

T8451C

Trusted TMR 24 Vdc Digital Output Module

PRODUCT TECHNICAL REFERENCE

ICS Triplex T8451C is a Trusted TMR 24 Vdc digital output module with 40 channels. It switches monitored loads through five eight-channel power groups for safety and process-control functions.

OFFICIAL SOURCE

Trusted TMR 24 Vdc Digital Output Module 40 Channel | ICSTT-RM2800-EN-P, August 2021

Verified technical profile

Trusted TMR 24 Vdc Digital Output Module

Backplane supply	20 to 32 Vdc
Backplane power	27 W
Field supply	18 to 32 Vdc
Outputs	40
Power groups	5 groups of 8
Field current at 50 deg C	40 A total; 8 A per group
Field current at 60 deg C	30 A total; 6 A per group
On-state resistance	1.6 ohm
Channel current	2 A continuous
Minimum on-state load	50 mA
Load capacitance	3000 uF maximum
Short-circuit protection	Electronic latching
Operating temperature	0 to 60 deg C
Dimensions	266 x 31 x 303 mm
Weight	1.3 kg

ENGINEERING USE OF THE VERIFIED DATA

The module is inserted in a Trusted I/O slot and automatically configured after the validated application is downloaded. Commissioning must cover group power budgets, wiring and grounding, channel mapping, output voltage/current feedback, protection latches and final-element response.

Verification focus: Confirm T8451C, hardware revision and Trusted slot assignment.

Only values traceable to the listed manufacturer source are treated as verified technical data.

System role and engineering boundaries

ICS Triplex T8451C is a Trusted TMR 24 Vdc digital output module with 40 channels. It switches monitored loads through five eight-channel power groups for safety and process-control functions.

1

Switches forty monitored 24 Vdc output channels

2

Separates channels into five field-power groups

3

Supports higher-current final elements within documented derating limits

4

Provides electronic short-circuit protection and output diagnostics

ENGINEERING NOTE

Install T8451C in a T8100 or T8300 I/O slot with the matched 24 Vdc digital-output termination hardware and preserve its five field-power groups. Verify ambient-temperature derating, channel current, measured output diagnostics and latching short-circuit recovery before service release.

Industrial application matrix

Four source-supported operating contexts for this exact product.

24 Vdc shutdown solenoids Controls protected trip loads in Trusted safety instrumented functions.	Process valve banks Drives grouped discrete actuators with monitored output state and current.
Alarm and interlock outputs Executes application commands to field relays and annunciation circuits.	Fault-tolerant digital outputs Supports matched-module output configurations with controlled online replacement procedures.
MODEL-SPECIFIC ACCEPTANCE FOCUS Confirm T8451C identity and revision, T8100/T8300 slot, 24 Vdc termination assembly, five supply groups, ambient derating, channel loads, grounding, Toolset and firmware/application versions, protection reset and complete final-element test before commissioning.	

Related-series navigation

Eight verified Apter Power product pages, kept separate from the manufacturer source record.

RELATED APTER POWER SERIES PAGES	
01	TC-301-02-10M0 Apter Power product page
02	T9482 Apter Power product page
03	T9803 Apter Power product page
04	TC-001-02-2M5 Apter Power product page
05	T8235 Apter Power product page
06	TC-301-02-15M0 Apter Power product page
07	TC-302-02-4M0 Apter Power product page
08	TC-303-02-4M0 Apter Power product page

Navigation links only - not manufacturer evidence for technical parameters.

SOURCE RECORD

Trusted TMR 24 Vdc Digital Output Module 40 Channel | ICSTT-RM280O-EN-P, August 2021

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