

A6371-10

Trip Backplane

Emerson A6371-10 is the AMS 6300 SIS backplane version with non-voted trip relays for three A6370D speed monitors. It distributes redundant 24 VDC power and exposes independent Trip A, Trip B and Trip C outputs.

IDENTITY	VERIFIED VALUE
Manufacturer	Emerson
Complete model	A6371-10
Product role	Trip Backplane
System family	AMS 6300 SIS
Country of origin	USA

DOCUMENT SCOPE

Exact identity, manufacturer-supported technical data, installation checks, applications, precautions and controlled verification records.

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A6371-10

Technical Specifications

PARAMETER	VERIFIED VALUE
Complete model	A6371-10
System	AMS 6300 SIS
Monitor positions	3 A6370D or A6370D/DP
Trip relay mode	Trip not voted
Independent trips	Trip A, Trip B, Trip C
Auxiliary outputs	Out 2 and Out 3 use 2oo3 logic
Supply	Redundant 24 VDC SELV/PELV
Minimum supply power	30 W
Conformal coating	HumiSeal 1B31 EPA; G3 environment

Model-Specific Engineering Note

ENGINEERING BOUNDARY

Record every Trip A/B/C and Out 2/Out 3 terminal before disturbing A6371-10. After installation, verify both supply feeds, the three independent trip relays and the documented 2oo3 auxiliary output logic without crossing channel identities.

Pre-Installation Checks

NO.	REQUIRED CHECK
1	Confirm A6371-10; do not assume the trip logic of another A6371 suffix.
2	Place every connected shutdown circuit in the approved test state.
3	Record terminals 1–19 and the external relay destinations before removal.
4	Keep Trip A, Trip B and Trip C conductors individually identified.
5	Verify both 24 VDC SELV/PELV feeds and at least 30 W capacity.

System Role and Architecture

Emerson A6371-10 is the AMS 6300 SIS backplane version with non-voted trip relays for three A6370D speed monitors. It distributes redundant 24 VDC power and exposes independent Trip A, Trip B and Trip C outputs.

FUNCTION 1

Carries three independent speed-monitor channels

FUNCTION 2

Provides non-voted Trip A, B and C relays

FUNCTION 3

Implements 2oo3 logic on auxiliary outputs

FUNCTION 4

Distributes redundant 24 VDC power to the monitor set

Common Applications

APPLICATION	ENGINEERING CONTEXT
Independent overspeed trips	Routes each A6370D channel to its own trip relay.
Shutdown-system interfacing	Provides terminal connections for Trip A, B and C outputs.
Auxiliary voted annunciation	Produces 2oo3 Out 2 and Out 3 logic.
Redundant power distribution	Feeds the three-monitor set from two 24 VDC SELV/PELV supplies.

CONTROLLED ACCEPTANCE DUTY

Confirm identity, physical interface, companion hardware, configured values and functional response against the installed-system record before release.

Engineering Precautions

NO.	PRECAUTION
1	Confirm A6371-10; do not assume the trip logic of another A6371 suffix.
2	Place every connected shutdown circuit in the approved test state.
3	Record terminals 1–19 and the external relay destinations before removal.
4	Keep Trip A, Trip B and Trip C conductors individually identified.
5	Verify both 24 VDC SELV/PELV feeds and at least 30 W capacity.
6	Use ESD controls and protect all three monitor connectors.
7	Test independent trips separately from 2oo3 auxiliary outputs.
8	Restore bypasses only after every relay and supply alarm is proven.

Model-Specific FAQ - Part 1

QUESTION	ANSWER
What trip logic is built into Emerson A6371-10?	The /10 version is documented as Trip Not Voted: Trip A, Trip B and Trip C are independent relay outputs.
Are all Emerson A6371-10 outputs non-voted?	No. The three trip relays are independent, while auxiliary Out 2 and Out 3 use 2oo3 logic.
How many A6370D monitors fit Emerson A6371-10?	The backplane is arranged for three A6370D or A6370D/DP speed monitors.
Which terminals carry the independent trips on Emerson A6371-10?	The operating manual assigns Trip A, B and C to terminals 7–15.

Model-Specific FAQ - Part 2

QUESTION	ANSWER
Where are the Emerson A6371-10 power connections?	Redundant supply connections are assigned to terminals 16–19.
What supply is required for Emerson A6371-10?	Use redundant 24 VDC SELV/PELV sources with at least 30 W available for the documented system.
What coating is documented for Emerson A6371-10?	The manual identifies a G3-rated conformal coating using HumiSeal 1B31 EPA.
How should Emerson A6371-10 relay logic be accepted?	Energize each A6370D channel independently to prove Trip A/B/C, then use the approved combinations to verify Out 2 and Out 3 change only under the documented 2oo3 condition.

Related Products on Apter Power

MODEL	APTER POWER PAGE
Bently Nevada 21000-28-05-00-130-04-02	View Bently Nevada 21000-28-05-00-130-04-02
Bently Nevada 21000-28-05-00-133-04-02	View Bently Nevada 21000-28-05-00-133-04-02
Bently Nevada 21000-28-05-00-40-03-02	View Bently Nevada 21000-28-05-00-40-03-02
Bently Nevada 21000-28-05-00-47-01-02	View Bently Nevada 21000-28-05-00-47-01-02
Bently Nevada 21000-28-05-15-027-01-02	View Bently Nevada 21000-28-05-15-027-01-02
Bently Nevada 21000-28-05-15-050-03-02	View Bently Nevada 21000-28-05-15-050-03-02
Bently Nevada 21000-28-05-20-035-03-02	View Bently Nevada 21000-28-05-20-035-03-02
Bently Nevada 21000-28-05-40-025-03-02	View Bently Nevada 21000-28-05-40-025-03-02

MANUFACTURER SOURCE RECORD

AMS 6300 SIS Overspeed Protection System Operating Manual
Emerson MHM-97442, Rev. 2.08, April 2026; A6371/10 wiring

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