

Documents corresponding to the product:

Standard EN 60947-1
EN 60947-4-1
The products are in accordance with the directives of EC "Low voltage directives (LVD) no 73/23 EEC" and "Electromagnetic Compatibility Directives (EMC) no. 89/336 EEC".

Thermal relays

The thermal relays LT 2- K/Exx series are devices designed for protection of induction motors from overload or overheat. They are mounted to contactors LT 1 K/Dxx series and an operating circuit for motor control is passed through their NC contacts. The operation of these devices is based on the curving of bimetal plates mounted in the thermal relay caused by the current passing through them. When the current to the consumer gets higher due to failure, the thermal current gets higher which leads to additional curving of the bimetal plates and at getting above the limit value for the plate it pushes the breaking mechanism and breaks the operating circuit. The choice of a suitable protection prevents motor's operation at unusual temperature conditions and guarantees maximum constant operation, increases the effectiveness and prolongs the term of exploitation.

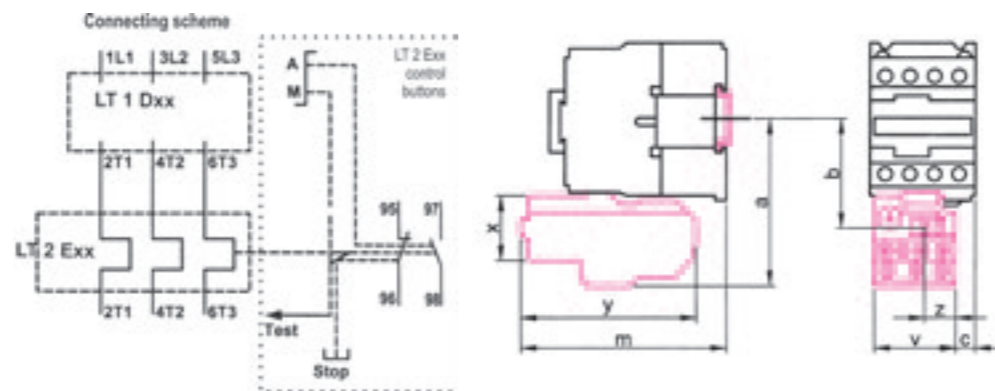
Functions:

- switching off alternating current consumers at current overload
- making of control systems for consumers
- used as a protective operating element in control panels of induction motors
- remarkable with high reliability of current characteristics

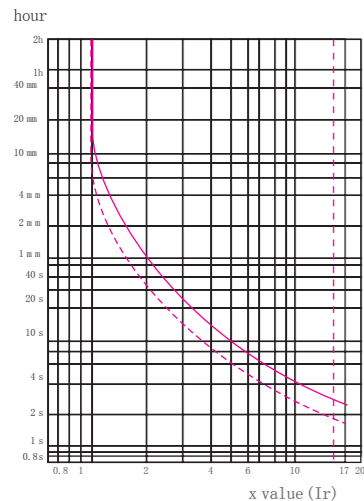
Technical data:

- * Rated operating voltage: up to 690V AC; 50/60 Hz
- * Rated operating current range: up to 690V AC
- * insulation voltage: >690V
- * Surge voltage wear resistance: ≥6000V
- * Joining terminal: screw terminal
- * Connecting:
 - flexible or rigid conductors with or without cable terminal for joining to the consumer
 - to the contactor through the relay terminals
 - the connecting terminals with the consumer can be adjusted according to the type of the contactor
- * Electrical wear resistance (number of cycles): ≥1000000
- * Mechanical wear resistance (number of cycles): ≥10000000
- * Indication for protection activating
- * Possibility for choice of the protection restoring (through the blue button)
- * Possibility for range adjustment of the protection activating
- * Possibility for operation at higher frequency
- * Mounting:
 - mounting to the contactor: to the terminals of the contactor as it is additionally clamped to its frame through a pin
 - mounting position: vertical gradient – maximum ± 5°
 - Plastic: wear resistance of UV rays and non-flammable (self-extinguishing material)
- * Ambient temperature: -10°C + 60°C
- * Installation altitude: up to 2000m

Note: To protect the consumer from short circuit, before the combination contactor- thermal relay, a suitably measured breaker or safety device should be mounted.



Type	Dimensions (mm)							
	a	b	c	m	x	y	v	z
LT 2 - Kxx	81	50	0	98	47	92	44	17
LT 2 - E13xx	86	55	10.7	108	47	92	44	17
LT 2 - E23xx	86	55	9	109	47	92	44	17
LT 2 - E33xx	115	76	9.5	124	54	109	70	30



For contactor LT1-K06 type	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Catalogue number
	220V 230V	380V 400V	660V 690V				
LT2-K0301	-	-	-	0.16	0.10 - 0.16	1 / 100	13401
LT2-K0302	-	-	-	0.25	0.16 - 0.25	1 / 100	13402
LT2-K0303	-	-	-	0.40	0.25 - 0.40	1 / 100	13403
LT2-K0304	-	-	0.37	0.63	0.40 - 0.63	1 / 100	13404
LT2-K0305	-	-	0.55	1.00	0.63 - 1.00	1 / 100	13405
LT2-K0306	-	0.37	1.10	1.60	1.0 - 1.60	1 / 100	13406
LT2-K0307	0.37	0.75	1.50	2.50	1.6 - 2.50	1 / 100	13407
LT2-K0308	0.75	1.50	3.00	4.00	2.5 - 4.00	1 / 100	13408
LT2-K0310	1.10	2.20	4.00	6.00	4.0 - 6.00	1 / 100	13410
LT2-K0312	1.10	2.20	4.00	8.00	5.5 - 8.00	1 / 100	13411
LT2-K0314	2.20	4.00	7.50	10.0	7.0 - 10.0	1 / 100	13412

For contactors from LT1-D09 to LT1-D25 type	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Catalogue number
	220V 230V	380V 400V	660V 690V				
LT2-E1301	-	-	-	0.16	0.10 - 0.16	1 / 100	13001
LT2-E1302	-	-	-	0.25	0.16 - 0.25	1 / 100	13002
LT2-E1303	-	-	-	0.40	0.25 - 0.40	1 / 100	13003
LT2-E1304	-	-	0.37	0.63	0.40 - 0.63	1 / 100	13004
LT2-E1305	-	-	0.55	1.00	0.63 - 1.00	1 / 100	13005
LT2-E1306	-	0.37	1.10	1.60	1.0 - 1.60	1 / 100	13006
LT2-E1307	0.37	0.75	1.50	2.50	1.6 - 2.50	1 / 100	13007
LT2-E1308	0.75	1.50	3.00	4.00	2.5 - 4.00	1 / 100	13008
LT2-E1310	1.10	2.20	4.00	6.00	4.0 - 6.00	1 / 100	13010
LT2-E1312	2.00	3.70	5.50	8.00	5.5 - 8.00	1 / 100	13012
LT2-E1314	2.20	4.00	7.50	10.0	7.0 - 10.0	1 / 100	13014
LT2-E1316	3.70	5.50	11.0	13.0	9.0 - 13.0	1 / 100	13016
LT2-E1321	4.00	7.50	15.0	18.0	12.0 - 18.0	1 / 100	13021
LT2-E1322	5.50	9.00	18.5	25.0	17.0 - 25.0	1 / 100	13022
LT2-E1353	9.00	11.0	18.5	33.0	23.0 - 32.0	1 / 100	13053

For contactor LT1-D32 type	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Catalogue number
	220V 230V	380V 400V	660V 690V				
LT2-E2353	11	11	18.5	32	23.0 - 32.0	1 / 100	13253
LT2-E2355	15	15	22.0	36	28.0 - 36.0	1 / 100	13255

For contactors from LT1-D40 to LT1-D95 type	Motor capacity (kW)			Rated current (A)	Protection adjustment range	Packing/Box (pcs)	Catalogue number
	220V 230V	380V 400V	660V 690V				
LT2-E3355	18.5	18.5	30	40	30.0 - 40.0	1 / 50	13355
LT2-E3357	22	22	30	50	37.0 - 50.0	1 / 50	13357
LT2-E3359	30	30	37	65	48.0 - 65.0	1 / 50	13359
LT2-E3363	45	45	55	80	63.0 - 80.0	1 / 50	13363
LT2-E3365	55	55	75	93	80.0 - 93.0	1 / 50	13365