

## Terminal designations

The purpose of the terminal-designation system for automotive electrical systems specified by the standard (DIN 72552) is to enable the most accurate connection of wires to all the various devices, above all when making repairs and installing spare parts. The terminal designations (Table 7) do not identify the wires because devices with different terminal designations can be connected at the two ends of each wire.

For this reason, they need not be written on the wires.

In addition to the terminal designations listed, designations according to DIN VDE standards may also be used on electrical machines. Multiple connectors, for which the number of terminal designations as per DIN 72552 no longer suffice, are numbered by consecutive numbers or letters whose function assignment is not specified by standards.

**Table 7: Terminal designations according to DIN 72552**

Terminal	Definition	Terminal	Definition
	Ignition coil		Starter
1	Low voltage	45	Separate starter-motor relay, output; starter, input (primary current)
4	High voltage		Dual starters, parallel activation
4a	From ignition coil I, terminal 4		Starting relay for pinion-engagement current
4b	From ignition coil II, terminal 4	45a	Starter I output, Starter I and II input
15	Switched positive after battery (ignition-switch output)	45b	Starter II output
15a	Output at the series resistor to the ignition coil and to the starter	48	Terminal on starter and start repeating relay (monitoring the starting process)
	Glow-plug and starter switch		Turn-signal flasher (pulse generator)
17	Start	49	Input
19	Preglow	49a	Output
	Battery	49b	Output to second flasher circuit
30	Line from battery positive terminal (direct)	49c	Output to third flasher circuit
30a	Battery changeover 12/24 V		Starter
	Line from battery II positive terminal	50	Starter control (direct)
31	Return wire from battery Negative or ground (direct)		Battery changeover relay
	Return wire to battery	50a	Output for starter control
	Negative or ground via switch or relay (switched negative)		Starter control
31 b	Battery changeover relay 12/24 V	50b	In parallel operation of two starter motors with sequence control
31a	Return line to battery II negative		Starting relay for sequence control of engagement current in parallel operation of two starter motors
31c	Return line to battery I negative	50c	Input at starting relay for starter I
	Electric motors	50d	Input at starting relay for starter II
32	Return line <sup>1)</sup>		Start-locking relay
33	Main terminal <sup>1)</sup>	50e	Input
33a	Self-parking	50f	Output
33b	Shunt field		Start repeating relay
33f	for second reduced-rpm operation	50g	Input
33g	for third reduced-rpm operation	50h	Output
33h	for fourth reduced-rpm operation		
33L	Rotation to left (counterclockwise)		
33R	Rotation to right (clockwise)		

<sup>1)</sup> Polarity reversal terminal 32/33 possible

**Table 7: Terminal designations according to DIN 72552 (continued)**

Terminal	Definition	Terminal	Definition
	Wiper motors		Current relay
53	Wiper motor, input (+)	84	Input, output, relay contact
53a	Wiper (+), self-parking	84a	Output, drive
53b	Wiper (shunt winding)	84b	Output, relay contact
53c	Electric windshield-washer pump		Switching relay
53e	Wiper (brake winding)	85	Output, drive
53i	Wiper motor with permanent magnet and third brush for higher speed)		(end of winding negative or ground)
	Lighting technology	86	Input, drive (start of winding)
55	Fog lamps	86a	Start of winding / 1st winding
56	Headlamps	86b	Winding tap / 2nd winding
56a	High beam with indicator lamp		Relay contact for NC contact and changeover contact:
56b	Low beam (dipped beam)	87	Input
56d	Headlamp-flasher contact	87a	1st output (NC side)
57a	Parking lamp	87b	2nd output
57L	Parking lamp, left	87c	3rd output
57R	Parking lamp, right	87z	1st input
58	Side-marker, tail, license-plate and instrument lamps	87y	2nd input
		87x	3rd input
58L	left		Relay contact for NO contact:
58R	right	88	Input
	Alternators and voltage regulators		Relay contact for NO contact and changeover contact (NO contact side):
61	Alternator charge indicator	88a	1st output
B+	Battery positive terminal	88b	2nd output
B-	Battery negative terminal	88c	3rd output
D+	Alternator positive terminal		Relay contact for NO contact:
D-	Alternator negative terminal	88z	1st input
DF	Alternator field winding	88y	2nd input
DF1	Alternator field winding 1	88x	3rd input
DF2	Alternator field winding 2		Turn-signal lamp
U, V, W	Three-phase terminals		(turn-signal flasher)
	Audio systems	C	1st indicator light
75	Radio, cigarette lighter	C0	Main terminal for check circuits separate from flasher
76	Loudspeaker	C2	2nd indicator lamp
	Switches	C3	3rd indicator lamp (e.g for dual trailer operation)
	NC contact/changeover contact	L	Left-side turn-signal lamp
81	Input	R	Right-side turn-signal lamp
81a	1st output, NC side		
81b	2nd output, NC side		
	NO contact		
82	Input		
82a	1st output		
82b	2nd output		
82z	1st input		
82y	2nd input		
	Multiple-position switch		
83	Input		
83a	Output, position 1		
83b	Output, position 2		
83L	Output, position left		
83R	Output, position right		