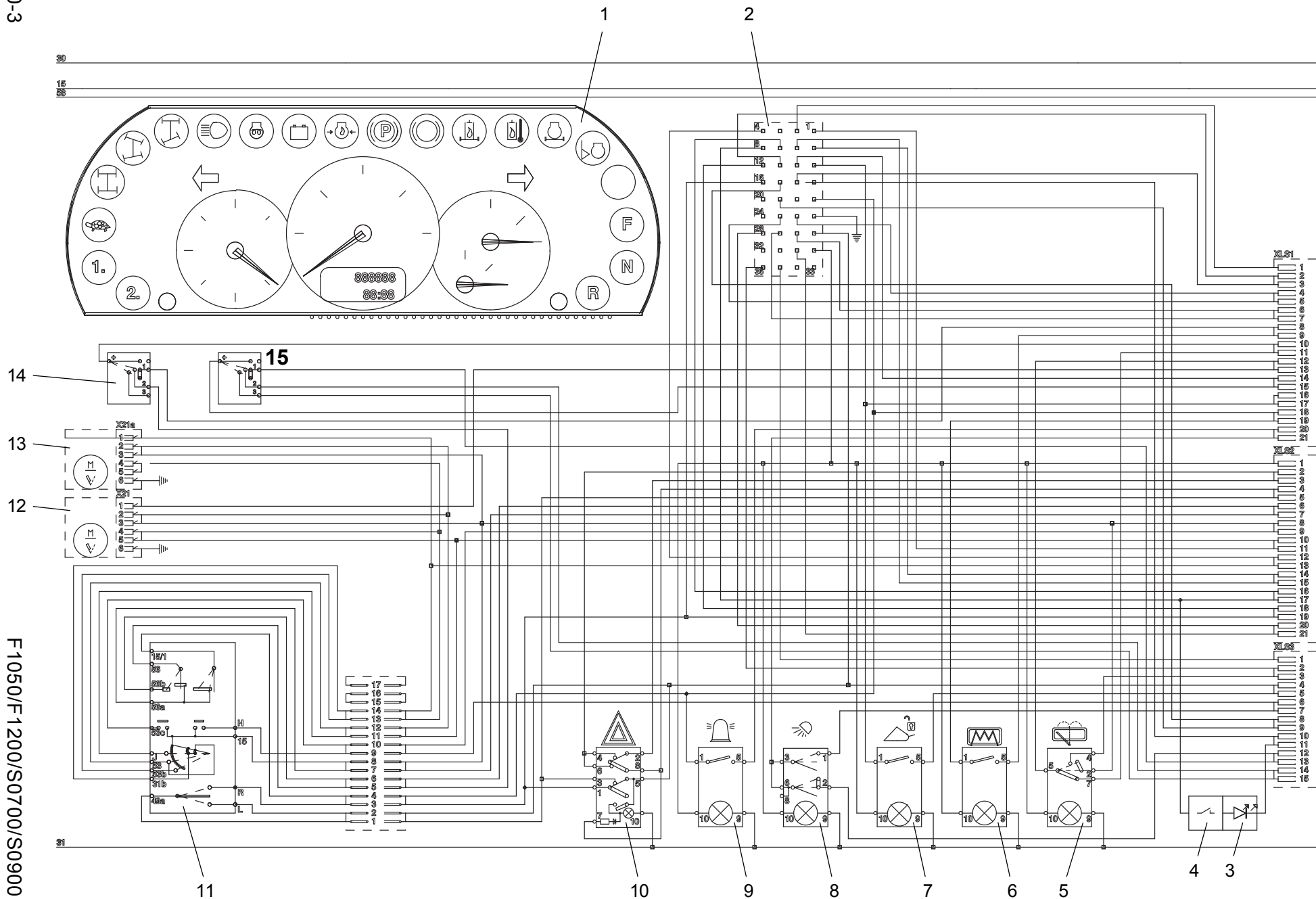


Circuit diagrams



10.1 Electric wiring diagram (Type 1)**Sheet/item Designation**

1-4/1	Multifunction panel
1-4/2	Connector multifunction panel
1-4/3	LED bucket position indicator
1-4/4	Switch bucket position indicator
1-4/5	Actuator: rear window wiper/washer
1-4/6	Actuator: Rear window heater
1-4/7	Actuator: release of quick-change device
1-4/8	Actuator: working lights
1-4/9	Actuator: warning beacon (opt.)
1-4/10	Actuator: Hazard flasher
1-4/11	Steering column switch
1-4/12	Motor windshield wiper front/interval timer (AF 1050 / AF 1200 / AS 900)
1-4/13	Motor windshield wiper front (AS 700)
1-4/14	Actuator: road lights
1-4/15	Actuator: Steering type switching

Sheet/item	Designation
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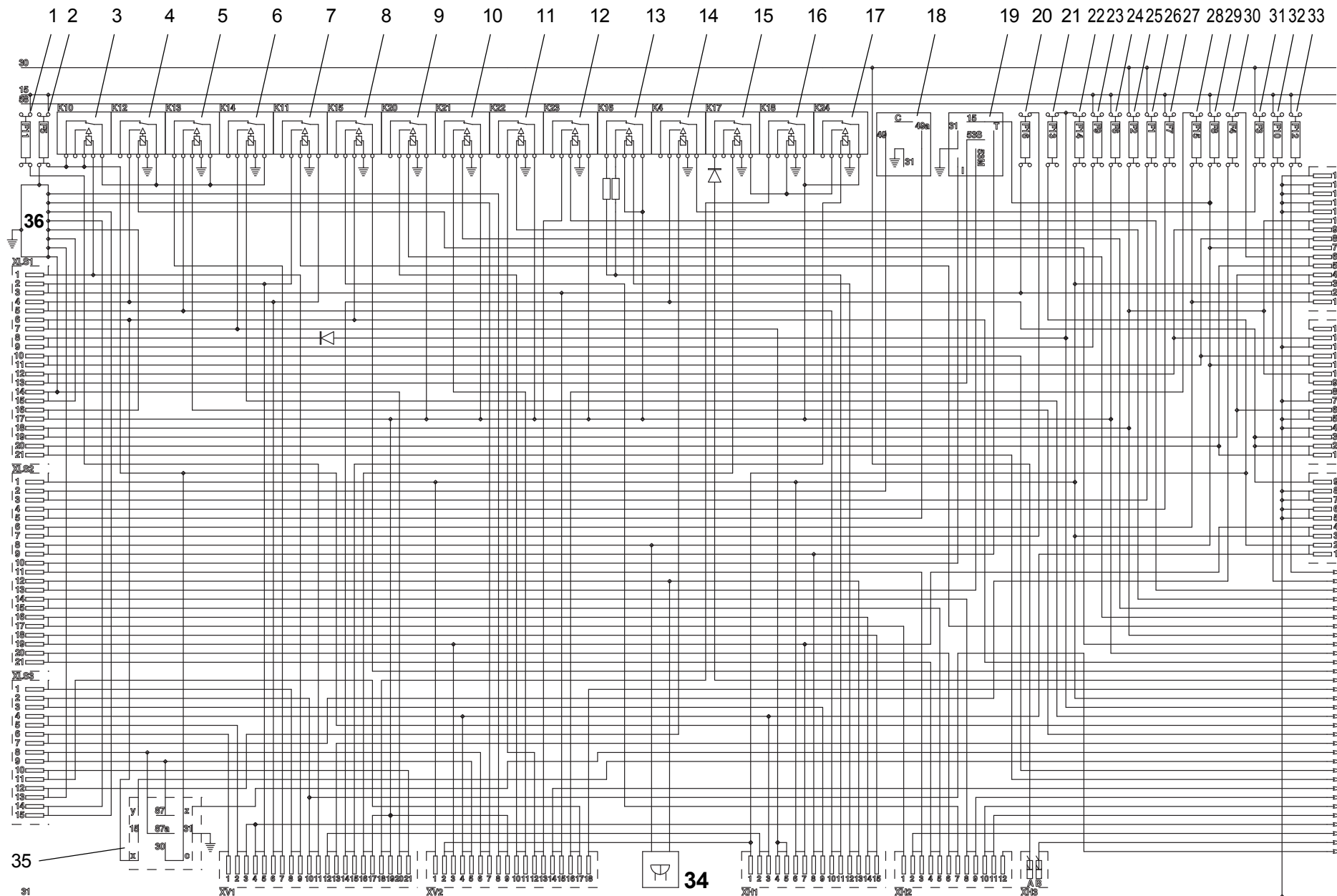
2-4/1	Fuse (F11) Brake lights (5.0 A)
2-4/2	Fuse (F5) Traction drive, steering (20.0 A)
2-4/3	Relay (K10): Traction drive cut-out
2-4/4	Relay (K12): Alpha max.
2-4/5	Relay (K13): Power control: forward
2-4/6	Relay (K14): Power control: reverse
2-4/7	Relay (K11): Differential lock
2-4/8	Relay (K15): Start-up interlock
2-4/9	Relay (K20): 2nd auxiliary hydraulics circuit
2-4/10	Relay (K12): 2nd auxiliary hydraulics circuit
2-4/11	Relay (K22): 1st auxiliary hydraulics circuit
2-4/12	Relay (K23): 1st auxiliary hydraulics circuit
2-4/13	Relay (K16): Fan control
2-4/14	Relay (K4): Working lights, front
2-4/15	Relay (K17): Dump interlock
2-4/16	Relay (K18): Dump interlock
2-4/17	Relay (K24): Dump interlock timer
2-4/18	Turn signal relay
2-4/19	Interval timer
2-4/20	Fuse (F16) High beam (15.0 A)
2-4/21	Fuse (F13) Parking light, left; tail light, left (5.0 A)
2-4/22	Fuse (F14) Parking light, right; tail light, right (5.0 A)
2-4/23	Fuse (F9) Rear window heater (20.0 A)
2-4/24	Fuse (F6) Hydraulics (20.0 A)
2-4/25	Fuse (F2) Warning beacon, 2-pole socket (10.0 A)
2-4/26	Fuse (F1) Hazard flasher (15.0 A)
2-4/27	Fuse (F7) Turn indicator (7.5 A)
2-4/28	Fuse (F15) Low beam (15.0 A)
2-4/29	Fuse (F8) Windshield wiper/washer front/rear (20.0 A)
2-4/30	Fuse (F4) Working lights, rear (15.0 A)
2-4/31	Fuse (F3) Working lights, front (20.0 A)
2-4/32	Fuse (F10) Heater fan motor (20.0 A)
2-4/33	Fuse (F12) Engine shut-off (5.0 A)
2-4/34	Acoustic buzzer, hydraulic oil temperature
2-4/35	Gear shift (fast loader)
2-4/36	ECU steering switch

**10.1 - 06.2010 Elektrik-Schaltplan/Schéma électrique/Wiring diagramm/Elektrisch schakelschema/Sähkökytkentäkaavio/
Variante 1 Kopplungsschema-elektrik/Schemat instalacji elektrycznej/Schéma elektrického zapojení/EI-diagram**

F1050/F1200/S0700/S0900

4 - 1

10-4

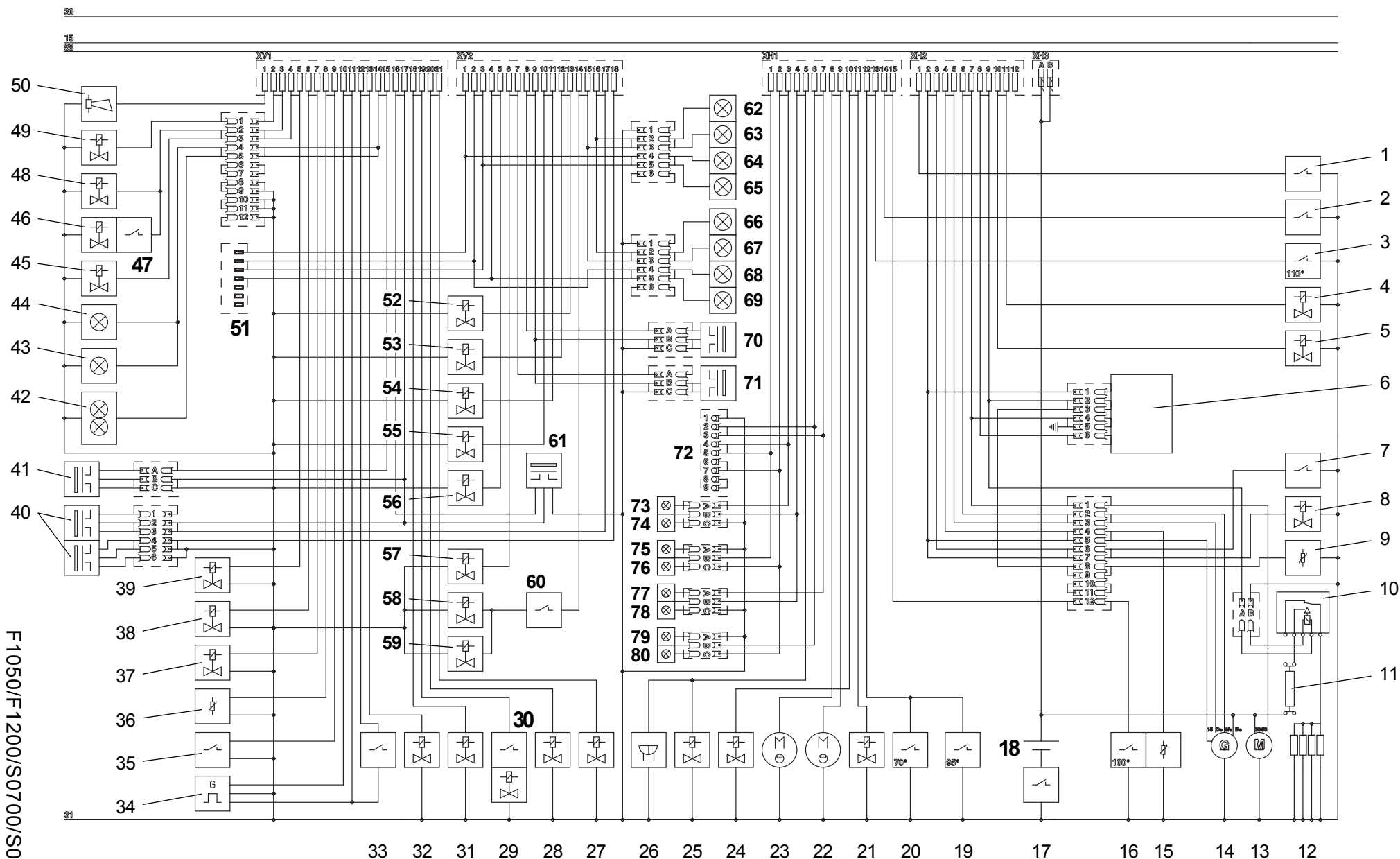


4 - 4

10.1 - 06.2010 Elektrik-Schaltplan/Schéma électrique/Wiring diagramm/Elektrisch schakelschema/Sähkökytkentäkaavio/
Variante 1 Kopplungsschema-elektrik/Schemat instalacji elektrycznej/Schéma elektrického zapojení/EI-diagram

10-5

F1050/F1200/S0700/S0900



Sheet/item	Designation	Sheet/item	Designation
3-4/1	Switch: Air filter	3-4/56	Valve: 1st gear
3-4/2	Switch: hydraulic oil filter	3-4/57	Valve: 2nd gear
3-4/3	Switch: hydraulic oil temperature	3-4/58	Valve: Rear axle support right
3-4/4	Valve: fan reversal	3-4/59	Valve: Rear axle support left
3-4/5	Valve: pilot control switch-off	3-4/60	Pressure switch: Rear axle support
3-4/6	Glow start controller	3-4/61	Proximity switch: Lifting arm
3-4/7	Switch: engine oil pressure		
3-4/8	Valve: Engine shut-off		For AS 700 only:
3-4/9	Coolant temperature sensor (glow start system)		Driving light, right:
3-4/10	Relay: glow start system	3-4/62	Low beam, right
3-4/11	Maxi fuse (80 A): glow start system	3-4/63	High beam, right
3-4/12	Glow plugs	3-4/64	Parking light, right
3-4/13	Starter	3-4/65	Turn signal, right
3-4/14	Alternator		Driving light, left:
3-4/15	Coolant temperature sensor	3-4/66	Low beam, left
3-4/16	Switch: Coolant temperature (100°)	3-4/67	High beam, left
3-4/17	Battery main switch (option)	3-4/68	Parking light, left
3-4/18	Battery	3-4/69	Turn signal, left
3-4/19	Switch: Coolant temperature (95°)	3-4/70	Proximity switch: Rear axle
3-4/20	Switch: Engine oil temperature (70°)	3-4/71	Proximity switch: Front axle
3-4/21	Valve: Fan speed	3-4/72	Adapter, 7-pole socket
3-4/22	Window washer motor, rear	3-4/73	Turn signal, rear left
3-4/23	Window washer motor, front	3-4/74	Reversing light, left
3-4/24	Valve: Travel direction forward	3-4/75	Tail light, left
3-4/25	Valve: Travel direction reverse	3-4/76	Brake light, left
3-4/26	Reversing warning buzzer	3-4/77	Turn signal, rear right
3-4/27	Valve: four-wheel steering	3-4/78	Reversing light, right
3-4/28	Valve: rear-axle steering	3-4/79	Tail light, right
3-4/29	Valve: Parking brake	3-4/80	Brake light, right
3-4/30	Pressure switch, inching		
3-4/31	Valve: Dump interlock		
3-4/32	Valve: Permanent auxiliary hydraulics		
3-4/33	Switch: Brake lights		
3-4/34	Tacho sensor		
3-4/35	Switch: Parking brake		
3-4/36	Dip pipe sensor		
3-4/37	Valve: Direction detection		
3-4/38	Valve: Alpha max.		
3-4/39	Valve: Differential lock		
3-4/40	Inclination switch		
3-4/41	Proximity switch: Boost		
3-4/42	Working lights, centre support		
3-4/43	Working lights, lifting arm		
3-4/44	Working lights, lifting arm		
3-4/45	Combination valve: pipe break protection / lifting device suspension (option)		
3-4/46	Memory valve, lifting device suspension (option)		
3-4/47	Switch: Memory valve, lifting device suspension (option)		
3-4/48	Reservoir valve, lifting device suspension (option)		
3-4/49	Valve: release of quick-change device		
3-4/50	Signal horn		
3-4/51	7-pole socket (option)		
3-4/52	Valve: Open 1st auxiliary hydraulics circuit		
3-4/53	Valve: Close 1st auxiliary hydraulics circuit		
3-4/54	Valve: Open 2nd auxiliary hydraulics circuit		
3-4/55	Valve: Close 2nd auxiliary hydraulics circuit		

Sheet/item	Designation
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Not for AS 700:

4-4/1	Interior lighting
4-4/2	Switch: Interior lighting
4-4/3	Windshield wiper motor, rear
4-4/4	Working lights, rear
4-4/5	warning beacon (opt.)
4-4/6	Rear window heater (opt.)
4-4/7	Mirror heater (opt.)
4-4/8	License plate illumination (fast loader)
4-4/9	High beam, left
4-4/10	Low beam, left
4-4/11	High beam, right
4-4/12	Low beam, right

Not for AS 700:

4-4/13	Turn signal, right
4-4/14	Parking light, right
4-4/15	Parking light, left
4-4/16	Turn signal, left

For AS 700 only:

4-4/17	Windshield wiper motor, rear
4-4/18	Interior lighting
4-4/19	Switch: Interior lighting
4-4/20	Rear window heater (opt.)
4-4/21	Working lights, rear
4-4/22	Working lights, front
4-4/23	Warning beacon (opt.)

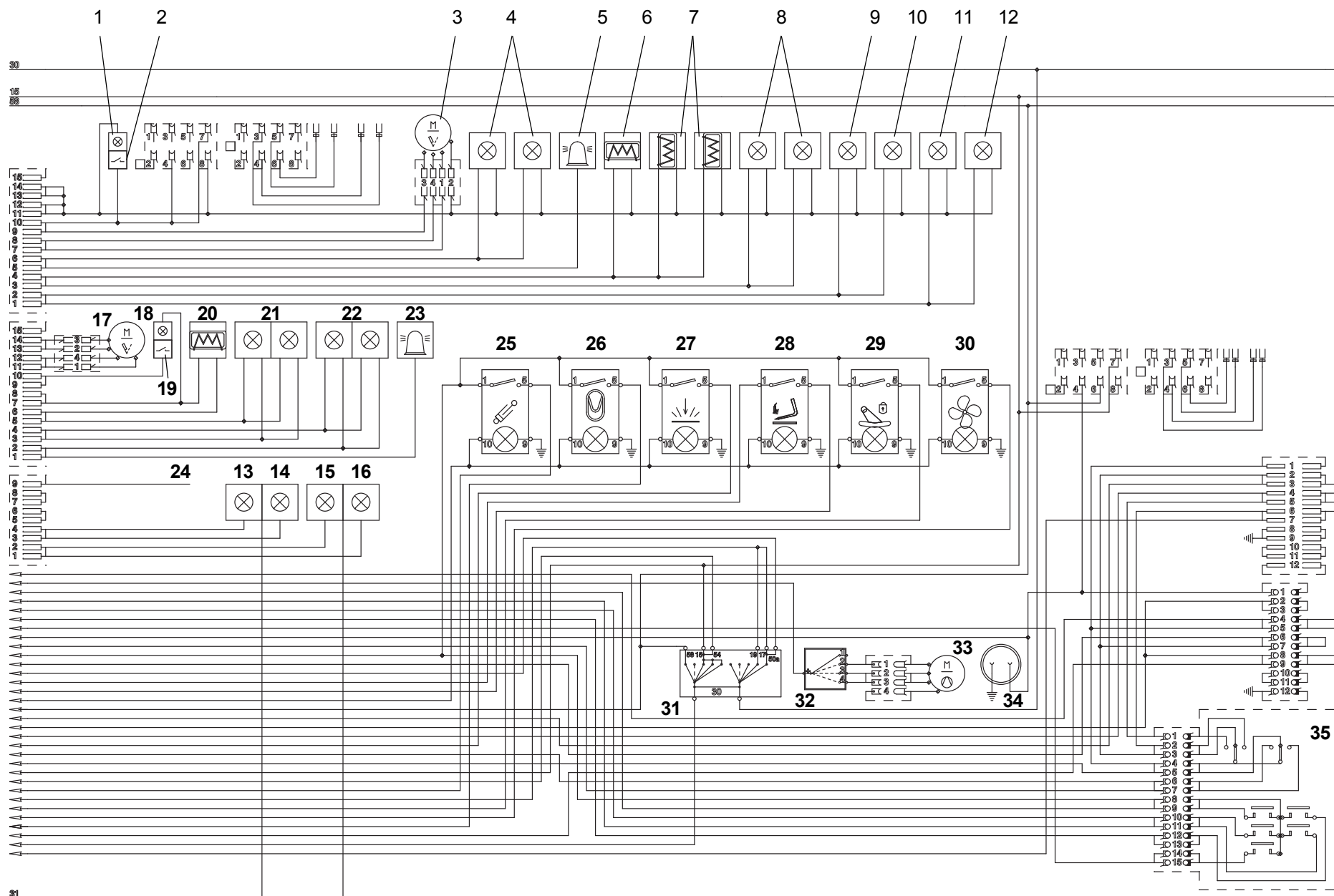
For AZ 95 only:

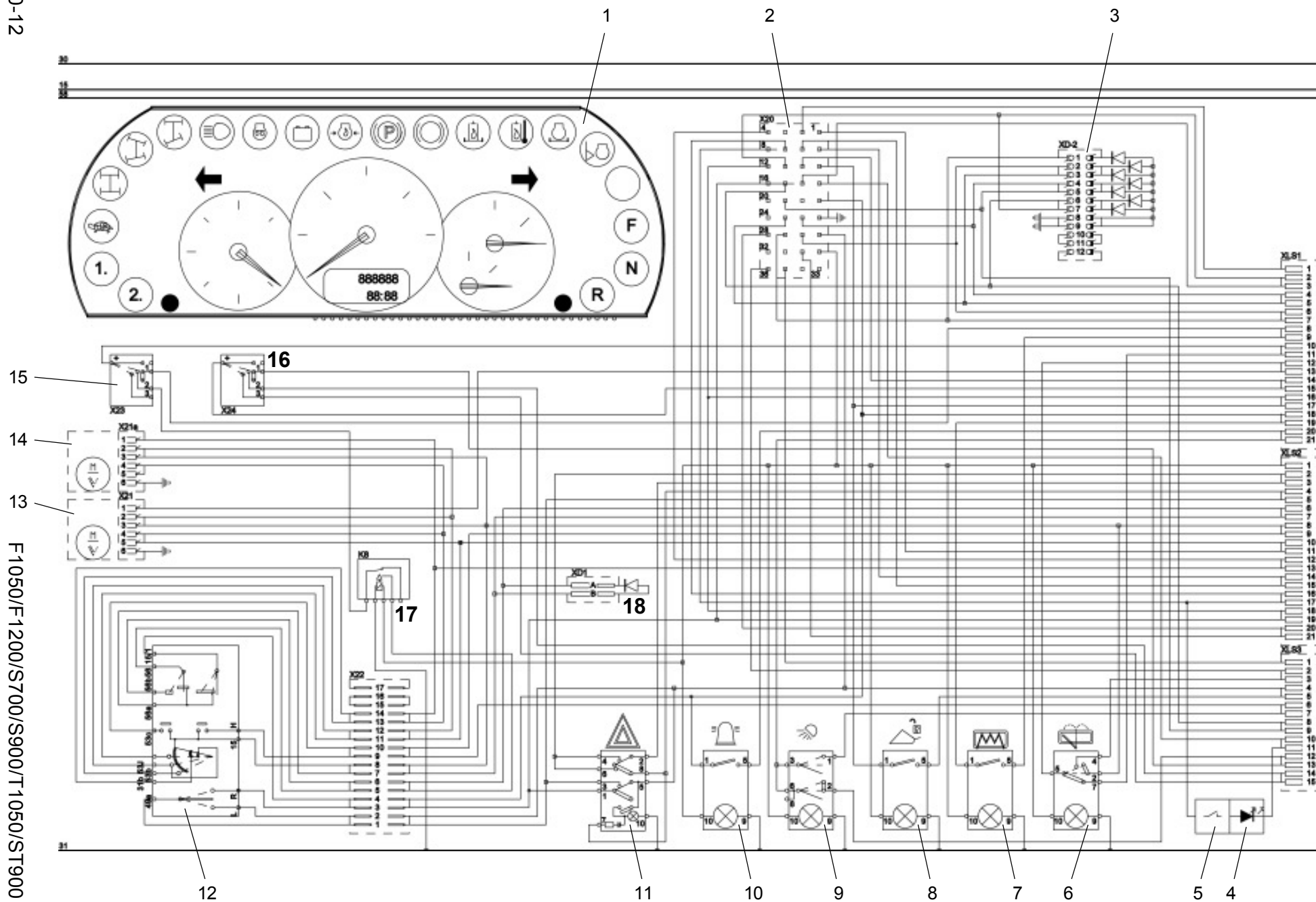
4-4/24	Working lights
4-4/25	Actuator: Rear axle support switch-off
4-4/26	Actuator: lifting device suspension (option)
4-4/27	Actuator: Permanent auxiliary hydraulics (opt.)
4-4/28	Actuator: Dump interlock switch-off
4-4/29	Actuator: pilot control switch-off
4-4/30	Actuator: fan reversal
4-4/31	Start switch
4-4/32	Actuator: fan/blower
4-4/33	Heater fan motor
4-4/34	2-pole socket
4-4/35	Multifunction handle right

**10.1 - 06.2010 Elektrik-Schaltplan/Schéma électrique/Wiring diagramm/Elektrisch schakelschema/Sähkökytkentäkaavio/
Variante 1 Kopplungsschema-elektrik/Schemat instalacji elektrycznej/Schéma elektrického zapojení/EI-diagram**

F1050/F1200/S0700/S0900

4 - 2





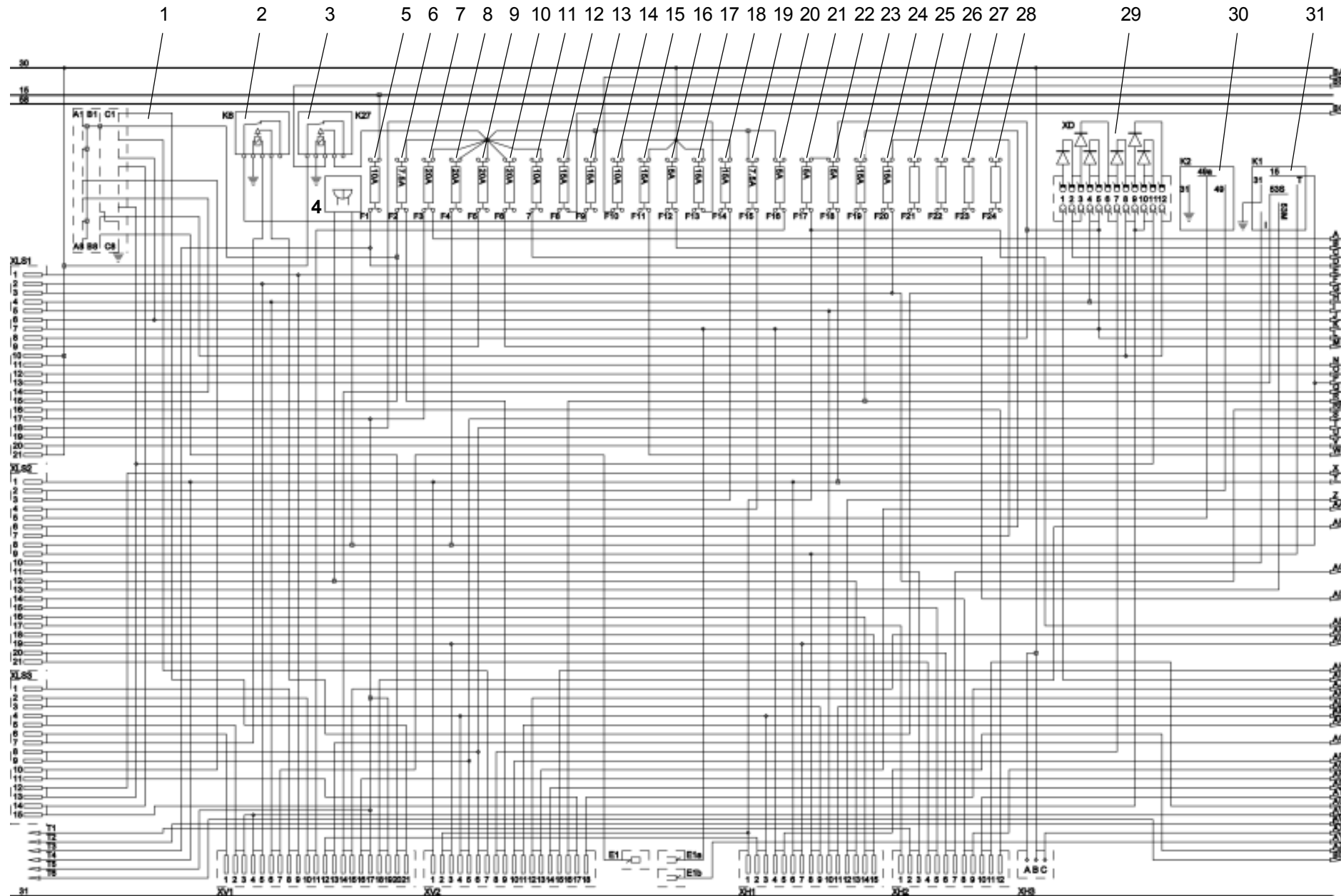
10.1 Electric wiring diagram (Type 3)**Sheet/
item Designation**

1-6/1	Multifunction panel
1-6/2	Connector multifunction panel
1-6/3	Diode assembly
1-6/4	LED bucket position indicator
1-6/5	Switch bucket position indicator
1-6/6	Actuator: rear window wiper/washer
1-6/7	Actuator: Rear window heater
1-6/8	Actuator: release of quick-change device
1-6/9	Actuator: working lights
1-6/10	Actuator: warning beacon (opt.)
1-6/11	Actuator: Hazard flasher
1-6/12	Steering column switch
1-6/13	Motor front windshield wiper (only AS 700 / AZ 75)
1-6/14	Windshield wiper motor, front/interval timer
1-6/15	Actuator: road lights
1-6/16	Actuator: Steering type switching
1-6/17	Relay (K8): Parking/road light control
1-6/18	Power diode 20 A

Sheet/ item	Designation
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2-6/1	ECU steering
2-6/2	Relay (K6): Working lights, rear
2-6/3	Relay (K27): High current relay (12 V/120 A)
2-6/4	Acoustic buzzer, hydraulic oil temperature
2-6/5	Fuse (F1): Traction drive (10,0 A)
2-6/6	Fuse (F2): Steering (7,5 A)
2-6/7	Fuse (F3): Hydraulics (20.0 A)
2-6/8	Fuse (F4): Windshield wiper/washer front/rear (20.0 A)
2-6/9	Fuse (F5): Rear window heater (20.0 A)
2-6/10	Fuse (F6): Heater, air-conditioning system (20.0 A)
2-6/11	Fuse (F7): Engine shut-off, fuel pump (10.0 A)
2-6/12	Fuse (F8): Working lights, front (15,0 A)
2-6/13	Fuse (F9): Working lights, rear (15.0 A)
2-6/14	Fuse (F10): Drive-away interlock (5.0 A)
2-6/15	Fuse (F11): 2-pole socket (15,0 A)
2-6/16	Fuse (F12): Radio, interior lighting (5.0 A)
2-6/17	Fuse (F13): Warning beacon (opt.) (15,0 A)
2-6/18	Fuse (F14): Hazard flasher (15.0 A)
2-6/19	Fuse (F15): Turn indicator left/right (7.5 A)
2-6/20	Fuse (F16): Brake lights (5.0 A)
2-6/21	Fuse (F17): Parking light, left (5.0 A)
2-6/22	Fuse (F18): Parking light, right (5.0 A)
2-6/23	Fuse (F19): Low beam (15.0 A)
2-6/24	Fuse (F20): High beam (15.0 A)
2-6/25	Fuse (F21): Spare
2-6/26	Fuse (F22): Spare
2-6/27	Fuse (F23): Spare
2-6/28	Fuse (F24): Spare
2-6/29	Diode assembly
2-6/30	Turn signal relay
2-6/31	Interval timer

10.1 - 02.2013 Elektrik-Schaltplan/Schéma électrique/Wiring diagramm/Elektrisch schakelschema/Sähkökytkentäkaavio/
Variante 3 Kopplungsschema-elektrik/Schemat instalacji elektrycznej/Schéma elektrického zapojení/EI-diagram

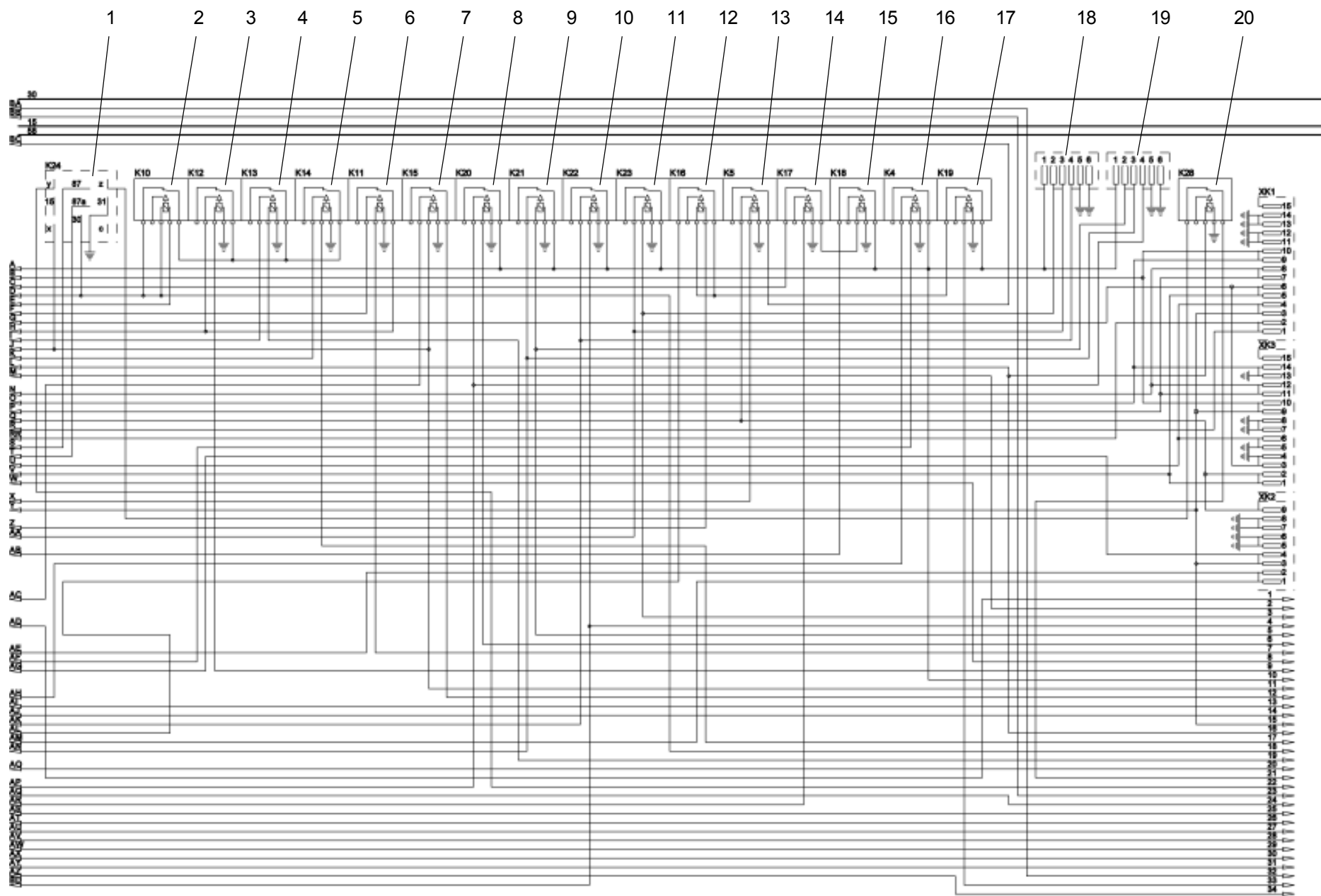


F1050/F1200/S700/S900/T1050/ST900

9 - 1

10-13

**10.1 - 02.2013 Elektrik-Schaltplan/Schéma électrique/Wiring diagramm/Elektrisch schakelschema/Sähkökytkentäkaavio/
Variante 3 Kopplungsschema-elektrik/Schemat instalacji elektrycznej/Schéma elektrického zapojení/EI-diagram**



**Sheet/ Designation
item**

3-6/1	Relay (K24):	Transmission controller PLC (fast loader)
3-6/2	Relay (K10):	Traction drive
3-6/3	Relay (K12):	Alpha max.
3-6/4	Relay (K13):	Power control: forward
3-6/5	Relay (K14):	Power control: reverse
3-6/6	Relay (K11):	Differential lock (option)
3-6/7	Relay (K15):	Start-up interlock
3-6/8	Relay (K20):	2nd auxiliary hydraulics circuit: closed (option)
3-6/9	Relay (K12):	2nd auxiliary hydraulics circuit: open (option)
3-6/10	Relay (K22):	1st auxiliary hydraulics circuit: closed (option)
3-6/11	Relay (K23):	1st auxiliary hydraulics circuit: open (option)
3-6/12	Relay (K16):	Fan control
3-6/13	Relay (K5):	Working lights, front
3-6/14	Relay (K17):	Dump interlock (option)
3-6/15	Relay (K18):	Dump interlock (option)
3-6/16	Relay (K4):	Dump interlock timer (option)
3-6/17	Relay (K19):	Air-conditioning system (option)
3-6/18	Connector:	auxiliary hydraulics, 1st circuit (proportional)
3-6/19	Connector:	auxiliary hydraulics, 2nd circuit (proportional)
3-6/20	Relay (K28):	Working platform preparation (option)

Sheet/ item	Designation
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4-6/1	Interior lighting
4-6/2	Switch: Interior lighting
4-6/3	Windshield wiper motor, rear
4-6/4	Working lights, rear
4-6/5	warning beacon (opt.)
4-6/6	Rear window heater (opt.)
4-6/7	Mirror heater (opt.)
4-6/8	License plate illumination (fast loader)
4-6/9	High beam, left
4-6/10	Low beam, left
4-6/11	High beam, right
4-6/12	Low beam, right
4-6/13	Air-conditioning system (option)
4-6/14	Actuator: Air-conditioning system (option)
4-6/15	Actuator: Rear axle support switch-off
4-6/16	Actuator: lifting device suspension (option)
4-6/17	Actuator: Permanent auxiliary hydraulics (opt.)
4-6/18	Actuator: Dump interlock switch-off
4-6/19	Actuator: pilot control switch-off
4-6/20	Actuator: fan reversal
4-6/21	Start switch
4-6/22	Actuator: fan/blower
4-6/23	Heater fan motor
4-6/24	2-pole socket
4-6/25	Multifunction handle right

For AS 700 only:

4-6/26	Windshield wiper motor, rear
4-6/27	Interior lighting
4-6/28	Switch: Interior lighting
4-6/29	Rear window heater (opt.)
4-6/30	Working lights, rear
4-6/31	Working lights, front
4-6/32	warning beacon (opt.)

Not for AS 700:

4-6/33	Turn indicator, right
4-6/34	Parking light, right
4-6/35	Parking light, left
4-6/36	Turn indicator, left

For AZ 95 only:

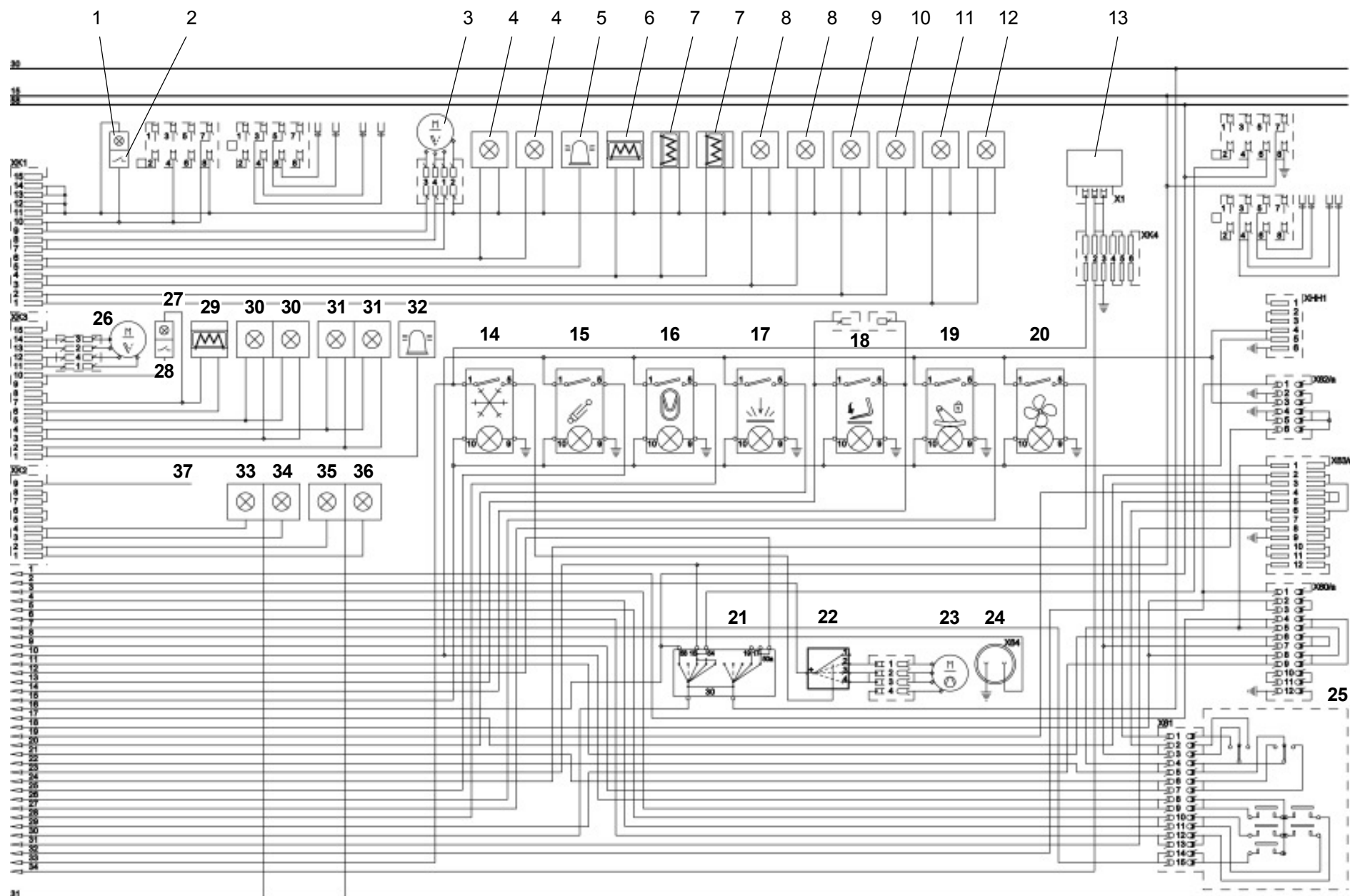
4-6/37	Working lights
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10.1 - 02.2013 Elektrik-Schaltplan/Schéma électrique/Wiring diagram/Elektrisch schakelschema/Sähkökytkentäkaavio/
Variante 3 Kopplungsschema-elektrik/Schemat instalacji elektrycznej/Schéma elektrického zapojení/EI-diagram

F1050/F1200/S700/S900/T1050/ST900

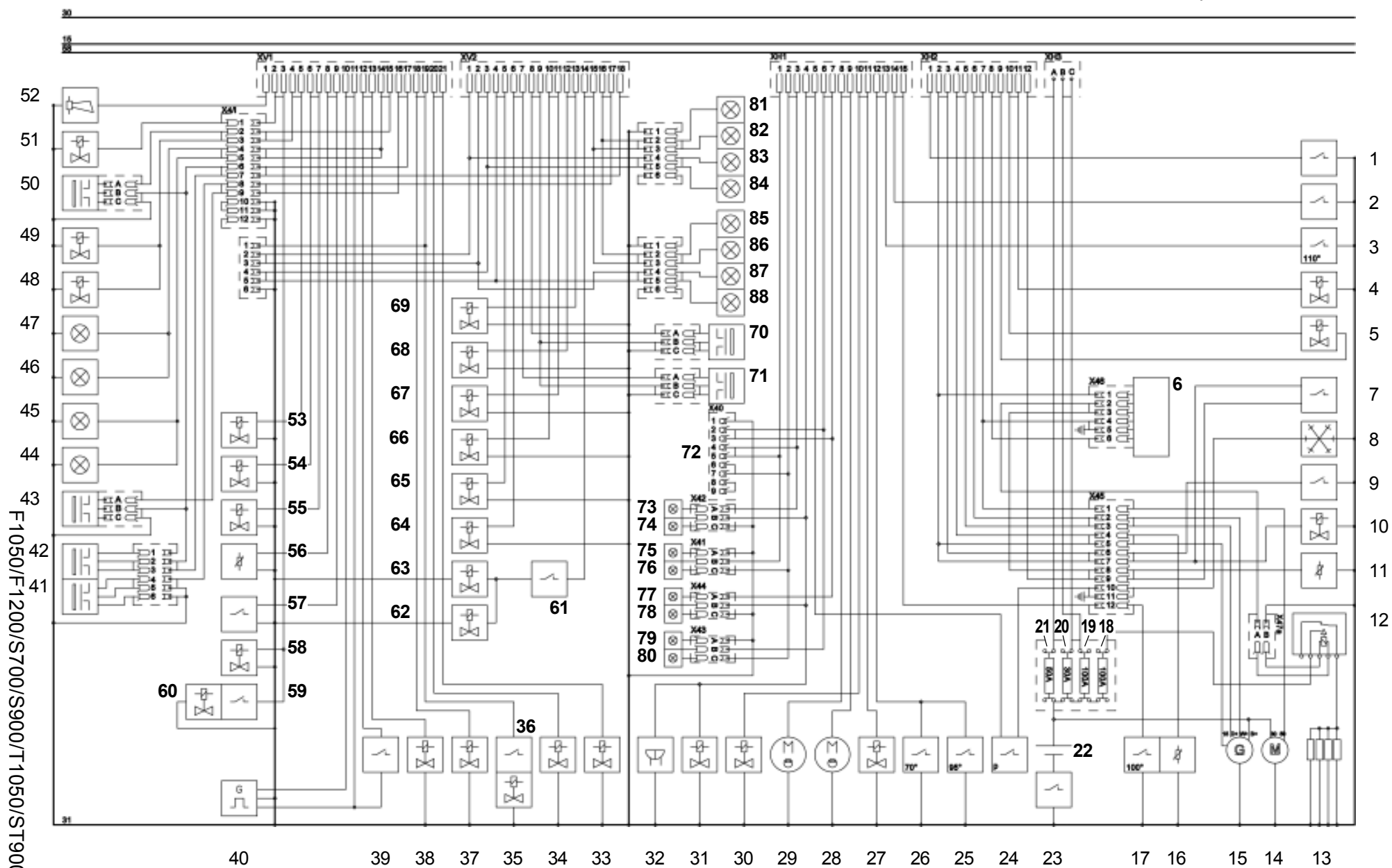
9 - 3

10-15

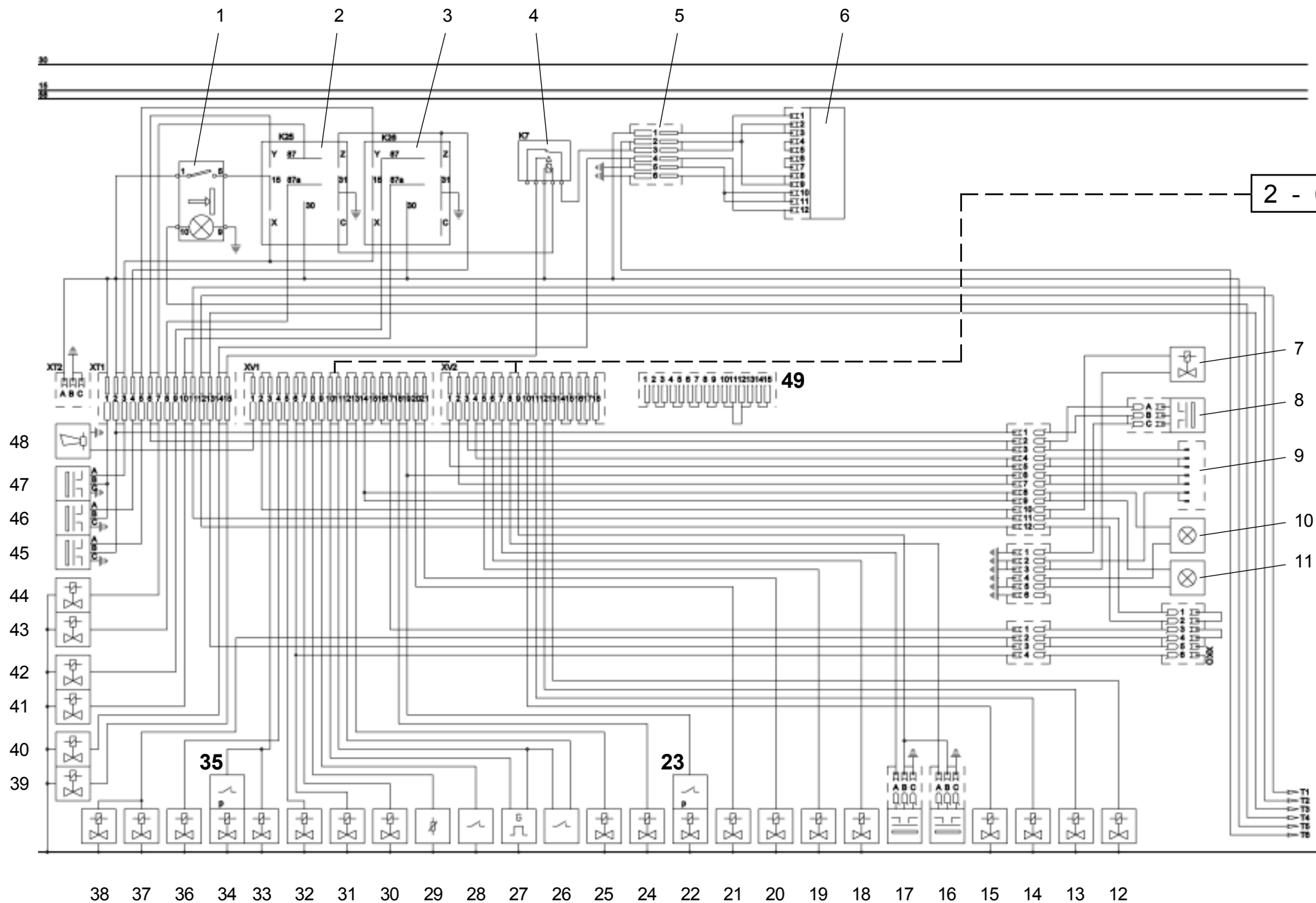


Front loader and swivel loader

Front loader and swivel loader and telescopic loader

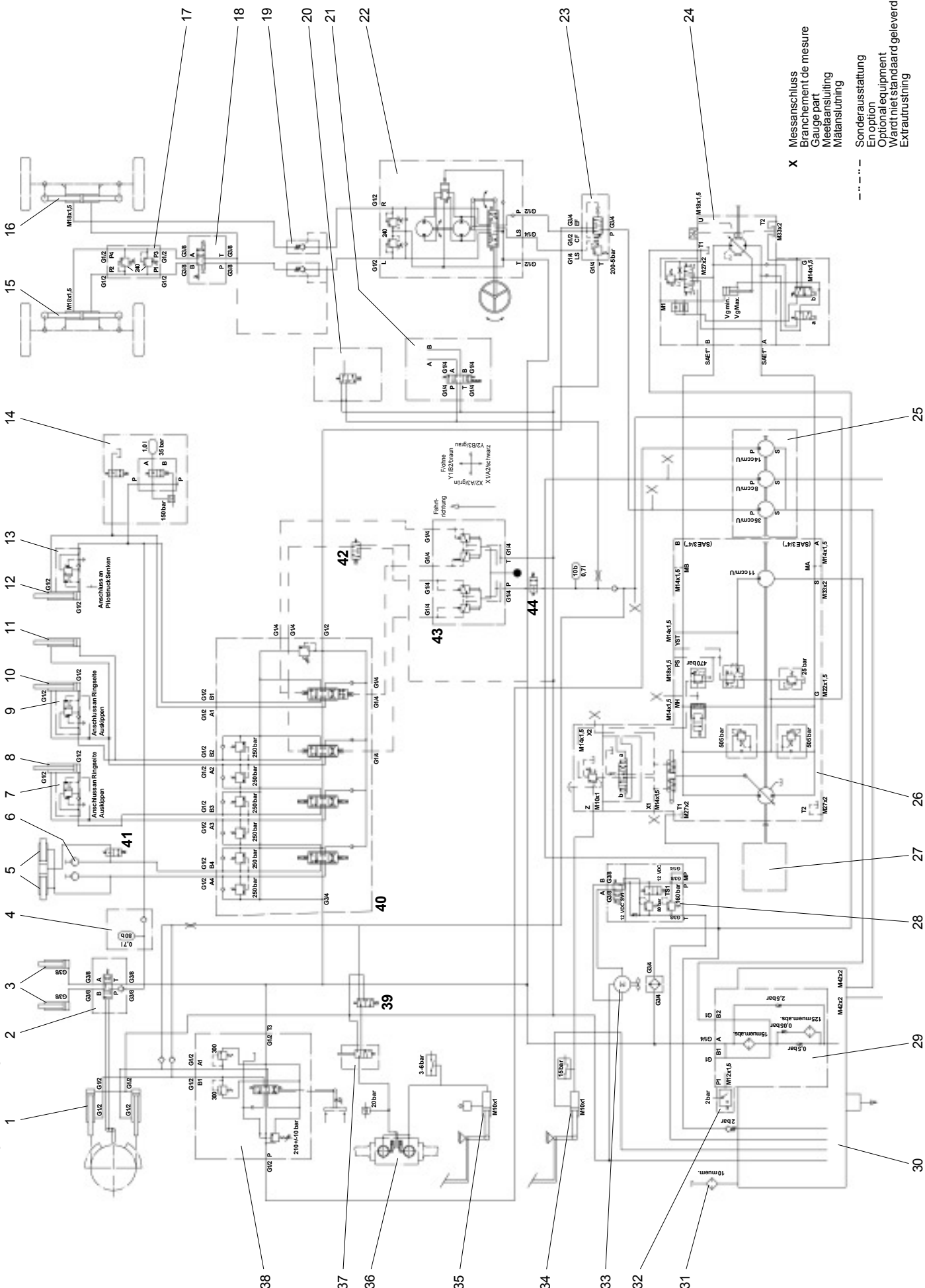


Sheet/ item	Designation	Sheet/ item	Designation
5-6/1	Switch: Air filter	5-6/52	Signal horn
5-6/2	Switch: hydraulic oil filter	5-6/53	Valve: Differential lock
5-6/3	Switch: hydraulic oil temperature	5-6/54	Valve: Alpha max.
5-6/4	Valve: fan reversal	5-6/55	Valve: Direction detection
5-6/5	Valve: pilot control switch-off	5-6/56	Dip pipe sensor
5-6/6	Glow start controller	5-6/57	Switch: Parking brake
5-6/7	Switch: Fuel filter water level	5-6/58	Reservoir valve, lifting device suspension (option)
5-6/8	air-conditioning compressor	5-6/59	Switch: Memory valve, lifting device suspension (option)
5-6/9	Switch: engine oil pressure	5-6/60	Memory valve, lifting device suspension (option)
5-6/10	Valve: Engine shut-off	5-6/61	Pressure switch: Rear axle support
5-6/11	Coolant temperature sensor (glow start system)	5-6/62	Valve: Rear axle support left
5-6/12	Relay: glow start system	5-6/63	Valve: Rear axle support right
5-6/13	Glow plugs	5-6/64	Valve: 2nd gear
5-6/14	Starter	5-6/65	Valve: 1st gear
5-6/15	Alternator	5-6/66	Valve: Close 2nd auxiliary hydraulics circuit
5-6/16	Coolant temperature sensor	5-6/67	Valve: Open 2nd auxiliary hydraulics circuit
5-6/17	Switch: Coolant temperature (100°)	5-6/68	Valve: Close 2nd auxiliary hydraulics circuit
5-6/18	Maxi fuse (100 A): glow start system	5-6/69	Valve: Open 2nd auxiliary hydraulics circuit
	Maxi fuse (250 A):	5-6/70	Proximity switch: Rear axle
	Glow start system 63 kW engine	5-6/71	Proximity switch: Front axle
5-6/19	Main fuse (100 A): Loader electrics	5-6/72	Adapter, 7-pole socket
5-6/20	Main fuse (30 A): Loader electrics	5-6/73	Turn indicator, rear left
5-6/21	Main fuse (50 A): Loader electrics	5-6/74	Reversing light, left
5-6/22	Battery	5-6/75	Tail light, left
5-6/23	Battery main switch (option)	5-6/76	Brake light, left
5-6/24	Switch: Air-conditioning system	5-6/77	Turn indicator, rear right
5-6/25	Switch: Coolant temperature (95°)	5-6/78	Reversing light, right
5-6/26	Switch: Engine oil temperature (70°)	5-6/79	Tail light, right
5-6/27	Valve: Fan speed	5-6/80	Brake light, right
5-6/28	Window washer motor, rear		For AS 700 only:
5-6/29	Window washer motor, front		Driving light, right
5-6/30	Valve: Travel direction forward	5-6/81	Dipped beam
5-6/31	Valve: Travel direction reverse	5-6/82	High beam
5-6/32	Reversing warning buzzer	5-6/83	Parking light
5-6/33	Valve: four-wheel steering	5-6/84	Turn indicator
5-6/34	Valve: rear-axle steering		Driving light, left
5-6/35	Valve: Parking brake	5-6/85	Dipped beam
5-6/36	Pressure switch, inching	5-6/86	High beam
5-6/37	Valve: Dump interlock	5-6/87	Parking light
5-6/38	Valve: Permanent auxiliary hydraulics	5-6/88	Turn indicator
5-6/39	Switch: Brake lights		
5-6/40	Tacho sensor		
5-6/41	PAD sensor: Bucket position indicator		
5-6/42	PAD sensor: Dump interlock		
5-6/43	Proximity switch: Dump interlock, raise		
5-6/44	Working lights, front end (front loader)		
5-6/45	Working lights, front end (front loader)		
5-6/46	Working lights, lifting arm (swivel loader)		
5-6/47	Working lights, lifting arm (swivel loader)		
5-6/48	Valve: Pipe break protection (option)		
5-6/49	Combination valve: pipe break protection/ lifting device suspension (option)		
5-6/50	Proximity switch: BOOST		
5-6/51	Valve: Quick-change device		



Swivel telescopic loader

Sheet/ item	Designation
6-6/1	Actuator: Swivel restriction bypass (more than 30°)
6-6/2	Micro PLC: Telescoping (K25)
6-6/3	Micro PLC: Swivelling (K26)
6-6/4	Relay (K7): Interrupt telescoping
6-6/5	Connector: auxiliary hydraulics, 3rd circuit (proportional)
6-6/6	Controller: Telescoping
6-6/7	Valve: Quick-change device
6-6/8	Proximity switch: Telescopic arm retracted
6-6/9	7-pole socket
6-6/10	Working lights, telescope arm
6-6/11	Working lights, telescope arm
6-6/12	Valve: Open 1st auxiliary hydraulics circuit
6-6/13	Valve: Close 1st auxiliary hydraulics circuit
6-6/14	Valve: Open 2nd auxiliary hydraulics circuit
6-6/15	Valve: Close 2nd auxiliary hydraulics circuit
6-6/16	Proximity switch: Rear axle
6-6/17	Proximity switch: Front axle
6-6/18	Valve: 2nd gear
6-6/19	Valve: 1st gear
6-6/20	Valve: four-wheel steering
6-6/21	Valve: rear-axle steering
6-6/22	Valve: Parking brake
6-6/23	Pressure switch, inching
6-6/24	Valve: Dump interlock
6-6/25	Valve: Permanent auxiliary hydraulics
6-6/26	Switch: Brake lights
6-6/27	Tacho sensor
6-6/28	Switch: Parking brake
6-6/29	Dip pipe sensor
6-6/30	Valve: Direction detection
6-6/31	Valve: Alpha max.
6-6/32	Valve: Differential lock
6-6/33	Reservoir valve, lifting device suspension (option)
6-6/34	Memory valve, lifting device suspension (option)
6-6/35	Switch: Memory valve, lifting device suspension (option)
6-6/36	Combination valve: pipe break protection / lifting device suspension (option)
6-6/37	Valve: Tip lock
6-6/38	Valve: Dump lock
6-6/39	Valve: Extend telescopic arm
6-6/40	Valve: Retract telescopic arm
6-6/41	Valve: rear axle interlock right
6-6/42	Valve: rear axle interlock left
6-6/43	Valve: Release, swivelling right
6-6/44	Valve: Release, swivelling left
6-6/45	Proximity switch: Rear axle support
6-6/46	Proximity switch: Swivelling right
6-6/47	Proximity switch: Swivelling left
6-6/48	Signal horn
6-6/49	Strapping plug: preparation for working platform



10.2 Hydraulic circuit diagram

Item	Designation
01	Swivel cylinder DW 100/50/620/960
02	Supporting valve
03	Supporting cylinder EW 50/164,5/378
04	Reservoir system, pipe break protection (option)
05	Locking cylinder DW 40/25/50/157
06	Auxiliary hydraulics
07	Pipe break protection, telescope cylinder (option)
08	Telescope cylinder DW 80/50/1050/1770
09	Pipe break protection, tip cylinder (option)
10	Tip cylinder DW 110/70/456/871
11	Compensation cylinder DW 80/50/350/800
12	Lift cylinder DW 110/70/815/1465
13	Pipe break protection, lift cylinder (option)
14	Lifting device suspension
15	Steering cylinder, front
16	Steering cylinder, rear
17	Double shock valve
18	Steering switching valve
19	Blocking valve
20	Differential lock valve
21	Gear shift (fast loader)
22	Steering unit, 320/160 cm ³ /rev.
23	Priority valve
24	Drive motor A6VM 115 HA
25	Gear-type pump (32 + 8 + 14) cm ³ /rev.
26	Drive pump A4VG 045 DA
27	Drive motor
	- CUMMINS B3.3T-C74 55 kW 2600 rpm
	- CUMMINS B3.3TAA-C85 63 kW 2600 rpm
28	Fan control valve
29	Suction/return flow filter
30	Hydraulic oil tank
31	Filling/ventilation filter
32	Electric contamination indicator
33	Hydrostatic fan drive
34	Inching main cylinder
35	Stepped main brake cylinder
36	Lamella brake
37	Parking brake valve
38	1-way valve
39	Automatic brake valve
40	3-way valve
41	Electric interlock for quick-change device
42	Dump interlock
43	Control pressure transmitter, working hydraulics
44	Electric interlock for pilot control