NOT	ÄNDRING	INFÖRD	SIGN	
]
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KONSTR.	KJS	RIT.	KJS
KOLL.	HRo	GODK.	
SKALA		DAT.	2023-10-2

SECONDARY SUBSTATION

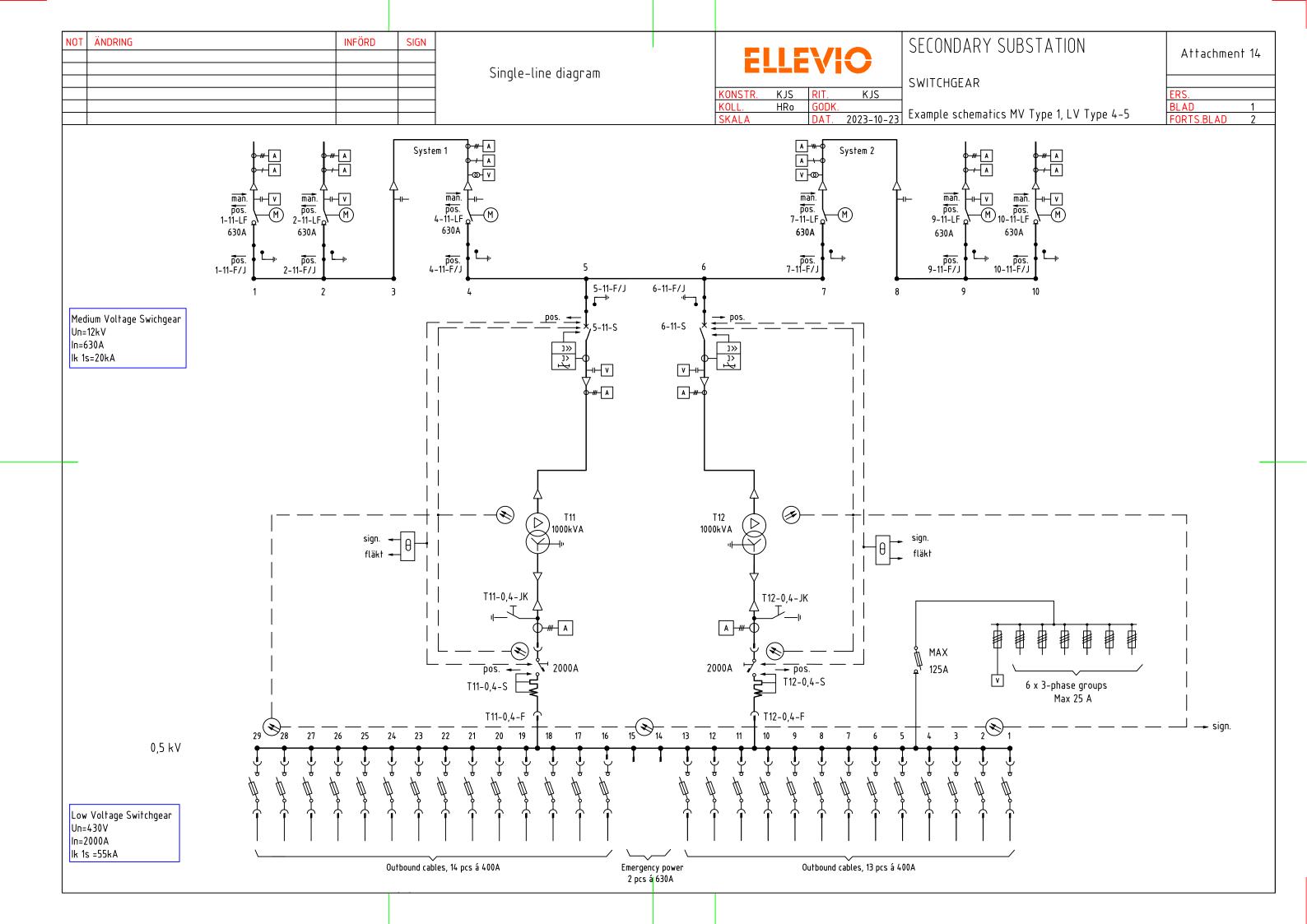
SWITCHGEAR

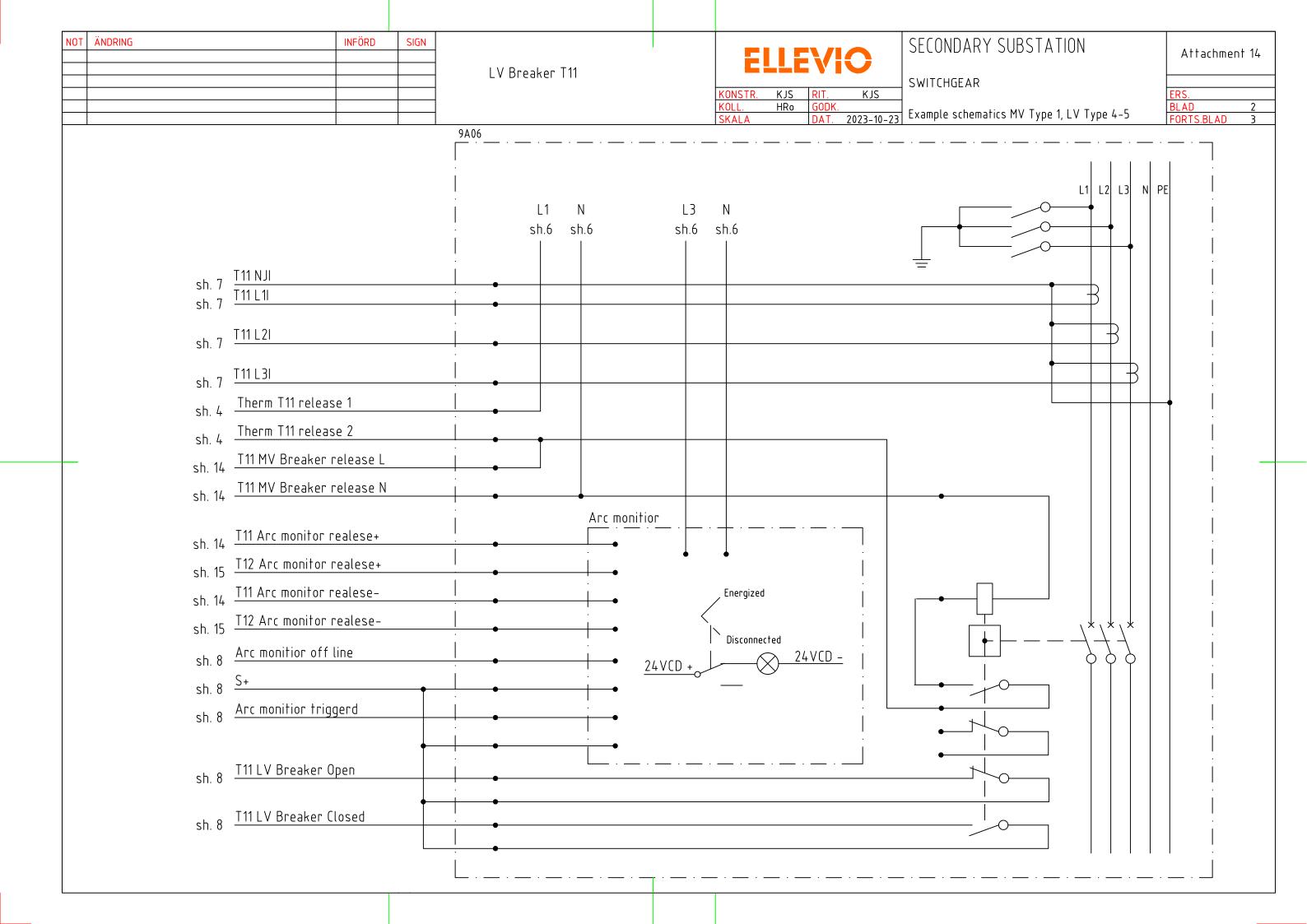
DAT. 2023-10-23 Example schematics MV Type 1, LV Type 4-5

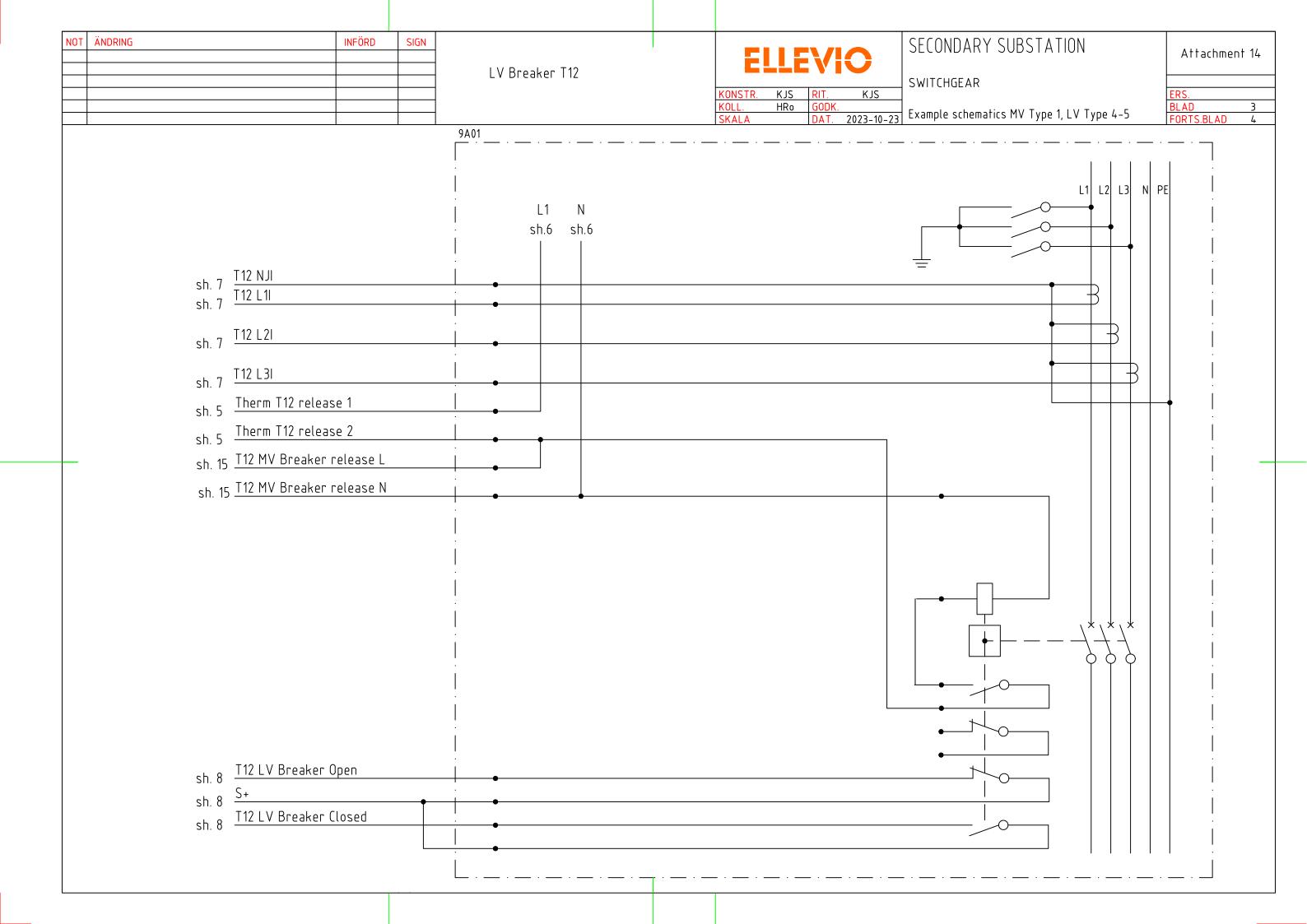
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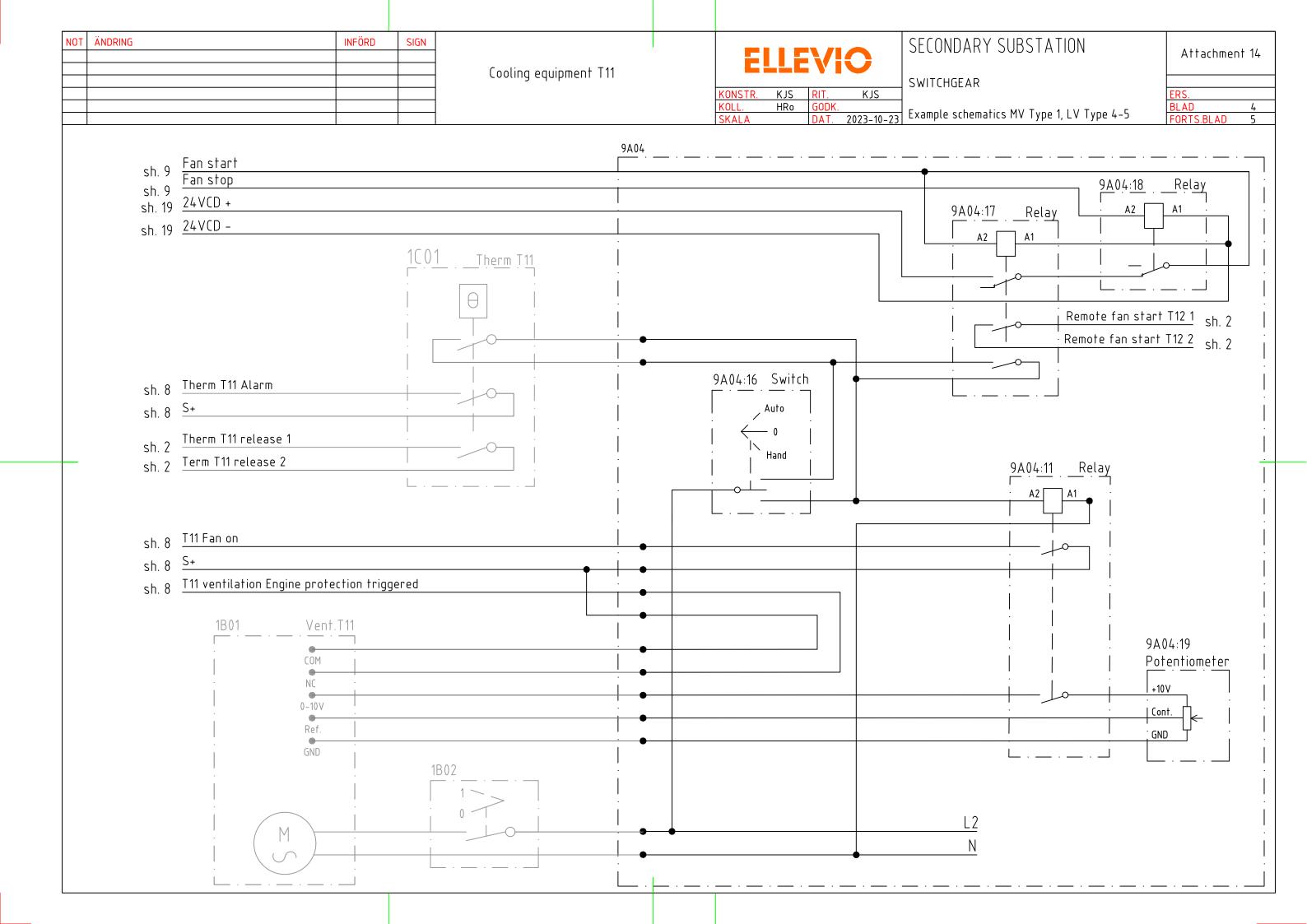
ERS. BLAD FORTS.BLAD

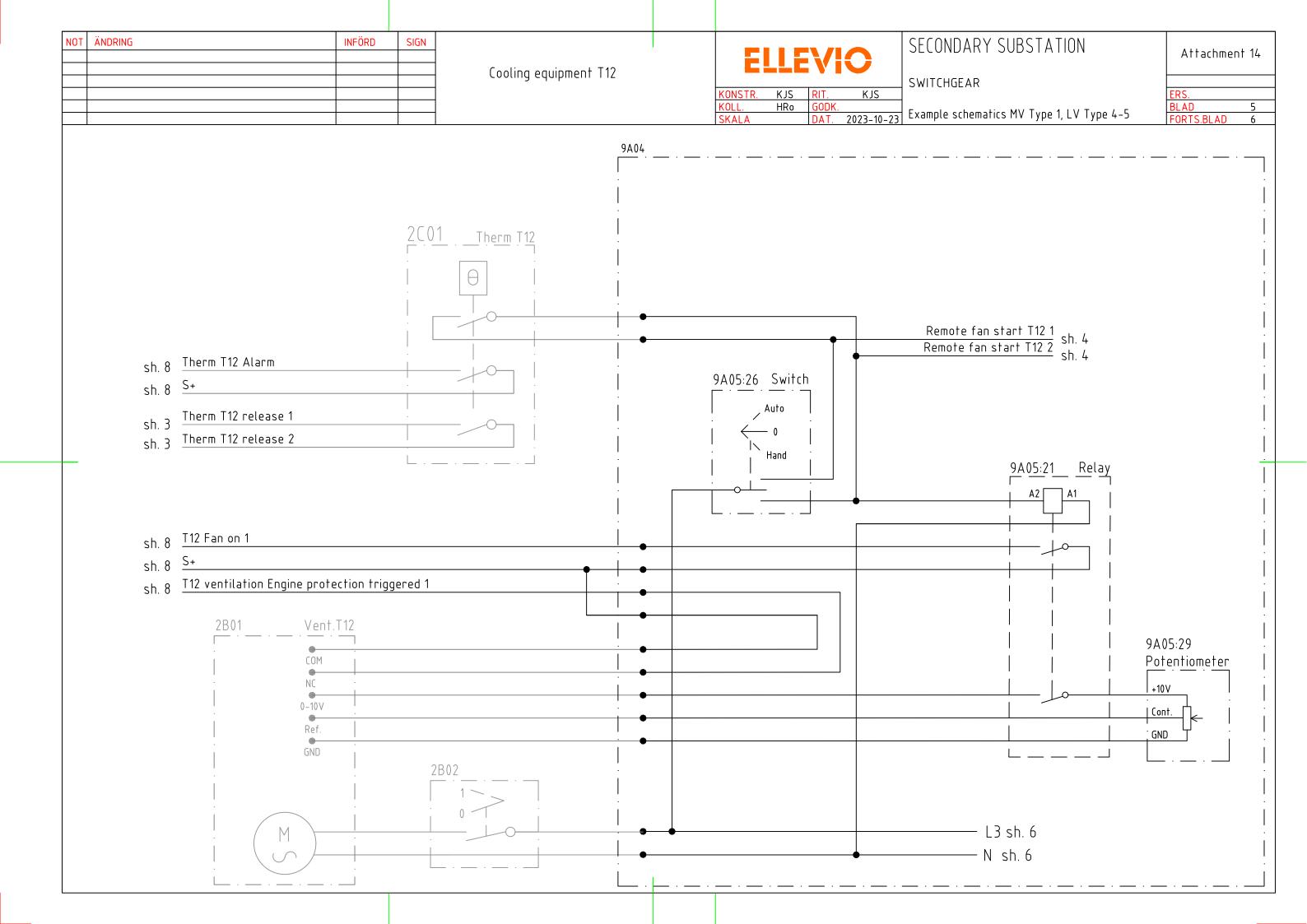
SCHEMATIC		MV SWITCHGEAR	
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		MV Switch over bay 1	sh.13
LV SWITCHGEAR		MV Transformer bay 1	sh.14
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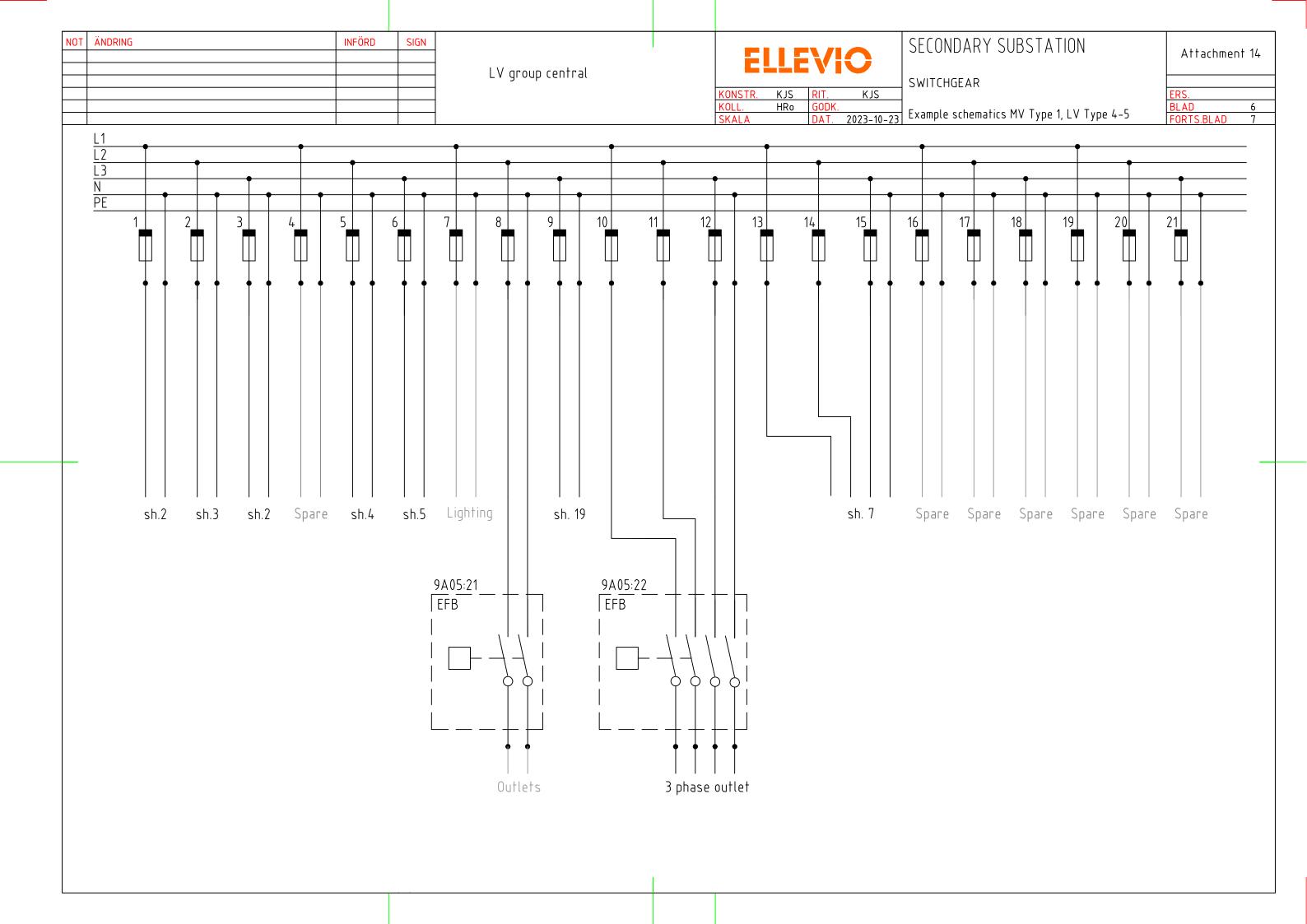








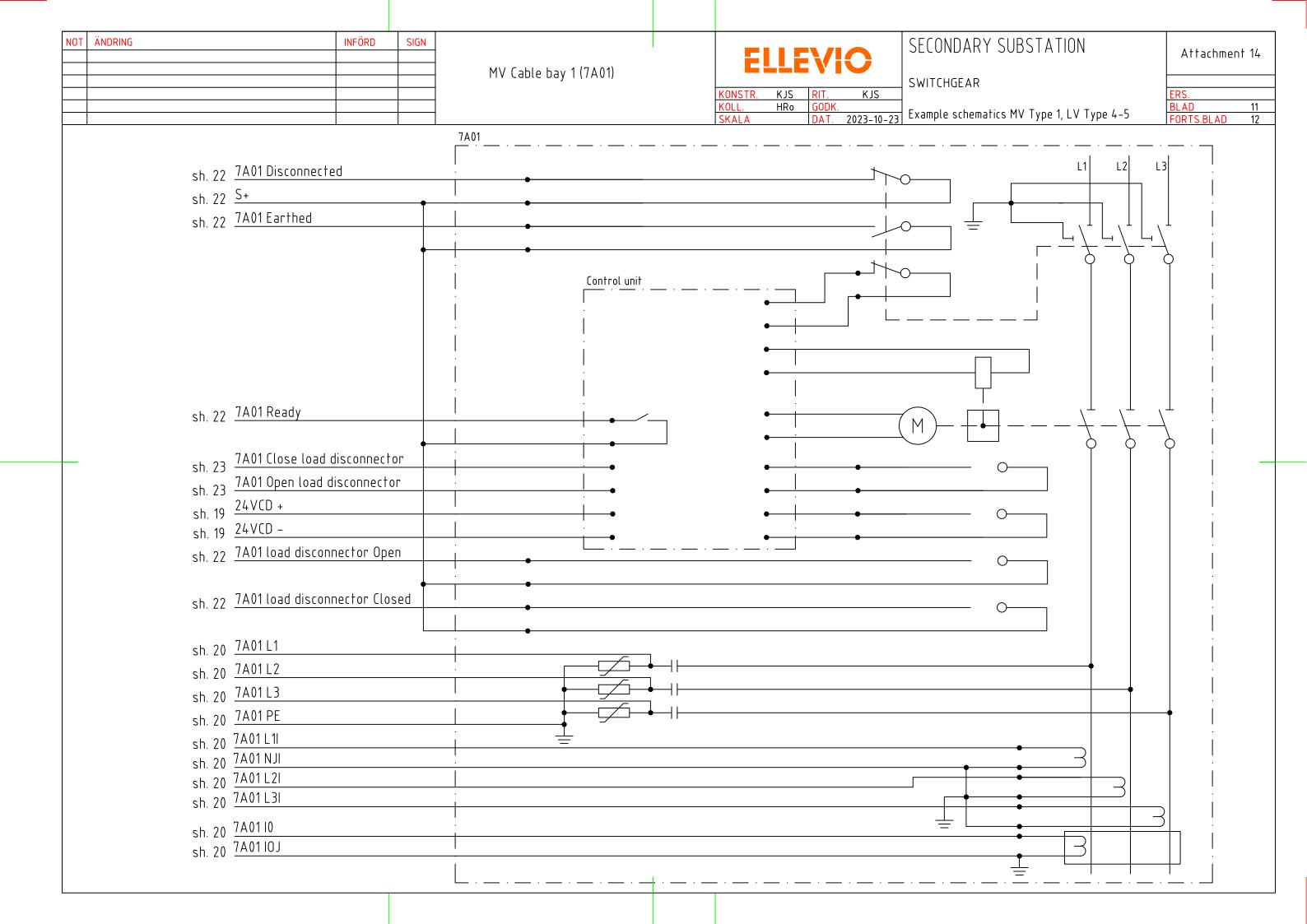


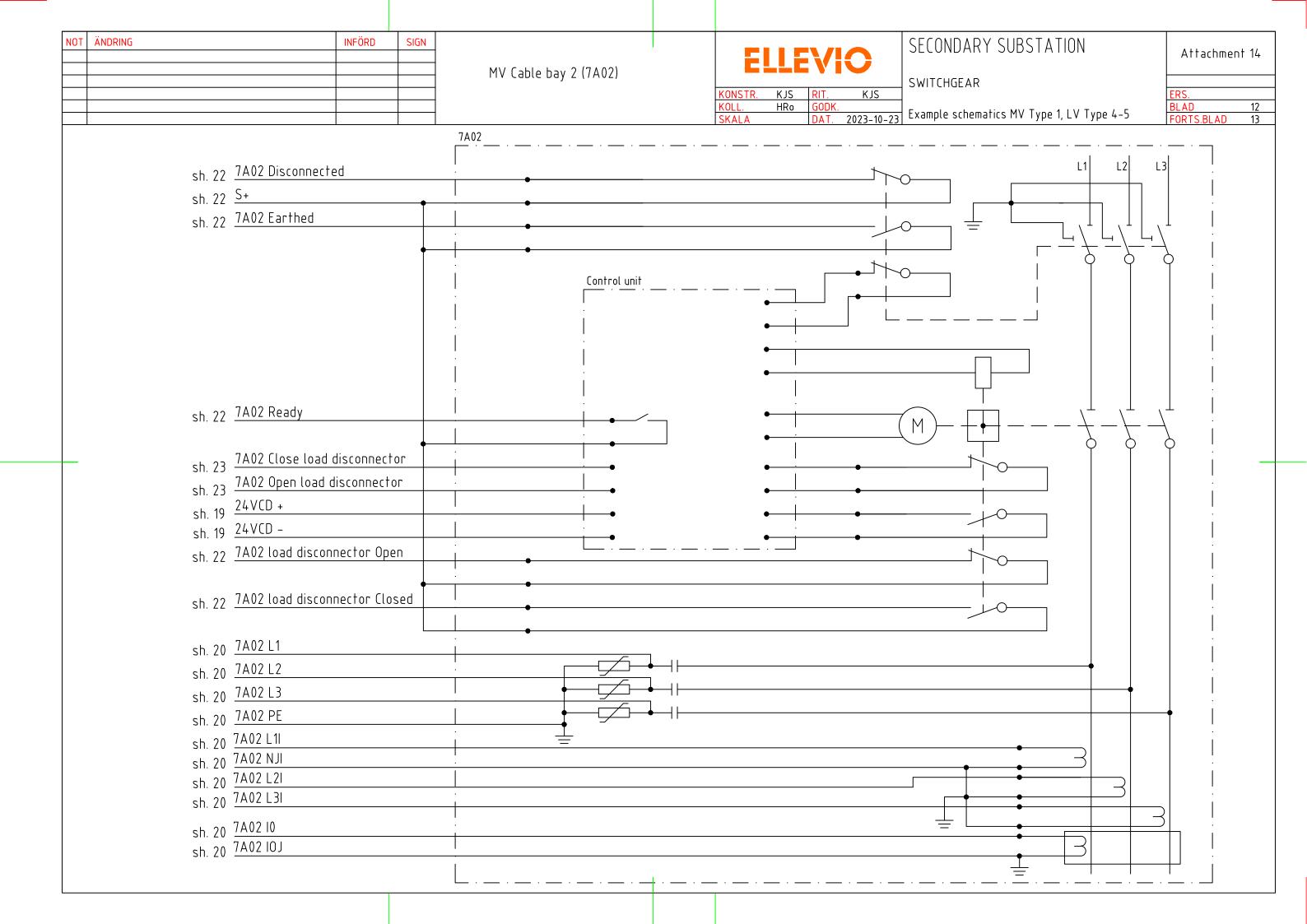


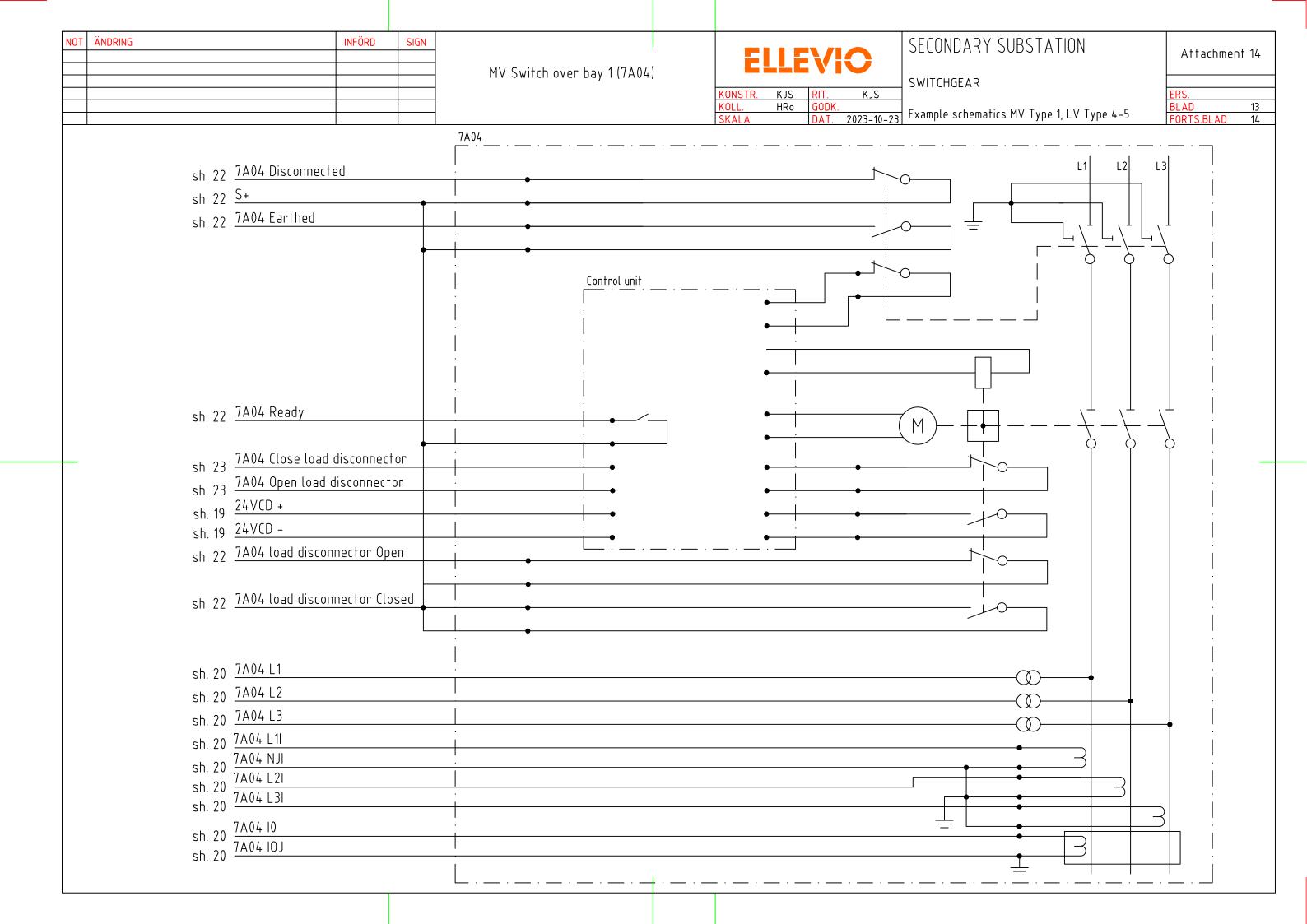
No. Shape Shape	NOT	ÄNDRING	INFÖRD	SIGN	RTU LV Measurements	ELLEVIO KONSTR. KJS RIT. KJS KOLL. HRO GODK.	SECONDARY SUBSTATION SWITCHGEAR	Attachment 14 ERS. BLAD 7 FORTS.BLAD 8
11					1 40	SKALA DAT. 2023-10-23	MEASURING MEASURING	
T11 L21 Sh. 2 T11 L31 T11 NJI T12 L11 T12 L21 Sh. 3 T12 L31 T12 NJI T12 temperature 110 T12 temperature 402 Therm Roon					L1 L2 sh. 6 L3			
T12 L21 sh. 3 T12 L31 T12 current measurement T17 NJI T18 remperature T19 remperature T11 temperature T12 temperature 40.2 Therm Room					T11 L2I sh. 2 T11 L3I T11 NJI			rent measurement
2C02 Therm I12 T12 temperature Spare temperature	_	<u>1C</u> 02	Therm <u>T11</u>		T12 L2I sh. 3 T12 L3I			rent measurement
Spare temperature 40.2 Therm Room		202	Therm T12					
		4C02Th	erm Room				 	emperature

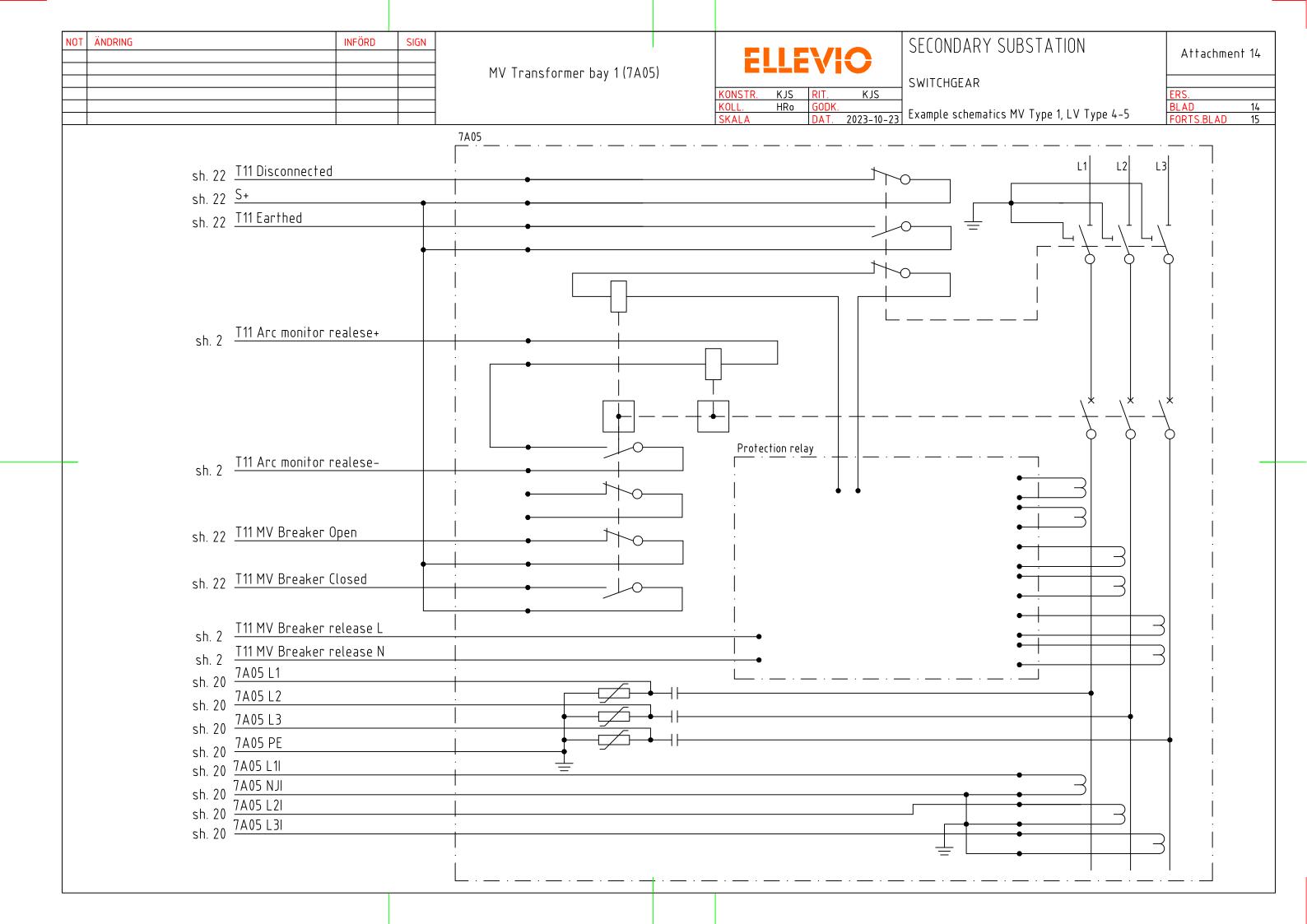
NOT ÄN	IDRING	INFÖRD	SIGN		CECOND A DV CLIDCT A TION
NOT AN		INI OND	Sidit		SECONDARY SUBSTATION Attachment 14
				RTU LV DI	KONSTR. KJS RIT. KJS ERS.
					KOLL. HRo GODK. SKALA DAT. 2023-10-23 Example schematics MV Type 1, LV Type 4-5 Example schematics MV Type 1, LV Type 4-5
,		<u> </u>	<u>/_RTU</u>		LV RTU DI2
sh. 2	T11 LV Breaker Open			——CH01 .	sh. 2 Arc monitior off line CH17
sh. 2	T11 LV Breaker Closed			CH02	sh. 2 Arc monitior triggerd · CH18
sh. 4	Therm T11 Alarm	: 		CH03	:
sh. 4	T11 ventilation Engine protection triggere	ed .		———CH04 :	· •—CH20
sh. 4	T11 Fan on			CH05	:
		I		●——CH06 .	——CH22 :
				•——CH07	CH23
_				•——CH08	•——CH24
	T12 LV Breaker Open	<u> </u>		———CH09 · 	· • CH25 ·
	T12 LV Breaker Closed	· - :		———CH10	•——CH26
	Therm T12 Alarm	<u> </u> 		———CH11 .	
	T12 ventilation Engine protection trigger	ed :		——CH12 :	•——CH28
sh. 5	T12 Fan on			———CH13	←—CH29 :
				●——CH14 :	· CH30
		:		•——CH15	●——CH31
sh. 2	S+	 - 		●——CH16 .	sh. 3
sh. 4 sh. 4	<u>S</u> +			24VCD+	sh. 5

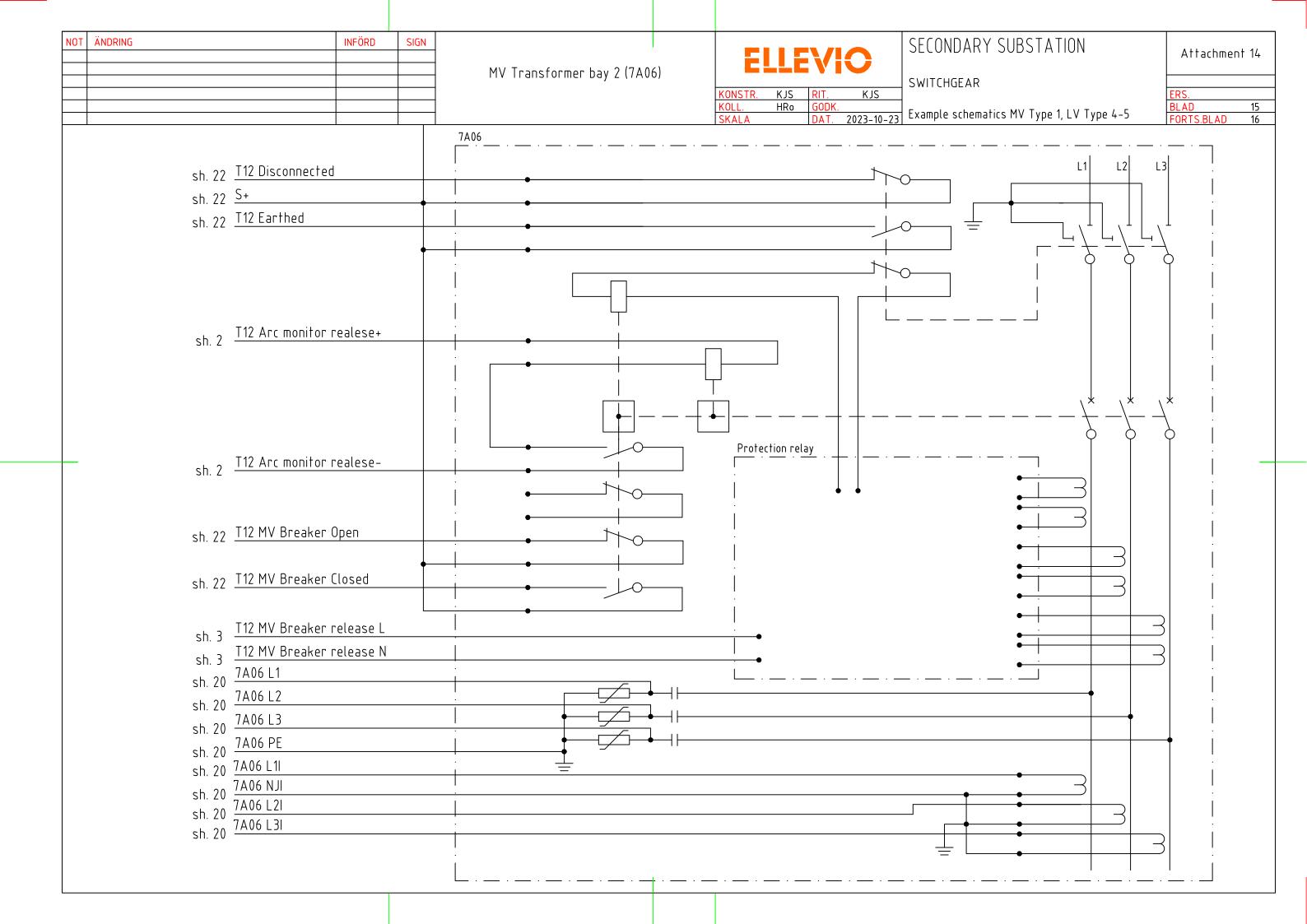
ОТ	ÄNDRING	INFÖRD	SIGN		ELLEVIO SECONDARY SUBSTATION Attack	nment
+				RTU LV DO	SWITCHGEAR	
					KOLL. HRo GODK. Example schematics MV Type 1, LV Type 4-5 BLAD FORTS.BL	
					_ · _ · _ · _ · _ · _ · _ · _ · _ · _ ·	. D01
					sh.4 Fan start C	: :H01
					sh.4 Fan stop	: : _{H02}
					511.4	1102 :
						: H03 :
					· · · · · · · · · · · · · · · · · · ·	: :H04
						:
						:H05
						: :H06
						: : _{H07}
						: 80H:
					· C	: H09.
						: H10
						:H11
						:H12
						:H13 ·
					· · · · · · · · · · · · · · · · · · ·	[H14
						 :H15
						נווו .
						:H16
						VCD+

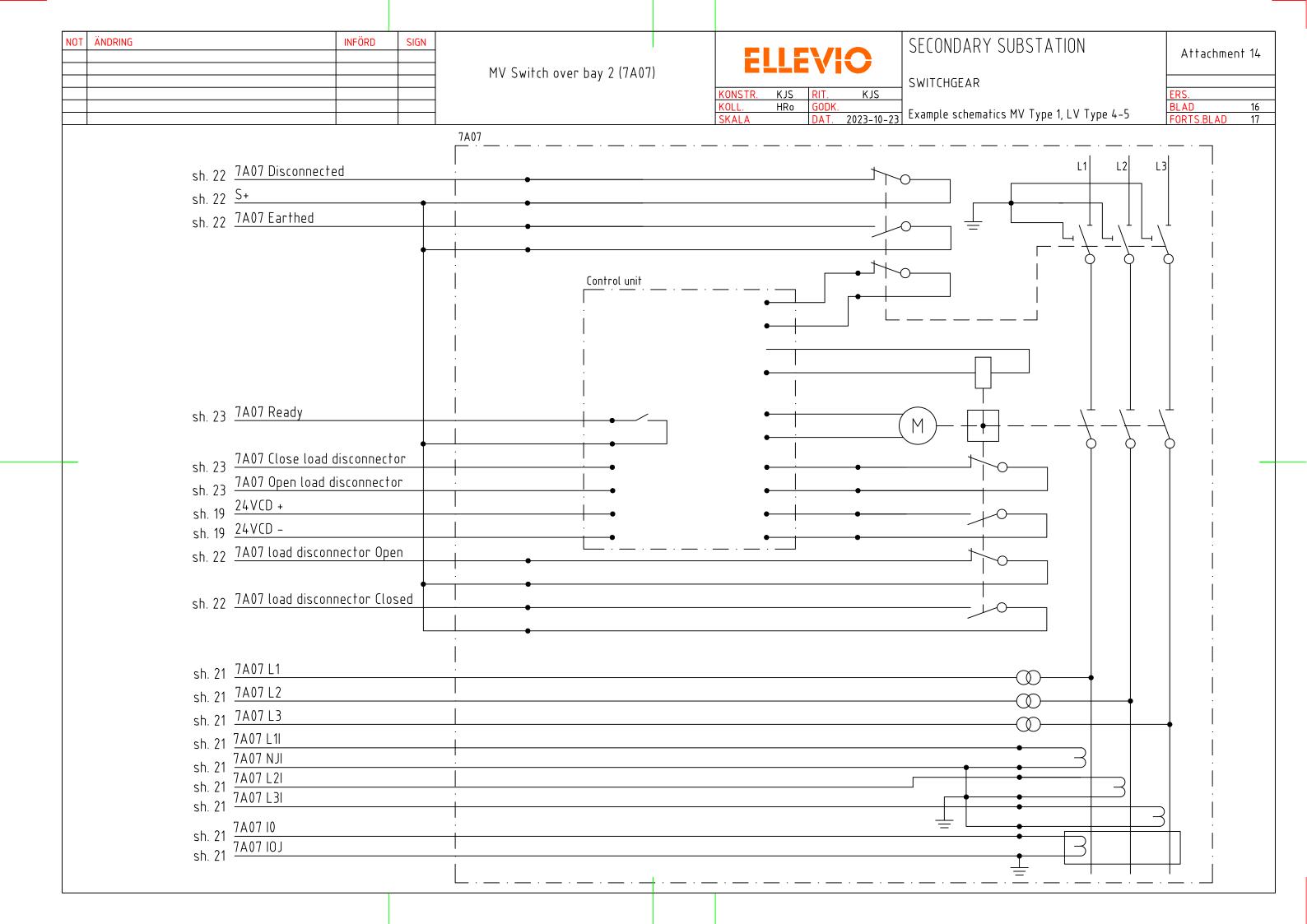


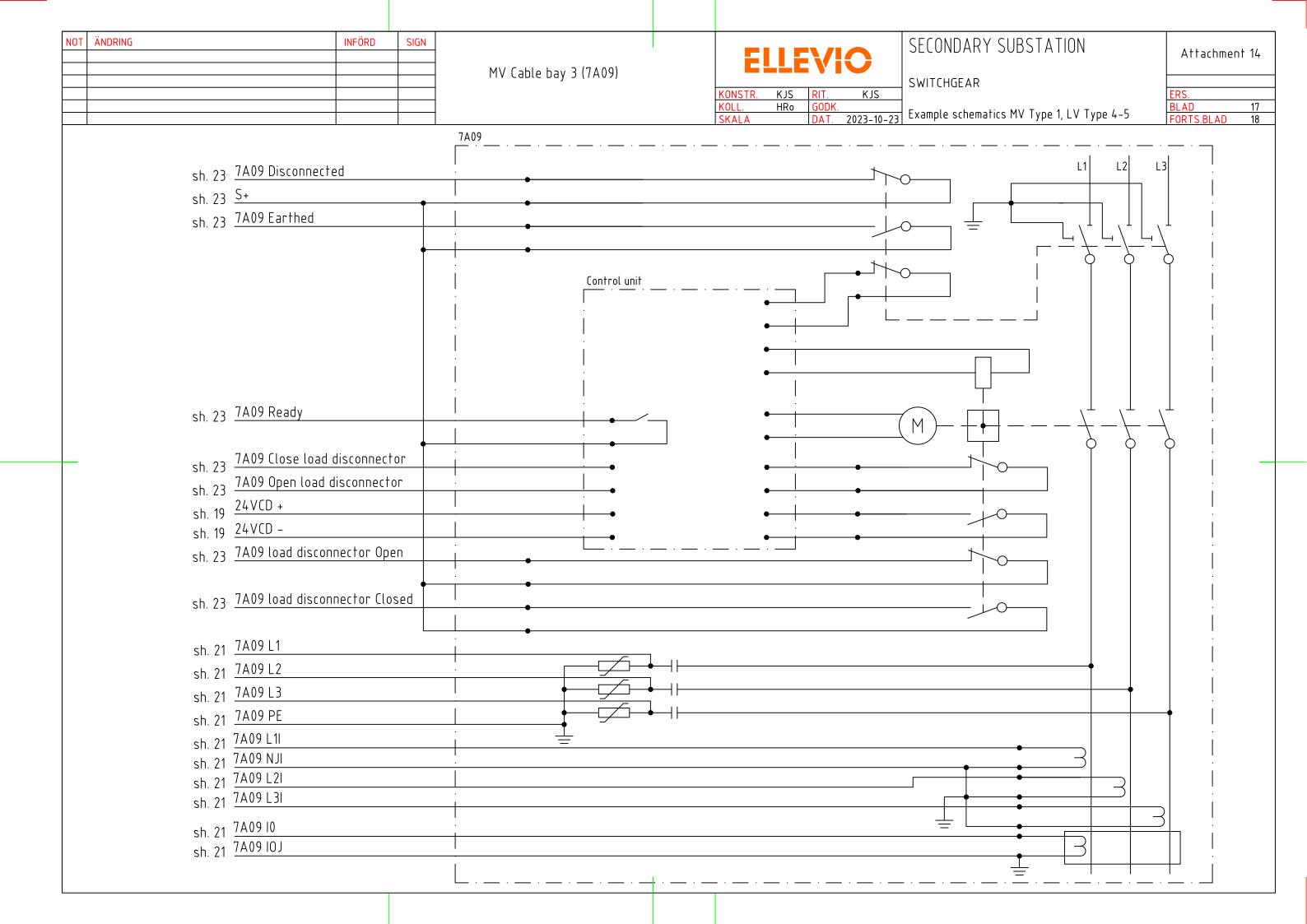


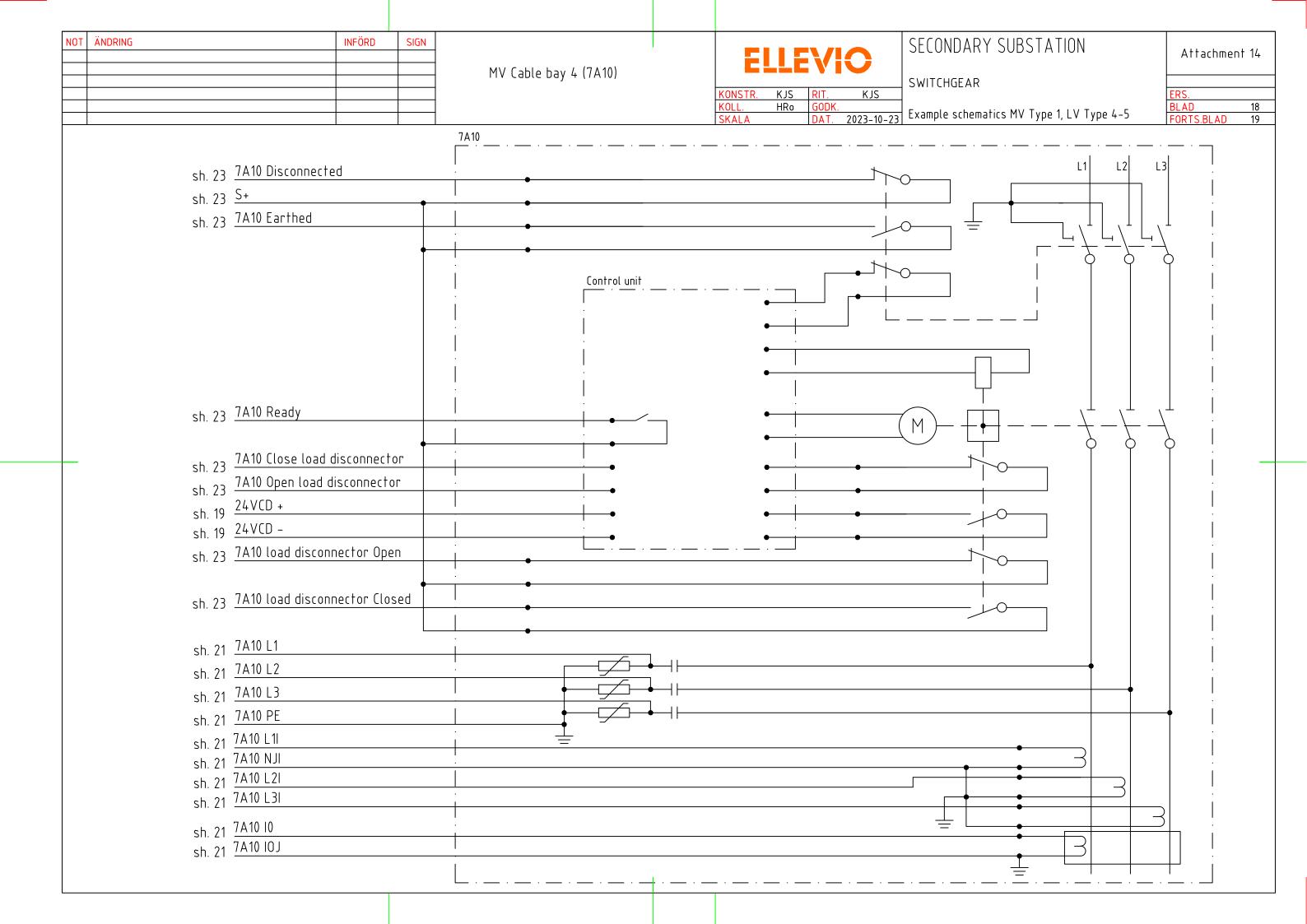












NOT	ÄNDRING	INFÖRD	SIGN	RTU MV Power Distribution	ELLEVIO SECONDARY SUBSTATION Attachment 14
					KONSTR. KJS RIT. KJS KOLL. HRo GODK. SKALA DAT. 2023-10-23 Example schematics MV Type 1, LV Type 4-5 ERS. BLAD 19 FORTS.BLAD 20
	L3 N sh.6 sh.6 MV. RTU				POWER DISTRIBUTION
	24VCD - 24VCD +			sh.11 sh.12 sh.13 sh.16 sh	n.17 sh.18

NOT ÄNDRING	INFÖRD	SIGN	SECONDARY SUBSTATION Attachment	 nt 14
		RTU MV Measurements	KONSTR. KJS RIT. KJS SWITCHGEAR ERS.	
			KOLL.HRoGODK.SKALADAT.2023-10-23Example schematics MV Type 1, LV Type 4-5FORTS.BLAD	20 21
sh. 11 7A01 L1 sh. 11 7A01 L2 sh. 11 7A01 L3	· · 7A01	MEASURING Voltage measurement	sh. 13 7A04 L1 MEASURING sh. 13 7A04 L2 7A04 L3 7A04 L3 7A04 L3	
sh. 11 7A01 PE sh. 11 7A01 L1I sh. 11 7A01 L2I sh. 11 7A01 L3I sh. 11 7A01 NJI		Current measurement	sh. 13	
sh. 11 7A01 I0 sh. 11 7A01 I0J sh. 12 7A02 L1 sh. 12 7A02 L2	7402	Valtaga pagagagat	sh. 14 7A05 L1 sh. 14 7A05 L2 sh. 14 7A05 L3 sh. 14 7A05 PE	
sh. 12 7A02 L3 7A02 PE sh. 12 7A02 L1I sh. 12 7A02 L2I	7A02	Voltage measurement	sh. 14 7A05 L1I sh. 14 7A05 L2I sh. 14 7A05 L3I sh. 14 7A05 NJI	-
sh. 12 7A02 L3I sh. 12 7A02 NJI sh. 12 7A02 I0 sh. 12 7A02 IOJ	7A02	Current measurement	sh. 15	
		: - - -	sh. 15 7A06 L1I sh. 15 7A06 L2I sh. 15 7A06 L3I sh. 15 7A06 NJI	
		: 	sh. 16 7A07 L1	
			sh. 16	

NOT	ÄNDRING		INFÖRD	SIGN	
					RTU MV Measurements
		MV RTU			MEA SURING
	740014		· · ·		
	sh. 17 7A09 L1 sh. 17 7A09 L2	•			
	sh. 17 <u>7A09 L2</u> sh. 17 <u>7A09 L3</u>		_{7A0}	9 Voltag	e measurement ;
	sh. 17 7A09 PE	•			
	sh. 17 7A09 L11				
	sh. 17 7A09 L2I				į
	sh. 17 7A09 L3I				:
	sh. 17 7A09 NJI	<u> </u> 	7A0	9 Curren	t measurement .
	sh. 17 7A09 10	+ •			
	sh. 17 7A09 IOJ	· • • • • • • • • • • • • • • • • • • •			·
	sh. 18 7A10 L1	<u>'</u>			
	sh. 18 7A10 L2		7Δ10) Voltagi	e measurement
	sh. 18 7A10 L3 sh. 18 7A10 PE	•		v v ottragi	e medsurement
	511. 10	· • • · · · · · · · · · · · · · · · · ·			·
	sh. 18 7A10 L11 sh. 18 7A10 L21	<u> </u>			
	7 4 4 0 1 7 1	•			
	sh. 18 7A10 L31 sh. 18 7A10 NJI	•	7A1) Current	t measurement
	sh 18 7A10 I0				·
	sh. 18 7A10 IOJ	· · · · · · · · · · · · · · · · · · ·			
		· 			
		·			
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KONSTR.	KJS	RIT.	KJS
KOLL.	HRo	GODK.	
SKALA		DAT.	2023-10-23

SECONDARY SUBSTATION

SWITCHGEAR

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23	Example schematics	ľV	туре	I, LV	Type 4-5)

Attachment 14

ERS.
BLAD 21
FORTS.BLAD 22

NOT ÄNDRING	INFÖRD SIGN		SECONDARY SUBSTATION	Attachment 14
		RTU MV DI	ELLEVIO KONSTR. KJS RIT. KJS SLCONDAR I SUDSTATION SWITCHGEAR	ERS.
			KOLL. HRo GODK. SKALA DAT. 2023–10–23 Example schematics MV Type 1, LV Type 4–5	BLAD 22 FORTS.BLAD 23
sh. 11 <u>7A01 load disconnector Open</u>	MV RTU	DI1 CH01	sh. 13 7A04 load disconnector Closed	DI2 CH17
sh. 11 7A01 load disconnector Closed		——CH02	sh. 13 7A04 Disconnected ·	CH18
sh. 11 7A01 Disconnected		——CH03	sh. 13 7A04 Earthed	CH19
sh. 11 7A01 Earthed	<u> </u>	——CH04	sh. 13 <u>7A04 Ready</u>	CH20 :
sh. 11 <u>7A01 Ready</u>		CH05	sh. 14 T11 MV Breaker Open	CH21
sh. 12 7A02 load disconnector Open	· ·	——CH06 .		——СH22 !
sh. 12 7A02 load disconnector Closec	j . 	———CH07		——CH23 :
sh. 12 7A02 Disconnected		———CH08	sh. 14 T11 Earthed	——CH24 -
sh. 12 7A02 Earthed		——CH09 :	sh. 15 T12 MV Breaker Open	CH25 ·
sh. 12 <u>7A02 Ready</u>		———CH10	<u>'</u>	CH26
		◆——CH11 :		——CH27 :
		◆——CH12		CH28 :
		●——CH13	I	——СH29
		◆ CH14 :		CH30 :
		●——CH15	<u>'</u>	CH31
sh. 13 7A04 load disconnector Open sh. 11 S+	· 	——CH16	sh. 16 7A07 Earthed sh. 14 S+	——CH32 :
sh. 12 S+ sh. 13	<u> </u>	24VCD+	c,	24VCD+

NOT ÄNDRING	INFÖRD	SIGN	SECONDARY SUBSTATION Attack	hmont
		RTU MV DI/D		
			KONSTR. KJS RIT. KJS KOLL. HRO GODK. SWITCHGEAR ERS. BLAD	
	MV DTU		SKALA DAT. 2023-10-23 Example schematics MV Type 1, LV Type 4-5 FORTS.BL/	_AD
sh. 16	<u>MV RTU</u>			. <u>D01</u>
SII. 10	- 	——CH33	sh.11 7A01 Open load disconnector	: CH01
sh. 17 7A09 load disconnector Ope	en :	● CH34	sh.11 7A01 Close load disconnector	
7AAQ land discoppactor (la	cod!		;	CH02
h. 17 <u>7A09 load disconnector Clo</u>	seu	●—CH35	sh.12 7A02 Open load disconnector	 : CH03
sh. 17 7A09 Disconnected		● —CH36		
7400 5 11 1		Cilia	sh.12 7A02 Close load disconnector	CH04
h. 17 <u>7A09 Earthed</u>	+	● CH37	sh.13 7A04 Open load disconnector	(H05 :
h. 17 <u>7A09 Ready</u>	·	● CH38		
	j	CHISO	sh.13 7A04 Close load disconnector	CH06
h. 18 $\frac{7A10 \text{ load disconnector Ope}}{4A10 \text{ load disconnector Ope}}$	<u> </u>	● —CH39	sh.16 7A07 Open load disconnector	CH07
h. 18 7A10 load disconnector Clo	: sed	• (11/0	_ ;	
	:	——CH40	sh.16 7A07 Close load disconnector	CH08 !
h. 18 <u>7A10 Disconnected</u>		● CH41	sh.17 7A09 Open load disconnector	CH09
sh. 18 <u>7A10 Earthed</u>		5		
	:	● CH42	sh.17 7A09 Close load disconnector	CH10 .
h. 18 <u>7A10 Ready</u>		● —CH43	sh.18 7A10 Open load disconnector	
				CH11
		● ——(H44	sh.18 7A10 Close load disconnector	CH12
	İ	← —		İ
	·			CH13 ·
	i	● ——CH46		: CH14
	:	← —СН47		:
	:			CH15
n. 17 S+	 	● ——CH48		ا : CH16 ا
n. 17 S+	:	•—24VCD+		
I. IU			24'	VCD+