

● Features

- Shrouded power relay
- 40A switching capability
- 1 Form A & 1 Form C contact arrangement
- Metal Bracket Available
- Ambient temperature range: -40°C to 125°C
- Environmental friendly product (RoHS compliant)
- Direct insert mounting
- Dimension: 35.2 x 35.2 x 46.0 mm



● Application

Rear Windows Defogger / Battery Disconnection Device / Air-Conditioning System / Power Distribution / Fog Lamp & Headlight Control / Fuel Pump Control / ABS / Traction Control system / Cooling Fan Control / Heating Control / Power Supply Management System, etc.

● Contact Data

Contact Arrangement	1A	1C
Contact Material	Ag Alloy	
Contact Rating (Resistive Load)	40A 14VDC	NO: 40A 14VDC NC: 30A 14VDC
Max. Switching Power	560W	
Max. Switching Current	40A	
Min. Contact Load	1A 6VDC	
Voltage Drop (initial)	Typ.: 20mV (at 10A) Max.: 250mV (at 10A)	
Contact Resistance	≤ 100mΩ	
Electrical Endurance	1x10 ⁵	
Mechanical Endurance	1x10 ⁷	

● Coil Parameter (at 23°C)

Coil Voltage (VDC)		Coil Resistance (Ω±10%)	Pickup Voltage(max) (VDC)	Release Voltage(min) (VDC)	Coil Power Consumption (W)
Rated	Max.				
12	18	90	8.4	1.2	1.6
24	36	360	16.8	2.4	1.6

● Operation Condition

Insulation Resistance		100MΩ min (at 500VDC)
Dielectric Strength	Between Contacts	500V, 50/60Hz 1 min.
	Between Contact and Coil	500V, 50/60Hz 1 min.
Shock Resistance	Operating Extremes	20G
	Damage Limits	100G
Vibration Resistance	Operating Extremes	10~500Hz, 5.0G
	Damage Limits	10~500Hz, 5.0G
Ambient Temperature		-40~85°C (no freezing)
Operate Time		≤ 10ms
Release Time		≤ 10ms
Relative Humidity		5%~85%
Weight		Approx. 52.5g

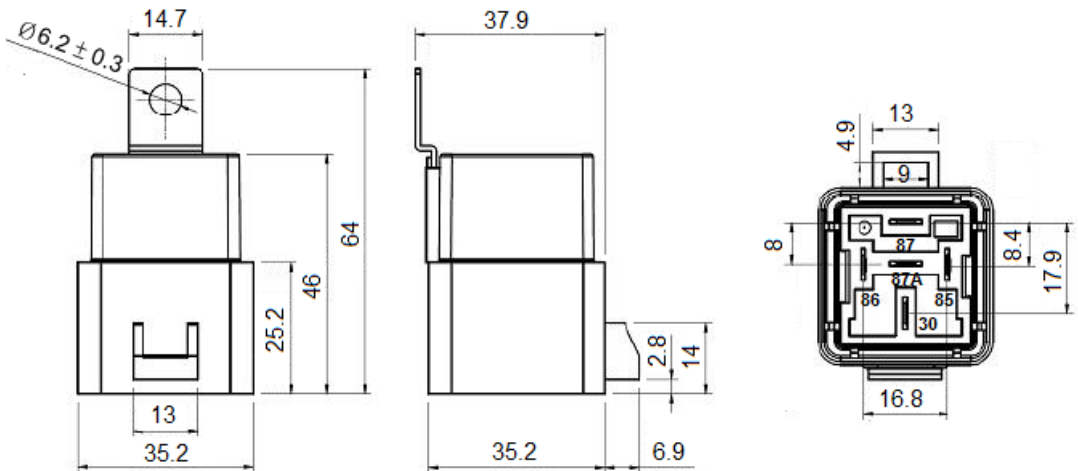
● Ordering Information

		ALMS	-12D	R	-A	40	-S	(XXX)
Model	ALMS: Shrouded dust cover with Metal bracket							
Coil Voltage	12: 12VDC 24: 24VDC							
Paralled Component	Nil: Standard R: with resistor(680Ω 12V) (2700Ω 24V) D1: with diode(the diode anode on #85 terminal) D2: with diode(the diode anode on #86 terminal)							
Contact Form	A: 1 Form A C: 1 Form C							
Contact Rating	40: 40A							
Construction	Nil: Flux tight S: Sealed							
Special Code	Nil: Standard XXX: Customer special requirement							

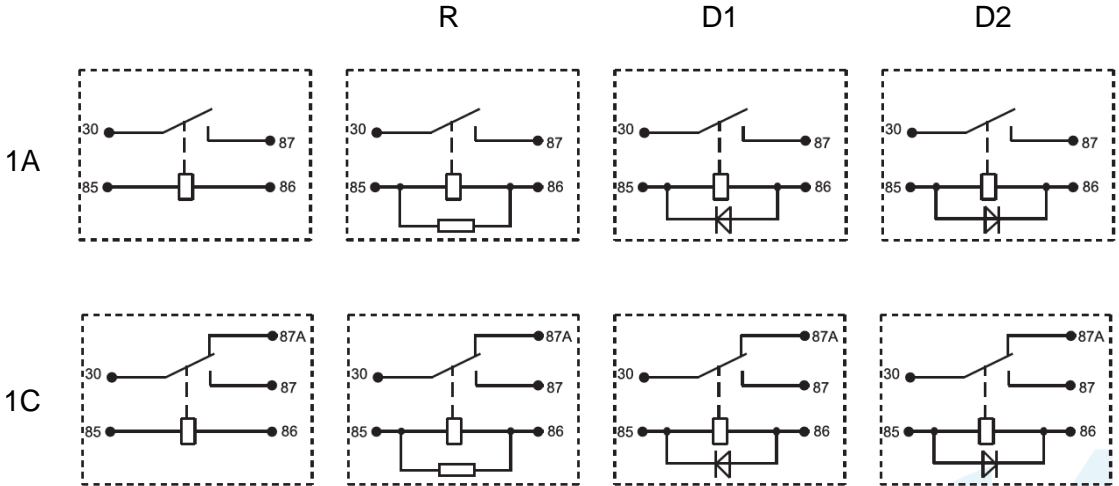
● Dimensions (UNIT: mm)

Outline Dimensions

Mounting (Bottom views)



● Dimensions (UNIT: mm)
 Wiring Diagram (Bottom views)



Remark: 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $>1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $>5\text{mm}$, tolerance should be $\pm 0.5\text{mm}$.

Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact IOEC for the technical service. However, it is the user's responsibility to determine which product should be used only.

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