

SELECTRAIL®



QUICK REFERENCE GUIDE

SOLID-STATE SIGNALLING RELAYS

SELECTIQ®

iQCJ1

A non-safety relay used in point control circuits to disconnect the circuit within a pre-determined time.



- ▶ 100% solid-state technology | Patented design
- ▶ DC biased | AC & DC switching
- ▶ Time delay relay: 7.5 sec and 10 sec delay models available (Other time delays available on request)
- ▶ Contact arrangement: 1F 3B
- ▶ Nominal voltage: = 50V DC
- ▶ Pick voltage: = 36V
- ▶ Drop voltage: = 25V
- ▶ Power consumption: During pick delay - 75mW. After time delay expires & relay has picked - 225mW.
- ▶ Approx. front contact resistance: = 50mΩ
- ▶ Approx. back contact resistance: = 150mΩ
- ▶ Weight: 0.5kg

PRODUCT CODE	NOMINAL WORKING VOLTS	CONTACTS	DELAY (SEC)	INTERLOCKING PIN CODE	PLUGBOARD PRODUCT CODE
iQCJ1-1F-3B-50-10	50 VDC	1F 3B	10 sec	ACELM	iQCJ1-ACELM-B
iQCJ1-1F-3B-50-7.5	50 VDC	1F 3B	7.5 sec	ABDFGJ	iQCJ1-ABDFGJ-B

iQMT2

- ▶ SIL2
- ▶ Time delay relay: User adjustable delay from 2.5 to 240 seconds



- ▶ Visual indication of timing | Digital clock accuracy
- ▶ Timing adjustment via DIP switches
- ▶ 100% solid-state technology | Patented design
- ▶ User friendly display
- ▶ 30x longer life expectancy (30,000,000 cycles)
- ▶ Self testing, zero maintenance
- ▶ Low power consumption | Increased reliability
- ▶ Available biased only
- ▶ Contact current rating: 3.0A/channel
- ▶ Backwards and upwards compatibility with existing electromechanical relays and Q-relay plugboards
- ▶ AC & DC switching (DC only - available on request)
- ▶ Designed for operating temps: -40°C to +70°C
- ▶ BR930 Q relay form factor
- ▶ Compatible w/ BR829 plugboards (refer datasheet)
- ▶ Weight: 0.7kg

PRODUCT CODE	NOMINAL WORKING VOLTS	CONTACTS	INTERLOCKING PIN CODE	PLUGBOARD PRODUCT CODE
iQMT2-1F-3B-50	50 VDC	1F 3B	BEFJK	iQMT2-BEFJK-B
iQMT2-1F-3B-24	24 VDC	1F 3B	BEGHK	iQMT2-BEGHK-B

iQN1

- ▶ SIL4 design
- ▶ 100% solid-state technology
- ▶ Patented design



- ▶ Low power consumption
- ▶ Self testing, zero maintenance
- ▶ 30x longer life expectancy (30,000,000 cycles)
- ▶ Non-biased
- ▶ Backwards and upwards compatibility with existing electromechanical relays and Q-relay plugboards
- ▶ Contact current rating: 3.0A/channel
- ▶ DC neutral
- ▶ AC & DC switching (DC only - available on request)
- ▶ Designed for operating temps: -40°C to +70°C
- ▶ BR930 Q relay form factor
- ▶ Compatible w/ BR829 plugboards (refer datasheet)
- ▶ Operate time: 150ms | Release time: 30ms
- ▶ Weight: 0.8kg

PRODUCT CODE	NOMINAL WORKING VOLTS	CONTACTS	INTERLOCKING PIN CODE	PLUGBOARD PRODUCT CODE
iQN1-12F-4B-50	50 VDC	12F 4B	ABCEF	iQN1-ABCEF-B
iQN1-12F-4B-24	24 VDC	12F 4B	ABCDE	iQN1-ABCDE-B

iQNA1

- ▶ SIL4 design
- ▶ 100% solid-state technology
- ▶ Patented design



- ▶ Low power consumption
- ▶ Self testing, zero maintenance
- ▶ 30x longer life expectancy (30,000,000 cycles)
- ▶ Non-biased
- ▶ Backwards and upwards compatibility with existing electromechanical relays and Q-relay plugboards
- ▶ Contact current rating: 3.0A/channel
- ▶ DC neutral | AC immune
- ▶ AC & DC switching (DC only - available on request)
- ▶ Designed for operating temps: -40°C to +70°C
- ▶ BR930 Q relay form factor
- ▶ Compatible w/ BR829 plugboards (refer datasheet)
- ▶ Operate time: 150ms | Release time: 30ms
- ▶ Weight: 0.75kg

PRODUCT CODE	NOMINAL WORKING VOLTS	CONTACTS	INTERLOCKING PIN CODE	PLUGBOARD PRODUCT CODE
iQNA1-12F-4B-50	50 VDC	12F 4B	ABEFH	iQNA1-ABEFH-B
iQNA1-12F-4B-24	24 VDC	12F 4B	ABDFH	iQNA1-ABDFH-B



SELECTiQ®
The Intelligent Q-Relay



iQPR2 - 75% LESS VOLUME
Than equivalent Q-STYLE relay solutions

SELECTRAIL AUSTRALIA's innovative iQBA1 Relay is the world's First: Certified, 100% Solid-State, SIL4, Q-Style Relay! iQBA1 has successfully passed Network Rail (UK) approvals for Live Trials with the confirmed regions of Wales, West, North West, Scottish and Eastern routes interested in proceeding to the trial phase.

iQBA1

- ▶ TÜV certified SIL4
- ▶ EMC tested to EN 50121-4:2016/A1:2019
- ▶ Patented design

- ▶ 100% solid-state technology
- ▶ 30x longer life expectancy (30,000,000 cycles)
- ▶ Self testing, zero maintenance
- ▶ Consistent output and operation over its lifespan
- ▶ Biased
- ▶ Contact current rating: 3.0A/channel
- ▶ Backwards and upwards compatibility with existing electromechanical relays and Q-relay plugboards
- ▶ DC biased | AC immune
- ▶ AC & DC switching (DC only - available on request)
- ▶ Designed for operating temps: -40°C to +70°C
- ▶ BR930 Q relay form factor
- ▶ Compatible w/ BR829 plugboards (refer datasheet)
- ▶ Operate time: 220ms | Release time: 30ms
- ▶ Weight: 0.8kg



PRODUCT CODE	NOMINAL WORKING VOLTS	CONTACTS	INTERLOCKING PIN CODE	PLUGBOARD PRODUCT CODE
iQBA1-12F-4B-50	50 VDC	12F 4B	ACDFH	iQBA1-ACDFH-B
iQBA1-12F-4B-24	24 VDC	12F 4B	ABFGH	iQBA1-ABFGH-B

iQSELECT2

- ▶ TÜV certified SIL4
- ▶ EMC tested to EN 50121-4:2016/A1:2019
- ▶ 100% solid-state technology | Patented design
- ▶ 30x longer life expectancy (30,000,000 cycles)
- ▶ Self testing, zero maintenance

- ▶ Consistent output and operation over its lifespan
- ▶ Time delay relay: User adjustable delay from 2.5 to 325 seconds
- ▶ Stick contact
- ▶ Low power consumption
- ▶ Visual indication of timing
- ▶ User friendly display
- ▶ Digital clock accuracy
- ▶ Fine adj. via DIP switches
- ▶ AC & DC switching (DC only - available on req.)
- ▶ Increased reliability - No contact resistance issues
- ▶ Contact current rating: 3.0A/channel
- ▶ Accurate and consistent repeatability
- ▶ Designed for operating temps: -40°C to +70°C
- ▶ Recognises strapping and sets the time range accordingly
- ▶ Improved interlocking PIN code retaining plate design
- ▶ Backwards and upwards compatibility with existing electromechanical relays and Q-relay plugboards
- ▶ BR930 Q relay form factor
- ▶ Compatible w/ BR829 plugboards (refer datasheet)
- ▶ Weight: 0.7kg



PRODUCT CODE	NOMINAL WORKING VOLTS	CONTACTS	INTERLOCKING PIN CODE	PLUGBOARD PRODUCT CODE
iQSELECT2-5F-2B-50	50 VDC	5F 2B	BDFHX	iQSELECT2-BDFHX-B
iQSELECT2-5F-2B-24	24 VDC	5F 2B	BDFJX	iQSELECT2-BDFJX-B

THE NEXT-GENERATION OF SELECTIQ | 75% LESS VOLUME THAN EQUIVALENT Q-RELAY SOLUTIONS

THE WORLD'S FIRST 75% LESS VOLUME Q-RELAY SOLUTION!

SELECTRAIL AUSTRALIA's all-new iQPR2 relay technology.

SELECTRAIL is thrilled to announce our new cutting-edge relay solution as the result of a collaboration and request to adapt our existing SELECTIQ technology into an innovative and bespoke design by leveraging our World-First SELECTIQ relay range as the footing to develop this tailor-made solution.

iQPR2

World First Innovations

- ▶ Patented design
- ▶ 75% less volume: Than incumbent solutions
- ▶ DIN Rail mountable

- ▶ SIL4 architecture for enhanced safety
- ▶ 2x N/O solid-state contacts
- ▶ Low power consumption: 320mW at 25V DC | 560mW at 48V DC
- ▶ Dimensions: 95mm (L) x 99mm (H) x 23mm (W)
- ▶ Contact configuration: Double, normally open - biased DC only
- ▶ Input voltage: 0-68V DC (biased) | Nominally 48V
- ▶ Relay status indication: Red LED (solid) = Picked, Flashing = Fault, No light = Dropped
- ▶ Contact rating: 5-110V DC @ 3A max
- ▶ Power inrush current: Below 1A for < 2ms
- ▶ Operate pick voltage: Approx. 25V DC
- ▶ Release drop voltage: Approx. 20V DC
- ▶ Operate time: Approx. 130ms
- ▶ Power interruption hold-up: Contact remains closed if power is interrupted for < 30ms
- ▶ Release time: Contact opens if power is interrupted for > 75ms
- ▶ Weight: 0.5kg



PRODUCT CODE	NOMINAL WORKING VOLTS	CONTACTS
iQPR2-2F-48	48 VDC	2F





Selectrail (Australia) Pty Ltd is an Australian-based railway signalling and solutions company, specialising in the supply of high-quality railway products, equipment, and services to the global signalling industry.

Selectrail can assist with all your solid-state signalling relay needs. Our team of specialists brings years of experience in delivering bespoke and innovative solutions. Whatever the challenge, we're ready to support your next project — whether it's design, commissioning, training, or something truly unique.

As part of our ongoing commitment to continuous improvement, Selectrail has achieved **ISO 9001 Certification** (*Quality Management Systems*), ensuring the highest standards in our internal processes and operations.



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