

KKK-C200

200A 继电器

Features

- 200A switching capability at both 12VDC and 24VDC
- 1 Form A (SPST-NO) contact arrangement
- Resistor and diode for coil component available
- Ambient temperature -40°C ~ +125°C



Typical Application

Applicable for 200A Automotive Grade Circuit: Engine start preheating system, power management system, heating plug, front windshield heating start/stop control, etc.

ORDERING GUIDE

	KKAC200	-012	1H	3.5W	-R	(XXX)
Type	KKAC200					
Coil Voltage	012:12VDC 024:24VDC					
Contact Form	1H:1 Form A (SPST-NO)					
Coil Power	3.6W/3.8W/3.2W/4.1W Customization Available					
Parallel Coil Components	Nil: without parallel component L: paralleled with LED light R: parallel transient suppression resistors D1:parallel transient suppression diode, with anode connected to terminal #1 D2:parallel transient suppression diode, with anode connected to terminal #2					
Special Code	(XXX):customer special requirement Nil: Standard					

COIL DATA

Nominal poltage (VDC)	Pick-up voltage (VDC)	Drop-out voltage (VDC)	Coil resistance x (1±10%)Ω	Paral ^{lel} resistance x(1+5%)Ω	Equivalent resistance x(1±10%)Ω	Power consumption (W)
	-40°C	125°C				
12	≤ 8	≥ 1.2	39.5	-	-	3.6
12	≤ 8	≥ 1.2	39.5	680	37	3.8
24	≤ 16	≥ 2.4	177.5	-	-	3.2
24	≤ 16	≥ 2.4	177.5	2700	141	4.1

CHARACTERISTICS

Contact arrangement	1H (SPST-NO)
Contact Rating ¹⁾	12VDC 300A 24VDC 200A
Max.continuous current ¹⁾	200A (23°C) long-term 170A (85°C) long-term
Overload current ²⁾	400A 1min (23°C)
Min.contact load	1A 6VDC
Electrical endurance	See "CONTACT DATA"
Mechanical endurance	1x107OPS (60OPS/min)
Insulation resistance	100M Ω (at 500VDC)
Dielectric strength ³⁾	1000VAC 1min
Operate time ⁴⁾	Typ.:50ms
Release time ⁴⁾	Typ.:10ms
Noise ⁵⁾	Typ.: 75dB(A)
Ambient temperature	-40°C to +125°C No condensation and ice
Vibration resistance (random)(functional) ⁶⁾	10Hz to 2000Hz, >3g GB/T 28046.3 4.1.2.4 Test IV

Shock resistance	Energize: 50g (Half Sine, pulse 11ms) Non-energize: 20g (Half Sine, pulse 11ms)
Termination	Screw connection
Construction	Plastic sealed, Dust protected
Unit weight	Approx.350g
Protection grade ⁷⁾	Plastic sealed: IP6K7(GB/T 30038) Dust cover type: IP5K4(GB/T 30038)
Mechanical data ⁸⁾	housing retention (pull &push): 500N terminal retention(pull &push):150N min. Terminal torque: 6N·m ~ 8N·m

Notes:

1)The conductor cross section 35mm²

2)Failure criterion: No smoke, fire or explosion occurs during the test;

3)1 min,leakage current less than 1mA;

4)Measurement of coil shunt resistance at rated voltage;

5)Test distance 0.4m;

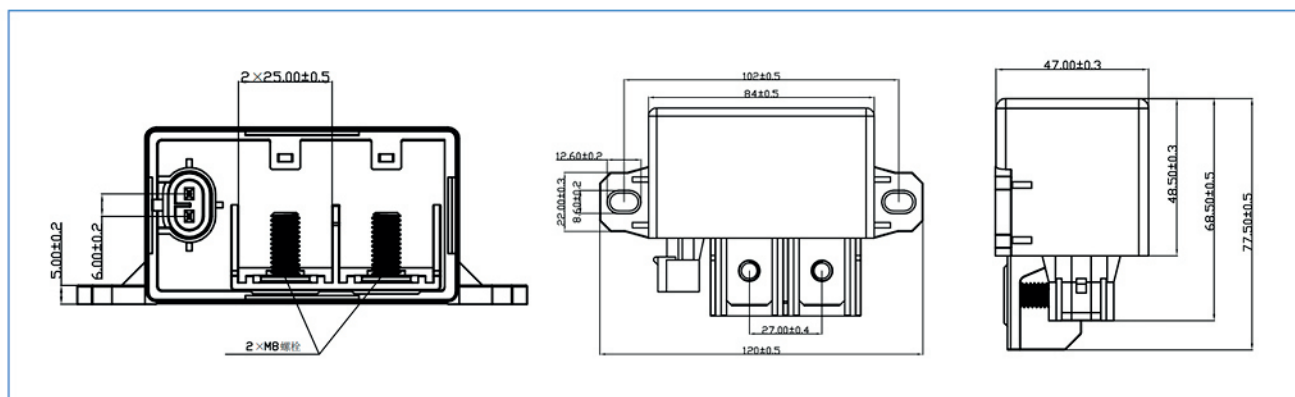
6)Use matching sealed connectors for protection level testing.

CONTACT DATA

Load voltage (VDC)	Load type	Load current A	On/Off ratio		Electrical endurance (ops)	Contact Material	Ambient temp
			On(s)	Off(s)			
14	Resistive	300	3	7	5×10 ⁴	AgSnO ₂ In ₂ O ₃	23°C
28	Resistive	200	3	7	5×10 ⁴		

Notes:1) Load in this table is only for coil shunt resistance, Zener Diode or other components, please contact KKA for more technical supports; while the inductive load and the lamp load are the analog load. If the load conditions are not consistent with this table, please provide the corresponding detailed conditions to KKA for more support.

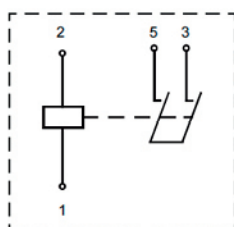
DIMENSION



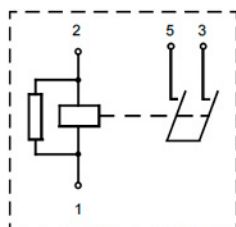
Remark: In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; Outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.

WIRING DIAGRAM

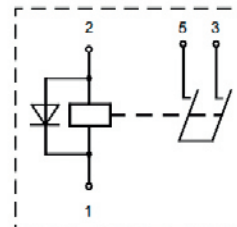
KKA-C200-□1H□-□



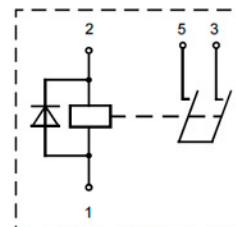
KKA-C200-□1H□-R



KKA-C200-□1H□-D1



KKA-C200-□1H□-D2



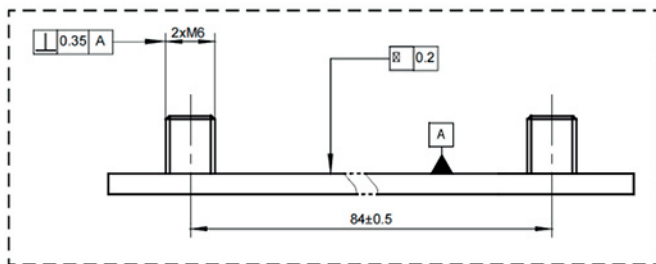
To prevent looseness, please use spring washer or jam nut when installing the relay. See the following table for installation requirements, if the scope is exceeded, the product may be damaged. When the use conditions are inconsistent with this table, please provide the corresponding detailed use conditions to KKA for more support.

Load terminal mounting requirements						Housing mounting plate installation requirements		
InstallationMethod	Threadpitch	Torque Requirements	Gasket outer diameter	Copper nose model	Wire diameter	InstallationMethod	Torque Requirements	Base size requirements
M6 Nut gasket	1.0mm	6N•m ~ 8N•m	<φ15mm	SC25-6	25mm ²	M6 Screw	3.4N•m ~ 4.2N•m	See figure below for details

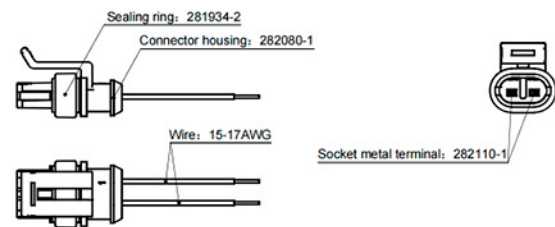
2. Please avoid grease and other foreign bodies on the terminal, please use the recommended specification of copper nose and wires in Article 1 of the precautions for installation, otherwise abnormal heat may occur at the load terminal.

3. Coil Terminal: Connector type AMP SUPERSEAL 1.5 series (Customer self-configuration: Connector housing 282080-1; Sealing ring 281934-2; Socket metal terminal 282110-1).

Base size requirements



TE connector: AMP SUPERSEAL 1.5 series (Customer self-configuration)



4. During the installation of the product, make sure that the connectors are inserted smoothly in the correct direction, the snap clips are in place, and do not plug and unplug more than once, to prevent the connector from distorting the opening of the metal terminal that connects, causing unreliable contact.

