

# RXR40 SERIES

**High Voltage Contactors** 

400A CONTINUOUS DUTY
1500V SYSTEM VOLTAGE



#### **FEATURES**

## **SPST Normally Open High Voltage Contactors**

- Hermetic seal with gas fill
- Auxiliary contacts for main position feedback
- Integrated coil economizer to reduce coil holding power
- Bi-Directional Power Switching

- Meets RoHS 2011/65/EU
- IEC60947-4-1 compliant





#### **PERFORMANCE**

TABLE 1. SPECIFICATIONS			
CHARACTERISTIC	MEASURE		
Contact Arrangement	Form X, SPST NO		
Max Switching Voltage	1,500 VDC		
Dielectric Withstand Voltage Across Open Contacts	4,500 VAC, 1 minute 4,500 VDC, 1 minute		
Continuous Current (127mm² conductor)	400A		
Overload Current 1 minute 30 seconds	1,000A 1,200A		
Short Circuit Withstand	8,000A (10ms)		
Make and Break	See table		
Min Insulation Resistance	1,000 Mohm @ 1,000V		
Contact Resistance (typical)	0.15mohm at 400A		
Operate Time (Max, incl bounce)	30ms		
Release Time (Max)	10ms		
Shock - Functional, 1/2 Sine, 11ms	20G		
Shock – Destructive, 1/2 Sine, 11ms	50G		
Operating Temperature	-40°C to 85°C		
Ingress Protection	Exceeds IP69, (Hermetically sealed)		
Mechanical life	500,000		
AUXILIARY CONTACTS	MEASURE		
Contact Arrangement	SPST		
Continuous Current	2A		
Minimum Current	5mA @ 8V		
COIL	MEASURE		
Nominal Voltage	12V 24V 48V		
Max Voltage	16V 32V 64V		
Pick-up Voltage (Max)	≤ 9VDC		
Drop-out Voltage (Min) Inrush Current (Max) – up to 300ms	1.2VDC 2.4VDC 4.8VDC 4.2A 2.1A 1A		
Holding Current	0.42A		
ribiding durient	0.42A 0.10A		

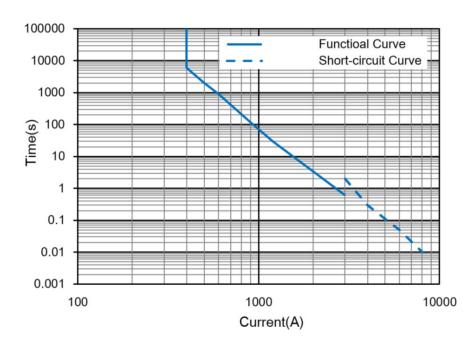


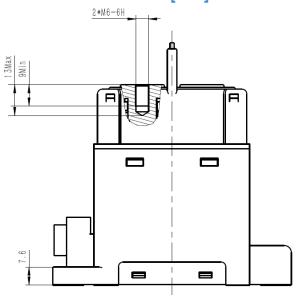
TABLE 2. RESISTIVE LOAD SWITCHING (MAKE / BREAK DATA)				
BI-DIRECT	CYCLES (1 cycle = 1 make + 1			
400V	CURRENT 400A	break) 2000		
800V	400A	800		
1000V	400A	200 (BREAK)		
1500V	250A	50 (BREAK)		
450V	800A	50 (BREAK)		
800V	2500A	1 (BREAK)		

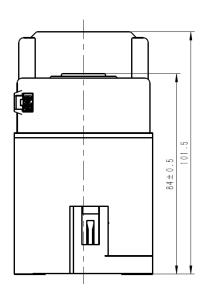


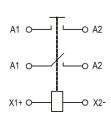
#### **OPTIONS**

TABLE 3. PRODUCT NOMENCLATURE				
	CONTACT POLARITY	MOUNTING	COIL	AUXILIARY CONTACTS
RXR40	<b>B</b> Bi-directional	1 Bottom Mount	P 12V economized coil Q 24V economized coil R 48V economized coil	A SPST, Normally Open

### **PRODUCT DIMENSIONS [mm]**







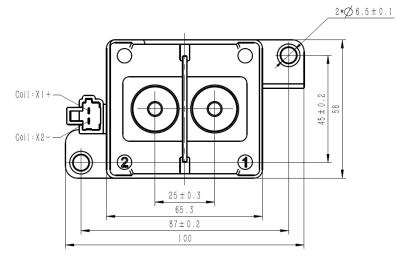


TABLE 5. Connector Info		
Coil	Part Number	
Yazaki	7283-1020	
Yazaki	7116-4020	
Aux contacts	Part Number	
Molex	43645-0200	
Molex	43030-0001	

TABLE 4. DIMENSIONAL AND INSTALLATION		
CHARACTERISTIC	MEASURE	
Weight	700g (1.5 lb)	
Mounting Position	Any / Not Position Sensitive	
Package Quantity	TBD	
Install Torque M6 Main Terminals	6-8Nm (53-71 in-lb)	



#### **NOTES**

- The coil is polarized, please follow schematic when wiring the coil
- The coil has an integrated economizer that limits coil holding power. Please allow for inrush of up to 300ms to fully close the contacts. Coil economizer will automatically reduce coil current once the contacts are closed
- Attached cables and busbars directly to the main terminal pad using the recommended install torque. Do not use washers or other materials between the contactor and the conductor. This will ensure the lowest possible contact resistance
- Avoid excessive coil voltages. Exceeding the ratings on the datasheet may result in high coil temperature and coil failure
- Contactor may be used above Max Switching Voltage if the application does not require significant load breaking. Please contact Rincon Power to discuss in more detail