



GLR1-D series thermal relay

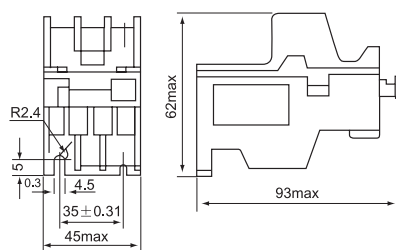
Applications

GLR1-D series thermal relay is suitable for using in the circuits rated voltage up to 660V, rated current 80A AC 50Hz or 60Hz, for over-voltage protection of A.C. motor. The relay has the differential mechanism and temperature compensating and can plug in GLC1-D series A.C. contactor. The product conforms to GB14048.4, IEC60947-4 standards.

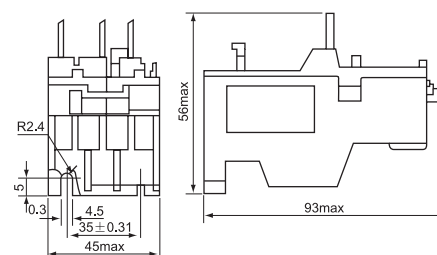
Technical parameter

Type	Number	Setting range(A)	For contactor
GLR1-D	09301	0.1~0.16	D09~D25
	09302	0.16~0.25	D09~D25
	09303	0.25~0.4	D09~D25
	09304	0.4~0.63	D09~D25
	09305	0.63~1	D09~D25
	09306	1~1.6	D09~D25
	09307	1.6~2.5	D09~D25
	09308	2.5~4	D09~D25
	09310	4~6	D09~D25
	09312	5.5~8	D09~D25
	09314	7~10	D09~D25
	12316	10~13	D09~D25
	16321	13~18	D09~D25
	25322	18~25	D09~D25
	40353	23~32	D09~D25
	40355	30~40	D40、D50、D63
	63357	38~50	D40、D50、D63
	63359	48~57	D40、D50、D63
	63361	57~66	D40、D50、D63
	80363	63~80	D40、D50、D63

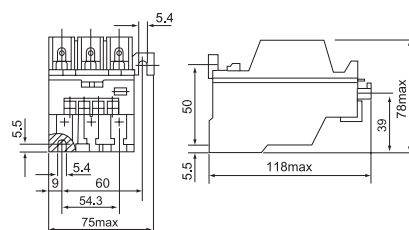
Dimension



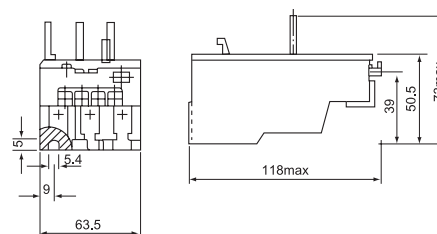
GLR1-09-25, F type



GLR1-09-25, Z type

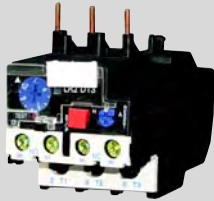


GLR1-40-80, F type



GLR1-40-80, Z type

- d 3-pole thermal overload relays (class 10 A) adjustable from 0.1 to 93 A, for motor protection
- References



GLR2-D series thermal relay

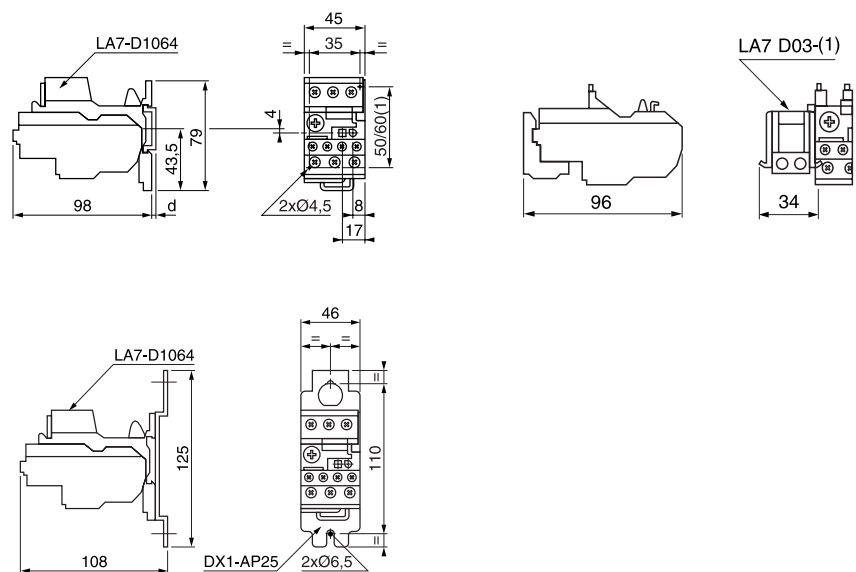
Thermal overload relays to be used with fuses

- Compensated with manual or automatic reset,
- Relay trip indicator,
- for a.c. or d.c.

Technical parameter

Relay setting range (A)	Fuses to be used with selected relay Type (A)		For contactor GLC1, GLP1	Reference	Weight (kg)
	aM	gG(BS88)			
0.10...0.16	0.25	2	D09...D32	GLR2-D1301	0.165
0.16...0.25	0.5	2	D09...D32	GLR2-D1302	0.165
0.25...0.40	1	2	D09...D32	GLR2-D1303	0.165
0.40...0.63	1	4	D09...D32	GLR2-D1304	0.165
0.63...1	2	4	D09...D32	GLR2-D1305	0.165
1...1.6	2	6	D09...D32	GLR2-D1306	0.165
1.6...2.5	4	10	D09...D32	GLR2-D1307	0.165
2.5...4	6	16	D09...D32	GLR2-D1308	0.165
4...6	8	16	D09...D32	GLR2-D1310	0.165
5.5...8	12	20	D09...D32	GLR2-D1312	0.165
7...10	12	20	D09...D32	GLR2-D1314	0.165
9...13	16	25	D12...D32	GLR2-D1316	0.165
12...18	20	32	D18...D32	GLR2-D1321	0.165
17...25	25	50	D25 and D32	GLR2-D1322	0.165
23...32	40	63	D25 and D32	GLR2-D2353	0.320
30...40	40	80	D32	GLR2-D2355	0.320
17...25	25	50	D40...D95	GLR2-D3322	0.510
23...32	40	63	D40...D95	GLR2-D3353	0.510
30...40	40	80	D40...D95	GLR2-D3355	0.510
37...50	63	100	D50...D95	GLR2-D3357	0.510
48...65	63	100	D50...D95	GLR2-D3359	0.510
55...70	80	125	D65...D95	GLR2-D3361	0.510
63...80	80	125	D80 and D95	GLR2-D3363	0.510
80...93	100	160	D95	GLR2-D3365	0.510

Dimension



- K thermal overload relays, adjustable from 0.11 to 11.5 A, for motor protection; compensated and phase failure sensitive, manual or automatic reset
- References



GLR2-K series thermal relay

3-pole relays with screw clamp terminals

Direct mounting : under the contactor for versions with screw clamp terminals only; pre-wired terminals, see below.
Separate mounting : using terminal block LA7-K0064 (see below).

On the front of the overload relay

- Selection of reset mode : Manual (marked H) or Automatic (marked A)
 - Red pushbutton : Trip Test function
 - Red pushbutton : Trip reset
 - Blue pushbutton : Stop and manual Reset
 - Yellow trip flag indicator : overload relay tripped
- Protection by fuses or by magnetic circuit-breaker type GV2-L, see page 1/92.

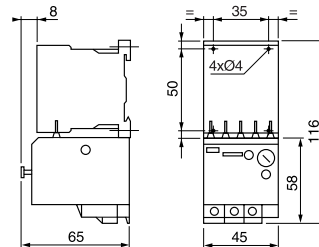
Technical parameter

Relay setting range (A)	Fuses to be used with selected relay Type (A)		Reference	Weight (kg)
	aM	gM (BS88)		

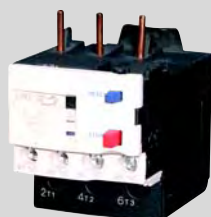
Class 10 A (the standard specifies a tripping time of between 2 and 10 seconds at 7.2 In)

0.11...0.16	0.25	2	GLR2-K0301	0.145
0.16...0.23	0.25	2	GLR2-K0302	0.145
0.23...0.36	0.5	2	GLR2-K0303	0.145
0.36...0.54	1	4	GLR2-K0304	0.145
0.54...0.8	1	4	GLR2-K0305	0.145
0.8...1.2	2	6	GLR2-K0306	0.145
1.2...1.8	2	6	GLR2-K0307	0.145
1.8...2.6	4	10	GLR2-K0308	0.145
2.6...3.7	4	16	GLR2-K0310	0.145
3.7...5.5	6	16	GLR2-K0312	0.145
5.5...8	8	20	GLR2-K0314	0.145
8...11.5	10	20	GLR2-K0316	0.145

Dimension



■ 3-pole thermal overload relays, model d



GLRD series thermal relay

Differential thermal overload relays for use with fuses

- Compensated relays with manual or automatic reset
- with relay trip indicator
- for a.c. or d.c.

Technical parameter

Relay setting range(A)	Fuses to be used with selected relay ((A))			For contactor GLC1	Reference	Weight kg
	aM	gG	BS88			
0.10...0.16	0.25	2	-	D09...D38	GLRD01	0.124
0.16...0.25	0.5	2	-	D09...D38	GLRD02	0.124
0.25...0.40	1	2	-	D09...D38	GLRD03	0.124
0.40...0.63	1	2	-	D09...D38	GLRD04	0.124
0.63...1	2	4	-	D09...D38	GLRD05	0.124
1...1.6	2	4	6	D09...D38	GLRD06	0.124
1.6...2.5	4	6	10	D09...D38	GLRD07	0.124
2.5...4	6	10	16	D09...D38	GLRD08	0.124
4...6	8	16	16	D09...D38	GLRD10	0.124
5.5...8	12	20	20	D09...D38	GLRD12	0.124
7...10	12	20	20	D09...D38	GLRD14	0.124
9...13	16	25	25	D12...D38	GLRD16	0.124
12...18	20	35	32	D18...D38	GLRD21	0.124
16...24	25	50	50	D25...D38	GLRD22	0.124
23...32	40	63	63	D25...D38	GLRD32	0.124
30...38	40	80	80	D32 and D38	GLRD35	0.124
17...25	25	50	50	D40...D95	GLRD3322	0.510
23...32	40	63	63	D40...D95	GLRD3353	0.510
30...40	40	100	80	D40...D95	GLRD3355	0.510
37...50	63	100	100	D40...D95	GLRD3357	0.510
48...65	63	100	100	D50...D95	GLRD3359	0.510
55...70	80	125	125	D50...D95	GLRD3361	0.510
63...80	80	125	125	D65...D95	GLRD3363	0.510
80...104	100	160	160	D80 and D95	GLRD3365	0.510
80...104	125	200	160	D115 and D150	GLRD4365	0.900
95...120	125	200	200	D115 and D150	GLRD4367	0.900
110...140	160	250	200	D150	GLRD4369	0.900

GLR9 series thermal relay

Compensated and differential overload relays (1) (2)

- Thermal overload relays :
 - compensated and differential,
 - relay trip indicator,
 - for a.c.,
 - for direct mounting on contactor or independent mounting (3).

Technical parameter

Relay setting range (A)	Max fuses to be used with selected relay		For contactor GLC1	Reference	Weight (kg)
	aM (A)	gG (A)			
30...50	50	80	F115...F185	GLR9-F5357	0.885
48...80	80	125	F115...F185	GLR9-F5363	0.900
60...100	100	160	F115...F185	GLR9-F5367	0.900
90...150	160	250	F115...F185	GLR9-F5369	0.885
132...220	250	315	F225 and F265	GLR9-F5371	0.950
200...330	400	355	F225...F500	GLR9-F7375	2.320
300...500	500	500	F225...F500	GLR9-F7379	2.320
380...630	630	630	F400...F630	GLR9-F7381	4.160

(1) Standard IEC 947-4 specifies a tripping time for 7.2 times the setting current I_r :

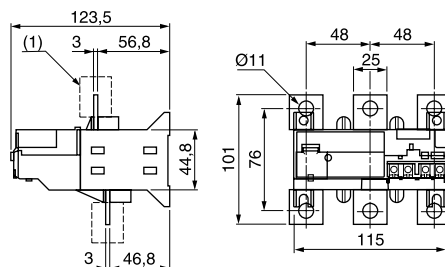
Class 10: between 4 and 10 seconds,

Class 10A : between 2 and 10 seconds.

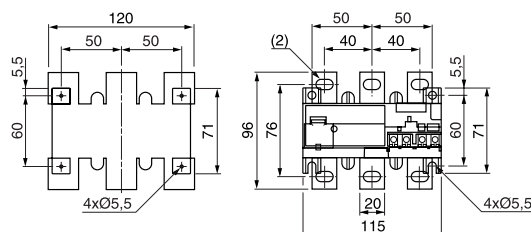
(2) When mounting overload relays GLR9-F5557 to GLR9-F5571 directly beneath the contactor they can be additionally supported by a mounting plate (see page 1/83). Above these sizes it is always necessary to use the mounting plate.

(3) Power terminals can be protected against direct finger contact by the addition of shrouds and/or insulated terminal blocks, to be ordered separately (see page 1/83)

Dimension



GLR9-F5 ● 71



GLR9-F5 ● 57, F5 ● 63, F5 ● 67, F5 ● 69

(1) Terminal shroud GLA9-F70

(2) 6.5 x 13.5 for GLR9-F5 ● 57 and 8.5 x 13.5 for GLR9-F5 ● 63, F5 ● 67, F5 ● 69