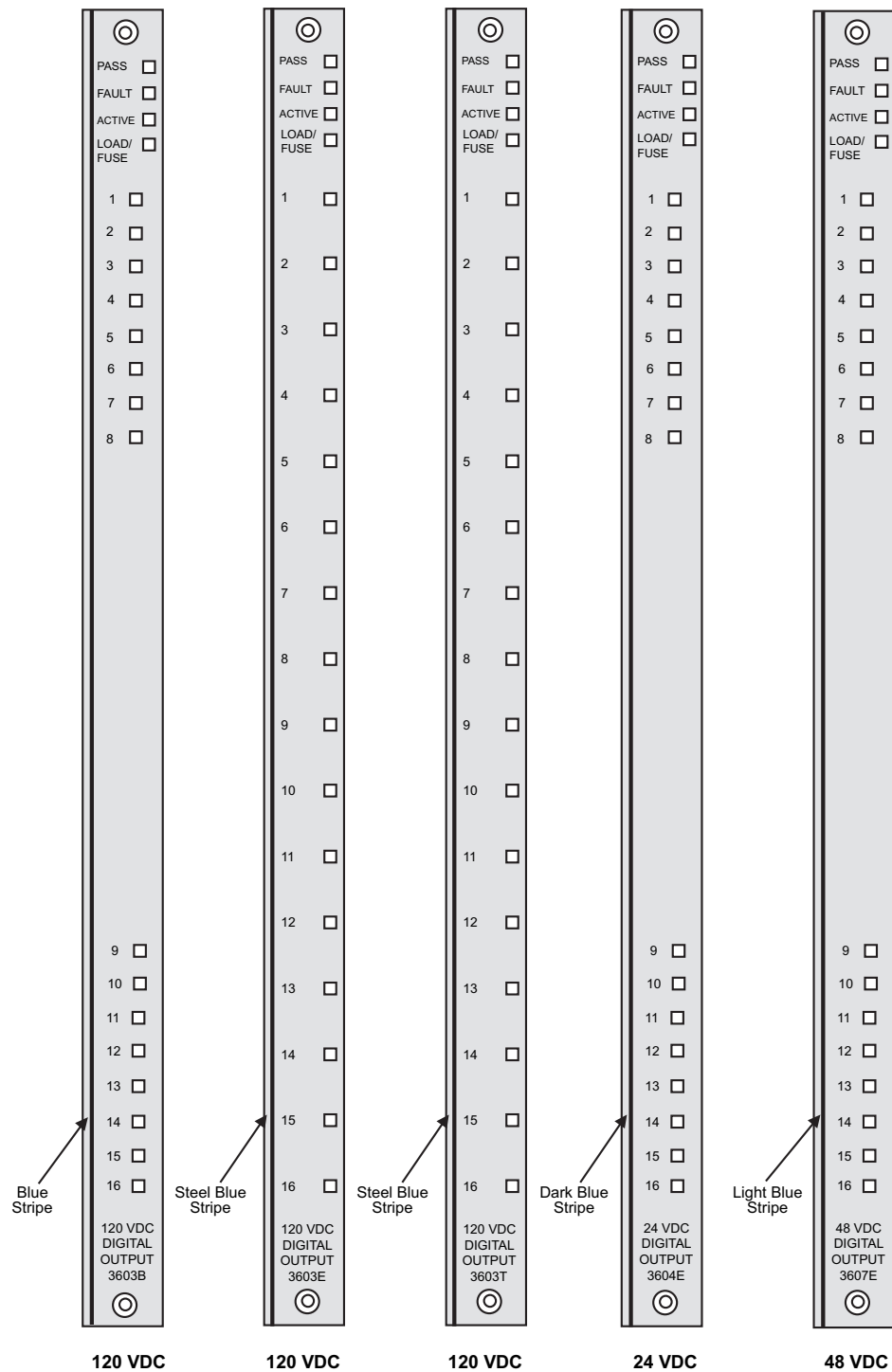


This figure shows the front panels of models 3603B, 3603E, 3603T, 3604E, and 3607E.



**Figure 39** 3603B, 3603E, 3603T, 3604E, and 3607E Front Panels

## 3603B Specifications

This table lists the specifications for model 3603B which is a TMR Digital Output Module with a nominal output voltage of 120 VDC.

### CAUTION

Model 3603B, 3603E, and 3603T Digital Output Modules should not be mixed in the same logical slot.

**Table 32 3603B Digital Output Specifications**

Feature	Specification
Color code	Blue
Number of output signals	16, non- commoned
Minimum load required	20 k $\Omega$ , installed as standard on all field termination modules
Voltage range	99–155 VDC
Power module load	< 10 watts
Current ratings, maximum	0.8 amps/point, 4 amps surge/10 ms
Leakage current to load	2 mA, maximum
Fuses, field termination module	1 per output, 1 amp, fast-acting
Status indicator: On or Off state	1 per point
Status indicator: Module status	Pass, Fault, Active
Status indicator: Field alarm <sup>1</sup>	Load/Fuse
Point isolation	1000 VDC minimum
Output diagnostic fault coverage <sup>2</sup> :	
Maximum output toggle rate	Every 100 ms plus one scan
Minimum output toggle rate	Not required
Diagnostic glitch duration <sup>3</sup>	2 ms, maximum
On-state voltage drop:	< 0.5 VDC typical @ 250mA
At backplane	< 0.5 VDC maximum @ 1A
On-state voltage drop:	< 2 VDC typical @ 250mA
With external termination, 10-foot cable	< 3 VDC maximum @ 1A
On-state voltage drop:	< 3 VDC typical @ 250mA
With external termination, 99-foot cable	< 6 VDC maximum @ 1A
Inductive kick-back protection (reverse EMF)	Reverse diode on I/O module

1. Power must be supplied to all points, including unused points on non-commoned panels.
2. 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% of the calculated mean-time-between-faults (MTBF) for the module.
3. Diagnostic glitching can be disabled by using the OVD disable function.

## 3603E and 3603T Specifications

This table lists the specifications for models 3603E and 3603T, which are TMR Digital Output Modules with a nominal voltage of 120 VDC.

### CAUTION

Model 3603B, 3603E, and 3603T Digital Output Modules should not be mixed in the same logical slot.

Triconex highly recommends that you perform compatibility testing before selecting the model 3603T module for use in applications that have any of the following:

- field wiring lengths over 328 feet (100 meters)
- cable that is not twisted pair
- atypical loads such as smart devices, strobe lights, or klaxons

Model 3603T may experience Output Voter Diagnostic (OVD) failures when used with a 1600 meter cable and a low-watt solenoid.

**Table 33 3603E and 3603T Digital Output Specifications**

Feature	Specification
Color code	Steel blue
Number of output signals	16, commoned
Voltage range	90-150 VDC
Maximum voltage	160 VDC
Logic power	< 10 watts
Current ratings, maximum	0.8 amp/point, 4 amps surge/10 ms
Leakage current to load	2 mA, maximum
Fuses (field termination module)	1 per output (1 amp, fast-acting)
Status indicator: On or Off state	1 per point
Status indicator: Module status	Pass, Fault, Active
Status indicator: Field alarm <sup>1</sup>	Load/Fuse
Point isolation: 3603E	1500 VDC minimum
Point isolation: 3603T	2500 VDC minimum
Output diagnostic fault coverage <sup>2</sup> :	
Maximum output toggle rate	Every 100 ms plus one scan
Minimum output toggle rate	Not required
Diagnostic glitch duration <sup>3</sup>	2 ms, maximum, 500 µsec, typical
On-state voltage drop:	< 0.5 VDC typical @ 250mA
At backplane	< 0.5 VDC maximum @ 1A

**Table 33 3603E and 3603T Digital Output Specifications** (*continued*)

Feature	Specification
On-state voltage drop:	< 1.5 VDC typical @ 250mA
With external termination, 10-foot cable	< 2.5 VDC maximum @ 1A
On-state voltage drop:	< 2.5 VDC typical @ 250mA
With external termination, 99-foot cable	< 5.5 VDC maximum @ 1A
Inductive kick-back protection (reverse EMF)	Reverse diode on I/O module

1. Power must be supplied to all points, including unused points on non-commoned panels.
2. 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% of the calculated mean-time-between-faults (MTBF) for the module.
3. Diagnostic glitching can be disabled by using the OVD disable function.

### 3604E Specifications

This table lists the specifications for model 3604E, which is a TMR Digital Output Module with a nominal voltage of 24 VDC.

**Table 34 3604E Digital Output Specifications**

Feature	Specification
Color code	Dark blue
Number of output signals	16, non-commoned
Voltage range	22–45 VDC
Logic power	< 10 watts
Current ratings, maximum	2 amps/point, 10 amps surge/10 ms
Leakage current to load	2 mA, maximum
Fuses (field termination module)	1 per output (2.5 amps fast-acting)
Status indicator: On or Off state	1 per point
Status indicator: Module status	Pass, Fault, Active
Status indicator: Field alarm <sup>1</sup>	Load/Fuse
Point isolation	1500 VDC minimum
Output diagnostic fault coverage <sup>2</sup> :	
Maximum output toggle rate	Every 100 ms plus one scan
Minimum output toggle rate	Not applicable
Diagnostic glitch duration <sup>3</sup>	2 ms maximum, 500 $\mu$ s typical
On-state voltage drop:	< 3 VDC typical @ 500mA
At backplane	< 3 VDC maximum @ 2A