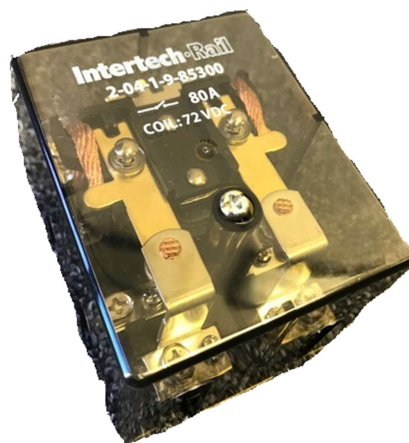
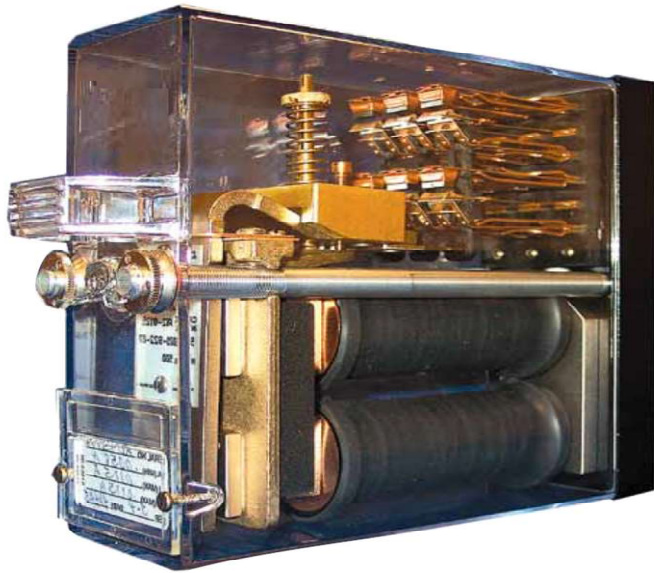


B1 B2 AREMA

Vital Relays

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InterchRail develops and markets systems, equipment and services for the railway sector. We offer a wide range of custom products and services for the rail and transit industries.

IntertechRail partnerships with key manufactures and players in the market to produce what is the most innovative in the sector.

IntertechRail is one of the most innovative company in the railway sector, producing key products to railroads, such as switch machines, signaling and transit relays and RFID systems.

Due to our innovative production method, including 3D modeling and green manufacturing, it is possible to reduce lead time and costs of key components.

All of our equipment production follows AREMA standards and are now in use by the most important railroads in the world.

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VANE RELAY

	frequency	Contacts	local Volts	Track Volts	INtertechRail P/N
	60hz	4f-4B	110	1/0.5	2-04-3-5-101-01
	60hz	2f-2B	110/55	1/0.5	2-04-3-5-101-09
	60hz	2f-2B	110/55	5	2-04-3-5-101-18
	100hz	4f-4B	110	2/1	2-04-3-5-101-20
	100hz	4f-4B	110	2/1	2-04-3-5-101-24

ELECTRONIC CODE TRANSMITTER

	Rate	low Voltage	high Voltage	Replaces These CT Relays	P/N
	Universal (note 1)	x		none	2-04-3-0-100-01
	Universal (note 1)		x	none	2-04-3-0-100-02
	50 fixed		x	57490-122-01	2-04-3-0-100-04
	75 fixed	x		57490-095-01, -05 (different registration)	2-04-3-0-100-05
	75 fixed		x	57490-091-05, -06	2-04-3-0-100-06
	75 fixed		x	57490-080-02	2-04-3-0-101-06
	96 fixed	x		57490-080-07, -09	2-04-3-0-100-07
	96 fixed		x	57490-080-08	2-04-3-0-100-08
	120 fixed	x		57490-096-01, -04	2-04-3-0-100-09
	120 fixed		x	57490-092-01	2-04-3-0-100-10
	180 fixed	x		57490-097-01, -04	2-04-3-0-100-11
	180 fixed		x	57490-093-01	2-04-3-0-100-12
	220 fixed	x		57490-119-01, -02 (Relay only had 1f-1B)	2-04-3-0-100-13
	220 fixed		x	57490-111-01 (Relay only had 1f-1B)	2-04-3-0-100-14
	270 fixed	x		57490-098-01	2-04-3-0-100-15
	270 fixed		x	57490-094-01	2-04-3-0-100-16

VITAL TIMER (DC)

description	P/N
Microchron ii Timer	2-04-3-0-101-01
Microchron ii Timer with seal option	2-04-3-0-101-02
Plugboard Kit	2-04-3-6-007-12

VITAL TIMER (AC)

AC Microchron	P/N
60 hz Relay	2-04-3-7-0X- XXX-XX
25 hz Relay	
aC Microchron ii 60 hz	2-04-3-0-103-01
aC Microchron ii 25 hz	2-04-3-0-104-01

B1 & B2 BIASED-NEUTRAL RELAYS

Relay	Contacts	nominal Resistance Ω	Max Pickup Working amperes	notations	Similar GRS P/N	P/N
B1	2f-2B	2100	0.0093	Ehd Contacts	56001-942-01	2-04-3-1-942-01
B1	4fB-2f-1B	2	0.158		56001-921-09	2-04-3-1-921-09
B1	4fB-2f-1B	500	0.0121		56001-921-07	2-04-3-1-921-07
B1	6fB	500	0.0121		56001-922-07	2-04-3-1-922-07
B1	4fB-2f-1B	100	0.026		56001-921-02	2-04-3-1-921-02
B1	4fB-2f-1B	63	0.0305		56001-921-05	2-04-3-1-921-05
B1	4fB-2f-1B	375	0.0126		56001-921-14	2-04-3-1-921-14
B1	4fB-2f-1B	750	0.0084		56001-921-10	2-04-3-1-921-10
B1	6fB	63	0.0305		56001-922-05	2-04-3-1-922-05
B1	6fB	250	0.0168		56001-922-01	2-04-3-1-922-01
B1	6fB	100	0.026		56001-922-02	2-04-3-1-922-02
B1	6fB	1	0.236		56001-922-10	2-04-3-1-922-10
B1	2fB-4f-2B	1000	0.0088		56001-927-01	2-04-3-1-927-01
B1	2fB-3f-3B	1000	0.0088		56001-928-01	2-04-3-1-928-01
B1	4fB-2f-1B	2100	0.0058		56001-932-01	2-04-3-1-932-01
B1	2fB-4f-2B	2100	0.0058		56001-933-01	2-04-3-1-933-01
B1	4fB-2f-1B	500	0.0121	hd Contacts(*)	56001-956-01	2-04-3-1-956-01
B1	4fB-2f-1B	2	0.158	hd Contacts(*)	56001-956-02	2-04-3-1-956-02
B1	4fB-2f-1B	1000	0.009		56001-921-04	2-04-3-1-921-04
B1	5f-4B	0.5(**)	0.32	high % Release	56001-961-01	2-04-3-1-961-01
B1	5f-4B	0.5(**)	0.374	high % Release	56001-965-01	2-04-3-1-965-01
B1	6fB	2	0.13		56001-968-01	2-04-3-1-968-01
B1	5f-4B	4	0.126		56001-963-01	2-04-3-1-963-01
B1	2fB-4f-2B	2100	0.0058	Special Single Coil da	56001-970-01	2-04-3-1-970-01
B1	2fB-4f-2B	2100	0.0058	hd Contacts(1)	56001-945-01	2-04-3-1-945-01
B1	8f-1B (1)	2100	0.0058	Tightly Controlled da	56001-971-01	2-04-3-1-971-01
B1	5f-1B-2fB	100	0.026	1B is agC	56001-972-01	2-04-3-1-972-01
B1	5f-1B-2fB	2100	0.0058	1B is agC	56001-973-01	2-04-3-1-973-01
B1	6fB	4	0.109		56001-979-01	2-04-3-1-979-01
B1	4fB-1f-2B	750	0.0084		56001-925-10	2-04-3-1-925-10
B1	2f-2B	500	0.019	Ehd Contacts	56001-926-01	2-04-3-1-926-01
B1	4fB-2f-1B	2100	0.0099		56001-980-01	2-04-3-1-980-01
B1	8f-1B	2100	0.0058	(2f-1B) hd, 1B is agC	56001-969-01	2-04-3-1-969-01
B2	8fB-4f-2B	350	0.0189		56002-719-01	2-04-3-2-719-01
B2	12fB	350	0.0189		56002-720-01	2-04-3-2-720-01
B1	4fB-2f-1B	.5(2)	0.393		56001-987-01	2-04-3-1-987-01
B1	4fB-2f-1B	2100	0.0058		56001-986-01	2-04-3-1-986-01
B1	2fB-4f-2B	2100	0.0099	hd Contacts	56001-984-01	2-04-3-1-984-01

B1 FLASHER RELAY

	P/N
flasher Relay (60 Ω)	2-04-3-1-985-01
Mounting Kit	2-04-4-0-071-01
flasher Module 48-54 flashes per minute drives 1,2,or 3 60 Ω flasher relays in parallel	2-04-4-3-003-01
flasher Module Rate 56-64 flashes per minute drives 1,2,or 3 60 Ω flasher relays in parallel	2-04-4-3-003-02
flasher Module Rate 56-64 flashes per minute drives 1 18 Ω flasher relay	2-04-4-3-003-04

LIGHT-OUT NEUTRAL RELAY

Contacts	nominal Resistance Ω	Use with lamp Volts @ 60hz	Watts	Max.Working amps aC/dC for low res. winding	P/N
4fB	0.24	10	5+3.5	0.68	2-04-3-1-785-35
4fB	450-0.069	10	18+3.5	1.52	2-04-3-1-785-61
4fB	450-0.12	12.0-16.0	21(CP)	0.883	2-04-3-1-873-01
6fB	450-0.2	10	10	0.84	2-04-3-1-785-10
4fB	0.4	10	13+3.5	0.294	2-04-3-1-785-55

POWER TRANSFER NEUTRAL RELAY

Contacts	GRS P/N	Nominal Res Ohms	P/N
6fB(*) 10 100-100			2-04-3-55255
6fB(**) 10 100-100			2-04-3-55053
6fB(*) 12 100-100			2-04-3-55254

CODE RESPONSIVE RELAY						
Contacts	nominal Sys Voltage	nominal Res Ω	notations			P/N
2fB(**)	10	200	line Code Repeater			2-04-3-1-672-01
4fB(**)	10	80	line Code Repeater			2-04-3-0-172-03
2fB(**)-2fB(***)	12	80	line Code Repeater			2-04-3-0-171-04
4fB(***)	10	80	line Code Repeater			2-04-3-0-171-03
4nR(****)	—	500	Magnetic-Stick Relay			2-04-3-5-172-05
2fB(**)	—	10	line Code Repeater			2-04-3-1-672-02
2nR(**)	—	520	Polar-Stick Ground detector			2-04-3-1-675-01

SWITCH OVERLOAD						
Contacts	nominal Res Ω	Switch Machine oper. Voltage	overload Rating amperes			P/N
2fB(**) (MB)	.058-135	low	18			2-04-3-1-916-02
2fB(**) (MB)	.058-135	high	12			2-04-3-1-916-01
2B(***)	.068-1225	high	12			2-04-3-1-785-01
2fB(**) (MB)	.068-220	high	11.5			2-04-3-1-785-21

SWITCH CONTROL RELAY						
Contacts	nominal Res Ω	Switch Machine oper. Voltage	notations			P/N
4fB	500	low	0.0136 neutral Relay. hd contacts, .090"(2.286mm) front contact opening			2-04-3-1-917-01
2f-2B	500	low or high	0.019 Biased-neutral Relay. Ehd contacts. .125" (3.175mm) front contact opening			2-04-3-1-926-01
2fB-5f-1B	0.045-450	high	0.0315 neutral Relay. hd contacts. .090" (2.28mm) front contact opening. for Model 6 Switch Machine control.			2-04-3-1-785-99
2f-1B-1fB	500	low or high	0.019 Biased neutral Relay. 2f-1B are Ehd contacts. .125" (3.175mm) front contact openings. 1fB are medium duty contacts.			2-04-3-1-988-01

B1 & B2 NEUTRAL NORMAL RELEASE RELAY						
Relay Size	Contacts	nominal System Resistance Ω	Max Pickup and Working amperes	notations		P/N
B1	6fB	1.8	0.13	Track Relay		2-04-3-1-714-03
B1	6fB	4	0.089	Track Relay		2-04-3-1-714-01
B1	6fB	500	0.0121	line Relay		2-04-3-1-762-02
B1	4fB-2f-1B	4	0.089	Track Relay		2-04-3-1-787-01
B1	4fB-2f-1B	500	0.0121	line Relay		2-04-3-1-783-02
B1	6fB	84	0.0195	line Relay		2-04-3-1-785-31
B1	6fB	900	0.0084	line Relay		2-04-3-1-762-01
B1	6fB(*)	500	0.0157	line Relay		2-04-3-1-951-01
B1	4f-2B	350	0.0086	line Relay		2-04-3-1-789-05
B1	4fB-2f-1B	84	0.0195	line Relay		2-04-3-1-785-37
B1	4fB-2f-1B	900	0.0084	line Relay		2-04-3-1-783-01
B1	4fB-2f-1B	350	0.0136	hd contacts (silver backs)		2-04-3-1-822-06
B1	4fB-2f-1B	500	0.0121	hd contacts (silver backs)		2-04-3-1-822-02
B1	4fB-2f-1B	900	0.0084	hd contacts (silver backs)		2-04-3-1-822-01
B1	6fB	9	0.055	operated from decoder unit.		2-04-3-0-004-01
B1	4fB	6	0.116	overlay track circuits		2-04-3-1-785-91
B1	4fB-2f-1B	100	0.0192	V P i		2-04-3-1-787-05
B1	2fB-1B-2f	500	0.0158	Ehd on 2f contacts		2-04-3-1-931-02
B1	4f-2B(*)	1	2.3	intermittent train control		
B1	6fB	500	0.012	hd front & back contacts		2-04-3-1-978-01
B1	2f-1B	1400	0.0315	line RELAY		2-04-3-1-911-01
B1	6fB	500	0.0157	.4fB(*)		2-04-3-1-983-01
B2	12fB	500	0.0152	line Relay		2-04-3-2-703-01
B2	8fB-2f	330	0.0294	Ehd on 2f contacts		2-04-3-2-710-01

B1 & B2 NEUTRAL SLOW ACTING RELAY

Relay Size	Characteristics	Contacts	nominal Resistance Ω	Max Pickup and Working Volts/amps	Minimum Time of Pickup and/or Release		P/N
B1	Slow-Pickup	4fB-2f-1B	300	0.034a	1.4 sec at 13.2V		2-04-3-1-790-01
B1	Slow-Pickup	6fB	220	9.45V	1.35 sec at .050a		2-04-3-1-736-01
B1	Slow-Release	4fB-2f-1B	194	0.046a	0.9-1.0 sec release at 10V		2-04-3-1-851-01
B1	Slow-Release	2fB	460	0.014a	3-3.75 sec at 9V		2-04-3-1-830-01
B1	Slow-Release	4fB	450	0.013a	0.9-1.1 sec at 10V		2-04-3-1-808-26
B1	Slow-Release	4fB	194	0.031a	3.0-3.75 sec at 12V		2-04-3-1-774-01
B1	Slow-Release	4fB-2f-1B	194	0.035a	1-1.25 sec at 10V		2-04-3-1-792-02
B1	Slow-Release	4fB-2f-1B	194	0.0335a	2.8-3.5 sec at 10V		2-04-3-1-778-01
B1	Slow-Release	4fB-2f-1B(**)	194	0.0347a	1.0-1.25 sec at 10V		2-04-3-1-957-01
B1	Slow-Release	6fB	194	0.035a	1-1.25 sec at 10V		2-04-3-1-780-01
B1	Slow-Release	4fB(**/ ***)	194	0.0315a	3-3.75 at 12V		2-04-3-1-960-01
B1	Slow-Release	4fB-2f-1B	300	0.0283a	1.7-2.1 sec. at 8.4V		2-04-3-1-817-01
B1	Slow-Release	4fB-2f-1B	800	0.121a	0.9-1.1 sec. at 10V		2-04-3-1-792-01
B1	Slow-Release(*)	4fB-2f-1B	460-460	0.036a	0.8-0.9 sec. at 21.6V		2-04-3-1-785-85
B1	Slow-Release	2f-4B	80	0.0242a	0.1-0.125 sec at 2V		2-04-3-1-759-01
B1	Slow-Release	2fB-4f-2B(*)	460	0.022a	2.0-2.5 sec at 32V		2-04-3-1-950-01
B1	P a r t i a l, Slow-Rel.	4fB(3)	210	0.0109a	approximately 0.15 sec		2-04-3-1-886-01

B2 CODE TRANSMITTER RELAY, DIRECT CURRENT

Contacts	nominal Code Rate	nominal Resistance Ω	nominal System Voltage		P/N
2f-2B(*)	75	150	10		2-04-3-0-095-05
2f-2B(*)	180	150	10		2-04-3-0-097-04
2f-2B(*)	270	150	10		2-04-3-0-098-01
2f-2B(**)	75	150	10		2-04-3-0-091-05
2f-2B(**)	120	150	10		2-04-3-0-092-01
2f-2B(**)	180	150	10		2-04-3-0-093-01
2f-2B(**)	270	150	10		2-04-3-0-094-01
2f-2B(*)	75	150	10		2-04-3-0-080-01
1f-1B(*)	220	150	10		2-04-3-0-119-02
2f-2B(*)	50	150	10		2-04-3-0-121-01

B2 VANE, 2 POSITIONS, TRACK RELAY (AC)

Contacts	local Winding Volts	Track Winding Volts	frequency (hz)		P/N
2f-2B	110/55	1.0/0.5	50		2-04-3-5-100-08
2f-2B	110/55	1.0/0.5	60		2-04-3-5-100-09
4f-4B	110/55	1.0/0.5	60		2-04-3-5-100-01
4f-4B	110/55	2.0/1.0	100		2-04-3-5-100-20
2f-2B	110	5	60		2-04-3-5-100-18
2f-2B	110	5	50		2-04-3-5-100-21

PLUGBOARDS

description		P/N
Type B1 Plugboard Kit, for all Type B, Size 1 Relays, includes insulators; solder terminals; relay mounting studs with nuts and washers; plugboard; test post; mounting bolts, nuts and washers. does not include registration plates or voltage post.		2-04-5-6-005-01
PIUGBoaRd KIT, Same as above except has #16-20. aWG crimp type terminals		2-04-5-6-005-05
PIUGBoaRd KIT, Same as above except has #10-14. aWG crimp type terminals		2-04-5-6-005-04
PIUGBoaRd KIT, Same as above except without terminals		2-04-5-6-005-08
Type B2 Plugboard Kit - (Except Vane and Michrocron), for all Type B, Size 2 Relays except B2 Vane and Microchron Timer includes insulators; solder terminals; relay mounting studs with nuts and washers; plugboard, test post, mounting bolts, nuts and washers. does not include registration plates, voltage post, or terminal block.		2-04-5-6-007-01
PIUGBoaRd KIT, Same as above except has #16-20. aWG crimp type terminals		2-04-5-6-007-06
PIUGBoaRd KIT, Same as above except without terminals		2-04-5-6-007-10
Plugboard Kit for Vane Relay, for all Type B2 Vane, includes insulators; solder terminals; relay mounting studs with nuts and washers; plugboard, test post, mounting bolts, nuts and washers. does not include registration plates, voltage post, or terminal block		2-04-5-6-007-02
PIUGBoaRd KIT, Same as above except has #16-20, aWG crimp type terminals		2-04-5-6-007-07
PIUGBoaRd KIT, Same as above except has #10-14. aWG crimp type terminals		2-04-5-6-007-05
Plugboard Kit for Michrocron Relay, for all Microchron Timer, includes insulators; solder terminals; relay mounting studs with nuts and washers; plugboard, test post, mounting bolts, nuts and washers. does not include registration plates, voltage post, or terminal block		2-04-5-6-007-12
Terminal Block (2 Post), to mount on back of plugboards		2-04-5-8-053-01

Vital Relays

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