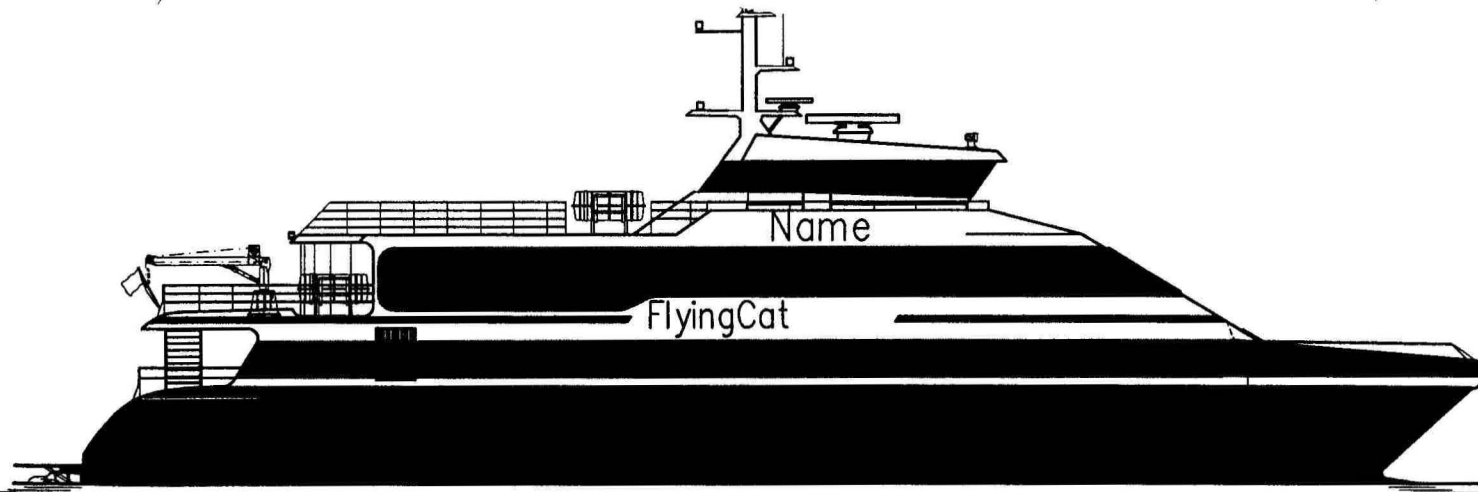
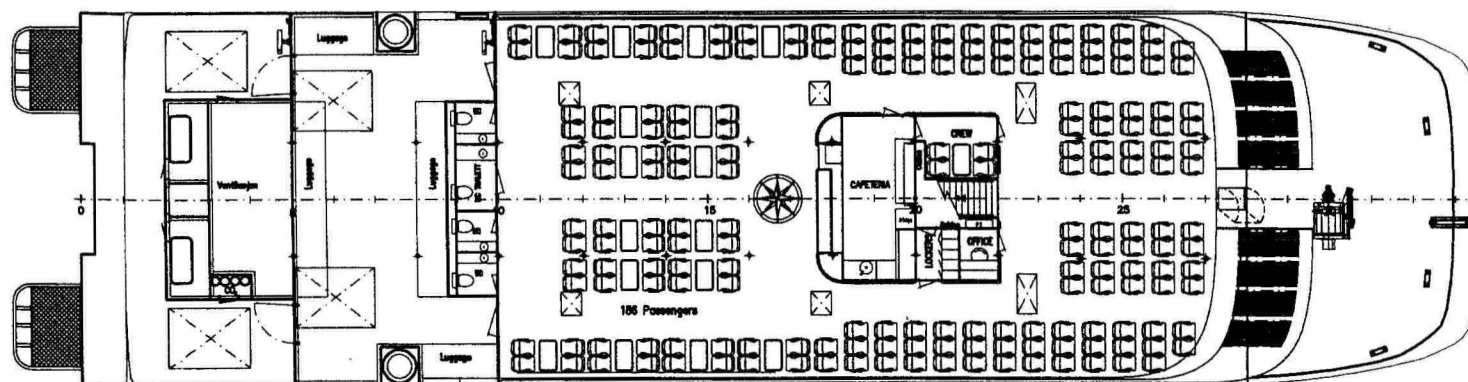
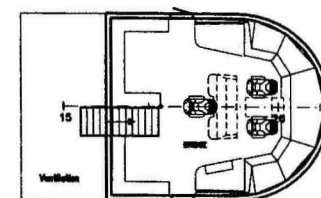
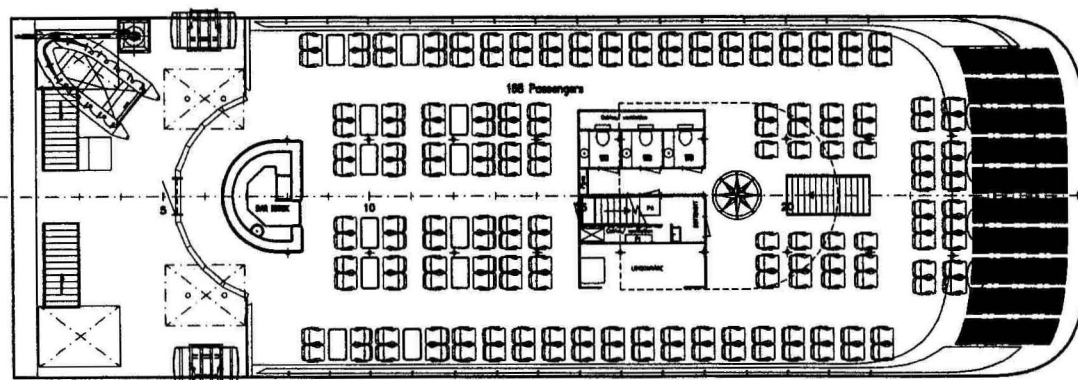




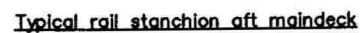
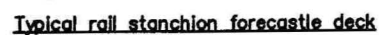
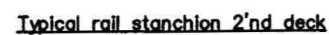
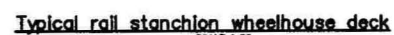
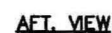
0 5 10 15 20 25 30



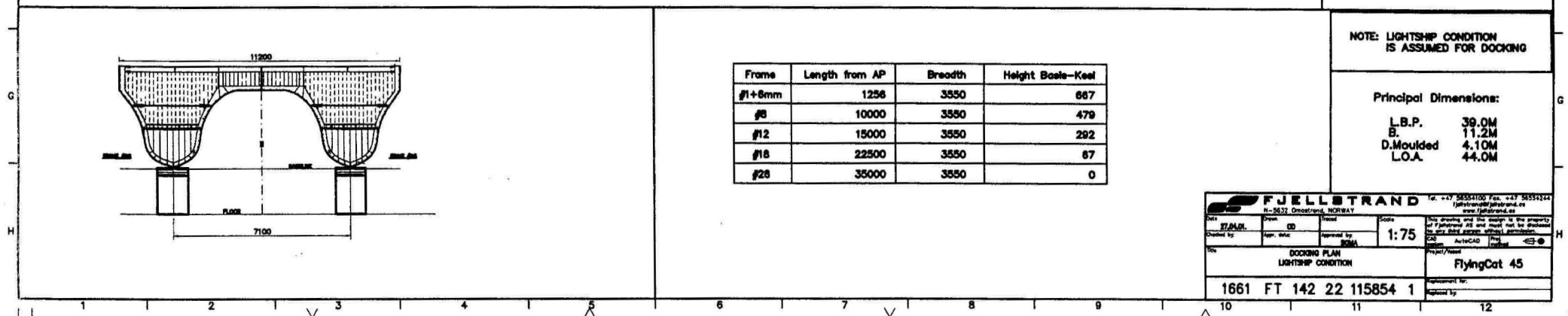
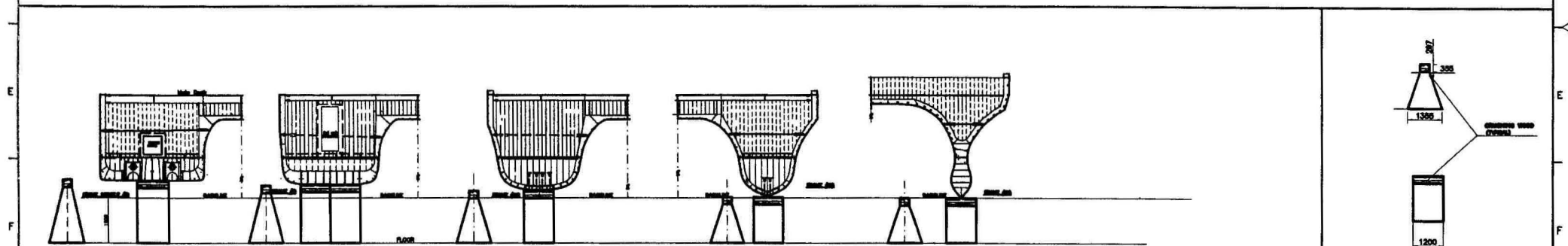
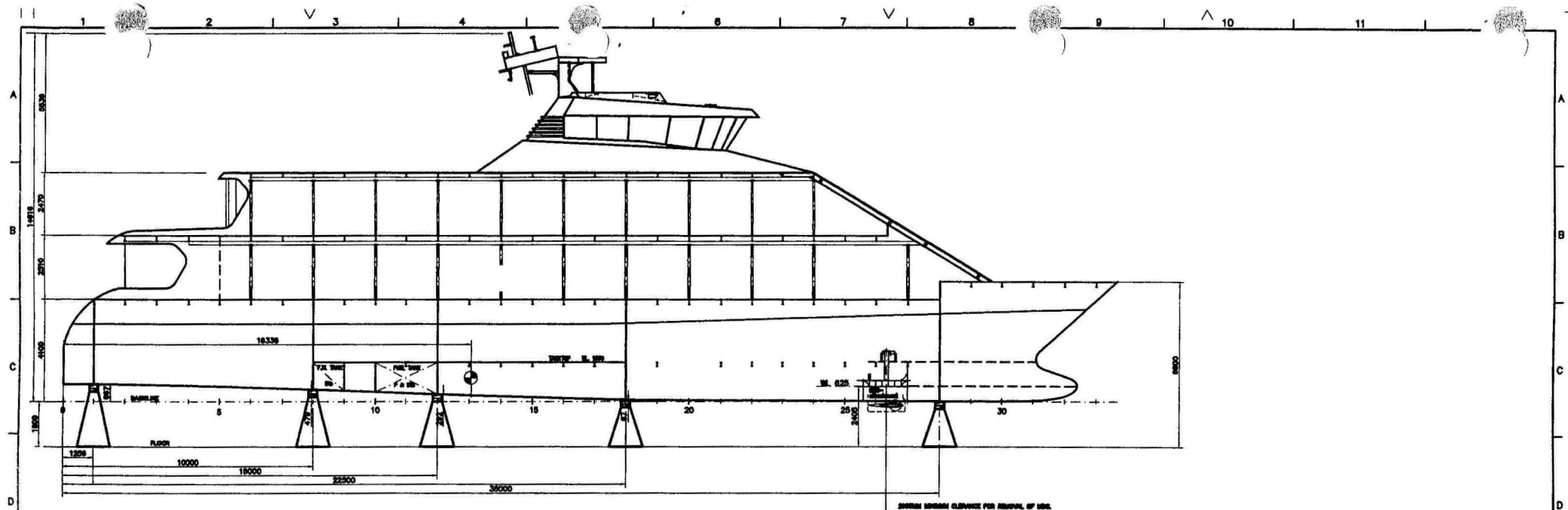
FlyingCat 45

Length o.a. 44,0m
Breadth moulded 11,2m
Passengers 354
Seat pitch 1000/900

 FJELLSTRAND				Tel. +47 50554100 Fax. +47 50554141 fjellstrand.no www.fjellstrand.no	
N-2632 Ørnesund, NORWAY					
Date	Drawn	Revised	Scale	This drawing and the design is the property of Fjellstrand AS and must not be distributed to any other person without permission.	
10.10.2000	S. Tøft		1:75		
Checked by	Appr. date	Approved by		Project/Name FlyingCat 45	
	25.09.01				
Title GENERAL ARRANGEMENT					
1661 FT 100 24 115471 A				Replacement for Replacement by	



#	14/12/00	data correction	MS	
#	20/08/00	House had windows, new bath.	ht	QP
#	12/06/01	Issued for production	sp	
Rev	A/rev	Date	Description	Made by
				Chk'd Appr.
Drawing			SP1 0333	
Previous plan taken			002366 dpc.	
Reference name			Reference no.	
 FJELLSTRAND NO-5672 Drammen, NORWAY			Tel. +47 865500 Fax. +47 865434 fjellstrand@fjellstrand.no www.fjellstrand.no	
Date	REV	Issue	This drawing and the design is the property of FJELLSTRAND AS and must not be distributed outside the company without permission.	
Drawn by	Appr. date	Appr. by	1:150	Project/Room
File	FLOORPLAN		FlyingCat 45	
1661 FT 100 20 115749 B			Information: Mr. Prepared by:	



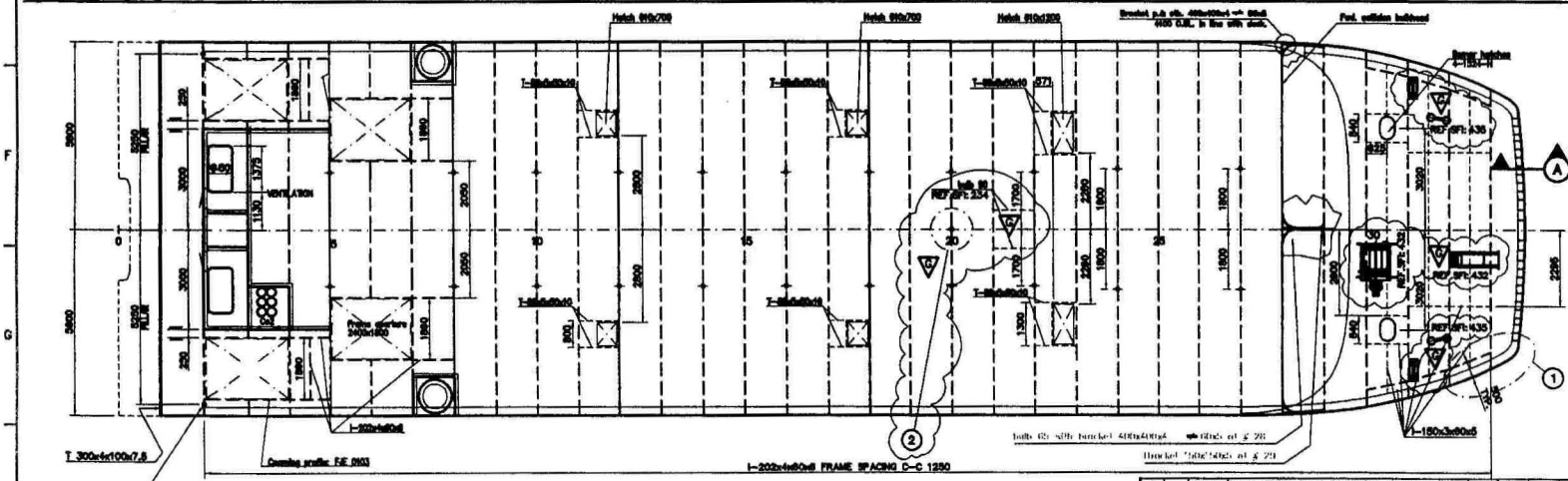
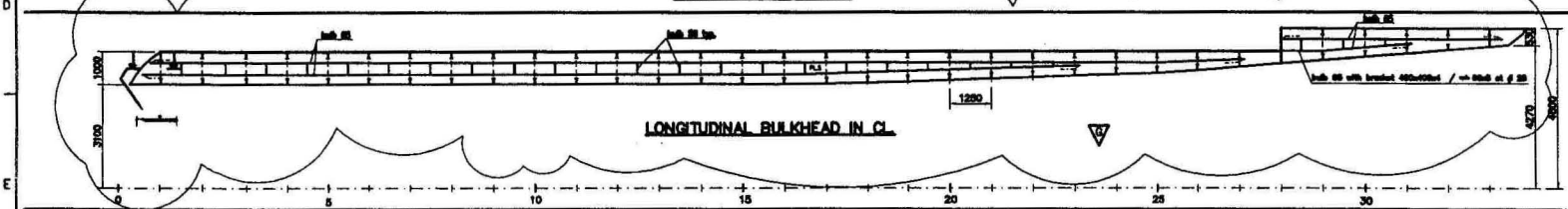
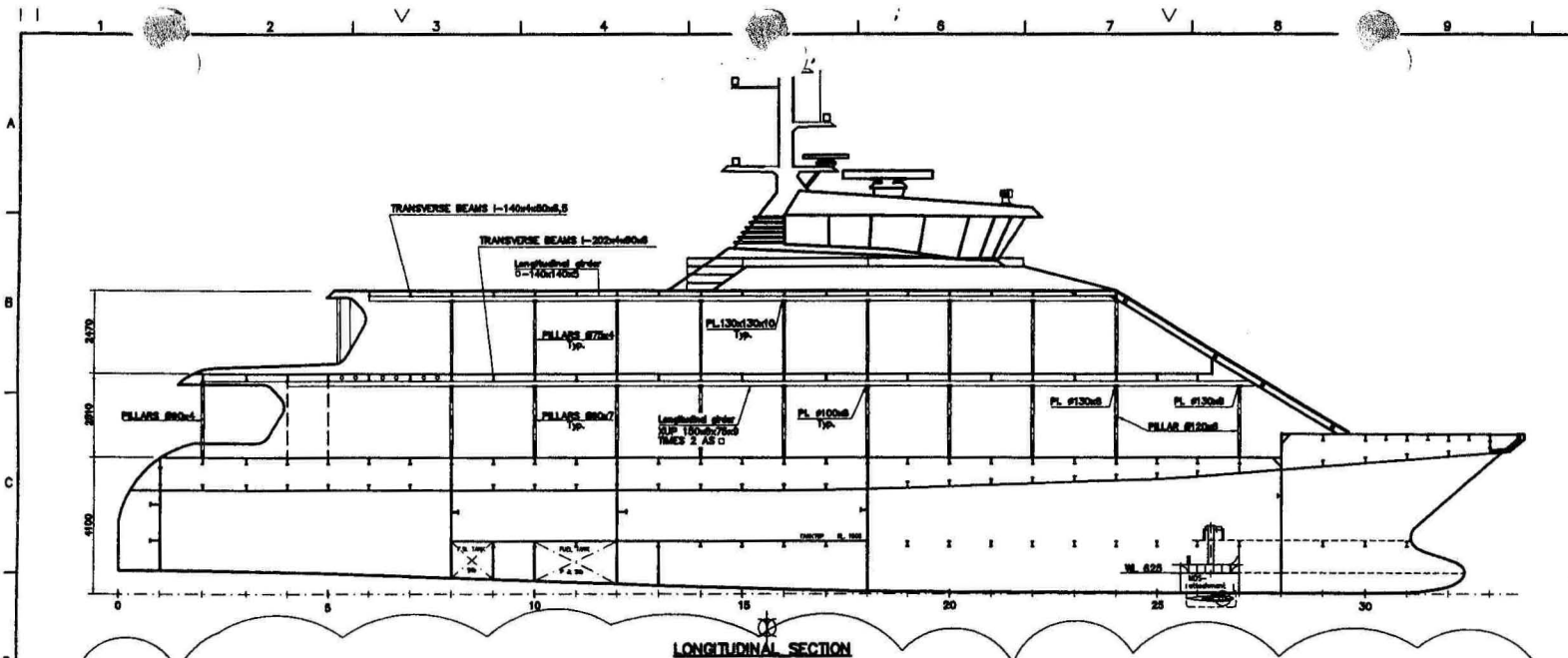
Frame	Length from AP	Breadth	Height Baseline-Keel
#1+8mm	1256	3550	667
#8	10000	3550	479
#12	15000	3550	292
#18	22500	3550	87
#28	35000	3550	0

NOTE: LIGHTSHIP CONDITION IS ASSUMED FOR DOCKING

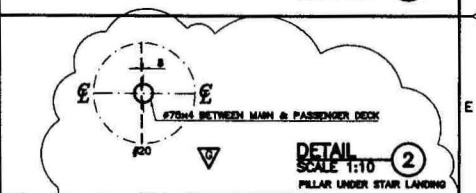
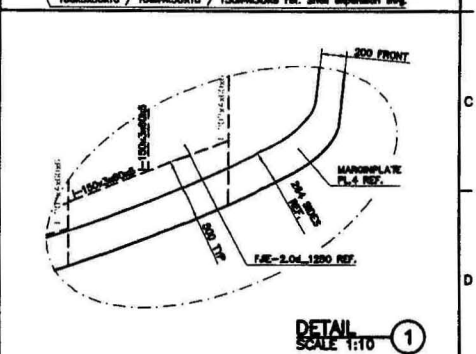
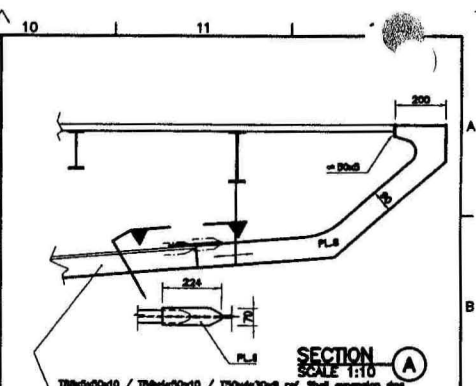
Principal Dimensions:

L.B.P. 39.0M
B. 11.2M
D.Moulded 4.10M
L.O.A. 44.0M

FJELLSTRAND				Tel. +47 58554100 Fax. +47 58554144	
N-5632 Orustrend, NORWAY				www.fjellstrand.no	
Date: 27.04.01	Drawn: []	Revised: []	Scale: 1:75	This drawing and the design is the property of Fjellstrand AS and must not be disclosed to any third person without permission.	
Checked by: []	Appr. date: []	Approved by: []	Software: AutoCAD	Plot: []	Plotter: []
Title: DOCKING PLAN LIGHTSHIP CONDITION				Project/Name: FlyingCat 45	
1661 FT 142 22 115854 1				Replacement for: []	
[]				[]	

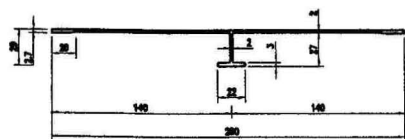
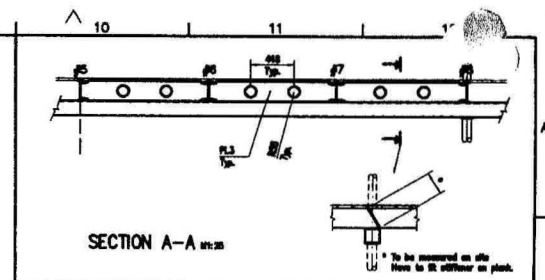


Rev.	Area	Date	Description	Drawn by	Checked by	Appr.
1		21.05.01	ADDED VERTICAL PILLAR ON #20 (Det. 2) 400 IN G.	des		
2		03.05.01	ADDED VERTICAL PILLAR ON #2	des		
3		27.04.01	Changed measure of engineering entrance.	des	S.O.N.A.	
4		24.04.01	ADJUSTED MOS-ATTACHMENT	des		
5		18.04.01	Referenced dimensions in section A	des		
6		09.04.01	Strainers on hull within Deck beam #1. Details added	des	S.O.N.A.	
7		28.03.01	Hull-framing in longitudinal	des	S.O.N.A.	
8		23.08.00	Issued for production	S.H.	S.O.N.A.	

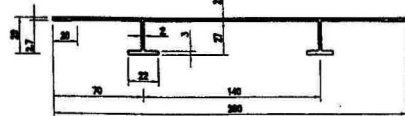


Reference name	Reference no.
Shell expansion	SPI 231
Intercoastals under deck, Superstructure	SPI 253
Plan of superstructure decks	SPI 253
Engine room hatch & Hatch w/ panel toggle	SPI 304
Engine-room, Stringers & Frames	SPI 223
Typical frames in hull	SPI 232
Bulkheads in hull	SPI 236
Midsection frame	SPI 232

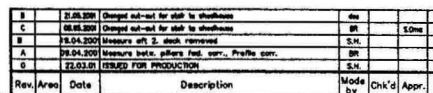
FJELLSTRAND		N-2632 Ormestrand, NORWAY		Tel. +47 58551100 Fax. +47 58551244	
Drawn by	24.08.00	Rev.	des	Appr.	des
Checked by	23.03.01	Appr.	S.O.N.A.	Scale	1:75
LONGITUDINAL SECTION AND PLAN OF MAIN DECK FRAME SPACING 1250					
1661 FT 234 22 113167 G					



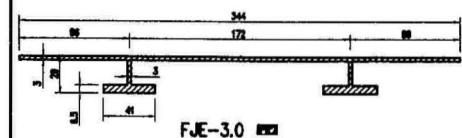
SCALE 1:1



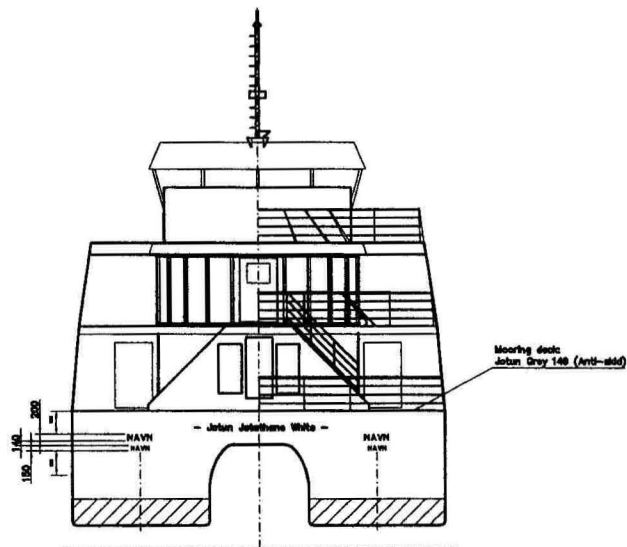
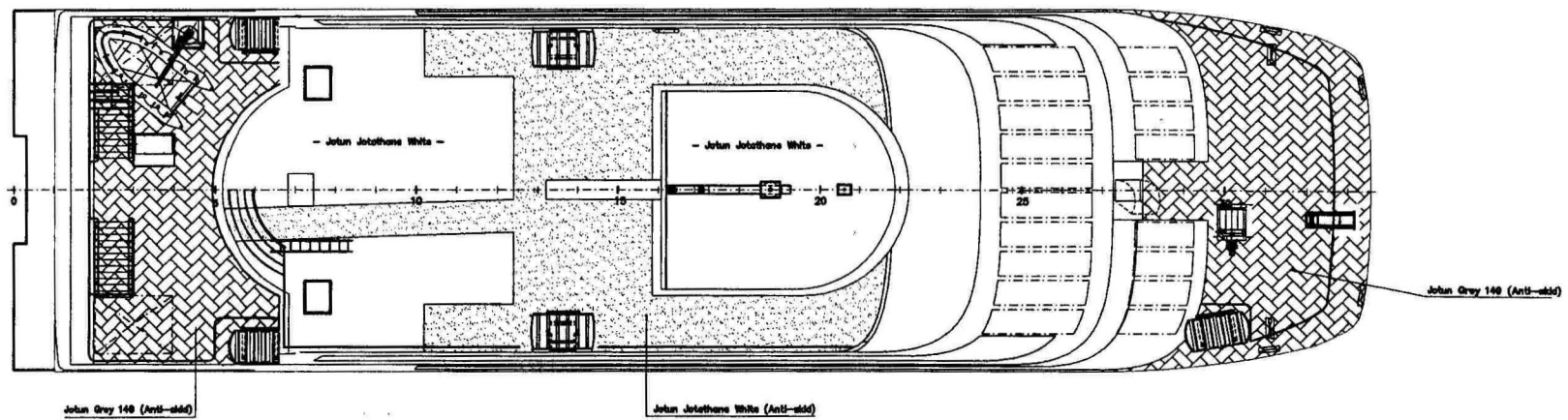
SCALE 1:2



Plan of extruded profiles in sides
SCALE 1:100

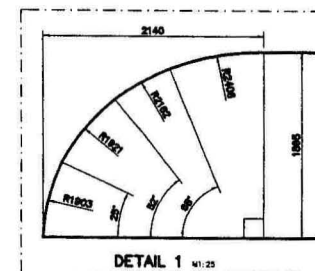
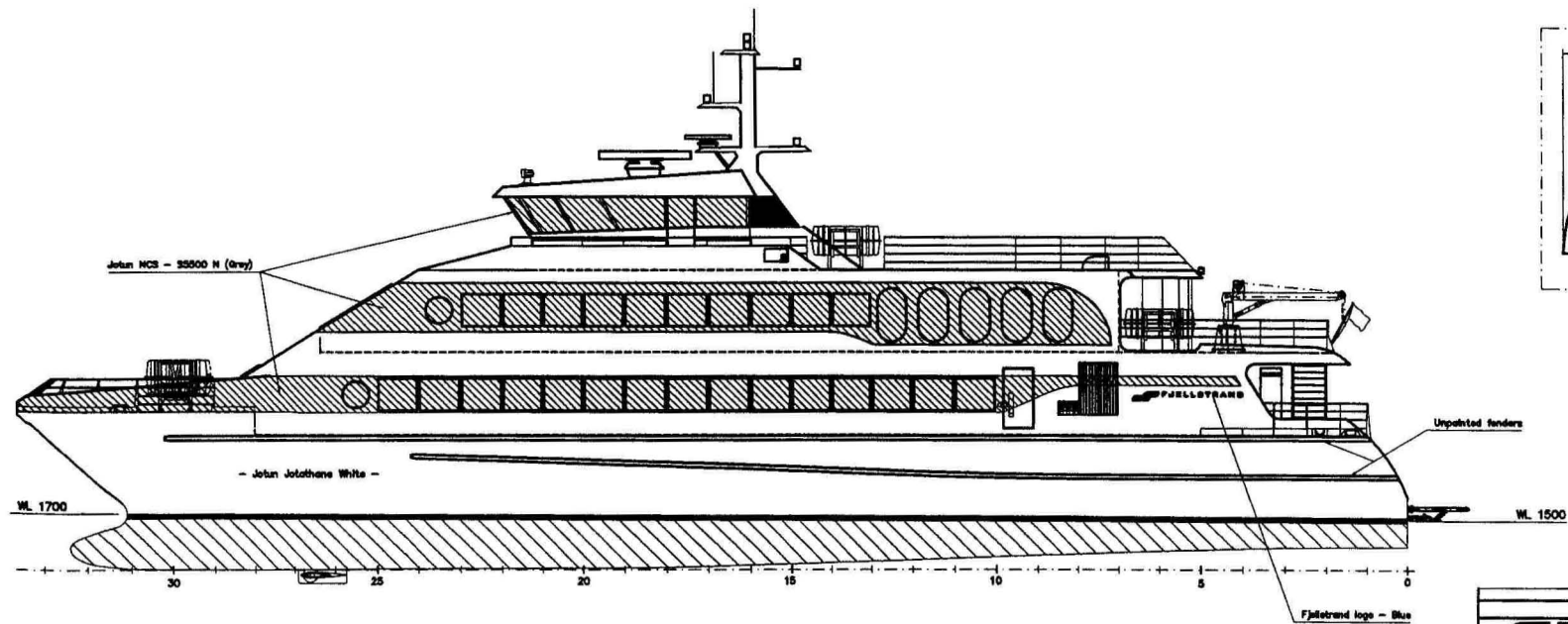
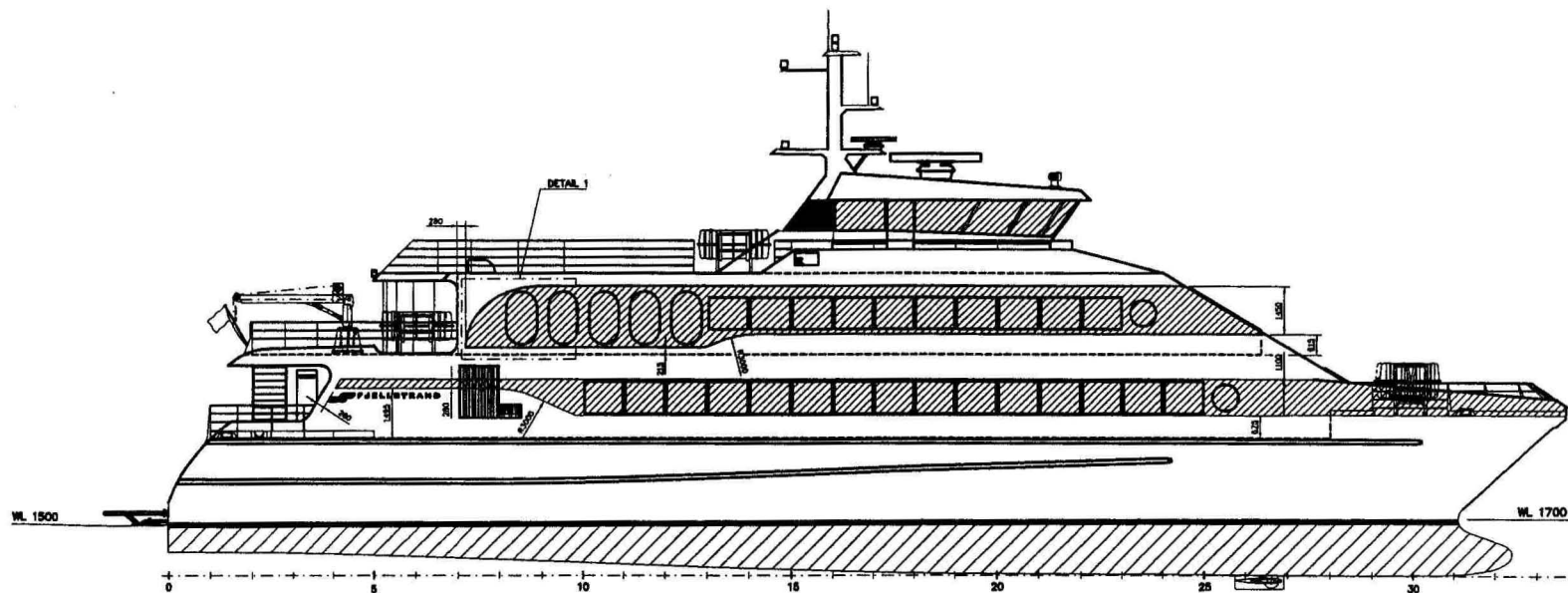


Wharfedale Structures			SPT 231
Superstructures Front			SPT 233
Longitudinal section and plan of main deck			SPT 234
Midsection Frame			SPT 232
Reference name			Reference no.
 FJELLSTRAND N-5632 Gnoststrand, NORWAY			Tel. +47 5854100 Fax. +47 5854244 fjellstrand@fjellstrand.no www.fjellstrand.no
Date	Drawn	Issue	Scale
08.06.98			1:75
Checked by	Appr. date	Approved by	
		S. G. G.	
Title			Project No.
PLAN OF SUPERSTRUCTURE DECKS			FlyingCat 45
1661 FT 253 22 115495 D			Replacement for:
			Replaced by:



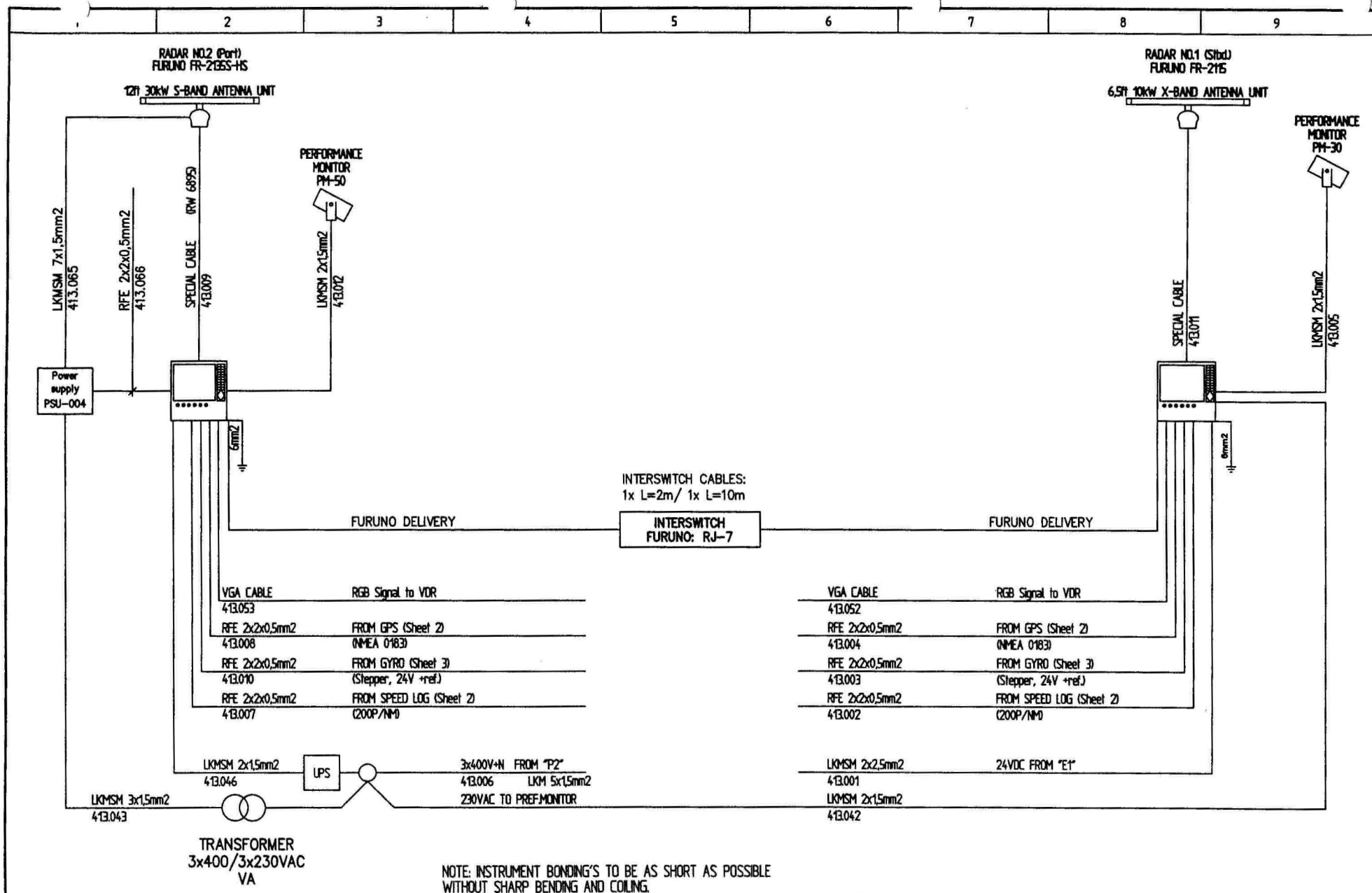
Rev	Area	Date	Description	Rev	Area	Date	Description
0		26.10.2009	Issued for production				

Reference name				Reference no.			
FJELLSTRAND				N-2632, Omstads, NORWAY			
Date	Drawn	Revised	Scale	This drawing and the design is the property of Fjellstrand AS and must not be disclosed to any third person without permission.			
06.07.2009	BR		1:75				
Checked by	Appr. date	Appr. by	Appr. date				
The				Project/Phase			
EXTERNAL PARTING PLAN AND ART VIEW				FlyingCat 45			
1661 FT 272 24 115773 0				Approved for			
				Signed by			

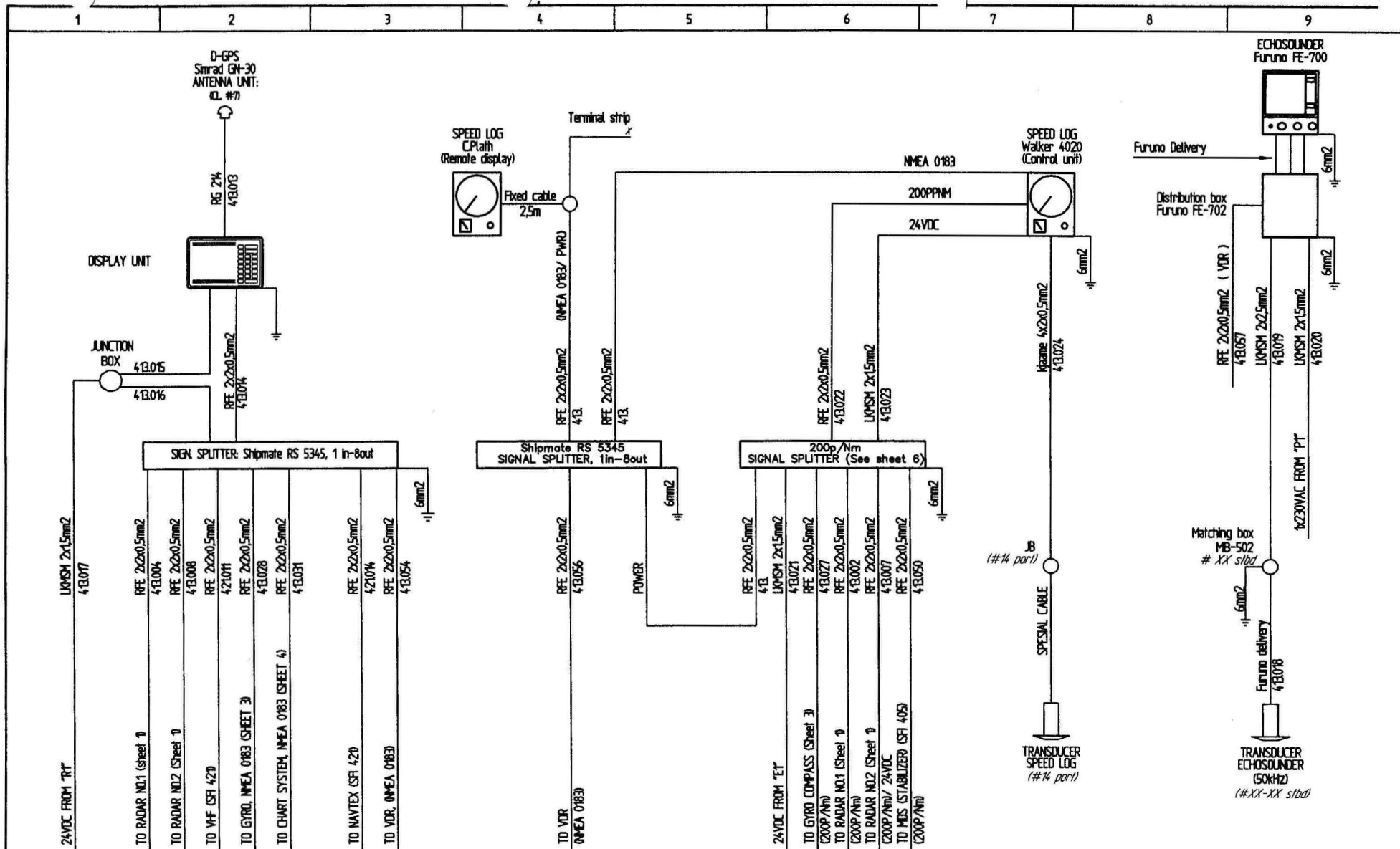


Rev	Area	Date	Description	Made by	Chk'd	Appr.
0		26.10.2020	Issued for production			

Reference name				Reference no.			
FJELLSTRAND				N-5032 Omstrand, NORWAY			
N-5032 Omstrand, NORWAY				www.fjellstrand.no			
Scale	1:75	This drawing and the design is the property of Fjellstrand AS and must not be disclosed to any third person without permission.		C/A		Fjellstrand AS	
EXTERNAL PAINTING				FlyingCat 45			
SIDE VIEW				1661 FT 272 24 115860 0			
1661 FT 272 24 115860 0				Approved by:			



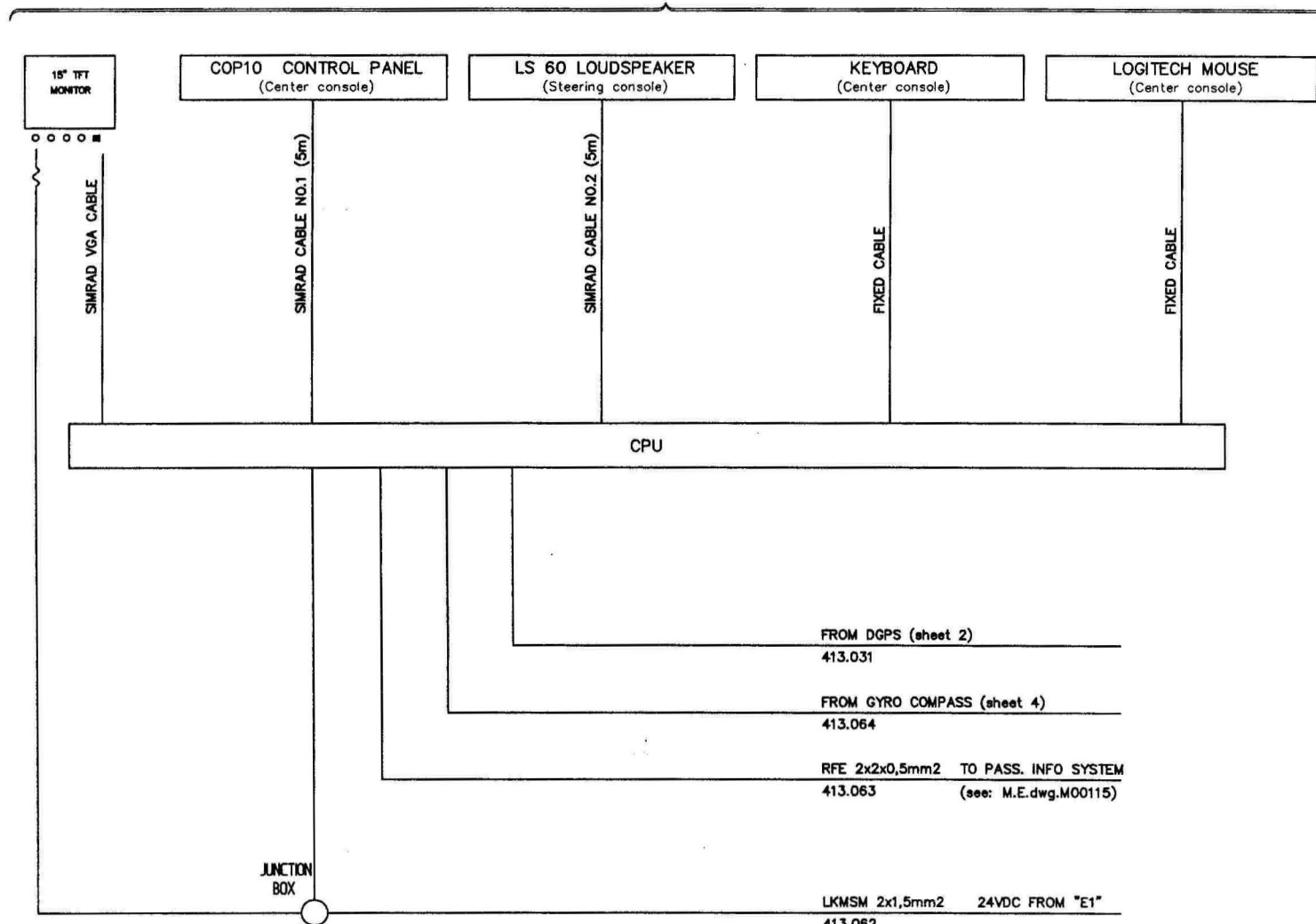
B	CHANGE GYRO SIG.	18.01.02	A.Lie	Date	20.09.01	NAVIGATION EQUIPMENT ONE LINE DIAGRAM	MARITIM elektro as H-5632 ØMASTRAND Tlf: +47 56550560 Fax: +47 56554202	RADAR	Project no.		=	
A	ADD INTERSWITCH/PSU-004	04.01.02	A.Lie	Drawn	SM				FJELLSTRAND AS		+	
A	CABLES RADAR 2 CABLES PREF-MONITOR	04.01.02	A.Lie	Approval					Scale		Sheet 1	
Rev. no.	Description	Date	Drawn	Standard	EC 617	Original desig.	Repl. desig.		%	SP no. / DWG no.	1661 413 M00105-B	6



NOTE: INSTRUMENT BONDING'S TO BE AS SHORT AS POSSIBLE
WITHOUT SHARP BENDING AND COILING.

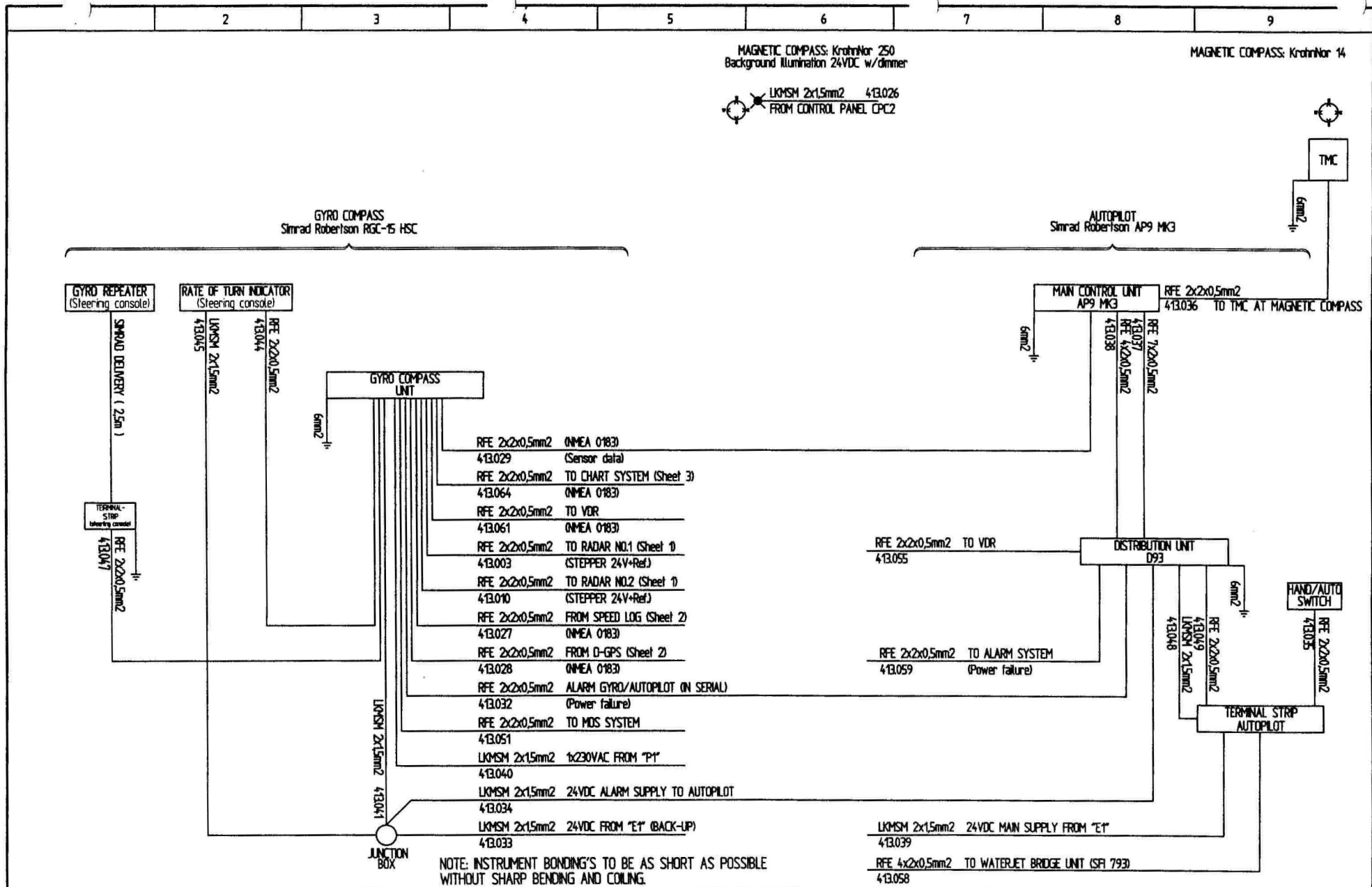
B 413.030 SPARE CABLE 18.01.02 A.Lie Date 02.09.01 NAVIGATION EQUIPMENT ONE LINE DIAGRAM MARITIM elektro as N-5632 OMASTRAND TF: +47 56550560 Fax: +47 56554202 Original des: Repl. by: Repl. by:	B ADD SIGN. SPLITTER LOG REMOTE DISPLAY 18.01.02 A.Lie Drawn SH	A CABLE 413.031 CHART SYSTEM 04.01.02 A.Lie Approved	Rev. no. Description Date Drawn Standard IEC 617	Project no. FJELLSTRAND AS Scale % SFI no. / DWG no. 1661 413 M00105-B Sheet 2 of 6
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ELECTRONIC MAP SIMRAD Robertson CS56



NOTE: INSTRUMENT BONDING'S TO BE AS SHORT AS POSSIBLE
WITHOUT SHARP BENDING AND COILING.

				Date	04.01.02	NAVIGATION EQUIPMENT ONE LINE DIAGRAM		MARITIM elektro as N-5632 ØHASTRAND TR: +47 56550560 Fax: +47 56554202	CHART SYSTEM	Project no.	FJELLSTRAND AS		
				Drawn	ALL					Scale	SP no. / DWG no.	Sheet	3
A	ADD CHART SYSTEM	04.01.02	ALL	Approved	NH					%	1661 413 M00105-B	of	6
Rev. no.	Description	Date	Drawn	Standard		Original dwg	Repl. no.	Repl. by					

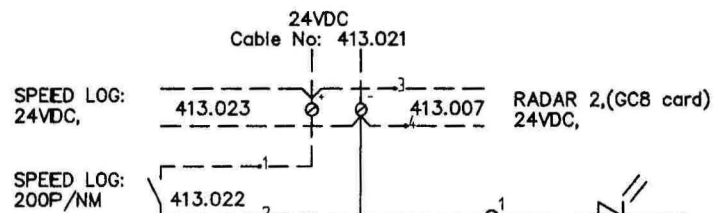


NAVIGATION EQUIPMENT		DATE		10/01/01	
ONE LINE DIAGRAM		DRAWN		SH	
A		CABLE NO. 413.064		04.01.02	
CHART SYSTEM		ALL		Approved	
Rev. no.	Description	Date	Drawn	Standard	EC 617
					Original disp.
					Repl. Rev.
					Repl. Rev.

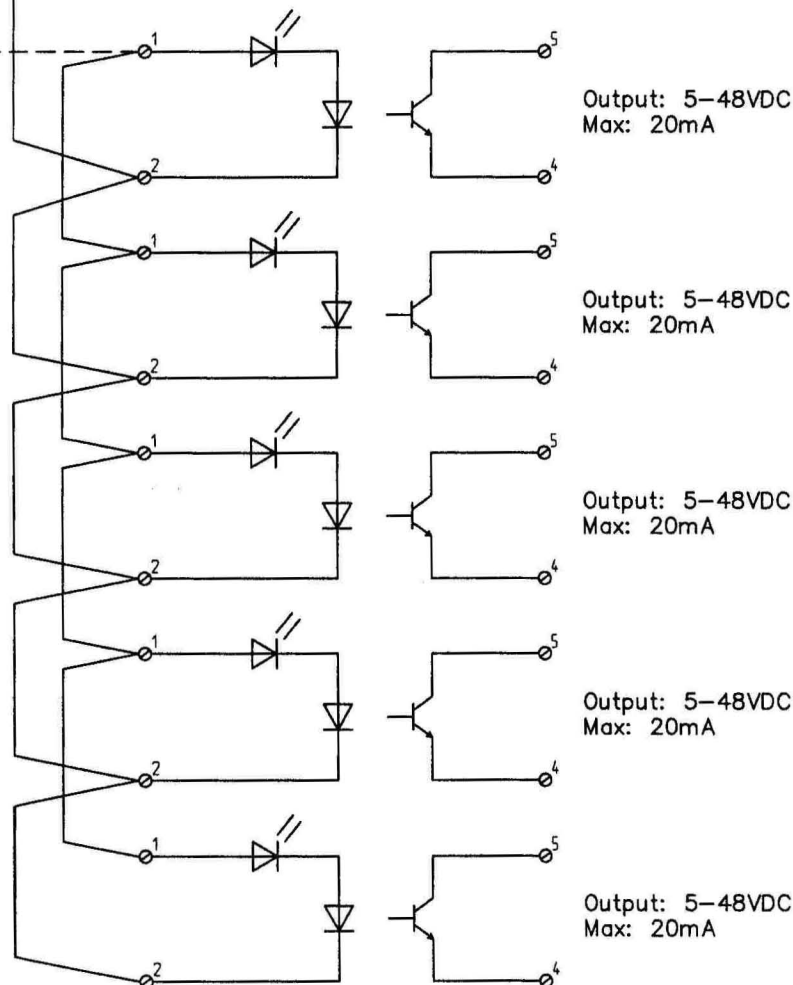
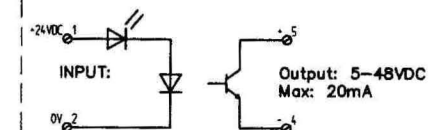
MARITIM
elektro as
M-5632 OMASTRAND
TEL: +47 56650560 FAX: +47 56654202

GYRO & MAGNETIC COMPASS
AUTOPILOT

Project no.		FJELLSTRAND AS	
Scale		SP no. / DMS no.	
%		1661 413 M00105-B	
		Sheet 4	
		of 6	

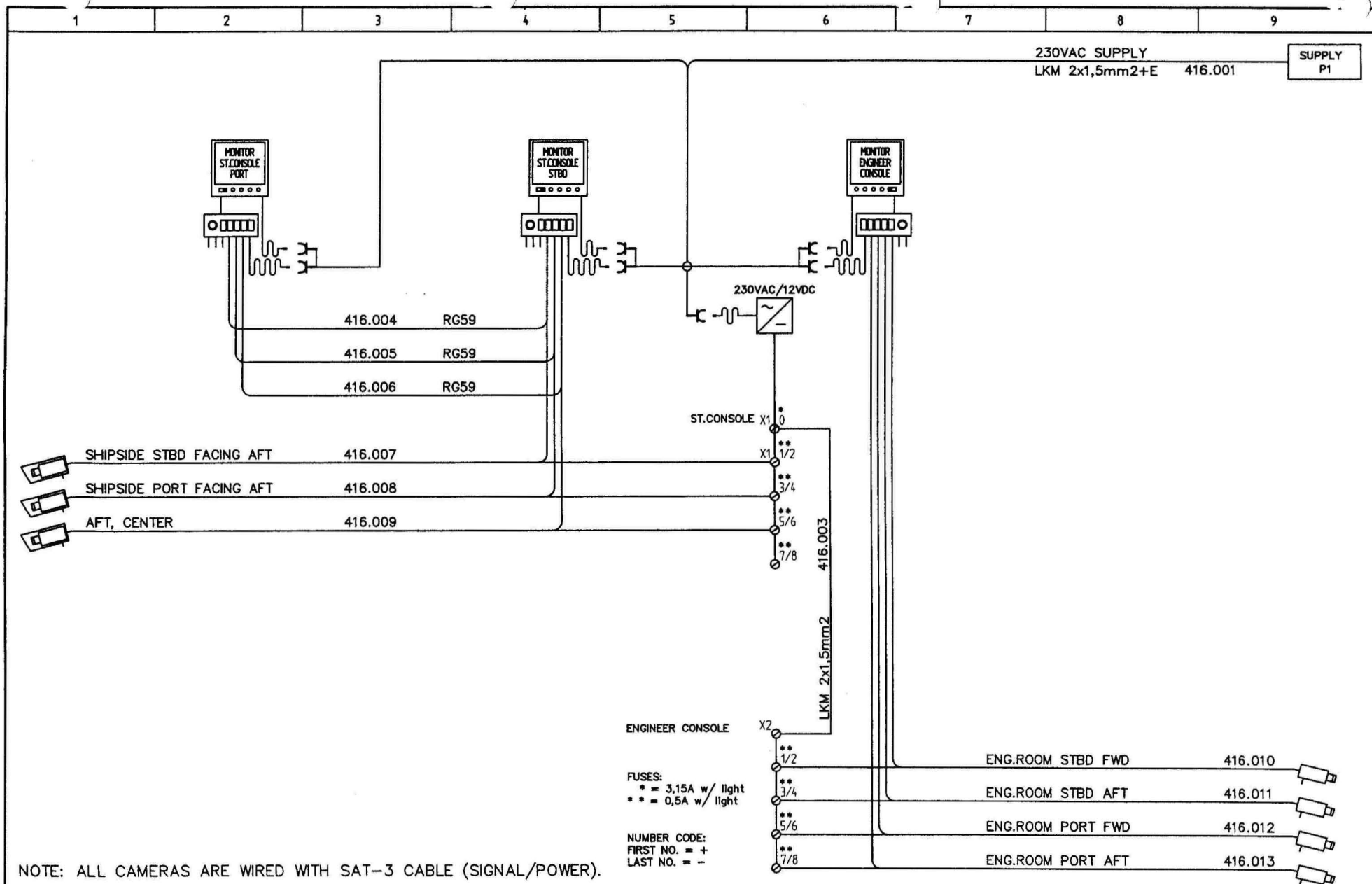


SPLITTER SPEED LOG
(Best no.: 3338836594)
Weidmuller MCZ: 0-24AC/DC, 20mA



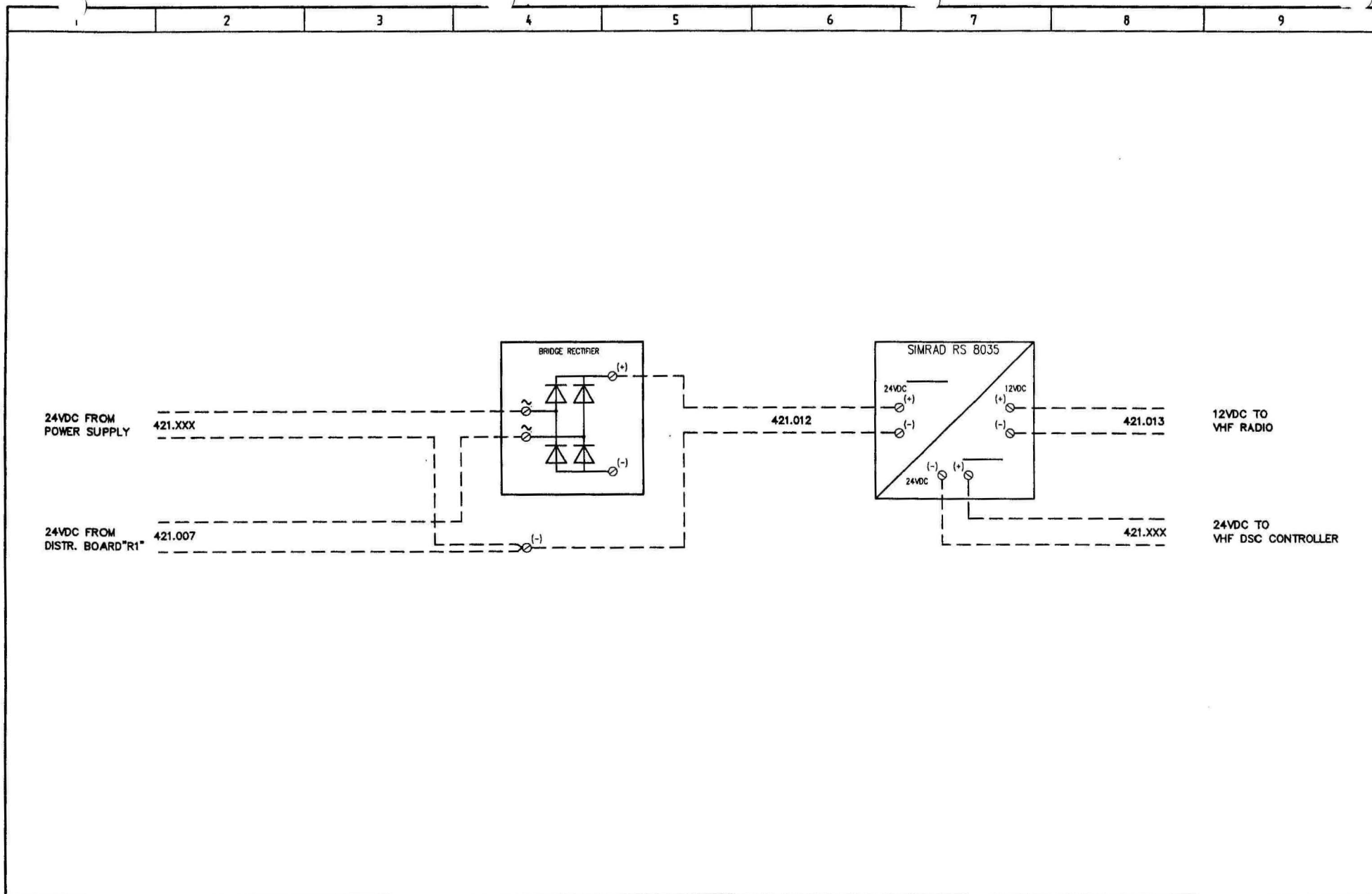
NOTE: INSTRUMENT BONDING'S TO BE AS SHORT AS POSSIBLE
WITHOUT SHARP BENDING AND COILING.

Rev. no.		Description	Date	Drawn	Standard	Original disp.	Repl. no.	Repl. disp.	Project no.		Sheet	
B		ADD. 413.007, 022.023	22.01.02	A.Lie	Drawn	Alk	NAVIGATION EQUIPMENT ONE LINE DIAGRAM		FJELLSTRAND AS		6	
A		NEW DWG.	04.01.02	A.Lie	Approved	HN	MARITIM elektro as N-5632 ØMASTRAND Tlf: +47 56550560 Fax: +47 56554202		Scale		6	
							PHOENIX SIGNAL SPLITTER (SPEED LOG)		SPR no. / DWG no.		6	
									%		1661 413 M00105-B	
											6	

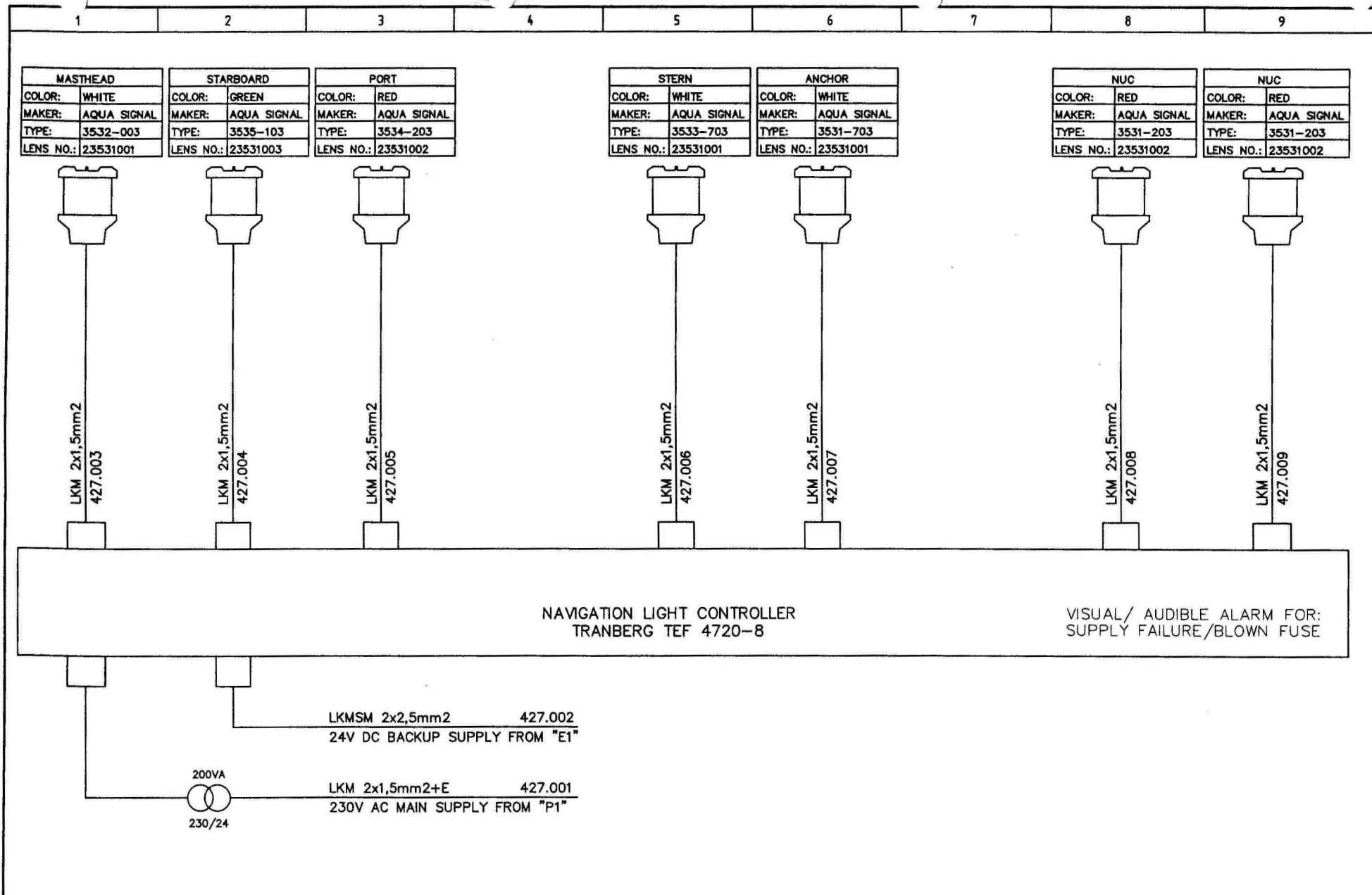


				Date	21.06.01	TV SUPERVISION SYSTEM, ONE LINE DIAGRAM	MARITIM elektro as H-5632 ØMASTRAND Tlf: +47 56550560 Fax: +47 56554202	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-</
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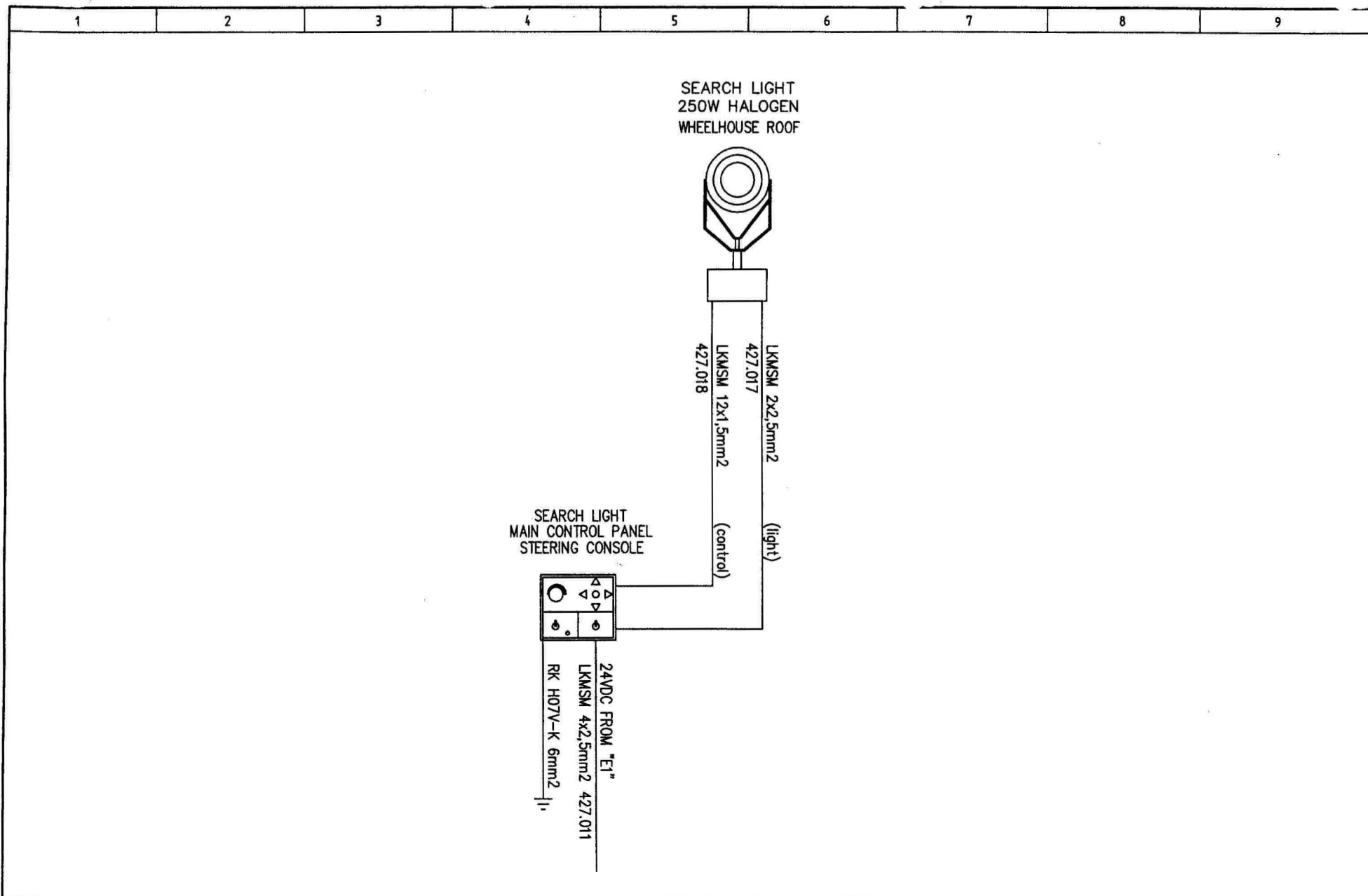




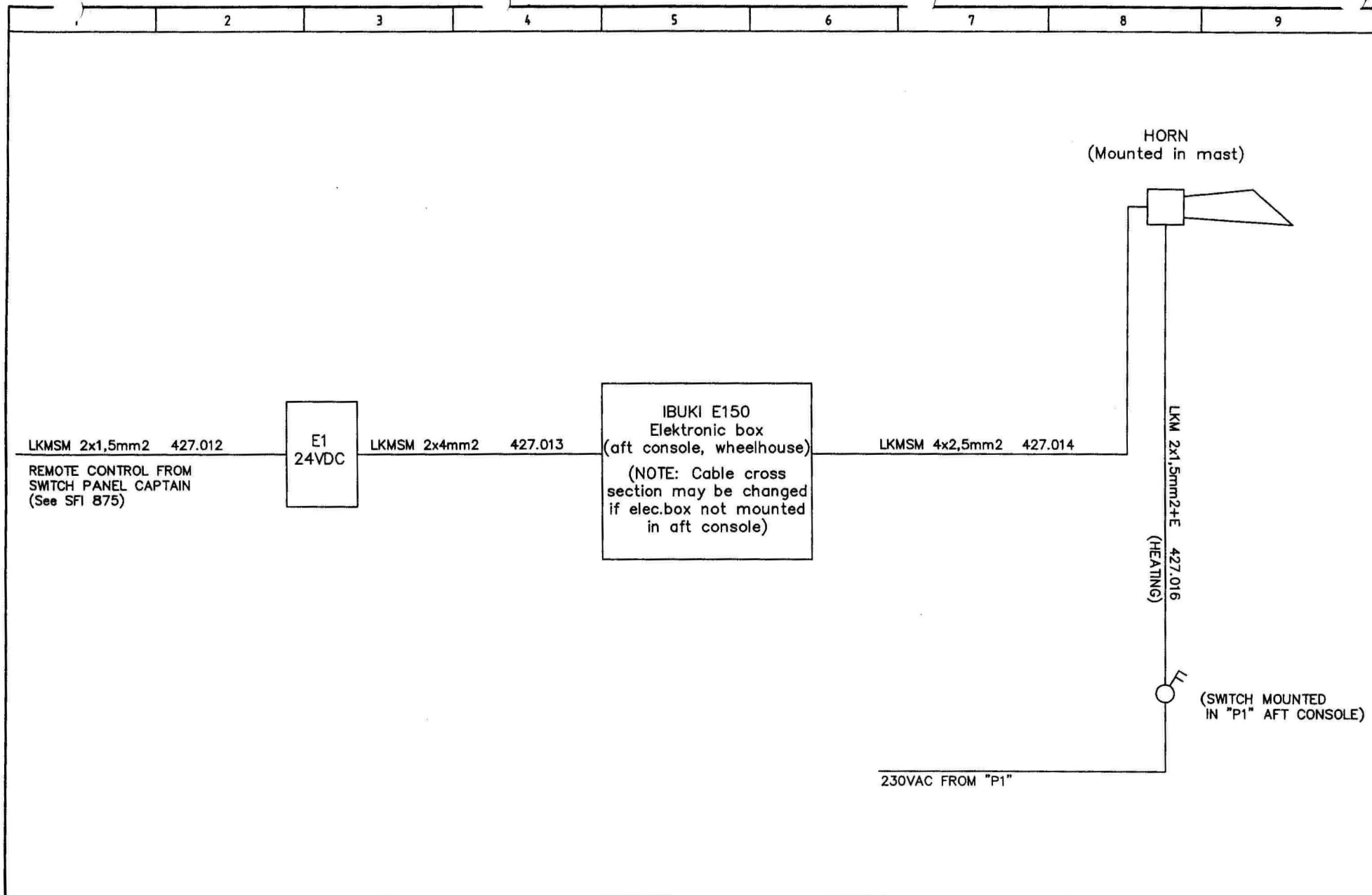
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				Drawn	ALLie							+
B	Add. new diag.	09.02.02	ALLie	Approved	NN							
Rev. no.	Description	Date	Drawn	Standard	-	Original diag	Repl. by	Repl. by	Scale	SPT no. / DWG no.	Sheet	3
									%	1661 421 M00108-B	or	3



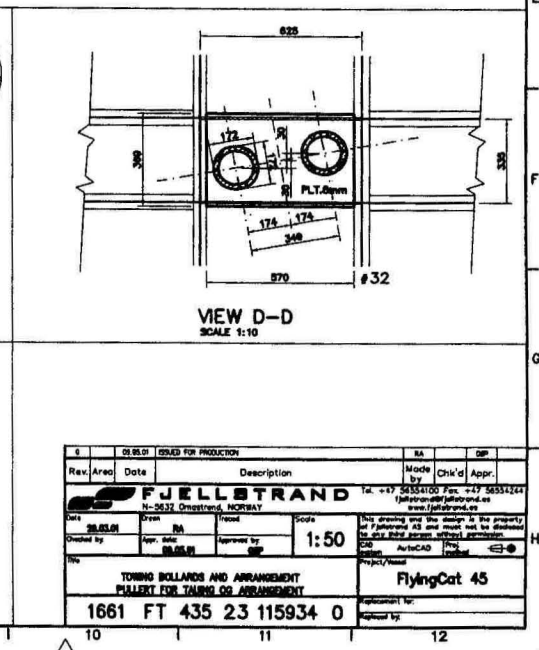
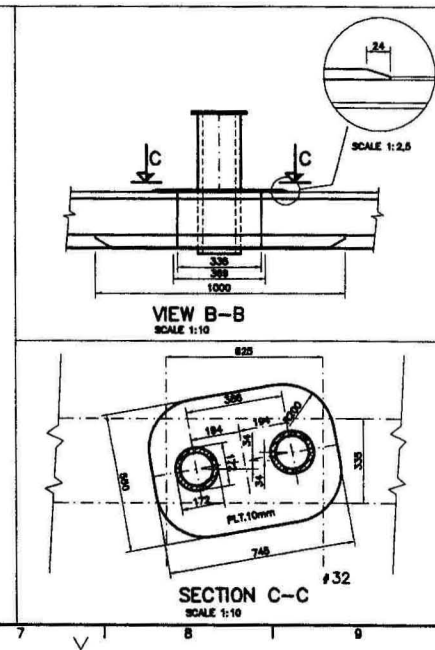
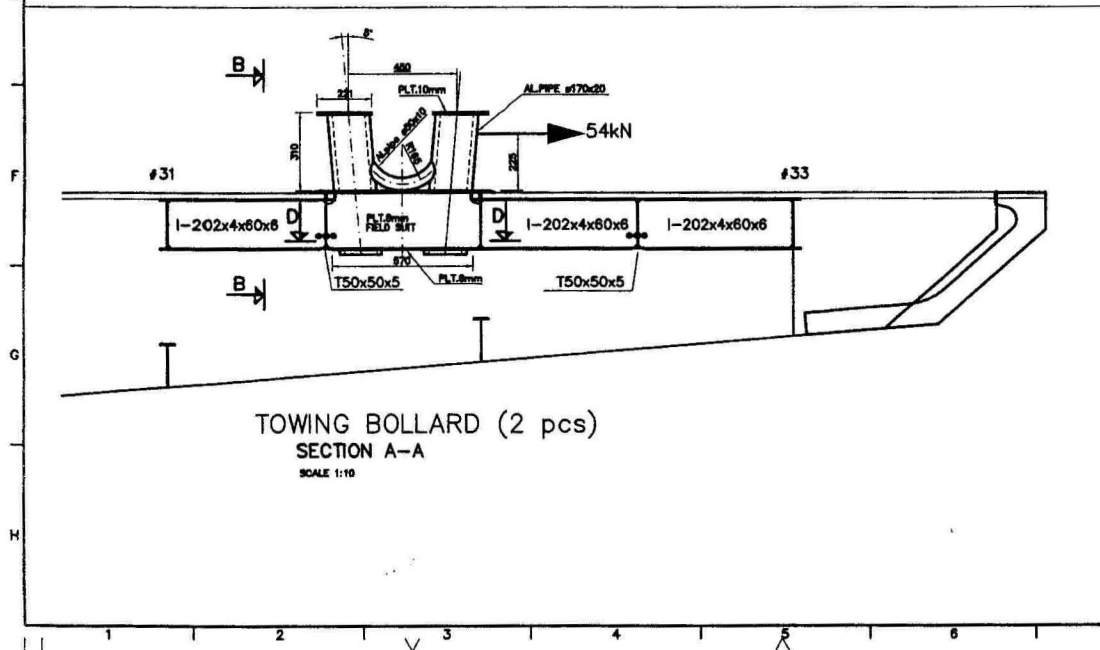
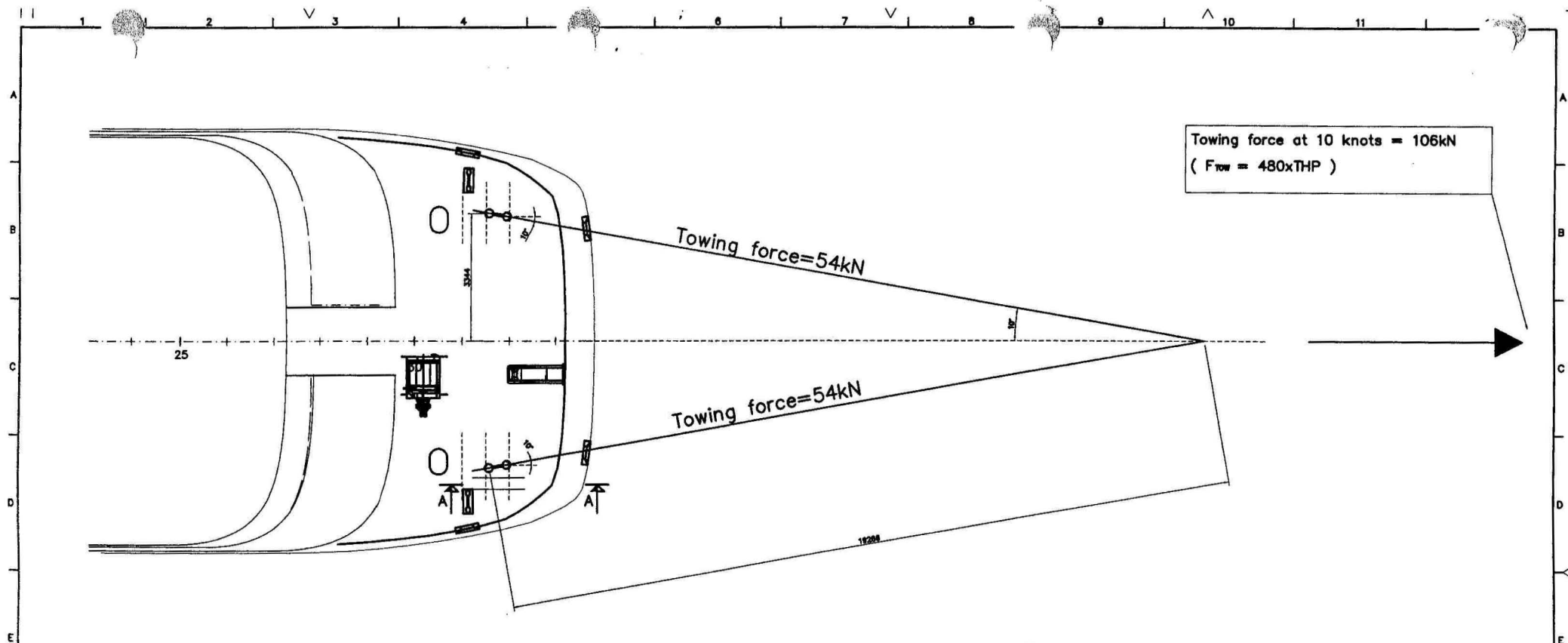
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				Drawn	ALL					Fjellstrand as		+
A	Rem. terminal strip	01.10.01	S.M.	Approval	IKH					Scale	SI no. / DWG no.	
Rev. no.	Description	Date	Drawn	Standard	-	Original desig	Repl. desig	Repl. by	%	1661 427 M00111-A	3	

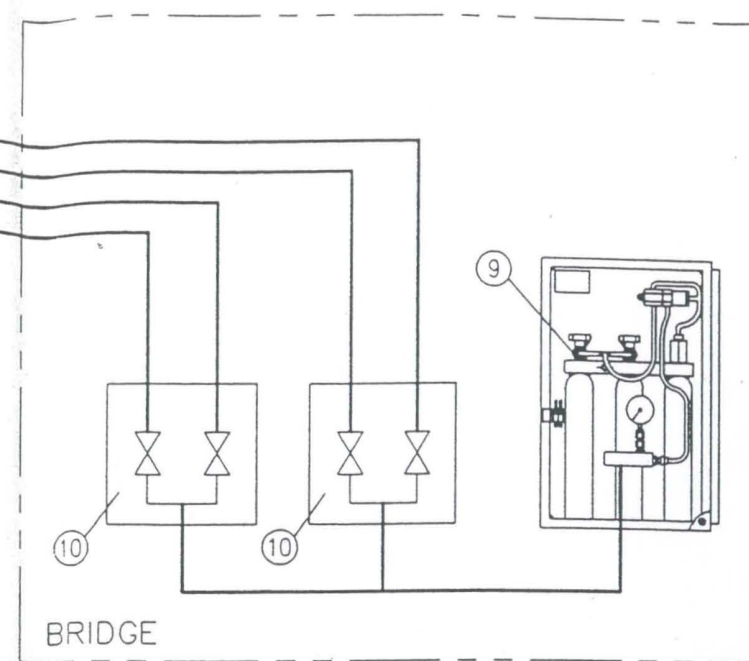
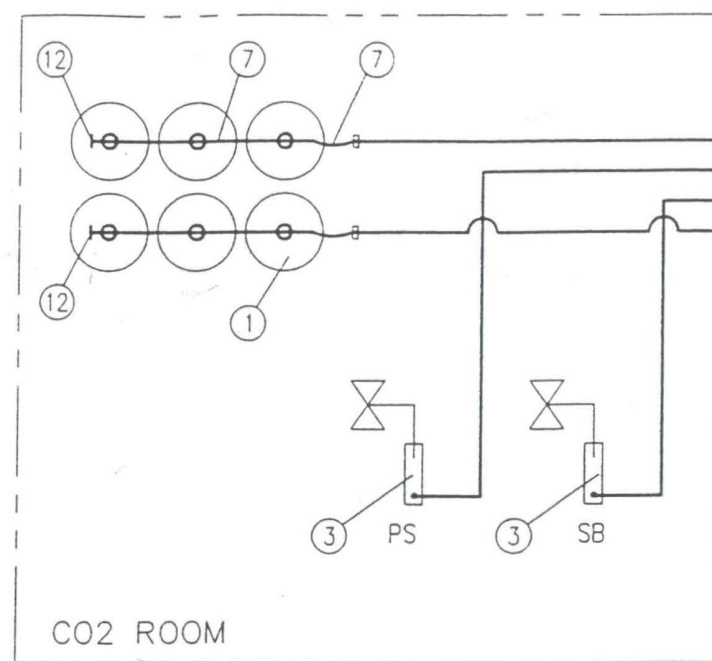


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				Drawn	ALL						
				Approved	HN						
Rev. no.	Description	Date	Drawn	Standard	-	Original disp.	Repl. by	Repl. by	Scale	SFI no. / DMS no.	Sheet 2 of 3
									%	1661 427 M00111-A	

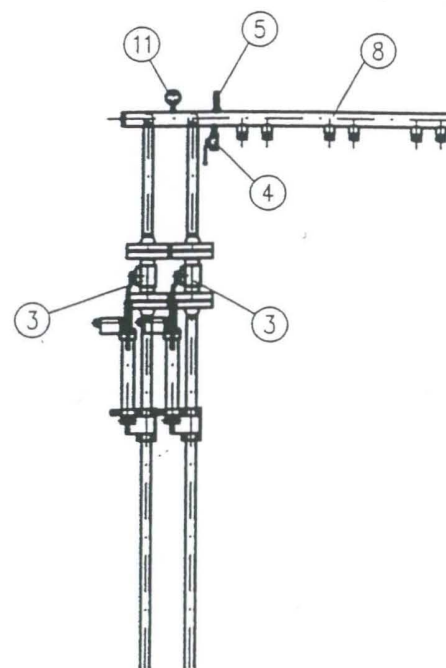
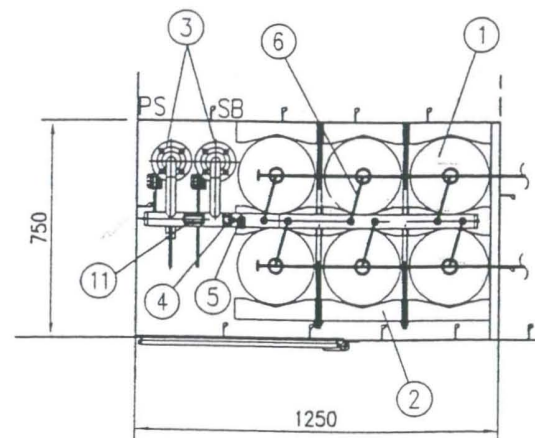


		Date	2006/01	SIGNAL LIGHTS, HORN AND SIGNAL EQUIPMENT, ONE LINE DIAGRAM		MARITIM elektro as N-5632 OMASTRAND TR: +47 56550560 Fax: +47 56554202		Project no.		=	
		Drawn	ALL					Fjellstrand as		+	
		Approved	MM					Scale		SFI no. / DWG no.	
Rev. no.	Description	Date	Drawn	Standard	Original diag	Repl. Rev.	Repl. by	%		1661 427 M00111-A	
										Sheet	3
										of	3





NOTE:
PS = PORT SIDE
SB = STARBOARD



12	1	END PLUG 3/8" BSP FOR PILOT LINE		310500	N/A
11	1	PRESSURE GAUGE 0-160 BAR		307001	33177-C3
10	2	VALVE RELEASE CABINET		306320	33173-C3
9	1	SUPPLY CABINET		306310	33172-C3
8	1	MANIFOLD 2 ROW DN25		PRO 03	210539-M3
7	6	FLEXIBLE PILOT HOSE 1/4" x 303mm		304010	33166-C3
6	6	FLEXIBLE DISCHARGE HOSE 1/2" x 350mm		304001	33165-C3
5	1	RELIEF VALVE		303401	33162-C3
4	1	AIR/SHORE CONNECTION		303301	33161-C3
3	2	VALVE 1" PNEUMATIC		303225	33158-C3
2	1	FASTENING ASSEMBLY 2x3		302005	33153-C3
1	6	CYLINDER 45Kg PNEUMATIC OPERATED		301001	33144-C3
Item no.	Qty.	Description	Material	Part no.	Dwg. no.

Date	18.07.2001	Constr.	RCG	Traced.	TSK	Scale.	1:25
Replaces:		Replaced by:		Projection.			

**Heien
Larsen**

HEIEN - LARSEN A/S
P.O.BOX 234
3431 SPIKKESTAD
NORWAY
Tlf. : +47 31 29 55 00
Fax: +47 31 29 55 01

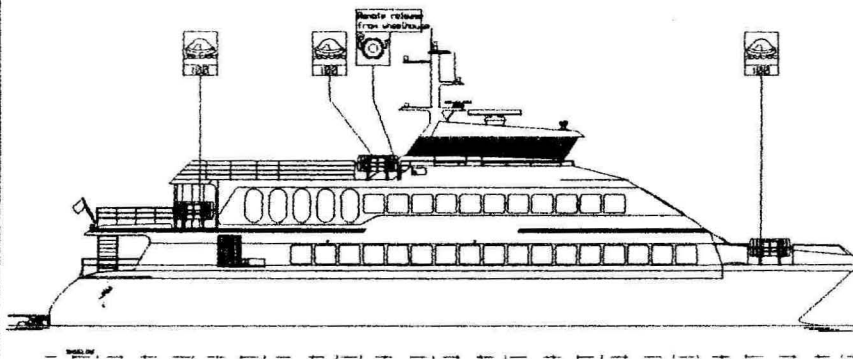
CO2 FIRE EXTINGUISHING SYSTEM
CO2 ROOM ARRANGEMENT
NB1661
FJELLSTRAND

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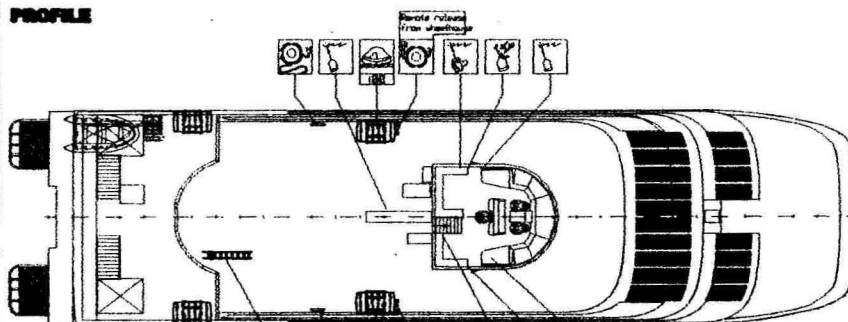
Drawing no.
210538-M3

Rev.	Date	Description	Area	Constr.	Checked	Approved
△						
△						
A	18.07.01	ISSUED FOR APPROVAL		RCG	IAN	RL

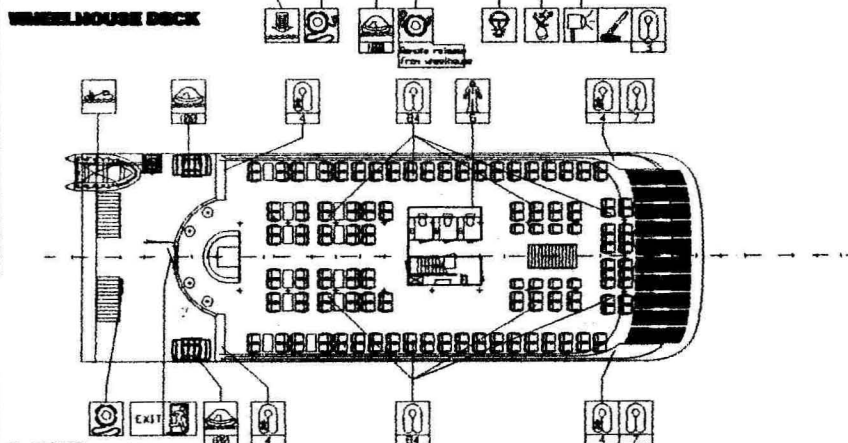
Project no.	11271	Part no.		Rev.	A	File no.	
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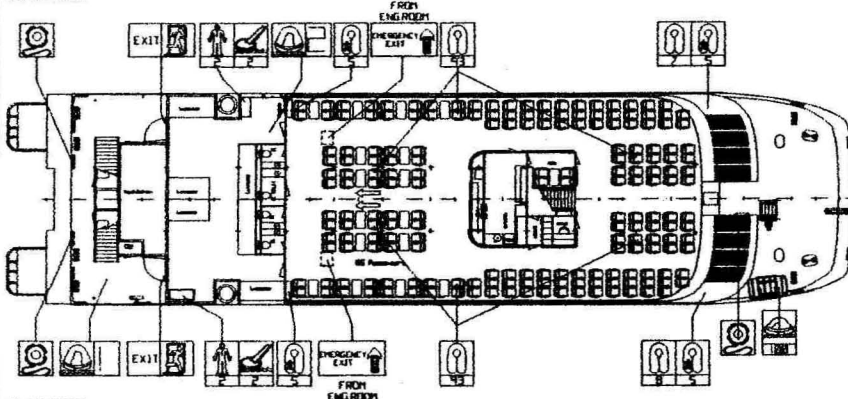
PROFILE



WHEELHOUSE DECK



2. DECK



1. DECK

LIFE SAVING PLAN

LIFE SAVING EQUIPMENT



SIGNAL EQUIPMENT



EXITS



Rev	Arbe	Dato	Description	Made by	Chk'd	Appr.
1	11.08.84	Revised according to DNV/Libera requirements	BR	GS		
2	14.05.85	Revised	ER	GP		
3	25.08.85	Revised	TCT	GP		
4	23.08.85	Revised	TCT	GP		
5	15.08.85	Revised	GP	GP		
6	08.08.85	Revised	GP	GP		
7	11.08.85	Revised	WT	GP		
8	08.07.86	ISSUED FOR PRODUCTION	NS	GP		

Rev	Arbe	Dato	Description	Made by	Chk'd	Appr.
1	11.08.84	Revised according to DNV/Libera requirements	BR	GS		
2	14.05.85	Revised	ER	GP		
3	25.08.85	Revised	TCT	GP		
4	23.08.85	Revised	TCT	GP		
5	15.08.85	Revised	GP	GP		
6	08.08.85	Revised	GP	GP		
7	11.08.85	Revised	WT	GP		
8	08.07.86	ISSUED FOR PRODUCTION	NS	GP		

1661 FT 502 23 206133 G

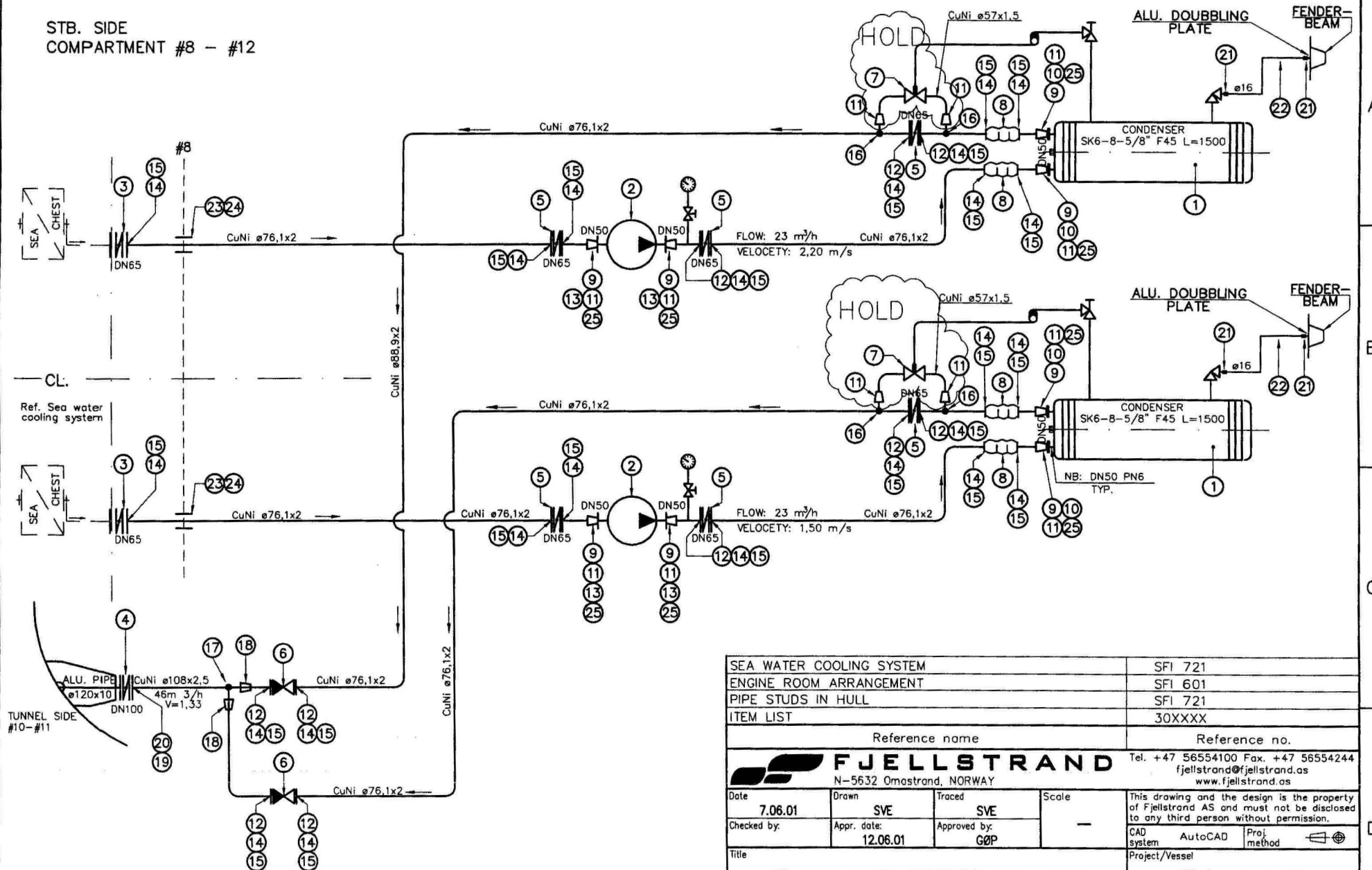
FlyingCat 45

Replacement for:

Replaced by:

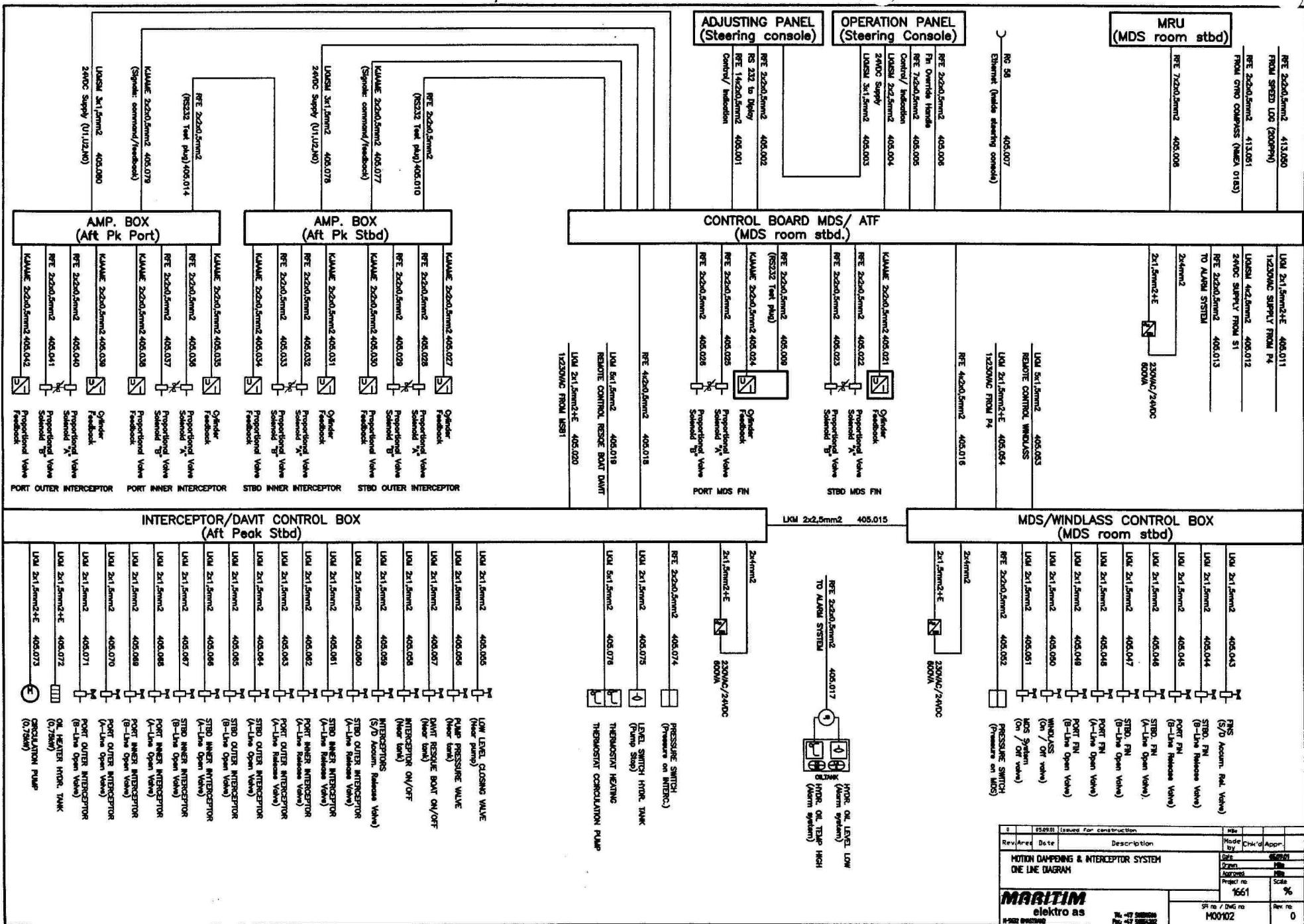
STB. SIDE
COMPARTMENT #8 - #12

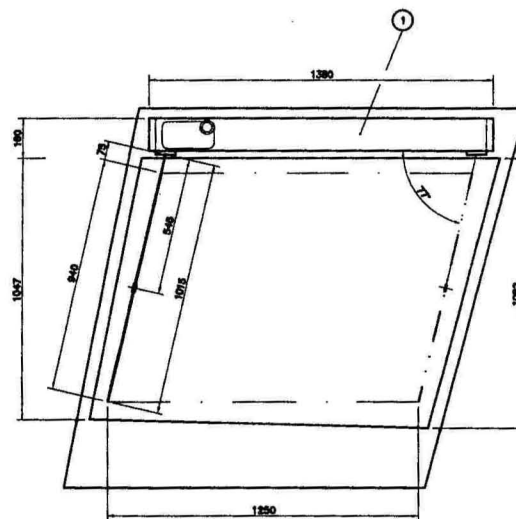
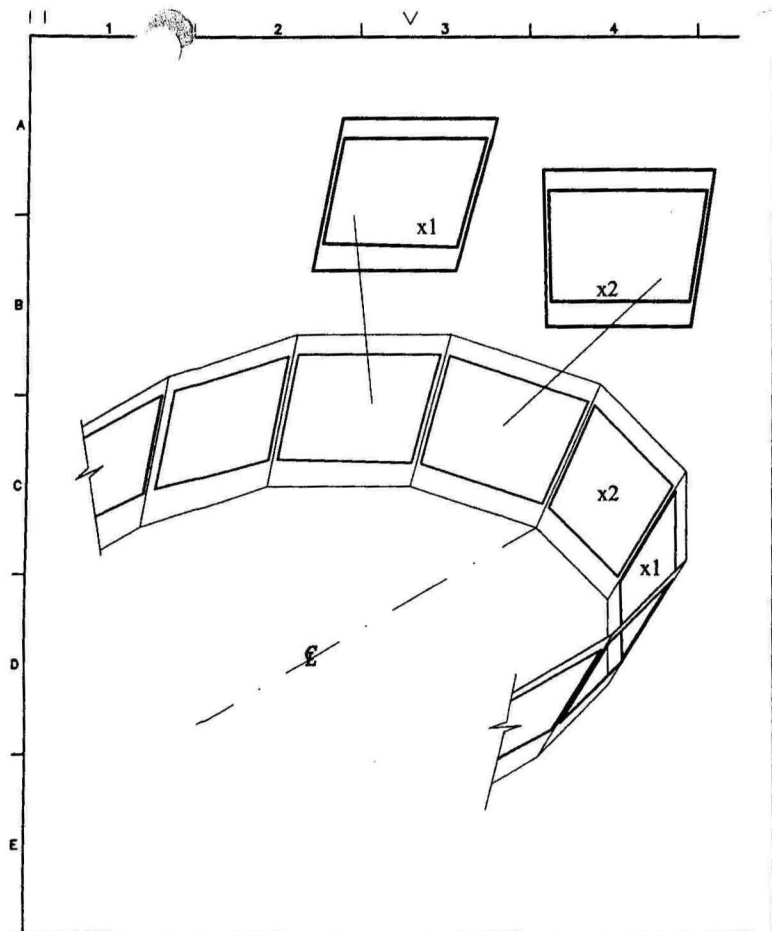
A
B
C
D



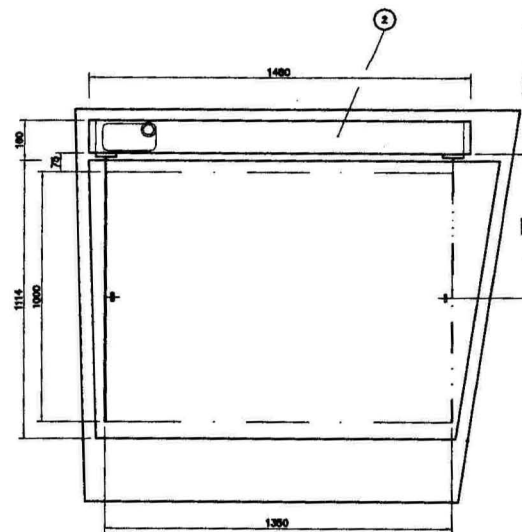
SEA WATER COOLING SYSTEM				SFI 721
ENGINE ROOM ARRANGEMENT				SFI 601
PIPE STUDS IN HULL				SFI 721
ITEM LIST				30XXXX
Reference name				Reference no.
FJELLSTRAND N-5632 Omastrand, NORWAY				Tel. +47 56554100 Fax. +47 56554244 fjellstrand@fjellstrand.as www.fjellstrand.as
Date	Drawn	Traced	Scale	This drawing and the design is the property of Fjellstrand AS and must not be disclosed to any third person without permission. CAD system AutoCAD Proj. method
7.06.01	SVE	SVE	—	
Checked by:	Appr. date: 12.06.01	Approved by: GØP		
Title				Project/Vessel
SEAWATER COOLING SYSTEM FOR AIR CONDITION				FlyingCat 45
SJØVANNSKJØLESYSTEM FOR AIR CONDITION				Replacement for:
1661 FT 571 23 304671 0				Replaced by:

Rev.	Area	Date	Description	Made by	Chk'd	Appr.
1						





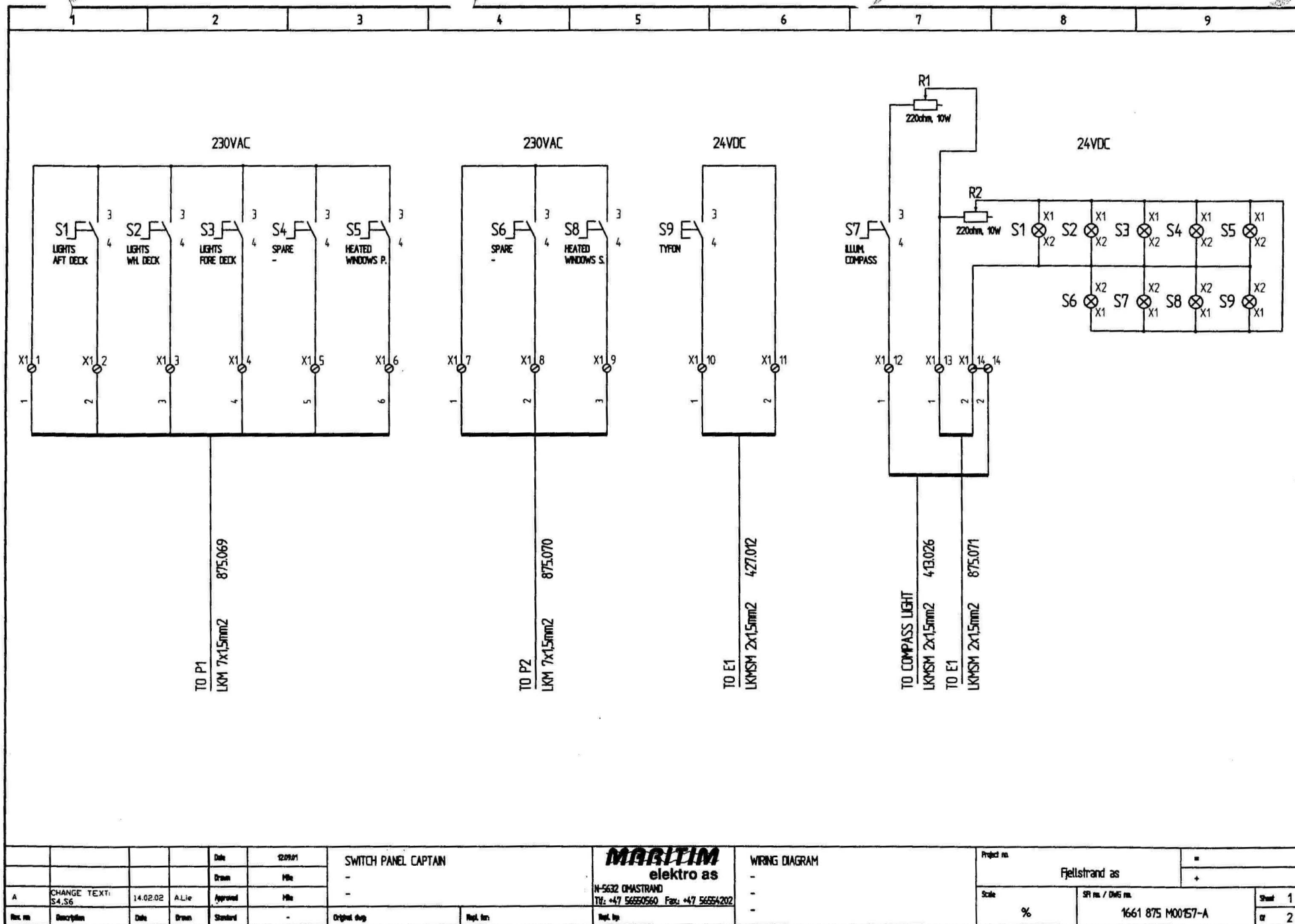
FRONT WINDOWS X1
STB. SEEN FROM OUTSIDE
PS. AS SIMILAR



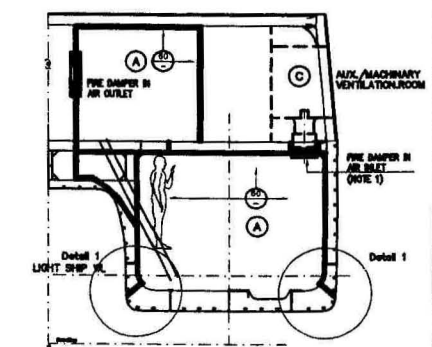
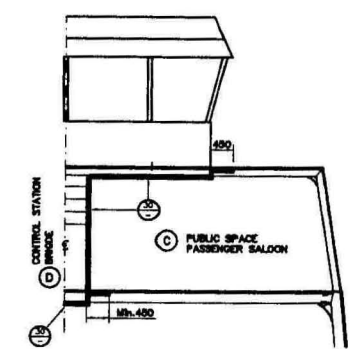
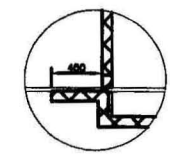
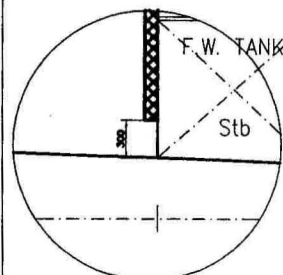
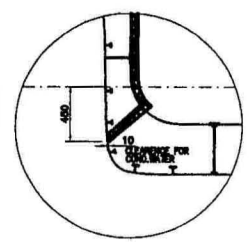
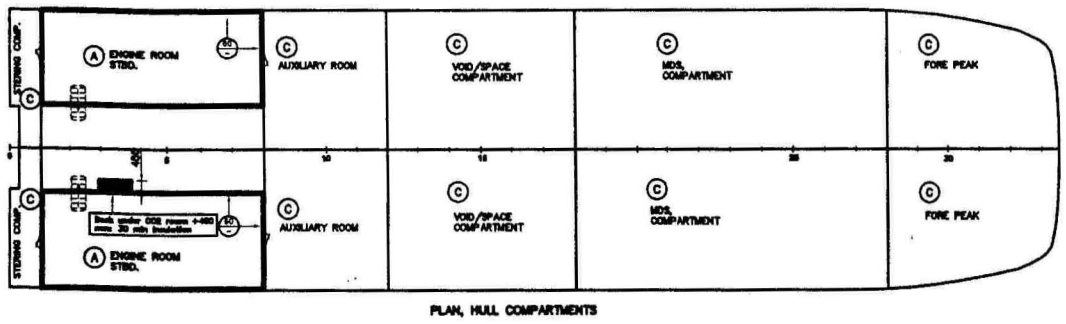
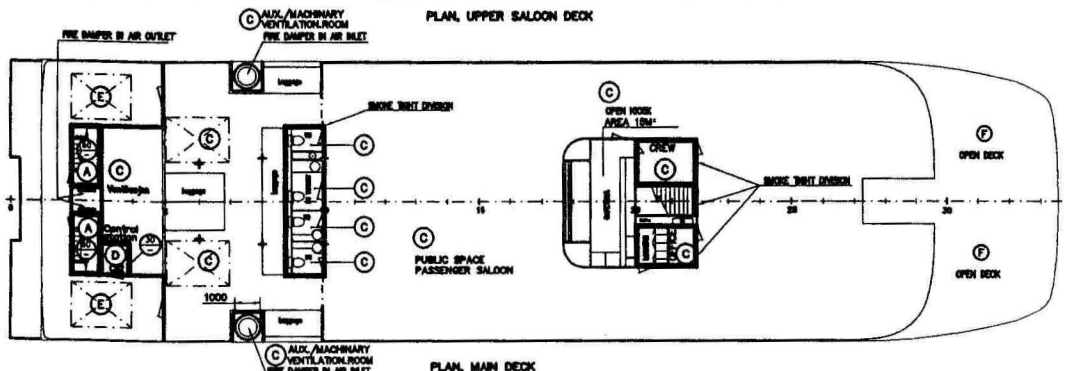
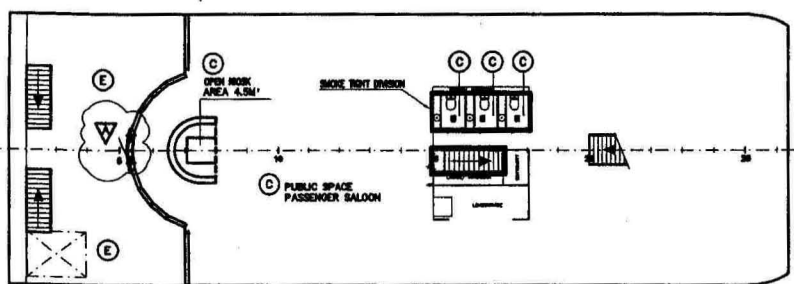
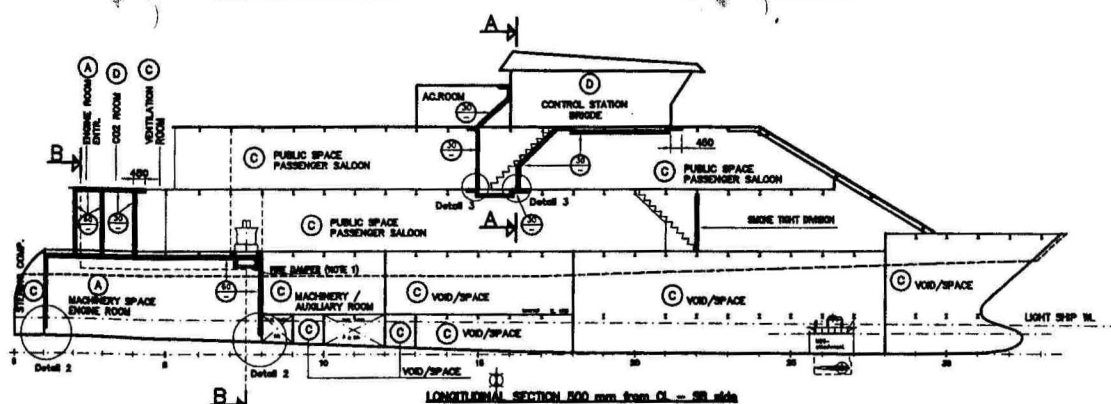
FRONT WINDOWS X2
STB. SEEN FROM OUTSIDE
PS. AS SIMILAR

Rev.	Area	Date	Description	Made by	Chk'd	Appr.

Reference name			Reference no.		
FJELLSTRAND			Tel. +47 58554100 Fax. +47 58554244		
No. 5623, Overstrand, NORWAY			fjellstrand@fjellstrand.no		
Date	Drawn	Revised	Scale	This drawing and the design is the property of Fjellstrand AS and must not be disclosed to any other person without permission.	
7.05.01	BHC		1:10		
Checked by	Appr. date	Appr. by			
	01.05.01				
Title			Project/Room		
WINDOW WIPER ARRANGEMENT			FlyingCat 45		
WINDOW WIPER ARRANGEMENT					
1661 FT 515 23 115963 0					



				Date	12/01/01	SWITCH PANEL CAPTAIN		MARITIM elektro as	WIRING DIAGRAM	Project no.		-
				Drawn	MB					Fjellstrand as		+
A	CHANGE TEXT: S4, S6	14.02.02	A.Lie	Approved	MB					N-5632 OMASTRAND Tlf: +47 56550560 Fax: +47 56554202		
Rev. no	Description	Date	Drawn	Standard	-	Original sig.	Repl. for	Repl. by	-	Scale	SP no. / DWG no.	Sheet 1
									-	%	1661 875 M00157-A	or 2

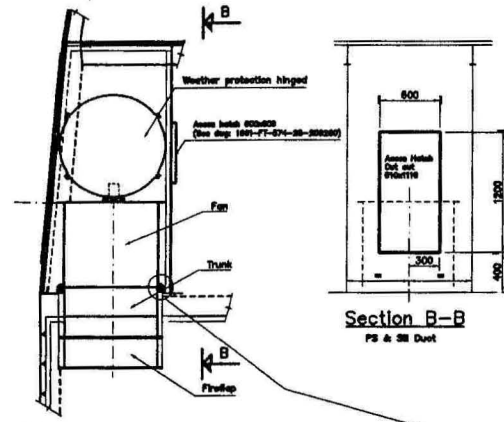


NOTE ON FIRE INSULATION
(1) INSULATION TO BE SHOWN ABOVE FIRE DAMPER IN AIR INLET

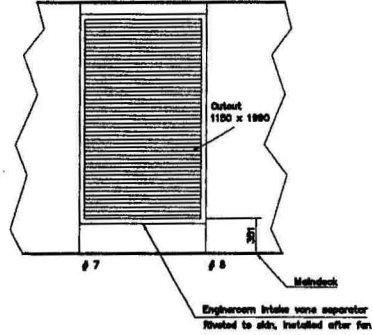
FIRE INSULATION CLASSIFICATION	
XX	= FIRE PROTECTION TIME ON ARROW SIDE OF BULKHEAD
YY	= FIRE PROTECTION TIME ON OPPOSITE SIDE OF BULKHEAD
FIRE ZONE CLASSIFICATION	
(A)	= AREAS OF MAJOR FIRE HAZARD
(B)	= AREAS OF MODERATE FIRE HAZARD
(C)	= AREAS OF MINOR FIRE HAZARD
(D)	= CONTROL STATION
(E)	= EVACUATION STATION AND EXTERNAL ESCAPE ROUTES
(F)	= OPEN SPACES

1	08.04.01	DOOR ON UPPER SALOON DECK WIND	BA	CS	
2	23.03.01	FORNED FOR PRODUCTION	BA	CS	
3	27.03.01	USED FOR APPROVAL COMMENT	BA	CS	
Rev.	Area	Date	Description	Made by	Chk'd. Appr.
FJELLSTRAND N-5632 Onstvedt, NORWAY Tel: +47 56551100 Fax: +47 56551424 Email: fjellstrand@fjellstrand.no Web: www.fjellstrand.no					
Date	08.04.01	Drawn	BA	Scale	1:100
Checked by	BA	Appr'd by	BA	Project	AutoCAD
This drawing and the design is the property of Fjellstrand AS and must not be distributed to any other person without permission.					
DEFINITION OF FIRE HAZARD AREA AND STRUCTURAL FIRE INSULATION PLAN					
1661 FT 511 23 115790 A					
FlyingCat 45					

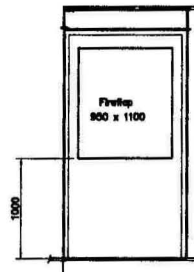
Section at #7,5



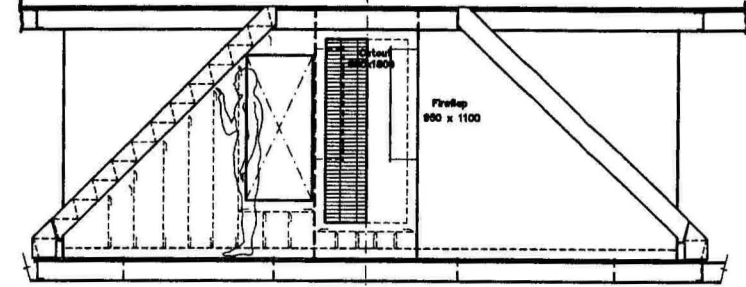
Side of superstructure



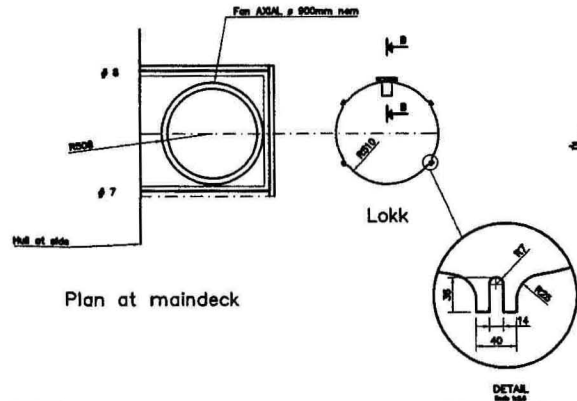
Blkhd at CL casing



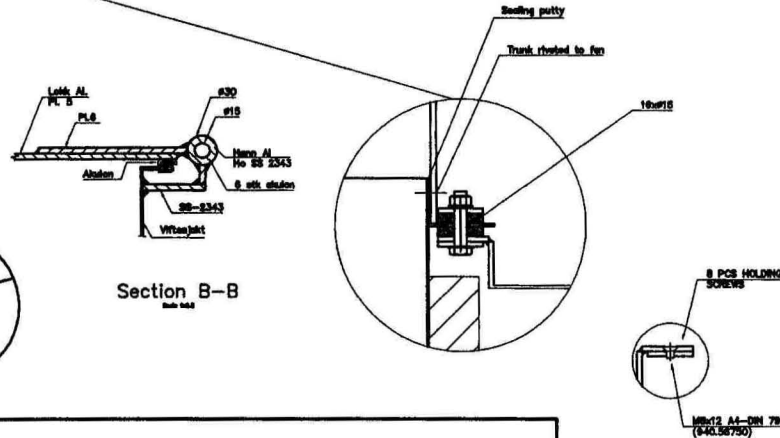
Section A-A



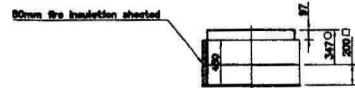
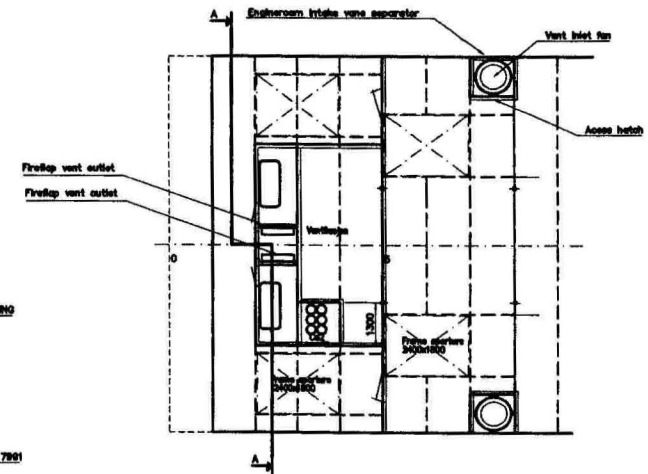
Plan at maindeck



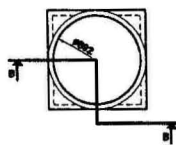
Section B-B



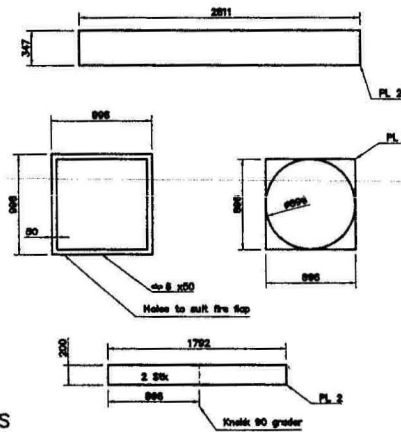
Plan at maindeck



Section B-B

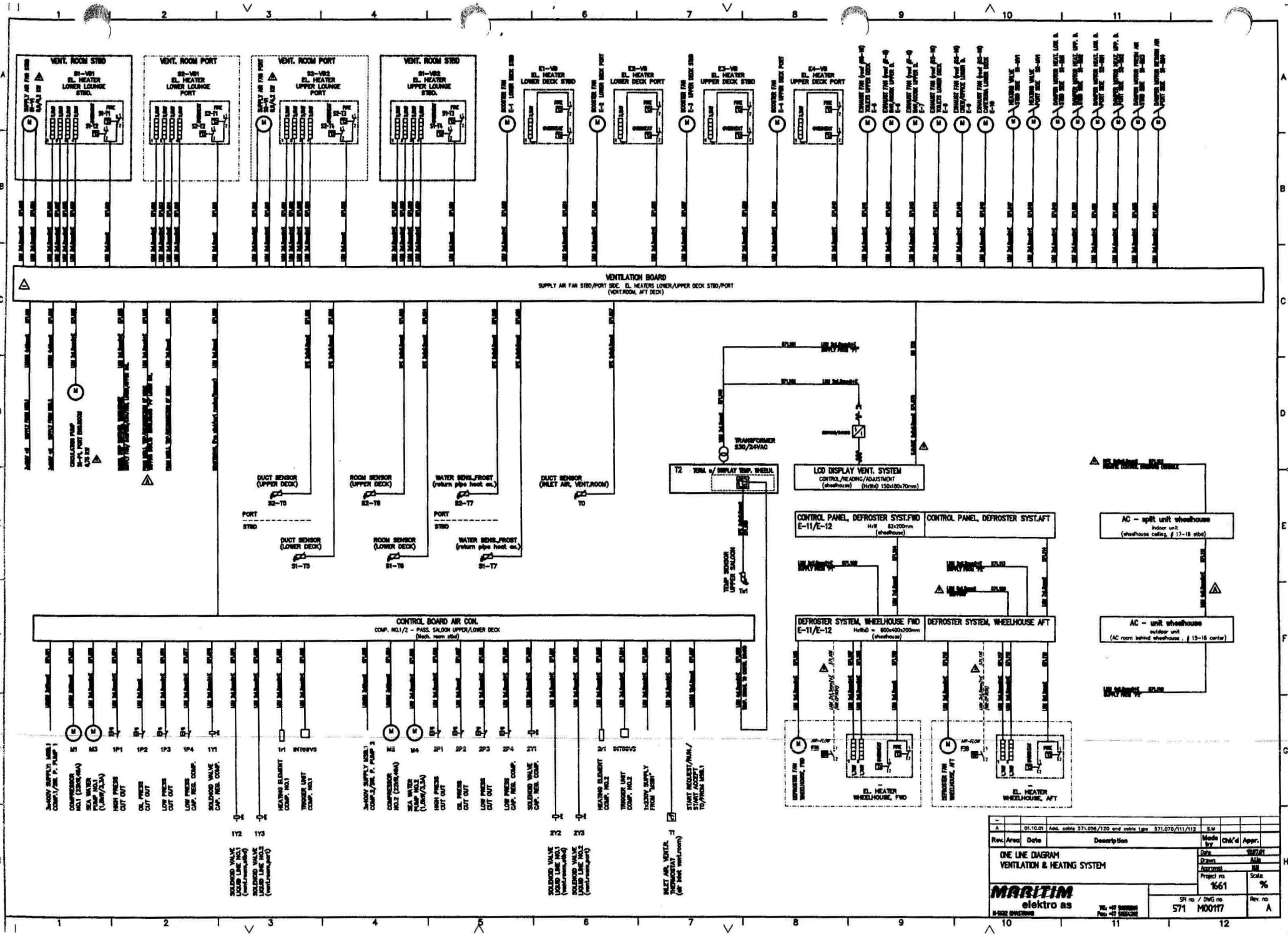


Trunk for fireflap SS
AISI 316 L PL 2

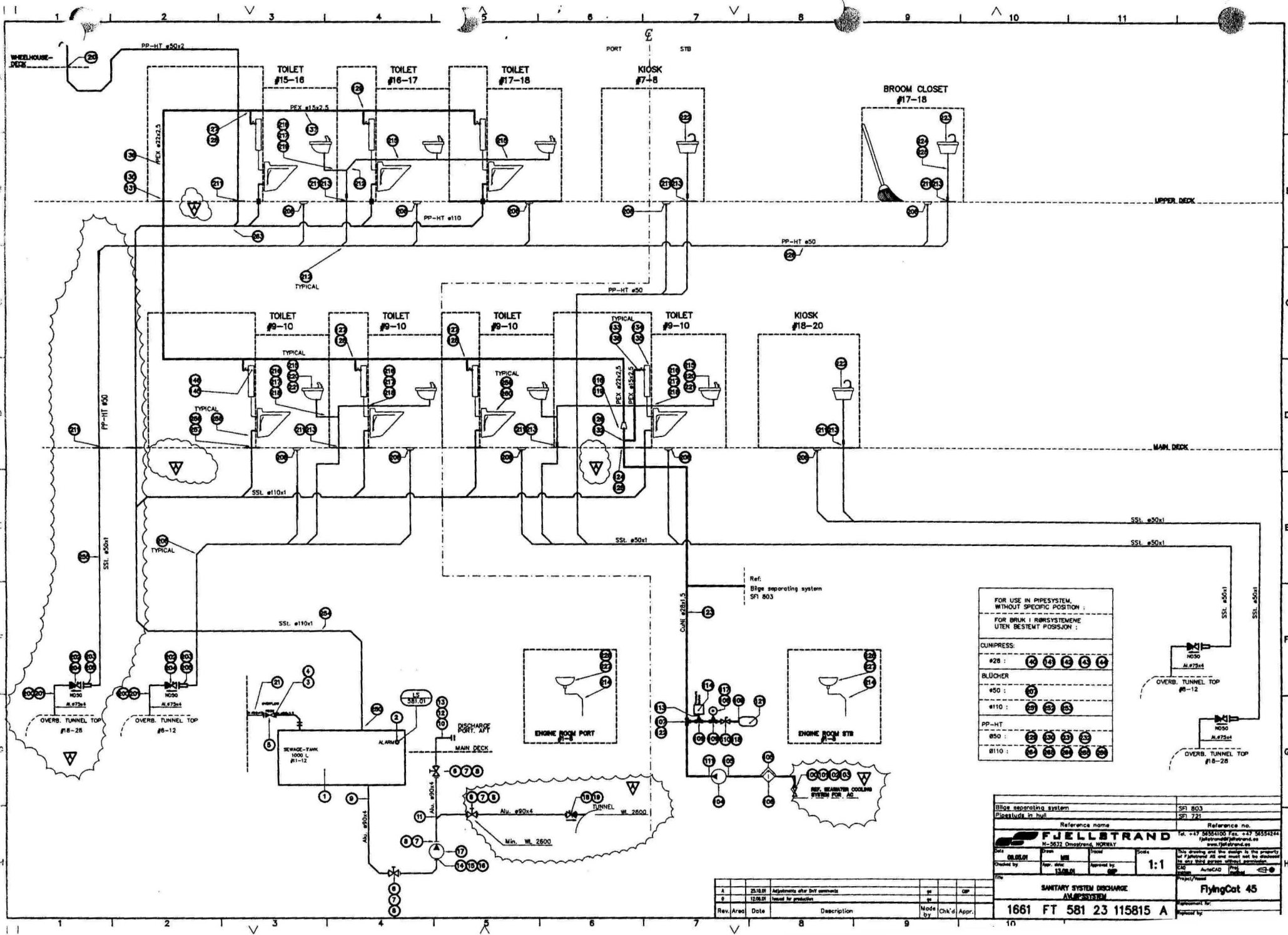


Rev.	Area	Date	Description	Made by	Chk'd	Appr.
1		03.10.08	Access hatch and vane separator	sh	UD	
2		14.02.09	Access hatch and vane separator	sh	UD	
3		14.02.09	Access hatch and vane separator	sh	UD	
4		07.06.09	Access hatch and vane separator	sh	UD	
5		25.04.09	Access hatch and vane separator	sh	UD	

Rev. Area		Date	Description	Made by	Chk'd	Appr.
1661		FT 574 28	115811 D	FlyingCat 45		
1661		FT 574 28	115811 D	FlyingCat 45		



Rev.	Area	Date	Description	Made by	Chk'd	Appr.
A		01.10.01	Add. cables 371.026/120 and cable type 371.075/111/112	S.M.		
ONE LINE DIAGRAM VENTILATION & HEATING SYSTEM				Scale	1:100	
MARITIM elektro as				Project no.	1661	
S/N no. / DWG no.				571	M00117	
Rev. no.				A		

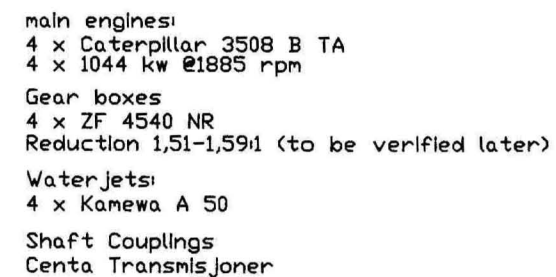
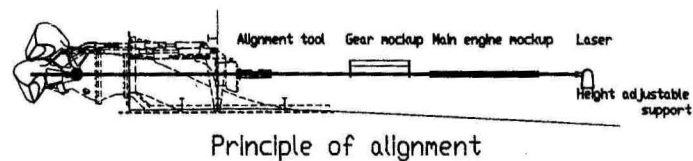


FOR USE IN PIPESYSTEM,
WITHOUT SPECIFIC POSITION:
FOR BRUK I RØRSYSTEMENE
UTEN BESTEMT POSISJON:

CUNIPRESS:	#28:	28 29 30 31 32 33
BLÜCHER	#50:	34 35 36 37 38 39
	#110:	40 41 42 43 44 45
PP-HT	#50:	46 47 48 49 50 51
	#110:	52 53 54 55 56 57

Sludge separating system		SFI 803
Plastluds in hull		SFI 721
Reference name		Reference no.
FJELLSTRAND		1661 FT 581 23 115815 A
K-5671 Ømsgrønd, NORWAY		1661 FT 581 23 115815 A
Scale	1:1	1:1
Checked by	12/08/01	12/08/01
SANTARY SYSTEM DISCHARGE		FlyingCat 45
1661 FT 581 23 115815 A		

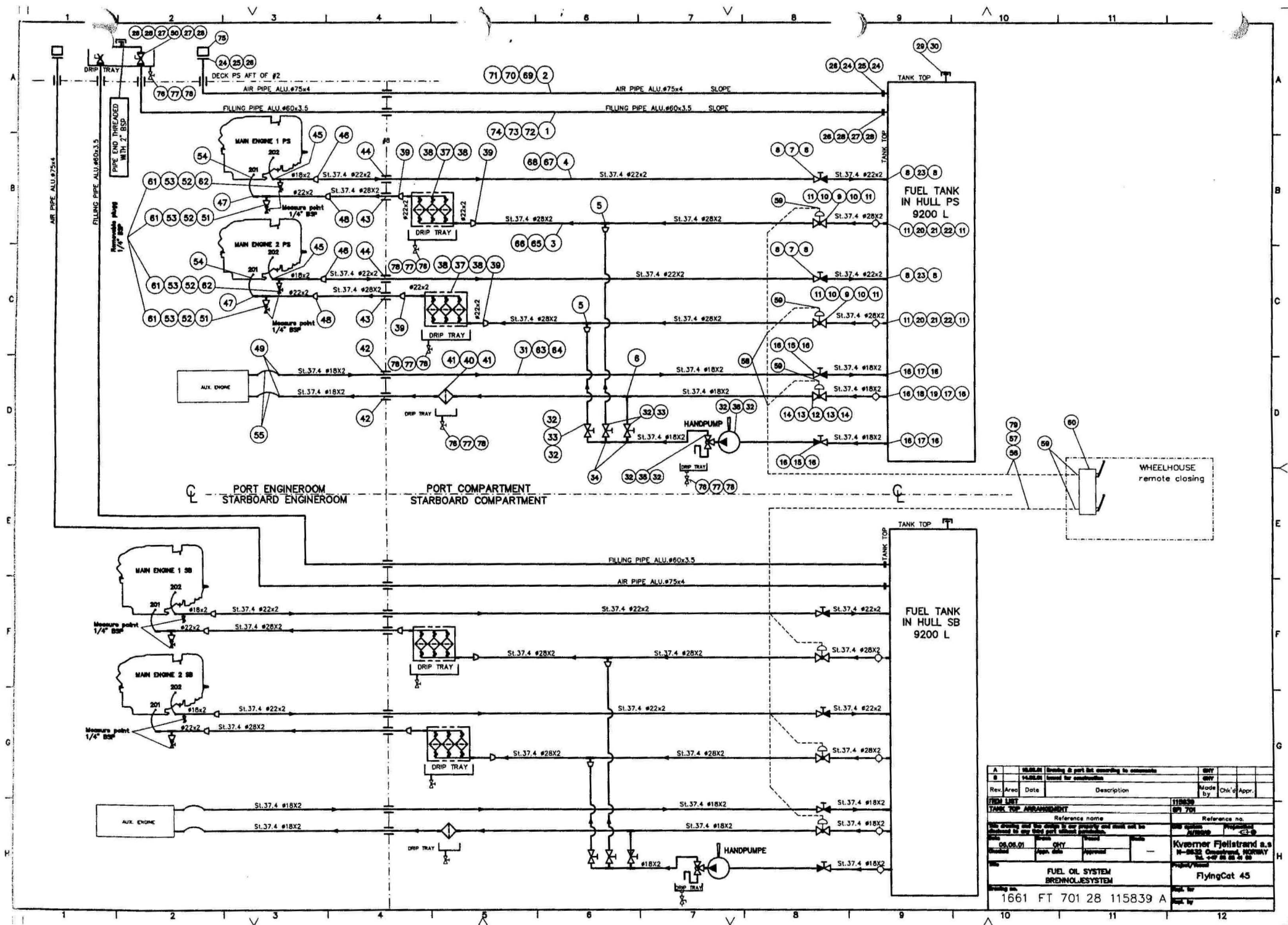
Rev.	Area	Date	Description	Drawn by	Checked by	Appr.
1		25.10.01	Adjustments after test commands			
2		12.08.01	Issued for production			

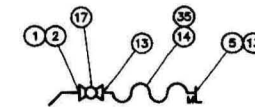
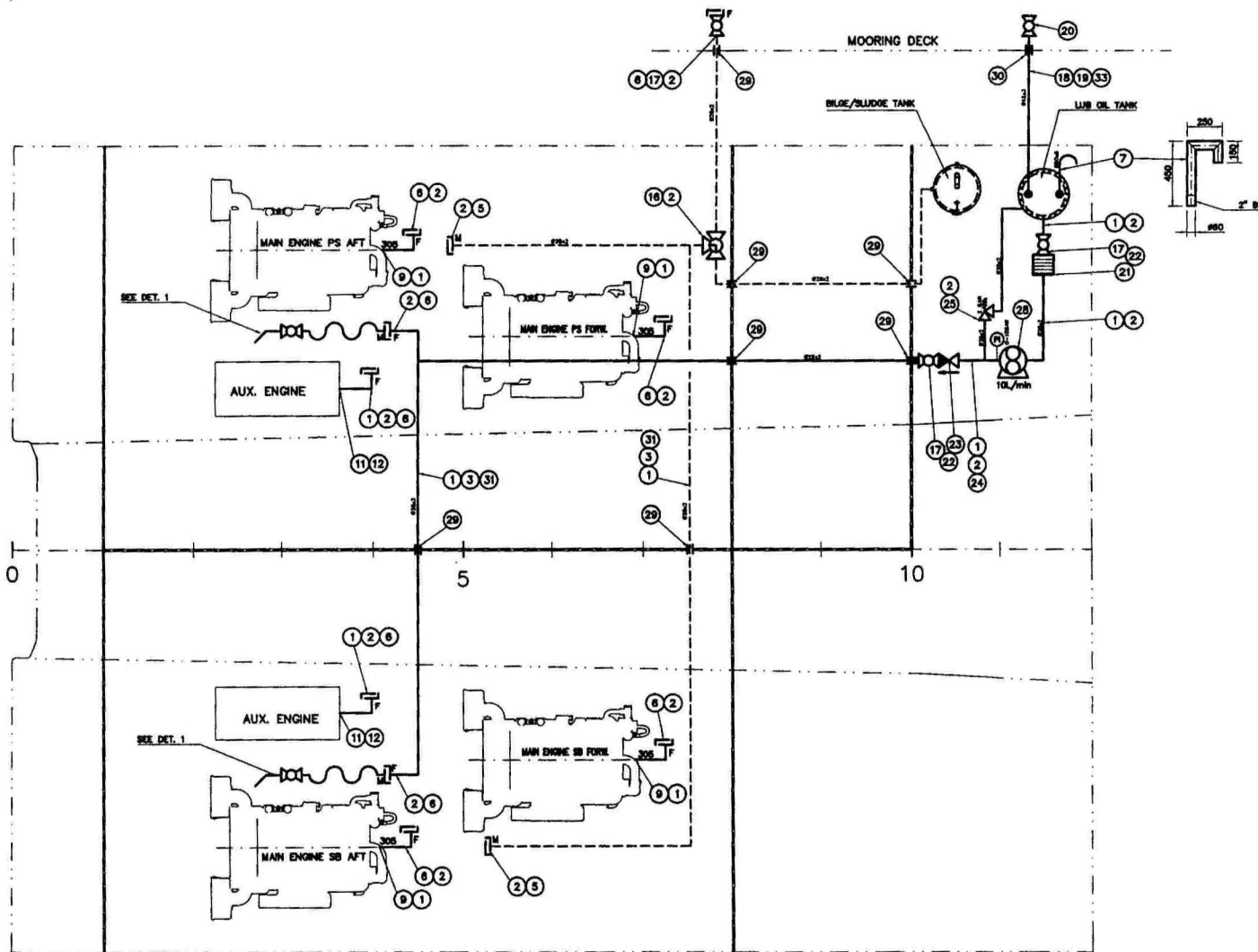


Pos	Bolt	Class	Torque	Condition
1	M16x1,5	8.8	204Nm	Black lightly oiled

C	2518A	Belt tension gears and engine	day
		Updated worklog terms	LSD
A	1406A	Gear ratio updated, Engine profile updated	day
B	2643B	Issued for production	LSD LSD

Revised	Date	Description	Mode by	Chk'd Appr.
		FJELLSTRAND	Tel. 937 5451000 Fax 937 5052444	
		N-5632 Desstrand, NORVAT	Fjellstrand@fjellstrand.no	
State	PLAN	Trace	Scale	This drawing is NOT TO BE USED FOR REPRODUCTION OR FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF THE DESIGNER. AUTOCAD (PWS) SYSTEM
Checked by	PLAN	Approved by	1:25	Project/Vessel
Title		Shaft arrangement Mainframe 4 x CAT 3506 TA Kvaerner A 30		
1661 FT 601 28 115828 C		Replacement for Replacement by		

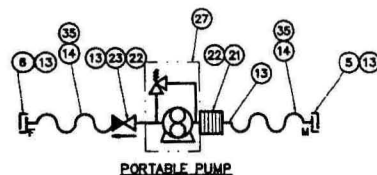




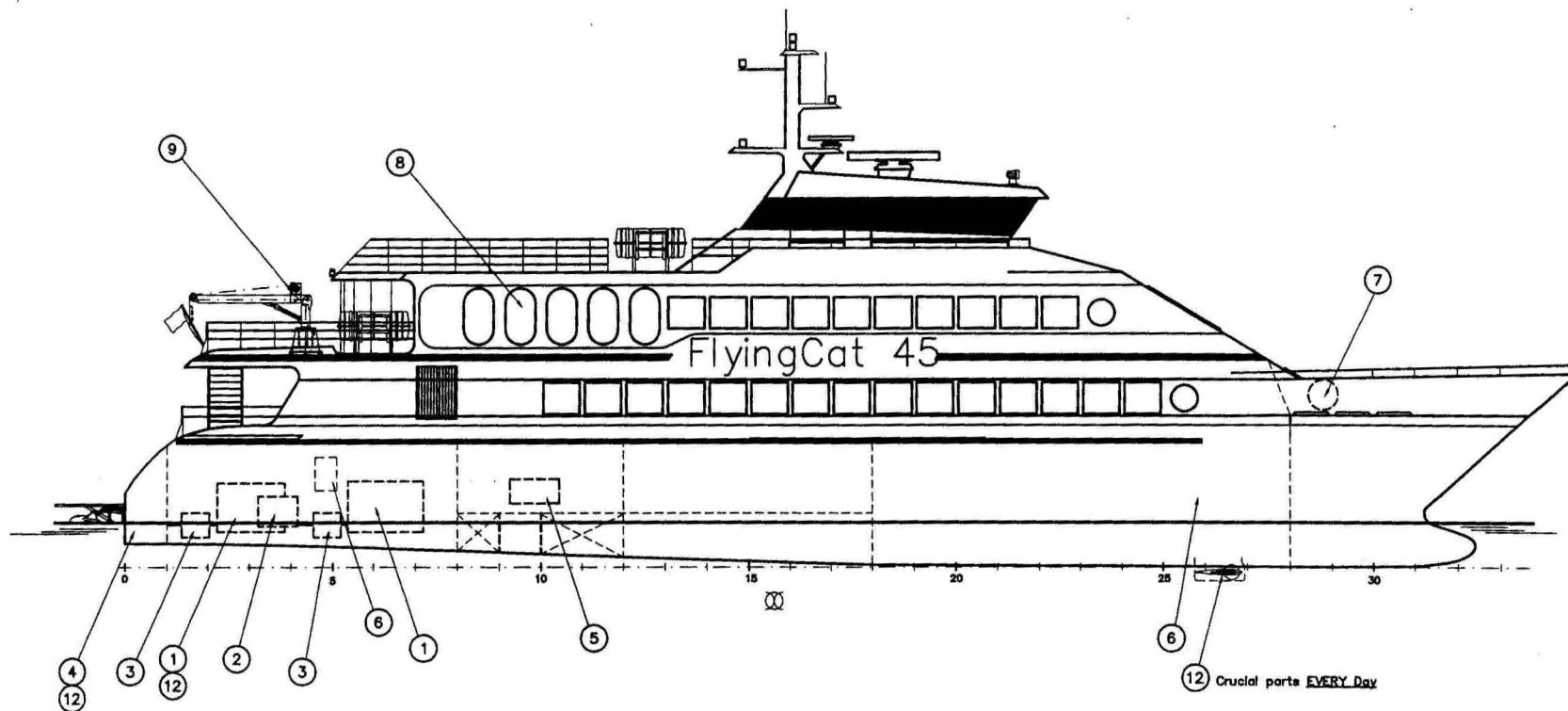
DETAIL 1

General Notes:

1. Test pressure 6-7 BAR, tank connection must be blanked off before pressure testing.
2. Pipes must be cleaned before installation and kept clean during installation. Open pipe ends must be plugged to avoid entry of unwanted particles.
3. Pipe penetrations to be sealed with flame resistant CSD putty or similar (DNV approved).



Rev.	Area	Date	Description	Drawn by	Checked by	Appr.	Mod.	Chk'd	Appr.
1		31.08.00	Issued for construction						
FJELLSTRAND M-3632 Omsorgsstrand, NORWAY www.fjellstrand.no fjellstrand@fjellstrand.no									
Date	Drawn	Rev.	Scale	This drawing and the design is the property of Fjellstrand AS and must not be disclosed to any third person without permission.					
01.08.01	DRY	1	N/A	01.08.01	150		AutocAD	1:1	
Project/Name: Lub oil system 1661 FT 711 28 115840 0								Project/Name: FlyingCat 45 Replacement for:	

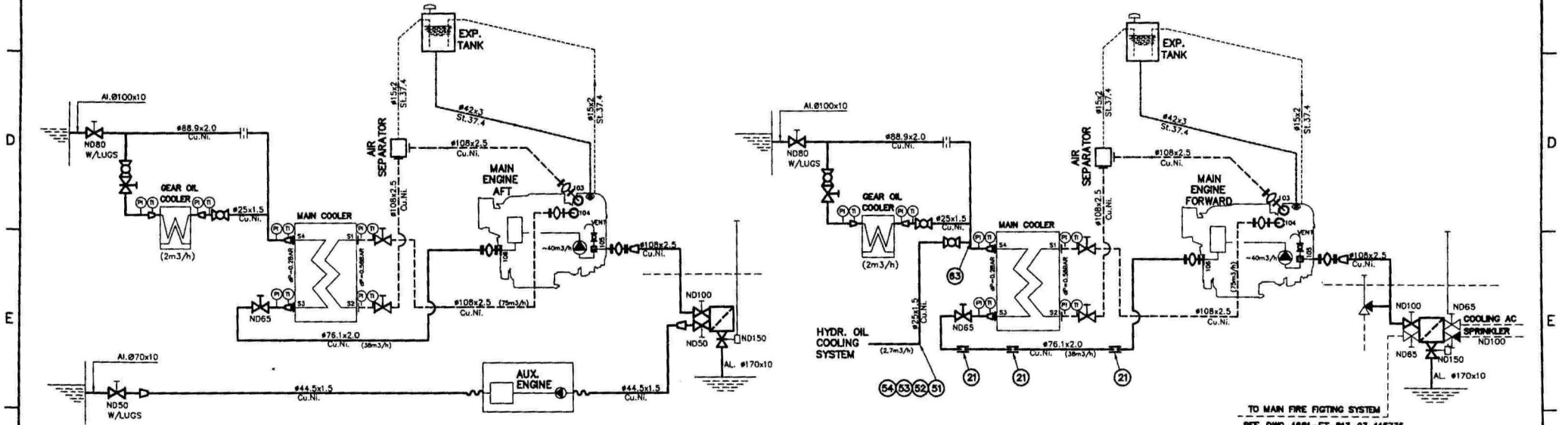
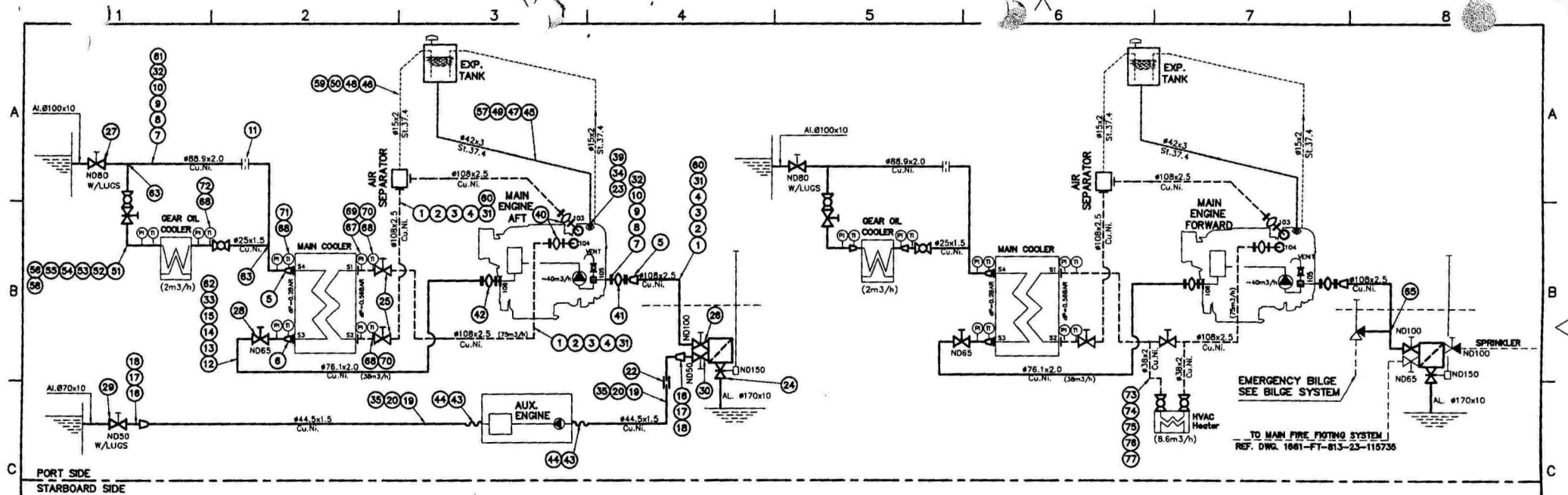


* What ever occurs first (If the vessel is not going to be used for long periods a preservation oil should be considered)
A S.O.S Analysis may be an alternative, test intervals 250 running hours.

Pos.	Description	Lubr. Type	Lubricant standard recommended	Castrol	Shell	Alt.1	Alt.2	Change Intervals	Capacity
12	Ball bearings in general	Grease	Lithium Calcium Grease	-	ALVANIA EP 2	FINA LICAL EP2	ESSO BACON 2	-	-
11	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-
9	Life Saving Rafts Crane	Hydr. Oil	SAE 46 (ISO VG 46, DIN 51524, part 2)	-	Tellus 46	-	-	Each Year	-
8	Door locks and hinges	Lub. Oil	-	-	Gadina 40	-	-	Once a week	-
7	Anchor Windlass	Hydr. Oil	SAE 46 (ISO VG 46, DIN 51524, part 2)	-	Tellus 46	-	-	Each Year	-
6	Motion Damping System (MDS)	Hydr. Oil	SAE 32 or SAE 46 choice dependent on temperature	-	Tellus 46	-	-	Each Year	280 Liter
5	Air Conditioning Compressor	Refr. Lub. Oil	Fuchs DEA Reniso SE-55 Triton	-	-	-	-	-	2 x 5 Liter
4	Waterjet type Kamewa	Hydr. Oil	SAE 46 (ISO VG 46, DIN 51524, part 2)	-	Tellus 46	-	-	-	-
3	Reduction Gear ZF-4550	Lub. Oil	See pos. 1	-	Gadina 40	-	-	-	~80L
2	Auxiliary Engine Caterpillar 3304T	Lub. Oil	See pos. 1	-	Gadina 40	-	-	500h/3 months*	-
1	Main Engine type Caterpillar 3508B	Lub. Oil	Single grade oil SAE 30 or 40 with a API CF-4 classification	-	Gadina 40	-	-	500h/3 months*	104 Liter

Rev.	Area	Date	Description	Made by	Chk'd	Appr.
A		05.12.01	Pos.4, 6, 7 and 9 changed oil type from Shell T32 to T46	ohy		
0		29.11.01	Issued for production	ohy		

Reference name			Reference no.		
			Tel. +47 56554100 Fax. +47 56554244 fjellstrand@fjellstrand.no www.fjellstrand.no		
Date	Drawn	Traced	Scale	This drawing and the design is the property of Fjellstrand AS and must not be disclosed to any third person without permission.	
17.09.01	OHY		N/A		
Checked by:	Appr. date:	Approved by:			
Title			Project/Vessel		
Lubrication Survey			FlyingCat 45		
1661 FT 711 28 206147 A			Replacement for:		
			Replaced by:		

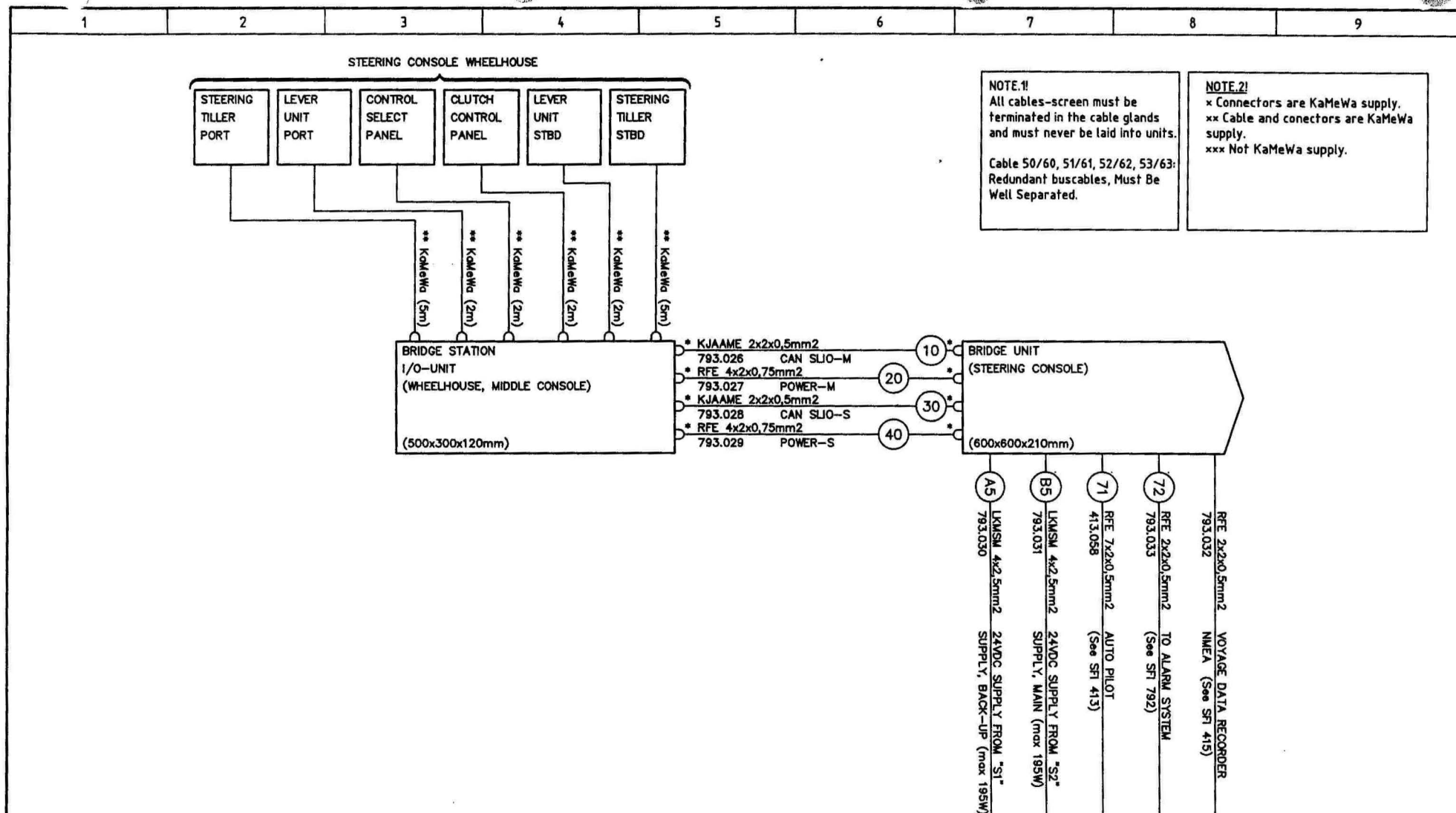


PIPING SYMBOLOLOGY

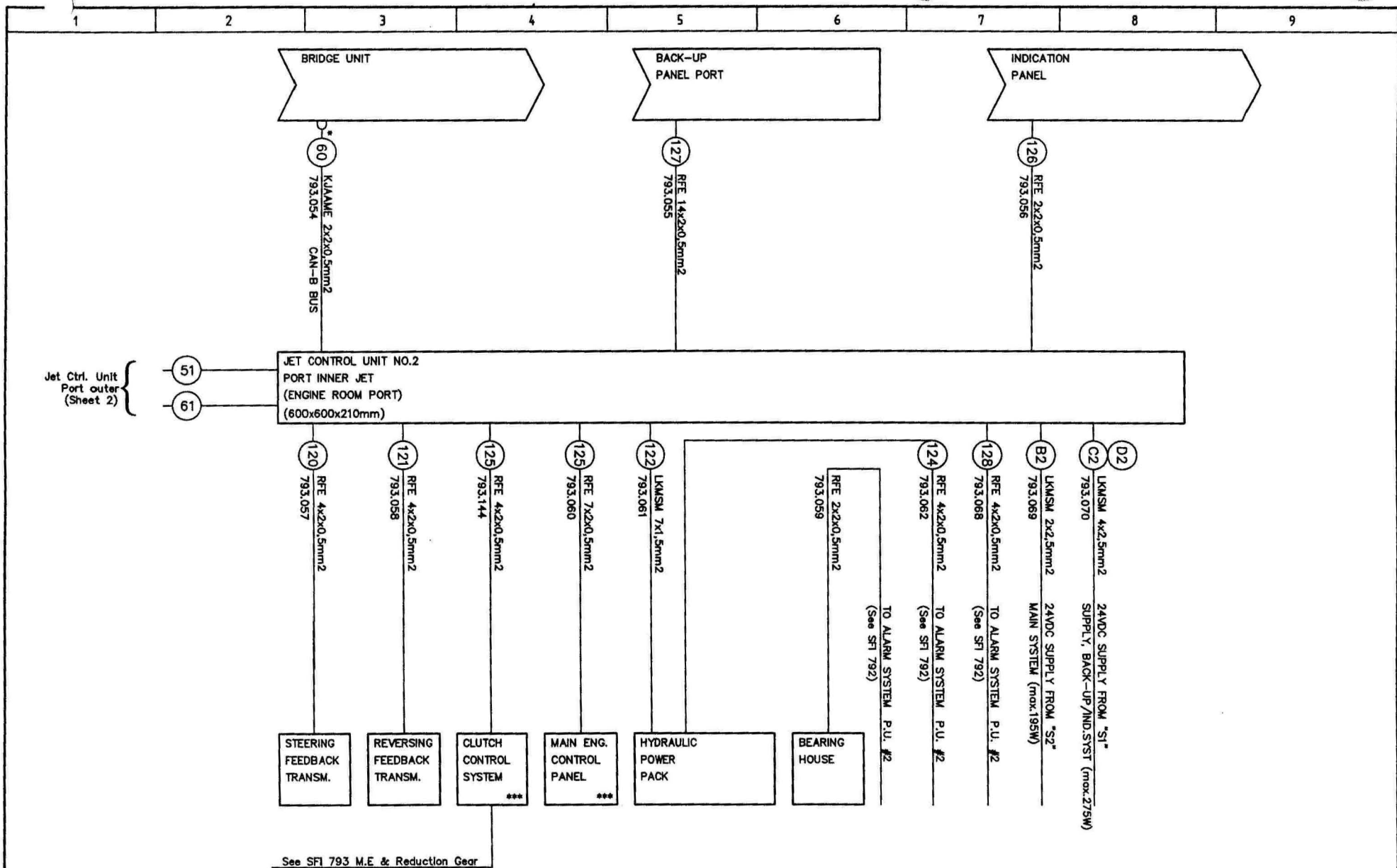
FW COOLING SYSTEM	SCREW DOWN STOP VALVE	PRESSURE INDICATOR (MANOMETER)
SW COOLING SYSTEM	ADJUSTABLE ORIFICE	TEMPERATURE INDICATOR (THERMOMETER)
GATE VALVE	GEARED MANUAL OPERATION	FLOW DIRECTION
BUTTERFLY VALVE W/ LEVER	HOSE	
MUD BOX (FJELLSTRAND TYPE)	PUMP (TYPE NOT SPECIFIED)	
FLANGED EXPANSION BELOW	REDUCER	
BALL VALVE		

Rev.	Area	Date	Description	Made by	Chk'd	Appr.
B		05.08.01	Emergency bilge changed acc. to bilge system	chy		
A		03.09.01	Emergency bilge & HVAC heater included	chy		
0		15.08.01	Issued for comments	chy		
Item list				206101		
Reference name				Reference no.		

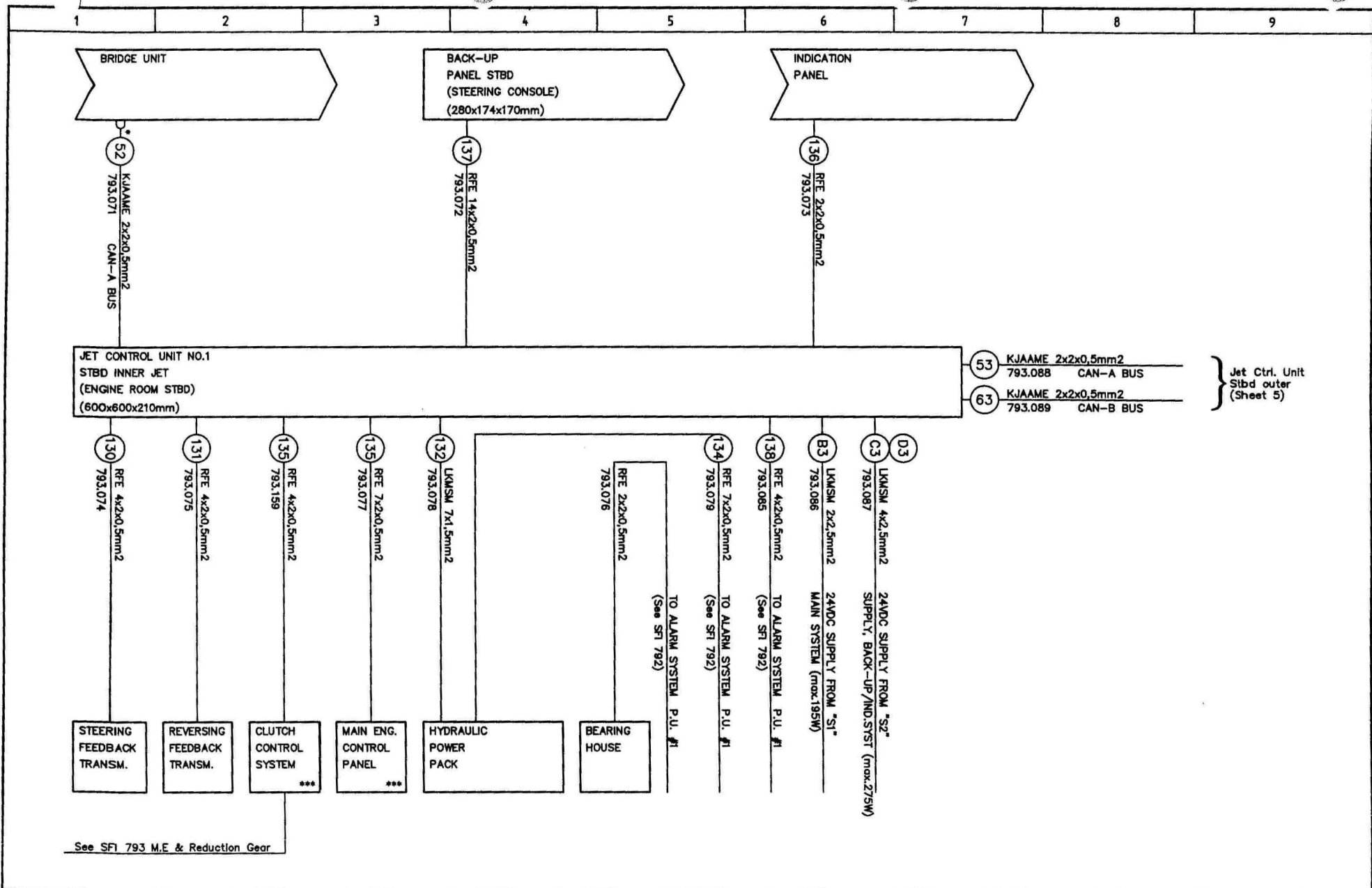
 FJELLSTRAND						Tel. +47 56554100 Fax. +47 56554244 fjellstrand@fjellstrand.no www.fjellstrand.no	
N-5632 Omstrand, NORWAY							
Date	Drawn	Inched	Scale	This drawing and the design is the property of Fjellstrand AS and must not be disclosed to any third person without permission. CAD system AutoCAD Proj. method 			
25.06.01	OHY		1:1				
Checked by:	Appr. date:	Approved by:		Project/Vessel 45m FlyingCat Replacement for: Replaced by:			
Title							
SEA & FRESH WATER COOLING SYSTEM							
1661 FT 721 28 206143 B							



				Date	12/06/01	WATERJET CONTROL SYSTEM ONE LINE DIAGRAM		MARITIM elektro as H-5632 OMASTRAND Tlf: +47 56550560 Fax: +47 56554202	BRIDGE UNIT -		Project no. Fjellstrand as		Sheet 1 of 5	
				Drawn	AL									
				Approved	BN									
Rev. no.	Description	Date	Drawn	Standard	-	Original shop	Repl. for	Repl. by	Scale %		SFI no. / Dwg no. 1661 793 M00129-0			

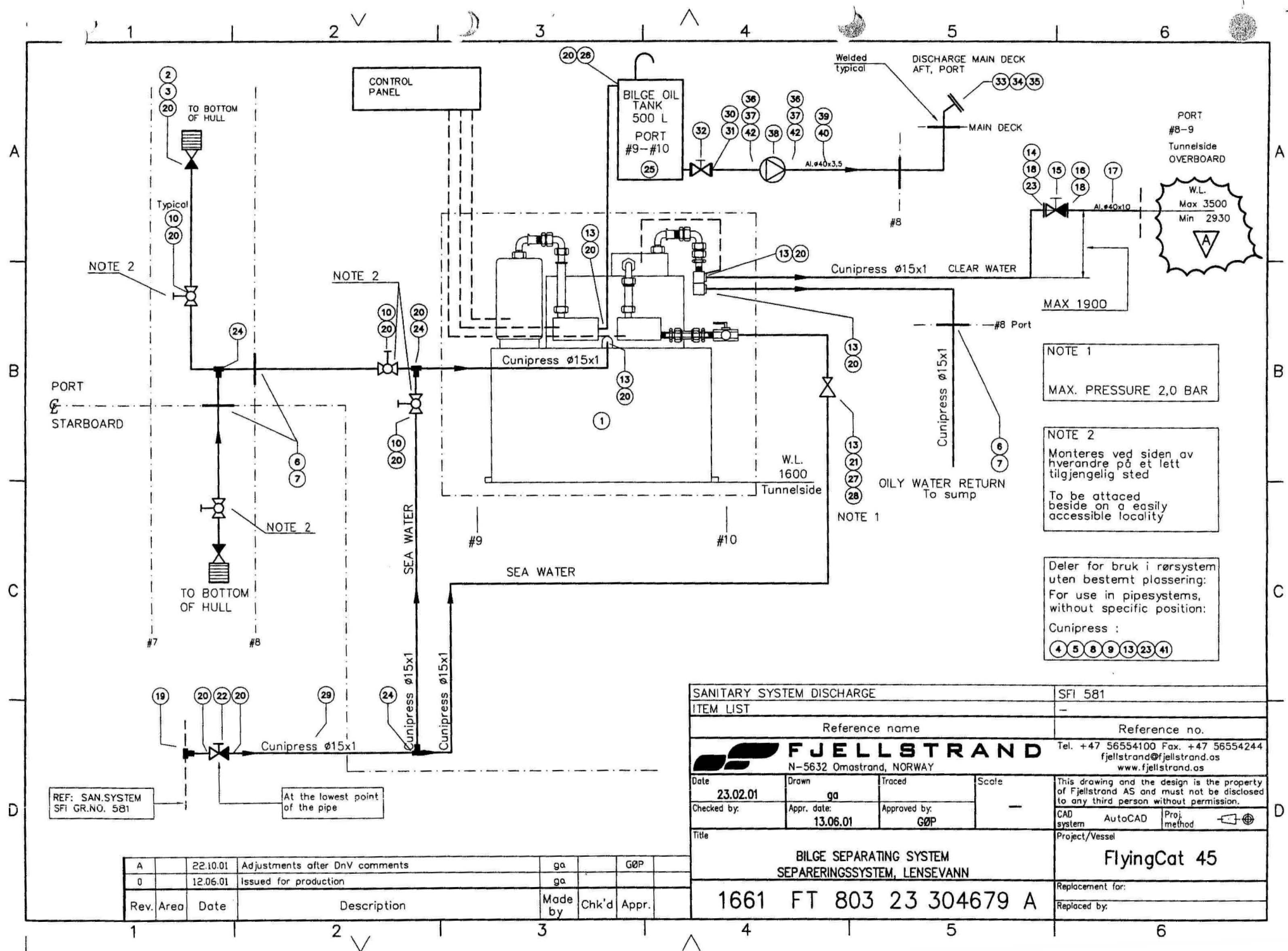


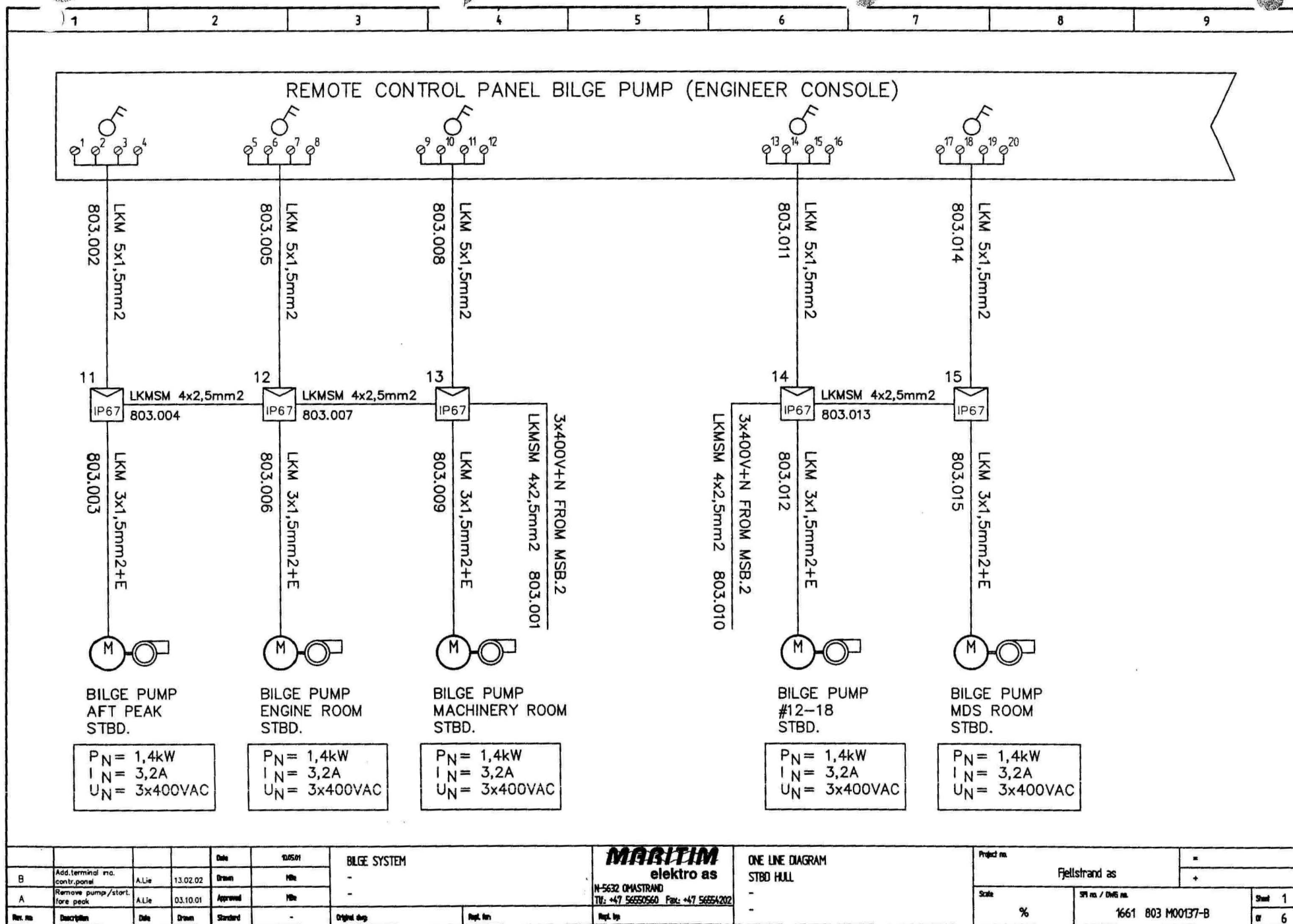
					Date		22.06.01	WATERJET CONTROL SYSTEM		MARITIM		PORT INNER JET		Project no.			
					Drawn		AL	ONE LINE DIAGRAM		elektro as				Fjellstrand a.s.			
					Approved		NR			N-5632 OMASTRAND				Scale		SFI no. / DWG no.	
										Tel: +47 56550560 Fax: +47 56554202				NA		1661 793 M00129-0	
					Original des.			Repl. for		Repl. by						Sheet 3	
																or 5	



Jet Ctrl. Unit
Stbd outer
(Sheet 5)

				Date	12.06.01	WATERJET CONTROL SYSTEM ONE LINE DIAGRAM		MARITIM elektro as N-5632 OMASTRAND TEL: +47 56550560 Fax: +47 56554202		STBD INNER JET		Project no.	Fjellstrand as		=
				Drawn	AL									+	
				Approved								Scale	SFI no. / DWG no.	Sheet	4
Rev. no.	Description	Date	Drawn	Standard	-	Original desig.	Repl. by	Repl. by		NA	1661 793 M00129-0			5	





MARITIM
elektro as

N-5632 OMASTRAND
TV: +47 56650560 Fax: +47 56654202

ONE LINE DIAGRAM
STBD HULL

Project no.

Fjellstrand as

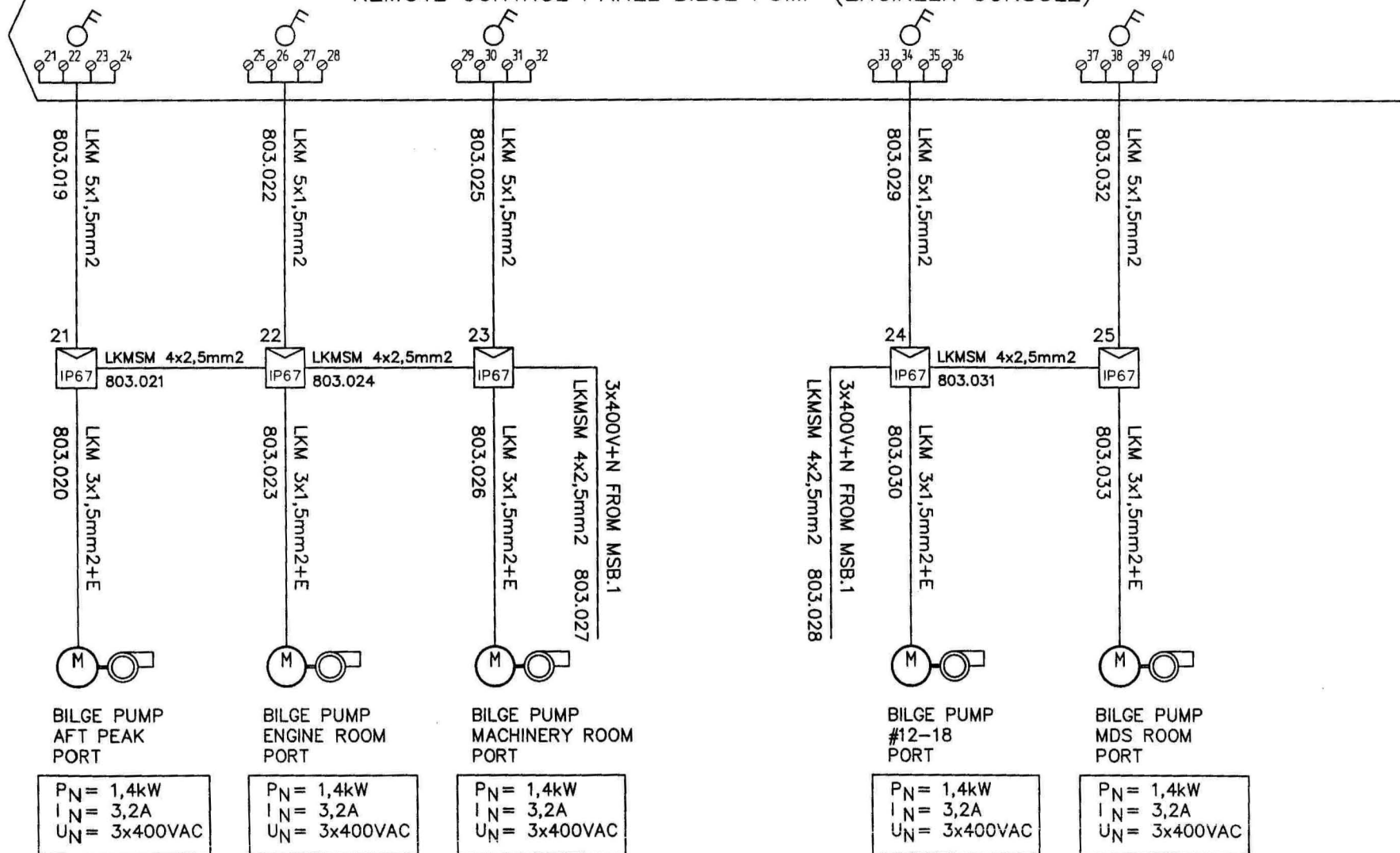
Scale

SP no. / DWG no.

1661 803 M00137-B

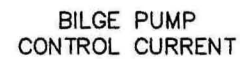
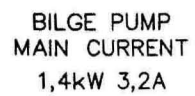
Sheet 1
of 6

REMOTE CONTROL PANEL BILGE PUMP (ENGINEER CONSOLE)



BILGE SYSTEM				MARITIM elektro as		ONE LINE DIAGRAM PORT HULL		Project no.		Feltstrand as	
B	Add terminal no. contr. panel	A.Lie	13.02.02	Drawn	Mie	-	-	Scale	%	SN no. / DWG no.	Sheet 2
A	Remove pump/start. fore peak	A.Lie	03.10.01	Approved	Mie	-	-			1661 803 M00137-B	6
Rev. no.	Description	Date	Drawn	Standard	Original sign	Repl. by	Repl. by				

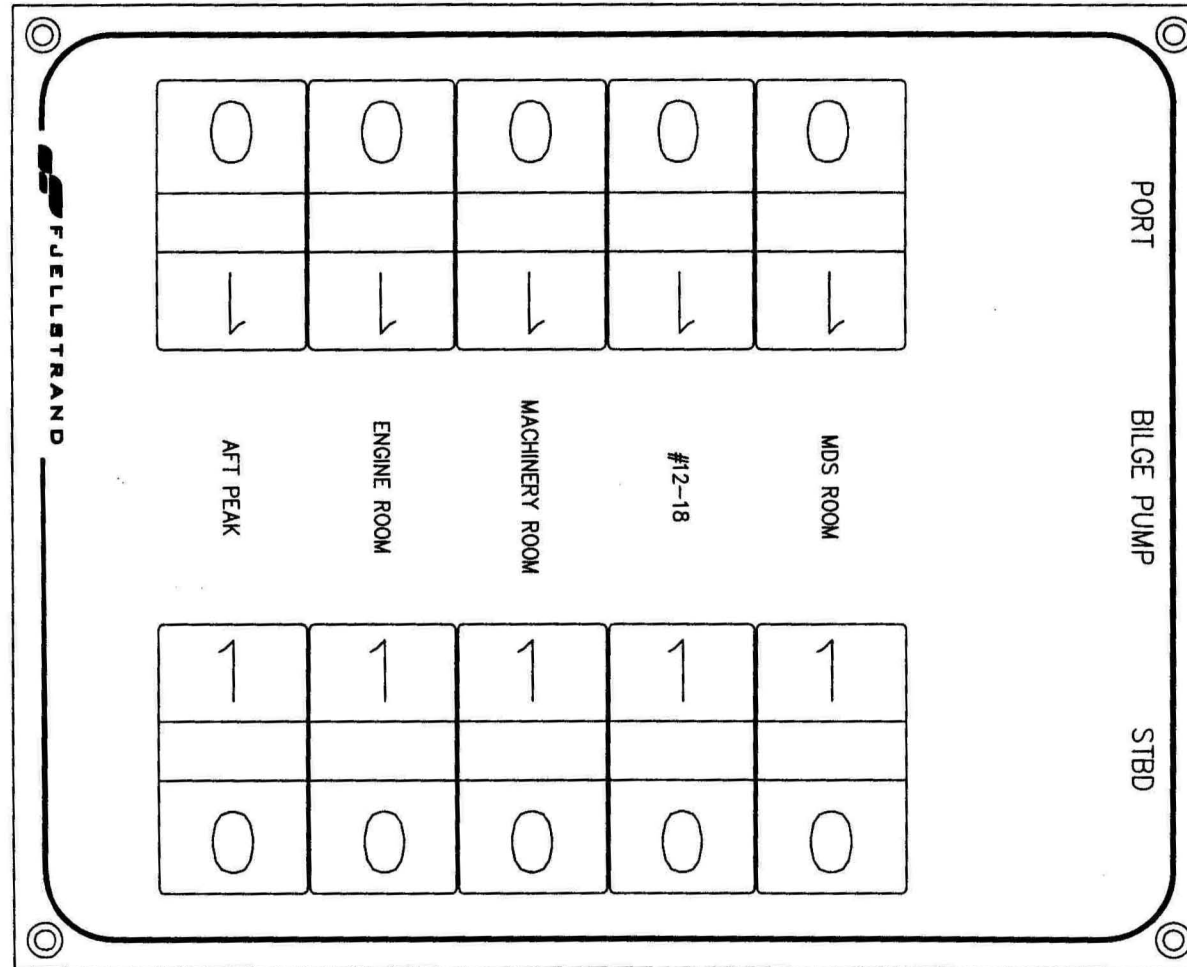
MARITIM
elektro as
H-5632 OMASTRAND
TEL: +47 56552560 FAX: +47 56554202



				Date	08.05.01	BILGE SYSTEM		 N-5632 OMASTRAND TEL: +47 56550560 FAX: +47 56554202	WIRING DIAGRAM BILGE PUMPS ALL STARTERS 11-16 & 21-26 ARE EQUAL -	Project no.		=			
				Drawn	NHe	-				Fjellstrand as		+			
				Approved	NHe	-									
Rev. no.	Description	Date	Drawn	Standard	-	Original disp.	Repl. for	Repl. by		Scale	%	SPT no. / DWG no.		Sheet	3
												1661 803 M00137-B		of	6

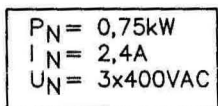
1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

(Scala 1:1, A3 printing)



				Date	10.05.01	BILGE SYSTEM - - N-5632 ØMASTRAND TV: +47 56550560 Fax: +47 56554202			REMOTE CONTROL PANEL BRIDGE LAYOUT - -			Project no.		=	
				Drawn	Mbe							Fjellstrand as		+	
A	Remove pump/start. fore peak	A.Lie	03.10.01	Approved	Mbe							Scale		SP no. / DWG no.	
Rev. no	Description	Date	Drawn	Standard	-	Original disp.	Repl. Rev	Repl. by	%			1661 803 M00137-B		6	





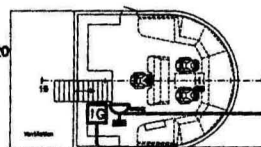
				Date	12.05.01	BILGE SYSTEM		 N-5632 ØMASTRAND TV: +47 56550560 Fax: +47 56554202	OILY WATER DISCHARGE PUMP OILY WATER SEPARATOR ONE LINE DIAGRAM	Project no.		=		
				Drawn	Hls	-				Fjellstrand as		+		
				Approved	Hls	-								
Rev. no	Description	Date	Drawn	Standard	-	Original desig	Repl. no	Repl. by	-	Scale	%	SPI no. / DWG no.	1661 803 M00137-B	Sheet 6 of 6

- 1G GENERAL ALARM, Autronica BF-8A
 1A SMOKE DETECTOR IONE, ENG.-/MACH. ROOM, Autronica BJ-20B
 1B SMOKE DETECTOR OPTIC, ACCOM. AFT DECK, Autronica BH-25
 1C MANUAL CALL POINT, ENG.- ROOM/ENTR., AFT DECK, Autronica BF-20
 1D MANUAL CALL POINT, ACCOMMODATION, Autronica BF-20
 1E HEAT DETECTOR 80°C, ENG.ROOMS, Autronica BD-27
 1F END RESISTOR, DETECTOR/ SIREN LOOP END.

ELECTRONIC SIREN (Roehm)

ELECTRONIC SIREN/LIGHT E2s AL105

FIRE/GENERAL ALARM THROUGH PA-SPEAKERS IN PASSAREA (see SFI 425)



BUTTER (WHEELHOUSE)

RFE 2x2x0,5mm2 CABLE NO.811.005

GENERAL ALARM
 RFE 2x2x0,5mm2 CABLE NO.811.008

SUPPLY 230V 50Hz FROM "P2"

LKM 2x1,5mm2+PE CABLE NO.811.001

TO ALARM SYSTEM ("Fire Alarm System Failure")

RFE 2x2x0,5mm2 CABLE NO.811.002

TO PA-SYSTEM B-RACK ("Fire Alarm /General Alarm")

RFE 4x2x0,5mm2 CABLE NO.811.003

TO PA-SYSTEM A-RACK ("Fire Alarm /General Alarm")

RFE 4x2x0,5mm2 CABLE NO.811.043

TO Voice Data Recorder ("Fire Alarm Zone 1-...")

RFE 7x2x0,5mm2 CABLE NO.811.004

ZONE NO.01 (UPPER DECK)

RFE 2x2x0,5mm2 CABLE NO.811.007

ZONE NO.02 (LOWER DECK)

RFE 2x2x0,5mm2 CABLE NO.811.008

ZONE NO.03 (AFT DECK/VENT.ROOM)

RFE 2x2x0,5mm2 CABLE NO.811.009

ZONE NO.04 (ENGINE ROOM PORT)

RFE 2x2x0,5mm2 CABLE NO.811.010

SIREN W/FLASHLIGHT

LKM5M 3x1,5mm2 CABLE NO.811.011

ZONE NO.05 (ENGINE ROOM STBD.)

RFE 2x2x0,5mm2 CABLE NO.811.012

FIRE ALARM CENTRAL
 (Mounted in wheelhouse)

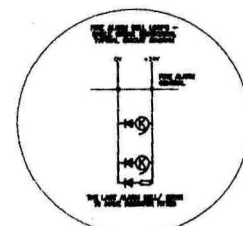
BACK-UP SUPPLY:
 BUILT-IN BATTERY (24V/12Ah)

TYPE

BX-40/8

MAKER

AUTRONICA



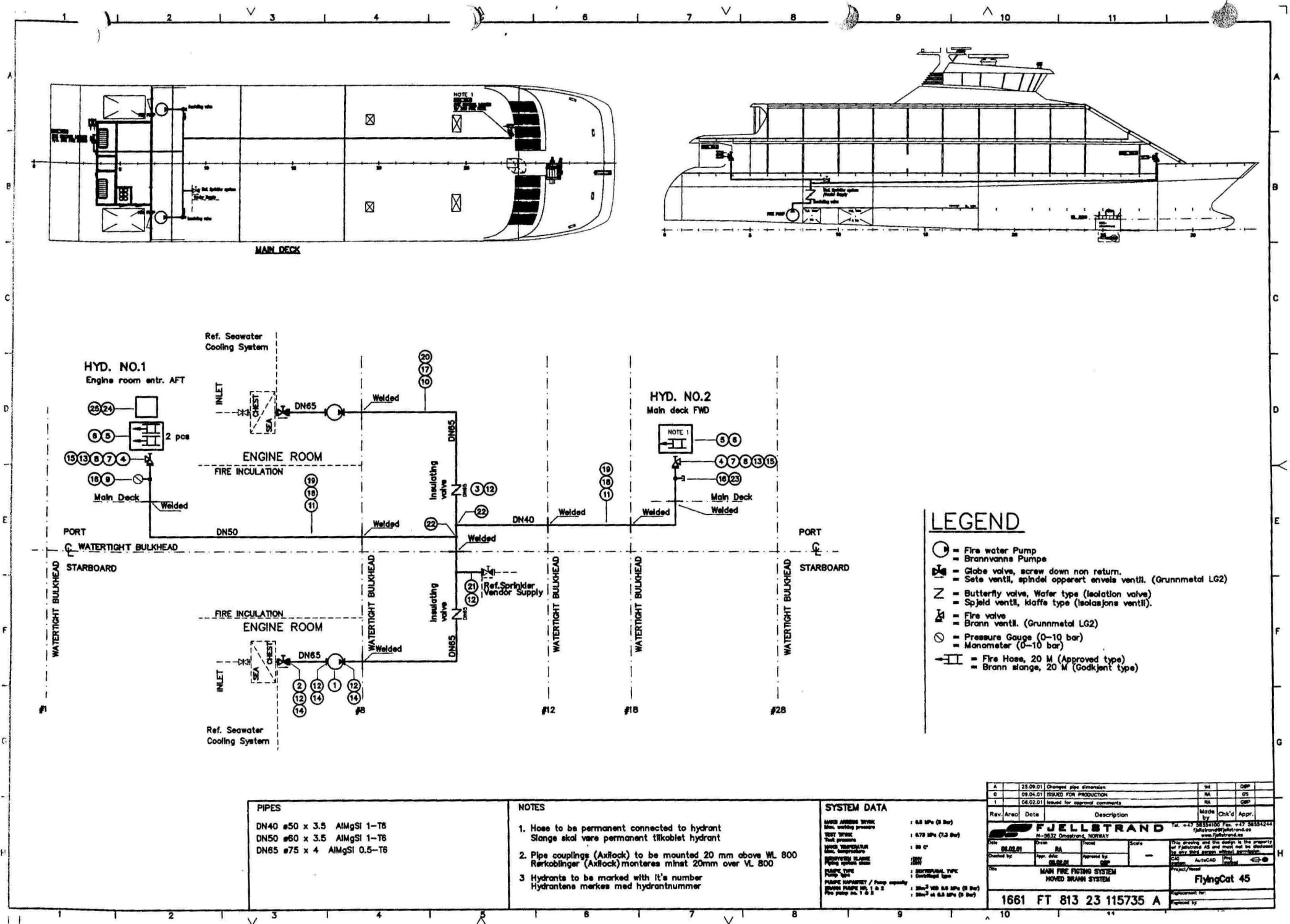
DETECTORS SHOULD BE LOCATED FOR
 OPTIMUM PERFORMANCE.
 INSTALLATION OF DETECTORS NEAR BEAMS
 AND VENTILATION DUCTS OR OTHER
 POSITIONS WHERE PATTERNS OF AIR FLOW
 COULD ADVERSELY AFFECT PERFORMANCE
 AND POSITIONS WHERE IMPACT OR PHYSICAL
 DAMAGE IS LIKELY SHOULD BE AVOIDED.

SPACING OF SMOKE DETECTORS:
 FROM BULKHEAD: (max.5,5m)
 FROM SHIPSIDE: (max.5,5m)
 BETWEEN: (max.11m)
 AREAL PER DETECTOR: (max.74m2)

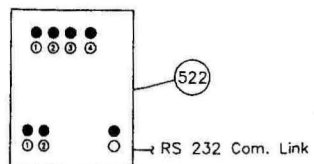
A	A11	05.10.01	ADD. CABLE 425.043, CHANGE TEXT 423.003	A11		
Rev.	Area	Date	Description	Made by	Chk'd	Appr.
INSTALLATION PLAN FIRE ALARM SYSTEM				Date	8/11/01	
				Drawn	811	
				Approved	811	
				Project no	1561	Scale
						%
				SR no / DWG no	811	M00138
				Rev. no		A

MARITIM
 elektro as

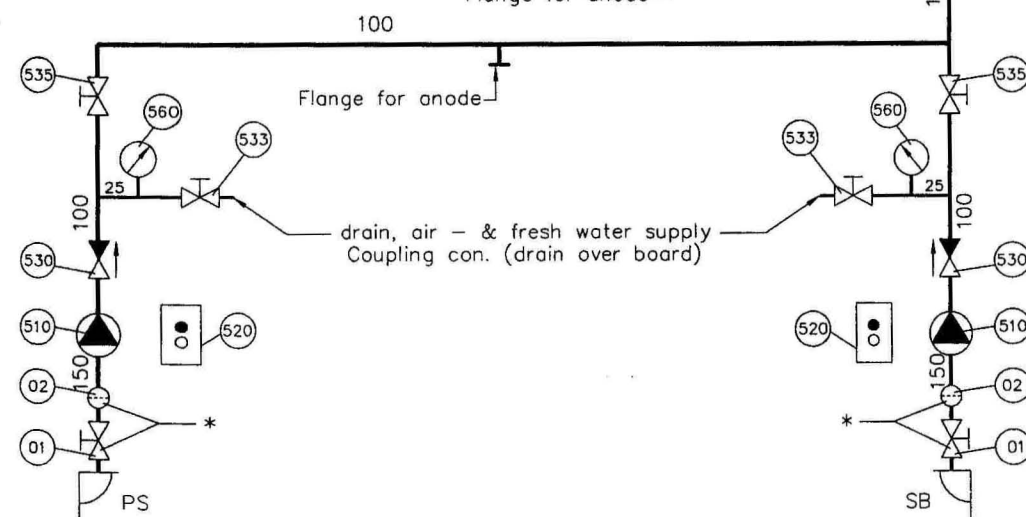
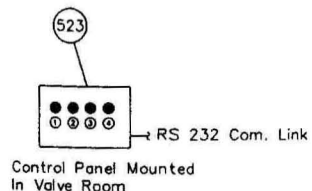
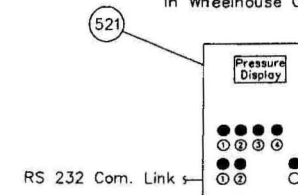
NO. 47 SUNDEN
 Post. 407 000-202



PRINCIPLE HIGH SPEED CRAFT SYSTEM



Control Panel Mounted
In Wheelhouse Console



COMPONENTS MARKED WITH (*) ARE YARD DELIVERY

610	7	DN15	DRENCHER NOZZLE DD1-7 SSP	
610	55	DN15	DRENCHER NOZZLE DD1-9 SSP	
580	4	DN65	REMOTE CONTROLLED BUTTERFLY VALVE (SECTION VALVE)	
560	3	DN15	PRESSURE GAUGE 0-10 BAR	
543	1	DN65	NON-RETURN VALVE (FIRE MAIN)	
542	1	DN65	BUTTERFLY VALVE (FIRE MAIN)	
541	1	DN50	BUTTERFLY VALVE (PUMP TEST)	
535	2	DN100	BUTTERFLY VALVE (PUMP)	
533	2	DN25	STOP VALVE (FOR DRAIN, AIR - & FRESH WATER SUPPLY)	
530	2	DN100	NON-RETURN VALVE (PUMP)	
525	1		PRESSURE TRANSMITTER	
523	1		CONTROL BOX (VALVE ROOM)	
522	1		CONTROL PANEL (STAIR CASE)	
521	1		CONTROL PANEL (WHEEL HOUSE)	
520	2		START/STOP PUMP	
510	2		DRENCHER PUMP	
02	2		STRAINER	*
01	2	DN150	SEA VALVE	*
POS. NO.	NO.(S)	NO.(S)	DESCRIPTION	REMARKS

No.	Date	Init.	Revision	HULL NO.	Our Ref.
C	09-08-01	MNK	Change pipe at pump inlet to DN150 and outlet to DN100	1651	0128-1810-01
			YARD Fjellstrand	CUSTOMER PROJECT	Scale 1:1
			TITLE Principle High Speed Craft System		Drawn by RJP Date 18-05-01
			TYPE Diagram		Checked by MNK Date 09-08-01
			SYSTEM This drawing must not be lent, copied or utilized by any third party. Supervised by		Drawing No. 0128-1810-01-002 0128-1810-01-002C.DWG

MM.	15	20	25	32	40	50	65	80	100	125	150	200
INCH	$\frac{1}{2}$ "	$\frac{3}{4}$ "	1"	1 $\frac{1}{4}$ "	1 $\frac{1}{2}$ "	2"	2 $\frac{1}{2}$ "	3"	4"	5"	6"	8"

MAIN SWITCH BOARD NO.2 (PORT)

SUPPLY SYSTEM:
TN-S 400/230V THREE PHASE FOUR WIRE, NEUTRAL EARTHED

MAIN SWITCH BOARD NO.1 (STBD.)

CABLE TYPE	CABLE NO.	CONSUMER	MCCB	NO.
LQM5M 4x16mm ²	875.002	P2 - DISTRIBUTION BOARD WHEELHOUSE	83A	2-101
LQM5M 4x6mm ²	875.004	P4 - DISTR. BOARD LOWER PASS.SAL.	32A	2-102
LQM5M 4x16mm ²	571.002	V1 - VENTILATION SYSTEM (Supply no.2)	83A	2-103
LQM5M 3x10mm ²	813.014	SPRINKLER PUMP PORT	50A	2-104
LQM5M 4x4mm ²	813.006	FIRE PUMP NO.2, PORT	32A	2-105
LQM5M 4x6mm ²	574.002	ENGINE ROOM FAN, PORT	32A	2-106
LQM5M 4x2.5mm ²	803.010	BILGE PUMPS STBD FORE	20A	2-107
LQM5M 4x2.5mm ²	803.001	BILGE PUMPS STBD AFT	20A	2-108
LQM5M 4x1.5mm ²	722.006	MAIN ENGINES PREHEATERS, PORT	16A	2-109
LQM 5x1.5mm ²	581.006	SEWAGE DISCHARGE PUMP	16A	2-110
LQM 3x1.5mm ² +E	803.037	OILY WATER DISCHARGE PUMP	16A	2-111
			16A	2-112
LQM 3x2.5mm ² +E	881.006	SOCKET OUTLET 400VAC, ENG. ROOM PORT.	16A	2-113
			83A	2-114
			16A	2-115
LQM 2x1.5mm ² +E	875.031	BATTERY CHARGER 1 "S2"(MONIT.M.E.) PORT	16A	2-116
LQM 2x1.5mm ² +E	875.033	BATTERY CHARGER 2 "S2"(MONIT.M.E.) PORT	16A	2-117
LQM 2x1.5mm ² +E	875.037	BATTERY CHARGER "S4" (MAIN ENGINES/ AUX.ENGINE) PORT	16A	2-118
LQM 2x1.5mm ² +E	881.011	LIGHT/ SOCKET OUTLET SEC. PORT	16A	2-119
LQM 2x1.5mm ² +E	881.003	LIGHT CAUSING/ENG./MACH.ROOM PORT	16A	2-119
LQM 2x1.5mm ² +E	881.005	SOCKET OUTLET ENG./ MACH.ROOM PORT	16A	2-120
LQM 2x1.5mm ² +E	881.009	LIGHT CAUSING/ENG./MACH.ROOM, STBD	16A	2-120
		EARTH FAULT TEST, MSB2 J.W./ SPACE HEATER AUX.ENG. PORT	16A	2-121
LQM 2x1.5mm ² +E	803.039	OILY WATER SEPARATOR	16A	2-122
LQM 2x1.5mm ² +E	881.017	CHARGE/RESCUE BOAT. LIGHT/ SOCKET OUTLETS VENT.ROOM/LUGGAGE COMPARTMENT	16A	2-123
LQM 2x1.5mm ² +E	813.019	SPRINKLER SYSTEM (Control, Backup supply)	16A	2-124
LQM 2x1.5mm ² +E	574.004	ENG.ROOM FAN PORT, CONTROL CIRCUIT	16A	2-125
			16A	2-126
			16A	2-127
			16A	2-128
			16A	2-129
			10A	2-130

LQM 3x1x50mm²+1x35mm² L1/L2/L3/N
CABLE NO. 871.005/-006/-007/-008LQM 3x1x50mm²+1x35mm² L1/L2/L3/N
CABLE NO. 871.013/-014/-015/-016LQM 3x1x50mm²+1x35mm² L1/L2/L3/N
CABLE NO. 871.001/-002/-003/-004

SHORE CONNECTION BOX

EARTH CONNECTION FOR DOCKING

25m NSHO 4x35mm²+E
L1/L2/L3/PE/NGENERATOR NO.2
400/230V, 50Hz
85kW, 106kVA, 153ASHORE CONNECTION
400/230V, 50Hz
125AGENERATOR NO.1
400/230V, 50Hz
85kW, 106kVA, 153A

NO.	MCCB	CONSUMER	CABLE NO.	CABLE TYPE
1-101	83A	P1 - DISTRIBUTION BOARD WHEELHOUSE	875.001	LQM5M 4x16mm ²
1-102	32A	P3 - DISTR. BOARD UPPER PASS.SAL.	875.003	LQM5M 4x6mm ²
1-103	83A	V1 - VENTILATION SYSTEM (supply no.1)	571.001	LQM5M 4x16mm ²
1-104	50A	SPRINKLER PUMP, STBD	813.018	LQM5M 3x10mm ²
1-105	32A	FIRE PUMP NO.1, STBD	813.001	LQM5M 4x4mm ²
1-106	32A	ENGINE ROOM FAN, STBD	574.001	LQM5M 4x6mm ²
1-107	20A	BILGE PUMPS PORT, FORE	803.026	LQM5M 4x2.5mm ²
1-108	20A	BILGE PUMPS PORT, AFT	803.027	LQM5M 4x2.5mm ²
1-109	16A	MAIN ENGINES PREHEATERS, STBD	722.001	LQM5M 4x2.5mm ²
1-110	83A	AIR COND. COMPRESSOR/SEA WATER P. NO.1	571.071	LQM5M 3x16mm ²
1-111	83A	AIR COND. COMPRESSOR/SEA WATER P. NO.2	571.063	LQM5M 3x16mm ²
1-112	10A	SEA WATER PUMP	581.009	LQM 5x1.5mm ²
1-113	10A	LUB.OIL FILLING PUMP	711.001	LQM 5x1.5mm ²
1-114	16A	SOCKET OUTLET 400VAC, ENG. ROOM STBD.	881.007	LQM 3x2.5mm ² +E
1-115	16A			
1-116	16A	BATTERY CHARGER 1 "S1"(MONIT.M.E.) STBD	875.011	LQM 2x1.5mm ² +E
1-117	16A	BATTERY CHARGER 2 "S1"(MONIT.M.E.) STBD	875.013	LQM 2x1.5mm ² +E
1-118	16A	BATTERY CHARGER "S3" (START MAIN ENGINES/ AUX.ENGINE) STBD	875.017	LQM 2x1.5mm ² +E
1-119	16A	LIGHT/ SOCKET OUTLET SEC. STBD	881.012	LQM 2x1.5mm ² +E
1-119	16A	LIGHT CAUSING/ENG./MACH.ROOM STBD	881.002	2x1.5mm ² +E
1-120	16A	SOCKET OUTLET ENG./ MACH.ROOM, STBD	881.004	LQM 2x1.5mm ² +E
1-120	16A	LIGHT CAUSING/ENG./MACH.ROOM, PORT	881.010	
1-121	16A	EARTH FAULT TEST, MSB1 J.W./ SPACE HEATER AUX.ENG. STBD	INTERNAL	
1-122	16A	WATER HEATER	581.004	LQM 2x1.5mm ² +E
1-123	16A	FRESH WATER PRESSURE PUMP	581.001	LQM 2x1.5mm ² +E
1-124	16A	SPRINKLER SYSTEM (Control, Main supply)	813.020	LQM 2x1.5mm ² +E
1-125	16A	ENG.ROOM FAN STBD, CONTROL CIRCUIT	574.003	LQM 2x1.5mm ² +E
1-126	16A	AC SYSTEM, CONTROL CIRCUIT	571.095	LQM 2x1.5mm ² +E
1-127	16A	INTERCEPTOR/DAWT CONTROL BOX	405.020	LQM 2x1.5mm ² +E
1-128	16A			
1-129	16A			
1-130	10A			

Rev. Area		Date	Description	Made by	Chk'd	Appr.
A		14.02.02	CHANGE PUSHS P. 1-106,111+126, P. 2-106-113,115-129	ALW		
MAIN SWITCH BOARDS ONE LINE DIAGRAM				Date: 09/2011 Drawn: ALW Approved: 1661 Scale: % Project no: 871 M0054 Rev. no: A		
MARITIM elektro as		51 no / DWG no: 871 M0054		No. 47 14.02.02		

Read Single-line tables for the same
must be to be fully checked
together and not to be checked
by any separate methods.

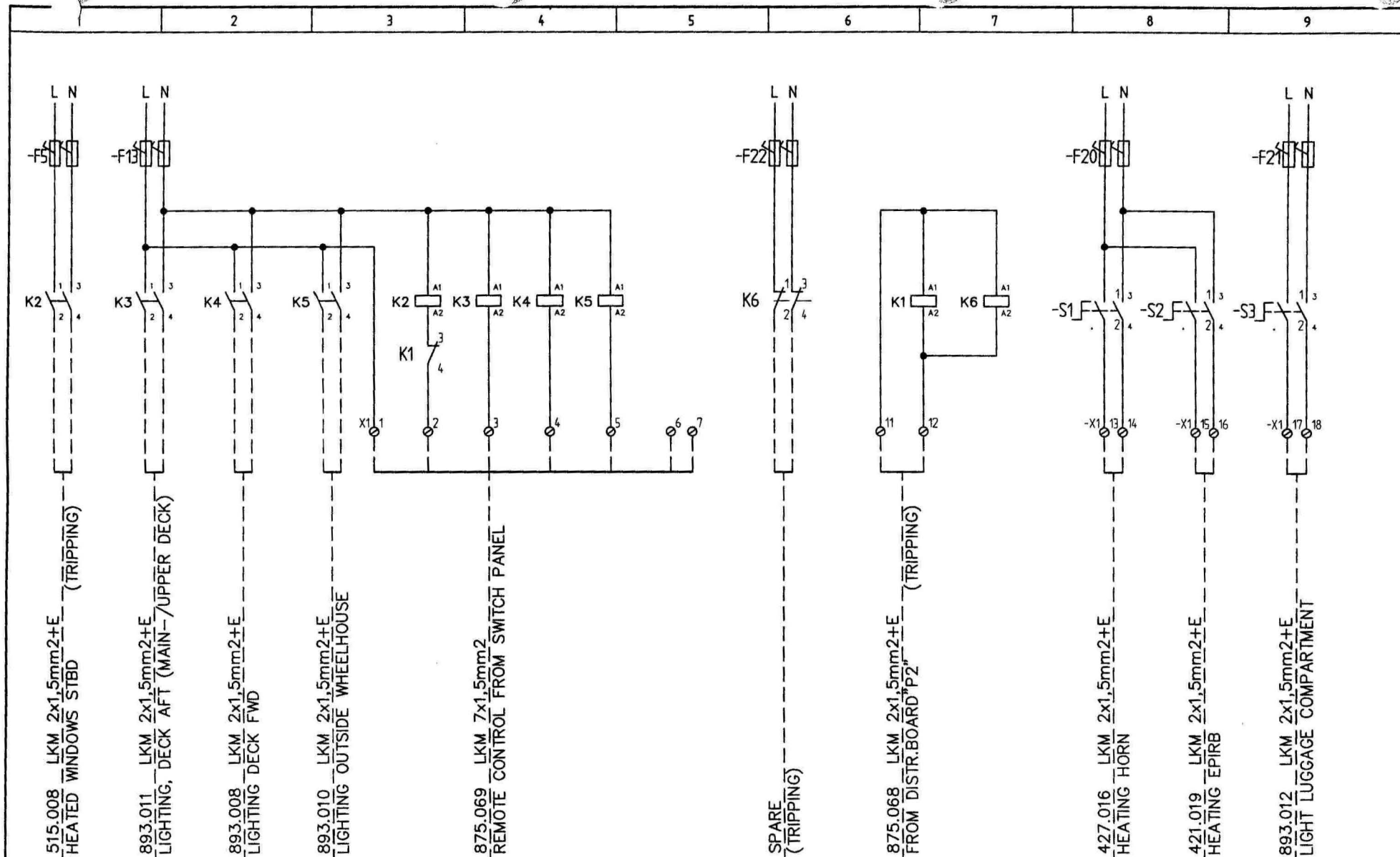
Check with control core
(200-4)

Check without control core
(200-5)

NO.		FUSE	CONSUMER	kW	CABLE NO	CABLE TYPE
			SUPPLY FROM MAIN SWITCH BOARD NO.1		875.001	LKMSM 4x16mm2
F1	16A					
F2	13A					
F3	10A					
F4	15A		WINDOW WIPERS STBD	0,3	515.004	LKM 2x1,5mm2+E
F5	15A		HEATED WINDOWS WHEELHOUSE STBD (TRIPPING)	2,0	INTERNAL	LKM 2x1,5mm2+E
F6	15A		VOICE DATA RECORDER. (main supply)	-	417.001	LKM 2x1,5mm2+E
F7	15A		MOLAND ALARM SYSTEM, AUTOCHANGE (supply no.1)	-	792.004	LKM 2x1,5mm2+E
F8	20A		BATTERY CHARGER NO.1 FOR "E1"	-	875.006	LKM 2x2,5mm2+E
F9	20A		DEFROSTER SYSTEM WHEELHOUSE, FWD.	3,2	571.103	LKM 2x2,5mm2+E
F10	15A		SUPPLY NO.1 TO AUTOCHANGE, BATTERY CHARGER FOR "R1"	-	421.002	LKM 2x1,5mm2+E
F11	15A		RED LIGHT, WHEELHOUSE		892.015	LKM 2x1,5mm2+E
F12	15A		NAVIGATION LIGHT CONTROLLER (main supply)	0,5	427.001	LKM 2x1,5mm2+E
F13	15A		LIGHT DECK OUTDOOR/ REMOTE CONTROL SYSTEM CONTROL CURRENT CONTACTOR IN "E1"	-	INTERNAL 875.059	LKM 2x1,5mm2+E
F14	15A		PUBLIC ADDRESS, B-SYSTEM (main supply)	-	425.004	LKM 2x1,5mm2+E
F15	15A		TV SURVEILLANCE SYSTEM (Eng.room, Nav.)	-	416.001	LKM 2x1,5mm2+E
F16	15A		GYRO COMPASS (main supply)	0,14	413.040	LKMSM 2x1,5mm2+E
F17	10A		ECHO SOUNDER, FURUNO FE-700		413.020	LKMSM 2x1,5mm2+E
F18	13A					
F19	13A		CONTROL CURRENT DISPLAY, AC AND VENT.SYSTEM		571.101	LKM 2x1,5mm2+E
F20	13A		HEATING HORN/ HEATING EPIRB		INTERNAL	LKM 2x1,5mm2+E
F21	13A		LIGHT LUGGAGE COMPARTMENT		INTERNAL	LKM 2x1,5mm2+E
F22	20A		SPARE (TRIPPING)		INTERNAL	
F23	13A					
F24	13A					
F25	10A					

P1- 400/230VAC DISTRIBUTION BOARD IN WHEELHOUSE		MARITIM elektro as N-5632 OMASTRAND TEL: +47 56550560 Fax: +47 56554202		ONE LINE DIAGRAM		Project no. Fellstrand as		Scale %		SFI no. / Dn6 no. 1661 875 M0058-A		Sheet 1 2	
Rev. no.	Description	Date	Drawn	Standard	Original disp.	Repl. by	Repl. by						
A	F18-21,23-24	23.01.02	A.Lie	Approved	Rev. no.								

P1- 400/230VAC DISTRIBUTION BOARD IN WHEELHOUSE		MARITIM elektro as N-5632 ØMASTRAND TEL: +47 56550560 Fax: +47 56554202		ONE LINE DIAGRAM		Project no. Fjellstrand as		Sheet 1 2	
Rev. no.	Description	Date	Drawn	Standard	Original desig.	Repl. desig.	Scale %	SFI no. / DWG no. 1661 875 M00158-A	
A	F18-21,23-24	23.01.02	A.Lie	Approved	NR				
			Date	110901					
			Drawn	ALH					



				Date	10/9/01	P1- 400/230VAC DISTRIBUTION BOARD IN WHEELHOUSE		MARITIM elektro as H-5632 ØMASTRAND TEL: +47 56550560 Fax: +47 56554202		CIRCUIT DIAGRAM		Project no.			
				Drawn	ALL							Fjellstrand as			
A	F22 SPARE TRIPPING	23.01.01	A.Lie	Approved	RM							Scale	SFI no. / DWG no.		Sheet 2
Rev. no.	Description	Date	Drawn	Standard	-	Original dup.	Repl. no.	Repl. by				%	1661 875 M0058-A		2

1		2		3		4		5		6		7		8		9	
NO.	FUSE	CONSUMER		kW	CABLE NO	CABLE TYPE											
		SUPPLY FROM MAIN SWITCH BOARD NO.2			875.002	LKMSM 4x16mm2											
F1	20A	AIR CONDITION SYSTEM WHEELHOUSE (TRIPPING)	3.0	INTERNAL	LKM 4x2.5mm2+E												
F2	13A	RADAR NO.2 , TRANSFORMER 400/230VAC, UPS. (PORT) PREF.MONITOR RADAR NO.1 AND 2	-	413.006	LKM 5x1.5mm2												
F3	10A	WINDOW WASHER PUMP	0,3	515.001	LKM 2x1.5mm2+E												
F4	13A	WINDOW WIPERS PORT	0,3	515.003	LKM 2x1.5mm2+E												
F5	13A	HEATED WINDOWS WHEELHOUSE PORT (TRIPPING)	2.0	INTERNAL	LKM 2x1.5mm2+E												
F6	13A	VOICE DATA RECORDER, (back-up supply)	-	417.002	LKM 2x1.5mm2+E												
F7	13A	MOLAND ALARM SYSTEM, AUTOCHANGE (supply no.2)	-	792.005	LKM 2x1.5mm2+E												
F8	20A	BATTERY CHARGER NO.2 FOR "E1"	-	875.005	LKM 2x2.5mm2+E												
F9	20A	DEFROSTER SYSTEM WHEELHOUSE, AFT.	3.2	571.113	LKM 2x2.5mm2+E												
F10	10A	FIRE ALARM SYSTEM		811.002	LKM 2x1.5mm2+E												
F11	13A	LIGHT / SOCKET OUTLETS, WHEELHOUSE		892.014	LKM 2x1.5mm2+E												
F12	13A	SUPPLY NO.2 TO AUTOCHANGE, BATTERY CHARGER FOR "R1"	-	421.020	LKM 2x1.5mm2+E												
F13	13A	REMOTE CONTROL SYSTEM	-	INTERNAL	LKM 2x1.5mm2+E												
F14	13A	AC/DC AUTOCHANGE UNIT VHF	-	421.001	LKM 2x1.5mm2+E												
F15	20A																
F16	13A																
F17	13A																
F18	13A																
F19	10A																

P2- 400/230VAC DISTRIBUTION BOARD IN WHEELHOUSE		MARITIM elektro as N-5632 OMASTRAND TEL: +47 56550560 Fax: +47 56554202		ONE LINE DIAGRAM		Project no. Fjellstrand as		Sheet 1	
Repl. by		Repl. by		Scale		SF no. / DWG no. 1661 875 M00159-A		2	
Rev. no.	Description	Date	Drawn	Standard					
A	F2,12,CABLE 413.006 421.020	23.01.02	A.Lie	Drawn	ALL				
A	F9, CABLE 571.113 F4-T,F11-14,F16-18	23.01.02	A.Lie	Approved	NM				

P2- 400/230VAC DISTRIBUTION BOARD IN WHEELHOUSE		Date 11/09/01		11/09/01		11/09/01		11/09/01		11/09/01		11/09/01		11/09/01		11/09/01	
A		F2,12,CABLE 413.006 421.020		23.01.02		A.Lie		Drawn		A.Lie		11/09/01		11/09/01		11/09/01	
A		F9, CABLE 571.113 F4-7,F11-14,F16-18		23.01.02		A.Lie		Approved		NM		11/09/01		11/09/01		11/09/01	
Rev. no		Description		Date		Drawn		Standard		-		Original desig		Repl. by		Repl. by	

MARITIM
elektro as

N-5632 ØMASTRAND
Tlf: +47 56550560 Fax: +47 56554202

ONE LINE DIAGRAM

Project no.

Fjellstrand as

Scale

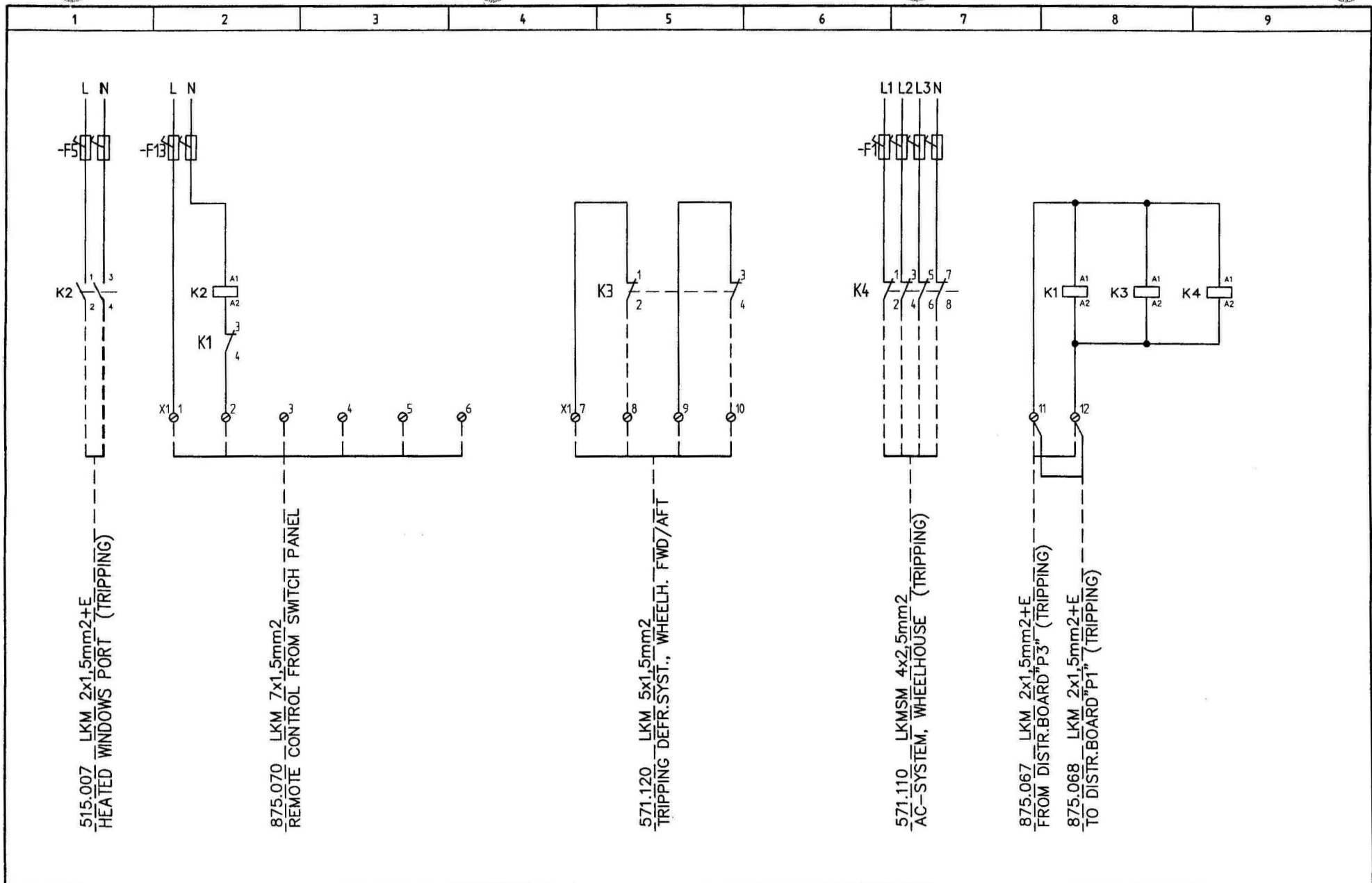
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Sh. no. / Dwg. no.

1661 875 M00159-A

Sheet 1

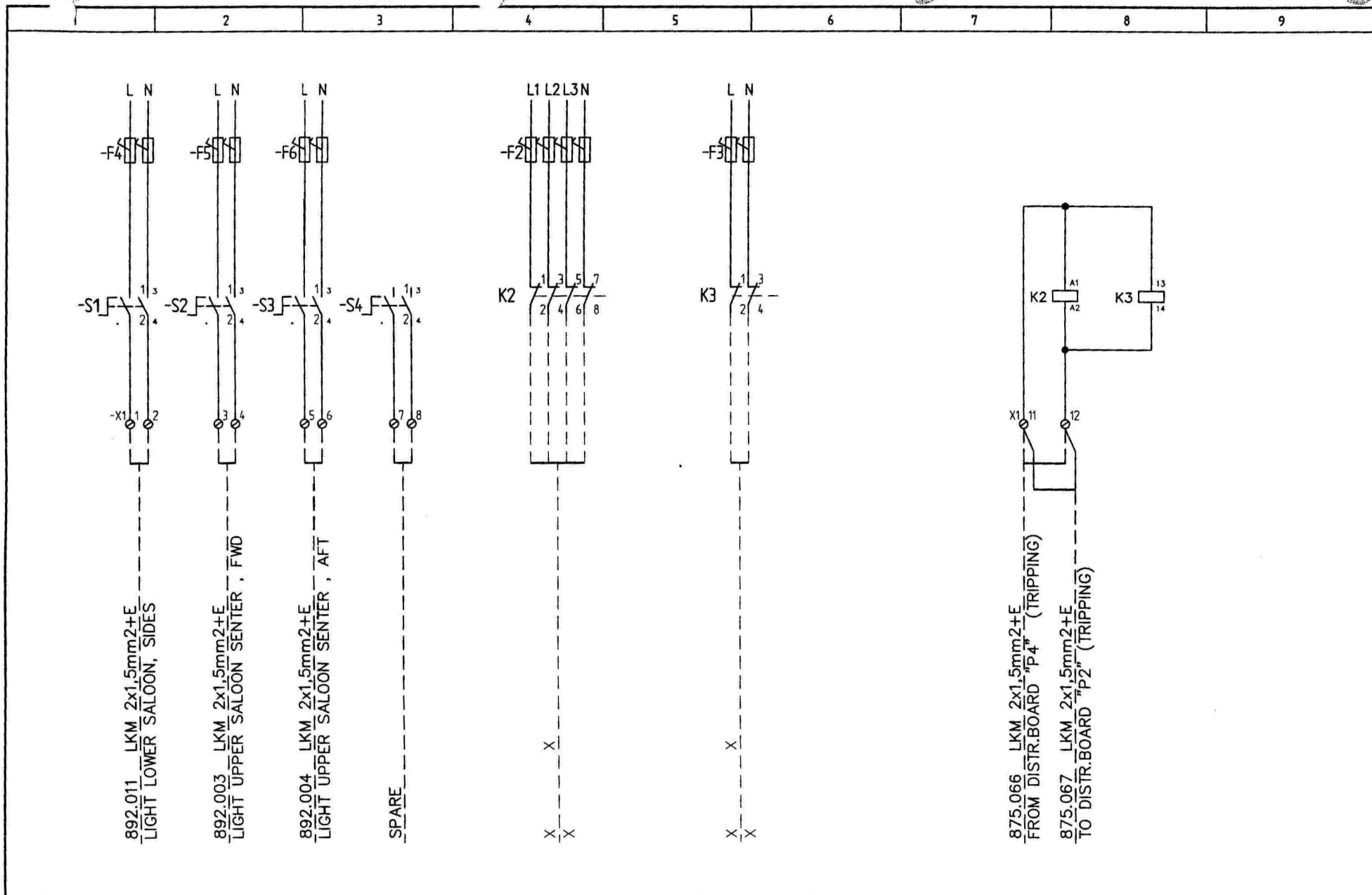
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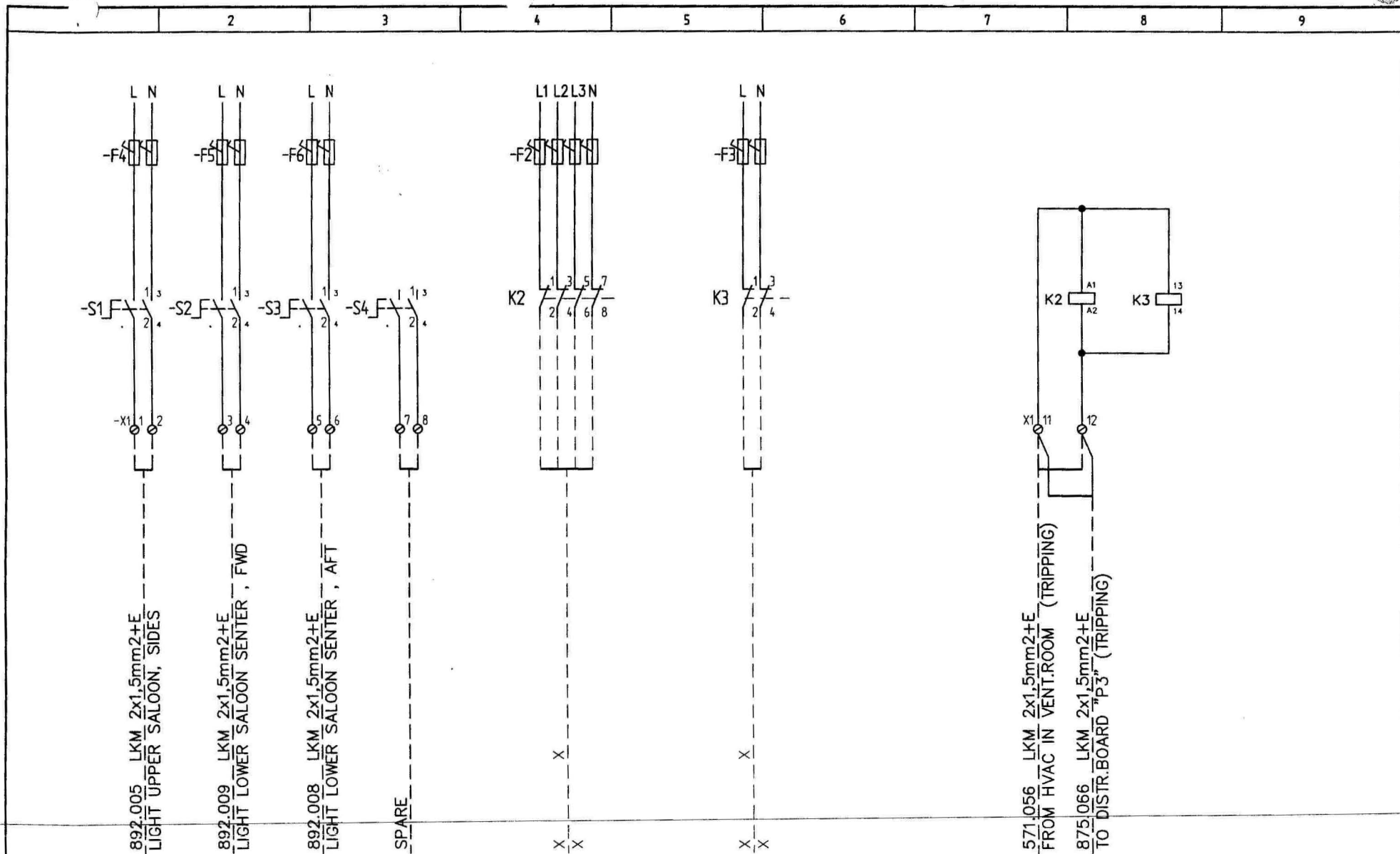
				Date	11/01/01	P2- 400/230VAC DISTRIBUTION BOARD IN WHEELHOUSE			MARITIM elektro as N-5632 ØMASTRAND Tlf: +47 56650560 Fax: +47 56654202	CIRCUIT DIAGRAM	Project no.		=
				Drawn	ALH						Fjellstrand as		+
A	K3, TRIPPING DEFR.	23.01.02	A.Lie	Approved	NH								
Rev. no	Description	Date	Drawn	Standard	-	Original desig.	Repl. lin.	Repl. typ.			Scale	SFI no. / DWG no.	Sheet 2
											%	1661 875 M00159-A	of 2

1	2	3	4	5	6	7	8	9
NO.	FUSE	CONSUMER	kW	CABLE NO	CABLE TYPE			
		SUPPLY FROM MAIN SWITCH BOARD NO.1		875.003	LKMSM 4x6mm ²			
F1	16A							
F2	13A	SPARE w/tripping (Coffee maker)		INTERNAL				
F3	20A	SPARE w/ tripping		INTERNAL				
F4	13A	LIGHT LOWER SALOON SIDES		INTERNAL	LKM 2x1,5mm ² +E			
F5	13A	LIGHT UPPER SALOON SENTER, FWD		INTERNAL	LKM 2x1,5mm ² +E			
F6	13A	LIGHT UPPER SALOON SENTER, AFT		INTERNAL	LKM 2x1,5mm ² +E			
F7	13A	SOCKET OUTLET/ CHARGING EMERG. LIGHTS UPPER SALOON STBD	-	892.002	LKM 2x1,5mm ² +E			
F8	13A	SOCKET OUTLET/ CHARGING EMERG. LIGHTS LOWER SALOON PORT	-	892.010	LKM 2x1,5mm ² +E			
F9	13A	LIGHT/SOCKET OUTLETS TOILETS/BROOM CLOSET U. SALOON	-	892.001	LKM 2x1,5mm ² +E			
F10	13A	LIGHT/SOCKET OUTLETS/ REFRIGATOR, IN BAR/KIOSK	-	892.020	LKM 2x1,5mm ² +E			
F11	13A							
F12	13A							
F13	13A							
F14	13A							
F15	13A							
F16	13A							
F17	16A							
F18	20A							

P3- 400/230VAC DISTRIBUTION BOARD ON UPPER PASSENGER DECK		MARITIM elektro as N-5632 ØMASTRAND Tlf: +47 56550560 Fax: +47 56554202		ONE LINE DIAGRAM		Project no. Fellstrand as		=	
A	CHANGE TYPE: F4-16	21.01.02	A.Lie	Approved	IKH	Scale	SP no. / DWG no.	Sheet	1
Rev. no	Description	Date	Drawn	Standard	-	%	1661 875 M00160-A	of	2



				Date	11/09/01	P3- 400/230VAC DISTRIBUTION BOARD ON UPPER PASSENGER DECK		MARITIM elektro as N-5632 ØMASTRAND TV: +47 56550560 Fax: +47 56554202		CIRCUIT DIAGRAM		Project no.		=		
				Drawn	ALL							Fjellstrand as		+		
-	-	-	-	Approved	HN											
Rev. no.	Description	Date	Drawn	Standard	-	Original desig.	Repl. desig.	Repl. by			Scale	%	SP no. / DWG no.		Sheet	2
													1661 875 M00160-A		of	2



Rev. no.	Description	Date	Drawn	Standard	Original desig.	Repl. desig.	Repl. by	Project no.	Scale	SR no. / DWG no.	Sheet
-	-	-	-	-	-	-	-	1661 875 M00173-A	%	1661 875 M00173-A	2
											2

P4- 400/230VAC DISTRIBUTION BOARD
LOWER PASSENGER DECK

MARITIM
elektro as

N-5632 OMASTRAND
TEL: +47 56550560 FAX: +47 56554202

CIRCUIT DIAGRAM

Fjellstrand a.s.

1661 875 M00173-A

NO.	FUSE	CONSUMER	W	CABLE NO	CABLE TYPE
F1	125A ☒	SUPPLY FROM BATTERY (translational source)		875.009(+) 875.010(-)	LKM 2x1x35mm ²
F2	63A ☒	SUPPLY FROM BATTERY CHARGER NO.1, (50A)	1200	875.007(+) 875.008(-)	LKM 2x1x16mm ²
F3	63A ☒	SUPPLY FROM BATTERY CHARGER NO.2, (50A)	1200	875.027(+) 875.028(-)	LKM 2x1x16mm ²
F4	6A ☒	EARTH FAULT TEST / VOLTMETER		INTERNAL	
F5	15A ☒	NAVIGATION LIGHT CONTROLLER (back-up supply)	200	427.002	LKMSM 2x2.5mm ²
F6	20A ☒	HORN	350	INTERNAL	
F7	15A ☒	RADAR NO.1		413.001	LKMSM 2x2.5mm ²
F8	10A ☒	AUTOPILLOT (main supply)	48	413.039	LKMSM 2x1.5mm ²
F9	10A ☒	AUTOPILLOT (alarm supply) GYRO COMPASS (back-up supply)	144	413.033	LKMSM 2x1.5mm ²
F10	10A ☒	SPEED LOG / 200ppm SIGNAL SPLITTER	15	413.021	LKMSM 2x1.5mm ²
F11	10A ☒	WATER JET INDICATION PANEL (illumination)	15	793.037	LKMSM 2x1.5mm ²
F12	25A ☒	ALARM SYSTEM (Back-up supply)	X	792.008	LKMSM 4x2.5mm ²
F13	25A ☒	ALARM PRINTER/MONITOR NO.1, (DC/AC CONVERTER) (Back-up pwr.)	250	792.001	LKMSM 4x2.5mm ²
F14	10A ☒	ILLUMINATION SUPPLY, MAIN ENGINE CONTROL PANEL, CAPTAIN ILLUMINATION SUPPLY, MAIN ENG. CONTR./DEIF PMS PANEL/ENGINEER	X X	793.118 793.017	LKMSM 2x1.5mm ²
F15	16A ☒	FLOODLIGHT LIFERAFTS STBD	320	INTERNAL	LKMSM 2x2.5mm ²
F16	16A ☒	FLOODLIGHT LIFERAFTS PORT	320	INTERNAL	LKMSM 2x2.5mm ²
F17	10A ☒				
F18	10A ☒	EMERGENCY LIGHT OUTDOOR/LUGGAGE COMPARTMENT	100	INTERNAL	LKMSM 2x1.5mm ²
F19	16A ☒	SEARCHLIGHT	250	427.011	LKMSM 4x2.5mm ²
F20	10A ☒	ILLUMINATION SWITCH PANEL CAPTAIN/COMPASS		875.071	LKMSM 2x1.5mm ²
F21	25A ☒	PUBLIC ADDRESS/ENTERTAINMENT SYSTEM A, (Back-up supply)		425.003	X LKMSM
F22	25A ☒	PUBLIC ADDRESS /ENTERTAINMENT SYSTEM B, (Back-up supply)		425.002	X LKMSM
F23	10A ☒	INTERCOM SYSTEM		425.001	LKMSM 2x1.5mm ²
F24	10A ☒				

DATE 10/01

DRAWN Ali

APPROVED NN

Project no.

Scale %

ONE LINE DIAGRAM

DESCRIPTION E1- 24V DC DISTRIBUTION BOARD

NO. N-5632

DATE 21.01.02

CONTRACTOR MARITIM elektro as

ADDRESS N-5632 OMASTRAND

PHONE +47 56550560

FAX +47 56554202

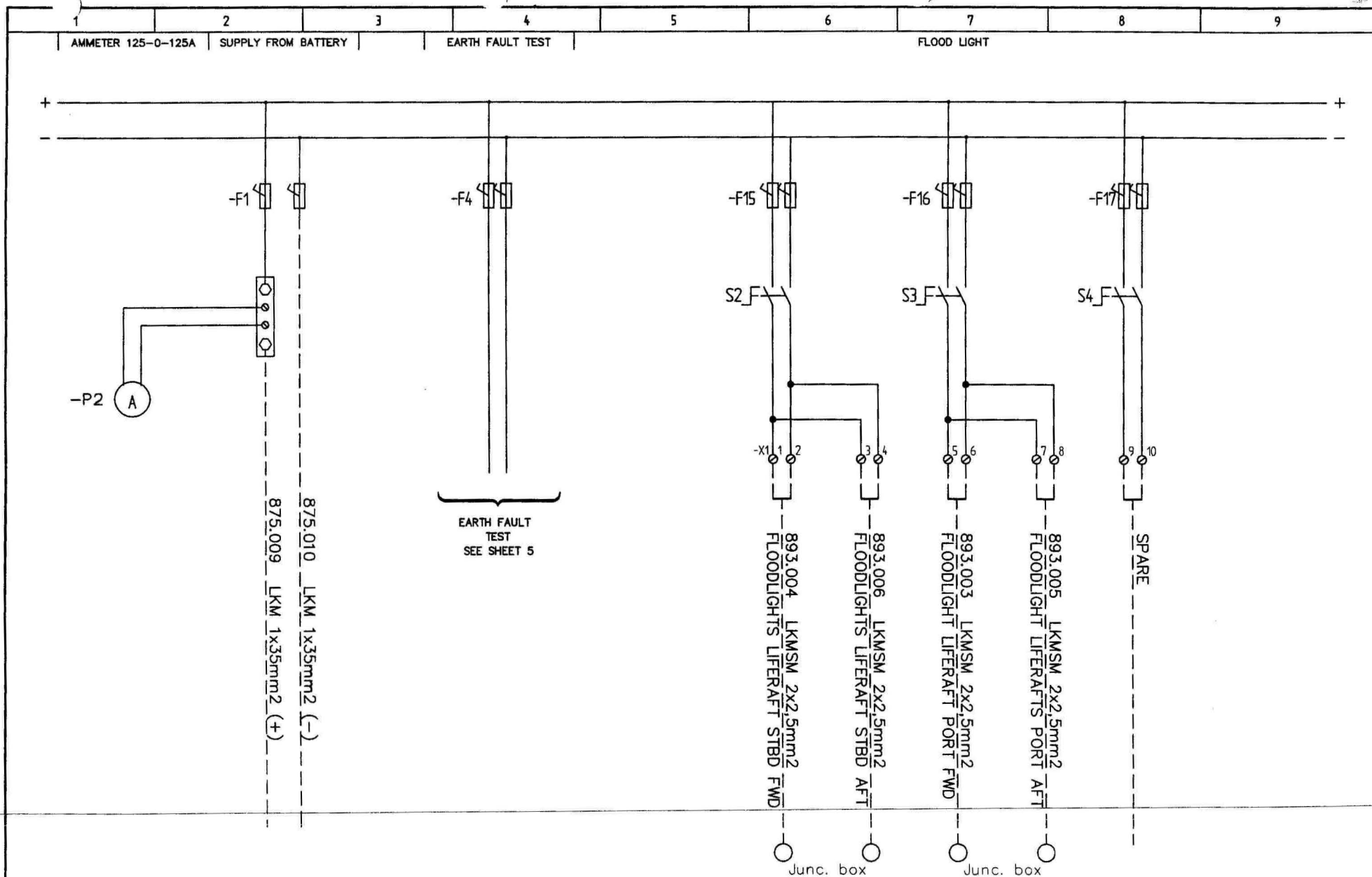
PROJECT NAME Feltstrand as

SCALE 100%

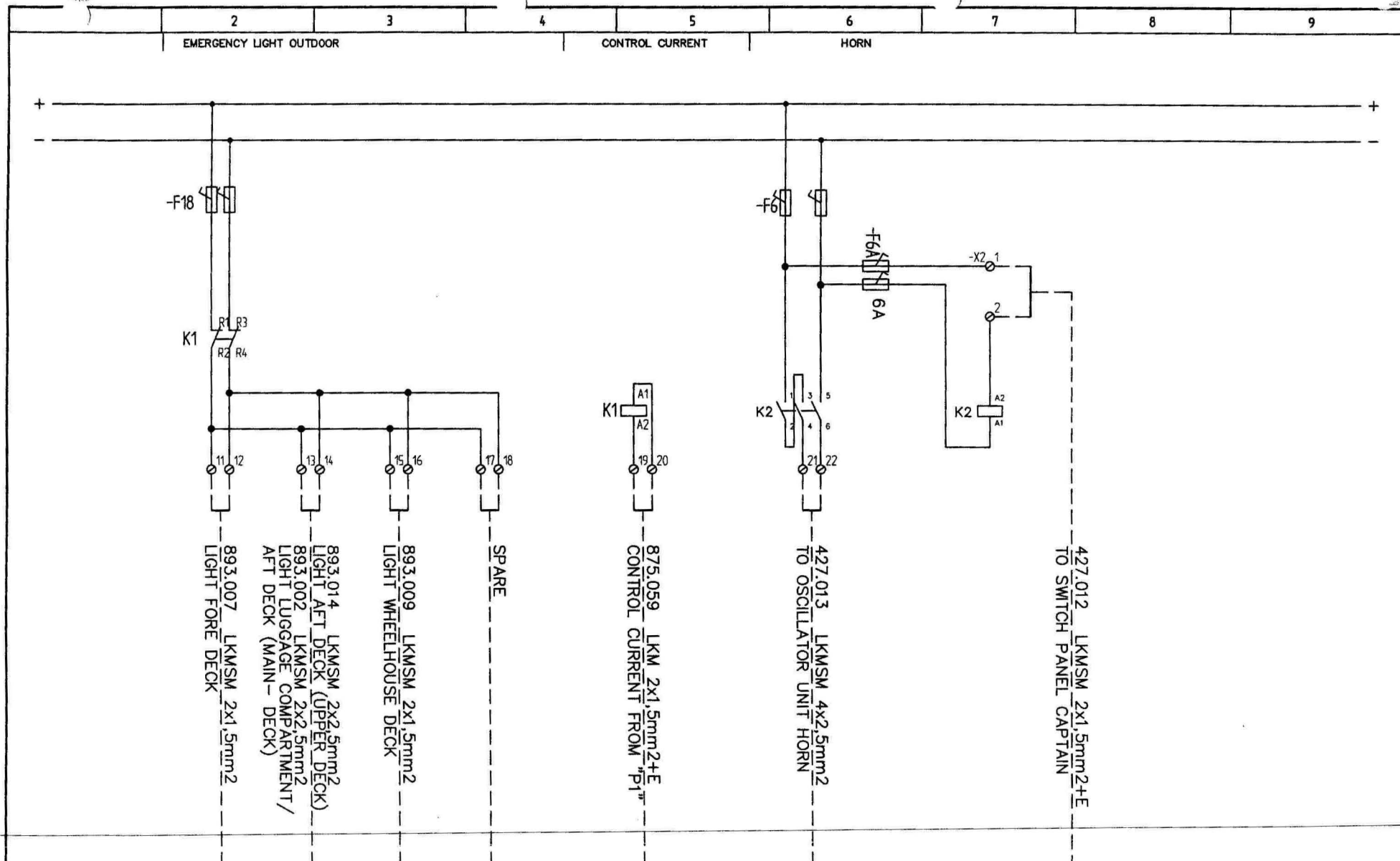
PROJECT NO. 1661 875 M001-A

NO.	FUSE	CONSUMER	W	CABLE NO	CABLE TYPE
F25	10A	CO2 SIRENE/LIGHT IN CO2-ROOM	30	815.008	LKMSM 2x1,5mm ²
F26	10A	VOL.T SENSE CABLE BATTERY CHARGER NO.1-2 FOR "E1"		875.061 875.062	LKMSM 2x1,5mm ²
F27	16A	CHART SYSTEM		413.062	LKMSM 2x1,5mm ²
F28	25A	SPARE			
F29	20A	SPARE			
F30	20A	SPARE			
F31	15A	SPARE			
F32	15A	SPARE			
F33	10A	SPARE			
F34	10A	SPARE			
F35	10A	SPARE			

				Date	110901	E1- 24V DC DISTRIBUTION BOARD IN WHEELHOUSE		MARITIM elektro as H-5632 ØMASTRAND TEL: +47 56550560 FAX: +47 56554202		ONE LINE DIAGRAM		Project no.		=	
				Drawn	ALH							Fjellstrand as		+	
A	F27, ADD. 413.062	21.01.02	A.Lie	Approved	NH							Scale	SPY no. / DWG no.		Sheet 2
Rev. no	Description	Date	Drawn	Standard	-	Original des.	Repl. Rev.	Repl. by				%	1661 875 M00161-A		of 5

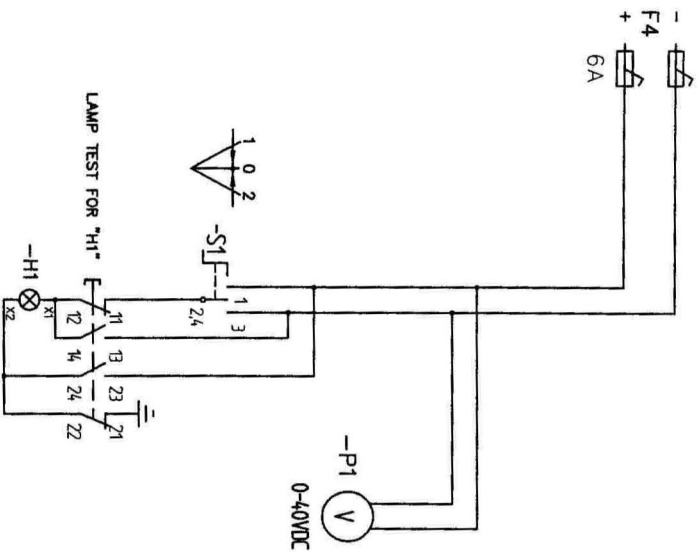


				Date	10/01	E1- 24V DC DISTRIBUTION BOARD IN WHEELHOUSE		MARITIM elektro as N-5632 ØMASTRAND Tlf: +47 56550560 Fax: +47 56554202	CIRCUIT DIAGRAM - - -	Project no.				
				Drawn	AKK					Fjellstrand a.s				
-	-	-	-	Approved	MM									
Rev. no.	Description	Date	Drawn	Standard	-	Original disp.	Repl. by	Repl. by		Scale	%	SFI no. / DWG no.	1661 875 M00161-A	Sheet 3 of 5

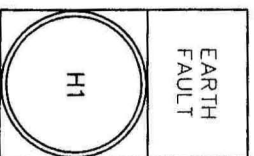
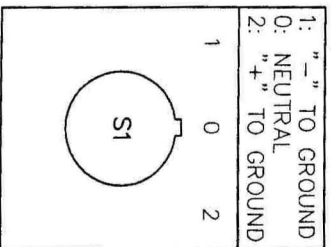


				Date	22.09.01	E1- 24V DC DISTRIBUTION BOARD IN WHEELHOUSE	MARITIM elektro as N-5632 ØMASTRAND TV: +47 56550560 Fax: +47 56554202		CIRCUIT DIAGRAM		Project no.		=	
				Drawn	ALM						Fjellstrand as		+	
A	ADD. F6A, ADD. 893.014	21.01.02	A.Lie	Approved	NH						Scale	SP no. / DWG no.	Sheet	4
Rev. no.	Description	Date	Drawn	Standard	-	Original des.	Repl. by	Repl. by			%	1661 875 M00161-A	of	5

EARTH FAULT TEST / VOLTMETER: (Mounted in door)

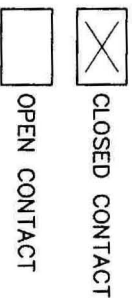


NOTE: 3 POSITION SPRING RETURN ROTARY SWITCH
 - POS 1: "-" TO GROUND LEAKAGE" - TEST
 - POS 0: NEUTRAL
 - POS 2: "+" TO GROUND LEAKAGE" - TEST

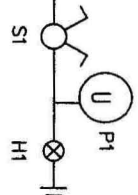


SWITCH CONNECTING DIAGRAM

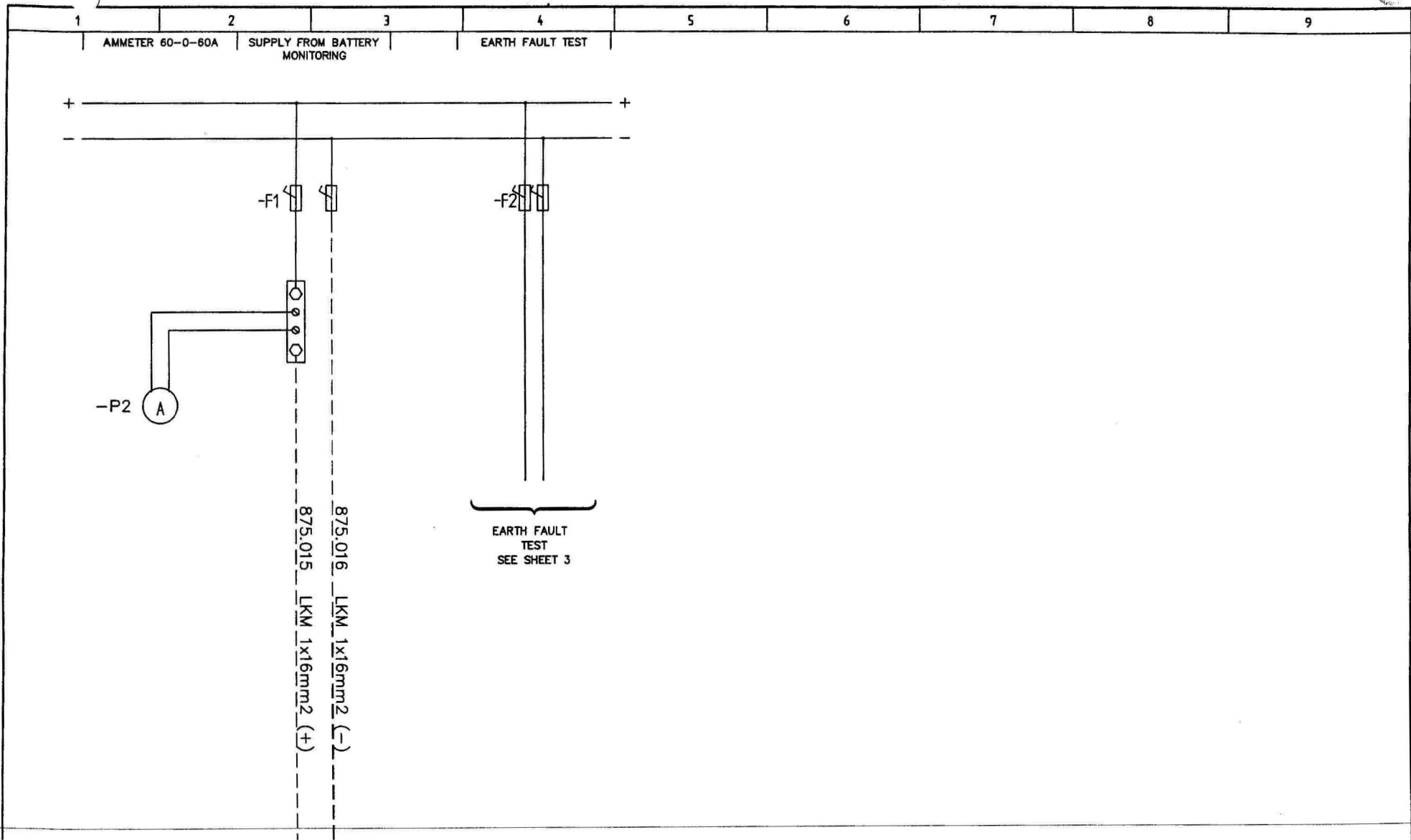
Pos.	1	0	2
Cont.	X		
1-2			
3-4			X



Rev. no.		Description	Date	Drawn	Standard	-	Original dep.	Repl. den.	Repl. by:	MARITIM elektro as H-5632 OMASTRAND Tlf: +47 56550560 Fax: +47 56554202		EARTH FAULT TEST CIRCUIT DIAGRAM		Project no. Fjellstrand as		Scale %		SPR no. / DWG no. 1661 875 M00161-A		Sheet 5	of 5
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NO.	FUSE	CONSUMERS "S1"	W	CABLE NO	CABLE TYPE
F1	63A 	SUPPLY FROM "MONITORING" BATTERY	X	875.015(+) 875.016(-)	LKM 2x1x16mm ²
F2	6A 	EARTH FAULT TEST/ VOLTMETER (Mont.battery)		INTERNAL	
					
F3	25A 	BATTERY CHARGER NO.1 (Monitoring battery)	X	875.012	LKMSM 4x2.5mm ²
F4	20A 	MAIN ENGINE NO.1, POWER DISTRIBUTION PANEL	144	793.111	LKMSM 2x2.5mm ²
F5	20A 	MAIN ENGINE NO.3, POWER DISTRIBUTION PANEL	144	793.131	LKMSM 2x2.5mm ²
F6	10A 	GEAR NO.1	X	793.155	LKMSM 2x1.5mm ²
F7	10A 	GEAR NO.3	X	793.150	LKMSM 2x1.5mm ²
F8	15A 	W.J. CONTROL UNIT STBD NO.1, INNER (Main supply)	195	793.086	LKMSM 2x2.5mm ²
F9	15A 	W.J. CONTROL UNIT STBD NO.3, OUTER (Main supply)	195	793.105	LKMSM 2x2.5mm ²
F10	15A 	W.J. CONTR. UNIT PORT INNER (Supply, Back-up/Ind.system)	275	793.070	LKMSM 4x2.5mm ²
F11	15A 	W.J. CONTR.UNIT PORT OUTER (Supply, Back-up/Ind.system)	275	793.051	LKMSM 4x2.5mm ²
F12	15A 	W.J. BRIDGE UNIT (Back-up supply)	195	793.030	LKMSM 4x2.5mm ²
F13	15A 	MAIN SWITCHBOARD NO.1 (PMS DGU1: Short Circuit Protection)	X	871.026	LKMSM 2x1.5mm ²
F14	15A 	MAIN SWITCHBOARD NO.1 (PMS DGU1)	X	871.025	LKMSM 2x1.5mm ²
F15	15A 	FIRE DAMPERS ENG. ROOM STBD RELAY BOX, CLOSED VENTILATION APERATURE	50	813.044	LKMSM 2x1.5mm ²
F16	15A 	MOTION DAMPENING SYSTEM (Control board) MDS/AFT	X	405.012	LKMSM 4x2.5mm ²
F17	25A 	BATTERY CHARGER NO.2 (Monitoring battery)	X	875.014	LKMSM 4x2.5mm ²
F18	10A 				
F19	10A 				
F20	15A 				
F21	15A 				

S1- 24V DC DISTRIBUTION BOARD STBD ENGINE ROOM		MARITIM elektro as N-5632 ØMASTRAND Tlf: +47 56550560 Fax: +47 56554202		ONE LINE DIAGRAM		Project no. Fjellstrand as		Scale %		SFI no. / DWG no. 1661 875 M00165-0		Sheet 1 of 3
Date	6/9/01	Drawn	ALL	Approved	NH							
Rev. no.		Description		Date	Drawn	Standard		Original disp.	Repl. Rev	Repl. by		

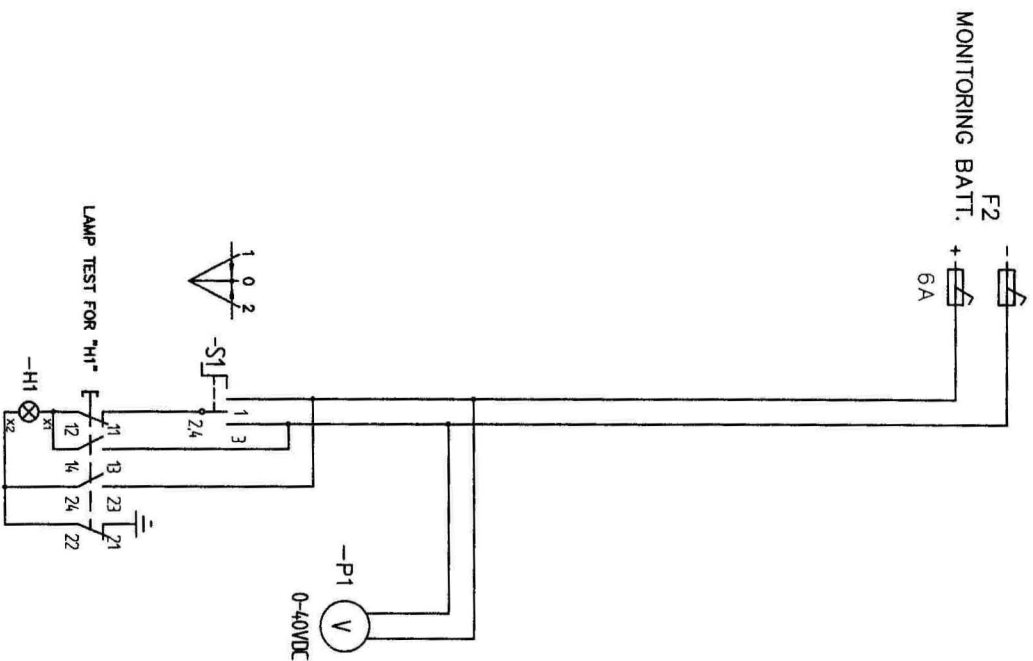


EARTH FAULT
TEST
SEE SHEET 3

875.015 LKM 1x16mm2 (+)
875.016 LKM 1x16mm2 (-)

				Date	08/09/01	S1- 24V DC DISTRIBUTION BOARD STBD ENGINE ROOM		MARITIM elektro as N-5632 ØMASTRAND TV: +47 56550560 Fax: +47 56554202	CIRCUIT DIAGRAM	Project no.		=	
				Drawn	ALL					Fjellstrand as		+	
-	-	-	-	Approved	NH					Scale	%	SFI no. / DWG no.	Sheet 2
Rev. no.	Description	Date	Drawn	Standard	-	Original disp.	Repl. Rev.	Repl. by				1661 875 M00165-0	or 3

EARTH FAULT TEST / VOLTMETER: (Mounted in door)



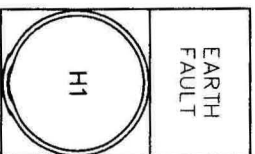
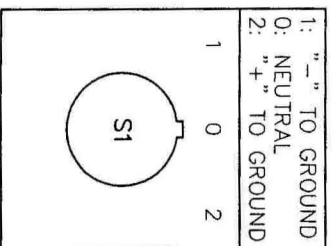
NOTE: 3 POSITION SPRING RETURN ROTARY SWITCH
 - POS 1: "-" TO GROUND LEAKAGE" -TEST
 - POS 0: NEUTRAL
 - POS 2: "+" TO GROUND LEAKAGE" -TEST

SWITCH CONNECTING DIAGRAM

Pos	1	0	2
Cont.			
1-2	X		
3-4			X

☒ CLOSED CONTACT

☐ OPEN CONTACT



Rev. no.	Description	Date	Drawn	Standard	-	Original desig.	Repl. desig.	Repl. by	Repl. by	Project no.	Fjellstrand as	Scale	SP no. / DWG no.	1661 875 M00165-0	Sheet	3
												%			or	3

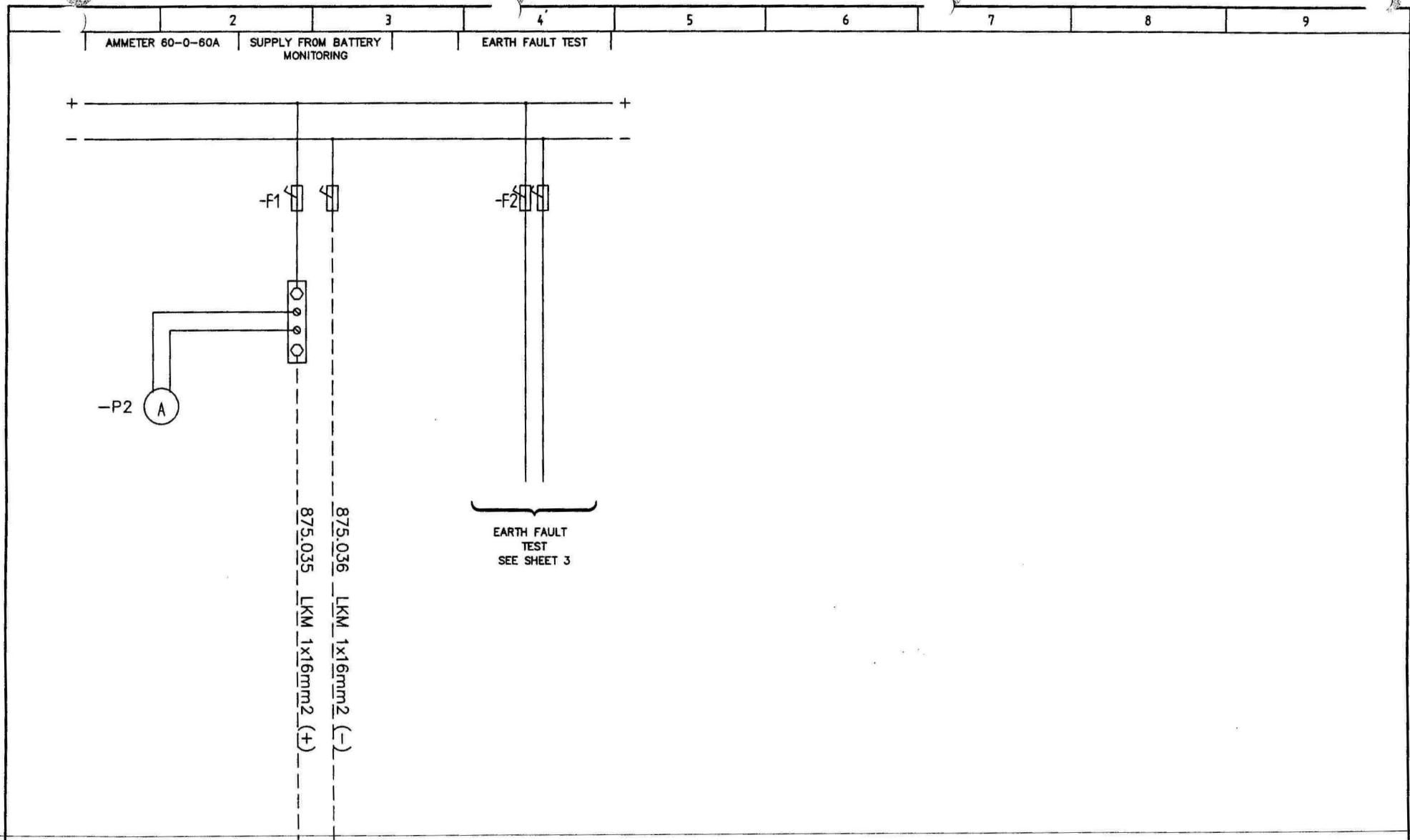
MARITIM
 elektro as
 N-5632 OMASTRAND
 Tlf: +47 56550560 Fax: +47 56554202

EARTH FAULT TEST
 CIRCUIT DIAGRAM

S1- 24V DC DISTRIBUTION BOARD
 STBD ENGINE ROOM

NO.	FUSE	CONSUMERS "S2"	W	CABLE NO	CABLE TYPE
F1	63A	SUPPLY FROM "MONITORING" BATTERY	X	875.036(+) 875.036(-)	LKM 2x1x16mm2
F2	6A	EARTH FAULT TEST/ VOLTMEETER (Monit.battery)		INTERNAL	
F3	25A	BATTERY CHARGER NO.1 (Monitoring battery)	X	875.032	LKMSM 4x2.5mm2
F4	20A	MAIN ENGINE NO.2, POWER DISTRIBUTION PANEL	144	793.171	LKMSM 2x2.5mm2
F5	20A	MAIN ENGINE NO.4, POWER DISTRIBUTION PANEL	144	793.191	LKMSM 2x2.5mm2
F6	10A	GEAR NO.2	X	793.140	LKMSM 2x1.5mm2
F7	10A	GEAR NO.4	X	793.145	LKMSM 2x1.5mm2
F8	15A	W.J. CONTR. UNIT STBD INNER (Supply, Back-up/Ind.system)	275	793.087	LKMSM 4x2.5mm2
F9	15A	W.J. CONTR.UNIT STBD OUTER (Supply, Back-up/Ind.system)	275	793.106	LKMSM 4x2.5mm2
F10	15A	W.J. CONTROL UNIT PORT NO.2, INNER (Main supply)	195	793.069	LKMSM 2x2.5mm2
F11	15A	W.J. CONTROL UNIT PORT NO.4, OUTER (Main supply)	195	793.050	LKMSM 2x2.5mm2
F12	15A	W.J. BRIDGE UNIT (Main supply)	195	793.031	LKMSM 4x2.5mm2
F13	15A	MAIN SWITCHBOARD NO.2 (PMS DGU2: Short Circuit Protection)	X	871.028	LKMSM 2x1.5mm2
F14	15A	MAIN SWITCHBOARD NO.2 (PMS DGU2)	X	871.027	LKMSM 2x1.5mm2
F15	15A	FIRE DAMPERS ENG. ROOM PORT RELAY BOX, CLOSED VENTILATION APERATURE	50	813.039	LKMSM 2x1.5mm2
F16	15A		X		
F17	25A	BATTERY CHARGER NO.2 (Monitoring battery)	X	875.034	LKMSM 4x2.5mm2
F18	10A				
F19	10A				
F20	15A				
F21	15A				

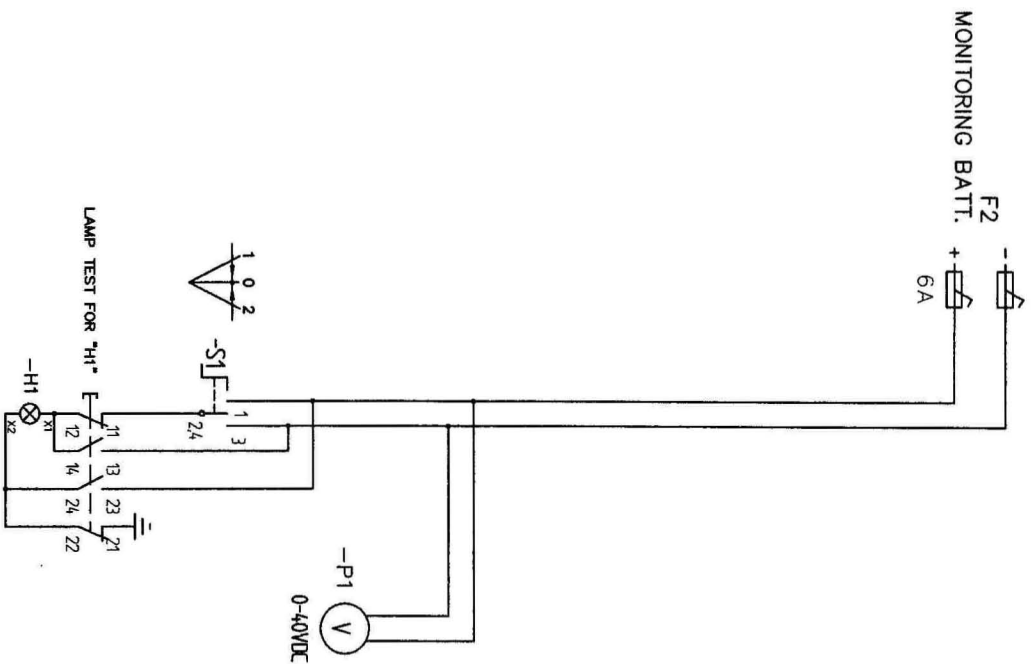
MARITIM elektro as N-5632 OHASTRAND Tel: +47 56555560 Fax: +47 56554202		ONE LINE DIAGRAM 1		Project no. Fjellstrand as		Scale %		SRI no. / DWG no. 1661 875 M00166-0		Sheet 1 of 3	
S2- 24V DC DISTRIBUTION BOARD PORT ENGINE ROOM		Date 09/01 Drawn Ali Approved N		Original disp Rep. fin		Date Drawn Standard		Date Drawn Standard		Date Drawn Standard	



				Date	20.09.21	S2- 24V DC DISTRIBUTION BOARD PORT ENGINE ROOM		MARITIM elektro as N-5632 ØMASTRAND Tlf: +47 56550560 Fax: +47 56554202	CIRCUIT DIAGRAM - - - -	Project no.		=	
				Drawn	AKK					Fjellstrand as		+	
-	-	-	-	Approved	NH								
Rev. no.	Description	Date	Drawn	Standard	-	Original desig.	Repl. desig.	Repl. desig.	%	SFI no. / DWG no.	Sheet	2	
										1661 875 M00166-0	or	3	

EARTH FAULT TEST / VOLTMETER:

(Mounted in door)



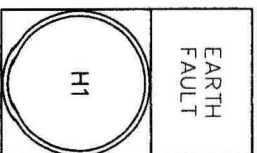
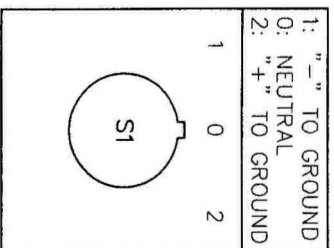
NOTE: 3 POSITION SPRING RETURN ROTARY SWITCH
 - POS 1: " - " TO GROUND LEAKAGE" - TEST
 - POS 0: NEUTRAL
 - POS 2: " + " TO GROUND LEAKAGE" - TEST

SWITCH CONNECTING DIAGRAM

Pos.	1	0	2
Cont.	X		
1-2			
3-4			X

☒ CLOSED CONTACT

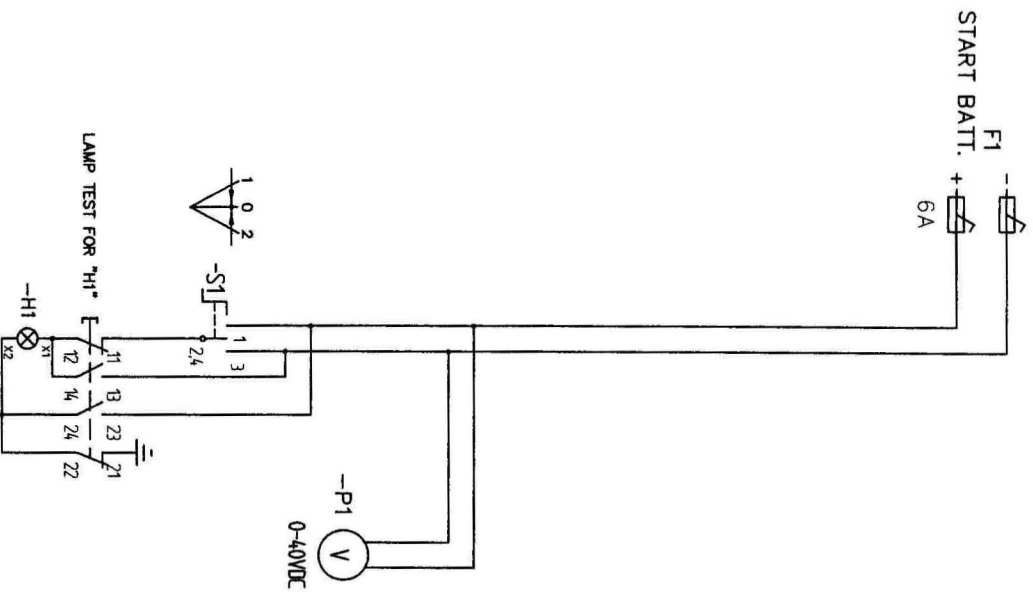
☐ OPEN CONTACT



				Date	10.01.01	S2- 24V DC DISTRIBUTION BOARD PORT ENGINE ROOM -		MARITIM elektro as N-5632 ØMASTRAND Tlf: +47 56550560 Fax: +47 56554202	EARTH FAULT TEST CIRCUIT DIAGRAM - -	Project no.		=			
				Drawn	ALB					Fjellstrand as		+			
				Approved	HN										
Rev. no.	Description	Date	Drawn	Standard	-	Original: aug	Repl. by:	Repl. by:		Scale	%	SF no. / DWG no.		Sheet	3
												1661 875 M00166-0		of	3

EARTH FAULT TEST / VOLTMETER:

(Mounted in door)



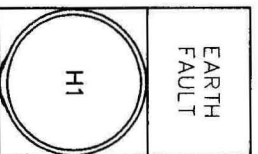
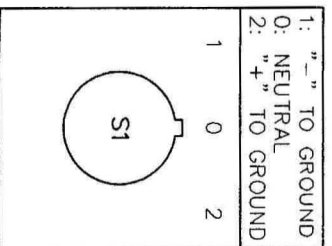
NOTE: 3 POSITION SPRING RETURN ROTARY SWITCH
 - POS 1: "-" TO GROUND LEAKAGE" -TEST
 - POS 0: NEUTRAL
 - POS 2: "+" TO GROUND LEAKAGE" -TEST

SWITCH CONNECTING DIAGRAM

Pos	1	0	2
Cont.	1-2		
3-4			

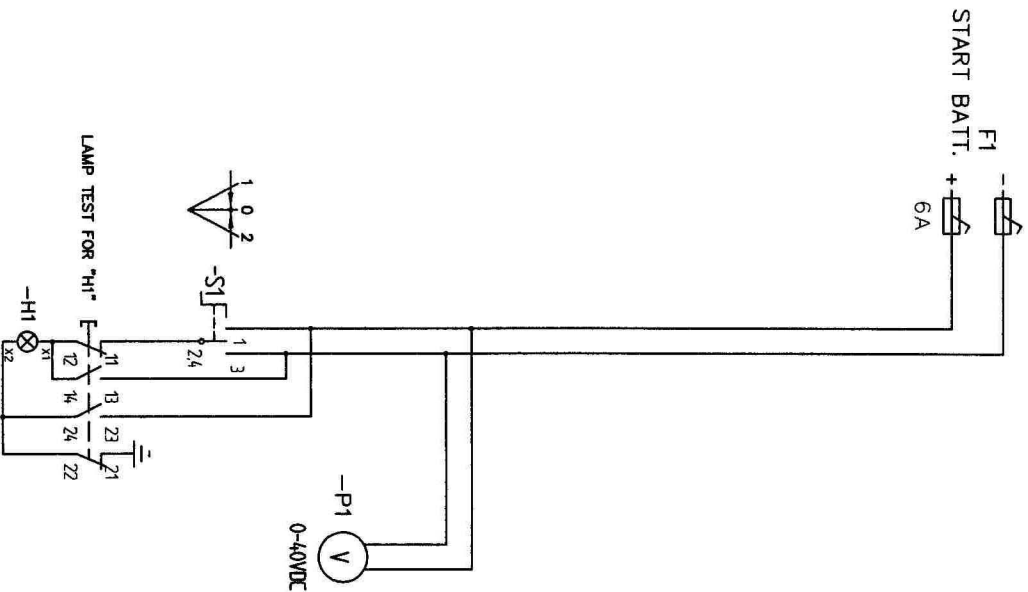
☒ CLOSED CONTACT

☐ OPEN CONTACT



Rev. no.		Description		Date	10/09/01	S3- 24V DC DISTRIBUTION BOARD		MARITIM elektro as		CIRCUIT DIAGRAM		Project no.		Fjellstrand as		Sheet 2	
-		-		Drawn	ALL	STBD ENGINE ROOM		N-5632 OMASTRAND		-		Scale		SFI no. / DWG no.		2	
-		-		Approved	NH	-		TV: +47 56550560 Fax: +47 56554202		-		%		1661 875 M00162-A		2	
-		-		Standard	-	Original design		Repl. by		Repl. by						2	

EARTH FAULT TEST / VOLTMETER: (Mounted in door)



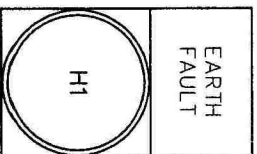
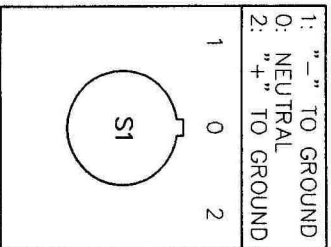
NOTE: 3 POSITION SPRING RETURN ROTARY SWITCH
 - POS 1: "-" TO GROUND LEAKAGE" - TEST
 - POS 0: NEUTRAL
 - POS 2: "+" TO GROUND LEAKAGE" - TEST

SWITCH CONNECTING DIAGRAM

Pos	1	0	2
Cont.			
1-2	X		
3-4			X

☒ CLOSED CONTACT

☐ OPEN CONTACT



				Date	10.09.01	S4- 24V DC DISTRIBUTION BOARD PORT ENGINE ROOM		MARITIM elektro as N-5632 ØMASTRAND TEL: +47 56550560 Fax: +47 56554202	CIRCUIT DIAGRAM - - - -	Project no.		=	
				Drawn	ALL					Fellstrand as		+	
-	-	-	-	Approved	RON								
Rev. no.	Description	Date	Drawn	Standard	-	Original disp.	Repl. by	Repl. by		Scale	SP no. / DWG no.	Sheet	2
										%	1661 875 M00163-A	or	2