


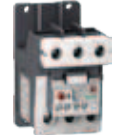

# Advanced motor protection for a wide range of applications

New TeSys LR9D electronic overload relays provide motor safety tailored to your needs



# New TeSys LR9D Product Specification

Commercial Reference		LR9D01, LR9D02, LR9D08, LR9D32	LR9D110S
<b>Specification Item</b>			
Overload Relay Type		Solid state (electronic)	
Power Consumption		<300mW	
Current Sensors		3CT	
Current Setting Ranges		0.1-0.5A (LR9D01) 0.4-2A (LR9D02) 1.6-8A (LR9D08) 6.4-32A (LR9D32)	22-110A (LR9D110S)
Operation Current Setting Ratio		5:1	
Internal/External CT		Internal	
Insulation Voltage	Main Circuit	1000 Vac	
	(Ui) IEC Auxiliary Circuit	690 Vac	
Operation Voltage	Main Circuit	690 Vac	
	(Ue) IEC Auxiliary Circuit	660 Vac	
Operation Voltage	Main Circuit	600 Vac	
	(Ue) UL Auxiliary Circuit	600 Vac (B600-R300)	
Resistance to Vibrations (IEC 60.068)		6g (any direction 5-150 Hz)	
Protection to Shock-Hazard, According to (VDE 0106 Part 100)		Standard	
Impulse Withstand Voltage		6kV	
Index of Protection (IP) (IEC 60529&VDE 0470)		IP 20	
Trip Class (IEC)		5/10/20/30 selectable	
Self-Powered (Control Circuit)		Standard	
Ambient Temperature Compensation		Standard	
Overall Dimensions: W*H*D (mm)		45 * 72.5 * 79.9	65 * 120 * 115
Weight (kg)		0.18	0.64
<b>Mechanism Functions</b>			
Trip Indication		Standard	
Reset/Stop Functions		Standard	
Reset		Manual / Auto	
Function Test Method (Test Button)		Mechanical (yellow)	
Locking Settings Window		Standard	
Mounting	Directly beneath Contactor	LC1D09-38 and LC2D09-38	Not Available
	Panel Mounting	With LAD7B205 accessory	Standard
	Din Rail (35mm)	With LAD7B205 accessory	Standard
<b>Electronic Function</b>			
Hot/Cold State Trip Memory (Thermal Memory)		Standard	
Automatic Reset Time		1.5 to 4 min	
Manual Instantaneous Reset		Standard	
Mounting Position		Any	
Inrush Current Protection		12 times	
Phase Loss Protection		Standard (phase difference than > 70%, will trip within 3 seconds)	
Phase Unbalance Protection		Standard (phase difference than > 40%, will trip within 3 seconds.)	
Overload Curve		Inverse Time/Current Curve	

SE reference	Description	
LR9D01	EOCR, Relay Setting Range 0.1-0.5A	
LR9D02	EOCR, Relay Setting Range 0.4-2.0A	
LR9D08	EOCR, Relay Setting Range 1.6-8.0A	
LR9D32	EOCR, Relay Setting Range 6.4-32A	
LR9D110S	EOCR, Relay Setting Range 22-110A	
LAD7B205	Separate Mounting Adapter Suitable for LR9D01 - 32	

**Starter Combination**



> DOL Starter



> Reversing Starter

## Type 1 Coordination Table: D.O.L. Starters with Circuit Breaker and Separate Electronic Thermal Overload Relay at 415V

Motor Rating	Operational Current	Iq	Circuit breaker		Electronic thermal overload relay		Contactors
kW	Amp	kA	Reference	Amp	Reference	Range	Reference
0.06	0.2	130	GV2LE03	0.4	LR9D01	0.1 - 0.5	LC1D09
0.09	0.3	130	GV2LE03	0.4	LR9D01	0.1 - 0.5	LC1D09
0.12	0.44	130	GV2LE04	0.63	LR9D01	0.1 - 0.5	LC1D09
0.18	0.6	130	GV2LE04	0.63	LR9D02	0.4 - 2	LC1D09
0.25	0.85	130	GV2LE05	1	LR9D02	0.4 - 2	LC1D09
0.37	1.1	130	GV2LE05	1	LR9D02	0.4 - 2	LC1D09
0.55	1.5	130	GV2LE06	1.6	LR9D02	0.4 - 2	LC1D09
0.75	1.9	130	GV2LE07	2.5	LR9D02	0.4 - 2	LC1D09
1.10	2.7	130	GV2LE08	4	LR9D08	1.6 - 8	LC1D09
1.50	3.6	130	GV2LE08	4	LR9D08	1.6 - 8	LC1D09
2.2	4.9	130	GV2LE10	6.3	LR9D08	1.6 - 8	LC1D09
3	6.5	130	GV2LE14	10	LR9D08	1.6 - 8	LC1D09
4	8.5	130	GV2LE14	10	LR9D32	6.4 - 32	LC1D09
5.5	11.5	15	GV2LE16	14	LR9D32	6.4 - 32	LC1D12
7.5	15.5	15	GV2LE20	18	LR9D32	6.4 - 32	LC1D18
11	22	15	GV2LE22	25	LR9D32	6.4 - 32	LC1D25
15	29	10	GV2LE32	32	LR9D32	6.4 - 32	LC1D32
18.5	35	50	GV3L40	40	LR9D110S	22 - 110	LC1D40A
22	41	50	GV3L50	50	LR9D110S	22 - 110	LC1D50A
30	55	50	GV3L65	65	LR9D110S	22 - 110	LC1D65A
37	66	70	28100	80	LR9D110S	22 - 110	LC1D80
45	80	36	LV429740	100	LR9D110S	22 - 110	LC1D80
55	97	36	LV430830	150	LR9D110S	22 - 110	LC1D115

## Type 2 Coordination Table: D.O.L. Starters with Circuit Breaker and Separate Electronic Thermal Overload Relay at 415V

Motor Rating	Operational Current	Iq	Circuit breaker		Electronic thermal overload relay		Contactors
kW	Amp	kA	Reference	Amp	Reference	Range	Reference
0.06	0.2	100	GV2L03	0.4	LR9D01	0.1 - 0.5	LC1D09
0.09	0.3	100	GV2L03	0.4	LR9D01	0.1 - 0.5	LC1D09
0.12	0.44	100	GV2L04	0.63	LR9D02	0.4 - 2.0	LC1D18
0.18	0.6	100	GV2L04	0.63	LR9D02	0.4 - 2.0	LC1D18
0.25	0.85	100	GV2L05	1	LR9D02	0.4 - 2.0	LC1D18
0.37	1.1	100	GV2L05	1	LR9D02	0.4 - 2.0	LC1D18
0.55	1.5	100	GV2L06	1.6	LR9D02	0.4 - 2.0	LC1D18
0.75	1.9	100	GV2L07	2.5	LR9D08	1.6 - 8.0	LC1D18
1.1	2.7	100	GV2L08	4	LR9D08	1.6 - 8.0	LC1D18
1.5	3.6	100	GV2L08	4	LR9D08	1.6 - 8.0	LC1D18
2.2	4.9	100	GV2L10	6.3	LR9D08	1.6 - 8.0	LC1D18
3	6.5	100	GV2L14	10	LR9D32	6.4 - 32	LC1D25
4	8.5	100	GV2L14	10	LR9D32	6.4 - 32	LC1D25
5.5	11.5	100	GV2L16	14	LR9D32	6.4 - 32	LC1D25
7.5	15.5	50	GV2L20	18	LR9D32	6.4 - 32	LC1D25
11	22	50	GV2L22	25	LR9D32	6.4 - 32	LC1D25
15	29	50	GV3L32	40	LR9D110S	22 - 110	LC1D65A
18.5	35	50	GV3L40	40	LR9D110S	22 - 110	LC1D65A
22	41	50	GV3L50	50	LR9D110S	22 - 110	LC1D65A
30	55	50	GV3L65	65	LR9D110S	22 - 110	LC1D65A

# Meet the new TeSys LR9D

In today's world, we rely on electric motors to ensure the continuity of key processes. Choosing the right motor protection therefore affects not only your infrastructure, but also your overall business performance. New TeSys™ LR9D electronic overload relays from Schneider Electric provide advanced, flexible, and reliable protection to your motors. Adaptable to diverse needs, they fit a wide range of applications, including pumping, HVAC, hoisting, material working, and packaging.

With the new relays from the TeSys LR9D range, you can provide reliable protection to your assets, improving both motor life and cost savings.

By incorporating multiple functionalities in a single space-saving design, the new relays simplify control architecture as well as selection and stocking of motor protection devices.

## See how our new electronic overload relays suit your needs:

- Selectable trip class (5, 10, 20, 30), lets you set the desired level of protection
- 5:1 adjustment range, makes new relays a natural choice for wide range of applications, from 0.1 A to 110 A.
- Ambient insensitivity, allows accurate current measurement
- Close couple configuration\*, reduces installation time and simplifies control architecture
- Compact size, saves space in control panels
- Self-powered, eliminates the need for an external power supply

\* available for relays up to 32 A

TeSys LR9D electronic overload relays are compliant with the following certifications and standards:  
IEC, CCC, CSA, UL, TÜV

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