

# SELECTRAIL®

## iQBA1 SOLID STATE SIGNALLING RELAYS

INNOVATING SAFETY FOR YOUR TRAIN NETWORKS



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# TECHNICAL DATA

The **SELECTiQ**® has been designed to improve reliability, performance and functionality over its electromechanical predecessors.

Incorporating customer feedback, the SELECTiQ has been designed to provide everything required to bring projects to market in a timely and cost-effective manner.

## FEATURES

- SIL4
- No moving parts
- Reduced maintenance requirements
- Reduced lead time
- 100% solid state technology
- No more contact resistance issues
- Consistent operation in wider environments.
- Backward and upward compatibility with existing electromechanical relays
- Accurate and consistent repeatability
- User friendly display
- Improved PIN code retaining plate design
- Longer life
- Increased reliability
- Patented design
- AC & DC switching or DC only switching (on request)
- BR930 Q relay form factor
- Compatible with existing BR829 Q relay plugboards (interlocking pin code permitting)

### FEATURE 2

The SELECTiQ is controlled by two synchronized microcontrollers - 2oo2 composite architecture. Both microcontrollers must agree before the relay can change from its default (safe) state.

### FEATURE 1

The highest Safety Integrity Level rating. SIL4

### FEATURE 3

Improved PIN code retaining plate design.



# TECHNICAL DATA

## FEATURE 4

User friendly display provides simple and clear indication of operational status.

## SPECIFICATIONS

- Contact Current Rating: 3.0A/channel
- AC Immune
- Approximate weight: 0.75kg
- Designed for Operating Temperature: -40°C to +70°C
- Low Power Consumption
- Available Biased or Non-Biased

## FEATURE 5

Building upon the existing BR930 Q style platform enables retrofitting to existing relay installations/ plugboards.

## FEATURE 6

100% solid state technology. No more contact resistance issues, no moving parts, high temperature stability, accurate and consistent repeatability. Backward and upward compatible with existing electromechanical relays.

## FEATURE 7

Contact feet made from new updated material providing greater performance. Also found in military and aerospace industries.

## FEATURE 8

Analogue to digital converters accurately detect the applied control voltage, providing precise, clearly defined and highly repeatable control.



# iQBA1

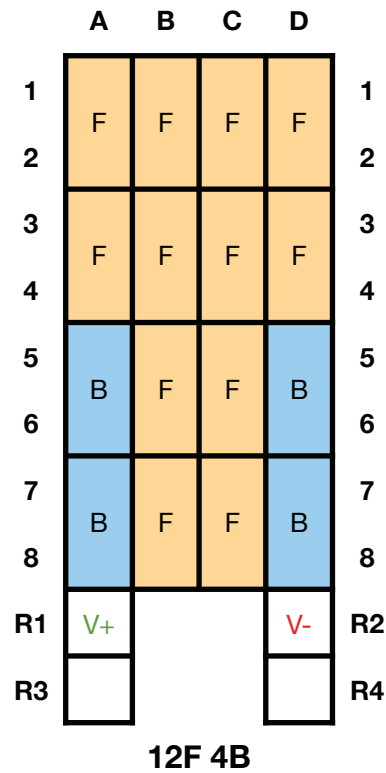
### FEATURES:

- DC biased
- AC & DC switching (DC only switching variant available on request)
- AC immune
- Patented design
- SIL4
- Typical operate time = 220ms
- Typical release time = 30ms
- Weight = 0.78kg



### CONTACT LAYOUT:

Note: Layouts shown are when viewed from the rear of the relay.



| Product Code    | Nominal Working Volts (VDC) | Contacts | Operating Volts (VDC) | Release Volts (VDC) | PIN code |
|-----------------|-----------------------------|----------|-----------------------|---------------------|----------|
| iQBA1-12F-4B-50 | 50                          | 12F 4B   | 33                    | 22                  | ACDFH    |
| iQBA1-12F-4B-24 | 24                          | 12F 4B   | 16                    | 10                  | ABFGH    |