

P/N: 72203-0411

Copyright

© 2017, FLIR Systems, Inc.

All rights reserved worldwide. Names and marks appearing herein are either registered trademarks or trademarks of FLIR Systems and/or its subsidiaries. All other trademarks, trade names or company names referenced herein are used for identification only and are the property of their respective owners.

Document identity

Publ. No.: 72203-0411

Release:

Commit: 41168

Language: en-US

Modified: 2017-03-14

Formatted: 2017-12-12

Website

<http://www.flir.com>

Customer support

<http://support.flir.com>

Disclaimer

Specifications subject to change without further notice. Camera models and accessories subject to regional market considerations. License procedures may apply. Products described herein may be subject to US Export Regulations. Please refer to exportquestions@flir.com with any questions.



Call Us 1.877.571.7901

General description	
The FLIR K33 is a robust and reliable infrared camera designed to perform under extremely severe conditions. The FLIR K33 has an intuitive interface with a design that makes it easy to control even with a gloved hand. The crisp and clear image helps you to navigate through smoke and to make quick and accurate decisions.	
Benefits:	
<ul style="list-style-type: none"> • Robust and reliable: The FLIR K33 is designed to meet tough operating conditions. It can withstand a drop from 2 m (6.5 ft.) onto a concrete floor, is water resistant to IP67, and is fully operational up to +85°C (+185°F), or +260°C (+500°F) for 5 min. • Clear and crisp thermal images: The maintenance-free uncooled microbolometer sensor produces clear and detail-rich images of 240 × 180 pixels which have been further improved with FSX, a digital image processing enhancement technique. Thermal images are presented on a large, bright 4" display, helping you to navigate and to make quick and accurate decisions. • Easy-to-use—also in a gloved firefighter's hand: An intuitive and simple user interface allows you to focus on the job. The FLIR K33 can be controlled by just one large button on top of the unit. Ideal for a gloved firefighter's hand. 	
Imaging and optical data	
IR resolution	240 × 180 pixels
Thermal sensitivity/NETD	< 40 mK @ +30°C (+86°F)
Field of view (FOV)	51° × 38°
Depth of field	0.84 m to infinity (33 in. to infinity)
Focal length	9 mm (0.35 in.)
Spatial resolution (IFOV)	3.6 mrad
F-number	1.25
Image frequency	60 Hz
Focus	Fixed
Detector data	
Detector type	Focal plane array (FPA), uncooled microbolometer
Spectral range	7.5–13 μm
Pitch	25 μm

P/N: 72203-0411

© 2017, FLIR Systems, Inc.

#72203-0411; r. /41168; en-US

Image presentation	
Display	4 in. LCD, 320 × 240 pixels, backlit
Auto range	Yes, selectable on/off using FLIR Tools
Contrast optimization	Digital image enhancement using FSX
Image presentation modes	
Image modes	T1 Basic fire-fighting mode
Measurement	
Object temperature range	<ul style="list-style-type: none"> • -20°C to +150°C (-4°F to +302°F) • 0°C to +650°C (+32°F to +1202°F)
Accuracy	±4°C (±7.2°F) or ±4% of reading, for ambient temperature 10°C to 35°C (+50°F to 95°F)
Measurement analysis	
Spotmeter	1
Isotherm	Yes
Set-up	
Set-up commands	Local adaptation of units, date and time formats
Languages	English
Video streaming	
Non-radiometric IR video streaming	Uncompressed colorized video using USB
USB	
USB	USB Mini-B
Compatibility	
Compatible with FLIR software	FLIR Tools
Data communication interfaces	
Interfaces	<ul style="list-style-type: none"> • Update from PC devices • Data transfer to and from PC
Power system	
Battery type	Li Ion
Battery voltage	3.6 V
Battery capacity	4.4 Ah, at +20°C to +25°C (+68°F to +77°F)
Battery operating time	Approx. 4 hours at +25°C (+77°F) ambient temperature and typical use
Charging system	<ul style="list-style-type: none"> • Battery is charged inside the camera • 2-bay charger • Optional In-truck charger
Charging time	2 h to 85% capacity, charging status indicated by LEDs
Charging temperature	0°C to +45°C (+32°F to +113°F)
Power management	Automatic shutdown and sleep mode
Start-up time from sleep mode	< 4 s.
Start-up time	< 17 s. (IR image, no GUI)

P/N: 72203-0411

© 2017, FLIR Systems, Inc.

#72203-0411; r. /41168; en-US

Environmental data	
Operating temperature range	<ul style="list-style-type: none"> -20°C to +85°C (-4°F to +185°F) +150°C (+302°F): 15 min. +260°C (+500°F): 5 min.
Storage temperature range	-40°C to +85°C (-40°F to +185°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity +25°C to +40°C (+77°F to +104°F) / 2 cycles
Relative humidity	95% relative humidity +25°C to +40°C (+77°F to +104°F) non-condensing
Directives	Designed to meet NFPA 1801:2013 specification: <ul style="list-style-type: none"> Vibration Impact acceleration resistance Corrosion Viewing surface abrasion Heat resistance Heat and flame Product label durability
EMC	<ul style="list-style-type: none"> EN 61000-6-2:2005 (Immunity) EN 61000-6-3: 2011 (Emission) FCC 47 CFR Part 15 B (Emission)
Magnetic fields	EN 61 000-4-8, Test level 5 for continuous field (severe industrial environment)
Encapsulation	IP 67 (IEC 60529)
Shock	25 g (IEC 60068-2-27)
Vibration	2 g (IEC 60068-2-6)
Drop	2 m (6.6 ft.) on concrete floor (IEC 60068-2-31)
Safety (power supply)	CE/EN/UL/CSA/PSE 60950-1
Physical data	
Camera weight, incl. battery	1.1 ±0.05 kg (2.4 ±0.1 lb.)
Battery weight	0.152 kg (0.3 lb.)
Camera size (L × W × H)	120 × 125 × 280 mm (4.7 × 4.9 × 11 in.)
Tripod mounting	UNC ¼"-20 (adapter needed)
Material	<ul style="list-style-type: none"> PPSU Silicon rubber Aluminium, cast Flame-resistant magnesium alloy
Shipping information	
List of contents	<ul style="list-style-type: none"> Infrared camera Battery (2 ea.) Battery charger Hard transport case Lanyard strap Neck strap Power supply Printed documentation Retractable lanyard USB cable
Packaging, weight	5.7 kg (12.6 lb.)
Packaging, size	500 × 190 × 370 mm (19.7 × 7.5 × 14.6 in.)
EAN-13	7332558011515
UPC-12	845188012465
Country of origin	Estonia



FLIR K33

P/N: 72203-0411

© 2017, FLIR Systems, Inc.

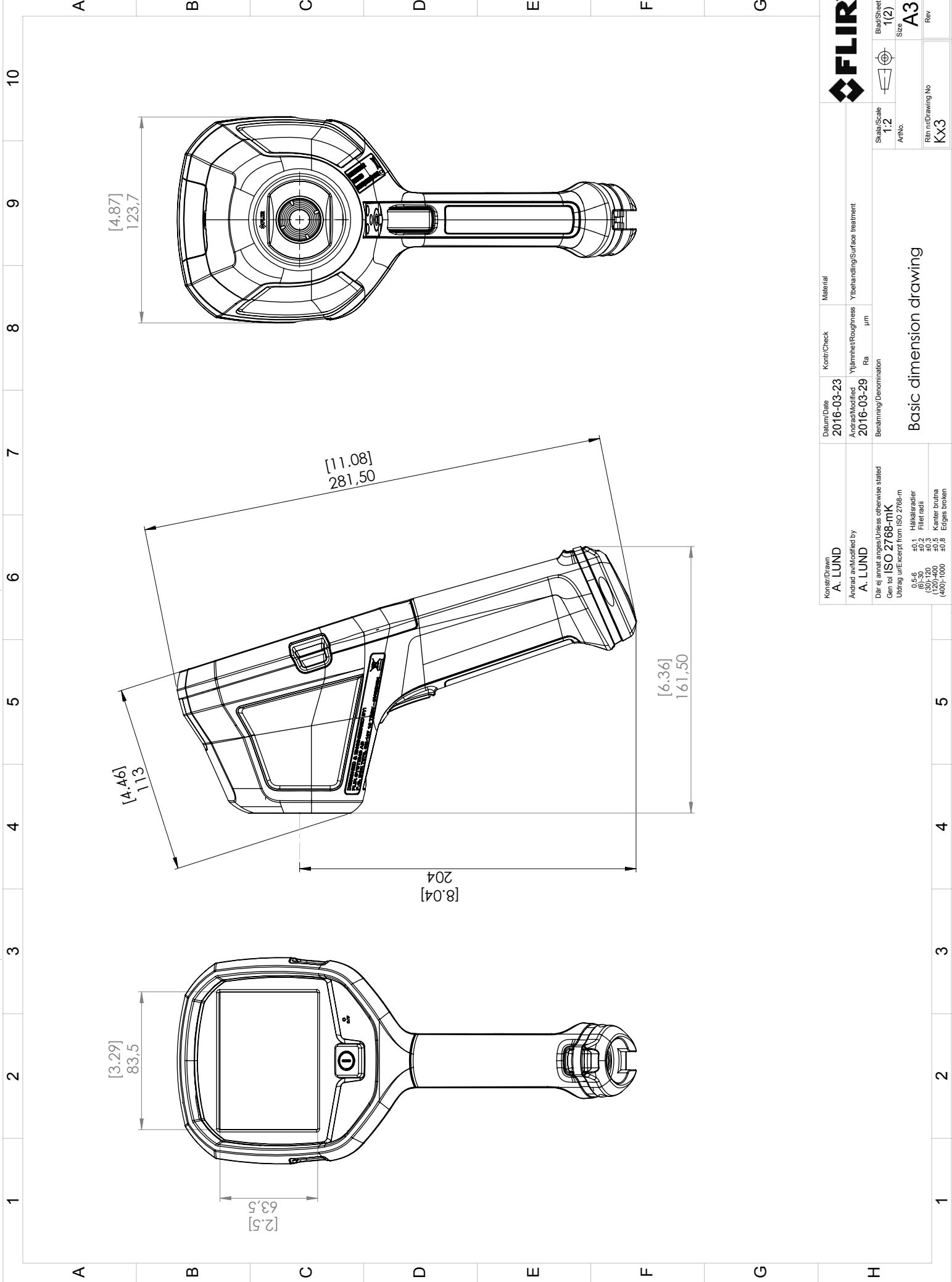
#72203-0411; r. /41168; en-US

Supplies & accessories:

- 1910423; USB cable Std A <-> Mini-B
- T198509; Cigarette lighter adapter kit, 12 VDC, 1.2 m/3.9 ft.
- T198125; Battery charger, incl. power supply with multi plugs (Exx, Kxx)
- T198310ACC; Li-Ion Battery pack 3.6 V 16 Wh
- T127724ACC; Neck strap
- T127722ACC; Retractable lanyard
- T198416ACC; Lanyard strap
- T198457ACC; Tripod Adapter, Kxx
- T198441ACC; Transport case Kxx
- T198322ACC; In-truck charger
- T199368ACC; Battery Li-ion 3.6 V, 4.4 Ah, 16 Wh
- T129915ACC; Carabiner strap



Call Us 1.877.571.7901



FLIR

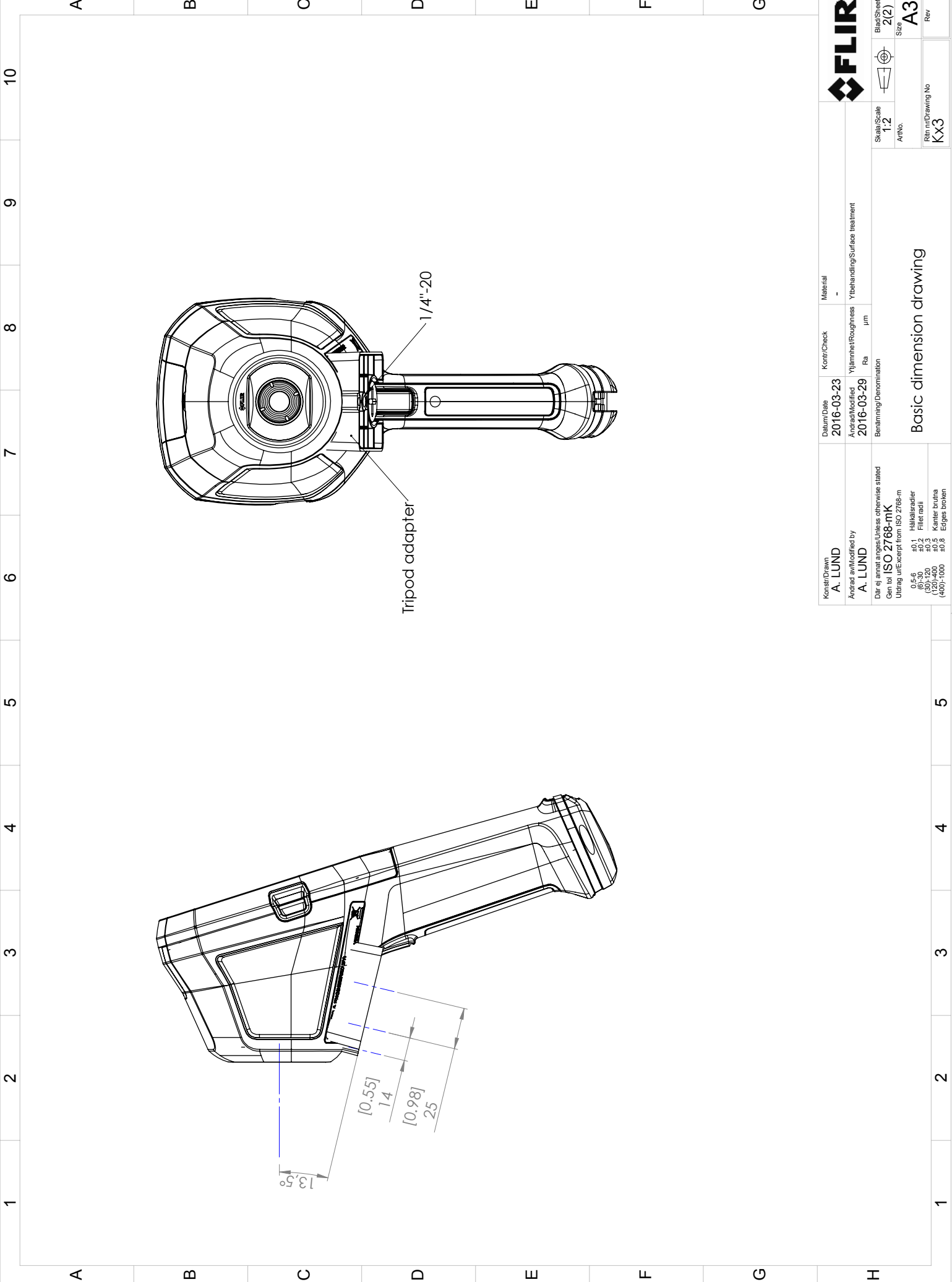
BlackSheet
Size
A3

Scale
1:2

Rev
KX3

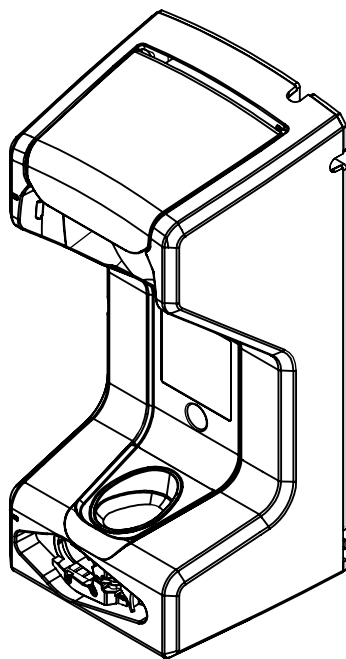
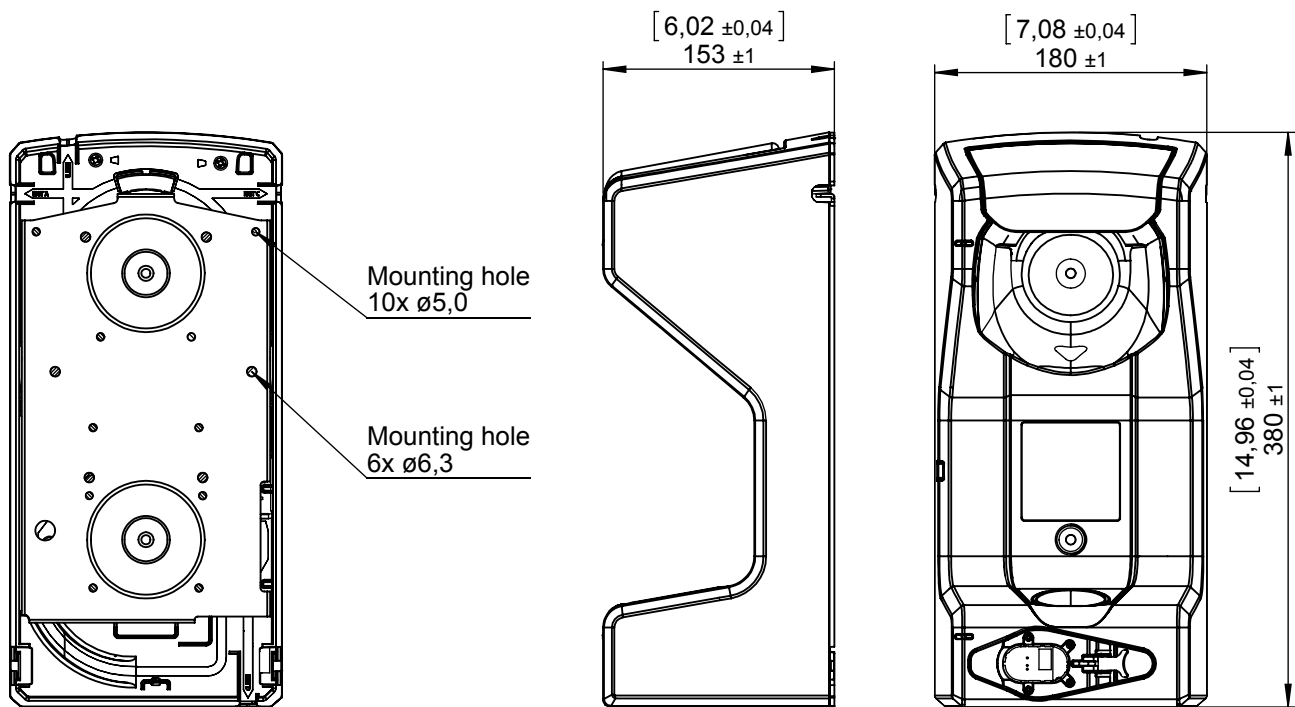
Konstr/Drawn A. LUND	Datum/Date 2016-03-23	Kontr/Check Material
Ändrad av/Modified by A. LUND	Ändrad/Modified 2016-03-29	Ytjämnhet/Roughness Ra μm
Dir ej anses ansvarig. Unless otherwise stated Gen tol ISO 2768-mk Utdrag ur: except from ISO 2768-m	Benämning/Denomination	Ytbehandling/Surface treatment
0.5-6 (6)-30 (120)-400 (400)-1000	+0.1 +0.2 +0.5 +0.8	Hälskradler Fillet radii Kanter brutna Edges broken

Basic dimension drawing



FLIR SYSTEMS AB
 Övervakelse hållbar betonas med stöd av gällande lag.
 Övrigt innehåll eller delar utan vårt medgivande
 får inte kopieras, spridas eller användas på annat sätt.
 FLIR SYSTEMS AB
 This document must not be communicated or
 copied completely or in part, without our permission.
 Any infringement will lead to legal proceedings.
 FLIR SYSTEMS AB

FLIR		Blad/Sheet 2(2)	
SE		A3	
Scale/Scale 1:2		Rev	
AFNo.		Rin nr/Drawing No KX3	
Konstr/Drawn A. LUND		Datum/Date 2016-03-23	
Ändrad av/Modified by A. LUND		Kontroll/Check -	
Där ej annat anges/Unless otherwise stated Utgång ur/except from ISO 2768-m		Material -	
0.5-6 0.1-30 0.05-20 120-400 400-1000 ±0.1 Hållarsradier ±0.2 Fileradii ±0.5 Kanter brutna ±0.8 Edgese broken		Ytjämnhet/Roughness µm	
		Ytbehandling/Surface treatment	
		Benämning/Denomination	
Basic dimension drawing			



Konstr/Drawn P. MARCUS	Datum/Date 2013-04-08	Kontr/Check MABR	Material	
Ändrad av/Modified by P. MARCUS	Ändrad/Modified 2013-04-08	Ytjämnhet/Roughness Ra μm	Ytbehandling/Surface treatment	
Där ej annat anges/Unless otherwise stated Gen tol ISO 2768-mK Utdrag ur/Excerpt from ISO 2768-m	Benämning/Denomination Basic dimensions In-truck charger		Skala/Scale 1:5	Blad/Sheet 1(1)
0,5-6 $\pm 0,1$ Hålkälsradier (6)-30 $\pm 0,2$ Fillet radii (30)-120 $\pm 0,3$ (120)-400 $\pm 0,5$ Kanter brutna (400)-1000 $\pm 0,8$ Edges broken			Art.No.	Size A4
			Ritn nr/Drawing No T127865	Rev A



The World's Sixth Sense™

December 08, 2017 Täby, Sweden

AQ320212

CE Declaration of Conformity – EU Declaration of Conformity

Product: FLIR KXX series

Name and address of the manufacturer:

FLIR Systems AB

PO Box 7376

SE-187 15 Täby, Sweden

This declaration of conformity is issued under the sole responsibility of the manufacturer.

The object of the declaration: FLIR KXX series

The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

Directives:

Directive	2014/30/EU	Electromagnetic Compatibility
Directive	2014/35/EU	Low Voltage Directive (Power Supply)
Directive	2012/19/EU	Waste electrical and electric equipment
Directive	2011/65/EU	RoHS and 2015/830/EU (Phtalates)

Standards:

Emission	EN 61000-6-3:2007+A1:2011	Electromagnetic Compatibility Generic standards – Emission
Immunity	EN 61000-6-2:2005	Electromagnetic Compatibility Generic standards – Immunity
Safety (Power Supply)	IEC 60950-1:2005+A1	Information technology equipment - Safety
RoHS	EN 50581:2012	Technical documentation

FLIR Systems AB
Quality Assurance

Lea Dabiri
Quality Manager



Call Us 1.877.571.7901