

Part Number Information

RYA5A Series	1A Contact Arrangement	12VDC Voltage Rating	1 Terminals	R Special Mark
RYA5AS: Sealed Type	1A: 1 Form A 1C: 1 Form C	12VDC 24VDC	1: Quick Connect	Blank: Standard Type R: With Resistor (12V - 680Ω, 24V - 2700Ω) D: With Diode

Contact Data

Contact Arrangement		1 form A (1 NO)	1 form A (1 NO)	1 form C (1 NO)	1 form C (1 NO)
Rated Voltage		12VDC	24VDC	12VDC	24VDC
Limiting Continuous Current	23°C	30A		30/20A	
	85°C	25A		25/15A	
	125°C	10A		10/8A	
Limiting Making Current		120A		120/40A	120/20A
Limiting Breaking Current		30A	20A	30/15A	20/10A
Limit Short-Time Current (Overload Current, ISO 8820-3)		1.35 x 25A (1800s)			
		2.00 x 25A (5s)			
		3.50 x 25A (0.5s)			
		6.00 x 25A (0.1s)			
Jump Start Test		24VDC for 5 Min (conducting nominal current at 23°C)			
Contact Material		AgSn02			
Minimum Recommended Contact Load		1A at 5VDC			
Initial Voltage Drop	NO Contact at 10A, typ./max.	15/200 mV			
	NC Contact at 10A, typ./max.	20/250 mV			
Frequency of Operation		6 ops./min (0.1Hz)			
Operate/Release Time Typ.		7/2ms			
Electrical Endurance	Resistive Load at 14VDC	> 1 x 10 ⁵ ops, 25A	-	> 1 x 10 ⁵ ops, 25A (NO) > 1 x 10 ⁵ ops, 15A (NO)	> 1 x 10 ⁵ ops, 30A
	Resistive Load at 28VDC	-	> 1 x 10 ⁵ ops, 15A	> 1 x 10 ⁵ ops, 10A (NC)	
	Mechanical Endurance		typ. 10 7ops		

- Note:**
- The values apply to a resistive or inductive load with suitable spark suppression and at maximum 13.5VDC for 12VDC or 27VDC for 24VDC load voltages.
 - For a load current duration of maximum 3s for a make/break ratio of 1:10
 - Current and time are compatible with circuit protection by a typical automotive fuse. Relat will make, carry, and break the specified current.
 - Electrical endurance data are only valid for the variants with a resistor.

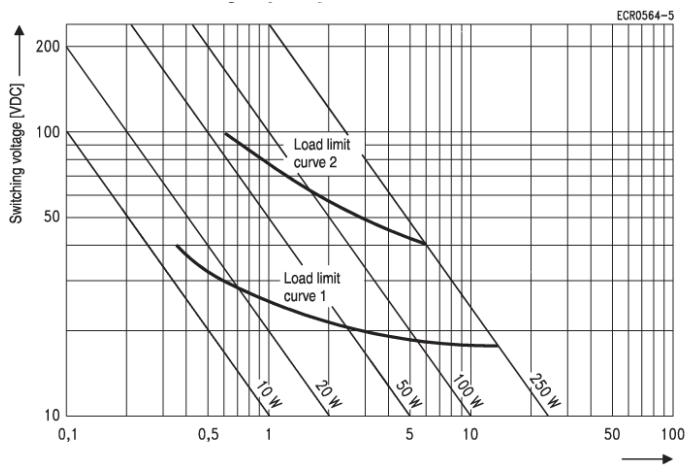
Coil Data

Rated Coil Voltage: 12VDC, 24VDC

Coil Code	Rated Voltage (VDC)	Operate Voltage (VDC)	Release Voltage (VDC)	Coil Resistance ($\Omega \pm 10\%$)	Rated Coil Power (W)
1	12	7.2	1.6	119	1.2
2	24	14.4	3.6	430	1.34
5	12	7.2	1.6	144	1
F	12	7.2	1.2	90	1.6
H	24	14.4	3.6	430	1.34

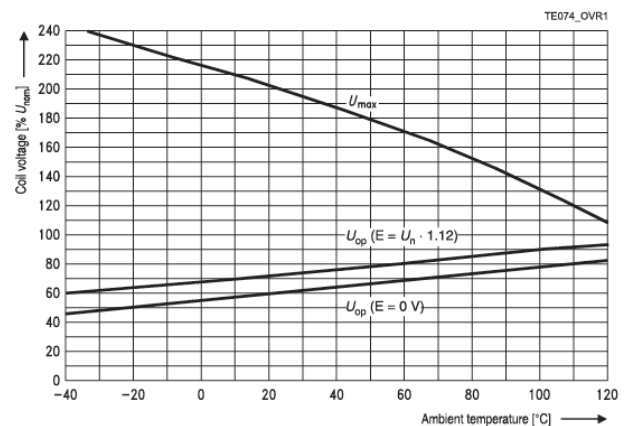
All figures are given for coil without pre-energization, at ambient temperature +23°C

Max DC Load Breaking Capacity



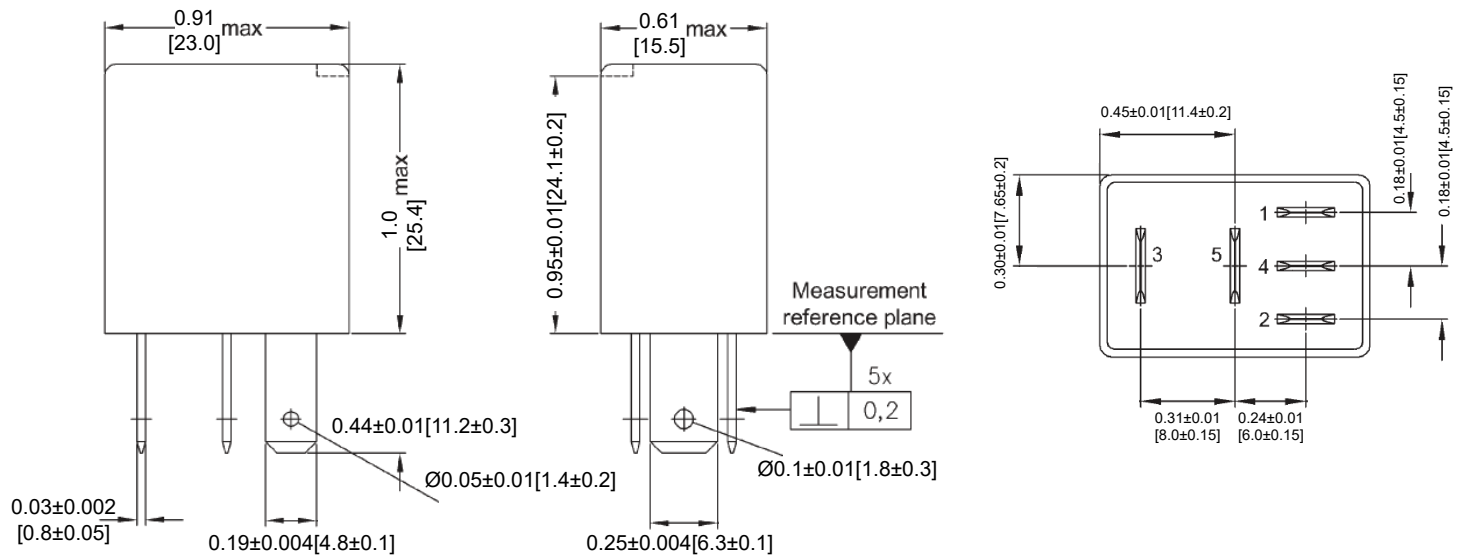
Load limit curve 1: arc extinguishes during transit time (CO contact).
 Load limit curve 2: safe shutdown, no stationary arc (NO contact).
 Load limit curves measured with low inductive resistors verified for 1000 switching events.

Coil Operating Range



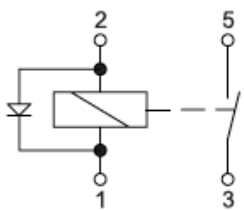
Does not take into account the temperature rise due to the contact current
 E = pre-energization.

Mechanical Dimensions: Inches [mm]

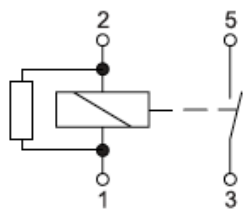
Tolerances ± 0.012 [0.3] Unless Otherwise Specified

Circuit Diagram

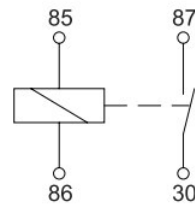
NOD
1 form A, 1 NO with diode



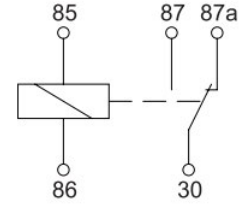
NOR
1 form A, 1 NO with resistor



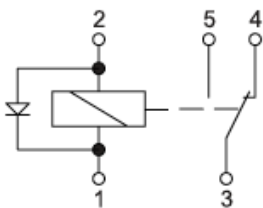
NO
1 form A, 1 NO



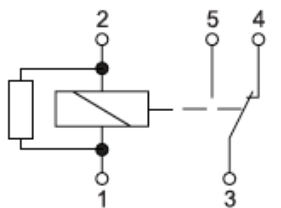
CO
1 form C, 1 CO



COD
1 form C, 1 CO with diode



COR
1 form C, 1 CO with resistor



Insulation Data

Initial dielectric strength

Between Open Contacts	500 Vrms
Between Contact and Coil	500 Vrms

Disclaimer: Information provided is believed to be accurate and reliable. Users are responsible for confirming the suitability and performance of any Switch Components product for their particular application. These products may not be appropriate for every use, and proper evaluation is recommended before implementation. For additional information, please visit sales@switchcomp.com.

Specifications are subject to change without notice

Rev	Date of issue	Revision Notes	Designed	Approved
A	06-25-2026	Initial Drawing	RC	OF