Sullair Supervisor IE Protocol

Connector Configuration Parameters

RTS ON DelayX10ms

Enter a number from 0 to 255 (0 to 2.55 seconds) to delay sending a message after turning on Request To Send (RTS). Commonly used with modem communication to allow additional time for the modems to synchronize.

RTS OFF DelayX10ms

Enter a number from 0 to 255 (0 to 2.55 seconds) to keep RTS on after a message has been sent. Commonly used to keep a radio on for a short period of time at the end of a message.

Handshake Option

If Full Handshake is selected the Omnii-Comm will assert RTS and wait for CTS before sending a message. RTS will be turned off after the message has been sent. If Constant Carrier is selected the Omnii-Comm will assert RTS when it sends its first message and leave it asserted. It will wait for CTS before sending. If Ignore CTS is selected, RTS will be asserted before sending a message and removed at the end of the message. The CTS input will be ignored. If No Handshake is selected, RTS will be asserted when the Omnii-Comm sends its first message. RTS will not be turned off at the end of the message. The CTS input will be ignored. If Activity Monitor is selected, the Omnii-Comm will check the DCD input before sending a message. If DCD is ON, the Omnii-Comm will delay sending the message.

Retry Count

The number of times a message will be retried before an error is reported

Option Bit Parameters

Use Radio Key

If checked, Bit 0 in a register specified by the "Radio Key Address" on the Header configuration screen will be turned ON before a message is sent and turned OFF after the message has been completed.

Sullair Supervisor IE Protocol

Protocol Extension Table Parameters

The Protocol extension table is used to define additional parameters required for Sullair Supervisor IE operation. Click on the box to enable the Protocol Extension Table. Click on the button to bring up the specific options as detailed below.

CMD Flag Data Type and Offset

The first two entries are used to specify the Data Type and Starting Offset that will be used to store the Command Flags. Command Flags are used to initiate the sending of a message to the compressor. Messages are sent when a Command Flag transitions from OFF to ON. The Omnii-Comm uses one word for Command Flags. The low byte is used for the Command Flags. The corresponding bits in the upper byte are used to provide a Command Complete Status. The Omnii-Comm supports 5 Sullair Supervisor IE commands.

Function
ME Emergency Stop
ML Load/Unload
MS Start/Stop
MP Parameter Change
D Deselect All

CMD Data Data Type and Offset

The next two entries are used to specify the Data Type and Starting Offset that will be used to store Command Data. Command Data is used to make up the command message that will be sent when the Command Flag changes state. The Omnii-Comm uses 4 words of Command Data.

Word Function

O Target Compressor Number (for Select)
P: Parameter Type; L:0=unload,1=load;S:0=stop,1=start,2=auto
P: Parameter Number; L:0=modulate,1=full load
P: Parameter Value

The parameter type, number, description and units are detailed in the following table:

Type	Numbei	r Description	Units
0	0	Language	0=French 1=German 2=Italian 3=Spanish 4=English
0	1	Machine Number	1-32
1	1	Pressure Units	0=bar,1=psi
1	2	Temperature Units	0=C, 1=F
2	0	Max Discharge Pressure	PSI/BAR*10
2	1	Max Line Pressure A	PSI/BAR*10
2	2	Min Differential Pressure A	PSI/BAR*10
2	3	Max Line Pressure B	PSI/BAR*10
2	4	Min Differential Pressure B	PSI/BAR*10
2	5	Max Line Pressure C	PSI/BAR*10
2	6	Min Differential Pressure C	PSI/BAR*10
2	7	Min Oil Pressure	PSI/BAR*10
3	0	Off Load Time Function	Minutes
3	1	Drain Time	Seconds
3	2	Time Between Drains	Minutes
3	3	Wye-Delta Timer	Seconds
3	4	Stop Mode Timer	Seconds

Sullair Supervisor IE Protocol

Poll Table Read Parameters

Compressor

This is the Compressor Number that will be selected for the Poll. Selects and De-select commands are automatically sent.

Command

This field is hidden and cannot be changed. It is allways "M" message.

Function

This field is hidden and cannot be changed. It is always "C" Request Current Status.

Byte Count

This field is hidden and cannot be changed. It is always 38 bytes, the length of the Current Status message.

Poll Table Write and Error Parameters

INVALID SELECTION. Can not Write to the Sullair port from the Poll Table. Use COMMANDS to send messages to Sullair.

Note: System Error Protocol Definitions are the same as Poll Table Write and Error Parameters

Database Extension Table Parameters

Index	Name	Size
0	INVALID SELECTION	