



Technical data

LR 75 vs High-Current Relay

BOSCH LR 75 (Normally Open)



Bosch No.	Coil Voltage
0 332 002 156 (Diode)	12V
0 332 002 168 (Resistor)	12V
0 332 002 256 (Diode)	24V
0 332 002 258 (Resistor)	24V

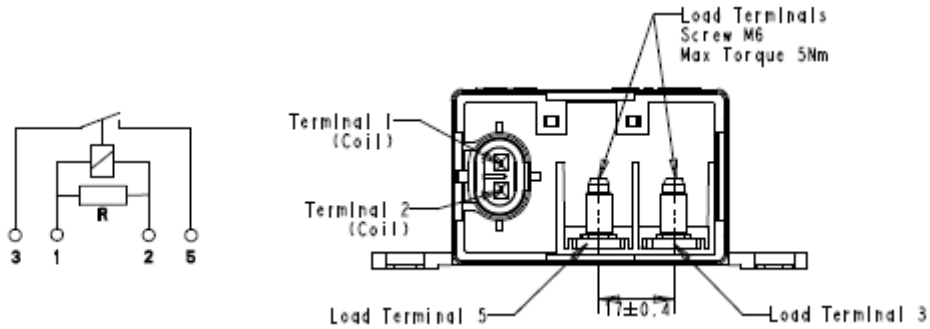
NEW High-Current Relays (HCR)



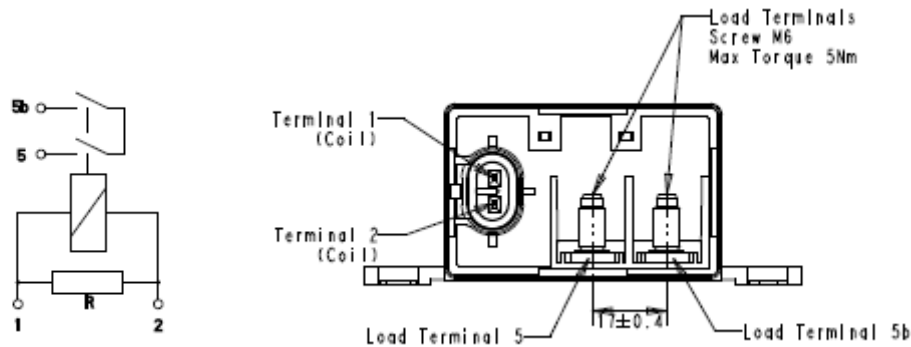
Bosch No.	Coil Voltage
0 332 002 159 (Resistor)	12V
0 332 002 259 (Resistor)	24V

No diode version available at the moment.

NEW High-Current Relays (HCR)

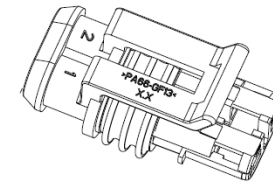


0332002159



0332002259

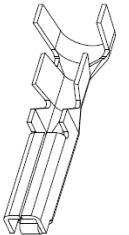
Customer may require an additional coil connector kit to perform the replacement in the field:



1 x Connector
2 Pole TE AMP Superseal 1.5



2 x Wire Seals
Single wire seal
(1.7 - 2.4mm Ø wire)



2 x Loose Wire Contacts
Mini MIC Rec. Contact

Available packaging indices

Connector kit

896: single packaging

included

441: bulk packaging

not included

Size, Contact Data, Coil Data

12 Volt Version

	Size	Cont. Current 23°C	Cont. Current 85°C	Operating Voltage	Release Voltage	Coil Resistance	Parallel Resistor	Total Resistance	Contact Resistance
LR 75	44 x 31,5 x 39	75 A	50 A	8,0 V	1,5 V	46 Ω	680 Ω	43 Ω	< 100 mV new cond. < 200 mV after LD
HCR	63 x 40 x 65,1	140 A	100 A	7,2 V	1,2 V	37 Ω	270 Ω	33 Ω	Typ. 70 V < 200 mV

24 Volt Version

	Size	Cont. Current 23°C	Cont. Current 85°C	Operating Voltage	Release Voltage	Coil Resistance	Parallel Resistor	Total Resistance	Contact Resistance
LR 75	44 x 31,5 x 39	50 A	30 A	17,0 V	1,0 V	130 Ω	510 Ω	104 Ω	< 100 mV new cond. < 200 mV after LD
HCR	63 x 40 x 65,1	140 A	100 A	16,0 V	2,4 V	150 Ω	680 Ω	123 Ω	Typ. 70 V < 200 mV

Electrical Endurance: Resistive Life Time

12 Volt Version: Electrical Endurance: Resistive Life Time

	Load Current	on / off	Cycles	Temperature	Coil Voltage	Short Time Endurance
0332002156	75 A	2s / 2s	>100.000	23°C	13,5 V	250 A / 1s / 1 cycle
0332002168	100 A	1s / 45s	>20.000	23°C	13,5 V	
0332002159	100 A	1s / 4s	>100.000	-40°C ... +85°C	14,0 V	600 A / 1s / 1 cycle

24 Volt Version: Electrical Endurance: Resistive Life Time

	Load Current	on / off	Cycles	Temperature	Coil Voltage	Short Time Endurance
0332002258	50 A	2s / 2s	>50.000	23°C	27 V	150 A / 1s / 1 cycle
0332002256	75 A	1s / 45s	>20.000	23°C	27 V	
0332002259	100 A	1s / 4s	>100.000	-40°C ... +85°C	28 V	600 A / 1s / 1 cycle

Environmental Tests

	LR 75	HCR
Ambient Operating Temperature	-40°C ... +85°C	-40°C ... +85°C
Mechanical Life Endurance	> 1.000.000	> 10.000.000
Vibration, random wide-band	DIN EN 60068-2-64 10 Hz ... 2000 Hz, 3h	ISO 16750-3 10 to 1000 Hz, >2,8grms Test IV
Shock Test	DIN EN 60068-2-27 30g, 11ms	IEC 60068-2-27 >20g, 6ms
Drop Test	1m	1m
Dry Heat	DIN EN 60068-2-2 +120°C, +50 h	IEC 60068-2-2 +100°C, 500h
Thermal Shock	DIN EN 60068-2-14	IEC 60068-2-14 100 cycles, -40°C / +125°C
Humidity	DIN EN 60068-2-30 12 cycles, +40°C	IEC 60068-2-30 6 cycles, +55°C