

### References

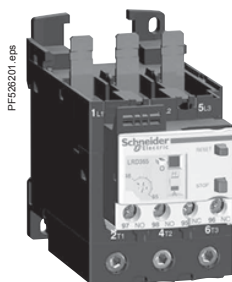
### Overload relays

#### Differential thermal overload relays for screw clamp connectors and lugs for use with fuses or magnetic circuit breakers GV2 L and GV3 L

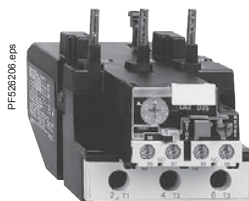
- Compensated relays with manual or automatic reset
- with relay trip indicator
- for a.c. or d.c.



LRD 04L...LRD 32L



LRD 300L



LR2 D3500

Relay setting range (A)	Fuses to be used with selected relay			For use with contactor LC1	Reference
	aM (A)	gG (A)	BS88 (A)		
<b>Classes 20 <sup>(1)</sup> for connection by screw clamp terminals</b>					
0.4...0.63	1	2	-	D09...D38	LRD04L
0.63...1	2	4	-	D09...D38	LRD05L
1...1.6	2	4	6	D09...D38	LRD06L
1.6...2.5	4	6	10	D09...D38	LRD07L
2.5...4	6	10	16	D09...D38	LRD08L
4...6	8	16	16	D09...D38	LRD10L
5.5...8	12	20	20	D09...D38	LRD12L
7...10	12	20	20	D09...D38	LRD14L
9...13	16	25	25	D12...D38	LRD16L
12...18	20	35	32	D18...D38	LRD21L
17...24	25	50	50	D25...D38	LRD22L
23...32	40	63	63	D25...D38	LRD32L
<b>Class 20 <sup>(1)</sup> for connection by EverLink® BTR screw connectors <sup>(2)</sup></b>					
9...13	20	32	35	D40A...D65A	LRD313L
12...18	25	40	40	D40A...D65A	LRD318L
17...25	32	50	50	D40A...D65A	LRD325L
23...32	40	63	63	D40A...D65A	LRD332L
30...40	50	80	80	D40A...D65A	LRD340L
37...50	63	100	100	D40A...D65A	LRD350L
48...65	80	125	125	D50A and D65A	LRD365L
<b>Classes 20 <sup>(1)</sup> for connection by screw clamp terminals</b>					
17...25	32	50	50	D80 and D95	LR2D3522
23...32	40	63	63	D80 and D95	LR2D3553
30...40	40	100	80	D80 and D95	LR2D3555
37...50	63	100	100	D80 and D95	LR2D3557
48...65	80	125	100	D80 and D95	LR2D3559
55...70	100	125	125	D80 and D95	LR2D3561
63...80	100	160	125	D80 and D95	LR2D3563

#### Class 20 <sup>(1)</sup> for connection by lugs

For relays LRD 04L to LRD 32L and relays LRD 313L to LRD 365L, select the appropriate overload relay with screw clamp terminals or connectors from the table above and add the suffix **6**.

Example: **LRD 04L** becomes **LRD 04L6**.

#### Thermal overload relays for use with unbalanced loads

##### Class 20 <sup>(1)</sup> for connection by screw clamp terminals or lugs

For relays LRD 04L to LRD 32L and relays LR2 D3522 to LR2 D3563, select the appropriate overload relay with screw clamp terminals or connectors from the table above and change the prefix LRD or LR2 D to **LR3 D**. Example: **LRD 04L** becomes **LR3D 04L**.

(1) Standard IEC 60947-4-1 specifies a tripping time for 7.2 times the setting current  $I_{se}$ :  
class 20: between 6 and 20 seconds

(2) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference **LAD ALLEN4**, see page B8/21).

### Overload relays

#### Differential thermal overload relays for screw clamp connectors and springs for use with fuses or magnetic circuit breakers GV2 L and GV3 L

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

Relay setting range (A)	Fuses to be used with selected relay			For mounting beneath contactor LC1	Reference
	aM (A)	gG (A)	BS88 (A)		
<b>Class 20 <sup>(1)</sup> with connection by EverLink® BTR screw connectors <sup>(2)</sup> and control by spring terminals</b>					
9...13	20	32	35	D40A...D65A	LRD313L3
12...18	25	40	40	D40A...D65A	LRD318L3
17...25	32	50	50	D40A...D65A	LRD325L3
23...32	40	63	63	D40A...D65A	LRD332L3
30...40	50	80	80	D40A...D65A	LRD340L3
37...50	63	100	100	D40A...D65A	LRD350L3
48...65	80	125	125	D50A and D65A	LRD365L3

#### Differential thermal overload relays for bars and connectors for use with fuses or magnetic circuit breakers NSX

- Compensated relays, with relay trip indicator
- for a.c.
- for direct mounting on contactor or independent mounting <sup>(3)</sup>.

Relay setting range (A)	Fuses to be used with selected relay		For mounting beneath contactor LC1	Reference
	aM (A)	gG (A)		
<b>Classes 10 or 10A <sup>(1)</sup> for connection using bars or connectors</b>				
60...100	100	160	D115 and D150	LR9D5367
90...150	160	250	D115 and D150	LR9D5369
<b>Classes 20 <sup>(1)</sup> for connection using bars or connectors</b>				
60...100	125	160	D115 and D150	LR9D5567
90...150	200	250	D115 and D150	LR9D5569

#### Electronic thermal overload relays for use with balanced or unbalanced loads

- Compensated relays
- with separate outputs for alarm and tripping.

Relay setting range (A)	Fuses to be used with selected relay		For mounting beneath contactor LC1	Reference
	aM (A)	gG (A)		
<b>Classes 10 or 20 <sup>(1)</sup> selectable, for connection using bars or connectors</b>				
60...100	100	160	D115 and D150	LR9D67
90...150	160	250	D115 and D150	LR9D69

<sup>(1)</sup> Standard IEC 60947-4-1 specifies a tripping time for 7.2 times the setting current  $I_R$ :

class 10: between 4 and 10 seconds,  
class 10 A: between 2 and 10 seconds,  
class 20: between 6 and 20 seconds

<sup>(2)</sup> BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference **LAD ALLEN4**, see page B8/21).

<sup>(3)</sup> 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 B8/20).

#### Other versions

Thermal overload relays for resistive circuits in category AC-1.  
Please consult your Regional Sales Office.

