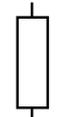
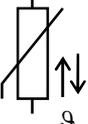
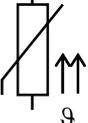
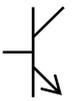
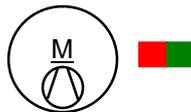
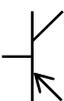
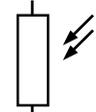
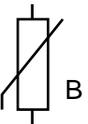
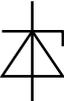


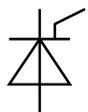
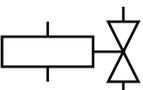
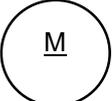
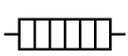
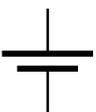
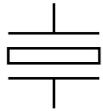
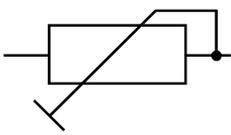
Kraftfahrzeugtechnologie

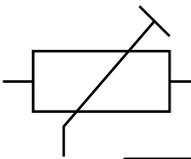
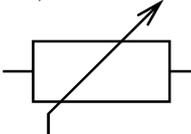
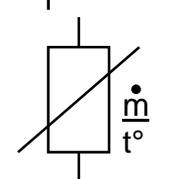
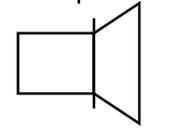
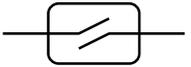
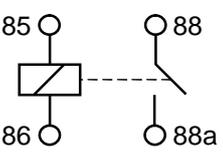
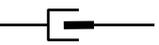
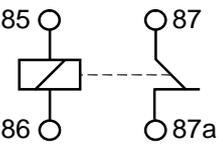
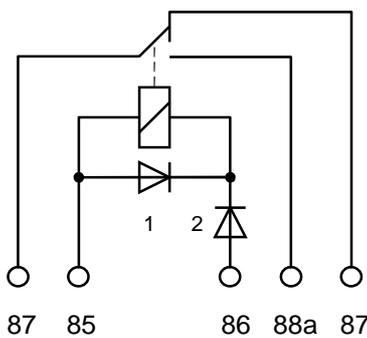
Elektrik / Elektronik

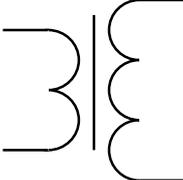
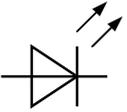
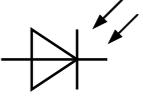
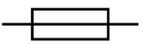
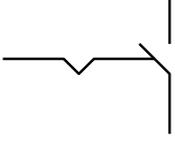
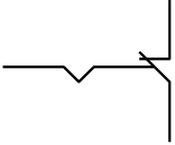
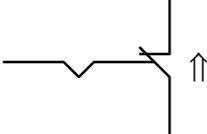
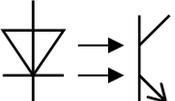
- Schaltzeichen der Kraftfahrzeugelektrik allgemein

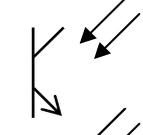
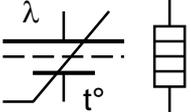
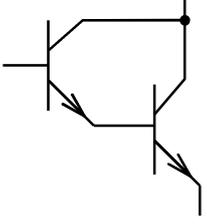
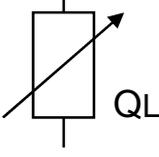
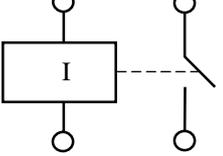
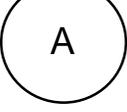
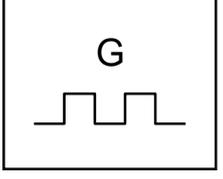
Schaltzeichen der Kraftfahrzeugelektrik allgemein

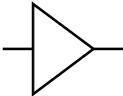
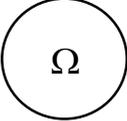
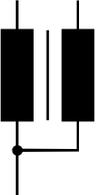
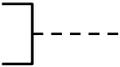
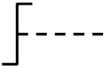
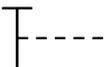
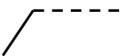
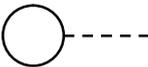
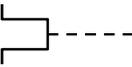
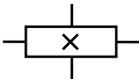
Schaltzeichen	Benennung
1. 	Widerstand
2. 	NTC Negativer Temperatur Coeffizient, Heißeiter
3. 	PTC Positiver Temperatur Coeffizient, Kaltleiter
4. 	NPN-Transistor
5. 	Motor mit Gebläse, Lüftermotor, mit Permanenterregung
6. 	PNP-Transistor
7. 	LDR (Light Depending Resistor, engl.) Fotowiderstand
8. 	Feldplatte, magnetoresistiver Widerstand
9. 	VDR (Voltage Dependent Resistor, engl.) Varistor, spannungsabhängiger Widerstand
10. 	Diode
11. 	Zenerdiode
12. 	ungepolarter Kondensator

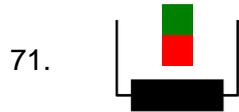
13.  gepolter Kondensator
14.  P-Gate-Thyristor
15.  N-Gate-Thyristor
16.  Glühlampe, oder auch Wärmestrahlerbeleuchtungskörper
17.  Magnet-, Einspritz-, Kaltstartventil
18.  Stellmotor, zum Beispiel Leerlaufdrehseller
19.  Elektropumpe, Scheibenspüler, Kraftstoffpumpe
20.  Heizwiderstand, zum Beispiel Glühkerze
21.  Funkenstrecke
22.  Batterie, Spannungsquelle allgemein
23.  Steckanschluss
24.  Piezoelektrischer Baustein, zum Beispiel Klopfsensor
25.  Trimpotenziumeter

26.  Trimpotenziumeter
-
27.  Potenziometer
-
28.  Potenziometer
-
29.  Luftmassenmesser
-
30.  Lautsprecher
-
31.  Reedkontaktschalter
-
32.  Relais Typ Schließer
-
33.  Steckverbindung
-
34.  Relais Typ Öffner
-
35.  Relais Typ Wechsler mit Freilaufdiode (1) und
Verpolungsschutzdiode (2)

36.  Transformator
-
37.  LED (Light emitting diode, engl.) Licht emittierende Diode
Leuchtdiode
-
38.  Fotodiode
-
39.  Sicherung, Fuse (engl.)
-
40.  Raste, nicht selbsttätiger Rückgang
-
41.  Raste, selbsttätiger Rückgang in Pfeilrichtung (bei Taste)
-
42.  Tastschalter, Schließer
-
43.  Tastschalter, Öffner
-
44.  Stellschalter, Schließer
-
45.  Stellschalter, Öffner
-
46.  Stellschalter, Schließer dynamische Darstellung
-
47.  Optokoppler
-

48.  Fototransistor ohne Basisanschluss
49.  Fototransistor mit Basisanschluss
50.  Lambdasonde beheizt
51.  NPN-Darlington Transistor
52.  Luftmengenmesser
53.  Masse, Gehäusemasse, Fahrzeugmasse
54.  Stromrelais, Typ Schließer
55.  Antenne
56.  Messinstrument, anzeigend, Spannungsmesser
57.  Messinstrument, anzeigend, Strommesser
58.  Blink-, Impulsgeber, Intervallrelais

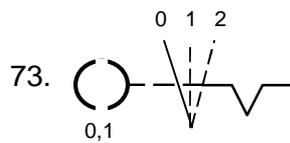
59.  Verstärker
-
60.  Messinstrument, anzeigend, Widerstandsmesser
-
61.  Zündspule in Sparschaltung
-
62.  Antrieb durch menschliche Kraft allgemein
-
63.  Antrieb durch menschliche Kraft durch Drücken
-
64.  Antrieb durch menschliche Kraft durch Ziehen
-
65.  Antrieb durch menschliche Kraft durch Drehen
-
66.  Antrieb durch menschliche Kraft durch Kippen
-
67.  Antrieb durch menschliche Kraft durch Fußantrieb
-
68.  Betätigung durch Nocken
-
69.  Thermische Betätigung, zum Beispiel Bimetall
-
70.  Hallgeber, das Kreuz gibt die Richtung des Nordpols an, das heißt, der Betrachter blickt vom Nordpol aus
-



Induktionsgeber



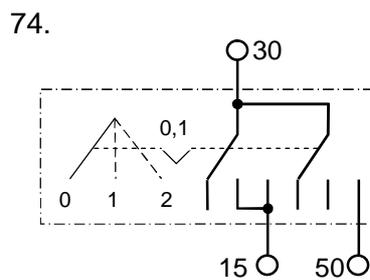
Induktionsgeber



Schlüsselbetätigter Antrieb mit Angabe der

Schaltstellung in der der Schlüssel eingesteckt

oder abgezogen werden kann



Mehrstellenschalter, zum Beispiel

Zündstartschalter mit Taststellung 2
