WESTINGHOUSE 1C31233G04

Sequence of Events Input Module

WESTINGHOUSE 1C31233G04 is a compact 16-channel Ovation sequence-of-events contact input module with a 48 VDC on-card auxiliary supply.

01	02	03	04
Sixteen sequence-of-events inputs	48 VDC on-card auxiliary supply	Compact Ovation module format	1C31238H01 cavity insert

System position

Field contact transition	1C31238H01 wiring insert	1C31233G04 SOE processing	Ovation event buffer and controller

Product and release scope

Exact identity	Engineering use	Verification boundary	Acceptance
WESTINGHOUSE 1C31233G04 is retained without shortening its suffix.	WESTINGHOUSE 1C31233G04 combines field-contact acquisition with sequence-of-events processing. Correct time synchronization, event-buffer handling and channel-state validation are essential because the module is used to reconstruct the order of plant events.	Only exact-model or explicitly applicable family facts are populated.	Connections, configuration, function and safe response require recorded proof.

02 / CAPABILITY AND INTERFACE MAP

Verified technical matrix

Product class	Compact sequence-of-events contact input
Channel count	16
Field-input type	Contact input
Auxiliary supply	48 VDC on card
Auxiliary range	42-55 VDC

Field insert	1C31238H01 molded cavity insert
Transition rejection	Less than 3.87 ms
Transition acceptance	Greater than 4.13 ms
Propagation time	3.75-4.4 ms

Interface architecture

Contact boundary	Event detection	Buffer interface	Controller interface
Sixteen field-contact circuits using the installed cavity-insert wiring label	State transitions qualified by the compact SOE input timing	Accepted transitions written to the module event buffers	Time-ordered event records transferred to the Ovation system

Control path

Field contact transition	1C31238H01 wiring insert	1C31233G04 SOE processing	Ovation event buffer and controller

Technical service focus

H1	H2	H3	H4
Sixteen sequence-of-events inputs	48 VDC on-card auxiliary supply	Compact Ovation module format	1C31238H01 cavity insert

Use cases with controlled scope

Trip-sequence analysis

Captures the order of protective and equipment contact changes.

Alarm chronology

Supplies event-timed discrete states for post-event review.

Compact SOE replacement

Restores an existing sixteen-channel compact event-input position.

Event-buffer diagnostics

Provides a defined boundary for checking time sync, overflow and channel transition behavior.

INTEGRATION CHECKPOINTS

Identity

WESTINGHOUSE 1C31233G04 remains complete in purchasing, drawings and labels.

Host system

Installed position and surrounding hardware are verified before exchange.

Configuration

Project data, jumpers, wiring and settings are recorded as applicable.

Acceptance

Functional and safe-state evidence is captured before release.

Installation decision points

1

Isolate the on-card auxiliary supply and all connected contact circuits before handling WESTINGHOUSE 1C31233G04.

2

Match the complete G04 identity and the 1C31238H01 cavity insert before installation.

3

Record all sixteen point assignments, normal states and event priorities before removing the module.

4

Preserve the field-contact common and wetting-supply arrangement shown on the installed wiring insert.

System relationship

Field contact transition	1C31238H01 wiring insert	1C31233G04 SOE processing	Ovation event buffer and controller

FAQ decision matrix

Engineering decision	Controlled response
How many SOE channels are provided by WESTINGHOUSE 1C31233G04?	The compact module provides sixteen contact-input channels.
Which field insert is used with WESTINGHOUSE 1C31233G04?	The documented molded cavity insert is 1C31238H01.
What wetting supply belongs to WESTINGHOUSE 1C31233G04?	The module uses an on-card 48 VDC auxiliary supply operating over the documented 42 to 55 VDC range.
Which short transitions are rejected by WESTINGHOUSE 1C31233G04?	Input changes shorter than 3.87 ms are rejected.

Eight release precautions

1 Isolate the on-card auxiliary supply and all connected contact circuits before handling WESTINGHOUSE 1C31233G04.	**2** Match the complete G04 identity and the 1C31238H01 cavity insert before installation.	**3** Record all sixteen point assignments, normal states and event priorities before removing the module.	**4** Preserve the field-contact common and wetting-supply arrangement shown on the installed wiring insert.
5 Confirm controller time synchronization and event-buffer readiness before injecting test transitions.	**6** Do not use a slow or bouncing test contact when validating the documented millisecond transition thresholds.	**7** Check event-buffer overflow and readout behavior after channel testing, not only the live input state.	**8** Release the module only after timestamps, event order, alarms and protective logic match the approved sequence test.

Product verification and contact

Evidence applicability

Evidence record	Applicable scope
Ovation I/O Reference Manual R3-1150, compact SOE subsystem, timing and event-buffer pages	Supports only the exact-model or explicitly applicable family facts used in this document.
Emerson Ovation Spare Parts document PWS_010046	Supports only the exact-model or explicitly applicable family facts used in this document.

Related Apter Power references

Related Apter Power references	Scope note
WESTINGHOUSE 1C31166G02	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31169G02	Portfolio reference only; verify compatibility independently.
WESTINGHOUSE 1C31189G01	Portfolio reference only; verify compatibility independently.

	Apter Power technical support sales13@apterpower.com +86 180 3023 5313 www.apterpower.com	Model record WESTINGHOUSE 1C31233G04 Sequence of Events Input Module Verify the complete nameplate before installation.