

SINOFUSE RS309-MM High-Speed Fuse Series

Cylindrical bolt-connected fuse series | AC/DC 1000 V | 5 A to 800 A | Utilization class aR

Parameter	Verified source value
Series	RS309-MM
Product type	Cylindrical bolt-connected high-speed fuse
Rated voltage	AC/DC 1000 V
Rated current range	5 A to 800 A
Utilization class	aR
Breaking capacity	AC 100 kA; DC 50 kA (time constant <= 15 ms)
Referenced standards	IEC 60269; ISO 8820; GB/T 31465
Compliance shown on source	CE; RoHS compliant

Manufacturer-listed characteristics

The supplied parameter sheet describes the series as having compact size, low fusing I-squared-t, high breaking capacity, resistance to current impulse, and resistance to mechanical vibration and impact.

Manufacturer-listed applications

Road-vehicle applications are listed, including electric-vehicle traction power systems, power-conversion systems, energy-storage and power systems, variable-frequency controllers, chargers, busbars, and other vehicle electrical components or equipment for short-circuit, overload, and backup protection.

Selection guidance

Select the exact RS309-MM model by rated current, then compare the corresponding size code, pre-arcing I-squared-t, fusing I-squared-t, power loss, mounting bolt, recommended torque, and dimensional data shown on the following pages.

Document status: This is an authored specification sheet compiled from the parameter images supplied by the user. It is not presented as a manufacturer-issued original PDF. Confirm the selected model against the original manufacturer documentation before final ordering.

Model Selection Table

Values below are transcribed from the supplied RS309-MM parameter table.

Model	Size code	Rated current (A)	Pre-arcing I _t (A%)	Fusing I _t (A%)	Power loss (W)	Mounting bolt	Recommended torque
RS309-MM-5A	2YA	5	18	110	1.5	M6	6 +/- 1 N.m
RS309-MM-10A	2YA	10	29	160	2	M6	6 +/- 1 N.m
RS309-MM-15A	2YA	15	46	215	3	M6	6 +/- 1 N.m
RS309-MM-20A	2YA	20	69	350	3.5	M6	6 +/- 1 N.m
RS309-MM-25A	2YA	25	81	500	4	M6	6 +/- 1 N.m
RS309-MM-30A	2YA	30	105	810	5	M6	6 +/- 1 N.m
RS309-MM-35A	4RC	35	190	1280	6.5	M8	12 +/- 1 N.m
RS309-MM-40A	4RC	40	300	1690	8	M8	12 +/- 1 N.m
RS309-MM-50A	4RC	50	450	2500	10	M8	12 +/- 1 N.m
RS309-MM-60A	4RC	60	710	4350	15	M8	12 +/- 1 N.m
RS309-MM-70A	4RC	70	850	5600	14	M8	12 +/- 1 N.m
RS309-MM-80A	4RC	80	1100	6670	16	M8	12 +/- 1 N.m
RS309-MM-90A	5RB	90	1850	11000	17	M8	12 +/- 1 N.m
RS309-MM-100A	5RB	100	2360	12700	18	M8	12 +/- 1 N.m
RS309-MM-125A	5RB	125	3500	21500	20	M8	12 +/- 1 N.m
RS309-MM-150A	5RB	150	5020	26600	28	M8	12 +/- 1 N.m
RS309-MM-175A	6RB	175	9300	41000	30	M10	21 +/- 1 N.m
RS309-MM-200A	6RB	200	16100	61500	32	M10	21 +/- 1 N.m
RS309-MM-225A	6RB	225	20100	107000	41	M10	21 +/- 1 N.m
RS309-MM-250A	6RB	250	25300	115000	48	M10	21 +/- 1 N.m
RS309-MM-300A	6RB	300	27100	165000	53	M10	21 +/- 1 N.m
RS309-MM-350A	7HA	350	43000	232000	60	M10	21 +/- 1 N.m
RS309-MM-400A	7HA	400	72000	323000	65	M10	21 +/- 1 N.m
RS309-MM-450A	7HA	450	79000	310000	80	M10	21 +/- 1 N.m
RS309-MM-500A	7HA	500	106000	365000	95	M10	21 +/- 1 N.m
RS309-MM-600A	8HA	600	165000	532000	105	M13	35 +/- 1 N.m
RS309-MM-700A	8HA	700	326000	700000	152.5	M13	35 +/- 1 N.m
RS309-MM-800A	8HA	800	423000	890000	183	M13	35 +/- 1 N.m

Mounting groups shown by the source: 2YA - M6, 6 +/- 1 N.m; 4RC and 5RB - M8, 12 +/- 1 N.m; 6RB and 7HA - M10, 21 +/- 1 N.m; 8HA - M13, 35 +/- 1 N.m.

Dimensions and Installation Data

External and installation dimensions are in millimeters. Source tolerances: A +/- 2; B +/- 0.5; C +/- 1; D +/- 1.5; E +/- 1.5; F +/- 1; G +/- 1; H +/- 0.2.

Size code	A	B	C	D	E	F	G	H
2YA	73.5	14.3	47.6	60.5	63.5	6.5	10.3	1.6
4RC	124	24	78	95	109	9	18	3.2
5RB	124	31	78	95	109	9	22	5
6RB	144	37	82	105	122	10.5	25	6
7HA	144	49	88	105	122	10.5	38	6
8HA	183	62	88	119.5	152	13.5	50	10

Size-code mapping

Size code	Associated rated-current models
2YA	5 A, 10 A, 15 A, 20 A, 25 A, 30 A
4RC	35 A, 40 A, 50 A, 60 A, 70 A, 80 A
5RB	90 A, 100 A, 125 A, 150 A
6RB	175 A, 200 A, 225 A, 250 A, 300 A
7HA	350 A, 400 A, 450 A, 500 A
8HA	600 A, 700 A, 800 A

Technical reference note

The supplied material also includes a time-current characteristic graph. No numerical curve data have been inferred or digitized in this authored sheet; refer to the supplied manufacturer image for the original plotted characteristic.

Supplied Parameter Image - Reference Appendix

Included as a visual reference to the user-supplied source material. The transcribed tables in this document should be checked against the original image when used for procurement review.



RS309-MM圆管螺栓连接式快速熔断器

AC/DC1000V 5A-800A



产品基本资料

- 额定电压：AC/DC1000V
- 额定电流：5A~800A
- 使用类别：aR
- 分断能力：AC100kA、DC50kA(时间常数 $\leq 15\text{ms}$)
- 性能符合IEC60269；安全性和应用环境可靠性符合ISO8820、GB/T 31465
- 通过CE认证，符合RoHS指令

本产品为圆管螺栓连接式熔断器。具有小体积，低熔断 I^2t 值，高分断能力，抗电流冲击的特点；可耐受高强度机械振动及冲击、宽温度范围冲击、较强化学负荷，适合道路车辆行业应用。可用于电动汽车驱动电力系统、功率变换系统、储能和动力系统、变频控制器、充电器、导线及其他车用器件和设备的短路、过载以及后备保护。

注：本规格书中所有试验数据都是在直流环境下测得，时间常数（预期试验电流 $I \geq 20\text{kA}$ ，取 $10\sim 15\text{ms}$ ；预期试验电流 $I < 20\text{kA}$ ，取 $0.5\text{ms}^{0.3}$ ）和接线方式参照IEC60269/UL248。

序号	型号	尺寸代码	额定电流 I	$I^2t (A^2s)$		功耗 P	安装
				弧前	熔断		
1	RS309-MM-5A	2YA	5	18	110	1.5	安装螺栓 M6 推荐扭矩 6 $\pm 1\text{N.m}$
2	RS309-MM-10A		10	29	160	2	
3	RS309-MM-15A		15	46	215	3	
4	RS309-MM-20A		20	69	350	3.5	
5	RS309-MM-25A		25	81	500	4	
6	RS309-MM-30A		30	105	810	5	
7	RS309-MM-35A	4RC	35	190	1280	6.5	安装螺栓 M8 推荐扭矩 12 $\pm 1\text{N.m}$
8	RS309-MM-40A		40	300	1690	8	
9	RS309-MM-50A		50	450	2500	10	
10	RS309-MM-60A		60	710	4350	15	
11	RS309-MM-70A		70	850	5600	14	
12	RS309-MM-80A		80	1100	6670	16	
13	RS309-MM-90A	5RB	90	1850	11000	17	安装螺栓 M10 推荐扭矩 21 $\pm 1\text{N.m}$
14	RS309-MM-100A		100	2360	12700	18	
15	RS309-MM-125A		125	3500	21500	20	
16	RS309-MM-150A		150	5020	26600	28	
17	RS309-MM-175A		175	9300	41000	30	
18	RS309-MM-200A		200	16100	61500	32	
19	RS309-MM-225A	6RB	225	20100	107000	41	安装螺栓 M13 推荐扭矩 35 $\pm 1\text{N.m}$
20	RS309-MM-250A		250	25300	115000	48	
21	RS309-MM-300A		300	27100	165000	53	
22	RS309-MM-350A		350	43000	232000	60	
23	RS309-MM-400A		400	72000	323000	65	
24	RS309-MM-450A		450	79000	310000	80	
25	RS309-MM-500A	7HA	500	106000	365000	95	安装螺栓M13 推荐扭矩 35 $\pm 1\text{N.m}$
26	RS309-MM-600A		600	165000	532000	105	
27	RS309-MM-700A		700	326000	700000	152.5	
28	RS309-MM-800A		800	423000	890000	183	