

INDUSTRIAL AUTOMATION PRODUCT

9907-186

GS3/LQ Valve Driver

WOODWARD 9907-186 is a GS3/LQ valve driver for an integrated liquid-fuel metering system. It converts a 4-20 mA command into controlled valve positioning with feedback, shutdown/reset and fault indication.

IDENTITY	VERIFIED VALUE
Manufacturer	WOODWARD
System family	Woodward GS3/LQ liquid-fuel valve control
Part number	9907-186
Product role	Converts the control command into valve position
Lifecycle	Installed product record

DOCUMENT SCOPE

Exact-article identity, technical data, host role, installation checks, applications, precautions and engineering verification.

MODEL-SPECIFIC ENGINEERING NOTE

Record the 4-20 mA command, position-feedback loop, 18-32 V DC supply, shutdown/reset contact, driver-fault contact and valve cable before removing 9907-186. Restore the approved GS3/LQ configuration and complete a controlled stroke and shutdown test before enabling fuel flow.

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



9907-186

Technical Specifications

Technical values below are limited to the named WOODWARD product record and directly applicable manufacturer documentation.

PARAMETER	VALUE	PARAMETER	VALUE
Command input	4-20 mA	Discrete input	Shutdown/reset contact
Power supply	18-32 V DC	Discrete output	Driver fault contact
Position feedback	4-20 mA	Maximum valve cable	60 m

Verified Product Record

DATA GROUP	VERIFIED VALUE
Installed host / carrier	Woodward GS3/LQ liquid-fuel valve control
Primary system role	Converts the control command into valve position
Connection boundary	Record the 4-20 mA command, position-feedback loop, 18-32 V DC supply, shutdown/reset contact, driver-fault contact and valve cable before removing 9907-186. Restore the approved GS3/LQ configuration and complete a controlled stroke and shutdown test before enabling fuel flow.
Controlled acceptance duty	Gas-turbine liquid-fuel control

ENGINEERING BOUNDARY

Confirm WOODWARD 9907-186, GS3/LQ driver and valve, 18-32 V DC supply, 4-20 mA command and feedback, shutdown/reset and fault contacts, valve cable, grounding, calibration and controlled stroke results before commissioning.

Pre-Installation Checks

1	Confirm WOODWARD 9907-186 and the assigned GS3/LQ valve-driver position.	2	Place the turbine and fuel system in the approved maintenance state.
3	Isolate the 18-32 V DC supply and secure the fuel system.	4	Record command, feedback, shutdown/reset, fault and valve-cable connections.

Documented Service Record

RECORD ITEM	REQUIRED ENTRY
As-found article	9907-186
Installed host	Woodward GS3/LQ liquid-fuel valve control
Connection record	Capture before removal
Controlled release	Diagnostics and functional proof

System Role and Architecture

WOODWARD 9907-186 is a GS3/LQ valve driver for an integrated liquid-fuel metering system. It converts a 4-20 mA command into controlled valve positioning with feedback, shutdown/reset and fault indication.

FUNCTION 1 Converts the control command into valve position	FUNCTION 2 Returns documented position feedback
FUNCTION 3 Provides shutdown/reset and fault interfaces	FUNCTION 4 Supports integrated liquid-fuel metering

Matched System Components

NO.	DOCUMENTED COMPONENT / ROLE
1	Woodward GS3/LQ liquid-fuel valve control
2	18-32 V DC
3	Gas-turbine liquid-fuel control
4	Record the 4-20 mA command, position-feedback loop, 18-32 V DC supply, shutdown/reset contact, driver-fault contact and valve cable before removing 9907-186. Restore the approved GS3/LQ configuration and complete a controlled stroke and shutdown test before enabling fuel flow.

System Integration Record

INTEGRATION ITEM	DOCUMENTED ROLE
Host identity	Woodward GS3/LQ liquid-fuel valve control
Interface role	Converts the control command into valve position
Field / power context	The driver interfaces the 4-20 mA command with the electrically actuated valve and returns position and fault information. Commissioning verifies polarity, valve cable, feedback calibration, shutdown behavior and controlled stroking.
Commissioning evidence	Complete a controlled valve stroke and fail-safe shutdown test before fuel release.

Installation and Connection Checks

1 Confirm the approved valve, cable length and mechanical fuel arrangement.	2 Restore wiring, calibration and turbine-control configuration.
3 Review driver supply, feedback, fault and shutdown diagnostics.	4 Complete a controlled valve stroke and fail-safe shutdown test before fuel release.

MANUFACTURER SOURCE RECORD

GS3/LQ Valve Driver Installation and Operation Manual
Woodward manual 40175_C

Applications and Engineering Context

Gas-turbine liquid-fuel control

Positions the metering valve from the turbine control command.

Fuel-bypass regulation

Supports the approved bypass or metering arrangement in the fuel system.

Valve-driver replacement

Restores an exact driver position with recorded loop and cable evidence.

Fuel-system recommissioning

Provides controlled stroke, feedback and shutdown verification before fuel enablement.

TECHNICAL NOTE

Record the 4-20 mA command, position-feedback loop, 18-32 V DC supply, shutdown/reset contact, driver-fault contact and valve cable before removing 9907-186. Restore the approved GS3/LQ configuration and complete a controlled stroke and shutdown test before enabling fuel flow.

Model-Specific Acceptance Evidence

CHECK	ACCEPTANCE CONDITION
Identity	9907-186 recorded
Host / carrier	Woodward GS3/LQ liquid-fuel valve control
Physical interface	Converts the control command into valve position
Configuration	Review driver supply, feedback, fault and shutdown diagnostics.
Functional proof	Complete a controlled valve stroke and fail-safe shutdown test before fuel release.

IMPORTANT NOTICE

Confirm WOODWARD 9907-186, GS3/LQ driver and valve, 18-32 V DC supply, 4-20 mA command and feedback, shutdown/reset and fault contacts, valve cable, grounding, calibration and controlled stroke results before commissioning.

Controlled Release Summary

RELEASE ITEM	MODEL-SPECIFIC CONDITION
Article identity	9907-186
Approved role	Gas-turbine liquid-fuel control
Final validation	Complete a controlled valve stroke and fail-safe shutdown test before fuel release.

Engineering Precautions

1	Confirm WOODWARD 9907-186 and the assigned GS3/LQ valve-driver position.	2	Place the turbine and fuel system in the approved maintenance state.
3	Isolate the 18-32 V DC supply and secure the fuel system.	4	Record command, feedback, shutdown/reset, fault and valve-cable connections.
5	Confirm the approved valve, cable length and mechanical fuel arrangement.	6	Restore wiring, calibration and turbine-control configuration.
7	Review driver supply, feedback, fault and shutdown diagnostics.	8	Complete a controlled valve stroke and fail-safe shutdown test before fuel release.

Related Products on Apter Power

MODEL	SYSTEM ROLE	APTER POWER PAGE
WOODWARD 8237-1246	Related Apter Power product	View WOODWARD 8237-1246 page
WOODWARD 8200-226	Related Apter Power product	View WOODWARD 8200-226 page
WOODWARD 8200-203	Related Apter Power product	View WOODWARD 8200-203 page
WOODWARD 9905-971	Related Apter Power product	View WOODWARD 9905-971 page
WOODWARD 8280-192	Related Apter Power product	View WOODWARD 8280-192 page
WOODWARD 5437-2131	Related Apter Power product	View WOODWARD 5437-2131 page
WOODWARD 8280-4001	Related Apter Power product	View WOODWARD 8280-4001 page
WOODWARD 5464-654	Related Apter Power product	View WOODWARD 5464-654 page

MANUFACTURER SOURCE RECORD

GS3/LQ Valve Driver Installation and Operation Manual
Woodward manual 40175_C

APTER POWER SALES TEAM

WHATSAPP / PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com



9907-186