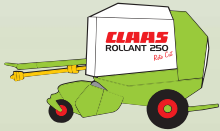


# **CLAAS**



**ROLLANT 240**  
**ROLLANT 250**

**ROLLANT 240 with UNIWRAP**  
**ROLLANT 250 with UNIWRAP**

## **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.

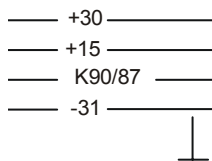
### Numbering of circuit diagrams

01...

01a / 01b ...

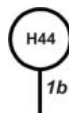
- The respective numbering can be found on the corresponding cover sheet and in the footer.
- Depending on the machine no., the components fitted and the country specification, there may be several individual circuit diagrams for a given function.

### Potentials



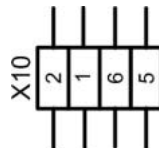
- Main power supply (battery)
- Ignition switch power supply (switched)
- Relay-controlled power supply
- Earth
- Housing earth (external)

### Connections

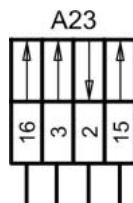


- The description provided **inside** the circle (e.g. "H44") defines the connection.
- Numbers **next to** the circle (e.g. "1b") describe the continuation of the cabling in accordance with the circuit diagram numbering which can be taken from the cover sheet or from the footer.

### Designations



- Connectors (e.g. „X10“, pin 2– 1– 6– 5). Each chapter lists the respective connectors and their pin assignment in the individual connection tables.



- Modules (e.g. "A23")  
The arrows identify the functional inputs and outputs according to the assignment table provided in chapter **ZE**.

Wiring loom A

- Position of components according to wiring looms

- 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

### Wire colours / Wire cross-sections

| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| XT1 – 1   | 1.5             | bk     |
| XT1 – 2   | 1.5             | br     |
| XT1 – 4   | 1.5             | bk-rd  |
| XT1 – 5   | 1.5             | br-rd  |
|           |                 |        |
| XT2 – 1   | 1.5             | bk     |
| XT2 – 2   | 1.5             | bk-rd  |
| XT2 – 3   | 1.5             | br-rd  |
| XT2 – 15  | 1.5             | br     |

- Indication of cross-section (mm<sup>2</sup>) and colour

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

- Meaning of wire colours

|       |                                                                   |
|-------|-------------------------------------------------------------------|
| bk    | - +30 Power supply from tractor [12V power]                       |
| br    | - -31 Power supply from tractor [0V power]                        |
| bk-rd | - +15 switched via CCT [12V electronics]                          |
| br-rd | - -31 via CCT [0V electronic system]                              |
| bk-wt | - +30 switched via K90 (polarity reversal protection) [12V power] |

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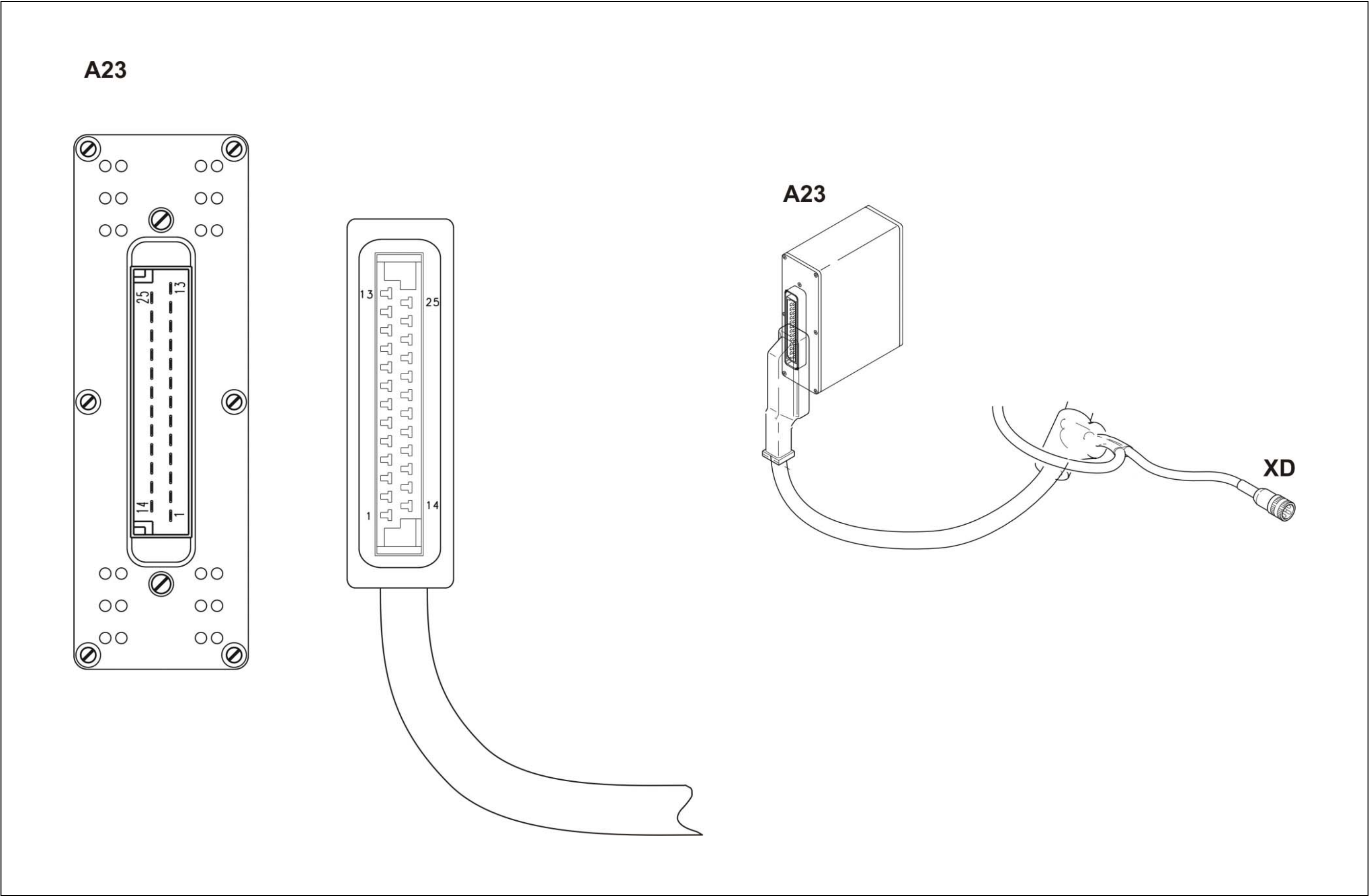




## **Central terminal compartment**

- Rollant 240 Standard
- Rollant 250 Standard

Central terminal compartment Rollant 240/250 Standard



**Key to diagram:**

|     |                                         |                        |
|-----|-----------------------------------------|------------------------|
| A23 | ROLLANT 240/250 Standard<br>module..... | Wiring loom A – part 2 |
| XD  | CAN bus socket (7 pin) .....            | Wiring loom A – part 2 |

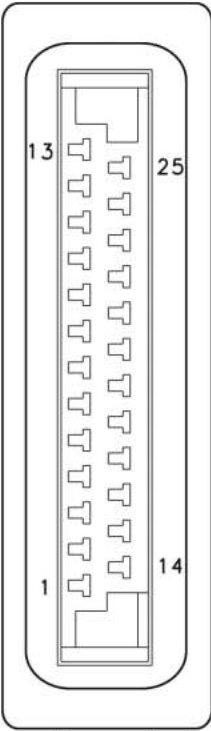
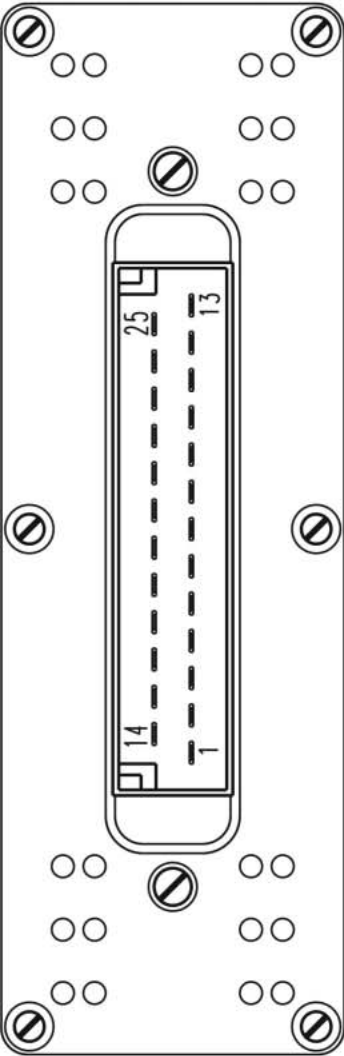


## **Central terminal compartment**

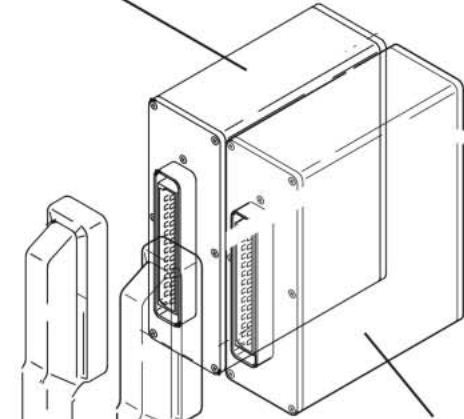
- Rollant 250 Comfort

Central terminal compartment Rollant 250 Comfort

A23-1  
A23-2



A23-2



A23-1

XD

**Key to diagram:**

|       |                                            |                        |
|-------|--------------------------------------------|------------------------|
| A23-1 | ROLLANT module 1 .....                     | Wiring loom B – part 2 |
| A23-2 | ROLLANT module 2 .....                     | Wiring loom B – part 2 |
| XD    | CAN bus connector (7 pin)<br>terminal..... | Wiring loom B – part 2 |

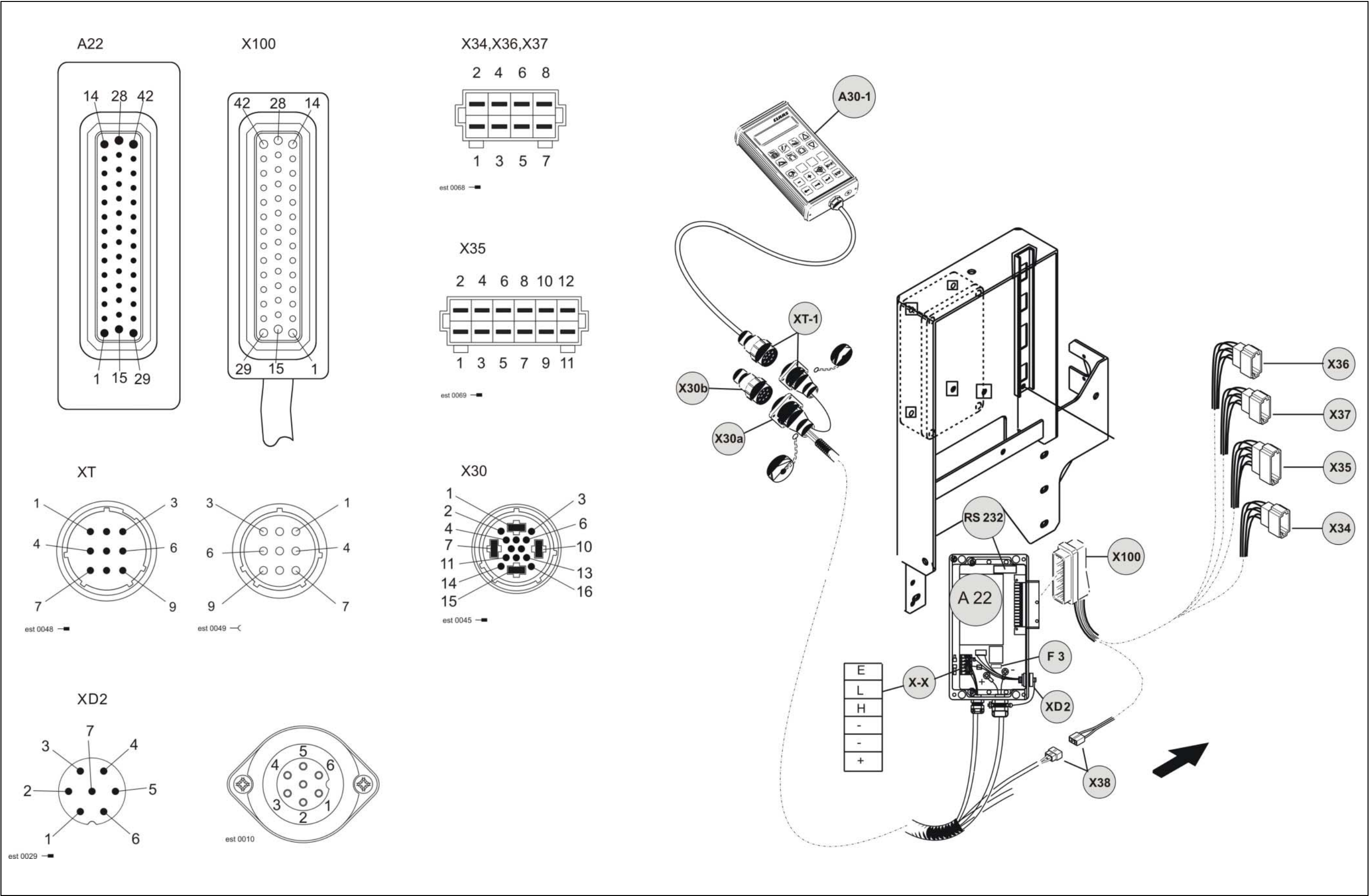




## **Central terminal compartment**

- UNIWRAP

Central terminal compartment UNIWRAP



**Key to diagram:**

|        |                                                            |
|--------|------------------------------------------------------------|
| A22    | UNIWRAP bale wrapper module                                |
| A30-1  | Bale wrapper terminal                                      |
| F 3    | Fuse (15 Amperes)                                          |
| RS 232 | Data link                                                  |
| XD2    | CAN bus socket (7 pin)                                     |
| X-X    | Socket                                                     |
| XT-1   | Terminal connector                                         |
| X30a   | UNIWRAP link connector                                     |
| X30b   | Blind connector (on Rollant balers <b>without</b> UNIWRAP) |
| X34    | Hydraulic system connector                                 |
| X35    | Sensor system connector                                    |
| X36    | Hydraulic system connector                                 |
| X37    | Sensor system connector                                    |

| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X-X E     | 0.5             | rd     |
| X-X L     | 0.5             | bk     |
| X-X H     | 0.5             | gn-ye  |
| X-X -     | 0.5             | vi     |
| X-X -     | 0.5             | br-rd  |
| X-X +     | 0.5             | bk-rd  |



## **Pin assignment in modules**

Rollant 240

Rollant 250

UNIWRAP

## Module A23 Rollant 240/250 Standard

| Pin | Function                                        | Component | Measuring variable | Direction | Circuit diagram no. |
|-----|-------------------------------------------------|-----------|--------------------|-----------|---------------------|
| 1   | ROTOCUT knives ON solenoid coil                 | Y55       | 12 V               | Output    | 7a                  |
| 2   | Electronics earth                               | 32        | Earth              | Input     | 6a                  |
| 3   | CAN high                                        | -         | -                  | -         | 6a                  |
| 4   | Not used                                        | -         | -                  | -         | -                   |
| 5   | Wrapping release switch (manual)                | S77       | Earth              | Input     | 11a                 |
| 6   | Not used                                        | -         | -                  | -         | -                   |
| 7   | Not used                                        | -         | -                  | -         | -                   |
| 8   | Not used                                        | -         | -                  | -         | -                   |
| 9   | Not used                                        | -         | -                  | -         | -                   |
| 10  | Cam track switch                                | Z35       | 12 V               | Input     | 11a                 |
| 11  | Not used                                        | -         | -                  | -         | -                   |
| 12  | Twine/net coupling solenoid coil                | Y39       | 12 V               | Output    | 11a                 |
| 13  | Buzzer                                          | H44       | 12 V               | Output    | 11a                 |
| 14  | ROTOCUT knives OFF                              | Y54       | 12 V               | Output    | 7a                  |
| 15  | Electronics plus                                | 15        | 12 V               | Input     | 6a                  |
| 16  | CAN low                                         | -         | -                  | -         | 6a                  |
| 17  | No function                                     | -         | -                  | -         | -                   |
| 18  | Wrapping delay switch (manual)                  | S76       | Earth              | Input     | 11a                 |
| 19  | Wrapping type selector switch                   | S74       | Earth              | Input     | 11a                 |
| 20  | Power plus<br>(protected against rev. polarity) | K 90 / 87 | 12 V               | Input     | 7a, 11a             |
| 21  | Tailgate closed switch                          | Z16       | 12 V               | Input     | 11a                 |
| 22  | Bale ejector switch                             | Z6        | 12 V               | Input     | 11a                 |
| 23  | Main switch ON / OFF - Rotocut ON / OFF         | S75       | 12 V               | Input     | 7a                  |
| 24  | Not used                                        | -         | -                  | -         | -                   |
| 25  | Operating light                                 | H3        | 12 V               | Output    | 11a                 |

## Module A23 –1 Rollant 250 Comfort and Rollant 250 Comfort for Uniwrap

| Pin | Function                                 | Component   | Measuring variable | Direction | Circuit diagram no. |
|-----|------------------------------------------|-------------|--------------------|-----------|---------------------|
| 1   | Twine coupling                           | Y38         | 12 V               | Output    | 11b                 |
| 2   | Electronics earth                        | 32          | Earth              | Input     | 6b, 6c              |
| 3   | CAN high                                 | -           | -                  | -         | 6b, 6c              |
| 4   | Amplifier (net cutter motor)             | V16         | 5 V                | Output    | 11b                 |
| 5   | Drive speed sensor                       | B9          | high- low (-)      | Input     | 11b                 |
| 6   | Left twine ball speed sensor             | B13         | high- low (-)      | Input     | 11b                 |
| 7   | Not used                                 | -           | -                  | -         | -                   |
| 8   | Not used                                 | -           | -                  | -         | -                   |
| 9   | Tailgate open switch                     | Z17         | 12 V               | Input     | 11b                 |
| 10  | Cam track switch                         | Z35         | 12 V               | Input     | 11b                 |
| 11  | Not used                                 | -           | -                  | -         | -                   |
| 12  | Tailgate open solenoid coil              | Y27         | 12 V               | Output    | 12a                 |
| 13  | Tailgate close solenoid coil             | Y28         | 12 V               | Output    | 12a                 |
| 14  | Net coupling solenoid coil               | Y41         | 12 V               | Output    | 11b                 |
| 15  | Electronics plus                         | 15          | 12 V               | Input     | 6b, 6c              |
| 16  | CAN low                                  | -           | -                  | -         | 6b, 6c              |
| 17  | Buzzer                                   | H44         | 5 V                | Output    | 5a, 5b              |
| 18  | Right twine ball speed sensor            | B14         | high- low (-)      | Input     | 11b                 |
| 19  | Net roll speed sensor                    | B22         | high- low (-)      | Input     | 11b                 |
| 20  | Power plus (protected ag. rev. polarity) | K 90 / 87   | 12 V               | Input     | 4a, 4b, 11b, 12a    |
| 21  | Tailgate closed switch                   | Z16         | 12 V               | Input     | 11b                 |
| 22  | Bale ejector switch                      | Z6          | 12 V               | Input     | 11b                 |
| 23  | No function                              | -           | -                  | -         | 40a, 40b            |
| 24  | Not used                                 | -           | -                  | -         | -                   |
| 25  | Circulation shut-off valve solenoid coil | Y77 / Y77-2 | 12 V               | Output    | 4a, 4b              |

## Module A23 – 2 Rollant 250 Comfort and Rollant 250 Comfort for Uniwrap

| Pin | Function                                       | Component | Measuring variable | Direction | Circuit diagram no. |
|-----|------------------------------------------------|-----------|--------------------|-----------|---------------------|
| 1   | Pick-up lower solenoid coil                    | Y49       | 12 V               | Output    | 20a                 |
| 2   | Electronics earth                              | 32        | Earth              | Input     | 6b, 6c              |
| 3   | CAN high                                       | -         | -                  | -         | 6b, 6c              |
| 4   | No function                                    | -         | -                  | -         | 40a, 40b            |
| 5   | No function                                    | -         | -                  | -         | 40a, 40b            |
| 6   | Not used                                       | -         | -                  | -         | -                   |
| 7   | Not used                                       | -         | -                  | -         | -                   |
| 8   | Not used                                       | -         | -                  | -         | -                   |
| 9   | No function                                    | -         | -                  | -         | 40a, 40b            |
| 10  | No function                                    | -         | -                  | -         | 40a, 40b            |
| 11  | Electronics plus                               | 15        | 12 V               | Input     | 6b, 6c              |
| 12  | Rotor reverse solenoid coil (extend cylinder)  | Y56       | 12 V               | Output    | 7b                  |
| 13  | Rotor reverse solenoid coil (retract cylinder) | Y57       | 12 V               | Output    | 7b                  |
| 14  | Pick-up raise solenoid coil                    | Y48       | 12 V               | Output    | 20a                 |
| 15  | Electronics plus                               | 15        | 12 V               | Input     | 6b, 6c              |
| 16  | CAN low                                        | -         | -                  | -         | 6b, 6c              |
| 17  | No function                                    | -         | -                  | -         | 40a, 40b            |
| 18  | Not used                                       | -         | -                  | -         | -                   |
| 19  | Not used                                       | -         | -                  | -         | -                   |
| 20  | Power plus (protected ag. rev. polarity)       | K 90 / 87 | 12 V               | Input     | 7b, 20a             |
| 21  | Reverser switch                                | Z48       | 12 V               | Input     | 7b                  |
| 22  | No function                                    | -         | -                  | -         | 40a, 40b            |
| 23  | Not used                                       | -         | -                  | -         | -                   |
| 24  | Not used                                       | -         | -                  | -         | -                   |
| 25  | Relay K93 (ROTOCUT knives ON/OFF)              | K93       | 12 V               | Output    | 7b                  |

## Module A22 – Uniwrap bale wrapper (Pin assignment on connector X100)

| Pin | Function                                         | Component | Measuring variable | Direction | Circuit diagram no. |
|-----|--------------------------------------------------|-----------|--------------------|-----------|---------------------|
| 1   | Not used                                         | -         | -                  | -         | -                   |
| 2   | Rotate wrapping arm forward solenoid coil        | Y133      | 12 V PWM           | Output    | 21a                 |
| 3   | Not used                                         | -         | -                  | -         | -                   |
| 4   | Wrapping arm basic position sensor               | B106      | high- low (-)      | Input     | 21a                 |
| 5   | Film break monitoring receiver                   | V12       | high- low (-)      | Input     | 22a                 |
| 6   | Not used                                         | -         | -                  | -         | -                   |
| 7   | Not used                                         | -         | -                  | -         | -                   |
| 8   | Rollant circulation shut-off valve solenoid coil | Y77-1     | 12 V               | Output    | 4c                  |
| 9   | Rotate wrapping arm backward solenoid coil       | Y134      | 12 V               | Output    | 21a                 |
| 10  | Lower tipping cradle solenoid coil               | Y135      | 12 V               | Output    | 19a                 |
| 11  | No function                                      | -         | -                  | -         | 40c                 |
| 12  | Raise tipping cradle solenoid coil               | Y136      | 12 V               | Output    | 19a                 |
| 13  | Close film cutters solenoid coil                 | Y140      | 12 V               | Output    | 22a                 |
| 14  | Raise wrapping table                             | Y138      | 12 V               | Output    | 19a                 |
| 15  | Not used                                         | -         | -                  | -         | -                   |
| 16  | Not used                                         | -         | -                  | -         | -                   |
| 17  | Not used                                         | -         | -                  | -         | -                   |
| 18  | Not used                                         | -         | -                  | -         | -                   |
| 19  | Not used                                         | -         | -                  | -         | -                   |
| 20  | Not used                                         | -         | -                  | -         | -                   |
| 21  | Bale on wrapping table switch                    | Z92       | Earth              | Input     | 19a                 |
| 22  | Safety bracket switch                            | Z91/91-2  | Earth              | Input     | 21a                 |
| 23  | Wrapping arm rotations sensor                    | B107      | high- low (-)      | Input     | 21a                 |
| 24  | Not used                                         | -         | -                  | -         | -                   |
| 25  | Not used                                         | -         | -                  | -         | -                   |
| 26  | Not used                                         | -         | -                  | -         | -                   |
| 27  | Not used                                         | -         | -                  | -         | -                   |
| 28  | Lower wrapping table solenoid coil               | Y137      | 12 V               | Output    | 19a, 21a, 22a       |
| 29  | 0 Volt power (earth)                             | A22       | 0 V                | Output    | 19a, 21a, 22a       |
| 30  | Not used                                         | -         | -                  | -         | -                   |
| 31  | 12 V (sensor power supply)                       | A22       | 12 V               | Output    | 19a                 |
| 32  | Not used                                         | -         | -                  | -         | -                   |
| 33  | Not used                                         | -         | -                  | -         | -                   |
| 34  | Wrapping table at top switch                     | B105      | high- low (-)      | Input     | 19a                 |
| 35  | Not used                                         | -         | -                  | -         | -                   |
| 36  | Bale in tipping cradle sensor                    | B102      | high- low (-)      | Input     | 19a                 |
| 37  | Tipping cradle at bottom sensor                  | B103      | high- low (-)      | Input     | 19a                 |
| 38  | 0 V (sensor power supply)                        | A22       | 0 V                | Output    | 19a, 21a, 22a       |
| 39  | Not used                                         | -         | -                  | -         | -                   |
| 40  | Not used                                         | -         | -                  | -         | -                   |
| 41  | Open film cutters                                | Y139      | 12 V               | Output    | 22a                 |
| 42  | Not used                                         | -         | -                  | -         | -                   |



## Circuit diagram allocation of fuses and relays

|      |                                             |
|------|---------------------------------------------|
| 25 A | On tractor side (not shown) / protects + 30 |
|------|---------------------------------------------|

|     |            |
|-----|------------|
| K90 | 1a, 1b, 1c |
| K93 | 7b         |
| V16 | 11b        |



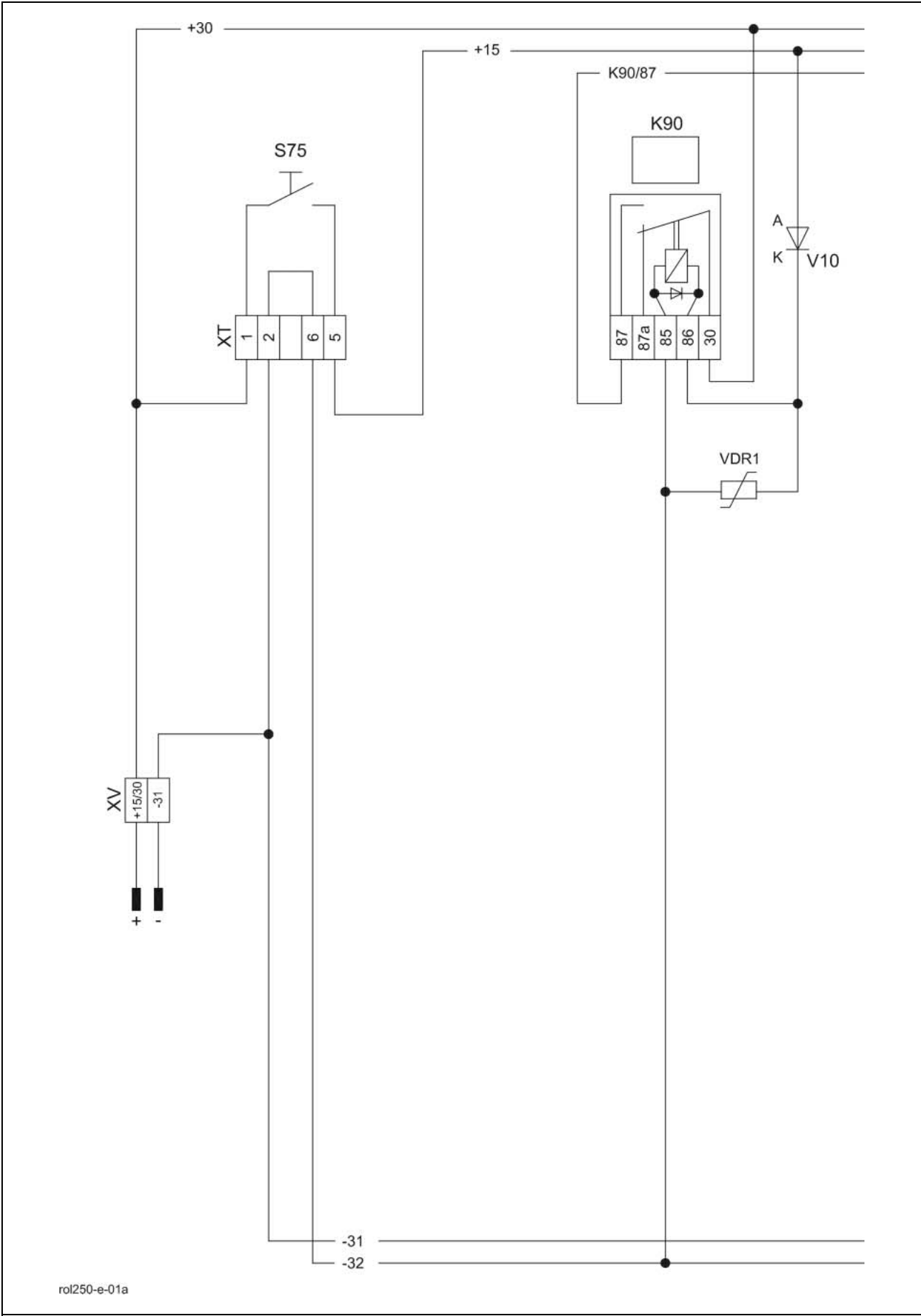
## **1a**

### **Main power supply**

Rollant 240 Standard

Rollant 250 Standard

01a - Main power supply Rollant 240/250 Standard



Key to diagram:

- K90 Power supply relay (protected against reverse polarity).... Wiring loom A-part 2
- S75 Main switch..... Wiring loom A-part 1
- V10 Reverse polarity protection Diode ..... Wiring loom A-part 2
- VDR1 Varistor..... Wiring loom A-part 2
- XT Terminal connector ..... Wiring loom A-part 1
- XV Power supply connector..... Wiring loom A-part 1

Measured value table:

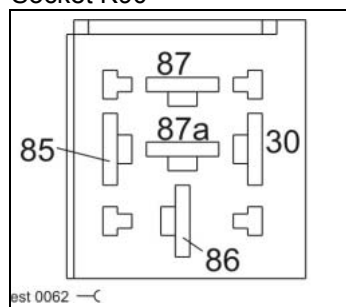
| Item | Component            | Measured value | Note               |
|------|----------------------|----------------|--------------------|
| K90  | Remote control relay | 75±10 Ω        | (Pin 86/1 – 85/2)  |
|      | 20 A                 |                | (Pin 87a/4 – 30/3) |
|      | 30 A                 |                | (Pin 87/5 – 30/3)  |

**Description of function:**

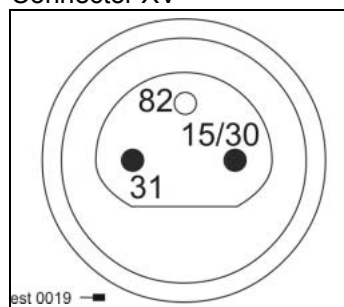
|                        |                                                                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Main power supply      | Power supply from the tractor to the baler is via connector XV. On the tractor, this power supply should be protected by a fuse of 25 A max. |
| Potential + 15         | This is switched by the main switch T 12 on the control box (electronics +).                                                                 |
| Potential K 90 / 87    | Potential K 90/ 87 is a power plus protected against reverse polarity by diode V10.                                                          |
| Overvoltage protection | VDR1 becomes conducting when overvoltage occurs. This smooths the voltage peaks in the electronics circuit (+15 / -32).                      |

## Connector pin definition

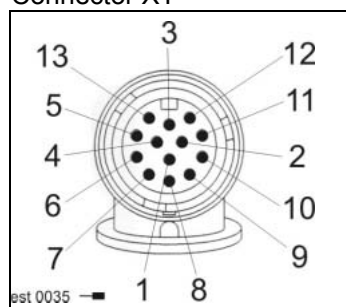
Socket K90



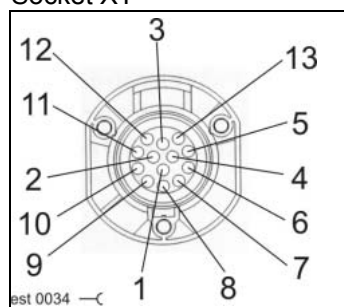
Connector XV



Connector XT



Socket XT



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| K90/30    | 2.5             | bk     |
| K90/85    | 1.0             | br-rd  |
| K90/86    | 0.75            | bk-rd  |
| K90/87    | 2.5             | bk-wt  |
|           |                 |        |
| XT1 – 1   | 1.5             | bk     |
| XT1 – 2   | 1.5             | br     |
| XT1 – 5   | 1.5             | bk-rd  |
| XT1 – 6   | 1.5             | br-rd  |
|           |                 |        |
| XT2 – 1   | 1.5             | bk     |
| XT2 – 2   | 1.5             | br     |
| XT2 – 5   | 1.5             | bk-rd  |
| XT2 – 6   | 1.5             | br-rd  |

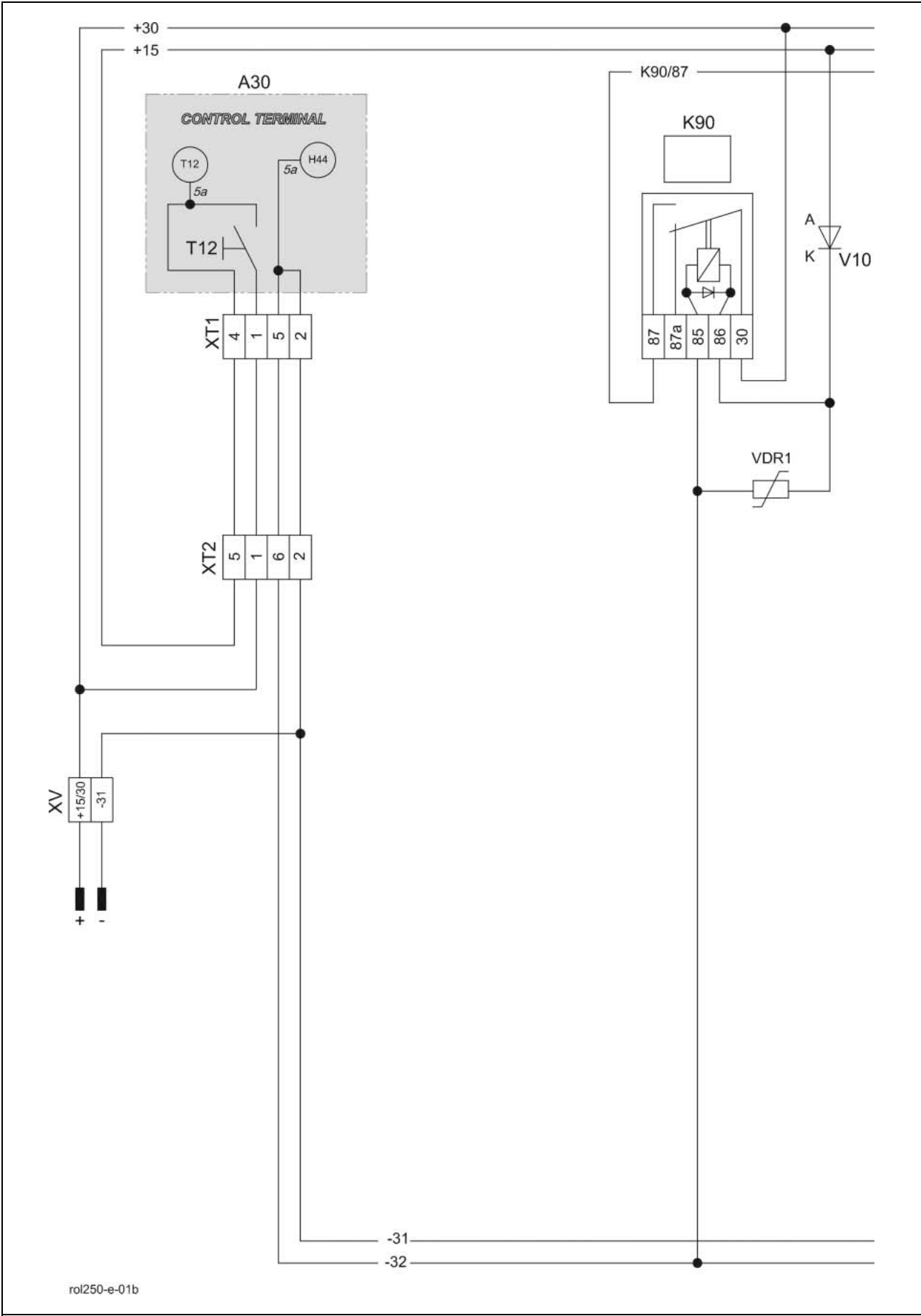
| Connector  | mm <sup>2</sup> | Colour |
|------------|-----------------|--------|
| XV - 15/30 | 2.5             | bk     |
| XV - 31    | 2.5             | br     |

## **1b**

### **Main power supply**

Rollant 250 Comfort

01b - Main power supply      Rollant 250 Comfort



Key to diagram:

- A30 CCT terminal ..... Wiring loom B-part 1
- H44 Buzzer ..... Wiring loom B-part 1
- K90 Power supply relay  
(protected against reverse polarity).... Wiring loom B-part 2
- T12 Main switch..... Wiring loom B-part 1
- V10 Reverse polarity protection diode..... Wiring loom B-part 2
- VDR1 Varistor ..... Wiring loom B-part 2
- XT1 Terminal connector ..... Wiring loom B-part 1
- XT2 Terminal connector ..... Wiring loom B-part 1
- XV Power supply connector ..... Wiring loom B-part 1

Measured value table:

| Item | Component            | Measured value | Note               |
|------|----------------------|----------------|--------------------|
| K90  | Remote control relay | 75±10 Ω        | (Pin 86/1 – 85/2)  |
|      | 20 A                 |                | (Pin 87a/4 – 30/3) |
|      | 30 A                 |                | (Pin 87/5 – 30/3)  |

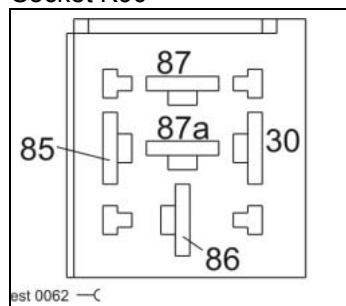


**Description of function:**

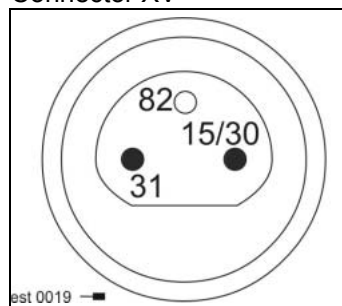
|                        |                                                                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Main power supply      | Power supply from the tractor to the baler is via connector XV. On the tractor, this power supply should be protected by a fuse of 25 A max. |
| Potential + 15         | This is switched by the main switch T 12 on terminal A30 (electronics +).                                                                    |
| Potential K 90 / 87    | Potential K 90/ 87 is a power plus protected against reverse polarity by diode V10.                                                          |
| Overvoltage protection | VDR1 becomes conducting when overvoltage occurs. This smooths the voltage peaks in the electronics circuit (+15 / -32).                      |

## Connector pin definition

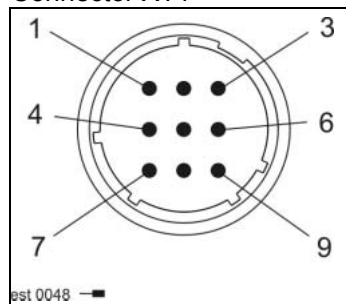
Socket K90



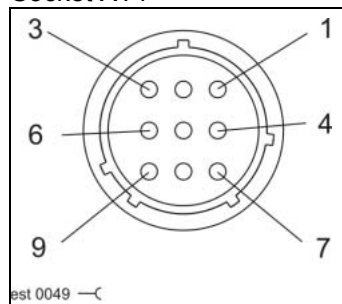
Connector XV



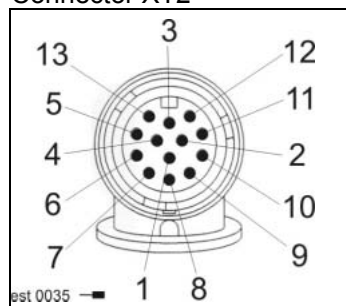
Connector XT1



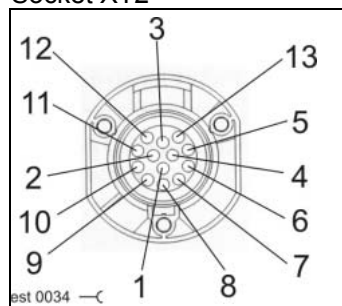
Socket XT1



Connector XT2



Socket XT2



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| K90/30    | 2.5             | bk     |
| K90/85    | 1.0             | br-rd  |
| K90/86    | 0.75            | bk-rd  |
| K90/87    | 2.5             | bk-wt  |
|           |                 |        |
| XT1 – 1   | 1.5             | bk     |
| XT1 – 2   | 1.5             | br     |
| XT1 – 4   | 1.5             | bk-rd  |
| XT1 – 5   | 1.5             | br-rd  |
|           |                 |        |
| XT2 – 1   | 1.5             | bk     |
| XT2 – 2   | 1.5             | br     |
| XT2 – 5   | 1.5             | bk-rd  |
| XT2 – 6   | 1.5             | br-rd  |

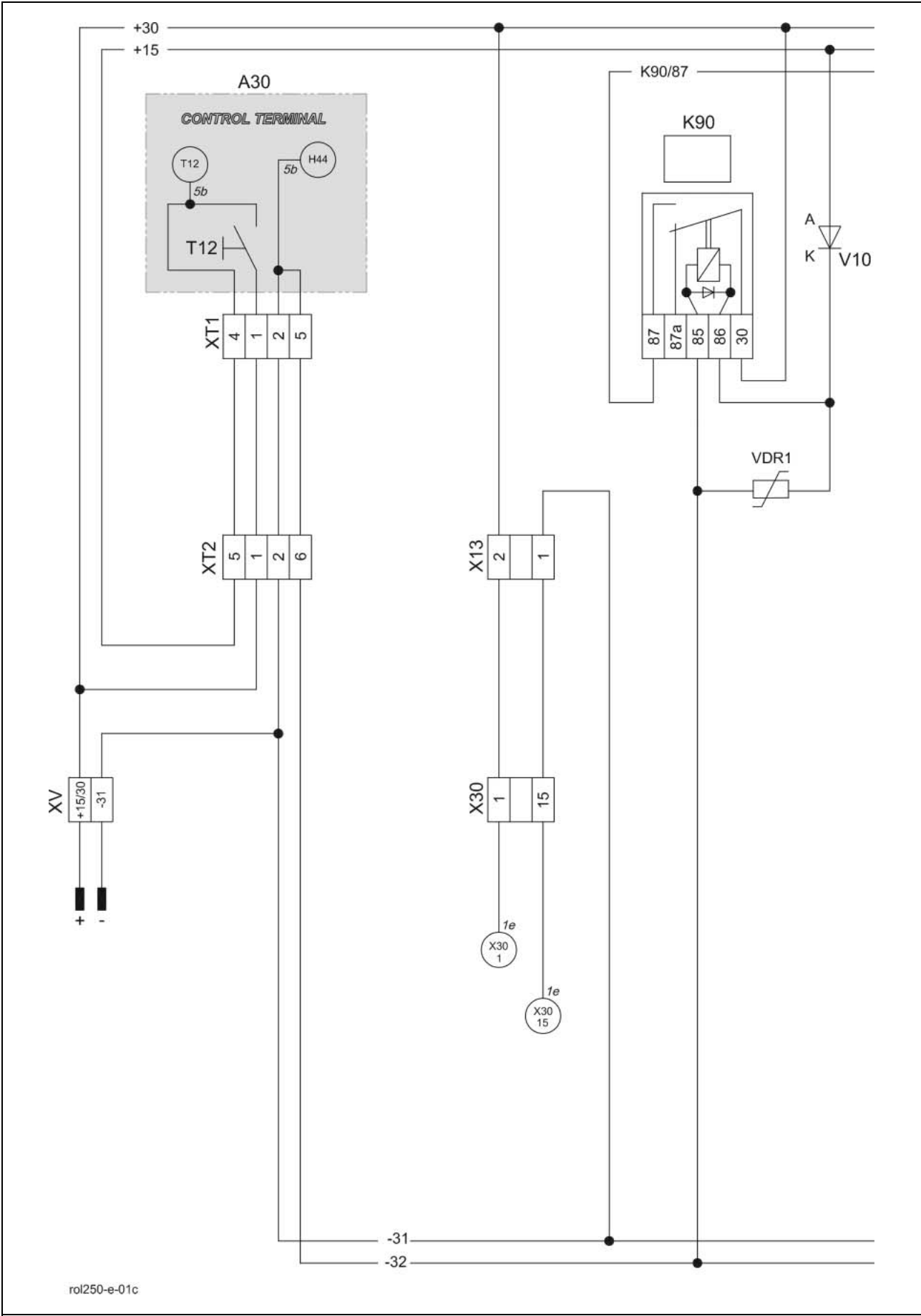
| Connector  | mm <sup>2</sup> | Colour |
|------------|-----------------|--------|
| XV - 15/30 | 2.5             | bk     |
| XV - 31    | 2.5             | br     |

## **1c**

### **Main power supply**

Rollant 250 Comfort for UNIWRAP

01c - Main power supply Rollant 250 Comfort for UNIWRAP



Key to diagram:

|      |                                                                |                      |
|------|----------------------------------------------------------------|----------------------|
| A30  | CCT terminal .....                                             | Wiring loom B-part 1 |
| H44  | Buzzer .....                                                   | Wiring loom B-part 1 |
| K90  | Power supply relay<br>(protected against reverse polarity).... | Wiring loom B-part 2 |
| T12  | Main switch.....                                               | Wiring loom B-part 1 |
| V10  | Reverse polarity protection diode.....                         | Wiring loom B-part 2 |
| VDR1 | Varistor .....                                                 | Wiring loom B-part 2 |
| X13  | Connector .....                                                | Wiring loom B-part 2 |
|      | .....                                                          | Wiring loom D        |
| X30  | Connector .....                                                | Wiring loom D        |
|      | .....                                                          | Wiring loom K        |
| XT1  | Terminal connector .....                                       | Wiring loom B-part 1 |
| XT2  | Terminal connector .....                                       | Wiring loom B-part 1 |
| XV   | Power supply connector .....                                   | Wiring loom B-part 1 |

Measured value table:

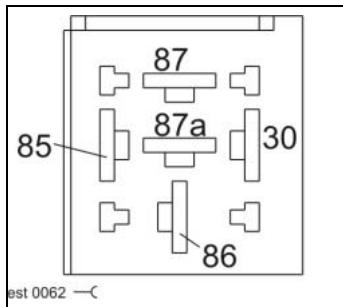
| Item | Component            | Measured value | Note               |
|------|----------------------|----------------|--------------------|
| K90  | Remote control relay | 75±10 Ω        | (Pin 86/1 – 85/2)  |
|      | 20 A                 |                | (Pin 87a/4 – 30/3) |
|      | 30 A                 |                | (Pin 87/5 – 30/3)  |

**Description of function:**

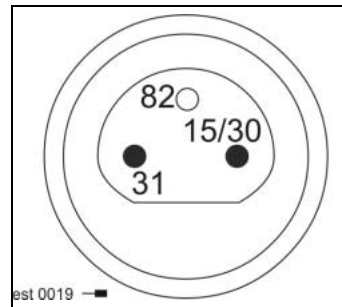
|                        |                                                                                                                                              |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Main power supply      | Power supply from the tractor to the baler is via connector XV. On the tractor, this power supply should be protected by a fuse of 25 A max. |
| Potential + 15         | This is switched by the main switch T 12 on terminal A30 (electronics +).                                                                    |
| Potential K 90 / 87    | Potential K 90/ 87 is a power plus protected against reverse polarity by diode V10.                                                          |
| Overvoltage protection | VDR1 becomes conducting when overvoltage occurs. This smooths the voltage peaks in the electronics circuit (+15 / -32).                      |

## Connector pin definition

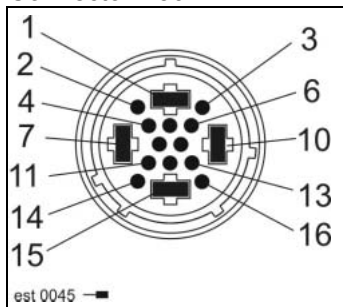
Socket K90



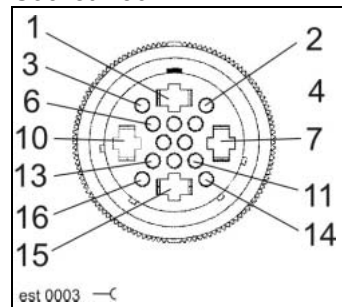
Connector XV



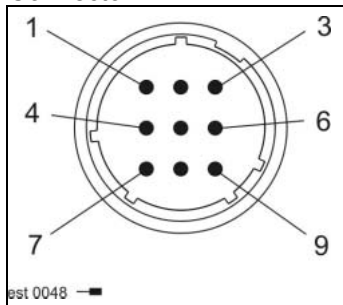
Connector X30



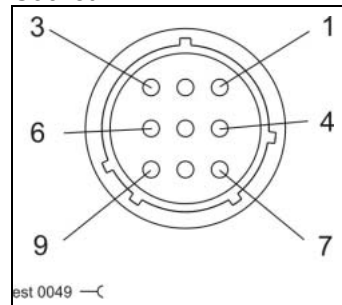
Socket X30



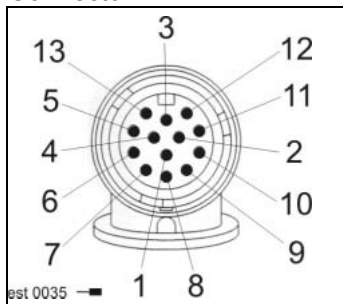
Connector XT1



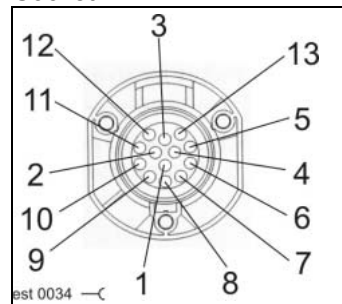
Socket XT1



Connector XT2



Socket XT2



| Connector  | mm <sup>2</sup> | Colour |
|------------|-----------------|--------|
| K90/30     | 2.5             | bk     |
| K90/85     | 1.0             | br-rd  |
| K90/86     | 0.75            | bk-rd  |
| K90/87     | 2.5             | bk-wt  |
|            |                 |        |
| X13 - 2    | 2.5             | bk     |
| X13 - 1    | 2.5             | br     |
|            |                 |        |
| X30 - 1    | 2.5             | bk     |
| X30 - 15   | 2.5             | br     |
|            |                 |        |
| XT1 - 1    | 1.5             | bk     |
| XT1 - 2    | 1.5             | br     |
| XT1 - 4    | 1.5             | bk-rd  |
| XT1 - 5    | 1.5             | br-rd  |
|            |                 |        |
| XT2 - 1    | 1.5             | bk     |
| XT2 - 2    | 1.5             | br     |
| XT2 - 5    | 1.5             | bk-rd  |
| XT2 - 6    | 1.5             | br-rd  |
|            |                 |        |
| XV - 15/30 | 2.5             | bk     |
| XV - 31    | 2.5             | br     |



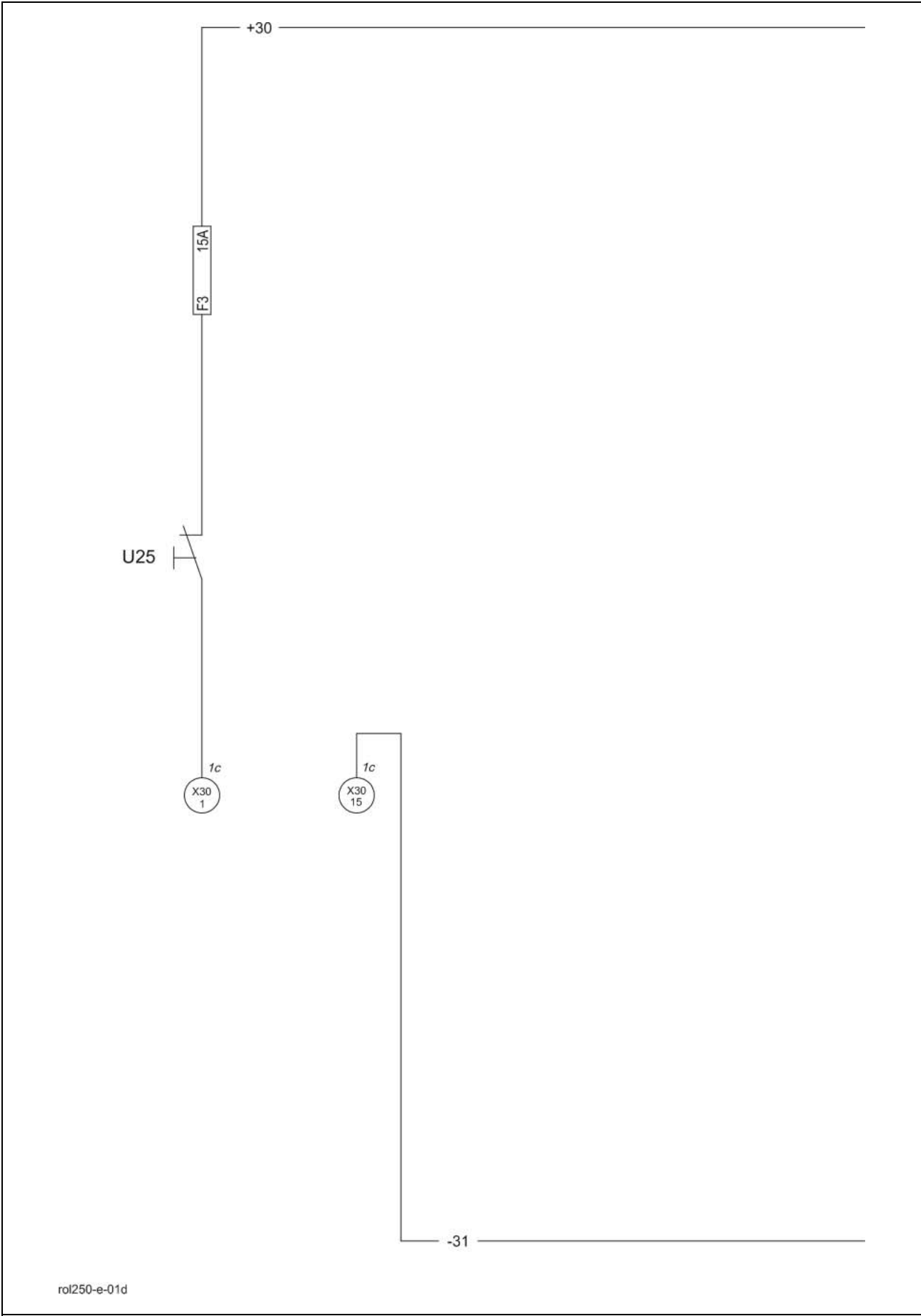


**1d**

## **Main power supply**

UNIWRAP

01d - Main power supply    UNIWRAP



Key to diagram:

- U25    EMERGENCY OFF switch ..... Wiring loom K
- X30    Connector ..... Wiring loom D / G / K

**Description of function:**

Main power supply

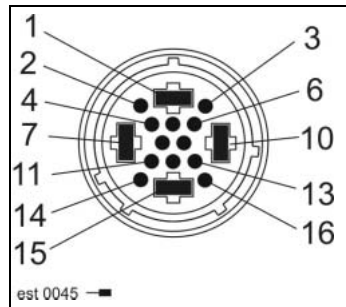
Power supply from the tractor to the bale wrapper is via connector X30. On the tractor, this power supply should be protected by a fuse of 25 A max.

Potential + 30  
(power plus)

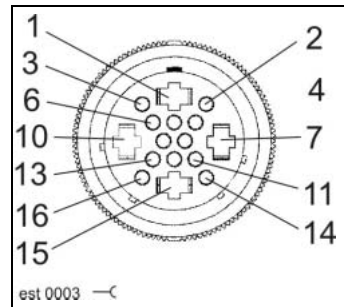
Power supply plus is switched on by EMERGENCY OFF switch U25 on the bale wrapper and protected by fuse F3.

## Connector pin definition

Connector X30



Socket X30



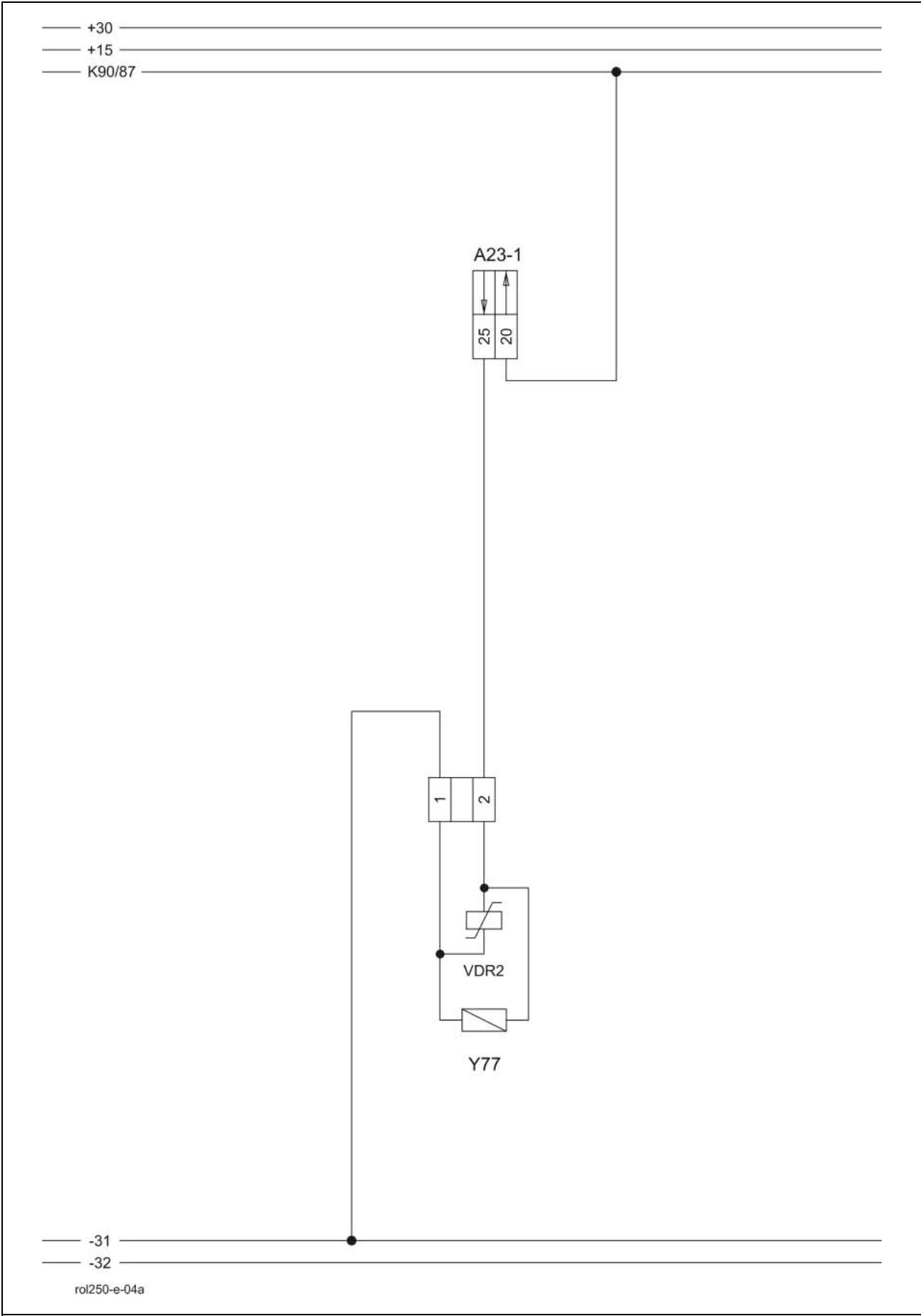
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X30 - 1   | 2.5             | bl     |
| X30 - 15  | 2.5             | bl     |

**4a**

## **Circulation shut-off valve**

Rollant 250 Comfort

04a - Circulation shut-off valve (with central terminal compartment) Rollant 250 Comfort



Key to diagram:

- A23-1 ROLLANT 250 module ..... Wiring loom B - part 2
- VDR2 Varistor ..... not shown
- Y77 Circulation shut-off valve  
solenoid coil ..... Wiring loom B - part 2

Measured value table:

| Item | Component     | Measured value | Note |
|------|---------------|----------------|------|
| Y77  | Soleoind coil | 3.8 A; 3.2 Ω   |      |

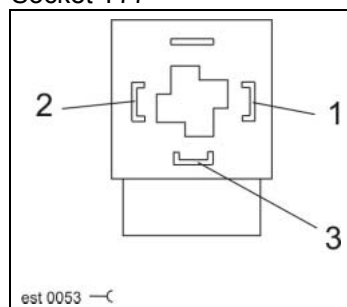
**Description of function:**

Circulation shut-off valve

To be able to build up the working pressure necessary for many hydraulic control systems, the neutral hydraulic circulation must be blocked (see chapter "Hydraulic system"). In this case, the solenoid coil (Y77) is actuated by module A 23 –1 in parallel to the function.

## Connector pin definition

### Socket Y77



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| Y77 - 1   | 0.75            | br     |
| Y77 - 2   | 0.75            | gn     |

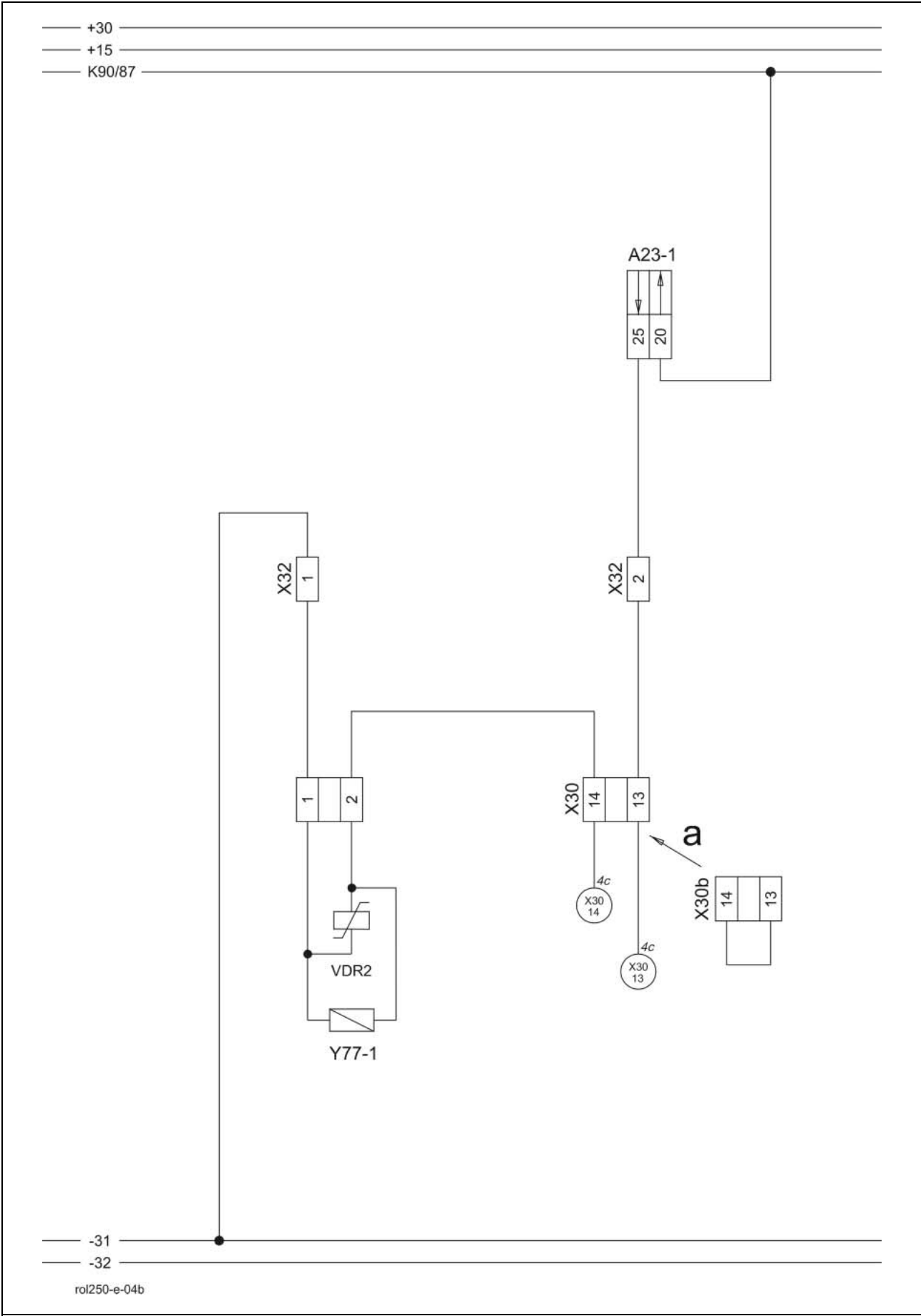


**4b**

## **Circulation shut-off valve**

Rollant 250 Comfort for UNIWRAP

04b - Circulation shut-off valve Rollant 250 Comfort for UNIWRAP



Key to diagram:

- A23-1 ROLLANT 250 module..... Wiring loom B – part 2
- VDR2 Varistor ..... not shown
- X30 Connector ..... Wiring loom D
- X32 Connector ..... Wiring loom D
- Y77-1 Circulation shut-off valve solenoid coil (Rollant 250)..... Wiring loom D

Measured value table:

| Item | Component     | Measured value | Note |
|------|---------------|----------------|------|
| Y77  | Solenoid coil | 3.8 A; 3.2 Ω   |      |

Note:

- a - Blind connector X30-b only when using the baler **without** UNIWRAP

**Description of function:**

Circulation shut-off valve  
Use **with** UNIWRAP bale wrapper

To be able to build up the working pressure necessary for many hydraulic control systems, the neutral hydraulic circulation must be blocked (see chapter "Hydraulic system").  
In this case, the circulation shut-off valve solenoid coil Y77-2 (UNIWRAP) on the bale wrapper is actuated by module A 23-1 in parallel to the respective function.

When used with the bale wrapper, the bale wrapper module A 22 **permanently** actuates the circulation shut-off valve solenoid coil Y77-1 (Rollant 250). The circulation shut-off valve solenoid coil Y77-1 is additionally blocked by mechanical means (see Operator's Manual).

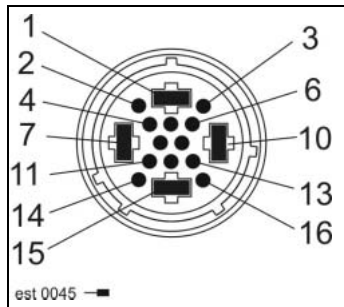
Circulation shut-off valve  
Use **without** UNIWRAP bale wrapper

To be able to build up the working pressure necessary for many hydraulic control systems, the neutral hydraulic circulation must be blocked (see chapter "Hydraulic system").  
In this case, the circulation shut-off valve solenoid coil Y77-1 (ROLLANT 250) is actuated by module A 23-1 in parallel to the respective function.

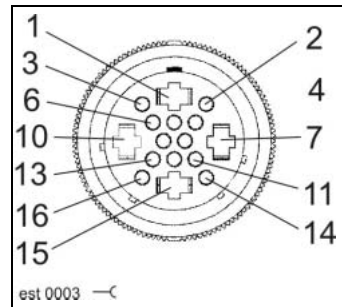
When used without the bale wrapper, a blind plug is mounted on X30. This provides the connection between module A 23-1 and the circulation shut-off valve solenoid coil Y77-1 (see note a). For further modification measures refer to the respective chapter in the Operator's Manual.

## Connector pin definition

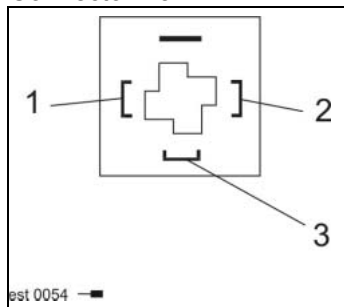
Connector X30



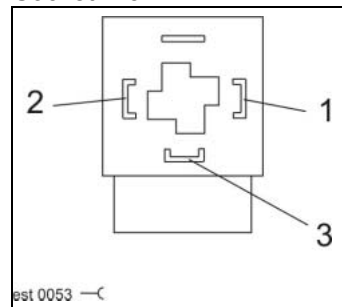
Socket X30



Connector X32



Socket X32 / Y77-1



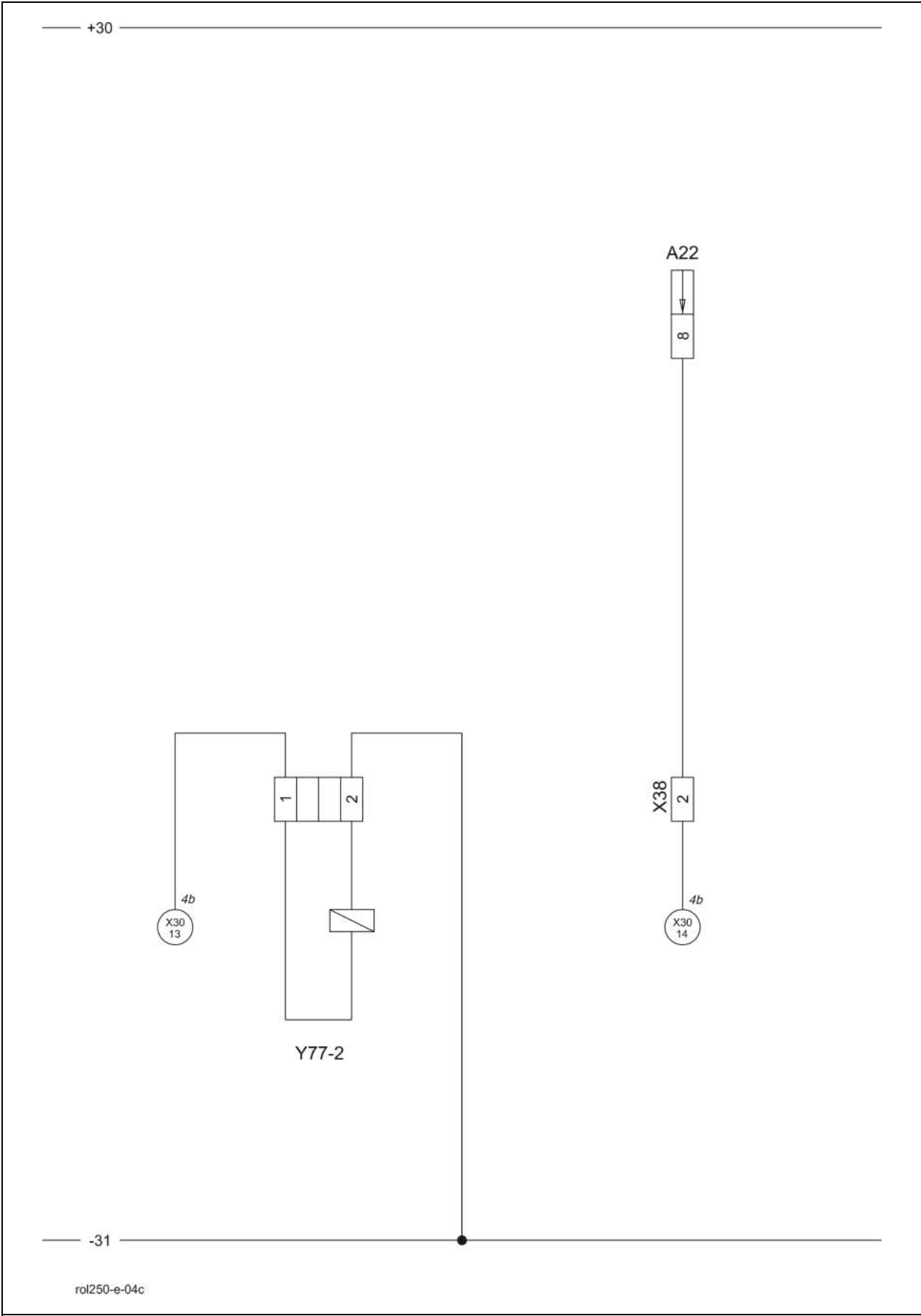
| Connector   | mm <sup>2</sup> | Colour |
|-------------|-----------------|--------|
| X30 – 13    | 1.0             | bk-ye  |
| X30 – 14    | 1.0             | bk-gn  |
|             |                 |        |
| X32 – 1     | 1.0             | br     |
| X32 – 2     | 1.0             | bk-ye  |
|             |                 |        |
| Y77 – 1 – 1 | 1.0             | br     |
| Y77 – 1 – 2 | 1.0             | bk-gn  |

**4c**

## **Circulation shut-off valve**

UNIWRAP

04c - Circulation shut-off valve    UNIWRAP



Key to diagram:

- A22    Bale wrapper module ..... ZE
- X30    Connector ..... Wiring loom D / K
- X38    ZE separating point ..... ZE
- Y77-2    Circulation shut-off valve (bale wrapper)..... Wiring loom K

Measured value table:

| Item  | Component     | Measured value | Note |
|-------|---------------|----------------|------|
| Y77-2 | Solenoid coil | 1.9 A; 6.4 Ω   |      |

**Description of function:**

Circulation shut-off valve  
Use **with**  
UNIWRAP bale wrapper

To be able to build up the working pressure necessary for many hydraulic control systems, the neutral hydraulic circulation must be blocked (see chapter "Hydraulic system").

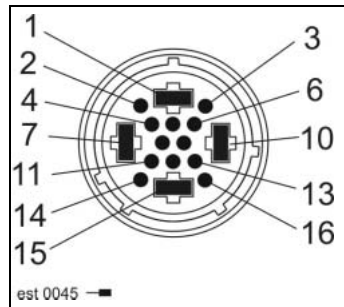
In this case, the circulation shut-off valve solenoid coil Y77-2 (UNIWRAP) on the bale wrapper is actuated by module A 23 – 1 (Rollant 250) via plug X30 in parallel to the respective function.

When used with the bale wrapper, the bale wrapper module A 22 **permanently** actuates the circulation shut-off valve solenoid coil Y77-1 (Rollant 250) via plug X30.

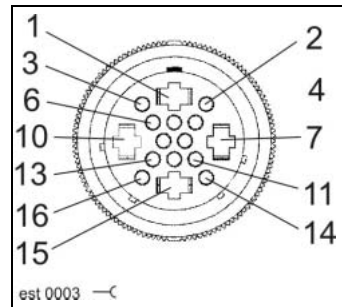
The circulation shut-off valve solenoid coil Y77-1 is additionally blocked by mechanical means (see Operator's Manual).

## Connector pin definition

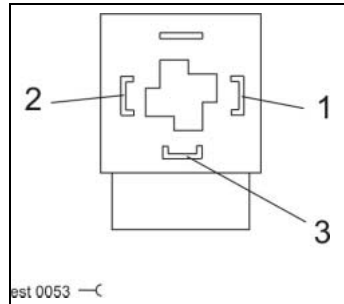
Connector X30



Socket X30



Socket Y77-2



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X30 - 13  | 2.5             | br     |
| X30 - 14  | 2.5             | br     |
|           |                 |        |
| X38 - 2   | 0.75            | gr-wt  |
|           |                 |        |
| Y77-2 - 1 | 2.5             | br     |
| Y77-2 - 2 | 2.5             | bl     |

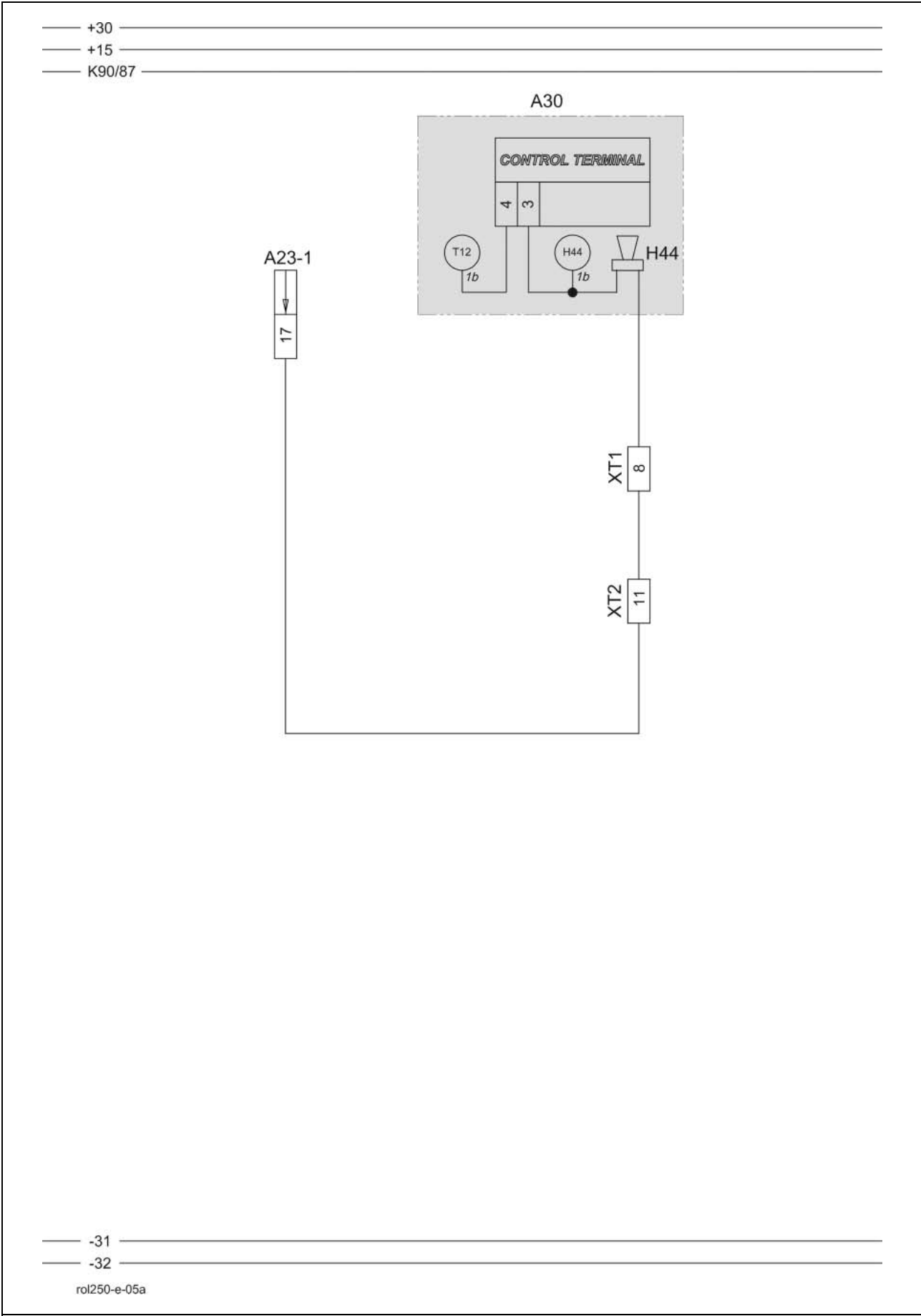


**5a**

## **Terminal**

Rollant 250 Comfort

05a - Terminal Rollant 250 Comfort



Key to diagram:

|       |                    |                             |
|-------|--------------------|-----------------------------|
| A23-1 | ROLLANT 250 module | .....Wiring loom B – part 2 |
| A30   | CCT terminal       | .....Wiring loom B – part 1 |
| H44   | Buzzer             | .....Wiring loom B – part 1 |
| T12   | Main switch        | .....Wiring loom B – part 1 |
| XT1   | Terminal connector | .....Wiring loom B – part 1 |
| XT2   | Terminal connector | .....Wiring loom B – part 1 |

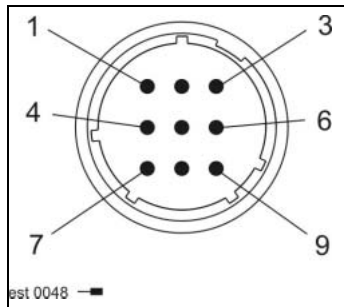
**Description of function:**

Terminal

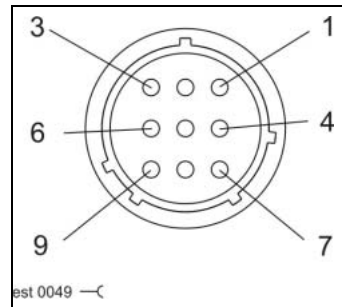
Buzzer H 44 is actuated by module A 23-1 to inform the driver about operating conditions / alarms (see also respective chapters in Operator's Manual).

### Connector pin definition

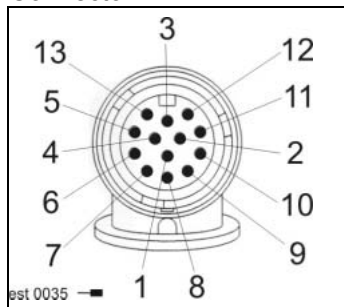
Connector XT1



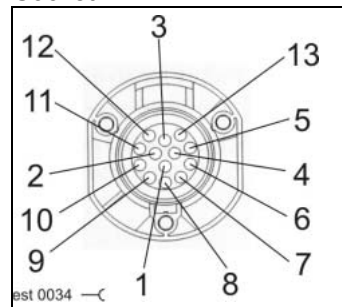
Socket XT1



Connector XT2



Socket XT2



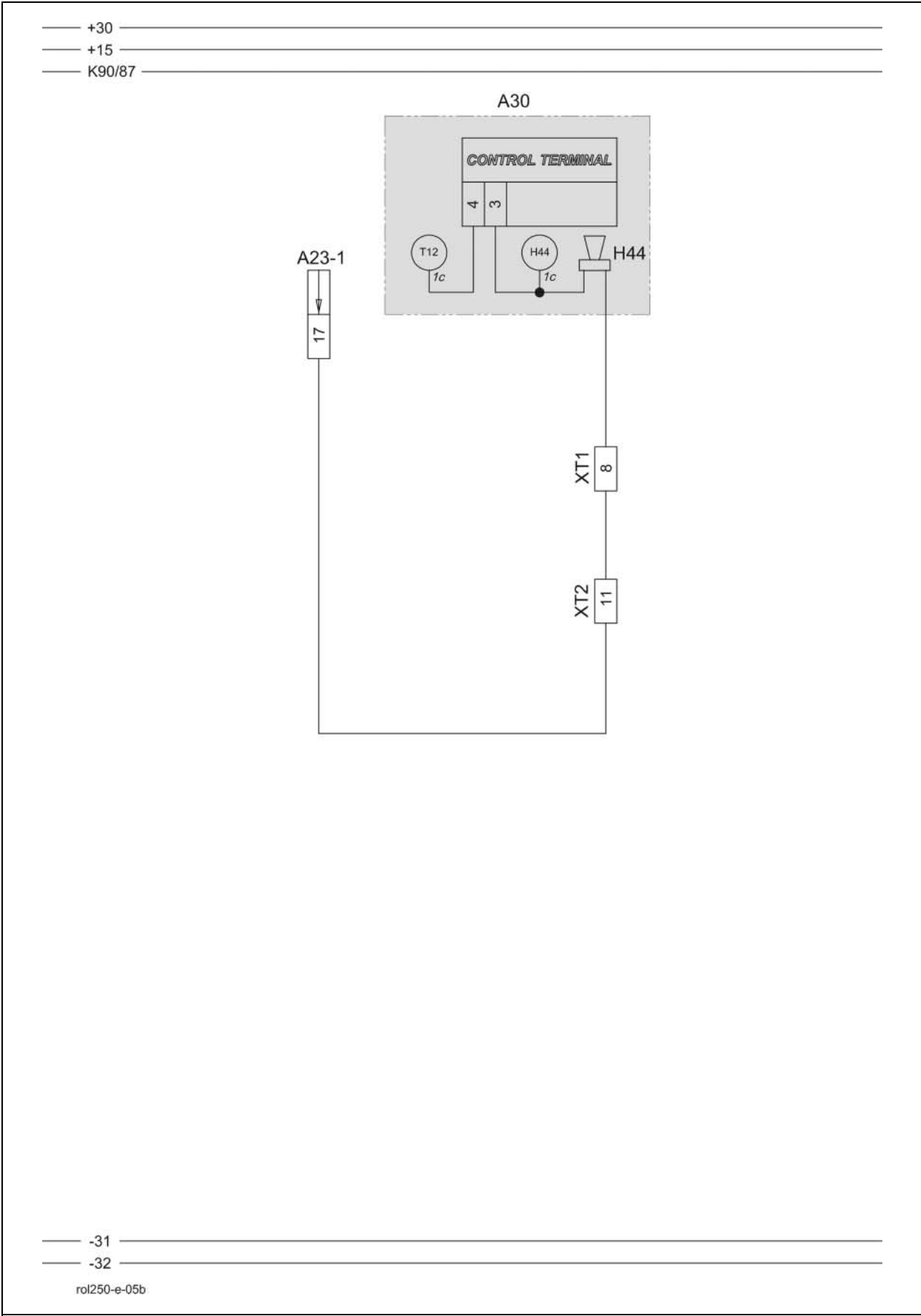
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| XT1 – 8   | 0.75            | bk-ye  |
|           |                 |        |
| XT2 – 11  | 0.75            | bk-ye  |

**5b**

## **Terminal**

Rollant 250 Comfort for UNIWRAP

05b - Terminal    UNIWRAP up to machine no. 726 00 130



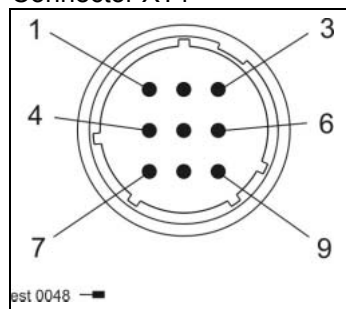
**Description of function:**

Terminal

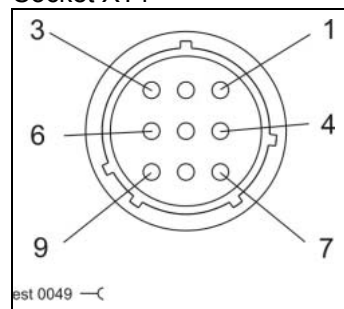
Buzzer H 44 is actuated by module A 23-1 to inform the driver about operating conditions / alarms (see also respective chapters in Operator's Manual).

## Connector pin definition

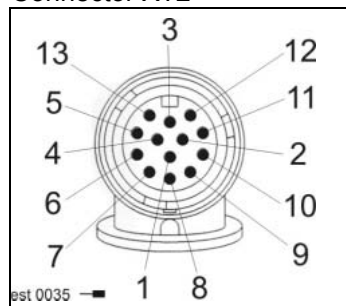
Connector XT1



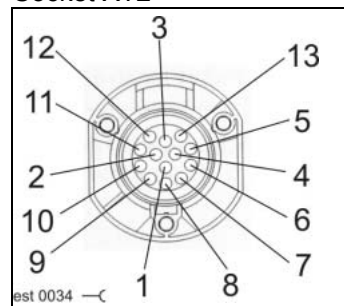
Socket XT1



Connector XT2



Socket XT2



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| XT1 – 8   | 0.75            | bk-ye  |
| XT2 – 11  | 0.75            | bk-ye  |



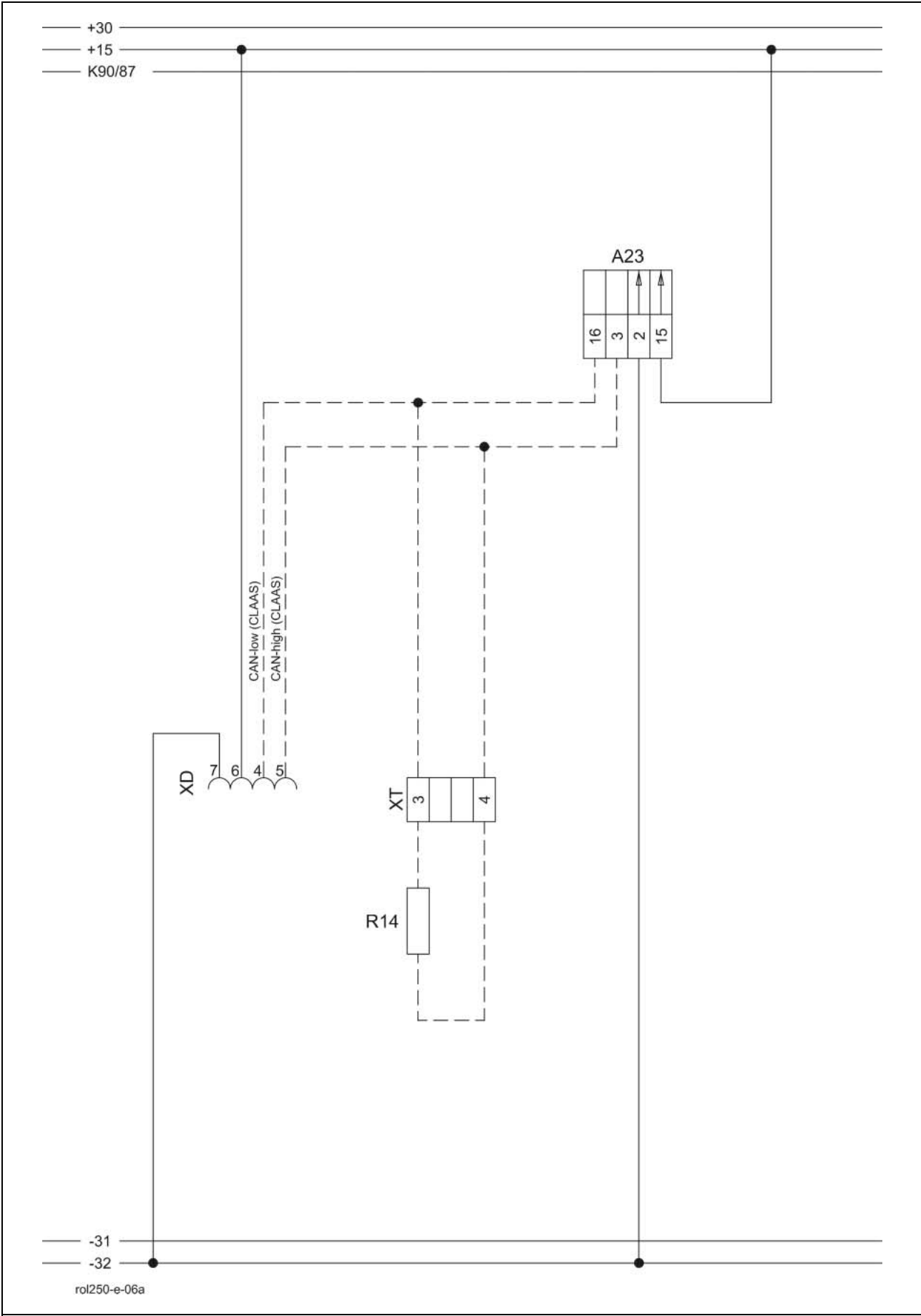
## **6a**

### **CAN bus, module power supply**

Rollant 240 Standard

Rollant 250 Standard

06a - CAN bus, module power supply Rollant 240/250 Standard



Key to diagram:

- A23 ROLLANT 240/250 module..... Wiring loom A - part 2
- R14 CAN BUS matching resistor..... Wiring loom A - part 1
- XD CAN Bus connector (7-pin) ..... Wiring loom B - part 2
- XT Terminal connector ..... Wiring loom A - part 1

Measured value table:

| Item | Component         | Measured value | Note |
|------|-------------------|----------------|------|
| R14  | Matching resistor | 122 Ω          |      |

**Description of function:**

## Performance data

Connector XD serves for diagnosis with the Claas Diagnosis System CDS.

The performance data (total number of bales, operating hours, ...) are saved in module A 23. The CDS CLAAS Diagnosis System may be used to read out these data.

CAN bus  
(Controller Area Network)

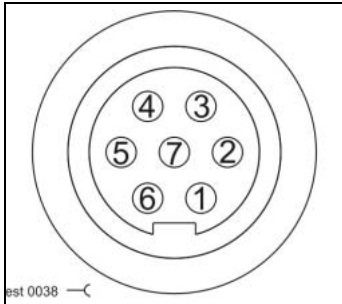
Data exchange between electronic components via a serial network.

- Measured value table  
CAN bus

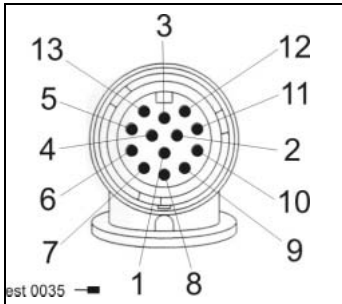
| CAN high ( $U_{\text{eff}}$ )      | CAN low ( $U_{\text{eff}}$ )       | Diagnosis                          |
|------------------------------------|------------------------------------|------------------------------------|
| $2.52 \text{ V} \pm 0.1 \text{ V}$ | $2.49 \text{ V} \pm 0.1 \text{ V}$ | System OK                          |
| 2.50 V                             | 2.50 V                             | Short circuit CAN high to CAN low  |
| 12 V                               | >2.50 V                            | Short circuit CAN high to +12 Volt |
| 0 V                                | <2.5 V                             | Short circuit CAN high to earth    |
| >2.50 V                            | 12 V                               | Short circuit CAN low to +12 Volt  |
| <2.50 V                            | 0 V                                | Short circuit CAN low to earth     |

## Connector pin definition

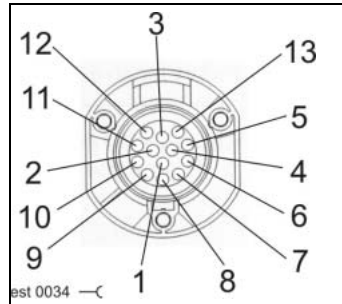
### Socket XD



### Connector XT



### Socket XT



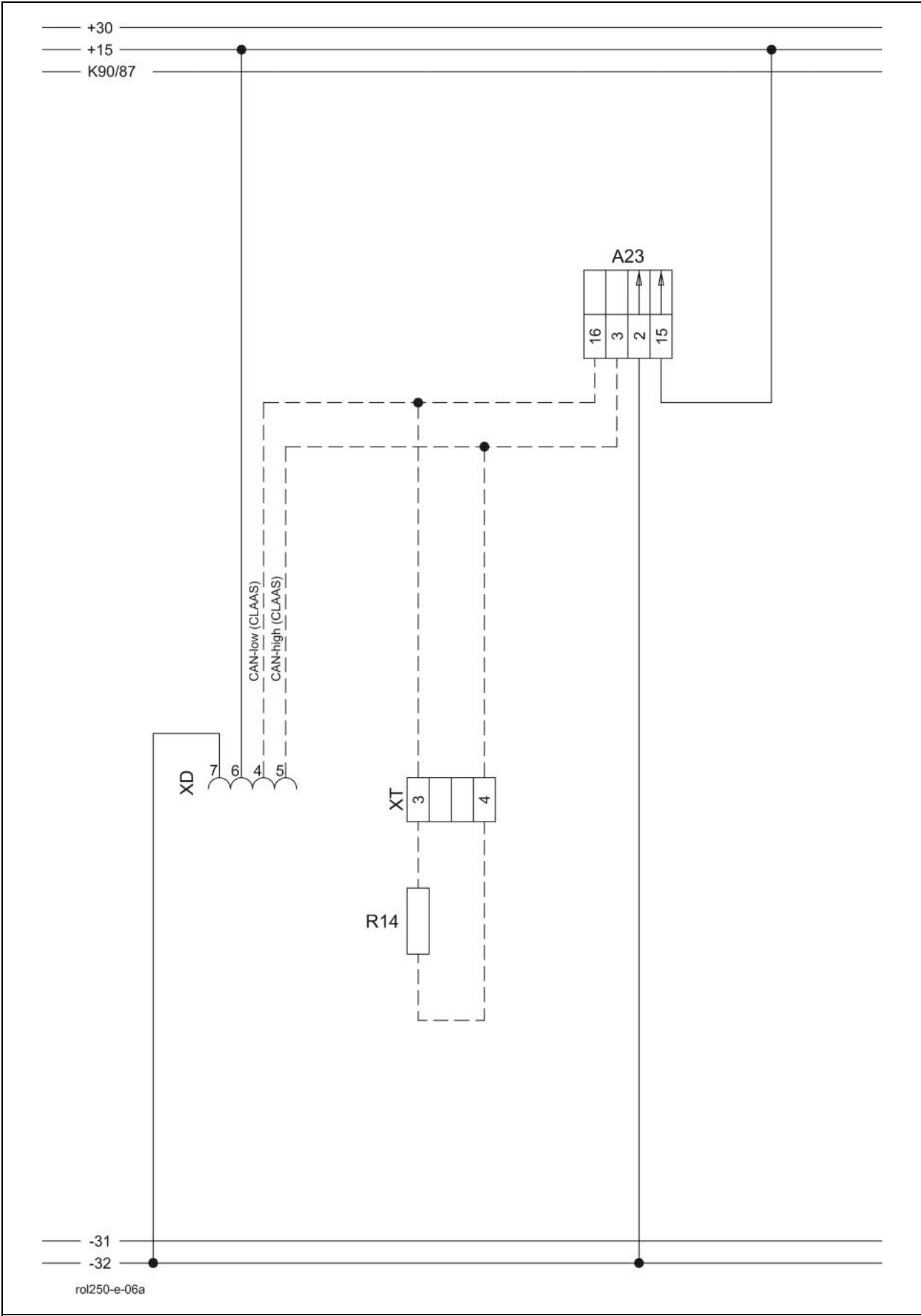
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| XD - 4    | 0.75            | wt-br  |
| XD - 5    | 0.75            | wt-bk  |
| XD - 6    | 0.75            | bk-rd  |
| XD - 7    | 0.75            | br-rd  |
|           |                 |        |
| XT - 3    | 0.75            | wt-br  |
| XT - 4    | 0.75            | wt-bk  |

**6b**

## **CAN bus, module power supply**

Rollant 250 Comfort

06b - CAN bus, module power supply      Rollant 250 Comfort



Key to diagram:

- A23-1 ROLLANT 250 module 1 ..... Wiring loom B/E - part 2
- A23-2 ROLLANT 250 module 2 ..... Wiring loom B/E - part 2
- A30 CCT terminal ..... Wiring loom B/E - part 1
- X10 Connector ..... Wiring loom B - part 2 / C  
..... Wiring loom E - part 2 / F
- XD CAN bus connector (7-pin) ..... Wiring loom B - part 2
- XT1 Terminal connector ..... Wiring loom B/E - part 1
- XT2 Terminal connector ..... Wiring loom B/E - part 1

Measured value table:

| Item | Component         | Measured value | Note |
|------|-------------------|----------------|------|
| R14  | Matching resistor | 122 Ω          |      |

**Description of function:**

## Performance data

Connector XD serves for diagnosis with the Claas Diagnosis System CDS.

The performance data (total number of bales, operating hours, ...) are saved in modules A 23-1 and A 23-2.

Each of these modules takes over a defined part of the functions required for baling (see diagram).

Important: Module A 23-1 is connected to the same wiring loom as diagnosis connector XD.

## Task assignment of modules

| Function                   | Module 1 | Module 2 |
|----------------------------|----------|----------|
| Tailgate control           | ✓        |          |
| Circulation shut-off valve | ✓        |          |
| Pick-up                    |          | ✓        |
| Twine, net wrapping        | ✓        |          |
| Rotocut knives (ON/OFF)    |          | ✓        |
| Reverse rotor              |          | ✓        |

✓ Option

CAN bus  
(Controller Area Network)

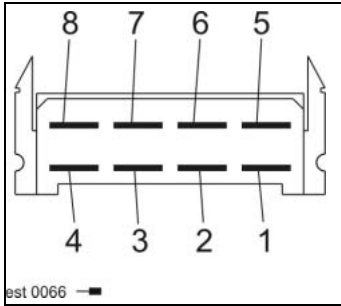
Data exchange between electronic components via a serial network.

- Measured value table CAN bus

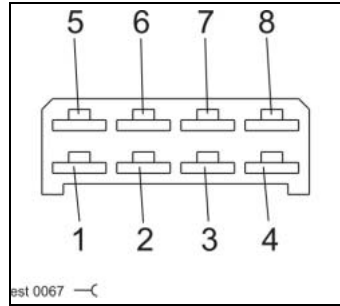
| CAN high ( $U_{\text{eff}}$ )      | CAN low ( $U_{\text{eff}}$ )       | Diagnosis                          |
|------------------------------------|------------------------------------|------------------------------------|
| $2.52 \text{ V} \pm 0.1 \text{ V}$ | $2.49 \text{ V} \pm 0.1 \text{ V}$ | System OK                          |
| 2.50 V                             | 2.50 V                             | Short circuit CAN high to CAN low  |
| 12 V                               | >2.50 V                            | Short circuit CAN high to +12 Volt |
| 0 V                                | <2.5 V                             | Short circuit CAN high to earth    |
| >2.50 V                            | 12 V                               | Short circuit CAN low to +12 Volt  |
| <2.50 V                            | 0 V                                | Short circuit CAN low to earth     |

## Connector pin definition

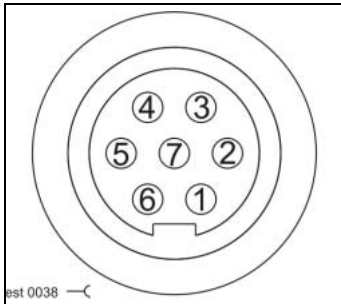
Connector X10



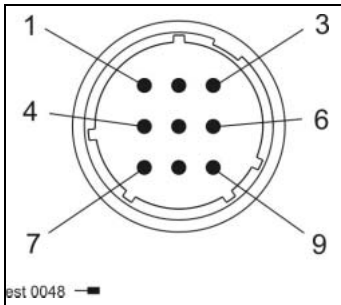
Socket X10



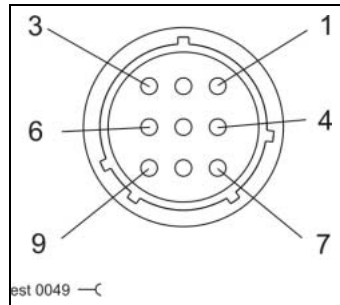
Socket XD



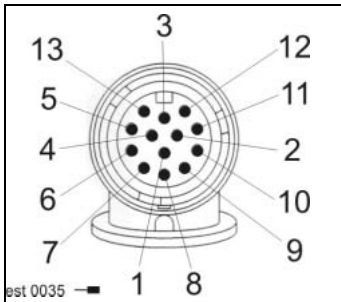
Connector XT1



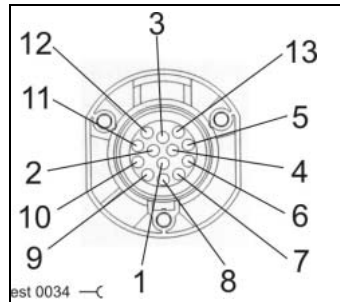
Socket XT1



Connector XT2



Socket XT2





| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X10 - 1   | 1.0             | br-rd  |
| X10 - 2   | 1.0             | bk-rd  |
| X10 - 5   | 0.5             | wt-br  |
| X10 - 6   | 0.5             | wt-bk  |
|           |                 |        |
| XD - 4    | 0.75            | wt-br  |
| XD - 5    | 0.75            | wt-bk  |
| XD - 6    | 0.75            | bk-rd  |
| XD - 7    | 0.75            | br-rd  |
|           |                 |        |
| XT1 - 6   | 0.5             | wt-br  |
| XT1 - 7   | 0.5             | wt-bk  |
|           |                 |        |
| XT2 - 3   | 0.5             | wt-br  |
| XT2 - 4   | 0.5             | wt-bk  |

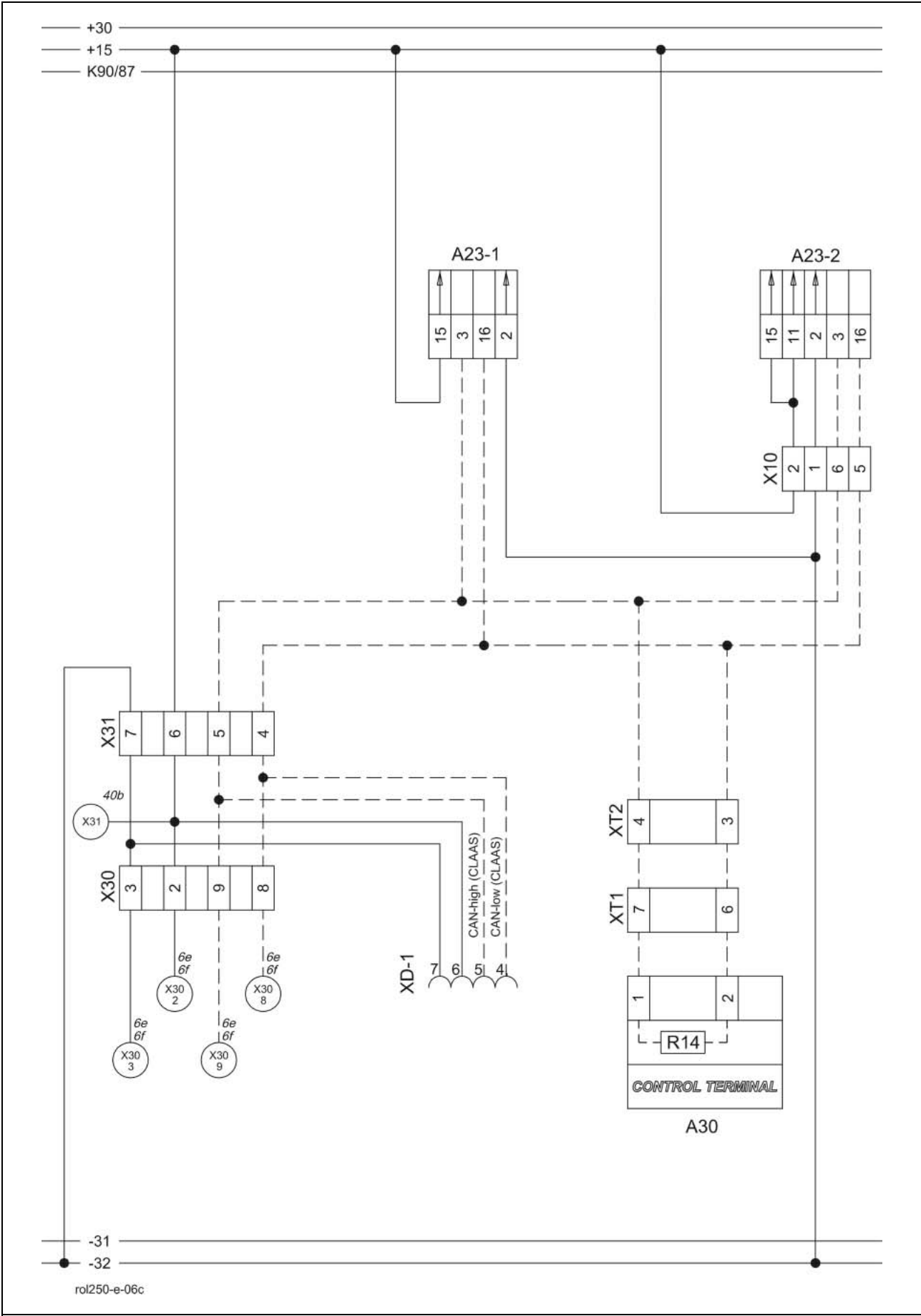


## **6c**

### **CAN bus, module power supply**

Rollant 250 Comfort for UNIWRAP

06c - CAN bus, module power supply      Rollant 250 Comfort for UNIWRAP



Key to diagram:

- A23-1 ROLLANT 250 module 1 ..... Wiring loom B-part 2
- A23-2 ROLLANT 250 module 2 ..... Wiring loom B-part 2
- A30 CCT terminal ..... Wiring loom B-part 1
- X10 Connector ..... Wiring loom B-part 2 /C
- X30 Connector ..... Wiring loom D/K
- X31 Connector ..... Wiring loom D
- XD1 CAN bus connector (7-pin) ..... Wiring loom D
- XT1 Terminal connector ..... Wiring loom B-part 1
- XT2 Terminal connector ..... Wiring loom B-part 1

Measured value table:

| Item | Component         | Measured value | Note |
|------|-------------------|----------------|------|
| R14  | Matching resistor | 122 Ω          |      |

**Description of function:**

Dati di produzione

Connector XD serves for diagnosis with the Claas Diagnosis System CDS.

The performance data (total number of bales, operating hours, ...) are saved in modules A 23-1 and A 23-2.

Each of these modules takes over a defined part of the functions required for baling (see diagram).

Important: Module A 23-1 is connected to the same wiring loom as diagnosis connector XD.

Task assignment of modules

| Function                   | Module 1 | Module 2 |
|----------------------------|----------|----------|
| Tailgate control           | ✓        |          |
| Circulation shut-off valve | ✓        |          |
| Pick-up                    |          | ✓        |
| Twine, net wrapping        | ✓        |          |
| Rotocut knives (ON/OFF)    |          | ✓        |
| Reverse rotor              |          | ✓        |

✓ Option

CAN bus  
(Controller Area Network)

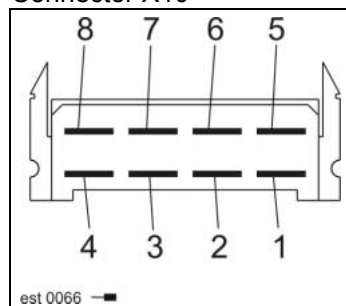
Data exchange between electronic components via a serial network.

- Measured value table  
CAN bus

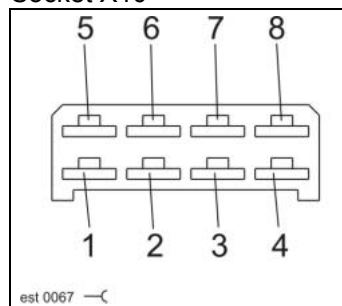
| CAN high ( $U_{\text{eff}}$ )      | CAN low ( $U_{\text{eff}}$ )       | Diagnosis                          |
|------------------------------------|------------------------------------|------------------------------------|
| $2.52 \text{ V} \pm 0.1 \text{ V}$ | $2.49 \text{ V} \pm 0.1 \text{ V}$ | System OK                          |
| 2.50 V                             | 2.50 V                             | Short circuit CAN high to CAN low  |
| 12 V                               | >2.50 V                            | Short circuit CAN high to +12 Volt |
| 0 V                                | <2.5 V                             | Short circuit CAN high to earth    |
| >2.50 V                            | 12 V                               | Short circuit CAN low to +12 Volt  |
| <2.50 V                            | 0 V                                | Short circuit CAN low to earth     |

## Connector pin definition

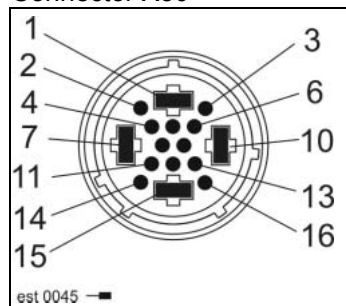
Connector X10



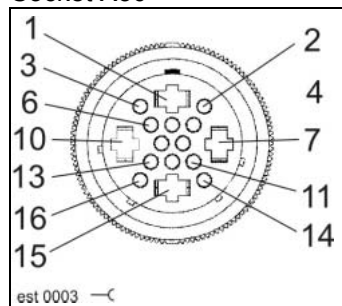
Socket X10



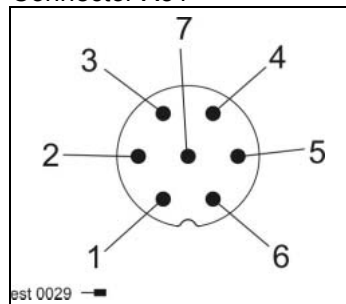
Connector X30



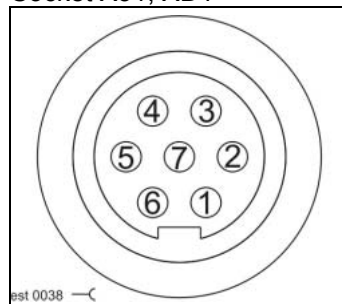
Socket X30



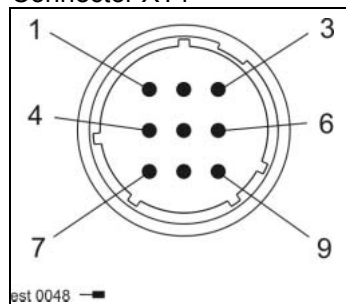
Connector X31



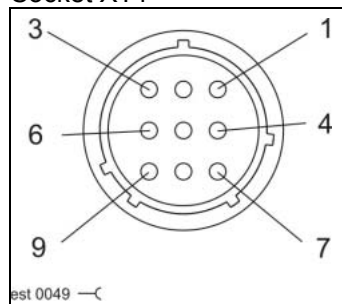
Socket X31, XD1



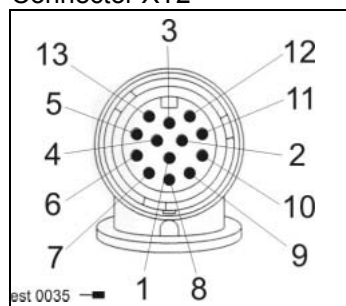
Connector XT1



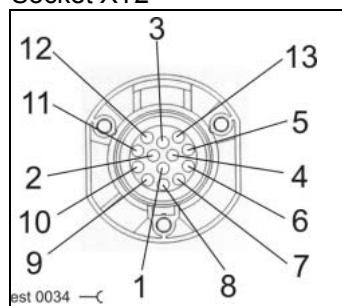
Socket XT1



Connector XT2



Socket XT2



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X10 - 1   | 1.0             | br-rd  |
| X10 - 2   | 1.0             | bk-rd  |
| X10 - 5   | 0.5             | wt-br  |
| X10 - 6   | 0.5             | wt-bk  |
|           |                 |        |
| X30 - 2   | 0.75            | bk-rd  |
| X30 - 3   | 0.75            | br-rd  |
| X30 - 8   | 0.75            | wt-br  |
| X30 - 9   | 0.75            | wt-bk  |
|           |                 |        |
| X31 - 4   | 0.75            | wt-br  |
| X31 - 5   | 0.75            | wt-bk  |
| X31 - 6   | 0.75            | bk-rd  |
| X31 - 7   | 0.75            | br-rd  |
|           |                 |        |
| XD1 - 4   | 0.75            | wt-br  |
| XD1 - 5   | 0.75            | wt-bk  |
| XD1 - 6   | 0.75            | bk-rd  |
| XD1 - 7   | 0.75            | br-rd  |
|           |                 |        |
| XT1 - 6   | 0.5             | wt-br  |
| XT1 - 7   | 0.5             | wt-bk  |
|           |                 |        |
| XT2 - 3   | 0.5             | wt-br  |
| XT2 - 4   | 0.5             | wt-bk  |





**6d**

## **CAN bus, module power supply**

UNIWRAP up to serial no. 72900130

The diagram illustrates the electrical connections for the CLAAS UNIWRAP A30-1. It features three main components: the A30-1 unit, the A22 unit, and two terminal blocks, XT1 and XD-2.

- A30-1 Unit:** A rectangular box labeled "CLAAS UNIWRAP A30-1". It has four output terminals labeled 4, 5, 6, and 7.
- XT1 Terminal Block:** A 4-pin terminal block with pins labeled 4, 5, 6, and 7. It is connected to the A30-1 unit via solid lines.
- XD-2 Terminal Block:** A 5-pin terminal block with pins labeled 4, 5, 6, 7, and 8. It is connected to the A30-1 unit via solid lines.
- A22 Unit:** A rectangular box with four input terminals labeled "+", "-", "L", and "H". It is connected to the XT1 and XD-2 terminal blocks via solid lines.
- Wiring Details:**
  - Pin 4 of XT1 is connected to the "+" terminal of A22.
  - Pin 5 of XT1 is connected to the "-" terminal of A22.
  - Pin 6 of XT1 is connected to the "L" terminal of A22.
  - Pin 7 of XT1 is connected to the "H" terminal of A22.
  - Pin 4 of XD-2 is connected to the "+" terminal of A22.
  - Pin 5 of XD-2 is connected to the "-" terminal of A22.
  - Pin 6 of XD-2 is connected to the "L" terminal of A22.
  - Pin 7 of XD-2 is connected to the "H" terminal of A22.
  - Pin 8 of XD-2 is connected to the "L" terminal of A22.

|        |                                    |    |
|--------|------------------------------------|----|
| A30-1  | Bale wrapper terminal.....         | ZE |
| A22    | Bale wrapper module.....           | ZE |
| RS 232 | Data link.....                     | ZE |
| X30    | Connector ..... Wiring loom D / K  |    |
| XD2    | CAN bus connector (7-pin) .....    | ZE |
| XT1    | Terminal connector (Uniwrap) ..... | ZE |
| X-X    | Socket ZE .....                    | ZE |

| Item | Component         | Measured value | Note |
|------|-------------------|----------------|------|
| R14  | Matching resistor | 122 $\Omega$   |      |

**Description of function:**

|                     |                                                                                                                                                                                                                   |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Performance data    | All performance data (total number of bales, ...) are saved in module A 22 and may be read even after deletion in terminal A30 or A30-1, using the CDS Claas Diagnosis System.                                    |
| Data communication  | The baler and the bale wrapper are connected via the CAN bus.                                                                                                                                                     |
| Electronics plus 15 | Electronics plus 15 activates module A22.                                                                                                                                                                         |
| RS 232              | The RS 232 connection serves as a data link with the CDS Claas Diagnosis System.<br><br>Connector XD2 serves for diagnosis with the Claas Diagnosis System CDS.                                                   |
| Terminal            | Terminal A30-1 is used for operating the bale wrapper.<br>It serves for manual operation, diagnosis, selecting the operating mode and set values and for informing the operator about the current operating mode. |

CAN bus  
(Controller Area Network)

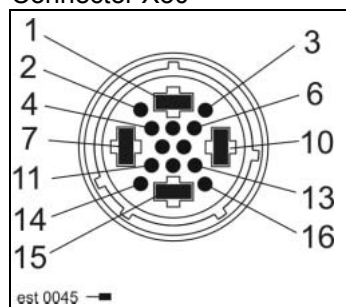
Data exchange between electronic components via a serial network.

- Measured value table  
CAN bus

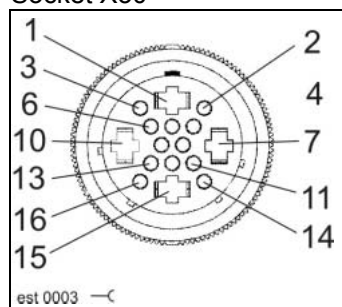
| CAN high ( $U_{eff}$ )             | CAN low ( $U_{eff}$ )              | Diagnosis                          |
|------------------------------------|------------------------------------|------------------------------------|
| $2.52 \text{ V} \pm 0.1 \text{ V}$ | $2.49 \text{ V} \pm 0.1 \text{ V}$ | System OK                          |
| 2.50 V                             | 2.50 V                             | Short circuit CAN high to CAN low  |
| 12 V                               | >2.50 V                            | Short circuit CAN high to +12 Volt |
| 0 V                                | <2.5 V                             | Short circuit CAN high to earth    |
| >2.50 V                            | 12 V                               | Short circuit CAN low to +12 Volt  |
| <2.50 V                            | 0 V                                | Short circuit CAN low to earth     |

## Connector pin definition

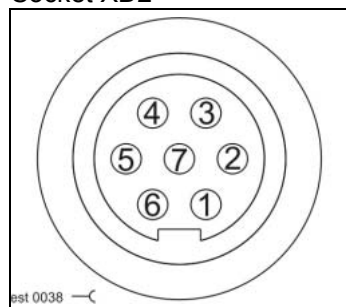
Connector X30



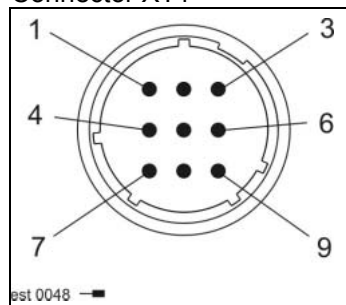
Socket X30



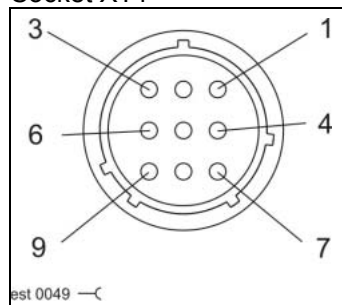
Socket XD2



Connector XT1



Socket XT1



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X30 - 2   | 1.5             | br     |
| X30 - 3   | 1.5             | bl     |
| X30 - 8   | 1.5             | bk     |
| X30 - 9   | 1.5             | gn-ye  |
|           |                 |        |
| XD2 - 4   | 0.75            | bl     |
| XD2 - 5   | 0.75            | bl     |
| XD2 - 6   | 0.75            | rd     |
| XD2 - 7   | 0.75            | vi     |

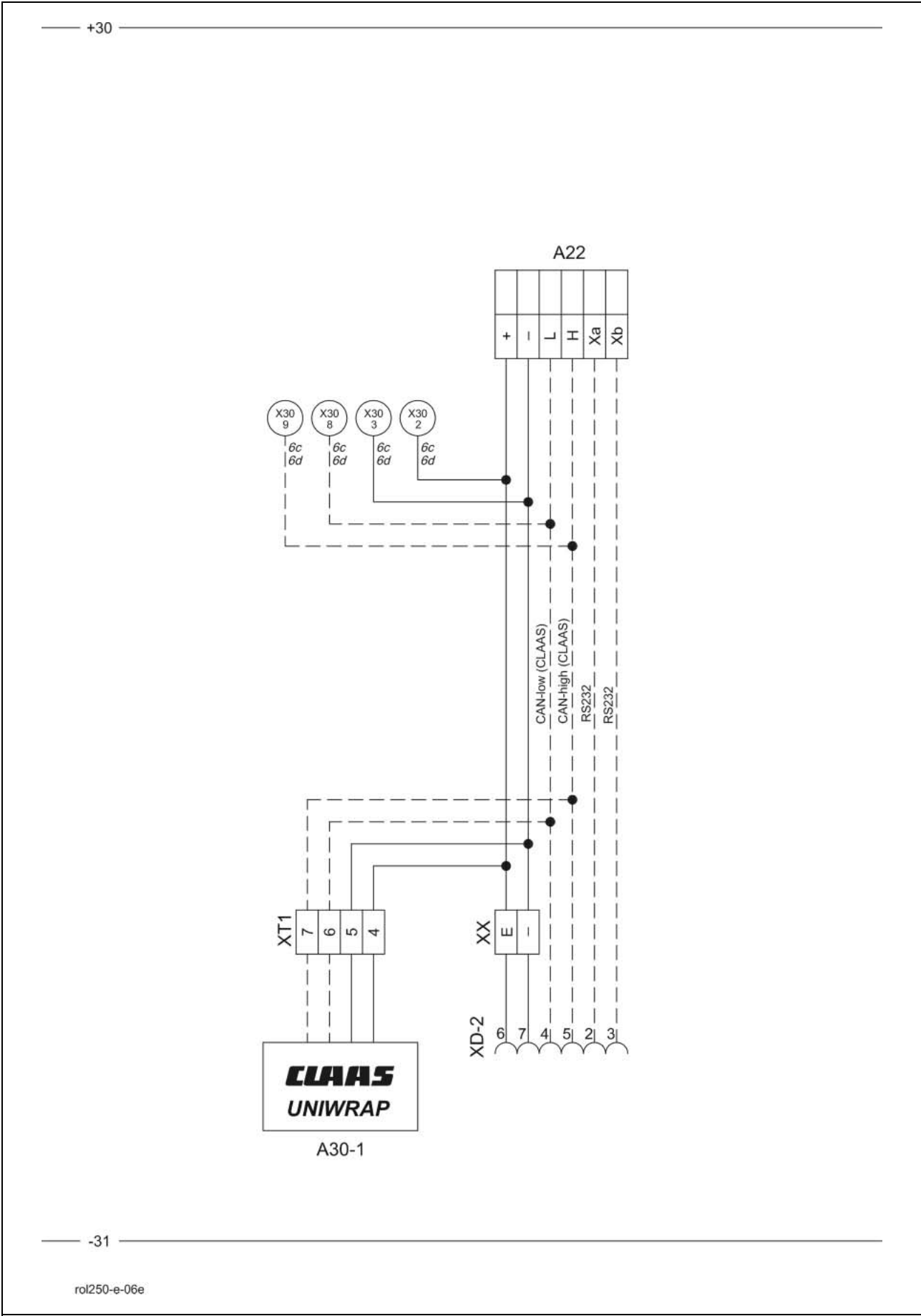
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| XT1 - 4   | 1.5             | br     |
| XT1 - 5   | 1.5             | bl     |
| XT1 - 6   | 1.5             | bk     |
| XT1 - 7   | 1.5             | gn-ye  |
| XX-E      | 1.5             | rd     |
| XX-I      | 1.5             | vio    |

**6e**

## **CAN bus, module power supply**

UNIWRAP from serial no. 72900131

06e - CAN bus, module power supply      UNIWRAP from serial no. 72900131



Key to diagram:

- A30-1 Bale wrapper terminal.....ZE
- A22 Bale wrapper module.....ZE
- RS 232 Data link.....ZE
- X30 Connector ..... Wiring loom D / K
- Xa/Xb Connector band .....ZE
- XD2 CAN bus connector (7-pin) .....ZE
- XT1 Terminal connector (Uniwrap) .....ZE
- X-X Socket ZE .....ZE

Measured value table:

| Item | Component         | Measured value | Note |
|------|-------------------|----------------|------|
| R14  | Matching resistor | 122 Ω          |      |

**Description of function:**

|                     |                                                                                                                                                                                                                   |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Performance data    | All performance data (total number of bales, ...) are saved in module A 22 and may be read even after deletion in terminal A30 or A30-1, using the CDS Claas Diagnosis System.                                    |
| Data communication  | The baler and the bale wrapper are connected via the CAN bus.                                                                                                                                                     |
| Electronics plus 15 | Electronics plus 15 activates module A22.                                                                                                                                                                         |
| RS 232              | The RS 232 connection serves as a data link with the CDS Claas Diagnosis System.<br><br>Connector XD2 serves for diagnosis with the Claas Diagnosis System CDS.                                                   |
| Terminal            | Terminal A30-1 is used for operating the bale wrapper.<br>It serves for manual operation, diagnosis, selecting the operating mode and set values and for informing the operator about the current operating mode. |

CAN bus  
(Controller Area Network)

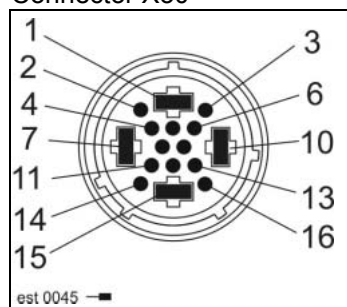
Data exchange between electronic components via a serial network.

- Measured value table  
CAN bus

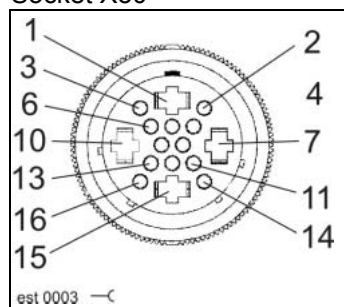
| CAN high ( $U_{\text{eff}}$ )      | CAN low ( $U_{\text{eff}}$ )       | Diagnosis                          |
|------------------------------------|------------------------------------|------------------------------------|
| $2.52 \text{ V} \pm 0.1 \text{ V}$ | $2.49 \text{ V} \pm 0.1 \text{ V}$ | System OK                          |
| 2.50 V                             | 2.50 V                             | Short circuit CAN high to CAN low  |
| 12 V                               | >2.50 V                            | Short circuit CAN high to +12 Volt |
| 0 V                                | <2.5 V                             | Short circuit CAN high to earth    |
| >2.50 V                            | 12 V                               | Short circuit CAN low to +12 Volt  |
| <2.50 V                            | 0 V                                | Short circuit CAN low to earth     |

## Connector pin definition

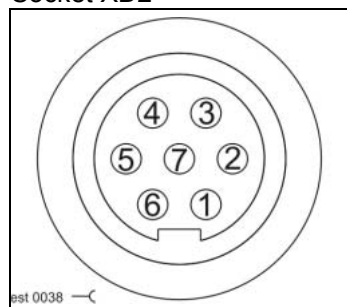
Connector X30



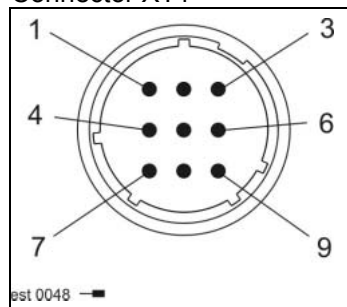
Socket X30



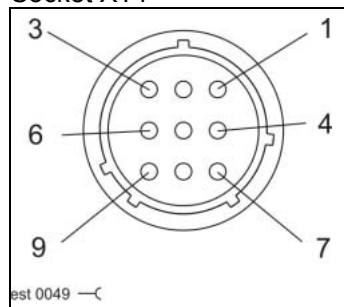
Socket XD2



Connector XT1



Socket XT1



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X30 - 2   | 1.5             | br     |
| X30 - 3   | 1.5             | bl     |
| X30 - 8   | 1.5             | bk     |
| X30 - 9   | 1.5             | gn-ye  |
|           |                 |        |
| XD2 - 2   | 0.75            |        |
| XD2 - 3   | 0.75            |        |
| XD2 - 4   | 0.75            | bl     |
| XD2 - 5   | 0.75            | bl     |
| XD2 - 6   | 0.75            | rd     |
| XD2 - 7   | 0.75            | vi     |

| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| XT1 - 4   | 1.5             | br     |
| XT1 - 5   | 1.5             | bl     |
| XT1 - 6   | 1.5             | bk     |
| XT1 - 7   | 1.5             | gn-ye  |
| XX - E    | 1.5             | rd     |
| XX - I    | 1.5             | vio    |



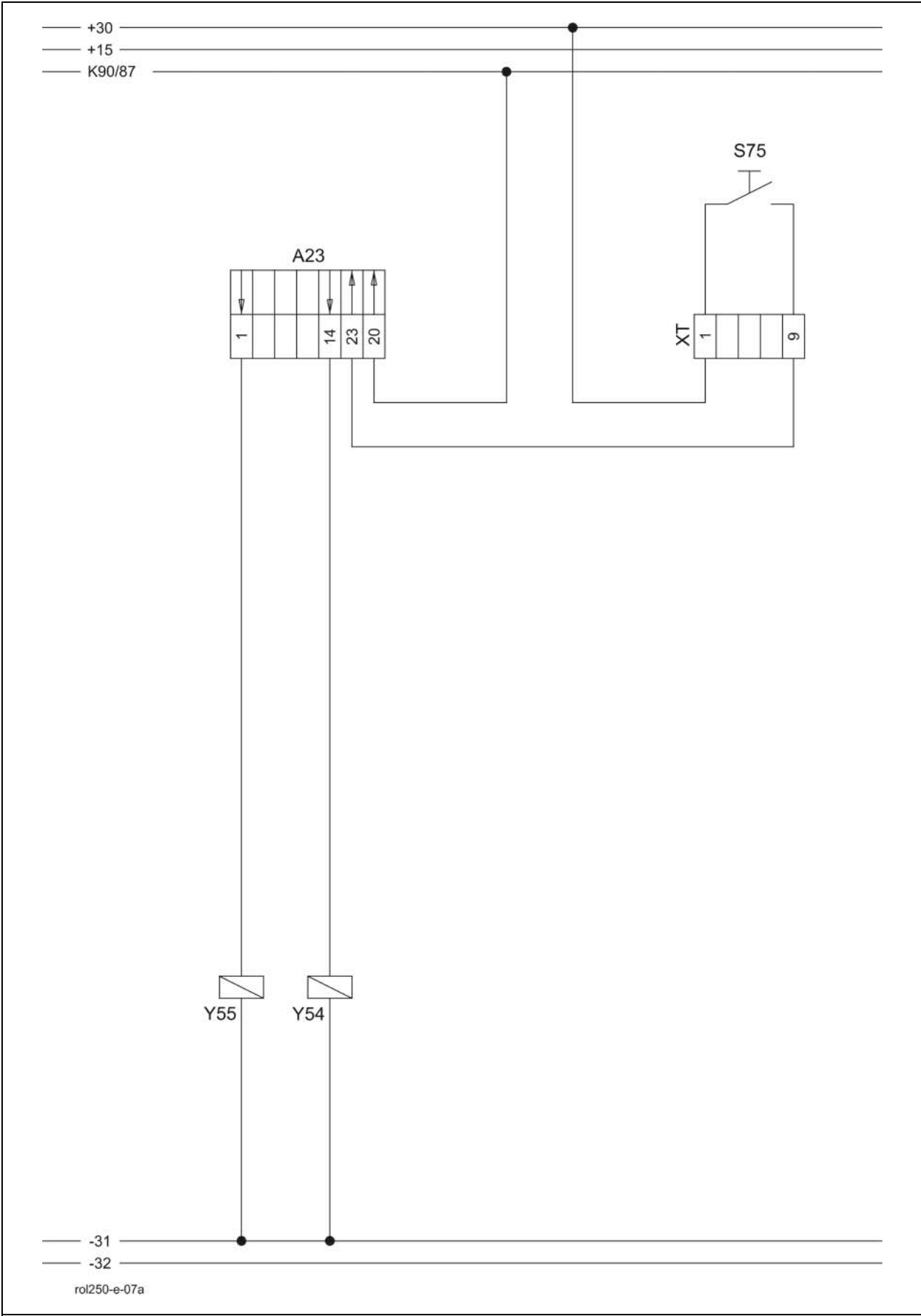
## **7a**

### **Rotocut**

Rollant 240 Standard

Rollant 250 Standard

07a - Rotocut Rollant 240/250 Standard



Key to diagram:

- A23 ROLLANT 240/250 module..... Wiring loom A-part 2
- S75 Main switch ON / OFF -  
Rotocut ON / OFF ..... Wiring loom A-part 1
- Y54 ROTOCUT knives OFF  
solenoid coil ..... Wiring loom A-part 2
- Y55 ROTOCUT knives ON  
solenoid coil ..... Wiring loom A-part 2
- XT Terminal connector ..... Wiring loom A-part 1

Measured value table:

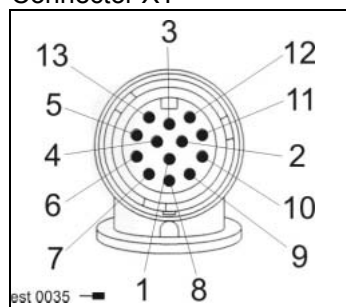
| Item | Component     | Measured value | Note |
|------|---------------|----------------|------|
| Y54  | Solenoid coil | 3.8 A; 3.2 Ω   |      |
| Y55  |               |                |      |

**Description of function:**

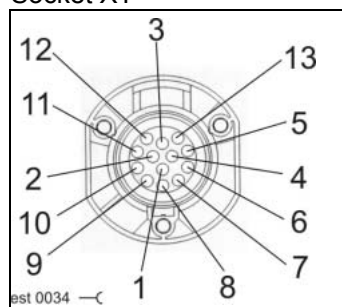
|                        |                                                                                                                                                                                                                              |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Function pre-selection | <p>The Rotocut position is pre-selected by means of main switch ON / OFF - ROTOCUT ON / OFF S75 (S75 closed = ROTOCUT ON).</p> <p>For ROTOCUT operation, module A 23 controls the corresponding solenoid coils Y 54/Y55.</p> |
| ROTOCUT ON             | <p>When the ROTOCUT knives ON solenoid coil Y55 is actuated and the pick-up is raised, the knives swing in - ROTOCUT ON.</p>                                                                                                 |
| ROTOCUT OFF            | <p>When the ROTOCUT knives OFF solenoid coil Y54 is actuated and the pick-up is lowered, the knives are forced out by the baled material - ROTOCUT OFF.</p>                                                                  |

## Connector pin definition

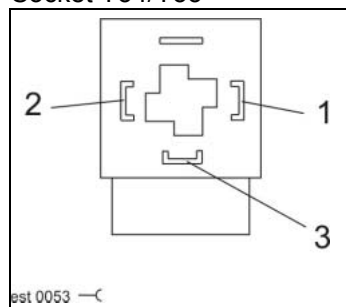
Connector XT



Socket XT



Socket Y54/Y55



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| XT - 1    | 1.5             | bk     |
| XT - 9    | 0.75            | br-gr  |
|           |                 |        |
| Y54 - 1   | 1.0             | br     |
| Y54 - 2   | 1.0             | bk-bl  |
|           |                 |        |
| Y55 - 1   | 1.0             | br     |
| Y55 - 2   | 1.0             | bk-gr  |

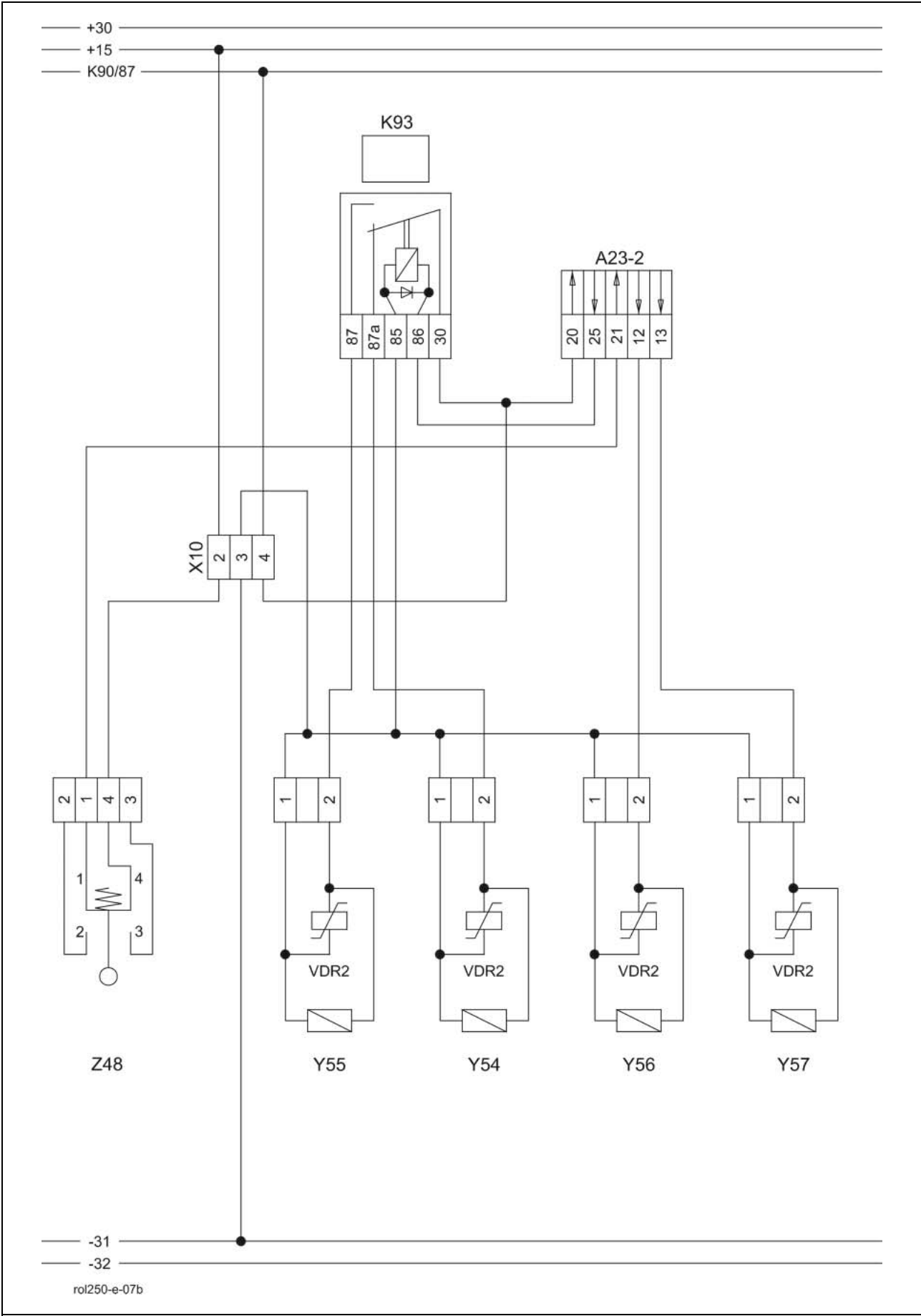
## **7b**

### **Rotocut**

Rollant 250 Comfort

Rollant 250 Comfort for UNIWRAP

07b - Rotocut Rollant 250 Comfort / Comfort for UNIWRAP



Key to diagram:

- A23-2 ROLLANT 250 module 2 ..... Wiring loom B-part 2
- K93 ROTO CUT knives ON/OFF relay ..... Wiring loom B-part 2
- VDR2 Varistor ..... not shown
- Y54 ROTO CUT knives OFF solenoid coil ..... Wiring loom C
- Y55 ROTO CUT knives ON solenoid coil ..... Wiring loom C
- Y56 Rotor reverse solenoid coil (extend cylinder)..... Wiring loom C
- Y57 Rotor reverse solenoid coil (retract cylinder)..... Wiring loom C
- X10 Separating point wiring loom B / C ..... Wiring loom B-part 2 /C
- Z48 Reverser actual value switch..... Wiring loom C

Measured value table:

| Item | Component     | Measured value | Note |
|------|---------------|----------------|------|
| Y54  | Solenoid coil | 3.8 A; 3.2 Ω   |      |
| Y55  |               |                |      |
| Y56  |               |                |      |
| Y57  |               |                |      |

**Description of function:****ROTOCUT ON / OFF**

For ROTO CUT operation, module A 23-2 actuates the corresponding solenoid coils Y 54/Y55 via relay K 93.  
Circulation shut-off valve Y77 is also actuated in parallel with ROTO CUT ON solenoid coil Y55 because this function requires pressure build-up within the system.  
When the ROTO CUT OFF function is active, solenoid coil Y54 is actuated.  
The knives are forced out by the baled material.

**Rotor reverse**

When the rotor is plugged, terminal A 30 can be used to activate the rotor reverse function.  
To operate the rotor reverser, module A 23– 2 actuates the corresponding rotor reverse solenoid coils Y 56/Y57.  
Circulation shut-off valve Y77 is also actuated in parallel with the solenoid coils Y56/Y57 because this function requires pressure build-up within the system. The reverser actual value switch Z 48 transmits a signal to module A23-2 when the rotor reverse cylinder 337 is retracted.

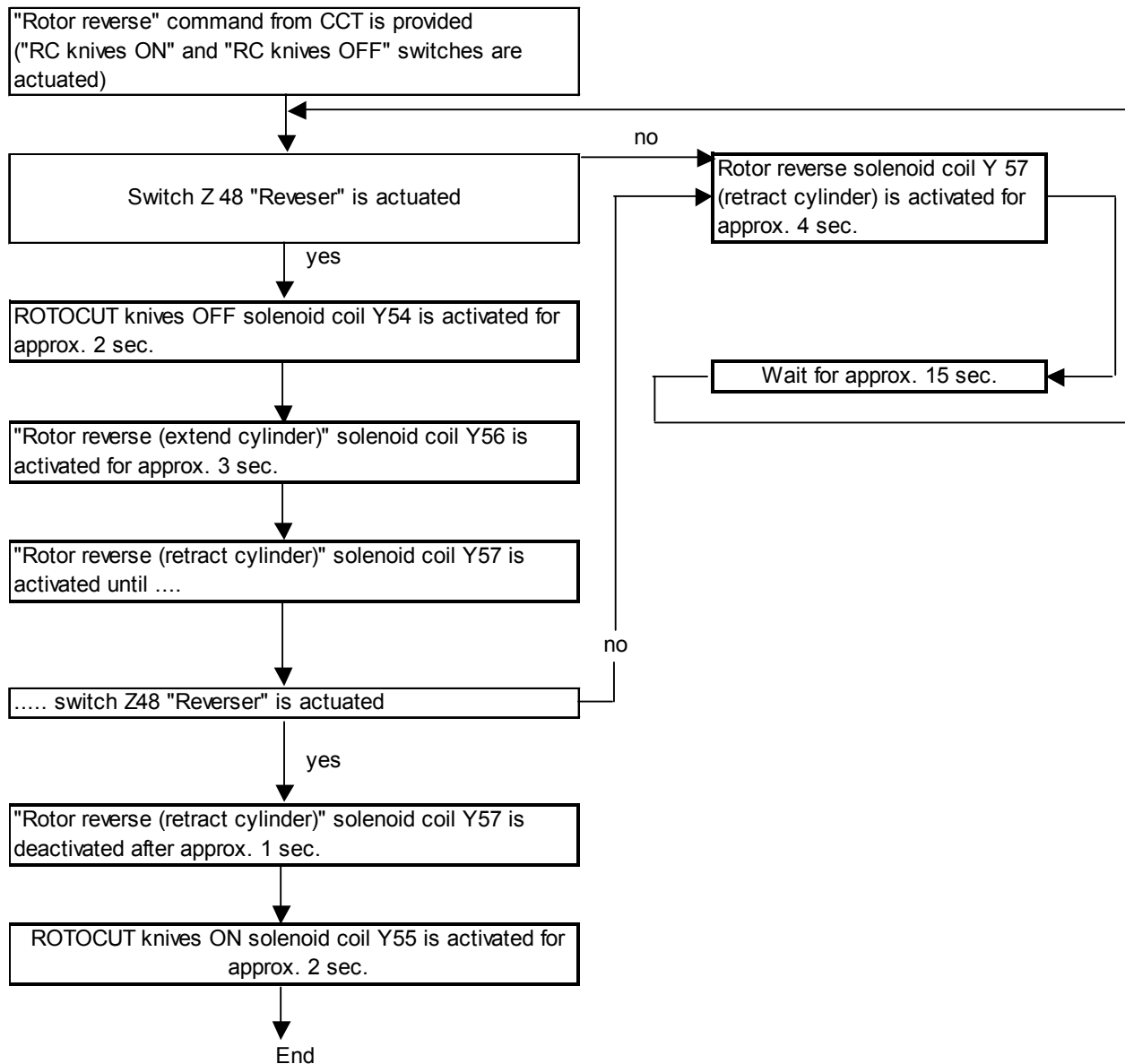
**Settings:**

- Reverser actual value switch Z48

Set the switch so that it can be pushed 5 mm max. (For functional check see sequence diagram).

**Automatic sequence "Rotor reverse" ROLLANT 250**

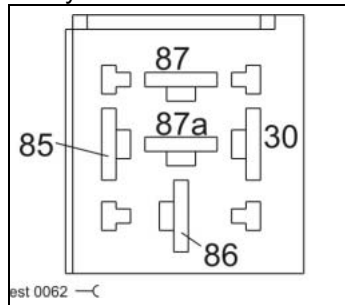
Hydraulic oil and electric power supply on the baler are provided.



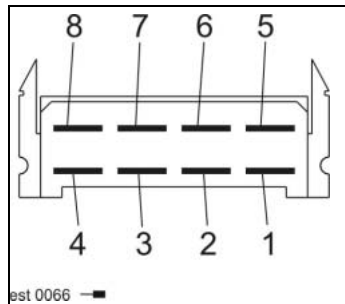


## Connector pin definition

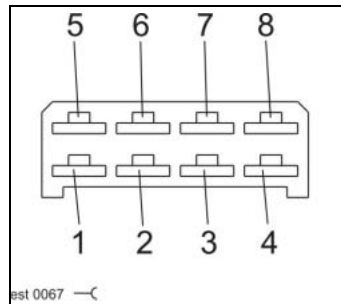
Relay socket K93



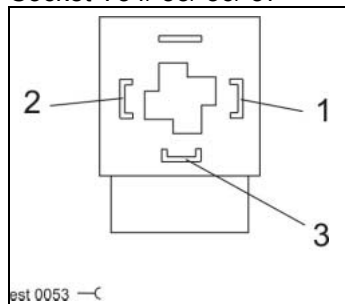
Connector X10



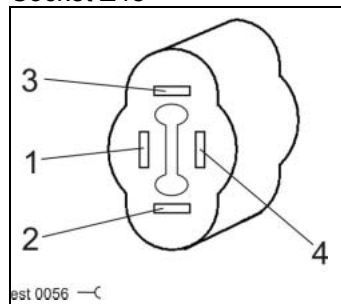
Socket X10



Socket Y54/ 55/ 56/ 57



Socket Z48



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| K93-30    | 1.5             | bk-wt  |
| K93-85    | 0.5             | br     |
| K93-86    | 0.75            | rd     |
| K93-87    | 0.75            | gn-bl  |
| K93-87a   | 0.75            | ye-bl  |
| X10-2     | 1.0             | bk-rd  |
| X10-3     | 2.5             | br     |
| X10-4     | 2.5             | bk-wt  |

| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| Y54-1     | 0.75            | br     |
| Y54-2     | 0.75            | ye-bl  |
| Y55-1     | 0.75            | br     |
| Y55-2     | 0.75            | gn-bl  |
| Y56-1     | 0.75            | br     |
| Y56-2     | 0.75            | ye-bk  |
| Y57-1     | 0.75            | br     |
| Y57-2     | 0.75            | bk-gn  |
| Z48-1     | 0.5             | gr-or  |
| Z48-4     | 0.5             | bk-rd  |



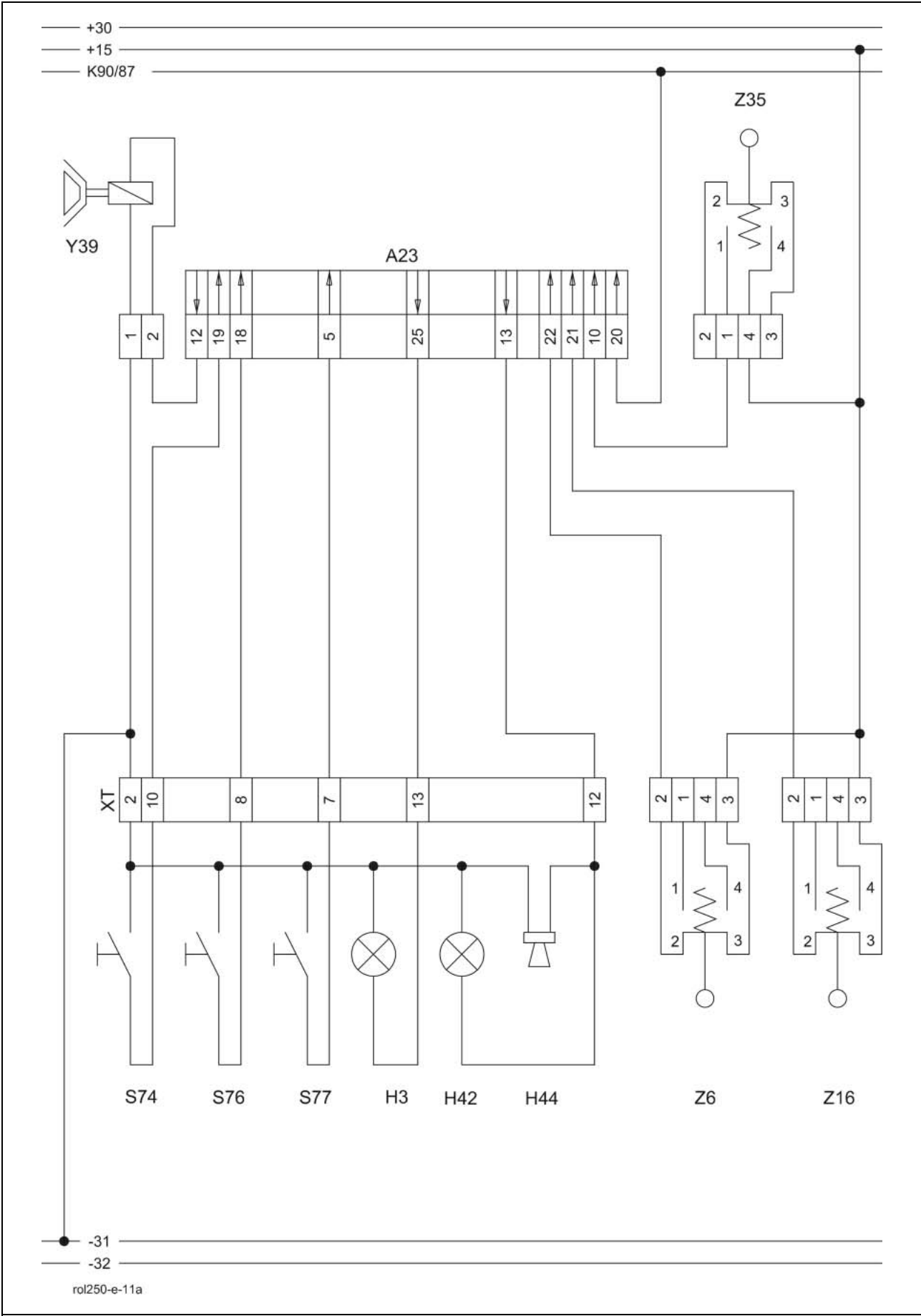
## **11a**

### **Wrapping release**

Rollant 240 Standard

Rollant 250 Standard

11a - Wrapping release Rollant 240/250 Standard



Key to diagram:

|     |                                        |                        |
|-----|----------------------------------------|------------------------|
| A23 | ROLLANT 240/250 module .....           | Wiring loom A - part 2 |
| H3  | Operating light .....                  | Wiring loom A - part 1 |
| H42 | STOP light .....                       | Wiring loom A - part 1 |
| H44 | Buzzer .....                           | A - part 1             |
| S74 | Wrapping type selection switch .....   | Wiring loom A - part 1 |
| S76 | Wrapping delay switch (manual) .....   | Wiring loom A - part 1 |
| S77 | Wrapping release switch (manual)...    | Wiring loom A - part 1 |
| XT  | Terminal connector .....               | Wiring loom A - part 1 |
| Y39 | Twine/net coupling solenoid coil ..... | Wiring loom A - part 2 |
| Z6  | Bale ejector actual value switch ..... | Wiring loom A - part 2 |
| Z16 | Tailgate closed actual value switch..  | Wiring loom A - part 2 |
| Z35 | Cam track actual value switch.....     | Wiring loom A - part 1 |

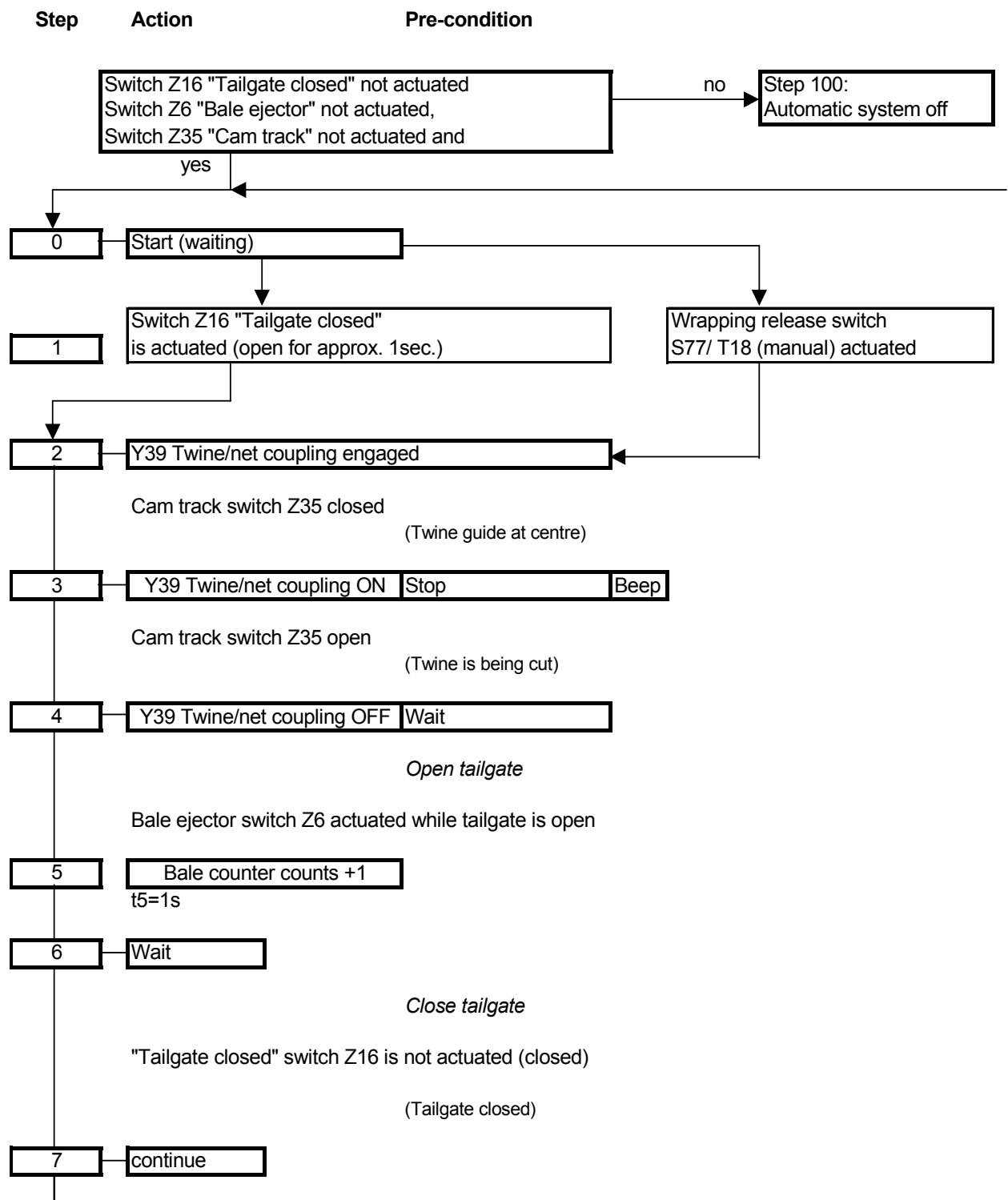
**Description of function:**

|                            |                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational readiness      | The machine is ready for automatic wrapping when signal light H3 lights up.<br>Fast blinking of signal light H3 means that the machine is <b>not</b> ready for operation. In this case, the bale ejector actual value switch Z6, the tailgate closed switch Z16 and / or the cam track switch Z35 are actuated (see sequence diagram). |
| Selection of wrapping type | The wrapping type (net / twine) is pre-selected using switch S 74. After this, further modifications must be carried out (see Operator's Manual).                                                                                                                                                                                      |
| Automatic wrapping release | A completely filled bale chamber makes the baler reach the pre-set hydraulic baling pressure.<br>The tailgate is pushed open by approx. 5 cm.<br>Signal light H3 starts blinking slowly. The wrapping process is started automatically (see sequence diagram).                                                                         |
| Early wrapping release     | When actuating the wrapping release switch (manual) S77, the start of the wrapping process may be released early.                                                                                                                                                                                                                      |
| Wrapping process delay     | When actuating the wrapping delay switch (manual) S76, the start of the wrapping process may be delayed. The wrapping process will start automatically only after switch S76 has been released.                                                                                                                                        |

**Settings:**

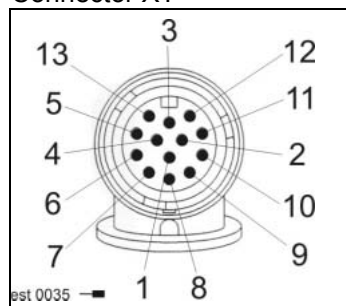
|                                           |                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| - Bale ejector actual value switch Z6     | Set the switch so that it can be pushed 5 mm max. (for functional check see sequence diagram).                                                                                                                                                                                                                                                      |
| - Tailgate closed actual value switch Z16 | Open the tailgate to $30 \pm 5$ mm. The gap at the elevation of the centre of rotation of roller no. 5 shall serve as measuring point.<br>Adjust the adjusting screw on the tailgate so that the switch changes its signal at this position and that wrapping is started.<br>Adjust the mechanical limit so that the switch can be pushed 5 mm max. |
| - Cam track actual value switch Z35       | Set the switch so that it can be pushed 5 mm max. (for functional check see sequence diagram).                                                                                                                                                                                                                                                      |



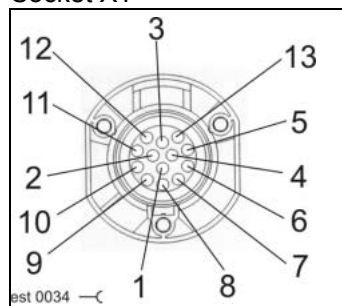
**Twine wrapping sequence diagram (Rollant 240/250)**

**Connector pin definition**

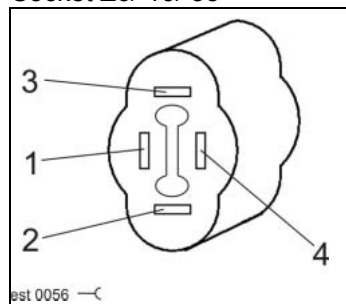
Connector XT



Socket XT



Socket Z6/ 16/ 35

**Connector pin definition**

| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| XT1 - 2   | 1.5             | br     |
| XT1 - 7   | 0.75            | br-ye  |
| XT1 - 8   | 0.75            | br-bl  |
| XT1 - 10  | 0.75            | bl-gr  |
| XT1 - 12  | 0.75            | bk-bl  |
| XT1 - 13  | 0.75            | xx-xx  |
| XT2 - 2   | 1.5             | br     |
| XT2 - 7   | 0.75            | br-ye  |
| XT2 - 8   | 0.75            | br-bl  |
| XT2 - 10  | 0.75            | bl-gr  |
| XT2 - 12  | 0.75            | bk-bl  |
| XT2 - 13  | 0.75            | xx-xx  |

| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| Y39 - 1   | 1.0             | br     |
| Y39 - 2   | 1.0             | bk-ye  |
| Z 6 - 2   | 0.75            | bl-rd  |
| Z 6 - 3   | 0.75            | bk-rd  |
| Z16 - 2   | 0.75            | bl-ye  |
| Z16 - 3   | 0.75            | bk-rd  |
| Z35 - 1   | 0.75            | br-bk  |
| Z35 - 4   | 0.75            | bk-rd  |



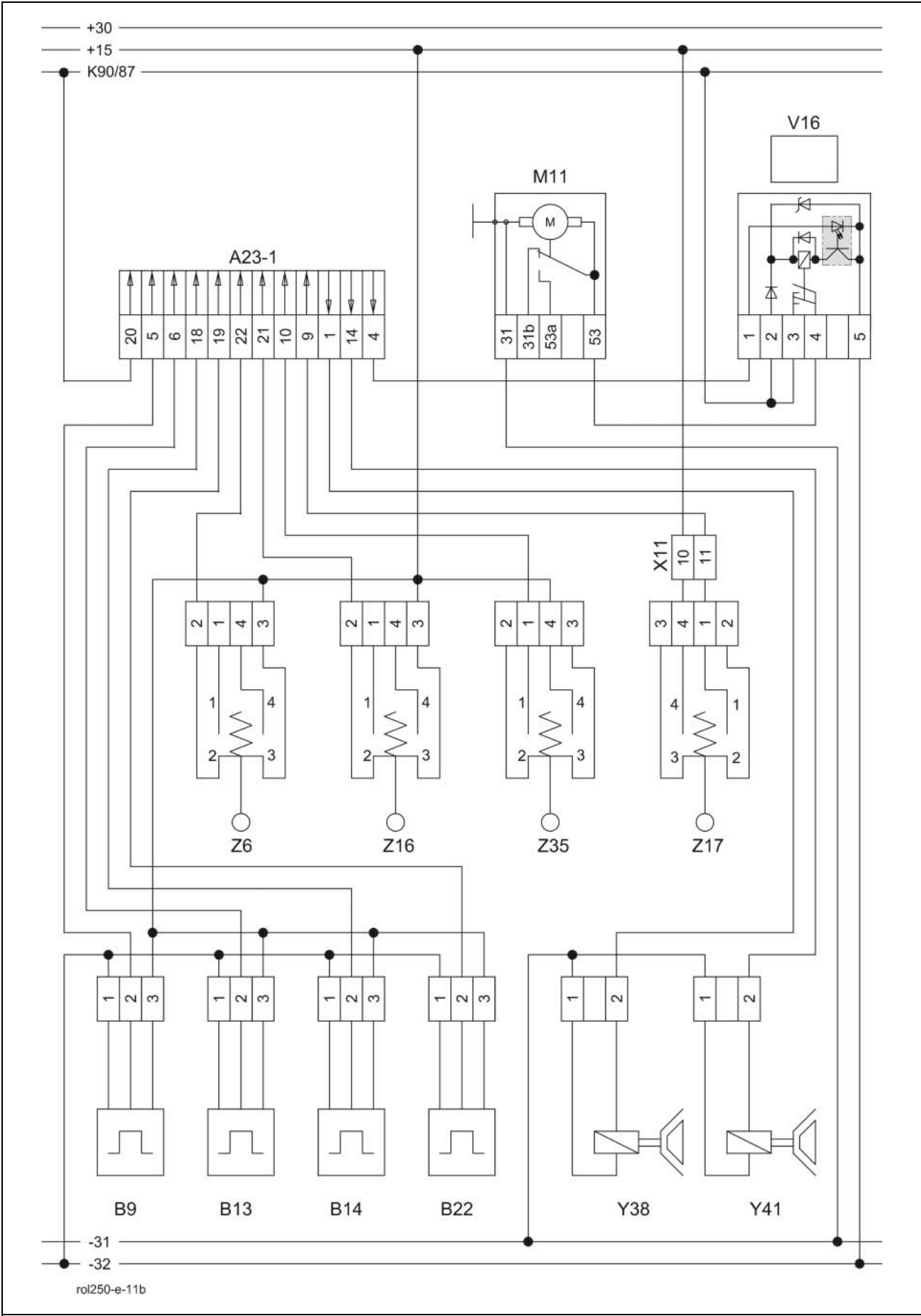
## **11b**

### **Wrapping release**

Rollant 250 Comfort

Rollant 250 Comfort for UNIWRAP

11b - Wrapping release Rollant 250 Comfort / Comfort for UNIWRAP



Key to diagram:

|       |                                     |                      |
|-------|-------------------------------------|----------------------|
| A23-1 | ROLLANT 250 module 1                | Wiring loom B-part 2 |
| B9    | Drive rpm sensor                    | Wiring loom B-part 3 |
| B13   | Twine roll left rpm sensor          | Wiring loom B-part 1 |
| B14   | Twine roll right rpm sensor         | Wiring loom B-part 1 |
| B22   | Net roll rpm sensor                 | Wiring loom B-part 3 |
| M11   | Net cutter motor                    | Wiring loom B-part 3 |
| V16   | Amplifier (Net cutter motor)        | Wiring loom B-part 2 |
| X11   | Connector                           | Wiring loom B-part 2 |
| Y38   | Twine coupling solenoid coil        | Wiring loom B-part 3 |
| Y41   | Net coupling solenoid coil          | Wiring loom B-part 2 |
| Z6    | Bale ejector actual value switch    | Wiring loom B-part 2 |
| Z16   | Tailgate closed actual value switch | Wiring loom B-part 2 |
| Z17   | Tailgate open actual value switch   | Wiring loom B-part 2 |
| Z35   | Cam track actual value switch       | Wiring loom B-part 1 |

Measured value table:

| Item | Component | Measured value | Note            |
|------|-----------|----------------|-----------------|
| B9   | Sensor    | I – O          | Switching earth |
| B13  |           |                |                 |
| B14  |           |                |                 |
| B22  |           |                |                 |

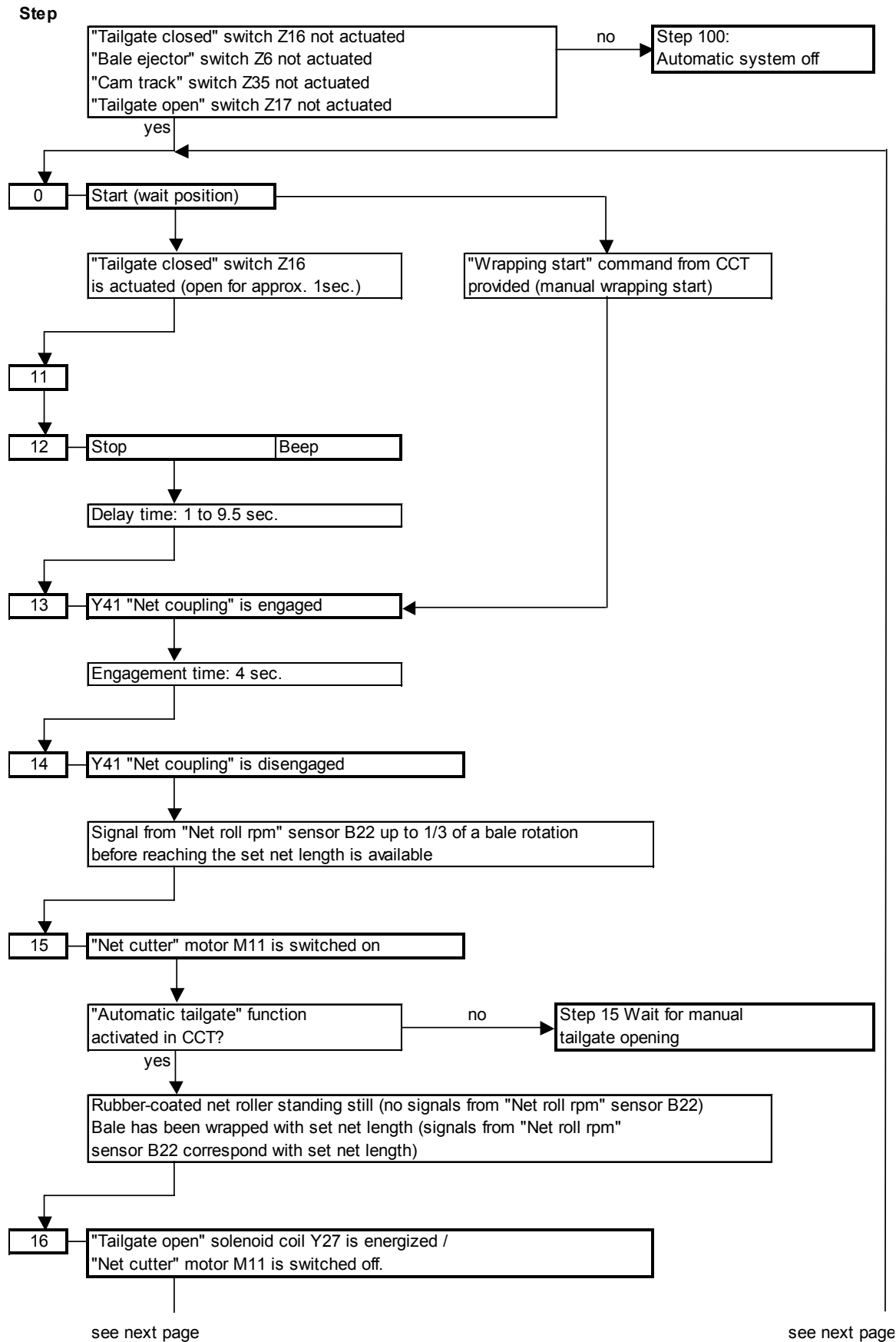
**Description of function: 1/2**

|                              |                                                                                                                                                                                                                                                                       |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operational readiness        | The machine is ready for automatic wrapping when this is displayed in terminal A30.<br>When the machine is not ready, main menu 1 / 2 shows a 100 as program step and the corresponding fault symbol.                                                                 |
| Selection of wrapping type   | The wrapping type (net / twine) is pre-selected at terminal A 30.                                                                                                                                                                                                     |
| Automatic wrapping release   | A completely filled bale chamber makes the baler reach the pre-set hydraulic baling pressure. The tailgate is pushed open by approx. 5 cm. The filled bale chamber and the Stop symbol are displayed in terminal A 30. The wrapping process is started automatically. |
| Early wrapping release       | When actuating the wrapping release key on terminal A 30, the start of the wrapping process may be released early.                                                                                                                                                    |
| Wrapping process delay       | When pressing and holding the wrapping release key on terminal A 30, the start of the wrapping process may be delayed. The wrapping process will start automatically only after the wrapping release key on terminal A 30 has been released.                          |
| Setting the net wraps        | The desired number of net wraps is set in terminal A 30, menu 2/1. Module A23-1 monitors the net wrapping process with the drive rpm sensor B9 and the net roll rpm sensor B22. (see net wrapping sequence diagram).                                                  |
| Setting the twine wraps      | The desired number of twine wraps is set in terminal A 30, menu 2 / 2. Module A23-1 monitors the twine wrapping with the drive rpm sensor B9, the Twine roll left rpm sensor B13 and the Twine roll right rpm sensor B14. (see twine wrapping sequence diagram).      |
| Automatic tailgate operation | Automatic opening and closing of the tailgate after a successfully completed wrapping may be activated in terminal A 30.<br>The automatic function is monitored by the Tailgate closed actual value switch Z16, Tailgate open switch Z17 and bale ejector switch Z6.  |
| <b>Note:</b>                 | For cabling of the corresponding solenoid valves see circuit diagram 12a.                                                                                                                                                                                             |

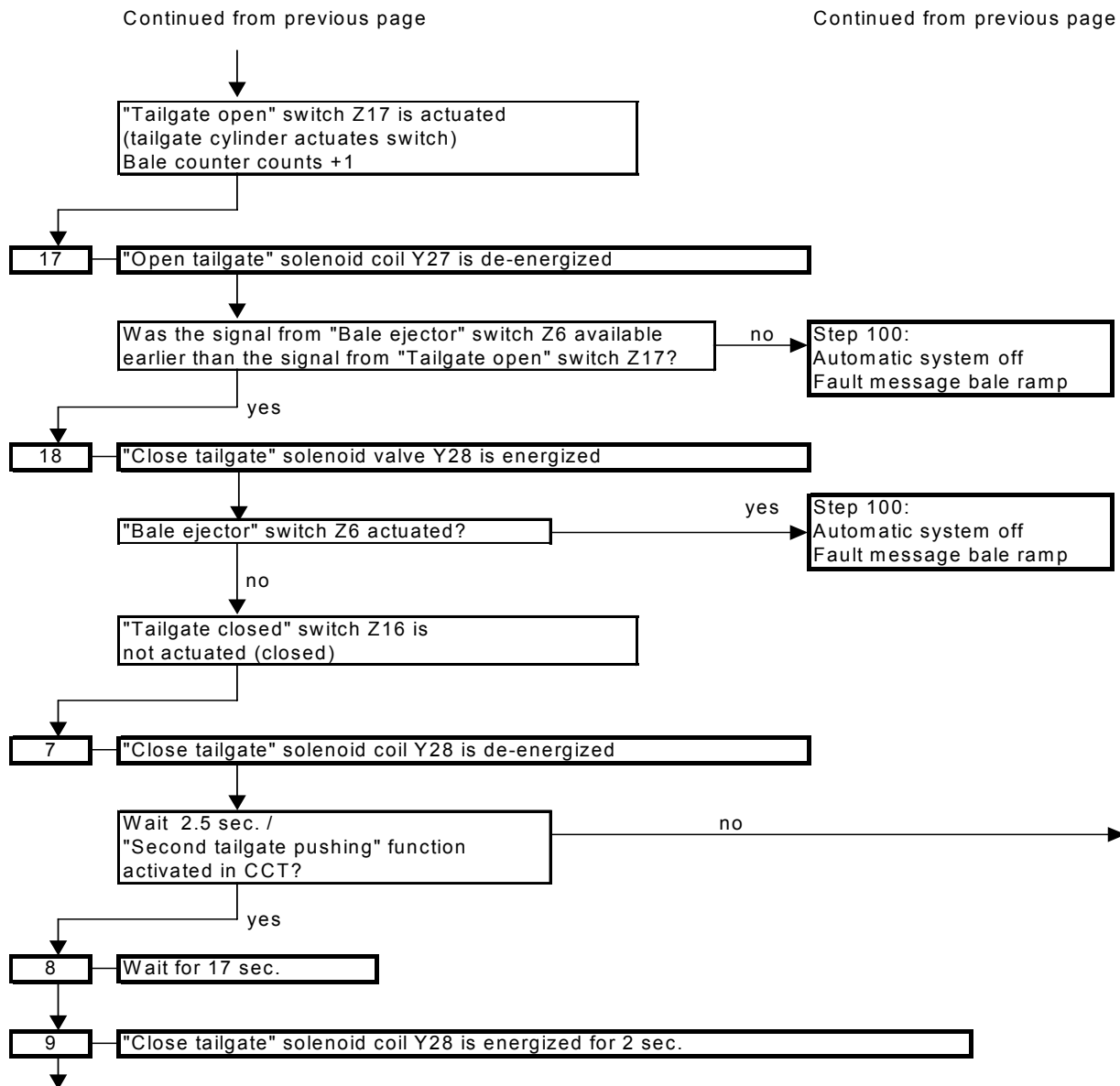
**Description of function: 2/2****Sensor settings**

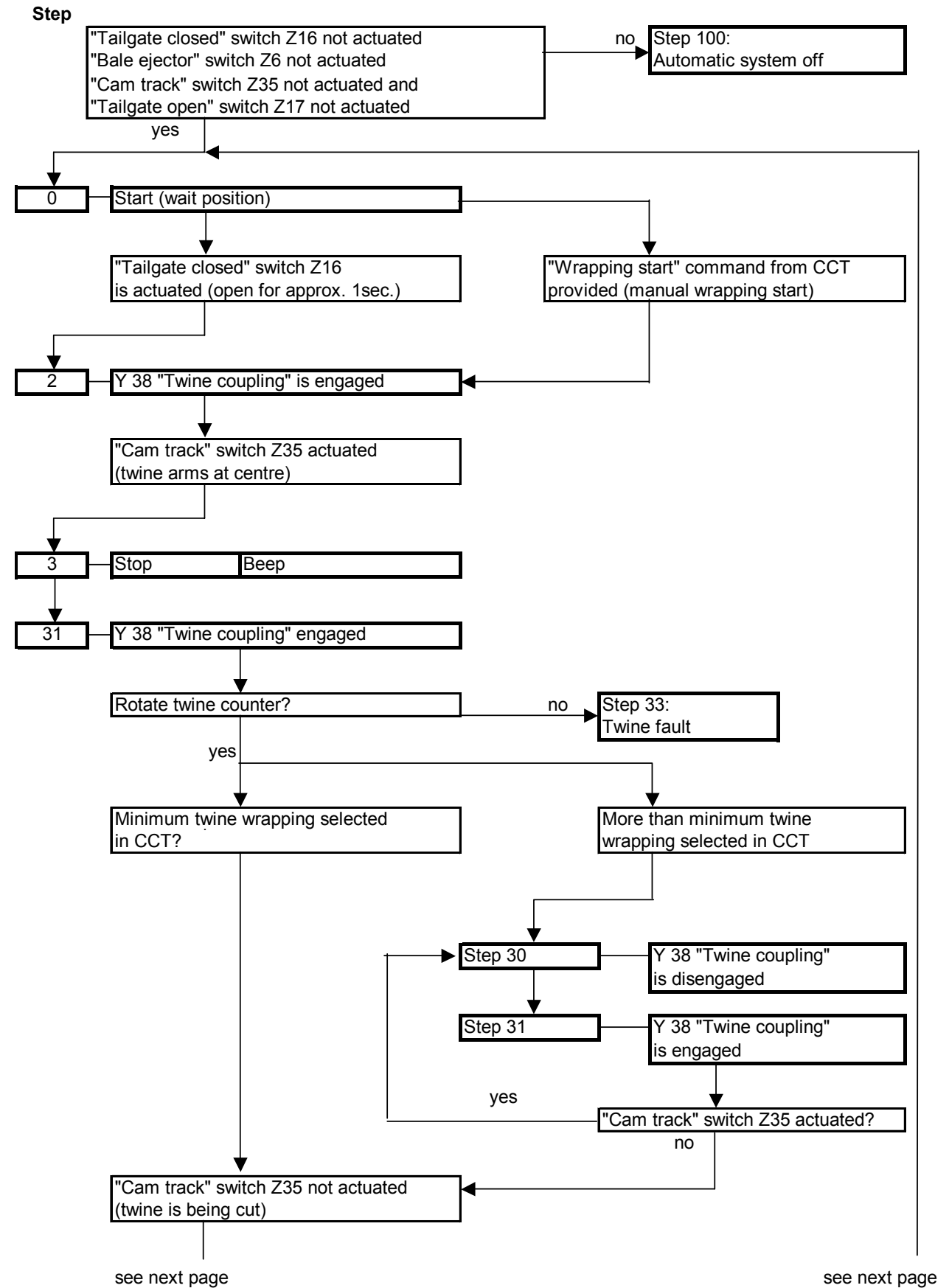
(see also "Diagnosis" chapter)

- HALL sensor (B9, B13, B14, B22)  
The signal change (O-I) is displayed in service menu 8/1 of terminal A30. When there is no signal change, the clearance of the sensors must be corrected.
- Bale ejector actual value switch Z6  
Set the switch so that it can be pushed 5 mm max. The signal change (O-I) is displayed in service menu 8/1 of terminal A30.
- Tailgate closed actual value switch Z16  
Open the tailgate to  $30 \pm 5$  mm. The gap at the elevation of the centre of rotation of roller no. 5 shall serve as measuring point.  
Adjust the adjusting screw on the tailgate so that the switch changes its signal at this position and that wrapping is started. The signal change (O-I) is displayed in service menu 8/1 of terminal A30.  
Adjust the mechanical limit so that the switch can be pushed 5 mm max.
- Tailgate open actual value switch Z17  
Set the switch so that it can be pushed 5 mm max. (functional check - see sequence diagram).  
The signal change (O-I) is displayed in service menu 8/1 of terminal A30.
- Cam track actual value switch Z35  
Set the switch so that it can be pushed 5 mm max. (functional check - see sequence diagram).  
The signal change (O-I) is displayed in service menu 8/1 of terminal A30.

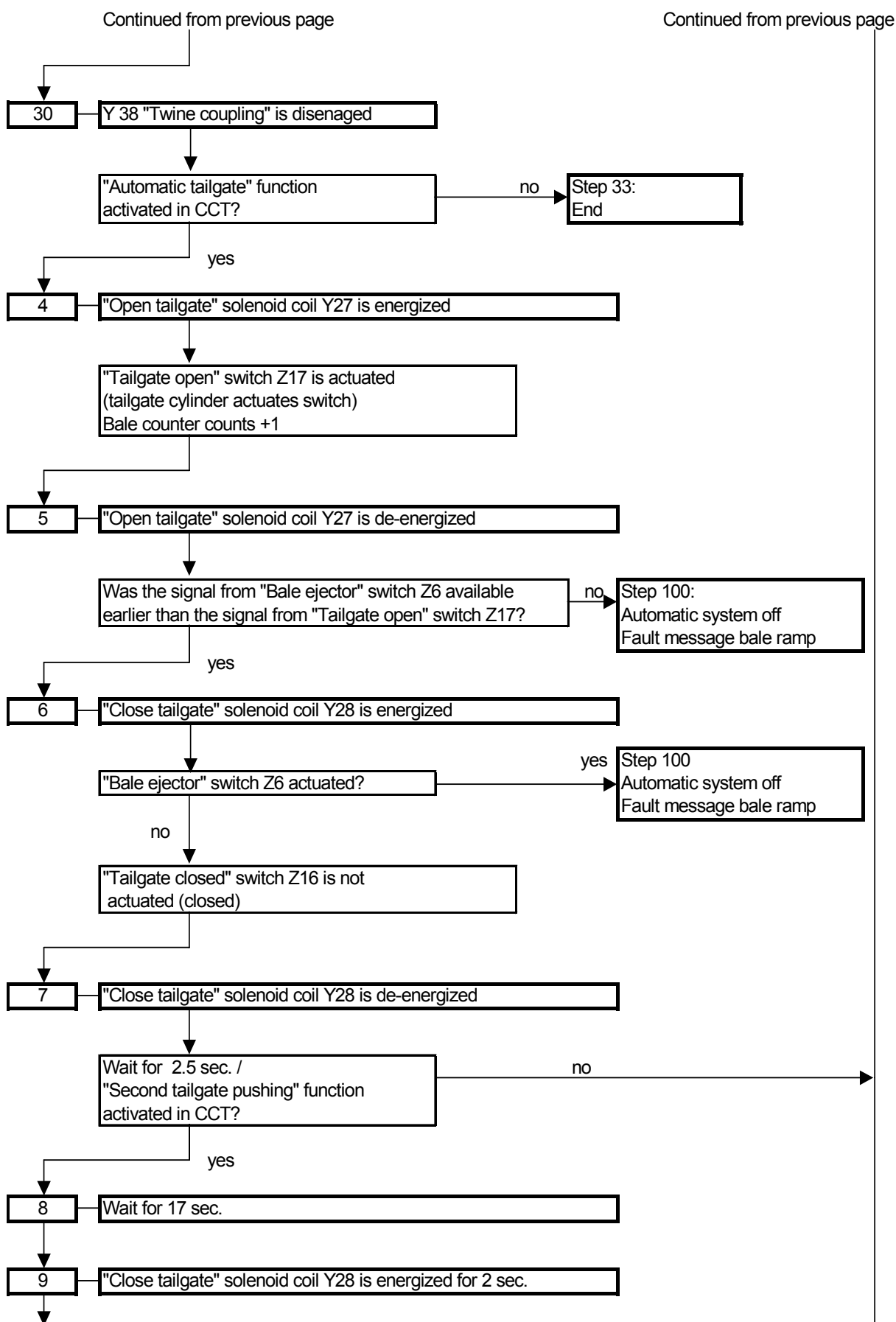
**Net wrapping sequence diagram: 1/2**

Net wrapping sequence diagram: 2/2



**Twine wrapping sequence diagram: 1/2**

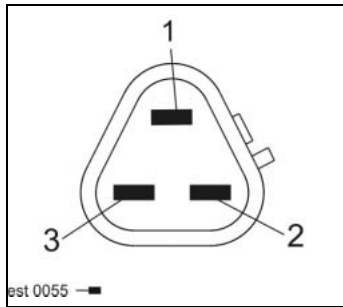
Twine wrapping sequence diagram: 2/2



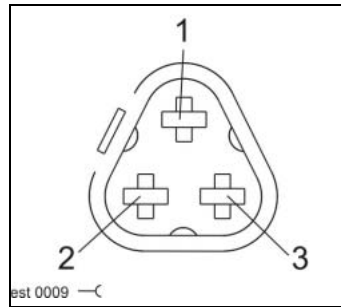


## Connector pin definition

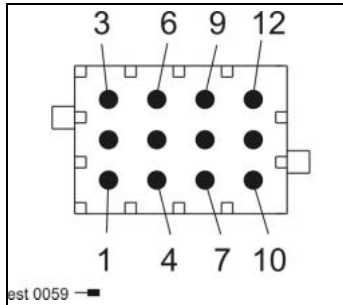
Connector B9/ 13/ 14/ 22



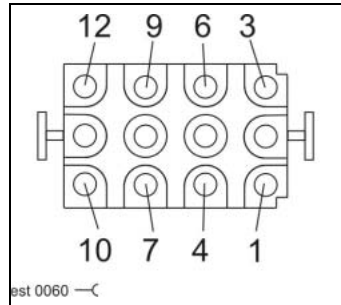
Socket B9/ 13/ 14/ 22



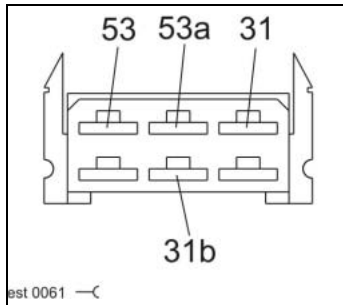
Connector X11



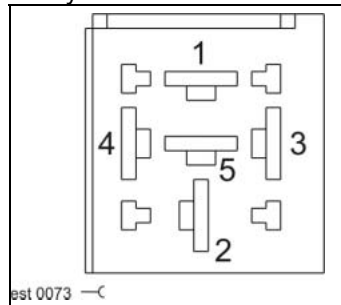
Socket X11



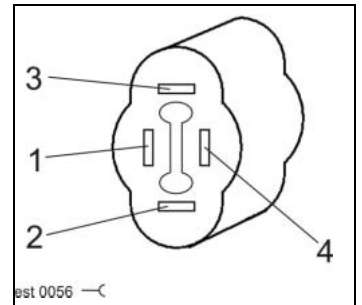
Socket M11



Relay socket V16



Socket Z 6/ 16/ 17/ 35



**Connector pin definition**

| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| B 9-1     | 0.5             | br-rd  |
| B 9-2     | 0.5             | br-ye  |
| B 9-3     | 0.5             | bk-rd  |
|           |                 |        |
| B13-1     | 0.5             | br-rd  |
| B13-2     | 0.5             | br-gr  |
| B13-3     | 0.5             | bk-rd  |
|           |                 |        |
| B14-1     | 0.5             | br-rd  |
| B14-2     | 0.5             | br-bl  |
| B14-3     | 0.5             | bk-rd  |
|           |                 |        |
| B22-1     | 0.5             | br-rd  |
| B22-2     | 0.5             | bl     |
| B22-3     | 0.5             | bk-rd  |
|           |                 |        |
| M11-31    | 0.75            | br     |
| M11-53    | 1.5             | gr-rd  |
|           |                 |        |
| V16-1     | 0.5             | bk-bl  |
| V16-2     | 1.5             | bk-wt  |
| V16-3     | 1.5             | bk-wt  |
| V16-4     | 1.5             | gr-rd  |
| V16-5     | 0.5             | br-rd  |
|           |                 |        |
| X11-10    | 0.5             | bk-rd  |
| X11-11    | 0.5             | bl-wt  |
|           |                 |        |
| Y38-1     | 0.75            | br     |
| Y38-2     | 0.75            | gr-bl  |
|           |                 |        |
| Y41-1     | 0.75            | br     |
| Y41-2     | 0.75            | gr-ye  |
|           |                 |        |
| Z 6-2     | 0.5             | vi-ye  |
| Z 6-3     | 0.5             | bk-rd  |
|           |                 |        |
| Z16-2     | 0.5             | rd-bk  |
| Z16-3     | 0.5             | bk-rd  |
|           |                 |        |
| Z17-1     | 0.5             | bl-wt  |
| Z17-4     | 0.5             | bk-rd  |
|           |                 |        |
| Z35-1     | 0.5             | wt     |
| Z35-4     | 0.5             | bk-rd  |

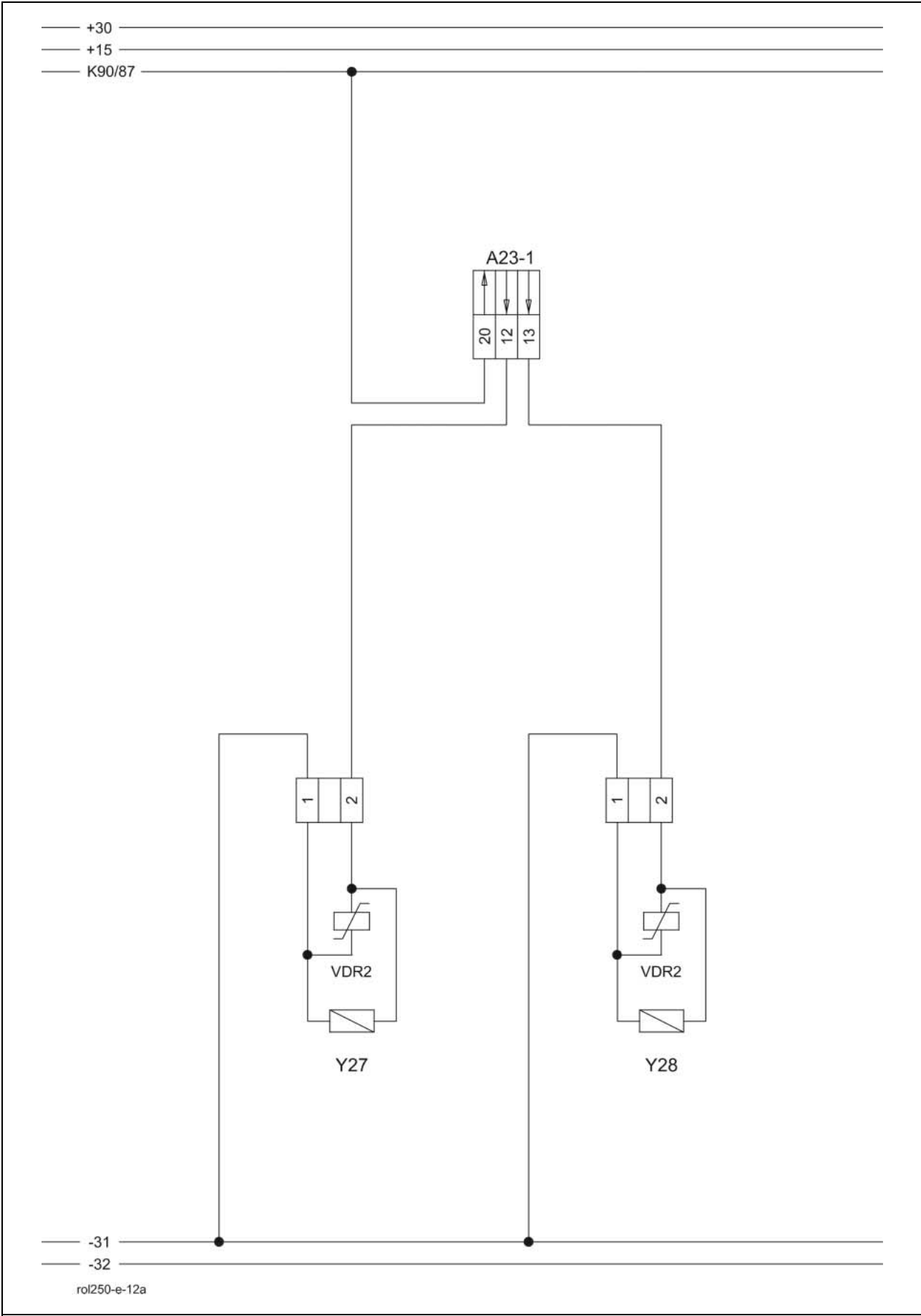
## **12a**

### **Open / close tailgate**

Rollant 250 Comfort

Rollant 250 Comfort for UNIWRAP

12a - Open / close tailgate Rollant 250 Comfort / Comfort for UNIWRAP



Key to diagram:

- A23-1 ROLLANT 250 module 1 ..... Wiring loom B - part 2
- VDR2 Varistor ..... not shown
- Y27 Open tailgate solenoid coil ..... Wiring loom B - part 2
- Y28 Close tailgate solenoid coil ..... Wiring loom B - part 2

Measured value table:

| Item | Component     | Measured value | Note |
|------|---------------|----------------|------|
| Y27  | Solenoid coil | 2.72 A; 4.5 Ω  |      |
| Y28  |               |                |      |

**Description of function:**

Open/close tailgate

Module A23 –1 actuates the solenoid valves Open tailgate Y27 and Close tailgate Y28 according to either the operation via terminal A 30 or the wrapping program with automatic tailgate operation.

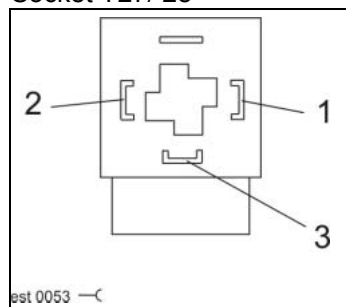
Circulation shut-off valve Y77 is actuated in parallel with the solenoid coils Open tailgate Y27 and Close tailgate Y28 because these functions require pressure build-up within the system.

**Note:**

For the function of the sensors for automatic tailgate operation please refer to circuit diagrams 11b.

## Connector pin definition

### Socket Y27/ 28



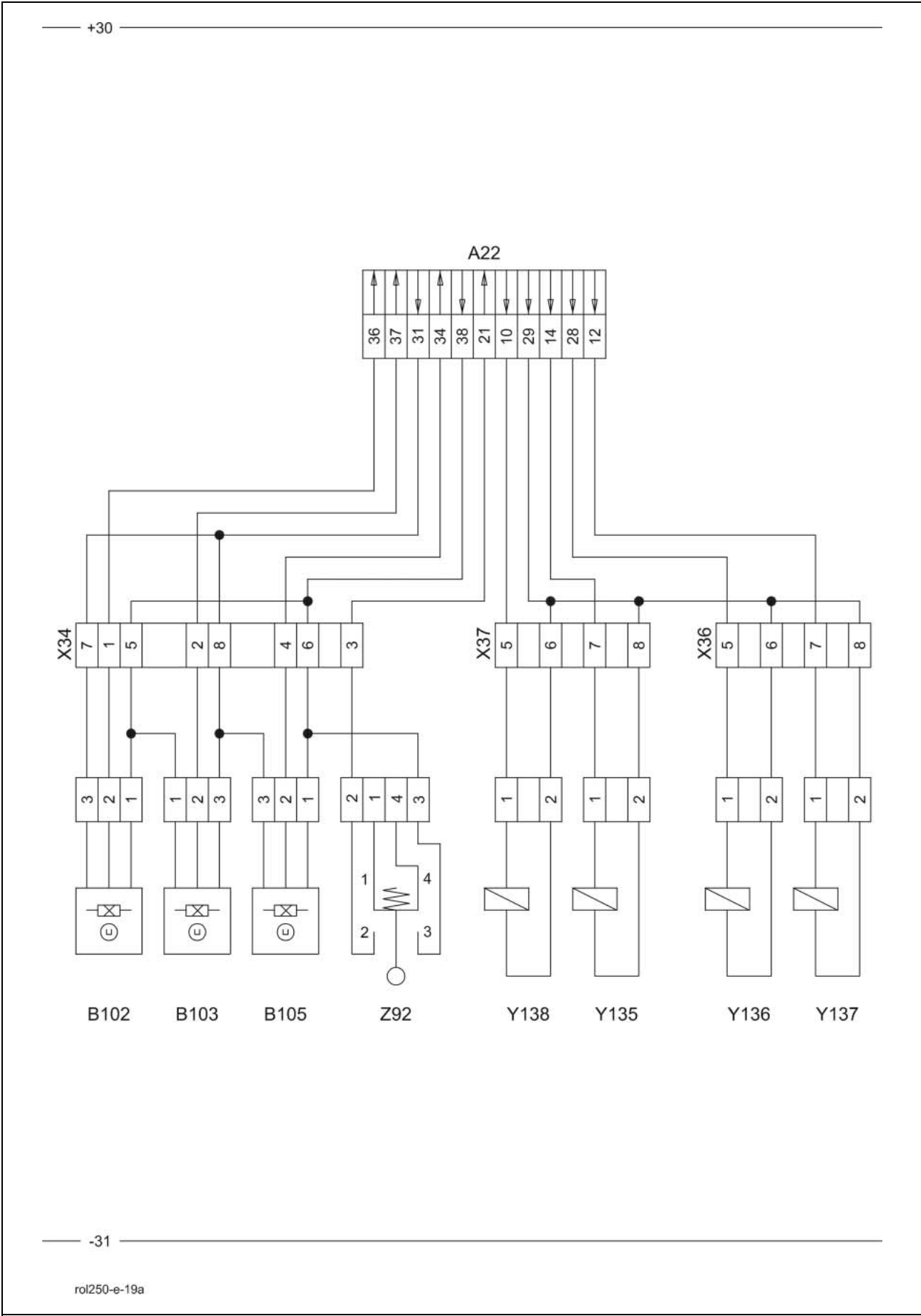
| Connector | mm <sup>2</sup> | Colour   |
|-----------|-----------------|----------|
| Y27 - 1   | 0.75            | br       |
| Y27 - 2   | 0.75            | bk-rd-wt |
|           |                 |          |
| Y28 - 1   | 0.75            | br       |
| Y28 - 2   | 0.75            | wt-gn    |

## **19a**

### **Load / unload bale**

UNIWRAP

19a - Load / unload bale UNIWRAP



Key to diagram:

|      |                                               |               |
|------|-----------------------------------------------|---------------|
| A22  | Bale wrapper module .....                     | E-10          |
| B102 | Bale in tipping cradle sensor .....           | Wiring loom L |
| B103 | Tipping cradle down sensor .....              | Wiring loom L |
| B105 | Wrapping table up sensor .....                | Wiring loom L |
| X34  | Connector .....                               | Wiring loom L |
| X36  | Connector .....                               | Wiring loom K |
| X37  | Connector .....                               | Wiring loom K |
| Y135 | Lower tipping cradle solenoid coil .....      | Wiring loom K |
| Y136 | Raise tipping cradle solenoid coil .....      | Wiring loom K |
| Y137 | Lower wrapping table solenoid coil .....      | Wiring loom K |
| Y138 | Raise wrapping table solenoid coil .....      | Wiring loom K |
| Z92  | Bale on wrapping table actual value switch .. | Wiring loom L |

Measured value table:

| Item                         | Component     | Measured value | Note            |
|------------------------------|---------------|----------------|-----------------|
| B102<br>B103<br>B105         | Sensor        | I – O          | Switching earth |
| Y135<br>Y136<br>Y137<br>Y138 | Solenoid coil | 1.9 A; 6.4 Ω   |                 |



**Description of function:**

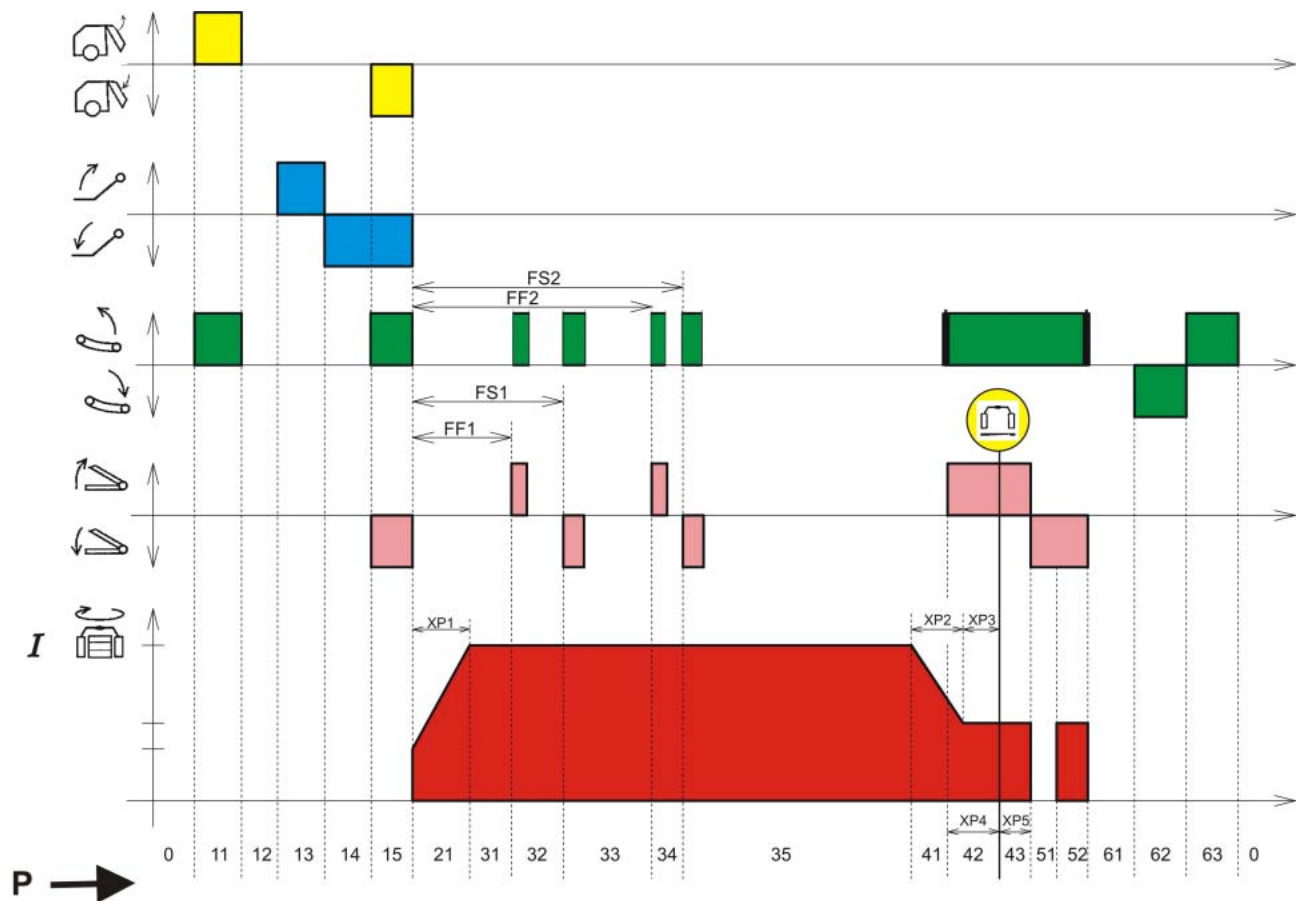
|                                                  |                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Bale transfer                                    | After opening the tailgate, the bale rolls into the tipping cradle.                                                                                                                                                                                                                                                                              |
| Bale in tipping cradle                           | The Bale in tipping cradle sensor B102 detects that the bale is in the tipping cradle (magnet in front of sensor). If the bale has not been detected in the tipping cradle 1.5 seconds after tailgate opening, the "Err : Bale bench" message is displayed in terminal A30-1 and the automatic sequence is interrupted.                          |
| Tipping cradle transports bale on wrapping table | After the bale has been detected in the tipping cradle, the Raise tipping cradle solenoid coil Y138 is actuated. Detection of the Tailgate open switch Z17 is a pre-condition for this. If this pre-condition is not met, the "Err : Tailgate" message is displayed in terminal A30-1 and the automatic sequence is interrupted.                 |
| Bale on wrapping table                           | When the bale is on the wrapping table, the Bale on wrapping table switch Z92 is actuated. The bale must have been detected on the wrapping table 1.5 seconds after actuation of the Raise tipping cradle solenoid coil Y138. Otherwise the "Err : Bale table" message is displayed in terminal A30-1 and the automatic sequence is interrupted. |
| Lower tipping cradle                             | After transferring the bale to the wrapping table, the Lower tipping cradle solenoid coil Y135 is actuated. Detection of the Tailgate open switch Z17 is a pre-condition for this. If this pre-condition is not met, the "Err : Tailgate" is displayed in terminal A30-1 and the automatic sequence is interrupted.                              |
| Tipping cradle down<br>Close tailgate            | After the first of 3 magnets has been detected by the Tipping cradle down sensor B103, the tailgate closes. Manual tailgate closing also requires that the Tipping cradle down sensor B103 be detected. Otherwise, the "Err : Tailgate" message will appear in terminal A30-1 and the tailgate cannot be closed.                                 |
| Wrapping table up                                | The wrapping table at top sensor B105 detects if the wrapping table is in its top position (solenoid in front of sensor). Otherwise the "Err : Wrapping table" message is displayed in terminal A30-1 and the automatic sequence is interrupted.                                                                                                 |

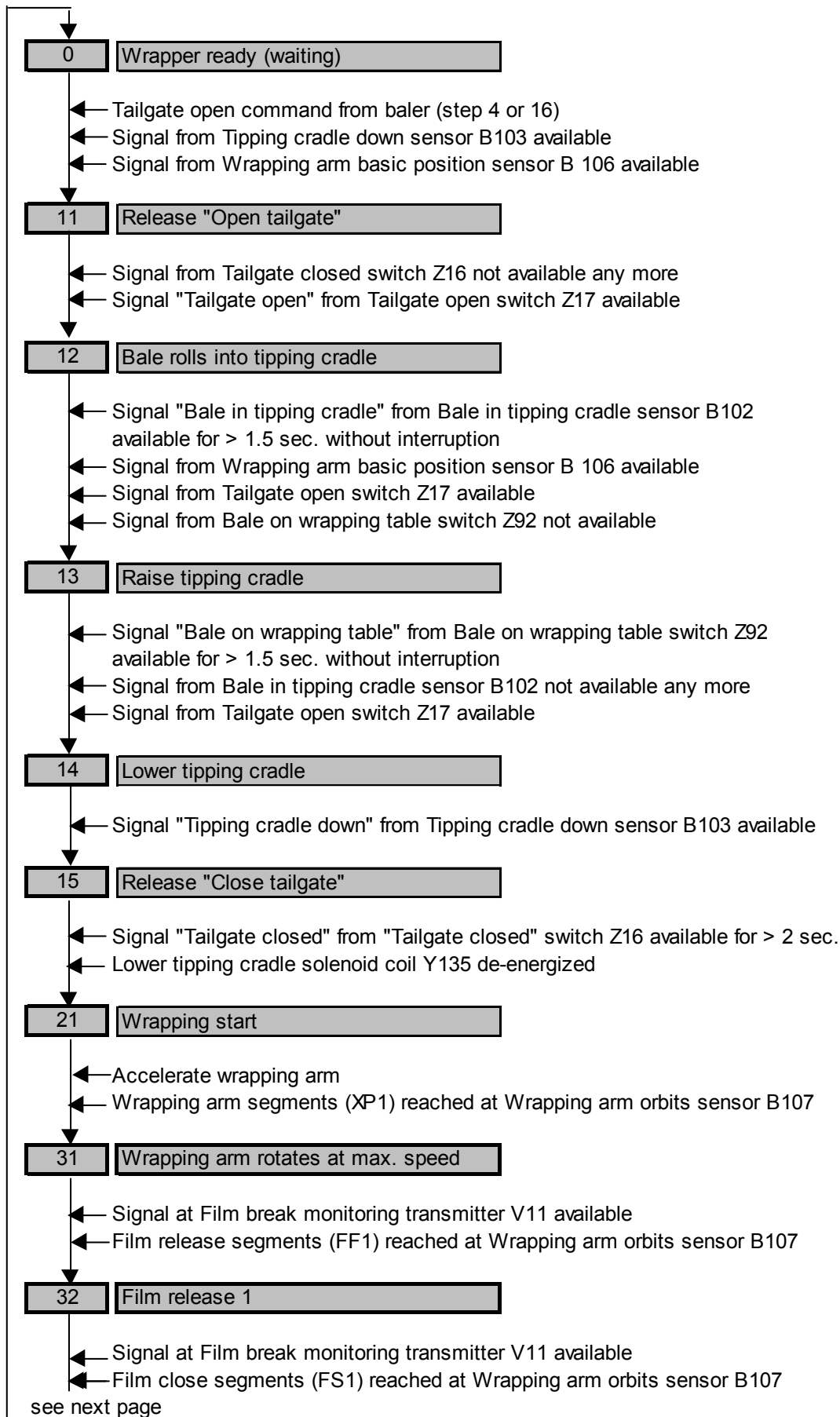
**Sensor settings**

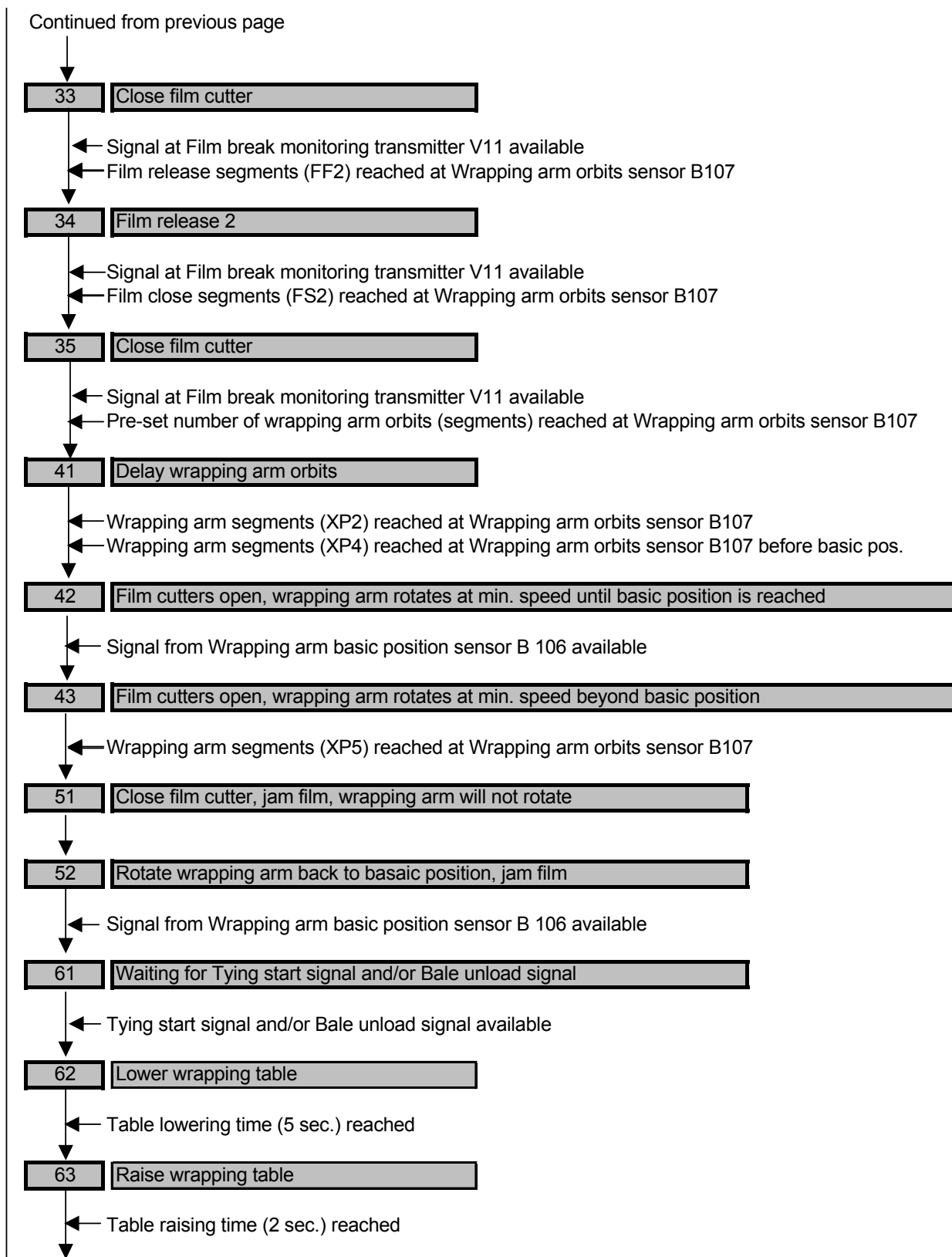
- HALL sensor (B102, B103, B105)  
The sensors B102, B103, B105 should be set to a clearance of 6 - 7 mm from the magnet upon detecting the signal (magnet in front of sensor = 0 → I, see Wiring loom L).
- Bale on wrapping table actual value switch Z92  
The Bale on wrapping table switch Z92 should change its signal after a mechanical actuation from approx. 6.5 - 9.5 mm (0 → I) (see also "Sensor test" chapter in Operator's Manual).

# Wrapping sequence diagram:

The program steps (P) are displayed in menu 5/... of terminal A30 during the wrapping process.

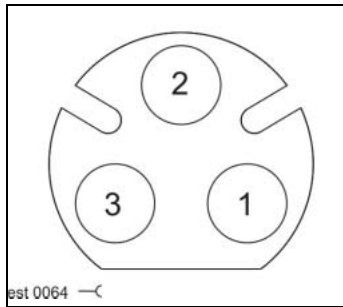




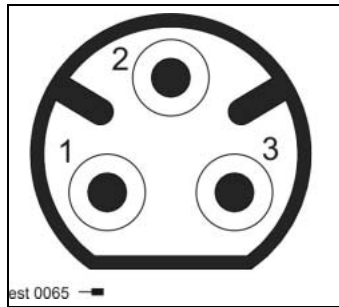


## Connector pin definition

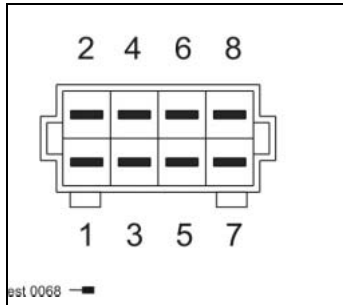
Socket B102/ 103/ 105



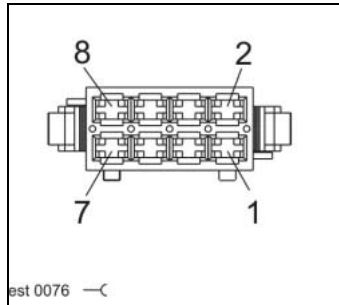
Connector B102/ 103/ 105



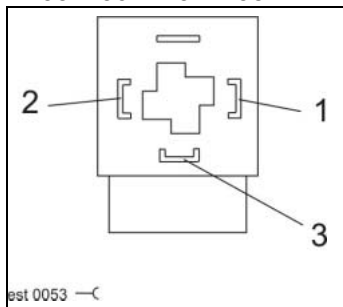
Connector X34/ X36/ X37



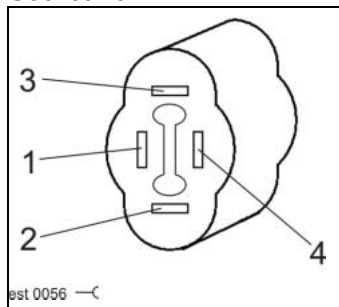
Socket X34/ X36/ X37



Socket  
Y135/ 136/ Y137/ 138



Socket Z92



**Connector pin definition**

| Connector | mm <sup>2</sup> | Colour       |
|-----------|-----------------|--------------|
| B102-1    | 1.0             | wt           |
| B102-2    | 1.0             | vi           |
| B102-3    | 1.0             | rd           |
|           |                 |              |
| B103-1    | 1.0             | wt-bk        |
| B103-2    | 1.0             | or           |
| B103-3    | 1.0             | rd-bk        |
|           |                 |              |
| B105-1    | 1.0             | wt-gn        |
| B105-2    | 1.0             | ye-rd        |
| B105-3    | 1.0             | rd-gn        |
|           |                 |              |
| X34-1     | 1.0             | vi           |
| X34-2     | 1.0             | or           |
| X34-3     | 1.0             | rs           |
| X34-4     | 1.0             | ye-rd        |
| X34-5     | 1.0             | wt/ wt-bk    |
| X34-6     | 1.0             | wt-gn/ wt-rd |
| X34-7     | 1.0             | rd           |
| X34-8     | 1.0             | rd-bk/ rd-gn |
|           |                 |              |
| X36-5     | 1.0             | br           |
| X36-6     | 1.0             | bl           |
| X36-7     | 1.0             | br           |
| X36-8     | 1.0             | bl           |
|           |                 |              |
| X37-5     | 1.0             | br           |
| X37-6     | 1.0             | bl           |
| X37-7     | 1.0             | br           |
| X37-8     | 1.0             | bl           |
|           |                 |              |
| Y135-1    | 1.0             | br           |
| Y135-2    | 1.0             | bl           |
|           |                 |              |
| Y136-1    | 1.0             | br           |
| Y136-2    | 1.0             | bl           |
|           |                 |              |
| Y137-1    | 1.0             | br           |
| Y137-2    | 1.0             | bl           |
|           |                 |              |
| Y138-1    | 1.0             | br           |
| Y138-2    | 1.0             | bl           |
|           |                 |              |
| Z92-2     | 1.0             | pi           |
| Z92-3     | 1.0             | wt-rd        |

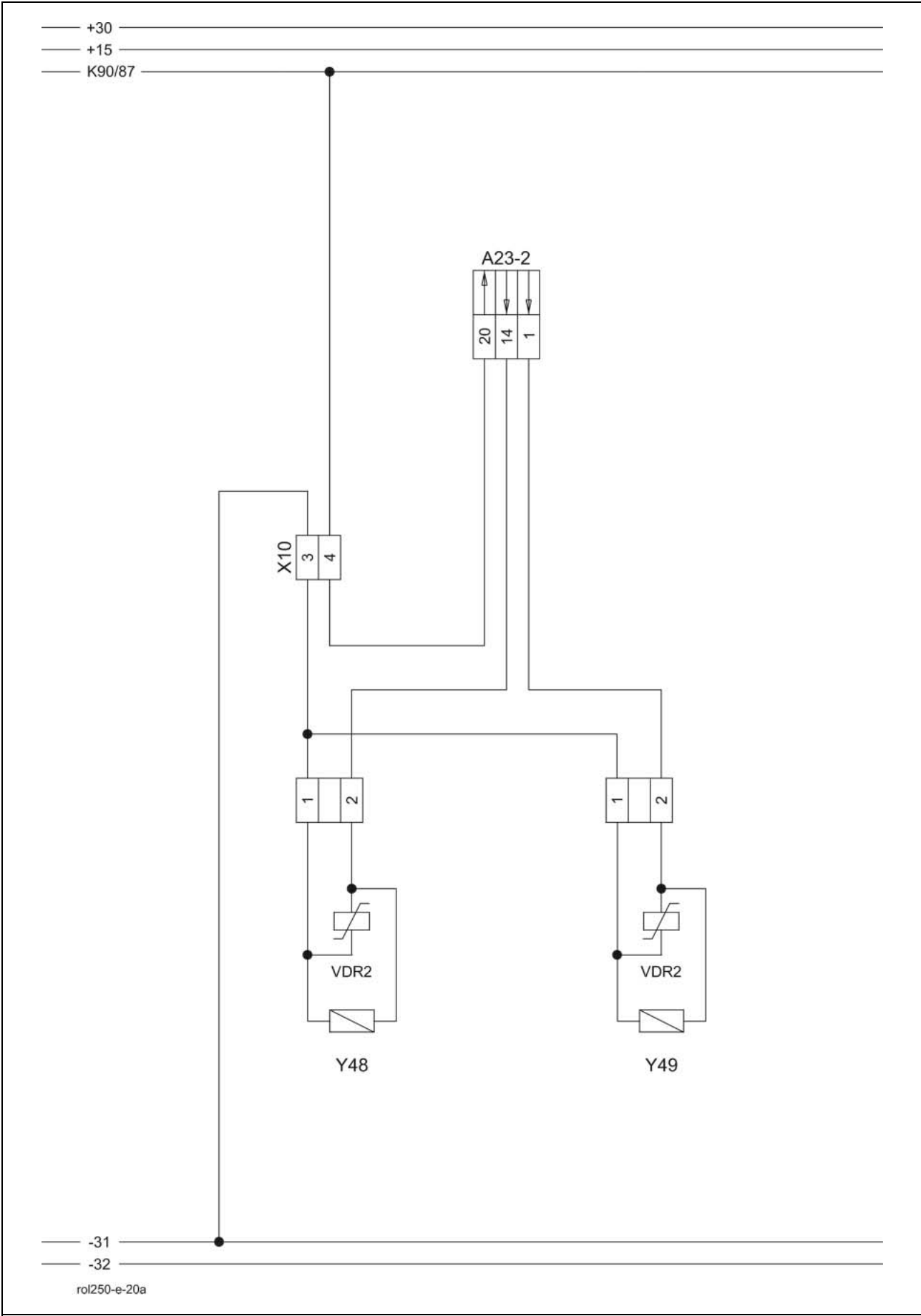
## **20a**

### **Raise / lower pick-up**

Rollant 250 Comfort

Rollant 250 Comfort for UNIWRAP

20a - Raise / lower pick-up - Rollant 250 Comfort / Comfort for UNIWRAP



Key to diagram:

- A23-2 ROLLANT 250 module 2 ..... Wiring loom B - part 2
- VDR2 Varistor ..... not shown
- X10 Connector ..... Wiring loom B - part 2 / C
- Y48 Raise pick-up solenoid coil ..... Wiring loom C / F / H
- Y49 Lower pick-up solenoid coil ..... Wiring loom C / F / H

Measured value table:

| Item | Component     | Measured value | Note |
|------|---------------|----------------|------|
| Y48  | Solenoid coil | 3.8 A; 3.2 Ω   |      |
| Y49  |               |                |      |



**Description of function:**

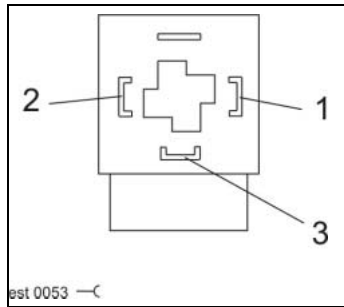
Raise / lower pick-up

According to the operation via the A 30 terminal, the Raise pick-up solenoid coil Y48 and the Lower pick-up solenoid coil Y49 are actuated by module A23 –2.

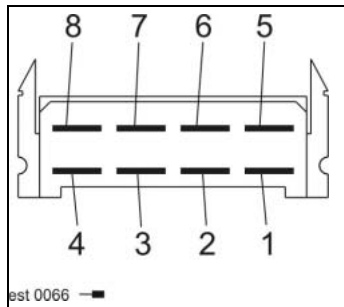
Circulation shut-off valve Y77 is actuated in parallel with the Raise pick-up solenoid coil Y48 since this function requires pressure build-up within the system.

## Connector pin definition

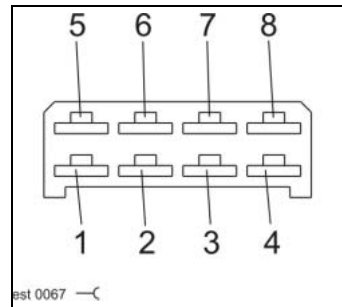
Socket Y 48/ 49



Connector X10



Socket X10



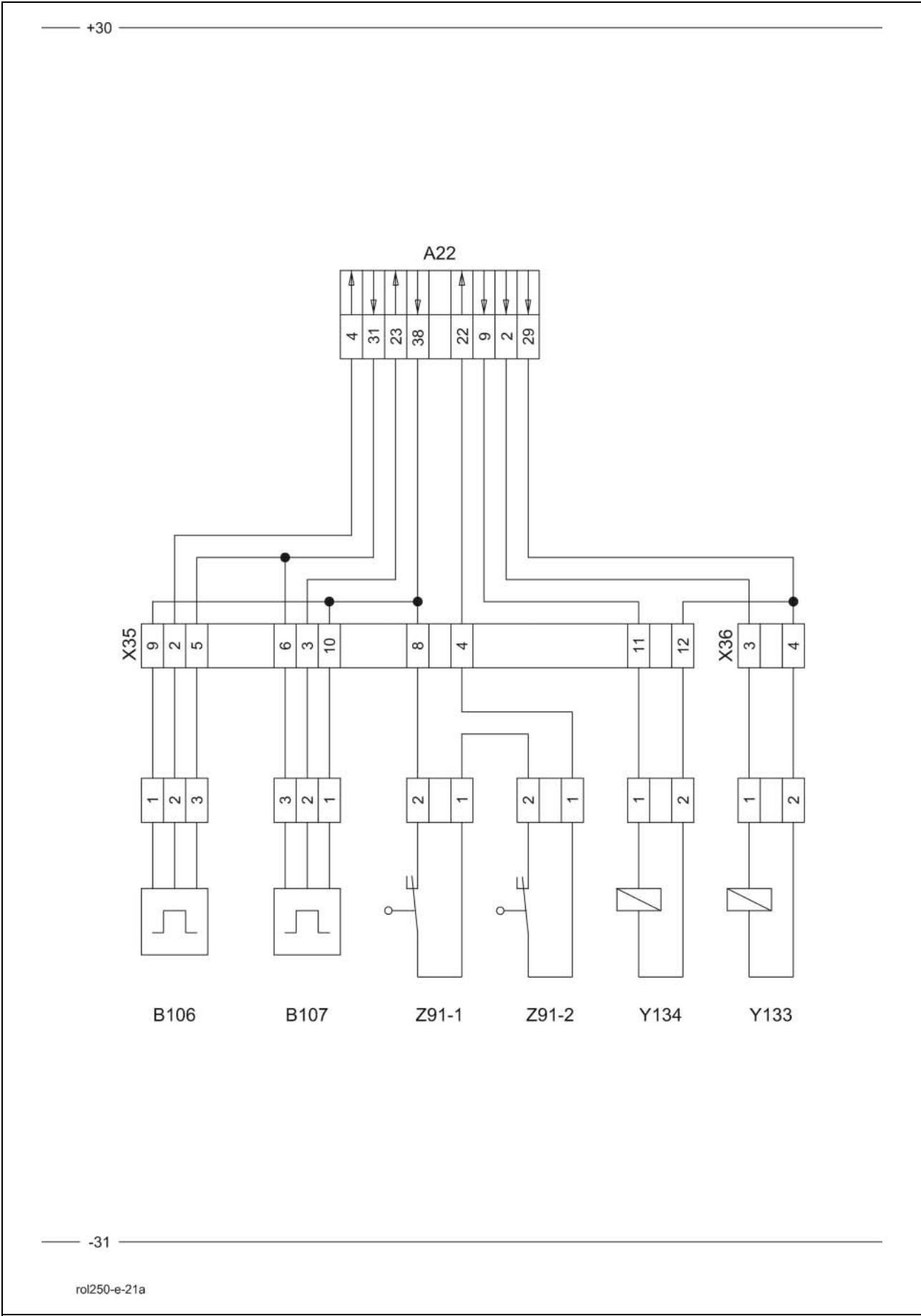
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X10 - 3   | 1.5             | br     |
| X10 - 4   | 1.5             | bk-wt  |
|           |                 |        |
| Y48 - 1   | 0.75            | br     |
| Y48 - 2   | 0.75            | wt     |
|           |                 |        |
| Y49 - 1   | 0.75            | br     |
| Y49 - 2   | 0.75            | gr     |

**21a**

**Wrapping arm rotation**

UNIWRAP

21a - Wrapping arm rotation - UNIWRAP



Key to diagram:

- A22 Bale wrapper module ..... ZE
- B106 Wrapping arm basic position sensor ..... Wiring loom M
- B107 Wrapping arm orbits sensor ..... Wiring loom M
- X35 Connector ..... Wiring loom M
- X36 Connector ..... Wiring loom K
- Y133 Wrapping arm forward solenoid coil ..... Wiring loom K
- Y134 Wrapping arm backward solenoid coil ..... Wiring loom M
- Z91-1 Safety bow actual value switch ..... Wiring loom M
- Z91-2 Safety bow actual value switch ..... Wiring loom M

Measured value table:

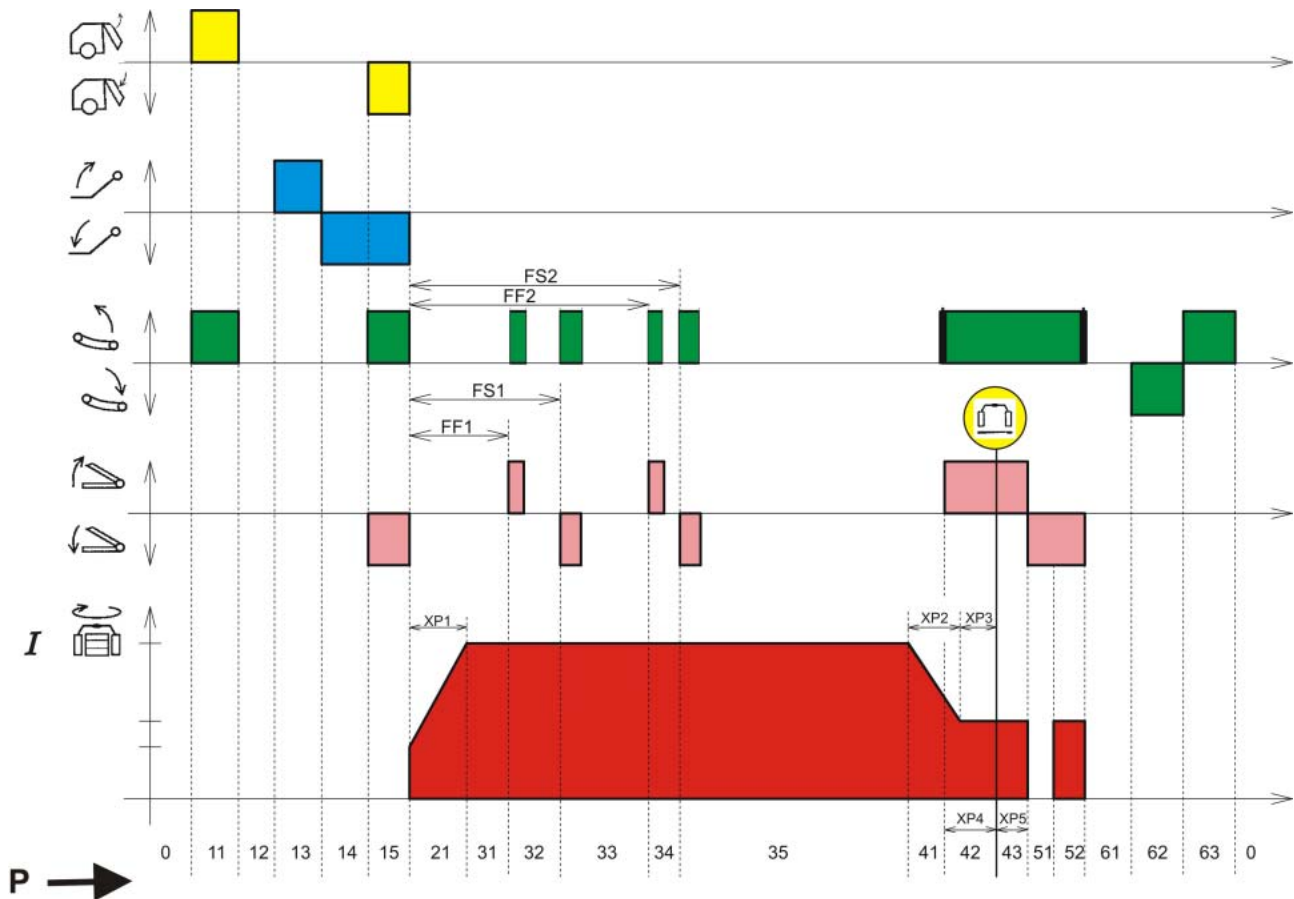
| Item         | Component                      | Measured value | Note            |
|--------------|--------------------------------|----------------|-----------------|
| B106<br>B107 | Sensor                         | I – O          | Switching earth |
| Y133<br>Y134 | Solenoid coil<br>Solenoid coil | 1.9 A; 6.4 Ω   |                 |

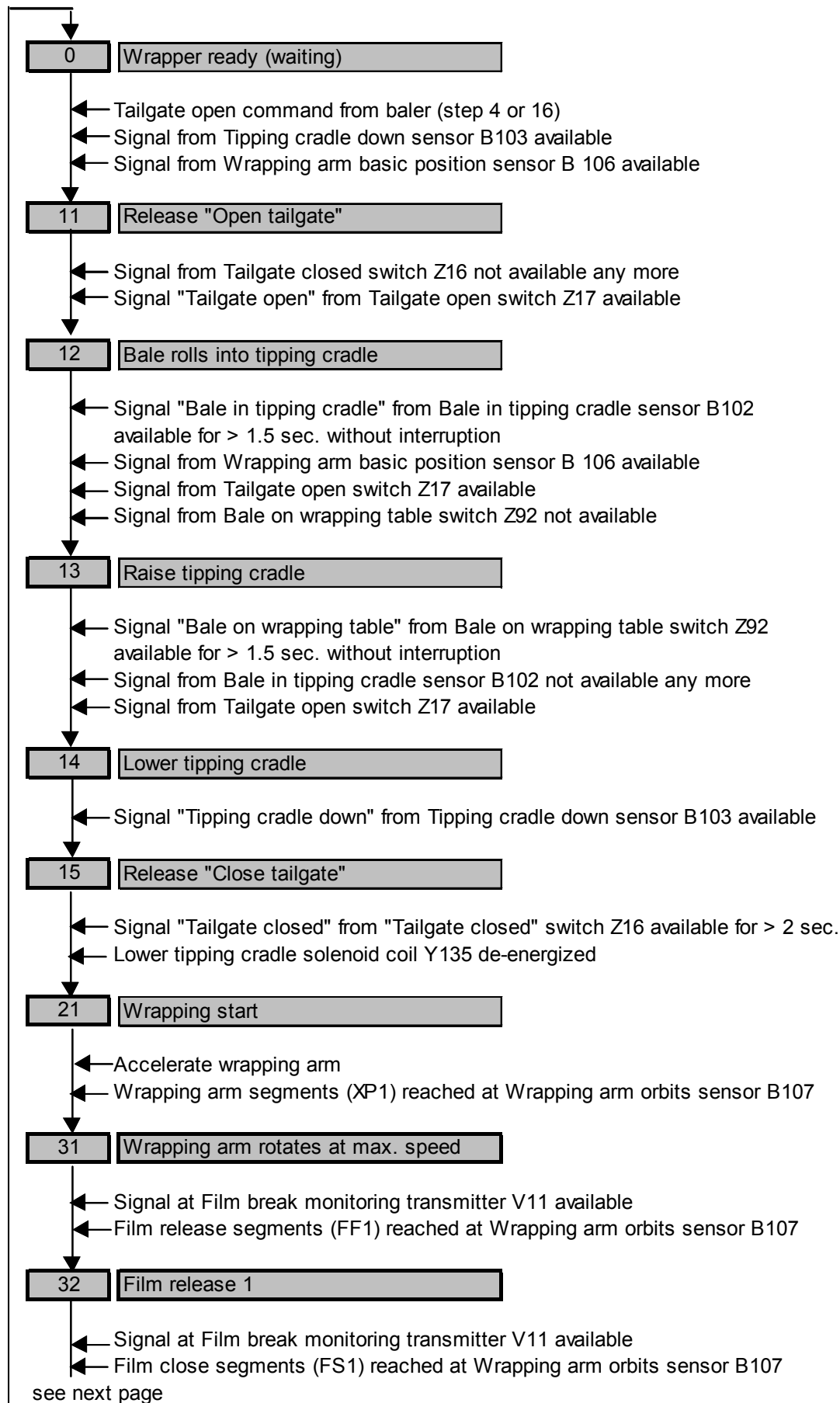
**Description of function:**

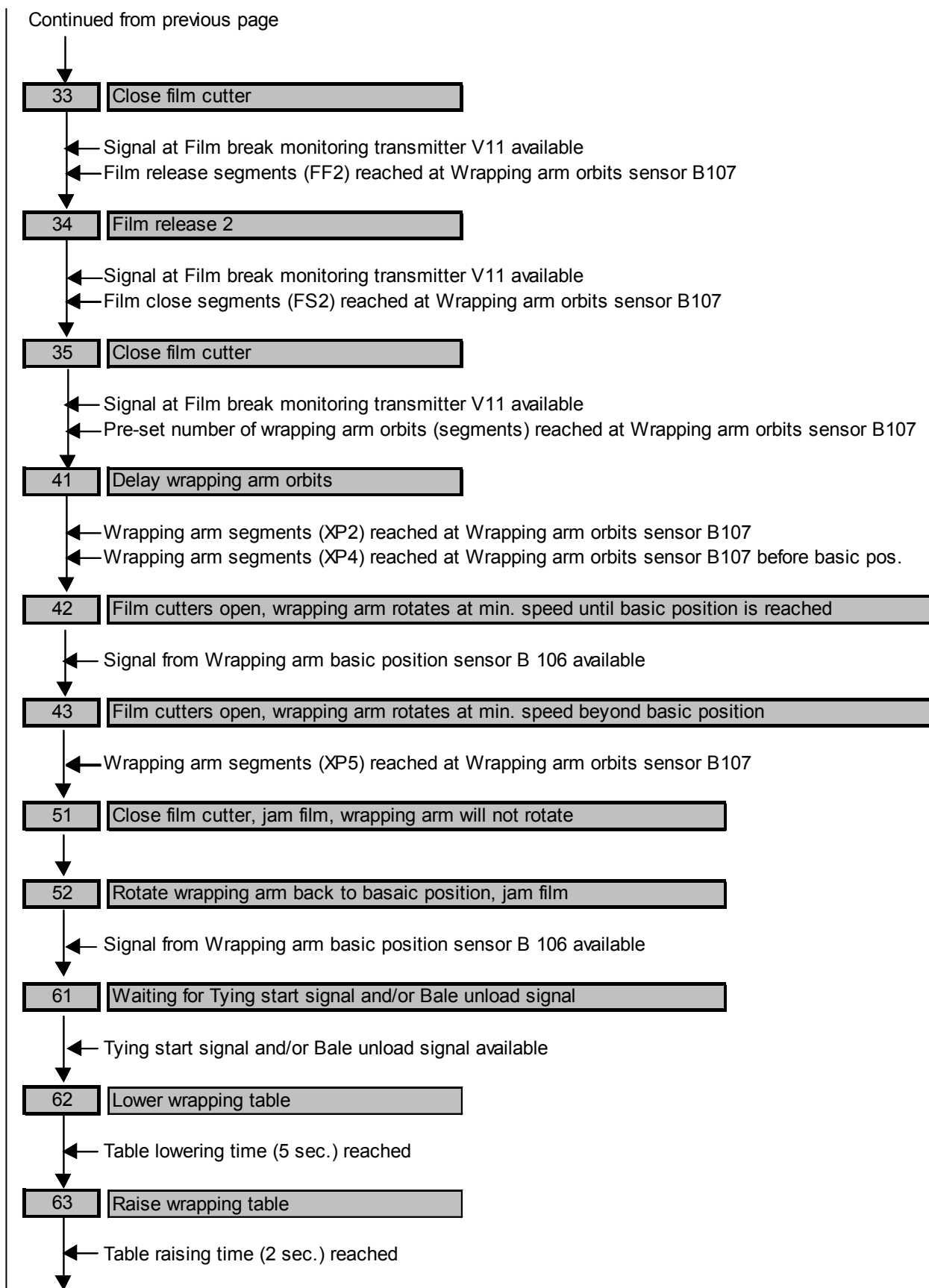
|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Wrapping arm basic position             | The basic position of the wrapping arm is a pre-condition for many automatic processes. The basic position is detected by the Wrapping arm basic position sensor B106 and the Wrapping arm orbits sensor B107. The wrapping arm is in its basic position when the slot of the perforated disk is below the Wrapping arm basic position sensor B106, but the Wrapping arm orbits sensor B107 detects metal (see also Wiring loom M). In this position, the wrapping arm is crosswise to the machine. |
| Wrapping arm orbits                     | Module A22 detects the position and the number of orbits of the wrapping arm via Wrapping arm orbits sensor B107.                                                                                                                                                                                                                                                                                                                                                                                   |
| Rotate wrapping arm                     | Module A22 actuates the Wrapping arm forward solenoid coil Y133 according to the "Wrapping" program. This is done using pulse-width modulation in order to allow controlled acceleration and deceleration of the wrapping arm.                                                                                                                                                                                                                                                                      |
| Rotate wrapping arm backward            | To rotate the wrapping arm backward, the Wrapping arm backward solenoid coil Y134 is actuated in addition to Wrapping arm forward solenoid coil Y133.                                                                                                                                                                                                                                                                                                                                               |
| Emergency stop                          | When a safety bow switch Z91 or Z91-2 is actuated during rotation of the wrapping arm, module A22 immediately cuts the circuit to the Wrapping arm forward solenoid coil Y133. The wrapping process is interrupted. The Wrapping arm forward solenoid coil Y133 is only actuated again after another manual start signal on terminal A30 or A30-1.                                                                                                                                                  |
| Braking and positioning of wrapping arm | When the Wrapping arm forward solenoid coil Y133 is not actuated, the wrapping arm is decelerated by a multiple disk brake and kept in position by a hydraulic clamping device.<br>(see also "Hydraulic System" chapter).                                                                                                                                                                                                                                                                           |
| <b>Setting of safety bow switch</b>     | The sensor test allows checking the setting of the safety bow switches Z91-1/Z91-2. When one of the safety bows is moved by approx. 150 mm, the signal should change (1 → 0).<br>(for further information refer to the respective chapter in the Operator's Manual).                                                                                                                                                                                                                                |
| <b>Setting of wrapping arm sensors</b>  | The sensors B106/B107 are set to a clearance of 2-3 mm from the perforated disk (see Wiring loom M).                                                                                                                                                                                                                                                                                                                                                                                                |

# Wrapping sequence diagram:

The program steps (P) are displayed in menu 5/... of terminal A30 during the wrapping process.



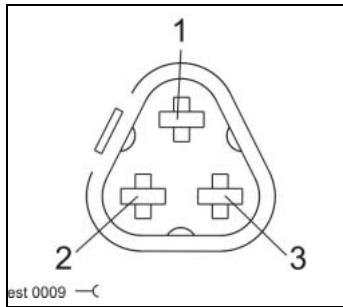




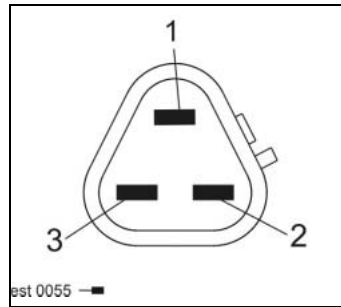


## Connector pin definition

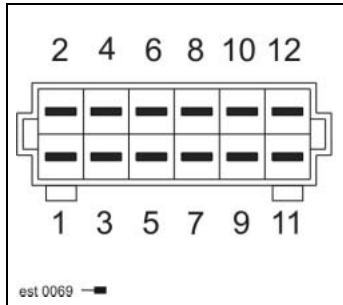
Socket B106/ 107



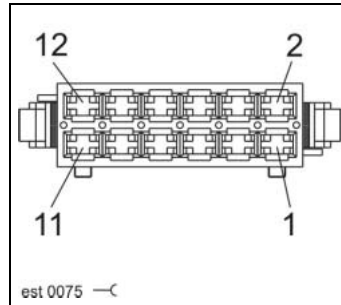
Connector B106/ 107



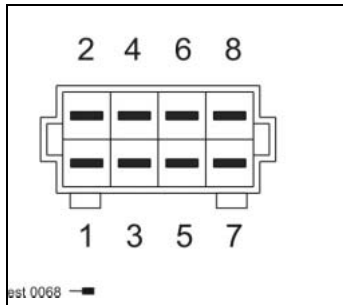
Connector X35



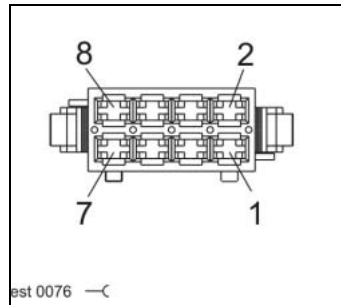
Socket X35



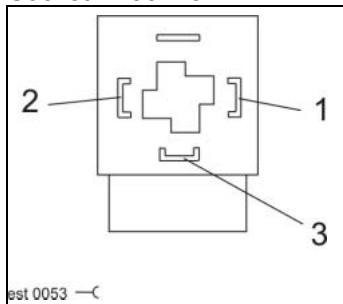
Connector X36



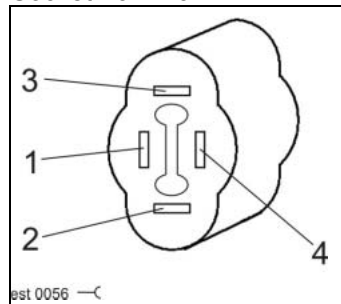
Socket X36



Socket Y133/ 134



Socket Z91/ Z91-2



**Connector pin definition**

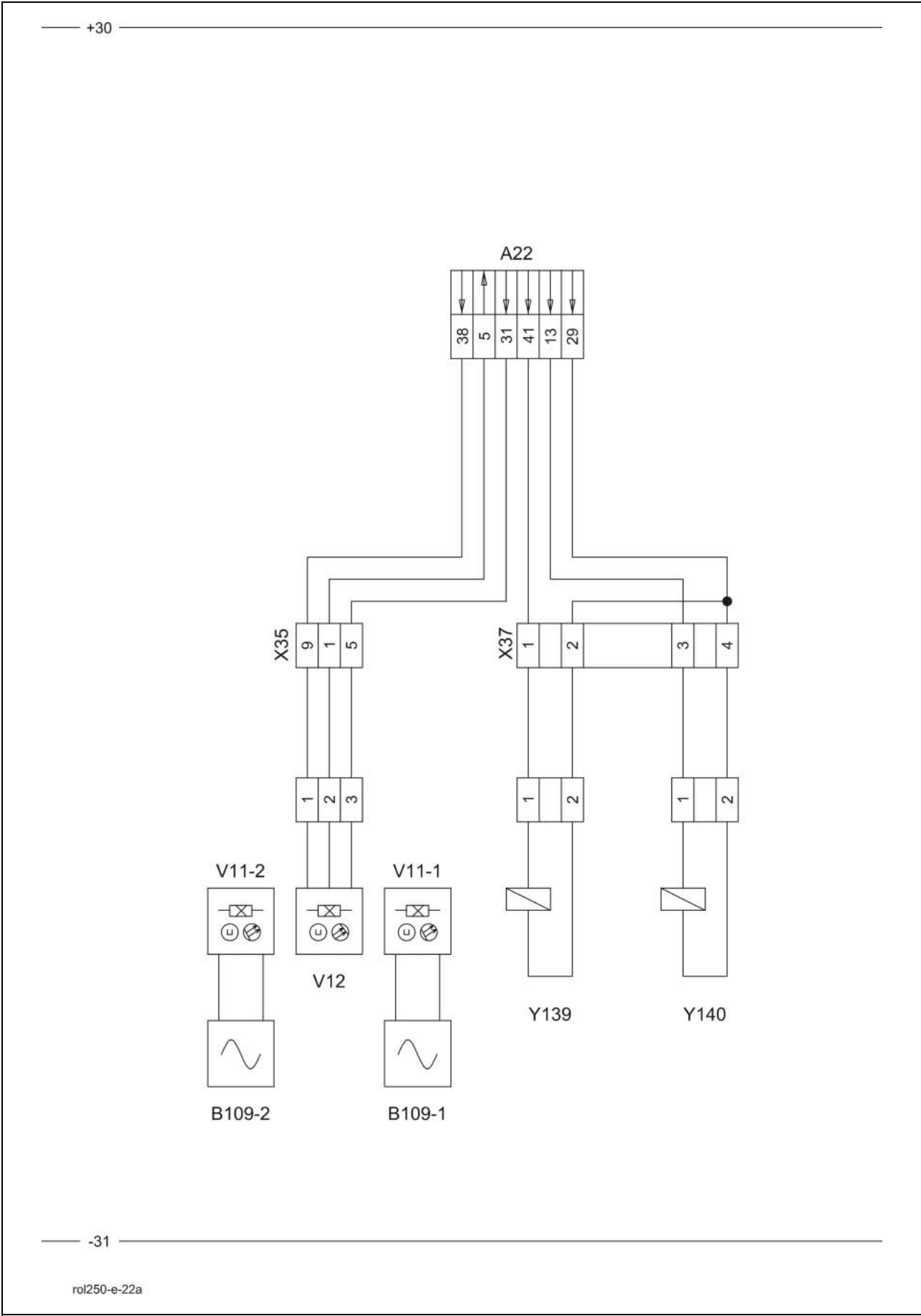
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| B106-1    | 1.0             | wt-bk  |
| B106-2    | 1.0             | gn     |
| B106-3    | 1.0             | rd-bk  |
|           |                 |        |
| B107-1    | 1.0             | wt-ye  |
| B107-2    | 1.0             | ye     |
| B107-3    | 1.0             | rd-gr  |
|           |                 |        |
| X35-2     | 1.0             | gn     |
| X35-3     | 1.0             | ye     |
| X35-4     | 1.0             | bk     |
| X35-5     | 1.0             | rd     |
| X35-6     | 1.0             | rd-gr  |
| X35-8     | 1.0             | wt     |
| X35-9     | 1.0             | wt-bk  |
| X35-10    | 1.0             | wt-ye  |
| X35-11    | 1.0             | br-ye  |
| X35-12    | 1.0             | br     |
|           |                 |        |
| X36-3     | 1.0             | br     |
| X36-4     | 1.0             | bl     |
|           |                 |        |
| Y133-1    | 1.0             | br     |
| Y133-2    | 1.0             | bl     |
|           |                 |        |
| Y134-1    | 1.0             | br-ye  |
| Y134-2    | 1.0             | br     |
|           |                 |        |
| Z91-1 – 1 | 1.0             | bk     |
| Z91-1 – 2 | 1.0             | wt     |
|           |                 |        |
| Z91-2 – 1 | 1.0             | bk     |
| Z91-2 – 2 | 1.0             | wt     |

**22a**

**Open / close film cutter,  
film break monitoring**

UNIWRAP

22a - Open / close film cutter, film break monitoring - UNIWRAP



Key to diagram:

- A22 Bale wrapper module ..... E-10
- B109-1 Film break sensor ..... Wiring loom M
- B109-2 Film break sensor ..... Wiring loom M
- X35 Connector ..... Wiring loom M
- X37 Connector ..... Wiring loom K
- Y139 Open film cutters solenoid coil ..... Wiring loom K
- Y140 Close film cutters solenoid coil ..... Wiring loom K
- V11-1 Film break monitoring transmitter ..... Wiring loom M
- V11-2 Film break monitoring transmitter ..... Wiring loom M
- V12 Film break monitoring receiver ..... Wiring loom M

Measured value table:

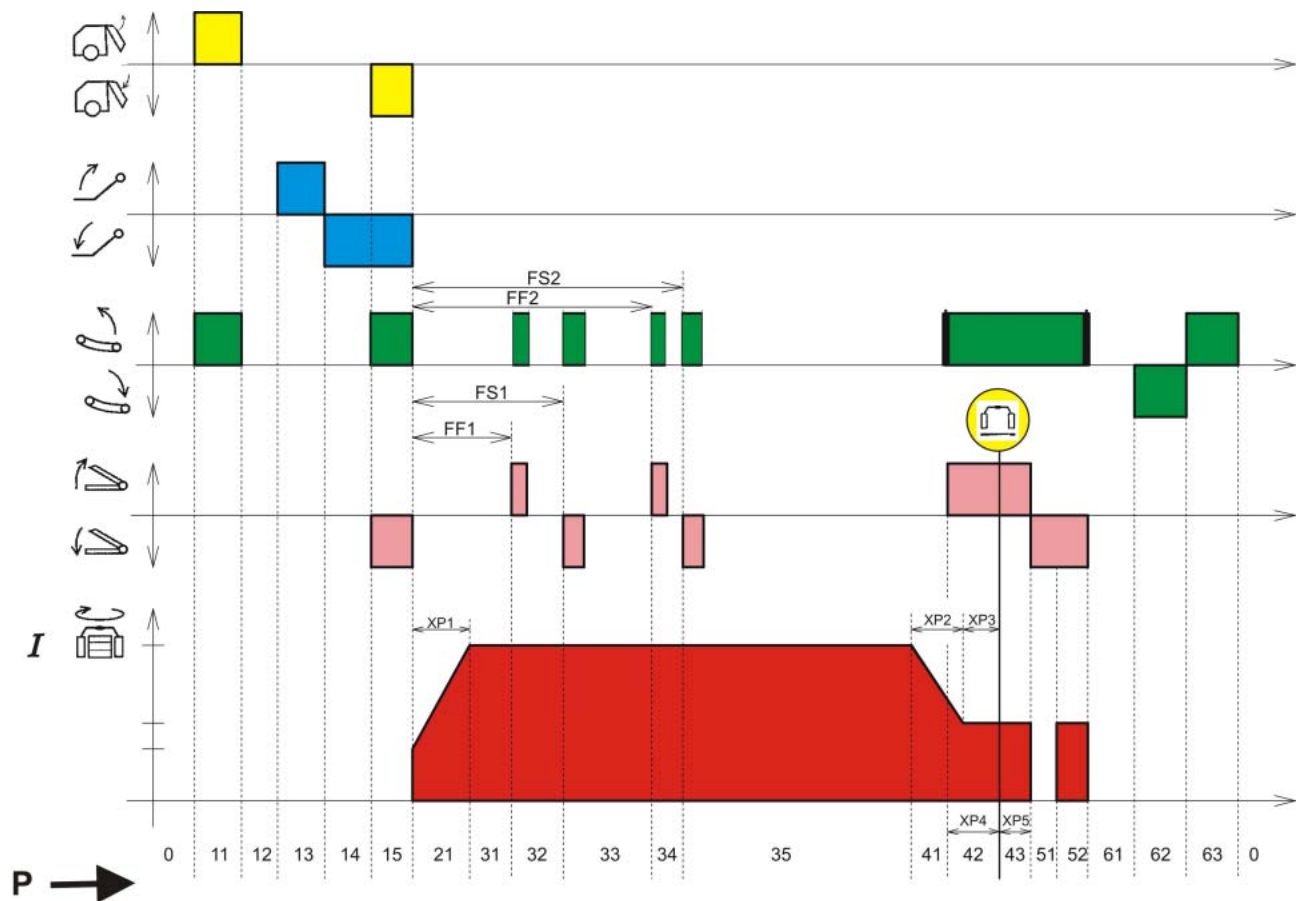
| Item             | Component                         | Measured value | Note                                                                                         |
|------------------|-----------------------------------|----------------|----------------------------------------------------------------------------------------------|
| B109-1<br>B109-1 | Sensor                            | 1000 – 1200 Ω  | Inductive<br><br>The signal voltage depends on the speed and on the clearance from the gear. |
| V11<br>V12       | Transmitter coil<br>Receiver coil |                |                                                                                              |
| Y139<br>Y140     | Solenoid coil                     | 1.9 A; 6.4 Ω   |                                                                                              |

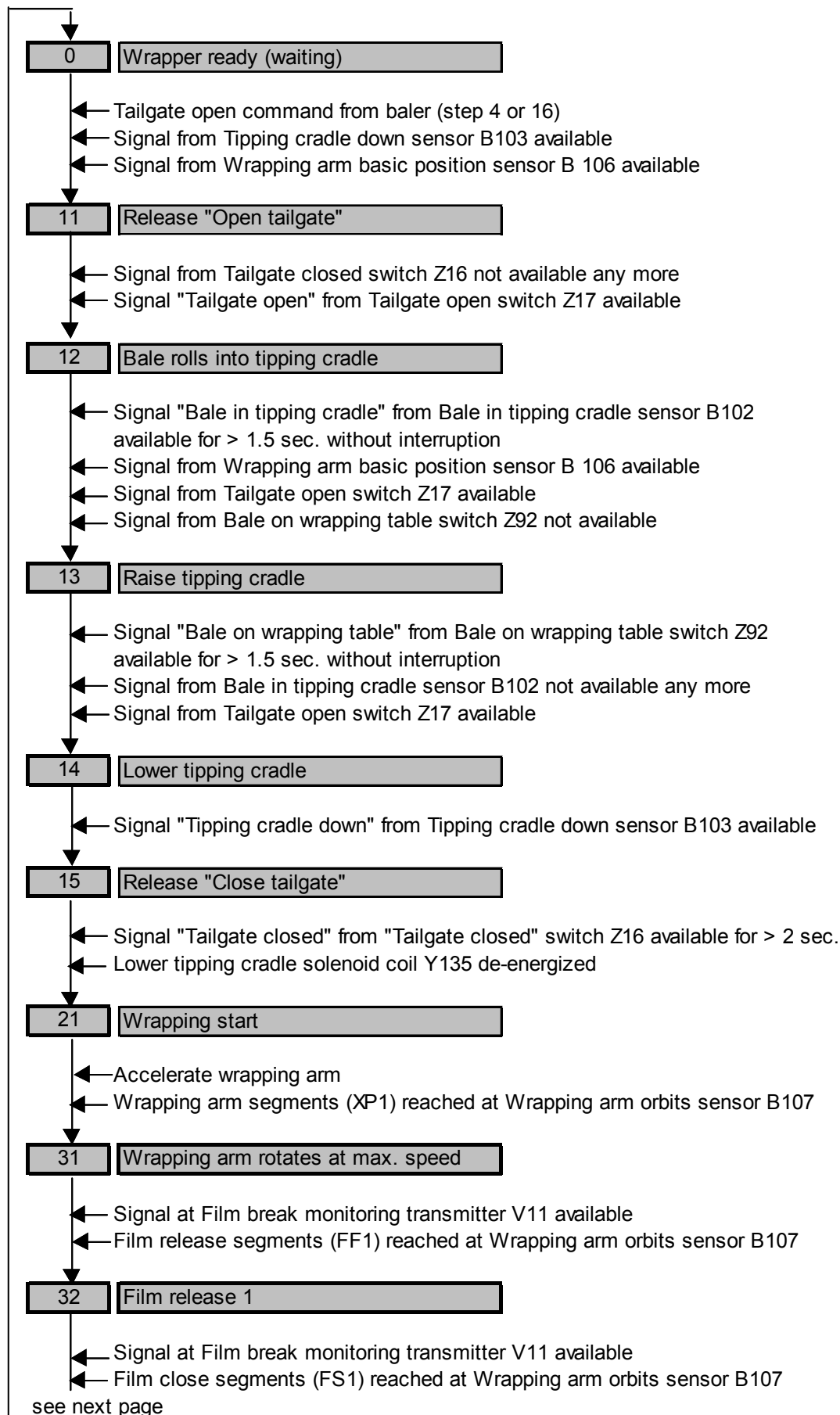
**Description of function:**

|                                     |                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Opening and closing of film cutters | To open and close the film cutters, the Open film cutters solenoid coil Y139 and Close film cutters solenoid coil Y140 are actuated. The Wrapping table raise solenoid coil (Y138) is actuated in parallel with this function. This is required in order to transmit a load pressure signal to the input pressure balance and to actuate the latter (see also "Hydraulic System" chapter). |
| Film break monitoring               | Rotation of the film rolls is monitored during the wrapping process under the pre-condition that the wrapping arm is accelerated and rotates with a min. speed of 20 rpm. It is also necessary to activate the film break monitoring via terminal A30 or A30-1 (see also relevant chapter in Operator's Manual).                                                                           |
| Sensor signals                      | At the top end of the stretch rolls, 4 magnets rotate below the Film break sensors B109-1 and B109-2. According to the speed and the clearance to the magnets, the sensors generate an alternating current. The Film break monitoring transmitters V11-1 and V11-2 convert this alternating current into a corresponding magnetic field.                                                   |
| Signal detection                    | At each rotation of the wrapping arm, the Film break monitoring receiver V12 detects the Film break monitoring transmitters V11-1 and V11-2. When a transmitter has not been detected, the wrapping process is stopped and the film break message is displayed in terminal A30 / A30-1.                                                                                                    |
| <b>Sensor setting</b>               | <p>On the pre-stretcher units, the film break sensors B109-1/109-2 should be set to a clearance of 2-3 mm from the magnets (see Wiring loom M).</p> <p>The clearance from the Film break monitoring transmitter V11-1/V11-2 to the Film break monitoring receiver V12 should be approx. 10 – 12 mm if the components cover each other up (see Wiring loom M).</p>                          |

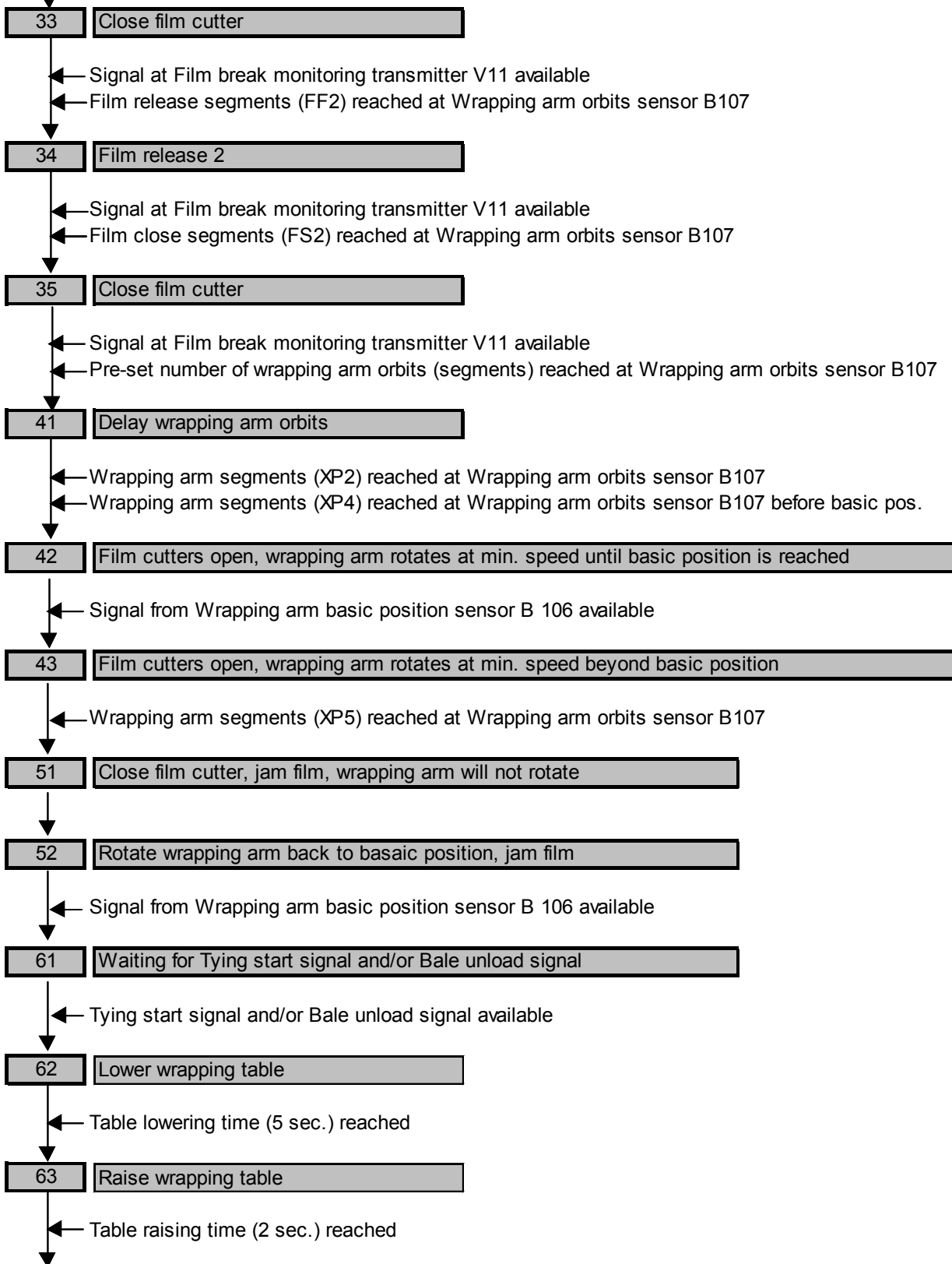
## Wrapping sequence diagram:

The program steps (P) are displayed in menu 5/... of terminal A30 during the wrapping process.





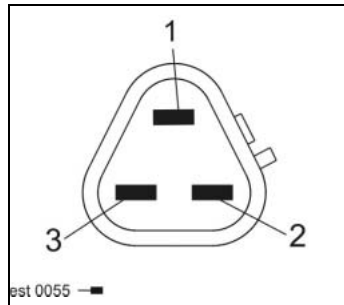
Continued from previous page



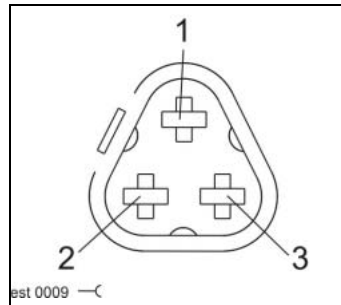


**Connector pin definition**

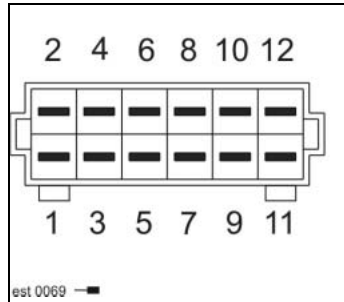
Connector V12



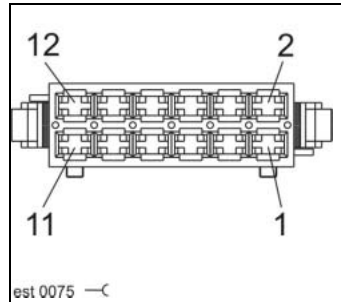
Socket V12



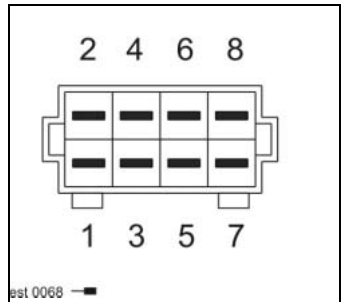
Connector X35



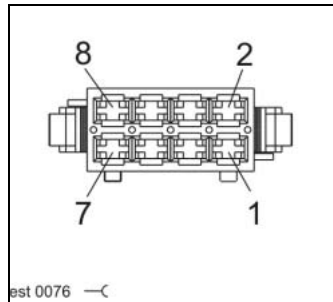
Socket X35



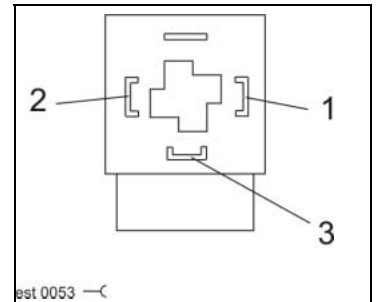
Connector X37



Socket X37



Socket Y139/ 140



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| V12-1     | 1.0             | wt-rd  |
| V12-2     | 1.0             | gr     |
| V12-3     | 1.0             | rd     |
|           |                 |        |
| X35-1     | 1.0             | gr     |
| X35-5     | 1.0             | rd     |
| X35-9     | 1.0             | wt-rd  |
|           |                 |        |
| X37-1     | 1.0             | br     |
| X37-2     | 1.0             | bl     |
| X37-3     | 1.0             | br     |
| X37-4     | 1.0             | bl     |

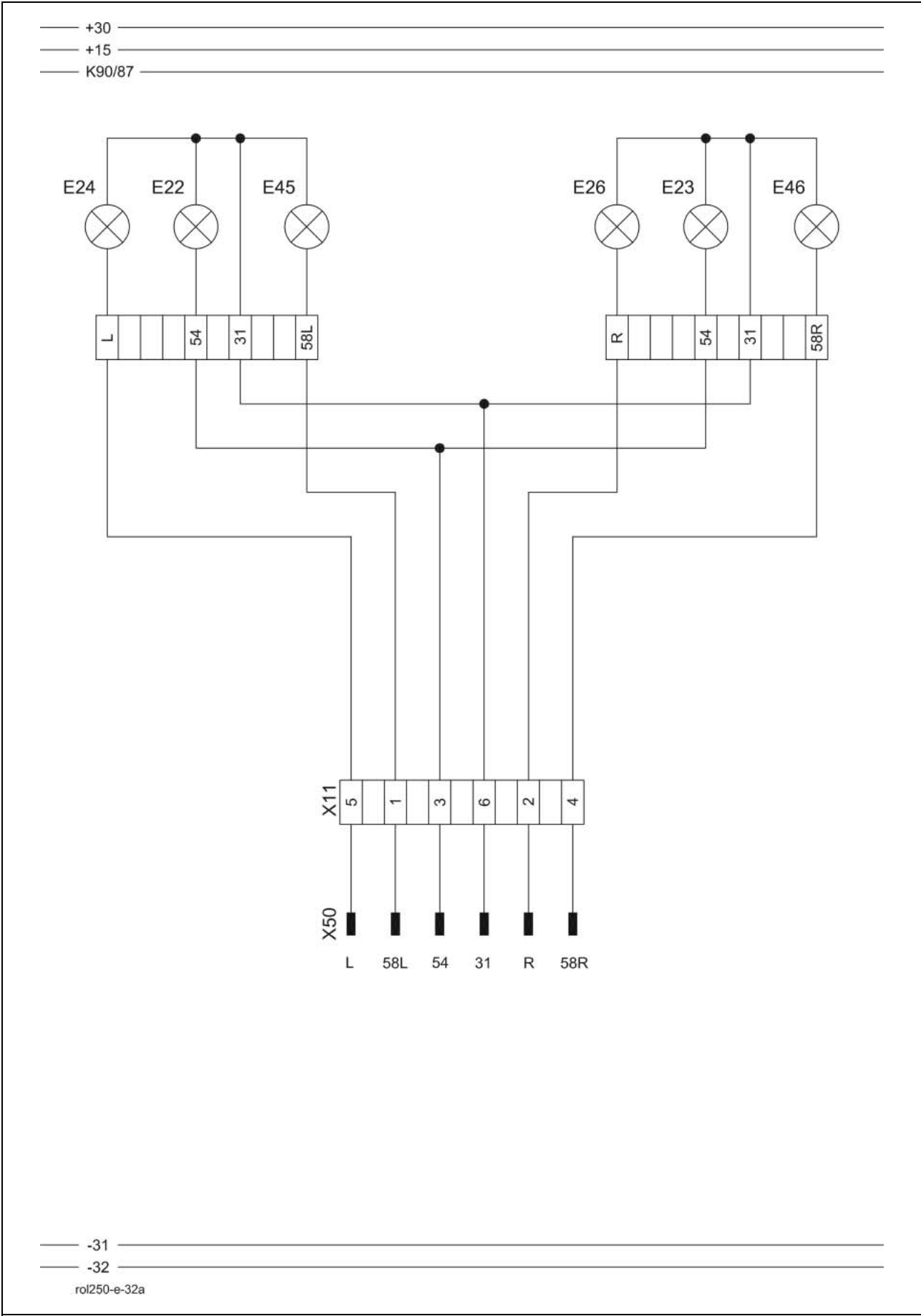
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| Y139-1    | 1.0             | br     |
| Y139-2    | 1.0             | bl     |
|           |                 |        |
| Y140-1    | 1.0             | br     |
| Y140-2    | 1.0             | bl     |



**32a**

**Taillight, side light**

32a - Taillight, side light (with central terminal compartment)



Key to diagram:

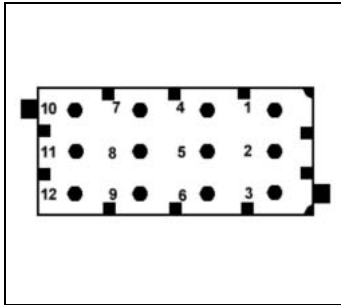
- E22 Brake light, left
- E23 Brake light, right
- E24 Turn flasher light, rear left
- E26 Turn flasher light, rear right
- E45 Taillight, left
- E46 Taillight, right
- X11 Lighting wiring loom
- X50 Lighting wiring loom

**Description of function:**

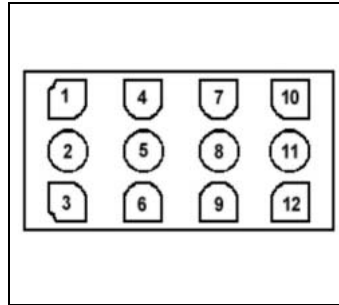
None

## Connector pin definition

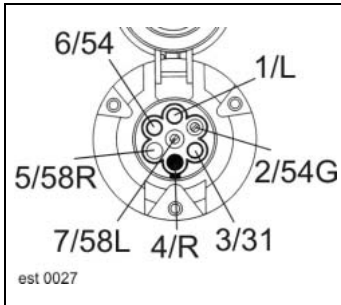
Connector X11



Socket X11



Socket X13



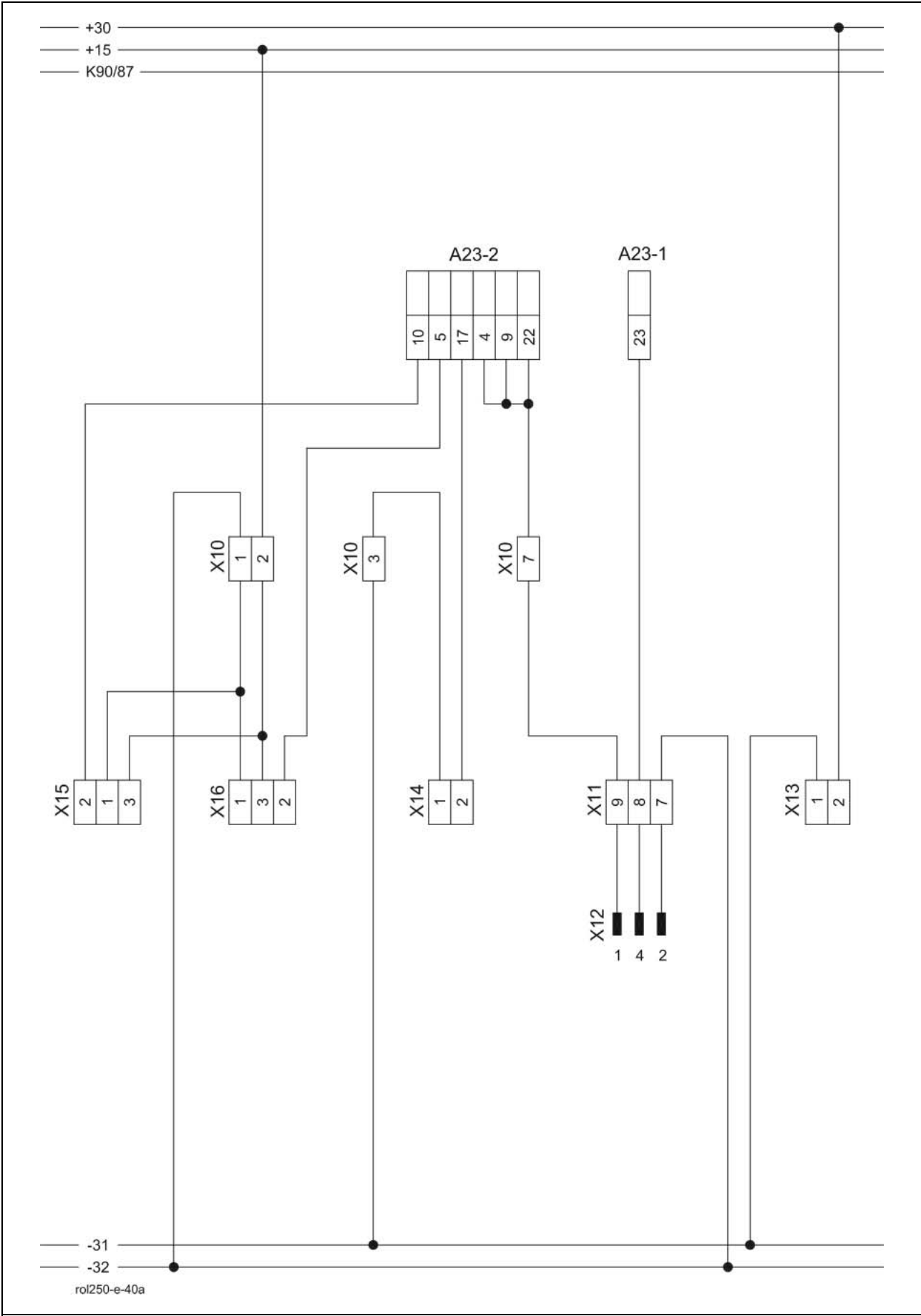
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X11-1     | 1.5             | gr-bk  |
| X11-2     | 1.5             | bk-gn  |
| X11-3     | 1.5             | bk-rd  |
| X11-4     | 1.5             | gr-rd  |
| X11-5     | 1.5             | bk-wt  |
| X11-6     | 1.5             | br     |
|           |                 |        |
| X13-31    | 1.5             | br     |
| X13-54    | 1.5             | bk-rd  |
| X13-58L   | 1.5             | gr-bk  |
| X13-58R   | 1.5             | gr-rd  |
| X13- L    | 1.5             | bk-wt  |
| X13- R    | 1.5             | bk-gn  |

**40a**

## **Additional sockets**

Rollant 250 Comfort

40a - Additional sockets



Key to diagram:

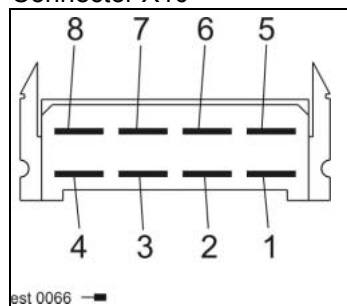
- A23-1 ROLLANT 250 module 1 .....Wiring loom B - part 2
- A23-2 ROLLANT 250 module 2 .....Wiring loom B - part 2
- X10 Connector ..... Wiring loom B - part 2 / C
- X11 Connector .....Wiring loom B - part 2
- X12 Socket (no function)..... not shown
- X13 Power supply connector  
(external consumers).....Wiring loom B - part 2
- X14 Socket (no function)..... Wiring loom C
- X15 Socket (no function)..... Wiring loom C
- X16 Socket (no function)..... Wiring loom C



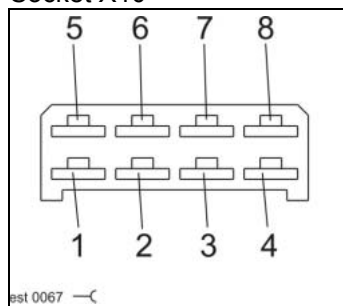
**Description of function:** None

## Connector pin definition

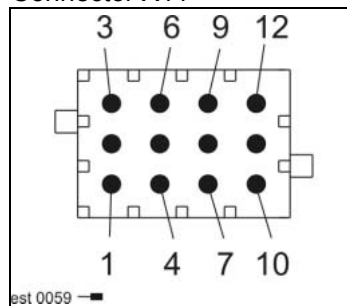
Connector X10



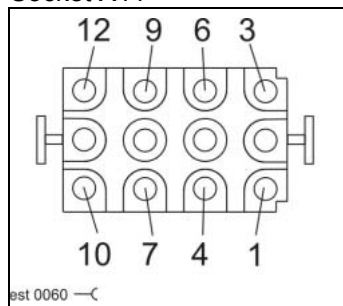
Socket X10



Connector X11



Socket X11



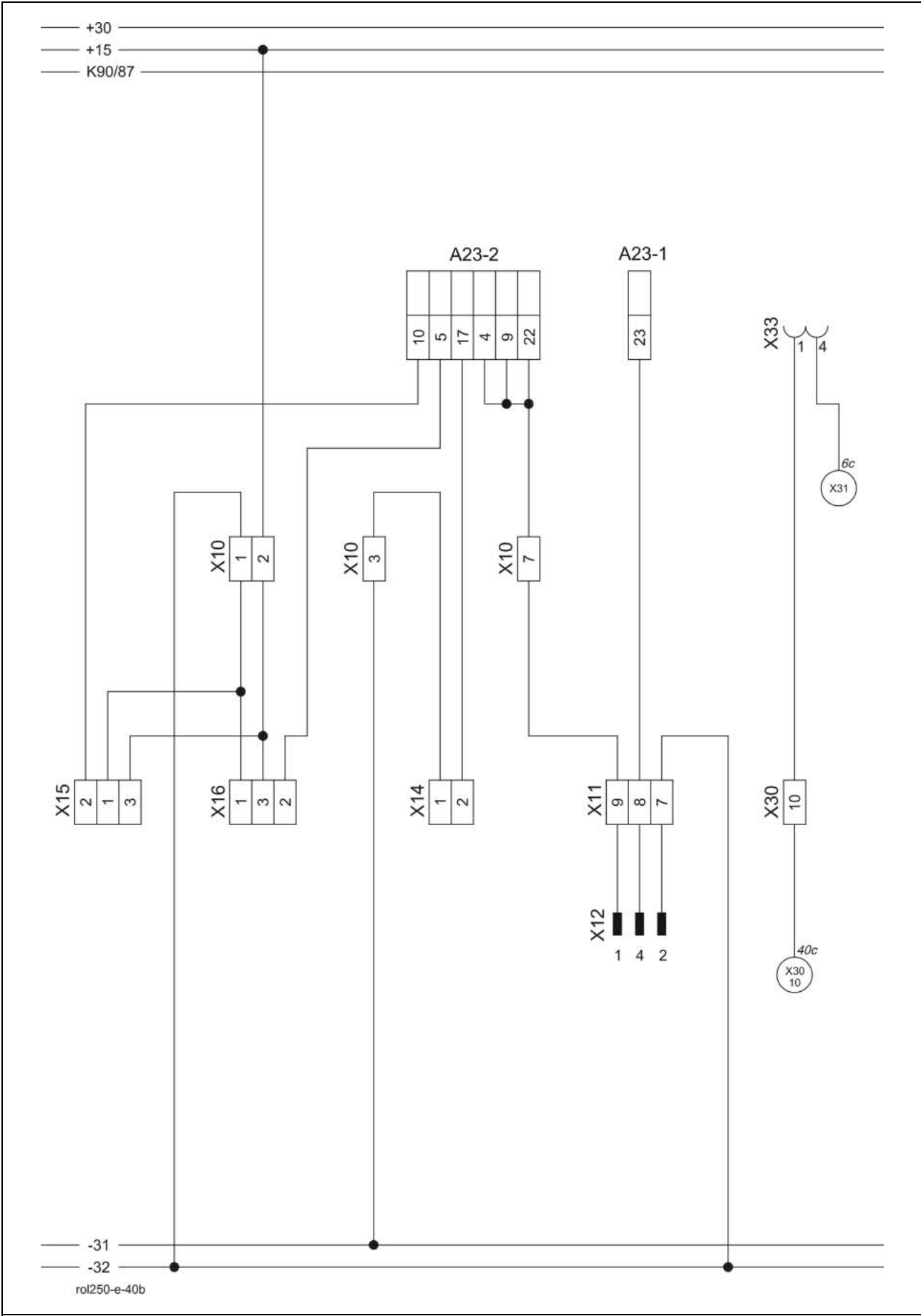
| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X10 – 1   | 1.0             | br-rd  |
| X10 – 2   | 1.0             | bk-rd  |
| X10 – 3   | 2.5             | br     |
| X10 – 7   | 0.5             | rd-wt  |
|           |                 |        |
| X11 – 7   | 0.5             | br-rd  |
| X11 – 8   | 0.5             | gr-wt  |
| X11 – 9   | 0.5             | rd-wt  |
|           |                 |        |
| X12 – 1   | 0.5             | rd-wt  |
| X12 – 2   | 0.5             | br-rd  |
| X12 – 4   | 0.5             | gr-wt  |
|           |                 |        |
| X13 – 1   | 1.5             | br     |
| X13 – 2   | 4.0             | bk     |
|           |                 |        |
| X14 – 1   | 0.5             | br     |
| X14 – 2   | 0.5             | rd-ye  |
|           |                 |        |
| X15 – 1   | 0.5             | br-rd  |
| X15 – 2   | 0.5             | gr-bk  |
| X15 – 3   | 0.5             | bk-rd  |
|           |                 |        |
| X16 – 1   | 0.5             | br-rd  |
| X16 – 2   | 0.5             | br-bk  |
| X16 – 3   | 0.5             | bk-rd  |

**40b**

## **Additional sockets**

Rollant 250 Comfort for UNIWRAP

40b - Additional sockets



Key to diagram:

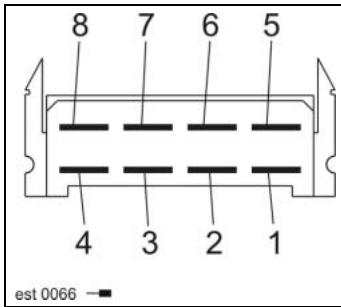
- A23-1 ROLLANT 250 module 1 ..... Wiring loom B - part 2
- A23-2 ROLLANT 250 module 1 ..... Wiring loom B - part 2
- X10 Connector ..... Wiring loom B - part 2 / C
- X11 Wiring loom B connector ..... Wiring loom B - part 2
- X12 Socket (no function) ..... not shown
- X14 Socket (no function) ..... Wiring loom C
- X15 Socket (no function) ..... Wiring loom C
- X16 Socket (no function) ..... Wiring loom C
- X30 Connector ..... Wiring loom D / K
- X33 Socket (no function) ..... Wiring loom D

**Description of function:**

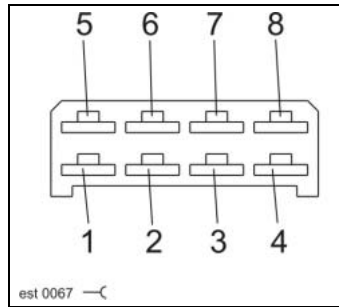
None

## Connector pin definition

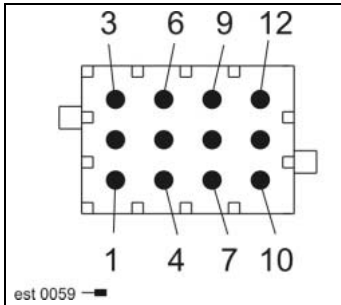
Connector X10



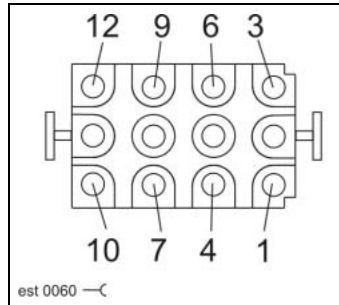
Socket X10



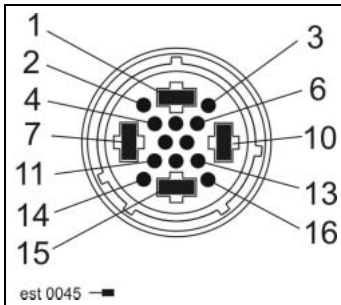
Connector X11



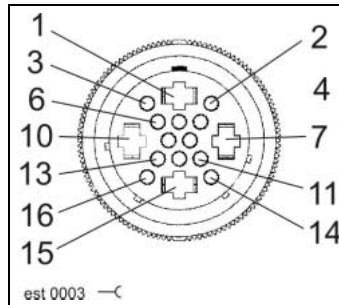
Socket X11



Connector X30



Socket X30



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X10 – 1   | 1.0             | br-rd  |
| X10 – 2   | 1.0             | bk-rd  |
| X10 – 3   | 2.5             | br     |
| X10 – 7   | 0.5             | rd-wt  |
|           |                 |        |
| X11 – 7   | 0.5             | br-rd  |
| X11 – 8   | 0.5             | gr-wt  |
| X11 – 9   | 0.5             | rd-wt  |
|           |                 |        |
| X12 – 1   | 0.5             | rd-wt  |
| X12 – 2   | 0.5             | br-rd  |
| X12 – 4   | 0.5             | gr-wt  |
|           |                 |        |
| X13 – 1   | 1.5             | br     |
| X13 – 2   | 4.0             | bk     |
|           |                 |        |
| X14 – 1   | 0.5             | br     |
| X14 – 2   | 0.5             | rd-ye  |
|           |                 |        |
| X15 – 1   | 0.5             | br.rd  |
| X15 – 2   | 0.5             | gr-bk  |
| X15 – 3   | 0.5             | bk-rd  |
|           |                 |        |
| X16 – 1   | 0.5             | br-rd  |
| X16 – 2   | 0.5             | br-bk  |
| X16 – 3   | 0.5             | bk-rd  |
|           |                 |        |
| X30 – 10  | 1.0             | bk-bl  |
|           |                 |        |
| X33 – 1   | 1.0             | bk-bl  |
| X33 – 4   | 1.0             | bk-rd  |



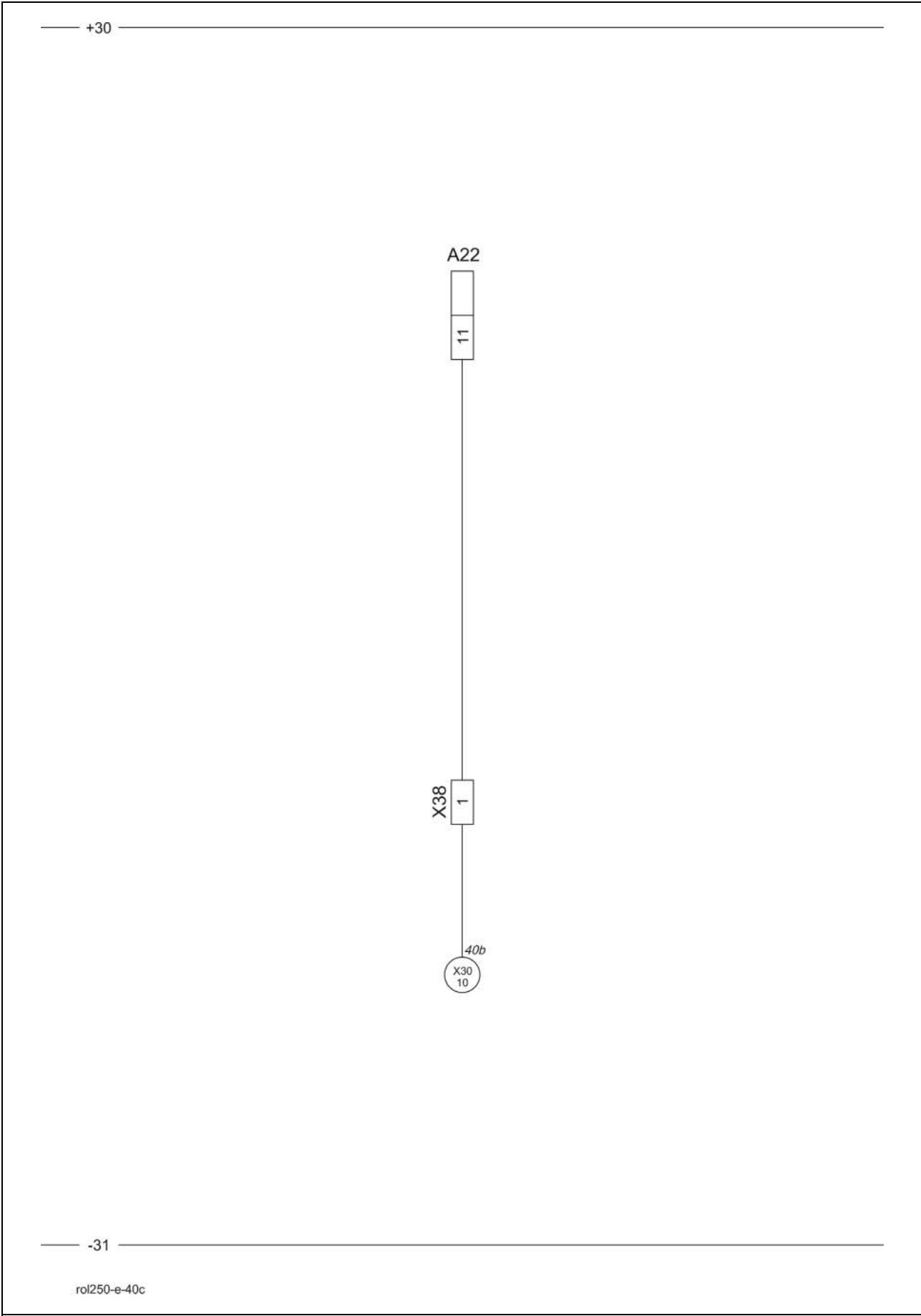


**40c**

## **Additional sockets**

UNIWRAP up to serial no. 130

40c - Additional sockets



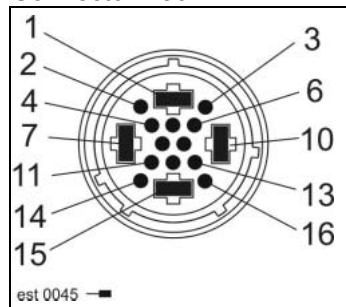
Key to diagram:

|     |                             |                   |
|-----|-----------------------------|-------------------|
| A22 | Bale wrapper module.....    | E10               |
| X30 | Wiring loom connector ..... | Wiring loom D / K |
| X38 | Connector .....             | E10               |

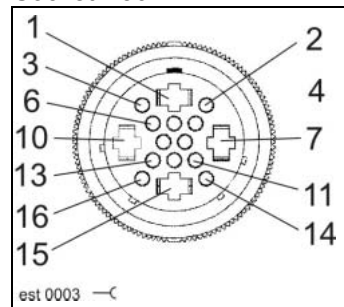
**Description of function:**      None

## Connector pin definition

Connector X30



Socket X30



| Connector | mm <sup>2</sup> | Colour |
|-----------|-----------------|--------|
| X30 - 10  | 2.5             | bl     |
|           |                 |        |
| X38 - 1   | 2.5             | bl     |



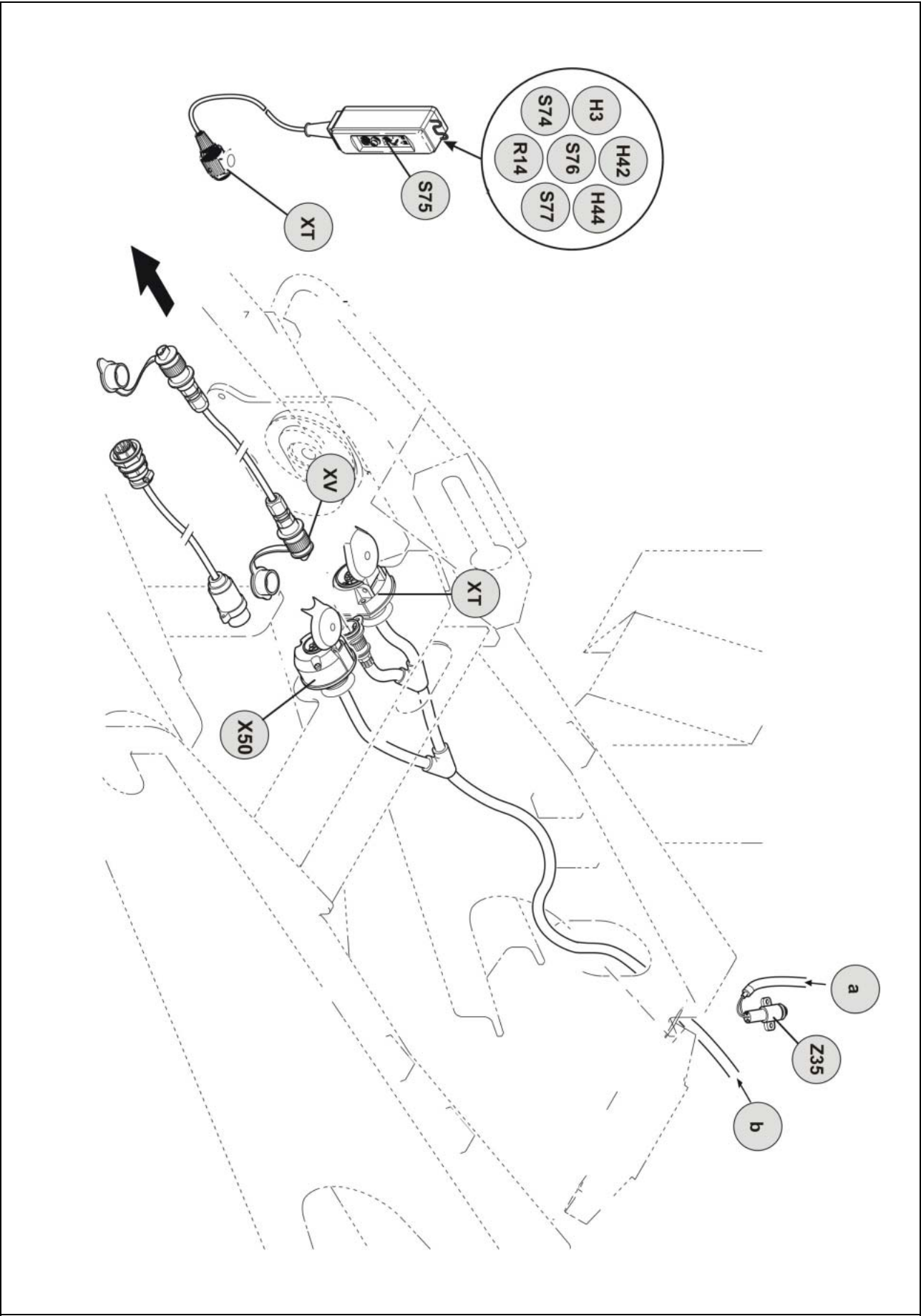
## **Wiring loom A – part 1**

- Rollant 250 Standard

Wiring loom A – part 1 (Rollant 250 Standard)

Key to diagram:

|     |                                                      |
|-----|------------------------------------------------------|
| a   | Continued in wiring loom A – part 2                  |
| b   | Continued in wiring loom A – part 2                  |
| H3  | Operation signal light..... 11a                      |
| H42 | STOP signal light..... 11a                           |
| H44 | Buzzer ..... 11a                                     |
| R14 | CAN BUS matching resistor ..... 6a                   |
| S74 | Wrapping type selector switch ..... 11a              |
| S75 | Main switch ON / OFF - Rotocut ON / OFF ..... 1a, 7a |
| S76 | Wrapping delay switch (manual)..... 11a              |
| S77 | Wrapping release switch (manual)..... 11a            |
| X50 | Lighting wiring loom connector ..... 32a             |
| XT  | Terminal connector ..... 1a                          |
| XV  | Power supply connector ..... 1a                      |
| Z35 | Cam track actual value switch..... 11a               |



## **Wiring loom A – part 2**

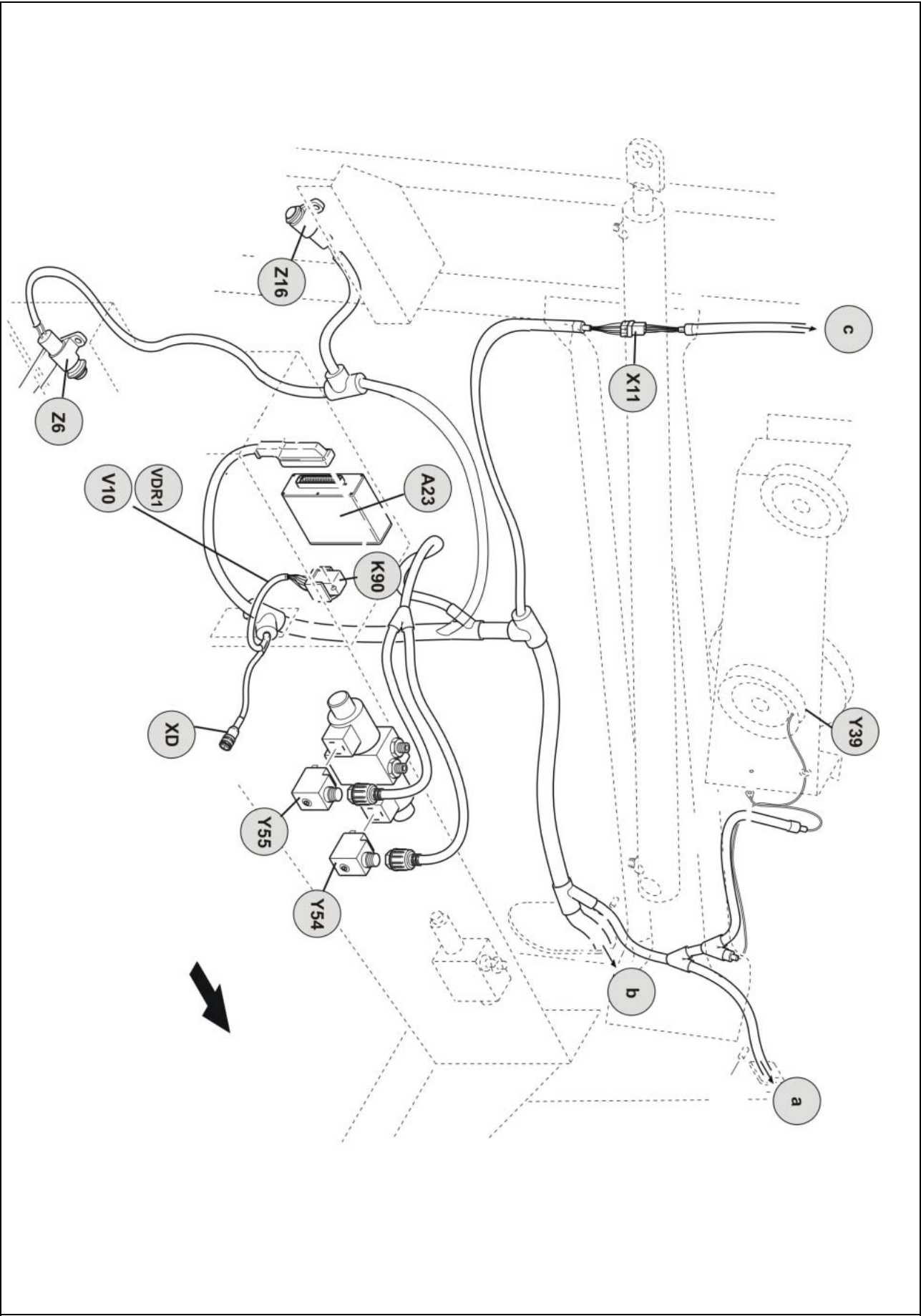
- Rollant 250 Standard



Key to diagram:

|      |                                          |             |
|------|------------------------------------------|-------------|
| a    | Continued in wiring loom A – part 1      |             |
| b    | Continued in wiring loom A – part 1      |             |
| c    | Lighting wiring loom.....                | 32a         |
| A23  | Module.....                              | 6a, 7a, 11a |
| K90  | Power supply relay K90/87.....           | 1a          |
| V10  | Reverse polarity protection diode.....   | 1a          |
| VDR1 | Varistor.....                            | 1a          |
| XD   | CAN bus connector (7 pin).....           | 6a          |
| X11  | Lighting wiring loom connector.....      | 32a         |
| Y39  | Twine/net coupling solenoid coil .....   | 11a         |
| Y54  | ROTOCUT knives OFF solenoid coil .....   | 7a          |
| Y55  | ROTOCUT knives ON solenoid coil .....    | 7a          |
| Z6   | Bale ejector actual value switch .....   | 11a         |
| Z16  | Tailgate closed actual value switch..... | 11a         |

Wiring loom A – part 2 (Rollant 250 Standard)



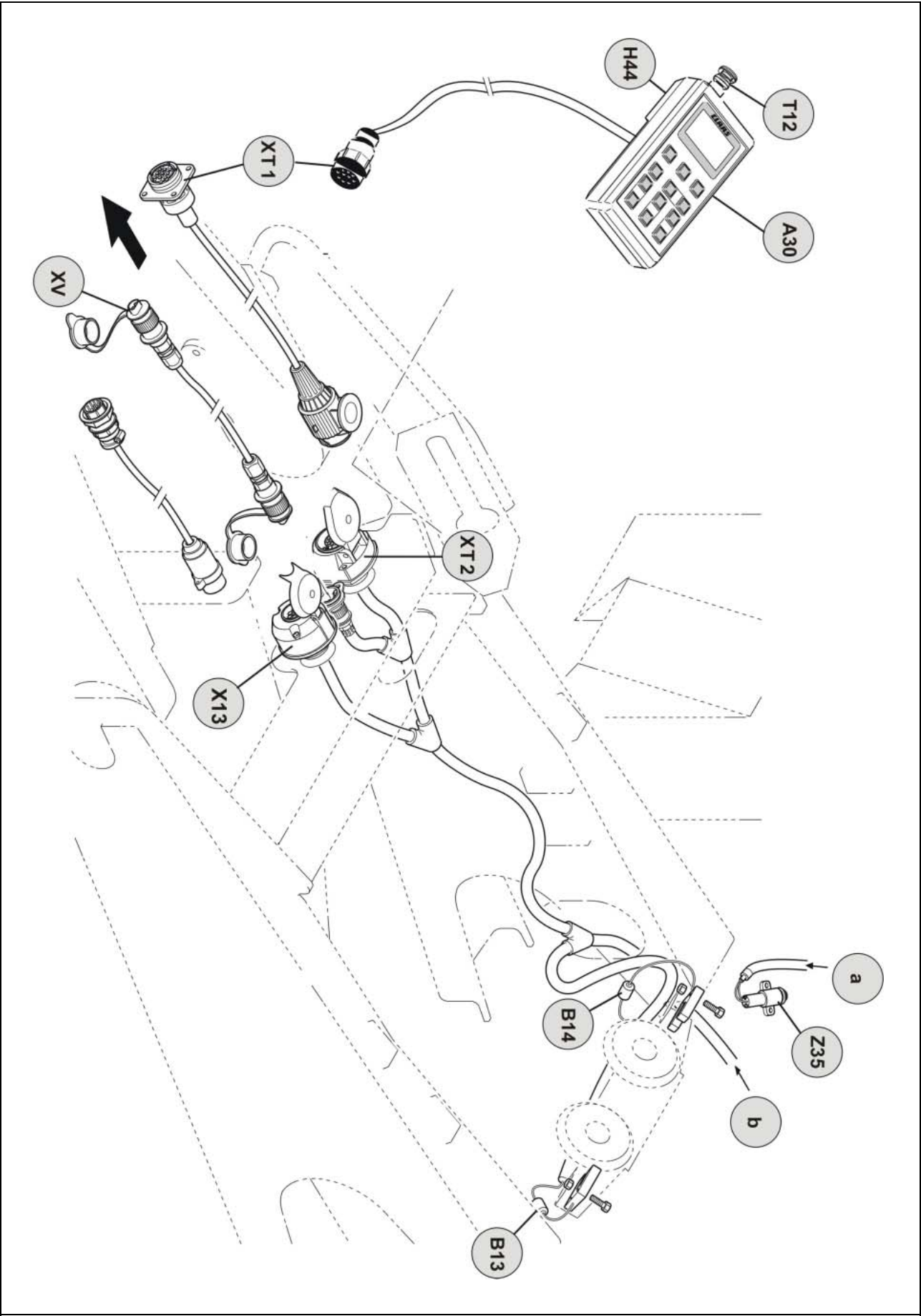
## **Wiring loom B – part 1**

- Rollant 250 Comfort
- Rollant 250 Comfort for UNIWRAP

Wiring loom B – part 1 (Rollant 250 Comfort / Rollant 250 Comfort for UNIWRAP)

Key to diagram:

|     |                                     |        |
|-----|-------------------------------------|--------|
| a   | Continued in wiring loom B – part 2 |        |
| b   | Continued in wiring loom B – part 2 |        |
| A30 | CCT terminal .....                  | 5a     |
| B13 | Twine roll left rpm sensor .....    | 11c    |
| B14 | Twine roll left rpm sensor .....    | 11c    |
| H44 | Buzzer .....                        | 5a     |
| T12 | Main switch.....                    | 1b, 1c |
| XT1 | Terminal connector .....            | 1b, 1c |
| XT2 | Terminal connector .....            | 1b, 1c |
| XV  | Power supply connector .....        | 1b, 1c |
| X50 | Lighting wiring loom connector..... | 32a    |
| Z35 | Cam track actual value switch.....  | 11b    |



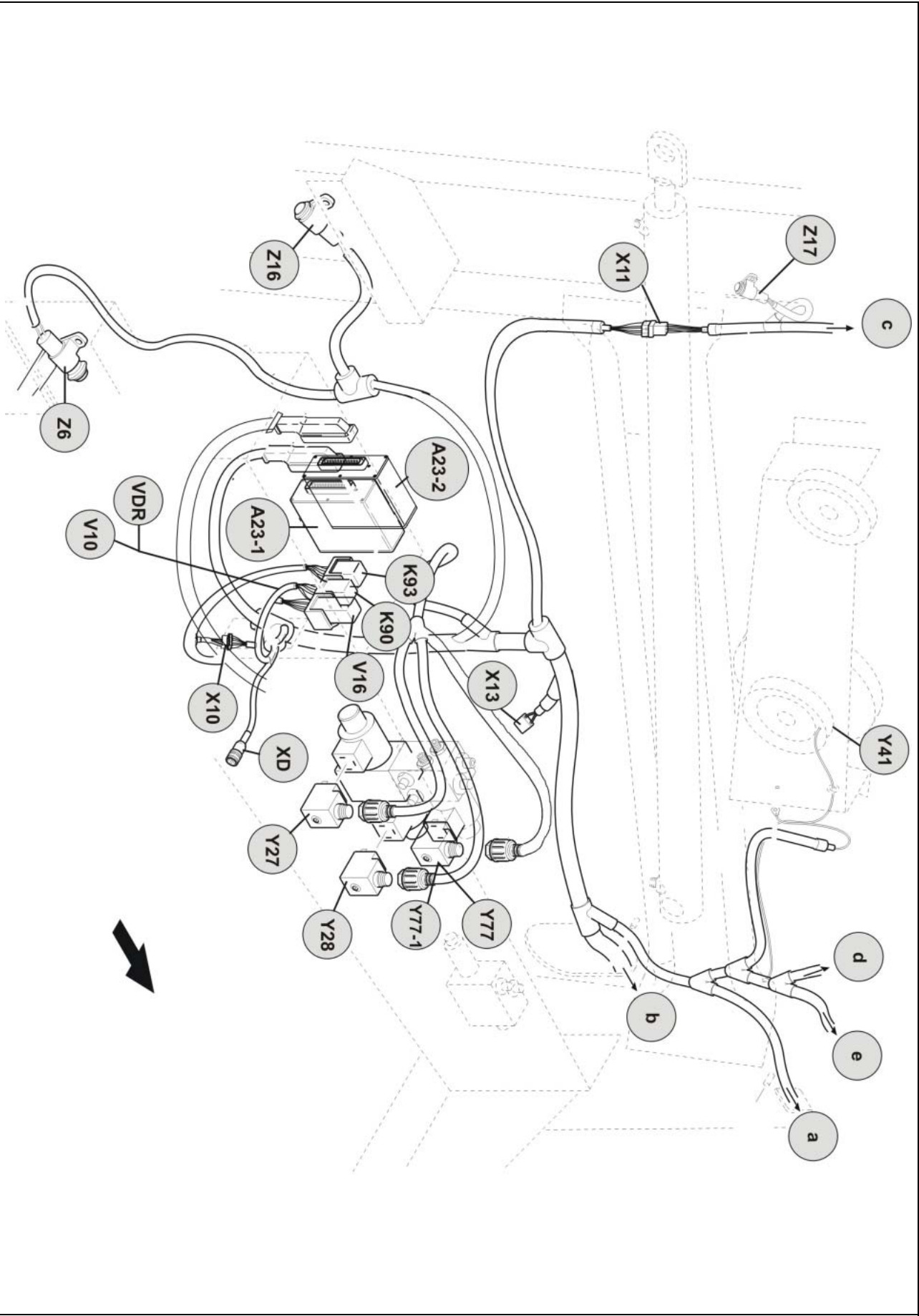
## **Wiring loom B – part 2**

- Rollant 250 Comfort
- Rollant 250 Comfort for UNIWRAP

Wiring loom B – part 2 (Rollant 250 Comfort / Rollant 250 Comfort for UNIWRAP)

Key to diagram:

- a Continued in wiring loom B – part 1
  - b Continued in wiring loom B – part 1
  - c Lighting wiring loom
  - d Continued in wiring loom B – part 3
  - e Continued in wiring loom B – part 3
- 
- |       |               |                                            |
|-------|---------------|--------------------------------------------|
| A23-1 | Module 1..... | 4a, 4b, 5a, 5b, 6b, 6c, 11b, 12a, 40a, 40b |
| A23-2 | Module 2..... | 6b, 6c, 7b, 20a, 40a, 40b                  |
- 
- |     |                                                                 |        |
|-----|-----------------------------------------------------------------|--------|
| K90 | Power supply relay<br>(protected against reverse polarity)..... | 1b, 1c |
| K93 | Rotocut knives ON/OFF relay .....                               | 7b     |
- 
- |      |                                        |        |
|------|----------------------------------------|--------|
| V10  | Reverse polarity protection diode..... | 1b, 1c |
| V16  | Amplifier (net cutter motor).....      | 11b    |
| VDR1 | Varistor .....                         | 1b, 1c |
- 
- |     |                                                  |        |
|-----|--------------------------------------------------|--------|
| XD  | CAN bus connector (7 pin).....                   | 6b, 6c |
| X10 | Connector .....                                  | 6b, 6c |
| X11 | Lighting wiring loom connector.....              | 32a    |
| X13 | Power supply connector (external consumers)..... | 40a    |
- 
- |     |                                                |        |
|-----|------------------------------------------------|--------|
| Y27 | Open tailgate solenoid coil .....              | 12a    |
| Y28 | Close tailgate solenoid coil .....             | 12a    |
| Y41 | Net coupling solenoid coil .....               | 11b    |
| Y77 | Circulation shut-off valve solenoid coil ..... | 4a, 4b |
- 
- |     |                                          |     |
|-----|------------------------------------------|-----|
| Z6  | Bale ejector actual value switch .....   | 11b |
| Z16 | Tailgate closed actual value switch..... | 11b |
| Z17 | Tailgate open actual value switch .....  | 11b |



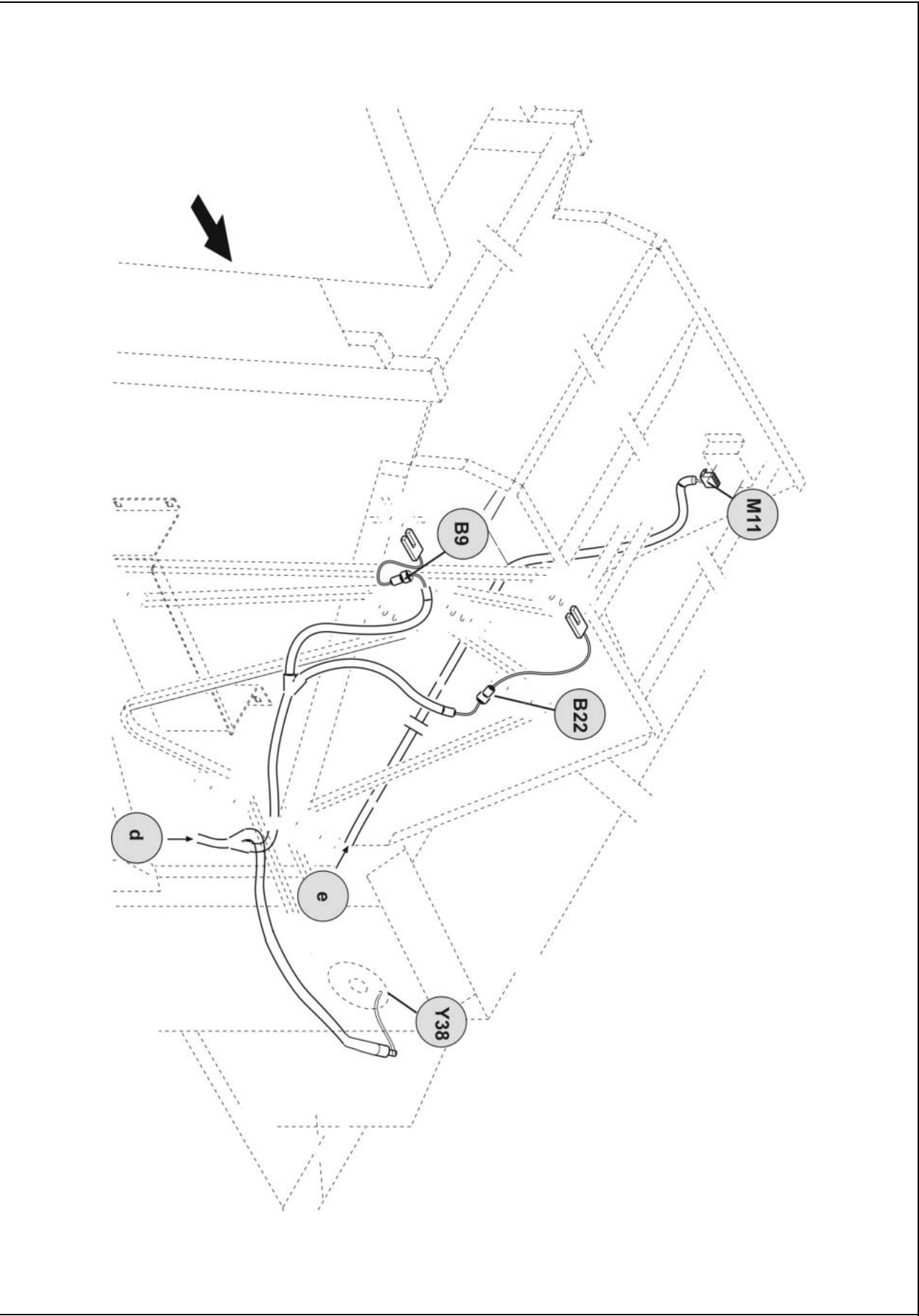
## **Wiring loom B – part 3**

- Rollant 250 Comfort
- Rollant 250 Comfort for UNIWRAP

Wiring loom B – part 3 (Rollant 250 Comfort / Rollant 250 Comfort for UNIWRAP)

Key to diagram:

- d Continued in wiring loom B – part 2
- e Continued in wiring loom B – part 2
- B9 Drive rpm sensor ..... 11b
- B22 Net roll rpm sensor ..... 11b
- M11 Net cutter motor ..... 11b
- Y38 Twine coupling solenoid coil ..... 11b



## **Wiring loom C**

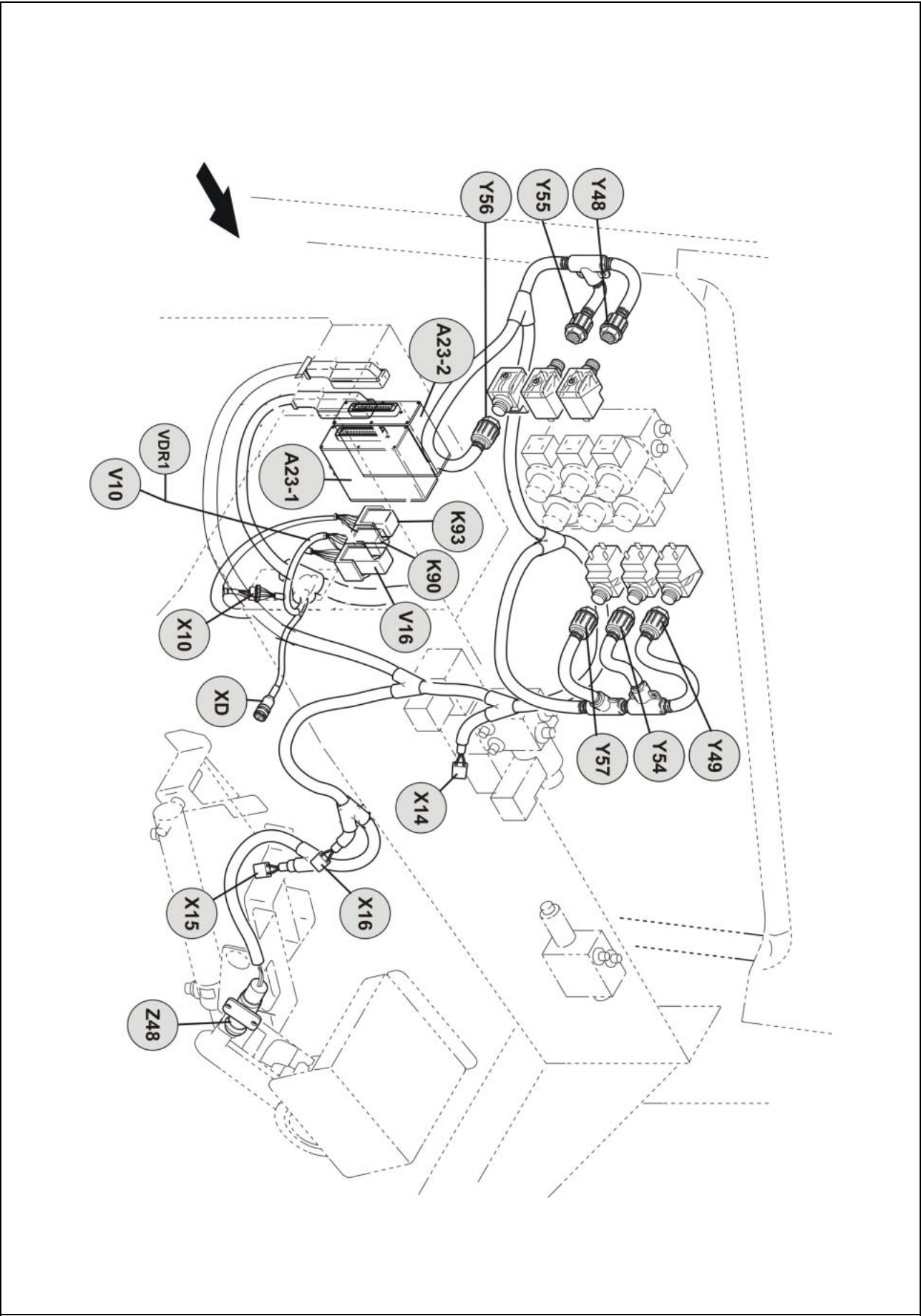
- Rollant 250 Comfort
- Rollant 250 Comfort for UNIWRAP



Wiring loom C (Rollant 250 Comfort / Rollant 250 Comfort for UNIWRAP)

Key to diagram:

|       |                                                                  |                                            |
|-------|------------------------------------------------------------------|--------------------------------------------|
| A23-1 | Module 1.....                                                    | 4a, 4b, 5a, 5b, 6b, 6c, 11b, 12a, 40a, 40b |
| A23-2 | Module 2.....                                                    | 6b, 6c, 7b, 20a, 40a, 40b                  |
| K90   | Power supply relay<br>(protected against reverse polarity) ..... | 1b, 1c                                     |
| K93   | Rotocut knives ON/OFF relay .....                                | 7b                                         |
| V10   | Reverse polarity protection diode .....                          | 1b, 1c                                     |
| V16   | Amplifier (net cutter motor) .....                               | 11b                                        |
| VDR1  | Varistor .....                                                   | 1b, 1c                                     |
| XD    | CAN bus connector (7 pin) .....                                  | 6b, 6c                                     |
| X14   | Socket (no function) .....                                       | 40a, 40b                                   |
| X15   | Socket (no function) .....                                       | 40a, 40b                                   |
| X16   | Socket (no function) .....                                       | 40a, 40b                                   |
| Y48   | Raise pick-up solenoid coil.....                                 | 20a                                        |
| Y49   | Lower pick-up solenoid coil .....                                | 20a                                        |
| Y54   | ROTOCUT knives OFF solenoid coil .....                           | 7b                                         |
| Y55   | ROTOCUT knives ON solenoid coil .....                            | 7b                                         |
| Y56   | Rotor reverse solenoid coil (extend cylinder).....               | 7b                                         |
| Y57   | Rotor reverse solenoid coil (retract cylinder).....              | 7b                                         |
| Z48   | Reverser actual value switch.....                                | 7b                                         |



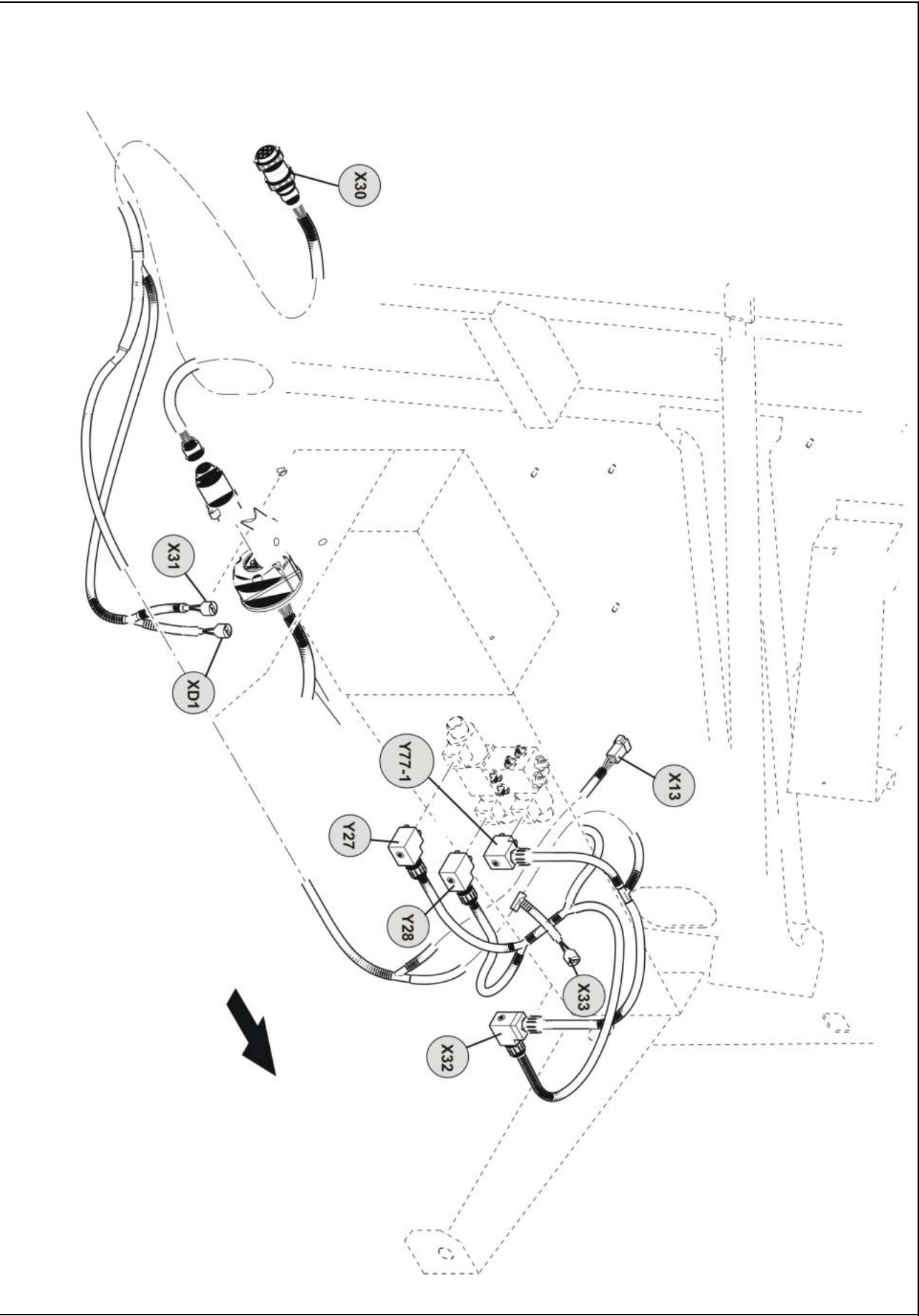
## **Wiring loom D**

- Rollant 250 Comfort for UNIWRAP

Wiring loom D (Rollant 250 Comfort for UNIWRAP)

Key to diagram:

|       |                                                              |     |
|-------|--------------------------------------------------------------|-----|
| XD1   | CAN bus connector (7 pin)                                    | 6c  |
| X13   | Connector                                                    | 40a |
| X30   | Connector                                                    | 6c  |
| X31   | Connector                                                    | 6c  |
| X32   | Connector                                                    | 4b  |
| X33   | Connector                                                    | 40b |
| Y27   | Tailgate open solenoid coil                                  | 12a |
| Y28   | Tailgate close solenoid coil                                 | 12a |
| Y77-1 | Circulation shut-off valve Rollant 250 Comfort solenoid coil | 4b  |



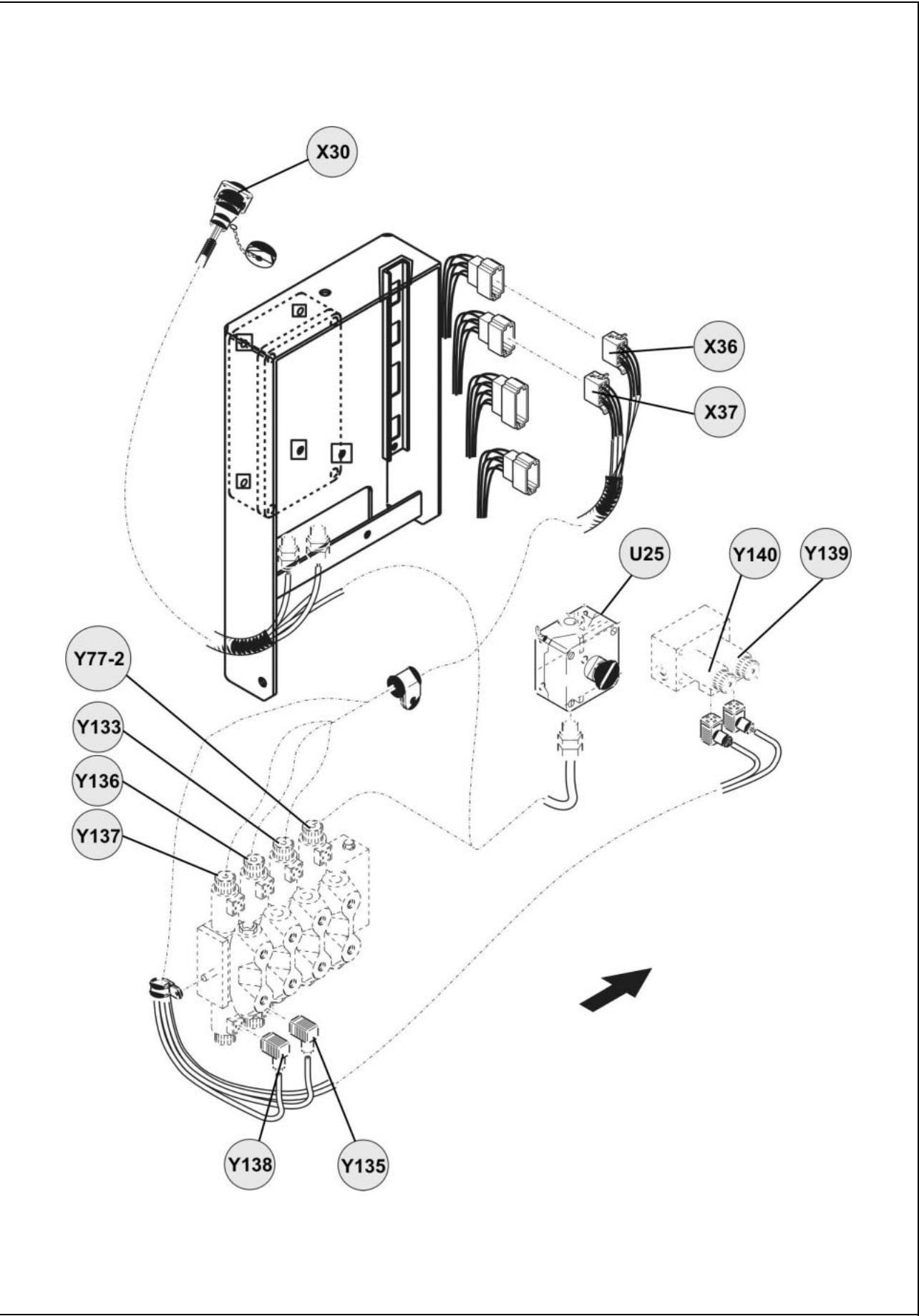
## **Wiring loom K**

- UNIWRAP

Key to diagram:

|       |                                                             |     |
|-------|-------------------------------------------------------------|-----|
| U25   | EMERGENCY OFF switch .....                                  | 1d  |
| X30   | Connector .....                                             | 1d  |
| X36   | Connector .....                                             | 19a |
| X37   | Connector .....                                             | 19a |
| Y77-2 | Bale wrapper circulation shut-off valve solenoid coil ..... | 4c  |
| Y133  | Wrapping arm forward solenoid coil .....                    | 21a |
| Y135  | Lower tipping cradle solenoid coil .....                    | 19a |
| Y136  | Raise tipping cradle solenoid coil .....                    | 19a |
| Y137  | Lower wrapping table solenoid coil .....                    | 19a |
| Y138  | Raise wrapping table solenoid coil .....                    | 19a |
| Y139  | Open film cutters solenoid coil .....                       | 22a |
| Y140  | Close film cutters solenoid coil .....                      | 22a |

Wiring loom K (UNIWRAP)



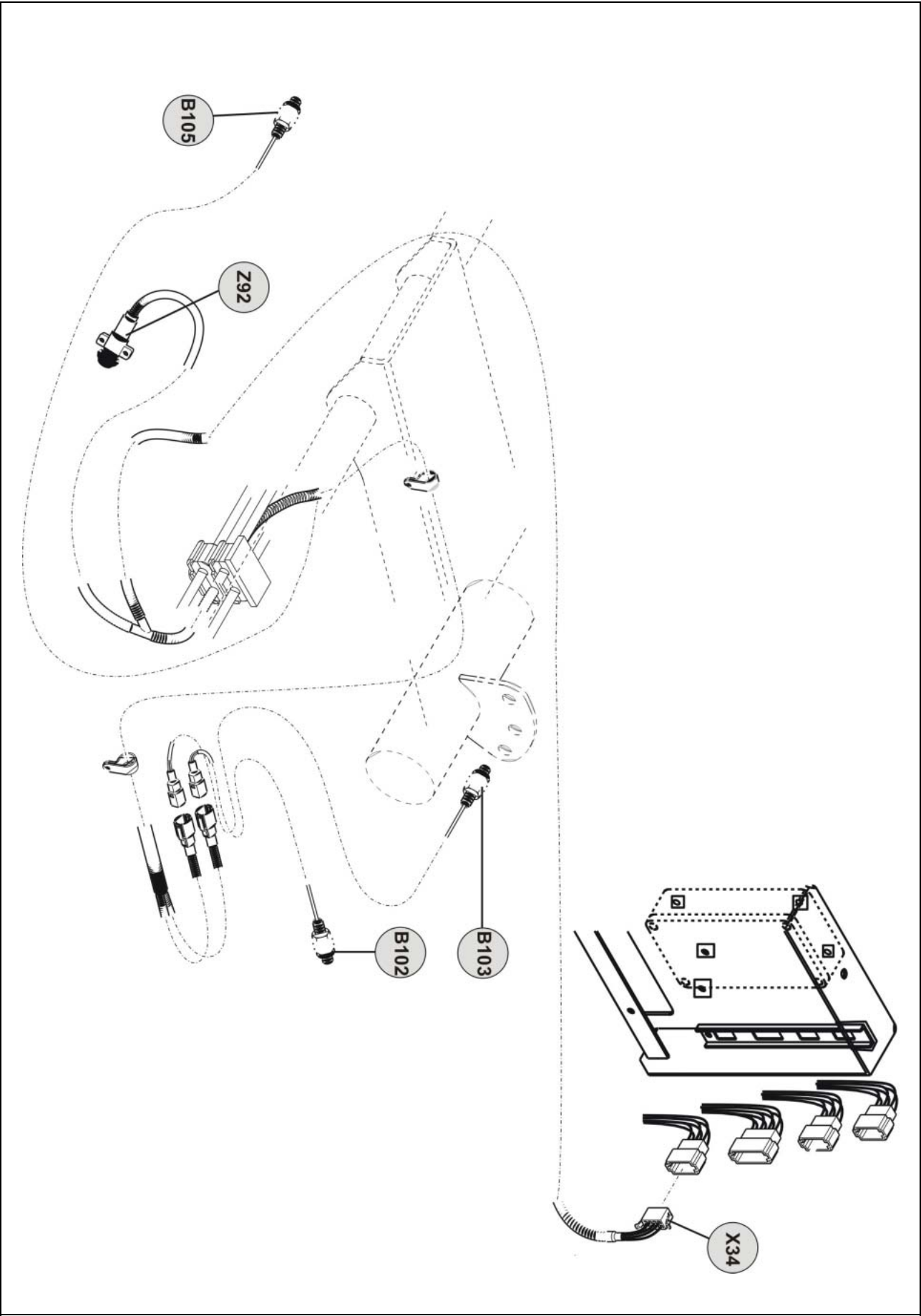
## **Wiring loom L**

- UNIWRAP

Key to diagram:

|      |                                                  |     |
|------|--------------------------------------------------|-----|
| B102 | Bale in tipping cradle sensor .....              | 19a |
| B103 | Tipping cradle down sensor .....                 | 19a |
| B105 | Wrapping table up sensor .....                   | 19a |
| X34  | Connector .....                                  | 19a |
| Z92  | Bale on wrapping table actual value switch ..... | 19a |

Wiring loom L (UNIWRAP)



## **Wiring loom M**

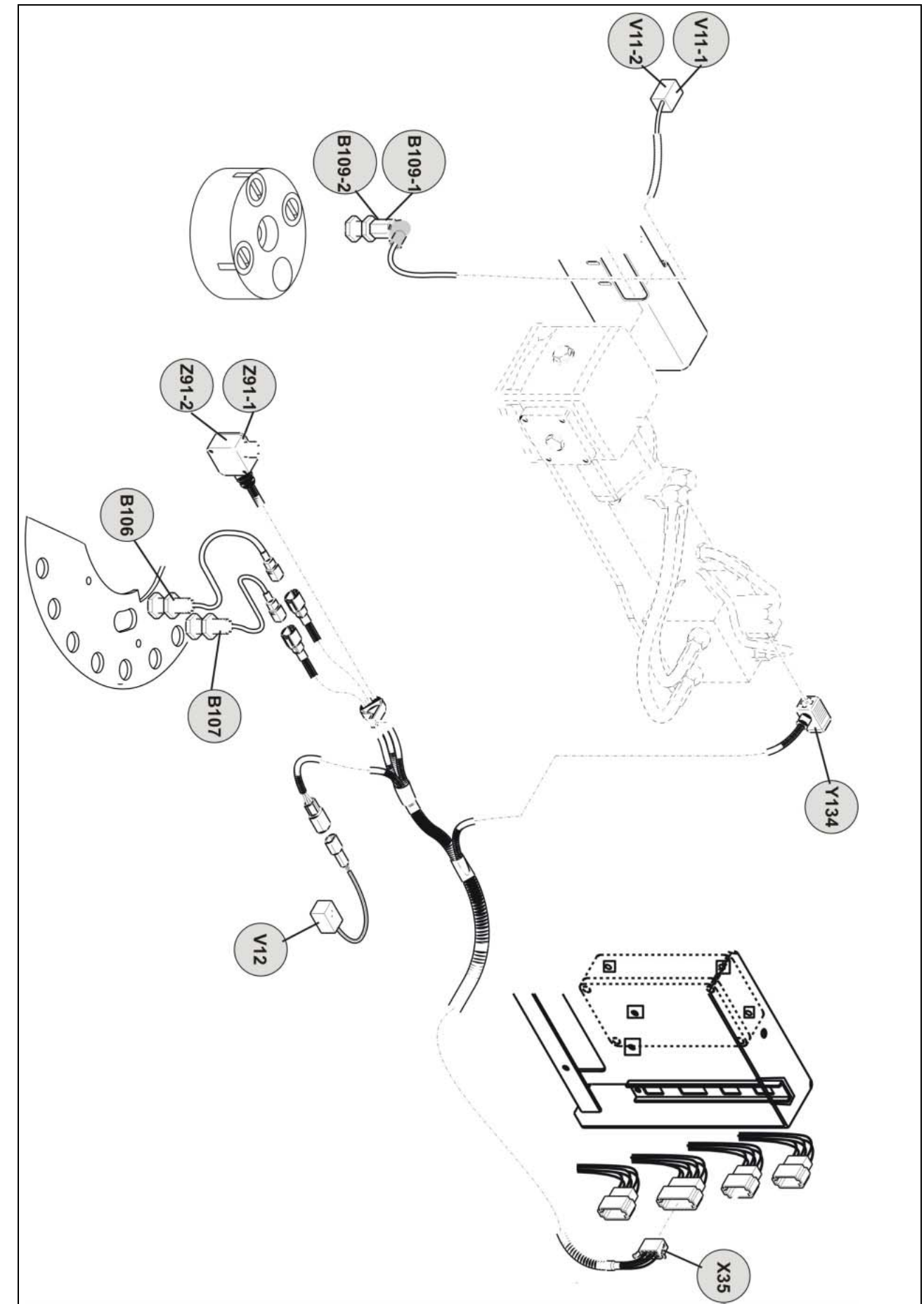
- UNIWRAP



## Wiring loom M (UNIWRAP)

## Key to diagram:

|        |                                           |     |
|--------|-------------------------------------------|-----|
| B106   | Wrapping arm basic position sensor .....  | 21a |
| B107   | Wrapping arm orbits sensor .....          | 21a |
| B109-1 | Film break sensor .....                   | 22a |
| B109-2 | Film break sensor .....                   | 22a |
| V11-1  | Film break monitoring transmitter.....    | 22a |
| V11-2  | Film break monitoring transmitter.....    | 22a |
| V12    | Film break monitoring receiver.....       | 22a |
| Y134   | Wrapping arm backward solenoid coil ..... | 21a |
| Z91-1  | Safety bow actual value switch .....      | 21a |
| Z91-2  | Safety bow actual value switch .....      | 21a |





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**Index**

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|          |                                         |       |
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