

## **High Current Relay 200**

## **■** Normally closed contact

## ■ Limiting continuous current 175A at 85°C

Typical applications

Energy management, battery coupling, start/stop.



F230 fcw5b

Contact Data				
Contact arrangement	1 form B, 1 NC			
Rated voltage	12VDC			
Max. switching voltage	depends on load parameter set A)			
Rated current, cable 50mm <sup>2</sup>	175A at 85°C			
Limiting continuous current				
23°C, load cable 35mm <sup>2</sup>	245A			
85°C, load cable 35mm <sup>2</sup>	165A			
110°C, load cable 35mm <sup>2</sup>	120A			
23°C, load cable 50mm <sup>2</sup>	255A			
85°C, load cable 50mm <sup>2</sup>	175A			
110°C, load cable 50mm <sup>2</sup>	130A			
Limiting making current	200A at <5VDC			
Limiting breaking current	200A at <5VDC			
Limiting short-time current	depends on load parameter set A)			
Contact material	AgSnO <sub>2</sub>			
Contact style	single contact			
Min. recommended contact load	1A at 5V			
Initial voltage drop	100mV at 100A			
Operate/release time typ. at nominal	voltage 25/6ms <sup>1)</sup>			
Bounce time max.	2)			
Electrical endurance				
50A (on), 30A (cont.), 50A (off):	48000 cycles			
80A (on), 30A (cont.), 120A (off):	1000 cycles			
200A (on), 120A (cont.), 120A (off)	: 1000 cycles			
repeated until 800000 cycles are reached <sup>3)</sup>				
Mechanical endurance	>10 <sup>7</sup> ops.			

- 1) With diode in parallel.
- Release and bounce time depend on component in parallel to the coil, please contact application engineering support.
- 3) Validated with a load voltage of 5VDC.
- A) Please contact TE relay application engineering.

Coil Data	
Rated coil voltage	12VDC
Max. coil power	3.3W <sup>1)</sup>
Max. coil temperature	155°C

With diode in parallel.

Coil versions DC coil

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Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDC	VDC	VDC	Ω±10%	W
1001	12	7.2	1.2	37	3.9
2001	12	7.2	1.2	13	2 2

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

500VDC	
500VDC	
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Other Data					
EU RoHS/ELV compliance	compliant				
Ambient temperature	-40°C to +110°C				
Climatic cycling with condensation,					
EN ISO 6988	240h (-10 to +65°C), 93% RH				
Temperature cycling (shock),					
IEC 60068-2-14, Na	600h (-40 to +110°C), <30s				
Degree of protection					
splash water proof:	IP64 (IEC 60529), RT III (IEC 61810)				
Corrosive gas	5 ±1%NaCl, 96h, 35°C				
Vibration resistance (functional),					
IEC 60068-2-64 (random)	10 to 2000Hz, min. 5g effective				
Shock resistance (functional),					
IEC 60068-2-27 (half sine)	11ms min. 30g				
Drop test, free fall	1m onto concrete				
Terminal type	connector, screw				
Weight	approx. 230g (8.1oz)				
Packaging unit	on request				

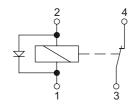


# High Current Relay 200 (Continued)

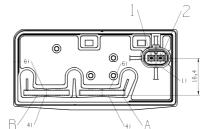
#### **Terminal Assignment**

NCD

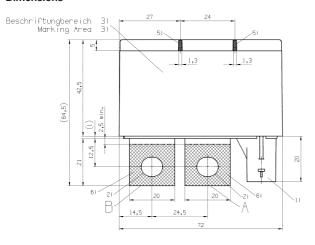
1 form B, NC with diode

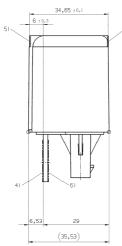


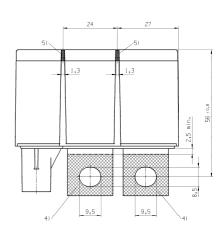
# View of the terminals (bottom view)



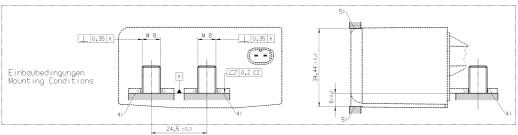
#### **Dimensions**







#### Mounting





Product code	Arrangement	Coil suppr.	Circuit <sup>1)</sup>	Coil	Enclosure (	Cont. material	Terminals	Part number
V23230-D2001-B200	1 form B, 1 NC	Diode	NCD	12VDC	IP64	AgSnO <sub>2</sub>	Screw	1-1414995-0
V23230-D1001-B200		Resistor						5-1415009-7

<sup>1)</sup> See Terminal assignment diagrams.