FieldServer Protocol Driver Sheet
Gardner Denver Auto Sentry ES/RS2000

FS-8700-60 Version: 1.03 / Rev. 2.B

1 DESCRIPTION

The Gardner Denver Auto Sentry ES/RS2000 driver allows the FieldServer to transfer data from devices over either RS-232 or RS-485 using Gardner Denver Auto Sentry ES/RS2000 protocol. The driver can be configured to communicate with ES Controllers with software versions V2.0X, V2.1X and RS2000 Controllers with software versions V4.0X.

The client driver implements the following functionality:

- Poll controllers for service and maintenance data.
- Poll controllers for operating mode data.
- Poll controllers for operating data.

The driver can poll up to 8 units connected to one ES/RS2000 Controller. It always sets the active unit on the ES/RS2000 Controller before polling for data even if consecutive polls are for the same unit. This is done to prevent synchronization problems.

Gardner Denver ES/RS2000 Controllers implements three message types for which the driver can poll. The driver does not validate the message data fields for correct values although it does validate data field lengths. For example, shutdown codes reported by V2.1 ES Controllers range from 0 to 27. If a code of 28 is reported, the driver will not flag it as an error since codes have to be interpreted by the operator. However, a message length longer than 2 digits will be reported as an error.

1.1 Connection Facts

FieldServer Mode	Nodes	Comments
Client	1	A client node can communicate with up to 8 units connected to a ES/RS2000 Controller

2 FORMAL DRIVER TYPE

Serial

Client Only

3 COMPATIBILITY

FieldServer Model	Compatible
FS-B35 Series	Yes
ProtoNode/ProtoAir	No
QuickServer FS-QS-10xx	No
QuickServer FS-QS-122x	Yes
QuickServer FS-QS-20xx	No
QuickServer FS-QS-22xx	Yes

4 CONNECTION INFORMATION

Connection Type:	RS-232 Or Rs-485 (Two wire, Half-Duplex)
Baud Rates:	1200; **9600**
Data Bits:	7,**8**
Stop Bits:	**1**,2
Parity:	Odd, Even, **None**
Multidrop Capability:	Yes

5 DEVICES TESTED

Device	Tested (FACTORY, SITE)
AUTO Sentry ES	SITE
RS2000	SITE

6 COMMUNICATIONS FUNCTIONS

6.1 Read Operations Supported

FieldServer as a Client
Read Service and Maintenance Data
Advisories Shutdown codes Total runtime hour-meter readings @ shutdown codes Current total runtime hour-meter reading Current loaded runtime hour-meter reading Current temp hour-meters Stored temp hour-meters Last maintenance A Last maintenance B Oilage
Read Operating Mode Data
Operating mode indication Sequence number Unit operating state
Read Operating Data
System pressure Filter pressure Discharge temperature Reservoir temperature Motor current

6.2 Unsupported Functions and Data Types

Function	Reason
Programming messages	The FieldServer is a data transfer device, so programming messages are not required

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