



User Instruction & Installation Manual
L230RC 100-Watt LED Searchlight



Product Reference Number:

A7297 L230RC 24v 100w LED
A7298 L230RC 240v 100w LED
A7299 L230RC 115v 100w LED

Manufacturer's details:

Francis Searchlights Ltd
Union Road, Bolton
Lancashire, BL2 2HJ, UK
Tel: +44 (0) 1204 558960
Fax: +44 (0) 1204 558979
<http://www.francis.co.uk>
E-mail: sales@francis.co.uk

Distributor details:

Manual Part Number: C29433

Issue: 4

6.3.26

EC: 2135

CONTENTS

- 1 - Introduction
- 2 - Safety Precautions
- 3 - Technical Information
- 4 - Unpacking and Installation Instructions
- 5 - Electrical Installation
- 6 - Operating Instructions
- 7 - Fault Finding
- 8 - Maintenance and Servicing
- 9 - General Assembly and Wiring Diagrams
- 10 - Spare Parts List

1 - Introduction

It is imperative that this manual is read carefully and understood before installing your equipment. For your future reference please keep this manual in a safe place.

Thank you for specifying a product from the Francis Searchlights range. All Francis products are designed to give complete customer satisfaction and are manufactured to the highest engineering standards to ensure optimum performance and service life.

The Francis LED range combines features proven over many years service in the most hazardous conditions in both marine and land installations.

To prolong the life and performance of your product, we recommend that you only specify Francis Searchlights spare parts. This will also ensure that any warranties on your equipment will not be invalidated. Information on spares ordering and parts is provided in this manual.

Should you ever need to contact Francis Searchlights Ltd. regarding your equipment, please always quote the Product Serial Number.

2 - Safety Precautions

The following instructions must be adhered to, to ensure a safe working environment and the safety of the user.

- The high luminance of the LED can cause severe damage to the eye if viewed directly. ALWAYS wear suitable protective goggles when viewing the LED.
- Searchlights get hot. Never touch the unit when lit and always allow 15 to 20 minutes for cooling down after turning the searchlight off.
- Never place anything on or cover the searchlight when in use.
- Ensure the LED has cooled sufficiently before removal.
- Due to the vast range of LED modules available it may appear possible that more powerful LED's can be used in the equipment than for which it was designed. Even when the unit will physically accept a higher wattage LED, this substitution is not recommended and is dangerous. This action will also void any warranties on the equipment.

3 – Technical Information

This product has been designed to operate in accordance with the product specification. The L230RC 100w LED searchlight has the following features:

- All marine grade materials and fixings.
- Powder coated and stove enamel paint finish.
- Full 365° horizontal rotation.
- Vertical movement $\pm 20^\circ$.
- Pan rotation speed 24°/sec.
- Tilt speed 4°/sec.
- Instant full light output from LED chip.
- Driver box supplied.
- Toughened super clear Optiwhite front glass.
- Parabolic super pure precision lens.
- Heater fitted in barrel.
- Sealing – IP66 Searchlight – IP65 Joystick.
- Searchlight weight 11Kgs.

The searchlight also performs to the following optical data:

- Wattage - 100 Watts.
- Supply voltage – 24v DC or 240v/115v AC.
- Luminous Flux – 7830 lumens.
- Range – 1430 metres @ 1 Lux at beam divergence of 4°.
- LED life – 30,000 hours.
- Fixed focus.
- Temperature range: -50°C

In order that the searchlight operates correctly it is imperative that competent personnel are responsible for the installation, operation, and servicing of this equipment. Failure to adhere to this advice may cause premature failure or incorrect operation of the searchlight, which may damage the equipment or cause personal injury.

4 - Unpacking and Installation Instructions

The following instructions should be read and fully understood prior to installing the equipment to ensure that the correct procedures are followed, and all safety precautions are observed.

Note: If the equipment has been in storage for a considerable amount of time, it is advisable to conduct a routine maintenance check on all parts before installation.

Safety Precautions

This equipment should not be connected to an electrical supply before being installed. Installation procedures should be adhered to, to ensure a safe working environment and reduce the risk of damage or personal injury.

Preparing the Mounting Position

Mark out and drill the fixing holes through the deck. If anti-vibration mounts are to be fitted, the fixing holes for the mounts should also be marked out and drilled. Prior to manoeuvring the searchlight into its' fixing position, the AV mounts should be fitted to the base.

Fit the 'O' ring in position and bolt the searchlight down securely. On an uneven surface it is necessary to use a suitable sealant, such as silicone, to ensure a weatherproofed joint.

5 - Electrical Installation

For safety purposes, only competent personnel should perform the electrical installation. All equipment should be installed to current Electrical Regulations and Standards.

To obtain the maximum light output from the searchlight, it is essential that the full operating voltage of the LED fitted be applied to the LED contacts.

Method of Electrical Connection

- 1) Disconnect the supply before working on the electrical system.
- 2) The searchlight must be connected to a fused electrical supply, using suitably sized cable.
- 3) If the searchlight is located a considerable distance from the supply, provision must be made in the cable size to overcome the voltage drop.
- 4) Whenever possible cable terminations should be made below deck and with approved terminal devices.
- 5) If a spare auxiliary fuse or circuit breaker is not available, one of the correct type/ratings should be fitted and connected to a positive supply. It is advisable to locate a bus bar or main connection and avoid any direct connection to the supply:

Installation Guidelines

A typical installation and connection routine for the L230RC 24v 100w LED searchlight is as follows:

Referring to wiring diagram C29432, a 24v supply is fed to the joystick panel.
The searchlight has been pre-wired with 4 meters of cable from the searchlight to diver box provided (12 core 1.5mm cable).

Cables required to be connected by the customer: -
12 core 1.5mm cable from the joystick panel to the driver box.
Supply cable to the junction box.

A typical installation and connection routine for the L230RC 240v 100w LED searchlight is as follows:

Referring to wiring diagram C29686, a 240v supply is fed to the HV driver box.
The searchlight has been pre-wired with 4 meters of cable from the searchlight to driver box provided (12 core 1.5mm cable).

Cables required to be connected by the customer: -
12 core 1.5mm cable from the joystick panel to the driver box.
Supply cable to the HV driver box.

A typical installation and connection routine for the L230RC 115v 100w LED searchlight is as follows:

Referring to wiring diagram C29687, a 115v supply is fed to the HV junction box.
The searchlight has been pre-wired with 4 meters of cable from the searchlight to diver box provided (12 core 1.5mm cable).

Cables required to be connected by the customer: -
12 core 1.5mm cable from the joystick panel to the driver box.
Supply cable to the HV junction box.

6 - Operating Instructions

This equipment is designed for use out of doors, in free air. Never place anything on or cover the searchlight when in use as this may present a hazard.

The searchlight can be remotely positioned via the joystick control panel, with the facility for movement up, down, left, and right. When in the desired position the joystick should be released so that it returns to its' home position, dead centre.

The heaters specified on this equipment are self-regulating and will shut off when they reach the dew point temperature.

This product should not be used for any purpose other than for which it was designed. Any modifications to the product should not be undertaken without consulting the manufacturer.

7- Fault Finding

All fault finding must be conducted by a competent person or qualified Electrical Engineer.

Failure of the LED to ignite

In the event of the LED failing to light the following steps should be taken:

- 1) Check that the supply is connected to the input of the LED and check all connections as per the wiring diagrams show below. On operation if the LED does not light, switch off supply and check all fuses.

8 - Maintenance and Servicing

To prolong the service life and performance of your searchlight, the following maintenance guidelines are recommended:

- Maintenance checks should be conducted before every voyage or at least every three months.
- Before checking, disconnect the equipment from the supply.
- Visually inspect the condition of the equipment.
- Any major or minor structural damage should be rectified immediately to reduce sympathetic wear.
- After inspection it may be necessary to clean the inside of the searchlight. The following procedure should be adhered to:
 - Remove the front bezel.
 - Clean the front glass inside and out using a proprietary glass cleaner.
 - Clean the LED lens if required.
- It is advisable to check all seals and gaskets for signs of degradation. Renew if necessary.
- Upon completing all maintenance requirements, the searchlight should be tested for full working order (approximately 20 minutes).

If in any doubt as to the correct servicing procedures to adopt, please contact your distributor/agent or the manufacturer who will be able to advise the best course of action for your product.

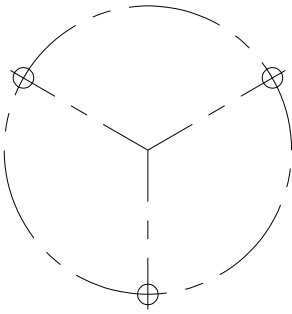
9 – General Assembly and Wiring Diagrams

Drawing Number	Description
A7297	L230RC 24v 100w LED General Assembly
C29432	Wiring Diagram 24v
C29686	Wiring Diagram 240v
C29687	Wiring Diagram 115v
C28321	Control Panel Assembly
C30200	Control Panel Assembly
C29416	LV Driver Box Assembly
C30194	HV Driver Box Assembly
C28516	115v Junction Box

FIRST USED ON

DO NOT SCALE DRAWING

BASE FIXING DETAILS
3 HOLES ϕ 11.0 EQUI-SPACED
AS SHOWN ON A 154.0 P.C.D.



THIRD ANGLE PROJECTION



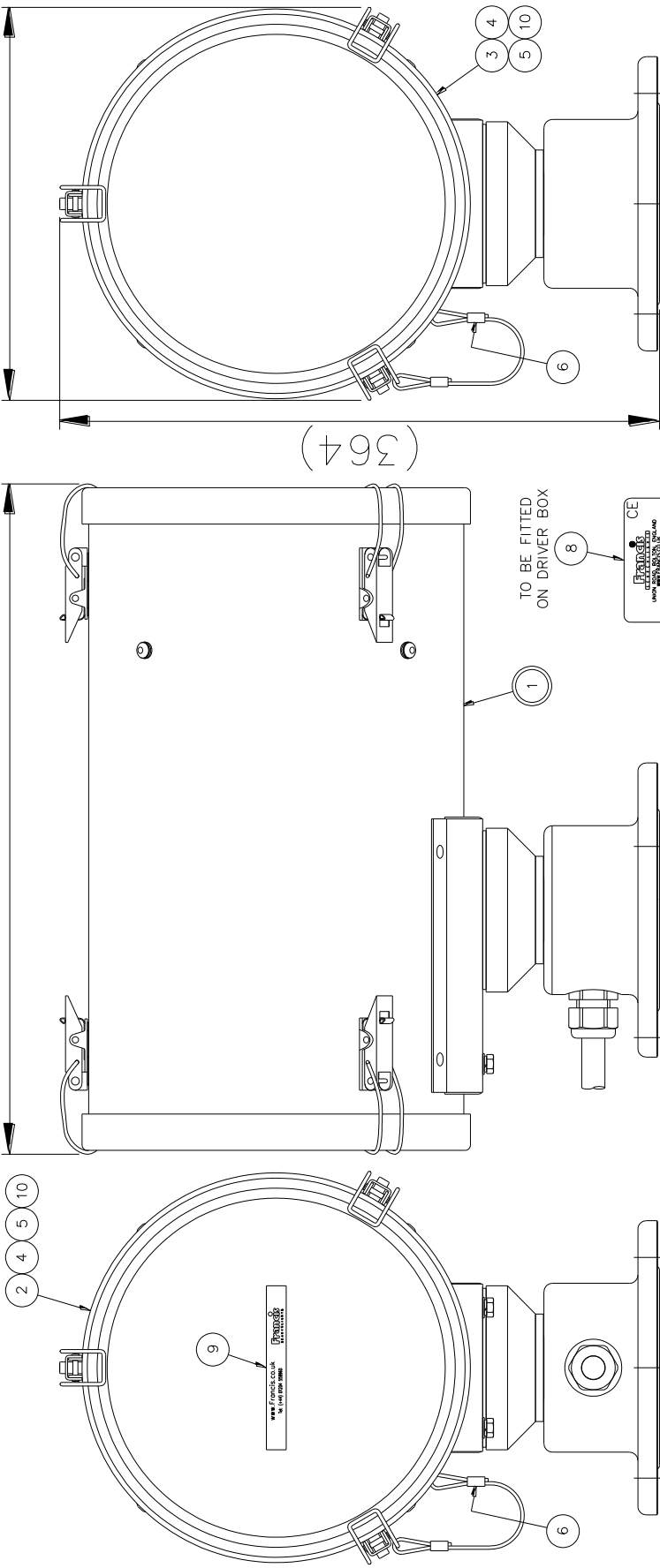
ITEM	PART No.	DRG No.	DESCRIPTION	QTY
1	C29417	C29417	BARREL ASSY	1
2	C26069	C26069	REAR PLATE	1
3	C26630	C26630	FRONT GLASS	1
4	C21119	C21119	BEZEL	2
5	C21141	C20567	GASKET	2

ITEM	PART No.	DRG No.	DESCRIPTION	QTY
6	C16573		FERRULE	2
7	C10168	X2656	'O' RING	1
8	C10154		NAMEPLATE LABEL	1
9	C04900		FRANCIS EXTERIOR LABEL	1
10	C12039		RTV CLEAR	A/R

(405)

(238)

(364)



A7297 L230RC 24V 100W LED GA
A7298 L230RC 240V 100W LED GA
A7299 L230RC 115V 100W LED GA

FRANCIS SEARCHLIGHTS LIMITED · UNION ROAD · BOLTON · BL2 2HU

DRAWN	D.S.	DATE	2.22	TOLERANCES
CHECKED	SCALE	1:2	General: ±	Angular: ±
ALL DIMENSIONS IN MILLIMETRES				

Sand Coating:	To ISO 8062 CT10	MATERIAL
Die Coating:	To ISO 8062 CT8	
Hole centres & posns: ±		

FINISH	DESCRIPTION
	L230RC 100W LED GA

© 2022 A2

PART No./DRG No.

L230RC 100W LED GA

CONT ON SHEET

SHT

A7297 1

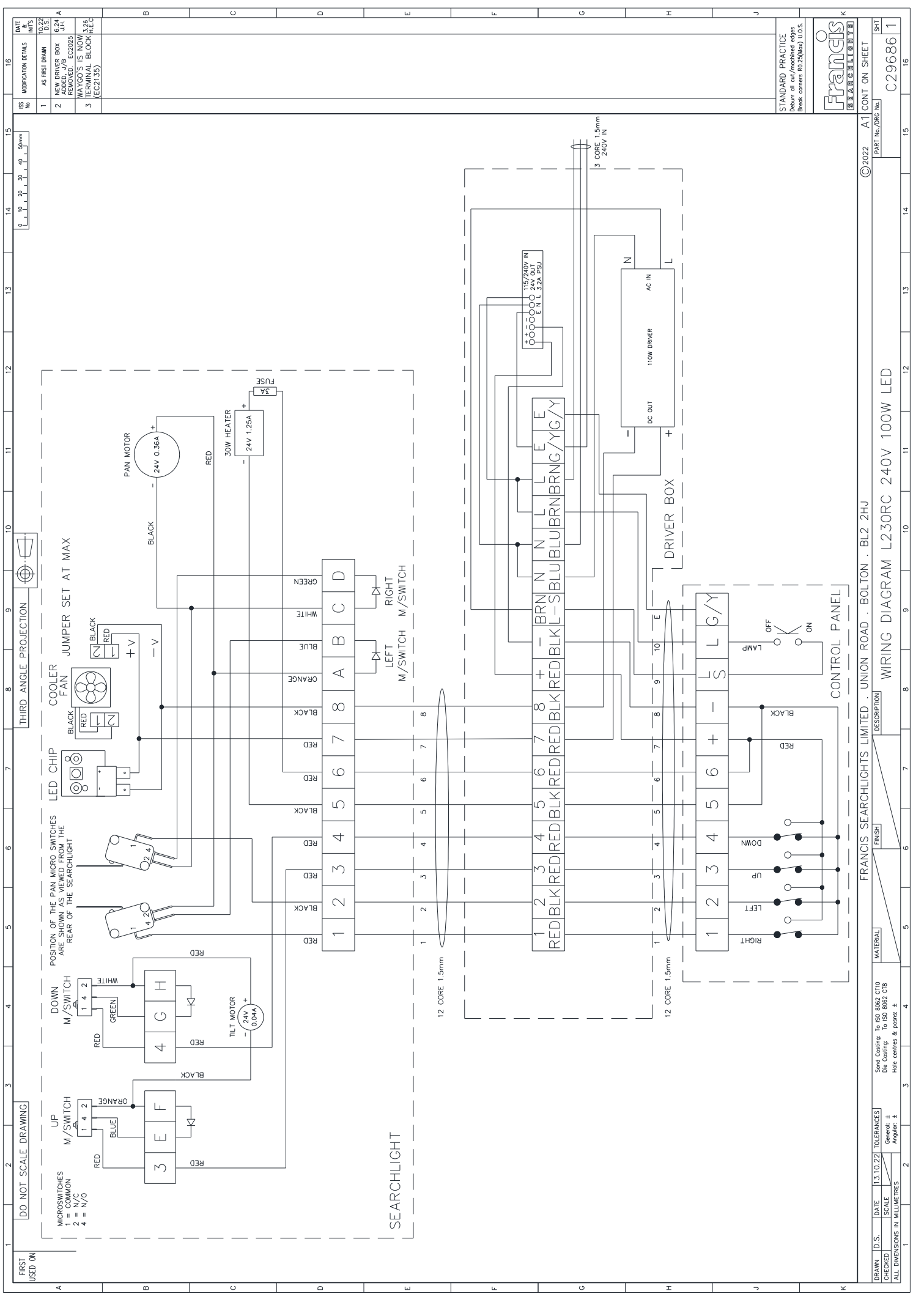
DATE & INT'S	MODIFICATION DETAILS	11
2.22 D.S.	AS FIRST DRAWN	10
6.24 J.H.	C29417 BROUGHT IN LINE. EC2020	9
		8
		7
		6
		5
		4
		3
		2
		1

STANDARD PRACTICE
Debur all cut/machined edges
Break corners R0.25(Max) U.O.S.

Francis
SEARCHLIGHTS

1 2 3 4 5 6 7 8 9 10 11

A B C D E F G



FIRST USED ON

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

SCALE 1:1

DATE 13.10.22

DRAWN TO ISO 8802 CT10

CHECKED TO ISO 8802 CT8

ALL DIMENSIONS IN MILLIMETRES

General: ±

Angular: ±

Hole centres & points: ±

Material

Finish

DESCRIPTION

FRANCIS SEARCHLIGHTS LIMITED · UNION ROAD · BOLTON · BL2 2JH

WIRING DIAGRAM L230RC 240V 100W LED

PART No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

A1 CONT ON SHEET

SHT

C29686 1

STANDARD PRACTICE

Date: 13/10/22

Drawn: J. Smith

Checked: J. Smith

Break corners R0.25(Min) U.O.S.

Francis

Francis Searchlights Limited

Union Road

Bolton

BL2 2JH

Wiring Diagram

L230RC

240V

100W LED

Part No./DRG No.

© 2022

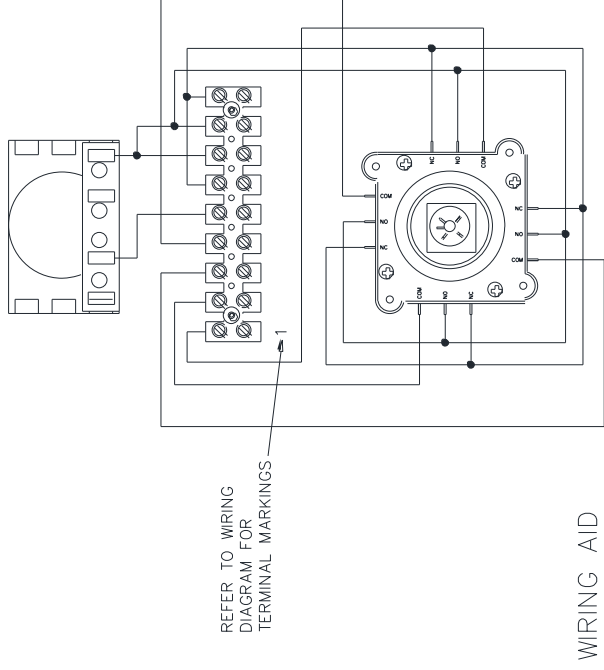
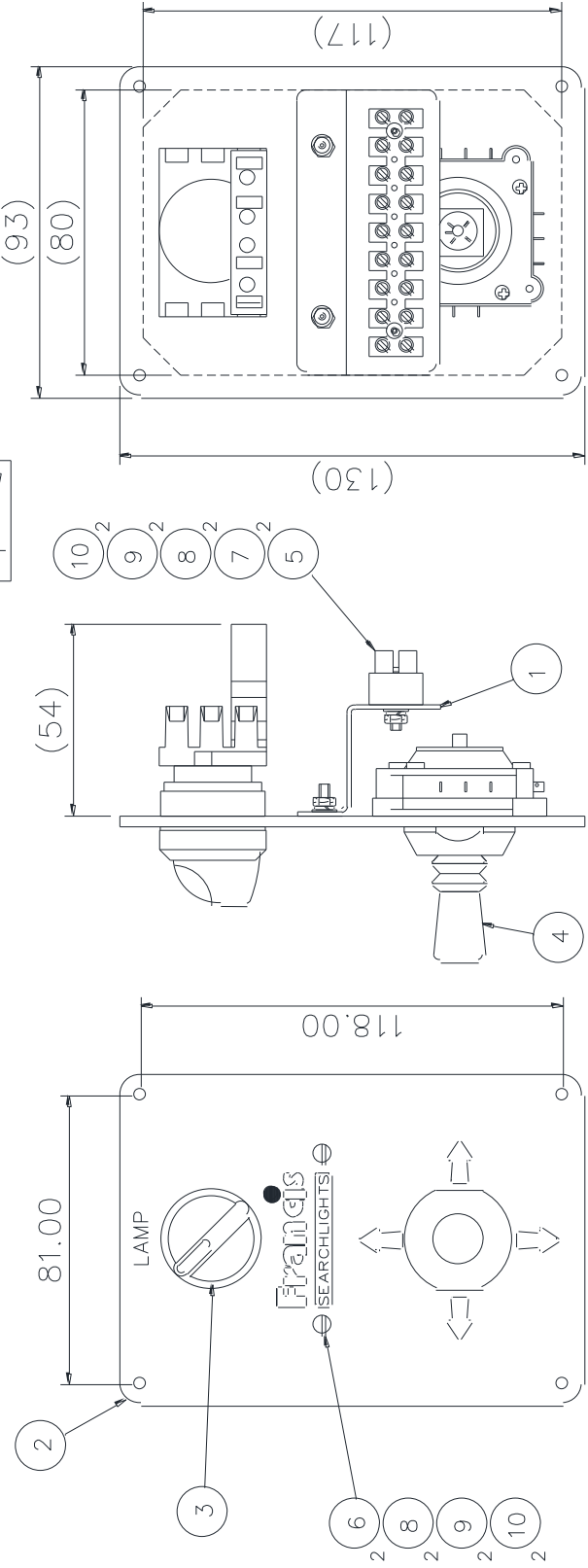
FIRST USED ON
 LX330RC
 A6103
 A6104
 A6119

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

ISS No 1

DATE & UNITS
 9.19 D.S.



WIRING AID

ITEM	PART No.	DRG No.	DESCRIPTION	QTY
1	C26222	C26222	TERMINAL BRACKET	1
2	C26122	C26122	CONTROL PANEL	1
3	C14143		SELECTOR SWITCH 10A	1
4	C14444		JOYSTICK	1
5	C15056		TERMINAL BLOCK (9 WAY)	1
6	C27070		M3 x 12 CSK HD SCREW	2
7	C10203		M3 x 16 BUTTON HD SCREW	2
8	C08028		M3 PLAIN WASHER	4
9	C10747		M3 S/C SPRING WASHER	4
10	C05298		M3 FULL NUT	4

STANDARD PRACTICE
 Deburr all cut/machined edges
 Break corners R0.25(Max) U.O.S.



FRANCIS SEARCHLIGHTS LIMITED . UNION ROAD . BOLTON . BL2 2HU

© 2019 A2 CONT ON SHEET

PART No./DRG No. C28321 1

DESCRIPTION CONTROL PANEL ASSY

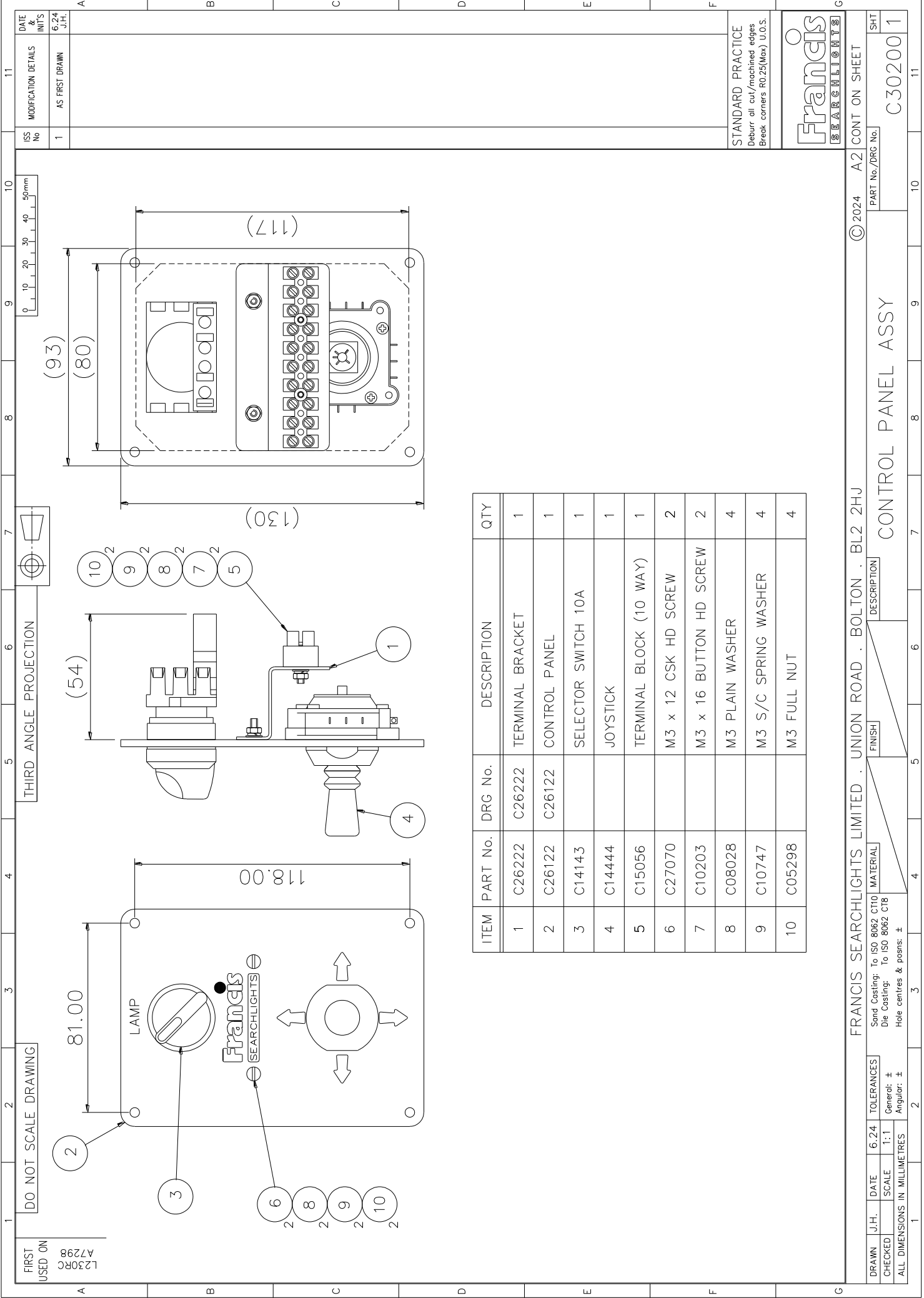
FINISH MATERIAL

Drawn: To ISO 8062 CT10
 Die Casting: To ISO 8062 CTB
 Hole centres & posns: ±

TOLERANCES
 9.19
 Scale: 1:1
 General: ±
 Angular: ±

ALL DIMENSIONS IN MILLIMETRES

11



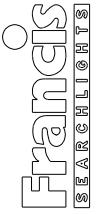
FIRST USED ON
L230RC
A7298

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION

DATE & INT'S	MODIFICATION DETAILS	ISS No
6.24 J.H.	AS FIRST DRAWN	1

STANDARD PRACTICE
Debur all cut/machined edges
Break corners R0.25(Max) U.O.S.



ITEM	PART No.	DRG No.	DESCRIPTION	QTY
1	C26222	C26222	TERMINAL BRACKET	1
2	C26122	C26122	CONTROL PANEL	1
3	C14143		SELECTOR SWITCH 10A	1
4	C14444		JOYSTICK	1
5	C15056		TERMINAL BLOCK (10 WAY)	1
6	C27070		M3 x 12 CSK HD SCREW	2
7	C10203		M3 x 16 BUTTON HD SCREW	2
8	C08028		M3 PLAIN WASHER	4
9	C10747		M3 S/C SPRING WASHER	4
10	C05298		M3 FULL NUT	4

FRANCIS SEARCHLIGHTS LIMITED . UNION ROAD . BOLTON . BL2 2HU

DRAWN	J.H.	DATE	6.24	TOLERANCES
CHECKED		SCALE	1:1	General: ± Angular: ±
ALL DIMENSIONS IN MILLIMETRES				

FINISH	DESCRIPTION

CONTROL PANEL ASSY

© 2024 A2 CONT ON SHEET

PART No./DRG No.	SHT
C30200	1

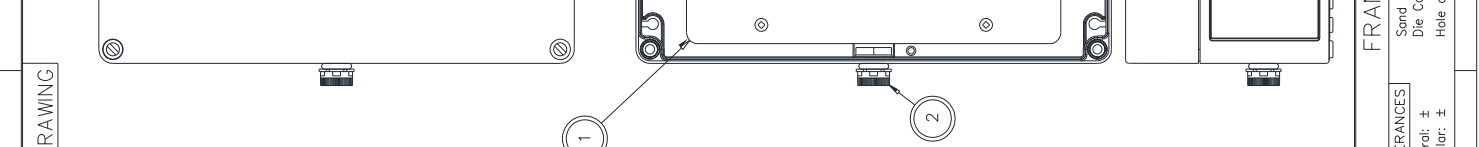
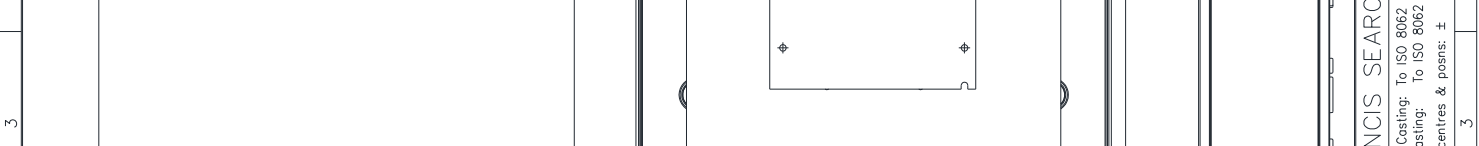
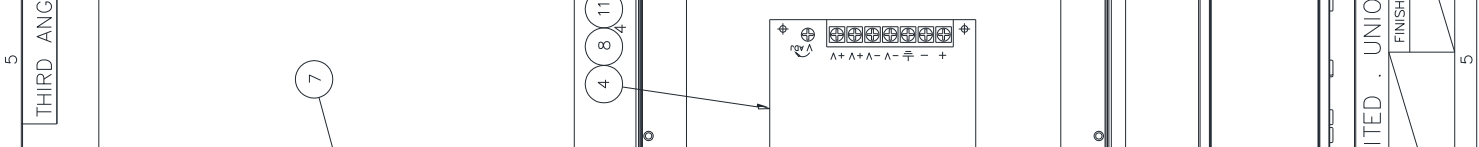
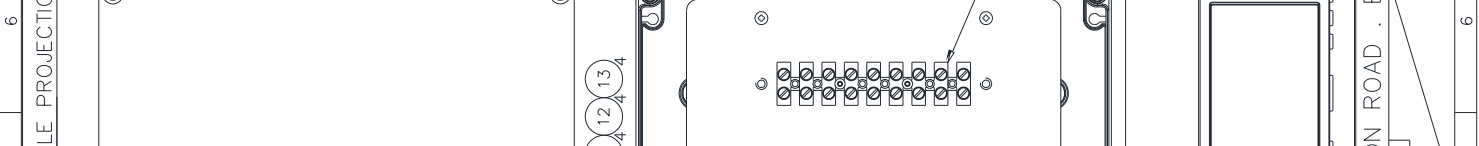
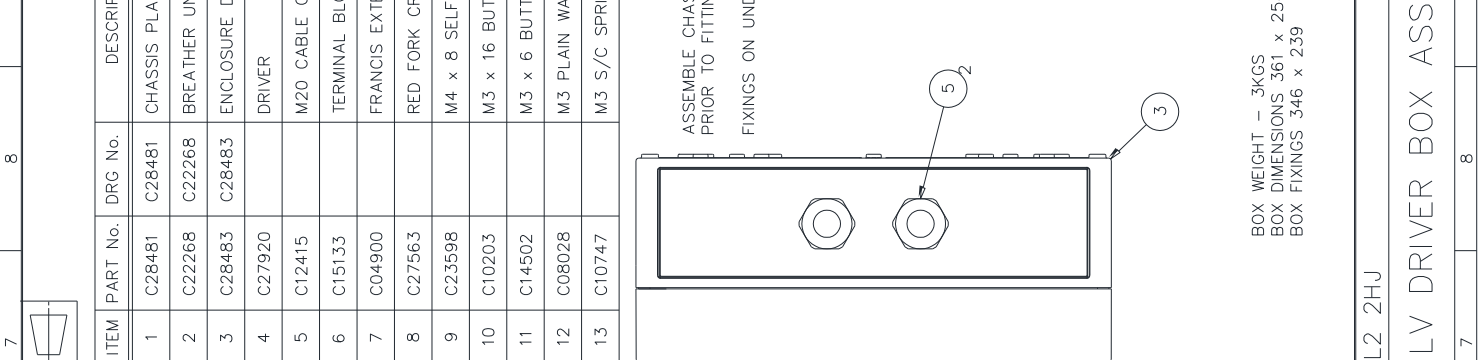
DATE & INT'S	1.22 D.S.	11
MODIFICATION DETAILS	AS FIRST DRAWN	
ISS No	1	

STANDARD PRACTICE	Debur all cut/machined edges Break corners R0.25(Max) U.O.S.
-------------------	---



CONT ON SHEET	A2
PART No./DRG No.	C29416
SHT	1

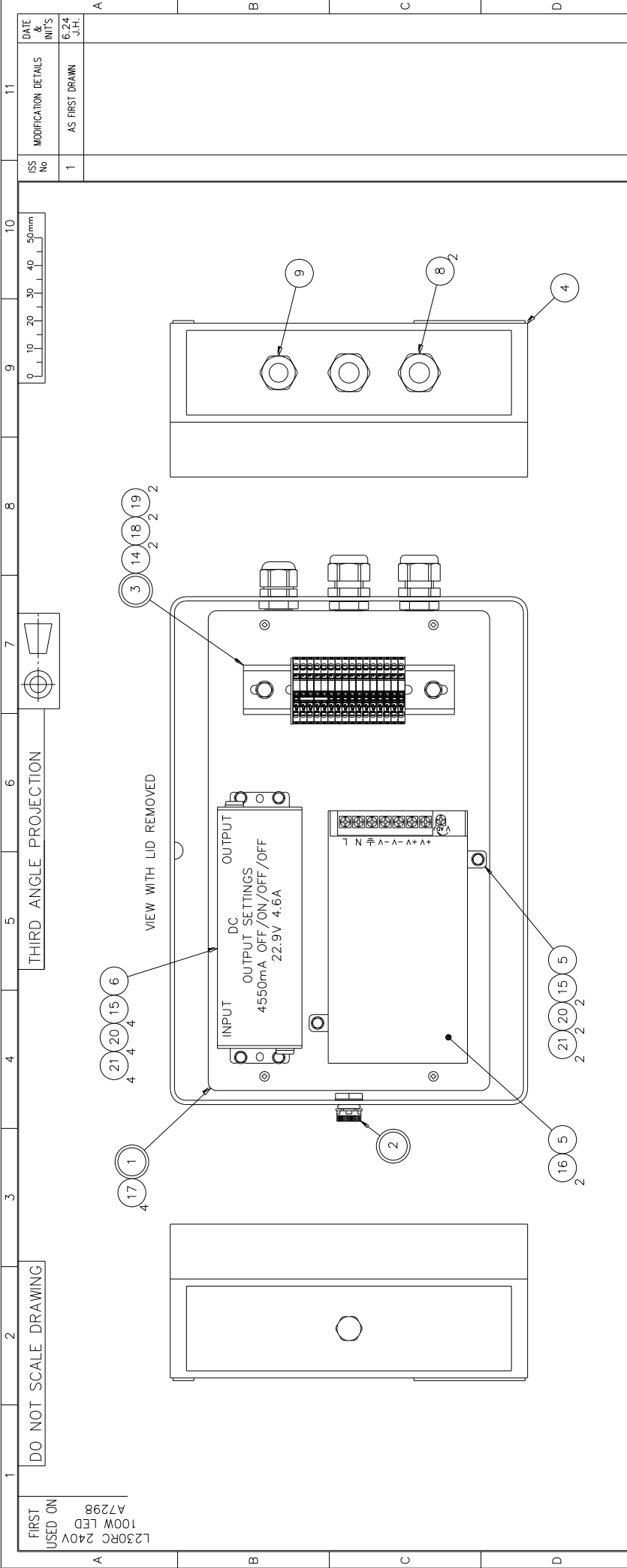
ITEM	PART No.	DRG No.	DESCRIPTION	QTY
1	C28481	C28481	CHASSIS PLATE ASSY	1
2	C22268	C22268	BREATHER UNIT ASSY	1
3	C28483	C28483	ENCLOSURE DRILLING	1
4	C27920		DRIVER	1
5	C12415		M20 CABLE GLAND	2
6	C15133		TERMINAL BLOCK 9 WAY	1
7	C04900		FRANCIS EXTERIOR LABEL	1
8	C27563		RED FORK CRIMP	4
9	C23598		M4 x 8 SELF TAP POZI HD SCREW	4
10	C10203		M3 x 16 BUTTON HD SCREW	2
11	C14502		M3 x 6 BUTTON HD SCREW	4
12	C08028		M3 PLAIN WASHER	4
13	C10747		M3 S/C SPRING WASHER	4



FRANCIS SEARCHLIGHTS LIMITED	UNION ROAD	BOLTON	BL2 2HU
Box Weight - 3KGS	Box Dimensions 361 x 254 x 111	Box Fixings 346 x 239	
FINISH		DESCRIPTION	LV DRIVER BOX ASSY
Material	To ISO 8062 CT10		
Die Casting	To ISO 8062 CT8		
Hole centres & posns:	±		
TOLERANCES	1:22	General: ±	
SCALE	1:2	Angular: ±	
ALL DIMENSIONS IN MILLIMETRES			

DO NOT SCALE DRAWING	THIRD ANGLE PROJECTION	50mm	0 10 20 30 40 50
FRANCIS SEARCHLIGHTS LIMITED	UNION ROAD	BOLTON	BL2 2HU
www.Francis.co.uk	0161 250 2888		

FRANCIS SEARCHLIGHTS LIMITED	UNION ROAD	BOLTON	BL2 2HU
CONT ON SHEET	A2		
PART No./DRG No.	C29416		
SHT	1		



ITEM	PART No.	DRG No.	DESCRIPTION	QTY
12	C22036		ISOLATE SUPPLY LABEL	1
13	C04900		FRANCIS EXTERIOR LABEL	1
14	C08120		M6 x 10 HEX HD SCREW	2
15	C26955		M4 x 10 HEX HD SCREW	6
16	C10231		M4 x 8 CSK HD SCREW	2
17	C23598		M4 x 8 SELF TAP POZI HD SCREW	4
18	C06997		M6 PLAIN WASHER	2
19	C10554		M6 S/C SPRING WASHER	2
20	C04376		M4 PLAIN WASHER	6
21	C08793		M4 S/C SPRING WASHER	6

ITEM	PART No.	DRG No.	DESCRIPTION	QTY
1	C30195		CHASSIS PLATE SUB ASSY	1
2	C22268		BREATHER ASSY	2
3	C30197		DIN RAIL ASSY	1
4	C30198		ENCLOSURE DRILLING	1
5	C30199		PSU MOUNTING PLATE	1
6	C30003		110W DRIVER	1
7	C29162		24V PSU	1
8	C12415		M20 CABLE GLAND	2
9	C10158		M20 CABLE GLAND	1
10	C24369		THIS WAY UP LABEL	1
11	C21464		230V WARNING LABEL	1

BOX WEIGHT - 3KGS
BOX DIMENSIONS 361 x 254 x 111
BOX FIXINGS 346 x 239

Francis
SEARCHLIGHTS LIMITED

FRANCIS SEARCHLIGHTS LIMITED · UNION ROAD · BOLTON · BL2 2HU

© 2024 A2 CONT ON SHEET

DRAWN J.H.	DATE 6.22	TOLERANCES	Send Castings: To ISO 8062 CT10	MATERIAL
CHECKED	SCALE 1:2	General: ±	Die Castings: To ISO 8062 C18	
ALL DIMENSIONS IN MILLIMETRES		Angular: ±	Hole centres & posns: ±	

DESCRIPTION: HV DRIVER BOX ASSY

FINISH: [Blank]

PART No./DRG No. C30194

SHT 1

10 – Spare Parts List

The following spare parts can be ordered directly from the manufacturer:

Part Number	Description
Searchlight Spares	
C29429-00	LED
C29428-00	Fresnel Lens
C26630-00	Front glass
C21141-00	Bezel gasket
C16410-01	Tilt Motor
C16534-00	Tilt Motor Cover
C27103-01	Pan Motor Assembly
C26094-00	Pan Gear
C23945-01	Tilt Gear Bush Assembly (20 Teeth)
C21212-00	Tilt Gear (60 Teeth)
C22410-00	Diode
C29148-00	Tilt Motor 2 Way Connector
C10168-00	Base 'O' ring
C26103-00	Bearing Housing Gasket
C21567-00	Searchlight Heater
C24118-00	Fuse
C24021-00	Fuse Holder
C24813-00	Transformer (Model A7299 HV Only)
C24072-00	Rectifier (Model A7299 HV Only)
C24823-00	Capacitor (Model A7299 HV Only)
C28022-00	Micro Switches (Tilt)
C22382-00	Micro Switches (Pan)

Driver Spares

C22268-01	Breather Assembly
C30003-01	Driver
C29162-01	PSU

Joystick Spares

C14143-00	On / off Switch
C14444-01	Joystick

To prolong the life and performance of your product, we recommend that you only specify Francis Searchlights spare parts. This will ensure that any warranties on your equipment will not be invalidated.

When ordering spare parts please contact the Sales Department at Francis Searchlights Limited. Please always quote searchlight model and serial number. This will enable a fast response to your spares' requirements.