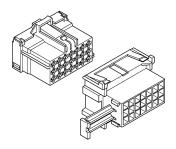
## Scania Diagnos & Programmer 3



YS2R6X400E9183544 / VIS, Visibility system / E 32, CUV control unit / CUV1 / P, Power supply / P2, Relay R19 for equipment with high current consumption



C 483, Connector

## E 32, CUV control unit

The CUV control unit has three multipin connectors and a 2-pin connector for the voltage supply. It comprises a driver stage which functions as a fuse in the event of overloading. The control unit receives information from the visibility system switch and controls and from other systems via the CAN link. It interprets the information and activates the requested functions or sends messages via the CAN link to other control units.

The control unit has three multipin connectors (15-, 18- and 21-pin) and a 2-pin connector for the voltage supply. Connector CCon-

Pin	Description	Signal type	Source/Destination		
A 1-2	Voltage supply for CUV	Input signal, +24 V	C55		
B1	Horn	Output signal, +24 V	Horn		
B2	Activate the reversing light relay	Output signal, +24 V	Relay R24		
В3	Activate the brake light relay	Output signal, +24 V	Relay R8		
B4	Main beam LH	Output signal, +24 V	Main beam LH		
B5	Ground		G14		
В6	Windscreen wipers, low speed	Output signal, +24 V	Wiper motor		
В7	Dipped beam RH	Output signal, +24 V	Dipped beam on the right- hand side		

nector D



B8	Wiper speed interval	Input signal, analogue	Direction indicator and wiper lever
В9	Not used		
B10	Windscreen washer	Output signal, +24 V	Windscreen washer
B11	Starter key is in the drive position	Input signal, +24 V	Starter lock
B12	CANL	CAN	
B13	Windscreen wipers, high speed	Output signal, +24 V	Wiper motor
B14	Not used		
B15	CANH	CAN	

Pin	Description	Signal type	Source/Destination
C1	Indicator lamp for hazard warning signal	Output signal, +24V	Lighting switch module S139
C2	Activate the horn	Input signal, ground	Signal switch in the steering wheel
C3	Activate the main beam flash- er	Input signal, ground	Direction indicator and wiper lever
C4	Dipped beam LH	Output signal, +24V	Dipped beam on the left- hand side
C5	Activate the bumper- mounted spotlight	Input signal, ground	Extra lighting module S140
C6	Activate the sun visor- mounted spotlight	Input signal, ground	Extra lighting module S140
C7	Main beam RH	Output signal, +24V	Main beam on the right-hand side
C8	Ground	Ground	G14
С9	Activate work light	Input signal, ground	Extra lighting module \$140
C10	Direction indicator front right	Output signal, +24V	Direction indicator front right
C11	Activate hazard warning signal	Input signal, ground	Lighting switch module S139
C12	Activate the parking lighting	Input signal, ground	Lighting switch module S139



C13	Direction indicator rear left	Output signal, +24V	Direction indicator rear left
C14	Lighting off/parking light	Input signal, ground	Lighting switch module S139
C15	Activate the direction indi- cator, RH side	Input signal, ground	Direction indicator and wiper lever
C16	Headlamp wipers	Output signal, +24V	Headlamp wiper Headlamp washer
C17	Switch for main/dipped beam	Input signal, ground	Direction indicator and wiper lever
C18	Activate the direction indi- cator, LH side	Input signal, ground	Direction indicator and wiper lever

Pin	Description	Signal type	Source/Destination
D1	Rear foglight	Output signal, +24V	Rear foglight
D2	Direction indicator, rear right on trailer	Output signal, +24V	Trailer socket
D3	Activate dipped beam/ parking lights	Input signal, ground	Lighting switch module S139
D4	Direction indicator, rear left on trailer	Output signal, +24V	Trailer socket
D5	Activate the windscreen washer	Input signal, ground	Direction indicator and wiper lever
D6	High-mounted headlamps indication	Input signal, ground	Switch for e.g. snow plough lighting
D7	Sun visor-mounted spotlight	Output signal, +24V	Sun visor-mounted spotlights
D8	Activate front foglight	Input signal, ground	Front foglight
D9	Extra connection		
D10	Direction indicator rear right	Output signal, +24V	Direction indicator rear right
D11	Activate rear foglight	Input signal, ground	Extra lighting module \$140
D12	Washer fluid level indication	Input signal, ground	Washer container
D13	Work light	Output signal, +24V	Work light
D14	Extra connection		



D15	Windscreen wiper end position	Input signal, ground	Wiper motor		
D16	Direction indicator, front left	Output signal, +24V	Direction indicator, front left		
D17	Activate the windscreen wiper, high or low speed	Input signal, analogue	Direction indicator and wiper lever		
D18	Activate electrical equipment with high current consumption	Output signal, +24V	Relay 19		
D19	Bumper-mounted spotlight	Output signal, +24V	Bumper-mounted spotlights		
D20	Front foglight	Output signal, +24V	Front foglight		
D21	Activate the parking light relay	Output signal, +24V	Relay 21		

## P 2, Central electric unit

**Fuses:**Warning!Always switch off the voltage when renewing fuses.Important!Always fit a fuse of the size specified in the list.Important! Always check the fuse and relay positions against the POW electrical diagram concerned.**Fuses for special functions:Relays and con-**

Fuse (No.)	Size (A)	System	Function	Supply	Cable colour	Connection 1	Marking of cable 1	Cable cross- sectional area 1 (mm²)	Connection 2	Marking of cable 2	Cable cross- sectional area 2 (mm²)
1	5	COO, BMS	Trailer ECU, ABS/EBS	15AA	Green	A-1	COO125	0.75	A-2	BMS212	0.75
2	30	COO	Trailer valves	15AB	Green	A-3	COO128	4	A-4		
3	5	COO	PT01, PT02	15AC	Green	A-5	COO251	0.75	A-6	COO253	0.75
4	2	MIA, VIS	Mirror adjust- ment, reverse alarm	15AD	Green	A-7	MIA15	0.75	A-8	VIS167	0.75
5	5	TCO, LDW, FLC	Tacho- graph, Lane depar- ture	15AE	Green	A-9	TCO33	0.75	A-10	LDW12	1.5



			warning								
6	20	WIW	Window winder, left- hand side	15AF	Green	A-11	WIW12	2.5	A-12	WIW10	2.5
7	10	VIS	Head- lamp wipers	15AG	Green	A-13	VIS16	1.5	A-14	VIS17	1.5
8	10	POW	Ciga- rette lighter	15AH	Green	A-15	POW45 +POW4 6	2.5	A-16	POW28	
9	5	FAS, COO	Inte- ractor 200 (FAS)/ Commu nicator 100, cruise control	15AJ	Green	A-17	FAS14 +FAS15	1.5+1.5	A-18	COO130	0.75
10	5	CCS, INL	ACC/ MCC, internal lighting Exclu- sive	15BA	Green	B-1	CCS3/ CCS2 +CCS4	0.75 +0.75 +0.75	B-2	INL12	0.75
11	10	RDL, AWD/ ABS	Diffe- rential locks, ABS 6 chan- nels	15BB	Green	B-3	RDL26	1	B-4	AWD12/ BMS222	1.5
12	5	FHS	Fuel pre- heating, heater for fuel filter	15BC	Green	B-5	FHS9	1	B-6		
13	10	TAL	Tag axle lift	15BD	Green	B-7	TAL17 +TAL4	0.75 +0.75	B-8		1.5
14	5	CSS	Airbag	15BE	Green	B-9	CSS015	0.75	B-10		
15	20	WIW	Window winder, right- hand	15BF	Green	B-11	WIW18 +WIW2 0	2.5+2.5	B-12	WIW14 +WIW1 6	2.5+2.5

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	Fuse (No.)	Size (A)	System	Function	Supply	Cable colour	Connection	Marking of	Cable cross-
П			1	1					l I



16	10	CAT	Electric cab tilt- ing	15BG	Green	B-13			B-14	CAT	
17	20	BWS	Body- work	15BH	Green	B-15	BWS111	2.5	B-16	BWS207	1.5
18	5	SCS, POW	Safety belt buckle, safety switch ADR	15BJ	Green	B-17	SCS015	0.75	B-18	POW22 7	01
19	20	coo	Coor- dinator	30A	Red	C-1	COO58	2.5	C-2		
20	20	EMS	EDC	30B	Red	C-3	COO68	2.5	C-4		
21	10	coo	Starter lock	30C	Red	C-5	COO73	0.75	C-6		
22	20	EMS	EDC	30D	Red	C-7	COO67	2.5	C-8		
23	10	VIS	Brake lamp	30E	Red	C-9	VIS275	1.5	C-10		
24	20	BMS	ABS/EBS	30F	Red	C-11	BMS44	2.5	C-12	BMS45	2.5
25	10	SMS	ELC	30G	Red	C-13	SMS4	1.5	C-14	SMS5	1.5
26	20	CCS	Cab fan	30H	Red	C-15	CCS1	2.5	C-16		
27	5	CCS, AHS	CT/CTR	30J	Red	C-17	CCS5	0.75	C-18	AHS3	0.75
28	20	ROH	Roof hatch	30K	Red	C-19	ROH1	2.5	C-20		
29	10	ICL, TCO	Instru- ment cluster, tacho- graph	30L	Red	C-21	ICL18	1.5	C-22	TCO13	1.5
30	30	BWS	Body- work	30M	Red	C-23	BWS		C-24	BWS	
31	10	AWD, INL	AWD ECU, internal lighting	30N	Red	C-25	AWD5	1.5	C-26	INL5 +INL4 +INL1	1.5+1 +1.5
32	10	COO	SDP3	30R	Red	D-1	COO83	0.75	D-2		
33	10	HVF, VIS	Swiss	30S	Red	D-3	HVF5	1.5	D-4	VIS172	1.5



			road toll prepa- ration, rotating beacon								
34	20	POW	Voltage con- verter 24 V/12 V, 12 V elec- trical socket	30T	Red	D-5	POW34	2.5	D-6		
35	10	TGS, BWS	Trailer	30U	Red	D-7	TGS	1.5	D-8	BWS216	1.5
36	20	GMS	OPC/GA Allison	30V	Red	D-9	GMS1/ GMS136 2 +GMS1 363	2.5/1.5 +1.5			
37	10	LAS	Central locking	30X	Red	D-11	LAS101 +LAS20 1/MCL1	1.5+1.5	D-12	LAS1/ MCL2	1.0/1.5
38	20	AHS	Auxiliary heater (ATA, WTA)	30Y	Red	D-13	AHS1		D-14		1.5
39	10	VIS	Re- versing light	30Z	Red	D-15	VIS276	1.5	D-16		1.5
40	20	POW	24 V elec- trical socket	30AA	Red	D-17	POW24 +POW3 9	2.5+2.5	D-18	POW41	2.5
41	10	APS, FMS	APS ECU, FMS prepa- ration	30AB	Red	D-19	APS9	1.5	D-20	RTG3	1.5
42	30	CAT	Electric cab tilt- ing	30AC	Red	D-21	CAT		D-22		
43	10	REF, FAS	Refri- gerator, Inte- ractor 200/ Commu nicator 100 (FAS/	30AD	Red	D-23	REF	1.5	D-24	FAS	1.5+1.5



			RTI)								
44	10	AUS	Am- plifier	30AE	Red	D-25	AUS42	1.5	D-26	AUS44	2.5
45	10	MIH, ACL	Rear view mirror heater, ACL	61A	Blue	E-1	MIH61	1.5	E-2	ACL1	1
46	10	SCS, ALT	Seat heating, Alert	61B	Blue	E-3	SCS61 +SCS26 1	1.5	E-4	ALT30	
47	10	APS, FHS	Air dryer, fuel filter heater	61C	Orange	E-5	APS47	1.5	E-6	FHS13	1.5
48	10	BWS	Body- work	61D		E-7	BWS		E-8	BWS	
49	_	_	_	-	_	_	-	-	_	_	_
50	5	coo	Alert yellow & green bus	X15	white	E-11	COO70	0.75	E-12		
51	_	_	_	-	_	_	-	-	_	_	_
52	2	LAS	Alarm	В	Brown	E-15	LAS40	0.75	E-16	INL	0.75
53	2	INL, ROH	INL Exclu- sive, warning of open roof hatch	В	Violet, grey	E-17	INL13	0.75	E-18	ROH050	0.75
54	10	VIS	Parking light, left- hand side	58A	Grey	F-1	VIS18 +VIS205	1.5+1.5	F-2	VIS19 +VIS20	1.5+1.5
55	10	VIS	Parking light, right- hand side	58B	Orange	F-3	VIS22 +VIS21	1.5+1.5	F-4	VIS24 +VIS23	1.5+1.5
56	5	INL, VIS	Back- ground lighting, levelling	58C	Blue	F-5	INL14	0.75	F-6	VIS	0.75



			adjust- ment for head- lamps								
57	20	BWS	Body- work	58D		F-7	BWS		F-8	BWS	
58	10	VIS	Trailer, left- hand side	58E	Grey	F-9	VIS203	1.5	F-10		
59	10	VIS	Trailer, right- hand side	58F	Brown	F-11	VIS204	1.5	F-12		
60	_	_	-	_	_	_	-	-	_	-	_
61	2	BWS	Body- work	RA		F-15	BWS		F-16	BWS	
62	2	POW	Voltage con- verter 24 V/12 V	RA	Violet	F-17	POW31	0.75	F-18		
63	10	DAU, FLC	Driver alert unit, Forward looking camera	30AR		A-19	DAU1	1.5	A-20		
64	5	SMS	Electric power supply	30AS	Red	A-21	SMS200		A-22		
65	20	coo	Variable geo- metry turbo- charger	30AT	Red	A-23	COO710	2.5	A-24		
66	10	TPM	Electric power supply, TPM control unit	30AU	Red	A-25	TPM1	1.5	A-26		
67	30	KIT, CAT	Kitchen module, cab tilt system	30AF	Red	B-19	KIT530/ 532 KIT536	4.0	B-20	CAT8	4.0
68	10	KIT	Electric power	30AG	Red	B-21	KIT835	1.5	B-22	KIT830	1.5



			supply								
69	20	ATL	Trailer axle lock	30AH	Red	B-23	ATL9	2.5	B-24		
70	10	DIS2	Distance sensor	30AJ	Red	B-25	DIS51	1.0	B-26		
71	20	FHS, FCS	Fuel heater, fuel cooler system	30AK	Red	E-19	FHS15	2.5	E-20	FCS23	
72	10	THR	Electric throttle	30AL	Red	E-21	COO8	2.5	E-22		
73	20	FHS, FCS	Fuel heater, fuel cooler system	30AM	Red	E-23	FHS4	2.5	E-24	FCS24	
74	20	VIS	Head- lamp cleaning	30AN	Green	E-25	VIS16	2.5	E-26		
75			Re- served for future system			F-19			F-20		
76			Re- served for future system			F-21			F-22		
77			Re- served for future system			F-23			F-24		
78			Re- served for future system			F-25			F-26		

							cable	sectional area
F5	30	KIT	Kitchen equipment	30	Red	F5-6	KIT	4

trol units in the central electric unit:



F5	10	KIT	Kitchen equipment	30	Red	F5-8	KIT	1.5
F9	20	FHS	Heater fuel filter	30	Red	F9-2	FHS4	2.5
F14	20	WIW	Window winder, rear left (crew cab)	30	Green	F14-2	WIW1004 +WIW1005	2.5
F14	20	WIW	Window winder, rear right (crew cab)	30	Green	F14-4	WIW1006 +WIW1007	2.5
F14	10	FST	Footstep (crew cab)	30	White	F14-6	FST1004	1
F14	10	FST, POW	Footstep (crew cab)	30	Yellow, green	F14-8	FST1022, POW1002	1, 1.5

Position	System	Function
1	POW	15 voltage
2	POW	15 voltage
3	POW	controlled by VIS
4	POW	58 supply, controlled by VIS
5	INL	Internal lighting
6	TAL	Tag axle lift
7	VIS	Brake lamp
8	VIS	Reversing light
9	соо	Resistor unit for vehicles with cruise control without buttons for this on steering wheel
10	FMS	ECU for FMS preparation
11	FMS	ECU for FMS preparation
12	ccs	A/C relay (crew cab)
13	POW	Safety switch



18	POW	Extra 15 supply relay for S vehicles
19	CAT	Relay for electronic cab tilting
20	TGL, KIT	Tail lift and kitchen equipment
23	VIS	Auxiliary light
24	VIS	Auxiliary light
25	VIS	Auxiliary light

	31 c-a c-a 30 c-a c-a *	64 0-21 0-21 63 0-21 0-0 H			RP24	RP25	RP26	RP27A RP27B
	29 cm cm 28 cm cm 27 cm cm	42 0-11 0-11 41 0-12 0-20 60 11-2 0-0	E31-171-11	627-177-11	RP20	RP21	RP22A RP22B	RP23
8 нялья 17 няны 7 нялья 16 няны	26 0-18 0-18 25 0-12 0-14	39 0-18 0-18 38 0-13 0-14	520-150-16 50-150-16	61 F-18 F-18	RP17	RP	18	RP19
	23 0 4 0 10 23 0 4 0 10 22 0 2 0 4	37 * 11 * 14 36 0 1 0 10 35 0 2 0 4	49	58 mm mm 58 mm mm 57 mm mm	RP13	RP14	RP15	RP16
S 83.84 [183.84	21 0-3 0-4 20 0-3 0-4	34 04 84 33 04 84	47 0-3 0-4 45 0-3 0-4	55 r o r o	RP9	RP10	RP11	RP12
RP1 RP2	19 or oz Fus	82 H1 H2 SBS	45 t-1 t-2 84 RP3	54 r-1 r-2 SH RP4	RP5	RP6	RP7	RP8
						Rel	ays	

P 2, Central electric unit