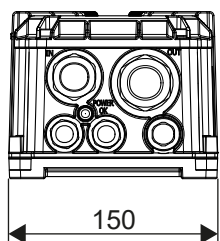


* These data refer to the worst case at indicated angle

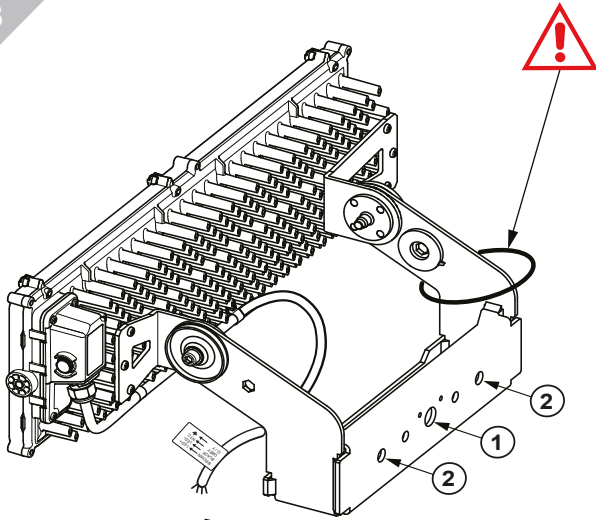
ALG5 GB LE



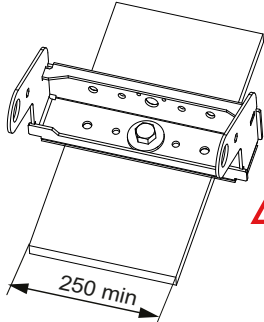
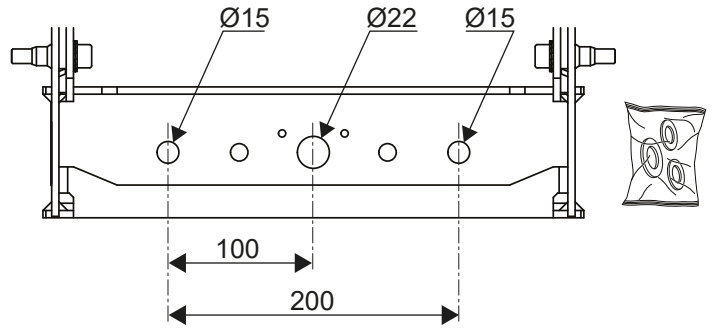
ALG5 GB 2 CH /AL G5 GB 3 CH



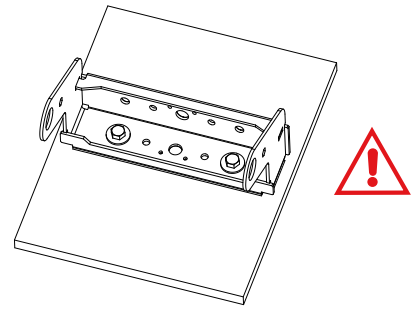
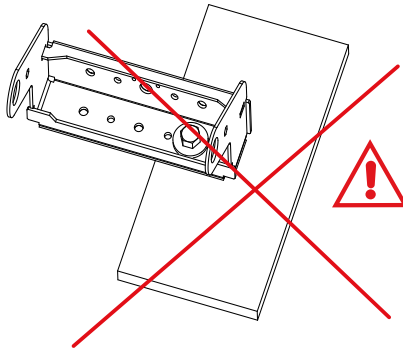
3



For installation higher >3m
Secure product with retaining cable
attached to the frame (not included in the delivery).
Please refer to local installation norms/regulations.

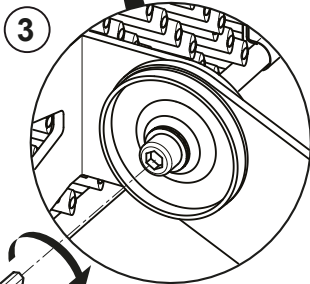
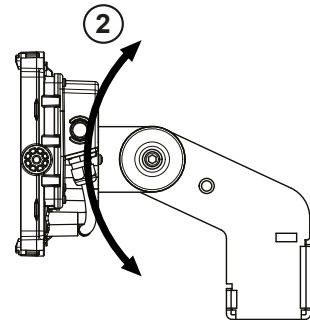
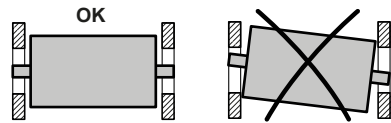
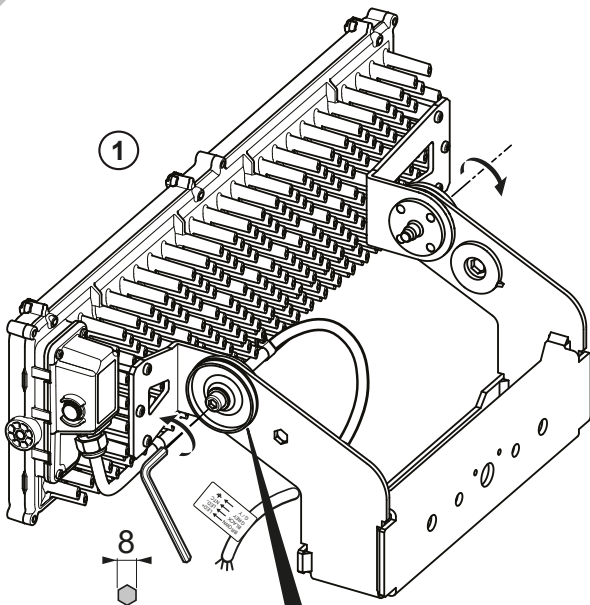


① 1xM20 with extra large washer

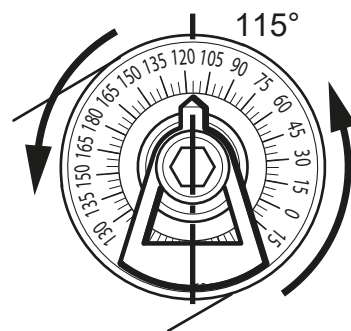


② 2xM14 with extra large washer

4

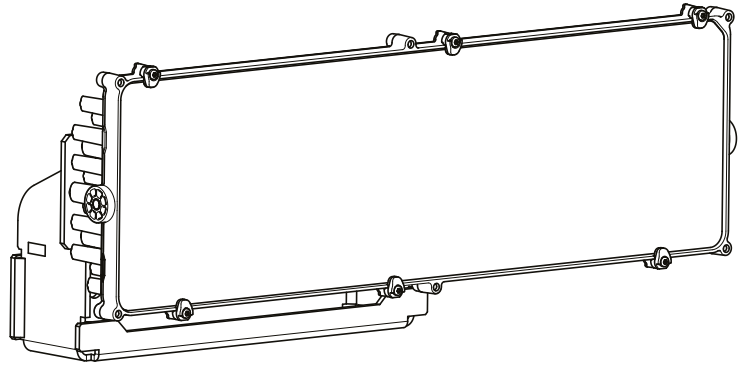
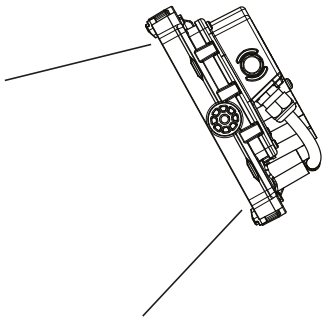


20Nm

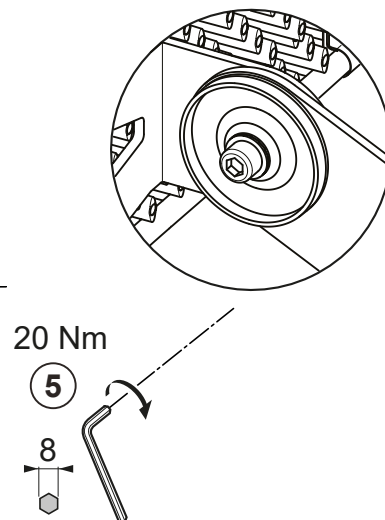
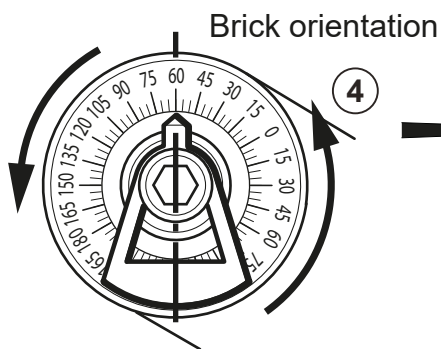
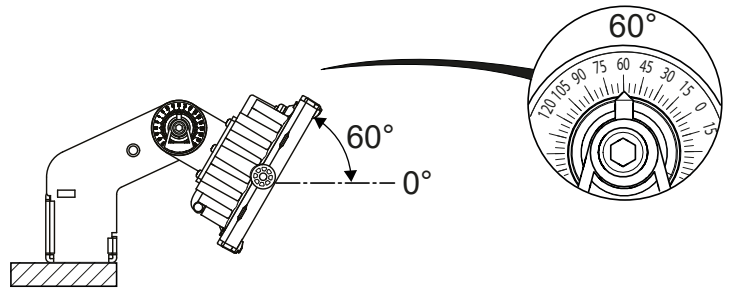
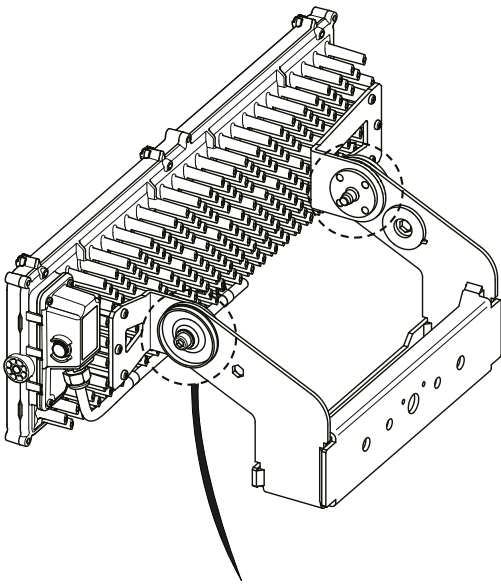
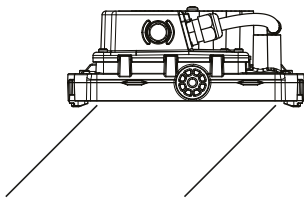


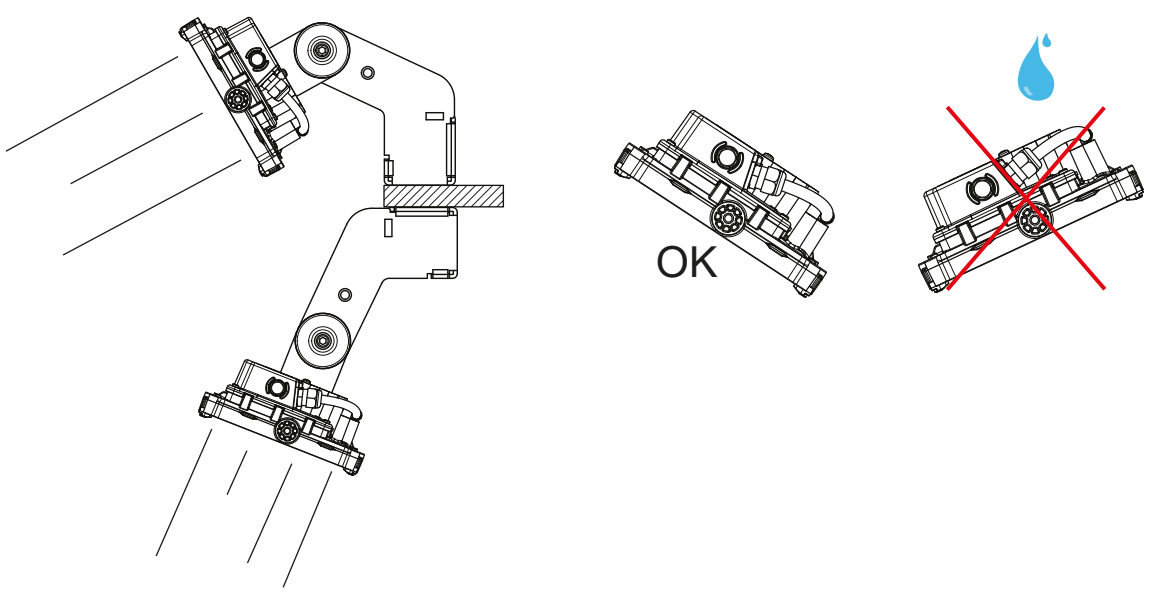
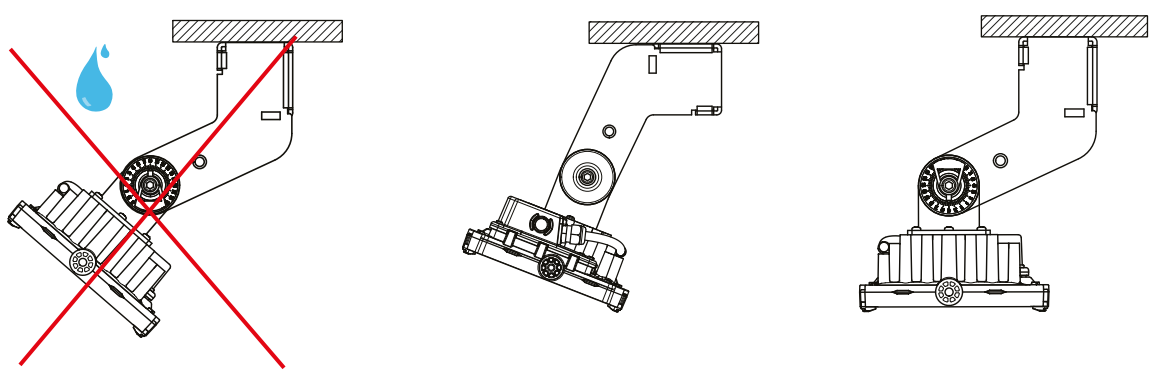
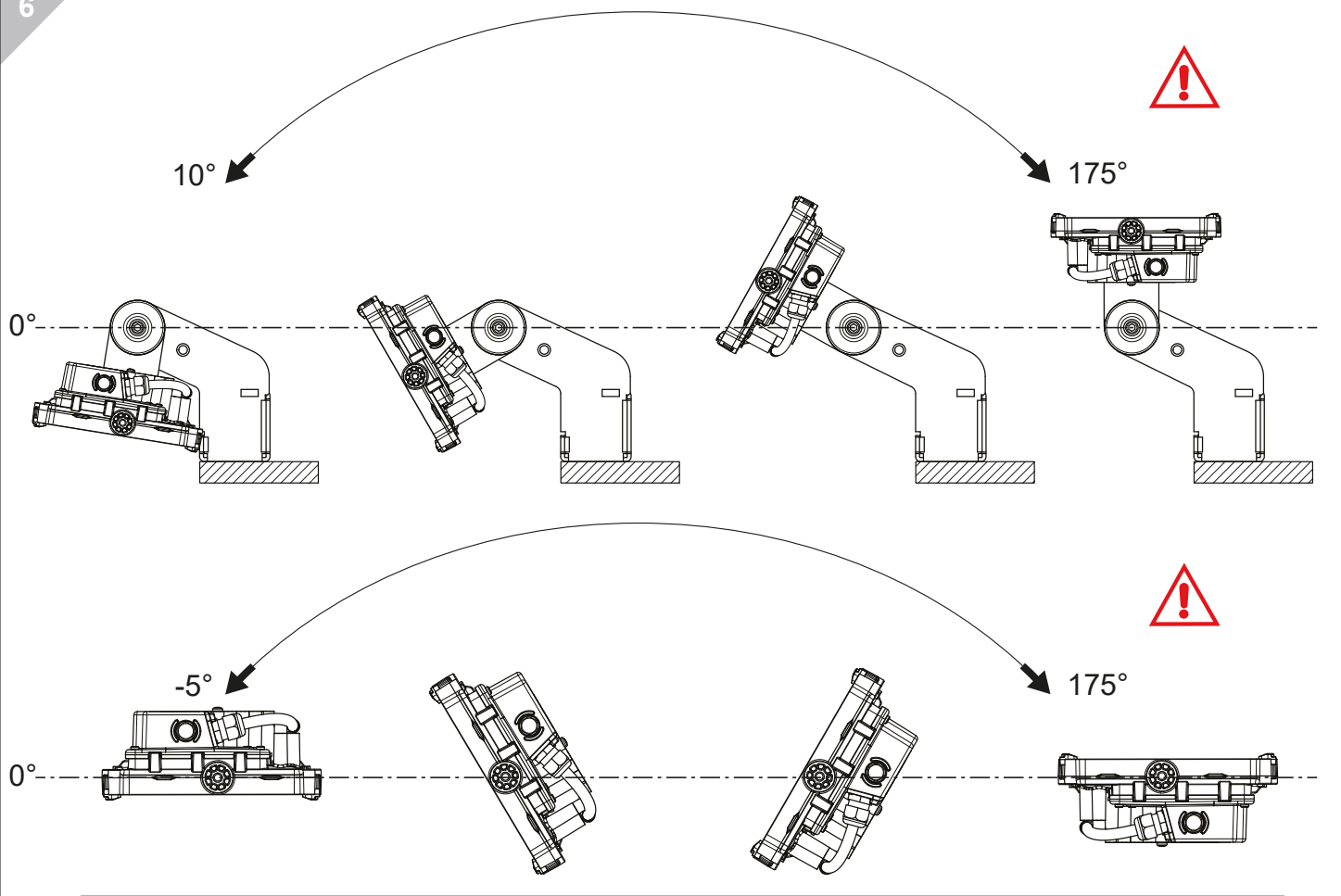
ALG5 144L125 - 740 PST NB ANT ALG5 168L

Symmetrical / Elliptical beam
(NB, MB, WB, EB)

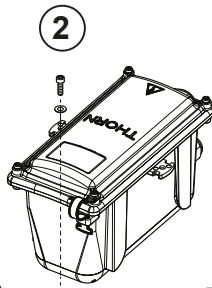
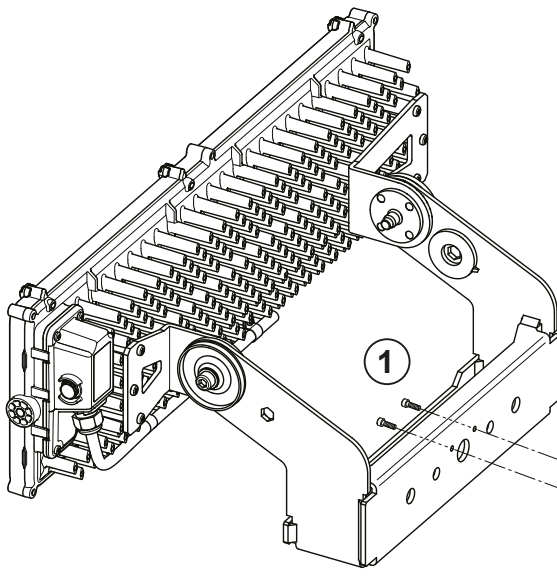
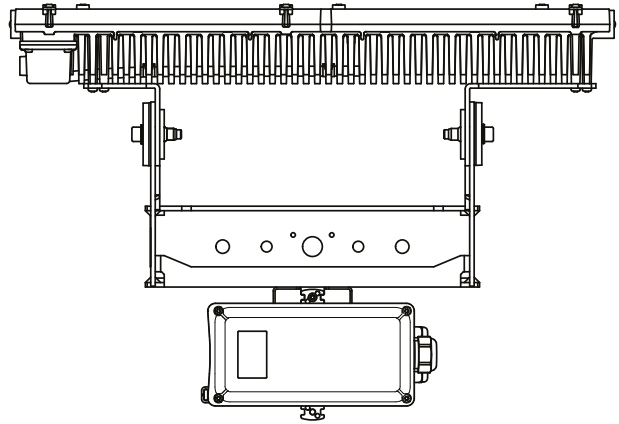
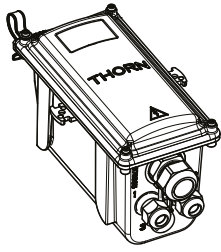


Asymmetrical beam
(A4, A5, A6, AI5, AI6, EW2)

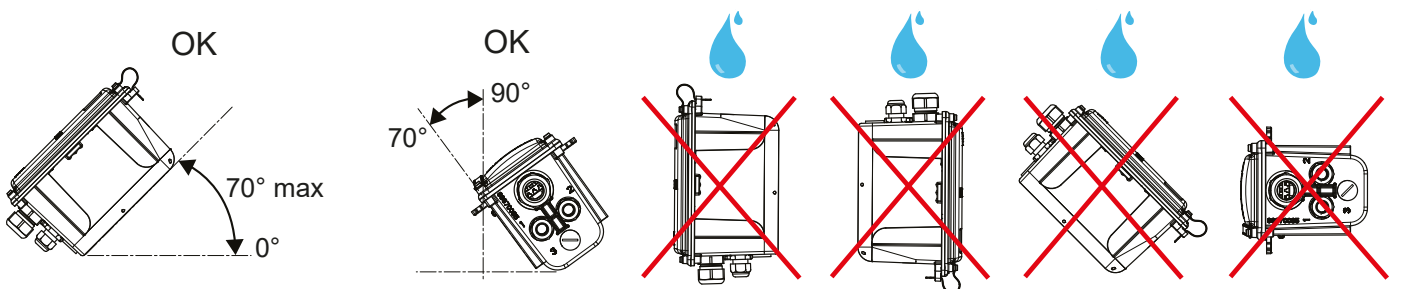
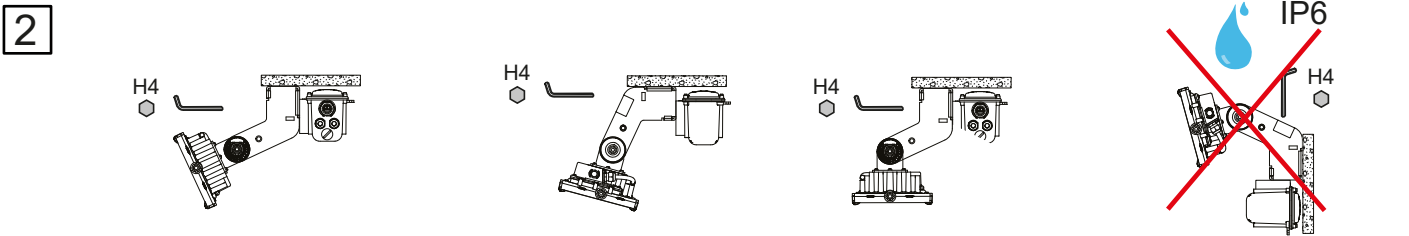
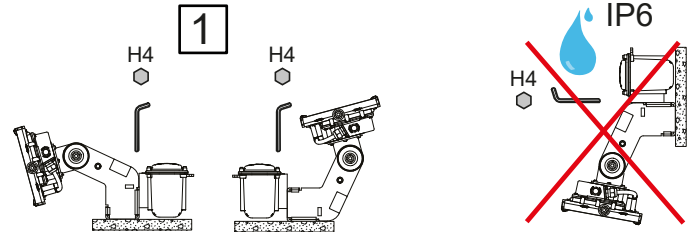
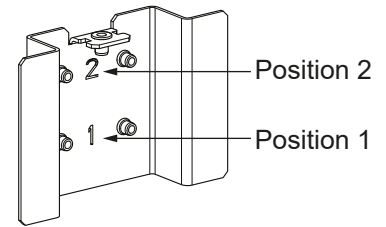




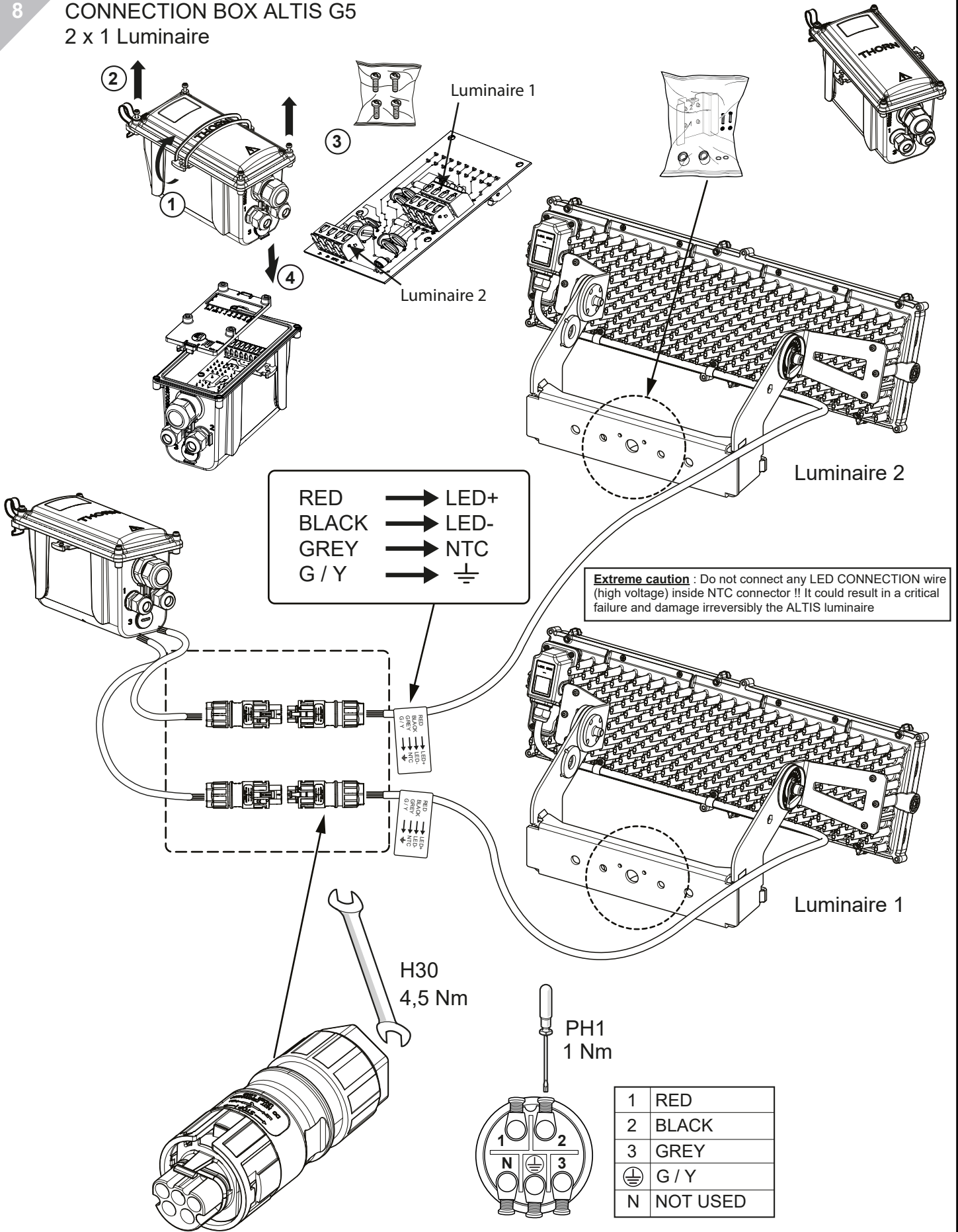
7 CONNECTION BOX



Position 1
OR
Position 2



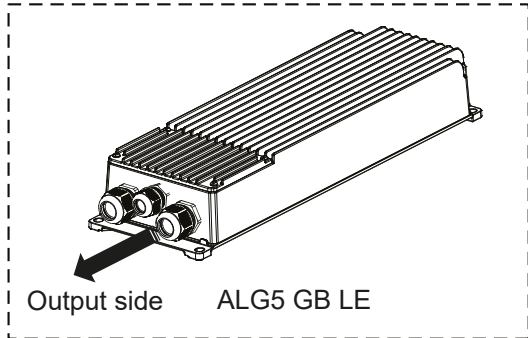
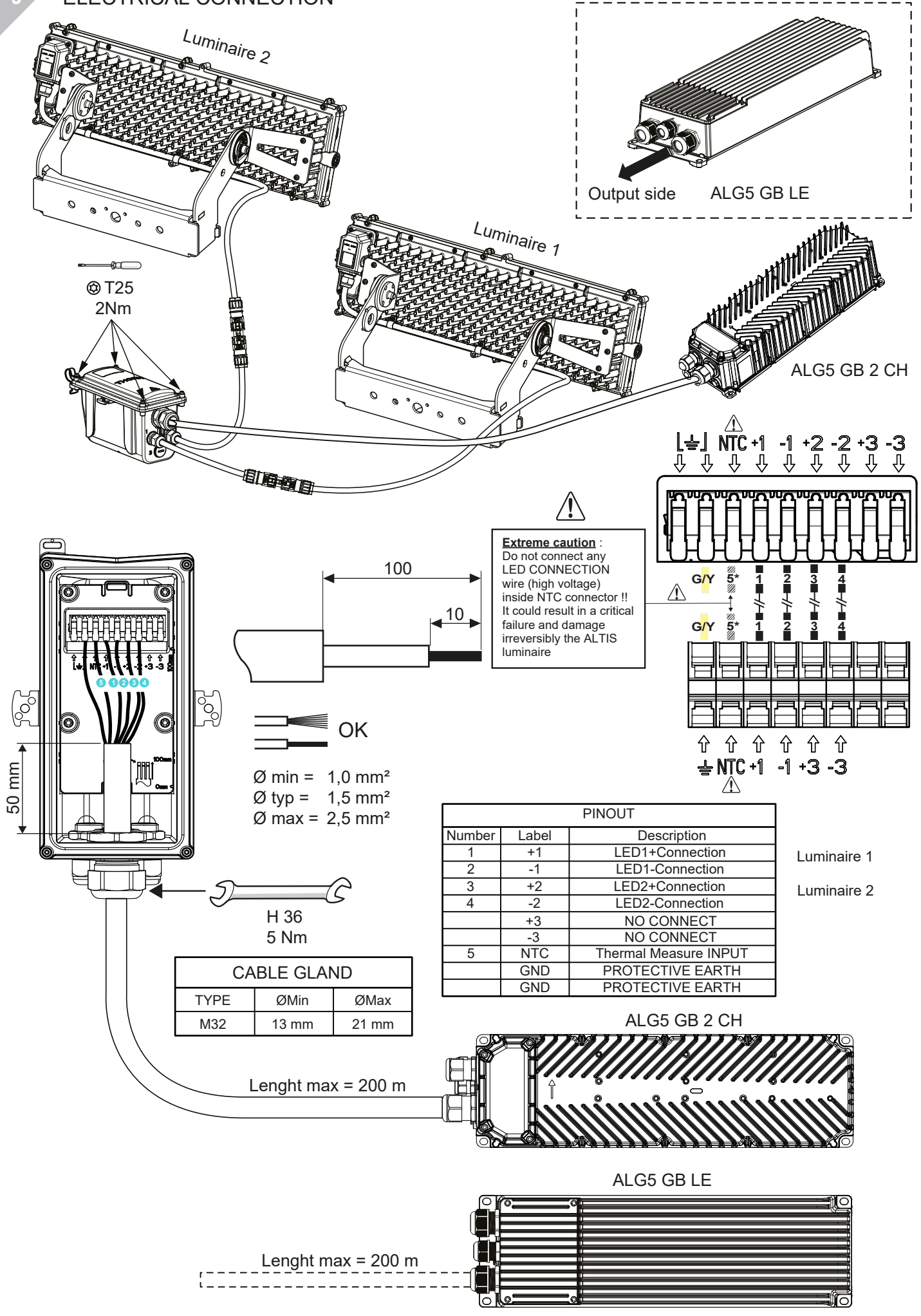
8 CONNECTION BOX ALTIS G5
2 x 1 Luminaire



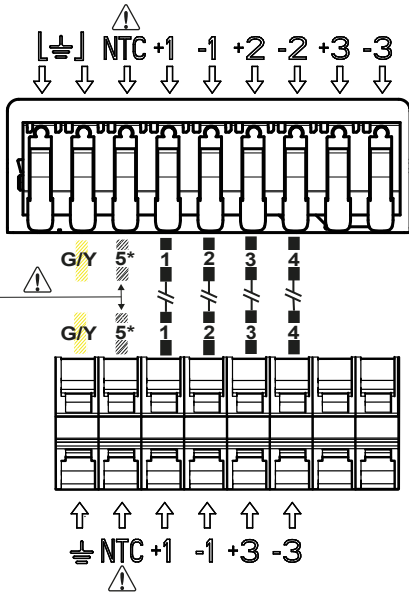
REF : PHOENIX CONTACT PRC 5 FC MS6 8-21
PHOENIX CONTACT PRC 5 FC MS6 8-21 HR

96679580 ALTIS G5 CON 5P M+F 600V X1

9 ELECTRICAL CONNECTION

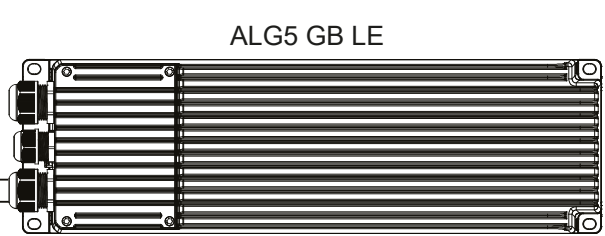
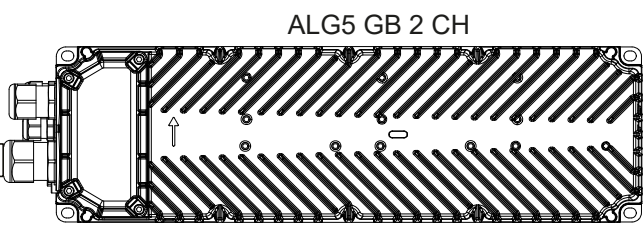
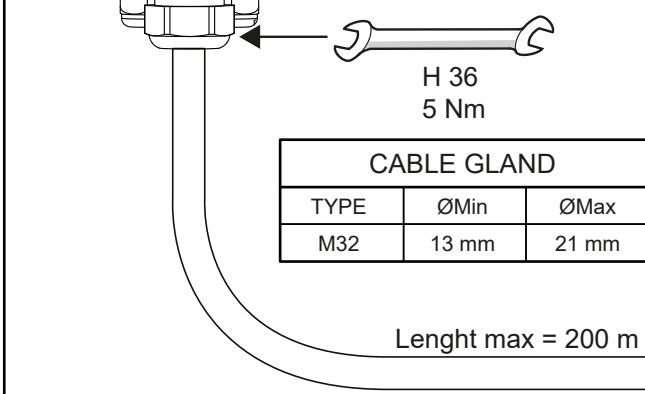
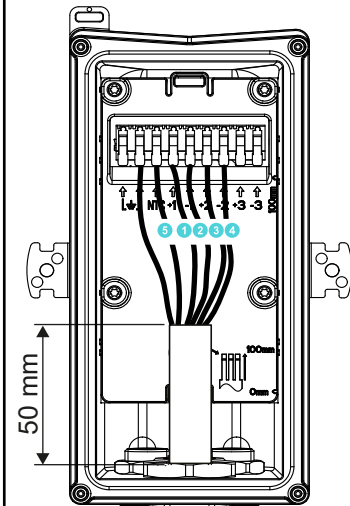


Extreme caution :
Do not connect any LED CONNECTION wire (high voltage) inside NTC connector !! It could result in a critical failure and damage irreversibly the ALTIS luminaire

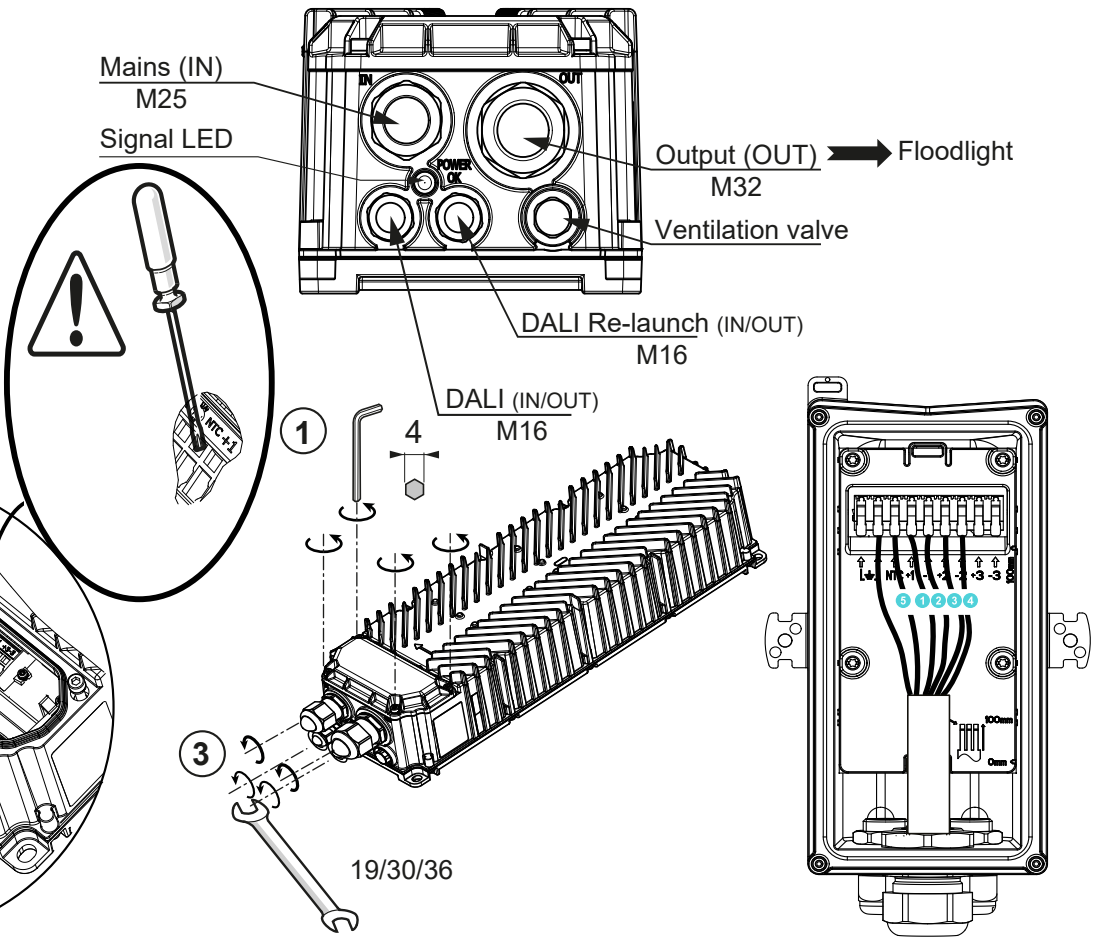
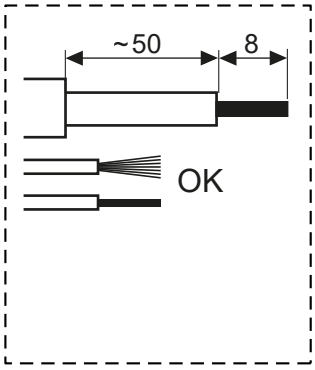


PINOUT		
Number	Label	Description
1	+1	LED1+Connection
2	-1	LED1-Connection
3	+2	LED2+Connection
4	-2	LED2-Connection
	+3	NO CONNECT
	-3	NO CONNECT
5	NTC	Thermal Measure INPUT
	GND	PROTECTIVE EARTH
	GND	PROTECTIVE EARTH

CABLE GLAND		
TYPE	ØMin	ØMax
M32	13 mm	21 mm

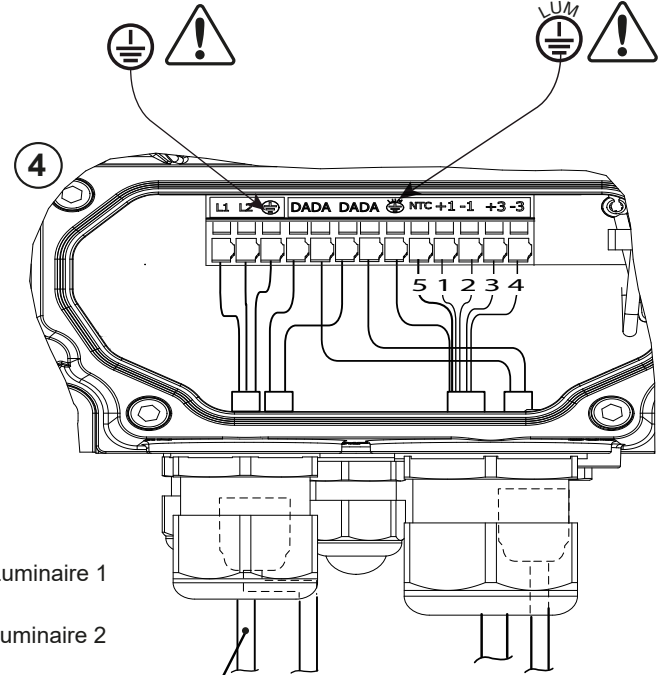


10 ALG5 GB 2CH / ELECTRICAL CONNECTION / DALI 2 Channels



Extreme caution : Do not connect any LED CONNECTION wire (high voltage) inside NTC connector !! It could result in a critical failure and damage irreversibly the ALTIS luminaire

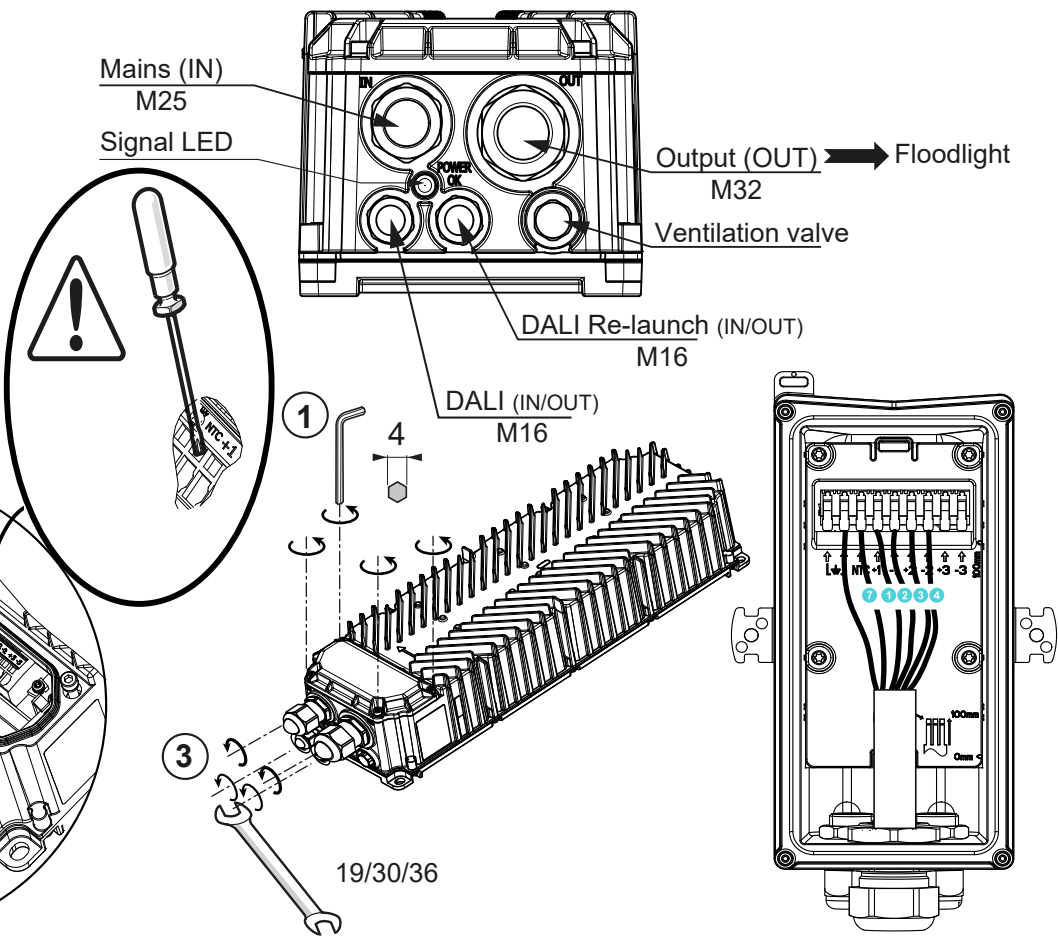
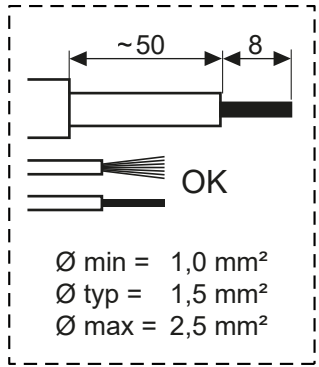
PINOUT		
Number	Label	Description
	L1	AC LINE 1 INPUT
	L2	AC LINE 2 INPUT
	⊕	PROTECTIVE EARTH
	DA+	DALI INPUT
	DA+	DALI RE-LAUNCH
	DA-	DALI INPUT
	DA-	DALI RE-LAUNCH
	⊕	PROTECTIVE EARTH FOR LUMINAIRE
5	NTC	THERMAL MEASURE INPUT
1	+1	LED1+CONNECTION
2	-1	LED1-CONNECTION
3	+3	LED3+CONNECTION
4	-3	LED3-CONNECTION



SIGNALLING LED INDICATIONS ON THE GEAR BOX			
PERIOD	PULSES	FAULT DESCRIPTION	PRIORITY
The encoded faults are based on pulses emitted every 4 seconds	1	One or more active outputs is not working	Maximum ↑ Minimum
	5	Undervoltage on one or more active outputs	
	2	short circuit on one or more active outputs	
	3	One or more active outputs disconnection from load	
	4	Overload on one or more active outputs	

CABLE GLAND		
TYPE	ØMin	ØMax
M16	5 mm	10 mm
M25	10 mm	17 mm
M32	13 mm	21 mm

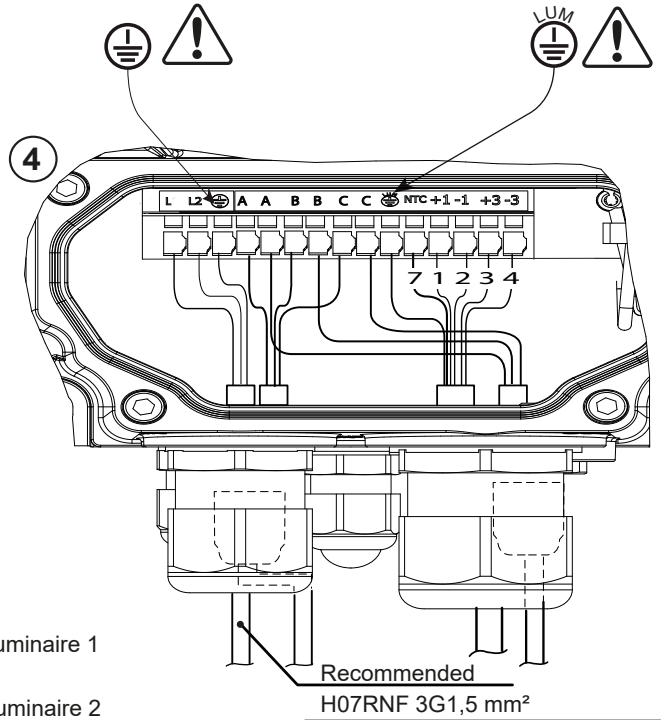
SEAL REDUCER for GB and FLOOD		
TYPE	ØMin	ØMax
M32	10 mm	16 mm



Extreme caution : Do not connect any LED CONNECTION wire (high voltage) inside NTC connector !! It could result in a critical failure and damage irreversibly the ALTIS luminaire

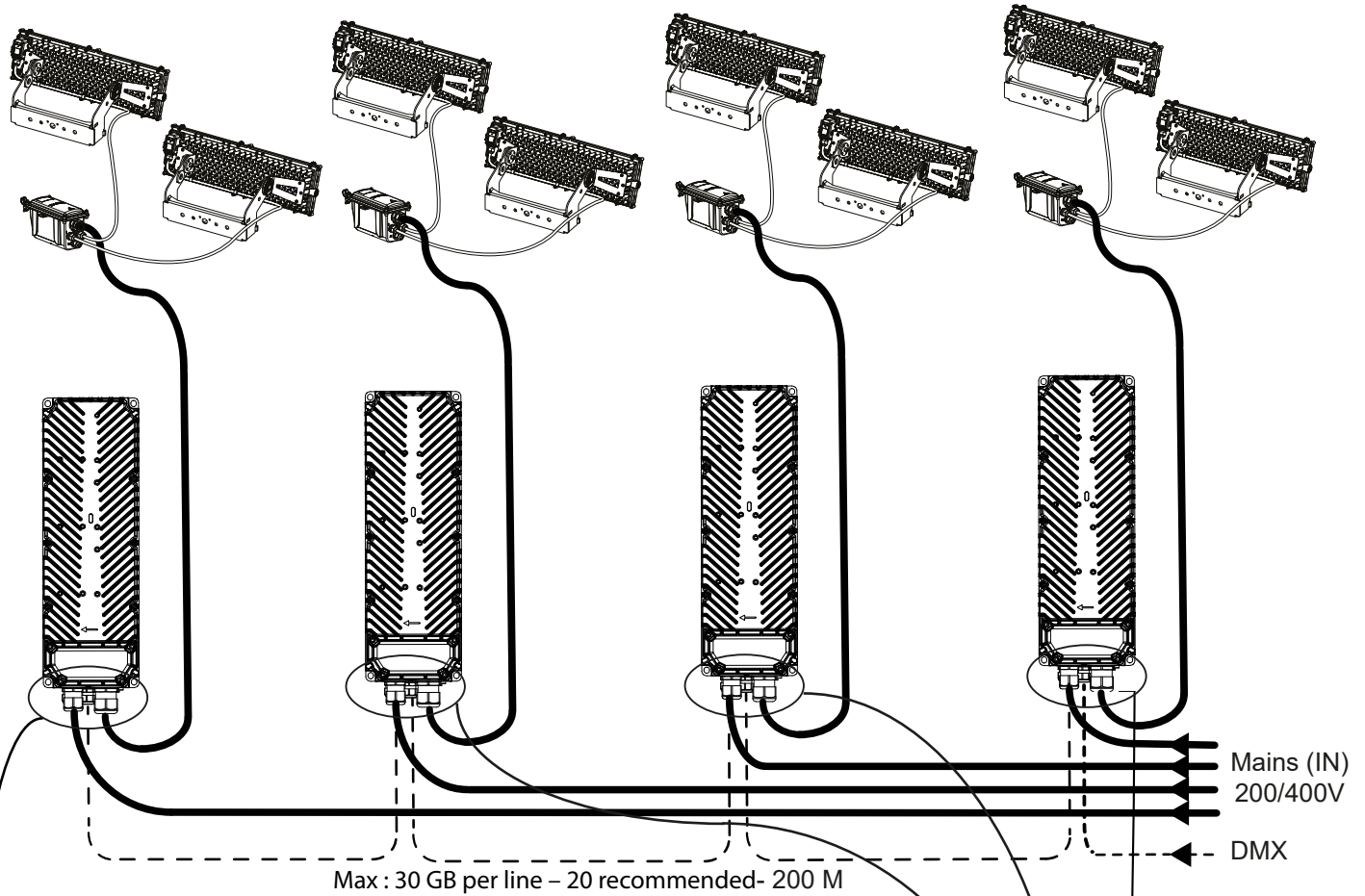
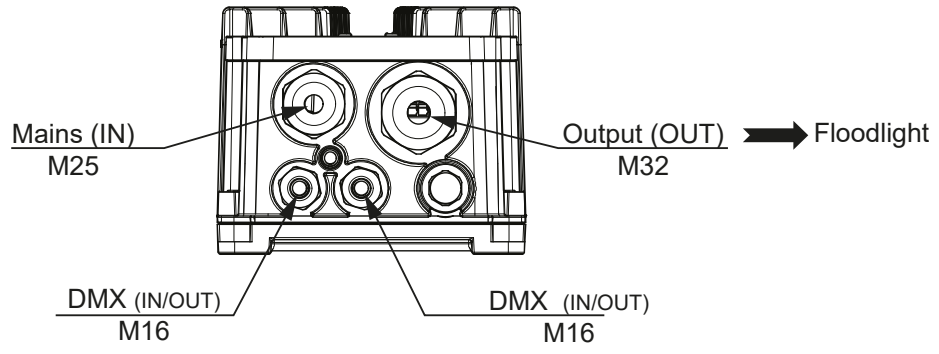
PINOUT		
Number	Label	Description
	L1	AC LINE 1 INPUT
	L2	AC LINE 2 INPUT
	⊕	PROTECTIVE EARTH
	A	DMX INPUT DATA+
	A	DMX-RE-LAUNCH DATA+
	B	DMX INPUT DATA-
	B	DMX-RE-LAUNCH DATA-
	S	DMX COMMON / SHIELD
	S	DMX COMMON / SHIELD
	⊕	PROTECTIVE EARTH FOR LED MODULE
7	NTC	THERMAL MEASURE INPUT
1	+1	LED1+CONNECTION
2	-1	LED1-CONNECTION
3	+3	LED3+CONNECTION
4	-3	LED3-CONNECTION

SIGNALLING LED INDICATIONS ON THE GEAR BOX			
PERIOD	PULSES	FAULT DESCRIPTION	PRIORITY
The encoded faults are based on pulses emitted every 4 seconds	1	One or more active outputs is not working	Maximum ↑ Minimum
	5	Undervoltage on one or more active outputs	
	2	short circuit on one or more active outputs	
	3	One or more active outputs disconnection from load	
	4	Overload on one or more active outputs	



CABLE GLAND		
TYPE	ØMin	ØMax
M16	5 mm	10 mm
M25	10 mm	17 mm
M32	13 mm	21 mm

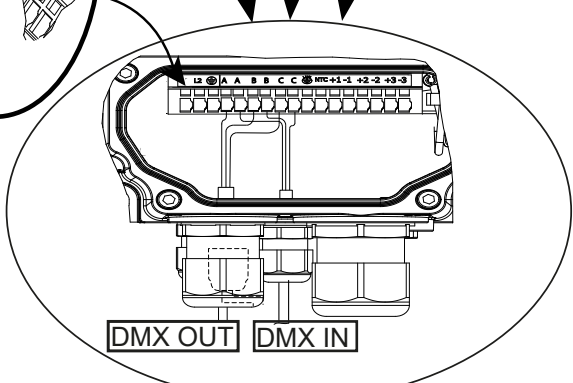
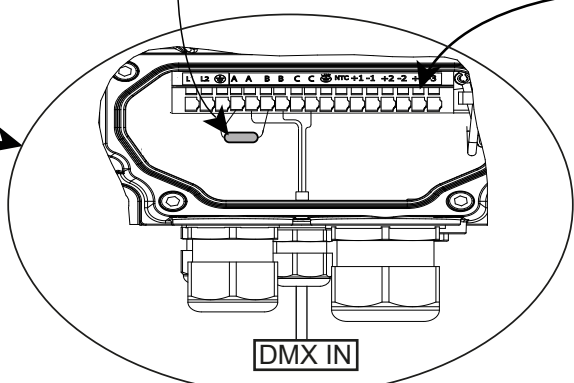
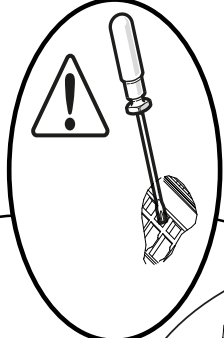
SEAL REDUCER for GB and FLOOD		
TYPE	ØMin	ØMax
M32	10 mm	16 mm



« DMX-RDM wiring shall respect ANSI E1.11 and AINSI E1.20 installation rules».

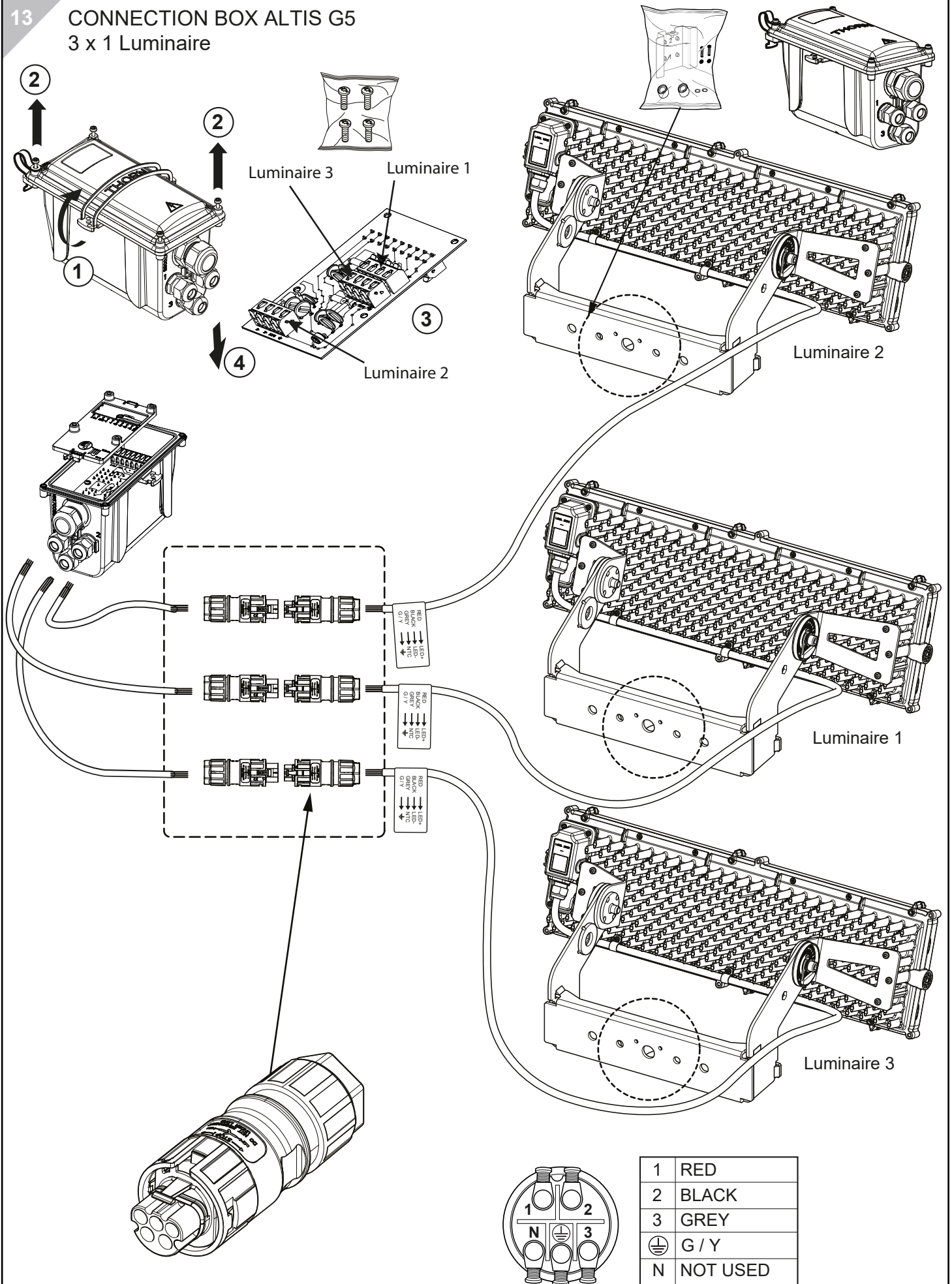
1 to 3 DMX addresses per GB – changeable via RDM

Last device on the line shall be properly terminated with a 120R 0.5W 5% resistance (96683550)



CONNECTION BOX ALTIS G5

3 x 1 Luminaire

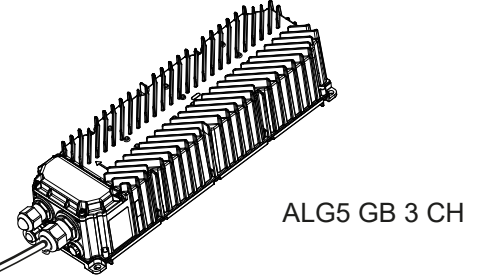
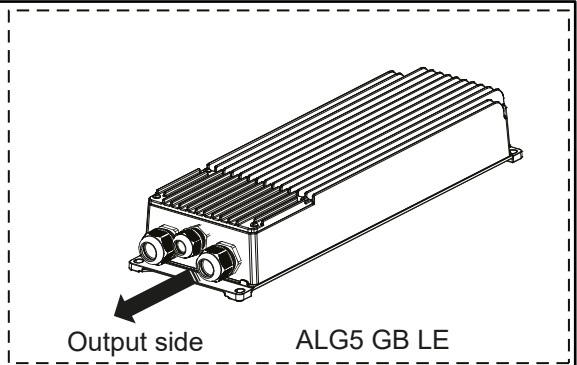
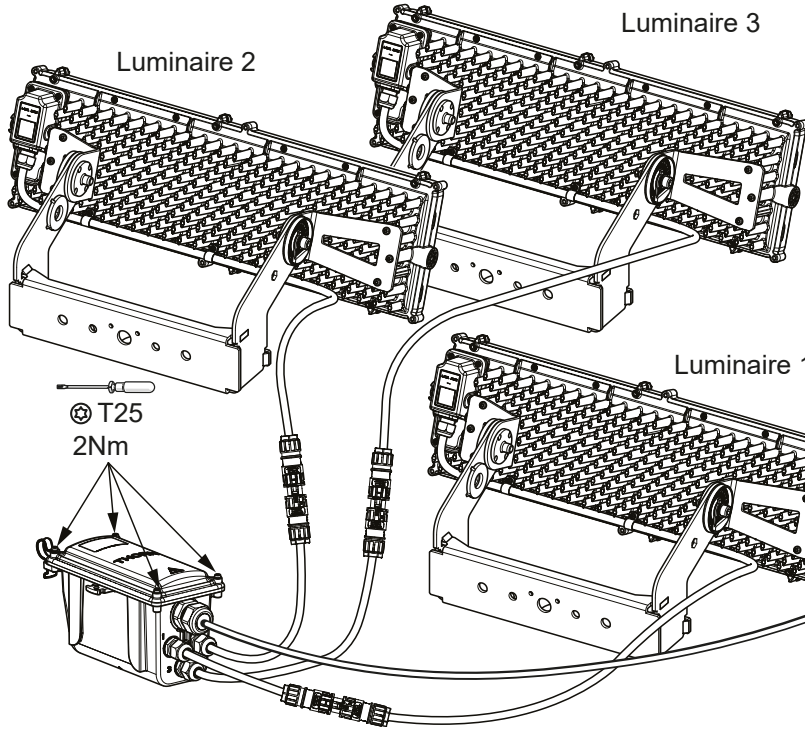


REF : PHOENIX CONTACT PRC 5 FC MS6 8-21
 PHOENIX CONTACT PRC 5 FC MS6 8-21 HR

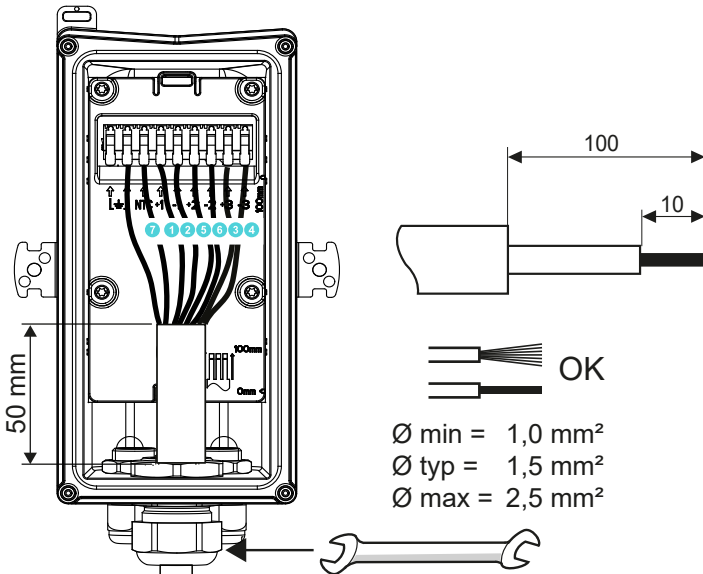
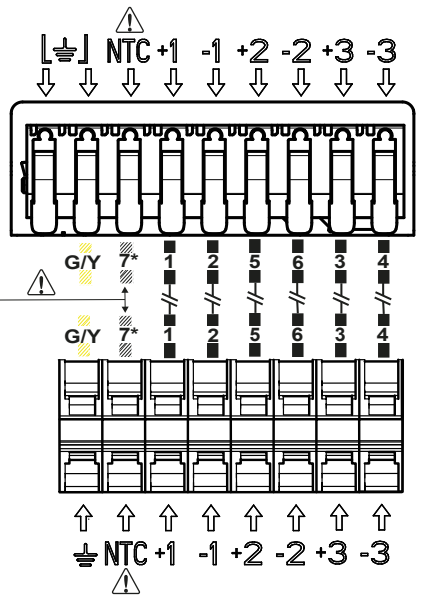
96679580 ALTIS G5 CON 5P M+F 600V X1

1	RED
2	BLACK
3	GREY
⊕	G / Y
N	NOT USED

ELECTRICAL CONNECTION



Extreme caution :
Do not connect any LED CONNECTION wire (high voltage) inside NTC connector !! It could result in a critical failure and damage irreversibly the ALTIS luminaire

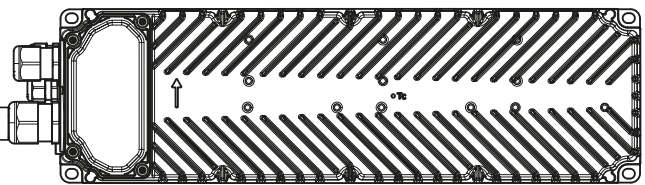


CABLE GLAND		
TYPE	ØMin	ØMax
M32	13 mm	21 mm

PINOUT		
Number	Label	Description
1	+1	LED1+Connection
2	-1	LED1-Connection
3	+3	LED3+Connection
4	-3	LED3-Connection
5	+2	LED2+Connection
6	-2	LED2-Connection
7	NTC	Thermal Measure INPUT
	GND	PROTECTIVE EARTH
	GND	PROTECTIVE EARTH

Luminaire 1
Luminaire 3
Luminaire 2

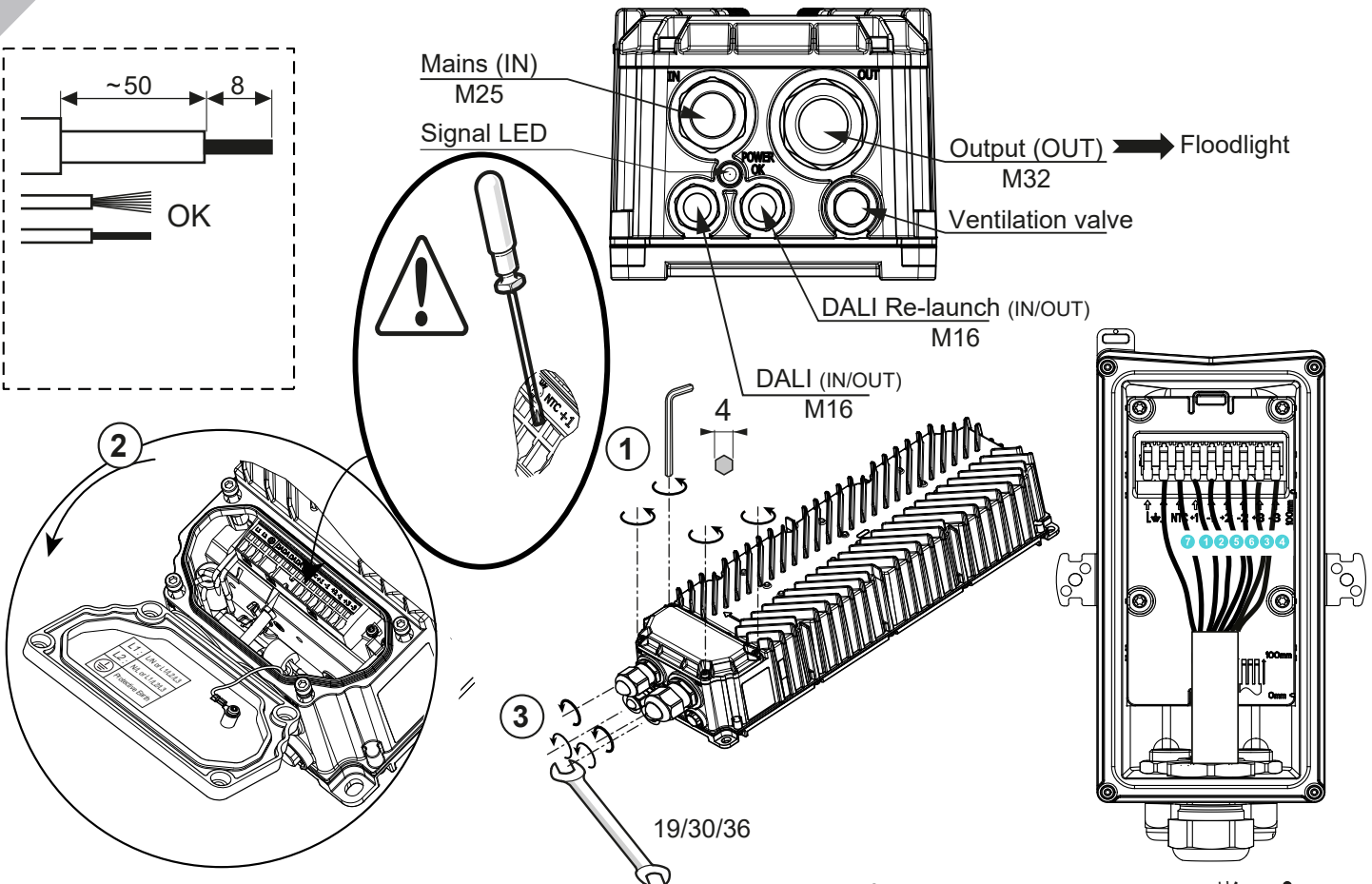
ALG5 GB 3 CH



ALG4 GB LE

Lenght max = 200 m

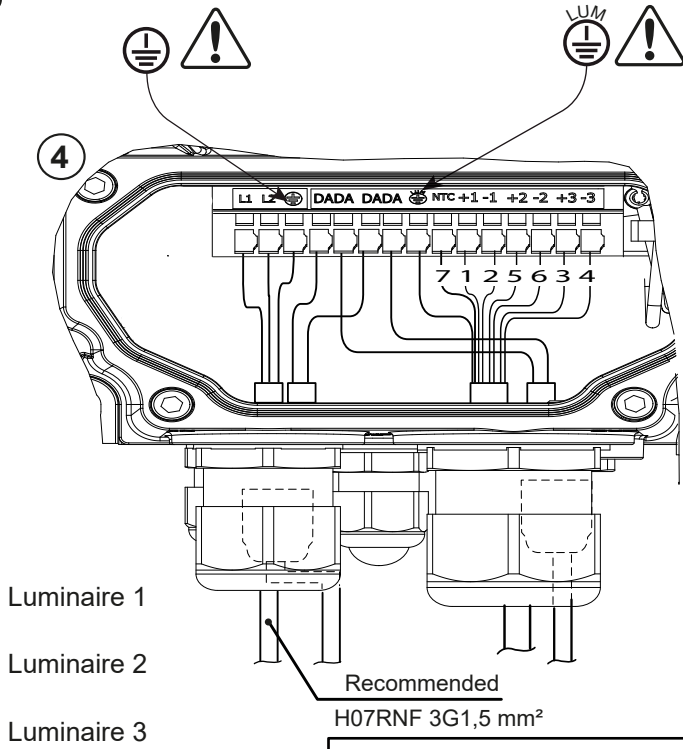
Lenght max = 200 m



Extreme caution : Do not connect any LED CONNECTION wire (high voltage) inside NTC connector !! It could result in a critical failure and damage irreversibly the ALTIS luminaire

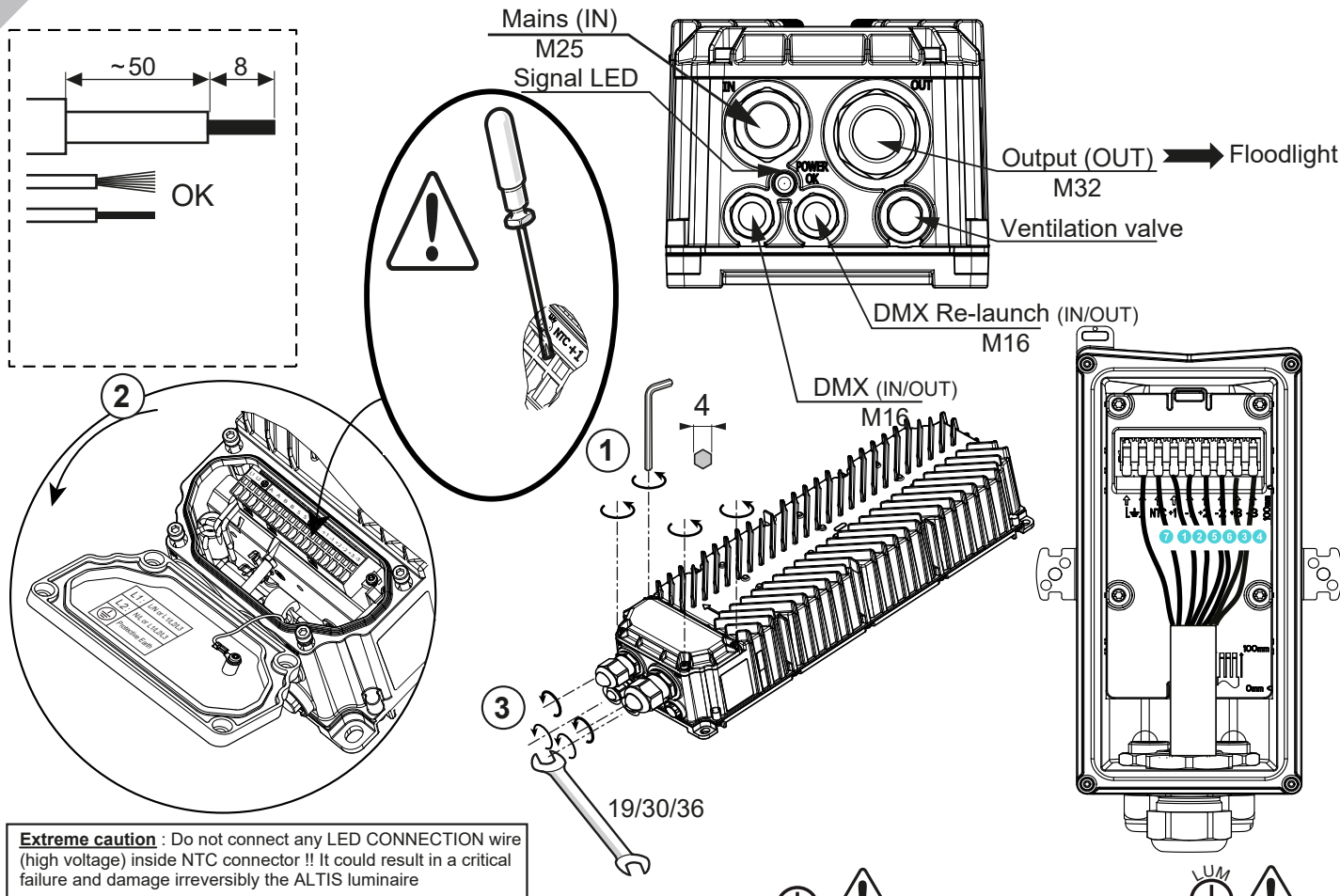
PINOUT		
Number	Label	Description
	L1	AC LINE 1 INPUT
	L2	AC LINE 2 INPUT
	⊕	PROTECTIVE EARTH
	DA+	DALI INPUT
	DA+	DALI RE-LAUNCH
	DA-	DALI INPUT
	DA-	DALI RE-LAUNCH
	⊕	PROTECTIVE EARTH FOR LED MODULE
7	NTC	THERMAL MEASURE INPUT
1	+1	LED1+CONNECTION
2	-1	LED1-CONNECTION
5	+2	LED2+CONNECTION
6	-2	LED2-CONNECTION
3	+3	LED3+CONNECTION
4	-3	LED3-CONNECTION

SIGNALLING LED INDICATIONS ON THE GEAR BOX			
PERIOD	PULSES	FAULT DESCRIPTION	PRIORITY
The encoded faults are based on pulses emitted every 4 seconds	1	One or more CCR module enabled by config are not communicating with logic board	Maximum
	5	Firmware version of one or more CCR module is not compatible with logic board firmware version	
	2	One or more CCR's output is short-circuited	Minimum
	3	Load failure on one or more CCR's output	
	4	Thermal derating active (output current reduction)	



CABLE GLAND		
TYPE	ØMin	ØMax
M16	5 mm	10 mm
M25	10 mm	17 mm
M32	13 mm	21 mm

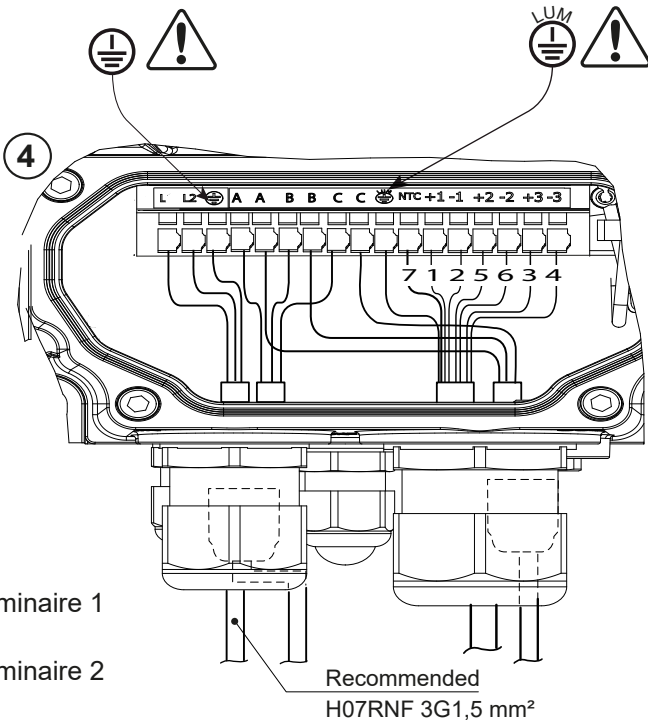
SEAL REDUCER for GB and FLOOD		
TYPE	ØMin	ØMax
M32	10 mm	16 mm



Extreme caution : Do not connect any LED CONNECTION wire (high voltage) inside NTC connector !! It could result in a critical failure and damage irreversibly the ALTIS luminaire

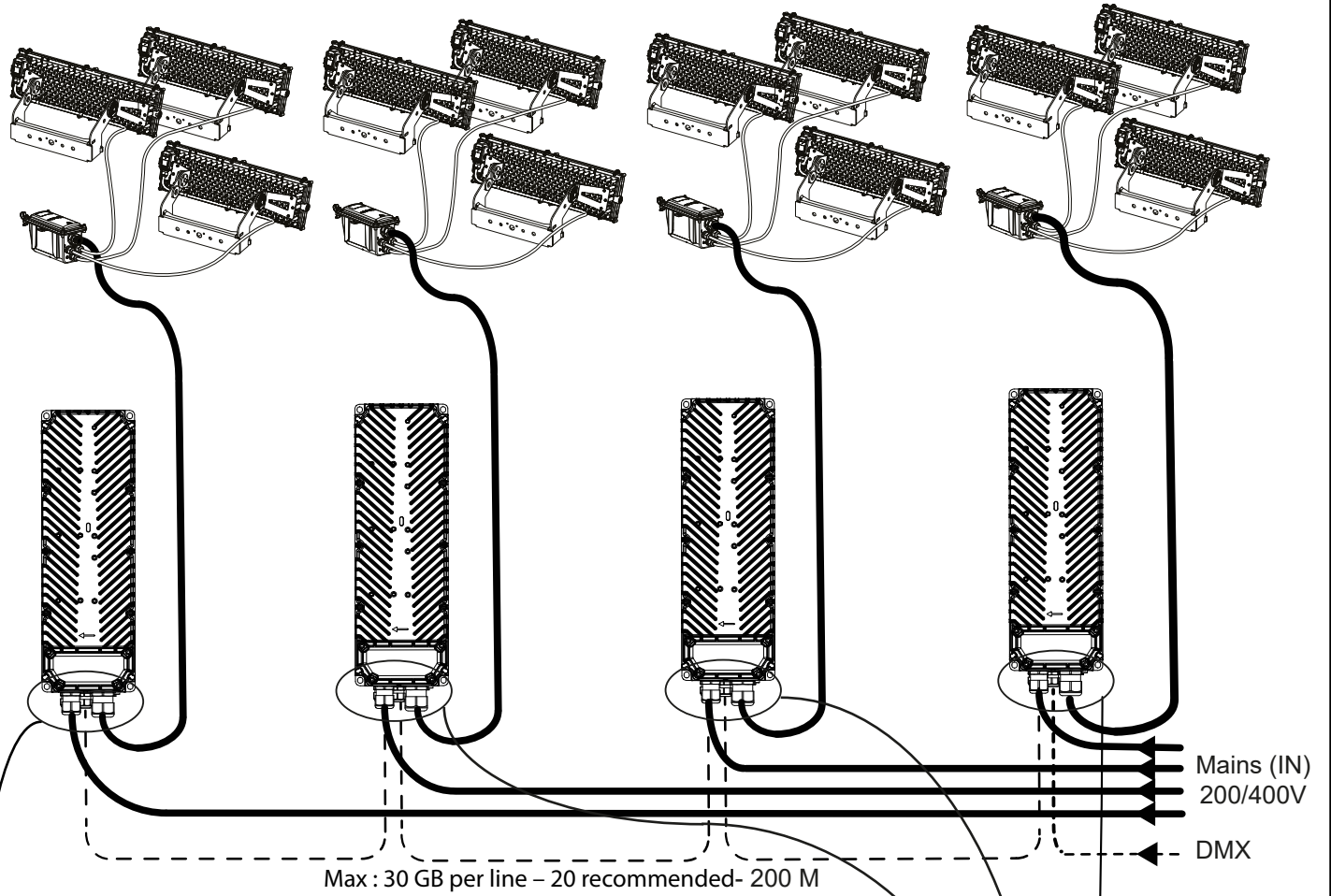
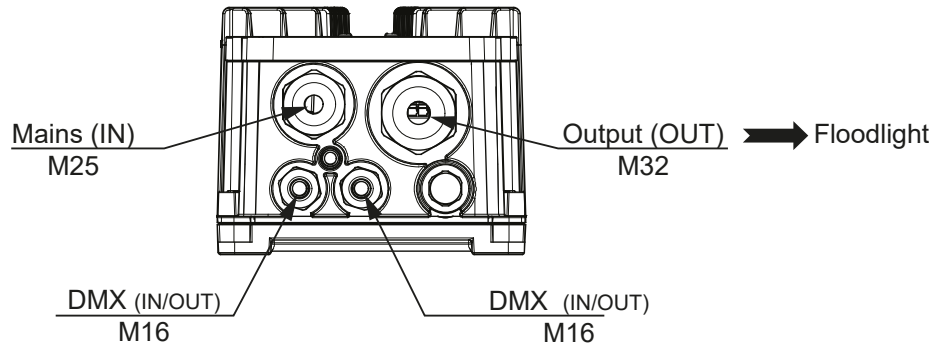
PINOUT		
Number	Label	Description
	L1	AC LINE 1 INPUT
	L2	AC LINE 2 INPUT
	⊕	PROTECTIVE EARTH
	A	DMX INPUT DATA+
	A	DMX-RE-LAUNCH DATA+
	B	DMX INPUT DATA-
	B	DMX-RE-LAUNCH DATA-
	S	DMX COMMON / SHIELD
	S	DMX COMMON / SHIELD
	⊕	PROTECTIVE EARTH FOR LED MODULE
7	NTC	THERMAL MEASURE INPUT
1	+1	LED1+CONNECTION
2	-1	LED1-CONNECTION
5	+2	LED2+CONNECTION
6	-2	LED2-CONNECTION
3	+3	LED3+CONNECTION
4	-3	LED3-CONNECTION

SIGNALLING LED INDICATIONS ON THE GEAR BOX			
PERIOD	PULSES	FAULT DESCRIPTION	PRIORITY
The encoded faults are based on pulses emitted every 4 seconds	1	One or more CCR module enabled by config are not communicating with logic board	Maximum ↑ Minimum
	5	Firmware version of one or more CCR module is not compatible with logic board firmware version	
	2	One or more CCR's output is short-circuited	
	3	Load failure on one or more CCR's output	
	4	Thermal derating active (output current reduction)	



CABLE GLAND		
TYPE	ØMin	ØMax
M16	5 mm	10 mm
M25	10 mm	17 mm
M32	13 mm	21 mm

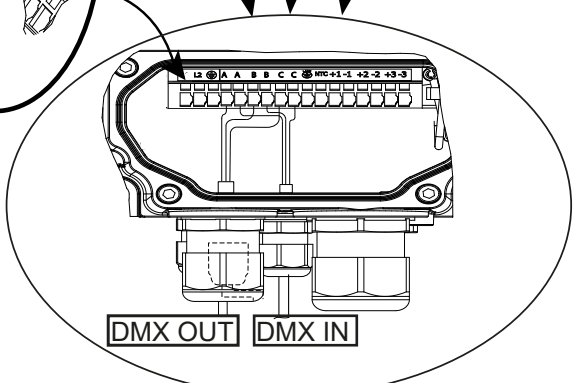
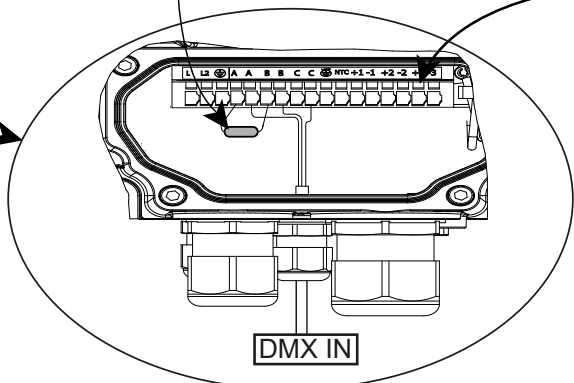
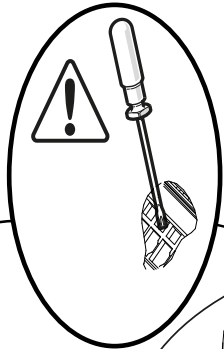
SEAL REDUCER for GB and FLOOD		
TYPE	ØMin	ØMax
M32	10 mm	16 mm

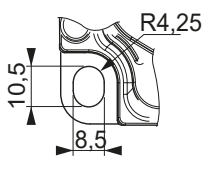
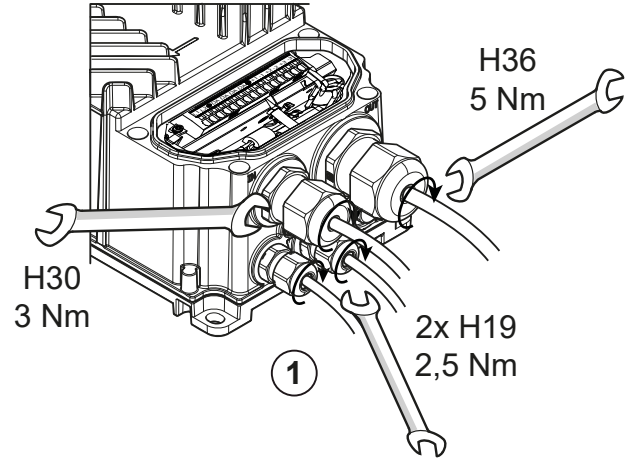
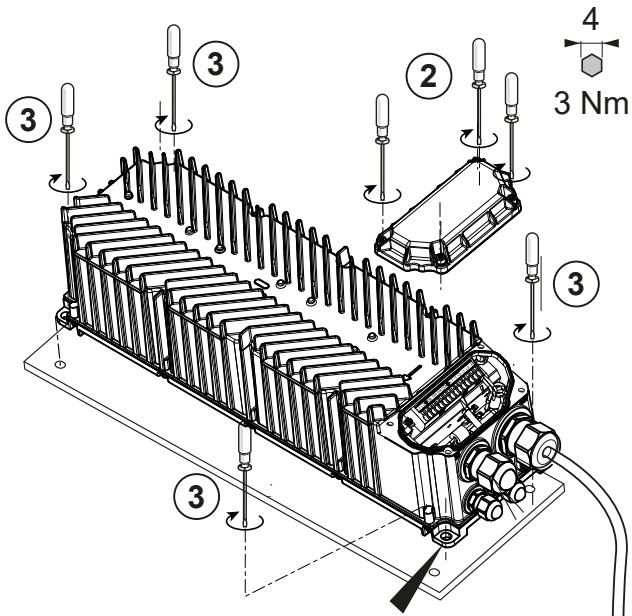


« DMX-RDM wiring shall respect ANSI E1.11 and AINSI E1.20 installation rules».

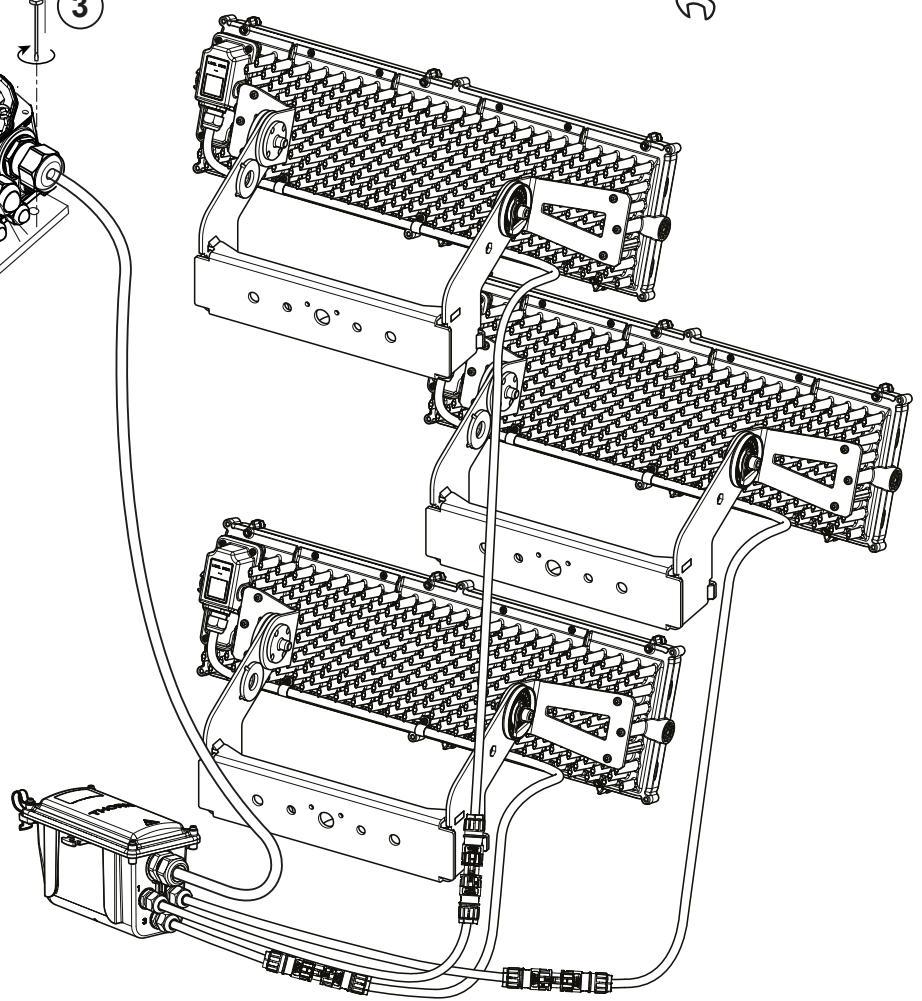
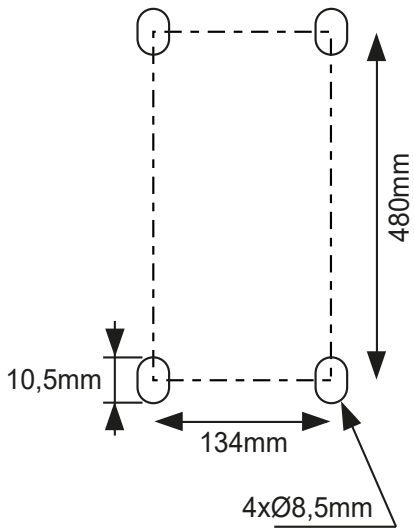
1 to 3 DMX addresses per GB – changeable via RDM

Last device on the line shall be properly terminated with a 120R 0.5W 5% resistance (96683550)

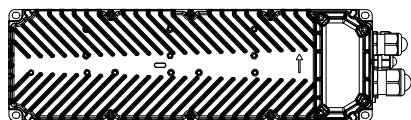
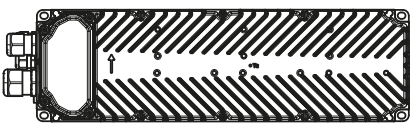




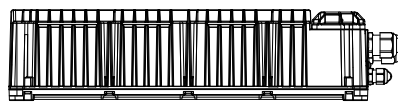
Drilling recommendation:



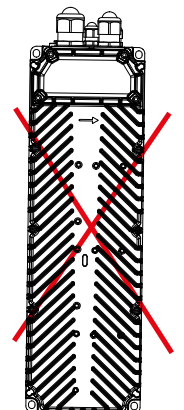
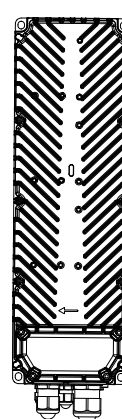
HORIZONTAL



LATERAL / SIDE



VERTICAL

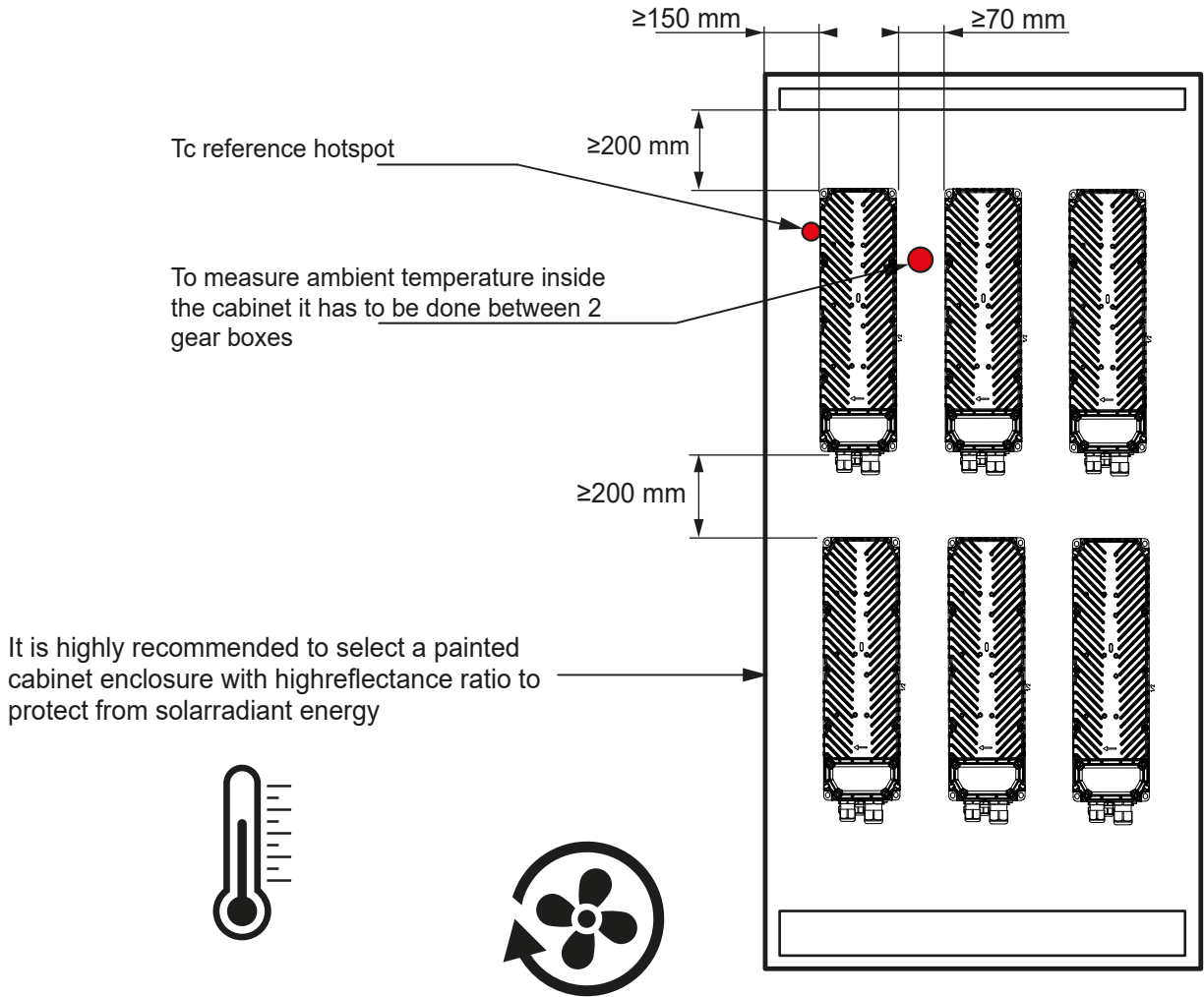


CIRCUIT BREAKER recommendation

It should mentioned in the notice that calculation has been done with a Circuit Breaker Load Factor of 100%.

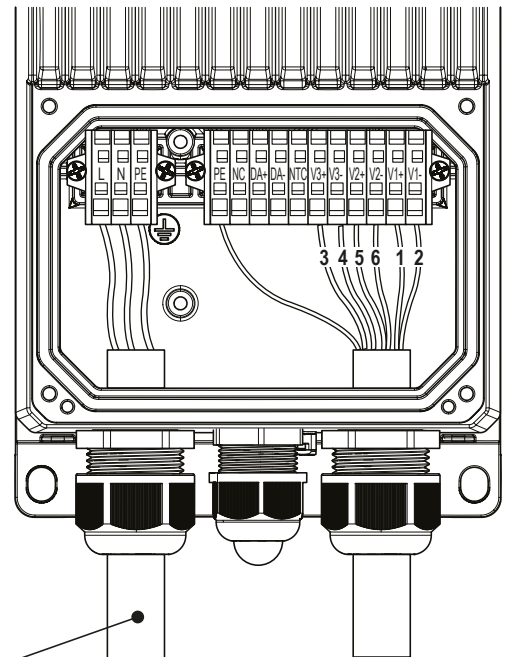
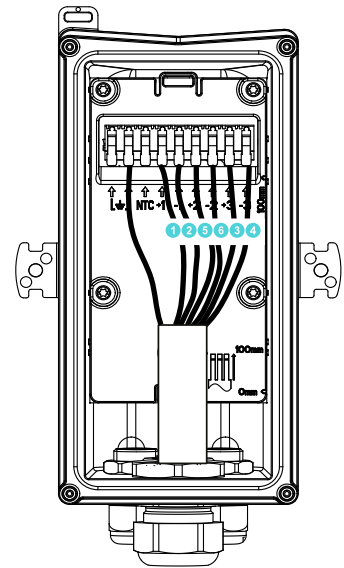
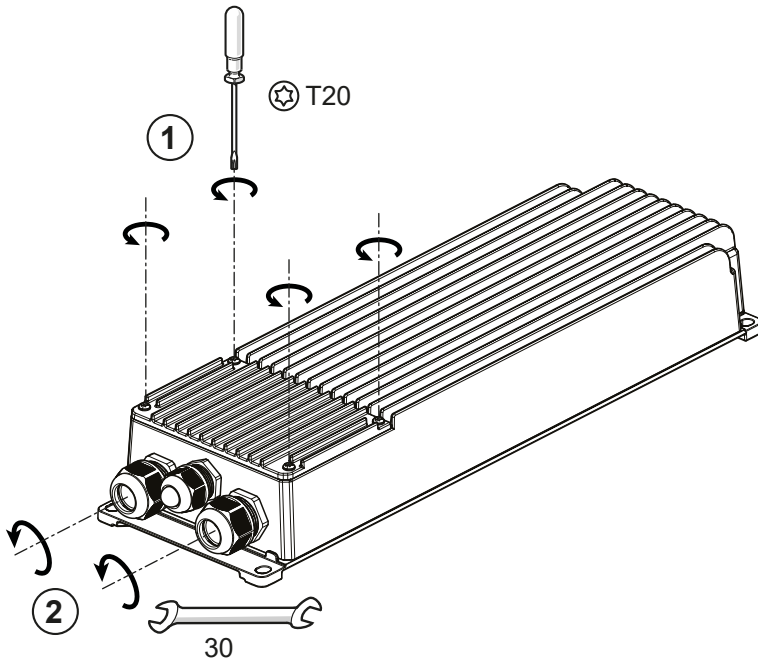
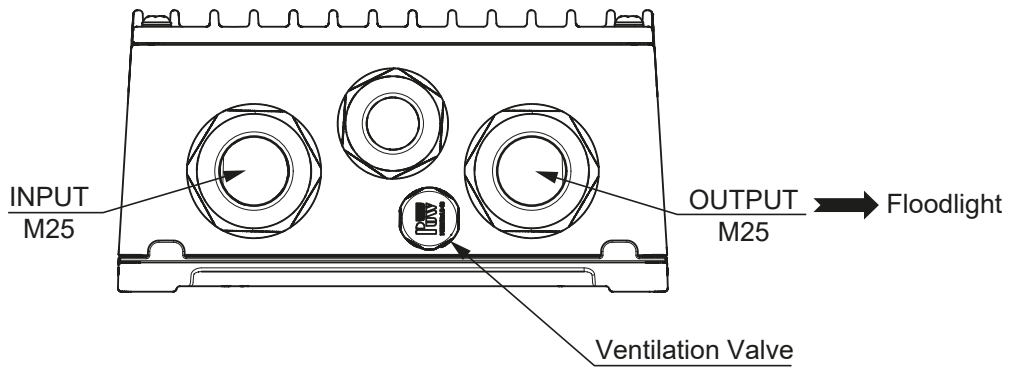
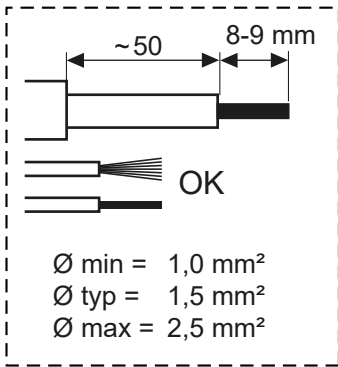
V in Nominal	Inrush Current Data		# Drivers for each Circuit Breaker											
	I peak (A)	Half Value Time (µs)	Type B 10A	Type B 16A	Type B 20A	Type B 25A	Type C 10A	Type C 16A	Type C 20A	Type C 25A	Type D 10A	Type D 16A	Type D 20A	Type D 25A
230Vac	40	2500	0	1	1	2	0	1	1	2	0	1	1	2
400Vac	68	2000	0	1	1	1	1	1	2	2	1	1	2	3

GUIDELINE FOR INTEGRATION OF GEAR BOX



If you cannot follow instructions included in previous section regarding gear box integration, you have to measure Tc reference point taking into consideration that measures must be down to Tc_max

Tc Reference at Max Ambient			
Position	Horizontal	Vertical	Side
Mounting			
230Vac	81°C	80°C	82°C (Ref.)
400Vac	69°C	68°C	70°C (Ref.)
Ambient Max	55°C	55°C	55°C (Ref.)



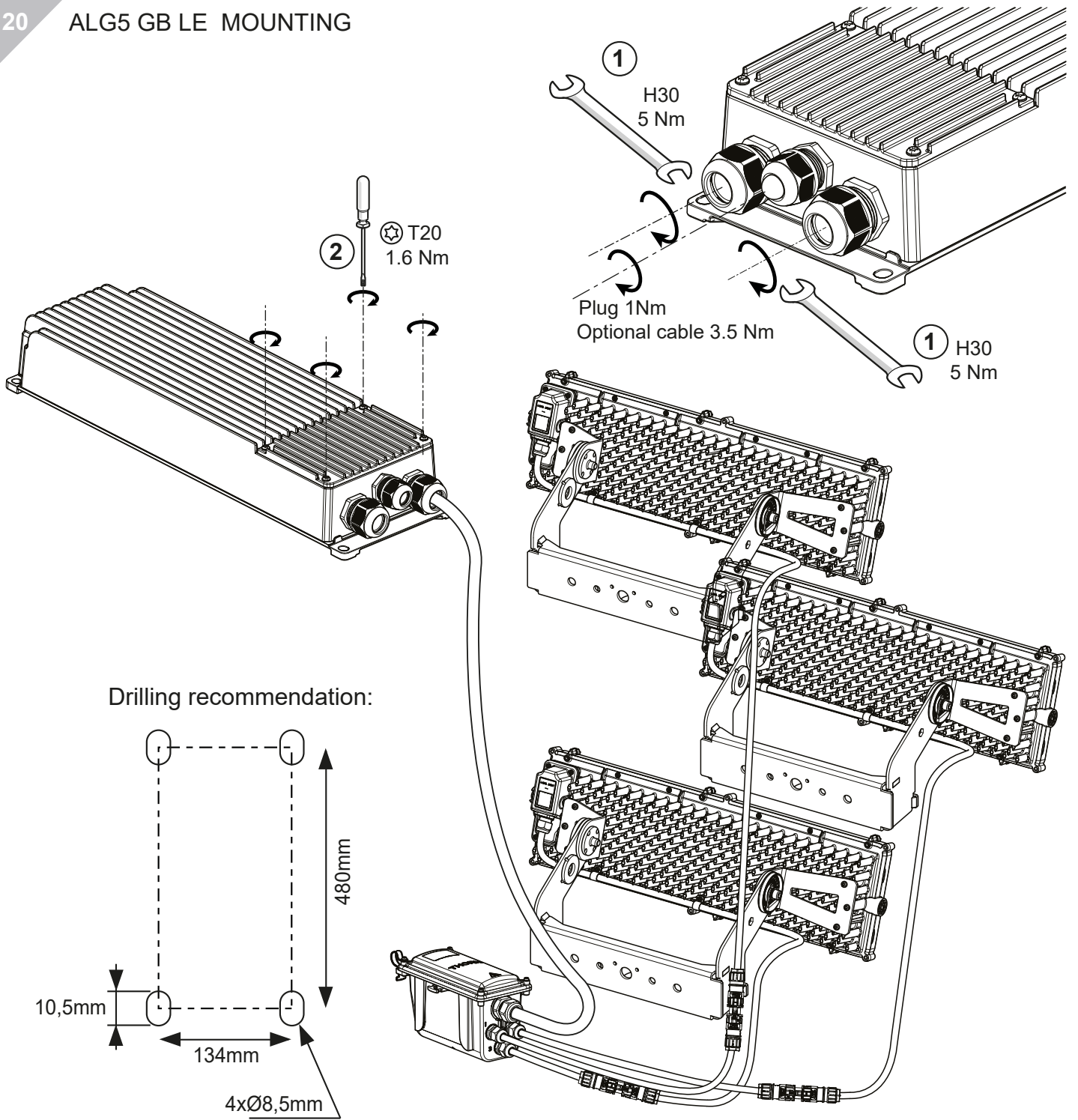
PINOUT		
Number	Label	Description
	L	AC INPUT
	N	AC INPUT
	PE	PROTECTIVE EARTH
	PE	PE FOR LED MODULE
	NTC	THERMAL PROTECTION FOR LED FIXTURE
3	V3+	OUTPUT CHANNEL 3+
4	V3-	OUTPUT CHANNEL 3-
5	V2+	OUTPUT CHANNEL 2+
6	V2-	OUTPUT CHANNEL 2-
1	V1+	OUTPUT CHANNEL 1+
2	V1-	OUTPUT CHANNEL 1-

Recommended :
H07RNF 3G1.5 mm²

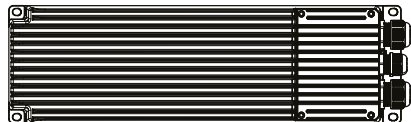
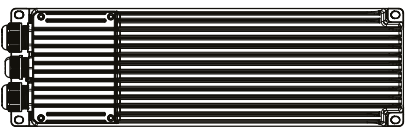
CABLE GLAND		
TYPE	ØMin	ØMax
M20	6.3 mm	11.3 mm
M25	10 mm	16.3 mm



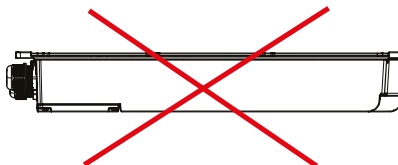
The wiring should follow label marking instruction, Otherwise the product could be damaged or the fonctions could be affected. Each set of + or - are not potential identical, cross connection is prohibited.



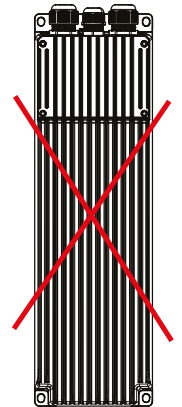
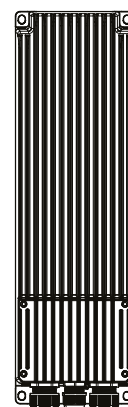
HORIZONTAL



LATERAL / SIDE



VERTICAL



ALG5 GB LE / 200-250 Vac - ALG5 GB LE /250-440 Vac

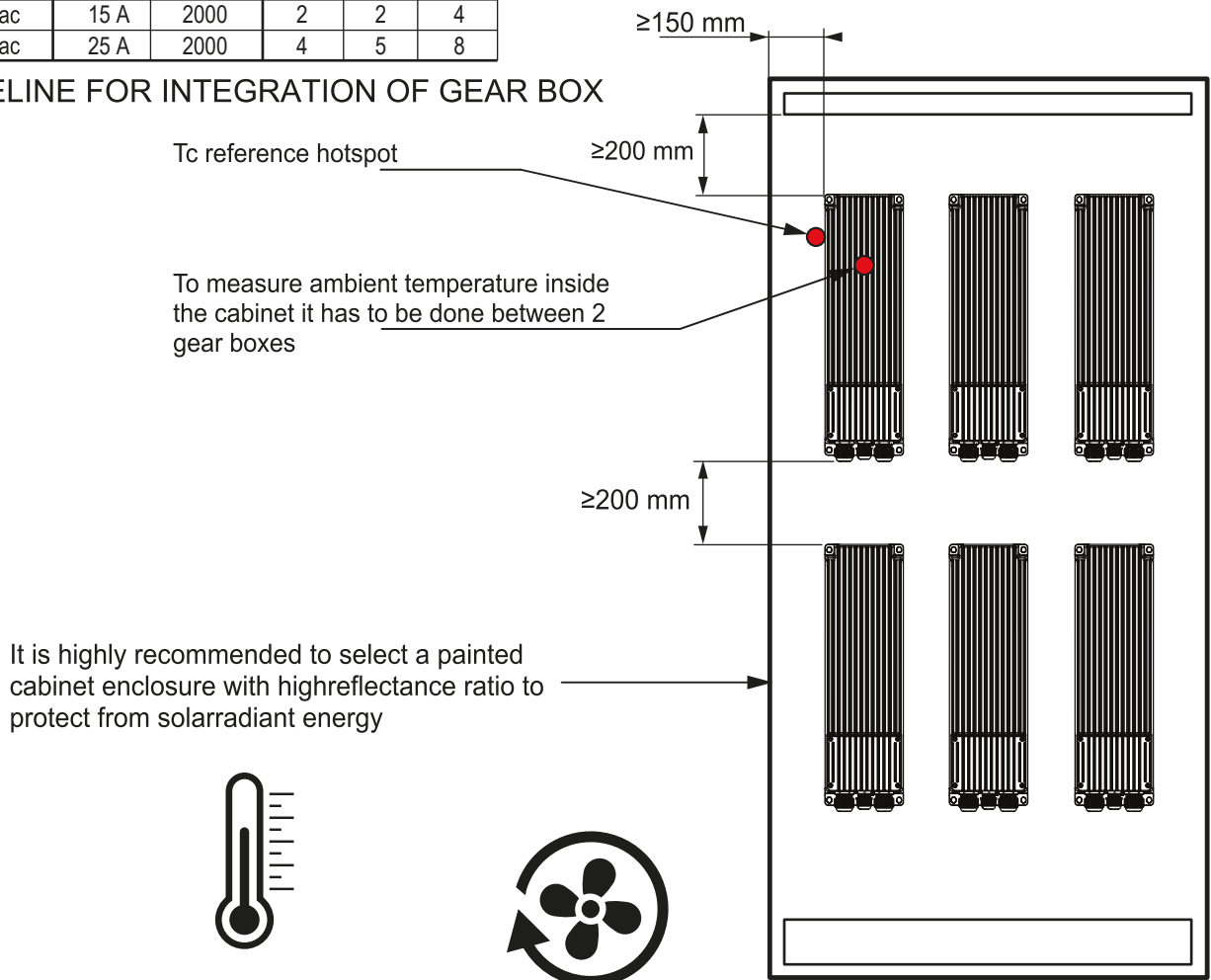
Drivers for each circuit breaker

Referring to the circuit breakers available on the market, the maximum number on the driver connectable for each circuit breaker is as the following table.

V in Nominal	Inrush Current Data		# Drivers for each Circuit Breaker										
	I peak (A)	Half Value Time (µs)	Type B 10A	Type B 16A	Type B 20A	Type B 25A	Type B 32A	Type B 40A	Type B 63A	Type C 10A	Type C 16A	Type C 20A	Type C 25A
230Vac	15 A	2000	0	1	1	1	2	2	4	0	1	1	1
400Vac	25 A	2000	1	1	2	2	3	4	6	1	2	2	3

V in Nominal	Inrush Current Data		Type C		
	I peak (A)	Half Value Time (µs)	32A	40A	63A
230Vac	15 A	2000	2	2	4
400Vac	25 A	2000	4	5	8

GUIDELINE FOR INTEGRATION OF GEAR BOX



If you cannot follow instructions included in previous section regarding gear box integration, you have to measure Tc reference point taking into consideration that measures must be down to Tc_max

Tc Reference at Max Ambient				
Position	Horizontal	Vertical	Side	
Mounting				
	230Vac	85°C	84°C	85°C (Ref.)
	400Vac	80°C	77°C	80°C (Ref.)
	Ambient Max	50°C	50°C	50°C (Ref.)

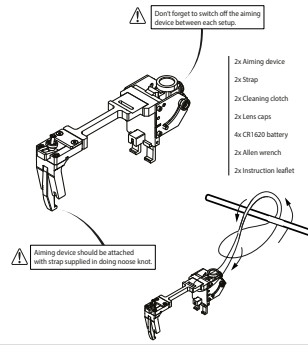
Aiming Device

THORN

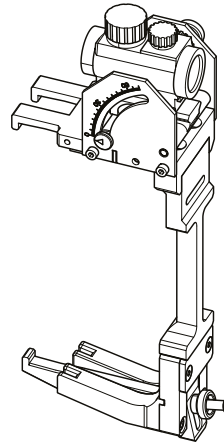
ALTIS LED AIMING DEVICE

UK Installation instructions	FI Asennusohje	LV Instalācijas instrukcijas
DE Montageanleitung	FR Notice de montage	NO Monteringsveiledning
CZ Montážní návod	HU Szerelési útmutató	PL Instrukcja montażu
DK Monteringsvejledning	IT Istruzioni di montaggio	SE Installationsanvisning
EE Paigaldusjuhend	LT Montavimo instrukcija	RU ИНСТРУКЦИЯ ПО МОНТАЖУ

ALTIS LED AIMING DEVICE



96671487	ALTIS G4/G5 AIMING DEVICE WITH VISOR
96671488	ALTIS G4/G5 AIMING DEVICE BRACKET



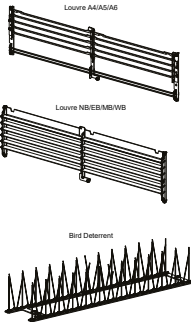
Louvres / Bird Deterrent

THORN

ALTIS LED

UK Installation instructions	FI Asennusohje	LV Instalācijas instrukcija
DE Montageanleitung	FR Notice de montage	NO Monteringsveiledning
CZ Montážní návod	HU Szerelési útmutató	PL Instrukcja montażu
DK Monteringsvejledning	IT Istruzioni di montaggio	SE Installationsanvisning
EE Paigaldusjuhend	LT Montavimo instrukcija	RU ИНСТРУКЦИЯ ПО МОНТАЖУ

TYPE: ALTIS LED G4/G5 ACCESSORIES

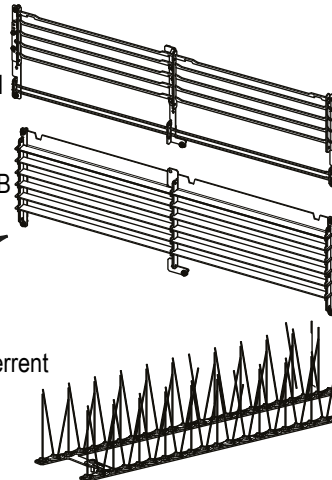


Louvre A4/A5/A6/A6I

Louvre NB/EB/MB/WB

Bird Deterrent

96671492	ALTIS G4/G5 1 BRICK LOUVRE A4
96671493	ALTIS G4/G5 1 BRICK LOUVRE A5
96671494	ALTIS G4/G5 1 BRICK LOUVRE A6/A6I
96671496	ALTIS G4/G5 1 BRICK LOUVRE MB
96671495	ALTIS G4/G5 1 BRICK LOUVRE NB/EB
96671497	ALTIS G54/G 1 BRICK LOUVRE WB



96671489 ALTIS G4/G5 BIRD DETERRENT

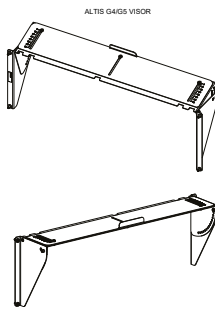
Visor

THORN

ALTIS LED

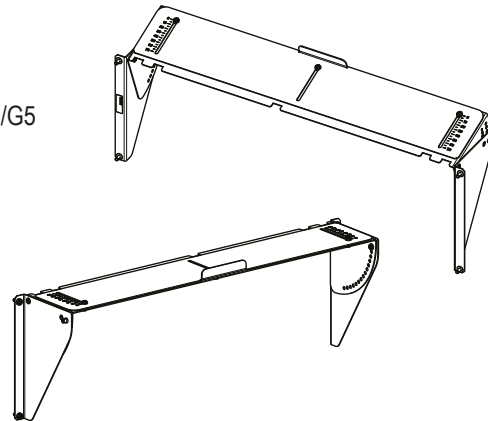
UK Installation instructions	FI Asennusohje	LV Instalācijas instrukcija
DE Montageanleitung	FR Notice de montage	NO Monteringsveiledning
CZ Montážní návod	HU Szerelési útmutató	PL Instrukcja montażu
DK Monteringsvejledning	IT Istruzioni di montaggio	SE Installationsanvisning
EE Paigaldusjuhend	LT Montavimo instrukcija	RU ИНСТРУКЦИЯ ПО МОНТАЖУ

TYPE: ALTIS G4/G5 ACCESSORIES



Visor G4/G5

96671498 ALTIS G4/G5 1 BRICK AJ VISOR



Power supply support

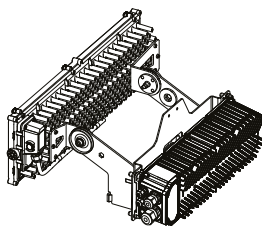
THORN

ALTIS LED

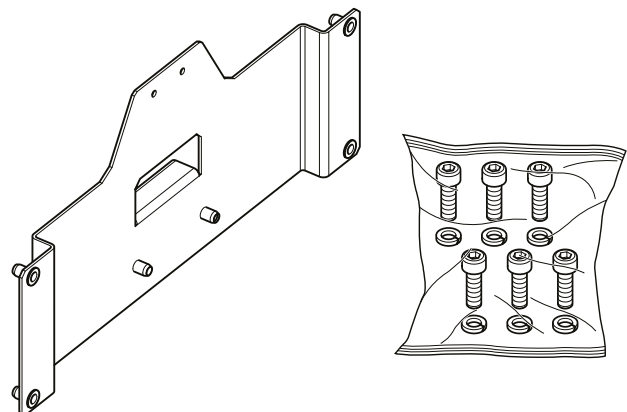
UK Installation instructions	FI Asennusohje	LV Instalācijas instrukcija
DE Montageanleitung	FR Notice de montage	NO Monteringsveiledning
CZ Montážní návod	HU Szerelési útmutató	PL Instrukcja montażu
DK Monteringsvejledning	IT Istruzioni di montaggio	SE Installationsanvisning
EE Paigaldusjuhend	LT Montavimo instrukcija	RU ИНСТРУКЦИЯ ПО МОНТАЖУ

TYPE: ALTIS G4/G5 ACCESSORIES

POWER SUPPLY SUPPORT



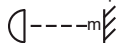
96671491 ALTIS G4/G5 GB BRACKET 2 BRICK LB STIRRUP



FRANCAIS

-Remplacer toute protection fissurée.
-Les luminaires classe II doivent être installés de façon à ce que la partie métallique ne soit pas en contact avec l'installation électrique connectée à la terre.

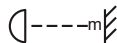
ATTENTION: Les luminaires classe I doivent être reliés à la terre.
-Ce luminaire fonctionne à une tension nominale qui doit être coupée avant toute intervention sur l'appareillage.
-Toute modification de cet appareil est interdite.
-Respecter la distance minimale par rapport aux objets éclairés définie par ce sigle.



SVERIGE

-Ersätta alla spräckta skyddsplåtar.
-Klass II armaturer måste installeras så att kontakten med metalldelar i armaturen inte är i kontakt med någon elektrisk installation, kopplad till en skyddledare.

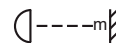
VARNING: Klass I armaturer måste vara jordade.
-Denna armatur fungerar med högspänning som måste vara frånslagen före ingripande i driftdonen.
-Alla ändringar i denna armatur är förbjuden.



ITALIANO

-Sostituire sempre tutte le protezioni danneggiate.
-Gli apparecchi in classe II devono essere installati in modo che le parti metalliche non siano in contatto con apparati elettrici collegati a terra.

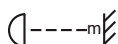
ATTENZIONE: Gli apparecchi in class I devono essere collegati a terra.
-Questo apparecchio funziona a tensione nominale, questa deve essere interrotta prima di ogni intervento sul gruppo di alimentazione.
-Ogni modifica dell' apparecchio è proibita.



ENGLISH

-Replace any cracked protective shield.
-Class II luminaires must be installed so that exposed metal work of the luminaire is not in contact with any part of the electrical installation connected to a protective conductor.

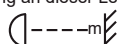
WARNING: Class I luminaires must be earthed.
-This luminaire operates at mains voltage which must be switched off before intervention in control gear.
-Any modification to this luminaire is forbidden.
-Lighted objects nearer than the minimal distance in the is forbidden.



DEUTSCH

-Ersetze jede gebrochene Schutzscheibe.
-Schutzklasse II Leuchten müssen so installiert werden, daß berührbare Metallteile nicht mit einem, an dem Schutzleiter angeschlossenen Teil der elektrischen Installation in Kontakt kommen können.

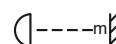
ACHTUNG: Schutzklasse I Leuchten müssen geerdet sein.
-Diese Leuchte wird mit Netzspannung betrieben. Bevor Eingriffe am Vorschaltgerät vorgenommen werden sowie vor Wartung und Installation, ist die Versorgungsspannung abzuschalten.
-Jede Änderung an dieser Leuchte ist verboten.



SUOMI

-Rikkoontunut suojalasi vaihdettava välittömästi uuteen vastaavaan.
-Asennettaessa suojausluokan II valaisinta on peruseristetyin johdon ja kosketeltavien metalliosien välinen kosketus tehokkaasti eristettävä.

VAROITUS: Suojausluokan I valaisin täytyy maadoittaa.
-Verkköjännite on kytkettävä pois ennen valaisimen huoltotoimenpiteitä.
-Valaisimen rakennetta ei saa muuttaa.



Thorn Lighting is constantly developing and improving its products. The right is reserved to change specifications without prior notification or public announcement.

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- To ensure maintaining the best system performances, we advice to switch on the system "At least one night hour per month".
- corrosion environment from C1 to C5 according to standard ISO9223 except gear Box ALG4 GB LE corrosion environment from C1 to C3