

134 SMD

LIST OF USED MODULES AND SINGLE COMPONENTS IN CONTROL SUBRACKS

CONTROL UNITS POWER SUPPLY – CPUS-01

COMPONENT NAME	TYPE	FUNCTION
1. AC/DC 30W power module	TRACO, TML 30212	Sensors & control part powering
2. AC/DC 30W power module	TRACO, TML 30105	Sensors & control part powering
3. LED diode	φ 3mm, solder type	Status indication
4. Metal rezistor 2W	Metal	Basic load for 5VDC power voltage
5. Capacitors	Tantal	Power voltage bypass
6. Fuse	Glass, 5x20mm	Input power line protection
7. Bus connector – HARTING	DIN 41612	Backplane interconnection

STEPPER MOTOR POWER SUPPLY – SMPS-01

COMPONENT NAME	TYPE	FUNCTION
8. AC/DC 320W power module	SUNPOWER, SPS-320P-48	Motor power stage powering
9. LED diode	φ 3mm, solder type	Status indication
10. Metal rezistor 0,6W	Metal	LED powering
11. Bus connector – HARTING	DIN 41612	Backplane interconnection

STEPPER MOTOR POWER STAGE – ZMX 93-70

COMPONENT NAME	TYPE	FUNCTION
12. Stepper motor power stage	PHYTRON, ZMX 93-70 MINI	Motor powering

STEPPER MOTOR MOTOR CONTROLLER BOARD – SMCB-01

COMPONENT NAME	TYPE	FUNCTION
13. DC/DC 2W power module	TRACO, TMA 1212S	Emergency stop line powering
14. DC stabilizator	LP 2950-3,3V	DC power for control circuits
15. LED diode	φ 3mm, solder type	Status indication
16. SMD rezistor 0,125W	YAEGO, 0805	Basic circuits functions
17. Metal rezistor 1W	Metal	Auxiliary function (not used)
18. Capacitors	Tantal	Power voltage bypass
19. Bus connector – HARTING	DIN 41612	Backplane interconnection
SEMICONDUCTORS		
20. Mixed signal procesor	Silabs, C8051F020	Main control function
21. Logic IC, Schmit-trigger	7S14	u-processor reset
22. Resolver convertor	DDC, RD-19230FG	Absolut position of driver
23. Sinus generator	AD, AD2S99A	Resolver reference signal
24. Digital potentiometer	Analog Devices, AD 7376 A10	Amplitude control of sinus generator
25. Power aplifier	ST, L165	Resolver powering
26. Operational amplifier	Texas instrument, TL 082C	Analogue measuring
27. Operational amplifier	MAXIM, MAX 4080 TAU A	Analogue measuring
28. Temperature sensor	National Semiconductors, LM35	Temperature measuring
29. RS-232 convertor	MAXIM, MAX 232	External communication
30. RS-422 convertor	Linear Technology, LTC 491CS	Internal control bus connection
31. Optocoupler	CPC1008N	Emergency stop line rele control
32. Optocoupler	PC 357	Discrete input/output signals processing
33. Zener overvoltage protection	MOTOROLA, P6SMB18	Resolver lines protection
34. Zener overvoltage protection	MOTOROLA, P6SMB6,8	Communication lines protection
35. Transistor	BSS 138, BSS 83P	Logic circuits

WORLDFIP/RS-422CONVERTOR – WFRSC-01

COMPONENT NAME	TYPE	FUNCTION
36. LED diode	φ 3mm, solder type	Status indication
37. SMD rezistor 0,125W	YAEGO, 0805	Basic circuits functions
38. Capacitors	Tantal	Power voltage bypass
39. Bus connector – HARTING	DIN 41612	Backplane interconnection
SEMICONDUCTORS		
40. WORLDFIP module	CC130A	WorldFip communication
41. DC stabilizator	LP 2950-3,3V	DC power for control circuit
42. Mixed signal procesor	Silabs, C8051F021	Main control function
43. Logic IC, Schmit-trigger	7S14	u-processor reset
44. Temperature sensor	National Semiconductors, LM35	Temperature measuring
45. RS-232 convertor	MAXIM, MAX 232	External communication
46. RS-422 convertor	Linear Technology, LTC 491CS	Internal control bus connection
47. Optocoupler	CPC1008N	Emergency stop line rele control
48. Optocoupler	PC 357	Discrete input/output signals processing
49. Zener overvoltage protection	MOTOROLA, P6SMB6,8	Communication lines protection
50. Transistor	BSS 138	Logic circuits