

Part Number Information

RYA3A	1A	12VDC	1	N	60
SERIES	CONTACT ARRANGEMENT	COIL NOMINAL VOLTAGE	TERMINAL TYPE	SPECIAL MARK	Special Ratings
RYA3A: No Bracket RYA3AP: Plastic Bracket RYA3AM: Metal Bracket RYA3AMS: Metal Bracket, Sealed Body	1A: 1 Form A (SPST-NO) 1C: 1 Form C (SPDT) 1A2: 1 Form A, two 87 pins (SPST-NO) 1U: 1 Form U, double make, 2NO contacts (SPST-NO)	12VDC 24VDC	1: Quick Connect PC: PCB Terminal	N: Standard type R: With Resistor D: With Diode DR: With both diode and resistor	Blank: Standard 40A version -60A: High Rated 60A version

Contact Data Standard

Contact Arrangement	1 form A, 1 CO	1 form C, 1 CO
Rated Voltage	12V DC	12V DC
Limiting Continuous Current		
Form A/Form B	NO/NC	NO/NC
23°C	40A	40/30A
85°C	27A	27/22A
125°C	12A	12/9A
"Limiting Making Current form A/form B"	80A	80/32A
"Limiting Breaking Current form A/form B"	40A	40/27A
"Limiting Short-time current Overload current"	1.35 x 40A, 1800s 2.00 x 40A, 60s 6.00 x 40A, 1s	
Jump start test	24VDC for 5min, conducting nominal current at 23°C	
Contact Material	Silver Based	
Min. recommended Contact Load ³⁾ Initial Voltage Drop,	1A at 5VDC	
form A (NO) contact at 40A, typ./max	60/200mV	
form B (NC) contact at 30A, typ./max	60/250mV	
Frequency of operation at nominal load	6ops./min (0.1HZ)	
Operate/release time typ.	7/2ms ⁴⁾	
Electrical Endurance	>1x10⁵ops.	
Resistive Load, form A (NO) Contact	40A, 14VDC	
Resistive Load, form B (NC) Contact	30A, 14VDC	

Contact Data -60A High Amperage Version

Contact Arrangement	1 form A, 1 CO	1 form C, 1 CO
Rated Voltage	12V DC	12V DC
Limiting Continuous Current		
Form A/Form B	NO/NC	NO/NC
23°C	60A	60/45A
85°C	40A	40/30A
125°C	17A	17/12A
"Limiting Making Current form A/form B"	120A	120/45A
"Limiting Breaking Current form A/form B"	60A	60/40A
"Limiting Short-time current Overload current"	1.35 x 40A, 1800s 2.00 x 40A, 60s 6.00 x 40A, 1s	
Jump start test	24VDC for 5min, conducting nominal current at 23°C	
Contact Material	Silver Based	
Min. recommended Contact Load ³⁾ Initial Voltage Drop,	1A at 5VDC	
form A (NO) contact at 40A, typ./max	60/200mV	
form B (NC) contact at 30A, typ./max	60/250mV	
Frequency of operation at nominal load	6ops./min (0.1HZ)	
Operate/release time typ.	7/2ms ⁴⁾	
Electrical Endurance	>1x10⁵)ops.	
Resistive Load, form A (NO) Contact	40A, 14VDC	
Resistive Load, form B (NC) Contact	30A, 14VDC	

Coil Data

Coil Data					
Rated Coil Voltage				12/24VDC	
Coil versions, DC coil					
Coil code	Rated Voltage (VDC)	Operate Voltage (VDC)	Release Voltage (VDC)	Coil Resistance $\Omega \pm 10\%$	Rated Coil Power (W)
F	12	7.2	1.2	90	1.6
H	24	14.4	2.4	360	1.6

Insulation Data

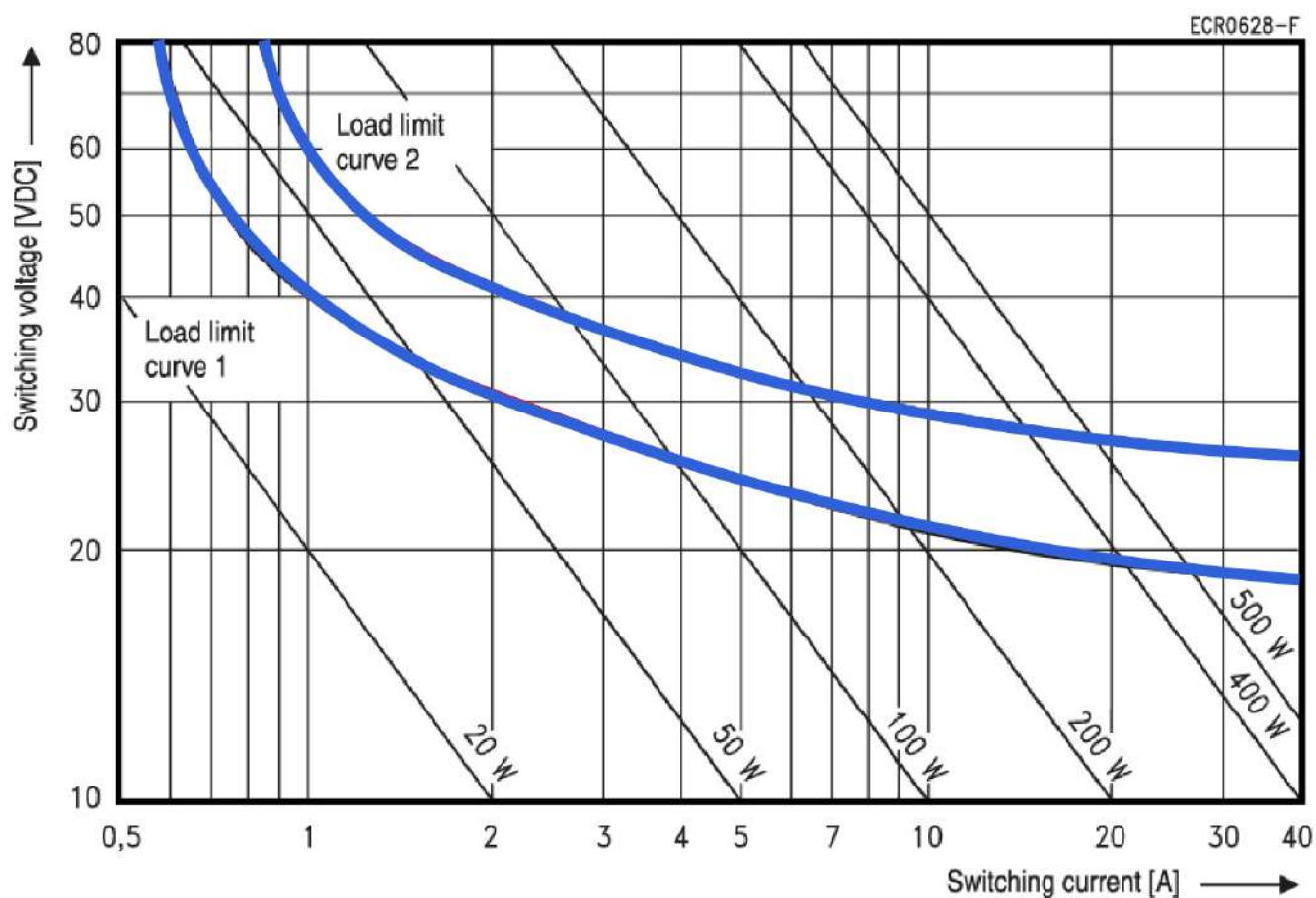
Initial Dielectric Strength

Between open contacts 500Vrms

Between contact and coil 500Vrms

Between adjacent contacts 500Vrms

Max. DC Load Breaking Capacity

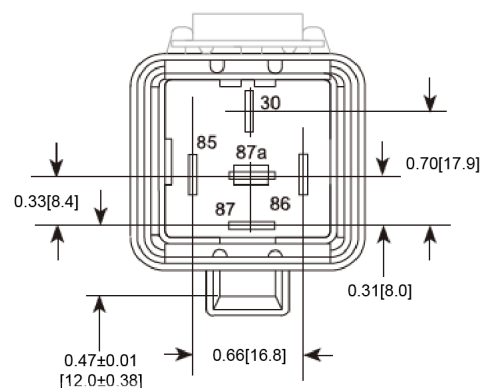
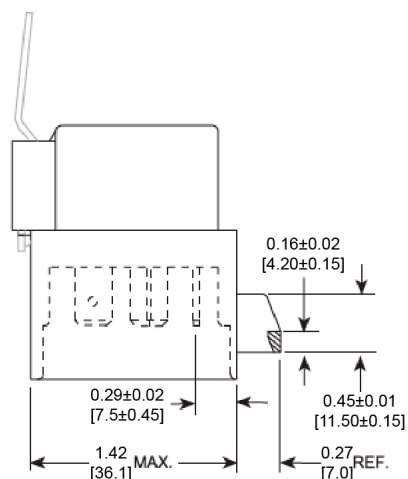
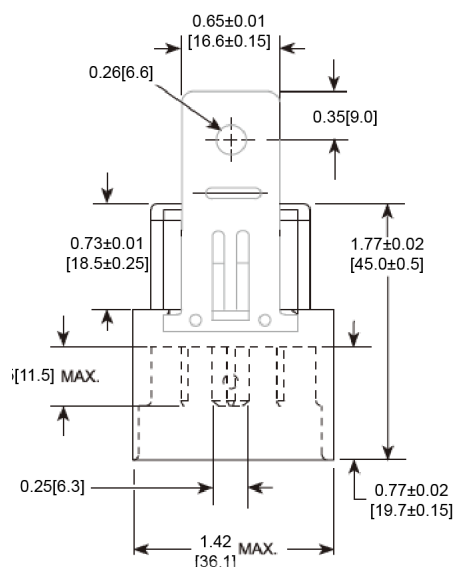
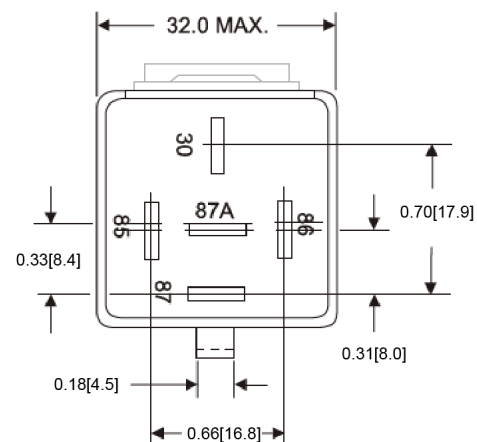
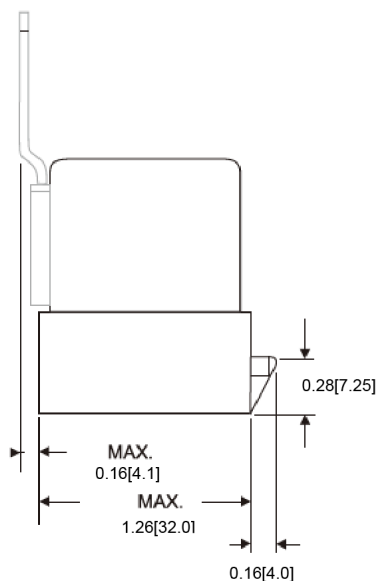
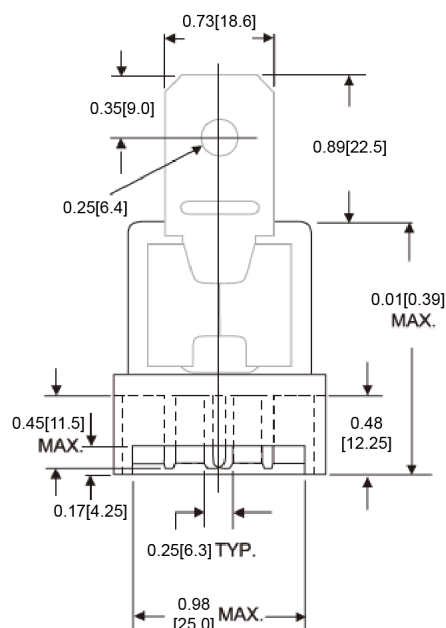


Load limit curve 1: arc extinguishes during transit time (changeover contact)

Load limit curve 2: safe shutdown, no stationary arc (make contact)

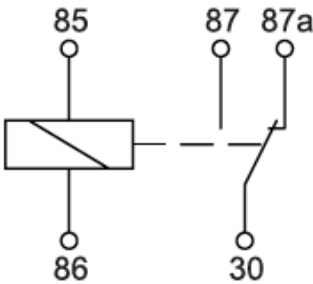
Load limit curves are measured with low inductance resistors verified for 1000 switching events

Mechanical Dimensions: Inches [mm]

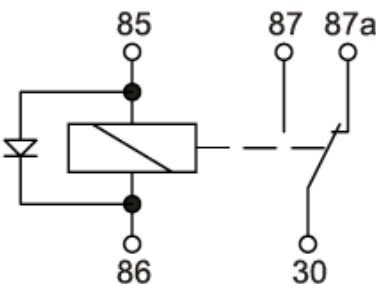
Tolerances ± 0.012 [0.3] Unless Otherwise Specified

Circuit Diagram

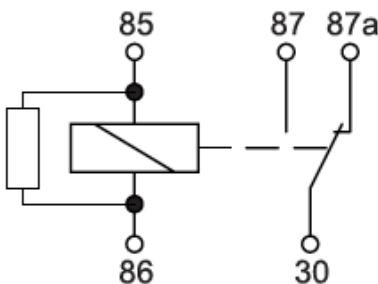
1C
1 form C, 1C



1C (with diode)
1 form C, 1C (with diode)



1C (with resistor)
1 form C, 1C (with resistor)



Specifications

Jump Start Test	24VDC for 5 min conducting nominal current at 23°C	
Contact Material	Silver Based	
Min. recommended contact load	1A at 5 VDC	
Frequency of Operation at nominal load	6 ops./min (0.1Hz)	
Operate/release time typ.	7/2ms	Note (4)

Mechanical Endurance	>1x106 operations	

Rev	Date of issue	Revision Notes	Designed	Approved
B	07-13-2026	Initial Drawing	RC	OF