

# TeSys IEC Contactors and Overload Relays

## Making High-Fault Short-Circuit Current Ratings Simple

Schneider Electric is an industry leader in **IEC contactors and overload relays**, and is recognized as the market leader in quality, durability, and product development.

TeSys K and D Contactors



The latest development in the TeSys™ family of IEC contactors and overload relays is component high-fault short-circuit current ratings (SCCRs).

SCCRs identify the level of fault current that a component or assembly can safely withstand. Without knowing the available fault current and SCCR, it is impossible to determine if components or equipment can be safely installed.

The new high-fault component SCCR ratings are available for all TeSys K and D contactors and overload relays, including the TeSys D solid-state overload relays. Component ratings provide the flexibility to choose the desired level of protection, up to the rated maximum, and use it without the need for specific tested combinations and confusing tested combination spreadsheets. Component ratings are available when using either fuse or circuit breaker protection.

TeSys K and D Overload Relays



### TeSys High-Fault Component Short-Circuit Current Ratings:

- > 65 kA on any system up to 480 Vac and 32 amps protected by a circuit breaker
- > 100 kA on any system up to 480 Vac and greater than 32 amps protected by a circuit breaker
- > 100 kA on any system up to 600 Vac protected by Class CC or J fuses



And the **best part about component ratings?**

You know you have the right SCCR when you see it on the label!

Make the most of your energy<sup>SM</sup>

**Schneider**  
Electric™

## TeSys K Contactors

Catalog Number	Maximum Horsepower Ratings					Maximum Component SCCR (kA) <sup>[1]</sup>	
	Single-Phase		Three-Phase			Circuit Breakers @ 480 Vac <sup>[2]</sup>	Fuses @ 600 Vac <sup>[3]</sup>
	120 Vac	240 Vac	240 Vac	480 Vac	600 Vac		
LC1K06	0.5	1.5	1.5	3	3	65	100
LC1K09	0.5	1.5	3	5	5	65	100
LC1K12	0.5	1.5	3	7.5	10	65	100

## TeSys D Contactors

Catalog Number	Maximum Horsepower Ratings					Maximum Component SCCR (kA) <sup>[1]</sup>	
	Single-Phase		Three-Phase			Circuit Breakers @ 480 Vac <sup>[2]</sup>	Fuses @ 600 Vac <sup>[3]</sup>
	120 Vac	240 Vac	240 Vac	480 Vac	600 Vac		
LC1D09	0.5	1	2	5	7.5	85	100
LC1D12	1	2	3	7.5	10	85	100
LC1D18	1	3	5	10	15	85	100
LC1D25	2	3	7.5	15	20	85	100
LC1D32	2	5	10	20	30	85	100
LC1D40A	3	5	10	30	30	100	100
LC1D50A	3	7.5	15	40	40	100	100
LC1D65A	5	10	20	40	50	100	100
LC1D80	7.5	15	30	60	60	100	100
LC1D115	—	—	40	75	100	100	100
LC1D150	—	—	50	100	125	100	100

## TeSys K Overload Relays

Current Setting Range (A)	Class 10 with Single-Phase Sensitivity	Maximum Component SCCR <sup>[1]</sup>	
		Circuit Breakers @ 480 V <sup>[2]</sup>	Fuses @ 600 V <sup>[3]</sup>
		Max. SCCR (kA)	Max. SCCR (kA)
0.1 – 0.16	LR2K0301	65	100
0.16 – 0.23	LR2K0302	65	100
0.23 – 0.36	LR2K0303	65	100
0.36 – 0.54	LR2K0304	65	100
0.54 – 0.8	LR2K0305	65	100
0.8 – 1.2	LR2K0306	65	100
1.2 – 1.8	LR2K0307	65	100
1.8 – 2.6	LR2K0308	65	100
2.6 – 3.7	LR2K0310	65	100
3.8 – 5.5	LR2K0312	65	100
5.5 – 8	LR2K0314	65	100
8 – 11.5	LR2K0316	65	100



<sup>[1]</sup> Ratings apply to circuits with voltage no greater than those listed and are subject to maximum breaker and fuse ampacities. See data bulletin 8536DB0901 for ampacity limitations.

<sup>[2]</sup> When protected by any circuit breaker, including thermal-magnetic and magnetic-only.

<sup>[3]</sup> When protected by any Class J or CC time-delay fuse (Class CC applicable up to 30 amps only).

**Note:** These tables list the maximum SCCR of the component when protected by any circuit breaker or fuse. If the maximum component SCCR is 65 kA and a 25 kA rated circuit breaker is used, then the system will be 25 kA as the circuit breaker becomes the weakest link.

## TeSys D Overload Relays

Current Setting Range (A)	For Direct Mounting to LC1...	Class 10 with Single-Phase Sensitivity	Class 10 without Single-Phase Sensitivity	Class 20 with Single-Phase Sensitivity	Class 20 without Single-Phase Sensitivity	Maximum Component SCCR (kA) <sup>[1]</sup>	
						Circuit Breakers @ 480 V <sup>[2]</sup>	Fuses @ 600 V <sup>[3]</sup>
						Max. SCCR (kA)	Max. SCCR (kA)
0.10 – 0.16	D09 – D32	LRD01	LR3D01	—	—	65	100
0.16 – 0.25		LRD02	LR3D02	—	—	65	100
0.25 – 0.40		LRD03	LR3D03	—	—	65	100
0.40 – 0.63		LRD04	LR3D04	—	—	65	100
0.63 – 1		LRD05	LR3D05	—	—	65	100
1 – 1.6		LRD06	LR3D06	—	—	65	100
1.6 – 2.5		LRD07	LR3D07	—	—	65	100
2.5 – 4		LRD08	LR3D08	LRD1508	LR3D1508A	65	100
4 – 6		LRD10	LR3D10	LRD1510	LR3D1510A	65	100
5.5 – 8		LRD12	LR3D12	LRD1512	LR3D1512A	65	100
7 – 10		LRD14	LR3D14	LRD1514	LR3D1514A	65	100
9 – 13	D12 – D32	LRD16	LR3D16	LRD1516	LR3D1516A	65	100
12 – 18	D18 – D32	LRD21	LR3D21	LRD1521	LR3D1521A	65	100
16 – 24	D25 – D32	LRD22	LR3D22	—	—	65	100
17 – 25		—	—	LRD1522	LR3D1522A	65	100
23 – 32		LRD32	LR3D32	—	—	65	100
23 – 28		—	—	LRD1530	LR3D1530A	65	100
25 – 32		—	—	LRD1532	LR3D1532A	65	100
30 – 38	D32	LRD35	LR3D35	—	—	65	100
9 – 13	D40A – D65A <sup>[4]</sup>	LRD313	LR3D313	LRD313L	—	100	100
12 – 18		LRD318	LR3D318	LRD318L	—	100	100
16 – 25		LRD325	LR3D325	LRD325L	—	100	100
23 – 32		LRD332	LR3D332	LRD332L	—	100	100
30 – 40		LRD340	LR3D340	LRD340L	—	100	100
37 – 50		LRD350	LR3D350	LRD350L	—	100	100
48 – 65	D50A – D65A <sup>[4]</sup>	LRD365	LR3D365	LRD365L	—	100	100
17 – 25	D40 – D80 <sup>[5]</sup>	LRD3322	LR3D3322	LR2D3522	LR3D3522	100	100
23 – 32		LRD3353	LR3D3353	LR2D3553	LR3D3553	100	100
30 – 40		LRD3355	LR3D3355	LR2D3555	LR3D3555	100	100
37 – 50	D50 – D80 <sup>[5]</sup>	LRD3357	LR3D3357	LR2D3557	LR3D3557	100	100
48 – 65		LRD3359	LR3D3359	LR2D3559	LR3D3559	100	100
55 – 70	D65 – D80 <sup>[5]</sup>	LRD3361	LR3D3361	LR2D3561	LR3D3561	100	100
63 – 80		LRD3363	LR3D3363	LR2D3563	LR3D3563	100	100
80 – 104	D80	LRD3365	—	—	—	100	100
80 – 104	D115 – D150	LRD4365	—	—	—	100	100
95 – 120		LRD4367	—	—	—	100	100



<sup>[1]</sup> Ratings apply to circuits with voltages no greater than those listed and are subject to maximum breaker and fuse ampacities. See data bulletin 8536DB0901 for ampacity limitations.

<sup>[2]</sup> When protected by any circuit breaker, including thermal-magnetic and magnetic-only.

<sup>[3]</sup> When protected by any Class J or CC time-delay fuse (Class CC applicable up to 30 A only).

<sup>[4]</sup> Overload relays with Everlink™ termination — direct mount to D40A to D65A only.

<sup>[5]</sup> Direct mount to old D2 style D40 to D65 (no Everlink terminations) and to D80 only.

**Note:** This table lists the maximum SCCR of the component when protected by any circuit breaker or fuse. If the maximum component SCCR is 100 kA and a 25 kA rated circuit breaker is used, then the system will be 25 kA as the circuit breaker becomes the weakest link.

## TeSys D Overload Relays – Solid State



Current Setting Range (A)	For Direct Mounting to LC1...	Class 10	Class 20	Class 10 or 20 Selectable	Maximum Component SCCR <sup>[1]</sup>	
					Circuit Breakers @ 480 V <sup>[2]</sup>	Fuses @ 600 V <sup>[3]</sup>
					Max. SCCR (kA)	Max. SCCR (kA)
60 – 100	D115 – D150	LR9D5367	LR9D5567	LR9D67	100	100
90 – 150	D115 – D150	LR9D5369	LR9D5569	LR9D69	100	100



<sup>[1]</sup> Ratings apply to circuits with voltages no greater than those listed and are subject to maximum breaker and fuse ampacities. See data bulletin 8536DB0901 for ampacity limitations.

<sup>[2]</sup> When protected by any circuit breaker, including thermal-magnetic and magnetic-only.

<sup>[3]</sup> When protected by any Class J time-delay fuse.

**Note:** This table lists the maximum SCCR of the component when protected by any circuit breaker or fuse. If the maximum component SCCR is 100 kA and a 25 kA rated circuit breaker is used, then the system will be 25 kA as the circuit breaker becomes the weakest link.



**For more information** on high-fault component short-circuit current ratings including maximum fuse and breaker ampacities, please refer to the TeSys Motor Control Solutions for the North American Market data bulletin ([8536DB0901](#)).

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