

# Relays

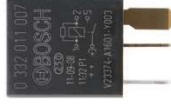
## Overview

Bosch relays are consistently reliable and perform switching operations in both automobiles and off-highway applications. The full program includes 12- and 24-volt relays in a variety of sizes.

## Experience & Quality

Bosch has been producing relays for vehicles, and a variety of other applications for more than 40 years. This vast development experience – and continuous advancement of the range to ensure state-of-the-art technology – ensures the quality parts you expect from a **world leader in mobility solutions**.

In addition to their long service life – made possible through meticulous processing and the use of high-quality materials allowing up to 250,000 switching cycles – Bosch relays are designed to withstand temperatures ranging from -40°F to up to +212°F (-40°C to up to +100°C).



### Micro Relays

A compact design with nominal 12- or 24-volts, Bosch micro relays are used in a wide range of vehicles. They perform switching operations and allow rated switching currents of up to 25 A. Thanks to their design, they are an ideal solution for quick and easy service tasks.

### Mini Relays

A compact design with nominal 12- or 24-volts, Bosch mini relays are used in a wide range of vehicles. They reliably perform switching operations and allow rated switching currents of up to 75 A. Thanks to their design, they are an ideal solution for safe and quick service tasks.

### Power Relays

Bosch power relays are used for switching operations in engines, starters and other large products. They work with rated switching currents of up to 350 A (and up to 3500 A in the case of battery cut-off relays).

	12 V / 24 V	12 V / 24 V	12 V / 24 V
Nominal Voltage	12 V / 24 V	12 V / 24 V	12 V / 24 V
Switching Current	Up to 25 A	Up to 75 A	Up to 350 A
Advantages at a Glance	<ul style="list-style-type: none"> <li>▶ Durable and robust due to meticulous processing</li> <li>▶ Use of high-quality materials for up to 250,000 switching cycles</li> <li>▶ High temperature resistance</li> <li>▶ Flexible and easy to use</li> </ul>	<ul style="list-style-type: none"> <li>▶ Powerful from high-rated switching currents of up to 75 A</li> <li>▶ Durable and robust due to meticulous processing</li> <li>▶ Use of high-quality materials for up to 250,000 switching cycles</li> <li>▶ High corrosion resistance</li> </ul>	<ul style="list-style-type: none"> <li>▶ Long service life due to vibration and shock resistance</li> <li>▶ Powerful relays – ideal for large engines</li> <li>▶ Particularly high temperature resistance</li> </ul>

Part Number	Pins	Voltage	Amperage	Resistor or Diode
<b>Micro Relay Normal Open</b>				
0 986 AHO 320	4	12 V	20 A	Neither
0 332 017 300	4	12 V	20 A	Resistor
0 986 AHO 300	4	12 V	20 A	Resistor
0 986 AHO 322	4	12 V	30 A	Diode
0 332 011 007	4	12 V	30 A	Resistor
0 986 AHO 323	4	24 V	10 A	Diode
0 986 AHO 321	4	24 V	10 A	Neither
0 986 AHO 328	4	24 V	10 A	Resistor
<b>Micro Relay Change Over</b>				
0 986 AHO 304	5	12 V	20/10 A	Diode
0 332 201 107	5	12 V	30/10 A	Resistor
0 986 AHO 307	5	12 V	30/10 A	Resistor
0 986 AHO 308	5	12 V	30/10 A	Neither
0 986 AHO 302	5	24 V	10/5 A	Diode
0 986 AHO 309	5	24 V	10/5 A	Neither
0 332 207 405	5	24 V	10/5 A	Resistor
0 986 AHO 305	5	24 V	10/5 A	Resistor
0 332 207 402	5	24 V	10/15 A	Diode
<b>Mini Relay Normal Open</b>				
0 332 019 166	4	12 V	30 A	Neither
0 332 019 453	4	12 V	30 A	Resistor
0 332 019 103	4	12 V	30 A	Resistor

<b>A</b> 	<b>B</b> 	<b>C</b> 	<b>D</b> 	<b>E</b> 
<b>K</b> 	<b>L</b> 	<b>M</b> 	<b>N</b> 	<b>O</b> 

Bracket	Color	Photo Reference	Minimum Order Qty	Part Number
<b>Micro Relay Normal Open</b>				
N	black	A	10	0 986 AHO 320
N	grey	B	1	0 332 017 300
N	black	C	10	0 986 AHO 300
N	black	D	10	0 986 AHO 322
N	black	E	1	0 332 011 007
N	black	F	10	0 986 AHO 323
N	black	G	10	0 986 AHO 321
N	black	H	10	0 986 AHO 328
<b>Micro Relay Change Over</b>				
N	black	I	10	0 986 AHO 304
N	black	J	1	0 332 201 107
N	black	K	10	0 986 AHO 307
N	black	L	10	0 986 AHO 308
N	black	M	10	0 986 AHO 302
N	black	N	10	0 986 AHO 309
N	grey	O	1	0 332 207 405
N	black	P	10	0 986 AHO 305
N	grey	Q	1	0 332 207 402
<b>Mini Relay Normal Open</b>				
N	black	R	1	0 332 019 166
Y	black	S	1	0 332 019 453
N	black	T	1	0 332 019 103

<b>F</b> 	<b>G</b> 	<b>H</b> 	<b>I</b> 	<b>J</b> 
<b>P</b> 	<b>Q</b> 	<b>R</b> 	<b>S</b> 	<b>T</b> 

Part Number	Pins	Voltage	Amperage	Resistor or Diode
<b>Mini Relay Normal Open</b>				
0 332 019 110	4	12 V	30 A	Resistor
0 332 019 456	4	12 V	30 A	Resistor
0 986 AHO 453	4	12 V	30 A	Resistor
0 332 019 157	4	12 V	40 A	Neither
0 986 332 030	4	12 V	40 A	Resistor
0 986 332 040	4	12 V	40 A	Resistor
0 986 AHO 080	4	12 V	70 A	Neither
0 986 332 002	4	12 V	70 A	Resistor
0 986 AHO 082	4	12 V	70 A	Resistor
0 332 019 205	4	24 V	20 A	Neither
0 986 AHO 081	4	24 V	50 A	Neither
0 986 AHO 083	4	24 V	50 A	Resistor
0 332 015 001	5	12 V	2x15 A	Neither
0 332 015 006	5	12 V	2x15 A	Neither
0 332 019 155	5	12 V	30 A	Diode
0 986 AHO 602	5	12 V	30 A	Diode
0 332 019 109	5	12 V	30 A	Diode
0 986 AHO 251	5	12 V	30 A	Neither
0 332 019 150	5	12 V	30 A	Neither
0 332 019 151	5	12 V	30 A	Neither

<b>A</b>	
<b>B</b>	
<b>C</b>	
<b>D</b>	
<b>E</b>	
<b>K</b>	
<b>L</b>	
<b>M</b>	
<b>N</b>	
<b>O</b>	

Bracket	Color	Photo Reference	Minimum Order Qty	Part Number
Y	black	A	1	0 332 019 110
T-Bar	orange	B	1	0 332 019 456
Y	black	C	10	0 986 AHO 453
Y	black	D	1	0 332 019 157
N	black	E	1	0 986 332 030
N	black	F	1	0 986 332 040
Y	black	G	10	0 986 AHO 080
N	grey	H	1	0 986 332 002
N	black	I	10	0 986 AHO 082
N	purple	J	1	0 332 019 205
Y	black	K	10	0 986 AHO 081
N	black	L	10	0 986 AHO 083
Y	green	M	1	0 332 015 001
N	blue	N	1	0 332 015 006
Y	grey	O	1	0 332 019 155
N	black	P	10	0 986 AHO 602
N	black	Q	1	0 332 019 109
N	black	R	10	0 986 AHO 251
Y	black	S	1	0 332 019 150
N	orange	T	1	0 332 019 151

<b>F</b>	
<b>G</b>	
<b>H</b>	
<b>I</b>	
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<b>P</b>	
<b>Q</b>	
<b>R</b>	
<b>S</b>	
<b>T</b>	

Part Number	Pins	Voltage	Amperage	Resistor or Diode
<b>Mini Relay Normal Open</b>				
0 332 019 801*	5	12 V	30 A	Neither
0 986 AHO 250	5	12 V	30 A	Neither
0 986 AHO 605	5	12 V	30 A	Neither
0 332 015 002	5	24 V	2x10 A	Neither
0 332 015 008	5	24V	2x10 A	Neither
0 986 AHO 253	5	24 V	20 A	Neither
0 332 019 203	5	24 V	20 A	Neither
0 332 019 213	5	24 V	20 A	Neither
0 986 AHO 603	5	24 V	20 A	Neither
0 986 AHO 204	5	24 V	20 A	Resistor
0 332 019 204	5	24 V	30 A	Resistor
<b>Mini Relay Change Over</b>				
0 986 AHO 611	5	6 V	30/20 A	Neither
0 332 209 152	5	12 V	20/30 A	Diode
0 332 209 158	5	12 V	20/30 A	Diode
0 332 209 150	5	12 V	20/30 A	Neither
0 332 209 151	5	12 V	20/30 A	Neither
0 332 209 159	5	12 V	20/30 A	Resistor
0 986 AHO 135	5	12 V	30/20 A	Diode
0 986 AHO 150	5	12 V	30/20 A	Neither
0 986 AHO 151	5	12 V	30/20 A	Neither


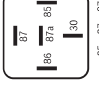
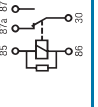

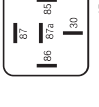
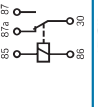

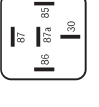
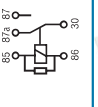

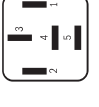
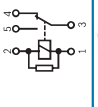


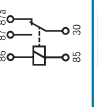

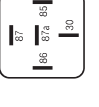
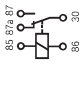

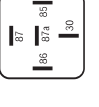
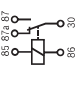

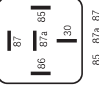
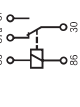


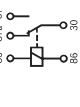


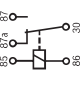
\*0 332 019 801 contains 4 connectors and a screw

<b>A</b>		
<b>B</b>		
<b>C</b>		
<b>D</b>		
<b>E</b>		
<b>K</b>		
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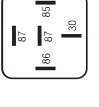
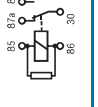

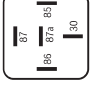
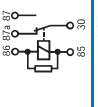

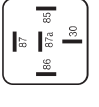
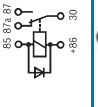

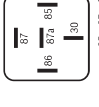
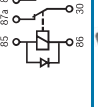

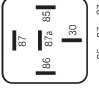
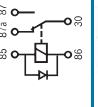


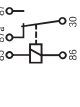

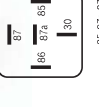
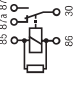


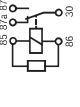

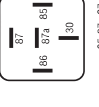
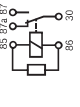

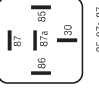
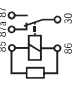
Bracket	Color	Photo Reference	Minimum Order Qty	Part Number
Y	black	A	1	0 332 019 801*
Y	black	B	10	0 986 AHO 250
Y	black	C	10	0 986 AHO 605
Y	grey	D	1	0 332 015 002
N	grey	E	1	0 332 015 008
Y	black	F	10	0 986 AHO 253
Y	black	G	1	0 332 019 203
N	black	H	1	0 332 019 213
N	black	I	10	0 986 AHO 603
N	black	J	10	0 986 AHO 204
Y	black	K	1	0 332 019 204
<b>Mini Relay Change Over</b>				
Y	black	L	10	0 986 AHO 611
N	grey	M	1	0 332 209 152
Y	grey	N	1	0 332 209 158
Y	black	O	1	0 332 209 150
N	purple	P	1	0 332 209 151
N	grey	Q	1	0 332 209 159
N	black	R	10	0 986 AHO 135
Y	black	S	10	0 986 AHO 150
N	black	T	10	0 986 AHO 151

<b>F</b>		
<b>G</b>		
<b>H</b>		
<b>I</b>		
<b>J</b>		
<b>P</b>		
<b>Q</b>		
<b>R</b>		
<b>S</b>		
<b>T</b>		

Part Number	Pins	Voltage	Amperage	Resistor or Diode
<b>Mini Relay Change Over</b>				
0 986 AHO 622	5	12 V	30/20 A	Resistor
0 986 AHO 625	5	12 V	30/20 A	Neither
0 986 AHO 237	5	12 V	40/20 A	Resistor
0 986 332 053	5	12 V	40/30 A	Resistor
0 986 332 022	5	12 V	40/60 A	Neither
0 332 209 138	5	12 V	50/20 A	Resistor
0 986 332 041	5	12 V	OE Specific	Resistor
0 332 209 204	5	24 V	20/10 A	Diode
0 986 AHO 612	5	24 V	20/10 A	Diode
0 986 AHO 614	5	24 V	20/10 A	Diode
0 332 209 203	5	24 V	20/10 A	Neither
0 332 209 211	5	24 V	20/10 A	Neither
0 986 AHO 613	5	24 V	20/10 A	Neither
0 986 AHO 615	5	24 V	20/10 A	Neither
0 986 AHO 803	5	24 V	20/10 A	Neither
0 986 AHO 811	5	24 V	20/10 A	Neither
0 332 209 216	5	24 V	20/10 A	Resistor
0 332 209 206	5	24 V	20/10 A	Resistor
0 332 209 207	5	24 V	20/10 A	Resistor
0 986 AHO 206	5	24 V	20/10 A	Resistor

<b>A</b>			
<b>B</b>			
<b>C</b>			
<b>D</b>			
<b>E</b>			
<b>K</b>			
<b>L</b>			
<b>M</b>			
<b>N</b>			
<b>O</b>			

Bracket	Color	Photo Reference	Minimum Order Qty	Part Number
Y	black	A	10	0 986 AHO 622
Y	black	B	10	0 986 AHO 625
N	black	C	10	0 986 AHO 237
T-BAR	green	D	1	0 986 332 053
N	black	E	1	0 986 332 022
Y	black	F	1	0 332 209 138
N	yellow	G	1	0 986 332 041
N	black	H	1	0 332 209 204
Y	black	I	10	0 986 AHO 612
N	black	J	10	0 986 AHO 614
Y	black	K	1	0 332 209 203
N	black	L	1	0 332 209 211
Y	black	M	10	0 986 AHO 613
N	black	N	10	0 986 AHO 615
Y	black	O	10	0 986 AHO 803
N	black	P	10	0 986 AHO 811
T-BAR	black	Q	1	0 332 209 216
N	black	R	1	0 332 209 206
Y	black	S	1	0 332 209 207
N	black	T	10	0 986 AHO 206

<b>F</b>			
<b>G</b>			
<b>H</b>			
<b>I</b>			
<b>J</b>			
<b>P</b>			
<b>Q</b>			
<b>R</b>			
<b>S</b>			
<b>T</b>			

Part Number	Pins	Voltage	Amperage	Resistor or Diode
<b>Mini Relay Change Over</b>				
0 986 AHO 617	5	24 V	20/10 A	Resistor
<b>Power Relay Normal Open</b>				
0 332 002 156	-	12 V	75 A	Diode
0 332 002 168	-	12 V	75 A	Resistor
0 986 332 086	-	12 V	150 A	Resistor
0 332 002 256	-	24 V	50 A	Diode
0 332 002 258	-	24 V	50 A	Resistor
0 986 332 091	-	24 V	150 A	Resistor
<b>Power Relay Change Over</b>				
0 986 332 087	-	12 V	150/150 A	Resistor
<b>Micro Relay (GM Footprint) Normal Open</b>				
0 986 AHO 115	4	12 V	30 A	Resistor
0 986 AHO 116	4	24 V	10 A	Resistor
<b>Micro Relay (GM Footprint) Change Over</b>				
0 986 AHO 113	5	12 V	30/10 A	Resistor
0 986 AHO 114	5	24 V	10/5 A	Resistor
<b>Semi Micro Relay Normal Open</b>				
0 986 AHO 090	4	12 V	20 A	Resistor
0 986 AHO 091	4	12 V	20 A	Resistor
0 986 AHO 092	4	12 V	20 A	Resistor
<b>Ultra Micro Relay Normal Open</b>				
0 986 AHO 093	4	12 V	20 A	Resistor
<b>Fuel Pump Relay</b>				
0 332 514 120	11	12 V	15 A	-
0 332 514 121	13	12 V	15 A	-

<b>A</b>		
<b>B</b>		
<b>C</b>		
<b>L</b>		
<b>K</b>		

Bracket	Color	Photo Reference	Minimum Order Qty	Part Number
Y	black	A	10	Mini Relay Change Over 0 986 AHO 617
Y	black	B	1	Power Relay Normal Open 0 332 002 156
Y	black	C	1	0 332 002 168
Y	black	D	1	0 986 332 086
Y	black	E	1	0 332 002 256
Y	black	F	1	0 332 002 258
Y	black	G	1	0 986 332 091
Y	black	H	1	Power Relay Change Over 0 986 332 087
N	black	I	10	Micro Relay (GM Footprint) Normal Open 0 986 AHO 115
N	black	J	10	0 986 AHO 116
N	black	K	10	Micro Relay (GM Footprint) Change Over 0 986 AHO 113
N	black	L	10	0 986 AHO 114
N	black	M	10	Semi Micro Relay Normal Open 0 986 AHO 090
Locking	black	N	10	0 986 AHO 091
Square Locking	black	O	10	0 986 AHO 092
N	black	P	10	Ultra Micro Relay Normal Open 0 986 AHO 093
Y	black	Q	1	Fuel Pump Relay 0 332 514 120
Y	black	R	1	0 332 514 121

<b>F</b>		<b>G</b>	
<b>H</b>		<b>I</b>	
<b>J</b>		<b>K</b>	
<b>L</b>		<b>M</b>	
<b>N</b>		<b>O</b>	
<b>P</b>		<b>Q</b>	
<b>R</b>		<b>S</b>	