Emerson A6371-10

01 Function and selected configuration

Product function

Emerson A6371-10 routes the three channel trip decisions separately so the installation can implement its required external voting arrangement. It also brings system power and the voted Out2 and Out3 relay circuits to the backplane terminal strip.

Selected configuration

The hyphenated A6371-10 order identity corresponds to the A6371/10 Trip Not Voted backplane. It is distinct from A6371/00, which supplies voted trip outputs. Three F48 monitor positions and separate analog and digital channel connections form the assembly interface.

Functional path

Three monitor cards	Separate Trip A / B / C	External voting circuit	Final trip element

Trip architecture	Three separate channel trip relay outputs
Auxiliary relays	Out2 and Out3 each use 2oo3 logic
Power connection	Redundant nominal 24 VDC feeds through the backplane

Terminals 7–9 serve Trip A, 10–12 serve Trip B and 13–15 serve Trip C, with changeover, normally closed and normally open contacts in each group. Out2 occupies terminals 1–3 and Out3 occupies 4–6; those two auxiliary functions retain 2oo3 logic even though the trip channels are separate.

A6371-10

02 Technical operating envelope

Backplane logic	Trip Not Voted
Monitor positions	Three; F48 interfaces
Trip relay outputs	Three; one per channel
Auxiliary relay outputs	Out2 and Out3, each 2oo3
Trip A terminals	7 common, 8 NC, 9 NO
Trip B terminals	10 common, 11 NC, 12 NO

Trip C terminals	13 common, 14 NC, 15 NO
Power terminals	16/17 and 18/19
System voltage	19–31.2 VDC; nominal 24 VDC
Supply arrangement	Two diode-decoupled inputs
Auxiliary contact load	48 VAC / 4 A or 30 VDC / 4 A maximum
Trip contact AC15 load	48 VAC / 3 A maximum

The terminal and relay data belong to the /10 backplane. A complete protection assembly also requires compatible monitors, controlled configuration and verified external trip logic.

Signal interpretation

Trip A, B and C remain separate on this backplane. The 2oo3 notation on Out2 and Out3 does not make the three trip relay circuits a voted trip output.

Interface boundary

Relay load limits depend on circuit category. The trip AC15 limit is 48 V at 3 A; the AC1 limit is 48 V at 4 A. Use the category applicable to the real switched load.

A6371-10

03 System integration and applications

External trip voting

Deliver separate Trip A, B and C contact sets to the system voting design.

Three-channel assembly

Connect the compatible monitor cards through their F48 positions and channel interfaces.

Redundant power entry

Route two properly protected DC supplies through diode-decoupled inputs.

Auxiliary voted functions

Use Out2 and Out3 as the configured 2oo3 relay functions without confusing them with trip-channel contacts.

System and supply context

Install three compatible monitors on the A6371/10 backplane and connect the individual trip contacts to the approved external protection logic. Monitor cards and the external voting circuit are separate components.

Application boundary

The Trip Not Voted arrangement is suited to protection architectures that retain independent channel trip decisions. Auxiliary Out2 and Out3 remain voted at the backplane.

Which A6371-10 terminals carry the Trip B changeover contact?

Terminals 10, 11 and 12 are Trip B common, normally closed and normally open respectively.

A6371-10

04 Engineering selection decisions

Why are three trip relays provided on A6371-10?

A6371/10 is the Trip Not Voted version. It exposes one trip relay per monitor channel so the external circuit can implement its intended voting logic.

Are Out2 and Out3 on A6371-10 also separate channel outputs?

No. Out2 and Out3 each use 2oo3 relay logic. Their arrangement differs from the three independent trip relay outputs.

What AC15 switching limit applies to the trip contacts of A6371-10?

The trip-relay AC15 rating is 48 VAC at a maximum 3 A. The 4 A AC1 value must not be substituted for this control-load category.

Does A6371-10 provide the same Channel OK relay listed for A6371/00?

The A6371/10 output arrangement lists three trip relays plus voted Out2 and Out3. The separate 1oo3 Channel OK relay is listed for A6371/00 and must not be assumed for this version.

Verify redundant feeds	Check both input supplies and their common returns before enabling the system.
Check module engagement	Confirm all F48 monitor connections are fully seated and compatible.

A6371-10

05 Configuration boundary and references

Lifecycle and support

The current manufacturing and factory-support phase of A6371-10 is not confirmed. Product availability alone does not establish its lifecycle status.

Replacement assessment

Retain the A6371/10 Trip Not Voted architecture, all three trip-channel wire groups, auxiliary voting and the dual-feed arrangement.

Document roles

Use the original manufacturer excerpt for its preserved technical tables and drawings. This product brief explains selection and system context. The separate installation guide covers preparation, connection, tests and handover; it does not replace manufacturer instructions.

Technical basis

Emerson AMS 6300 SIS Operating Manual, MHM-97442 Rev. 2.09, October 2026.

Related product navigation

- Emerson PR6423/012-100 CON011
- Emerson PR6424/000-041 CON041

These are related references, not confirmed substitutes or an automatically approved assembly.

Product enquiries