



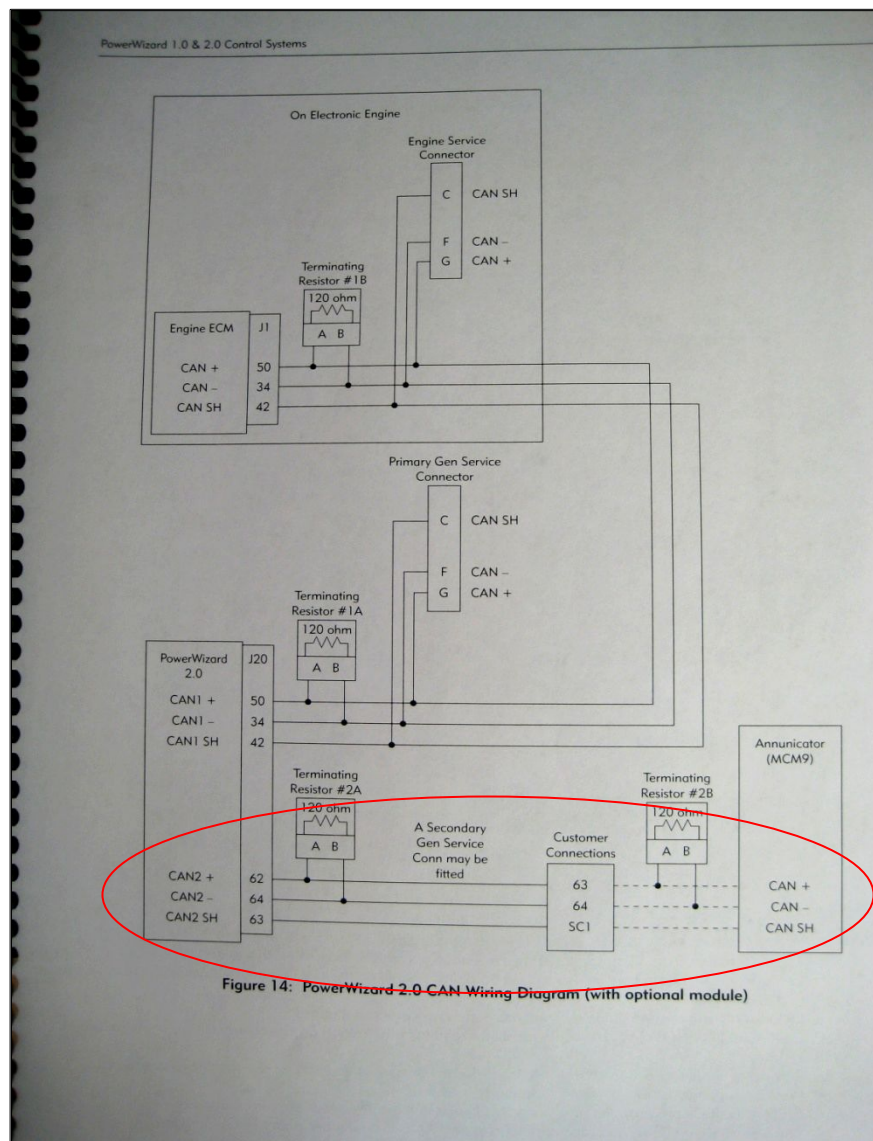
**Отдел эксплуатации**

**16.03.2012**

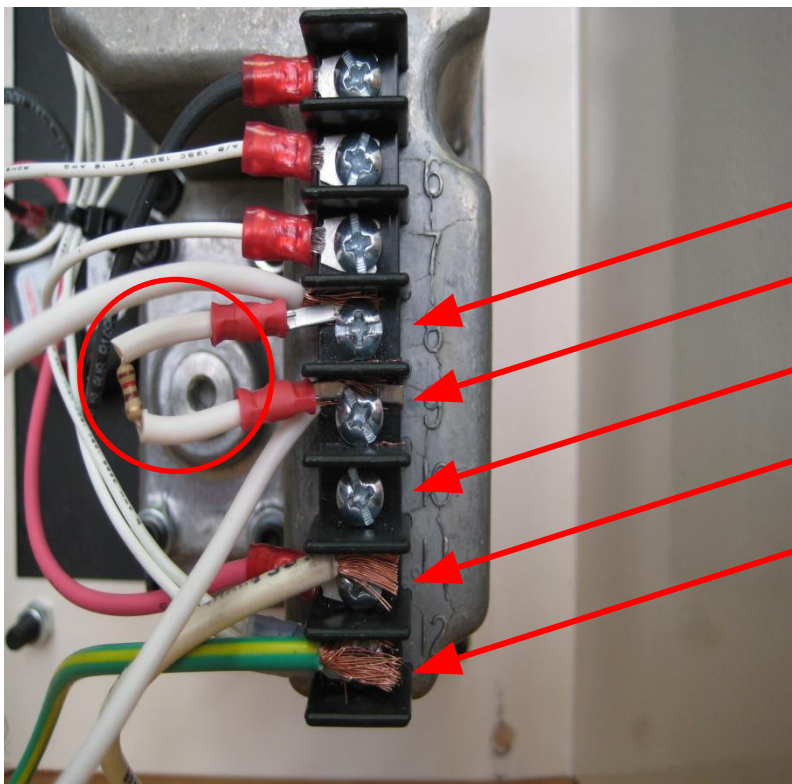
**Абакумов И.В.**

# Подключение Annunicator MCM9 К ПУ РВ 2.0 и АВР

## Подключаем согласно схеме на CAN 2







- Terminal 8: Can-H
- Terminal 9: Can-L
- Terminal 10: Shield
- Terminal 11: PWR+
- Terminal 12: PWR-

Клемма 8: +CAN

Клемма 9: -CAN

Клемма 10: Экран

Клемма 11: +12-24VDC

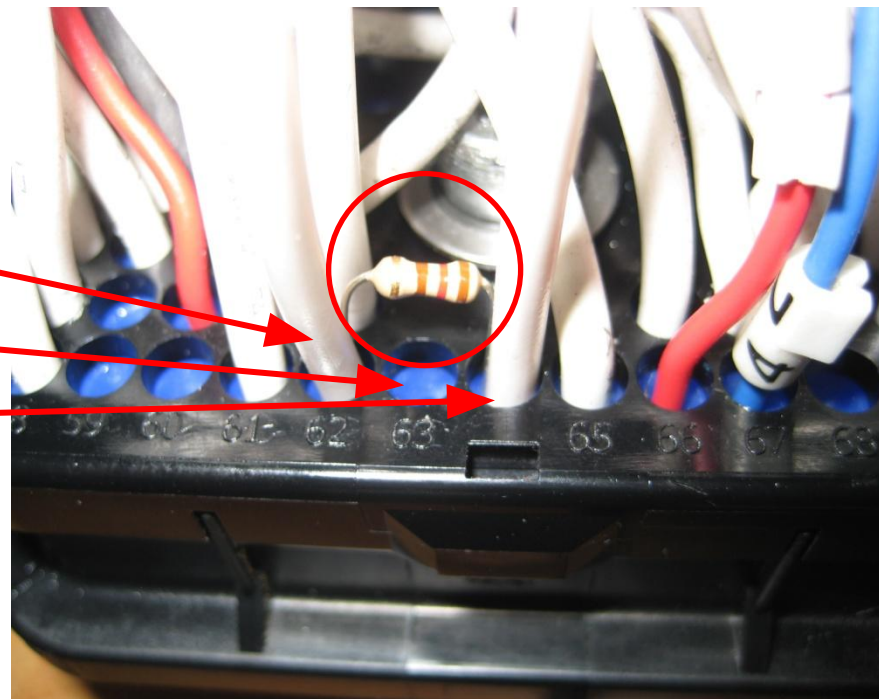
Клемма 12: -12-24VDC

Примчание: установка резистора 120 Ом между +CAN и -CAN обязательна!

The Accessory J1939 communication wires are connected to the connector. The pins, as designated on the AM

Pin #	Name
62	CAN2 +
63	CAN2 SH
64	CAN2 -

Table 3: Access



PIN 62: +CAN

PIN 63: Экран

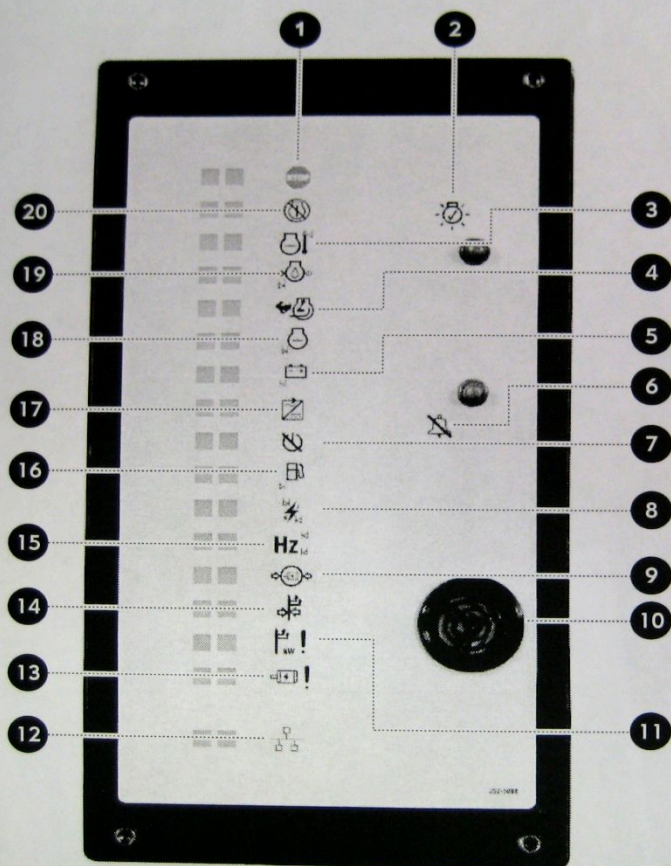
PIN 64: -CAN

Примчание: установка резистора 120 Ом между +CAN и -CAN обязательна!



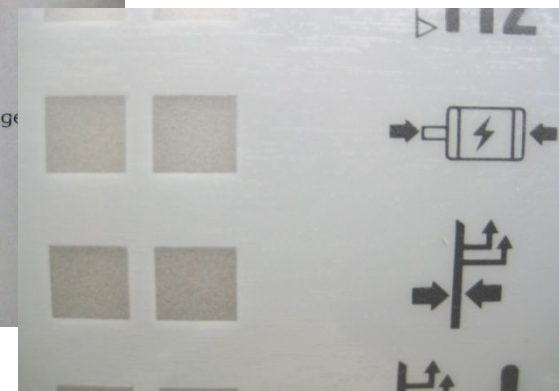
Подаем питание на МСМ9

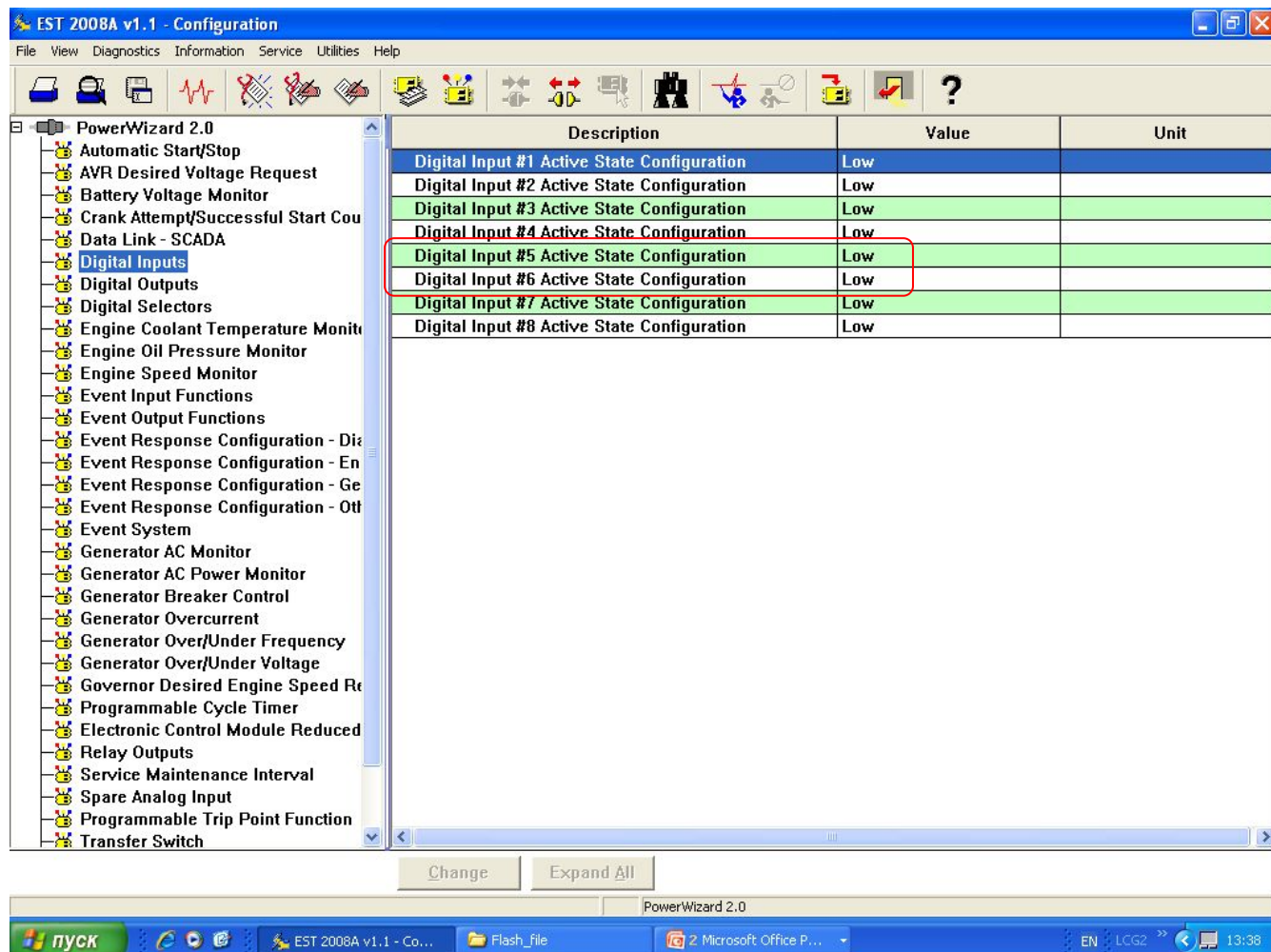




- 1 Emergency Stop
- 2 Lamp Test
- 3 High Engine Temperature
- 4 Overspeed
- 5 Low Battery Voltage
- 6 Mute
- 7 Not In Auto
- 8 Under / Over Voltage
- 9 Generating sets on Load (ATS in Emergency)
- 10 Horn
- 11 Utility Failed (Red)
- 12 J1939 Network Status
- 13 Generating Sets Failed
- 14 Mains on Load (ATS in Normal Position)
- 15 Under / Over Frequency
- 16 Low Fuel Level
- 17 Low Battery Charging System Voltage
- 18 Low Coolant Level
- 19 Low Oil Pressure
- 20 Fail to Start

5.6.2 Annunciator Features





Description	Value	Unit
Digital Input #1 Active State Configuration	Low	
Digital Input #2 Active State Configuration	Low	
Digital Input #3 Active State Configuration	Low	
Digital Input #4 Active State Configuration	Low	
Digital Input #5 Active State Configuration	Low	
Digital Input #6 Active State Configuration	Low	
Digital Input #7 Active State Configuration	Low	
Digital Input #8 Active State Configuration	Low	

Подключаем TIPSS, запускаем EST, заходим в Digital Inputs, проверяем что бы Input 5 и Input 6 были в “положении Low”



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- Automatic Start/Stop
- AVR Desired Voltage Request
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- Crank Attempt/Successful Start Cou
- Data Link - SCADA
- Digital Inputs
- Digital Outputs
- Digital Selectors
- Engine Coolant Temperature Monito
- Engine Oil Pressure Monitor
- Engine Speed Monitor
- Event Input Functions**
- Event Output Functions
- Event Response Configuration - Dis
- Event Response Configuration - En
- Event Response Configuration - Ge
- Event Response Configuration - Ott
- Event System
- Generator AC Monitor
- Generator AC Power Monitor
- Generator Breaker Control
- Generator Overcurrent
- Generator Over/Under Frequency
- Generator Over/Under Voltage
- Governor Desired Engine Speed Re
- Programmable Cycle Timer
- Electronic Control Module Reduced
- Relay Outputs
- Service Maintenance Interval
- Spare Analog Input
- Programmable Trip Point Function
- Transfer Switch

Description	Value	Unit
Event Input Function #1 Suspect Parameter Number	Engine Coolant Temperature	
Event Input Function #1 Failure Mode Identifier	High Shutdown	
Event Input Function #1 Event Notification Delay Time	0	Sec
Event Input Function #1 Active State Configuration	High	
Event Input Function #2 Suspect Parameter Number	Engine Oil Pressure	
Event Input Function #2 Failure Mode Identifier	Low Shutdown	
Event Input Function #2 Event Notification Delay Time	0	Sec
Event Input Function #2 Active State Configuration	High	
Event Input Function #3 Suspect Parameter Number	Custom Event	
Event Input Function #3 Failure Mode Identifier	High Warning	
Event Input Function #3 Event Notification Delay Time	0	Sec
Event Input Function #3 Active State Configuration	High	
Event Input Function #4 Suspect Parameter Number	Custom Event	
Event Input Function #4 Failure Mode Identifier	Low Shutdown	
Event Input Function #4 Event Notification Delay Time	0	Sec
Event Input Function #4 Active State Configuration	High	
Event Input Function #5 Suspect Parameter Number	Custom Event	
Event Input Function #5 Failure Mode Identifier	High Warning	
Event Input Function #5 Event Notification Delay Time	0	Sec
Event Input Function #5 Active State Configuration	High	
Event Input Function #6 Suspect Parameter Number	Custom Event	
Event Input Function #6 Failure Mode Identifier	High Warning	
Event Input Function #6 Event Notification Delay Time	0	Sec

Change Expand All

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Заходим в меню Event Input Function



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- Programmable Cycle Timer
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- Service Maintenance Interval
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- Programmable Trip Point Function
- Transfer Switch

Description	Value	Unit
Event Input Function #1 Suspect Parameter Number	Engine Coolant Temperature	
Event Input Function #1 Failure Mode Identifier	High Shutdown	
Event Input Function #1 Event Notification Delay Time	0	Sec
Event Input Function #1 Active State Configuration	High	
Event Input Function #2 Suspect Parameter Number	Engine Oil Pressure	
Event Input Function #2 Failure Mode Identifier	Low Shutdown	
Event Input Function #2 Event Notification Delay Time	0	Sec
Event Input Function #2 Active State Configuration	High	
Event Input Function #3 Suspect Parameter Number	Custom Event	

Change Parameter Value

Parameter Name: Event Input Function #3 Suspect Parameter Number

Current Value: Custom Event

New Value: Custom Event

Please select one of the listed

- Custom Event
- ATS in Emergency Position
- ATS in Normal Position
- Air Damper Closed
- Air Filter Differential Pressure
- Ambient Air Temperature
- Battery Charger Failure
- Battery Charging System Voltage
- Battery Voltage

OK Cancel

PowerWizard 2.0

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Выбираем Event Input Function #3 Suspect Parameter Number и в столбце «Value» Ставим имя ATS in Emergency Position.





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File View Diagnostics Information Service Utilities Help

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- Automatic Start/Stop
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- Data Link - SCADA
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- Generator Breaker Control
- Generator Overcurrent
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- Generator Over/Under Voltage
- Governor Desired Engine Speed Re
- Programmable Cycle Timer
- Electronic Control Module Reduced
- Relay Outputs
- Service Maintenance Interval
- Spare Analog Input
- Programmable Trip Point Function
- Transfer Switch

Description	Value	Unit
Event Input Function #1 Suspect Parameter Number	Engine Coolant Temperature	
Event Input Function #1 Failure Mode Identifier	High Shutdown	
Event Input Function #1 Event Notification Delay Time	0	Sec
Event Input Function #1 Active State Configuration	High	
Event Input Function #2 Suspect Parameter Number	Engine Oil Pressure	
Event Input Function #2 Failure Mode Identifier	Low Shutdown	
Event Input Function #2 Event Notification Delay Time	0	Sec
Event Input Function #2 Active State Configuration	High	
Event Input Function #3 Suspect Parameter Number	ATS in Emergency Position	
Event Input Function #3 Failure Mode Identifier	High Warning	

Change Parameter Value

Parameter Name: Event Input Function #3 Failure Mode Identifier

Current Value: High Warning

New Value:

Please select one of the listed

- High Warning
- Condition Exists**
- High Shutdown
- High Warning
- Low Shutdown
- Low Warning

OK Cancel

PowerWizard 2.0

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Выбираем Event Input Function #3 Failure Mode Identifier и в столбце «Value»  
Ставим имя Condition Exists





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File View Diagnostics Information Service Utilities Help

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- Automatic Start/Stop
- AVR Desired Voltage Request
- Battery Voltage Monitor
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- Data Link - SCADA
- Digital Inputs
- Digital Outputs
- Digital Selectors
- Engine Coolant Temperature Monit
- Engine Oil Pressure Monitor
- Engine Speed Monitor
- Event Input Functions**
- Event Output Functions
- Event Response Configuration - Di
- Event Response Configuration - En
- Event Response Configuration - Ge
- Event Response Configuration - Otl
- Event System
- Generator AC Monitor
- Generator AC Power Monitor
- Generator Breaker Control
- Generator Overcurrent
- Generator Over/Under Frequency
- Generator Over/Under Voltage
- Governor Desired Engine Speed Re
- Programmable Cycle Timer
- Electronic Control Module Reduced
- Relay Outputs
- Service Maintenance Interval
- Spare Analog Input
- Programmable Trip Point Function
- Transfer Switch

Description	Value	Unit
Event Input Function #2 Failure Mode Identifier	Low Shutdown	
Event Input Function #2 Event Notification Delay Time	0	Sec
Event Input Function #2 Active State Configuration	High	
Event Input Function #3 Suspect Parameter Number	ATS in Emergency Position	
Event Input Function #3 Failure Mode Identifier	Condition Exists	
Event Input Function #3 Event Notification Delay Time	0	Sec
Event Input Function #3 Active State Configuration	High	
Event Input Function #4 Suspect Parameter Number	Custom Event	
Event Input Function #4 Failure Mode Identifier	Low Shutdown	

**Change Parameter Value**

Parameter Name: Event Input Function #4 Suspect Parameter Number

Current Value: Custom Event

New Value: Custom Event

Please select one of the listed:

- ATS in Emergency Position
- ATS in Normal Position**
- Air Damper Closed
- Air Filter Differential Pressure
- Ambient Air Temperature
- Battery Charger Failure
- Battery Charging System Voltage
- Battery Voltage

OK Cancel

Change Expand All

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ПУСК EST 2008A v1.1 - Co... Flash\_file 100CANON 2 Microsoft Office P... EN LCG2 14:43

Выбираем Event Input Function #4 Suspect Parameter Number и в столбце «Value» Ставим имя ATS in Normal Position.



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File View Diagnostics Information Service Utilities Help

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- Automatic Start/Stop
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- Data Link - SCADA
- Digital Inputs
- Digital Outputs
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- Engine Speed Monitor
- Event Input Functions
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- Generator AC Monitor
- Generator AC Power Monitor
- Generator Breaker Control
- Generator Overcurrent
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- Generator Over/Under Voltage
- Governor Desired Engine Speed Re
- Programmable Cycle Timer
- Electronic Control Module Reduced
- Relay Outputs
- Service Maintenance Interval
- Spare Analog Input
- Programmable Trip Point Function
- Transfer Switch

Description	Value	Unit
Event Input Function #2 Failure Mode Identifier	Low Shutdown	
Event Input Function #2 Event Notification Delay Time	0	Sec
Event Input Function #2 Active State Configuration	High	
Event Input Function #3 Suspect Parameter Number	ATS in Emergency Position	
Event Input Function #3 Failure Mode Identifier	Condition Exists	
Event Input Function #3 Event Notification Delay Time	0	Sec
Event Input Function #3 Active State Configuration	High	
Event Input Function #4 Suspect Parameter Number	ATS in Normal Position	
Event Input Function #4 Failure Mode Identifier	Low Shutdown	

Change Parameter Value

Parameter Name: Event Input Function #4 Failure Mode Identifier

Current Value: Low Shutdown

New Value: Condition Exists

Please select one of the listed values for this parameter.

OK Cancel

Change Expand All

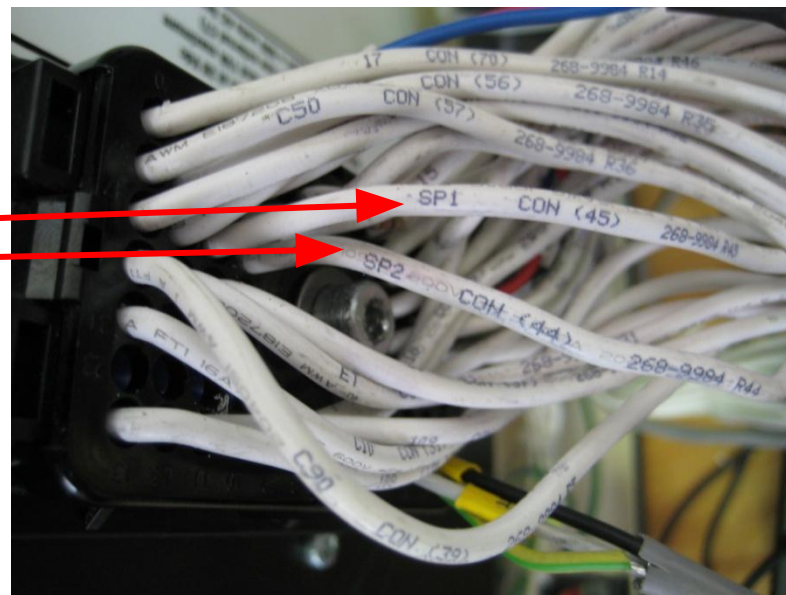
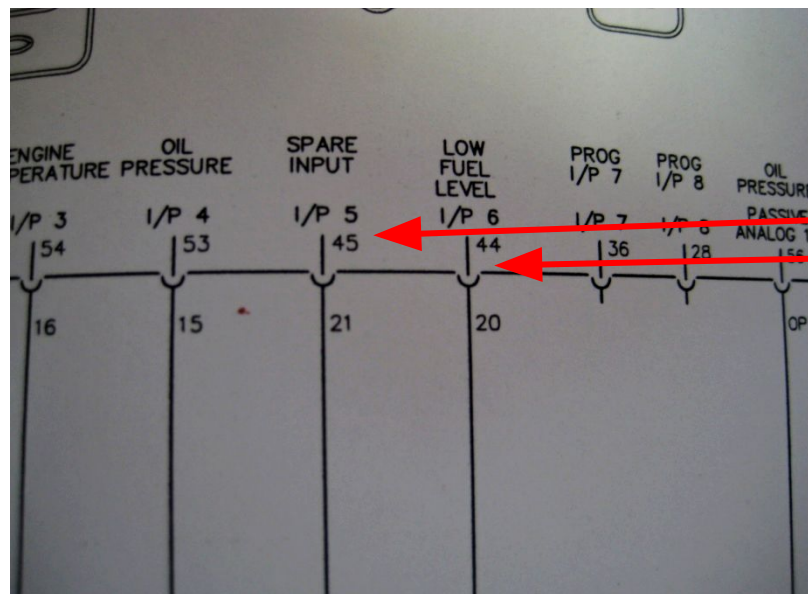
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Выбираем Event Input Function #4 Failure Mode Identifier и в столбце «Value» Ставим имя Condition Exists



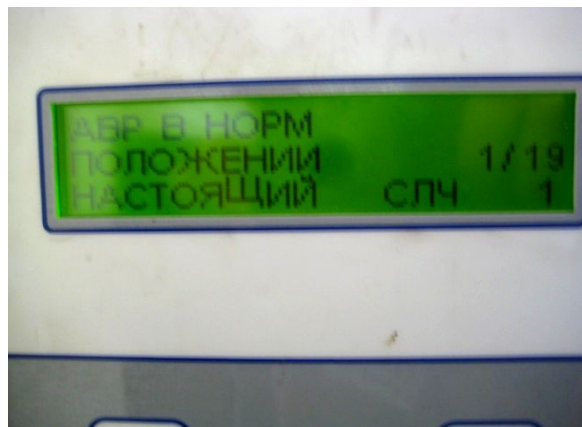




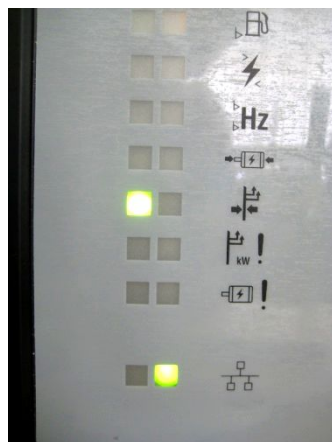
Далее находим провода SP1 и SP2 выходящие из разъемов №45 и №44 ПУ.



И получаем что при замыкании провода SP2 на «-» к примеру на провод № 5 ПУ у нас появляется сообщение на ПУ:



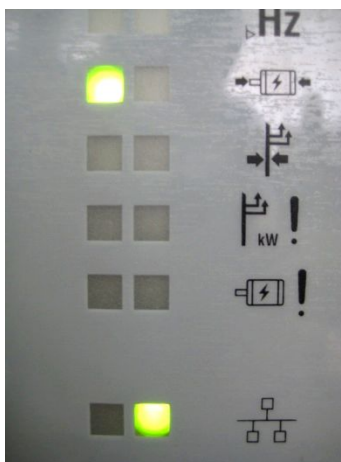
И горящий индикатор Mains on Load (ATS in Normal Postion) на MCM9:



А при замыкании провода SP1 на «-» к примеру на провод № 5 ПУ у нас появляется сообщение на ПУ:



И горящий индикатор Generation sets on Load (ATS in Emergency) на MCM9:



Подключаем провода SP1, SP2 и «-» (№5) к ABP согласно схеме:

