



RELAYS & CONTACTORS

IDEC GENERAL-PURPOSE RELAYS

RH, RR, RJ SERIES

DESCRIPTION

IDEC General-Purpose Relays are available in the **RH Series Blade Style Relays**, **RR Series Pin Style Relays**, and **RJ Series Compact Relays**. The **RH Series** features a 10A switching capacity. They are available in SPDT, DPDT, 3PDT, and 4PDT contact configurations, driven by AC or DC coils, and they have blade terminals for socket-mounting.

The **RR Series** has a 10A contact rating. The **RR Series** relays are available in SPDT, DPDT, and 3PDT configurations driven by AC or DC coils, and they have pin or blade terminals for socket-mounting. The **RJ Series** is compact to reduce space requirements. They are available in a 12A SPDT version and an 8A DPDT version. They are driven by AC or DC coils and have blade terminals for socket mounting.



RJ1S

RH Series

RR2P



FEATURES

- Blade-style, pin-style, and compact models
- Indicator light and/or check button available
- Surface or DIN rail mount
- UL recognized, CSA certified

SPECIFICATIONS

COIL RATINGS

RH SERIES													
RATED VOLTAGE		RATED CURRENT (mA) ±15% @ 20°C								INRUSH CURRENT (mA)			
		60 Hz				50 Hz							
		SPDT	DPDT	3PDT	4PDT	SPDT	DPDT	3PDT	4PDT	SPDT	DPDT	3PDT	4PDT
AC	12	75	100	140	165	86	118	165	196	120	170	260	310
	24	37	50	70	83	42	59.7	81	98	56	85	130	165
	120	7.5	11	14.2	16.5	8.6	12.9	16.4	19.5	12	16	26	33
	240	3.2	5.5	7.1	8.3	3.7	6.5	8.2	9.8	7	8	12	16
DC		SPDT		DPDT		3PDT		4PDT		SPDT	DPDT	3PDT	4PDT
	12	64		75		120		125		—	—	—	—
	24	32		36.9		60		62		—	—	—	—

RR Series				
Rated Voltage	Rated Current (mA) $\pm 15\%$ @ 20°C		INRUSH CURRENT (mA)	
	60 Hz		50 Hz	
AC	12	210	245	365
	24	105	121	182
	120	20.5	24	35
	240	10.5	12.1	18
DC	12	120	—	—
	24	60	—	—

RJ Series			
Coil Sensitivity	Nominal Voltage	Nominal Current	Coil Resistance
DC Coil	24V	25.7 mA	1080Ω
AC Coil (60 Hz)	24V	41.1 mA	243Ω
	120V	8.1 mA	5270Ω

CONTACT RATINGS

RH SERIES (UL ratings)												
VOLTAGE	RESISTIVE (A)				INDUCTIVE (A) $\cos\theta = 0.3$				MOTOR LOAD (hp)			
	SPDT	DPDT	3PDT	4PDT	SPDT	DPDT	3PDT	4PDT	SPDT	DPDT	3PDT	4PDT
	SPDT	DPDT	3PDT	4PDT	SPDT	DPDT	3PDT	4PDT	SPDT	DPDT	3PDT	4PDT
240 AC	10	10	—	7.5	7	7	*	5	1/3	1/3	1/3	—
120 AC	10	10	10	10	7.5	—	—	7.5	1/6	1/6	1/6	—
30 DC	10	10	10	—	7	7	—	—	—	—	—	—
28 DC	10	10	10	10	7.5	—	—	7.5	—	—	—	—

* Note: 6.5A, 20A Total

RR SERIES (UL ratings)			
VOLTAGE	RESISTIVE (A)	INDUCTIVE (A) $\cos\theta = 0.3$	MOTOR LOAD (hp)
240 AC	10	7	1/3
120 AC	10	7.5	1/4
30 DC	10	7	—

Resistive Load (Maximum)	CONTACT	RJ1S	RJ2S
	N.O.	12A @ 250 VAC/30 VDC	8A @ 250 VAC/30 VDC
	N.C.	12A @ 250 VAC; 6A @ 30 VDC	8A @ 250 VAC; 4A @ 30 VDC
Inductive Load (Maximum)	N.O.	7.5A @ 250 VAC; 6A @ 30 VDC	4A @ 250 VAC; 4A @ 30 VDC
	N.C.	7.5A @ 250 VAC; 3A @ 30 VDC	4A @ 250 VAC; 2A @ 30 VDC

Maximum continuous applied voltage

RH, RR	110% of rated voltage
RJ	140% of rated voltage
Pull-in voltage	80% of rated voltage, 70% for RJ DC coil

Drop-out voltage	
AC	30% or more of rated voltage
DC	10% or more of rated voltage

Contact material	
RH	Silver cadmium oxide
RR	Silver
RJ	Silver nickel alloy

Contact resistance	
RH	50 mΩ maximum
RR	30 mΩ maximum
RJ	50 mΩ maximum

Operate time

RH, RR	25 ms maximum
RJ	15 ms maximum

Release time

RH, RR	25 ms maximum
RJ	10 ms maximum

Min load

RH	24 VDC/30 mA, 5 VDC/100 mA
RR	24 VDC/10 mA, 5 VDC/20 mA
RJ	5 VDC/100 mA

Operating temp

Agency approvals	-22° to 158°F (-30° to 70°C) UL-recognized component, (RH, RR): File #E66043, (RJ): File #E55996 CSA certified, File #LR35144; CE certified (not RR blade style)
Warranty	1 year

RELAYS & CONTACTORS

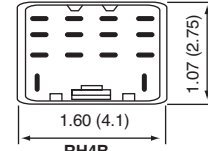
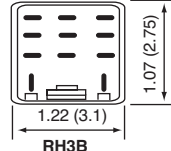
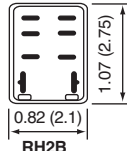
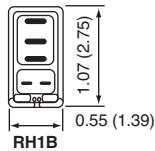
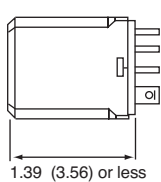
IDEC GENERAL-PURPOSE RELAYS

RH, RR, RJ SERIES

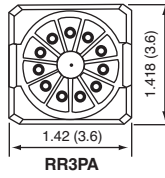
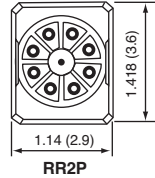
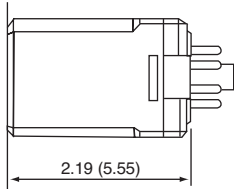


DIMENSIONS

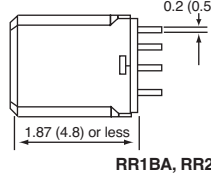
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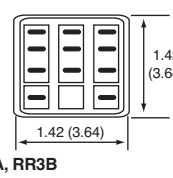
RH Series Relays (blade)



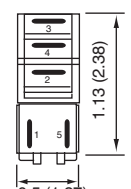
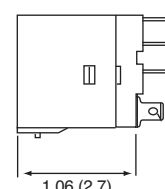
RR Series Relays (pin)



RR1BA, RR2BA, RR3B



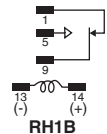
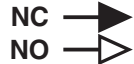
RR Series Power Relays (blade)



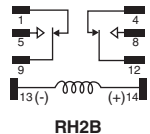
RJ Series Relays (blade)

WIRING

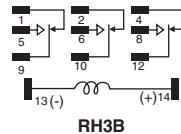
Legend



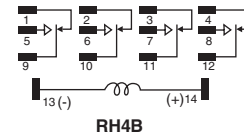
RH1B



RH2B



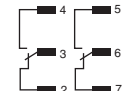
RH3B



RH4B

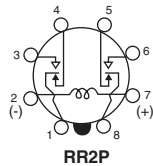


RJ1S

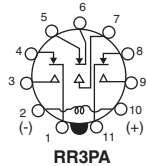


RJ2S

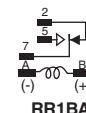
Bottom View



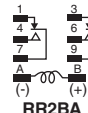
RR2P



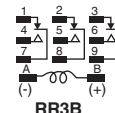
RR3PA



RR1BA



RR2BA



RR3B

ORDERING INFORMATION

MODEL	DESCRIPTION
RH1B	Relay, SPDT, blade (use SH1B-05 socket)
RH2B	Relay, DPDT, blade (use SH2B-05 socket)
RH3B	Relay, 3PDT, blade (use SH3B-05 socket)
RH4B	Relay, 4PDT, blade (use SH4B-05 socket)
U	Standard relay
UL	Indicator light
ULC	Indicator light and check button
AC12V	12 VAC coil voltage
AC24V	24 VAC coil voltage
AC120V	120 VAC coil voltage
AC240V	240 VAC coil voltage
DC12V	12 VDC coil voltage
DC24V	24 VDC coil voltage

RH1B U AC24V

MODEL	DESCRIPTION
RJ1S	Relay, SPDT (use SJ1S-05B socket)
RJ2S	Relay, DPDT (use SJ2S-05B socket)
C	No options
CL	LED indicator
A24	24 VAC coil voltage
A120	120 VAC coil voltage
D24	24 VDC coil voltage

RJ1S C A24

MODEL	DESCRIPTION
RR2P	Relay, DPDT, 8 pin (use SR2P-05 or SR2P-06)
RR3PA	Relay, 3PDT, 11 pin (use SR3P-06 socket)
RR1BA	Relay, SPDT, 11 blade (use SR3B-05 socket)
RR2BA	Relay, DPDT, 11 blade (use SR3B-05 socket)
RR3B	Relay, 3PDT, 11 blade (use SR3B-05 socket)
U	Standard relay
UL	Indicator light
ULC	Indicator light and check button
AC12V	12 VAC coil voltage
AC24V	24 VAC coil voltage
AC120V	120 VAC coil voltage
AC240V	240 VAC coil voltage
DC12V	12 VDC coil voltage
DC24V	24 VDC coil voltage

RR2P U AC24V

Example: RR2PUAC24V DPDT relay 8 pin with 24VAC coil

SH, SR, SJ Series

Relay sockets

RELATED PRODUCTS

BAM-1000 or DIN-3F

Mounting DIN rail