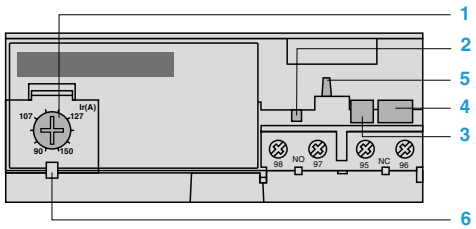
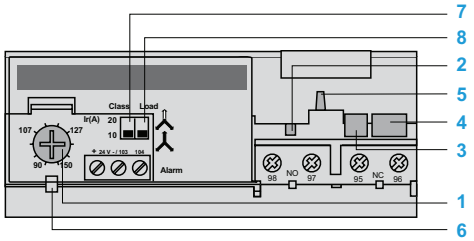
TeSys protection components
3-pole electronic thermal overload relays, TeSys LR9 D

Description



LR9 D5367…D5569



LR9 D67 and D69

LR9 D electronic thermal overload relays are designed for use with contactors LC1 D115 and D150.

In addition to the protection provided by TeSys D thermal overload relays (see page 6/14), they offer the following special features:
- protection against phase imbalance,
- choice of starting class,
- protection of unbalanced circuits,
- protection of single-phase circuits,
- alarm function to avoid tripping by load shedding.

1 Adjustment dial Ir.
2 Test button.
3 Stop button.
4 Reset button.
5 Trip indicator.
6 Setting locked by sealing the cover.
7 Class 10/class 20 selector switch.
8 Selector for balanced load /unbalanced load

Environment

Conforming to standards			IEC 60947-4-1, 255-8, 255-17, VDE 0660 and EN 60947-4-1
Product certifications			UL 508 , CSA 22-2
Degree of protection	Conforming to IEC 60529 and VDE 0106		IP 20 on front panel with protective covers **LA9 D11570●** or **D11560●**
Protective treatment	Standard version		"TH"
Ambient air temperature around the device (Conforming to IEC 60255-8)	Storage	**°C**	- 40…+ 85
	Normal operation	**°C**	- 20…+ 55 *(1)*
Maximum operating altitude	Without derating	**m**	2000
Operating positions without derating	In relation to normal vertical mounting plane		Any position
Shock resistance	Permissible acceleration conforming to IEC 60068-2-7		13 gn - 11 ms
Vibration resistance	Permissible acceleration conforming to IEC 60068-2-6		2 gn - 5…300 Hz
Dielectric strength at 50 Hz	Conforming to IEC 60255-5	**kV**	6
Surge withstand	Conforming to IEC 61000-4-5	**kV**	6
Resistance to electrostatic discharge	Conforming to IEC 61000-4-2	**kV**	8
Immunity to radiated radio-frequency disturbances	Conforming to IEC 61000-4-3 and NF C 46-022	**V/m**	10
Immunity to fast transient currents	Conforming to IEC 61000-4-4	**kV**	2
Electromagnetic compatibility	Draft EN 50081-1 and 2, EN 50082-2		Meets requirements

Electrical characteristics of auxiliary contacts

Conventional thermal current		**A**	5					
Max. sealed consumption of the operating coils of controlled contactors (Occasional operating cycles of contact 95-96)	a.c. supply	**V**	24	48	110	220	380	600
		VA	100	200	400	600	600	600
	d.c. supply	**V**	24	48	110	220	440	–
		W	100	100	50	45	25	–
Protection against short-circuits	By gG or BS fuses or by circuit-breaker **GB2**	**A**	5					
Cabling Flexible cable without cable end	1 or 2 conductors	**mm²**	Minimum c.s.a.: 1 Maximum c.s.a.: 2.5					
	Tightening torque	**Nm**	1.2					

(1) For operating temperatures up to 70 °C, please consult your Regional Sales Office.

References: pages 6/20 to 6/21
Dimensions, mounting : pages 6/26 to 6/28
Schemes: page 6/29