1X00691H01

Ovation 32-Channel Digital Output Personality Module

OVATION I/O ROLE

Emerson 1X00691H01 is an Ovation 32-channel, 24 V DC high-side single-ended digital output personality module. It works with electronics module 5X00500G01 and the Ovation four-slot I/O base 5X00497G01.

SYSTEM FAMILY

Ovation distributed control system

MODULE TYPE

Digital output personality module

OUTPUT CHANNELS

32

OUTPUT ARCHITECTURE

High-side, single-ended

Thirty-two-channel output path

Ovation controller – **5X00500G01 electronics** – **1X00691H01 personality module** – **32 field outputs**

CURRENT BOUNDARY

Each output is limited to 500 mA, and the complete personality module is limited to 2 A total.

Engineering data

Exact-model values organized by function

System family	Ovation distributed control system	**Per-channel current limit**	500 mA
Module type	Digital output personality module	**Total module current limit**	2 A
Output channels	32	**Module diagnostics**	P, C, E and I indicators
Output architecture	High-side, single-ended	**Channel indication**	Individual LEDs for channels 1 through 32
Field voltage class	24 V DC	**Auxiliary fuse**	2.5 A, 250 V, fast-acting, 5 x 20 mm
Paired electronics module	5X00500G01	**Excluded standard base**	1B30035H01
Required I/O base	5X00497G01 four-slot Ovation I/O base	**Additional excluded bases**	1X00014H01 and 5X00334G01

System role and applications

Four supported operating contexts

OVATION DISCRETE-OUTPUT PANELS

Routes thirty-two documented 24 V DC commands to field circuits through the approved personality-module assembly.

HIGH-SIDE LOAD CONTROL

Provides a sourced, single-ended output path for the installed process loads.

CHANNEL-LEVEL TROUBLESHOOTING

Uses individual output indications together with P, C, E and I diagnostics during maintenance.

LEGACY I/O RESTORATION

Reinstates the approved 5X00500G01 and 5X00497G01 hardware relationship after a controlled module replacement.

Integration control

The personality module must be installed on the Ovation four-slot I/O base 5X00497G01; the maintenance manual excludes standard bases 1B30035H01, 1X00014H01 and 5X00334G01. Before exchange, record the channel map, auxiliary supply and field-return arrangement. After installation, inspect the P, C, E and I diagnostics, then prove channels 1 through 32 without exceeding either the per-channel or total-module current limit.

Service checks

- Do not install 1X00691H01 on excluded standard bases 1B30035H01, 1X00014H01 or 5X00334G01.
- Check the 2.5 A fast-acting auxiliary fuse and field-supply wiring before energization.
- Keep each output at or below 500 mA and the complete module at or below 2 A.
- Review P, C, E and I diagnostics and prove channels 1 through 32 before release.

Engineering questions

Model-specific decisions for selection and service

WHAT ROLE DOES EMERSON 1X00691H01 SERVE IN AN OVATION I/O NODE?

Emerson 1X00691H01 is the field-facing 32-channel digital output personality module in the documented Ovation assembly.

HOW ARE THE OUTPUTS ON EMERSON 1X00691H01 ARRANGED?

Emerson 1X00691H01 provides thirty-two high-side, single-ended outputs for 24 V DC field circuits.

WHICH ELECTRONICS MODULE IS PAIRED WITH 1X00691H01?

The Ovation maintenance documentation pairs 1X00691H01 with electronics module 5X00500G01.

WHAT BASE IS REQUIRED FOR EMERSON 1X00691H01?

Emerson 1X00691H01 requires the 5X00497G01 four-slot Ovation I/O base.

CAN 1X00691H01 BE MOUNTED ON A STANDARD OVATION BASE?

No. Emerson excludes standard bases 1B30035H01, 1X00014H01 and 5X00334G01 from the 1X00691H01 arrangement.

WHAT OUTPUT-CURRENT LIMITS APPLY TO EMERSON 1X00691H01?

Each Emerson 1X00691H01 channel is limited to 500 mA, and the complete module is limited to 2 A total.

WHICH INDICATORS SUPPORT TROUBLESHOOTING ON 1X00691H01?

The 1X00691H01 assembly provides P, C, E and I module diagnostics plus individual indications for channels 1 through 32.

WHICH FUSE MUST BE CHECKED BEFORE EMERSON 1X00691H01 IS RETURNED TO SERVICE?

The documented auxiliary fuse for Emerson 1X00691H01 is a 2.5 A, 250 V fast-acting 5 x 20 mm fuse.

Evidence, related products and contact

Traceable source record and direct Apter Power support

Manufacturer evidence used

- Emerson Process Management Maintaining Your Ovation System, OW360_R1007.
- Emerson Ovation hardware-maintenance section for 24 V DC high-side, single-ended digital output personality modules.
- Emerson Ovation base-compatibility, diagnostic and fuse tables for the 1X00691H01 assembly.

Verified related ApterPower product pages

Emerson KL2101X1-BB1 SE6504

Emerson A6560

Emerson EC3-X33

Emerson EN-204 EN-204-00-000

Emerson ES0350.M1A05L.27N0

Emerson EZ1000

Talk to Apter Power

WHATSAPP / PHONE +86 180 3023 5313

EMAIL sales13@apterpower.com

WEBSITE www.apterpower.com

1X00691H01