

DYNAMIC BRAKING RESISTOR

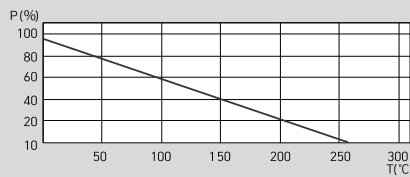
Single Type MCRA



Characteristics

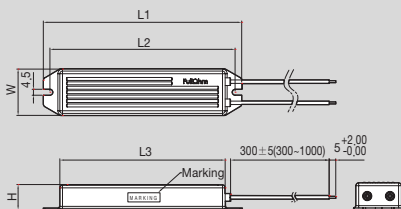
Temperature range	-55°C~200°C
Insulation resistance	Over 100 MΩ
Dielectric strength	AC 2,500V / 1 Min
Temperature coefficient	±260 ppm / °C max
Resistor wattage Range	50 ~ 200[W]

Power Derating Curve



[NOTE] Thermostat sensor included types use 0.5mm² silicone asbestos wire.

Dimensions [mm]



Model	L1 ±0.5	L2 ±0.5	L3 ±0.5	W ±0.5	H ±0.5
MCRA-80	150	140	125	35	19
MCRA-100	150	140	125	35	19
MCRA-120	182	172	150	43	20
MCRA-150	182	172	150	43	20
MCRA-200	230	220	200	60	20

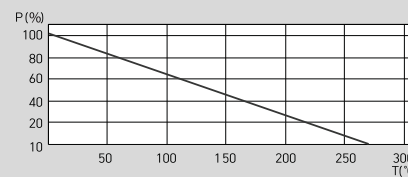
Single Type MCRF



Characteristics

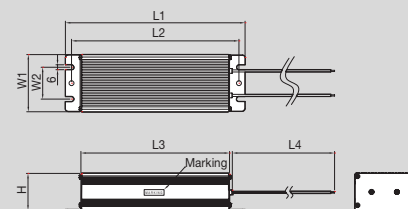
Temperature range	-55°C~200°C
Insulation resistance	Over 100 MΩ
Dielectric strength	AC 2,500V / 1 Min
Temperature coefficient	±260 ppm / °C max
Resistor wattage Range	300 ~ 2000[W]

Power Derating Curve



[NOTE] Thermostat sensor included types use 0.5mm² silicone asbestos wire.

Dimensions [mm]



Model	L1 ±1.0	L2 ±1.0	L3 ±1.0	W1 ±0.5	W2 ±0.5	H ±0.5
MCRF-300	190	175	152	70	39	45
MCRF-400	220	205	182	70	39	45
MCRF-500	240	225	202	70	39	45
MCRF-600	260	245	222	70	39	45
MCRF-800	300	285	262	70	39	45
MCRF-1000	340	325	302	70	39	45
MCRF-1200	400	385	362	70	39	45
MCRF-1500	440	425	402	70	39	45
MCRF-2000	510	495	472	70	39	45

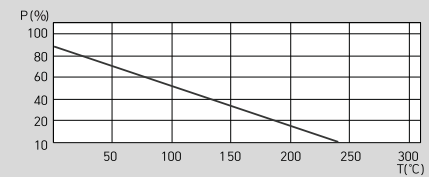
Single Type MCRS



Characteristics

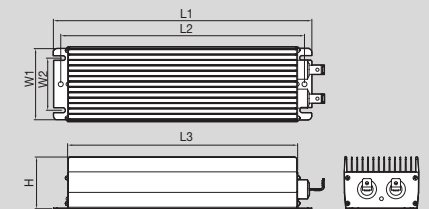
Temperature range	-55°C~200°C
Insulation resistance	Over 100 MΩ
Dielectric strength	AC 2,500V / 1 Min
Temperature coefficient	±260 ppm / °C max
Resistor wattage Range	2400[W]

Power Derating Curve



[NOTE] Thermostat sensor included types use 0.5mm² silicone asbestos wire.

Dimensions [mm]



Model	L1 ±1.0	L2 ±1.0	L3 ±1.0	W1 ±1.0	W2 ±1.0	H ±1.0
MCRS-2000	400	385	362	98	72	68
MCRS-2500	470	455	432	98	72	68
MCRS-3000	540	525	502	98	72	68

Set Type MCRF-ST

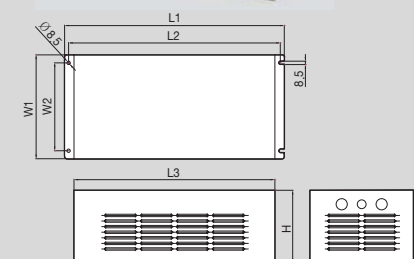


Characteristics

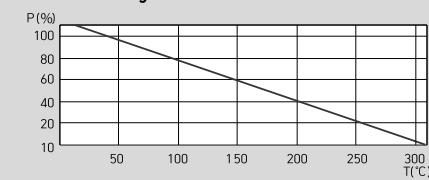
Temperature range	-55°C~200°C
Insulation resistance	Over 20 MΩ
Dielectric strength	AC 2,500V / 1 Min
Temperature coefficient	±260 ppm / °C max
Resistor wattage Range	12 ~ 60[kW]
Built-in thermostat sensor	B Contact

Dimensions [mm]

Model	L1 ±2	L2 ±2	L3 ±2	W1 ±2	W2 ±2	H ±2
MCRF-ST2000	550	530	503	180	140	126
MCRF-ST2400	550	530	503	180	140	126
MCRF-ST3000	550	530	503	260	220	126
MCRF-ST3600	550	530	503	260	220	126
MCRF-ST4000	550	530	503	180	140	182
MCRF-ST4800	550	530	503	180	140	182
MCRF-ST5000	550	530	503	180	140	182
MCRF-ST6000	550	530	503	260	220	182



Power Derating Curve



[NOTE] Thermostat sensor included types use 0.5mm² silicone asbestos wire.

Model	L1 ±2	L2 ±2	L3 ±2	W1 ±2	W2 ±2	H ±2
MCRF-ST6400	550	530	503	260	220	182
MCRF-ST7200	550	530	503	260	220	182
MCRF-ST8000	550	530	503	260	220	252
MCRF-ST9600	550	530	503	260	220	252
MCRF-ST10000	550	530	503	260	220	252
MCRF-ST12000	550	530	503	260	220	322
MCRF-ST15000	550	530	503	260	220	322
MCRF-ST18000	550	530	503	260	220	392

DYNAMIC BRAKING RESISTOR

Built-in Dynamic Breaking IGBT

Voltage Class	Capacity [kW]	Torque 100%						Torque 150%											
		Value [Ω]	Wattage[W] (%ED=5%)	Single		Set		Value [Ω] (%ED=5%)	Wattage[W] (%ED=5%)	Single(%ED=5%)		Set(%ED=5%)		Wattage[W] (%ED=10%)	Single(%ED=10%)		Set(%ED=10%)		
				ERP Code	Model Name	ERP Code	Model Name			ERP Code	Model Name	ERP Code	Model Name		ERP Code	Model Name	ERP Code	Model Name	ERP Code
200V	0.4	400	50	64090131	MCRA-50														
	0.75	200	100	64090134	MCRA-100														
	1.5	100	200	64090136	MCRA-200														
	2.2	60	300	64090149	MCRF-300														
	3.7/4.0	40	500	64090155	MCRF-500														
	5.5	33	600	64090158	MCRF-600														
	7.5	20	800	64090160	MCRF-800														
	11	15	1200	64090162	MCRF-1200	6409018400	MCRF-ST 1.2kW												
	15	10	2400	64090169	MCRS 2500	6409018900	MCRF-ST 2.4kW												
	18.5	8	2400	64090170	MCRS 2500	6409019700	MCRF-ST 2.4kW												
400V	0.4	1800	50	64090125	MCRA-50														
	0.75	900	100	64090128	MCRA-100														
	1.5	450	200	64090130	MCRA-200														
	2.2	300	300	64090138	MCRF-300														
	3.7/4.0	200	400	64090140	MCRF-400														
	5.5	120	700	64090145	MCRF-700														
	7.5	90	1000	64090146	MCRF-1000														
	11	60	1200	64090151	MCRF-1200	6409017200	MCRF-ST 1.2kW												
	15	45	2000	64090154	MCRF-2000	6409017300	MCRF-ST 2kW												
	18.5	35	2400	64090165	MCRS 2500	6409017600	MCRF-ST 2.4kW												
200V	2.2	300	300	64090138	MCRF-300														
	3.7/4.0	200	400	64090140	MCRF-400														
	5.5	120	700	64090145	MCRF-700														
	7.5	90	1000	64090146	MCRF-1000														
	11	60	1200	64090151	MCRF-1200	6409017200	MCRF-ST 1.2kW												
	15	45	2000	64090154	MCRF-2000	6409017300	MCRF-ST 2kW												
	18.5	35	2400	64090165	MCRS 2500	6409017600	MCRF-ST 2.4kW												
	22	30	2400	64090166	MCRS 2500	6409017800	MCRF-ST 2.4kW												
	30	20	3600			6409018100	MCRF-ST 3.6kW												
	400V	0.4	1800	50	64090125	MCRA-50													
0.75		900	100	64090128	MCRA-100														
1.5		450	200	64090130	MCRA-200														
2.2		300	300	64090138	MCRF-300														
3.7/4.0		200	400	64090140	MCRF-400														
5.5		120	700	64090145	MCRF-700														
7.5		90	1000	64090146	MCRF-1000														
11		60	1200	64090151	MCRF-1200	6409017200	MCRF-ST 1.2kW												
15		45	2000	64090154	MCRF-2000	6409017300	MCRF-ST 2kW												
18.5		35	2400	64090165	MCRS 2500	6409017600	MCRF-ST 2.4kW												
200V	10	2.4	64090169	MCRS 2500	6409018900	MCRF-ST 2.4kW													
	8	2.4	64090170	MCRS 2500	6409019700	MCRF-ST 2.4kW													
	5	3.6			6409020200	MCRF-ST 3.6kW													
	5	3.6			6409020200	MCRF-ST 3.6kW													
	3	5			6409021100	MCRF-ST 5kW													
	3	5			6409021100	MCRF-ST 5kW													
	2.4	6			6409021600	MCRF-ST 6kW													
	2	7.5			6409022000	MCRF-ST 7.5kW													
	1.5	10			6409022400	MCRF-ST 10kW													
	1.2	13			6409022600	MCRF-ST 13kW													
400V	40	2	64090156	MCRF-2000	6409017400	MCRF-ST 2kW													
	30	2.4	64090166	MCRS 2500	6409017800	MCRF-ST 2.4kW													
	20	3.6			6409018100	MCRF-ST 3.6kW													
	20	3.6			6409018100	MCRF-ST 3.6kW													
	12	5			6409018600	MCRF-ST 5kW													
	12	5			6409018600	MCRF-ST 5kW													
	10	6.4			6409019100	MCRF-ST 6.4kW													
	8.4	7.2			6409019500	MCRF-ST 7.2kW													
	6	10			6409019900	MCRF-ST 10kW													
	5	13			6409020400	MCRF-ST 13kW													
200V	4	16			6409020700	MCRF-ST 16kW													
	3.4	20			6409020900	MCRF-ST 20kW													
	2.8	24			6409021400	MCRF-ST 24kW													
	2.4	26			6409021800	MCRF-ST 26kW													
	2	30			6409022200	MCRF-ST 30kW													
	4	16			6409020700	MCRF-ST 16kW													
	3.4	20			6409020900	MCRF-ST 20kW													
	2.8	24			6409021400	MCRF-ST 24kW													
	2.4	26			6409021800	MCRF-ST 26kW													
	2	30			6409022200	MCRF-ST 30kW													

Dynamic Breaking Unit (Non Dynamic Breaking IGBT)

Voltage Class	DB Unit Capacity [kW]	Torque 100%						Torque 150%										
		Value [Ω]	Wattage[kW] (%ED=5%)	Single		Set		Value [Ω] (%ED=5%)	Wattage[kW] (%ED=5%)	Single(%ED=5%)		Set(%ED=5%)		Wattage[kW] (%ED=10%)	Single(%ED=10%)		Set(%ED=10%)	
				ERP Code	Model Name	ERP Code	Model Name			ERP Code	Model Name	ERP Code	Model Name		ERP Code	Model Name	ERP Code	Model Name
200V	11	8.5	1.6	64090163	MCRF-1600	6409019300	MCRF-ST 2kW											
	15	8.5	1.6	64090163	MCRF-1600	6409019300	MCRF-ST 2kW											
	18.5	5.7	2.4	64090171	MCRS 2500	6409020100	MCRF-ST 2.4kW											
	22	5.7	2.4	64090171	MCRS 2500	6409020100	MCRF-ST 2.4kW											
	30	4.2	3.2			6409020600	MCRF-ST 3.2kW											
	37	4.2	3.2			6409020600	MCRF-ST 3.2kW											
	45	2.8	4.8			6409021300	MCRF-ST 4.8kW											
	55	2.8	4.8			6409021300	MCRF-ST 4.8kW											
	75	2	7.5			6409022000	MCRF-ST 7.5kW											
	90	1.5	10			6409022400	MCRF-ST 10kW											
400V	11	33.9	1.6	64090157	MCRF-1600	6409017700	MCRF-ST 1.6kW											
	15	33.9	1.6	64090157	MCRF-1600	6409017700	MCRF-ST 1.6kW											
	18.5	22.8	2.4	64090167	MCRS 2500	6409018000	MCRF-ST 2.4kW											
	22	22.8	2.4	64090167	MCRS 2500	6409018000	MCRF-ST 2.4kW											
	30	16.9	3.2			6409018300	MCRF-ST 3.2kW											
	37	16.9	3.2			6409018300	MCRF-ST 3.2kW											
	45	11.4	4.8			6409018800	MCRF-ST 4.8kW											
	55	11.4	4.8			6409018800	MCRF-ST 4.8kW					</						