

**Table 41 3607E Digital Output Specifications (continued)**

Feature	Specification
On-state voltage drop:	
At backplane	< 2 VDC typical @ 250mA, < 3 VDC maximum @ 1A
With external termination, 10-foot cable	< 3 VDC typical @ 250mA, < 4 VDC maximum @ 1A
With external termination, 99-foot cable	< 4 VDC typical @ 250mA, < 7 VDC maximum @ 1A
Inductive kick-back protection (reverse EMF)	Reverse diode on I/O module

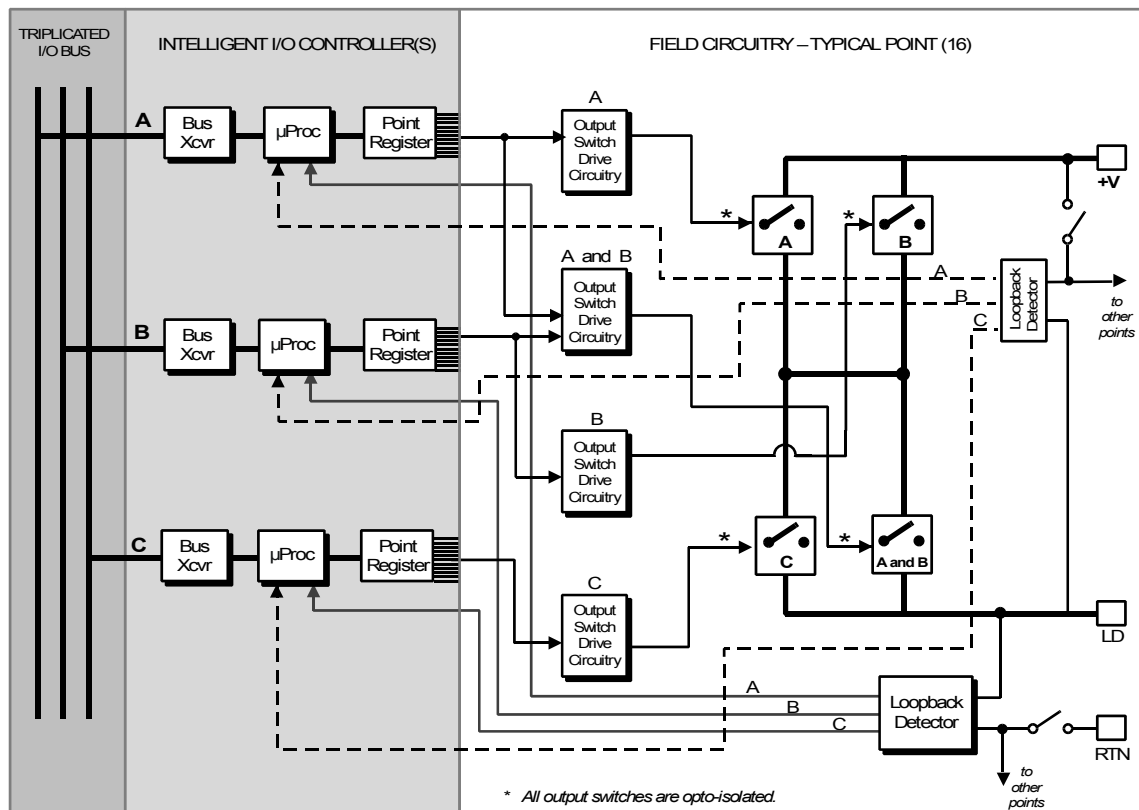
a. Power must be supplied to all points, including unused points on non-commoned panels.

b. The maximum output toggle rate enables proper operation of I/O diagnostics and detection of all normally detectable faults. The minimum toggle rate provides fault coverage of normally undetectable faults within 10 percent of the calculated mean-time-between-faults (MTBF) for the module.

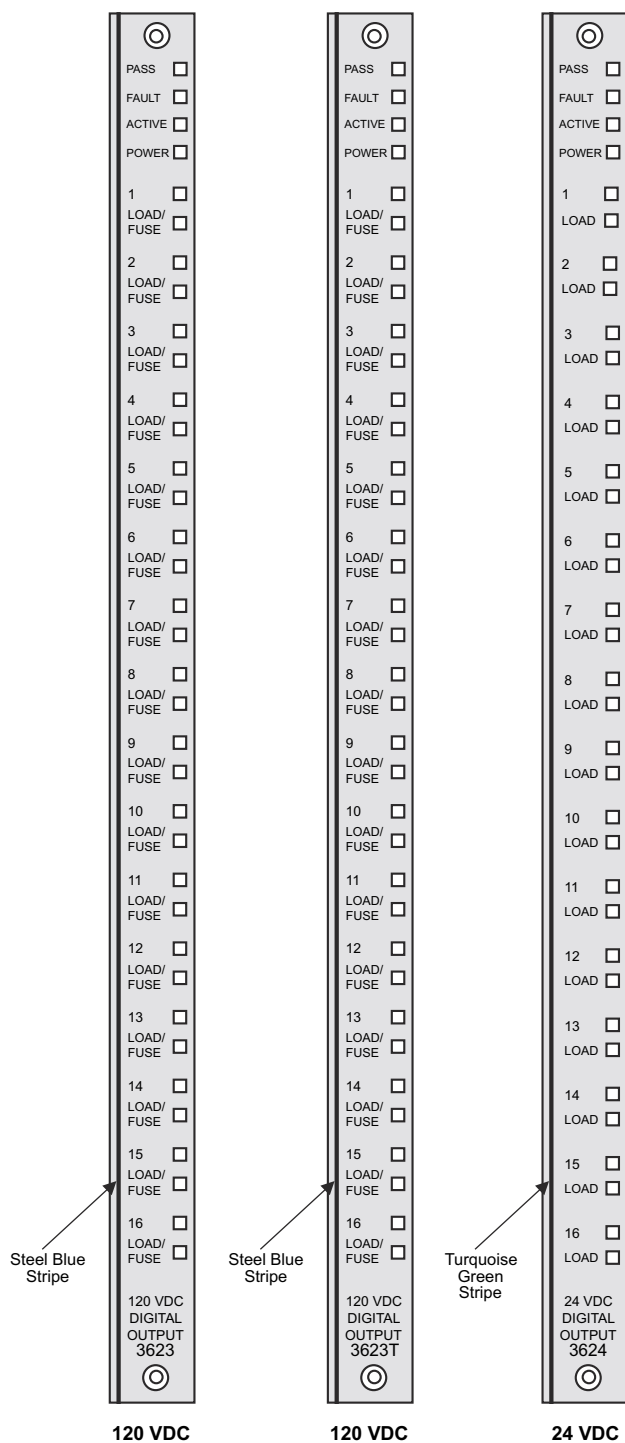
c. Diagnostic glitching can be disabled by using the OVD disable function.

## 24 to 120 VDC Supervised Digital Output Modules

This figure is a simplified schematic for Models 3623, 3623T, and 3624, which are TMR Supervised Digital Output Modules.

**Figure 47 3623, 3623T, and 3624 Simplified Schematic**

This figure shows the front panels of Models 3623, 3623T, and 3624.



**Figure 48** 3623, 3623T, and 3624 Front Panels

**Note** The Model 3623, 3623T, and 3624 modules will not assert point LEDs for both primary and spare modules. Only the primary module will assert point LEDs.

**Table 42 3623 and 3623T Supervised Digital Output Specifications (continued)**

Feature	Specification
Inductive kick-back protection (reverse EMF)	Reverse diode on I/O module
<p>a. Power must be supplied to all points, including unused points on non-commoned panels.</p> <p>b. The maximum output toggle rate enables proper operation of I/O diagnostics and detection of all normally detectable faults. The minimum toggle rate provides fault coverage of normally undetectable faults within 10 percent of the calculated mean-time-between-faults (MTBF) for the module.</p> <p>c. OVD glitching cannot be disabled.</p>	

### 3624 Specifications

This table lists the specifications for Model 3624, which is a TMR Supervised Digital Output Module with a nominal voltage of 24 VDC.

**Table 43 3624 Supervised Digital Output Specifications**

Feature	Specification
Color code	Turquoise green
Number of output signals	16, commoned
Recommended voltage range	16–30 VDC
Maximum voltage	36 VDC
Logic power	< 10 watts
Current ratings, maximum	0.7 amps/point, 4.8 amps surge/10 ms
Minimum required load	30 mA
Leakage current to load	4 mA, maximum
Fuses (field termination)	Not required; output switches are self-protected against over-voltage, over-temperature, and over-current
Status indicator: On or Off state	1 per point
Status indicator: Module status	Pass, Fault, Active
Status indicator: Field alarm <sup>a</sup>	Power, Load (1 per point)
Point isolation	1,500 VDC minimum
Short-circuit detection threshold in Off state <sup>b</sup>	< 10 $\Omega$ typical, 5–22 $\Omega$ worst-case
Output diagnostic fault coverage <sup>c</sup> :	
Maximum output toggle rate	Every 100 ms plus one scan
Minimum output toggle rate	Not required
Diagnostic glitch duration <sup>d</sup>	2 ms maximum, 500 $\mu$ s typical