



# FP9000

Part list

# LAB.GRUPPEN

For safety critical components please contact Labgruppen for the right manufacturer							
Item number	Safety critical	Item name	Replaces	Designator	Service level		
Power Supply		See restriction <a href="#">nr3</a> on how to find our item names			1	2	3
SMPS-A13-F02		SMPS-A13-F02 FCT	Replaces all SP130FXXX type F02 (see restriction <a href="#">nr1</a> and <a href="#">nr2</a> ) because of compatibility problems with the MIS board and deviations between 115V and 230V amps				X
SMPS-A13-F02		SMPS-A13-F02 FCT	Replaces all SP140FXXX type F02 ( <a href="#">see restriction nr1</a> ) because of deviations between 115V and 230V amps				X
T13KWF200VPM8770		Transformer 13kW flyback 200V core pm8770	<a href="#">See restriction nr7 for new mounting instructions</a>	K1			X
TCET1102G		Ic Photocoupler Tcet1102g		U2,U3,U4			X
PWMF107a-F01		Pulse Width Modulator Flyback 1 Rev.07a Final Assembly Type 01		U1			X
FPMSA		Front Panel Magnetic Shield Type A					x
400uHETD29ST		Inductor 400uH Etd29gsp		L1			X
BC549C		Transistor Bipolar Signal Bc549c		Q5,Q9			X
BC559C		Transistor Bipolar Signal Bc559c		Q7			X
BYM26E		Diode Power Switch Bym26e		D2, D5			X
6n8250VMMK5		Capacitor Polyester 6n8 250V Mmk 5mm		C12			X
STTA3006PI		Diode Power Stta3006pi 600v Isolated Dop3i		D16, D17			X
5V6.4W2%		Diode Zener 5V6 .4W 2%		D12,D13,D23,D24,D26,D27			X
MPSA42		Transistor Bipolar Signal Mpsa42		Q8			X
MPSA92		Transistor Bipolar Signal Mpsa92		Q10			X
BYT30PI1000		Diode Power Byt30pi1000 Isolated		D3			X


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SGW25N120 12V.4W5%		Transistor Igbt Power Sgw25n120		Q1, Q2,Q3			X
		Diode zener 12V.4w 5%		D19, D25			X
15V1.3W5%		Diode Zener 15V 1.3W 5%		D4			X
PN4392		Transistor Jfet Signal Pn4392		Q6			X
1N4148		Diode Signal 1n4148		D21, D22			X
STTA1512PI		Diode Power Stta1512pi 1200v Isolated Dop3i		D6			X
<b>INPUT and OUTPUT</b>							
AICO208-F01-9K-T		AICO208-F01-9K-T FCT	Replaces all AICO2XXX type F01				X
K-TBP60RED90		Kit Terminal Binding Post 60A Red 90dg	See <a href="#">restriction nr8</a> on how to mount the binding post				X
K-TBP60BLK90		Kit Terminal Binding Post 60A Black 90dg	See <a href="#">restriction nr8</a> on how to mount the binding post				X
LM317FP		Ic Voltage Regulator Lm317 Full Pack		U405			X
PCSPCO1A5V		Relay Pcb Singel Pole Change Over 1a 5v		RE402			X
74HCT4051D		Ic 2-input AND gate 74AHCT1G08 TSSOP-5		U410			X
HEF4094BT+-		Ic Comparator Lm393D SOIC-8		U414			X
2N7002		Transistor MOSFET 2N7002 SOT-23		Q3, Q5, Q103, Q105, Q205, Q203, Q303,Q305			X
NE8FA-H		Connector Ethercon 8+1pole Female+jack 90dg					X
BAW56		Diode Double BAW56 SOT-23		D3, D103			X
BC847C		Transistor Bipolar Signal BC847C SOT-23		Q1, Q101			X
BC857C		Transistor Bipolar Signal BC857C SOT-23		Q2, Q102			X
NE5532D		IC Operational Amplifier NE5532D SOIC-8		U5, U6, U105, U106,			X
BZX84C24		BZX84C24		D406,			X
TIP122FP		Transistor Bipolar Darlington Power Tip122 Fullpack		Q401			X





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Amp Board							
A70TD05-F01-T		A70TD05-F01-T FCT	Replaces all A50TDXXX type F01 and A70TDXXX type F01				X
MJW21195		Transistor Bipolar Power Mjw21195 To-247		Q1, Q2, Q3,Q4,Q5, Q6			X
MJW1302		Transistor Bipolar Power Mjw1302a		Q7			X
MJW3281		Transistor Bipolar Power NJW3281 TO-3		Q11			X
MJW21196		Transistor Bipolar Power Mjw21196 To-247		Q12, Q13, Q14, Q15, Q16, Q17			X
STY60NK30Z		Transistor Mos Power Sty60nk30z		Q39, Q40, Q41, Q42			X
STTH1506DPI		Diode Power Stth1506dpi		D34, D37			X
PWMNATD-F01		Pwm Negative Side Amp. Class Td Final Assembly Type 01		U5			X
PWMPATD-F01		Pwm Positive Side Amp. Class Td Final Assembly Type 01		U6			X
MJE350I		Transistor Bipolar Signal Mje350 Insulated		Q8, Q18, Q19, Q24			X
MJE340I		Transistor Bipolar Signal Mje340 Insulated		Q9, Q10, Q20. Q31			X
15V1.3W5%		Diode Zener 15V 1.3W 5%		D14, D31, D40, D41			X
82R.6W1%		Resistor Metal Film 82r .6W 1%		R51, R19			X
1N5404		Diode Power 1n5404		D1, D10, D18, D27			X
BC549C		Transistor Bipolar Signal Bc549c		Q23, Q29, Q30, Q33, Q34, Q35, Q36, Q44, Q51			X
BC559C		Transistor Bipolar Signal Bc559c		Q22, Q25, Q27, Q28, Q32, Q45, Q50,			X
HCPL2601		Ic Photocoupler Hcpl2601		U3, U4			X
3V3.4W5%		Diode Zener 3V3 .4W 5%		D39, D43			X
Q4040K7		Triac Q4040K7		Q38			X
T20AH250-6.3x32		Fuse slow blow 20A 250V 10000A Ir 6,32x32mm		P2, P3			X

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Mains input filter							For 115V amps
MIS13003-F04-T		MIS13003-F04-T FCT	Replaces all MISXXX type F04 ( <a href="#">see restriction nr2</a> ) because of compatibility problems with the SP130 board			X	See below
PCSPNO40A18V		PC SPNO 40A 18V		RE1		X	
PCSPCO10A12V		PC SPCO 10A 12V		RE2		X	
56R9W5%B		Resistor Wire Wound 56r 9W 5% Type B		R2		X	See below
T30AH250-6.3x32		Fuse Slow Blow 30a 250v 400a Ir 6.3x32mm		P7		X	See below
<b>Chassis</b>							
IFPC-PBLK		Interior fron panel type c painted black					X
SPRB04-PBLK		Side Panel Right Type B, Rev.04 Painted Black					X
SPLB04-PBLK		Side Panel Left Type B, Rev.04 Painted Black					X
RFPF2I		Rear Panel Fp2-series Type I					X
EFPC-ANBLK		Exterior front panel type c anodised black					X
DCSRA04-PGRY		Dustfilter clip steel right type A rev.03 Painted Grey				x	
DCSLA04-PGRY		Dustfilter clip steel left type A rev.04 Painted Grey				x	

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<b>Mains input filter</b>							
MIS13003-F54-T		MIS13003-F54-T FCT	Replaces all MISXXX type F54 ( <a href="#">see restriction nr2</a> ) because of compatibility problems with the SP130F board				X
TBT4.5/6.3L31.5		Tube brass tinned 4,5/6,3 L31,5mm		P7			X
22R9W5%		Resistor wire wound 22r 9W5%		R2			X
PCSPNO40A18V		PC SPNO 40A 18V		RE1			X
PCSPCO10A12V		PC SPCO 10A 12V		RE2			X
MLUS30A3x12AWG2 m		Mains Lead Usa 30a Plug Type Nema L5-30p 3xawg12 2m Black					X
<b>Miscellaneous</b>							
KNBD10H16POS		Knob D10 H16 black push-on slot				x	
F80x25-24HSC		Fan 80x80x25mm 24VDC high speed type C					X
B580x523x150LAB3		Box 580x523x150mm type 0427 Cardboard White Lab.gruppen 3			X		
IBA		Interior Box type A 570x119x45mm			X		
SRPFP9000-230C		Sticker Rear Panel FP9000 230V CE				x	
OM-FP+		Operation Manual for FP+ series			X		
MLEU3x1.52mBLK		Mains Lead Eu Plug Type Cee7/vii 3x1.5mm2 2m Black					X
PEPPCA		Packing EPP Corner type A			X		
UI12Lx206a-F01		User Interface 12Lx2 rev06 vers.a Final Assembly type 01					X
SRPFP9000-115E		Sticker Rear Panel FP9000 115V ETL Certified				x	
POT2B04		Pcb Potentiometer Board 2ch Type B rev.04					X
MH2x41ML		Mounting Header 2x4pole 1module Locking					X

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VR10KLIN31HSBF		Pot 10k Lin 31step Horizontal Support Bracket Flatted shaft					X
M6MM9x2B		Mutter M9x2 typ B Del av VR10KLIN31HSBF					X
BRB9.8x15x.5		Planbricka 9.8x15x.5 Del av VR10KLIN31HSBF					X
SLABL03		Sticker Lab.gruppen Logotype rev.03			X		
SCAFCCMBGD		Sticker Caution Approvals FCC Must Be Grounded Type D					x
MLUS20A3x12AWG2m		Mains Lead Usa 20a Plug Type Nema 6-20p 3xawg12 2m Black					x
SMSFPP		Sticker mains switch fp plus					x
SSDS5x72		Sticker selfadhesive double side 5x72mm					X
K-RSC		Kit Rear Support type c					x