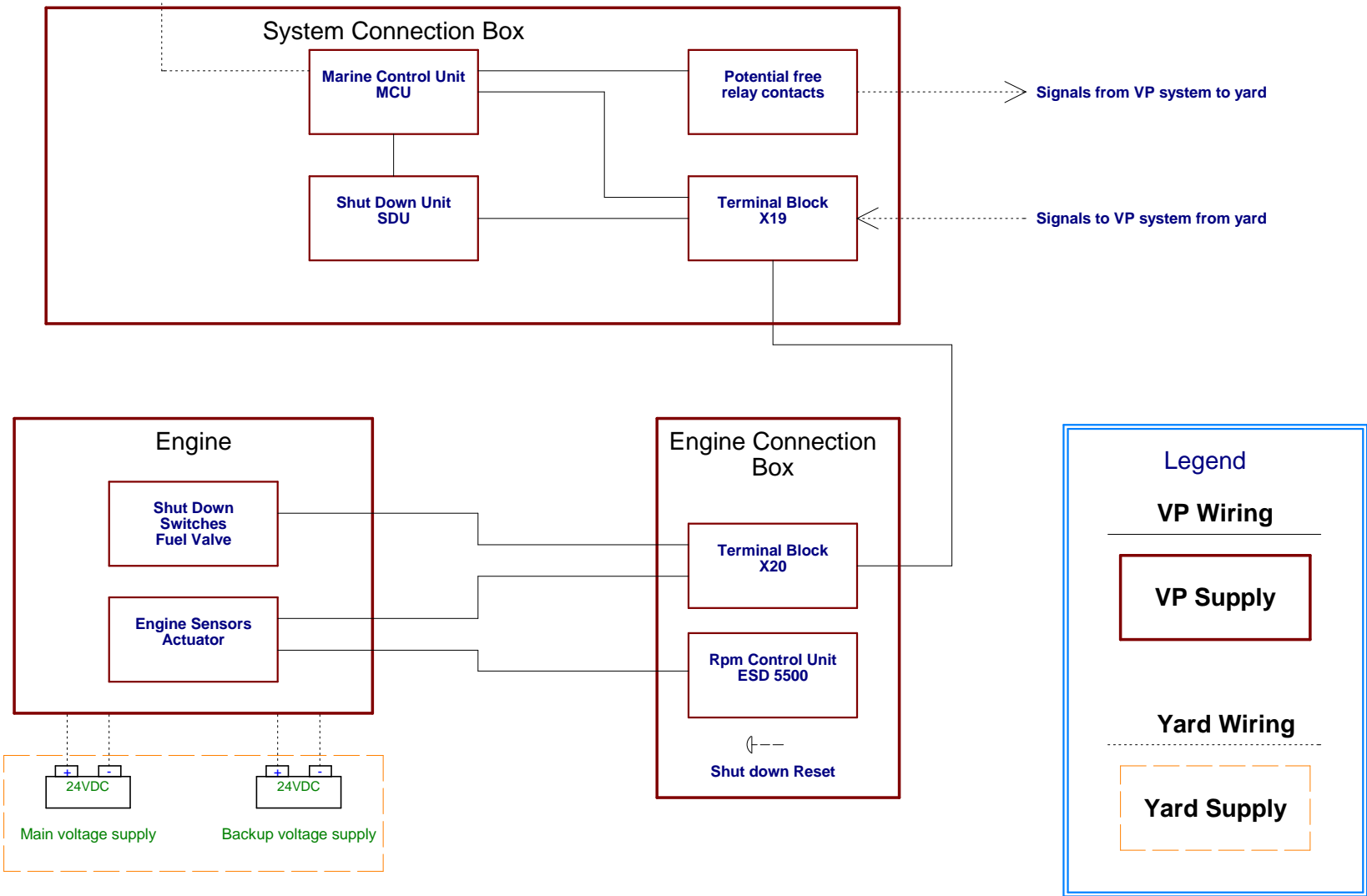


Modbus on RS232  
To yard



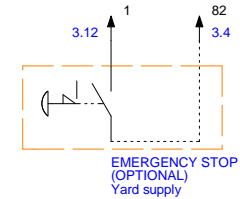
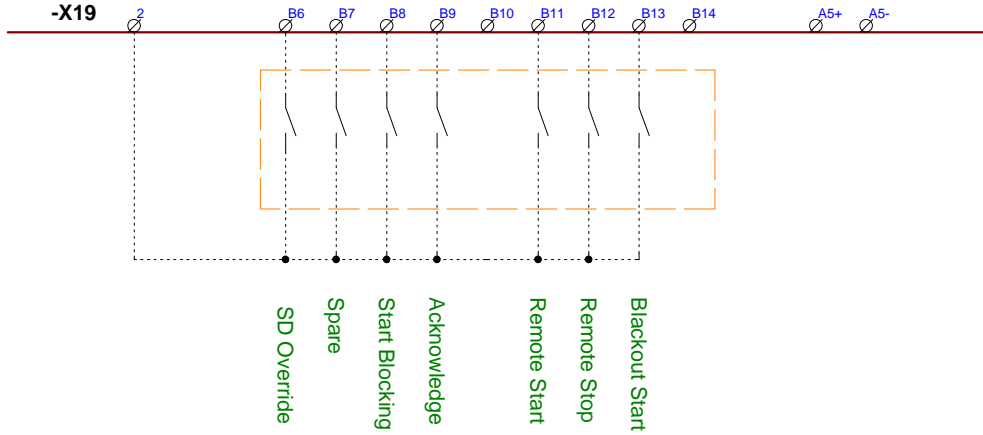
	Customer/Shipyard:	File Name: SEM-051114-37D	Drawing no.
	Hull No:	Drawn by: RJ	<b>SEM-051114-37D</b>
	Engine: D5 EME Electrical Starter	Based on software: 21654562_P01	Project no.
	Page Title: Single line diagram - System layout	Date For Last Change: 2013-12-18 15:03:00	Page 1 of 7

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

# Inputs

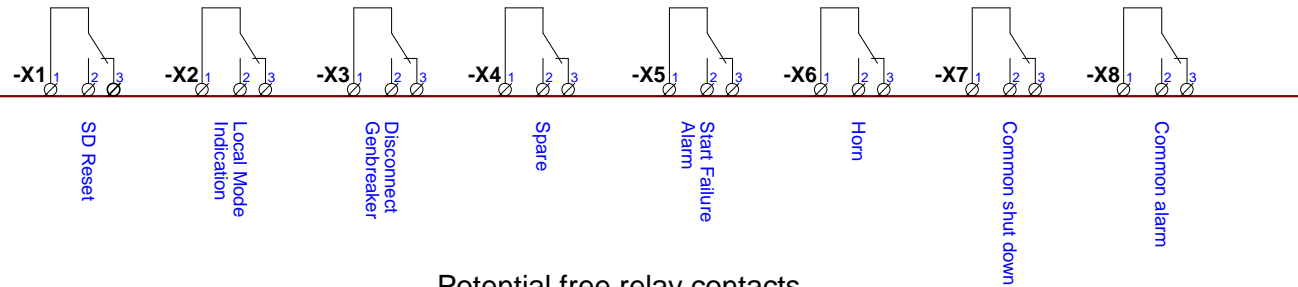
# Customer Interface

All terminals X1 through X19 are located in the system connection box mounted on a bracket at the rear of the genset.

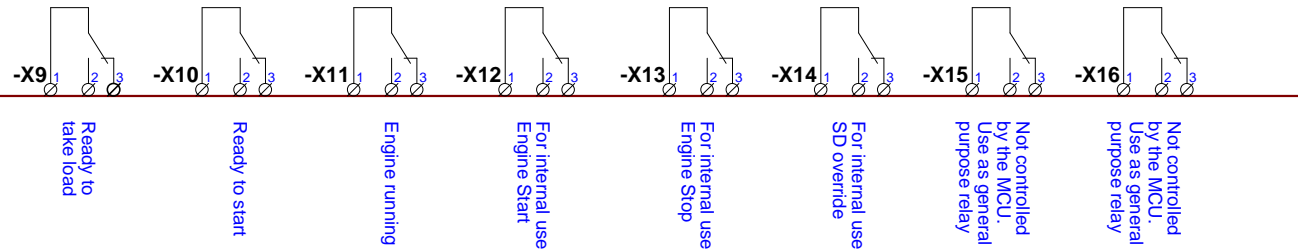


# Outputs

## Potential free relay contacts

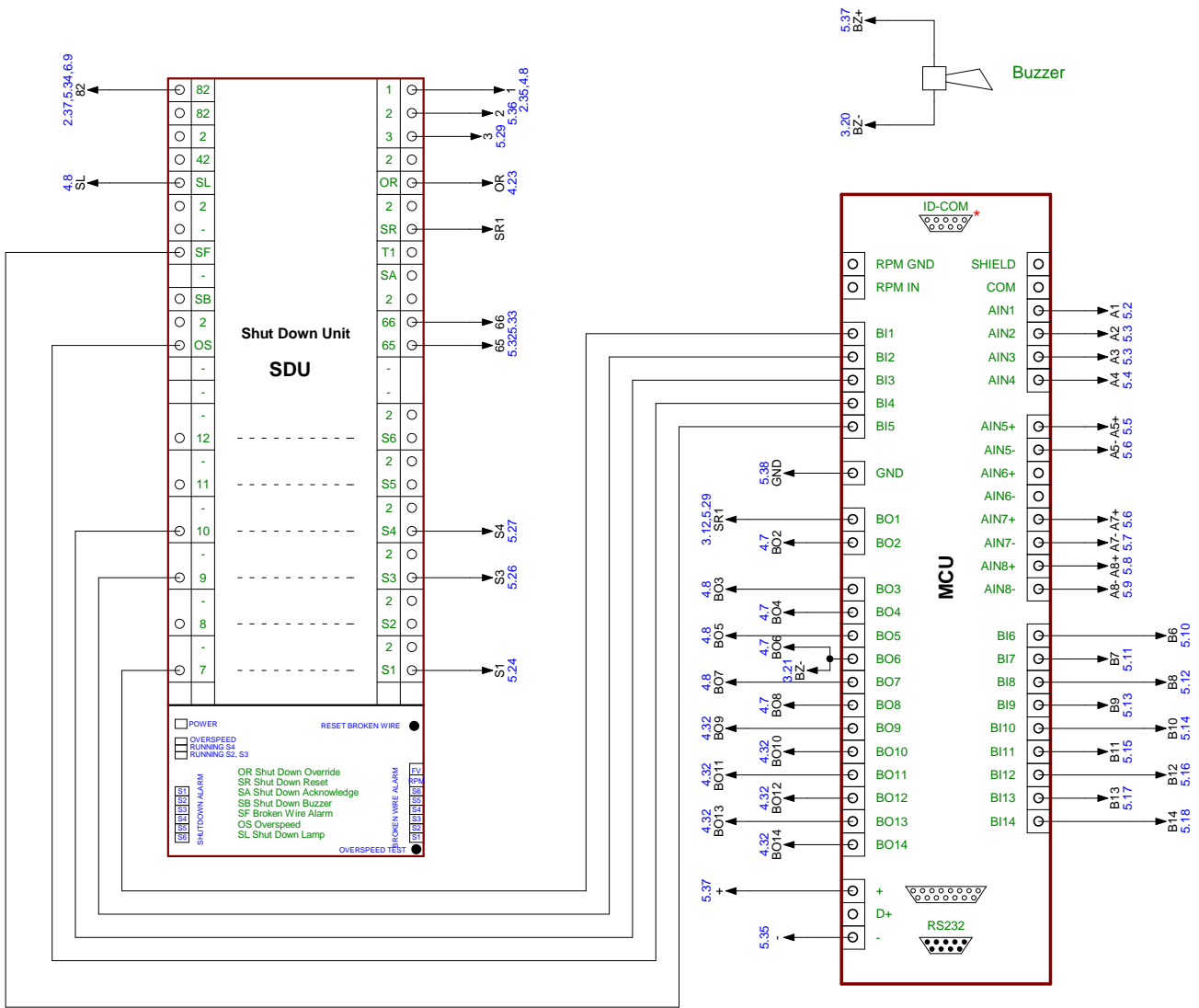


## Potential free relay contacts



Customer/Shipyard:	File Name: SEM-051114-37D	Drawing no.
Hull No:	Drawn by: RJ	<b>SEM-051114-37D</b>
Engine: D5 EME Electrical Starter	Based on software: 21654562_P01	Project no.
Page Title: Customer Interface	Date For Last Change: 2014-06-17 09:44:00	Page 2 of 7

# System Connection Box



MCU jumper settings  
 Current mode: 1-2  
 Voltage mode: 2-3  
 Resistance mode: 3-4

Jumper 1 is the most inner one and jumper 4 is the one closest to the edge of the circuit board

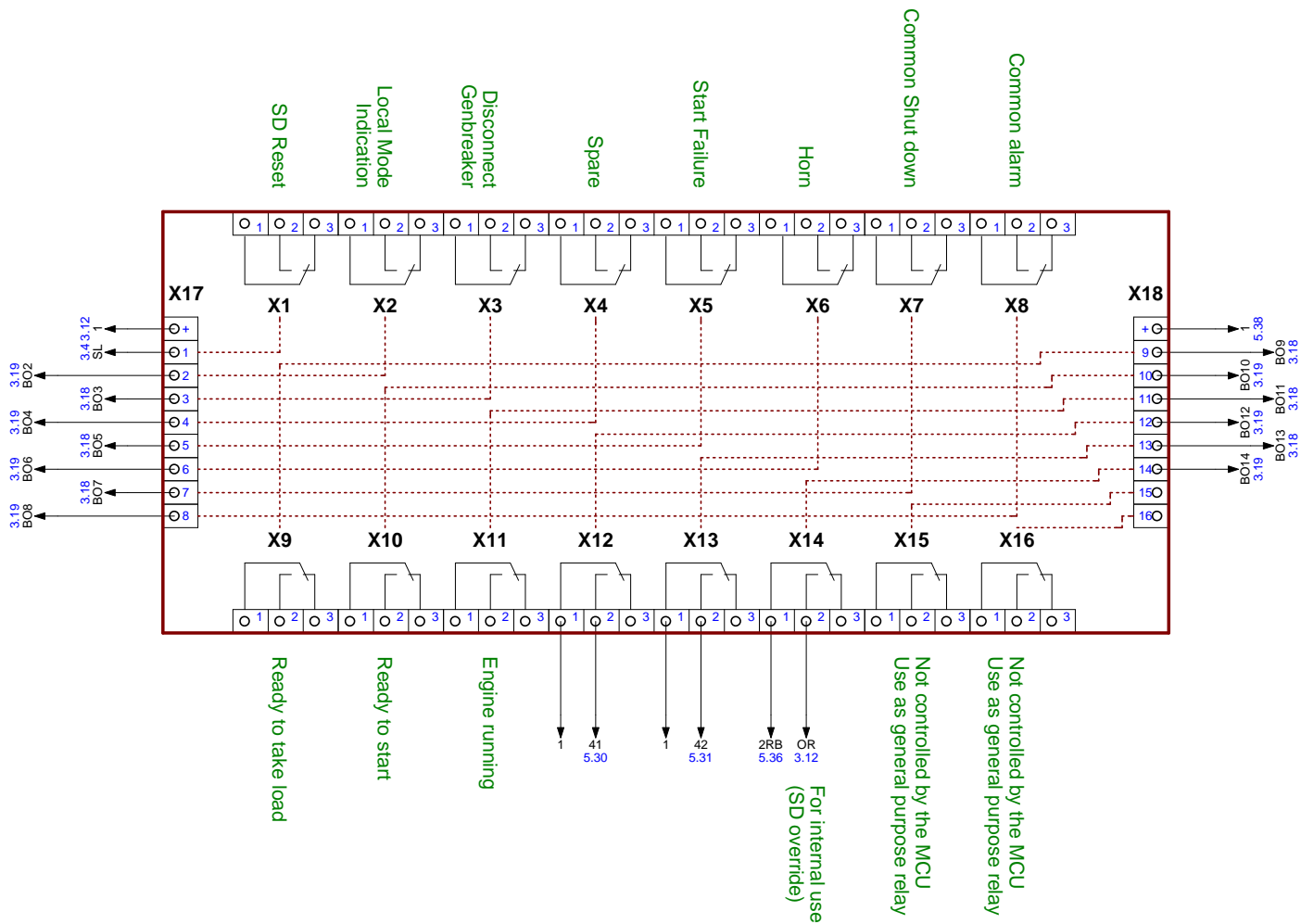


Customer/Shipyard:  
 Hull No:  
 Engine: D5 EME Electrical Starter  
 Page Title: MCU, SDU and ID-COM

File Name: SEM-051114-37D  
 Drawn by: RJ  
 Based on software: 21654562\_P01  
 Date For Last Change: 2014-06-17 14:28:04

Drawing no. **SEM-051114-37D**  
 Project no.  
 Page 3 of 7

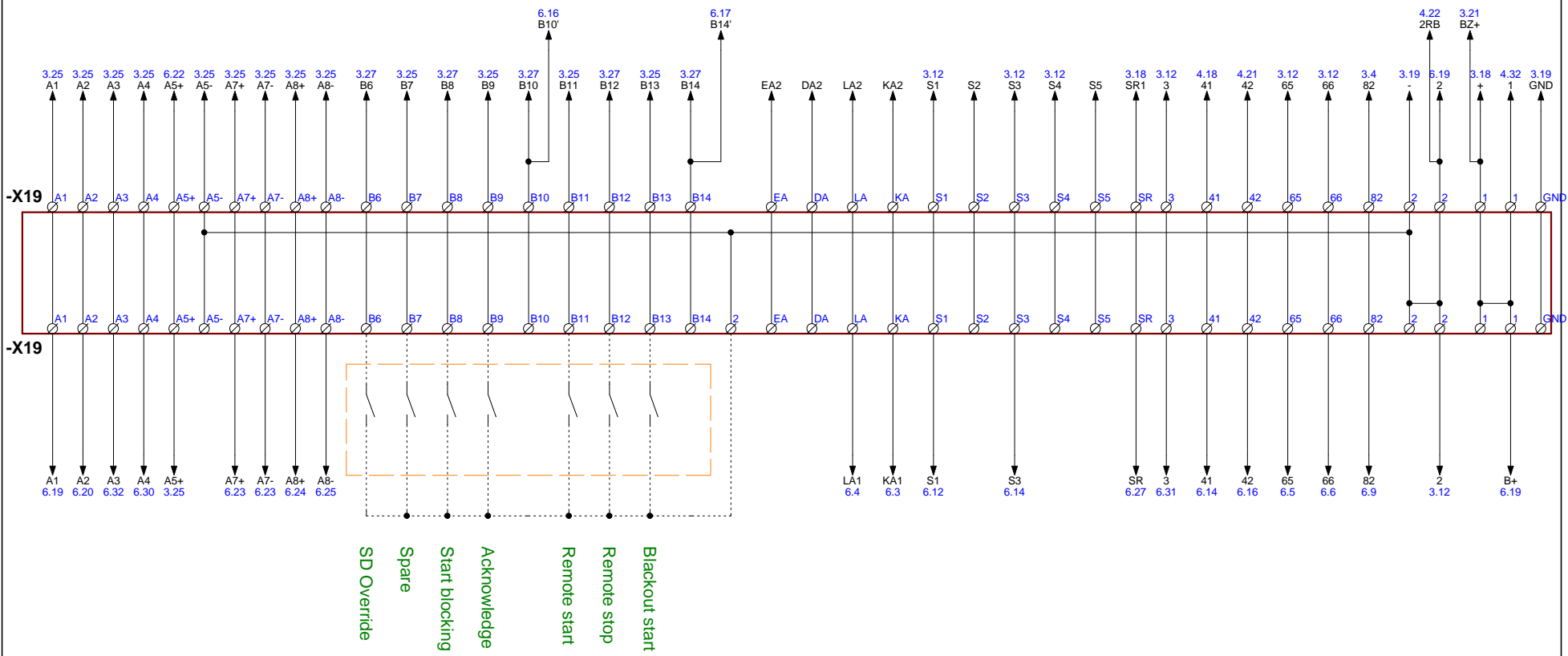
# System Connection Box



Customer/Shipyard:	File Name: SEM-051114-37D	Drawing no. SEM-051114-37D
Hull No:	Drawn by: RJ	Project no.
Engine: D5 EME Electrical Starter	Based on software: 21654562_P01	Page 4 of 7
Page Title: Potential free contacts	Date For Last Change: 2013-12-18 15:36:58	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

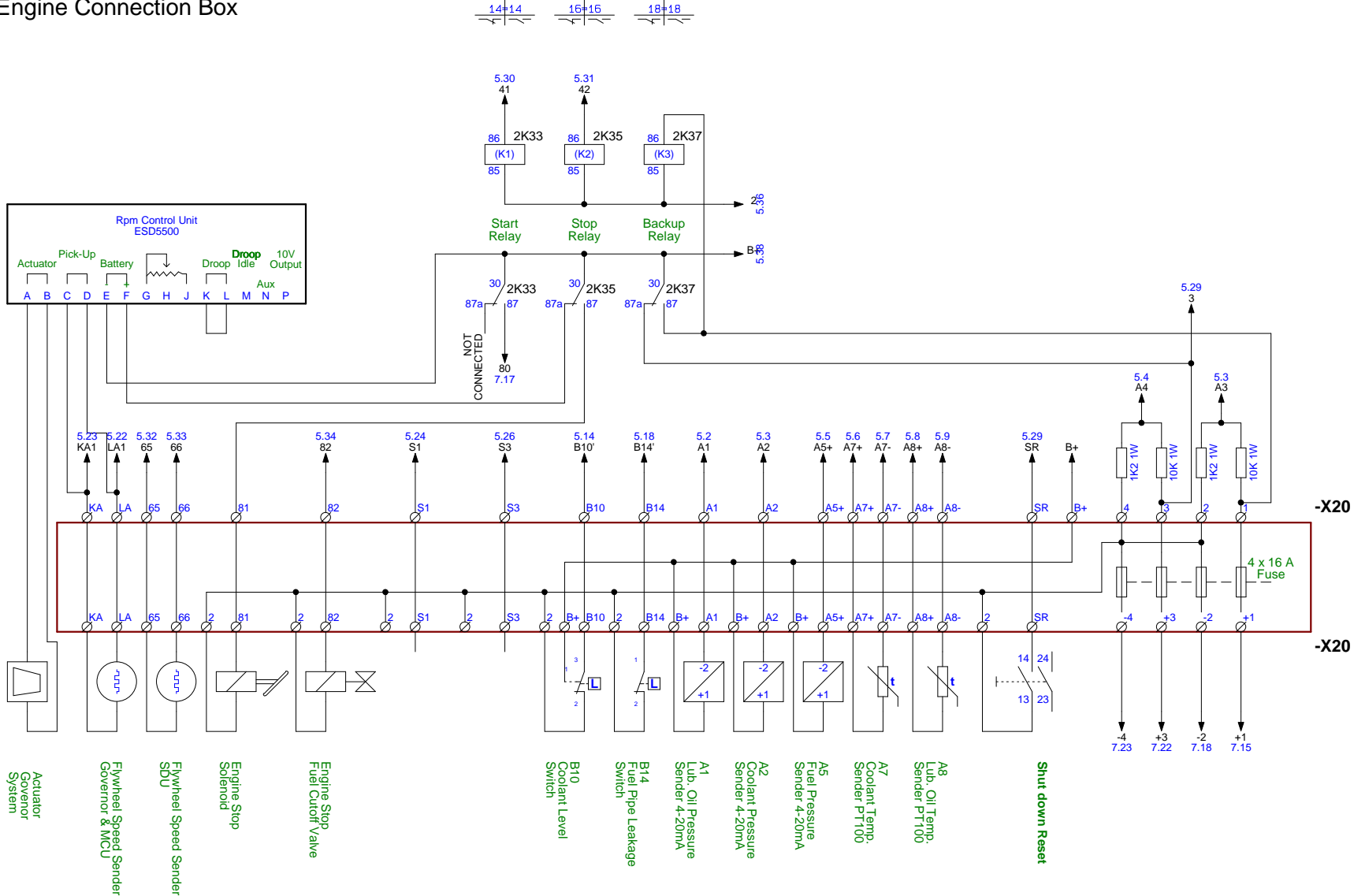
# System Connection Box



	Customer/Shipyard:	File Name: SEM-051114-37D	Drawing no.
	Hull No:	Drawn by: RJ	<b>SEM-051114-37D</b>
	Engine: D5 EME Electrical Starter	Based on software: 21654562_P01	Project no.
	Page Title: User inputs , -X19 terminals	Date For Last Change: 2014-06-17 09:26:28	Page 5 of 7

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38

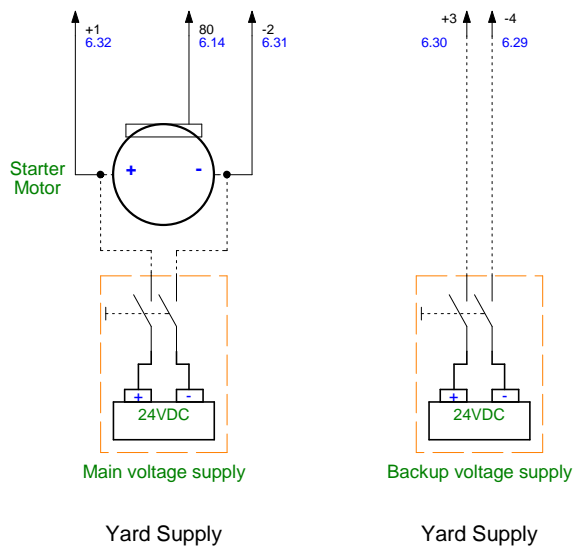
# Engine Connection Box



Customer/Shipyard:	File Name: SEM-051114-37D	Drawing no. SEM-051114-37D
Hull No:	Drawn by: RJ	Project no.
Engine: D5 EME Electrical Starter	Based on software: 21654562_P01	Page 6 of 7
Page Title: Terminals -X20	Date For Last Change: 2014-06-25 11:20:22	

Engine

# Electrical Starter



**VOLVO**  
**PENTA**

Customer/Shipyard:	File Name: SEM-051114-37D	Drawing no.
Hull No:	Drawn by: RJ	<b>SEM-051114-37D</b>
Engine: D5 EME Electrical Starter	Based on software: 21654562_P01	Project no.
Page Title: Voltage supply, Electric Starter	Date For Last Change: 2014-06-25 14:15:02	Page 7 of 7