

## »» Features



German Technology

- DPDT ; TPDT General Purpose Power Relay.
- DC / AC Coil.
- Single or Twin contacts with / without gold plated.
- With position indicator, manual override and override level.
- Optional LED and protection diode.
- Comply with RoHS-Directive 2011/65/EU.

## »» Type List

Terminal style	Contact form	Designation (provided with)	Enclosure style	
			Dust cover with manual	Dust cover with lockable manual
8PIN or 11PIN quick terminal	2C (DPDT)	LED	205-2CC-D-1	205-2CC-DM-1
		Diode & LED	205-2CC-D-3	205-2CC-DM-3
	3C (TPDT)	LED	205-3CC-D-1	205-3CC-DM-1
		Diode & LED	205-3CC-D-3	205-3CC-DM-3
	2T (DPDT)	LED	205-2TC-D-1	205-2TC-DM-1
		Diode & LED	205-2TC-D-3	205-2TC-DM-3
	3T (TPDT)	LED	205-3TC-D-1	205-3TC-DM-1
		Diode & LED	205-3TC-D-3	205-3TC-DM-3
General quick terminal	2C (DPDT)	LED	205W-2CC-D-1	205W-2CC-DM-1
		Diode & LED	205W-2CC-D-3	205W-2CC-DM-3
	3C (TPDT)	LED	205W-3CC-D-1	205W-3CC-DM-1
		Diode & LED	205W-3CC-D-3	205W-3CC-DM-3
	2T (DPDT)	LED	205W-2TC-D-1	205W-2TC-DM-1
		Diode & LED	205W-2TC-D-3	205W-2TC-DM-3
	3T (TPDT)	LED	205W-3TC-D-1	205W-3TC-DM-1
		Diode & LED	205W-3TC-D-3	205W-3TC-DM-3

## »» Ordering Information

205  - 3C CA - DM -    
 1 2 3 4 5 6 7

- |   |   |
|---|---|
| 1. 205 -- Basic series designation<br><br>2. Blank -- 8PIN or 11PIN quick terminal<br>W -- General quick terminal<br><br>3. 2C -- Double pole double throw<br>3C -- Three pole double throw<br>2T -- Twin contact, double pole double throw<br>3T -- Twin contact, three pole double throw<br><br>4. C -- Contact material AgNi<br>CA -- Contact material AgNi + Au plating | 5. D -- Dust cover with manual<br>DM -- Dust cover with lockable manual<br><br>6. Blank -- Without special features<br>1 -- Coil parallel with LED<br>2 -- Coil parallel with diode<br>3 -- Coil parallel with diode & LED<br><br>7. <input type="checkbox"/> -- Coil voltage (please refer to the coil rating data for the availability) |
|---|---|

## »» Contact Rating

Type	Single contact	Twin contact
Rated load (resistive)	10A 250VAC	4A 250VAC
Inrush current	20A	10A
Max. switching capacity	4000VA	1000VA

## »» Coil Rating (DC)

Rated voltage (V)	Rated current $\pm 10\%$ at 23°C (mA)	Coil resistance $\pm 10\%$ at 23°C ( $\Omega$ )	Max. continuous voltage at 60°C	Pick up voltage(Max.) at 23°C	Drop out voltage(Min.) at 23°C	Power consumption at rated voltage
12	125	96	120 % of rated voltage	80% of rated voltage	5% of rated voltage	approx. 1.2W
24	63	384				
48	31	1,536				
60	25	2,400				
110	14	7,660				
125	12	10,360				
220	7.2	30,630				

## »» Coil Rating (AC)

Rated voltage (V)	Coil resistance $\pm 10\%$ at 23°C ( $\Omega$ )	Max. continuous voltage at 40°C	Pick up voltage(Max.) at 23°C	Drop out voltage(Min.) at 23°C	Power consumption at rated voltage
24	74	110% of rated voltage	85% of rated voltage	15% of rated voltage	approx. 2.0VA
48	303				
60	474				
110	1,710				
115	1,710				
230	7,500				

## »» Specification

Contact material	AgNi alloy
Contact resistance <sup>(1)</sup>	100m $\Omega$ Max. (1A(100mA for Au-plating contact)/6VDC by 4 pipes m $\Omega$ meter)
Operate time <sup>(1)</sup>	12 ms Max.
Release time <sup>(1)</sup>	10 ms Max.
Insulation resistance <sup>(1)</sup>	1,000 M $\Omega$ Min. (DC 500V)
Dielectric strength <sup>(1)</sup>	Between open contact : AC 1500V , 50/60Hz 1 min.
	Between contact and coil : AC 2500V , 50/60Hz 1 min.
	Between contact circuits : AC 2500V , 50/60Hz 1 min.

Vibration resistance	Operating extremes	30 ~ 100Hz , >4G
Life expectancy	Mechanical	20,000,000 operations (frequency 18,000 operations/hr)
Operating ambient temperature	DC	-25 ~ +60°C (no freezing)
	AC	-25 ~ +40°C (no freezing)
Weight	Approx.90g	

Note : (1) initial value

### »» Safety Approval

Certified	UL	CSA / CUS
File No.	E88991	171397

### »» Safety Approval Rating

#### ◆ UL

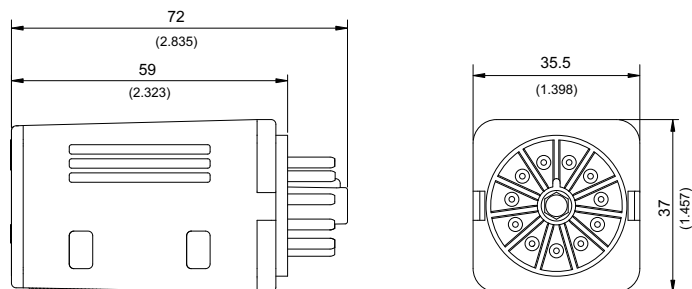
2C	3C	2T / 3T
10A 240VAC	6.6A 240VAC	4A 240VAC
6A 24VDC	10A 120VAC	6A 24VDC
0.3A 240VDC	6A 24VDC	0.3A 240VDC
0.6A 120VDC	0.3A 240VDC	0.6A 120VDC
	0.6A 120VDC	

#### ◆ CSA / CUS

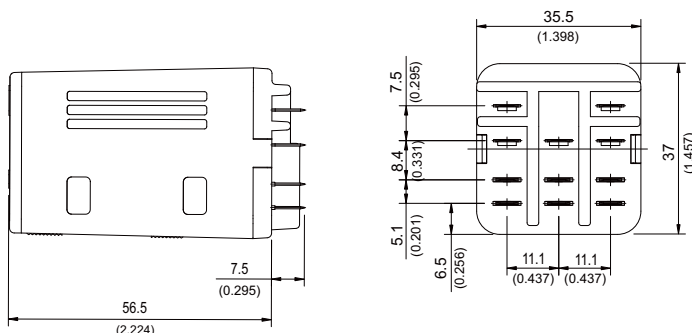
2C	3C	2T / 3T
10A 240VAC	6.6A 240VAC	4A 240VAC
6A 24VDC	10A 120VAC	6A 24VDC
0.3A 240VDC	6A 24VDC	0.3A 240VDC
0.6A 120VDC	0.3A 240VDC	0.6A 120VDC
1/2HP 120VAC / 240VAC	0.6A 120VDC	1/2HP 120VAC / 240VAC
	1/2HP 120VAC / 240VAC	

### »» Outline Dimensions

#### ◆ 205



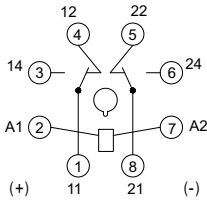
#### ◆ 205W



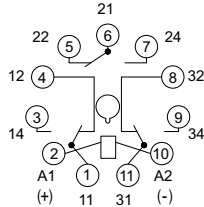
## Wiring Diagram BOTTOM VIEW

### ◆205

DPDT

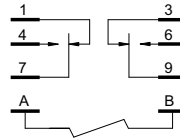


TPDPT

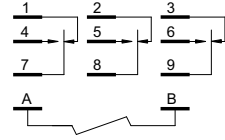


### ◆205W

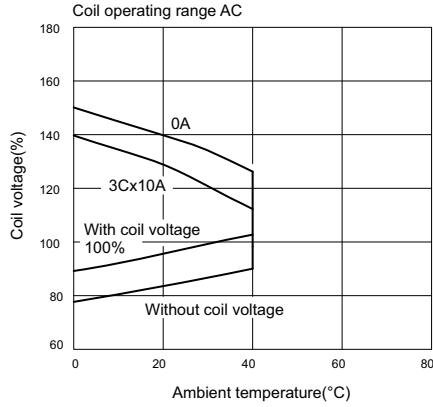
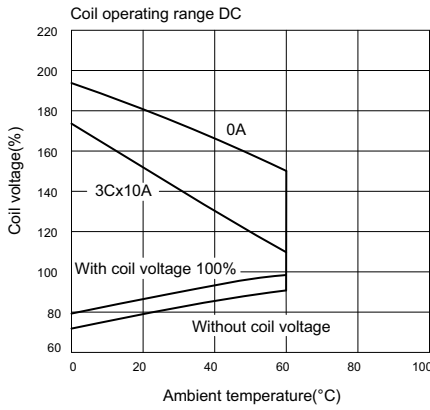
DPDT



TPDPT



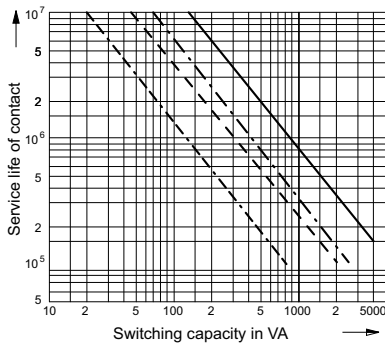
## Engineering Data



### Electrical Service Life AC

90 % operating

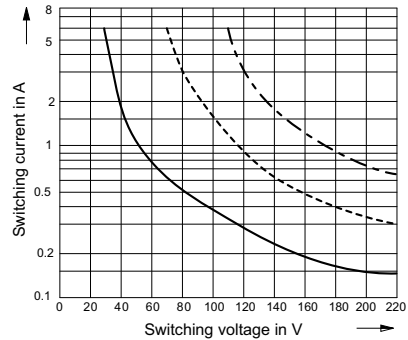
- resistive load Single contacts
  - - - inductive load Single contacts
  - · - resistive load Twin contacts
  - - - inductive load Twin contacts
- $\cos \phi = 0.4 \dots 0.7$



### Switching capacity DC

Below limiting characteristic: service life of contacts  
1 x 10<sup>6</sup> switching cycles (90 % operating)

- resistive load 1 contact
- - - 2 contacts in series
- · - 3 contacts in series



### Max.DC load breaking capacity

