

## ORDER/TILAUS PROJECT/PROJEKTI

## HM023859 O24477-48

Date/Päivä 28.09.2012	Dept./Osasto KHF	Designer/Suun. jallabh	Issue/Versio -	Order/Tilaus HM023859	Page/Sivu 1 ( 1 )
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E1 H-F1 4.0-6.3A	6A
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Electrical panels/Kojekaapit	
E1 E1 B900X400X250-7035	W900H400D250
E2A E2A EC25.9026.7021	W900H400D250

## BILL OF MATERIALS OSALUETTELO

## HM023859+ 50Hz, 415//115V

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Locat. Sij.	Refer. Positio	Qty. Lkm.	Specification Tyyppi	Description Kuvaus	Fabricate Valmistaja	Item Code Nimike	Sheet Sivu				
PROV	H-S2,H-S5,H-S6,H-S7	4	WL34-R230	OPTICAL SENSOR OPTINEN TUNNISTIN	SICK OPTIC-EL	52339329	3.D4				
		4	E100	REFLECTOR HEIJASTIN	SICK OPTIC-EL	52386674					

## BILL OF MATERIALS OSALUETTELO

## HM023859+E1 50Hz, 415//115V

Date/Päivä 28.09.2012		Dept./Osasto KHF		Designer/Suunn. jallabh		Issue/Versio -		Order/Tilaus HM023859		Page/Sivu 2( 6)	
Locat. Sij.	Refer. Positio	Qty. Lkm.	Specification Tyyppi	Description Kuvaus	Fabricate Valmistaja	Item Code Nimike	Sheet Sivu				
BR	H-H9	1	XVBC21	BASE	TELEMECANIQUE	52331674	2.C7				
		1	XVBC9M	ALUSTA ALARM HORN	TELEMECANIQUE	52370029					
		1	XVBC4M5	HÄLYTYSTORVI INDICATING LIGHT	TELEMECANIQUE	52331673					
		1	DL1BLG/10W,120V	SIGNAALIVALO LAMP	TELEMECANIQUE	52370030					
BR	H-M1, H-M2	2		SQUIRREL CAGE MOTOR OIKOSULKUMOOTTORI			4.B3				
BR	H-S1	1	XCK-MR54D1	LIMIT SWITCH RAJAKATKAISIN	TELEMECANIQUE	50003961	2.E5				
BR	X212., X222.	2	99.705.9114.1	SOCKET	WIELAND	52287838	4.C3				
		2	QA-TOP-PG21 10-POLE	VASTAKE ENCLOSURE, HOOD	KONECRANES	52294805					
E0	X01	1	CURRENT COLLECTOR	KOTELON YLÄOSA CURRENT COLLECTOR			1.F1				
E1	E1	1	B900X400X250-7035	VIRRANOTTORAUTA CUBICLE	KONECRANES	52421759	13.E4				
E1	H-A1	1	DMCS022F10TNOC	KOJEKAAPPI TRAVELLING CONTROL UNIT	KCI	52292675	2.D2				
E1	H-F1	1	GV2-ME10	SIIRTOLIIKKEEN OHJAIN MOTOR PROTECTION SWITCH	TELEMECANIQUE	52297214	2.E2				
E1	H-L1	1	KC-330	MOOTTORISUOJAKATKAISIJA POWER LINE FILTER	KCI	52296673	2.D2				
E1	H-L2	1	RH175285107	SUODIN BALLAST	KCI	52297604	2.B2				
E1	O-F01	1	GV2-ME05	KURISTIN MOTOR PROTECTION SWITCH	TELEMECANIQUE	52297210	1.E4				
E1	O-F1	1	480332	MOOTTORISUOJAKATKAISIJA FUSE BASE	DF	52293360	1.D1				
E1	O-F1.	3	420032	VAROKEALUSTA FUSE	DF	52281110	1.D1				
E1	O-F11	1	5SY6101-7	SULAKE CIRCUIT BREAKER	SIEMENS	52554793	1.F6				
E1	O-H1	1	ZB4-BV03	JOHDONSUOJAKATKAISIJA LENS	TELEMECANIQUE	52311039	1.B9				
		1	ZB4-BV6	LINSSI PILOT LIGHT BODY	TELEMECANIQUE	52311034					
		1	BA9s	MERKKILAMPPUKALUSTE LAMP		52311023					
E1	O-K02	1	CAD-32V7	LAMPPU CONTACTOR	TELEMECANIQUE	52297568	1.D5				
E1	O-K1	1	C09F7	KONTAKTORI CONTACTOR	KCI	52296553	1.B8				
E1	O-K1.	1	LADN20	KONTAKTORI AUXILIARY CONTACT BLOCK	TELEMECANIQUE	52297543	1.A8				
E1	O-Q1	1	OT80F3	APUKOSKETINLOHKO LOAD BREAK SWITCH	ABB	52411024	1.E1				
		1	OHYS2AJ	KUORMAKYTKIN HANDLE	ABB	52411023					
		1	OXS6X	KAHVA EXTENSION SHAFT	ABB	52411025					
E1	O-T1	1	100VA415, 400, 380/2x115	JATKOAKSELI 1PH TRANSFORMER	TRANSFORMATIC	52270521	1.C4				
E1	X012	1	99.713.9114.1	1V MUUNTAJA PLUG	WIELAND	52287835	1.E1				
		2	MOTL43-1A	PISTOKE FIXING PART	KONECRANES	52271683					
E1	X012.	1	99.711.9114.1	KIINNITYSOSA SOCKET	WIELAND	52287834	1.E1				
		1	MOTL105-3-A	VASTAKE ENCLOSURE, HOOD	KONECRANES	52271702					
				KOTELON YLÄOSA							

## BILL OF MATERIALS OSALUETTELO

## HM023859+E1 50Hz, 415//115V

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Locat. Sij.	Refer. Positio	Qty. Lkm.	Specification Tyyppi	Description Kuvaus	Fabricate Valmistaja	Item Code Nimike	Sheet Sivu				
E1	X1	50-51,54,92,190 5	WDU 4	TERMINAL BLOCK RIVILIIITIN	WEIDMULLER	52266108					
E1	X1	31-33 3	WDU 6	TERMINAL BLOCK RIVILIIITIN	WEIDMULLER	52266109					
E1	X211, X221, X2511, X2521, X2531, X2541	6	99.705.9114.1	SOCKET VASTAKE	WIELAND	52287838	2.B2				
		12	MOTL43-1-A	FIXING PART KIINNITYSOSA	KONECRANES	52271683					
E1	X211., X221., X2511., X2521., X2531., X2541.	6	99.708.9114.1	PLUG PISTOKE	WIELAND	52287844	2.B2				
		6	MOTL84-1-A	ENCLOSURE, HOOD KOTELON YLÄOSA	KONECRANES	52271706					
E1	X251, X32A1, X521	3	99.706.9114.1	SOCKET VASTAKE	WIELAND	52287830	2.E4				
		6	MOTL43-1A	FIXING PART KIINNITYSOSA	KONECRANES	52271683					
E1	X251., X32A1., X521.	3	99.709.9114.1	PLUG PISTOKE	WIELAND	52287831	2.E4				
		3	MOTL105-3-A	ENCLOSURE, HOOD KOTELON YLÄOSA	KONECRANES	52271702					
E1	X31A1	1	99.711.9114.1	SOCKET VASTAKE	WIELAND	52287834	5.C1				
		2	MOTL43-1A	FIXING PART KIINNITYSOSA	KONECRANES	52271683					
E1	X31A1.	1	99.713.9114.1	PLUG PISTOKE	WIELAND	52287835	5.C1				
		1	MOTL105-3-A	ENCLOSURE, HOOD KOTELON YLÄOSA	KONECRANES	52271702					

## BILL OF MATERIALS OSALUETTELO

## HM023859+E2A 50Hz, 415//115V

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Locat. Sij.	Refer. Positio	Qty. Lkm.	Specification Tyyppi	Description Kuvaus	Fabricate Valmistaja	Item Code Nimike	Sheet Sivu				
E2A	A-A2	1	CID-115/230V	CONDITION MONITORING UNIT KUNNONVALVONTA YKSIKKÖ	KONECRANES	52292510	5.C10				
E2A	A-A3	1	KAE400	AMPLIFIER VAHVISTIN	KCI	52309170	6.B3				
E2A	A-F7	1	GV2-ME05	MOTOR PROTECTION SWITCH MOOTTORISUOJAKATKAISIJA	TELEMECANIQUE	52297210	5.E8				
		1	GV-AE20	AUXILIARY CONTACT BLOCK APUKOSKETINLOHKO	TELEMECANIQUE	52297228					
E2A	A-G7	1	REC12-690+DC	RECTIFIER TASASUUNTAAJA	KONECRANES	60010145	5.C8				
E2A	A-K1,A-K2	2	C07F7	CONTACTOR KONTAKTORI	KCI	52296552	7.A4				
E2A	A-K1/2	1	LAD-9R1	MECHANICAL INTERLOCK BLOCK MEKAANINEN LUKITUS	TELEMECANIQUE	52298182	7.A4				
E2A	A-K4	1	C08F7	CONTACTOR KONTAKTORI	KCI	52296578	7.A7				
E2A	A-K7	1	C01F7	CONTACTOR KONTAKTORI	KCI	52296548	7.A6				
E2A	A-P1	1	CID-DISPLAY	DISPLAY UNIT NÄYTTÖYKSIKKÖ	KONECRANES	52292512	7.A3				
E2A	A-T20	1	MI 100	CURRENT TRANSFORMER VIRTAMUUNTAJA	CARLO GAVAZZI	52293298	5.F5				
E2A	E-A1	1	DMCS022F10TN0C	TRAVELLING CONTROL UNIT SIIRTOLIIKKEEN OHJAIN	KCI	52292675	9.D2				
E2A	E-F1	1	GV2-ME10	MOTOR PROTECTION SWITCH MOOTTORISUOJAKATKAISIJA	TELEMECANIQUE	52297214	9.E2				
E2A	E-L1	1	KC-330	POWER LINE FILTER SUODIN	KCI	52296673	9.D2				
E2A	E2A	1	EC25.9026.7021	ENCLOSURE KOTELO	ENSTO	52292922	14.D4				
E2A	X2A	1-3	3	2XWDU 6	TERMINAL BLOCK RIVILIITIN	WEIDMULLER	52266109				
E2A	X2A	50-51,53-54,190	5	WDU 4	TERMINAL BLOCK RIVILIITIN	WEIDMULLER	52266108				
E2A	X2A	37-39,45-47	6	WDU 6	TERMINAL BLOCK RIVILIITIN	WEIDMULLER	52266109				
E2A	X2A.GND	1	KLBU 3-8SC	GROUNDING MAADOITUS	JUHA-ELEKTRO	52295816	6.B3				
E2A	X31A2	1	99.713.9114.1	PLUG PISTOKE	WIELAND	52287835	5.B1				
		2	MOTL43-1A	FIXING PART KIINNITYSOSA	KONECRANES	52271683					
E2A	X31A2.	1	99.711.9114.1	SOCKET VASTAKE	WIELAND	52287834	5.B1				
		1	MOTL105-3-A	ENCLOSURE, HOOD KOTELON YLÄOSA	KONECRANES	52271702					
E2A	X32A2	1	99.709.9114.1	PLUG PISTOKE	WIELAND	52287831	7.F2				
		2	MOTL43-1A	FIXING PART KIINNITYSOSA	KONECRANES	52271683					
E2A	X32A2.	1	99.706.9114.1	SOCKET VASTAKE	WIELAND	52287830	7.F2				
		1	MOTL105-3-A	ENCLOSURE, HOOD KOTELON YLÄOSA	KONECRANES	52271702					
E2A.TR	E-S1	1	XCK-MR54D1	LIMIT SWITCH RAJAKATKAISIN	TELEMECANIQUE	50003961	9.E5				
TR1	A-B1	1	LOAD SENSOR	LOAD SENSOR KUORMA-ANTURI			6.A3				
TR1	A-M1,E-M1,E-M2	3		SQUIRREL CAGE MOTOR OIKOSULKUMOOTTORI			8.B5				
TR1	A-S1	1	HOISTING LIMIT SWITCH	ROTARY LIMIT SWITCH PYÖRIVÄ RAJAKYTKIN			7.C5				

## BILL OF MATERIALS OSALUETTELO

## HM023859+E2A 50Hz, 415//115V

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Locat. Sij.	Refer. Positio	Qty. Lkm.	Specification Tyyppi	Description Kuvaus	Fabricate Valmistaja	Item Code Nimike	Sheet Sivu				
TR1	A-S11	1	V4LSK2A2-5M-UL	OVERLOAD SWITCH YLIKUORMASUOJA		52269617	7.C4				
TR1	X33A	1-6	WDU 6	TERMINAL BLOCK RIVILIITIN	WEIDMULLER	52266109					
TR1	X33A2.	1	MOLEX 3191 PLUG 9	PLUG PISTOKE	MOLEX	52292795	8.C7				
TR1	X41E2.,X42E2.	2	99.705.9114.1	SOCKET VASTAKE	WIELAND	52287838	10.C2				
		2	MOTL84-1-A	ENCLOSURE, HOOD KOTELON YLÄOSA	KONECRANES	52271706					

## BILL OF MATERIALS OSALUETTELO

## HM023859+E3 50Hz, 415//115V

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Locat. Sij.	Refer. Positio	Qty. Lkm.	Specification Tyyppi	Description Kuvaus	Fabricate Valmistaja	Item Code Nimike	Sheet Sivu				
E3	E3	1	PBXA08YY	PENDANT CONTROLLER PAINIKEOHJAIN	TELEMECANIQUE	52569151	12.C4				
E3	X512	1	70.310.1640.0	PLUG	WIELAND	52274731	11.E9				
		1	70.352.1635.3	PISTOKE ENCLOSURE, HOOD	WIELAND	52314825					
E3	X512.	1	70.300.1640.0	KOTELON YLÄOSA SOCKET	WIELAND	52274765	11.E9				
		1	70.330.1628.0	VASTAKE ENCLOSURE, HOUSING KOTELON ALAOSA	WIELAND	52274740					

## CABLE WIRING KAAPELILISTA

## HM023859+BR 50Hz, 415//115V

Date/Päivä	Dept./Osasto	Designer/Suunn.	Issue/Versio	Order/Tilaus	Page/Sivu
28.09.2012	KHF	jallabh	-	HM023859	1 ( 8 )
Cable specification Kaapelin tyyppi	Cable no. Johdin	From Mistä	To Mihin	Sheet S.viite	
H07BB-F4G16	01	E0	E1		
		1 X01 L1	X012. 1	1.E1	
		2 X01 L2	X012. 2	1.E2	
		3 X01 L3	X012. 3	1.E2	
		PE X01 PE	X012. PE	1.E2	
GAMAFLEX 8G1.5JZ	21	BR	E1		
		1 X212. 1	X211. 1	2.A2	
		2 X212. 2	X211. 2	2.A2	
		3 X212. 3	X211. 3	2.A2	
		4 X212. 4	X211. 4	2.A3	
		5 X212. 5	X211. 5	2.A3	
		6			
		7			
PE X212. PE	X211. PE	2.A1			
GAMAFLEX 8G1.5JZ	22	BR	E1		
		1 X222. 1	X221. 1	2.A2	
		2 X222. 2	X221. 2	2.A3	
		3 X222. 3	X221. 3	2.A3	
		4 X222. 4	X221. 4	2.A4	
		5 X222. 5	X221. 5	2.A4	
		6			
		7			
PE X222. PE	X221. PE	2.A1			
GAMAFLEX 8G1.5JZ	25	BR	E1		
		1 H-S1 A21	X251. 10	2.E4	
		2 H-S1 A22	X251. 11	2.D4	
		3 H-S1 B21	X251. 12	2.E4	
		4 H-S1 B22	X251. 13	2.D4	
		5 H-S1 A11	X251. 14	2.E5	
		6 H-S1 A12	X251. 15	2.E5	
		7 H-S1 B12	X251. 16	2.D5	
PE H-S1 GND	X251. PE	2.D3			
GAMAFLEX 5G1.5JZ	26	BR	E1		
		1 H-H9 1	X1 190	2.C8	
		2 H-H9 2	X1 190	2.C7	
		3 H-H9 C	X1 51	2.B7	
		4			
PE					



## CABLE WIRING KAAPELILISTA

## HM023859+E2A.TR1 50Hz, 415//115V

Date/Päivä	Dept./Osasto	Designer/Suunn.	Issue/Versio	Order/Tilaus	Page/Sivu
28.09.2012	KHF	jallabh	-	HM023859	2( 8)
Cable specification Kaaelin tyyppi	Cable no. Johdin	From Mistä	To Mihin	Sheet S.viite	
GAMAFLEX 8G1.5JZ	45E	E2A.TR1	E2A		
	1	E-S1 B21	X32A2 6	9.E4	
	2	E-S1 B22	E-A1 X1.1	9.D4	
	3	E-S1 A21	X32A2 7	9.E4	
	4	E-S1 A22	E-A1 X1.2	9.D4	
	5	E-S1 B11	X32A2 8	9.E5	
	6	E-S1 A12	E-A1 X1.3	9.D5	
	7				
	PE	PE	E-S1 GND	9.D3	

## CABLE WIRING KAAPELILISTA

## HM023859+E3 50Hz, 415//115V

Date/Päivä	Dept./Osasto	Designer/Suunn.	Issue/Versio	Order/Tilaus	Page/Sivu
28.09.2012	KHF	jallabh	-	HM023859	3( 8)
Cable specification Kaapelin tyyppi	Cable no. Johdin	From Mistä	To Mihin	Sheet S.viite	
BTC-20X1,5	51	E3.1	E3		
	1	O-S1 12	X512 1	11.E9	
	2				
	3	O-S2 13	X512 3	11.C9	
	4	O-S2 24	X512 4	11.C10	
	5	A-S3 13	X512 5	11.E3	
	6	H-S3 14	X512 6	11.C7	
	7	H-S4 14	X512 7	11.C7	
	8	H-S4 34	X512 8	11.C8	
	9	A-S3 14	X512 9	11.C3	
	10	A-S4 14	X512 10	11.C3	
	11	A-S4 34	X512 11	11.C4	
	12	O-S2 23	X512 12	11.C9	
	13	E-S3 14	X512 13	11.C5	
	14	E-S4 14	X512 14	11.C5	
	15	E-S4 34	X512 15	11.C6	
	16				
	17				
	18				
	19				
	PE	PE	X512 PE	11.E1	

**CABLE WIRING  
KAAPELILISTA**
**HM023859+PROV  
50Hz, 415//115V**

Date/Päivä	Dept./Osasto	Designer/Suunn.	Issue/Versio	Order/Tilaus	Page/Sivu
28.09.2012	KHF	jallabh	-	HM023859	4 ( 8 )
Cable specification Kaapelin tyyppi	Cable no. Johdin	From Mistä	To Mihin	Sheet S.viite	
GAMAFLEX 5G1.5JZ	251	E1	PROV		
	1	X2511. 9	H-S2 1	3.D4	
	2	X2511. 10	H-S2 2	3.D4	
	3	X2511. 4	H-S2 3	3.D4	
	4	X2511. 5	H-S2 5	3.D4	
	PE				
GAMAFLEX 5G1.5JZ	252	E1	PROV		
	1	X2521. 9	H-S5 1	3.D5	
	2	X2521. 10	H-S5 2	3.D5	
	3	X2521. 4	H-S5 3	3.D5	
	4	X2521. 5	H-S5 5	3.D5	
	PE				
GAMAFLEX 5G1.5JZ	253	E1	PROV		
	1	X2531. 9	H-S6 1	3.D7	
	2	X2531. 10	H-S6 2	3.D7	
	3	X2531. 4	H-S6 3	3.D7	
	4	X2531. 5	H-S6 5	3.D7	
	PE				
GAMAFLEX 5G1.5JZ	254	E1	PROV		
	1	X2541. 9	H-S7 1	3.D8	
	2	X2541. 10	H-S7 2	3.D8	
	3	X2541. 4	H-S7 3	3.D9	
	4	X2541. 5	H-S7 5	3.D9	
	PE				

## CABLE WIRING KAAPELILISTA

## HM023859+TR1 50Hz, 415//115V

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28.09.2012	KHF	jallabh	-	HM023859	5( 8)
Cable specification Kaapelin tyyppi	Cable no. Johdin	From Mistä	To Mihin	Sheet S.viite	
WIRES IN TUBE	33A		TR1		
	PE	PE	A-M1 GND1	5.B7	
	BK1	A-K4 R1	X33A 1	5.B6	
	BK2	A-K4 R3	X33A 2	5.B6	
	BK3	A-K2 6	X33A 3	5.B7	
	BK4	A-K1 2	X33A 4	5.B5	
	BK5	A-K4 1	X33A 5	5.B5	
	BK6	A-K4 3	X33A 6	5.B5	
	BK7	A-G7 -	X33A2. 7	5.B8	
	BK8	A-G7 +	X33A2. 8	5.B8	
	RD1	A-F7 23	A-S1 112	7.C5	
	RD2	A-A2 2	A-S1 211	7.D4	
	RD3	X32A2 4	A-S1 311	7.E7	
	RD4	A-A2 8	A-S1 312	7.D7	
	RD5	A-A2 1	A-S1 411	7.D5	
	RD6	X2A 53	A-S1 212	7.C4	
	RD7	X2A 54	A-M1 T2	7.C3	
	RD8	A-F7 13	A-M1 T1	7.B3	
	RD9				
	RD10				
	RD11				
	RD12				
A05VV-F8G2.5 / 8XAWG14	41E	E2A	TR1		
	1	X2A 37	X41E2. 1	9.B2	
	2	X2A 38	X41E2. 3	9.B2	
	3	X2A 39	X41E2. 2	9.B2	
	4	X2A 45	X41E2. 4	9.B3	
	5	X2A 46	X41E2. 5	9.B3	
	6				
	7				
	PE	PE	X41E2. PE	9.B1	
A05VV-F8G2.5 / 8XAWG14	42E	E2A	TR1		
	1	X2A 37	X42E2. 1	9.B2	
	2	X2A 38	X42E2. 2	9.B3	
	3	X2A 39	X42E2. 3	9.B3	
	4	X2A 46	X42E2. 4	9.B4	
	5	X2A 47	X42E2. 5	9.B4	
	6				
	7				
	PE	PE	X42E2. PE	9.B1	
INT.CABLE (3 WIRES)	355A	E2A	TR1		
	BK	X2A 53	A-S11 C	7.C4	
	BN	X2A 54	A-S11 NC	7.C4	
	RD				

## CABLE WIRING KAAPELILISTA

## HM023859+TR1 50Hz, 415//115V

Date/Päivä	Dept./Osasto	Designer/Suunn.	Issue/Versio	Order/Tilaus	Page/Sivu
28.09.2012	KHF	jallabh	-	HM023859	6 ( 8 )
Cable specification Kaapelin tyyppi	Cable no. Johdin	From Mistä	To Mihin	Sheet S.viite	
INT.CABLE (4+SRN WIRE)	356A	E2A	TR1		
	BK	A-A3 1	A-B1 BK	6.B3	
	BN	A-A3 4	A-B1 BN	6.B3	
	OG	A-A3 3	A-B1 OG	6.B3	
	RD	A-A3 2	A-B1 RD	6.B3	
	SRN	A-A3 OFF	A-B1 SRN	6.B3	

## CABLE WIRING KAAPELILISTA

## HM023859+W2A 50Hz, 415//115V

Date/Päivä	Dept./Osasto	Designer/Suunn.	Issue/Versio	Order/Tilaus	Page/Sivu
28.09.2012	KHF	jallabh	-	HM023859	7( 8)
Cable specification Kaapelin tyyppi	Cable no. Johdin	From Mistä	To Mihin	Sheet S.viite	
H07VVH6-F4G10	31A	E1	E2A		
	1	X31A1. 1	X31A2. 1	5.C1	
	2	X31A1. 2	X31A2. 2	5.C1	
	3	X31A1. 3	X31A2. 3	5.C2	
	PE	X31A1. PE	X31A2. PE	5.C2	
H07VVH2-F12G1,5	32A	E1	E2A		
	1	X32A1. 1	X32A2. 1	7.F2	
	2	X32A1. 2	X32A2. 2	7.E4	
	3	X32A1. 3	X32A2. 3	7.E5	
	4	X32A1. 4	X32A2. 4	7.E7	
	5	X32A1. 5	X32A2. 5	7.E8	
	6	X32A1. 6	X32A2. 6	7.E9	
	7	X32A1. 7	X32A2. 7	7.E10	
	8	X32A1. 8	X32A2. 8	7.E10	
	9	X32A1. 9	X32A2. 9	7.A2	
	10	X32A1. 16	X32A2. 16	7.E9	
	11				
	PE	X32A1. PE	X32A2. PE	7.E10	

## CABLE WIRING KAAPELILISTA

## HM023859+W3 50Hz, 415//115V

Date/Päivä	Dept. /Osasto	Designer/Suunn.	Issue/Versio	Order/Tilaus	Page/Sivu
28.09.2012	KHF	jallabh	-	HM023859	8 ( 8 )
Cable specification Kaapelin tyyppi	Cable no. Johdin	From Mistä	To Mihin	Sheet S.viite	
H05VVH6-F18G1,0	52	E1	E3		
	1	X521. 1	X512. 1	11.E9	
	2	X521. 2	X512. 2	11.E2	
	3	X521. 3	X512. 3	11.B9	
	4	X521. 4	X512. 4	11.B10	
	5	X521. 5	X512. 5	11.E3	
	6	X521. 6	X512. 6	11.B7	
	7	X521. 7	X512. 7	11.B7	
	8	X521. 8	X512. 8	11.B8	
	9	X521. 9	X512. 9	11.B3	
	10	X521. 10	X512. 10	11.B3	
	11	X521. 11	X512. 11	11.B4	
	12	X521. 12	X512. 12	11.B9	
	13	X521. 13	X512. 13	11.B5	
	14	X521. 14	X512. 14	11.B5	
	15	X521. 15	X512. 15	11.B6	
	16				
	17				
	PE	X521. PE	X512. PE	11.E1	

## PARAMETERLIST PARAMETRILISTA

## HM023859 50Hz, 415//115V

Date/Päivä 28.09.2012	Dept./Osasto KHF	Designer/Suunn. jallabh	Issue/Versio -	Order/Tilaus HM023859	Page/Sivu 1( 1)
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### Parameters for CONTROL PRO A-A2

3-2-1	Load 1	0.00	4-7-1	Load Meas.	Sens.
3-2-10	Mlf2	0.000	4-7-10	C1f	0.000
3-2-2	Mhs1	0.00	4-7-11	C2f	0.000
3-2-3	Mhf1	0.000	4-7-12	ki	0.000
3-2-4	Mls1	0.000	4-7-13	Acc-t slow	0.2
3-2-5	Mlf1	0.000	4-7-14	Acc-t fast	0.3
3-2-6	Load 2	0.000	4-7-2	Load rate%	10
3-2-7	Mhs2	0.000	4-7-3	R0f	0.000
3-2-8	Mhf2	0.000	4-7-4	R0s	0.000
3-2-9	Mls2	0.000	4-7-5	T0	0.000
3-4-1	Load 1	15	4-7-6	TEMP_SLOW	T1
3-4-2	Input 1	4.00	4-7-7	TEMP_FAST	T2
3-4-3	Load 2	0	4-7-8	C2f	0.000
3-4-4	Input 2	2.13	4-7-9	C2s	0.000
3-5	OL protect	0	4-8	Hoist ctrl	2-SP
4-1-1	MF11 oper.	NU	4-9-1	SR select	No
4-1-2	MF11 IntL	15	4-9-2	Load limit	1.5
4-1-3	MF11 20LL	1	5-1-1	S run time	12500
4-1-4	MF11 CintL	15	5-1-2	S starts	42M000
4-10-1	OT run ?	No	5-1-3	S SWP	0
4-10-2	OT limit	150	5-1-4	S Br SWP%	0
4-10-3	Supply sup	Yes	6-1	Hoist name	A
4-11-1	Hoist cnt	1	6-10	D SRT3	1600
4-11-2	Run sup.	No	6-11	D SRT8	1600
4-11-3	B OL	No	6-12	D SL3	64000
4-11-4	B nom load	15	6-13	D SL8	64000
4-2-1	MF12 oper.	NU	6-14	MaxST MF11	3M000
4-2-2	MF12 IntL	15	6-15	MaxRT MF11	12500
4-2-3	1+2 IntL	15	6-16	MaxST MF12	3M000
4-2-4	MF12 20LL	1	6-17	MaxRT MF12	12500
4-2-5	MF12 CintL	15	6-18	Max Br	1M000
4-2-6	1+2 CintL	15	6-19	MaxControl	640k0
4-3-1	ROUT oper.	OL	6-2	#####	0
4-3-2	ROUT Logic	Norm	6-20	Passwd	4261
4-3-3	ROUT LoadX	15	6-3	Class	5
4-3-4	TempX meas	T1	6-4	Nom. Load	15
4-3-5	TempX lim	100	6-5	Nominal ED	60
4-4-1	T1 operat.	NU	6-6	Sp ratio	6
4-5-1	T2 operat.	NU	6-7	Max ST	3M000
4-6-1	AOUT oper.	SOLO	6-8	Max E-stop	5000
4-6-2	Zero load	2.000	6-9	Max RT	12500
4-6-3	Nom. load	8.000			

### Parameters for DynADrive 022 H-A1

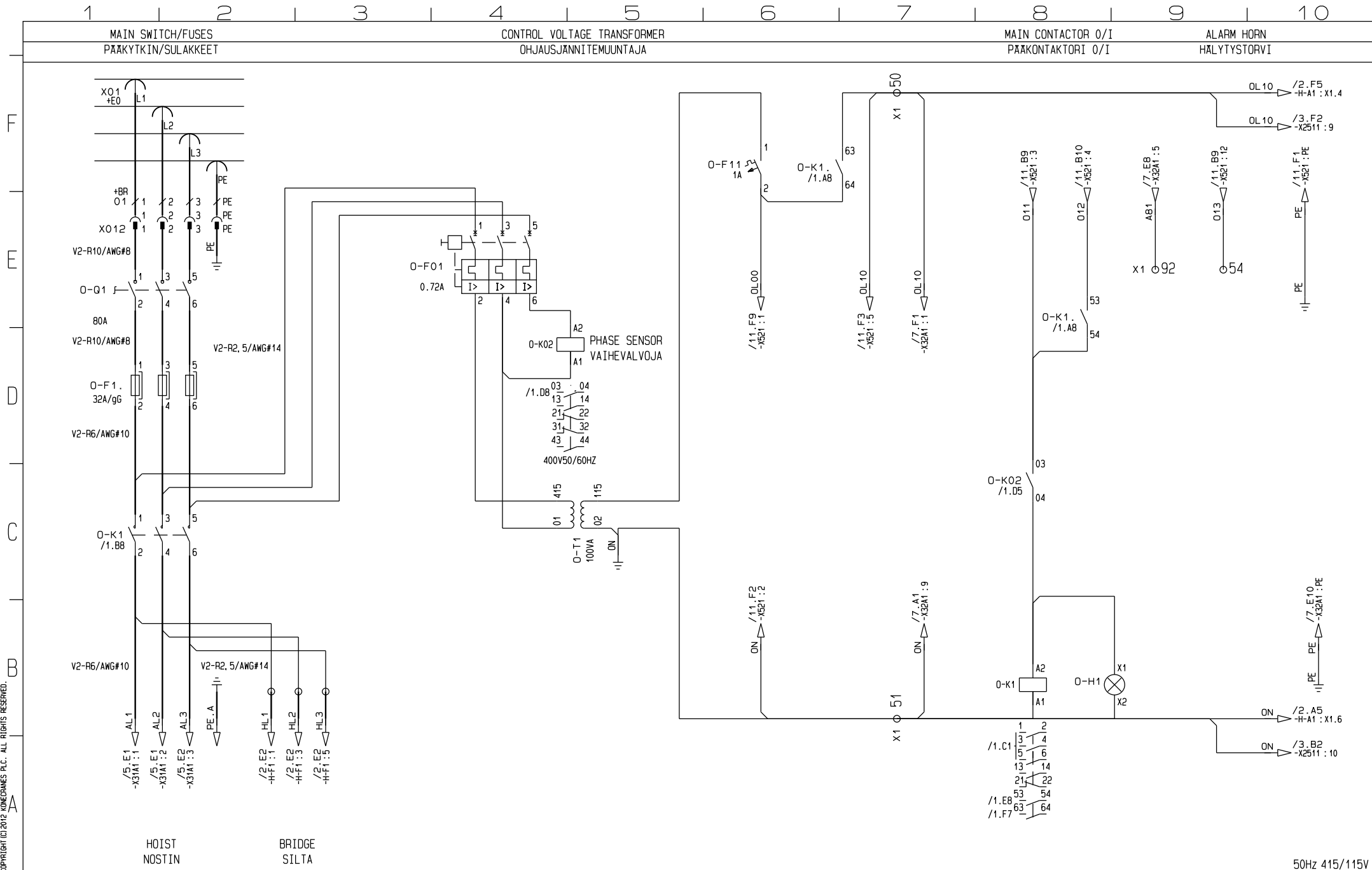
S1 0100  
S2 0110  
S3 1001  
S4 1001  
S5 1100  
S6 0000

### Parameters for DynADrive 022 E-A1

S1 0111  
S2 0111  
S3 1001  
S4 0010  
S5 1100  
S6 0000



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50Hz 415/115V

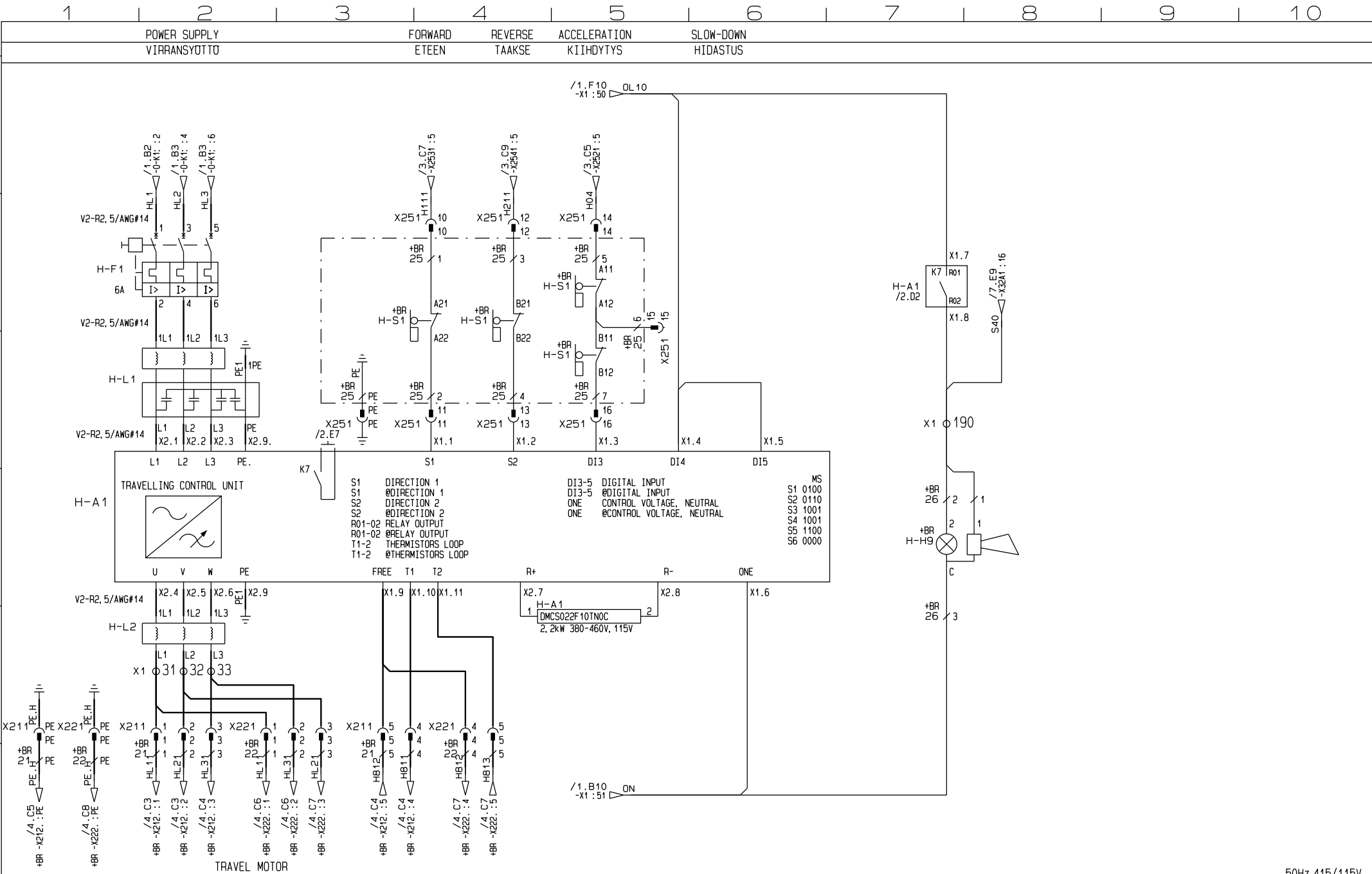
V2-R1, 5/ANG#16 WIRING (UNLESS OTHERWISE MENTIONED)  
JOHDOTUS (ELLEI TOISIN MAINITTU)

REPLACE KORVAA	REG. KIRJ.	PROJECT PROJEKTI	024477-48	A3
REPLACED KORVATTU	CHD. TARK.	TITLE NIMITYS	POWER SUPPLY	M-FILM M-FILMI
	DESIGN. SUUNN.	VIRRANSYÖTÖ		E1
	DRN. JYVÄSKYLÄ SAK	ORDER NBR PROJEKTI NRO.	HM023859	SHEET/NEXT SHEET SIVU/SEURAAVA SIVU
	OSASTO KHF	DRAWING NBR PIIRUSTUS NRO.	HM023859-	TOTAL (14)
				ISSUE MUUTOSTILA

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ISSUE M-TILA	REVISION MUUTOS	DATE PVM.	DRN. MUUT.	M-FILM M-FILMI
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ISSUE M-TILLA	REVISION MUUTOS	DATE PVM.	DRN. MUUT.	M-FILM M-FILMI

REPLACE KORVAA		REG. KIRJ.
REPLACED KORVATTU		APPD. HYV.
DESIGN. SUUNN.	jallabh	
DRN. SUUNN.	BSU	
	PVM. 120927	

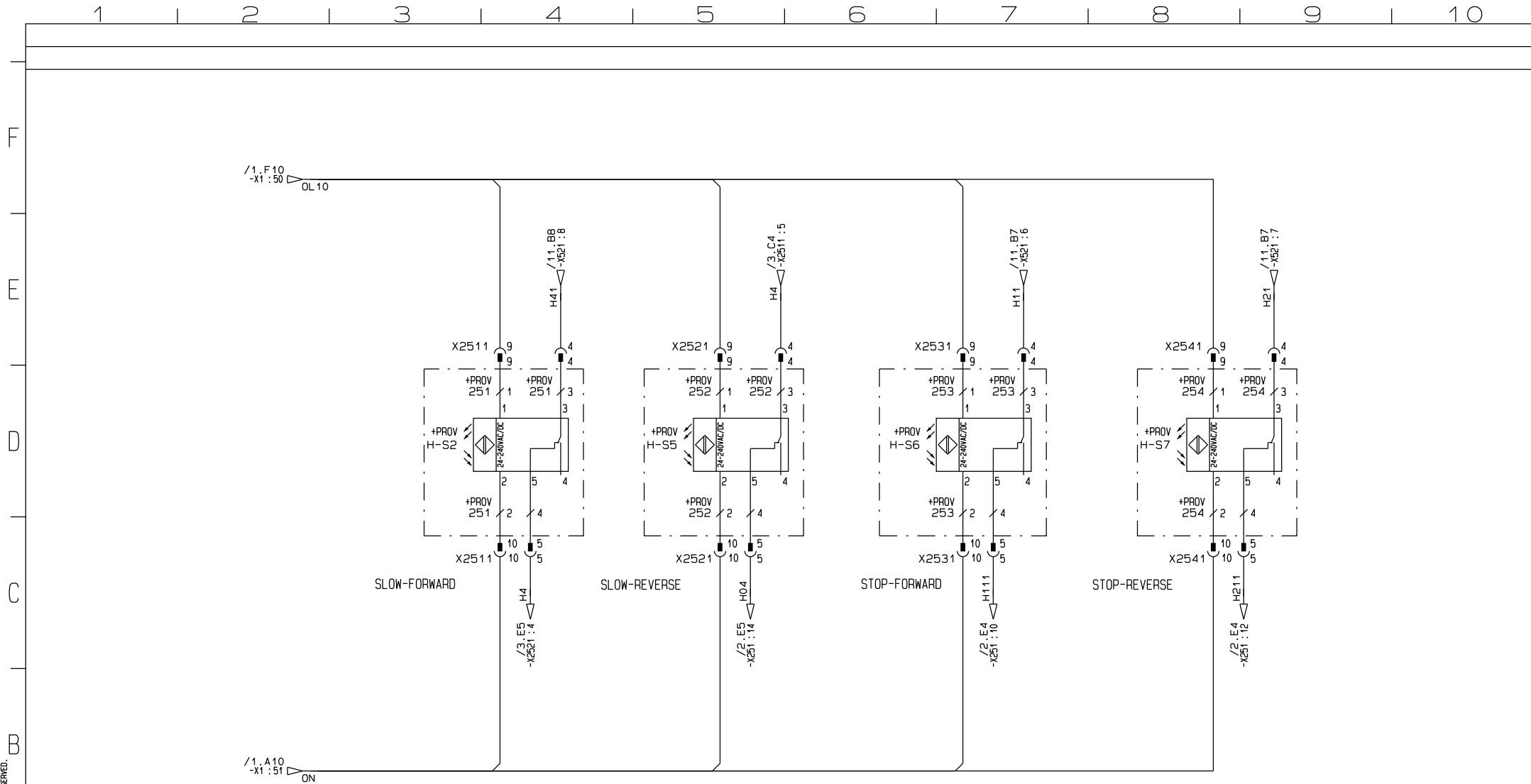
PROJECT PROJEKTI	024477-48		A3
TITLE NIMITYS	BRIDGE SILTA		M-FILM M-FILMI
			E1
ORDER NBR PROJEKTI NRO.	HM023859	DRAWING NBR PIIRUSTUS NRO.	HM023859-
		SHEET/NEXT SHEET SIVU/SEURAAVA SIVU	TOTAL MUUTOSTILIA
		2/	(14)

50Hz 415/115V

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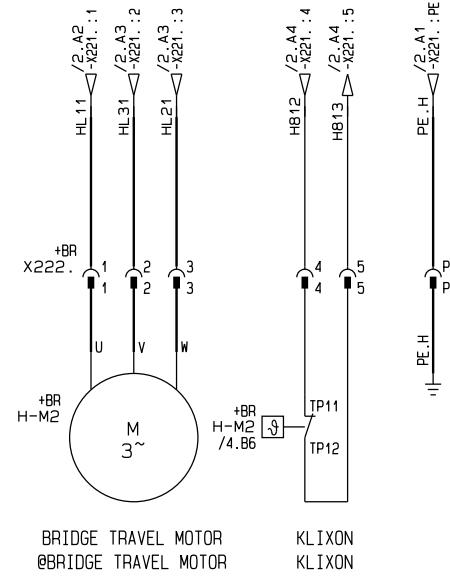
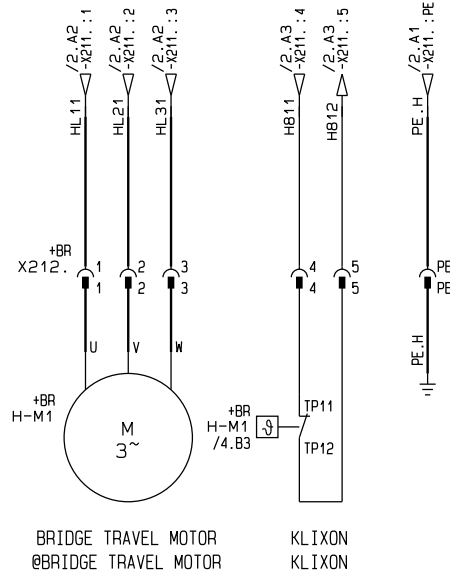
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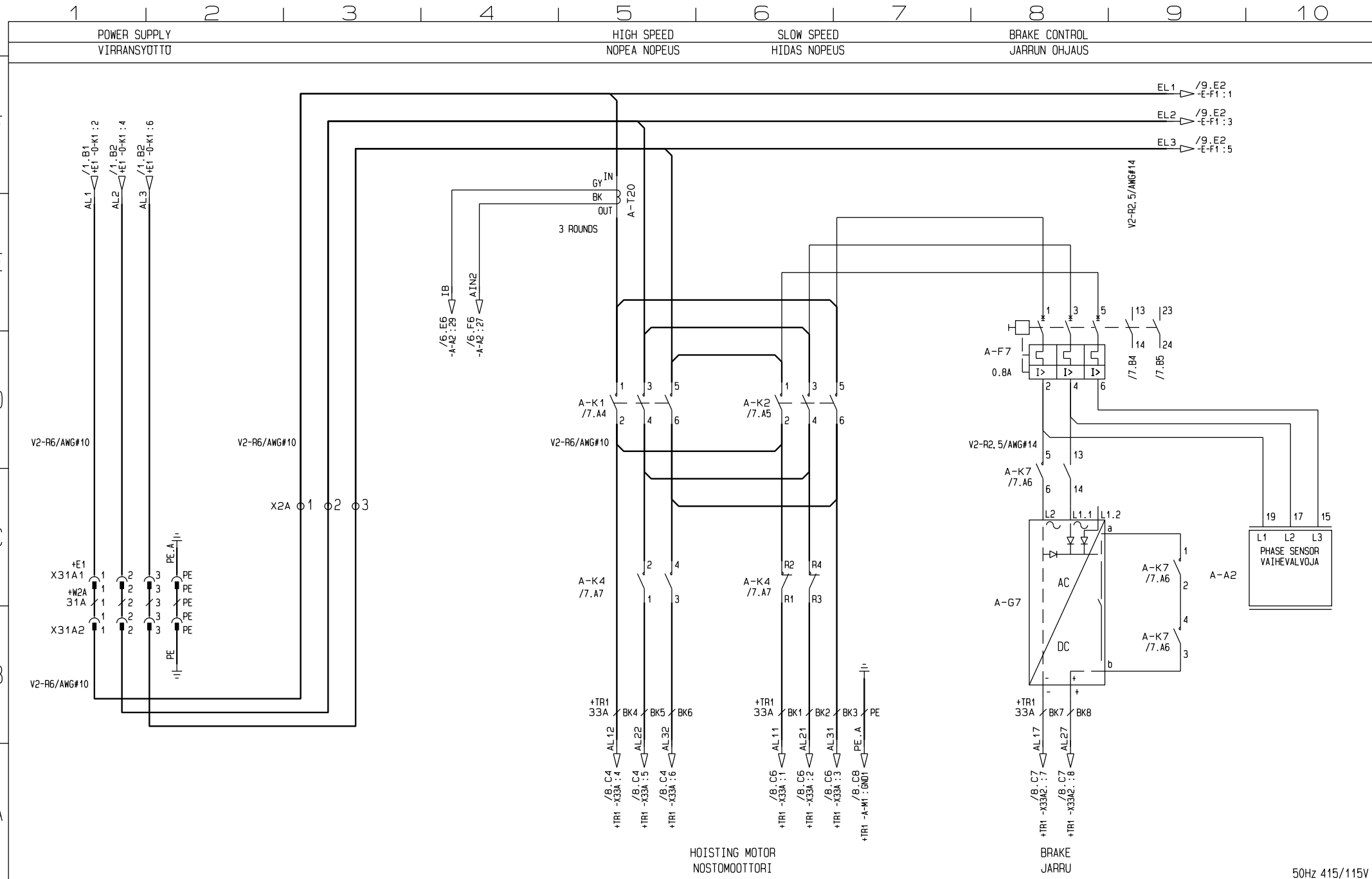
ISSUE M-TILLA	REVISION MUUTOS	DATE PVM.	DRN. MUUTT.	M-FILM M-FILMI	REPLACE KORVAA	REPLACED KORVATTU	DESIGN. SUUNN.	DRN. M-FILM	REG. KIRJ.	APPD. HYV.	PROJECT PROJEKTI	024477-48	A3	
					DESIGN. SUUNN.	jallabh		REG. KIRJ.	APPD. HYV.		TITLE NIMITYS	BRIDGE	E1	
					TITLE NIMITYS	SILTA		ORDER NBR PROJEKTI NRO.	HM023859		DRAWING NBR PIIRUSTUS NRO.	HM023859-		SHEET/NEXT SHEET SIVU/SEURAAVA SIVU
					DRN. M-FILM	OSASTO KHF		DATE PVM.	120927		ORDER NBR PROJEKTI NRO.	HM023859		
					<a href="https://crane-manuals.com">https://crane-manuals.com</a>						SHEET/NEXT SHEET SIVU/SEURAAVA SIVU		TOTAL	14
											ISSUE MUUTOSTILIA			

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ISSUE M-TILLA	REVISION MUUTOS	DATE PVM.	DRN. MUUT.	M-FILM M-FILMI	REPLACE KORVAVA	REPLACED KORVATTU	DESIGN. SUUNN.	DRN. SUUNN.	REG. KIRJ.	APPD. HYV.	PROJECT PROJEKTI	PROJECT NBR. PROJEKTI NRO.	DRAWING NBR. PIIRUSTUS NRO.	SHEET/NEXT SHEET SIVU/SEURAAVA SIVU	TOTAL Yhteensä	ISSUE MUUTOSTILIA	
							CHD. TARK.	jallabh			024477-48	HM023859	HM023859-	E1	(14)	A3	
					<a href="https://crane-manuals.com">https://crane-manuals.com</a>		DRN. SAK OSASTO KHF		DATE 120927		ORDER NBR. PROJEKTI NRO.		SHEET/NEXT SHEET SIVU/SEURAAVA SIVU		TOTAL Yhteensä		ISSUE MUUTOSTILIA
					50Hz 415/115V		REG. KIRJ.		APPD. HYV.		TITLE NIMITYS		PROJECT NBR. PROJEKTI NRO.		DRAWING NBR. PIIRUSTUS NRO.		SHEET/NEXT SHEET SIVU/SEURAAVA SIVU

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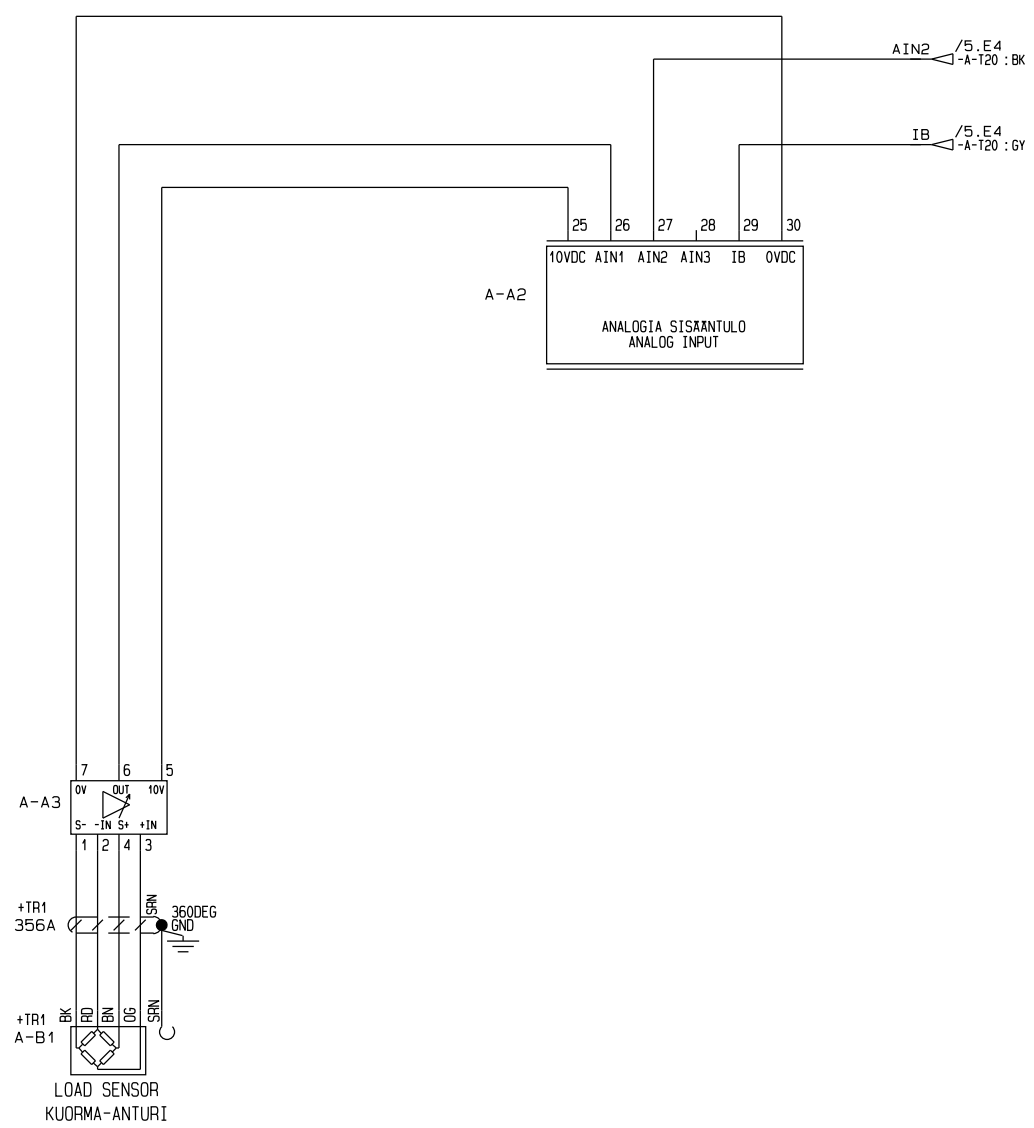


ISSUE M-TILIA	REVISION MUUTOS	DATE PVM.	DRN. MUUT.	M-FILM M-FILMI
V2-R1, 5/ANG#16 WIRING (UNLESS OTHERWISE MENTIONED) JOHDOTUS (ELLEI TOISIN MAINITTU)				

REPLACE KORVAA	REG. KIRJ.	PROJECT PROJEKTI	50Hz 415/115V
REPLACED KORVATTU	APPD. HYV.	TITLE NIMITYS	A3
DESIGN. SUUNN.	DRN. OSASTO	PROJECT NOSTO	E2A
DESIGNER: jallabh		ORDER NBR PROJEKTI NRO.	TOTAL
DRAWN: MKT		HM023859	ISSUE
CHECKED: KHF		HM023859-	MUUTOSTILA
DATE: 120927		5/ (14)	

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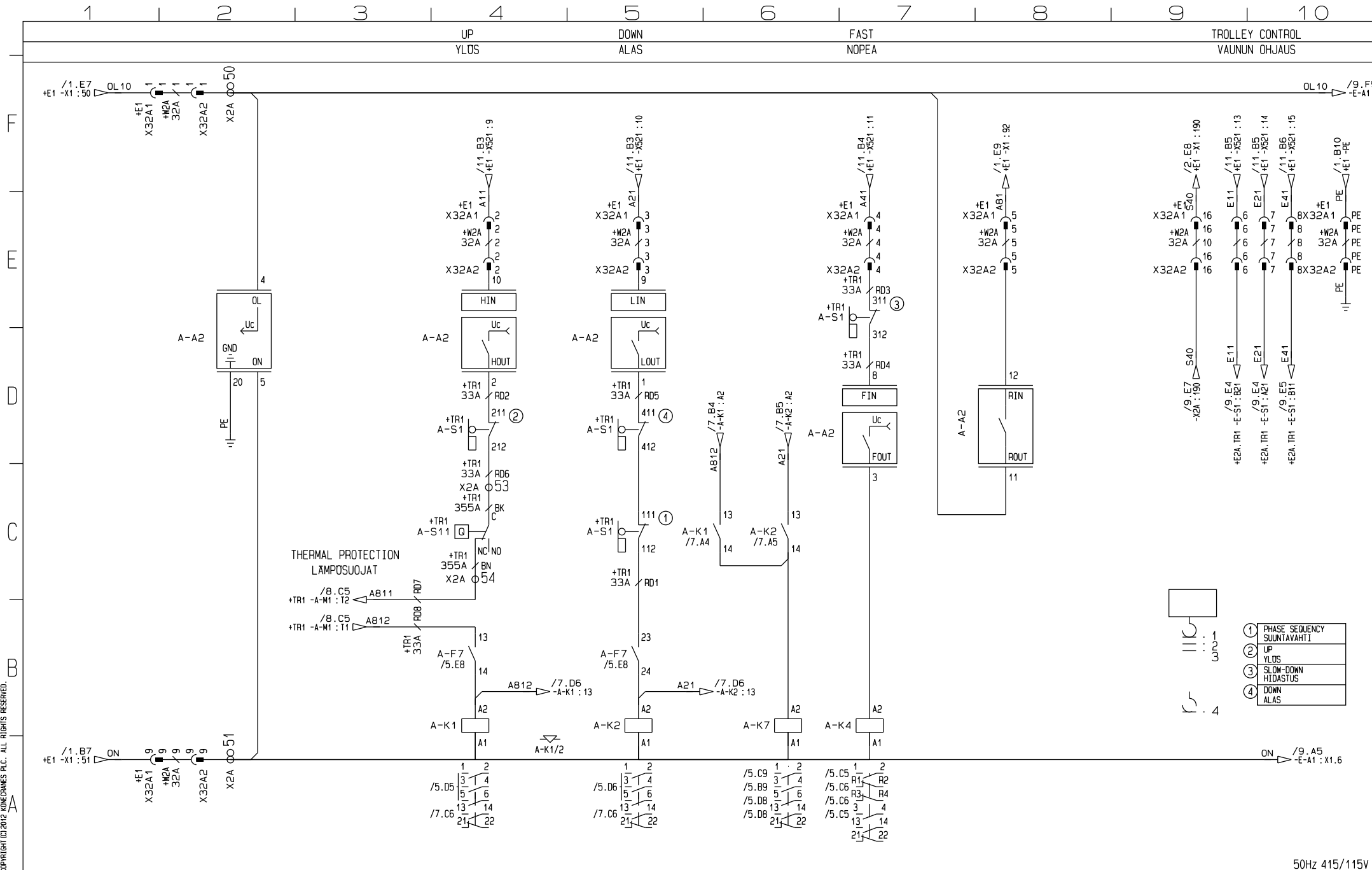
50Hz 415/115V

REPLACE KORVAVA		REG. KIRJ.	PROJECT 024477-48	A3
REPLACED KORVATTU	CHD. TARK.	APPD. HYV.	TITLE HOISTING	M-FILM M-FILMI
	DESIGN. SUUNN.	jallabh	NOSTO	E2A
	DRN. MKT		ORDER NBR HM023859	ISSUE MUUTOSTILA
	DRN. KHF	DATE 120927	PROJECTI NRO. HM023859-	TOTAL (14)
	OSASTO		DRAWING NBR P11RUSTUS NRO. HM023859-	SHEET/NEXT SHEET SIVU/SEURAAVA SIVU 6/ (14)

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ISSUE M-TILLA	REVISION MUUTOS	DATE PVM.	DRN. MUUTT.	M-FILM M-FILMI
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CID  
 A-P 1  
 CLA  
 CLB

REPLACE KORVAVA	REG. KIRJ.	PROJECT 024477-48	50Hz 415/115V
REPLACED KORVATTU	APPD. HYV.	TITLE HOISTING	A3
DESIGN. SUUNN.	DESIGN. SUUNN. jallabh	NOSTO	E2A
DRN. PAKET. OSASTO	DRN. PAKET. OSASTO KHF	ORDER NBR. PROJEKTI NRO. HM023859	SHEET/NEXT SHEET PIIIRUSTUS NRO. HM023859-
DATE PVM.	DATE PVM. 120927	DRAWING NBR. PIIIRUSTUS NRO. HM023859-	TOTAL (14)

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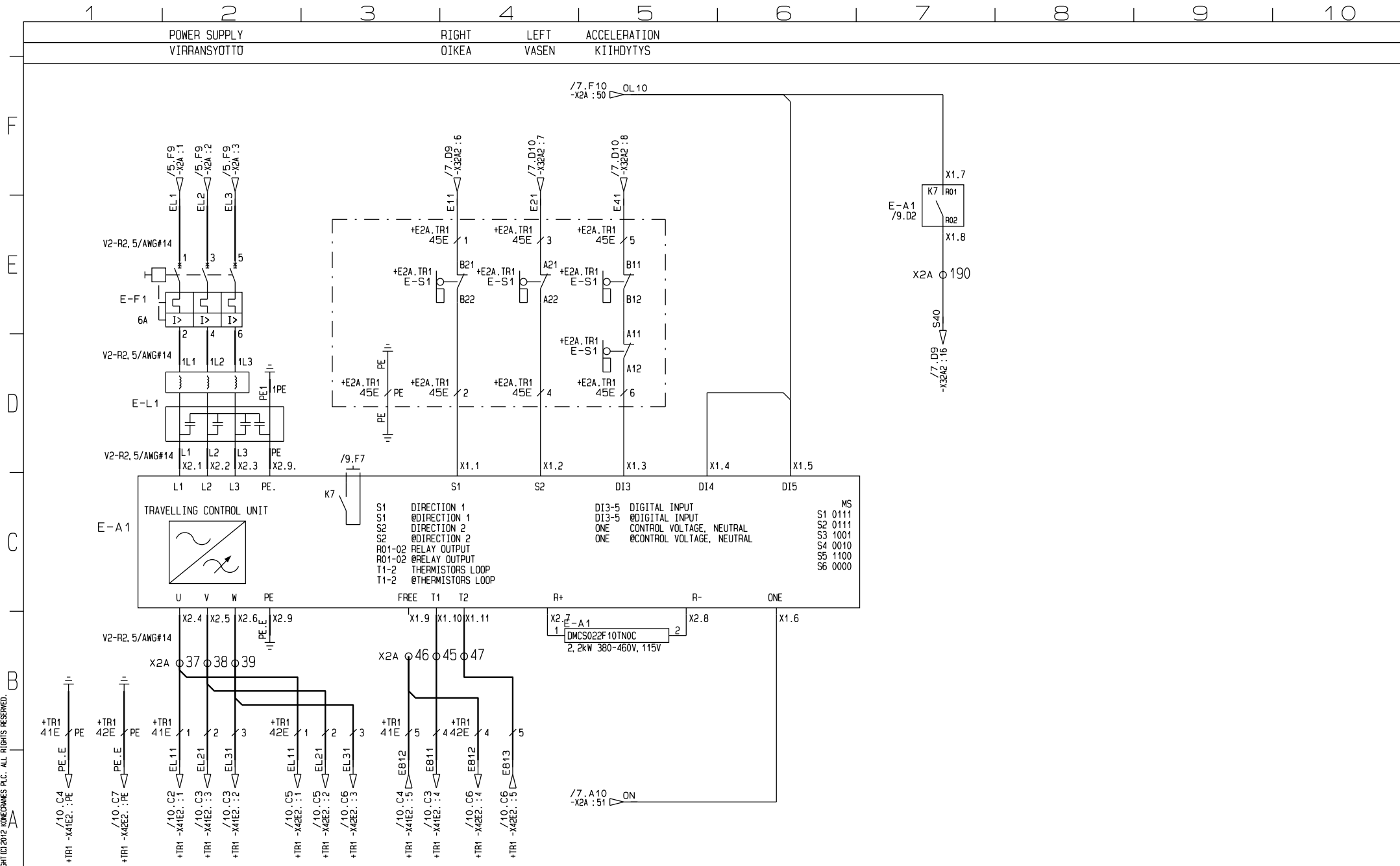
ISSUE M-TILA	REVISION MUOTOS	DATE PVM.	DRN. MUUTT.	M-FILM M-FILMI
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- ① PHASE SEQUENCY SUUNTAVAHTI
- ② UP YLOS
- ③ SLOW-DOWN HIDASTUS
- ④ DOWN ALAS





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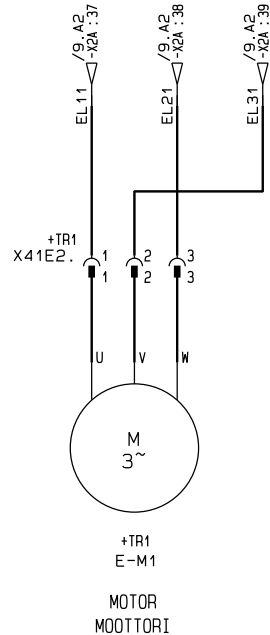
S1	DIRECTION 1	DI3-5	DIGITAL INPUT	MS
S4	ØDIRECTION 1	DI3-5	ØDIGITAL INPUT	S1 0111
S2	DIRECTION 2	ONE	CONTROL VOLTAGE, NEUTRAL	S2 0111
S5	ØDIRECTION 2	ONE	ØCONTROL VOLTAGE, NEUTRAL	S3 1001
R01-02	RELAY OUTPUT			S4 0010
R01-02	ØRELAY OUTPUT			S5 1100
T1-2	THERMISTORS LOOP			S6 0000
T1-2	ØTHERMISTORS LOOP			

REPLACE KORVAA	REG. KIRJ.	PROJECT	024477-48	A3
REPLACED KORVATTU	CHD. TARK.	TITLE	TROLLEY CONTROL	N-FILM
	DESIGN. SUUNN.	PROJECTI NIMITYS	VAUNUN OHJAUS	M-FILMI
	DRN. MMT		E2A	
	OSASTO KHF	ORDER NBR	HM023859	
	PVM. 120927	PROJECTI NRO.	HM023859-	
		DRAWING NBR	HM023859-	
		P11RUSTUS NRO.		
		SHEET/NEXT SHEET	9/ (14)	
		SIVU/SEURAAVA SIVU		
		TOTAL		
		ISSUE		
		MUUTOSTILA		

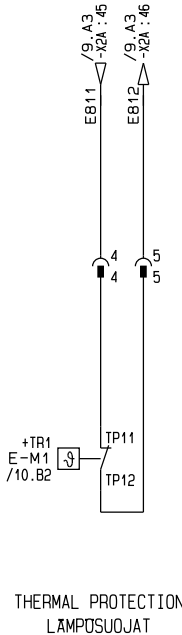
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50Hz 415/115V

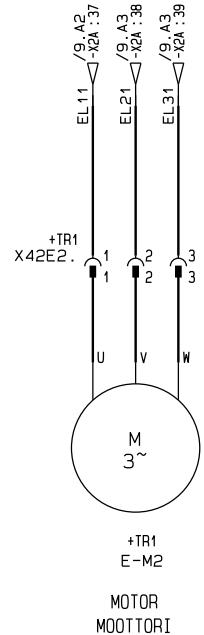
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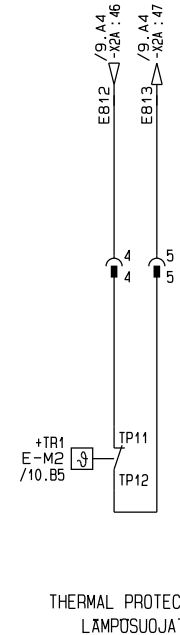
MOTOR MOOTTORI



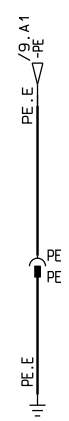
THERMAL PROTECTION LAMPUSUOJAT



MOTOR MOOTTORI



THERMAL PROTECTION LAMPUSUOJAT



CABLE LENGTHS OF TROLLEY MOTORS  
VAUNUN SIIRTOMOOTTOREIDEN KAAPELEIDEN PITUUDET

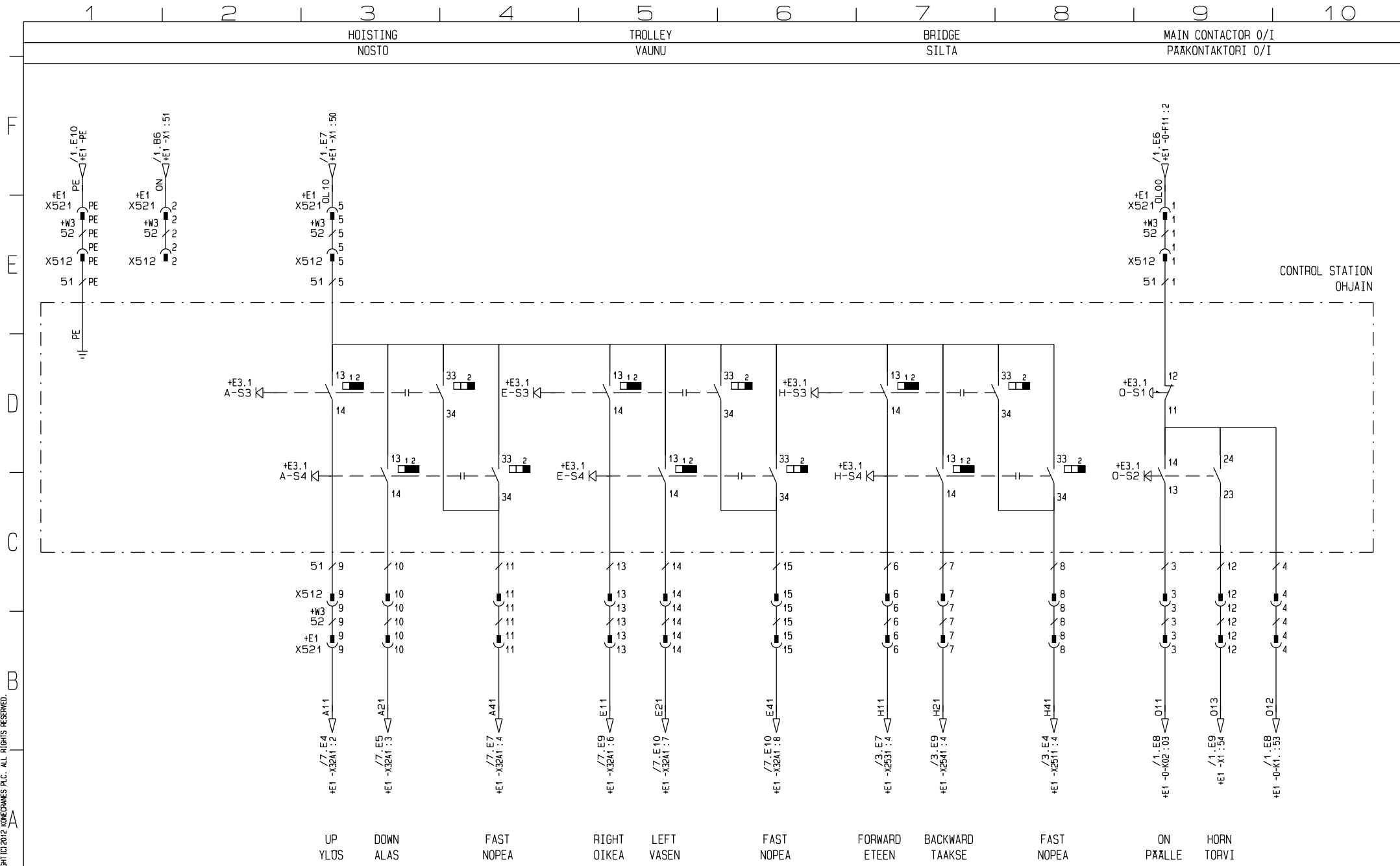
1500mm  
4100mm

ISSUE M-TILLA	REVISION MUUTOS	DATE PVM.	DRN. MUUTT.	M-FILM M-FILMI	REPLACE KORVAA	REPLACED KORVATTU	DESIGN. SUUNN.	DRN. PVM.	REG. KIRJ.	APPD. HYV.	PROJECT PROJEKTI	024477-48	A3
					DESIGN. SUUNN.	jallabh	DRN. PVM.	TNE	REG. KIRJ.	APPD. HYV.	TITLE NIMITYS	TROLLEY STEPLESS	E2A
					DRN. PVM.	OSASTO KHF	DATE PVM.	120927	PROJECT NRO.	HM023859	PROJECT NRO.	HM023859-	SHEET/NEXT SHEET SIVU/SEURAAVA SIVU
					ORDER NBR	HM023859	DRAWING NBR	HM023859-			50Hz 415/115V		ISSUE MUUTOSTILA

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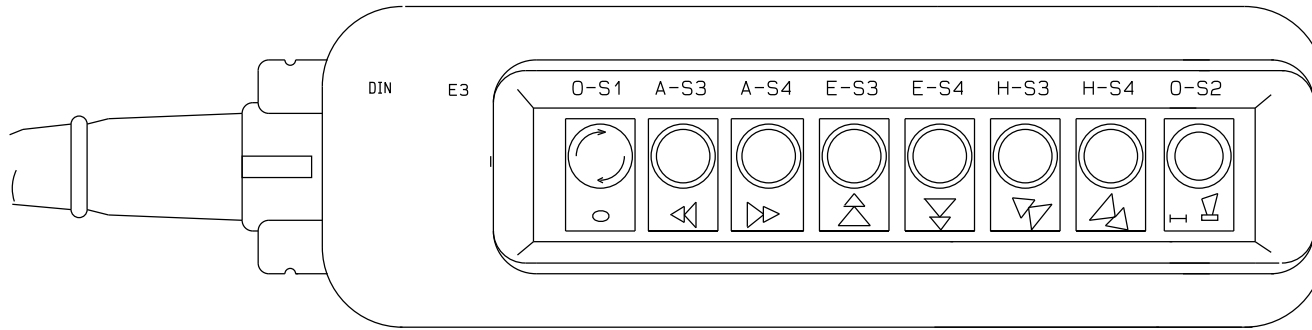
V2-R1, 5/ANG#16 WIRING (UNLESS OTHERWISE MENTIONED)  
JOHDOTUS (ELLEI TOISIN MAINITTU)

REPLACE KORVAA	REG. KIRJ.	PROJECT PROJEKTI	024477-48	A3
REPLACED KORVATTU	CHD. TARK.	TITLE NIMITYS	PENDANT PUSH-BUTTON CONTROL STATION	M-FILM M-FILMI
	DESIGN. SUUNN.	PAINIKEOHJAIN		E3
	DRN. SAK	ORDER NBR PROJEKTI NRO.	HM023859	SHEET/NEXT SHEET SIVU/SEURAAVA SIVU
	OSASTO KHF	DRAWING NBR PIIRUSTUS NRO.	HM023859-	TOTAL (14)
	DATE PVM.			ISSUE MUUTOSTILA
	DRN. MUUTT.			
	M-FILM M-FILMI			

50Hz 415/115V

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50Hz 415/115V

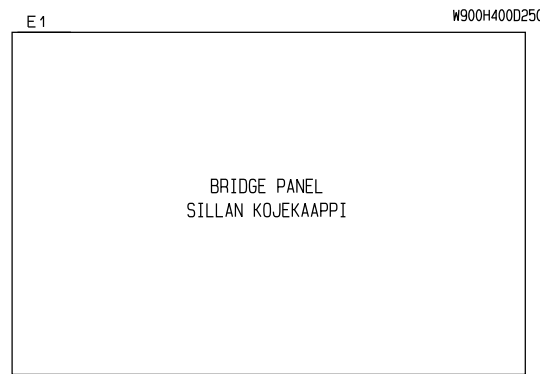
REPLACE KORVAA		REG. KIRJ.		PROJECT PROJEKTI	024477-48		A3
REPLACED KORVATTU	CHD. TARK.	APPD. HYV.		TITLE NIMITYS	PENDANT PUSH-BUTTON CONTROL STATION		M-FILM M-FILMI
	DESIGN. SULUNN.				PAINIKEOHJAIN		E3
	DRN. SAK	DATE PVM.		ORDER NBR PROJEKTI NRO.	HM023859	DRAWING NBR PIIRUSTUS NRO.	HM023859-
	OSASTO KH	DATE PVM.	120927			SHEET/NEXT SHEET SIVU/SEURAAVA SIVU	TOTAL (14)
ISSUE M-TILLA	REVISION MUUTOS	DATE PVM.	DRN. MUUTT.	M-FILM M-FILMI			ISSUE MUUTOSTILA

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50Hz 415/115V

REPLACE KORVAA		REG. KIRJ.		PROJECT PROJEKTI		024477-48		A3	
REPLACED KORVATTU		CHD. TARK.	APPD. HYV.	TITLE NIMITYS		BRIDGE PANEL		M-FILM M-FILMI	
		DESIGN. SUUNN.		SILLAN KOJEKAAPPI		E1			
		jallabh		ORDER NBR PROJEKTI NRO.		DRAWING NBR PIIRUSTUS NRO.		SHEET/NEXT SHEET SIVU/SEURAAVA SIVU	
		DRN. SAK		HM023859		HM023859-		TOTAL (14)	
		OSASTO KH		DATE PVM.		120927		ISSUE MUUTOSTILA	

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ISSUE M-TILLA	REVISION MUUTOS	DATE PVM.	DRN. MUUTT.	M-FILM M-FILMI
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ISSUE M-TILLA	REVISION MUUTOS	DATE PVM.	DRN. MUUTT.	M-FILM M-FILMI	<b>KONECRANES</b> <a href="http://Cranemanuals.com">http://Cranemanuals.com</a>	REPLACE KORVAA		REG. KIRJ.	PROJECT PROJEKTI 024477-48	TITLE NIMITYS HOIST PANEL NOSTIMEN KOJETAULU	E2A	SHEET/NEXT SHEET SIVU/SEURAAVA SIVU 14 / ( 14 )	TOTAL ( 14 )	ISSUE MUUTOSTILA
						REPLACED KORVATTU	CHD. TARK.	APPD. HYV.						
						DESIGN. SUUNN.	jallabh		DRN. PVM. OSASTO KHF	BSU DATE PVM. 120927	COPY KAKSOISKAPALE			