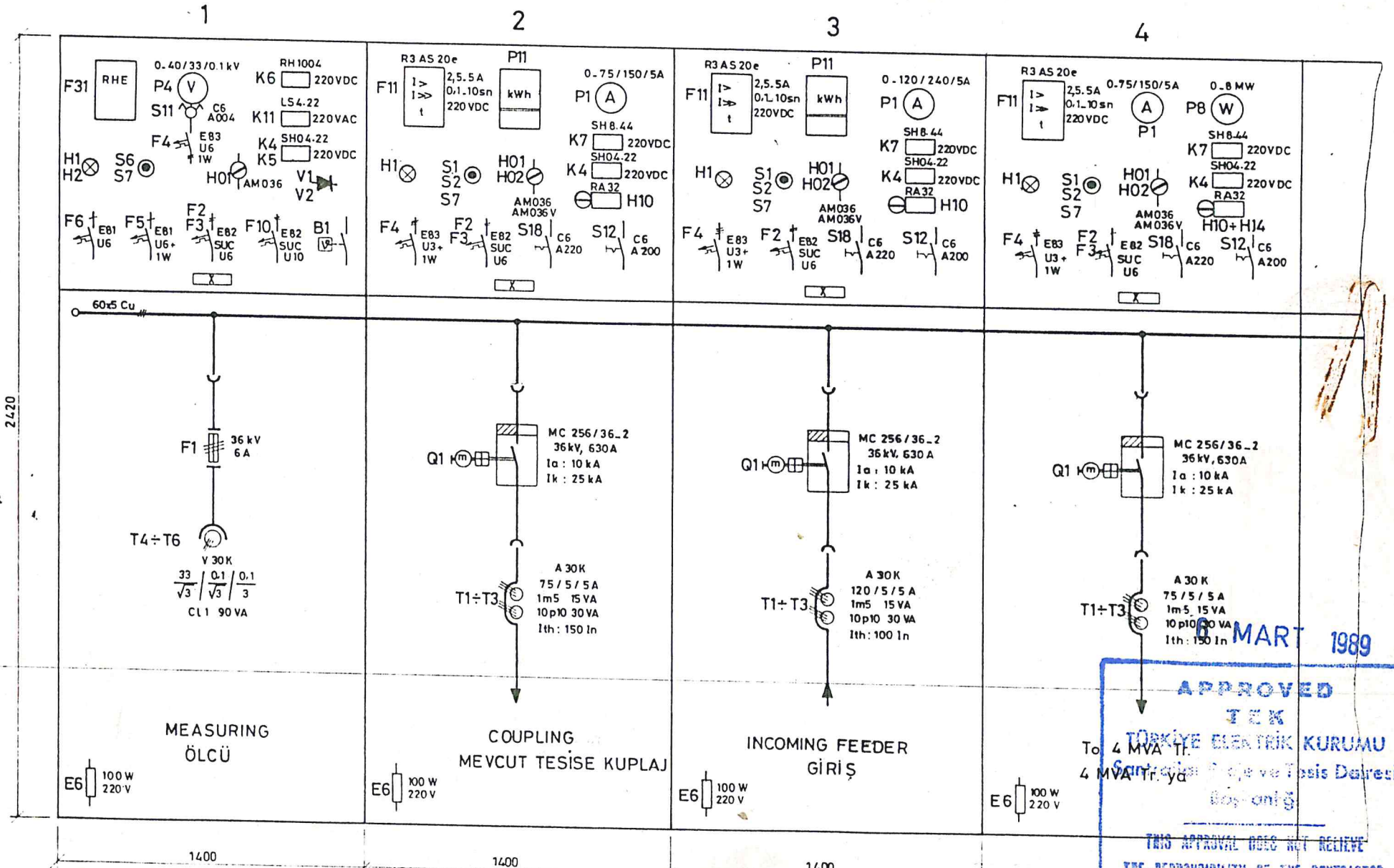


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6 MART 1989

APPROVED
TEK
TÜRKİYE ELEKTRİK KURUMU
Santraller Proje ve Tesis Dairesi Başkanlığı
THIS APPROVAL DOES NOT RELIEVE THE RESPONSIBILITY OF THE CONTRACTOR

NO	REVISION	DATE	Name

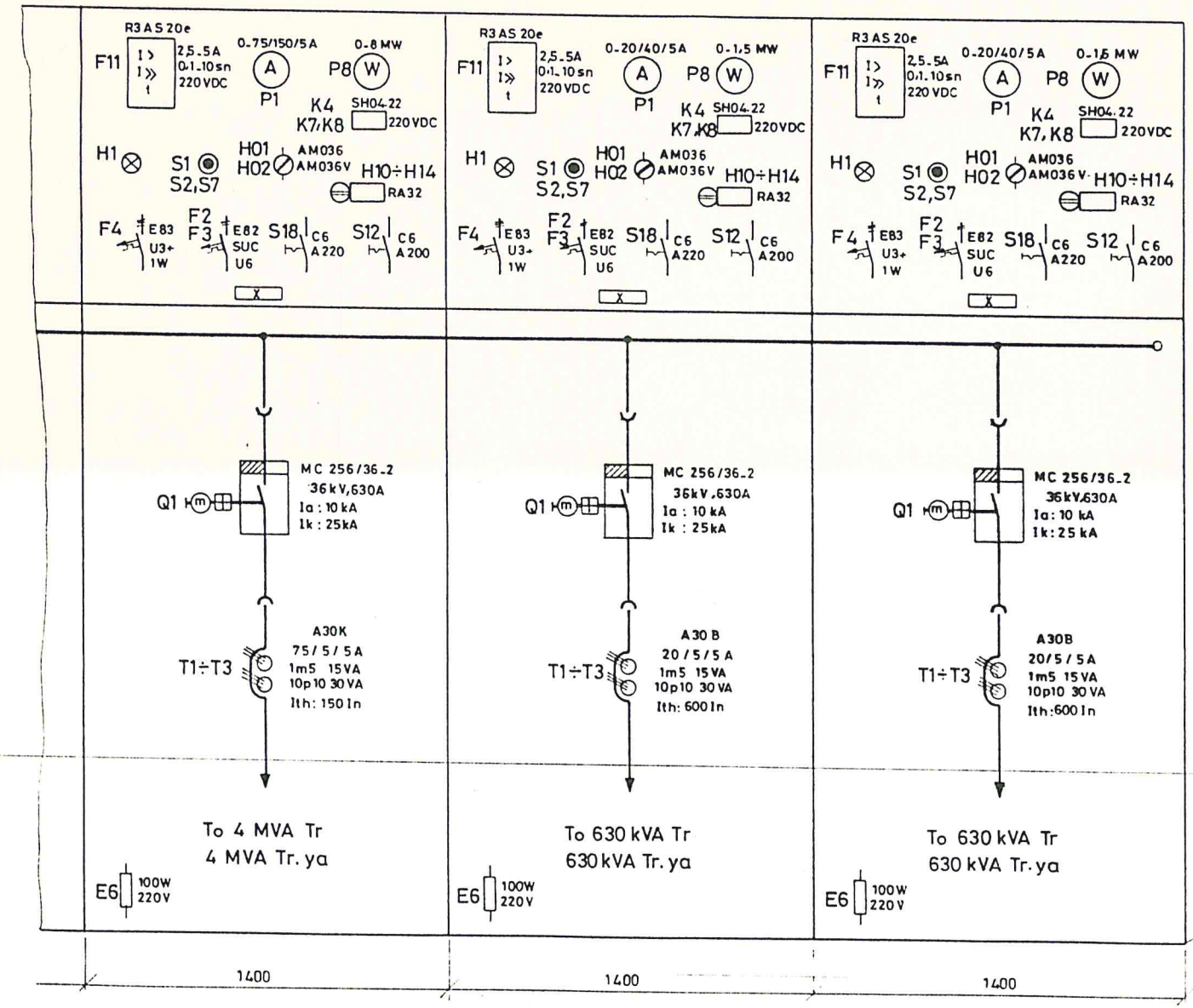
DATE 9-2-1989
DRAWN S.SONMEZ
CHECK
CORR
ORIGIN

GAMA - SEVİSLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

M.SF2.640.10.(2)



TECNICAL DATA

TEKNIK BİLGİLER

Operation voltage ..... 33 kV 50 Hz
İşletme gerilimi

Control voltage ..... 220 V DC
Kumanda gerilimi

Enclosure IP2x
Koruma tipi

panel type ..... RMB 8/36-2/1424
Pano tipi

Painting ..... RAL 7032
Boya

RELATED DRAWN

İLGİLİ RESİMLER

Front View .....M 652640 - 11 (3)
Ön görünüş

Foundation plan .....M 652640 - 12 (2)
Temel plan

Control diagram .....M 652640 - 20 53)
Akım yollar şeması

Terminal plan .....M 652640 - 60 (3)
Klemens planı

Material list .....M 652640 - 69 (3)
Malzeme listesi

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NO	REVISION	DATE	Name
			CORR.

DATE 10-2-1988
DRAWN S SÖNMEZ
CHECK A.Erdgan
ORIGIN

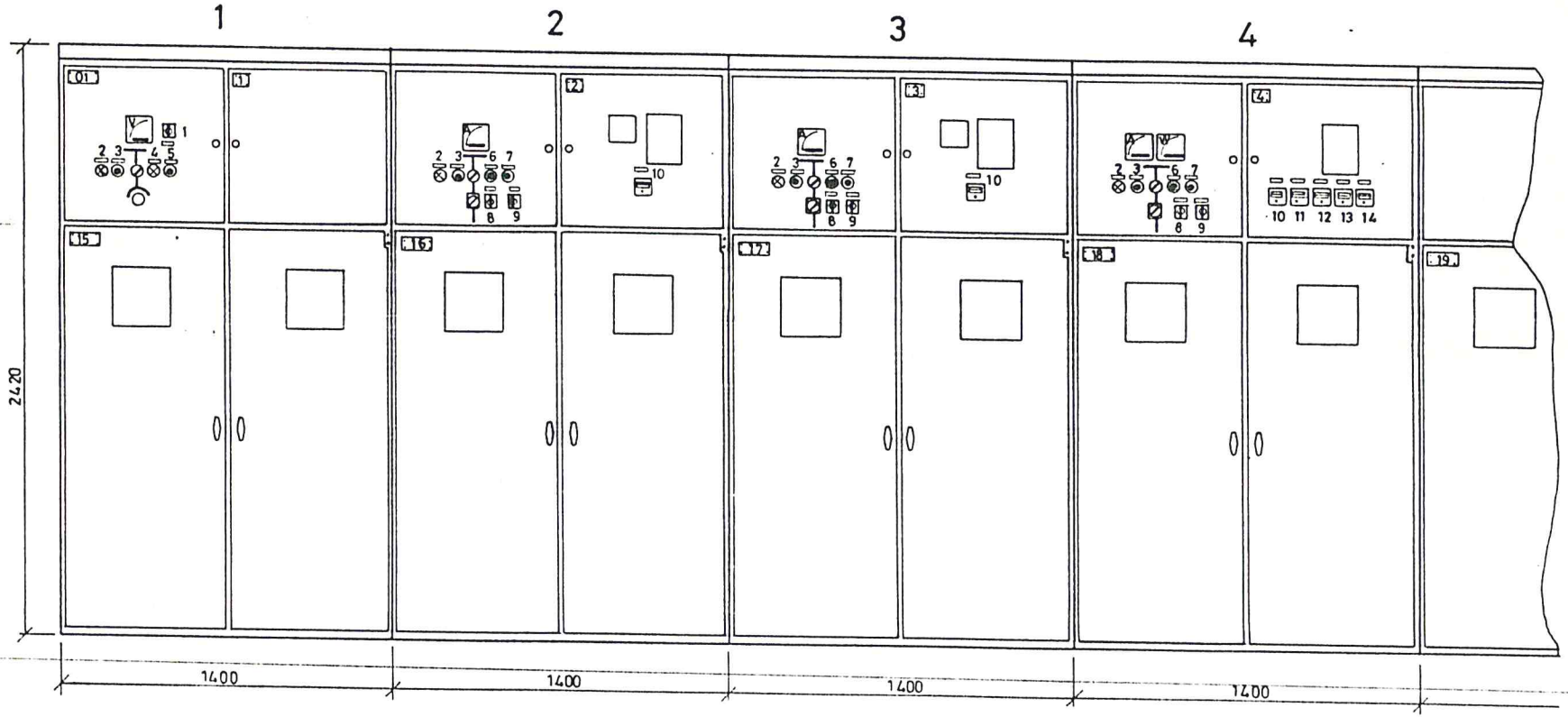
GAMA - SEVİSLER HAMSU POMPA TASYONU

AEG ETİ

33 kV S..TCHGEAR

M 652 640 10 (3)

SHEET 2



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name	CORR.
		DATE	17-2-1989	
		DRAWN	Semiha SÖNMEZ	
		CHECK	A. Erdoğan	

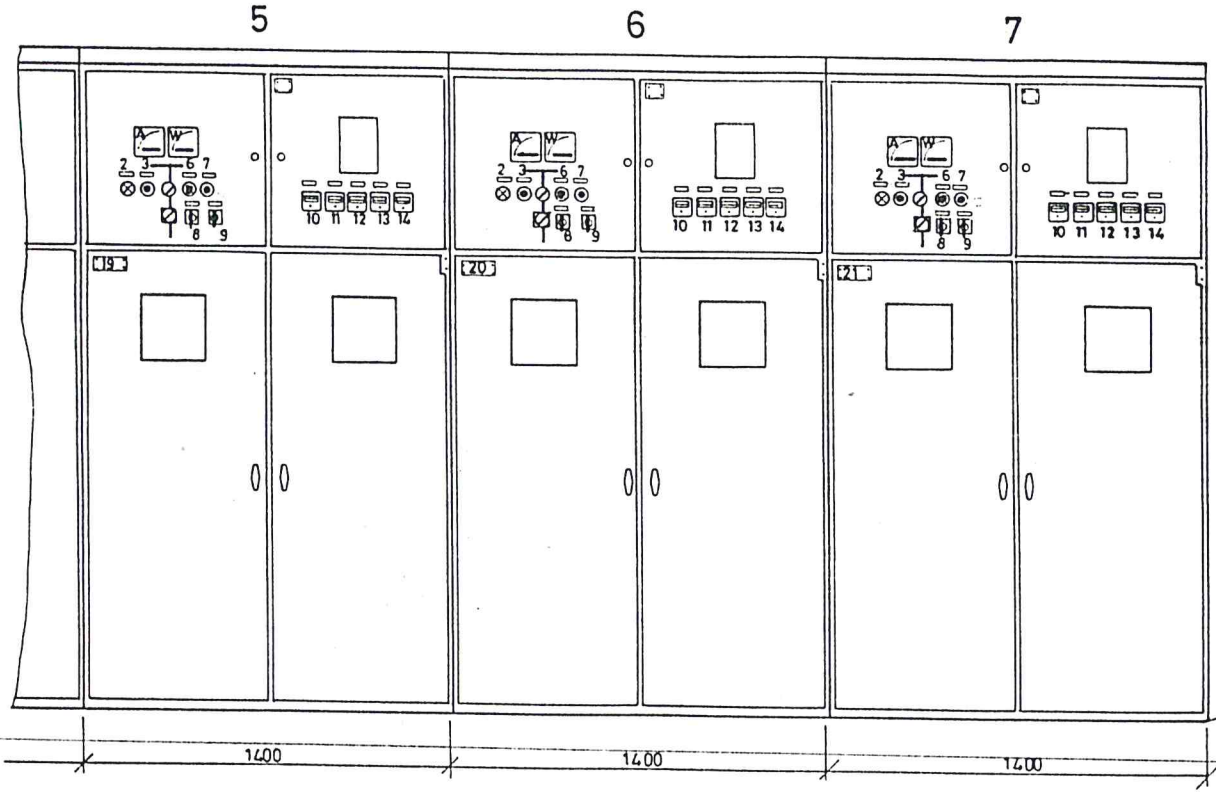
GAMA_SEVİSLER HAMSU POMPA İ[illegible] ASYONU

AEG ETİ

33 kV SWITCHGEAR

ORIGIN

SHEET



LABEL LIST

ETİKET LİSTESİ

01 - 33 kV SWITCHGEAR
- 33 kV ŞALT TESİSİ

1 - Voltmeter selector switch
Voltmetre komütatörü

2 - Fault
Arıza

3 - Lamp Test
Lamba test

4 - Earth fault
Toprak hatası

5 - Reset Button

6 - CB Tripping
Kesici açma

7 - CB Closing
Kesici kapama

8 - Local remote
Uzak - yakın

9 - Motor charging
Motor kurma

10 - O/C S/C Tripping
AA. KD açma

11 - Buchholz tripping
Buchholz açma

12 - Buchholz alarm
Buchholz alarm

13 - Thermometer tripping
Termometre açma

14 - Thermometer alarm
Termometre alarm

15 - MEASURING
ÖLÇÜ

16 - COUPLING
KUPLAJ

17 - INCOMING FEEDER
GİRİŞ

18 - To 4 MVA Tr.
4 MVA Tr'ya

19 - To 4 MVA TR
4 MVA Tr'ya

20 - To 630 kVA TR
630 kVA Tr'ya

21 - To 630 kVA Tr
630 kVA Tr'ya

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NO	REVISION	DATE	Name
			CORR

DATE 17-2-1989
DRAWN Semiha SÖNMEZ
CHECK A. Erdoğan
ORIGIN

GAMA - SEVİSLER HAM SU POMPA İ[illegible]ASYONU

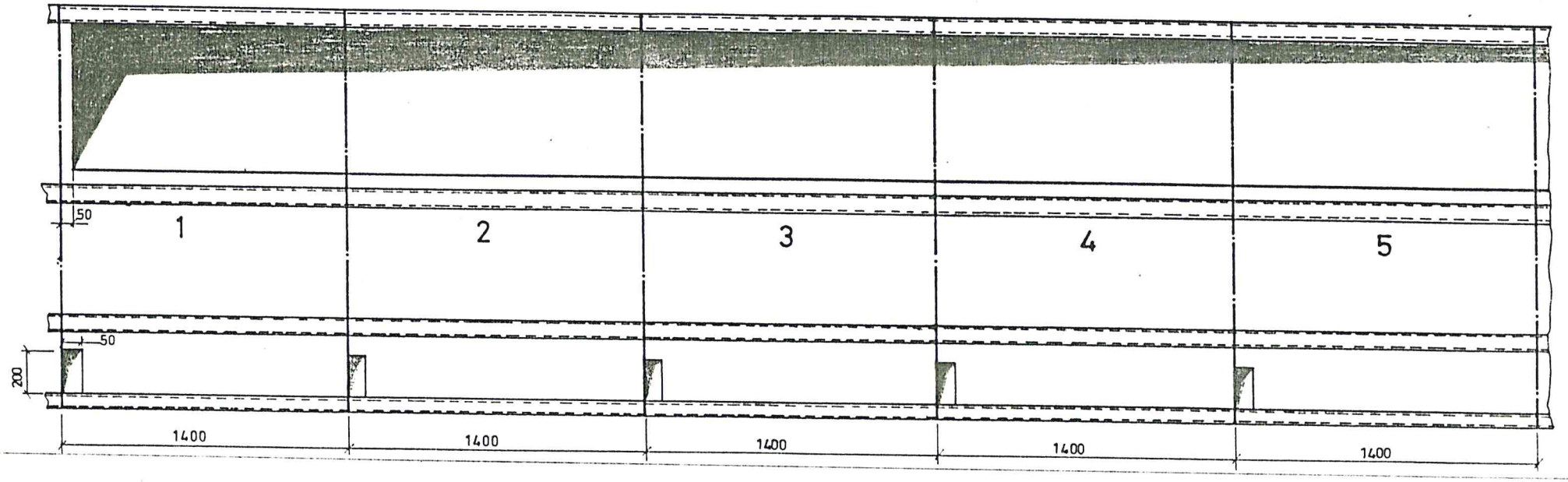
AEG ETİ

33 kV S[illegible]ITCHGEAR

M 652 640 11 (2)

SHEET 2

ALL RIGHTS ARE RESERVED



NO	REVISION	DATE	Name

DATE 13.2.1989
DRAWN Ayşin
CHECK
CORR.

GAMA SEVİŞLER HAM SU POMPA İSTAS NU

ORIGIN. SUBST.

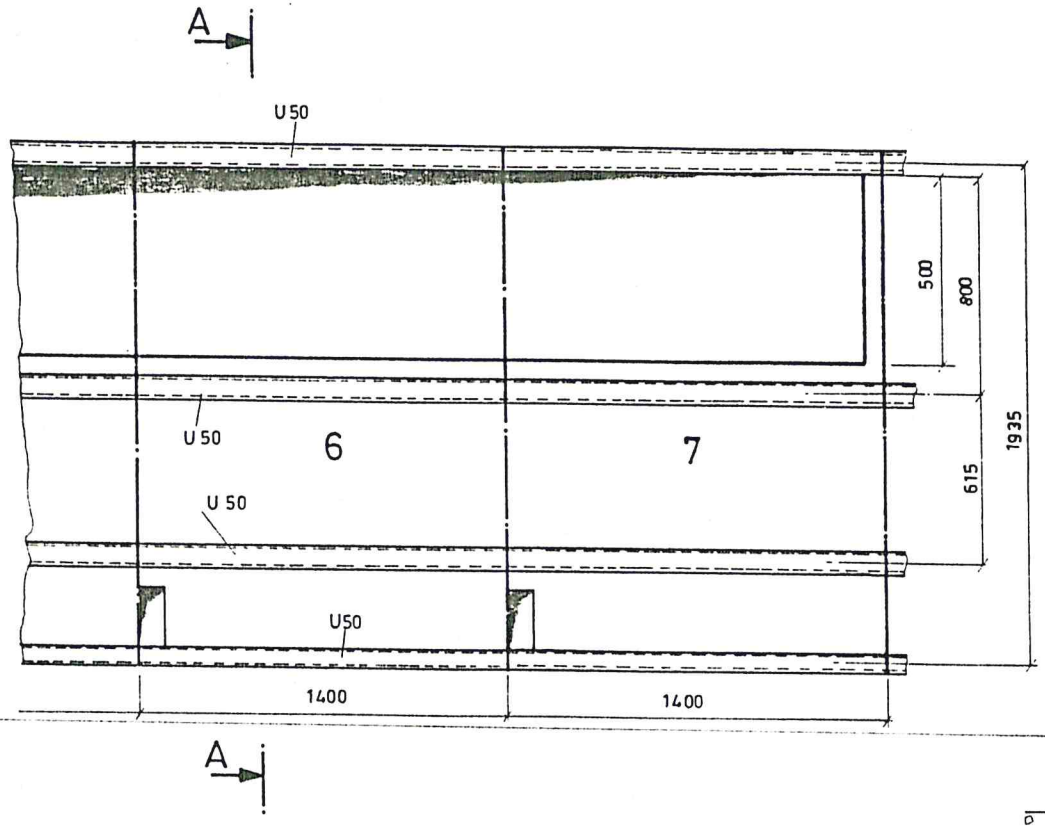
AEG ETİ

33kV SW CHGEAR

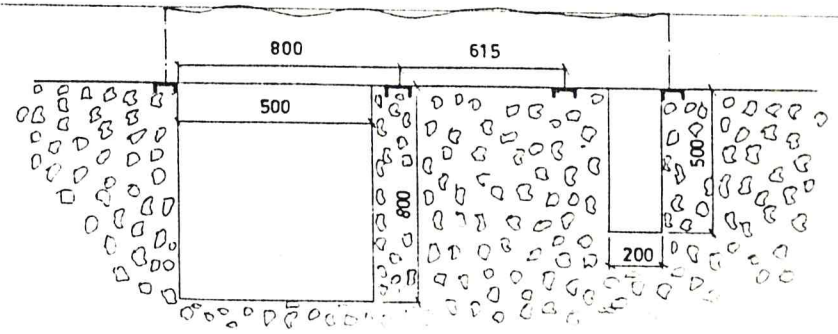
M 652 640 12(3)

SHEET 1

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KESİT AA
SECTION AA



NO	REVISION	DATE	Name
		DRAWN	Ayşin
		CHECK	A. Erdoğmuş
		CORR	

DATE 13.2.1989

GAMA SEVİŞLER HAM SU POMPA İST[illegible]YONU

ORIGIN. SUBST. REPL.

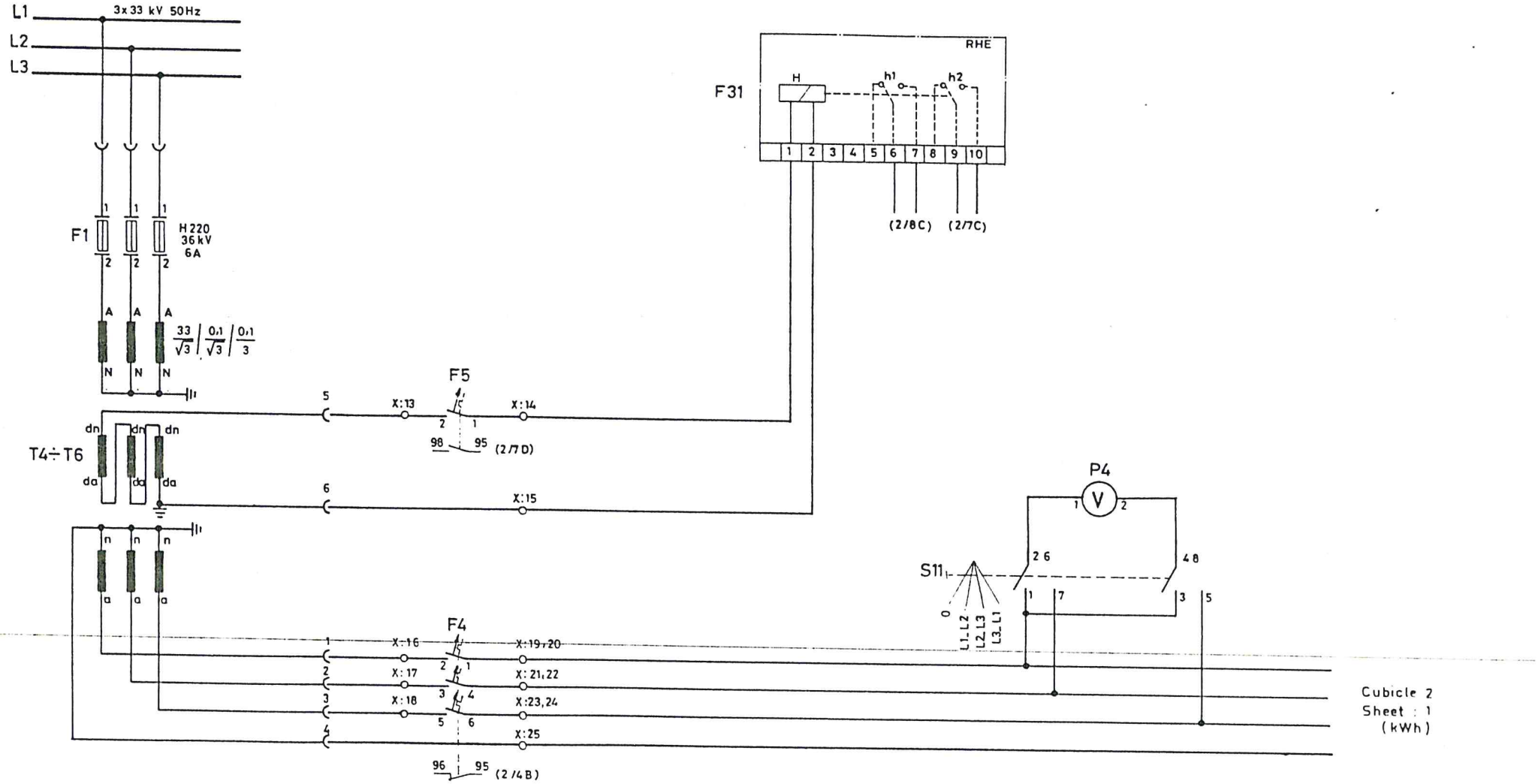
AEG ETİ

33kV SW[illegible]CHGEAR

M 652 640 12 (3)

SHEET 2

MV FUSES
VOLTAGE TRANSFORMER
CONTROL FUSES
VOLTMETER
VOLTMETER SELECTOR SWITCH
EARTH FAULT RELAY



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NO	REVISION	DATE	Name

DATE 14 - 2 - 1989
DRAWN Semiha SÖNMEZ
CHECK. A. Erdoğan
CORR.
ORIGIN. SUBST. REPL.

GAMA_SEVİŞLER HAM SU POMPA İ[illegible]SYONU

AEG ETİ

33 kV S[illegible]TCHGEAR

MEASURING

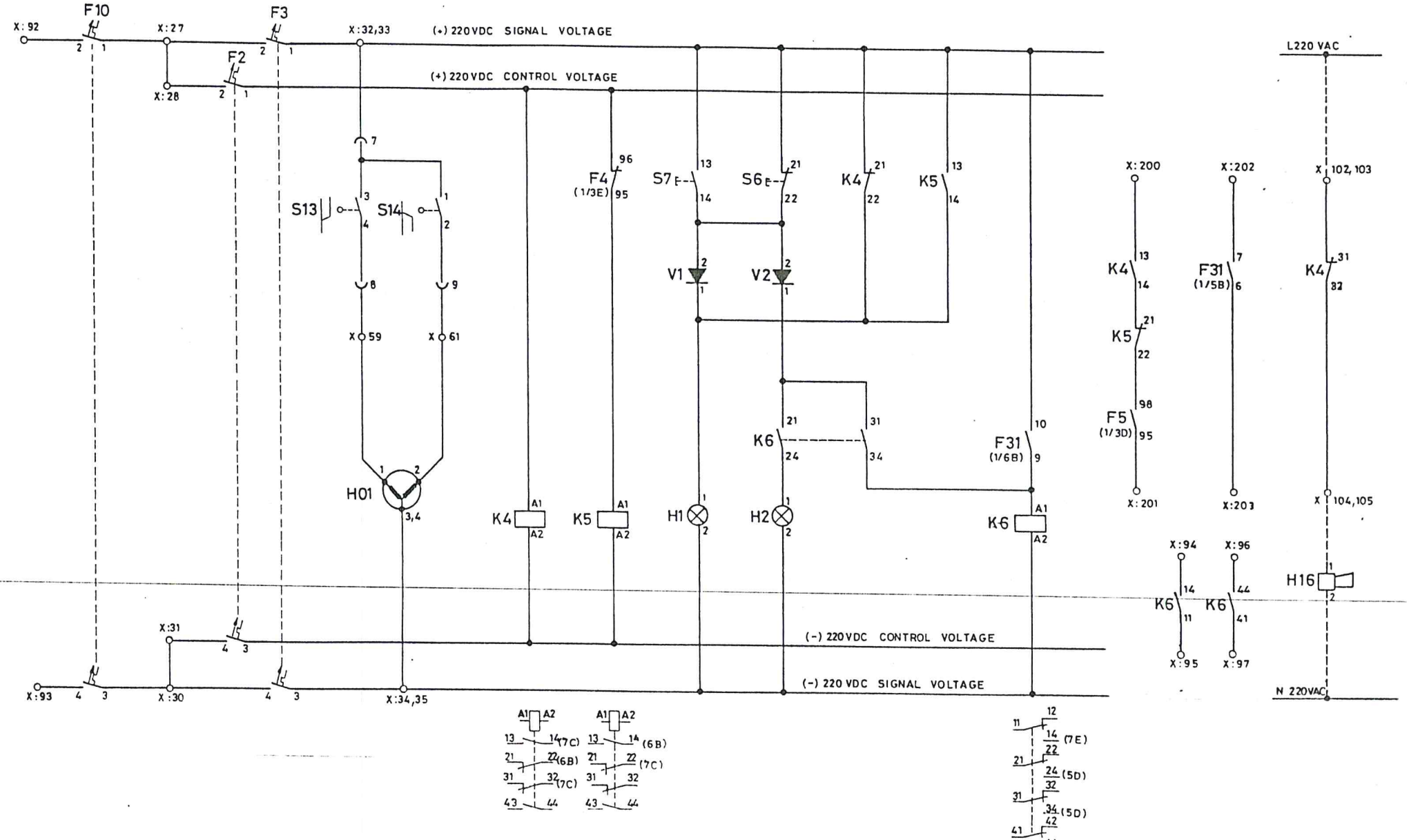
- CUBICLE 1
+

M 652 640 20 (2) SHEET 1

ALL RIGHTS ARE RESERVED

TRUCK POSITION

INSERT	TEST	FAULT	RELAY FAULT	REMOTE SIGNAL	CONTROL VOLT. MONITORING



NO	REVISION	DATE	Name
		DATE	15 – 2 – 1989
		DRAWN	S. SONMEZ
		CHECK.	A. Erdogan
		CORR.	

GAMA - SEVİŞLER HAM SU POMPA [illegible]ASYONU

ORIGIN. SUBST. REPL.

AEG ETİ

33 kV S[illegible]TCHGEAR

MEASURING

CUBICLE 1

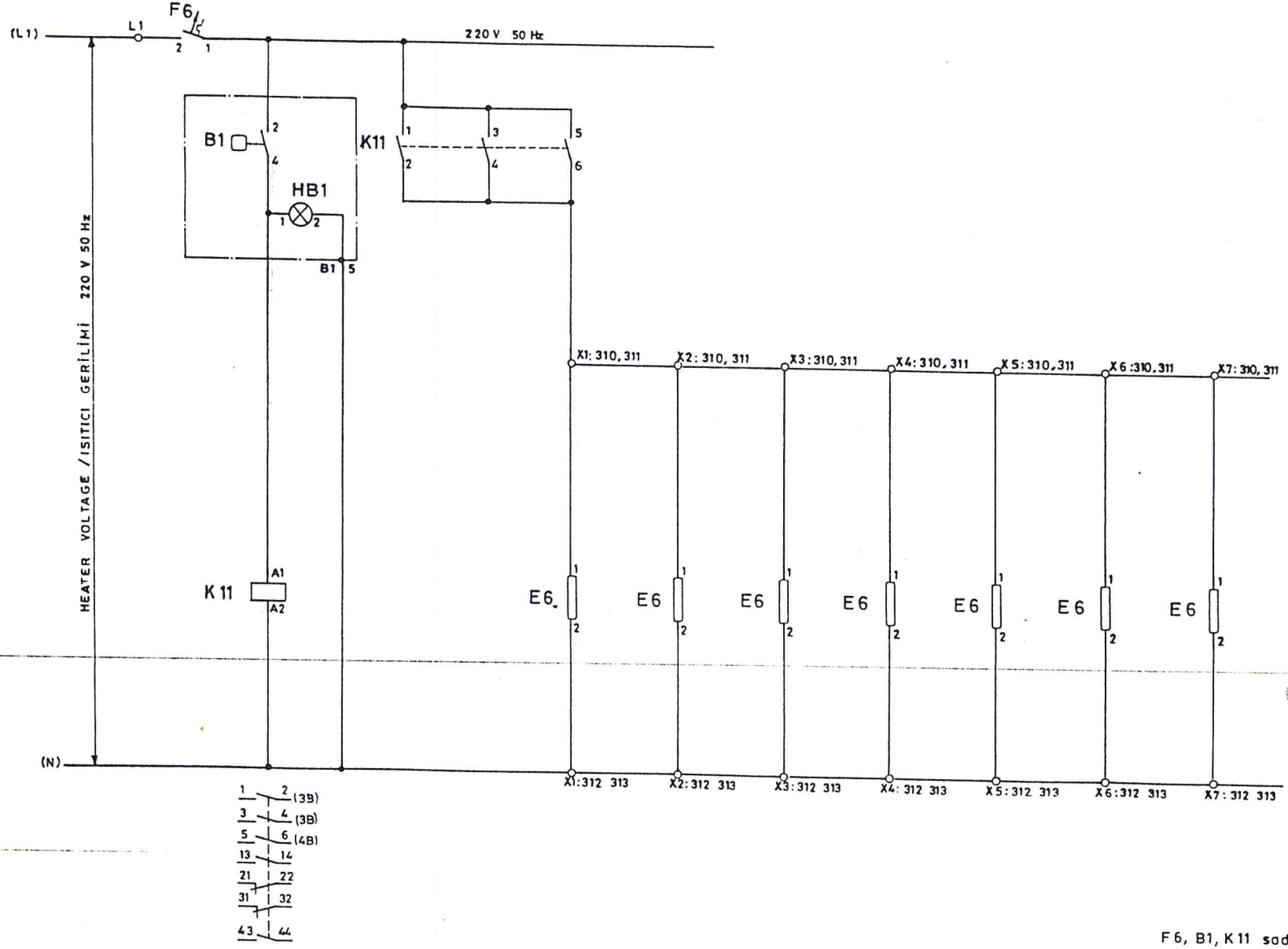
M 652 640 20(3)

SHEET 2

ALL RIGHTS ARE RESERVED

HEATER / ISITICILAR

THERMOSTAT / TERMOSTAT	CUBICLE 1 DOLAP 1	CUBICLE 2 DOLAP 2	CUBICLE 3 DOLAP 3	CUBICLE 4 DOLAP 4	CUBICLE 5 DOLAP 5	CUBICLE 6 DOLAP 6	CUBICLE 7 DOLAP 7



F6, B1, K11 sadece 1no.lu dolapta olacaktır.

NO	REVISION	DATE	Name	
				DATE 15-2-1989
				DRAWN Fezal Özen
				CHECK. A.Erdoğan
				CORR.

GAMA - SEVİŞLER HAM SU POMPA İST[illegible]YONU

ORIGIN. SUBST.

AEG ETİ 33 kV SWITCHGEAR

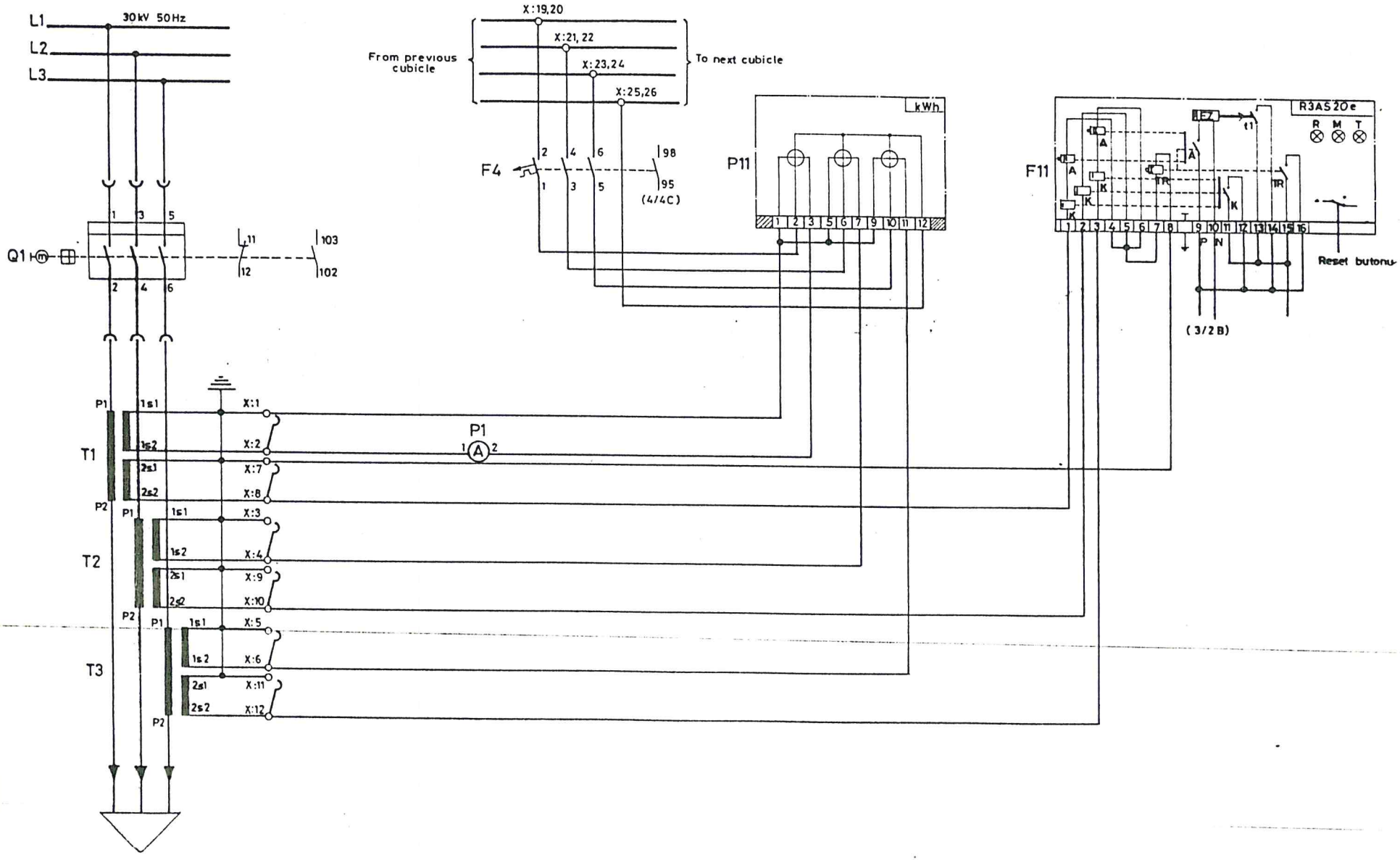
HEATERS

CUBICLE 1

M 652 640 20 (2) SHEET 3

MC CIRCUIT BREAKER

CURRENT TRANSFORMER | AMMETER | kWhour meter | O/C S/C and elf relay



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name

DATE 16-2-1989
DRAWN S.SÖNMEZ
CHECK A.Edoğan
CORR.

GAMA_SEVİŞLER HAM SU POMPA İSTASYONU

ORIGIN. | SUBST. | REPL.

AEG ETİ

33 kV SWITCHGEAR

COUPLING

CUBICLE : 2

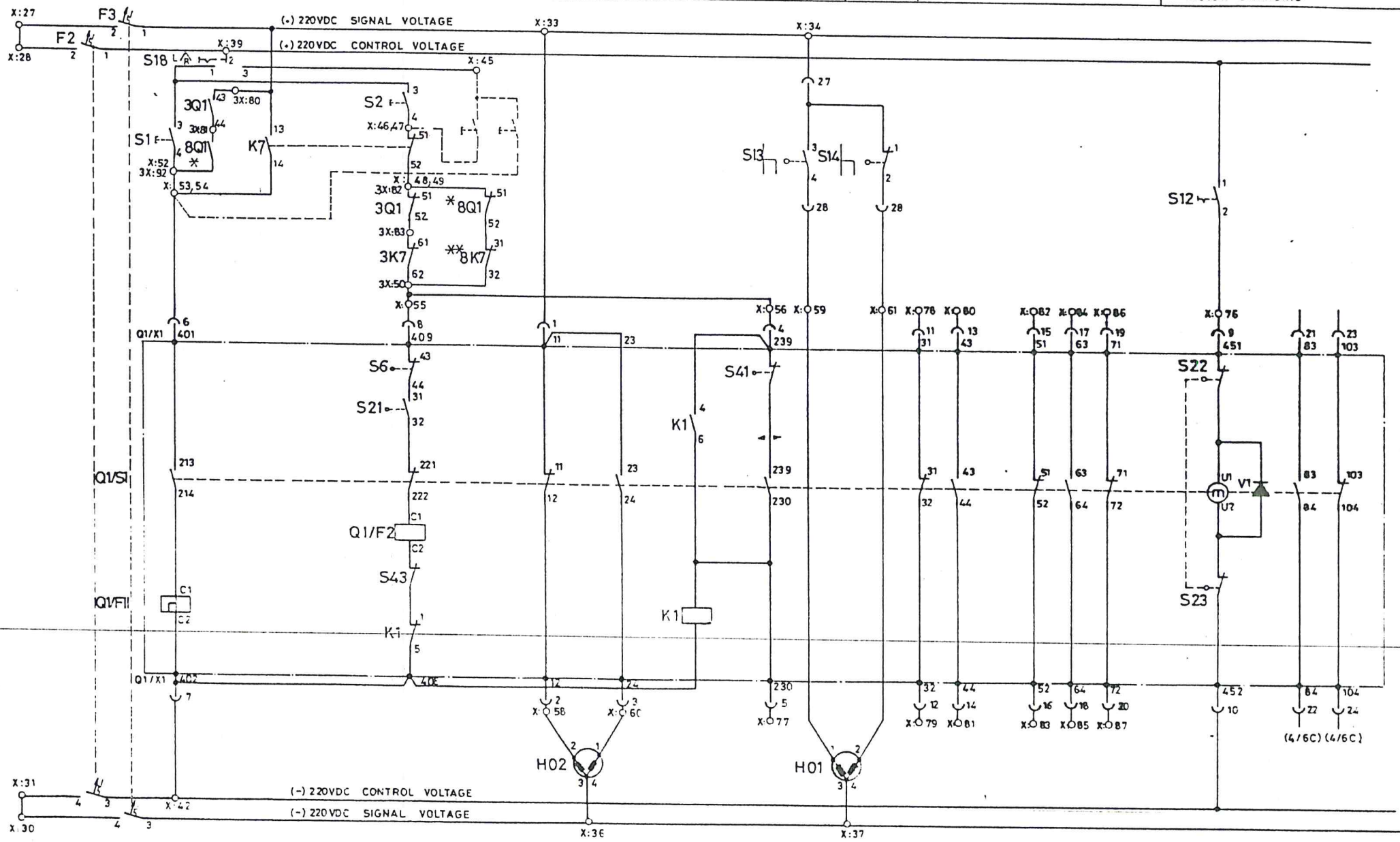
M 652 640_20 (3)

SHEET 1 OF 4

ALL RIGHTS ARE RESERVED

CIRCUIT BREAKER

LOCAL-REMOTE				TRUCK POSITION		INTERLOCKING	
TRIPPING	CLOSING	OFF	ON	INSERT	TEST	SPARE CONTACTS	MOTOR CHARGING

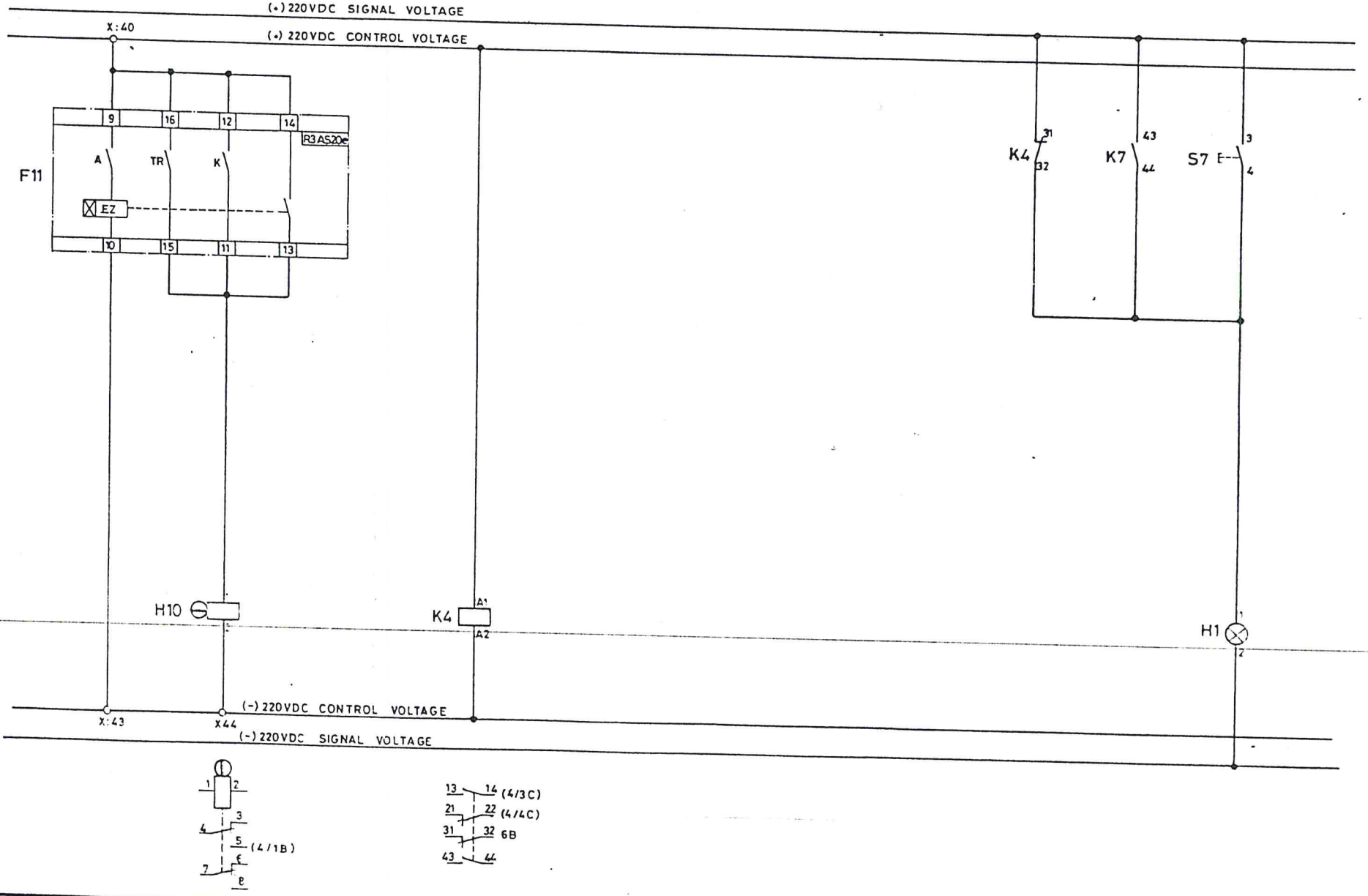


* 8Q1 Kontakları mevcut tesisteki besleme kesicisine aittir.

** 8K7 Kontağı mevcut tesisteki arıza kontağıdır.

			DATE 17.2.1989	GAMA SEVİŞLER HAM SU POMPA İSTASYONU	AEG ETİ	33 kV SWITCHGEAR	COUPLING
			DRAWN S.SÖNMEZ				CUBICLE : 2
			CHECK A.Erdoğan				M 652 640-20 (3)
NO	REVISION	DATE	Name CORR	ORIGIN	SUBST.	REPL.	SHEET 2 OF 4

O/C S/C AND ELF RELAY TRIPPING	VOLTAGE MONITORING RELAY	CONTROL VOLTAGE MONITORING RELAY TRIPPING	CONTROL VOLTAGE MONITORING RELAY TRIPPING	LAMP TEST FAULT



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name
			CORR

DATE 17.2.1989
DRAWN S. SONMEZ
CHECK A. Erdoğan
ORIGIN

GAMA_SEVİŞLER HAMSU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

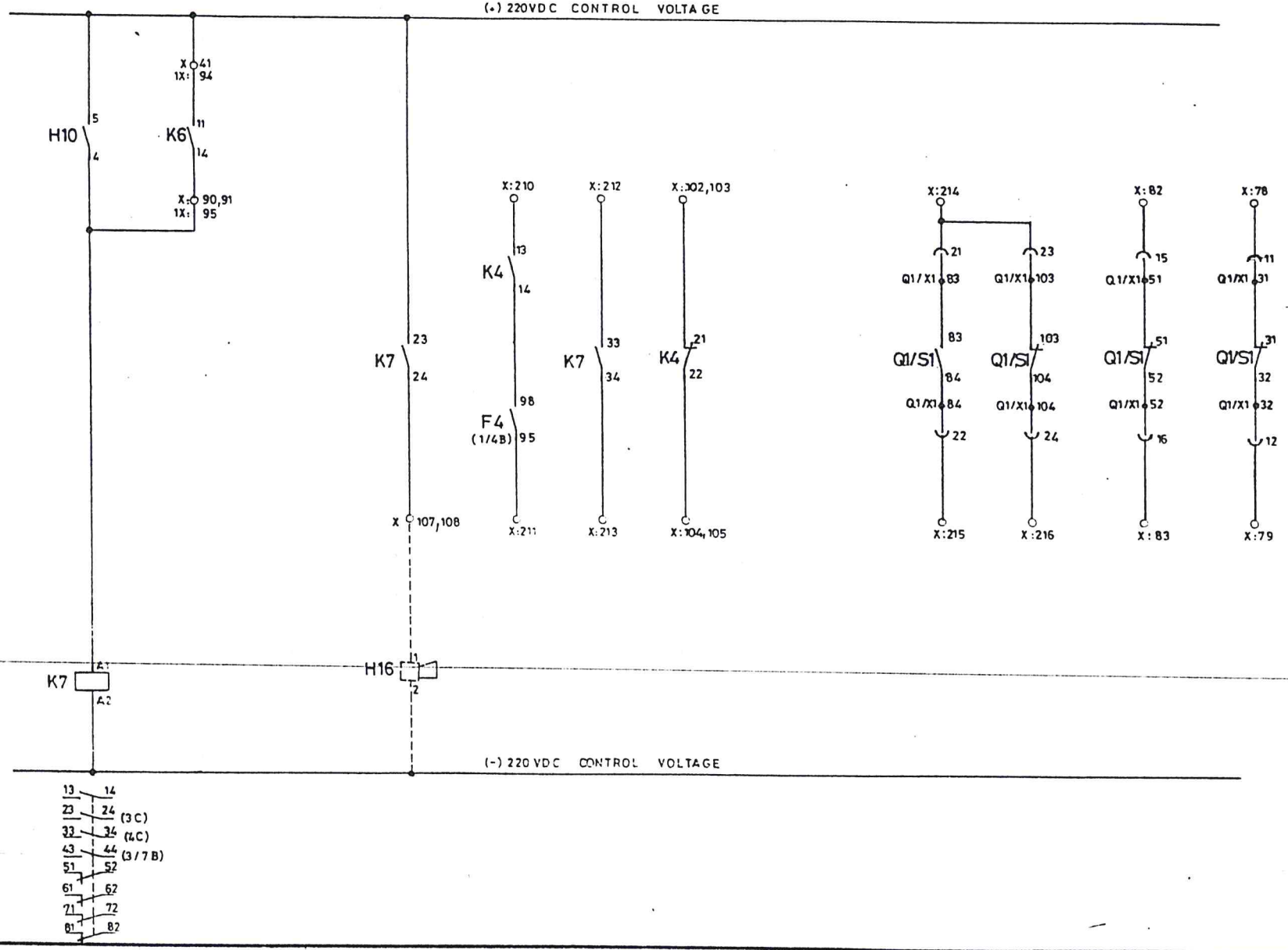
COUPLING

– CUBICLE 2

M 652 640_20 (3)

SHEET 3

O/C S/C AND ELF RELAY TRIPPING	REMOTE SIGNALS	CONTROL VOLTAGE MONITORING	CIRCUIT BREAKER ON	CIRCUIT BREAKER OFF	CUBICLE 3 INTERLOCKING	14 B D SWITCHGEAR INTERLOCKING



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NO	REVISION	DATE	Name	CORR
		DATE	17_2_1989	
		DRAWN	S SONMEZ	
		CHECK	A. Erdoğan	
		ORIGIN		REPL

GAMA_SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

COUPLING

CUBICLE 2

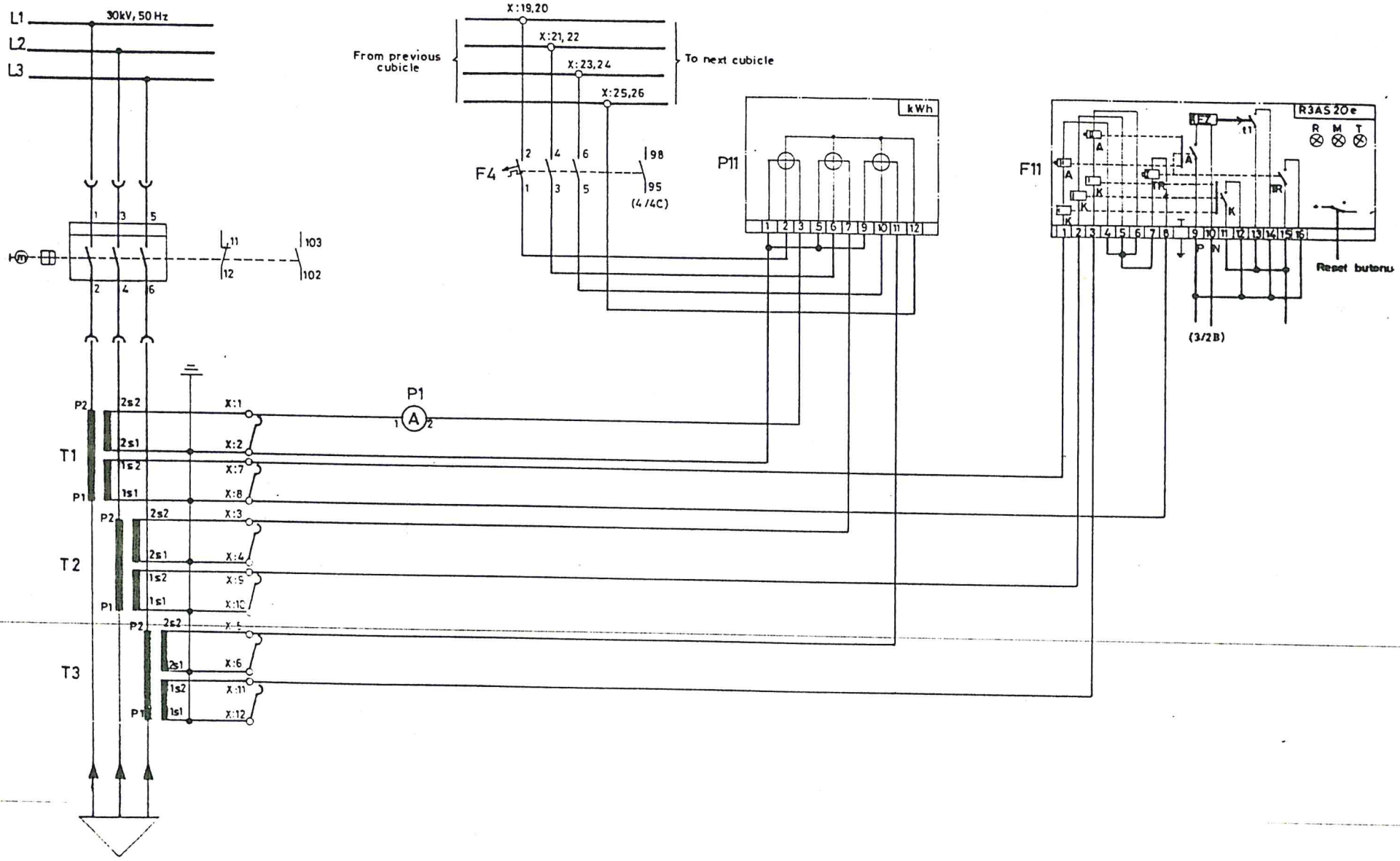
M 652 640_20 (3)

SHEET

OF

MC CIRCUIT BREAKER

CURRENT TRANSFORMER AMMETER kWhour meter O/C S/C AND ELF RELAY



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	name
		DATE	16-2-1985
		DRAWN	S. SÖNMEZ
		CHECK	A. Erdoğan
		CORR	

GAMA SEVİŞLER HAM SU POMPA İSTASYONU

ORIGIN SUBST

AEG ETİ

REPL

33 kV SWITCHGEAR

INCOMING FEEDER

CUBICLE: 3

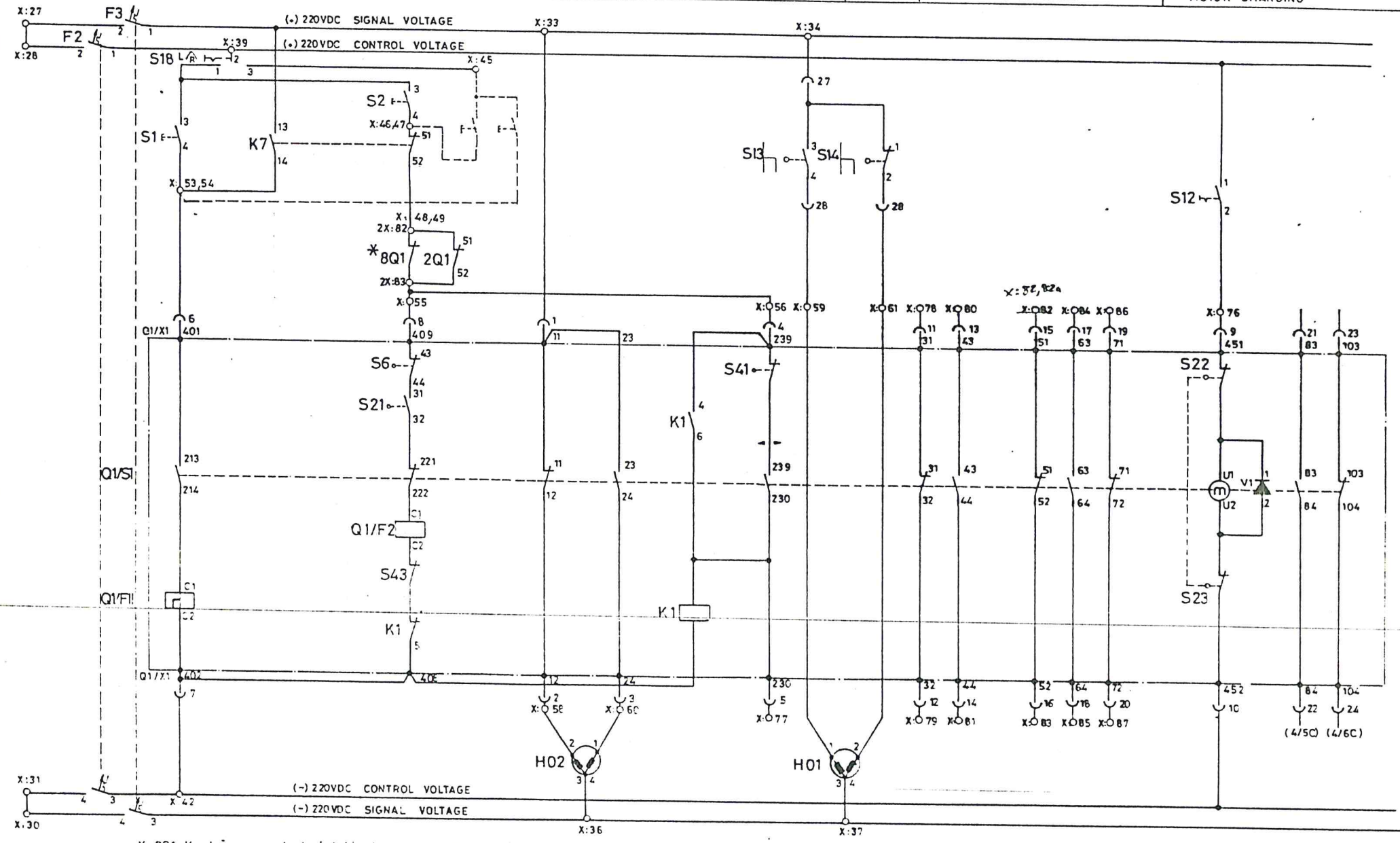
M 652 640_20 (3)

SHEET 1 OF 4

ALL RIGHTS ARE RESERVED

CIRCUIT BREAKER

LOCAL. REMOTE				TRUCK POSITION		INTERLOCKING	
TRIPPING	CLOSING	OFF	ON	INSERT	TEST	SPARE CONTACTS	MOTOR CHARGING



* 8Q1 Kontağı mevcut tesisteki besleme kesicisine aittir.

NO	REVISION	DATE	Name
			CORR

DATE 17.2.1989
DRAWN S.SONMEZ
CHECK A.Erdoğan

GAMA. SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

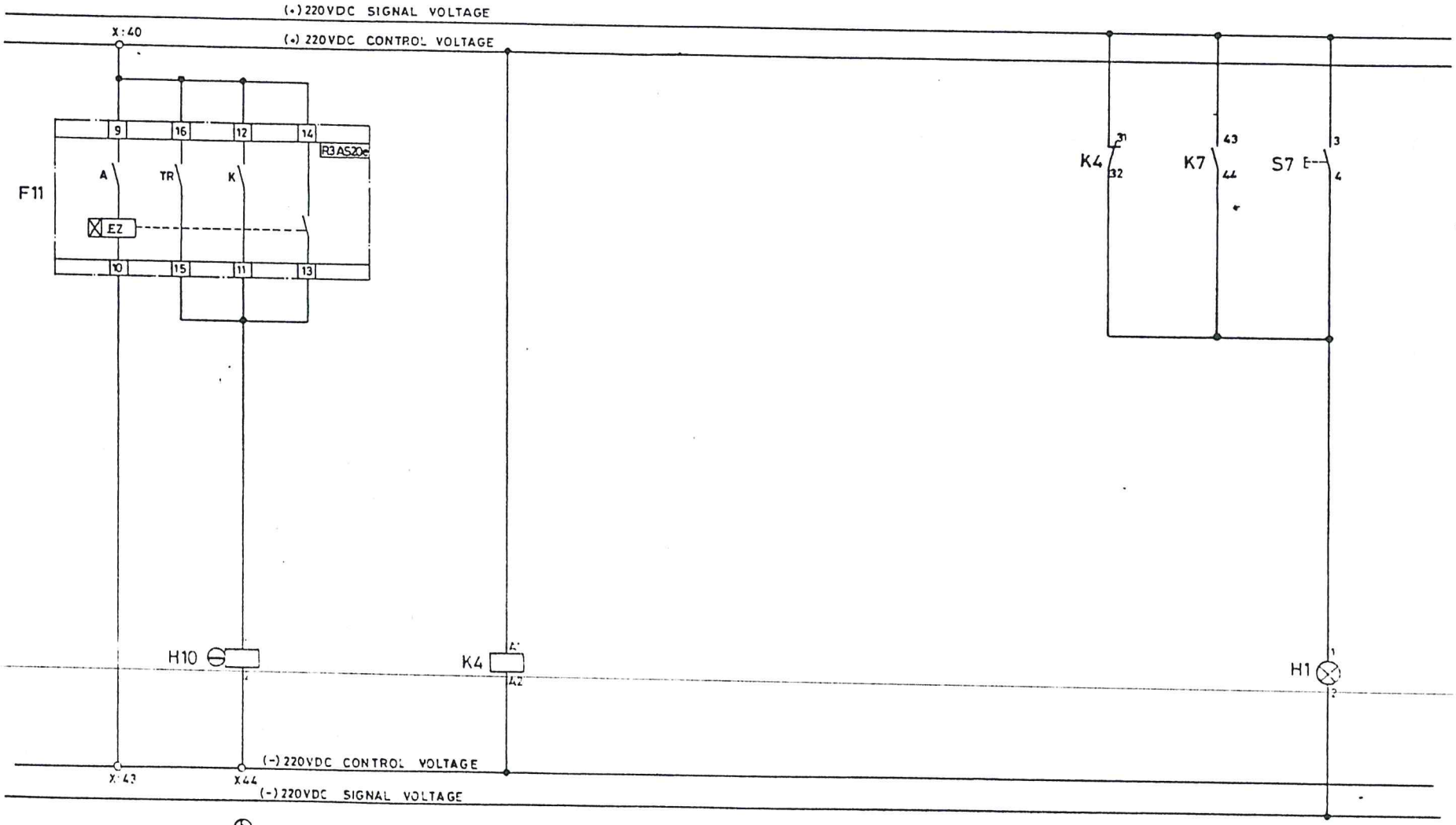
INCOMING FEEDER

CUBICLE : 3

M 652 640 20 (3)

SHEET 2

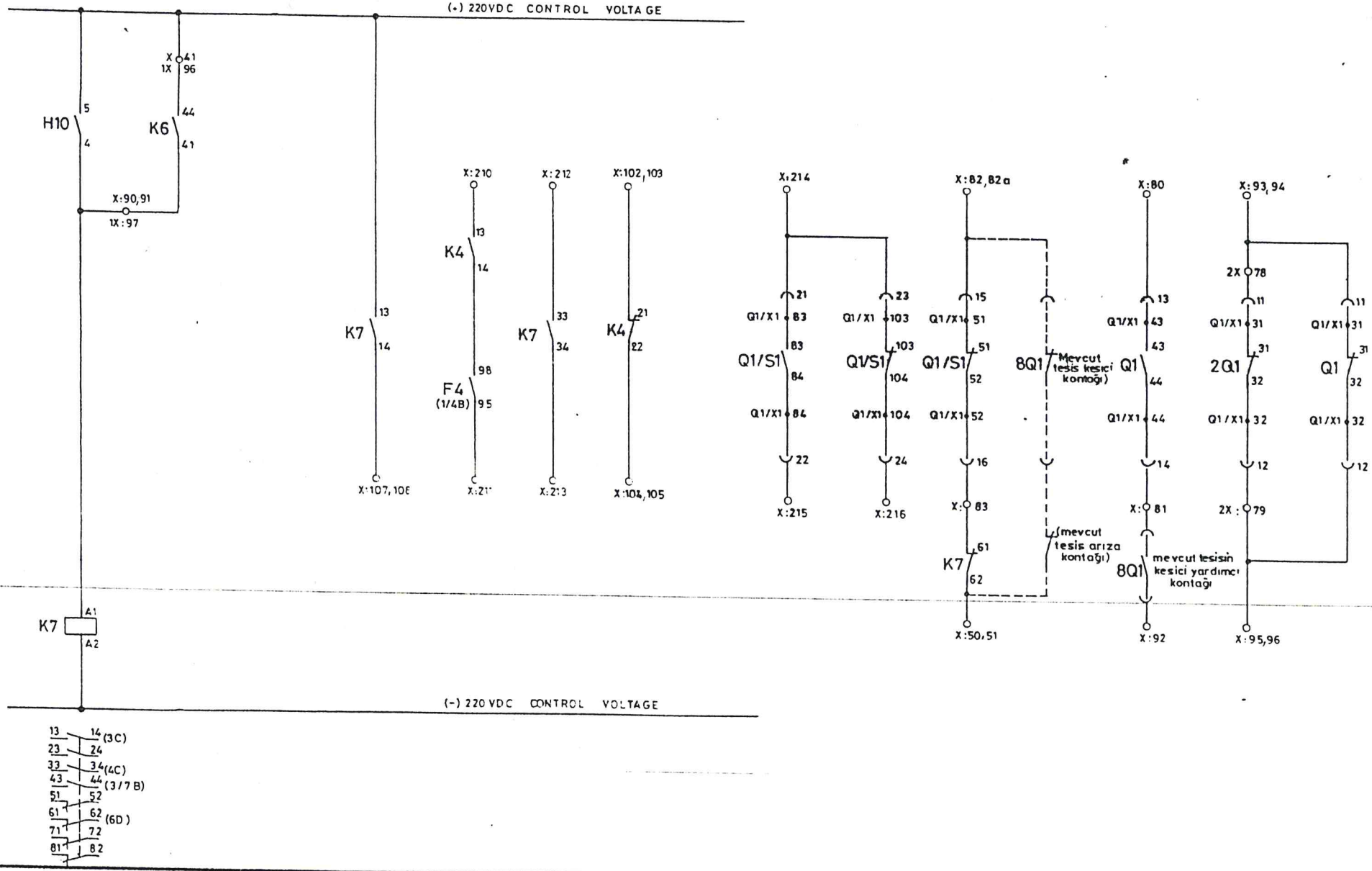
O/C S/C AND ELF RELAY TRIPPING	CONTROL VOLTAGE MONITORING RELAY	CONTROL VOLTAGE MONITORING RELAY TRIPPING	AUX. RELAY TRIPPING	LAMP TEST FAULT



ALL RIGHTS ARE RESERVED

DATE 17.2.1989	GAMA_SEVİŞLER HAMSU POMPA İSTASYONU	AEG ETİ	33 kV SWITCHGEAR	INCOMING FEEDER	– CUBICLE 3
DRAWN S. SÖNMEZ					+
CHECK					

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ TRIPPING	THERMOMETER TRIPPING		CONTROL VOLTAGE MONITORING	CIRCUIT BREAKER ON	CIRCUIT BREAKER OFF	CUBICLE 2 INTERLOCKING	14 BD SWITCHGEAR INTERLOCKING



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name
			CORR.

DATE 17_2_1989
DRAWN S SÖNMEZ
CHECK A.Erdoğan

GAMA_SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

INCOMING FEEDER

CUBICLE 3

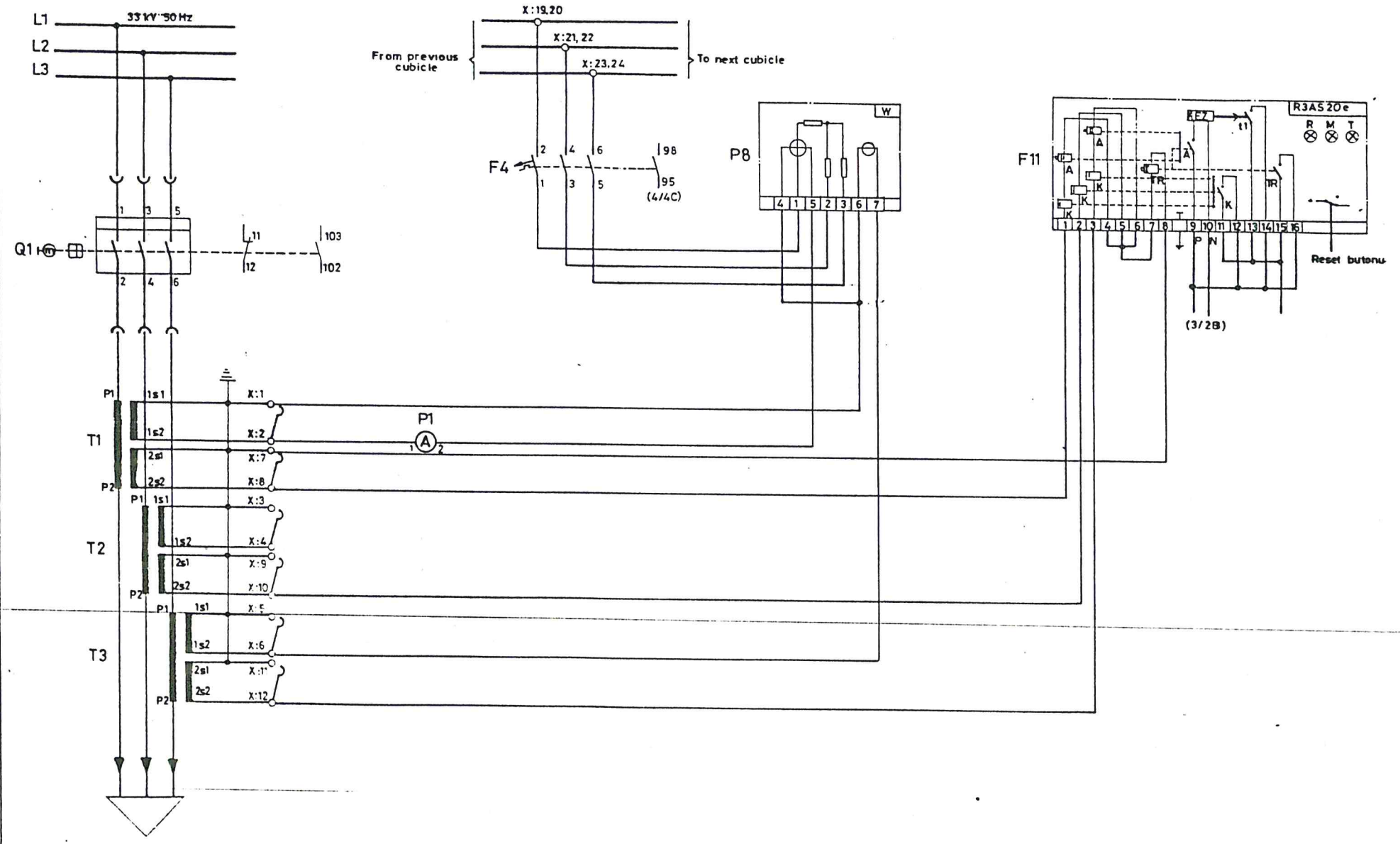
M 652 640_20 (3)

SHEET 4

ORIGIN | SUBST. | REPL.

MC CIRCUIT BREAKER

CURRENT TRANSFORMER | AMMETER | Watt meter | O/C S/C AND ELF RELAY



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NO	REVISION	DATE	Name

DATE 16-2-1989
DRAWN S.SÖNMEZ
CHECK A.Erdoğan
CORR.

GAMA_SEVİŞLER HAM SU POMPA İSTASYONU

ORIGIN | SUBST. | REPL

AEG ETİ

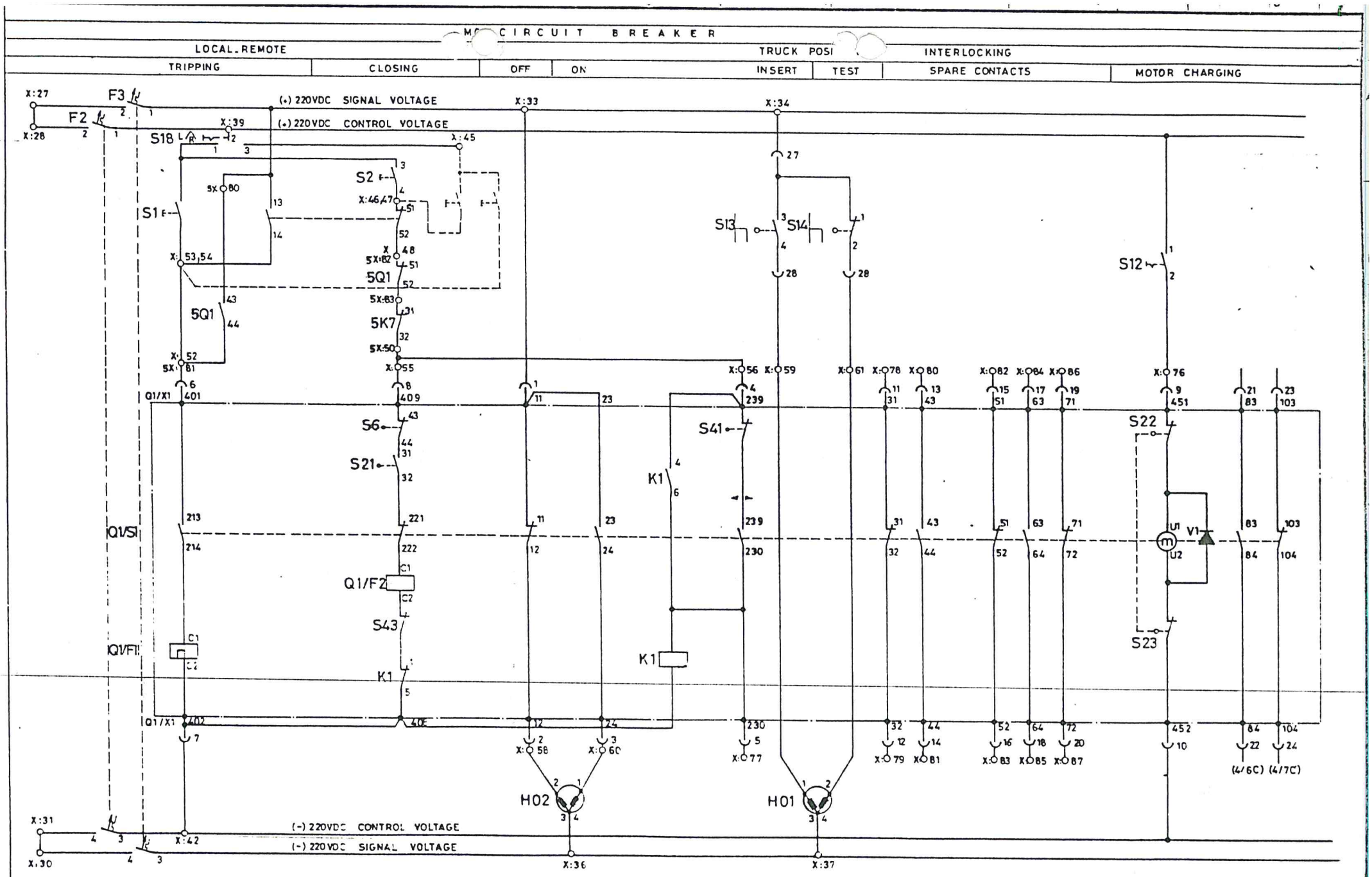
33 kV SWITCHGEAR

To 4 MVA Tr.

CUBICLE : 4

M 652 640_20 (3)

SHEET 1 OF 4



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name

DATE 17.2.1989
DRAWN S.SÖNMEZ
CHECK A.Erdoğan
CORR
ORIGIN
SUBS
REPL

GAMA SEVİŞLER HAM SU POMPA İSTASYONU

AEG EE

33 kV SWITCHGEAR

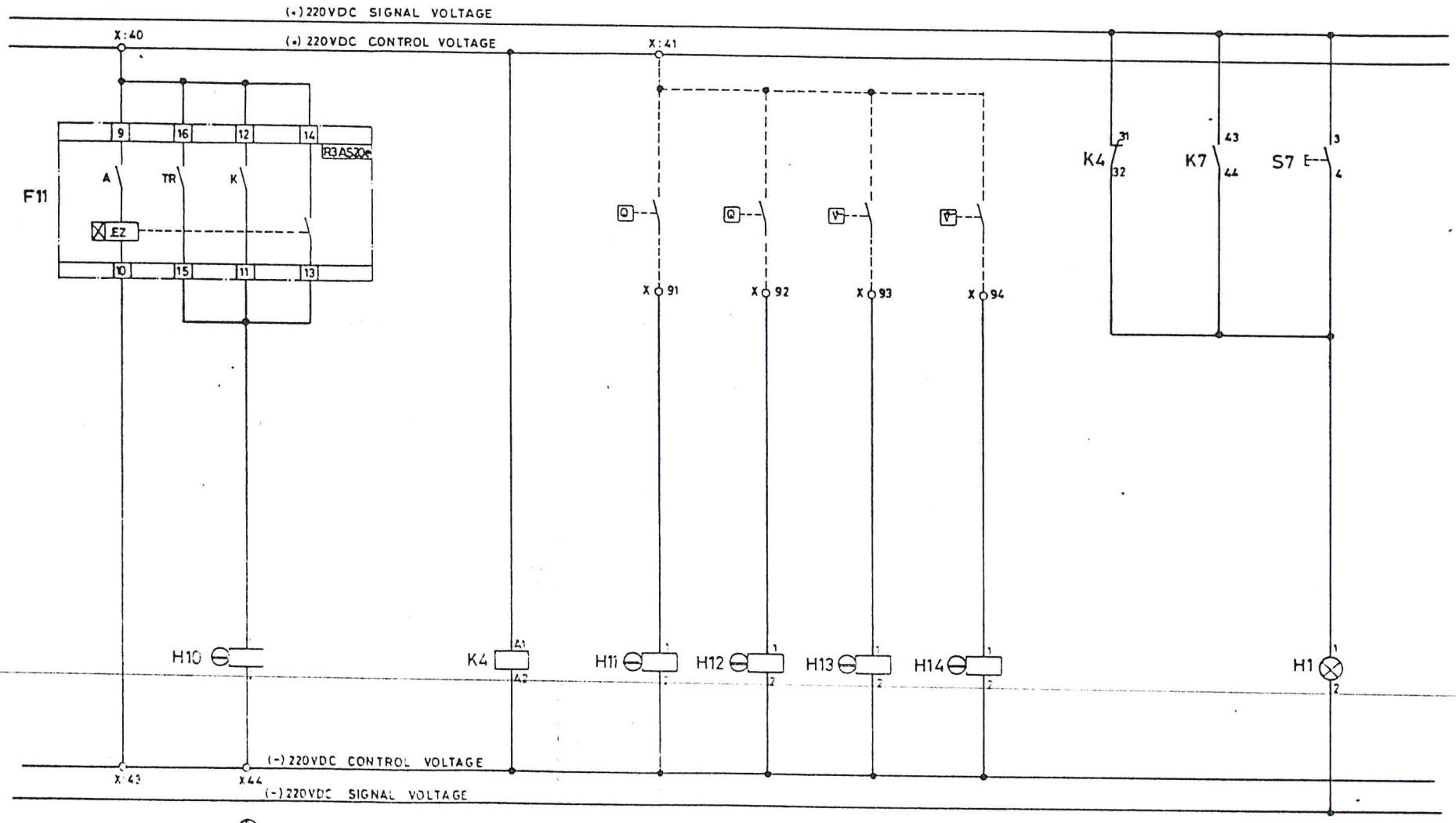
To 4 MVA Tr.

CUBICLE 4

M 652 640-20 (3)

SHEET 2 OF 4

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ		THERMOME		LAMP TEST
	TRIPPING	ALARM	TRIPPING	ALARM	FAULT



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NO	REVISION	DATE	Name	CORR

DATE 17_2_1989
DRAWN S. SÖNMEZ
CHECK A. Erdoğan

ORIGIN

GAMA_SEVİŞLER HAMSU POMPA İSTASYONU

AEG ETİ

REPL

33 kV SWITCHGEAR

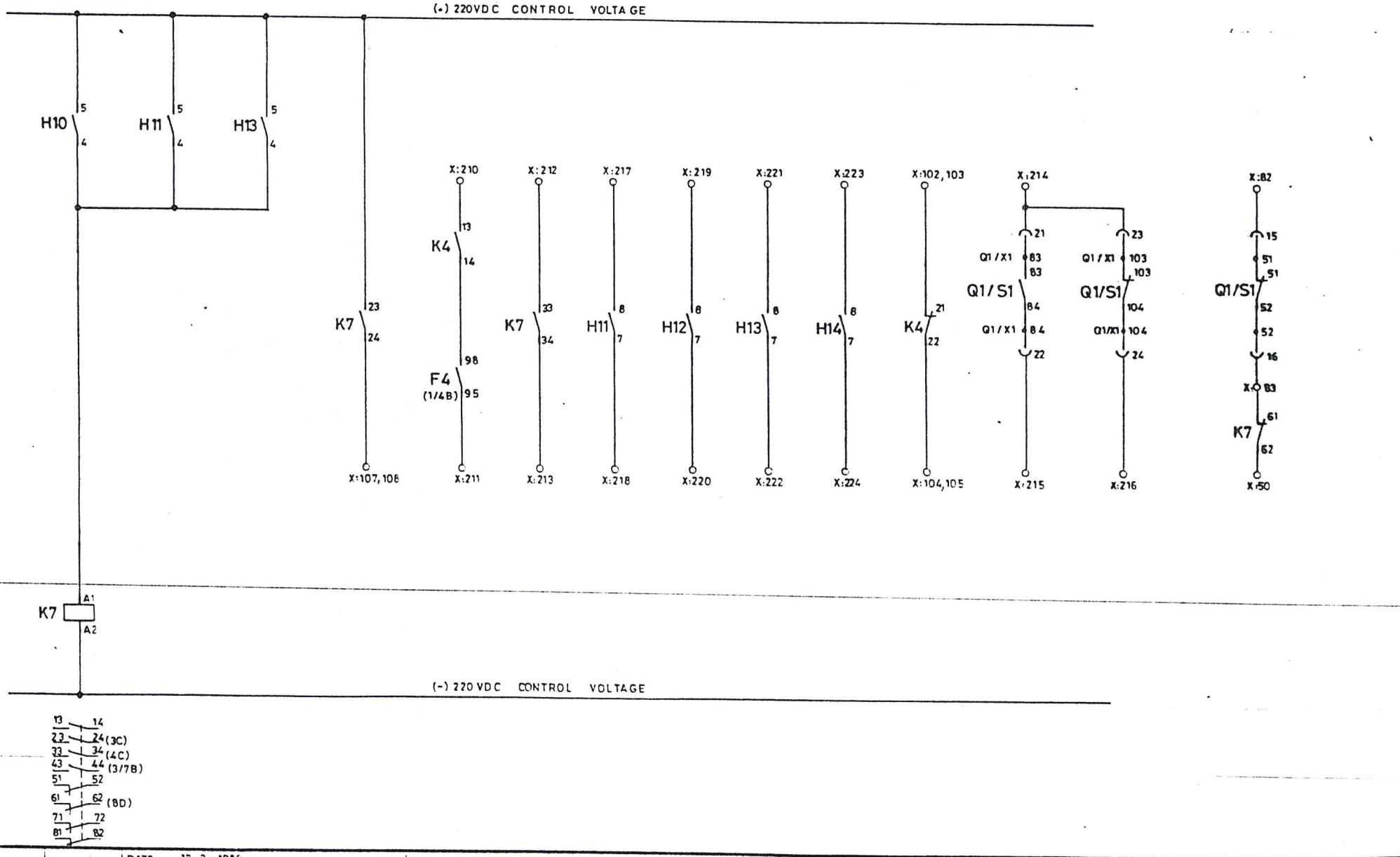
To 4 MVA Tr.

CUBICLE 4

M 652 640_20 (3)

SHEET 3 OF 4

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ TRIPPING	THERMOMETER TRIPPING	REMOTE SIGNALS	CONTROL VOLTAGE MONITORING	CIRCUIT BREAKER ON	CIRCUIT BREAKER OFF	CUBICLE 5 INTERLOCING



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NO	REVISION	DATE	DRWG	CORR

DATE 17_2_1989
DRAWN S. SÖNMEZ
CHECK A. Erdoğan

GAMA_SEVİŞLER HAM SU POMPA İSTASYONU

ORIGIN SUBS REPL

AEG ETİ

33 kV SWITCHGEAR

To 4 MVA Tr.

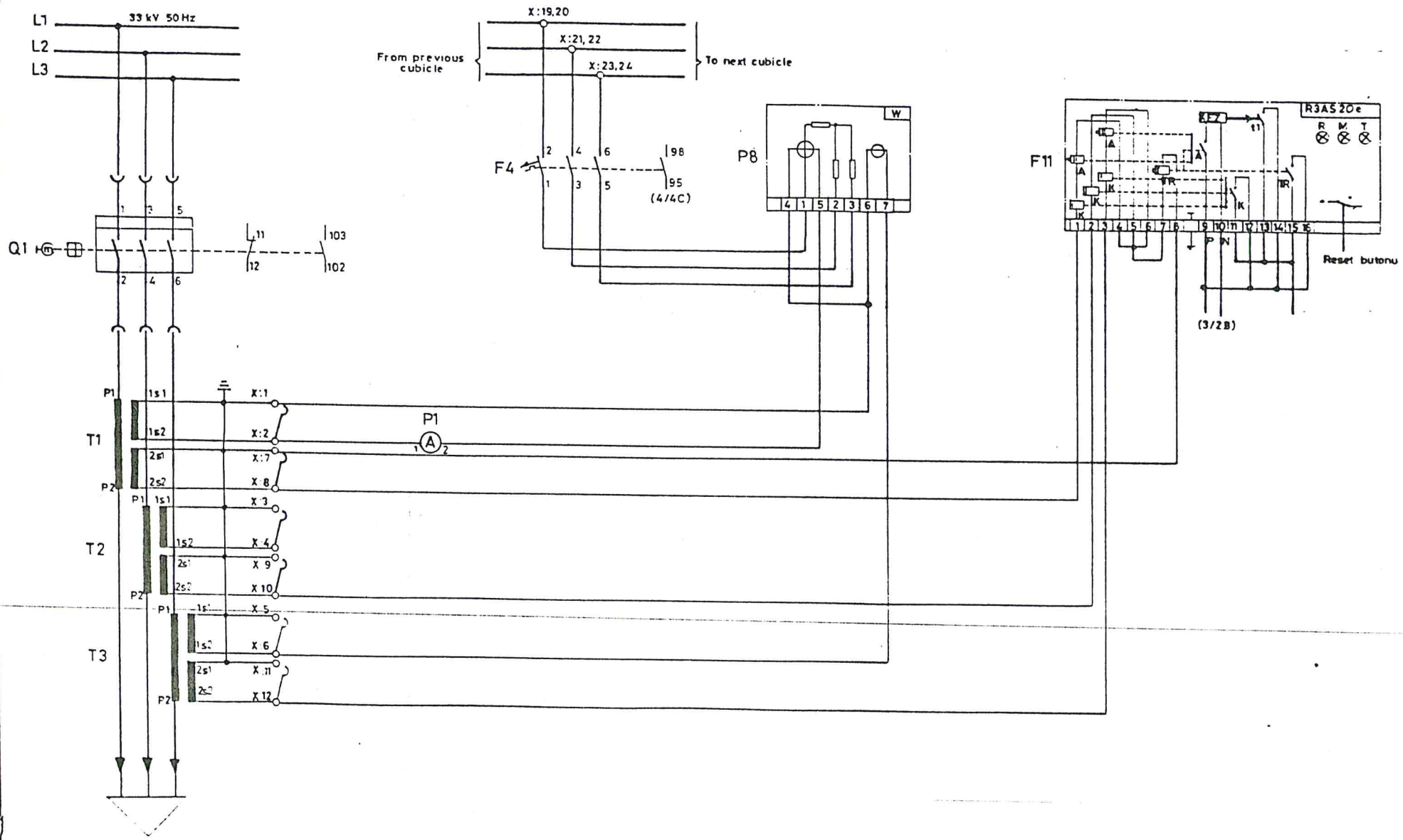
CUBICLE 4

M 652 640_20 (3)

SHEET 4 OF 4

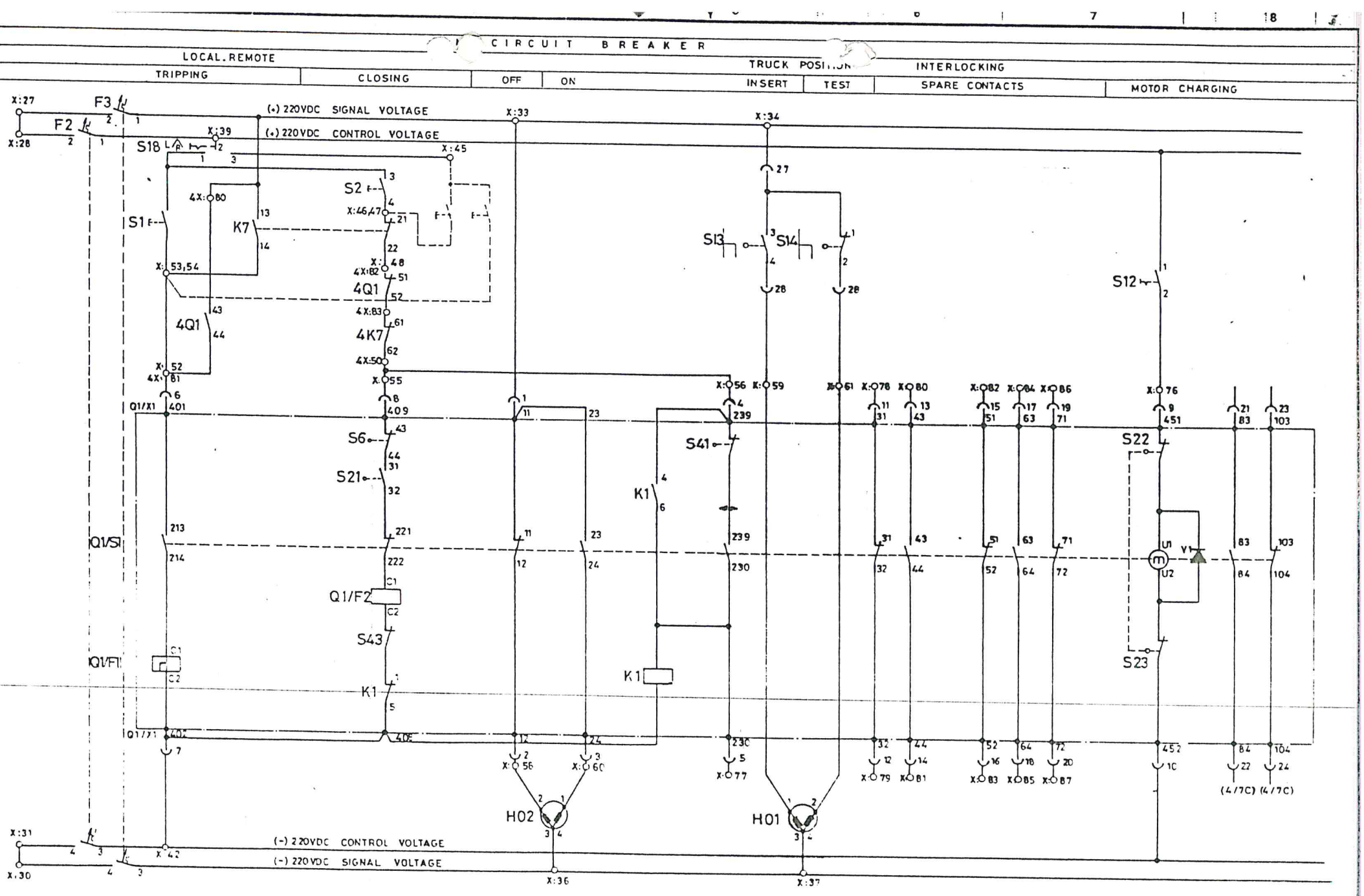
MC CIRCUIT BREAKER

CURRENT TRANSFORMER | AMMETER | Wattmeter | O/C S/C AND ELF RELAY



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		DATE	16 - 2 - 1965	GAMA- SEVİSLER HAM SU POMPA İSTASYONU	AEG ETİ	33 kV SWITCHGEAR	To 4MVA Tr. — CUBICLE 5
		DRAWN	S.SONMEZ				
		CHECK	A.Erdogan				
REVISION	DATE	NAME	CORR.	ORIGIN	SUBST.	REF.	M 652 640_20 (3) SHEET



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name	DRAWN	S. SONMEZ	17.2.1989
				CHECK	A. Erdoğan	
			CORR.	ORIGIN	SUBST.	REP.

GAMA. SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETS 33 kV SWITCHGEAR

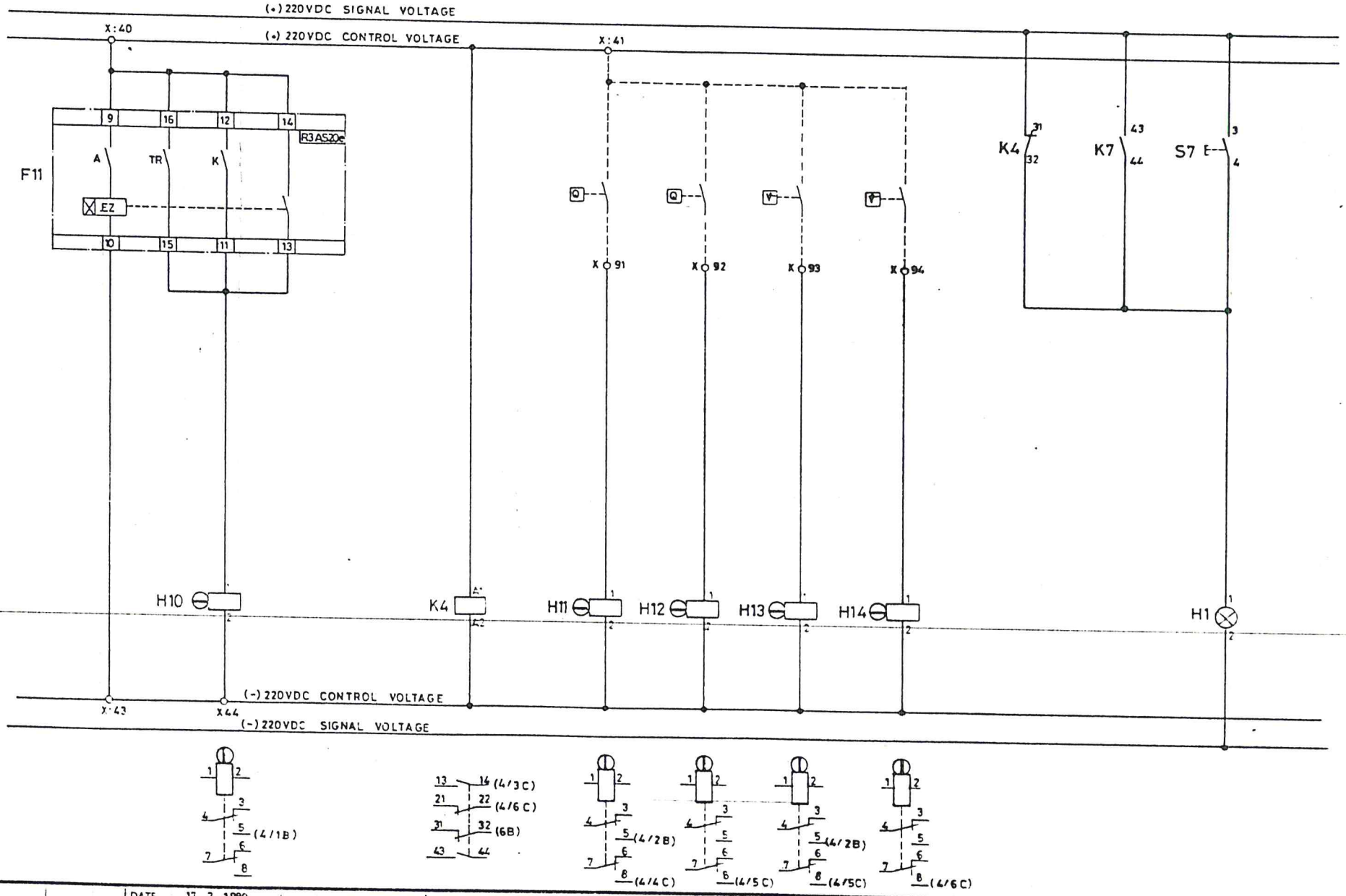
To 4 MVA Tr.

CUBICLE 5

M 652 640_20 (3)

SHEET 2 OF 4

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ		THERMOMETER		LAMP TEST FAULT
	TRIPPING	ALARM	TRIPPING	ALARM	



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name

DATE 17_2_1989
DRAWN S. SÖNMEZ
CHECK A. Erdoğan
CORR
ORIGIN
SUBS
REPL

GAMA_SEVİŞLER HAMSU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

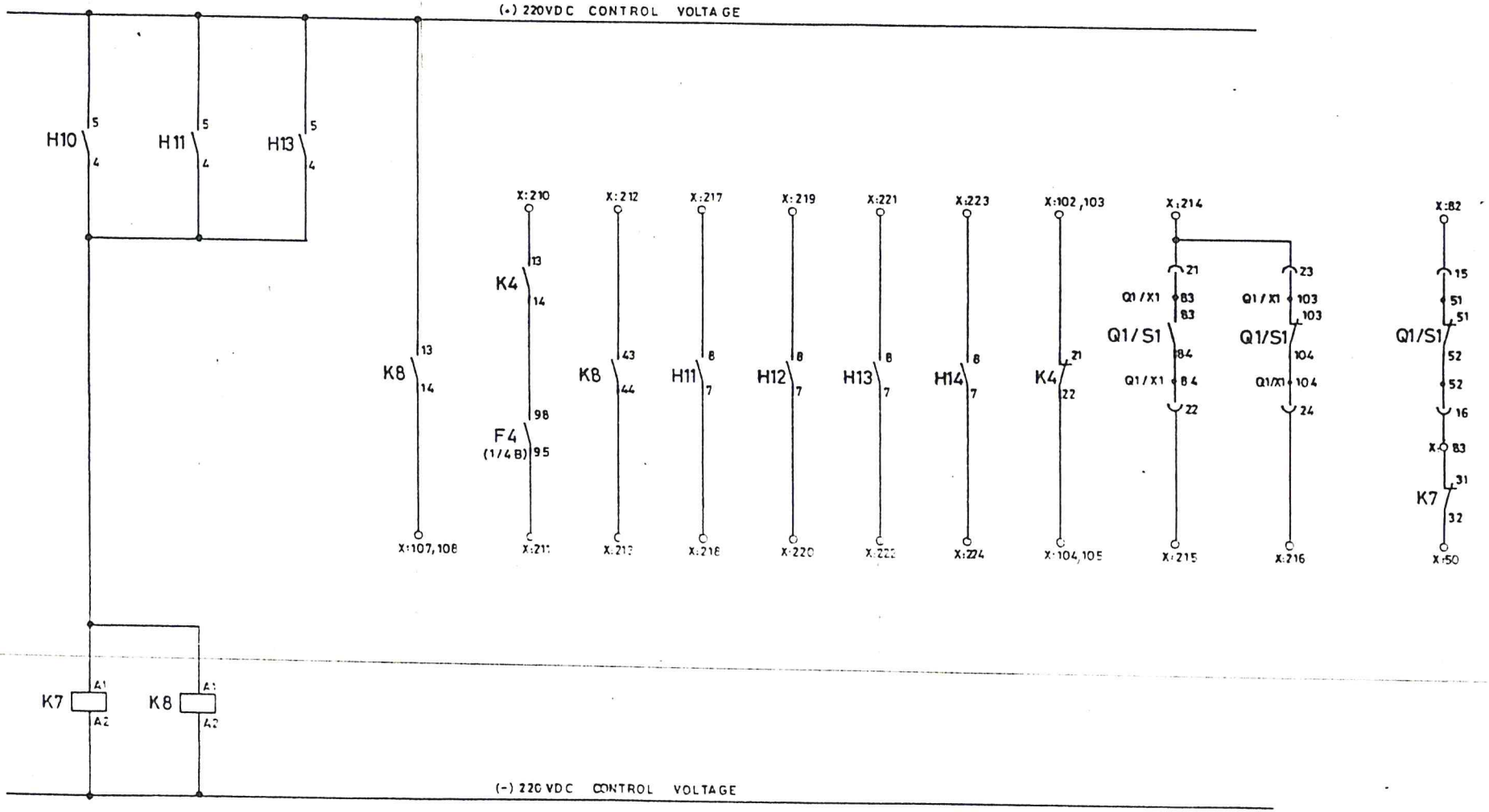
To 4MVA Tr.

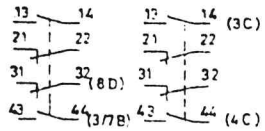
CUBICLE 5

M 652 640_20 (3)

SHEET 3 OF 4

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ TRIPPING	THERMOMETER TRIPPING	REMOTE SIGNALS	CONTROL VOLTAGE MONITORING	CIRCUIT BREAKER ON	CIRCUIT BREAKER OFF	CUBICLE 4 INTERLOCING





ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name	CORR.
		DATE	17_7_1989	
		DRAWN	S. SONMEZ	
		CHECK	A. Erdogan	

GAMA_SEVIŞLER HAM SU POMPA İ[illegible]ASYONU

AEG ETİ

33 kV SWITCHGEAR

To 4MVA Tr.

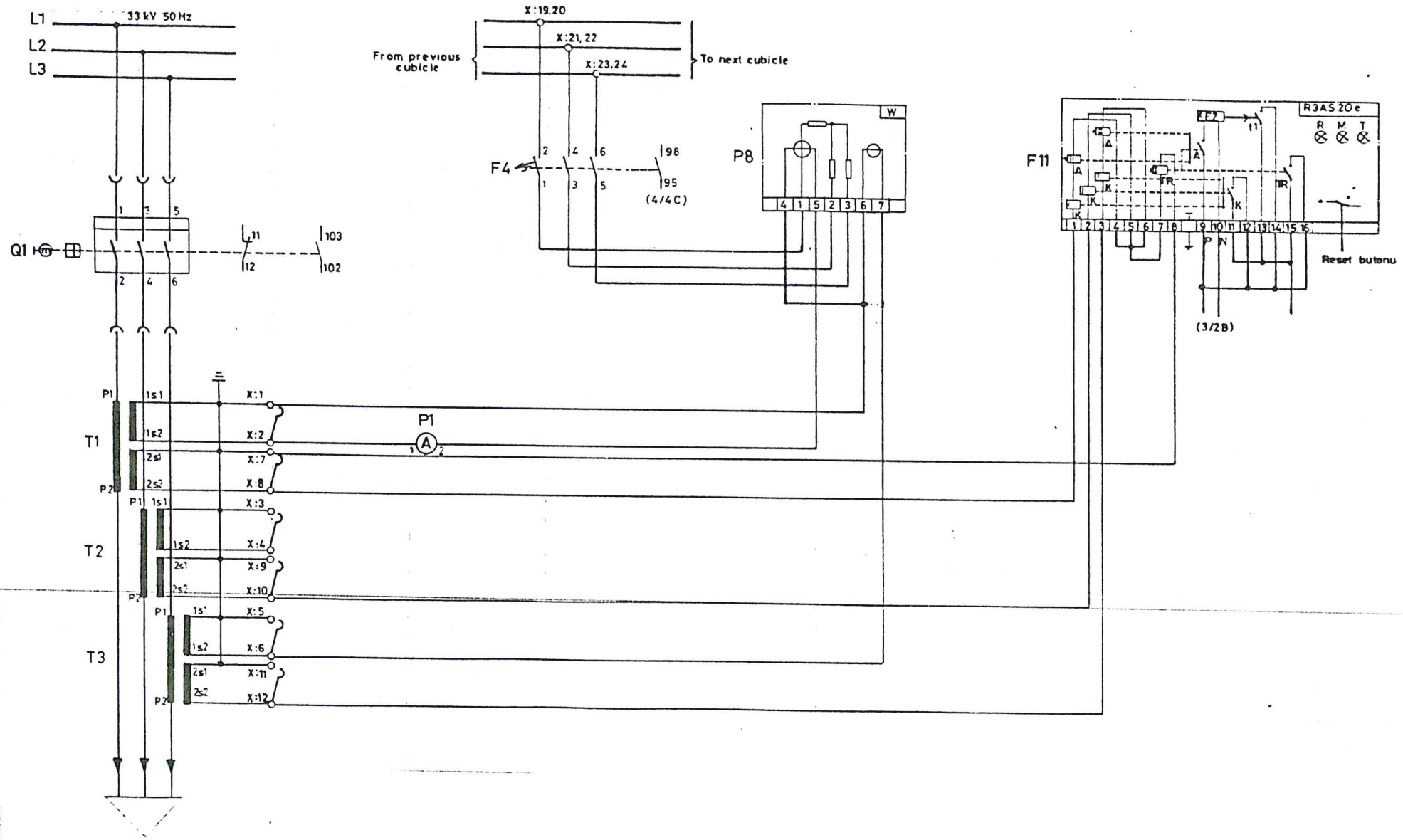
CUBICLE 5

ORIGIN | SUBST. | REF.

M 652 640_20 (3) SHEET 4 OF

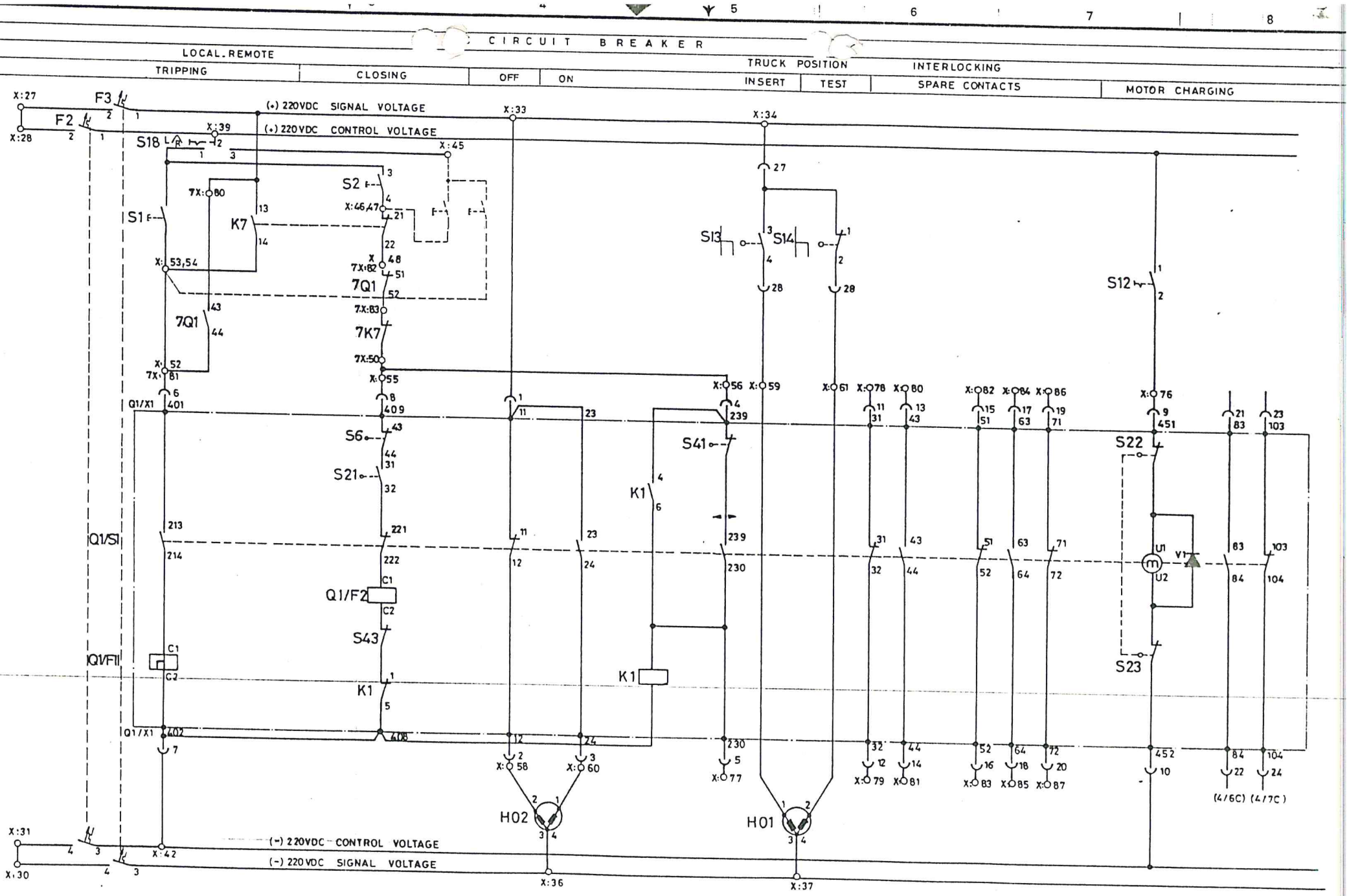
MC CIRCUIT BREAKER

CURRENT TRANSFORMER | AMMETER | Wattmeter | O/C S/C AND ELF RELAY



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DATE 16.2.1989	GAMA SEVİSİR HAM SU POMPA İSTASYONU	AEG ETİ	33 kV SWITCHGEAR	To 630 kVA Tr.	CUBICLE 6
DRAWN S.SÖNMEZ					
CHECK H. Erdoğan					



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name
		DATE	17.2.1989
		DRAWN	S. SÖNMEZ
		CHECK	A. Erdoğan
		CORR	

GAMA. SEVİŞLER HAM SU POMPA İ[illegible]ASYONU

ORIGIN | SUBST | REPL

AEG ETİ

33 kV S[illegible]TCHGEAR

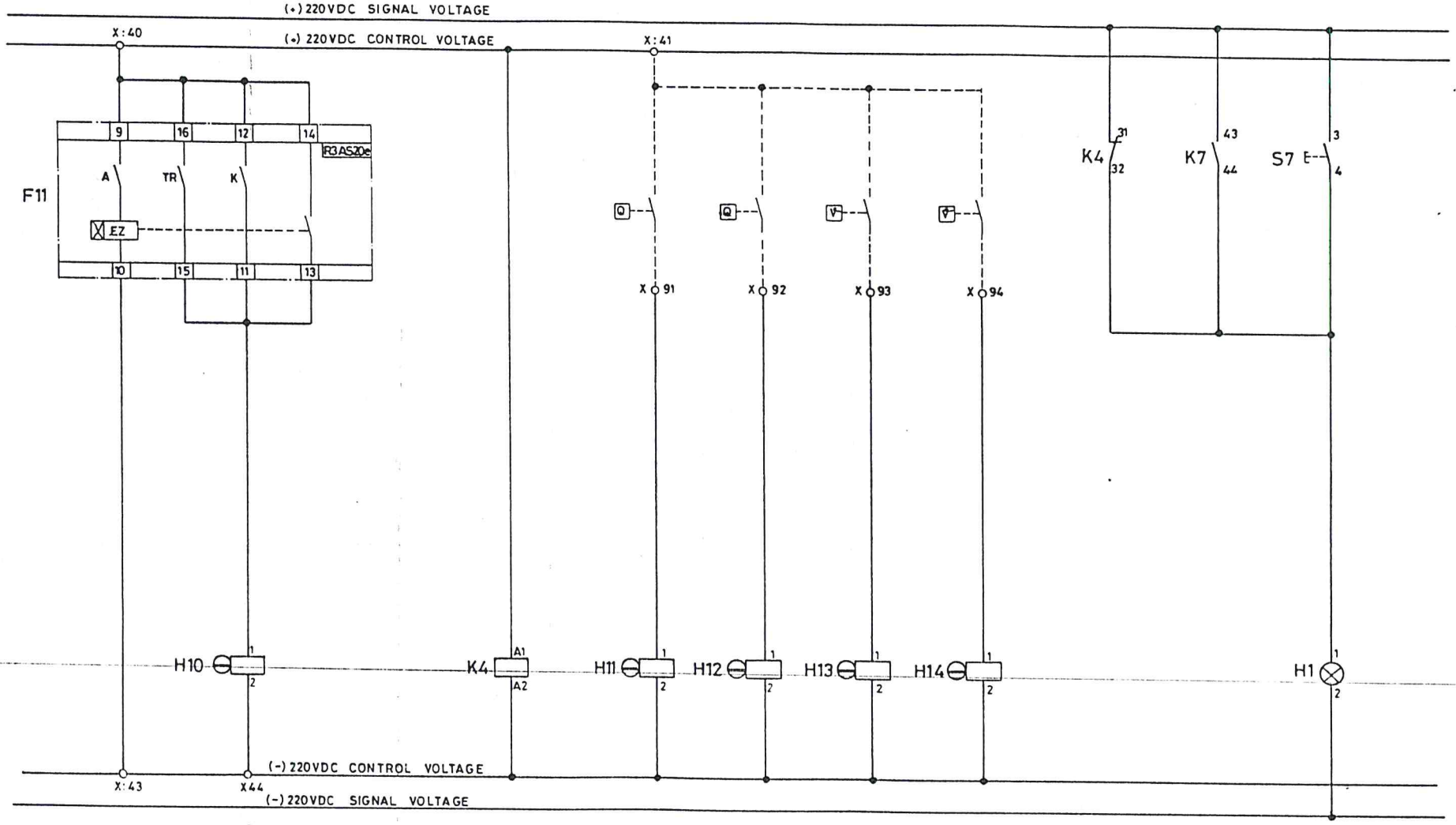
To 630 kVA Tr.

CUBICLE : 6

M 652 640 20 (3)

SHEET

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ		THERMOMETER		LAMP TEST FAULT
	TRIPPING	ALARM	TRIPPING	ALARM	



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	Name

DATE	17.2.1989	
DRAWN	S. SÖNMEZ	
CHECK.	A. Erdoğan	
CORR.		
ORIGIN.	SUBST.	REPL.

GAMA SEVİŞLER HAMSU POMPA İ[illegible]ASYONU

AEG ETİ

33 kV S[illegible]TCHGEAR

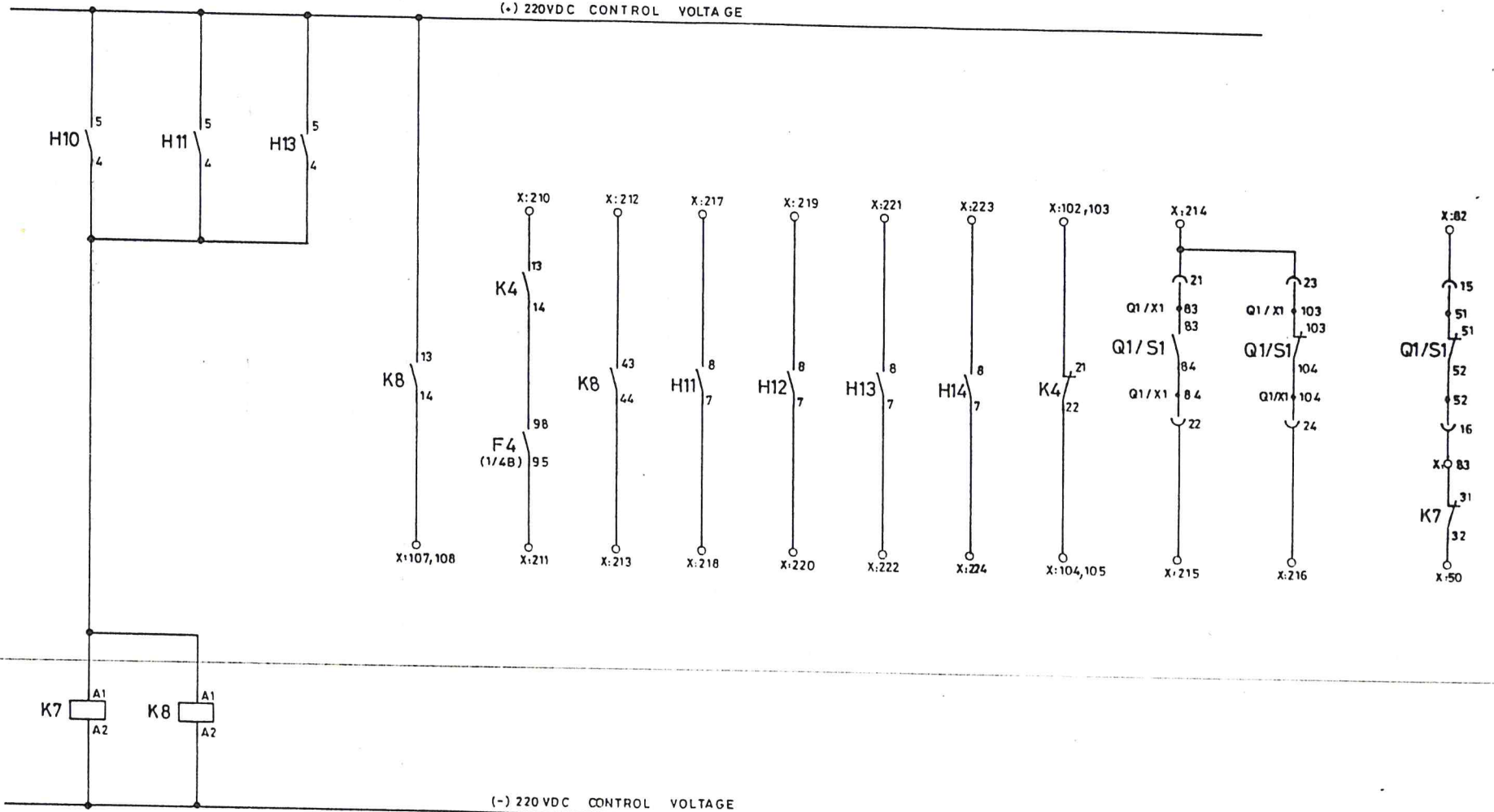
To 630 kVA Tr.

CUBICLE: 6

M 652 640_20 (3)

SHEET 3

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ TRIPPING	THERMOMETER TRIPPING	REMOTE SIGNALS	CONTROL VOLTAGE MONITORING	CIRCUIT BREAKER ON	CIRCUIT BREAKER OFF	CUBICLE 7 INTERLOCING



ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	NAME	CORR.

DATE 17-2-1989
DRAWN S. SÖNMEZ
CHECK A. Erdoğan

GAMA-SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETİ

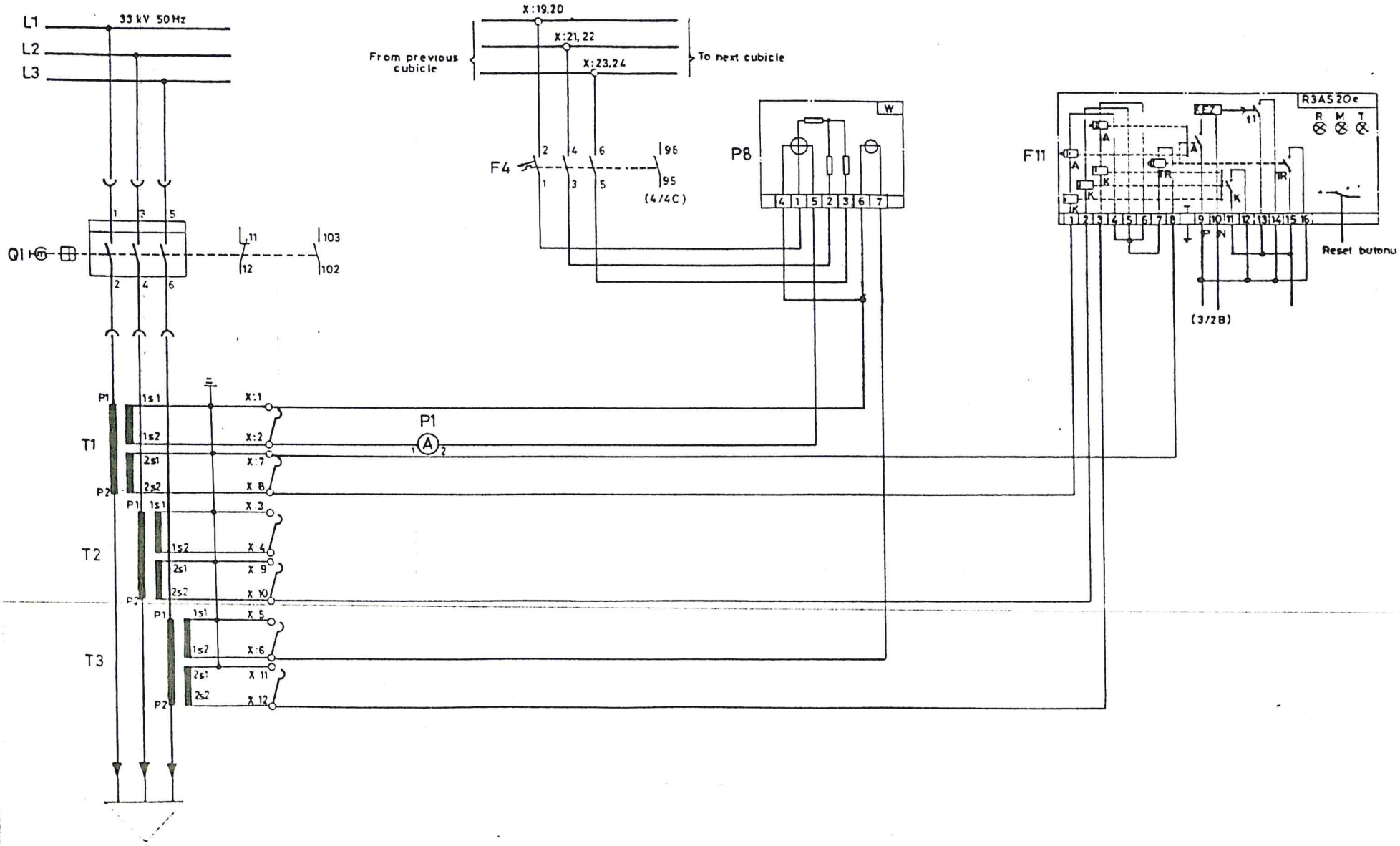
33 kV SWITCHGEAR

To 630 kVA Tr.

CUBICLE: 6

MC CIRCUIT BREAKER

CURRENT TRANSFORMER | AMMETER | Wattmeter | O/C S/C AND ELF RELAY



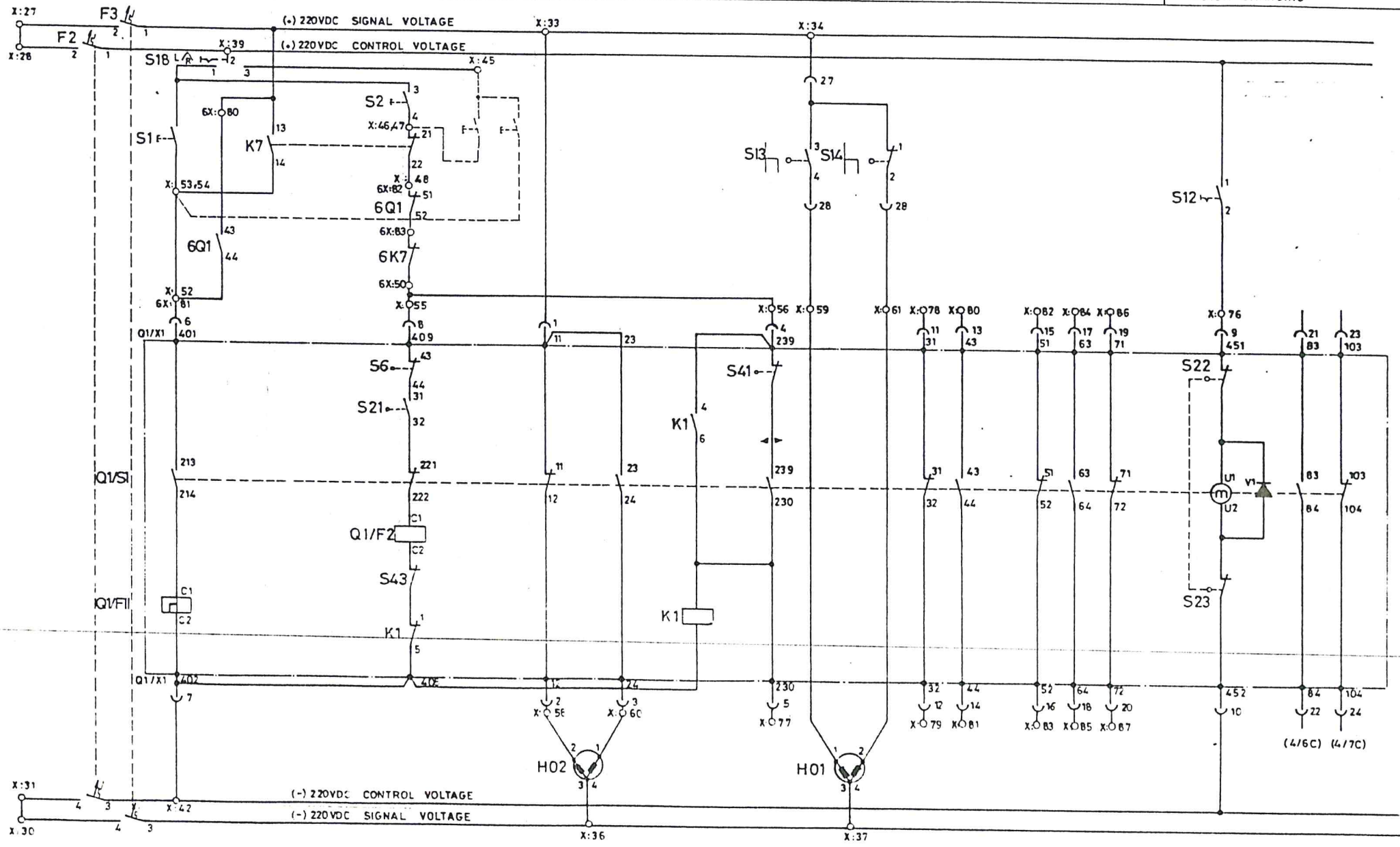
ALL RIGHTS ARE RESERVED

DATE	16.2.1965	GAMA SEVİSLİ HAM SU POMPA İSTASYONU	AEG ETİ	33 kV SWITCHGEAR	To 630 kVA Tr.
DRAWN	S. SONMEZ				CUBICLE 7
CHECK	A. Erdoğan				M 552 640 20 (2)

ALL RIGHTS ARE RESERVED

CIRCUIT BREAKER

LOCAL-REMOTE				TRUCK POSITION		INTERLOCKING	
TRIPPING	CLOSING	OFF	ON	INSERT	TEST	SPARE CONTACTS	MOTOR CHARGING



NO.	REVISION	DATE	Name	CORR.
			DATE	17.2.1989
			DRAWN	S.SONMEZ
			CHECK	A.Erdogan

GAMA-SEVISLER HAM SU POMPA ISTASYONU

AEG ETS

33 kV SWITCHGEAR

To 630 kVA Tr.

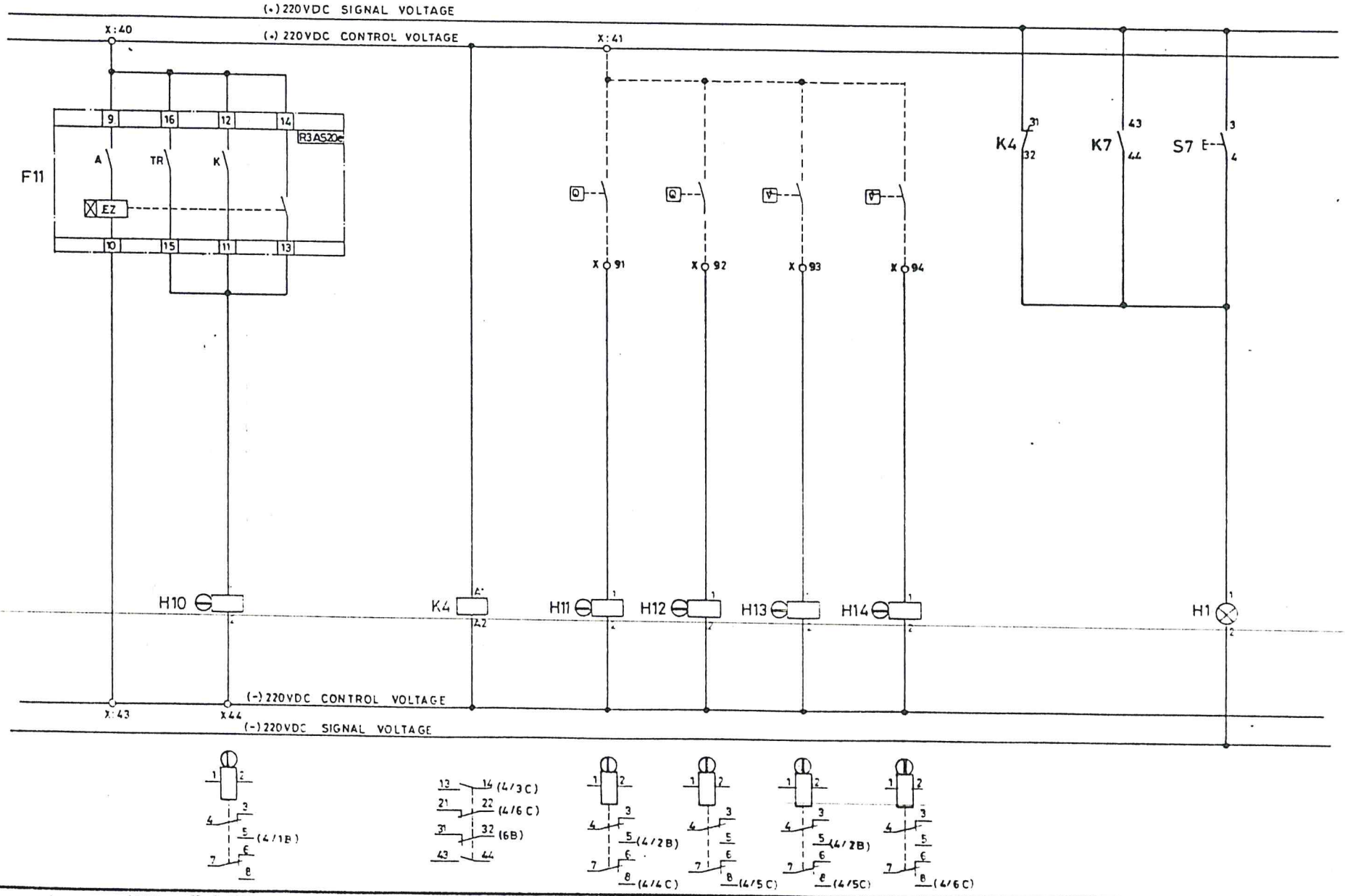
CUBICLE 7

ORIGIN | SUBST. | REPL.

M 652 640-20 (3)

SHEET 2 OF 4

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ		THERMOMETER		LAMP TEST FAULT
	TRIPPING	ALARM	TRIPPING	ALARM	



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REVISION	DATE	Name	CORR.
		DATE	17.2.1989
		DRAWN	S. SONMEZ
		CHECK.	A. Erdoğan

GAMA-SEVİŞLER HAMSU POMPA İSTASYONU

ORIGIN | SUBST | REPL

AEG ETİ

33 kV SWITCHGEAR

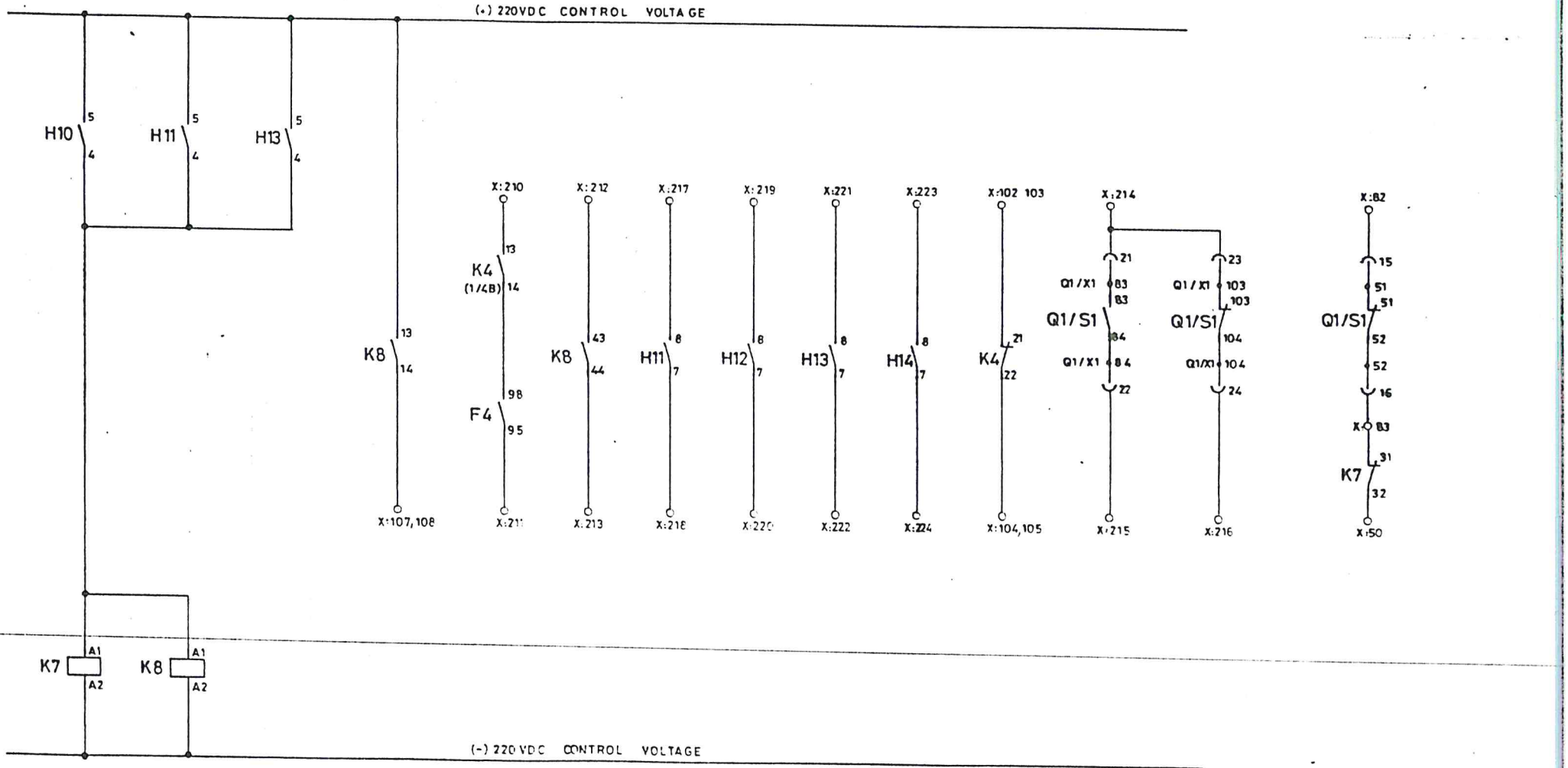
To 630 kVA Tr.

CUBICLE 7

M 652 640-20 (3)

SHEET 3 OF 4

O/C S/C AND ELF RELAY TRIPPING	BUCHHOLZ TRIPPING	THERMOMETER TRIPPING	REMOTE SIGNALS	CONTROL VOLTAGE MONITORING	CIRCUIT BREAKER ON	CIRCUIT BREAKER OFF	CUBICLE 6 INTERLOCING



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NO.	REVISION	DATE	Name

DATE 17-2-1989
DRAWN S. SÖNMEZ
CHECK
CORR
ORIGIN
SU
REP.

GAMA-SEVIŞLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

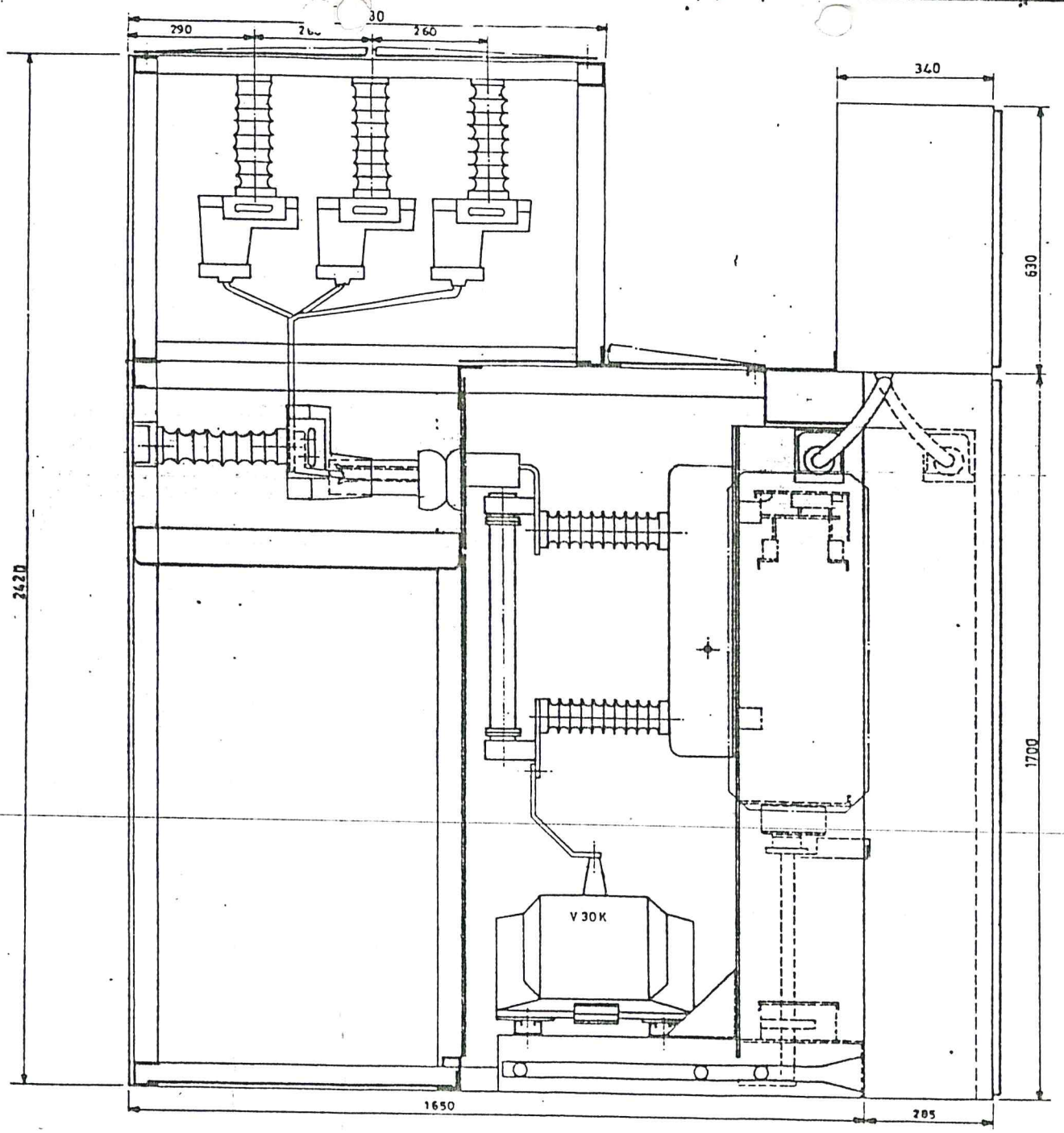
To 630 kVA Tr.

CUBICLE 7

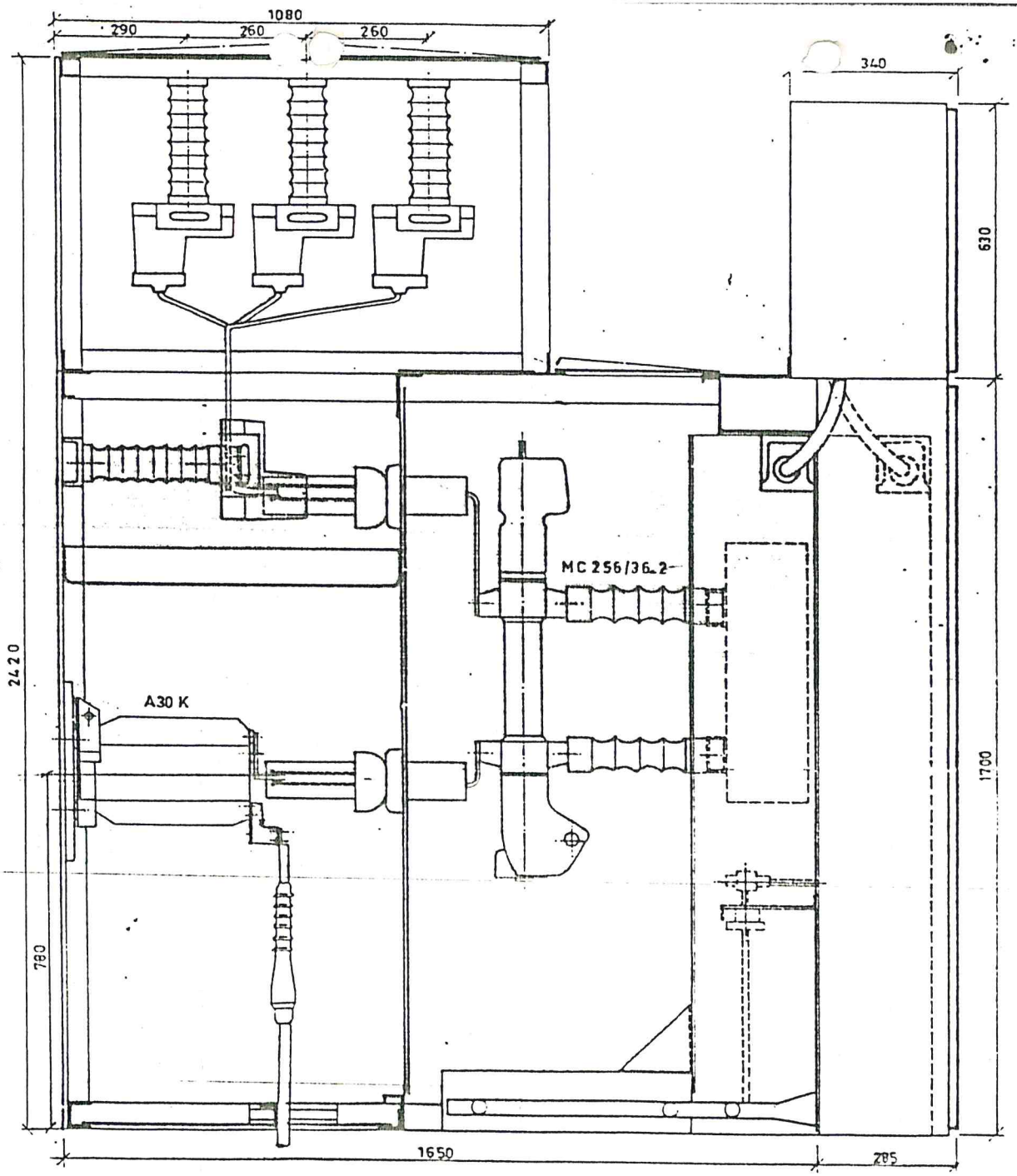
M 652 640-20 (3)

SHEET 4 OF 4

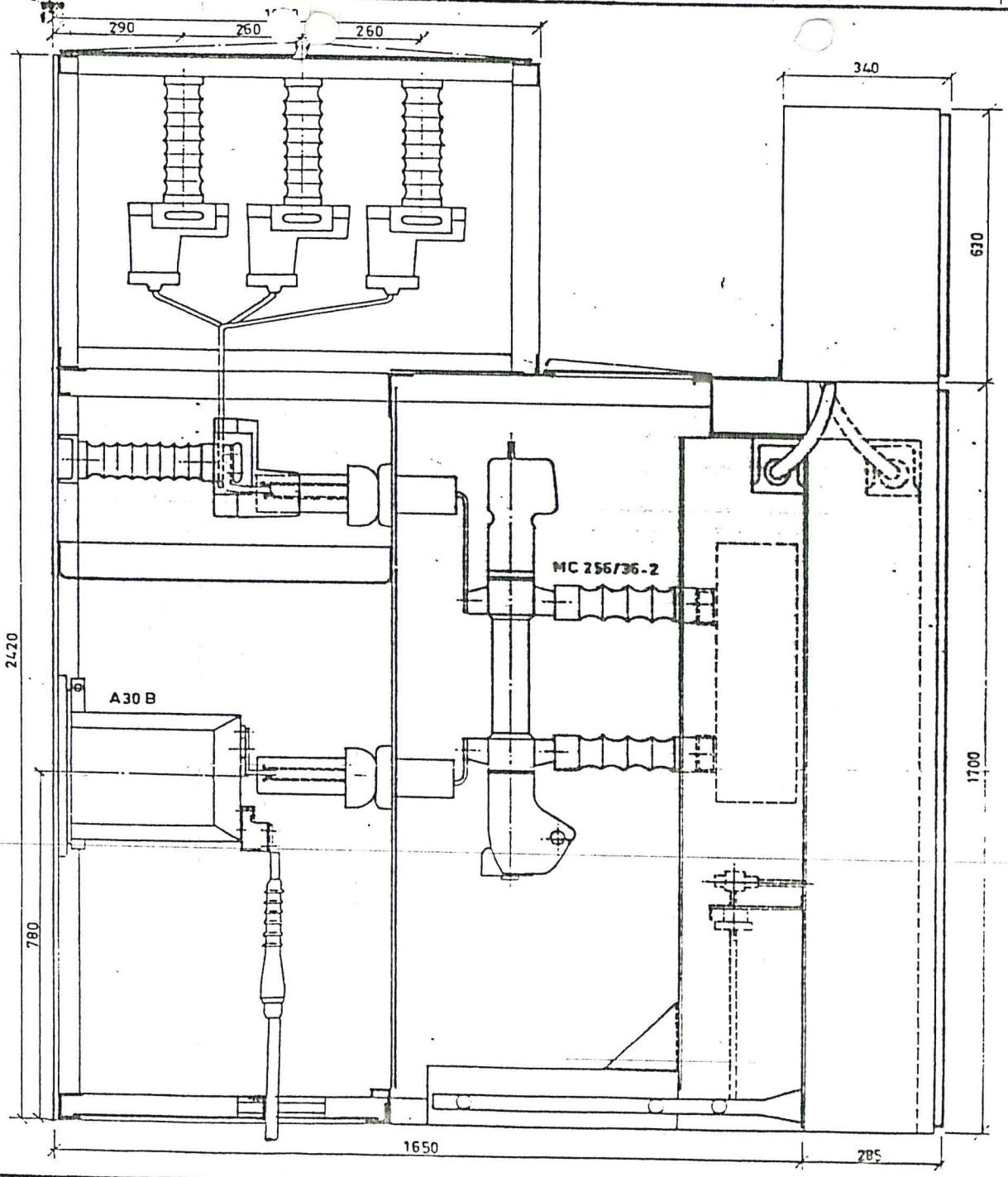
ALL RIGHTS ARE RESERVED



		DATE 20.2.1989	GAMA SEVİSLE HAM SU POMPA İSTASYONU	AEG ETİ	33 kV SWITCHGEAR	Cubicle : 1
		DRAWN AYŞİN				
		CHECK R. Erdoğan				
REVISION	DATE	NAME				



				DATE	20_2_1989	GAMA_SEVİŞLER HAM SU POMPA İSTASYONU	AEG ETİ	33 kV SWITCHGEAR	Cubicle : 2,3,4,5
				DRAWN	AYSIN				
				CHECK					
REVISION	DATE	Name		CORR.		ORIGIN		REFL.	M 652 640_91 (3) SHEET 1 OF 1



			DATE	20.2.1989	GAMA SEVİŞLER HAM SU POMPA İSTASYONU	AEG ETİ	33 kV SWITCHGEAR
			DRAWN	AYŞIN			Cubicle : 6,7
			CHECK	A.Erdoğan			
REVISION	DATE	Name	CORR.		ORIGIN		

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BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Terminal strip / Bağlantı klemensi

Circuit/Akım yolu	Sheet – No of function group / Fonksiyon grubunun sayfa no		Instalation/Designation of funktion – Yer/Fonksiyonun işareti	Destination Symbol / Gittiği yerin – Designation / Kodu	Connection No / Bağlantı No	Terminal No / Klemens No	Link / Köprü	Destination Symbol / Gittiği yerin – Designation / Kodu	Connection No / Bağlantı No	Cablemarking / Kablo adı – Cable type / Kablo tipi
C	3	1		F5.2		13	o	T4 dn→5		
C	4	1		F5.1		14	o	F31	1	
D	4	1		F31.2		15	o	T6.da→6		
E	3	1		F4.2		16	o	T4a →1		
E	3	1		F4.4		17	o	T5a →2		
E	3	1		F4.6		18	o	T6a →3		
E	4	1		F4.1		19	o—o (19–20)			
E	4	1		S11	1	20			19	2x
E	4	1		F4	3	21	o—o (21–22)			
E	4	1		S11	7	22			21	2x
E	4	1		F4	5	23	o—o (23–24)			
	4	1		S11	5	24			23	2x
E	4	1		T4n	4	25	o		25	2x
						26	o			
B	2		2	F3	2	27	o—o (27–28)	F10	1	
B	2		2	F2	2	28				
E	2		2	F3	4	30	o—o (30–31)	F10	3	
E	2		2	F2	4	31				
B	3		2	F3	1	32	o—o (32–33)	S13.3→7		
B	3		2	S7	13	33				
E	3		2	F3	3	34	o—o (34–35)	H01	3,4	
E	3		2	K6	A2	35				
C	3		2	H01	2	59	o	S13.4 →8		
C	3		2	H01	1	61	o	S14.2 →9		
B	1		2			92	o	(+) 220 V DC		
E	1		2			93	o	(−) 220 V DC		
D	7		2	K6	14	94	o		41	2x
E	7		2	K6	11	95	o		90	2x
D	8		2	K6	44	96	o		41	3x
E	8		2	K6	41	97	o		90	3x
						X	o			
B	8		2	K4	31	102	o—o (102–103)	220 V. 50 Hz		
B	8		2			103			102	2x
D	8		2	K4	32	104	o—o (104–105)	H16.1		
D	8		2			105			104	2x
							o			
B	7		2	K4	13	200	o			
D	7		2	K5	95	201	o			
B	8		2	F31	7	202	o			
D	8		2	F3	6	203	o			
						X	o			
B	2		3	F6	2	L1	o	220 V 50Hz(L1)		
C	4		3	K11	6	310	o—o (310–311)			
C	4		3	E6	1	311			310	2x
E	4		3	K11	A2	312	o—o (312–313)	220V 50 Hz(N)		
E	4		3			313			312	2x
							o			
							o			
							o			
							o			

Used: cores / kullanılan damarlar

From othe sheets/Diger sayfalarda

Total/Toplam

Continued on sheets/ Bağlantı için bakınız

Control voltage off (HORN) — 1 (terminal 102), 2 (terminal 104)

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

Line up terminal type / Sıra klemens tip

Terminal/ Klemens ..... 13-313 MEK 4 ....
Terminal/Klemens ....
Terminal / Klemens ....
Terminal/ Klemens ....

= Cable connection top/Kablo bağlantısı üst
= Cable connection bottom/Kablo bağlantısı alt

Wiring / Kablaj

Terminal / Klemens ..... 1,5 mm² NYA ....
Terminal / Klemens ..... 1,5 mm² NYAF ....
Terminal / Klemens ..... 2,5 mm² NYAF ....
Terminal / Klemens ....

General remarks / Genel notlar

Panodan panoya geçişler 2,5 mm² NYAF olacaktır.

DATE	20. 2. 1989	GAMA _ SEVİŞLER ... M SU POMPA İSTASYONU	AEG ETİ
DRAWN	Fazıl Bren		33 kV SWITCHGEAR
CHECK	A. Erdoğan	ORIGIN	MEASURING
REVISION / DATE / NAME			= CUBICLE 1

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BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Circuit/Akım yolu
Sheet_No of function Group / Fonksiyon grubunun sayfa no:
Instalation/Designation of funktion / Yer/Fonksiyonun işareti
Terminal strip: Bağlantı klemensi

Terminal_No: / Klemens_No: X	Circuit/Akım yolu	Sheet_No of function Group / Fonksiyon grubunun sayfa no:		Destination Symbol / Gittiği yerin: Connection No: / Bağlantı No:	Designation / Kodu	Destination Symbol / Gittiği yerin: Connection No: / Bağlantı No:	Designation / Kodu
1	C	2	1	1	P11	1B1	T1
2	D	2	1	1	P1	1B2	T1
3	D	2	1			1B1	T2
4	D	2	1	7	P11	1B2	T2
5	E	2	1			1B1	T3
6	E	2	1	11	P11	1B2	T3
7	D	2	1	8	F11	2B1	T1
8	D	2	1	1	F11	2B2	T1
9	D	2	1			2B1	T2
10	D	2	1	2	F11	2B2	T2
11	E	2	1			2B1	T3
12		2	1	3	F11	2B2	T3
19	A	4	1	2	F4		1x 20
20	A	4	1				3x 19
21	B	4	1	4	F4		1x 22
22	B	4	1				3x 21
23	B	4	1	6	F4		1x 24
24	B	4	1				3x 23
25	B	4	1	12	P11		2x 26
26	B	4	1				
27	A	1	2	2	F3		
28	A	1	2	2	F2		
30	F	1	2	4	F3		
31	F	1	2	4	F2		
33	A	4	2	1	F3		Q1/x1.11→1
34	A	5	2				S13.3→27
36	F	4	2	3	F3		
37	F	5	2	3,4	H01		
38		2	2	1	F2		3x 80→S13
40		2	3	9	F11		
41	B	2	4		K7.23		1x 94
42	F	2	1	3	F2		Q1/x1.402→9
43	E	2	3	10	F11		
44	E	2	3	2	H10		
45	A	3	2	3	S18		
46	B	3	2	4	S2		
47	B	3	2		K7.51		
48	B	3	2				3x 82
49	B	3	2		K7.52		
50							
51							
52	B	2	2				3x 92
53	B	2	2	4	S1		
54	B	2	2		K7 14		Q1/x1.401→6
55	C	3	2		Q1.x1.409→8		3x 50
56	C	5	2		Q1.x1.239→9		
57							
58	E	4	2		H02.2		Q1.x1.12→2
59	C	5	2		H01.1		S13.4→28

Link / Köprü

Cablemarking, Kablo adı / Cable_Type, Kablo tipi
From previous cubicle
To next cubicle
To 14 BÜ Switchgear
To control board

1 2

Used cores / kullanılan damarlar
From othe sheets/Diger sayfalarda
Total/Toplam
Continued on sheets/ Bağlantı kih. bakınız

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

Line up terminal type / Sıra klemens tip
Terminal/ Klemens ....1÷59 MEK_4........
Terminal/Klemens ....
Terminal / Klemens..............................
Terminal/ Klemens ....

▭ = Cable connection top/Kablo bağlantısı üst
▭ = Cable connection bottom/Kablo bağlantısı alt

Wiring / Kablaj
Terminal /Klemens........1,5 mm² NYAF..........
Terminal / Klemens ....1,5 mm² NYAF..........
Terminal / Klemens ....2,5 mm² NYAF..........
Terminal/Klemens ....

General remarks / Genel notlar

Panodan panoya gecisler 2,5 mm² NYAF olacaktır.

REVISION	DATE	NAME		
			DATE	20.2.1989
			DRAWN	Fezal Özen
			CHECK.	[signature]
			CORR.	

GAMA _ SEVİŞLER HAM SU POMPA İS[...]SYONU

ORIGIN. SUBST.

AEG ETİ

REPL.

33 kV SWITCHGEAR

COUPLING

= CUBICLE _ 2
+

M 652 6/0 . 60 (0)

SHEET 1

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BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Terminal / Klemens No	Circuit / Akım yolu	Sheet No of function group / Fonksiyon grubunun sayfa no	Installation/Designation of function – Yer/Fonksiyonun işareti	Destination Symbol (top) – Connection No / Bağlantı No	Destination Symbol (top) – Designation / Kodu	Link / Köprü	Destination Symbol (bottom) – Connection No / Designation	To control board	To horn (220 V DC)
60	4E	2		1	H02	o	Q1/x1.24⇒3		
61	6C	2		2	H01	o	S14 2⇒29		
76	7C	2		2	S12	o	Q1/x1.451⇒9		
77	5E	2		Q1/x1.230⇒5		o			
78	6C	2		Q1/x1.31⇒11		o	3x93		
79	6E	2		Q1/x1.32⇒12		o	3x95		
80	6C	2		Q1/x1.43⇒13		o			
81	6E	2		Q1/x1.44⇒14		o			
82	6C	2		Q1/X1.51⇒15		o	3x48		
83	6E	2		Q1/x1.52⇒16		o	3x55		
84	7C	2		Q1/x1.63⇒17		o			
85	E	2		Q1/x1.64⇒18		o			
86	7C	2		Q1/x1.71⇒19		o			
87	7	2		Q1/x1.72⇒20		o			
90	2B	4			K7.A1	o—o (90–91)	1x95		
91	2B	4		4	H10	o			
92						o			
93						o			
94						o			
95						o			
96						o			
102	4B	4			K4.21	o—o (102–103)	1x 103		
103	4B	4				o	3x 102		
104	4D	4			K4.22	o—o (104–105)	1x105		
105	4D	4				o	3x104		
106						o			
107	3D	4			K7.24	o—o (107–108)			1
108	3D	4				o	3x 107		
X						o			
210	3	4			K4.13	o		1	
211		4			F4 95	o		2	
212	4B	4			K7.33	o		3	
213	4D	4			K7.34	o		4	
214	5B	4		Q1/x1.83⇒21		o		5	
215	5D	4		Q1/x1.84⇒22		o		6	
216	6D	4		Q1/x1.104⇒34		o		7	
217						o			
218						o			
219						o			
220						o			
221						o			
222						o			
223						o			
224						o			
225						o			
X						o			
310					E6.1	o—o (310–311)	1x 311		
311						o			
312					E6.2	o—o (312–313)	1x 313		
313						o			

Terminal strip: Bağlantı klemensi

Cablemarking, Kablo adı – Cable-Type, Kablo tipi

From previous cubicle
To next cubicle
To 14 BD Switchgear
To control board
To horn (220 V DC)

Used cores / kullanılan damarlar

From othe sheets / Diger sayfalarda
Total/Toplam
Continued on sheets / Bağlantı kim bakınız

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

Line up terminal type / Sıra klemens tip
Terminal/ Klemens 60 ÷ 313 MEK 4
Terminal/Klemens ....
Terminal / Klemens ....
Terminal/ Klemens ....

▭ = Cable connection top/Kablo bağlantısı üst
▭ = Cable connection bottom/Kablo bağlantısı alt

Wiring / Kablaj
Terminal / Klemens 1,5 mm² NYA
Terminal / Klemens 1,5 mm² NYAF
Terminal / Klemens 2,5 mm² NYAF
Terminal / Klemens ....

General remarks / Genel notlar

NO	REVISION	DATE	NAME		
				DATE	20.2.1987
				DRAWN	Fazıl Özen
				CHECK.	A. Erdoğan
				CORR.	

GAMA – SEVİŞLER HAM SU POMPA İS[...]SYONU

ORIGIN. SUBST.

AEG ETİ

REPL.

33 kV SWI[...]HGEAR

COUPLING

= CUBICLE 2
+

M 652 640 – 60 (3)

SHEET 2 OF 2

Terminal / Klemens No	Circuit / Sheet – No of function group	Destination (upper) Connection No / Bağlantı No	Destination (upper) Designation / Kodu	Link / Köprü	Destination (lower) Connection No / Bağlantı No	Destination (lower) Designation / Kodu	Row a	Row b
1	12C	1	P1	o	2s2	T1		
2	12D	3	P11	o	2s1	T1		
3	12D	7	P11	o	2s2	T2		
4	12D			o	2s1	T2		
5	12E	11	P11	o	2s2	T3		
6	12E			o	2s1	T3		
7	12D	1	F11	o	1s2	T1		
8	12D	8	F11	o	1s1	T1		
9	12D	2	F11	o	1s2	T2		
10	12D			o	1s1	T2		
11	12E	3	F11	o	1s2	T3		
12	12			o	1s1	T3		
				o				
19	14	2	F4	o	20	2x		
20	14A			o	19	4x		
21	14B	4	F4	o	22	2x		
22	14B			o	21	4x		
23	14B	6	F4	o	24	2x		
24	14B			o	23	4x		
25	14B	12	P11	o	25	1x		
28	14B	.	-	o	25	3x		
27	21A	2	F3	o				
28	21A	2	F2	o				
30	21F	4	F3	o				
31	21F	4	F2	o				
33	24A	1	F3	o		Q1/x.11⇒1		
34	25A			o		S13.3⇒27		
36	24F	3	F3	o	3.4	HO2		
37	25F	3,4	HO1	o				
39	22	1	F2	o				
40	32	9	F11	o				
41	42B	23	K7	o	96	1x		
42	22F	3	F2	o		Q1/x1.402⇒7		
43	32E	10	F11	o				
44	32E	2	H10	o				
45	23A	3	S18	o				1
46	23A	4	S2	o				2
47	23A	51	K7	o				
48	23A			o	82	2x		
49	23A			o			1	
50	46E	62	K7	o	55	2x		
51	46E			o			2	
52				o				
53	22B	4	S1	o				3
54	22B	14	K7	o				
55	23C		Q1/x1.409⇒8	o	83	2x		
56	25C		Q1/x1.239⇒4	o			3	
57		.		o	.			
58	24E	2	HO2	o		Q1/x1.12⇒2		
59	25C	1	HO1	o		S13.3⇒28		

Circuit/Akım yolu
Sheet_No of function Group
Fonksiyon grubunun sayfa no:
Instalation/Designation of funktion
Yer/Fonksiyonun işareti

Destination Symbol / Gittiği yerin: Connection No: / Bağlantı No: — Designation / Kodu
Terminal_No: / Klemens_No: X
Link / Köprü
Terminal strip: / Bağlantı klemensi
Cablemarking, / Kablo adı — Cable_Type / Kablo tipi
From previous cubicle
To next cubicle
To 14 BD Switchgear
To control board

Used cores / kullanılan damarlar
From othe sheets/Diger sayfalarda
Total/Toplam
Continued on sheets/ Bağlantı için bakınız

ALL RIGHTS ARE RESERVED
BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

Line up terminal type/Sıra klemens tip
Terminal/ Klemens ....1÷59 MEK 4....
Terminal/Klemens ....
Terminal / Klemens ....
Terminal/ Klemens ....

= Cable connection top/Kablo bağlantısı üst
= Cable connection bottom/Kablo bağlantısı alt

Wiring / Kablaj
Terminal/Klemens ....1,5 mm² NYA....
Terminal/Klemens ....1,5 mm² NYAF....
Terminal/Klemens ....2,5 mm² NYAF....
Terminal/Klemens ....

General remarks/ Genel notlar

Panodan panoya geçisler 2,5 mm² NYAF olacaktır.

REVISION	DATE	NAME		
			DATE	21.2.1989
			DRAWN	[signature]
			CHECK.	[signature]
			COMR.	

GAMA SEVİŞLER HAM SU POMPA İS[illegible]SYONU

ORIGIN. SUBST. REPL.

AEG ETİ

33kV SWITCHGEAR

INCOMING FEEDER

= CUBICLE 3
+

M 652 640 60 (3)

SHEET 1

ALL RIGHTS ARE RESERVED
BU PLANIN BÜTÜN HAKLARI
MAHFUZDUR

Circuit/Akım yolu			Sheet No of function Group Fonksiyon grubunun sayfa no:	Installation/Designation of funktion Yer/Fonksiyonun işareti	Terminal strip: Bağlantı klemensi								Cablemarking, Kablo adı	Cable-Type Kablo tipi
					Destination on Symbol Gittiği yerin		Link Köprü	Terminal No: Klemens No: x	Destination Bağlantı No:					
					Designation Kodu	Connection No:			Designation Kodu	Connection No:				
E	4	2			Q1/x1.24	3	o	60	H02.	1				
C	6	2			S14.2	29	o	61	H01	2				
C	7	2			Q1/x1.45	9	o	76	S12	2				
E	5	2					o	77	Q1/x1.23	5				
C	6	2					o	78	Q1/x1.31	11				
E	6	2					o	79	Q1/x1.32	12				
C	6	2			2x	39	o	80	Q1/x1.43	13				
E	6	2			2x	51	o	81	Q1/x1.44	14				
C	6	2			2x	48	o	82	Q1/x1.51	15				
							o	82a						
E	6	2			Q1/x1.52	16	o	83	K7	61				
C	7	2					o	84	Q1/x1.63	17				
J	7	2					o	85	Q1/x1.64	18				
C	7	2					o	86	Q1/x1.71	19				
E	7	2					o	87	Q1/x1.72	20				
B	2	4			1x	97	o	90	K7A1					
B	2	4					o	91	H10	4				
E	7	4			2x	52	o	92						
B	7	4			2x	78	o	93	Q1/x1.31	11				
B	7	4					o	94						
E	7	4			2x	79	o	95	Q1/x1.32	12				
E	7	4					o	96						
B	4	4			2x	103	o	102	K4	21				
B	4	4			4x	102	o	103						
D	4	4			2x	105	o	104	K4	22				
D	4	4			4x	104	o	105						
							o	106						
D	3	4			2x	108	o	107	K7	24				
D	3	4			4x	107	o	108						
F	4	4					o	210	K4	13				
D	4	4					o	211	F4	95				
B	4	4					o	212	K7	33				
D	4	4					o	213	K7	34				
B	5	4					o	214	Q1/x1.83	21				
D	5	4					o	215	Q1/x1.84	22				
D	6	4					o	216	Q1/x1.104	24				
							o	217						
							o	218						
							o	219						
							o	220						
							o	221						
							o	222						
							o	223						
							o	224						
							o	225						
							o	X						
					2x	311	o	310	E1	6				
							o	311						
					2x	313	o	312	E6	2				
							o	313						

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

Line up terminal type/Sıra klemens tip

To 14 BD Switchgear
To control board

Wiring/Kablaj

Terminal/Klemens ..... 1,5 mm² NYA
Terminal/Klemens ..... 1,5 mm² NYAF
Terminal/Klemens ..... 2,5 mm² NYAF
Terminal/Klemens .....

= Cable connection top/Kablo bağlantısı üst
= Cable connection bottom/Kablo bağlantısı alt

General remarks/Genel notlar

From othe sheets/Diger sayfalarda
Total/Toplam
Continued on sheets/Bağlantı için: bakınız

Used cores kullanılan damarlar

REVISION | DATE | NAME | DATE 20.2.1989
DRAWN
CHECK. Uğur
APPR.

ORIGIN: GAMA SEVİŞLER SU POMPA İSTASYONU
SUBST.
REPL. AEG ETİ

33 kV SWITCHGEAR

INCOMING FEEDER

= CUBICLE : 3

SHEET 7

ALL RIGHTS ARE RESERVED
BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Circuit/Akım yolu	2C	2D	2D	2D	2E	2E	2D	2D	2D	2D	2D	2E	2E	2E	1C	4A	4B	4B	4B	4B	2A	4F	5E	2A	3B	2E	3B	3B	3B	3B	4B	2C	2C	2C	3C	5C	4E	5C	4E	6C
Sheet_No of function Group / Fonksiyon grubunun sayfa no:	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3	3	4	2	2	2	2	2	2	1	2	2
Instalation/Designation of funktion / Yer/Fonksiyonun işareti																																								
Terminal strip: Bağlantı klemensi — Destination Symbol: Gittiği yer — Connection No: Bağlantı No:	4	1					7	8			2			3		2	4	6		2	2	4	1	1	3,4	2	9	3	4	51	52		62					2	1	2	1
Designation / Kodu	P8	P1					P8	F11	F11		F11			F11		F4	F4	F4		F3	F2	F3	F2	F3	H01	F2	F11	H10	S18	S2	K7	K7		K7					H02	H01	H02	H01
Terminal_No: / Klemens_No:	1	2	3	4	5	6	6	7	8	9	10	11	12		19	20	21	22	23	24	27	28	30	31	33	34	36	37	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61
Link / Köprü	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Terminal strip: Bağlantı klemensi — Destination Symbol: Gittiği yer — Connection No: Bağlantı No:	1s1	1s2	1s1	1s2	1s1	1s2	2s1	2s2	2s1	2s2	2s1	2s2	2s1	2s2	3x	5x	3x	5x	3x	5x									5x								5x			5x			5x							
Designation / Kodu	T1	T1	T2	T2	T3	T3	T1	T2	T2	T2	T3	T3	T3	T3	20	19	22	21	24	23									80								82			55			50							
Cablemarking, Kablo adı — Cable_Type, Kablo tipi																								Q1/x1.11➔1 S13.3➔27		HO2. 3.4				Q1/81.402➔7							Q1/x1.401➔6								Q1/x1.12➔2	S13.4➔28	Q1/x1.24➔3	S14.2➔29			
To control board																																																		
Transformer warnings (•)																												1	2																						
																					1																			3											

Used: cores / kullanılan damarlar

From othe sheets/Diger sayfalarda

Total/Toplam

Continued on sheets/ Baglanti için bakiniz

Terminal strip horizontal, left, vertical, right
Baglanti klemensi, yatay, sol, düşey, sağ

☐ = Cable connection top/Kablo bağlantısı üst
☐ = Cable connection bottom/Kablo bağlantısı alt

Line up terminal type / Sıra klemens tip

Terminal/ Klemens ..... 1÷61 MEK 4 .....
Terminal/Klemens .....
Terminal / Klemens .....
Terminal / Klemens .....

Wiring / Kablaj

Terminal / Klemens ..... 1,5 mm² NYA .....
Terminal / Klemens ..... 1,5 mm² NYAF .....
Terminal / Klemens ..... 2,5 mm² NYAF .....
Terminal / Klemens .....

General remarks / Genel notlar

Pandan panoya geçişler 2,5 mm² NYAF olacaktır.

NO	REVISION	DATE	NAME	CORR.

DATE 21-2-1989
DRAWN
CHECK. A.Erbaşan

GAMA – SEVİŞLER HAM SU POMPA İSTASYONU

ORGIN. SUB.

AEG ETİ

REPL.

33 kV SWITCHGEAR

To 4 MVA Tr.

= CUBICLE 4
+

M 652 640 – 60 (3)

SHEET 1 OF 2

AEG ETİ 328

Sheet No of function group / Fonksiyon grubunun sayfa no – Circuit / Akım yolu	Destination Designation / Kodu (top)	Connection No / Bağlantı No (top)	Terminal No / Klemens No	Link / Köprü	Connection No / Bağlantı No (bottom)	Designation / Kodu (bottom)	Cablemarking / Kablo adı	To control board
2 7C	S12	2	76	o		Q1/x1.451→9		
2 5E	Q1/x1.230→5		77	o				
2 6C	Q1/x1.31→11		78	o				
2 6E	Q1/x1.32→12		79	o				
2 6C	Q1/x1.43→13		80	o				
2 6E	Q1/x1.44→14		81	o				
2 6C	Q1/x1.51→15		82	o	40	5X		
2 6C	K7	61	83	o		Q1/X1.52→46		
2 7C	Q1/x1.63→17		84	o				
2 7E	Q1/x1.64→18		85	o				
2 7C	Q1/x1.71→19		86	o				
2 –	Q1/x1.72→20		87	o				
			90	o				
3 4B	H11	1	91	o		Buchholz trip		
3 5B	H12	1	92	o		Buchholz alarm		
3 5B	H13	1	93	o		Ther. trip		
3 6B	H14	1	94	o		Ther. alarm		
			95	o				
			96	o				
				o				
4 6B	K4	21	102	o—o	103	3x		
4 6B			103	o—o	102	5x		
4 6D	K4	22	104	o—o	105	3x		
4 6D			105	o—o	104	5x		
			106	o				
4 3D	K7	24	107	o—o	108	3x		
4 3D			108	o—o	107	5x		
			X	o				
4 3D	K4	13	210	o				1
4 3[illegible]	F4	95	211	o				2
4 4B	K7	33	212	o				3
4 4D	K7	34	213	o				4
4 6B	Q1/x1.83→21		214	o				5
4 6D	Q1/x1.84→22		215	o				6
4 7D	Q1/x1.104→24		216	o				7
4 4B	H11	8	217	o				8
4 4D	H11	7	218	o				9
4 5B	H12	8	219	o				10
4 5D	H12	7	220	o				11
4 5B	H13	8	221	o				12
4 5D	H13	7	222	o				13
4 5B	H14	8	223	o				14
4 5D	H14	7	224	o				15
			225	o				
			X	o				
	E1	6	310	o—o	311	3x		
			311	o—o				
	E6	2	312	o—o	313	3x		
			313	o				

Circuit/Akım yolu
Sheet No of function Group / Fonksiyon grubunun sayfa no
Installation/Designation of funktion / Yer/Fonksiyonun işareti
Destination Symbol / Gittiği yerin — Connection No: / Bağlantı No: — Designation / Kodu
Terminal No: / Klemens No: X
Link / Köprü
Terminal strip / Bağlantı klemensi
Cablemarking / Kablo adı — Cable Type / Kablo tipi
To control board

Used cores / kullanılan damarlar
From othe sheets / Diger saytalarda
Total / Toplam
Continued on sheets / Bağlantı k/n: bakınız

Terminal strip horizontal, left, vertical, right / Bağlantı klemensi, yatay, sol, düşey, sağ
Line up terminal type / Sıra klemens tip
Terminal / Klemens 76 – 313 MEK 4
Terminal / Klemens
Terminal / Klemens
Terminal / Klemens

= Cable connection top / Kablo bağlantısı üst
= Cable connection bottom / Kablo bağlantısı alt
Wiring / Kablaj
Terminal / Klemens 1,5 mm² NYA
Terminal / Klemens 1,5 mm² NYAF
Terminal / Klemens 2,5 mm² NYAF
Terminal / Klemens

General remarks / Genel notlar

Panodan panoya geçişler 2,5 mm² NYAF olacaktır

REVISION	DATE	NAME		
			DATE	21.2.1989
			DRAWN	Uğur
			CHECK.	B. Erdoğan
			CORR.	

GAMA SEVİŞLER HAM SU POMPA İSTASYONU

ORIGIN:

REPL.

AEG ETİ

33 kV SWITCHGEAR

To 4MVA Tr.

= CUBICLE 4
+

M 652 640 _60 (3)

SHEET 2 OF 2

ALL RIGHTS ARE RESERVED
BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

ALL RIGHTS ARE RESERVED
BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Circuit/Akım yolu	2C	2D	2D	2D	2E	2C	2D	2D	2D	2D	2E	2		4A	4A	4B	4B	4B	4B	2A	1A	1A	1F	1F	2A	5A	4A	4F	5F	2A	2B	3	4	2F	2E	2E	3B	3B	3B	3B	4D	2C	2B	2B	3C	5C		4E	5C	4E	5C
Sheet_No of function Group / Fonksiyon grubunun sayfa no.	1	1	1	1	1	1	1	1	1	1	1	A		1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	2	3	3	3	2	3	3	2	2	2	2	4	2	2	2	3	5		4	5	4	5
Installation/Designation of funktion / Yer/Fonksiyonun işareti																																																			
Terminal strip / Bağlantı klemensi — Destination Symbol / Gittiği yer — Connection No: / Bağlantı No:	4	1				7	8	1		2	3			2	4	6		2	2	4	4	1	3		3																											
Destination Symbol / Gittiği yer — Designation Kodu	PB	P1				PB	F11	F11		F11	F11			F4	F4	F4		F3	F2	F3	F2	F3	H01	I2	F11																											
Terminal_No: / Klemens_No: X	1	2	3	4	5	6	7	8	9	10	11	12		19	20	21	22	23	24	27	28	30	31	33	34	36	37	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	
Link / Köprü																																																			
Terminal strip / Bağlantı klemensi — Destination Symbol / Gittiği yer — Connection No: / Bağlantı No:	1s1	1s2	1s1	1s2	1s1	1s2	2s1	2s2	2s1	2s2	2s1	2s2		20	19	22	21	24	23				Q1/x1.11→	S13.3→	H02. 3,4		80	Q1/x1.402→																									
Destination Symbol / Gittiği yer — Designation Kodu	T1	T1	T2	T2	T3	T3	T1	T2	T2	T2	T3	T3		4x	6x	4x	6x	4x	6x					27			4x																									
Cablemarking_ / Kablo adı — Cable_Type / Kablo tipi																																																			
To control board																																	1	2																	
Transformer warnings (+)																																											3								

Used cores / kullanılan damarlar

From the sheets / Diger sayfalardan

Total / Toplam

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

Line up terminal type / Sıra klemens tip

Terminal / Klemens 1-61 MEK 4

Terminal / Klemens

Terminal / Klemens

Terminal / Klemens

☐ = Cable connection top / Kablo bağlantısı üst

☐ = Cable connection bottom / Kablo bağlantısı alt

Wiring / Kablaj

Terminal / Klemens 1,5 mm² NYA

Terminal / Klemens 1,5 mm² NYAF

Terminal / Klemens 2,5 mm² NYAF

Terminal / Klemens

General remarks / Genel notlar

Panodan panoya geçişler 2,5 mm² NYAF olacaktır.

REVISION	DATE	NAME	CONR.
		DATE	20 2 1989
		DRAWN	Fezal Özen
		CHECK.	A. Erdoğan

ORGIN. SUBST. REPL.

GAMA - SEVİŞLER HAM SU POMPA İ[illegible]SYONU

AEG ETİ

33 kV SWIT[illegible]HGEAR

4 MVA Tr. Feeder

= CUBICLE 5

+

M 652 640 60 (3)

SHEET 1

AEG ETİ 328

Terminal / Klemens No.	Circuit/Akım yolu – Sheet No. of function group / Fonksiyon grubunun sayfa no	Destination (top) – Designation / Kodu	Connection No / Bağlantı No	Link / Köprü	Destination (bottom) – Designation / Kodu	Connection No / Bağlantı No
76	2 7 C	S12	2	o	Q1/x1.451→9	
77	2 5 E	Q1/x1.23U→		o		
78	2 6 C	Q1/x1.31→11		o		
79	2 6 E	Q1/x1.32→12		o		
80	2 6 C	Q1/x1.43→13		o		
81	2 6 E	Q1/x1.44→14		o		
82	2 7 C	Q1/x1.51→15		o	4X.	48
83	2 7 E	K7	31	o	Q1/x1.52	16
84	2 7 C	Q1/x1.63→17		o		
85	2 7 E	Q1/x1.64→18		o		
86	2 7 C	Q1/x1.71→19		o		
87	2 [illegible] E	Q1/x1.72→20		o		
90				o		
91	3 4 C	H11	1	o	Buchholz trip	
92	3 5 C	H12	1	o	Buchholz alarm	
93	3 5 C	H13	1	o	Ther. trip	
94	3 6 C	H14	1	o	Ther. alarm	
95				o		
96				o		
X						
102	4 6 B	K4	21	o—o	2X	103
103	4 6 B				6X	102
104	4 6 D	K4	22	o—o	2X	105
105	4 6 D				6X	104
106				o		
107	4 3 D	K8	14	o—o	4X	108
108	4 3 D				6X	107
210	4 3 B	K4	13	o		
211	4 [illegible]	F4	95	o		
212	4 [illegible] B	K7	33	o		
213	4 4 D	K7	34	o		
214	4 6 B	Q1/x183→21		o		
215	4 6 D	Q1/x1.[illegible]→22		o		
216	4 7 D	Q1/x1.104→24		o		
217	4 4 B	H11	8	o		
218	4 4 D	H11	7	o		
219	4 5 B	H12	8	o		
220	4 5 D	H12	7	o		
221	4 5 B	H13	8	o		
222	4 5 D	H13	7	o		
223	4 5 B	H14	8	o		
224	4 5 D	H14	7	o		
225				o		
X						
310		F1	6	o—o	4X	311
311						
312		F6	2	o—o	4X	313
313				o		

Circuit/Akım yolu
Sheet No of function Group / Fonksiyon grubunun sayfa no
Installation/Designation of funktion / Yer/Fonksiyonun işareti
Destination Symbol / Gittiği yerin – Connection No: / Bağlantı No – Designation / Kodu
Terminal No: / Klemens No. X
Link / Köprü
Terminal strip / Bağlantı klemensi
Cablemarking / Kablo adı – Cable Type / Kablo tipi

To control board: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Used cores / kullanılan damarlar
From other sheets/Diğer sayfalardan – Total/Toplam – Continued on sheets/ Bağlantı için bakınız

BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

Line up terminal type / Sıra klemens tip
Terminal/ Klemens 76 ÷ 313 MEK 4
Terminal/Klemens
Terminal / Klemens
Terminal/ Klemens

= Cable connection top/ Kablo bağlantısı üst
= Cable connection bottom/Kablo bağlantısı alt
Wiring / Kablaj
Terminal/Klemens 1,5 mm² NYA
Terminal/Klemens 1,5 mm² NYAF
Terminal/Klemens 2,5 mm² NYAF
Terminal/Klemens

General remarks / Genel notlar
Panodan panoya geçişler 2,5mm² NYAF olacaktır.

REVISION	DATE	NAME	DATE	20.1.1989
			DRAWN	[illegible]
			CHECK.	[illegible]
			COOR.	

GAMA SEVİŞLER HAM SU POMPA İSTASYONU
ORIGIN. SU
AEG ETİ
REPL.
33 kV SWITCHGEAR
4 MVA Tr. Feeder
= CUBICLE 5
+
M 652 640 _ 60 (3)
SHEET 2 OF 2

AEG ETİ 328

Circuit/Akım yolu	27C	15E	26C	16E	16C	16E	26C	26E	27C	27E	27C	27E	34C	35C	35C	36C	46C	46C	46D	46D	43D	43D	43B	43	44C	44C	46B	46D	46D	46B	46D	45B	45D	45B	45D	45B	45D				
Sheet_No of function Group / Fonksiyon grubunun sayfa no	42	42	42	42	42	42	42	42	42	42	42	42	43	43	43	43	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44				
Installation/Designation of funktion / Yer/Fonksiyonun işareti																																									
Destination Symbol / Gittiği yerin — Connection No. / Bağlantı No.	2	5															21				14		13	95	33	34																
Destination Symbol / Gittiği yerin — Designation / Kodu	512	Q1/x1.230→5	Q1/x1.31→31	Q1/x1.32→12	Q1/x1.43→3	Q1/x1.44→41	Q1/x1.51→31	K7	31	Q1/x1.63→17	Q1/x1.64→18	Q1/x1.71→41	Q1/x1.72→18	H11	1	H12	1	K4	K6	K8	K4	F4	K7	K7	Q1/x1.183→21	Q1/x1.184→22	Q1/x1.104→22	H11	H11	H12	H12	H13	H13	H14	H14	E1	6	E6	2	
Terminal_No. / Klemens_No	76	77	78	79	80	81	82	83	84	85	86	87	90	91	92	93	94	95	96	102	103	104	105	106	107	108		210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	310	311	312	313	
Link / Köprü	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o		o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	
Destination Symbol / Gittiği yerin — Connection No. / Bağlantı No.	45		48		16															103	102	101	104	106	107																							
Destination Symbol / Gittiği yerin — Designation / Kodu	Q1/x1.451→45	-	7X	Q1/x1.52→16										Buchholz trip	Buchholz alarm	Ther. trip	Ther. alarm			5X	7X	5X	7X	5X	7X																							
Cablemarking_ Kablo adı / Cable_Type Kablo tipi																																														
To Control Board																																														
																												1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					

Terminal strip / Bağlantı klemensi: horizontal, left, vertical, right / yatay, sol, düşey, sağ

Line up terminal type / Sıra klemens tip

Terminal / Klemens 76 ÷ 313 MEK 4

Terminal / Klemens .....

Terminal / Klemens .....

Terminal / Klemens .....

= Cable connection top / Kablo bağlantısı üst

= Cable connection bottom / Kablo bağlantısı alt

Wiring / Kablaj

Terminal / Klemens .....

Terminal / Klemens .....

Terminal / Klemens .....

Terminal / Klemens .....

General remarks / Genel notlar

Used cores / kullanılan damarlar

From othe sheets / Diger sayfalarda

Total / Toplam

Continued on sheets / Bağlanb. Kın. Sayfaları

REVISION	DATE	NAME	CORR.

DATE 21.2.1989

DRAWN M.Ger.

CHECK A.Erdoğan

ORGIN. SU...

REPL.

GAMA SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

To 630 kVA Tr

= Cubicle : 6

+

M 652 640_60 (3)

SHEET 2

AEG ETİ 326

EN FLANIN ESTÜM HAMPUDUR

BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Terminal strip / Bağlantı klemensi

Columns below: Circuit / Akım yolu; Sheet_No of function Group / Fonksiyon grubunun sayfa no: (two lines); Installation/Designation of funktion / Yer/Fonksiyonun işareti (empty); Destination on Symbol / Gittiği yerin (Connection No: / Bağlantı No:; Designation / Kodu) — for both sides of the strip.

Terminal No: / Klemens No:	Circuit / Akım yolu	Sheet No	Sayfa no	1 Gittiği yerin: Connection No / Bağlantı No	1 Gittiği yerin: Designation / Kodu	2 Gittiği yerin: Connection No / Bağlantı No	2 Gittiği yerin: Designation / Kodu
1	D	2	1	4	P8	1s1	I1
2	D	2	1	1	P1	1s2	I1
3	D	2	1			1s1	I2
4	D	2	1			1s2	I2
5	E	2	1			1s1	I3
6	E	2	1	7	P8	1s2	I3
7	D	2	1	8	F11	2s1	I1
8	D	2	1	1	F11	2s2	I1
9	D	2	1			2s1	I2
10	D	2	1	2	F11	2s2	I2
11	E	2	1			2s1	I3
12	E	2	1	3	F11	2s2	I3
19	[illegible]	4	1	2	F4	20	5x
20	A	4	1			19	7x
21	B	4	1	4	F4	22	5x
22	B	4	1			21	7x
23	C	4	1	6	F4	24	5x
24	C	4	1			23	7x
27	A	1	2	2	F3		
28	A	1	2	2	F2		
30	F	1	2	4	F3		
31	F	1	2	4	F2		
33	A	4	2	1	F3		Q1/x1.11->1
34	A	5	2			27	S13.3
36	F	4	2	3	F3	3,4	H02.
37	F	5	2	3,4	H01		
39	A	2	2	1	F2	80	7x
40	B	2	3	9	F11		
41	-	4	3				
42	[illegible]	2	2	3	F2		Q1/x1.402->7
43	E	2	3	10	F11		
44	E	2	3	2	H10		
45	A	3	2	3	S18		
46	B	3	2	4	S2		
47	B	3	2	24	K7		
48	B	3	2	22	K7	82	7x
49							
50	D	8	4	32	K7	55	7x
51							
52	C	2	2				Q1/x1.401->6
53	B	2	2			81	7x
54	B	2	2	4	S1		
55	C	3	2		Q1/x1 409->8	50	7x
56	C	5	2		Q1/x1.289->4		
57							
58	E	4	2	2	H02		Q1/x1.12->2
59	C	5	2	1	H01		S13.4->28
60	E	4	2	1	H02		Q1/x1.24->3
61	C	6	2	2	H01		S14.2->29

Link / Köprü

Cablemarking / Kablo adı — Cable_Type / Kablo tipi

To control board

Transformer warnings (*): 1 (terminal 45), 2 (terminal 46), 3 (terminal 53)

1 (terminal 41)

Used cores / kullanılan damarlar

From othe sheets / Diger sayfalarda — Total / Toplam — Continued on sheets / Bağlantı için bakınız

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

Line up terminal type / Sıra klemens tip

Terminal/ Klemens ..... 1÷61 MEK 4 .....
Terminal/Klemens .....
Terminal / Klemens .....
Terminal/ Klemens .....

▭ = Cable connection top/Kablo bağlantısı üst
▭ = Cable connection bottom/Kablo bağlantısı alt

Wiring / Kablaj
Terminal / Klemens .....
Terminal / Klemens .....
Terminal / Klemens .....
Terminal / Klemens .....

General remarks / Genel notlar

			DATE	20.2.1989
			DRAWN	[signature]
			CHECK.	[signature]
REVISION	DATE	NAME	CORR.	

GAMA _ SEVİŞLER HAM SU POMPA İSTASYONU

ORIGIN. — SU.... — REPL.

AEG ETİ

33 kV SWI[illegible]HGEAR

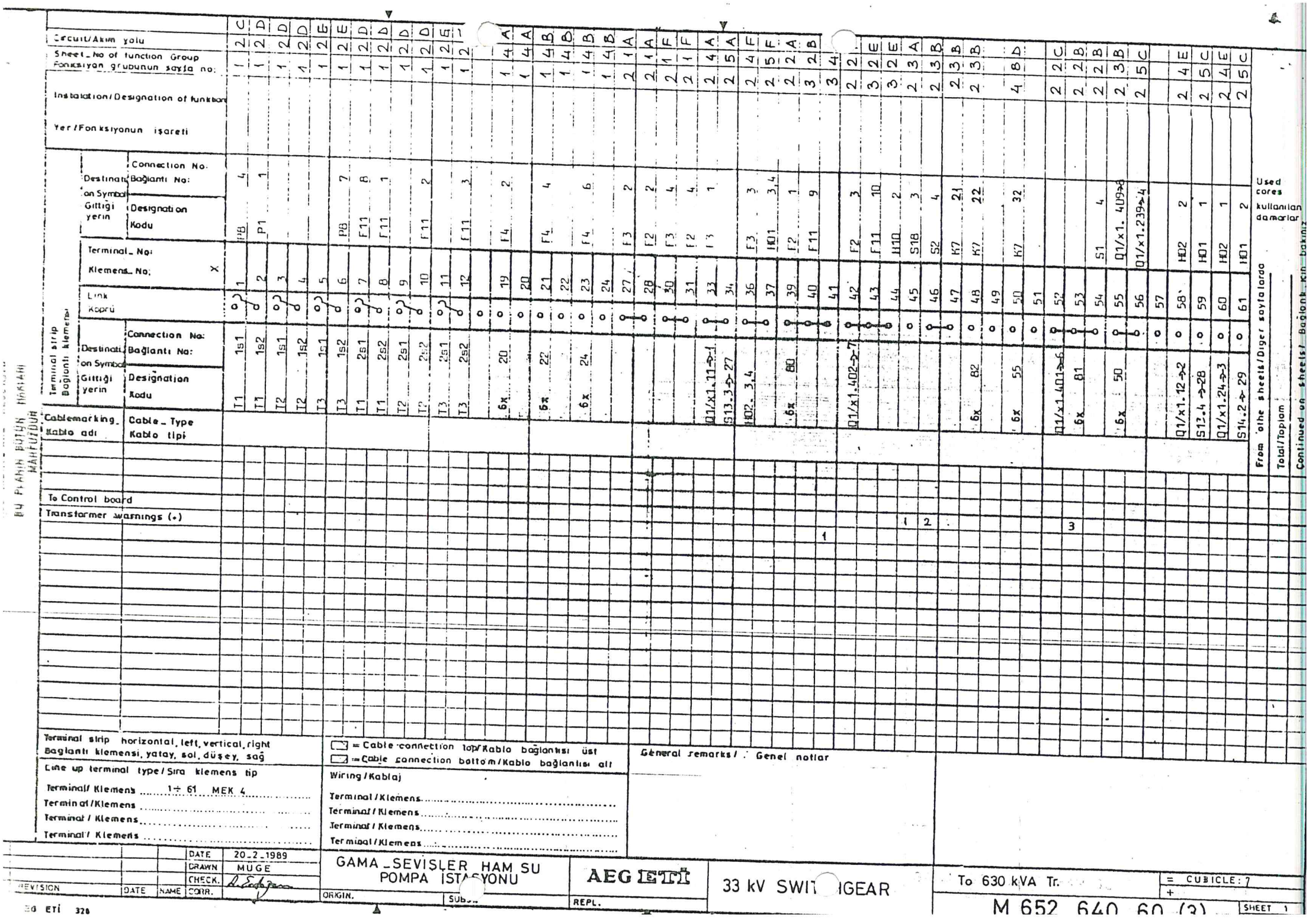
To 630 kVA Tr

= CUBICLE ; 6
+

M 652 640 _60 (3)

SHEET 1 OF 2

AEG ETİ 328


Circuit/Akım yolu
Sheet_No of function Group
Fonksiyon grubunun sayfa no:
Installation/Designation of funktion
Yer/Fonksiyonun işareti
Destination Symbol
Gittiği yerin
Connection No.
Bağlantı No:
Designation
Kodu
Terminal_No:
Klemens_No:
Link
Köprü
Terminal strip
Bağlantı klemensi
Cablemarking_
Kablo adı
Cable_Type
Kablo tipi
To Control board
Transformer warnings (+)
Used cores
kullanılan damarlar
From othe sheets/Diger sayfalarda
Total/Toplam
Continued on sheets/ Bağlantı için bakınız
Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ
= Cable connection top/Kablo bağlantısı üst
= Cable connection bottom/Kablo bağlantısı alt
General remarks/ Genel notlar
Line up terminal type/Sıra klemens tip
Terminal/ Klemens 1÷ 61 MEK 4
Terminal/Klemens
Terminal/ Klemens
Terminal/ Klemens
Wiring/Kablaj
Terminal/Klemens
Terminal/Klemens
Terminal/Klemens
Terminal/Klemens
DATE 20_2_1989
DRAWN MÜGE
CHECK.
REVISION DATE NAME CORR.
GAMA_SEVİSLER HAM SU POMPA İSTASYONU
ORGIN. SUBS. REPL.
AEG ETİ
33 kV SWITCHGEAR
To 630 kVA Tr.
= CUBICLE: 7
M 652 640 60 (3)
SHEET 1
AEG ETİ 328
BU PLANIN BÜTÜN HAKLARI SAKLIDIR

BU PLANIN BÜTÜN HAKLARI MAHFUZDUR

Circuit/Akım yolu	27C	25E	26C	26E	26C	26E	26C	26E	27C	27E	27C	27C	34B	35B	35B	36B	46B	46B	46D	46D	43D	43D	43B	43B	44D	44D	46B	46D	47D	48B	48D	45B	45D	45B	45D	45B	45D	45B	45D
Sheet_No of function Group / Fonksiyon grubunun sayfa no.	2	2	2	2	2	2	2	2	2	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Instalation/Designation of funktion / Fonksiyonun işareti																																						
Destination Symbol / Gittiği yer: Connection No. / Bağlantı No.	2	1/x1.230->5	1/x1.31->11	1/x1.32->12	1/x1.43->13	1/x1.44->14	1/x1.51->15	K7 31	1/x1.63->17	1/x1.64->18	1/x1.71->19	1/x1.72->20	H11 1	H12 1	H13 1	H14 1	K4 21	K4 22			K8 14		K4 13	F4 95	K7 33	K7 34	Q1/x1.83->21	Q1/x1.84->22	Q1/x1.101->24	H11 8	H11 7	H12 8	H12 7	H13 8	H13 7	H14 8	H14 7	E1 6		E6 2		
Designation / Kodu	S12																																					
Terminal_No. / Klemens_No. X	76	77	78	79	80	81	82	83	84	85	86	87	90	91	92	93	94	95	96	102	103	104	105	106	107	108		210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	310	311	312	313	
Link / Köprü	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Destination Symbol / Gittiği yer: Connection No. / Bağlantı No:	Q1/x1.451->9					6x 40	Q1/x1.52->16														6X 103		6X 105		6X 108																							
Designation / Kodu													Buchholz trip	Buchholz alarm	Ther. trip	Ther. alarm																																
Cablemarking_ Kablo adı																																																
Cable_Type / Kablo tipi																																																
To control board																																																

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Terminal strip horizontal, left, vertical, right
Bağlantı klemensi, yatay, sol, düşey, sağ

= Cable connection top/Kablo bağlantısı üst
= Cable connection bottom/Kablo bağlantısı alt

Line up terminal type/Sıra klemens tip

Terminal/Klemens ..... 76 ÷ 313 MEK 4

Terminal/Klemens .....

Terminal/Klemens .....

Terminal/Klemens .....

Wiring/Kablaj

Terminal/Klemens .....

Terminal/Klemens .....

Terminal/Klemens .....

Terminal/Klemens .....

General remarks/ Genel notlar

Used cores / kullanılan damarlar

From othe sheets/Diger soyfalarda

Total/Toplam

Continued on sheets/ Bağlantı için bakınız

REVISION	DATE	NAME	COMP.
		DATE	21.2.1989
		DRAWN	
		CHECK.	

GAMA SEVİŞLER HAM SU POMPA İSTASYONU

ORIGIN. SUBS.

AEG ETİ

REPL.

33 kV SWITCHGEAR

To 630 kVA Tr.

= CUBICLE 7

M 652 640 60 (3) SHEET 2

ETİ 328

ADET QTY.	CIHAZIN TANIMI DESCRIPTION AND APPLICATION	FABRIKASYON TANIMI SERIS NO, RESIM NO, CIHAZ TANIMI, TEKNIK DETAYLAR, ORNEK KUMANDA GERILIM FREKANS AYAR SAHASI. IDENTIFICATION DATE TYPE, ORDER NR, DRAWING NR, CODES DESIGNTATION REQUIRED TECHNICAL DATE, E.G CONTROL VOLTAGE, FREQUENCY SETTING RANGE	SIRA NO PART NR.	CIHAZIN KODU DESIGNATION	ACIKLAMALAR REMARKS	MONTAJ YERI LOCATION	IMALATCIYI ILGILENDIRIR CONCERNS ONLY THE MANUFACTURER.
3	HV fuses	H 220 36 kV 6 A	1	F1		Truck	İnterteknik
3	Voltage transformer	$33/\sqrt{3}$ /0,1/$\sqrt{3}$ /0,1/3 CL 1,90 VA	2	T4,T5,T6		Truck	ALCE
1	Voltmeter	0-40/33/0.1 kV	3	P4		LV.Part	ÖSTAŞ
6	MCB	C6 - A004	4	S11		LV.Part	Ünal Kardeş
1	Heater	ELFA - Otomat	5	F2,F3,F4,F5,F6,F10		LV.Part	AEG
1	Thermostat	220V, 50 Hz, 100 W	6	E6		LV.Part	DEMA
1	Position İndicator		7	B1		LV.Part	
2	Auxiliary Relay	AM036	8	H01		LV.Part	H&B
1	Auxiliary Relay	SH04.22 220 V DC	9	K4,K5		LV.Part	AEG
1	Contactor	RH 1004 220 V DC	10	K6		LV.Part	AEG
1	Earth fault Relay	LS4.22	11	K11		LV.Part	AEG
2	Push Button	RHE	12	F31		LV.Part	AEG
2	Signal Lamp (Yellow)	Ø 22,5 mm.	13	S6, S7		LV.Part	AEG
2	Diod	Ø 22,5 mm.	14	H1,H2		LV.Part	AEG
		IN 4001	15	V1,V2		LV.Part	AEG

BU PLANIN BUTUN ALL RIGHTS ARE
HAKLARI MAHFUZDUR RESERVED

REVISION	DATE	NAME	CORR.
		DATE	15.01.1989
		DRAWN	Müge
		CHECK	

GAMA - SEVİŞLE HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

ORIGIN. SUBST.

MEASURING

CUBICLE 1

ADET / QTY.	CIHAZIN TANIMI / DESCRIPTION AND APPLICATION	FABRIKASYON TANIMI. TIP, SIPARIS NO, RESIM NO, CIHAZ TANIMI, TEKNIK DETAYLAR, ORNEK: KUMANDA GERILIM FREKANSI AYAR SAHASI. / IDENTIFICATION DATE TYPE, ORDER NR, DRAWING NR, CODED DESIGNTATION REQUREG TECHNICAL DATE, E.G CONTROL VOLTAGE, FREQUENCY SETTING RANGE.
1	Circuit Breaker MC 256/36-2	36 kV 630 A, In: 10 kA Ik = 25 kA
3	Current Transformer	75/5/5 A 1M5, 15 VA, 10P10, 30 VA
1	Overcurrent and Short circuit relay	R3AS20e
1	kW Hourmeter	3x100/58 V, 5 A
1	Ammeter	0-75/150/5 A
1	Heater	100 W, 220 V, 50 Hz
3	MCB	ELFA Otomat
1	Auxiliary Relay	SH04.22 220 V DC
1	Auxiliary Relay	SH8 .44 220 V DC
1	Selector switch	C6 - A200
1	Selector switch (Local-remote)	C6 - A220
2	Position Indicator	AM036, AM036 V
1	Indicating Relay	RA 32
3	Push Button	Ø 22,5 mm.
1	Signal Lamp (Yellow)	Ø 22,5 mm.

SIRA NO. / PART NR.	CIHAZIN KODU / DESIGNATION	ACIKLAMALAR / REMARKS	MONTAJ YERI / LOCATION	IMALATCIYI ILGILENDIRIR / CONCERNS ONLY THE MANUFACTURER.
1	Q1		Truck	AEG ETİ
2	T1,T2,T3		HV.Part	ALCE
3	F11		LV.Part	DEMA
4	P11		LV.Part	MKE
5	P1		LV.Part	ÖSTAŞ
6	E6		LV.Part	DEMA
7	F2,F3,F4		LV.Part	AEG
8	K4		LV.Part	AEG
9	K7		LV.Part	AEG
10	S12		LV.Part	Ünal Kardeş
11	S18		LV.Part	Ünal Kardeş
12	H01,H02		LV.Part	H&B
13	H10		LV.Part	H&B
14	S1,S2,S7		LV.Part	AEG
15	H1		LV.Part	AEG

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BU PLANIN BÜTÜN HAKLARI SAKLIDIR

REVISION	DATE	NAME	CORR.

DATE 15.02.1989
DRAWN Müge
CHECK A.Erdeğirmen

GAMA - SEVİŞLER HAM SU POMPA İSTASYONU

ORIGIN | SUBST. | REPL

AEG ETİ

33 kV SWITCHGEAR

COUPLING

CUBICLE 2

342

ADET / QTY.	CIHAZIN TANIM / DESCRIPTION AND APPLICATION	FABRIKASYON TANIMI / IDENTIFICATION DATE TYPE, ORDER NR, DRAWING NR, CODES DESIGNTATION REQUIRED TECHNICAL DATE, E.G. CONTROL VOLTAGE, FREQUENCY SETTING RANGE.	SIRA NO / PART NR	CIHAZIN KODU / DESIGNATION	ACIKLAMALAR / REMARKS	MONTAJ YERI / LOCATION	IMALATCIYI ILGILENDIRIR / CONCERNS ONLY THE MANUFACTURER.
1	Circuit Breaker MC 256/36-2	36 kV 630 A, In: 10 kA Ik = 25 kA	1	Q1		Truck	AEG ETİ
3	Current Transformer	120/5/5 A 1M5, 15 VA, 10P10, 30 VA	2	T1,T2,T3		HV.Part	ALCE
1	Overcurrent and Short circuit relay	R3AS20e	3	F11		LV.Part	DEMA
1	kW Hourmeter	3x100/58 V, 5 A	4	P11		LV.Part	MKE
1	Ammeter	0-120/240/5A	5	P1		LV.Part	ÖSTAŞ
1	Heater	100 W, 220 V, 50 Hz	6	E6		LV.Part	DEMA
3	MCB	ELFA Otomat	7	F2,F3,F4		LV.Part	AEG
1	Auxiliary Relay	SH04.22 220 V DC	8	K4		LV.Part	AEG
1	Auxiliary Relay	SH8 44 220 V DC	9	K7		LV.Part	AEG
1	Selector switch	C6 - A200	10	S12		LV.Part	Ünal Kardeş
1	Selector switch (Local-remote)	C6 - A220	11	S18		LV.Part	Ünal Kardeş
2	Position Indicator	AM036, AM036 V	12	H01,H02		LV.Part	H&B
1	Indicating Relay	RA 32	13	H10		LV.Part	H&B
3	Push Button	Ø 22,5 mm.	14	S1,S2,S7		LV.Part	AEG
1	Signal Lamp (Yellow)	Ø 22,5 mm.	15	H1		LV.Part	AEG

BU PLANIN BUTUN ... ALL RIGHTS ARE RESERVED

REVISION	DATE	NAME	CORR.

DATE 15.02.1985
DRAWN Müge
CHECK R. Erdoğan

GAMA - SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

INCOMING FEEDER

CUBICLE 3

ADET / QTY.	CIHAZIN TANIMI / DESCRIPTION AND APPLICATION	FABRIKASYON TANIMI SIPARIS NO, RESIM NO, CIHAZ TANIMI, TEKNIK DETAYLAR, ORNEK KUMANDA GERILIM FREKANSI AYAR SAHASI. IDENTIFICATION DATE TYPE, ORDER NR, DRAWING NR, CODED DESIGNTATION REQUREG TECHNICAL DATE, E G CONTROL VOLTAGE, FREQUENCY SETTING RANGE	SIRA NO. / PART NR	CIHAZIN KODU / DESIGNATION	ACIKLAMALAR / REMARKS	MONTAJ YERI / LOCATION	IMALATCIYI ILGILENDIRIR / CONCERNS ONLY THE MANUFACTURER.
1	Circuit Breaker MC 256/36-2	36 kV 630 A, In: 10 kA Ik = 25 kA	1	Q1		Truck	AEG ETİ
3	Current Transformer	75/5/5 A 1M5, 15 VA, 10P10, 30 VA	2	T1,T2,T3		HV.Part	ALCE
1	Overcurrent and Short circuit relay	R3AS20e	3	F11		LV.Part	DEMA
1	Megawattmeter	A96 0-8 MW	4	P8		LV.Part	
1	Ammeter	0-75/150/5 A	5	P1		LV.Part	ÖSTAŞ
1	Heater	100 W, 220 V, 50 Hz	6	E6		LV.Part	DEMA
3	MCB	ELFA Otomat	7	F2,F3,F4		LV.Part	AEG
1	Auxiliary Relay	SH04.22 220 V DC	8	K4		LV.Part	AEG
1	Auxiliary Relay	SH8 .44 220 V DC	9	K7		LV.Part	AEG
1	Selector switch	C6 - A200	10	S12		LV.Part	Ünal Kardeş
1	Selector switch (Local-remote)	C6 - A220	11	S18		LV.Part	Ünal Kardeş
2	Position Indicator	AM036, AM036 V	12	H01,H02		LV.Part	H&B
1	Indicating Relay	RA 32	13	H10,H11,H12,H13,H14		LV.Part	H&B
3	Push Button	Ø 22,5 mm.	14	S1,S2,S7		LV.Part	AEG
1	Signal Lamp (Yellow)	Ø 22,5 mm.	15	H1		LV.Part	AEG

BU PLANIN BUTUN HAKLARI SAKLIDIR
ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	NAME
			CORR.

DATE 15.02.1989
DRAWN Müge
CHECK A. Erdoğan
ORIGIN
SUBST.

GAMA - SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

To 4 MVA Tr.

CUBICLE 4

M-SF2-640-C9(2)

SHEET 1

ADET / QTY.	CIHAZIN TANIM / DESCRIPTION AND APPLICATION	FABRIKASYON TANIMI: MARKA, TIP, SIPARIS NO, RESIM NO, CIHAZ TANIMI, GEREKLI TEKNIK DETAYLAR, ORNEK: KUMANDA GERILIMI, FREKANSI, AYAR SAHASI. / IDENTIFICATION DATE TYPE, ORDER NR, DRAWING NR, CODED DESIGNATION REQUIRED TECHNICAL DATE, E.G. CONTROL VOLTAGE, FREQUENCY SETTING RANGE	SIRA NO. / PART NR.	CIHAZIN KODU / DESIGNATION	ACIKLAMALAR / REMARKS	MONTAJ YERI / LOCATION	IMALATCIYI ILGILENDIRIR / CONCERNS ONLY THE MANUFACTURER.
1	Circuit Breaker MC 256/36-2	36 kV 630 A, In: 10 kA Ik = 25 kA	1	Q1		Truck	AEG ETI
3	Current Transformer	20/5/5 A 1M5, 15 VA, 10P10, 30 VA	2	T1,T2,T3		HV.Part	ALCE
1	Overcurrent and Short circuit relay	R3AS20e	3	F11		LV.Part	DEMA
1	Megawattmeter	A 96 0-8 MW	4	P8		LV.Part	
1	Ammeter	0-20/40/5 A	5	P1		LV.Part	ÖSTAŞ
1	Heater	100 W, 220 V, 50 Hz	6	E6		LV.Part	DEMA
3	MCB	ELFA Otomat	7	F2,F3,F4		LV.Part	AEG
3	Auxiliary Relay	SH04.22 220 V DC	8	K4,K7,K8		LV.Part	AEG
1	Selector switch	C6 - A200	9	S12		LV.Part	Ünal Kardeş
1	Selector switch (Local-remote)	C6 - A220	10	S18		LV.Part	Ünal Kardeş
2	Position Indicator	AM036, AM036-V	11	H01,H02		LV.Part	H&B
5	Indicating Relay	RA 32	12	H10,H11,H12,H13,H14		LV.Part	H&B
3	Push Button	Ø 22,5 mm.	13	S1,S2,S7		LV.Part	AEG
1	Signal Lamp (Yellow)	Ø 22,5 mm.	14	H1		LV.Part	AEG

BU PLANIN BUTUN HAKLARI MAHFUZDUR ALL RIGHTS ARE RESERVED

NO	REVISION	DATE	NAME	CORR.
		DATE	15.02.1989	
		DRAWN	MÜGE	
		CHECK		

GAMA SEVİŞLİ HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

To 4 MVA Tr.

CUBICLE 5

ADET QTY.	CIHAZIN TANIM. DESCRIPTION AND APPLICATION	FABRIKASYON TANIMI PARÇA NO, RESİM NO, CİHAZ TANIMI, TİP, TEKNİK DETAYLAR, ÖRNEK KUMANDA GERİLİM FREKANSI AYAR SAHASI. IDENTIFICATION DATE TYPE, ORDER NR, DRAWING NR, CODE DESIGNATION REQUIRED TECHNICAL DATE, E.G. CONTROL VOLTAGE, FREQUENCY SETTING RANGE.	SIRA NO. PART NR.	CİHAZIN KODU DESIGNATION	AÇIKLAMALAR REMARKS	MONTAJ YERİ LOCATION	İMALATÇIYI İLGİLENDİRİR CONCERNS ONLY THE MANUFACTURER.		
1	Circuit Breaker MC 256/36-2	36 kV 630 A, In: 10 kA Ik = 25 kA	1	Q1		Truck			AEG ETİ
3	Current Transformer	20/5/5 A 1M5, 15 VA, 10P10, 30 VA	2	T1,T2,T3		HV.Part			ALCE
1	Overcurrent and Short circuit relay	R3AS20e	3	F11		LV.Part			DEMA
1	Megawattmeter	0 - 1, 5 MW	4	P8		LV.Part			
1	Ammeter	0-20/40/5 A	5	P1		LV.Part			ÖSTAŞ
1	Heater	100 W, 220 V, 50 Hz	6	E6		LV.Part			DEMA
3	MCB	ELFA Otomat	7	F2,F3,F4		LV.Part			AEG
3	Auxiliary Relay	SH04.22 220 V DC	8	K4,K7,K8		LV.Part			AEG
1	Selector switch	C6 - A200	9	S12		LV.Part			Ünal Kardeş
1	Selector switch (Local-remote)	C6 - A220	10	S10		LV.Part			Ünal Kardeş
2	Position Indicator	AM036, AM036 V	11	H01,H02		LV.Part			H&B
5	Indicating Relay	RA 32	12	H10,H11,H12,H13,H14		LV.Part			H&B
3	Push Button	Ø 22,5 mm.	13	S1,S2,S7		LV.Part			AEG
1	Signal Lamp (Yellow)	Ø 22,5 mm.	14	H1		LV.Part			AEG

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BU PLANIN SUCUN İMALAT MAKSADIYLA

REVISION	DATE	NAME	CORR.
		DATE	15.02.1989
		DRAWN	Müge
		CHECK	

GAMA_SEVİŞLER HAM SU POMPA İSTASYONU

AEG ETİ

33 kV SWITCHGEAR

To 630 kVA Tr.

CUBICLE 6

ORIGIN SUBST REF

SHEET 1

ADET / QTY.	CIHAZIN TANIMI / DESCRIPTION AND APPLICATION	FABRIKASYON TANIMI TANIMLARIS NO, RESIM NO, CIHAZ TANIMI, TEKNIK DETAYLAR, ORNEK KUMANDA GERILIM FREKANSI AYAR SAHASI. IDENTIFICATION DATE TYPE, ORDER NR, DRAWING NR, CODES DESIGNTATION REQUREG TECHNICAL DATE, E G CONTROL VOLTAGE, FREQUENCY SETTING RANGE	SIRA NO. / PART NR.	HAZIN KODU / DESIGNATION	ACIKLAMALAR / REMARKS	MONTAJ YERI / LOCATION	IMALATCIYI ILGILENDIRIR / CONCERNS ONLY THE MANUFACTURER.
1	Circuit Breaker MC 25b/36-2	36 kV 630 A, In: 10 kA Ik = 25 kA	1	Q1		Truck	AEG ETİ
3	Current Transformer	20/5/5 A 1M5, 15 VA, 10P10, 30 VA	2	T1,T2,T3		HV.Part	ALCE
1	Overcurrent and Short circuit relay	R3AS20e	3	F11		LV.Part	DEMA
1	Megawattmeter	0 - 1, 5 MW	4	PA		LV.Part	.
1	Ammeter	0-20/40/5 A	5	P1		LV.Part	ÖSTAŞ
1	Heater	100 W, 220 V, 50 Hz	6	F6		LV.Part	DEMA
3	MCB	ELFA Otomat	7	F2,F3,F4		LV.Part	AEG
1	Auxiliary Relay	SH04.22 220 V DC	8	K4,K7,K8		LV. Part	AEG
1	Selector switch	C6 A200	9	S12		LV. Part	Ünal Kardeş
1	Selector switch (Local remote)	C6 A 220	10	S10		LV Part	Ünal Kardeş
2	Position indicator	AM 036 AM036 V	11	H01, H02		LV Part	H&B
5	Indicating relay	RA 32	12	H10,H11,H12,H13,H14		LV Part	H&B
3	Push button	Ø 22,5 mm.	13	S1,S2,S7		LV Part	AEG
1	Signal lamp (Yellow)	Ø 22,5 mm.	14	H1,		LV Part	AEG

BU PLANIN BUTUN HAKLARI MAHFUZTUR ALL RIGHTS ARE RESERVED

			DATE	15.02.1989	GAMA_SEVİSLER HAM SU POMPA İS YONU	AEG ETİ	33 kV SWITCHGEAR
			DRAWN	Müge			To 630 kVA Tr.
REVISION	DATE	NAME	CHECK				+ CUBICLE 7
			CORR.		ORIGIN	SUBST	