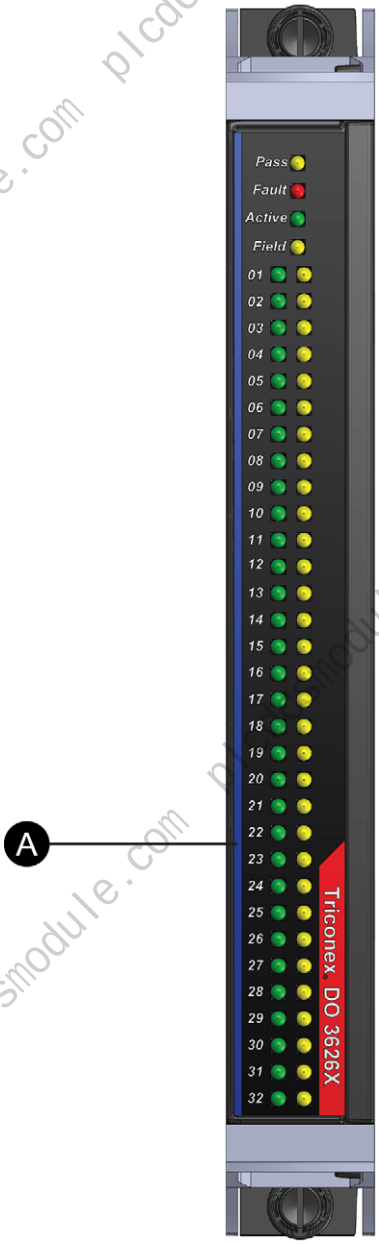
3626X Digital Output Module

Model 3626X, is a 32-point TMR Supervised or Non-Supervised Digital Output Module. It is compatible with 16-point commoned field termination panels, and is intended for energize-to-trip and de-energize-to-trip applications. The 3626X module can be installed only in Tricon CX I/O expansion chassis.

Figure 18 - 3626X DO Front Panel



A	Dark Blue Stripe

3626X Digital Output Specifications

Table 26 - 3626X Digital Output Specifications

Feature	Specification
Color code	Dark blue
Number of output signals	32, commoned[a]
Recommended voltage range	20.4–28.8 VDC
Nominal voltage	24 VDC
Maximum voltage	28.8 VDC is the maximum usable range 32 VDC is the maximum over-voltage range
Logic power	<8 watts
Current ratings, maximum	1.70 ± 10% amps/point, 5 amps surge/7 ms
Total module output current (all points)	10 amps per termination panel, 20 amps per module
Minimum required load (OFF point)	10 mA within 100 µs
Maximum output leakage	<4.0 mA
Fuses (field termination module)	Not required; output switches are self-protected against over-voltage, over-temperature, and over-current
Status indicator: Module status	Pass, Fault, Active, Load
Status indicator (green): On or Off state	1 per point
Status indicator (yellow): Field alarm[b]	Load (1 per point)
Field to system ground isolation	400 V_{rms} (566 V peak) continuous, 1500 VDC for 60 seconds
Point supervision	Can be programmed per point
Short/Open circuit detection threshold	Programmable per supervised point
Output diagnostic fault coverage:[b]: Maximum output toggle rate	 Every 100 ms
Diagnostic glitch duration	2 ms maximum, 200 µs typical
On-state voltage drop: At backplane	<0.23 VDC typical @ 250mA <1.52 VDC typical @ 1.7A
On-state voltage drop: With external termination, 10-foot cable	<1.21 VDC typical @ 250mA <3.85 VDC typical @ 1.7A
On-state voltage drop: With external termination, 99-foot cable	<2.80 VDC typical @ 250mA <9.20 VDC typical @ 1.7A

Table 26 - 3626X Digital Output Specifications (Continued)

Feature	Specification
Inductive kick-back protection (reverse EMF)	Output switches are self-protected
Compatible termination options	9662X-610RF ETP kit[d], 16 pts. 9671X-610RF Nonincendive ETP kit[(c)], 16 pts. 9671X-810RF ETP kit, 16 pts.
Compatible field external termination (FET) connector	9666X FET[(d)], 32 pts.

(a) For the 3626X module, field power is commoned to all points, so that if power is present on one point, it is present on all points.

(b) The maximum output toggle rate enables proper operation of I/O diagnostics and detection of all normally detectable faults.

(c) Individual field power monitoring is not supported and must be turned off in TriStation. The module will detect a fault if it is turned on.

(d) FETs are required for installing I/O modules in the Model 8131X I/O Expansion Chassis and for connecting ETPs to the I/O modules in the Model 8131X I/O Expansion Chassis.

NOTICE

EQUIPMENT OPERATION HAZARD

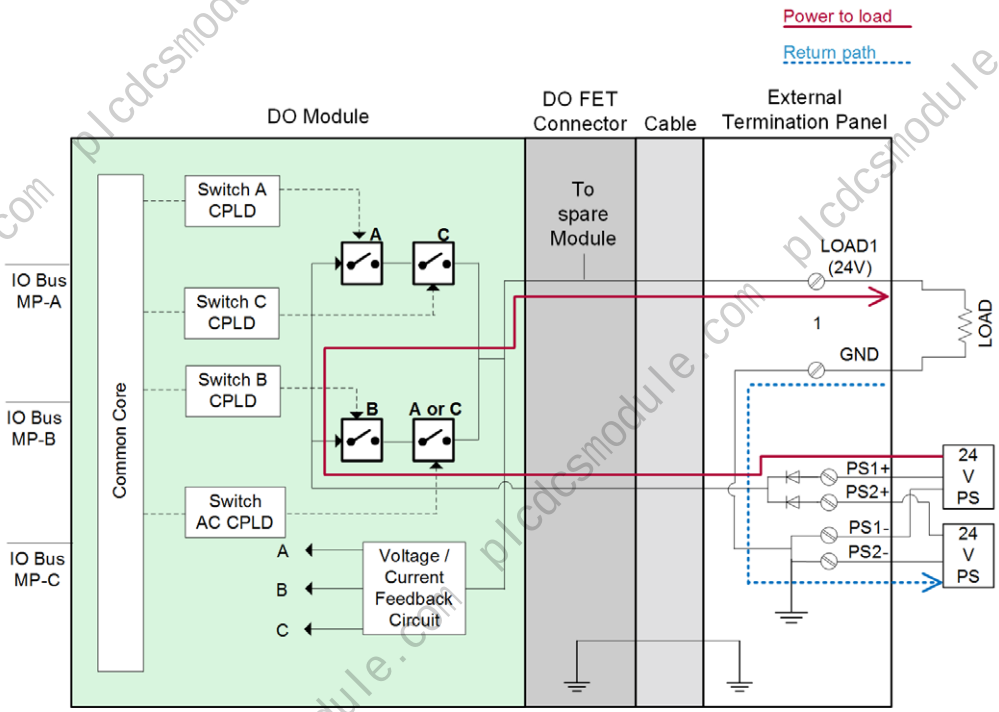
Apply power and ground to each termination panel PS+ and PS– from a single set of redundant field power sources.

Failure to follow these instructions can result in equipment damage.

3626X Simplified Schematics

This figure is a simplified schematic of a Model 3626X module with a 9666X FET and a 9662X-610RF ETP.

Figure 19 - Simplified Schematic of a 3626X DO Module with a 9662X-610RF ETP



NOTE: ETP 9671X-810RF also is compatible with the 3626X DO module. See the Termination Panel portion of the “Simplified Schematic of a 3625 or 3625A DO Module with a Commoned Interposing Relay Panel” in the *Field Terminations Guide for Tricon Systems* for ETP 9671X-810RF details.

This figure is a simplified schematic of a Model 3626X module with a 9666X FET and a 9671X-610RF ETP.

Figure 20 - Simplified Schematic of a 3626X DO Module with a 9671X-610RF ETP