

**INSTALLATION, OPERATION AND MAINTENANCE
MANUAL FOR CLAMPCO SISTEMI
OBSTRUCTION LIGHT**

Models:

SEGS12B32_IR
12Vdc version

SEGS24B32_IR
24Vdc version

SEGS48B32_IR
48Vdc version

SEGS23B32_IR
230Vac version

0	12/07/2017	T.Sinico	L.Pecoraro
REV.	DATE	Written BY	Verified BY

INSTALLATION, OPERATION AND MAINTENANCE MANUAL**1.0 SCOPE**

This document describes the Aircraft Warning Light System (AWL.S) in object, manufactured by Calzavara SpA, with Clampico Sistemi brand, and supplied to the customer.

This instruction manual provides information about installation, operation, maintenance and recommended spare parts.

The manual has been written for installation personnel, users and for first line maintenance.

For information about required adjustments or repair not instructed in this manual, contact service support:

CAI_ZAVARA SpA
Via Corecian no 60, 33031 Basiliano
(UD) Italy
Tel. : +39 0432 84381
Telefax : +39 0432 848997
E-mail : clampco@clampco.it
Internet : www.clampco.it

The integrity and reliability of this system depends on the use of Clampico Sistemi parts and components. To ensure the optimum performance and reliability of this system, it is strongly recommended that only components approved by Clampico Sistemi should be used.

The use of foreign parts, which are not approved by Clampico Sistemi, will invalidate the warranty and declared compliance.

Disclaimer

While every effort has been made to provide a complete and up-to-date and accurate manual, no liability claims for damages resulting by any error or any omission in this manual will be accepted by Clampico Sistemi.

2.0 WARNING

The warnings, here listed, must be followed in all the points, any damage due to the non-compliance of them, will never be ascribed to Calzavara SpA.
The symbol, reported below, means 'electrical risk'.



CAUTION: No thermal breaker protection device inside; it must be provided on site in the main power distribution box.

CAUTION: Install the top level obstruction light under a lighting rod, or anyway not as the highest object of the tower.

CAUTION: Do not switch ON the obstruction lights during daytime; do that only for the test procedure for few minutes.

CAUTION: Do not look directly at the light flash, for a long time, when you are near to the obstruction light.

- Follow applicable safety rules for operation in elevation. Adopt all precautions against fall of tools, of system components or of their parts.

SEGSxxB32_IR IOM_ING.doc	CLAMPCO Sistemi – Calzavara SpA AIRCRAFT WARNING LIGHT SYSTEM
INSTALLATION, OPERATION AND MAINTENANCE MANUAL	

- Operation on power supplied components shall be avoided and can be effected only by trained personnel aware of the electric danger; in this case the operator must use adequate means of protection against accidental fall.
- Fix firmly all cables and all components and verify periodically their state and the state of the fixing structures

3.0 REFERENCE STANDARDS

Aircraft Warning Light System in object is marked "CE" and complies to European Union regulations (European directive 2014/30/EU for Electro Magnetic Compatibility and 2014/35/EU for Electrical Safety).

3.1 Standards relating Complete AWLS

- ICAO - Annex 14, Chapter 6 "Visual aids for denoting obstacles"

3.2 Standards relating AWLS Components

- EN 61439-1 "Low voltage - General Standard"
- EN 60598-1 "Low voltage - General Standard"
- EN 60598-2-1 "Low voltage - Fixed luminaries"
- EN 61000-6-2 "Electromagnetic Compatibility - Generic rules on emissions - Industrial Environment"
- EN 61000-6-4 "Electromagnetic compatibility - Generic rules on Immunity - Industrial Environment"
- EN 61547 "Electromagnetic compatibility - Immunity of luminaires"

3.3 Standards relating AWLS cables

Cables are not supplied. Use only cables that comply local standards.

The outer diameter of the cable must be lower than 9.6mm.

4.0 AWLS COMPONENTS

4.1 Single Obstruction Light, steady red (Low Intensity, ICAO type B, 32 cd) with infrared module ($\lambda=850\text{nm}$)

This Obstruction light is composed by:

- plastic cap holder with polycarbonate transparent cap,
- the mounting structure in stainless steel,
- a female 3-poles connector to be used to power supply and control the obstruction light.

See attached drawings:

- SEGSxxB32_IR_DS layout, data sheet and connection instructions;
- SEGS_B_MNTG_1 mounting instructions.

Requested light intensity is accomplished by one LED array inside the lighting body and an internal electronic current regulator.

The obstruction light is power supplied and controlled through its 3-poles connector, which must be installed following the instruction enclosed at the end of the manual: during the installation, the lighting body must not be opened.

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

The terminals of the 3-poles female connector are:
 L = Positive voltage for DC versions / line for the 230Vac version.
 N = Negative voltage for DC versions / neutral for the 230Vac version.
 PE = Not Used.

The main components housed within the obstruction light:

- 1x Red + infrared LED bulb SPL0xAIR with a current regulator
- 1x 3-poles connector

*only for the 230Vac version, the current regulator is spliced from the bulb and identified with the code SPLS23832.

Outdoor primary lightning protection is generally accomplished by installing the top tower Obstruction Lights under the lightning rod of the tower.

Technical Data

MODEL	SEGS12B32_IR	SEGS24B32_IR	SEGS48B32_IR	SEGS23B32_IR
Nominal Voltage	12 Vdc (11...13 Vdc)	24 Vdc (22...26 Vdc)	48 Vdc (44...50 Vdc)	230 Vac (110...240 Vac)
Power Consumption	10.5 W			14 W
Light Intensity	ICAO Low Intensity 32 cd Type B			
	FAA Low Intensity 32 cd L-810			
Protection Grade	IP66			
T amb	-40°C ... +55°C			

5.0 INSTALLATION

Inspect the material upon arrival and verify integrity of parts.
 Read all this manual before installing any component of the system.

Follow the installation procedure below:

1) Identify first the nominal voltage of the obstruction light. This information is written into the label of the obstruction light.

2) Install the obstruction light using the appropriate enclosed fixing stainless steel hardware. The fixing possibilities are described in the attached layout drawings:

- SEGSxxB32_IR_DS layout and electric scheme.
- SEG_B_MNTG_1 mounting instructions.

ATTENTION: The lights must be installed in accurate vertical position, better to verify with a bubble level.

3) Obstruction Light must be installed following the attached instructions for mounting of the female connectors (see instructions at the end of the manual). Male connector are already fixed to the Obstruction Light.

4) power supply the obstruction light with its nominal voltage.

INSTALLATION, OPERATION AND MAINTENANCE MANUAL

6.0 MAINTENANCE

At least once a year the following checks shall be performed by trained personnel aware of the electric danger that can do electrical work on live parts:

Possible signs of a faulty bulb:

- extended brown area inside the LED's transparent lens
- broken transparent cap
- some LED doesn't lit or blinks

Obstruction light transparent lens:

- Remove dust or dirt from transparent lens
- Check the status of the 3-poles connector and of the electric connections

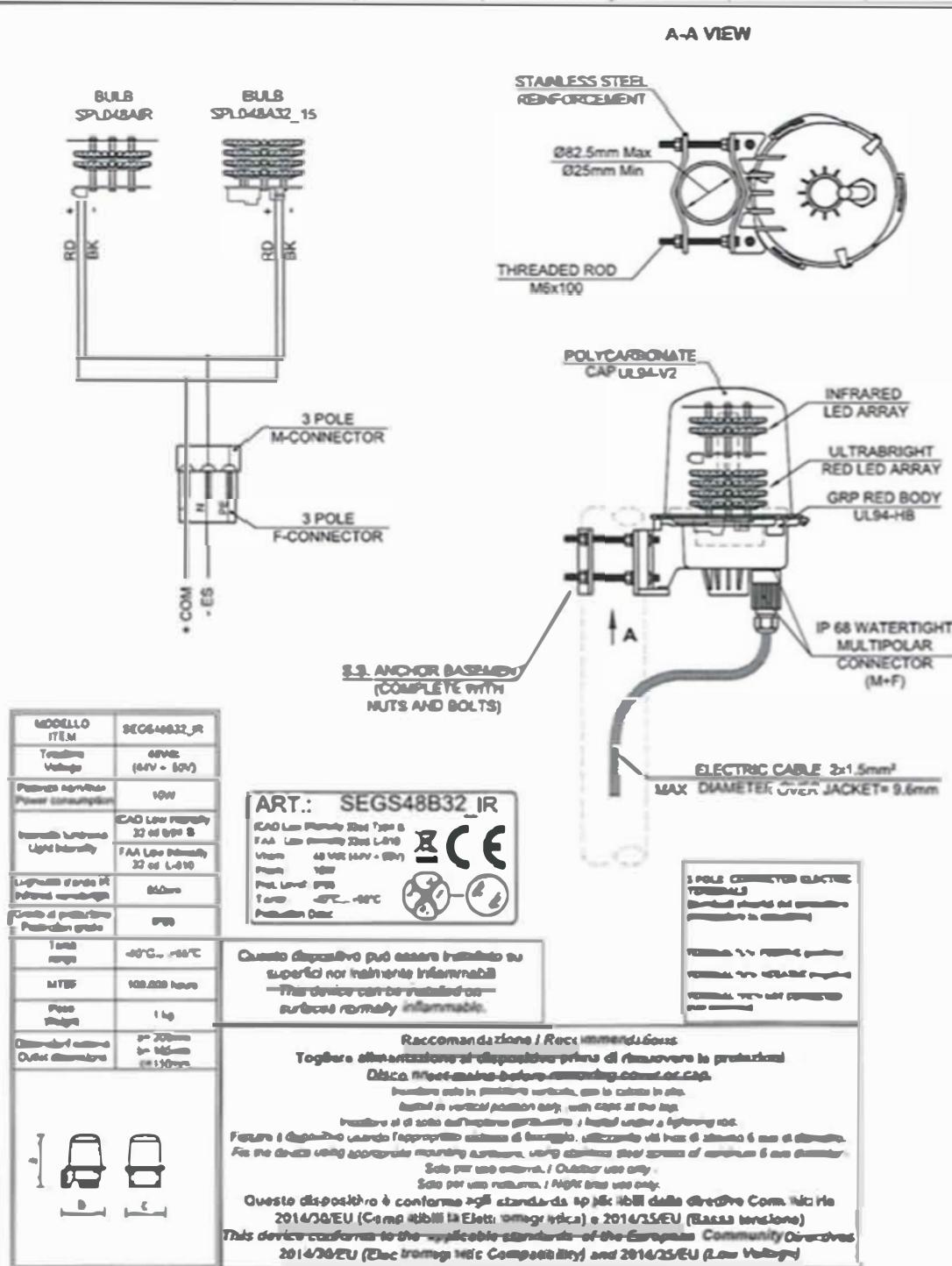
A faulty obstruction light may request the replacement of the bulb, this replacement must be done returning the lamp to the factory.

Opening this obstruction light will invalidate the warranty.

ANNEX 1 – LIST OF DRAWINGS / DOCS

Drawing Number/Doc	Rev	Title	Notes
SEGSxxB32_IR_DS	0	Single low intensity obstruction light ICAO Type B – 32 cd With infrared module	Layout, fixing and electric connections
SEG_B_MNTG_1	4	Obstruction light Mounting instruction	Layout, fixing
-	0	Instruction for installation of 3-poles connector	Installation

SEGS48B32 - Obstruction light + infrared module made Clampco S.p.A. with license of Cetim S.p.A.
 All rights reserved - This document is the exclusive property of Clampco S.p.A. with license of Cetim S.p.A.
 Transferring this document may not be total, neither part, nor complete, nor partial or extract to others or
 used in any way, without our written permission.



2003/2017	PIC	LP	LP
00000000000000000000000000000000	0000	checked	opened
Committente - customer	Signature		
Località - Site:	Site Code:	/	scale - scale
Project - Project	1:5		
comm-project ID			
SEGS48B32_IR			
OBSTRUCTION LIGHT + INFRARED			
Low intensity 32 cd			
SEGS48B32_IR_DS			

Clampco Sistemi
 where solution, reliability and business meet

SEGS48B32 - 00000000000000000000000000000000
 Formular-Site AA

Clavara S.p.A.
 Via Corecaian, 60 - 33031 Basilea (Italy)
 ph. +39 0432 84381 www.clampco-sistemi.com
 fax +39 0432 84899 clan@clan.it

A-A VIEW

NOTICE REQUIRED - The document is the exclusive property of Clampco S.p.A. which reserves all rights. Please note the document may not be copied, reproduced, communicated or disclosed to others or used in any way, without our written permission.

ART.: SEGS24B32_IR

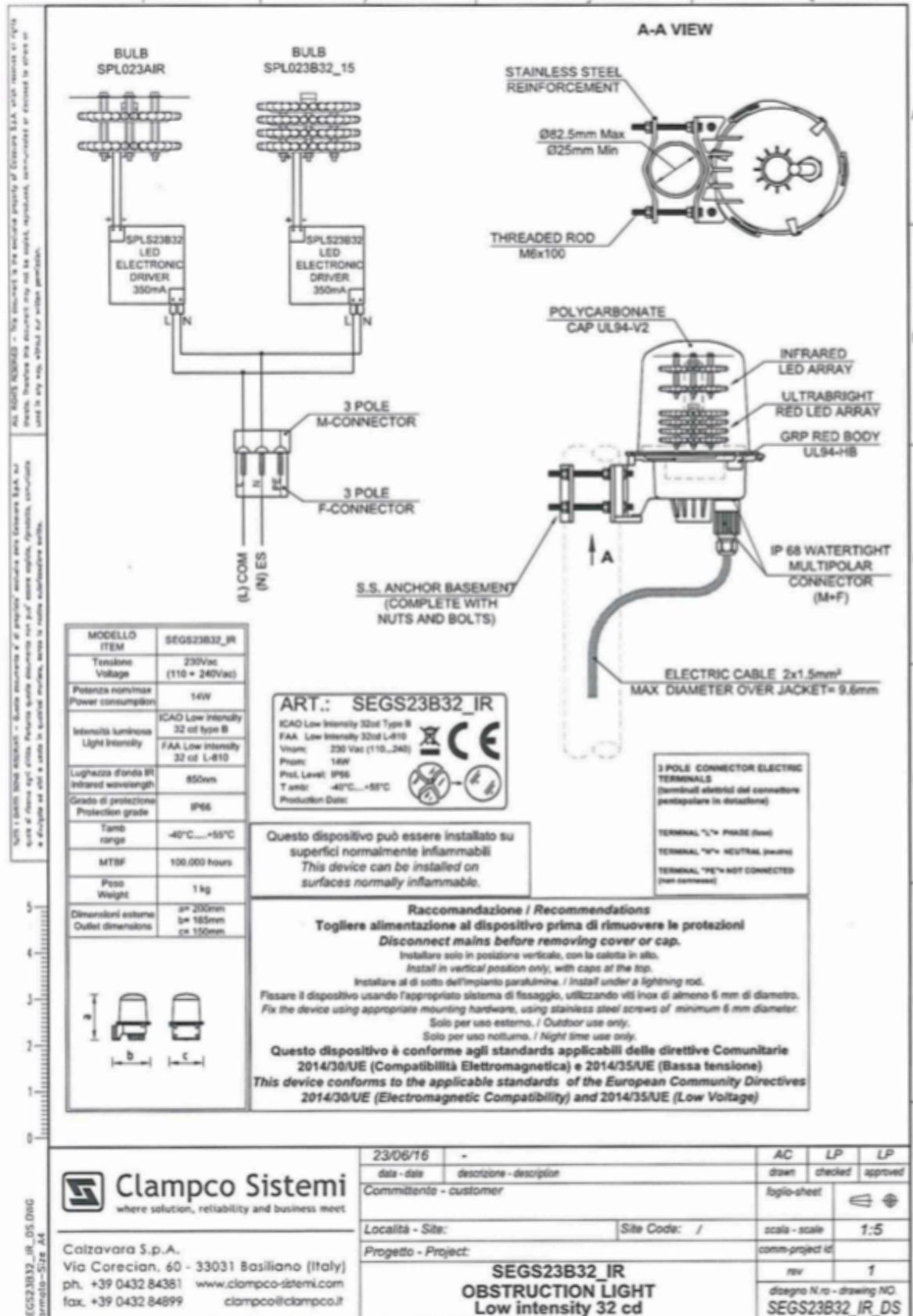
MODELLO / ITEM	SEGS24B32_IR
Tensione / Voltage	24Vdc (22V ~ 28V)
Power consumption	10W
Luminous flux	PLA-L Low Intensity 32 cd type B FAA Low Intensity 32 cd L-100
Light source	ULTRABRIGHT RED LED ARR
Temperatura di funzionamento	-40°C ~ +60°C
Tempo di accensione	0.05s
Tempo di spegnimento	0.05s
Temperatura	-40°C ~ +60°C
MTBF	100,000 hours
Peso / Weight	1 kg
Dimensioni esterne / Outer dimensions	Ø 200mm H 100mm

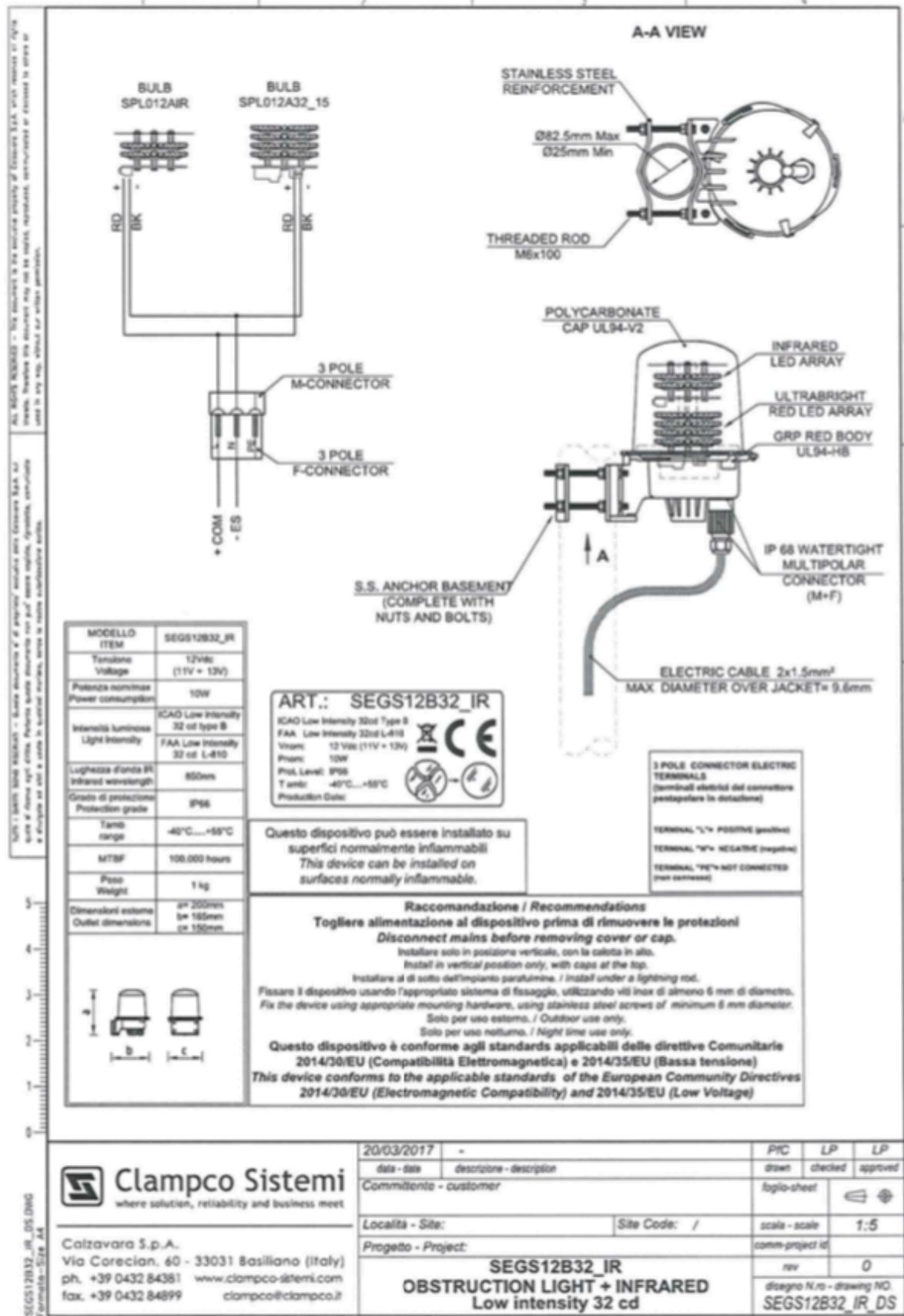
**Questo dispositivo può essere installato su superfici normalmente infiammabili.
This device can be installed on surfaces normally inflammable.**

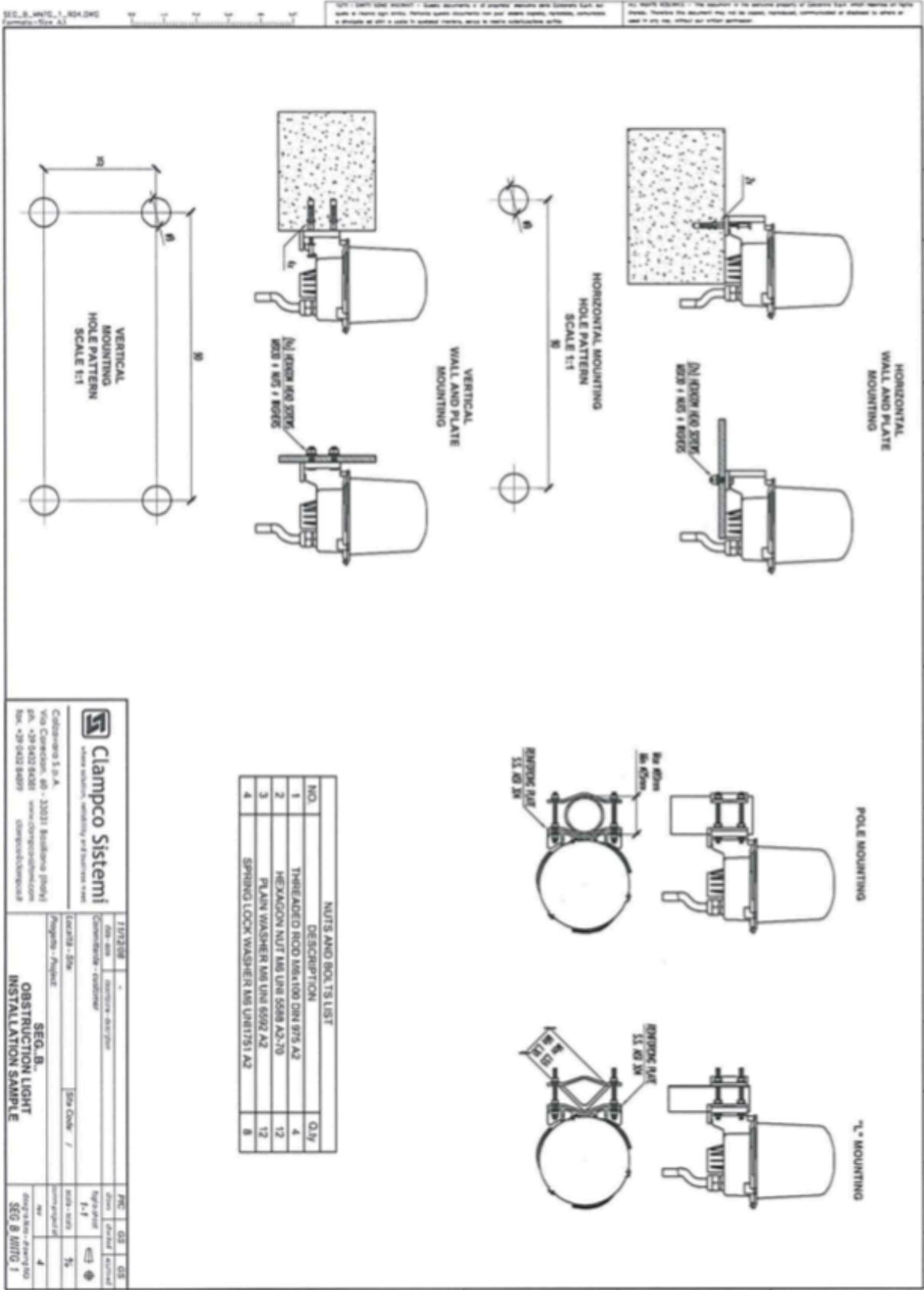
Raccomandazione / Recommendations
Togliere alimentazione al dispositivo prima di rimuovere la protezione.
Disconnect power before removing cover or cap.
Installare solo in posizione verticale, con lo specchio in alto.
Install in vertical position only, with glass at the top.
Montare il dispositivo sotto il tetto (sopra la strada) o sotto il soffitto (sotto la strada).
Mount the device under the roof (above the road) or under the ceiling (under the road).
Solo per uso stradale / Only road use only.

Questo dispositivo è conforme agli standard applicabili delle direttive Comunitarie 2014/30/EU (Compatibilità Elettromagnetica) e 2014/53/EU (Rimescolabile).
This device conforms to the applicable standards of the European Community Directives 2014/30/EU (Electromagnetic Compatibility) and 2014/53/EU (RoHS Directive).

Project	PC	LP	LP
Clampco Sistemi	Completed	Approved	
Locality - Site:	Scale - scale	1:5	
Project - Project:	comm-project ID:		
SEGS24B32_IR OBSTRUCTION LIGHT + INFRARED Low intensity 32 cd	0		
	Project No. - Proj. no.	SEGS24B32_IR_DS	









calzavara s.p.a.
CLAMPCO SISTEMI

Via Corecian n. 60 33031 Basiano (UD) Italy
Fax +39 0432 848997 clampco@clampco.it Tel. +39 0432 84391
www.clampco.it

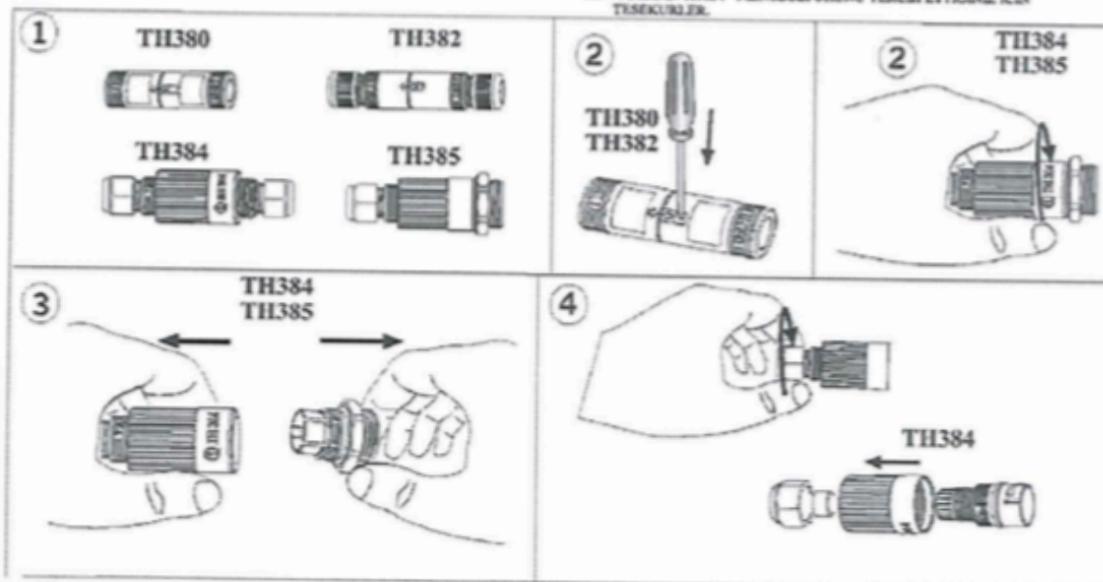
IT Istruzioni per l'installazione
GB Installation instructions
FR Instructions d'installation
DE Montage-Anweisungen
ES Instrucciones de instalación
PT Instruções de instalação
NL Instructies voor het installeren.
PL Instrukcja instalacji
CZ Montážní návod
SK Montážny návod
SI Navodila za namestitev
SE Instruktioner för installationen
DK Installationsvejledning
NO Instruksjon for installasjon
FI Asennus ohjeet
GR ΟΔΗΓΙΕΣ ΕΓΚΑΤΑΣΤΑΣΗΣ
BG Инструкции за установка
EE Põhigootiandmine
LV Ierīčēšanas instrukcija
LT Montavimo instrukcija
RO Instalație de instalare
HU Osztályozási útmutató
RU Инструкция по монтажу
CN 安装指南
AE ارشادات تثبيت;
IS Leitbeispiele für die Montage
TR Montaj bilgileri



A IT Togliere corrente prima di iniziare. Se in dubbio consultare un elettricista qualificato.
GB Isolate Main Power supply before commencing. If in doubt, consult a qualified electrician.
FR Couper l'alimentation principale avant de commencer. En cas de doute, consulter un électricien qualifié.
DE Vor Inbetriebnahme von Stromversorgung. Wenn im Zweifel Beratung durch einen qualifizierten Elektriker.
ES Astar la fuente de alimentación previamente antes de comenzar. En caso de duda, consultar electricista cualificado.
PT Cortar a alimentação de corrente antes de proceder à ligação. Em caso de dúvida consultar um eletricista especializado.
NL Zet de hoofdvoeding van de energievoorziening uit voordat u begint. Als u hiervan twijfelt houdt, vraag dan help aan van een gespecialiseerde elektricijn.
PL Odejmijcie napięcie przed rozpoczęciem instalacji. W przypadku wątpliwości proszę skontaktować się z wykwalifikowanym elektrykiem.
CZ Před začátkem instalace odpojte hlavní prívod elektrické energie. V případě pochybností kontaktujte kvalifikovanou osobu (elektrikářem).
SL Pred začetjem instalacije odpojite glavni prívod elektrickej energie. V prípade pochybností sa kontaktujte s kvalifikovanou osobou (elektrikárom).
SI Pred začetjem del na napravi preverjte ali je napajanje izklopljeno. V kolikor ste v doute, se posvetujte s kvalifikiranim elektrikarjem.
ES Keppla hett näpplingen innan inkoppling. Vid tvivel omhet, mata kvalificerad elektriker.
DK Afhævd strømmen før installations påbegyndes. I tvivl tilfælde kontakt autoriseret elektriker

NO Koble fra Hovedstrømkilden før montering. Er en i tvil, kontakt kvalifisert elektriker.
FI Erosta Päätarvikkeen ensin yhdintäminen. Jos epäilet, kysy ammattitaitoisesta henkilöstä.
GR ΚΑΙΣΤΕ ΤΗΝ ΠΑΡΟΧΗ ΤΟΥ ΡΕΥΜΑΤΟΣ ΗΠΝ ΣΕΚΙΝΗΣΤΕ ΑΝ ΕΧΕΤΕ ΑΜΦΙΘΑΛΕΣ ΣΥΜΒΟΥΛΕΥΤΕΣ ΗΛΕΚΤΡΟΛΟΓΟΥ.
BG Проверете зарядването на енергията пред започване. Ако не си сигурни, искрите съвет.
EE Lülitage voolutallikas enne alustamist välja. Kaitstesse puhul kontrollige elektriliste osade korrektsuse.
LV Neizildit Galveno Spīkli pirms pirmas daļas uzstādīšanas. Ja neesat pārliecīgi, par vēlāku parādību, kontaktaiziet ar profesionālu elektroķīli.
LT Prieti priešdienai atjunkite nuostatinę (elektrikinį), jei abejojate pažintiniameje ir kvalifikuotamelelektroķīli.
RO Înainte de conectarea la rețea opriți corrente, dacă aveți dificultăți cu instalarea apelați un electrician autorizat.
HU Állítmánytól a körültekli működéshez szükséges. Ha kérdése van leírásban lépett előszörben.
RU Перед началом монтажа отключите основной токоподводку. В случае сомнений проконсультируйтесь с квалифицированным электриком.
CN 请先断开主电源。如果不确定，请咨询有资质的电工。
AE ماتركي اتصال الموزع الرئيسي قبل البدء في العمل. إذا كنت غير متأكد، يرجى استشارة مهندس كهرباء معتمد.
IS ERANGLIGD - VÉRT ER EKKI HVAD HANN ER AÐ REYNA AÐ SIGJA Hvernig EF ETTINNAD ER ÖLÖST, HAFID ÞA SAMBAND VID RAFVIRKJA.
TK ANA ENERGI KAYNAGINIZI BASLAMADAN ONCE UGLE EDIN SUPRE ANANDA LUTFEN KALIFIYE BIR ELEKTRIKCİYE DANIŞIN

IT Grazie per aver acquistato un prodotto "MADE IN ITALY".
GB Thank you for having purchased a "MADE IN ITALY" product.
FR Merci pour avoir acheté un produit "MADE IN ITALY".
DE Vielen Dank, dass Sie ein Produkt, "MADE IN ITALY" gekauft haben.
ES Gracias por comprar un producto "MADE IN ITALY".
PT Obrigado por adquirir um produto de "MADE IN ITALY".
NL Wij danken u voor uw aankoop van ons product "MADE IN ITALY".
PL Serdecznie podziękujemy za zakup produktu "MADE IN ITALY".
CZ Děkujeme Vám za zakoupení "MADE IN ITALY" výrobku.
SL Dakujemo Vam za nakup "MADE IN ITALY" výrobka.
SI Zahvaljujemo Vam za kupujete "MADE IN ITALY" výrobka.
SE Tack för att du köpt en "MADE IN ITALY" produkt.
DK Tak for Detes køb af et "MADE IN ITALY" produkt.
NO Takk for at du har kjøpt et "MADE IN ITALY" produkt.
FI Kiitos ostosta "MADE IN ITALY" tuotteesta.
GR ΥΠΑΞΙΛΟΥΜΕ ΝΟΥ ΑΓΟΡΑΣΑΤΕ ΙΠΡΟΥΝ ΚΑΤΑΣΚΗΨΑΜΕΝΟ "MADE IN ITALY".
BG Съзнателно си, че купувате "MADE IN ITALY" продукт.
EE Täneme, et ostsite "MADE IN ITALY" toote.
LV Paldies, ka ievērojat pirkuma kā "MADE IN ITALY".
LT Ačiū, kad pirkjote produktu pagājotā "MADE IN ITALY".
RO Vă mulțumim ca a-ți ales produsul nostru "MADE IN ITALY".
HU Köszönjük, hogy "MADE IN ITALY" terméket választott.
RU Спасибо за покупку продукта "MADE IN ITALY".
CN 多謝購買本公司 "MADE IN ITALY" 產品。
AE شكرًا لك على شراء "MADE IN ITALY".
IS TAK FYRIR AD HAFA KEYPPT VÖRUR "MADE IN ITALY".
TR "MADE IN ITALY" MENZEGLİ URUNÜ TERÇÜMƏ ETGİNİZ İÇİN TEŞEKKÜRLER.





calzavara s.p.a.
CLAMPCO SISTEMI

Via Coredo n. 60
Fax +39 0432 848997

33031 Bassano (UD) Italy
clampco@clampco.it

Tel. +39 0432 84391
www.clampco.it

<p>60001260H Cavo Sen. Diam. 7-23 mm Ø 8 mm 60001261M F. 2 poli Diam. 10-12 mm Ø 10 mm 60001264V G. Tappo 2poli Diam. 14-19 mm Ø 19 mm 6000040LF Fissaggio Senso filo 6000042LF Fissaggio filo Ø 6 mm 6000041LF Fissaggio filo Ø 1,5 mm 60800200C Nero - Back 60800200E Grigio - Grey 7035</p> <p>Adattatore per auto Adapter for auto DIN 43650</p> <p>6000130CC Nero - Black 6000130CE Grigio - Grey 7035</p>	<p>Affiancata On adjacent</p>	<p>60001260A Nero - Black 60001140A Nero - Black 60002160A Nero - Black 6000030MA Nero - Black 60001260A Nero - Black 60001130A Nero - Black 60001260C Nero - Black 60001260E Grigio - Grey 7035 6000130CC Nero - Black 6000130CE Grigio - Grey 7035 60001262C Nero - Black 60001263C Nero - Black</p>
---	-----------------------------------	---

⑤

⑥

TH384

⑦

⑧

click

⑨

TH384

⑩

TH380

⑪

TH384
O20

TH382
O20

TH385
O25