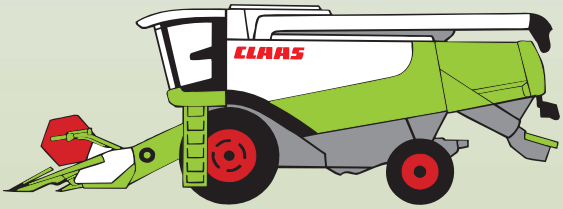
CLAAS



LEXION 600 - 510

Up to serial number: 589 00017
586 00917
585 00357
584 02255
583 00867

Technical Systems

Electric System

SERVICE & PARTS

Layout of electric circuit diagrams

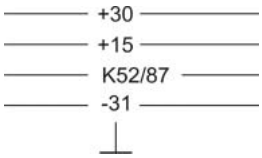
Following the circuit diagram layout, all electric circuits are shown in individual circuit diagrams. Some explanations are given below to illustrate the layout.

Numbering of circuit diagrams

Lex-e-**01a**

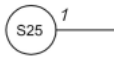
- The respective numbering can be found on the corresponding cover sheet and in the footer.
- Depending on the machine no., the components fitted and the country specification, there may be several individual circuit diagrams 01a, 01b, 01c, etc. for a given function.

Potentials

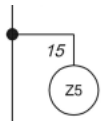


- Main power supply (battery)
- Ignition switch power supply (switched)
- Relay-controlled power supply
- Earth
- Housing earth (external)

Connections

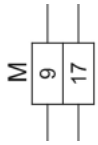


- The description provided **inside** the circle (e.g. „S25”) defines the connection.
- Numbers **next to** the circle (e.g. „1”) describe the continuation of the cabling in accordance with the circuit diagram numbering. This circuit diagram numbering can be taken among others from the footer.

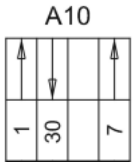


Example: Many electric circuits depend on the seat contact switch Z5 (see circuit diagram 17a). The number **next to** the circle (e.g. 15) indicates the number of the circuit diagram on which another function depending on the seat contact is shown.

Designations

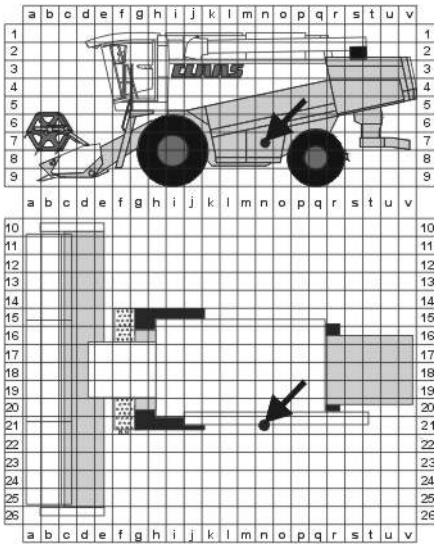


- Connectors (e.g. „M”, pin 9 and 17).
  Each chapter lists the respective connectors and their pin assignment in the individual connection tables.



- Modules (e.g. „A12 - Speed monitor“)
  The arrows identify the functional inputs and outputs according to the assignment table provided in chapter **ZE.**

7-n-21 - Position of components according to component grid coordinates



A 1 ... Z 99 - Component designation according to CLAAS standards catalogue

A - Terminal / Module
B - Sensor
E - Lighting
F - Fuse
G - Voltage Source
H - Signalling Device / Lamp
K - Relay
M - Electric Motor
P - Gauge
R - Potentiometer / Resistor
S - Switches – Cab Operation
T - Switches – Terminal Operation
U - Switches – External Operation
V - Electronic Component
W - Antenna
X - Connector
Y - Solenoid coil
Z - Actual Value Function Switch

Connections list

- List of connections within the central terminal compartment, stating cross-section (mm²) and colour of cables connected to the machine.

from	to 1	mm²	Colour
BB - 5	S 54	0.5	bl-wh
BB -10	Y 25	0.5	bk
MW-17	K49/86	0.75	br

rd - red
bk - black
br - brown
wh - white
bl - blue
gr - grey
ye - yellow
gn - green
pi - pink
or - orange
vi - violet

Contents:

Central terminal compartment ZE-2

Pin assignment in modules M-2

01a Main power supply, diesel engine electric starting motor 01a-2

02a Starting the diesel engine, diesel engine electric starting motor - CAT C12, C10, C9, 3126B 02a-2

02b Starting the diesel engine, diesel engine electric starting motor- DC 502 LA 02b-2

02c Starting the diesel engine, diesel engine electric starting motor- DC 502 LA, with electro-hydraulic ground drive (EFA) 02c-2

02d Starting the diesel engine, diesel engine electric starting motor - CAT C6.6 ..... 02d-2

02e Starting the diesel engine, diesel engine electric starting motor - C13 ACERT, C9 ACERT (TIER III) 02e-2

03a Diesel engine cut-off system 03a-2

04a Road travel activation, master valve 04a-2

04b Road travel activation, master valve - with electro-hydraulic ground drive (EFA) 04b-2

05a Terminal, keyboard, rotary switch, printer 05a-2

05b Terminal, keyboard, rotary switch, printer - with electro-hydraulic ground drive (EFA) 05b-2

06a CAN bus, module power supply, for diesel engine CATERPILLAR - C12, C10, C9, 3126B 06a-2

06b CAN bus, module power supply, for diesel engine Daimler - Chrysler DC 502 LA - **without** electro-hydraulic ground drive (EFA) 06b-2

06c CAN bus, module power supply, for diesel engine CATERPILLAR - C13 ACERT (TIER III) - **with** electro-hydraulic ground drive (EFA) 06c-2

06d CAN bus, module power supply, for diesel engine Daimler - Chrysler DC 502 LA, - **with** electro-hydraulic ground drive (EFA) 06d-2

06e CAN bus, module power supply, for diesel engine CATERPILLAR - C6.6 ..... 06e-2

06f CAN bus, module power supply, for diesel engine CATERPILLAR - C9 ACERT (TIER III) 06f-2

07a Threshing mechanism circuit 07a-2

08a Concave adjustment / Threshing drum variable-speed drive 08a-2

09a Rotor flap adjustment / Rotor variable-speed drive 09a-2

10a Fan variable-speed drive 10a-2

11a Sieve adjustment 11a-2

12a Deflector adjustment 12a-2

13a Straw and chaff spreader, uni-spreader - LEXION 580 ..... 13a-2

13b Straw and chaff spreader, radial spreader 13b-2

14a Swinging the grain tank unloading tube 14a-2

15a Grain tank unloading / Grain tank unloading aid 15a-2

16a Rape cutting knife circuit 16a-2

17a Front attachment drive, reverser drive, front attachment quick stop 17a-2

17b Front attachment drive, reverser drive, front attachment quick stop - with electro-hydraulic ground drive (EFA) 17b-2

18a Front attachment variable-speed drive 18a-2

19a Straw chopper 19a-2

19b Straw chopper, radial spreader without chaff spreader 19b-2

19c Straw chopper, radial spreader with chaff spreader 19c-2

20a Front attachment raise/lower, cross levelling 20a-2
20b Front attachment raise/lower, cross levelling - with electro-hydraulic ground drive (EFA) 20b-2
21a Reel adjustment - Standard cutterbar, MaxFlex soybean header 21a-2
21b Reel adjustment - VARIO cutterbar 21b-2
21c Reel adjustment - Folding cutterbar 21c-2
21d Folding the maize picker, snapping plate adjustment, down maize augers 21d-2
21e Rake-up – Drive, rake-up crop guard adjustment 21e-2
22a Reel variable-speed drive 22a-2
23a Cutting table adjustment (Vario), folding the cutterbar 23a-2
23b MaxFlex cutting table adjustment 23b-2
24a AUTOCONTOUR (CAC) 24a-2
25a Speed monitor 25a-2
26a Machine monitor 26a-2
26b Machine monitor - with electro-hydraulic ground drive (EFA) 26b-2
27a Yield meter / Grainmeter 27a-2
28a AUTOPILOT – Laser system 28a-2
28b AUTOPILOT – Feeler system 28b-2
28c AUTOPILOT – GPS-controlled steering 28c-2
29a Performance monitor 29a-2
30a Open / close grain tank (electric), grain tank full signal, warning beacon 30a-2
30b Open / close grain tank (hydraulic), grain tank full signal, warning beacon 30b-2
31a Front attachment dampening 31a-2
32a All-wheel drive, fuel tank 32a-2
32b All-wheel drive - overdrive, fuel tank 32b-2
32c All-wheel drive, fuel tank - with electro-hydraulic ground drive (EFA) 32c-2
32d All-wheel drive - overdrive, fuel tank - with electro-hydraulic ground drive (EFA) 32d-2
33a Cutterbar spring lock 33a-2

36a Indicator system (Europe) ... 36a-2

36b Indicator system (USA) ... 36b-2

37a Windscreen wiper, windscreen washer ... 37a-2

38a Compressor-type air conditioner ... 38a-2

38b Automatic air conditioner ... 38b-2

39a Cab comfort equipment – operator's seat ... 39a-2

40a Additional sockets, fuse tester ... 40a-2

42a Ground drive and brake control ... 42a-2

42b Ground drive and brake control - with electro-hydraulic ground drive (EFA) LEXION 600 TerraTrac ... 42b-2

43a Electro-hydraulic ground drive (EFA) ... 43a-2

44a Electro-hydraulic gearshift - 3-speed manual gearbox ... 44a-2

44b Electro-hydraulic gearshift - 2-speed manual gearbox ... 44b-2

45a Main lighting circuit, taillight, position light ... 45a-2

46a Dipped headlights, full beam, dipped headlights changeover switch ... 46a-2

47a Work lights I ... 47a-2

48a Work lights II ... 48a-2

49a Sieve, grain tank and returns lighting, reversing horn, brake light ... 49a-2

49b Sieve, grain tank and returns lighting, reversing horn, brake light - with electro-hydraulic ground drive (EFA) ... 49b-2

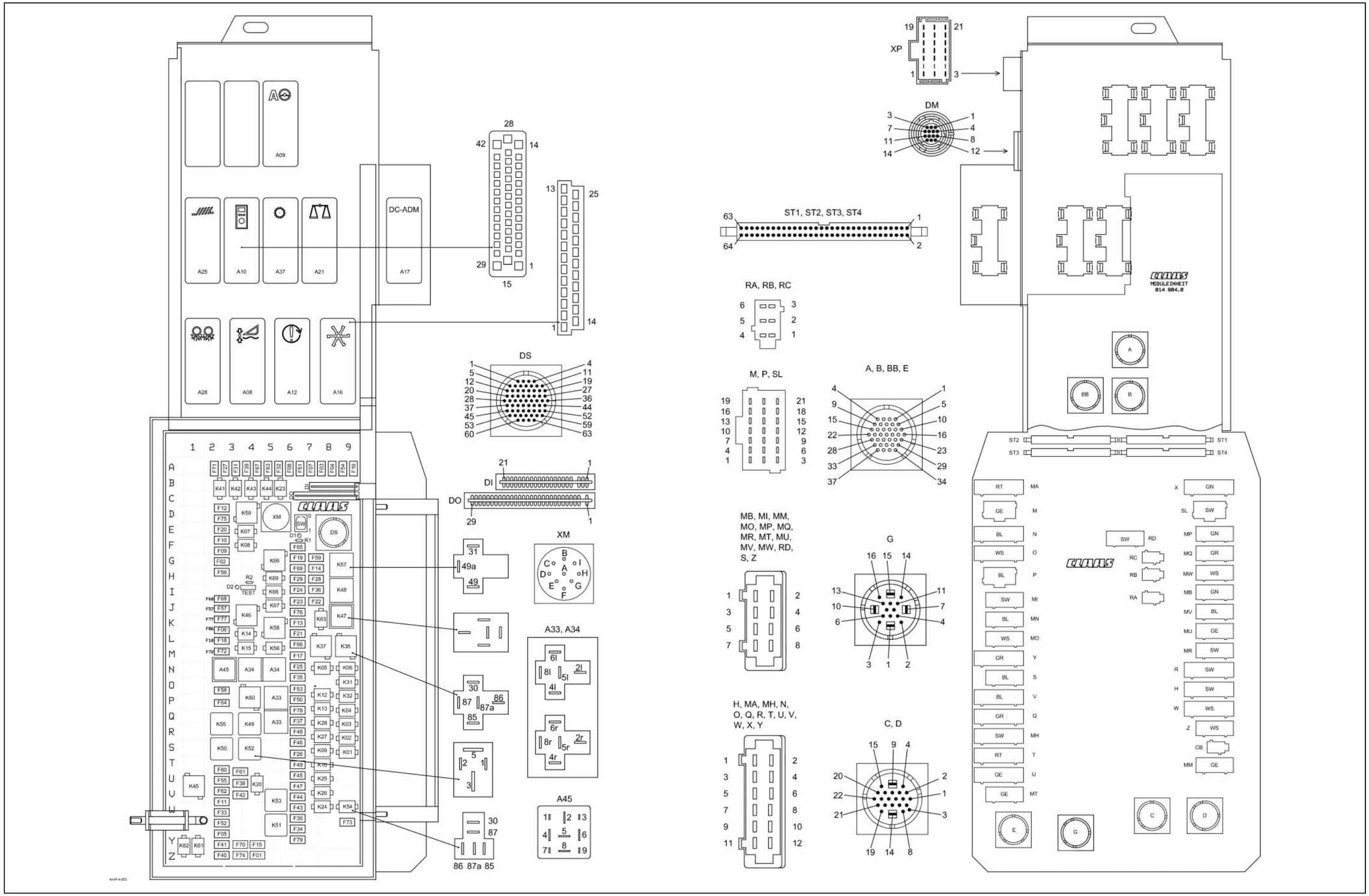
50a Instrument lighting, broadcast receiver, mirror adjustment ... 50a-2

Component grid ... R-2

Index ... index-2

Central terminal compartment

Central terminal compartment



Key to diagram:

		Centr. term. comp. position
	Modules	
A08	AUTOCONTOUR module (CAC)	
A09	AUTOPILOT module	
A10	Fieldwork computer module (BIF/CAB)	
A12	Speed monitor module (DZW)	
A16	Reel controller module (HAS)	
A17	Engine adaptation module (ADM)	
A21	YIELD METER module (LEM)	
A25	Sieve adjustment module	
A28	Uni-spreader module (VGS)	
A33	Sidefinder module	
A34	Grain tank module	
A37	Electro-hydraulic gearshift (EHS) module	
A45	Ground drive hydraulic motor brake restrictor module (HBM)	
	Electronic components	
DI	Warning device diode PCB	
D0	Master valve diode PCB	
DS	Diagnosis (63-pin) VIA	
ST1	Connecting cable (ribbon cable)	Connection between basic PCB and module PCB / Interconnection list on page ZE-6
ST2	Connecting cable (ribbon cable)	
ST3	Connecting cable (ribbon cable)	
ST4	Connecting cable (ribbon cable)	
	Fuses	
F1	Dipped headlights circuit	Z 4
F2	Sieve adjustment module 12 V control unit	G 2
F3	CAN connection of performance monitor	A 7-8
F4	+12 V electronic unit	A 8
F5	12 V air conditioner fan	X-Y 2
F6	Spare (plug MU)	K-L 2
F7	CAC module	A 7
F8	Reel module	A 6
F9	Yield meter	F 2
F10	Yield meter	F 2
F11	Inside work lights	V-W 2
F12	Work lights relay	C-D 2
F13	Cigarette lighter	K 6
F14	Seat socket	G-H 7
F15	Dipped headlights / Full beam	Y 4
F16	12 V CAB/DZW	A 9
F17	Electronic unit plus RIO	M 6
F18	Cutterbar quick stop	L 2
F19	Engine speed switch	G 6
F20	All-wheel drive 12 V switch	E 2
F21	Threshing mechanism relay	L 6
F22	Threshing mechanism ON	I-J 7
F23	Hazard warning switch 30	I-J 6
F24	Hazard warning switch 15	I 6
F25	Fan speed relay	N 6
F26	Reel controller	S 6
F27	Upper/lower sieve	A 2-3
F28	Autopilot switch	H 7
F29	Ground speed control lever limit switch 12 V	H 6
F30	Brake light switch 12 V / Sieve pan light	W-X 6

Key to diagram:

		Centr. term. comp. position
	Fuses	
F31	Rotary switch 12 V	A 3
F32	12 V IMO	A 5
F33	Air conditioner relay	W 2
F34	Engine ignition	X 6
F35	Fold cutterbar	N-O 6
F36	Grain tank extension	I 7
F37	12 V grain tank drive	Q 6
F38	Work light	U 3
F39	Chopper ON/OFF pushbutton	A 4
F40	Vehicle lighting switch 12 V	Z 2
F41	Warning beacon	Y 2
F42	12 V horn / wiper and washer system	V 3
F43	Position light, left-hand	W 6
F44	Position light, right-hand	V 6
F45	Left-hand full beam relay	U 6
F46	Left-hand dipped beam relay	S 6
F47	Right-hand full beam relay	U-V 6
F48	Right-hand dipped beam relay	R 6
F49	Table adjustment	T 6
F50	Grain tank extension	P 6
F51	Ignition diagnosis plug	A 6
F52	Instrument lighting	X 2
F53	Returns lighting	O 6
F54	Uni-spreader/Autopilot module	A 9
F55	Worklight switch	U 2
F56	Spare module	H 2
F57	Spare module	J 2
F58	Spare (connector H)	O 2
F59	Engine diagnosis	G 7
F60	12 V sockets LP/HP	T-U 2
F61	Sidefinder	T-U 3
F62	Outside railing worklights relay	V 2
F63	Power supply for 12 V potentiometers	A 5
F64	12V speed sensors	P 2
F65	Spare relay 40A incl. 12 V/30A	F 6
F66	12 V deflector adjustment RIO / radial spreader	L 6
F67	Rotor flaps RIO / rotor variator	A 4
F68	Wheel position worklights	I-J 2
F69	Cooling box socket outlet 12V	G-H 6
F70	Ignition switch back-up fuse	Y 3
F71	Sieve adjustment module 12V power	A 2
F72	MINI ECU	M 2
F73	Stubble lighting worklights	X 9
F74	Broadcast radio / radio 12 V constant plus	Z 3
F75	Transmission controller 12 V power supply	D 2
F76	Maintenance lights	J 6
F77	Front attachment electronic unit plus	K 2
F78	Diagnosis DC terminal 15	P-Q 6
F79	VCU terminal 30	Y 6

Key to diagram:

		Centr. term. comp. position
	Relay	
K1	Raise reel	S 9
K2	Lower reel	R-S 9
K3	Reel forward	Q-R 9
K4	Reel backward	P-Q 9
K5	Raise cutterbar	N 7-8
K6	Lower cutterbar	N 9
K7	Cutterbar left-hand cross levelling	E 3-4
K8	Cutterbar right-hand cross levelling	F 3-4
K9	Table adjustment forward	S 7-8
K10	Table adjustment backward	T 7-8
K12	Ground speed control lever zero position	P 7-8
K13	Threshing mechanism On/Off	P-Q 7-8
K14	Threshing mechanism On/Off	L 3-4
K15	Cutterbar quick stop	L-M 3-4
K20	Lighting main relay	U-V 4
K23	Generator	B-C 5
K24	Air conditioner relay	W 7-8
K25	Left-hand full beam relay	U 7-8
K26	Right-hand full beam relay	V 7-8
K27	Left-hand dipped beam relay	R-S 7-8
K28	Right-hand dipped beam relay	Q-R 7-8
K31	Grain tank extension up	O 9
K32	Grain tank extension down	P 9
K37	Fan speed -	L-M 7-8
K38	Fan speed +	L-M 8-9
K41	Upper sieve adjustment -	B-C 2
K42	Upper sieve adjustment +	B-C 3
K43	Lower sieve adjustment -	B-C 4
K44	Lower sieve adjustment +	B-C 5
K45	Work lights	U-V 1
K46	Maintenance lights	J-K 3-4
K47	Flash relay USA	J-K 8-9
K48	Indicator relay Europe	I 8-9
K49	Road travel main relay	Q-R 4
K50	Work lights relay	S 2
K51	Relay 15	X 5
K52	Ignition relay 15a	S 4
K53	Start relay	V-W 5
K54	Stubble lighting	W 9
K55	Work lights relay	Q-R 2
K56	Electronic unit plus	L-M 5
K57	Transducer	G-H 8-9
K58	Alternator relay	K-L 5
K59	Work lights relay	D 3-4
K60	Wheel position work lights	O-P 4
K61	Warning beacon	Y-Z 1
K62	Warning beacon grain tank 70% full	Y-Z 1
K63	Fan speed relay	J-K 7-8
K66	Spare relay 40 A	G 5
K67	Spare relay	J 5
K68	Spare relay	I 5
K69	Spare relay	H 5

Connecting cable Boards – Central terminal compartment
(Assignment table: Module → Connector): 1/5

Module board Module / Pin	**Connecting cable** ST 1-4 Pin		**Motherboard** Connector / Pin				
A08 01	**ST3**	**36**	K8 87	SL 10	MQ 3		
A08 02	**ST2**	**63,64**	Z 8	Q 12			
A08 03	**ST1**	**23**	MW 3	MV 3	MU 3		
A08 05	**ST2**	**43**	M 3				
A08 06	**ST2**	**51**	M 5				
A08 07	**ST4**	**13**	H 3	DS 53	W 2		
A08 08	**ST1**	**35**	E 25	DS 48			
A08 12	**ST2**	**40**	V 5	K5 87	DO 8		
A08 13	**ST2**	**36**	V 6	K6 87	DS 6		
A08 14	**ST3**	**35**	K7 87	MQ 4	SL 11		
A08 15	**ST3**	**17** **18**	F07 a	DS 5			
A08 16	**ST1**	**21**	MW 4	MV 4	MU 4		
A08 18	**ST2**	**49**	M 6				
A08 19	**ST2**	**41**	M 1				
A08 20	**ST2**	**23, 24** **25, 26** **27, 28** **29, 30** **31, 32**	N 12	F35 a	U 7		
A08 22	**ST1**	**39**	E 27				
A08 25	**ST3**	**32**	DO 1				
A10 01	**ST3**	**55, 56** **57, 58** **59, 60** **61, 62** **63, 64**	F16 a				
A10 02	**ST2**	**50**	K38 86				
A10 03	**ST4**	**13**	H 3	DS 53	W 2		
A10 04	**ST2**	**58**	P 6	MO 1			
A10 05	**ST2**	**33**	MA 8				
A10 06	**ST2**	**46**	Z 3				
A10 09	**ST3**	**54**	M 9	DI 1			
A10 10	**ST2**	**19**	P 4	R 1	A34 2R		
A10 13	**ST1**	**21**	E 30	MO 4	MP 4		
A10 14	**ST3**	**33** **34**	F04 a				
A10 15	**ST3**	**53**	V 2	DO 13			
A10 16	**ST3**	**50**	K37 86				
A10 17	**ST4**	**1**	P 14				
A10 18	**ST2**	**57**	SL 7	DS 2			
A10 19	**ST2**	**52**	O 10	DS 1	SL 8		
A10 20	**ST4**	**12**	W 1	F22 a	K63 86	MN 2	DS 52

Connecting cable Boards – Central terminal compartment
(Assignment table: Module → Connector): 2/5

Module board Module / Pin	**Connecting cable** ST 1-4	Pin	**Motherboard** Connector / Pin				
A10 24	**ST4**	**10**	O 9				
A10 27	**ST2**	**13**	G 11	XM G			
A10 29	**ST2**	**34**	V 1				
A10 32	**ST1**	**20**	Z 4				
A10 33	**ST4**	**2**	P 15				
A10 34	**ST1**	**32**	C 18	G 16	K58 86	MM 8	
A10 40	**ST1**	**23**	E 31	MO 7	MP 3		
A10 41	**ST2**	**47**	G 9	XM F			
A10 42	**ST2**	**11**	G 12	XM C			
A12 01	**ST3**	**49**	Q 1	DO 17			
A12 02	**ST3**	**38**	Y 1	Y 12	MO 8	E 1	E 12
A12 03	**ST1**	**23**	E 31	MO 7	MP 3		
A12 04	**ST1**	**19**	W 10	MN 3	DS 17		
A12 12	**ST1**	**42**	V 8	DO 15			
A12 13	**ST3**	**4**	V 7	DO 16			
A12 14	**ST2**	**10**	Q 2				
A12 15	**ST3**	**33** **34**	F04 a				
A12 16	**ST1**	**21**	E 30	MO 4	MP 4		
A12 20	**ST3**	**55, 56** **57, 58** **59, 60** **61, 62** **63, 64**	F16 a				
A12 25	**ST2**	**14**	P 7				
A16 01	**ST2**	**48**	E 6	DS 20	DO 3	K1 87	
A16 02	**ST2**	**63** **64**	Z 8	Q 12			
A16 03	**ST1**	**23**	MW 3	MV 3	MU 3		
A16 04	**ST1**	**40**	P 8	MQ 5	DO 2	DS 7	SL 12
A16 05	**ST1**	**36**	E 22				
A16 07	**ST2**	**37**	N 11				
A16 08	**ST1**	**22**	E 24				
A16 09	**ST3**	**3**	Z 5				
A16 10	**ST2**	**54**	E 28				
A16 13	**ST2**	**22**	Q 7	DS 24			
A16 14	**ST2**	**56**	E 7	K2 87	DS 21		
A16 15	**ST3**	**1,2**	F08 a				
A16 16	**ST1**	**21**	MW 4	MV 4	MU 4		
A16 17	**ST1**	**34**	E 29	MA 12			
A16 18	**ST3**	**20**	K3 86	K3 30	K4 86	K4 30	K2 30
A16 20	**ST3**	**19, 20** **21, 22** **23, 24** **25, 26** **27, 28**	Q 4	F26 a	K1 86	K1 30	K2 86

Connecting cable Boards – Central terminal compartment
(Assignment table: Module → Connector): 3/5

Module board Module / Pin	**Connecting cable** ST 1-4 Pin	**Motherboard** Connector / Pin				
A16 21	**ST1 38**	E 23				
A16 22	**ST2 45**	Q 3				
A16 25	**ST2 44**	Q 8	DS 25			
A25 01	**ST4 4**	K42 86				
A25 02	**ST3 39**	MH 2	MH 7	MU 2	MP 2	H 1
A25 03	**ST1 23**	A45 3	SL 4	MR 3	DS 62	
A25 08	**ST2 39**	DS 46				
A25 12	**ST4 3**	K41 86				
A25 13	**ST4 6**	K44 86				
A25 14	**ST4 5**	K43 86				
A25 15	**ST4 17**	MV 1	F02 a	MW 1		
A25 16	**ST1 21**	A45 9	SL 5	MR 4	DS 63	
A25 20	**ST1 61, 62 63, 64**	F71 a				
A28 02	**ST3 40**	R 3	MV 2	K55 85	O 4	MW 2
A28 03	**ST1 23**	A45 3	SL 4	MR 3	DS 62	
A28 07	**ST1 1, 2, 3, 4 5, 6, 7, 8 9, 10**	DS 49	MN 7			
A28 11	**ST1 26**	DS 47				
A28 12	**ST1 11, 12 13, 14**	DS 26	MN 5			
A28 13	**ST1 53, 54 55, 56**	DS 27	MN 6			
A28 15	**ST3 51 52**	MR 1	F54 a			
A28 16	**ST1 21**	A45 9	SL 5	MR 4	DS 63	
A28 20	**ST1 1, 2, 3, 4, 5, 6, 7, 8, 9, 10**	DS 49	MN 7			
A28 25	**ST1 15, 16 17, 18**	MN 8				
A28 13	**ST1 53, 54 55, 56**	DS 27	MN 6			
A28 15	**ST3 51, 52**	MR 1	F54 a			
A28 16	**ST1 21**	A45 9	SL 5	MR 4	DS 63	
A28 20	**ST1 1, 2, 3, 4, 5, 6, 7, 8 9, 10**	DS 49	MN 7			
A28 25	**ST1 15, 16, 17, 18**	MN 8				

Connecting cable Boards – Central terminal compartment
(Assignment table: Module → Connector): 4/5

Module board Module / Pin	**Connecting cable** ST 1-4 Pin	**Motherboard** Connector / Pin				
A 01	**ST4 19**	U 10	SL 20			
A 04	**ST4 15**	MN 4	DS 33			
A 05	**ST2 59 60**	A34 4R	H 6	DS 16	W 4	
A 06	**ST1 24**	G 14	K24 85			
A 08	**ST2 61**	A34 8L	W 3	H 5	M 21	DS 15
A 09	**ST1 29**	MH 6				
A 10	**ST1 33**	MH 8				
A 11	**ST2 9**	T 8	Y 2	SL 6		
A 12	**ST2 53**	G 6	DI 13			
A 14	**ST1 31**	MH 5	K62 85			
A 15	**ST2 55**	W 9	DI 4			
A 16	**ST2 62**	W 5				
A 17	**ST2 21**	K23 87a	G 13			
A 18	**ST4 16**	K57 49a	C 20			
A 19	**ST1 23**	E 31	MO 7	MP 3		
A 20	**ST1 21**	E 30	MO 4	MP 4		
A 21	**ST1 43, 44 45, 46 47, 48 49, 50 51, 52**	F32 a				
A 22	**ST2 1, 2, 3, 4, 5, 6, 7, 8**	MA 10	DS 61	U 4	MT 8	K46 85
A 23	**ST3 5, 6, 7, 8, 9, 10, 11, 12, 13, 14**	F51 a	DS 58	DS 59		
A 28	**ST4 7, 8, 9**	F31 a	DS 56			
A 34	**ST2 63 64**	Z 8	Q 12			
B 01	**ST1 41**	Z 6	DS 51	F64 a		
B 02	**ST4 18**	F17 a	MO 5	SL 14	K5 86	K5 30
B 03	**ST4 50, 51 52, 53 54, 55 56, 57 58, 59 60, 61 62, 63 64**	F67 a				
B 07	**ST4 5**	K43 86				
B 08	**ST4 6**	K44 86				
B 09	**ST4 3**	K41 86				
B 10	**ST4 4**	K42 86				

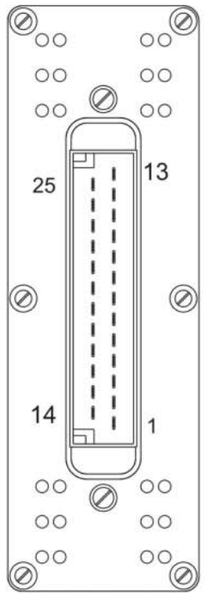
Connecting cable Boards – Central terminal compartment
(Assignment table: Module → Connector): 5/5

Module board Module / Pin	**Connecting cable** ST 1-4	Pin	**Motherboard** Connector / Pin				
B 11	**ST1**	**61, 62 63, 64**	F71 a				
B 13	**ST1**	**23**	MW 3	MV 3	MU 3		
B 14	**ST1**	**21**	MW 4	MV 4	MU 4		
B 15	**ST4**	**32, 33 34, 35 36, 37 38, 39 40, 41**	F39 a				
B 16	**ST4**	**42, 43 44, 45**	Q 6	DS 18	DO 22		
B 17	**ST4**	**46, 47 48, 49**	Q 5	DS 19	DO 20		
B 20	**ST2**	**59, 60**	A34 4R	H 6	DS 16	W 4	
B 23	**ST1**	**34**	E 29	MA 12			
B 24	**ST3**	**29**	F03 a	MU 1			
B 25	**ST2**	**2**	P 12	MI 2	T 7	T 6	C 16
B 26	**ST4**	**20, 21 22, 23**	K41 30				
B 27	**ST4**	**24, 25 26, 27**	K42 30				
B 28	**ST4**	**28, 29 30, 31**	K43 30				
B 29	**ST1**	**57, 58 59, 60**	K44 30				
B 30	**ST1**	**27, 28**	DS 57	MU 8	MR 5	F63 a	
B 31	**ST1**	**35**	E 25	DS 48			
B 33	**ST2**	**64**	CB 2	Bridge a	E 37		
B 34	**ST2**	**39**	DS 46				
BB 10	**ST1**	**35**	E 25	DS 48			
BB 12	**ST2**	**64**	CB 2	Bridge a	E 37		
BB 13	**ST1**	**27, 28**	DS 57	MU 8	MR 5	F63 a	
BB 19	**ST1**	**26**	DS 47				
BB 24	**ST1**	**41**	Z 6	DS 51	F64 a		
BB 29	**ST2**	**3**	MQ 8	V 12	V 11	MT 4	MT 3
	ST2	**24**	K6 30	K6 86	K7 86	K7 30	
	ST2	**25**	K8 86	K8 30			
	ST2	**15, 16 17, 18**					
	ST3	**15, 16**					

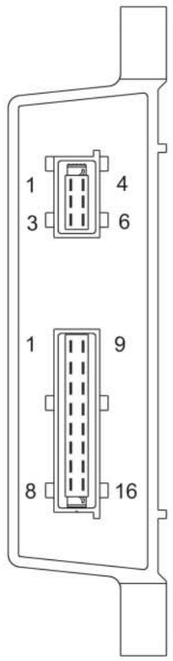
Pin assignment in modules

Pin assignment in modules

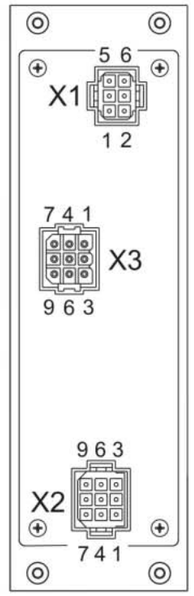
A8, A9, A12, A13, A16, A21, A27, A28, A37



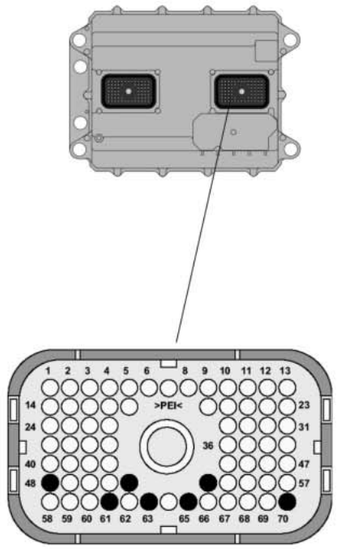
A25, A38, A46



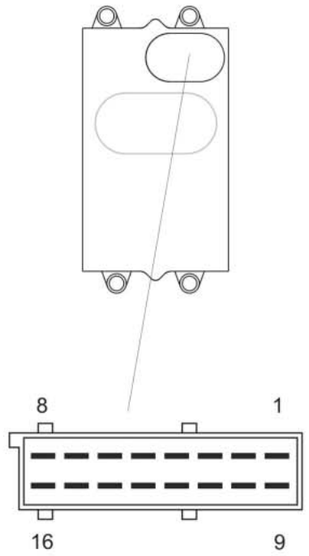
A6



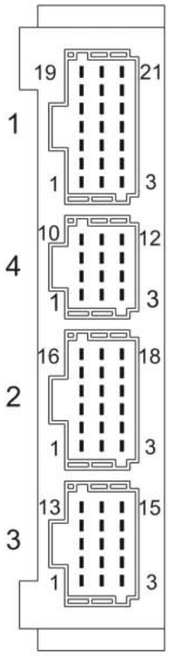
A15-CAT



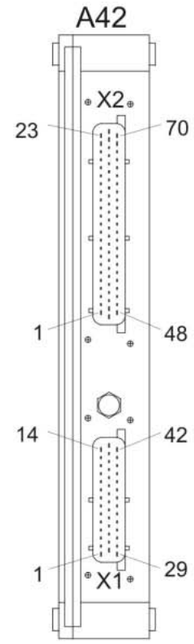
A15-DC



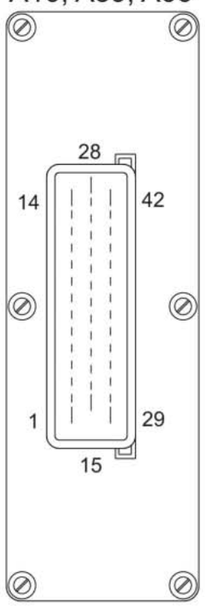
A17-DC



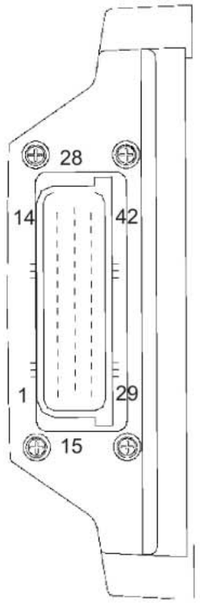
A42



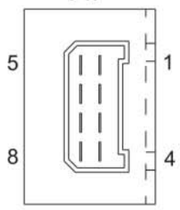
A10, A39, A66



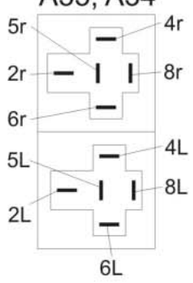
A49



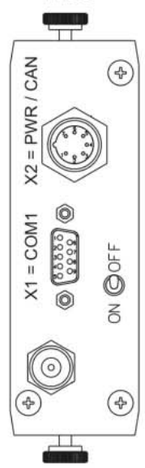
A7



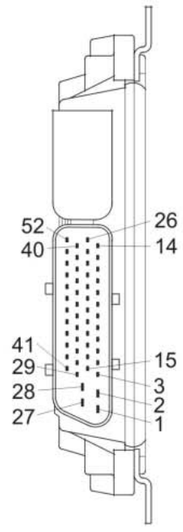
A33, A34



A65

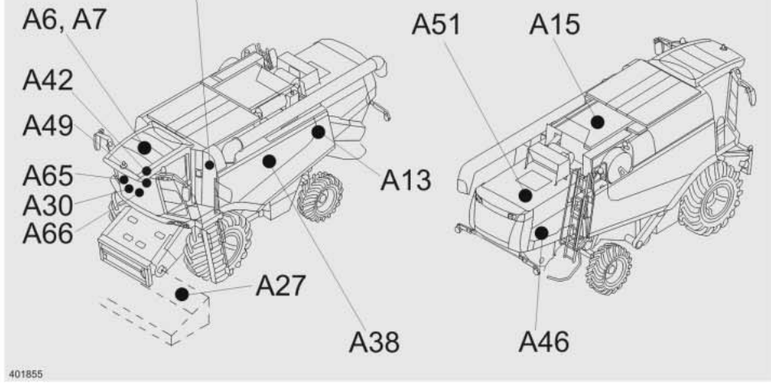


A51



401856-1

ZE:
A8, A9, A10, A12, A16, A17, A21, A28, A37, A39



401855

Module A6 – Automatic air conditioner

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1/ 1	Terminal 61	G 2	12 V	Input	01a
1/ 2	Power	a8 / 30 A	12 V	Input	38b
1/ 5	Instrument lighting	E 35	12 V	Output	36a
1/ 6	Earth	-31	0 V	Input	38b
2/ 1	Icing protection	Z 74	12 V	Output	38b
2/ 2	Heater solenoid coil	Y109	12 V (PWM)	Output	38b
2/ 3	PWM fan	M 7	12 V (PWM)	Output	38b
2/ 9	Power	a8 / 30 A	12 V	Input	38b
3/ 1	Inside temperature	B86	-20° - 97070 Ω	---	38b
3/ 2	Inside temperature	B86	-10° - 55330 Ω	---	38b
3/ 3	Blow-out temperature	B87	0° - 32650 Ω	---	38b
3/ 4	Blow-out temperature	B87	10° - 19900 Ω	---	38b
3/ 5	Outside temperature	B88	20° - 12490 Ω	---	38b
3/ 6	Outside temperature	B88	30° - 8057 Ω	---	38b
			40° - 5327 Ω		

Module A7 – Cab fan speed controller

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Earth	-31	0 V	Output	38b
2	not used	---	---	---	---
3	not used	---	---	---	---
4	Power	M7	0-12 V	Output	38b
5	Earth	M7	0 V	Input	38b
6	not used	---	---	---	---
7	PWM fan	A6	12 V (PWM)	Input	38b
8	Power	A7	12 V	Input	38b

Module A8 – AUTOCONTOUR (CAC)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Cross levelling, right-hand*	Y68	12 V	Output*	20
2	Earth (GND)	-32	Earth	Input	6
3	CAN high	-	-	-	6
4	---	---	---	---	---
5	Slowly raise front attachment signal	S38a	Earth	Input	20
6	Pre-set cutting height control signal	S38d	Earth	Input	24
7	Front attachment circuit signal	K16/87	12 V	Input	17
8	Reference voltage	---	5 V	Output	24
9	Feed rake conveyor position – actual value	B35	0.25-4.75 V	Input	24
10	Left-hand sensing band actual value signal	B3	0.25-4.75 V	Input	24
11	---	---	---	---	---
12	Raise front attachment	Y85	12 V	Output	20
13	Lower front attachment	Y87	12 V	Output	20
14	Cross levelling, left-hand*	Y67	12 V	Output*	20
15	Electronic unit	F7	12 V / 1 A	Input	6
16	CAN low	-	-	-	6
17	---	---	---	---	---
18	Cutting height control signal	S38c	Earth	Input	24
19	Slowly lower front attachment signal	S38b	Earth	Input	20
20	Power	F72	12 V / 15 A	Input	20
21	---	---	---	---	---
22	Right-hand sensing band signal – Actual value	B4	0.25 -4.75 V	Input	24
23	Ground pressure / cutterbar spring actual value signal	B2/ B68	0.25 -4.75 V	Input	24
24	---	---	---	---	---
25	Master valve	Y77	12 V	Output	4, 20

* - Pin1 and pin14 are also used as signal input for manual cross levelling (see diagram 20)

Module A9 – AUTOPILOT (ATP)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Laser right-hand changeover	S96	12 V	Input	28
2	Earth (GND)	-31	Earth	Input	6, 28
3	CAN high	---	---	---	6
4	---	---	---	---	---
5	ATP signal OFF	B83	Earth	Input	28
6	---	---	---	---	---
7	Power	S10	12 V / 15 A	Input	28
8	Touch sensor reference voltage	R3	5 V	Output	28
9	Wheel angle actual value signal	B6	0.25-4.75 V	Input	28
10	Centralizing switch set value signal	R3	0.25-4.75 V	Input	28
11	Pressure sensor signal (0-250 bar, linear)	B5	0.25-4.75 V	Input	28
12	Steering left	Y9	12 V	Output	28
13	Steering right	Y10	12 V	Output	28
14	ATP control	H2	12 V	Input	28
15	Electronic unit	F54	12 V / 1 A	Input	6
16	CAN low	---	---	---	6
17	---	---	---	---	---
18	ATP ON signal	S9	Earth	Input	28
19	Seat contact signal	Z5	Earth	Input	15, 16, 17, 28
20	Power	S10	12 V / 15 A	Input	28
21	Left-hand touch sensor or laser pilot actual value signal	B7, B50	0.25-4.75 V	Input	28
22	Right-hand touch sensor actual value signal	B8	0.25-4.75 V	Input	28
23	Laser pilot or left-hand touch sensor actual value signal	B7, B50	0.25-4.75 V	Input	28
24	ATP signal OFF	B83	Earth	Input	28
25	Master valve	Y77	12 V	Output	4

Module A10 – Fieldwork computer (BIF/CAB)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Power	F16	12 V / 7.5 A	Input	8
2	Fan speed +	K38/86	12V	Output	10
3	Front attachment ON	Y88	12 V (PWM)	Output	17
4	Reverse travel signal (ha counter OFF)	Z50	12 V	Input	49
5	Front attachment ON signal	S95	12 V	Input	17
6	---	---	---	---	---
7	Fuel tank filling signal	B43	0.25 - 4.75 V	Input	32
8	Main drive speed signal	B18	0.4 V - 4.6 V	Input	25
9	Front attachment OFF signal	S54	Earth	Input	17
10	Seat contact	Z5	Earth	Input	15, 17
11	---	---	---	---	---
12	---	---	---	---	---
13	CAN 1 low	-	-	-	6
14	Electronic unit	F4	12 V / 1 A	Input	6
15	Threshing drum speed +	Y20	12 V	Output	8
16	Fan speed -	K37/86	12 V	Output	10
17	Rotor flaps half open	S97	12 V	Input	9
18	Diesel engine signal 3rd gear	Z95	12 V	Input	44
19	Diesel engine full throttle signal	S35	12 V	Input	2
20	Threshing mechanism circuit signal (working hours)	F22	12 V	Input	7
21	Fan speed signal	B15	0.4 V - 4.6 V	Input	25
22	Radial spreader speed signal	B89	0.4 V - 4.6 V	Input	25
23	---	---	---	---	---
24	Diesel engine half throttle signal	S35	12 V	Input	2
25	---	---	---	---	---
26	Reference voltage	R29	5 V	Output	12
27	CAN 2 high (J1939)	-	-	-	-
28	Earth (GND)	-31	Earth	Input	6
29	Threshing drum speed -	Y19	12 V	Output	8
30	Additional fuel tank	Y91	12 V	Output	32
31	Spreading direction signal	R29	1.7 - 6.4 kΩ	Input	13
32	Ground drive filter warning	Z78	Earth	Input	26
33	Rotor flaps close	S97	12 V	Input	9
34	Alternator / Pin 61 signal (engine hours)	G2	14 V	Input	1
35	Threshing drum speed signal	B11	0.4 V - 4.6 V	Input	25
36	Ground speed signal (trip)	B16	0.4 V - 4.6 V	Input	25
37	---	---	---	---	---
38	Spreading width signal	R27	1.7 - 6.4 kΩ	Input	13
39	---	---	---	---	---
40	CAN 1 high	---	---	---	6
41	CAN 2 low (J1939)	---	---	---	2
42	CAN 2 screening (J1939)	---	---	---	2

Module A12 – Speed monitor (DZW)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Front attachment speed +	Y90	12 V	Output	18
2	Earth (GND)	-31	Earth	Input	6
3	CAN high	-	-	-	6
4	Chopper circuit signal (chopper operating hours)	Z58	12 V	Input	19
5	Feed rake conveyor speed signal	B12	0.4 V - 4.6 V	Input	25
6	Grain elevator speed signal	B21	0.4 V - 4.6 V	Input	25
7	Rotor / finger roller speed signal	B24/B74	0.4 V - 4.6 V	Input	25
8	Uni-spreader speed signal	B27	0.4 V - 4.6 V	Input	25
9	---	---	---	---	---
10	---	---	---	---	---
11	Concave position signal	B30	0.25 - 4.75 V	Input	8
12	Concave clearance +	Y18	12 V	Output	8
13	Concave clearance -	Y17	12 V	Output	8
14	Front attachment speed -	Y89	12 V	Output	18
15	Electronic unit	F4	12 V / 1 A	Input	6
16	CAN low	-	-	-	6
17	---	---	---	---	---
18	Returns speed signal	B29	0.4 V - 4.6 V	Input	25
19	Chopper speed / uni-spreader speed signal	B28	0.4 V - 4.6 V	Input	25
20	Power	F16	12 V / 7.5 A	Input	8, 18
21	---	---	---	---	---
22	---	---	---	---	---
23	---	---	---	---	---
24	---	---	---	---	---
25	Reverse front attachment	S57	12 V	Output	17

Module A13 – Performance monitor (DKG)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	---	---	---	---	---
2	Earth (GND)	31	Earth	Input	6
3	CAN high	-	-	-	6
4	---	---	---	---	---
5	Electronic unit	F3	12 V / 1 A	Input	29
6	Right-hand separation signal	B34	-	Input	29
7	---	---	---	---	---
8	---	---	---	---	---
9	---	---	---	---	---
10	---	---	---	---	---
11	---	---	---	---	---
12	---	---	---	---	---
13	---	---	---	---	---
14	---	---	---	---	---
15	---	---	---	---	---
16	CAN low	-	-	-	6
17	Left-hand separation signal	B33	-	Input	29
18	---	---	---	---	---
19	---	---	---	---	---
20	---	---	---	---	---
21	---	---	---	---	---
22	---	---	---	---	---
23	Cleaning signal	B31	-	Input	29
24	---	---	---	---	---
25	---	---	---	---	---

Module A15 – Electronic engine control module CATERPILLAR (CAT C13, C12, C10, C9, 3126B)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
3	Coolant level signal (only for ACERT / TIER III engines)	Z33	#	Input	2e
5	Coolant level signal (only for TIER II engines)	Z33	#	Input	2a
8	Diagnosis	XM	---	---	2a, 2e
9	Diagnosis	XM	---	---	2a, 2e
28	Error code	D1	---	Output	2a, 2e
34	CAN 2 low (J1939)	---	---	---	2a, 2e
42	CAN 2 screening (J1939)	---	---	---	2a, 2e
44	Diagnosis LED release	U22	Earth	Input	2a, 2e
48	Power	+30	12 V	Input	2a, 2e
49	Coolant level supply (only for ACERT / TIER III engines)	Z33	#	Input	2e
50	CAN 2 high (J1939)	-	-	-	2a, 2e
52	Power	+30	12 V	Input	2a, 2e
53	Power	+30	12 V	Input	2a, 2e
54	Cooling water level power supply (only for TIER II engines)	Z33	#	Input	2a, 2e
61	Earth	-31	Earth	Input	2a, 2e
63	Earth	-31	Earth	Input	2a, 2e
64	Electric starting motor power (terminal 50)	---	12 V	Input	1a, 2a, 2e
65	Earth	-31	Earth	Input	2a, 2e
70	Power +15	F34	12 V / 20 A	Input	1a, 2a, 2e

Module A15 – Electronic engine control module CATERPILLAR (CAT C 6.6)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Earth	-31	Earth	Input	2d
2	Earth	-31	Earth	Input	2d
3	Earth	-31	Earth	Input	2d
4	Power +15	F34	12 V	Input	2d
7	Power	+30	12 V	Input	2d
8	Power	+30	12 V	Input	2d
9	Earth	-31	Earth	Input	2d
10	Earth	-31	Earth	Input	2d
15	Power	+30	12 V	Input	2d
16	Power	+30	12 V	Input	2d
20	CAN 2 high (J1939)	---	---	---	2d
21	CAN 2 low (J1939)	---	---	---	2d
22	CAN 2 screening (J1939)	---	---	---	2d
57	Preheating	K77	Earth	Output	2d
59	Error code (heater plug indicator)	D1	---	Input	2d

Module A15 – Electronic engine control module DAIMLER-CHRYSLER (DC)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
X1/ 1	CAN-H	---	---	---	2b, 2c
X1/ 2	CAN-L	---	---	---	2b, 2c
X1/ 3	HF-GND	---	---	---	2b, 2c
X1/ 4	HF-GND	---	---	---	2b, 2c
X1/ 5	Power 12 V	---	12 V	Input	2b, 2c
X1/ 6	Power 12 V	---	12 V	Input	2b, 2c
X1/ 8	Electric starting motor power (terminal 50)	---	12 V	Input	1a, 2b, 2c
X1/ 9	Earth	---	0 V	Input	2b, 2c
X1/11	Earth	---	0 V	Input	2b, 2c
X1/13	Diagnosis	DM	---	---	2b, 2c
X1/15	12 V power (terminal 15)	---	12 V	Input	2b, 2c

Module A17 – Engine adaptation module ADM DAIMLER-CHRYSLER (DC)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1/01	Power input 12 V (terminal 30)	---	12 V	Input	2b, 2c
1/02	Power input 12 V (terminal 15)	---	12 V	Input	2b, 2c
1/03	Earth	---	0 V	Input	2b, 2c
1/19	CAN 2 high (J1939)	---	---	---	2b, 2c
1/20	CAN 2 screening (J1939)	---	---	---	2b, 2c
1/21	CAN 2 low (J1939)	---	---	---	2b, 2c
3/13	CAN-LH (J 1939)	---	---	---	2b, 2c
3/14	CAN-HF-GND (J 1939)	---	---	---	2b, 2c
3/15	CAN-LL (J 1939)	---	---	---	2b, 2c
4/02	Diagnosis	---	---	---	2b, 2c

Module A16 – Reel controller

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Raise reel	Y22	12 V	Output	21
2	Earth (GND)	32	Earth	Input	6
3	CAN high	-	-	-	6
4	Front attachment reverse signal	S57	12 V	Input	17
5	Reel speed signal	B17	0.4 V – 4.6 V	Input	22
6	---	---	---	---	---
7	---	---	---	---	---
8	Reference voltage	---	5 V	Output	---
9	---	---	---	---	---
10	Snapping plates actual value signal	B55	0.25-4.75 V	Input	21
11	---	---	---	---	---
12	Front attachment dampening	Y97	12 V	Output	31
13	Reel speed -	Y96	12 V	Output	22
14	Lower reel	Y23	12 V	Output	21
15	Electronic unit	F8	12 V / 1 A	Input	6
16	CAN low	-	-	-	6
17	Cutterbar identification signal	F49	12 V	Input	22
18	Power	F26	12 V / 15 A	Input	21, 22, 31
19	---	---	---	---	---
20	Power	F26	12 V / 15 A	Input	21, 22, 31
21	Reel height actual value signal	B39	0.25-4.75 V	Input	24
22	Variable displacement pump actual value signal	B73	0.25-4.75 V	Input	22
23	---	---	---	---	---
24	---	---	---	---	---
25	Reel speed +	Y95	12 V	Output	22

Module A21 – Yield meter

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Sample-taking slide	Y52	12 V	Output	27
2	Earth (GND)	31	Earth	Input	6
3	CAN high	-	-	-	6
4	---	---	---	---	---
5	Yield signal	B59	1.2 V / >2.5 V	Input	27
6	---	---	---	---	---
7	---	---	---	---	---
8	---	---	---	---	---
9	---	---	---	---	---
10	Longitudinal inclination actual value signal	B62	1.2-4.8 V	Input	27
11	Moisture + signal	B61	---	Input	27
12	---	---	---	---	---
13	---	---	---	---	---
14	---	---	---	---	---
15	Electronic unit	F9	12 V / 1 A	Input	6
16	CAN low	-	-	-	6
17	---	---	---	---	---
18	Returns signal	B75	1.2 V / >2.5 V	Input	27
19	---	---	---	---	---
20	Power	F10	12 V / 10 A	Input	27
21	Moisture - signal	B61	---	Input	27
22	Moisture temperature signal	B61	---	Input	27
23	Lateral inclination actual value signal	B62	1.2-4.8 V	Input	27
24	---	---	---	---	---
25	---	---	---	---	---

Module A25 – Sieve adjustment

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Open upper sieve	K42/86	12 V	Output	11
2	Earth (GND)	31	Earth	Input	6, 11
3	CAN high	-	-	-	6
4	---	---	---	---	---
5	---	---	---	---	---
6	---	---	---	---	---
7	---	---	---	---	---
8	Sieve adjustment reference voltage	R37, R38	5 V	Output	11
9	---	---	---	---	---
10	---	---	---	---	---
11	---	---	---	---	---
12	Close upper sieve	K41/86	12 V	Output	11
13	Open lower sieve	K44/86	12 V	Output	11
14	Close lower sieve	K43/86	12 V	Output	11
15	Electronic unit	F2	12 V / 3 A	Input	6, 11
16	CAN low	-	-	-	6
17	---	---	---	---	---
18	---	---	---	---	---
19	---	---	---	---	---
20	Power	F2	12 V / 3 A	Input	11
21	---	---	---	---	---
22	Upper sieve actual value signal	R37	0.25-4.75 V	Input	11
23	Lower sieve actual value signal	R38	0.25-4.75 V	Input	11
24	---	---	---	---	---
25	---	---	---	---	---

Module A27 – VARIO

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Reel forward	Y24	12 V	Output	21
2	Earth (GND)	-31	Earth	Input	6
3	CAN high	-	-	-	6
4	Reel limit switch signal	Z64	12 V	Input	21
5	---	---	---	---	---
6	---	---	---	---	---
7	---	---	---	---	---
8	Reference voltage	---	5 V	Output	---
9	---	---	---	---	---
10	---	---	---	---	---
11	---	---	---	---	---
12	Reel backward	Y25	12 V	Output	21
13	Table adjustment forward	K9	12 V	Output	23
14	Table adjustment backward	K10	12 V	Output	23
15	Electronic unit	F49	12 V / 1 A	Input	6
16	CAN low	-	-	-	6
17	Cutting table end signal	Z65	12 V	Input	23
18	---	---	---	---	---
19	---	---	---	---	---
20	Power	F49	12 V / 15 A	Input	23
21	---	---	---	---	---
22	Reel horizontal actual value signal	B40	0.25-4.75 V	Input	24
23	Cutting table actual value signal	B70	0.25-4.75 V	Input	24
24	---	---	---	---	---
25	---	---	---	---	---

Module A28 – Uni-spreader (VGS)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	---	---	---	---	---
2	Earth (GND)	-31	Earth	Input	6
3	CAN high	-	-	-	6
4	---	---	---	---	---
5	---	---	---	---	---
6	---	---	---	---	---
7	Chopper circuit signal	Z59	12 V	---	13, 19
8	Reference voltage	---	5 V	Output	13
9	---	---	---	---	---
10	---	---	---	---	---
11	Swivel position actual value signal	B71	0.25-4.75 V	Input	13
12	Swivel to the left	Y83	12 V	Output	13
13	Master valve	Y78	12 V	Output	13
14	---	---	---	---	---
15	Electronic unit	F54	12 V / 1 A	Input	6
16	CAN low	-	-	-	6
17	---	---	---	---	---
18	---	---	---	---	---
19	---	---	---	---	---
20	Power	Z59	12 V / 15 A	Input	13, 19, 20
21	---	---	---	---	---
22	---	---	---	---	---
23	---	---	---	---	---
24	---	---	---	---	---
25	Swivel to the right	Y84	12 V	Output	13

Module A30 – Terminal

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Coolant level float switch	Z33	Earth	Input	2, 5
2	Air filter maintenance switch	Z69	Earth	Input	3, 5
3	Hydraulic oil pressure, level	Z19, Z46	Earth	Input	5, 26
4	Compressor-type air conditioner fault	Z22, Z23	Earth	Input	5, 38
5	Rear axle limit switch, left-hand	Z38	Earth	Input	5, 26
6	Straw walker jammed pushbutton	Z61	Earth	Input	5, 26
7	Grain tank filling level 70% microswitch	Z28	Earth	Input	5, 30
8	Grain tank unloading	Y35	Earth	Input	5, 15
9	Grain tank unloading auger tube position limit switch	Z30	Earth	Input	5, 15
10	CAN low	---	---	---	5, 6
11	Power supply 12 V (+30, K56/87a)	---	12 V	Input	6
12	Power supply 12 V (+30, K56/87a)	---	12 V	Input	6
13	Power supply 12 V (+30, K56/87a)	---	12 V	Input	6
14	---	---	---	---	---
15	Hydraulic oil temperature switch	Z20, B123	Earth	Input	5, 26
16	Parking brake switch	Z12	Earth	Input	5, 26
17	Brake circuit pressure	Z79, Z80	12 V	Input	5, 44
18	Rear axle limit switch, right-hand	Z39	Earth	Input	5, 26
19	Straw chopper position limit switch	Z58	12 V	Input	5, 19
20	Grain tank filling level 100% microswitch	Z27	Earth	Input	5, 30
21	Grain tank extension position limit switch	Z29	Earth	Input	5, 30
22	CAN high	---	---	---	5
23	Earth	---	Earth	Input	5
24	Earth	---	Earth	Input	5
25	Earth	---	Earth	Input	5

Module A33 – Sidefinder

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
2 L	Sidefinder, left-hand	E71	12 V	Output	48
4 L	Power supply	F61	12 V	Input	36
5 L	Dipped lights	K55	12 V	Output	48
6 L	Earth	-31	Earth	Input	36
8 L	Sidefinder, right-hand	E72	12 V	Output	48
2 R	Turn flasher, left-hand	S16	12 V	Input	36
4 R	Turn flasher, right-hand	S16	12 V	Input	36
5 R	Ignition	+15	12 V	Input	48
6 R	Lights main switch	S17	12 V	Input	48
8 R	Ignition / road travel	F15	12 V	Input	48

Module A34 – Grain tank

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
2 l	Swing in grain tank unloading tube	Y34	12 V	Output	14
4 l	+12V	F37	12 V	Input	14
5 l	Swing out grain tank unloading tube	Y33	12 V	Output	14
6 l	Earth	-31	Earth	Input	14
8 l	Grain tank unloading ON	Y35	12 V	Output	15
2 r	Seat contact	Z5	12 V	Input	15, 17
4 r	Grain tank unloading tube swung out	Z30	Earth	Input	15
5 r	Swing in grain tank unloading tube	S88	Earth	Input	14
6 r	Swing out grain tank unloading tube	S87	Earth	Input	14
8 r	Grain tank unloading ON	S31	Earth	Input	48

Module A35 – Montana 570-520 control unit - with external MONTANA control unit

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Power supply (K69)	---	12 V	Input	41s, 4s
2	Lower axle, left-hand side	Y114	12 V	Output	41s
3	Raise axle, right-hand side	Y115	12 V	Output	41s
4	Raise axle, right-hand side	Y117	12 V	Output	41s
5	Lower axle, right-hand side	Y116	12 V	Output	41s
6	Rotate front attachment to the left	Y113	12 V	Output	41s
7	Rotate front attachment to the right	Y112	12 V	Output	41s
8	Raise cutting angle	Y110	12 V	Output	41s
9	Lower cutting angle	Y111	12 V	Output	41s
10	Master valve (Montana)	Y128	12 V	Output	4s
11	Master valve (Working hydraulics)	Y77, Y128	12 V	Output	4s
12	Oil quantity increase	Y118	12 V	Output	41s
13	not used	---	---	---	---
14	Earth	---	Earth	Input	41s
15	Power supply (K69)	---	12 V	Input	41s, 4s
16	Left-hand axle angle sensor signal	B91	0.25-4.75 V	Input	41s
17	Montana cross levelling sensor signal	B94	0.25-4.75 V	Input	41s
18	not used	---	---	---	---
19	not used	---	---	---	---
20	not used	---	---	---	---
21	CAN Low (Inclinometer)	B126-1	-	Output	41s
22	not used	---	---	---	---
23	CAN Low (Montana)	A41	-	Output	06s
24	Earth	A41	Earth	Output	06s
25	RS 232	---	---	---	06s
26	RS 232	---	---	---	06s
27	not used	---	---	---	---
28	Earth	---	Earth	Input	41s
29	Power supply (K69)	---	12V	Input	41s, 4s
30	Right-hand axle angle sensor signal	B92	0.25-4.75 V	Input	41s
31	Cutting angle sensor signal	B93	0.25-4.75 V	Input	41s
32	Parking brake signal	S93	12 V	Input	41s
33	Earth sensors	B91, B92, B93, B94, B95, B126	Earth	Output	41s
34	not used	---	---	---	---
35	not used	---	---	---	---
36	CAN High (Inclinometer)	B126	-	Output	41s
37	Power supply (CAN)	A41	12 V	Output	06s
38	CAN High (Montana)	A41	-	Output	06s
39	RS 232 (Boot)	---	---	---	06s
40	RS 232	---	---	---	06s
41	not used	---	---	---	---
42	not used	---	---	---	---

Module A36 – Montana 570-520 gearshift module - with external MONTANA control unit

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	Earth	---	Earth	Input	42s
2	Power supply (+15)	K56	12 V	Input	42s
3	Gearbox shifting release	S90	12 V	Output	42s
4	2nd gear signal	Z83	12 V	Input	42s
5	1st gear signal	Z82	12 V	Input	42s
6	Gearbox shift 1st gear	Y107	12 V	Output	42s
7	Gearbox shift 2nd gear	Y108	12 V	Output	42s
8	not used	---	---	---	---
9	Ground drive control pressure circuit SH	Y125	12 V	Output	42s
10	Engine speed maximum reduced	---	12 V - 1st gear 0 V - 2nd gear	Output	42s, 2s
11	Engine speed (Gearshift control)	---	12 V	Input	42s, 2s
12	Parking brake circuit	Y123	12 V	Input	42s
13	Shifting aid uphill signal	Y121	12 V	Input	42s
14	Shifting aid downhill signal	Y122	12 V	Input	42s
15	Montana master valve gear	Y77	12 V	Output	4s
16	Working hydraulics master valve gear	Y77	12 V	Output	4s
17	Montana master valve gear	Y128	12 V	Output	4s
18	Montana master valve gear	Y128	12 V	Input	4s
19	not used	---	---	---	---
20	Working hydraulics master valve gear	Y77	12 V	Input	4s
21	not used	---	---	---	---
22	not used	---	---	---	---
23	Working hydraulics master valve gear	Y77	12 V	Input	4s
24	Shifting aid gear	Y121; Y122	12 V	Output	42s
25	Ground speed control lever signal neutral	Z57	Earth	Input	1s, 42s

Module A37 – Electro-hydraulic gearshift (EHS) - 3-speed manual gearbox

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	1st gear	Y107	12 V	Output	44
2	GND	-31	Earth	Input	44
3	CAN high	-	-	-	6
4	2nd gear	Y108	12 V	Output	44
5	3rd gear	Y123	12 V	Output	44
6	Master valve	Y77	12 V	Output	4, 44
7	Ground speed control lever neutral	Z57	12 V	Input	1, 44
8	Gearbox power supply actual value switch	Z82, Z83, Z95, Z96, Z97	12 V, limited to 200 mA	Output	44
9	Brake circuit pressure	Z79,Z80	12 V	Input	44
10	Gearbox switch 2nd/3rd/neutral	Z97	12 V	Input	44
11	1st gear engaged gearbox switch	Z82	12 V	Input	44
12	2nd gear engaged gearbox switch	Z83	12 V	Input	44
13	3rd gear engaged gearbox switch	Z95	12 V	Input	44
14	Gearbox neutral signal	H63	12 V	Output	44
15	Electronic unit +	F17	12 V	Input	6
16	CAN low	-	-	-	6
17	1st gear / neutral gearbox switch	Z96	12 V	Input	44
18	1st gear engaged signal	H60	12 V	Output	44
19	2nd gear engaged signal	H61	12 V	Output	44
20	Power	F75	12 V / 15 A	Input	44
21	Gear selection 1st/2nd gear	S70	12 V	Input	44
22	Gear selection 1st/2nd gear	S70	12 V	Input	44
23	Gear selection 3rd gear / neutral	S71	12 V	Input	44
24	Gear selection 3rd gear / neutral	S71	12 V	Input	44
25	3rd gear engaged signal	H62	12 V	Output	44

Module A37 – Electro-hydraulic gearshift (EHS) - 2-speed manual gearbox

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
1	1^{st} gear	Y107	12 V	Output	44
2	GND	-31	Earth	Input	44
3	CAN high	-	-	-	6
4	2^{nd} gear	Y108	12 V	Output	44
5	---	---	---	---	---
6	Master valve	Y77	12 V	Output	4,44
7	EHS release signal (gearshift release)	A49	12 V	Input	1,44
8	Gearbox actual value switch power supply	Z82,Z83, Z96	12 V, limited to 200 mA	Output	44
9	EHS release signal (gearshift release)	A49	12 V	Input	1,44
10	---	---	---	---	---
11	1^{st} gear engaged gearbox switch	Z82	12 V	Input	44
12	2^{nd} gear engaged gearbox switch	Z83	12 V	Input	44
13	---	---	---	---	---
14	Gearbox neutral signal	H63	12 V	Output	44
15	Electronic unit +	F17	12 V	Input	6
16	CAN low	-	-	-	6
17	Gearbox switch neutral	Z96	12 V	Input	44
18	1^{st} gear engaged signal	H60	12 V	Output	44
19	2^{nd} gear engaged signal	H61	12 V	Output	44
20	Power	F75	12 V / 15 A	Input	44
21	Gear selection $1^{st}/2^{nd}$ gear	S70	12 V	Input	44
22	Gear selection $1^{st}/2^{nd}$ gear	S70	12 V	Input	44
23	---	---	---	---	---
24	Gear selection neutral	S71	12 V	Input	44
25	---	---	---	---	---

Module A38 – Rotor (RIO)

Pin	Function	Component	Measuring variable	Direction	Circuit diagram no.
R0/1	Electronic unit 5 V	B120	5 V	Output	9
R0/2	Electronic unit 12 V	---	12 V	Output	9
R0/3	Output 1	M28	12 V	Output	9
R0/4	Output 3	Y99	12 V	Output	9
R0/5	Output 2	M22	12 V	Output	9
R0/6	Output 4	Y98	12 V	Output	9
R0/7	Sensor 1	B120	0.25-4.75 V	Input	9
R0/8	Sensor 2	---	---	---	---
R0/9	Earth	Y98/Y99	Earth	Output	9
R0/10	Earth	B120	Earth	Output	9
R0/11	Module code 1	---	12V	Input	9
R0/12	Module code 2	---	---	---	---
R0/13	Module code 3	---	---	---	---
R0/14	Module code 4	---	---	---	---
R0/15	Sensor 3	---	---	---	---
R0/16	Sensor 4	---	---	---	---
R1/1	CAN low	-	-	-	6
R1/2	Electronic unit	F17	12 V	Input	6
R1/3	Power	F67	12 V	Input	9
R1/4	CAN high	-	-	-	6
R1/5	Earth	-	Earth	Input	6
R1/6	Earth	-	Earth	Input	6