

Legend

Wiring diagram no. **81.99192.2981** Sheet 2 of 21

Change status: 03.01

A = Supply voltage, central vehicle computer

B = Power supply intarder, EBS, ECAS

C = Power supply retarder

D = Power supply vehicle management computer

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

F152 (101) Fuse retarder (terminal 15)

F160 (105) Fuse EBS/ABS power supply, trailer

F161 (103) Fuse EBS/ABS power supply
pressure control valve

F162 (111) Fuse EBS/ABS control

F164 (101) Fuse ECAS (terminal 30)

F243 (105) Fuse central vehicle computer, permanent positive

F244 (105) Fuse central vehicle computer (terminal 30-1)

F245 (105) Fuse central vehicle computer (terminal 30-2)

F246 (101) Fuse central vehicle computer (terminal 15)

F371 (101) Fuse vehicle management computer (terminal 30)

F372 (116) Fuse vehicle management computer (terminal 15)

F374 (101) Fuse intarder/retarder (terminal 30)

F400 (101) Fuse steering wheel lock

F522 (105) Fuse, lead 30000

F523 (105) Fuse, lead 30000

X1064 (104) Bridge on central fuse, relay and terminal box 2 item 37
(Pin 1-2)

X1557 Stvd. frame left

X1644 Earthing point, cab, adjacent to central fuse,
relay and terminal block

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓘ Intarder

Ⓙ Electronic braking system (EBS)

Ⓚ Electronically controlled air suspension (ECAS)

Ⓛ Retarder

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

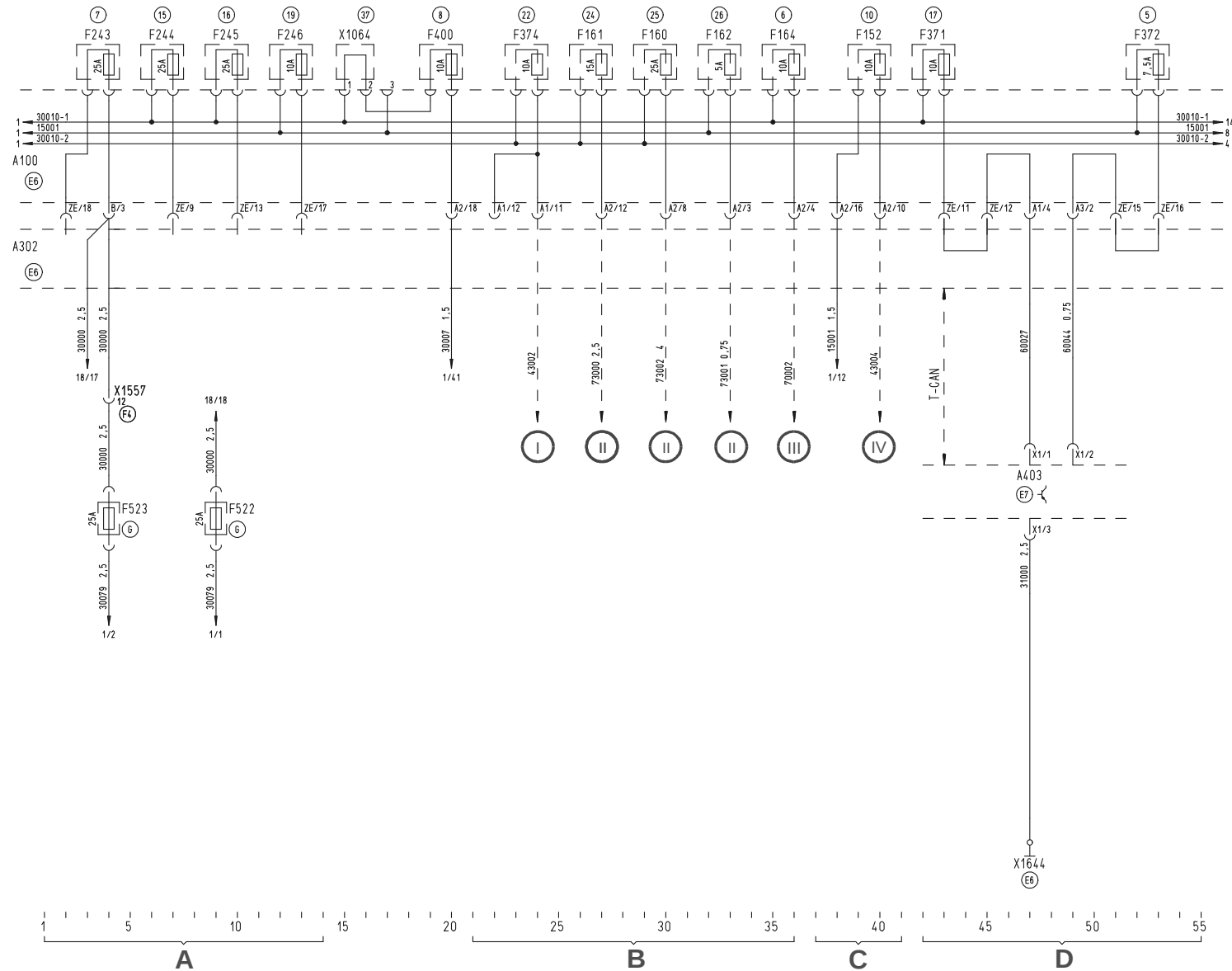
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet 2 of 21



Legend

Wiring diagram no. **81.99192.2981** Sheet **3** of 21

Change status: 03.01

A = Earth distributor

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

X1569 Stvd. locker lighting

X1570 Stvd. locker lighting, right

X1642 Earthing point, cab, behind instrument panel

X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block

X1825 (221) Crimped connector, line 31000

X1826 (221) Crimped connector, line 31000

X1827 (221) Crimped connector, line 31000

X1829 (221) Crimped connector, line 31000

X2541 (246) Potential distributor 21-pin, line 31000

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ Door module, driver's side

Ⓙ Door module, passenger's side

Ⓚ Door module

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

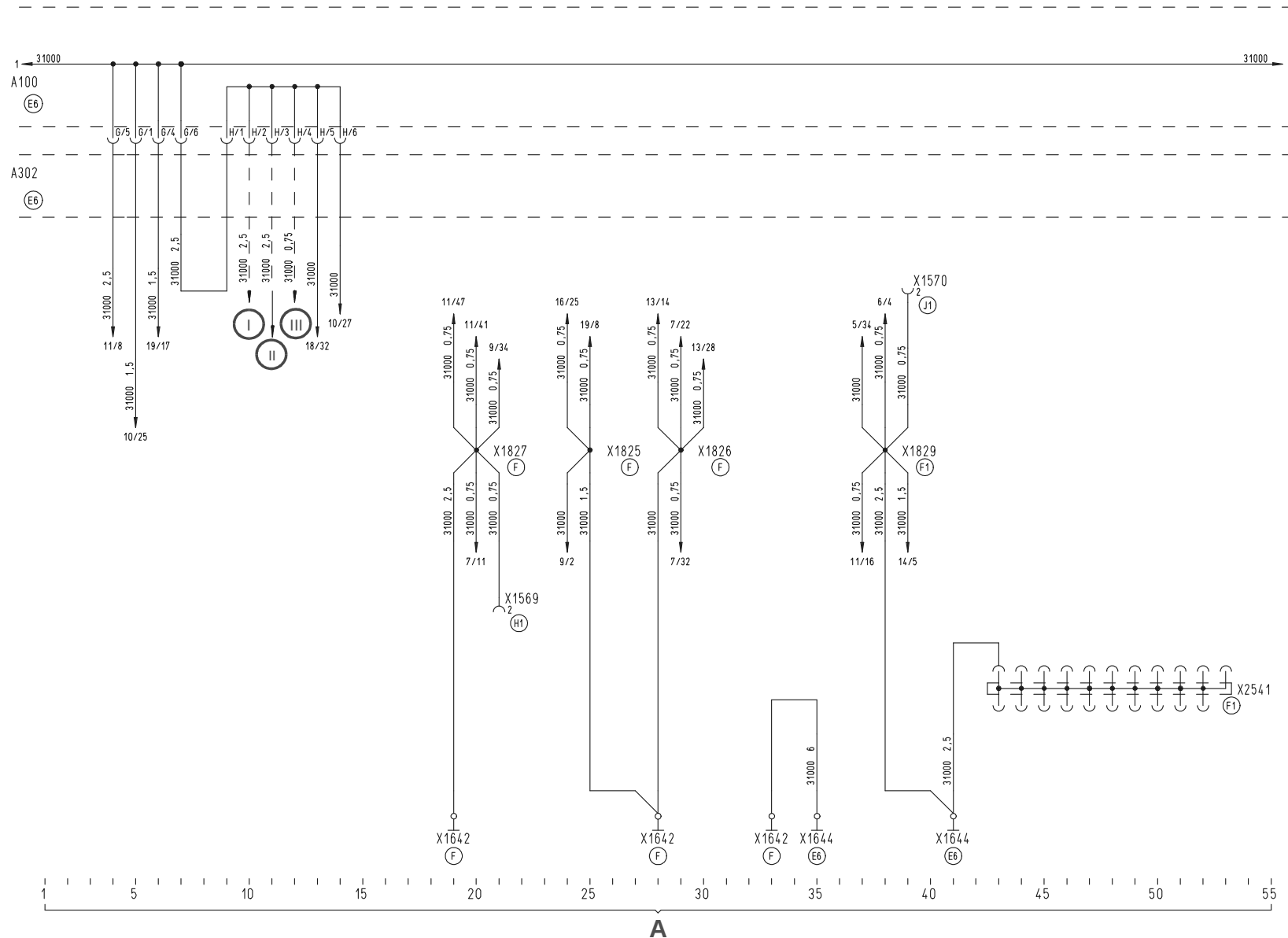
Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Wiring diagram no. **81.99192.2981** Sheet **3** of 21



Legend

Wiring diagram no. **81.99192.2981** Sheet 4 of 21
Change status: 03.01

A = Flame start device

B = Fan clutch

C = Coolant temperature, EDC

D = Coolant level

E = Reserve lines, engine START-STOP

A100 (255) Central fuse, relay and terminal block
A302 (352) Central computer 2
A403 (339) Vehicle management computer
A407 (342) Instrumentation
A435 (338) EDC control unit

B124 (265) Temperature sensor, coolant water (EDC)
B139 (272) Coolant level sensor

F106 (107) Fuse, flame start device

H101 Indicator light flame start device

K102 (150) Relay flame start device

R100 (144) Flame glow plug 1
R101 (144) Flame glow plug 2

S580 Control switch, engine start (MP box)
S581 Control switch, engine stop (MP box)

X1549 Stvd. engine/EDC/transmission I
X1551 Stvd. engine/EDC/transmission II
X1904 Threaded bolt M6 (MP box)

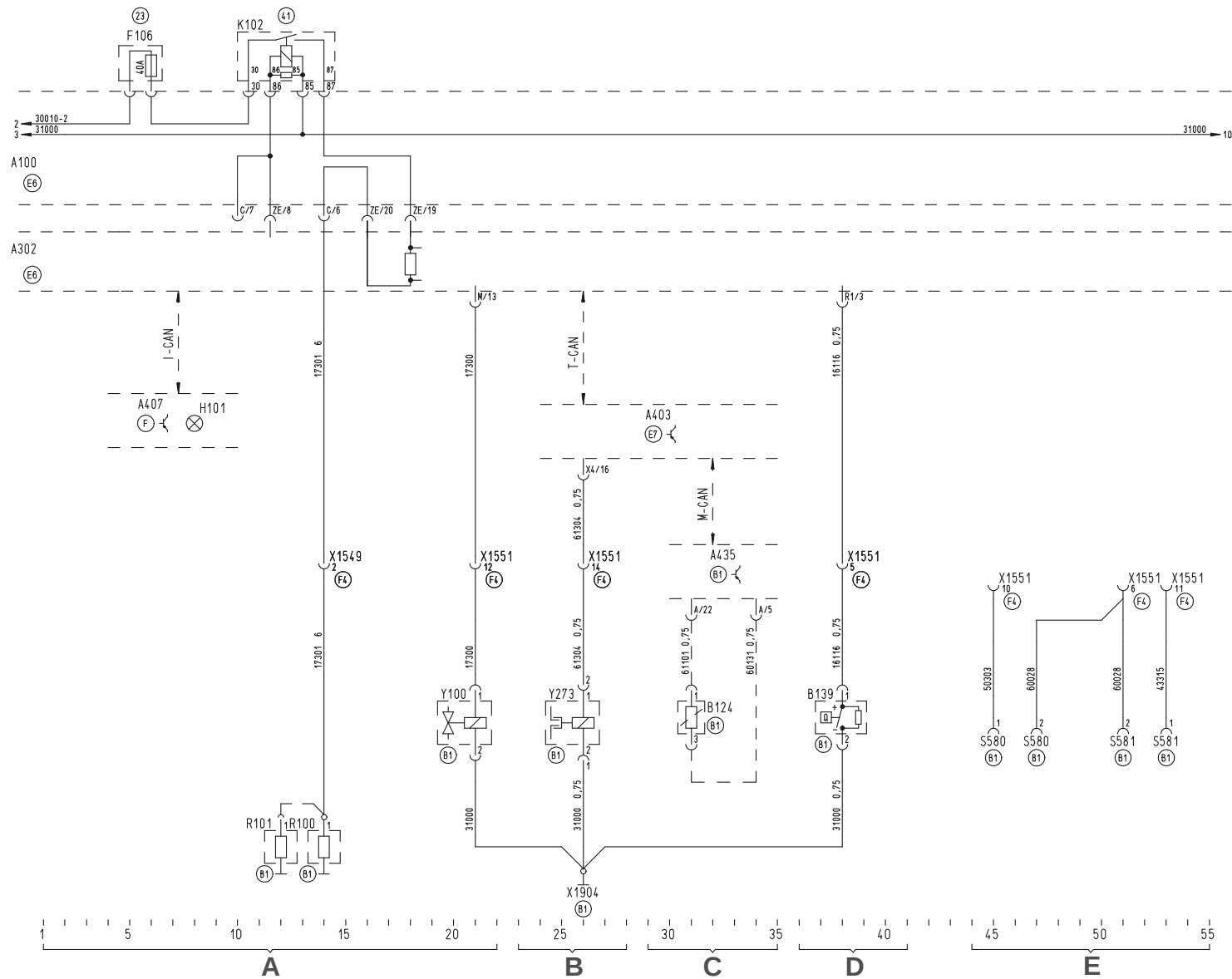
Y100 (189) Solenoid valve, flame start device
Y273 (190) Solenoid valve, fan clutch

Marking of mounting positions

Ⓐ Tail
Ⓑ Engine
Ⓑ1 Gearbox
Ⓒ Front
Ⓒ1 Bumper
Ⓒ2 Entrance right
Ⓒ3 Entrance left
Ⓔ Central electrics area
Ⓔ1 Control unit racks
Ⓔ2 Rear wall of cab
Ⓕ Instrument panel
Ⓕ1 Central part
Ⓕ2 Steering wheel/column
Ⓕ3 Foot pedals
Ⓖ4 Front wall, inside left
Ⓖ5 Front wall, inside right

Ⓕ6 Driving seat
Ⓕ7 Passenger seat
Ⓕ8 Control panel
Ⓖ Battery box
Ⓕ1 B-pillar on driver's side
Ⓕ2 A-pillar on driver's side
Ⓕ3 B-pillar on passenger's side
Ⓕ4 A-pillar on passenger's side
Ⓖ Ceiling/roof
Ⓖ Front axle
Ⓖ Rear axle
Ⓕ1 Front part of frame
Ⓕ2 Rear part of frame
Ⓕ1 Door left
Ⓕ2 Door right

Wiring diagram no. **81.99192.2981** Sheet 4 of 21



Legend

Wiring diagram no. **81.99192.2981** Sheet **5** of 21
Change status: 03.01

A = Steering hydraulic fluid level

B = Diagnosis

C = Pressure pickup, air filter

A100 (255) Central fuse, relay and terminal block
A302 (352) Central computer 2

B371 (318) Steering oil level switch
B433 (273) Pressure pickup, air filter

X200 (201) Plug, diagnostics
X1549 Stvd. engine/EDC/transmission I
X1847 Stvd. pressure pickup, air filter
X1904 Threaded bolt M6 (MP box)
X2544 (246) Potential distributor, 21-pin K-line

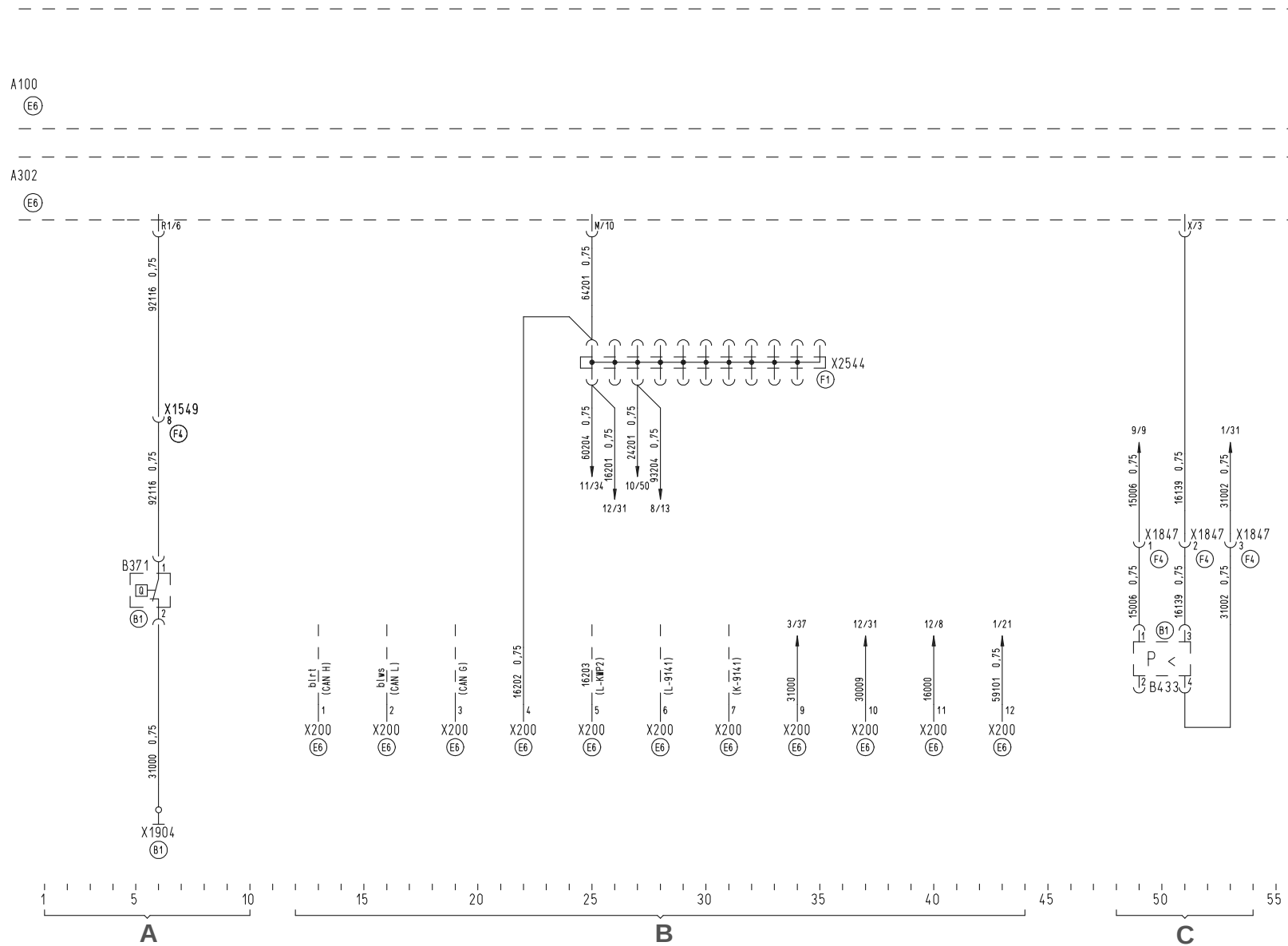
Marking of mounting positions

(A) Tail
(B1) Engine
(B2) Gearbox
(C) Front
(C1) Bumper
(C2) Entrance right
(C3) Entrance left
(E6) Central electrics area
(E7) Control unit racks
(E8) Rear wall of cab
(F) Instrument panel
(F1) Central part
(F2) Steering wheel/column
(F3) Foot pedals
(F4) Front wall, inside left
(F5) Front wall, inside right

(F6) Driving seat
(F7) Passenger seat
(F8) Control panel
(G) Battery box
(H1) B-pillar on driver's side
(H2) A-pillar on driver's side
(J1) B-pillar on passenger's side
(J2) A-pillar on passenger's side
(L) Ceiling/roof
(N) Front axle
(P) Rear axle
(R1) Front part of frame
(R2) Rear part of frame
(S1) Door left
(S2) Door right

LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **5** of 21



Legend

Wiring diagram no. **81.99192.2981** Sheet **6** of 21

Change status: 03.01

A = Clutch fluid level sensor

B = Heating thermostat

C = ZDR interface (vehicle management computer) (MDB, HGB)

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

B434 (272) Clutch fluid level sensor

F582 (117) Fuse, vehicle management computer (terminal 15)
ZDR/interface

R134 (146) EDC resistor group

X1551 Stvd. engine/EDC/transmission II

X1644 Earthing point, cab, adjacent to central fuse,
relay and terminal block

X1972 Stvd. pedals, external

X1996 Stvd. intermediate speed control interface (FFR)

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ Power take-off 1

Ⓙ Power take-off 2

Ⓜ Special customised module

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

The diagram illustrates a power distribution system for a ship's main power bus, divided into three sections: A, B, and C. The system is connected to a 100V AC source (A100) and a 302V AC source (A302). Section A includes a main switch (X1972) and a fuse (F4). Section B includes a main switch (X1972) and a fuse (F4). Section C includes a main switch (X1972) and a fuse (F4). The system is protected by fuses (F3, F4, F5, F6, F7, F8, F9, F10, F11, F12, F13, F14, F15, F16, F17, F18) and relays (R134, R135, R136, R137, R138, R139, R140, R141, R142, R143, R144, R145, R146, R147, R148, R149, R150, R151, R152, R153, R154, R155, R156, R157, R158, R159, R160, R161, R162, R163, R164, R165, R166, R167, R168, R169, R170, R171, R172, R173, R174, R175, R176, R177, R178, R179, R180, R181, R182, R183, R184, R185, R186, R187, R188, R189, R190, R191, R192, R193, R194, R195, R196, R197, R198, R199, R200, R201, R202, R203, R204, R205, R206, R207, R208, R209, R210, R211, R212, R213, R214, R215, R216, R217, R218, R219, R220, R221, R222, R223, R224, R225, R226, R227, R228, R229, R230, R231, R232, R233, R234, R235, R236, R237, R238, R239, R240, R241, R242, R243, R244, R245, R246, R247, R248, R249, R250, R251, R252, R253, R254, R255, R256, R257, R258, R259, R260, R261, R262, R263, R264, R265, R266, R267, R268, R269, R270, R271, R272, R273, R274, R275, R276, R277, R278, R279, R280, R281, R282, R283, R284, R285, R286, R287, R288, R289, R290, R291, R292, R293, R294, R295, R296, R297, R298, R299, R300, R301, R302, R303, R304, R305, R306, R307, R308, R309, R310, R311, R312, R313, R314, R315, R316, R317, R318, R319, R320, R321, R322, R323, R324, R325, R326, R327, R328, R329, R330, R331, R332, R333, R334, R335, R336, R337, R338, R339, R340, R341, R342, R343, R344, R345, R346, R347, R348, R349, R350, R351, R352, R353, R354, R355, R356, R357, R358, R359, R360, R361, R362, R363, R364, R365, R366, R367, R368, R369, R370, R371, R372, R373, R374, R375, R376, R377, R378, R379, R380, R381, R382, R383, R384, R385, R386, R387, R388, R389, R390, R391, R392, R393, R394, R395, R396, R397, R398, R399, R400, R401, R402, R403, R404, R405, R406, R407, R408, R409, R410, R411, R412, R413, R414, R415, R416, R417, R418, R419, R420, R421, R422, R423, R424, R425, R426, R427, R428, R429, R430, R431, R432, R433, R434, R435, R436, R437, R438, R439, R440, R441, R442, R443, R444, R445, R446, R447, R448, R449, R450, R451, R452, R453, R454, R455, R456, R457, R458, R459, R460, R461, R462, R463, R464, R465, R466, R467, R468, R469, R470, R471, R472, R473, R474, R475, R476, R477, R478, R479, R480, R481, R482, R483, R484, R485, R486, R487, R488, R489, R490, R491, R492, R493, R494, R495, R496, R497, R498, R499, R500, R501, R502, R503, R504, R505, R506, R507, R508, R509, R510, R511, R512, R513, R514, R515, R516, R517, R518, R519, R520, R521, R522, R523, R524, R525, R526, R527, R528, R529, R530, R531, R532, R533, R534, R535, R536, R537, R538, R539, R540, R541, R542, R543, R544, R545, R546, R547, R548, R549, R550, R551, R552, R553, R554, R555, R556, R557, R558, R559, R560, R561, R562, R563, R564, R565, R566, R567, R568, R569, R570, R571, R572, R573, R574, R575, R576, R577, R578, R579, R580, R581, R582, R583, R584, R585, R586, R587, R588, R589, R590, R591, R592, R593, R594, R595, R596, R597, R598, R599, R600, R601, R602, R603, R604, R605, R606, R607, R608, R609, R610, R611, R612, R613, R614, R615, R616, R617, R618, R619, R620, R621, R622, R623, R624, R625, R626, R627, R628, R629, R630, R631, R632, R633, R634, R635, R636, R637, R638, R639, R640, R641, R642, R643, R644, R645, R646, R647, R648, R649, R650, R651, R652, R653, R654, R655, R656, R657, R658, R659, R660, R661, R662, R663, R664, R665, R666, R667, R668, R669, R670, R671, R672, R673, R674, R675, R676, R677, R678, R679, R680, R681, R682, R683, R684, R685, R686, R687, R688, R689, R690, R691, R692, R693, R694, R695, R696, R697, R698, R699, R700, R701, R702, R703, R704, R705, R706, R707, R708, R709, R710, R711, R712, R713, R714, R715, R716, R717, R718, R719, R720, R721, R722, R723, R724, R725, R726, R727, R728, R729, R730, R731, R732, R733, R734, R735, R736, R737, R738, R739, R740, R741, R742, R743, R744, R745, R746, R747, R748, R749, R750, R751, R752, R753, R754, R755, R756, R757, R758, R759, R760, R761, R762, R763, R764, R765, R766, R767, R768, R769, R770, R771, R772, R773, R774, R775, R776, R777, R778, R779, R780, R781, R782, R783, R784, R785, R786, R787, R788, R789, R790, R791, R792, R793, R794, R795, R796, R797, R798, R799, R800, R801, R802, R803, R804, R805, R806, R807, R808, R809, R810, R811, R812, R813, R814, R815, R816, R817, R818, R819, R820, R821, R822, R823, R824, R825, R826, R827, R828, R829, R830, R831, R832, R833, R834, R835, R836, R837, R838, R839, R840, R841, R842, R843, R844, R845, R846, R847, R848, R849, R850, R851, R852, R853, R854, R855, R856, R857, R858, R859, R860, R861, R862, R863, R864, R865, R866, R867, R868, R869, R870, R871, R872, R873, R874, R875, R876, R877, R878, R879, R880, R881, R882, R883, R884, R885, R886, R887, R888, R889, R890, R891, R892, R893, R894, R895, R896, R897, R898, R899, R900, R901, R902, R903, R904, R905, R

Legend

Wiring diagram no. **81.99192.2981** Sheet 7 of 21

Change status: 03.01

A = Cruise control

B = Vehicle speed control/vehicle speed limiting, additional retarding brake

C = Distributor line 60028

A100 (255) Central fuse, relay and terminal block
A302 (352) Central computer 2
A403 (339) Vehicle management computer
A429 (405) Steering column switch, cruise control/transmission

F583 (117) Fuse, FFR (term. 15) switch/sensors

H378 (A405) Indicator light FGR/FGB (LED)

S284 (489) Switch FGR/FGB
S479 (476) Switch, additional retarding brake

X1693 Crimped connector, line 60028
X1831 (221) Crimped connector, line 60028
X1832 (221) Crimped connector, line 60028
X1968 Stvd. cruise control switch

Marking of mounting positions

- | | |
|---|--------------------------------|
| Ⓐ Tail | Ⓕ Driving seat |
| Ⓑ Engine | Ⓖ Passenger seat |
| Ⓒ Gearbox | Ⓗ Control panel |
| Ⓓ Front | Ⓖ Battery box |
| Ⓒ Bumper | Ⓗ B-pillar on driver's side |
| Ⓒ Entrance right | Ⓗ A-pillar on driver's side |
| Ⓒ Entrance left | Ⓖ B-pillar on passenger's side |
| Ⓖ Central electrics area | Ⓖ A-pillar on passenger's side |
| Ⓖ Control unit racks | Ⓖ Ceiling/roof |
| Ⓖ Rear wall of cab | Ⓖ Front axle |
| Ⓖ Instrument panel | Ⓖ Rear axle |
| Ⓖ Central part | Ⓖ Front part of frame |
| Ⓖ Steering wheel/column | Ⓖ Rear part of frame |
| Ⓖ Foot pedals | Ⓖ Door left |
| Ⓖ Front wall, inside left | Ⓖ Door right |
| Ⓖ Front wall, inside right | |
| Ⓖ Vehicle management computer (terminal 15) | |

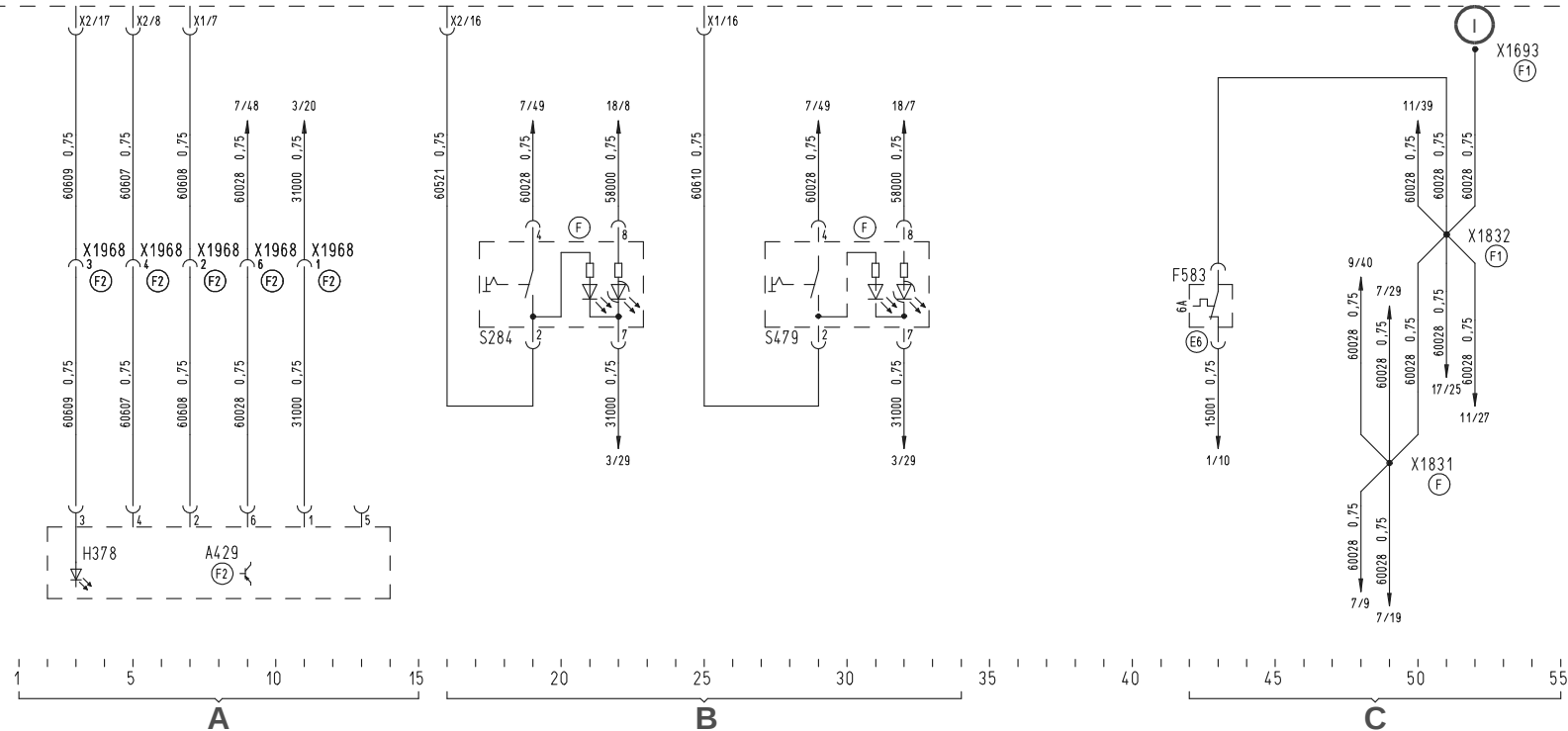
LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet 7 of 21

A100
(E6)

A302
(E6)

T-CAN
A403
(E7)



LegendWiring diagram no. **81.99192.2981** Sheet **8** of 21

Change status: 03.01

A = ECAM**B = Indicator light cab locking****C = Tank indicator****A100** (255) Central fuse, relay and terminal block**A302** (352) Central computer 2**A407** (342) Instrumentation**A409** (353) ECAM control unit**B103** (263) Tank sensor**F366** (101) ECAM/ECAS fuse (terminal 15)**G101** (113) Battery 2**H108** Indicator light, reservoir pressure**H149** Indicator light, cab locking**P102** Indicator instrument, reservoir pressure brake circuit 1**P103** Indicator instrument, reservoir pressure brake circuit 2**P104** Indicator instrument fuel in reserve**S198** (538) Switch, cab locking right**S199** (538) Switch, cab locking left**X1544** Stvd. frame III**X1557** Stvd. frame, left**X1644** Earthing point, cab, adjacent to central fuse,
relay and terminal block**X1809** Stvd. ECAS (terminal 15)**Marking of mounting positions**

Ⓐ Tail

Ⓑ Engine

Ⓑ1 Gearbox

Ⓒ Front

Ⓒ1 Bumper

Ⓒ2 Entrance right

Ⓒ3 Entrance left

Ⓔ Central electrics area

Ⓔ1 Control unit racks

Ⓔ2 Rear wall of cab

Ⓕ Instrument panel

Ⓕ1 Central part

Ⓕ2 Steering wheel/column

Ⓕ3 Foot pedals

Ⓕ4 Front wall, inside left

Ⓕ5 Front wall, inside right

Ⓘ Reserve

Ⓕ6 Driving seat

Ⓕ7 Passenger seat

Ⓕ8 Control panel

Ⓖ Battery box

Ⓕ1 B-pillar on driver's side

Ⓕ2 A-pillar on driver's side

Ⓕ1 B-pillar on passenger's side

Ⓕ2 A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ1 Front part of frame

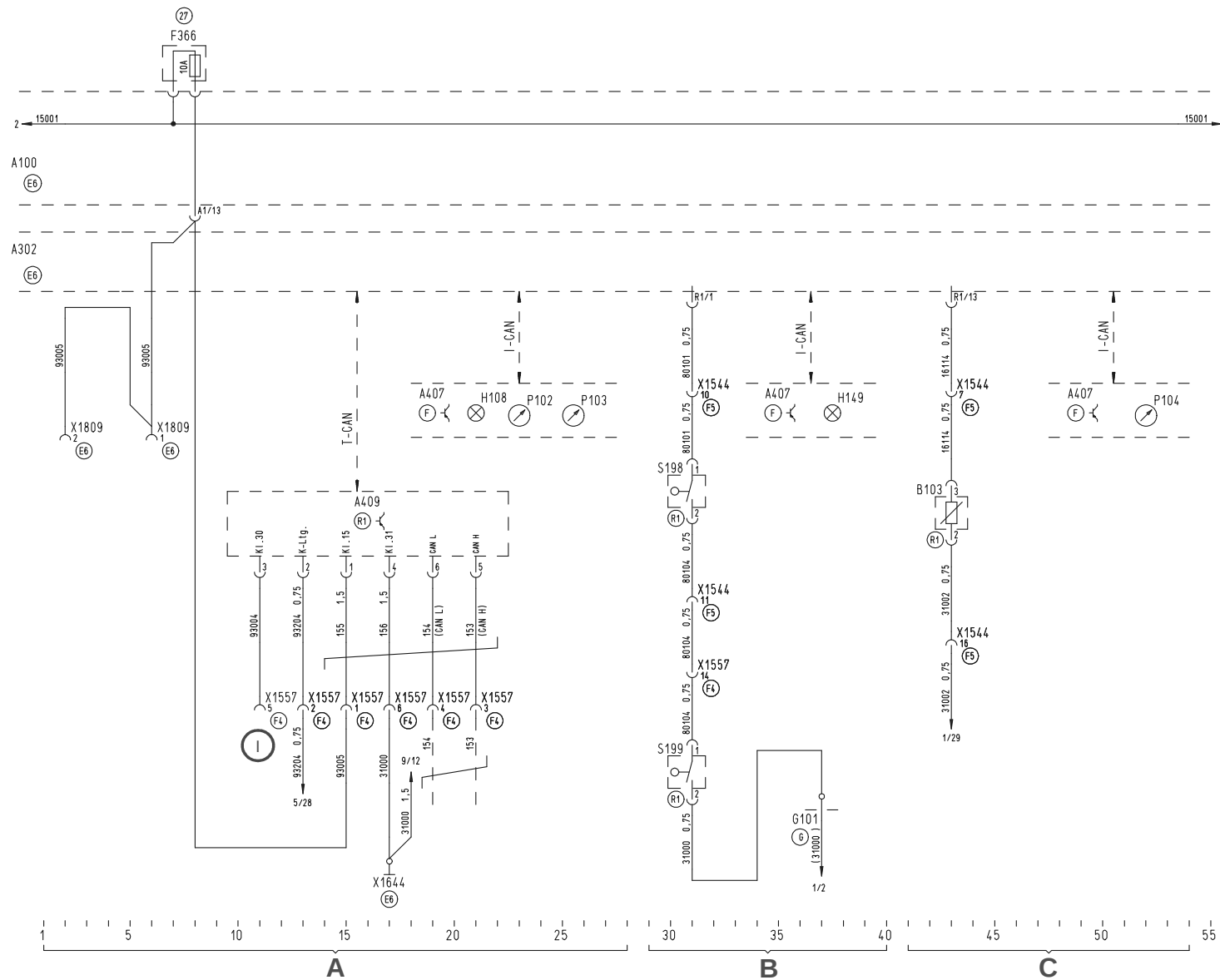
Ⓕ2 Rear part of frame

Ⓕ1 Door left

Ⓕ2 Door right

LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **8** of 21



LegendWiring diagram no. **81.99192.2981** Sheet **9** of 21

Change status: 03.01

A = Horn**B = Oil level sensor****C = Engine brake****D = Additional retarding brake pushbutton switch****E = External temperature**

A100 (255) Central fuse, relay and terminal block
A302 (352) Central computer 2
A403 (339) Vehicle management computer
A407 (342) Instrumentation
A437 (398) Additional retarding brake pushbutton switch
A551 (533) Control unit, oil level sensor

B269 (275) Temperature sensor, external air
B270 (338) Oil level sensor

F375 (101) Fuse, cab outside (terminal 15)**G101** (113) Battery 2

H102 (142) Horn
H145 Indicator light, retarder
H169 (143) Horn (dual-tone)

P113 Indicator device, external temperature**S108** (472) Steering column switch (indicators, wipers and headlights)

X1545 Stvd. front region, left
X1550 Stvd. front region, right
X1551 Stvd. engine/EDC/transmission II
X1557 Stvd. frame, left
X1559 Stvd. engine/EDC/transmission IV

Marking of mounting positions

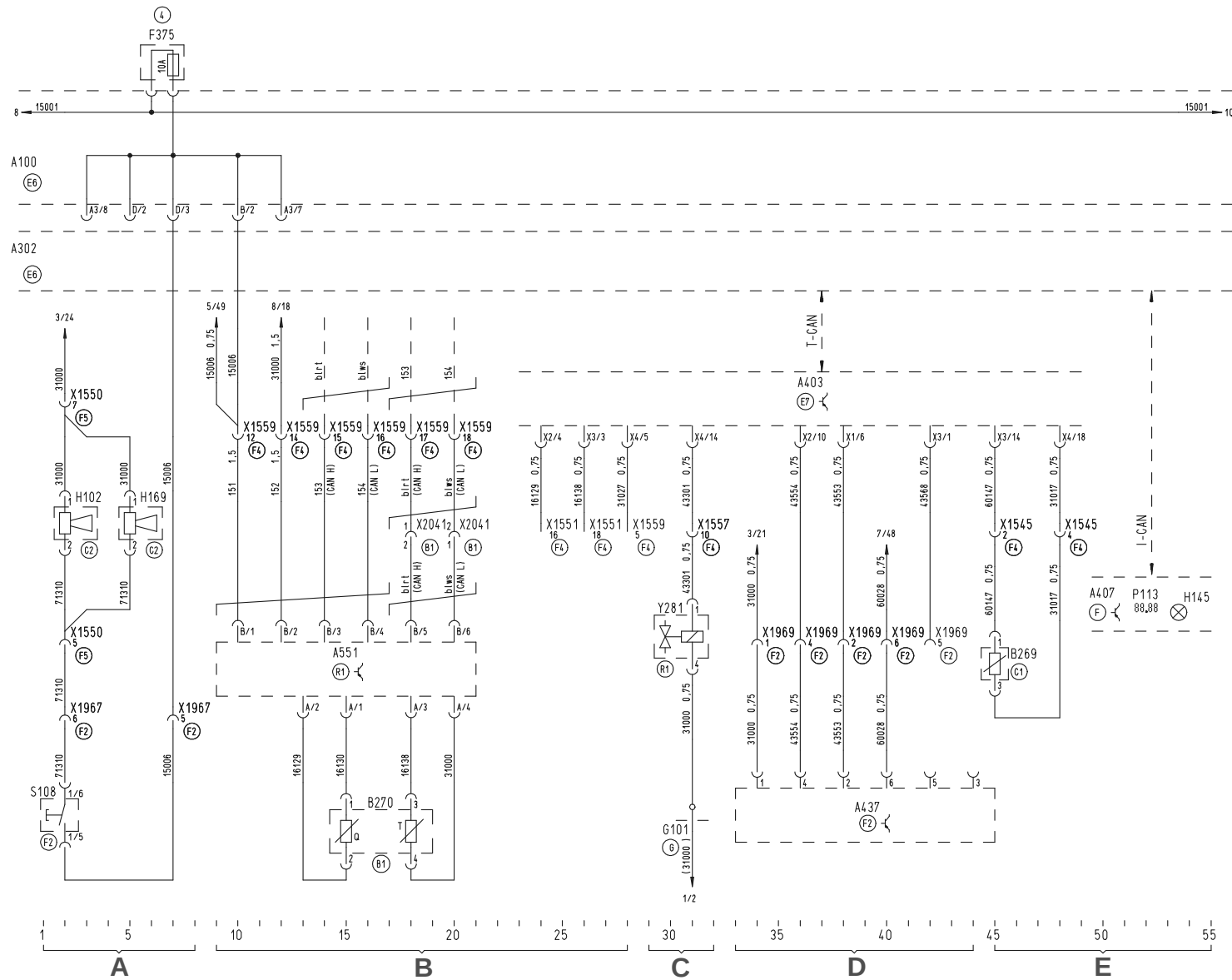
(A) Tail
(B1) Engine
(B2) Gearbox
(C) Front
(C1) Bumper
(C2) Entrance right
(C3) Entrance left
(E6) Central electrics area
(E7) Control unit racks
(E8) Rear wall of cab
(F) Instrument panel
(F1) Central part
(F2) Steering wheel/column
(F3) Foot pedals
(F4) Front wall, inside left
(F5) Front wall, inside right

(F6) Driving seat
(F7) Passenger seat
(F8) Control panel
(G) Battery box
(H1) B-pillar on driver's side
(H2) A-pillar on driver's side
(J1) B-pillar on passenger's side
(J2) A-pillar on passenger's side
(L) Ceiling/roof
(N) Front axle
(P) Rear axle
(R1) Front part of frame
(R2) Rear part of frame
(S1) Door left
(S2) Door right

X1967 Stvd. 1 combination steering column switch
X1969 Stvd. engine brake switch
X2041 Stvd. adaptation AS-TRONIC
Y281 (188) Solenoid valve, engine brake

LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **9** of 21



Legend

Wiring diagram no. **81.99192.2981** Sheet **10** of 21

Change status: 03.01

A = Wiper and washer system

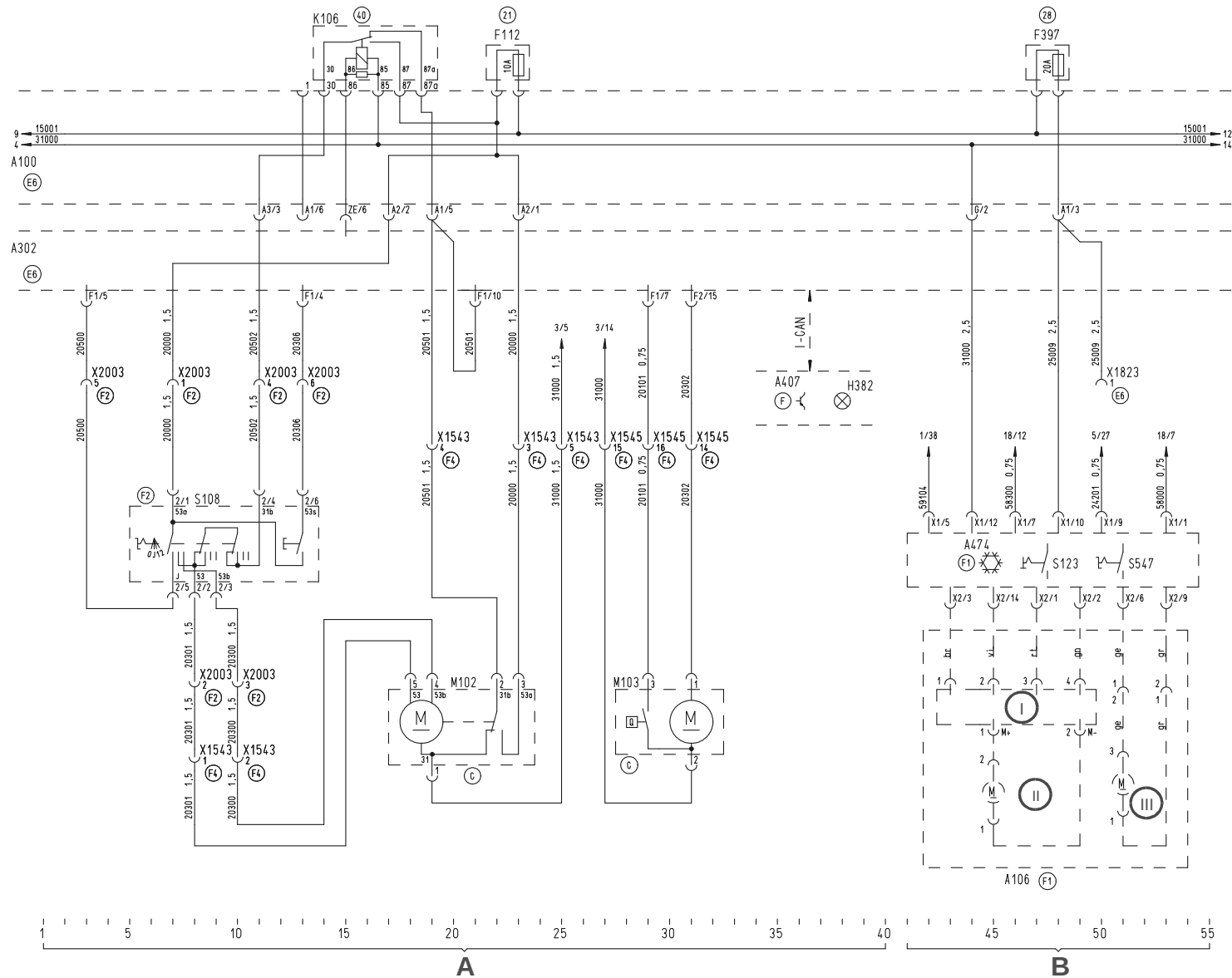
B = Heater fan

A100	(255)	Central fuse, relay and terminal block
A106	(383)	Front heater
A302	(352)	Central computer 2
A407	(342)	Instrumentation
A474	(375)	Control device, cab heating with/without air-conditioning
F112	(101)	Fuse, wiper and washer system
F397	(104)	Fuse, heater blower/air-conditioning unit
H382		Indicator light, level of washing water
K106	(244)	Relay, wiper pulses
M102	(145)	Screen wiper motor
M103	(146)	Screen wash pump
S108	(472)	Steering column switch (indicators, wipers and headlights)
S123	(A375)	Switch, fresh air circulation vent
S547	(A375)	Rotary control, blower
X1543		Stvd. wiper motor
X1545		Stvd. front region, left
X1823		Stvd. air-conditioning, terminal 15
X2003		Stvd. 2 combination steering column switch

Marking of mounting positions

Ⓐ	Tail	Ⓕ	Driving seat
Ⓑ1	Engine	Ⓖ7	Passenger seat
Ⓑ2	Gearbox	Ⓖ8	Control panel
Ⓒ	Front	Ⓖ	Battery box
Ⓒ1	Bumper	Ⓕ1	B-pillar on driver's side
Ⓒ2	Entrance right	Ⓕ2	A-pillar on driver's side
Ⓒ3	Entrance left	Ⓖ1	B-pillar on passenger's side
Ⓔ6	Central electrics area	Ⓖ2	A-pillar on passenger's side
Ⓔ7	Control unit racks	Ⓖ	Ceiling/roof
Ⓔ8	Rear wall of cab	Ⓖ	Front axle
Ⓕ	Instrument panel	Ⓖ	Rear axle
Ⓕ1	Central part	Ⓖ1	Front part of frame
Ⓕ2	Steering wheel/column	Ⓖ2	Rear part of frame
Ⓕ3	Foot pedals	Ⓖ1	Door left
Ⓕ4	Front wall, inside left	Ⓖ2	Door right
Ⓕ5	Front wall, inside right		
Ⓖ	Clock-pulse regulator		
Ⓖ	Blower		
Ⓖ	Fresh/circulating air		

Wiring diagram no. **81.99192.2981** Sheet **10** of **21**



Legend

Wiring diagram no. **81.99192.2981** Sheet **11** of 21
Change status: 03.01

A = Cigarette lighter

B = Illumination, ash tray

C = Gear lever

D = Diagnosis, vehicle management computer

E = Accelerator pedal unit

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A403 (339) Vehicle management computer

A410 (404) Accelerator pedal unit

E177 (176) Illumination, ash tray left

E178 (176) Illumination, ash tray right

F158 (122) Fuse, cigarette lighter

F236 (111) Generator engine control (terminal 15)

R108 (151) Cigarette lighter

S477 Switch, gear lever

X1559 Stvd. engine/EDC/transmission IV

X1604 Stvd. switch in operating button

X1642 Earthing point, cab, behind instrument panel

X1972 Stvd. pedals, external

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ HGS (hydraulic gearshift) heating

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Legend

Wiring diagram no. **81.99192.2981** Sheet **12** of 21
Change status: 03.01

A = Supply voltage +15V

B = Instrumentation/tachograph

A100 (255) Central fuse, relay and terminal block
A302 (352) Central computer 2
A407 (342) Instrumentation
A408 (403) Tachograph

B110 (271) Pulse generator, tachograph

F376 (101) Fuse, cab interior (terminal 15)
F398 (101) Fuse, tachograph, instrumentation (terminal 15)
F412 (101) Fuse, tachograph, instrumentation (terminal 30)

H111 Central warning light
H162 Warning beep

P101 Tachometer
P106 Indicator for cooling water temperature
P107 Clock
P116 Charge air indicator
P118 Speed indicator
P119 Mileage indicator
P120 Trip indicator

X1535 Stvd. tachograph
X1536 Stvd. tachograph
X1537 Stvd. tachometer pickup
X1639 Soldered connector, line 16000
X1642 Earthing point, cab, behind instrument panel
X1644 Earthing point, cab, adjacent to central fuse, relay and terminal block
X1757 Soldered connector, line 16006
X1833 (221) Crimped connector, line 16000

Marking of mounting positions

Ⓐ Tail
Ⓑ Engine
Ⓑ1 Gearbox
Ⓒ Front
Ⓒ1 Bumper
Ⓒ2 Entrance right
Ⓒ3 Entrance left
Ⓔ Central electrics area
Ⓔ1 Control unit racks
Ⓔ2 Rear wall of cab
Ⓕ Instrument panel
Ⓕ1 Central part
Ⓕ2 Steering wheel/column
Ⓖ Foot pedals
Ⓖ4 Front wall, inside left
Ⓖ5 Front wall, inside right

Ⓘ Differential lock

Ⓜ Supplementary heater

Ⓜ Door module

Ⓜ Terminal 15

Ⓜ Minus

Ⓜ Earth

Ⓜ See electronically controlled diesel injection

Ⓕ Driving seat
Ⓕ Passenger seat
Ⓕ Control panel
Ⓕ Battery box
Ⓕ1 B-pillar on driver's side
Ⓕ2 A-pillar on driver's side
Ⓕ3 B-pillar on passenger's side
Ⓕ4 A-pillar on passenger's side
Ⓕ Ceiling/roof
Ⓕ Front axle
Ⓕ Rear axle
Ⓕ1 Front part of frame
Ⓕ2 Rear part of frame
Ⓕ1 Door left
Ⓕ2 Door right

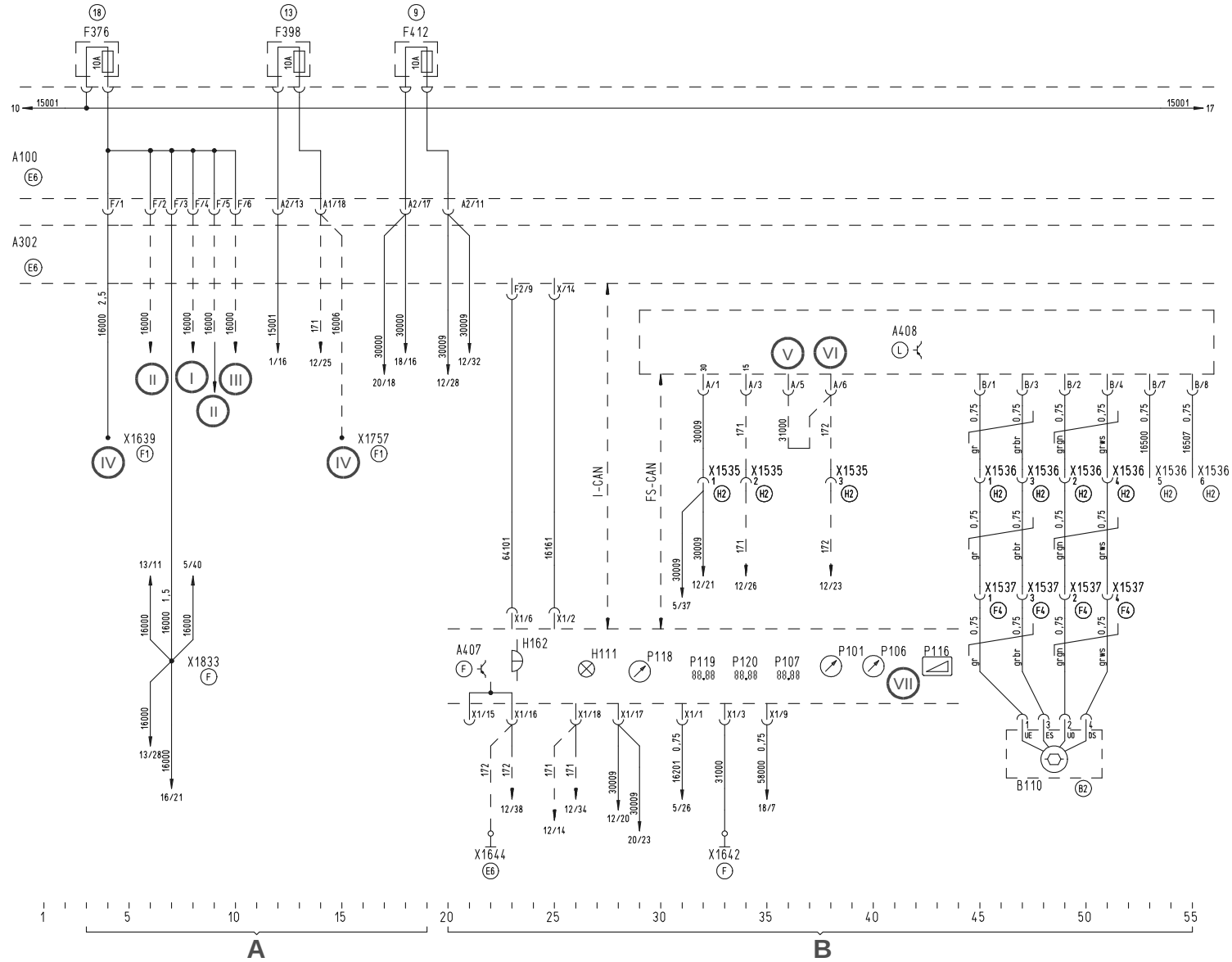
Note:

X1536/8 regarding soldering

X1536/6 regarding soldering

LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **12** of 21



Legend

Wiring diagram no. **81.99192.2981** Sheet **13** of 21

Change status: 03.01

A = Lighting learning run

B = Light circuits

A100 (255) Central fuse, relay and terminal block

A302 (352) Central computer 2

A407 (342) Instrumentation

F534 (117) Fuse, light switch

S111 (482) Light switch

S329 (473) Control switch, lighting learning run

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

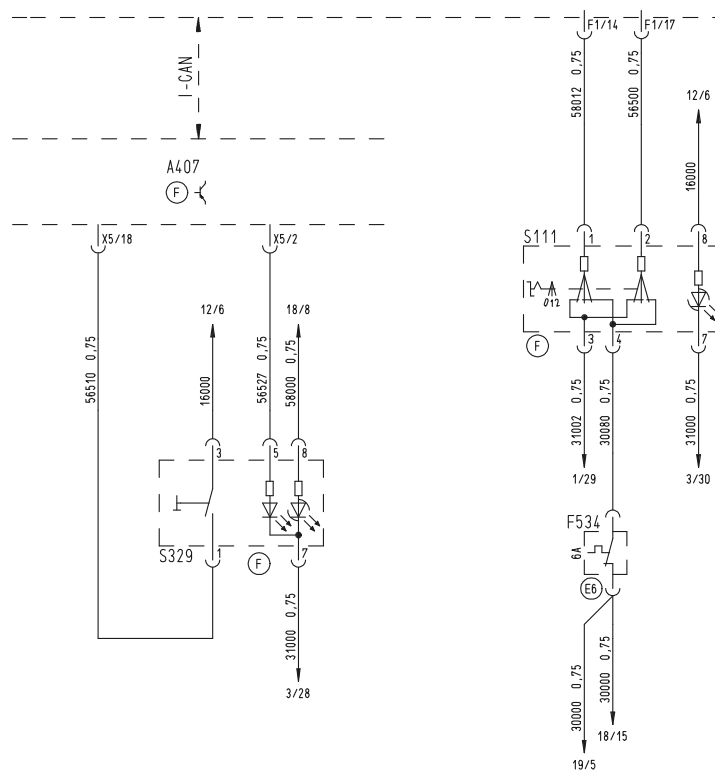
Wiring diagram no. **81.99192.2981** Sheet **13** of 21

A100

(E6)

A302

(E6)



1 5 10 15 20 25 30 35 40 45 50 55

A **B**

LegendWiring diagram no. **81.99192.2981** Sheet **14** of 21

Change status: 03.01

A = Parking lights, left**B = Parking lights, right**

A100 (255) Central fuse, relay and terminal block
A187 (411) Headlights, left
A188 (412) Headlights, right
A189 (195) Tail light, left
A190 (195) Tail light, right
A302 (352) Central computer 2

E108 Parking light, right
E109 Parking light, left
E114 (181) Outline marker light, front right
E115 (181) Outline marker light, front left
E116 Outline marker light, rear right
E117 Outline marker light, rear left
E118 Tail light, right
E119 Tail light, left

F117 (101) Fuse, parking tail light, left
F118 (101) Fuse, parking tail light, right

G101 (113) Battery 2**K116** (187) Relay, parking tail light

X395 Stvd. outline marker and interior light, left and right
X1540 Stvd. frame I
X1544 Stvd. frame III
X1545 Stvd. front region, left
X1550 Stvd. front region, right
X1557 Stvd. frame, left
X1586 Stvd. connection for trailer lighting socket 1
X2507 Stvd. adaptation parking light 1
X2508 Stvd. adaptation parking light 2

Marking of mounting positions

Ⓐ Tail
 Ⓑ Engine
 Ⓑ1 Gearbox
 Ⓒ Front
 Ⓒ1 Bumper
 Ⓒ2 Entrance right
 Ⓒ3 Entrance left
 Ⓔ Central electrics area
 Ⓔ1 Control unit racks
 Ⓔ2 Rear wall of cab
 Ⓕ Instrument panel
 Ⓕ1 Central part
 Ⓕ2 Steering wheel/column
 Ⓕ3 Foot pedals
 Ⓕ4 Front wall, inside left
 Ⓕ5 Front wall, inside right

Ⓘ Side marking light, left

Ⓜ Side marker light, right

Ⓕ6 Driving seat
 Ⓕ7 Passenger seat
 Ⓕ8 Control panel
 Ⓖ Battery box
 Ⓕ1 B-pillar on driver's side
 Ⓕ2 A-pillar on driver's side
 Ⓖ1 B-pillar on passenger's side
 Ⓖ2 A-pillar on passenger's side
 Ⓕ Ceiling/roof
 Ⓖ Front axle
 Ⓖ Rear axle
 Ⓕ1 Front part of frame
 Ⓕ2 Rear part of frame
 Ⓕ1 Door left
 Ⓕ2 Door right

Note:Position for mounting **X1586** is E8 on semitrailers!

LegendWiring diagram no. **81.99192.2981** Sheet **15** of 21

Change status: 03.01

A = Headlamp flasher**B = Dipped beam, main beam****C = Headlight levelling****A100** (255) Central fuse, relay and terminal block**A187** (411) Headlights, left**A188** (412) Headlights, right**A302** (352) Central computer 2**A407** (342) Instrumentation**E110** Dipped beam, right**E111** Dipped beam, left**E112** Main beam, right**E113** Main beam, left**H129** Indicator light, main beam**R109** (136) Positioning potentiometer, headlight levelling**S108** (472) Steering column switch (indicators, wipers and headlights)**X1545** Stvd. front region, left**X1550** Stvd. front region, right**X1642** Earthing point, cab, behind instrument panel**X1644** Earthing point, cab, adjacent to central fuse, relay and terminal block**X1967** Stvd. 1 combination steering column switch**Marking of mounting positions**

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓔ Instrument panel

Ⓔ Central part

Ⓔ Steering wheel/column

Ⓔ Foot pedals

Ⓔ Front wall, inside left

Ⓔ Front wall, inside right

Ⓘ for D2R headlights

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

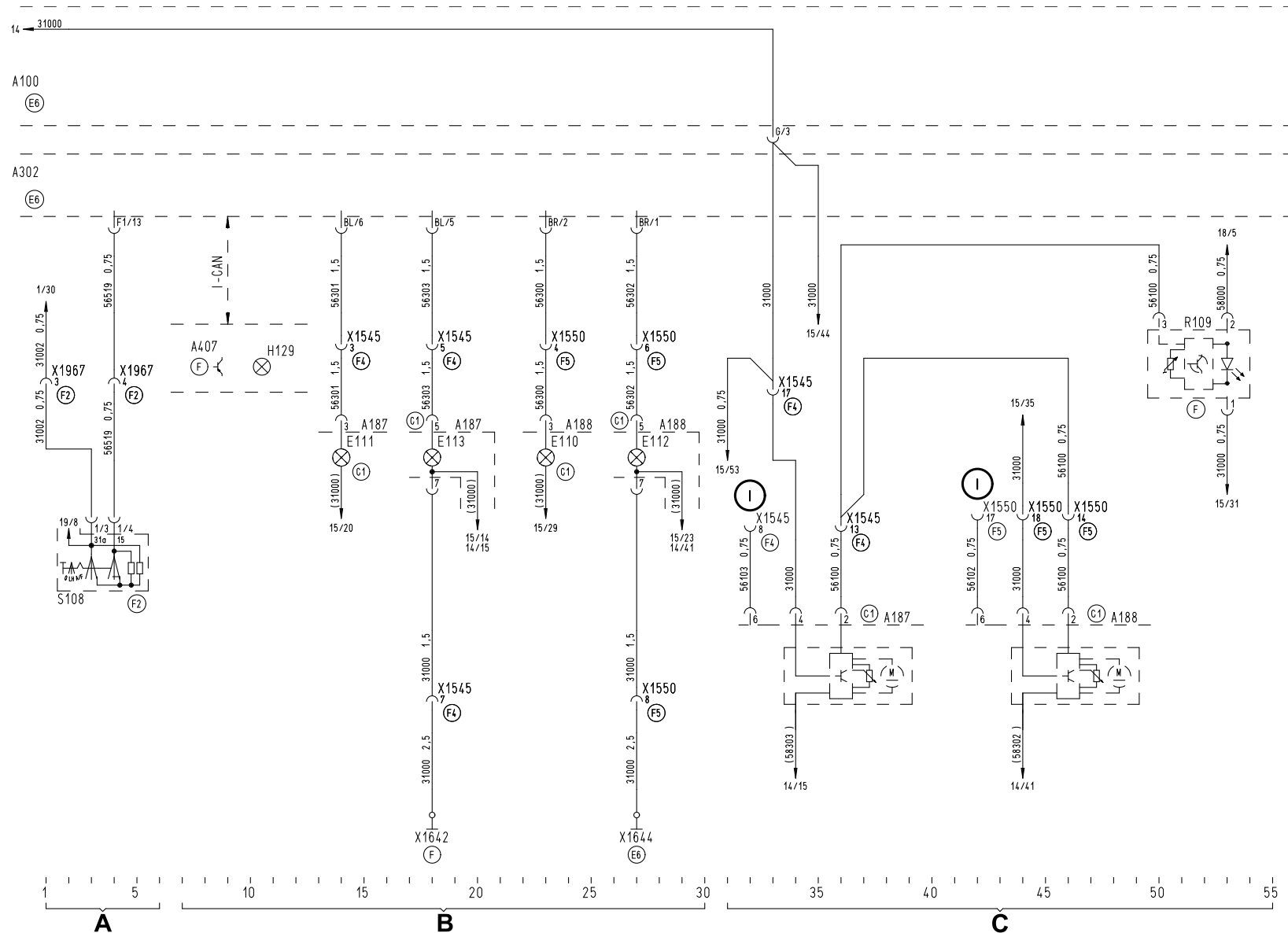
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

LL SERIES WIRING DIAGRAMS

Wiring diagram no. **81.99192.2981** Sheet **15** of 21



LegendWiring diagram no. **81.99192.2981** Sheet **16** of 21

Change status: 03.01

A = Rear fog lights**B = Fog light/rear fog light circuitry****C = Fog lights/additional main beam****A100** (255) Central fuse, relay and terminal block**A189** (195) Tail light, left**A190** (195) Tail light, right**A302** (352) Central computer 2**A407** (342) Instrumentation**A438** (410) Light strip, right**A439** (409) Light strip, left**E122** Fog lights, right**E123** Fog lights, left**E124** Rear fog light, right**E125** Rear fog light, left**E194** High beam, right**E195** High beam, right**S502** (490) Control switch, rear fog light**X1540** Stvd. frame I**X1544** Stvd. frame III**X1545** Stvd. front region, left**X1550** Stvd. front region, right**X1587** Stvd. connection for trailer lighting socket 2**Marking of mounting positions**

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

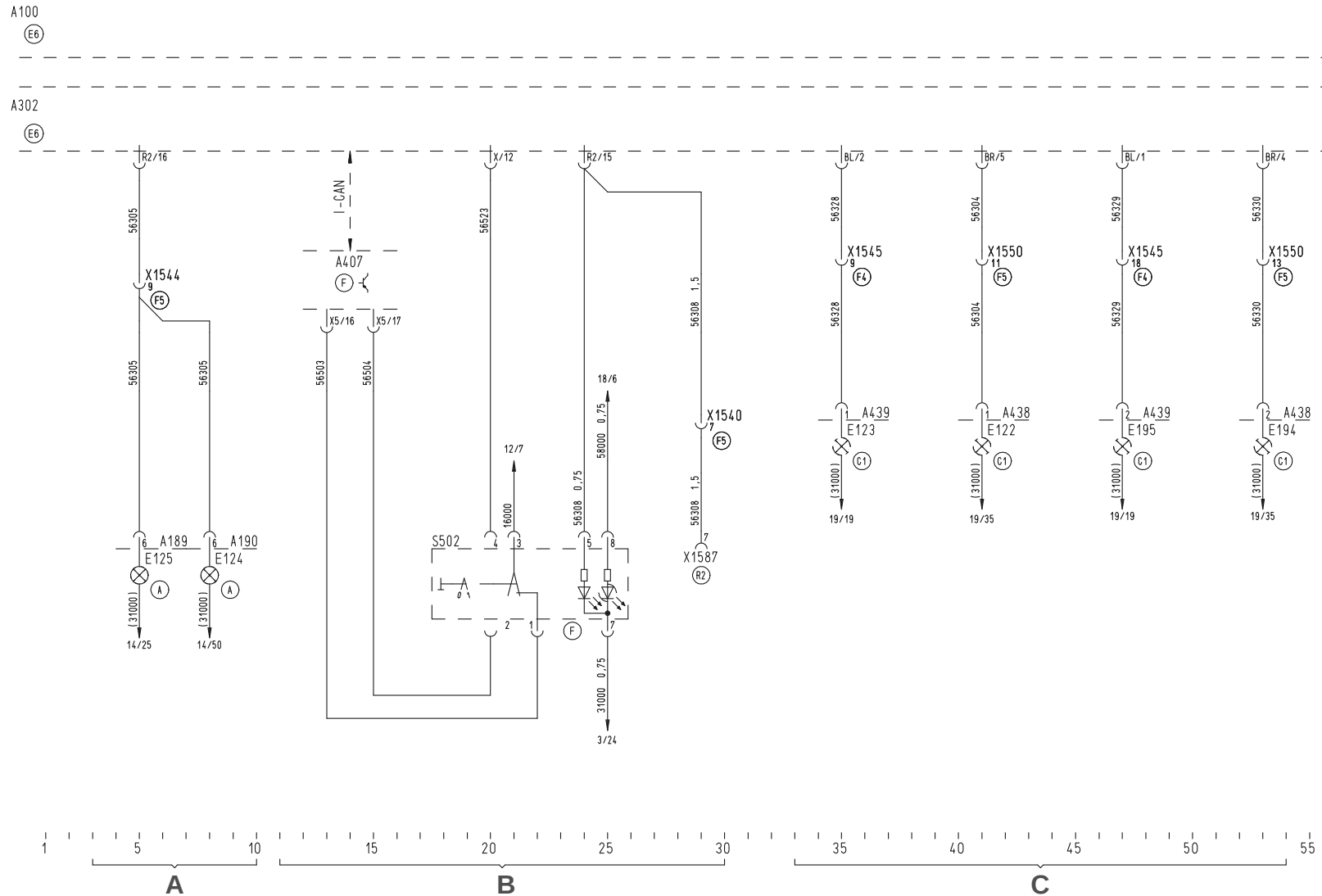
Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Note:Position for mounting **X1587** is E8 on semitrailers!

Wiring diagram no. **81.99192.2981** Sheet **16** of 21



Legend

Wiring diagram no. **81.99192.2981** Sheet **17** of 21

Change status: 03.01

A = Brake light

B = Parking brake

C = Reversing light

A100 (255) Central fuse, relay and terminal block

A189 (195) Tail light, left

A190 (195) Tail light, right

A302 (352) Central computer 2

A402 (399) EBS control unit

A403 (339) Vehicle management computer

A407 (342) Instrumentation

B337 (244) Brake sensor

B369 (276) Pressure switch, control lamp for parking brake

E102 Reversing beam, right

E103 Reversing beam, left

F314 (101) Fuse, reversing light

G101 (113) Battery 2

H112 Brake light, right

H113 Brake light, left

H117 Indicator lights, parking brake

X1540 Stvd. frame I

X1544 Stvd. frame III

X1586 Stvd. connection for trailer lighting socket 1

X1587 Stvd. connection for trailer lighting socket 2

X1627 Stvd. reversing beam

X1834 (221) Crimped connector, line 71300

Marking of mounting positions

Ⓐ Tail

Ⓑ Engine

Ⓑ Gearbox

Ⓒ Front

Ⓒ Bumper

Ⓒ Entrance right

Ⓒ Entrance left

Ⓔ Central electrics area

Ⓔ Control unit racks

Ⓔ Rear wall of cab

Ⓕ Instrument panel

Ⓕ Central part

Ⓕ Steering wheel/column

Ⓕ Foot pedals

Ⓕ Front wall, inside left

Ⓕ Front wall, inside right

Ⓖ Switch, reverse gear

Ⓕ Driving seat

Ⓕ Passenger seat

Ⓕ Control panel

Ⓕ Battery box

Ⓕ B-pillar on driver's side

Ⓕ A-pillar on driver's side

Ⓕ B-pillar on passenger's side

Ⓕ A-pillar on passenger's side

Ⓕ Ceiling/roof

Ⓕ Front axle

Ⓕ Rear axle

Ⓕ Front part of frame

Ⓕ Rear part of frame

Ⓕ Door left

Ⓕ Door right

Note:

Position for mounting **X1586** and **X1587** is E8 on semitrailers!