

MOTOR RUN AC METALLIZED

MRC SERIES

The MRC series is a range of AC metallized capacitors. These capacitors are most often used in motor run, HVAC, lighting, and power supply applications.

FEATURES:

- .25" 4-Way Quick Connect terminals
- Pressure activated circuit interrupter
- Self healing of shorts due to dielectric breakdown
- Non-PCB dielectric fluid
- Low dissipation factor
- Leak-proof terminals

RATINGS

Capacitance Range:

370 Volts – 2 μ F to 50 μ F

440 Volts – 2 μ F to 60 μ F

Tolerance: See Table on Next Page

PERFORMANCE SPECIFICATIONS

Operating Temperature Range: -25°C to +85°C

(MRC440V17R5 ONLY): -40°C to +70°C

(MRC440V30 ONLY): -55°C to +70°C

Capacitance Change Due To Temp: +5% to -7%

Dissipation Factor: 0.001% Max @ 60Hz

(MRC440V17R5 ONLY) 0.1% Max @ 60Hz

Service Life: *150,000 hours (at Max Rating)
94% survival

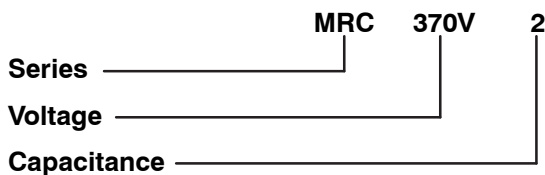
Shelf Life: 10 years (when stored at < 35°C)

Impregnant: Dykanol XK

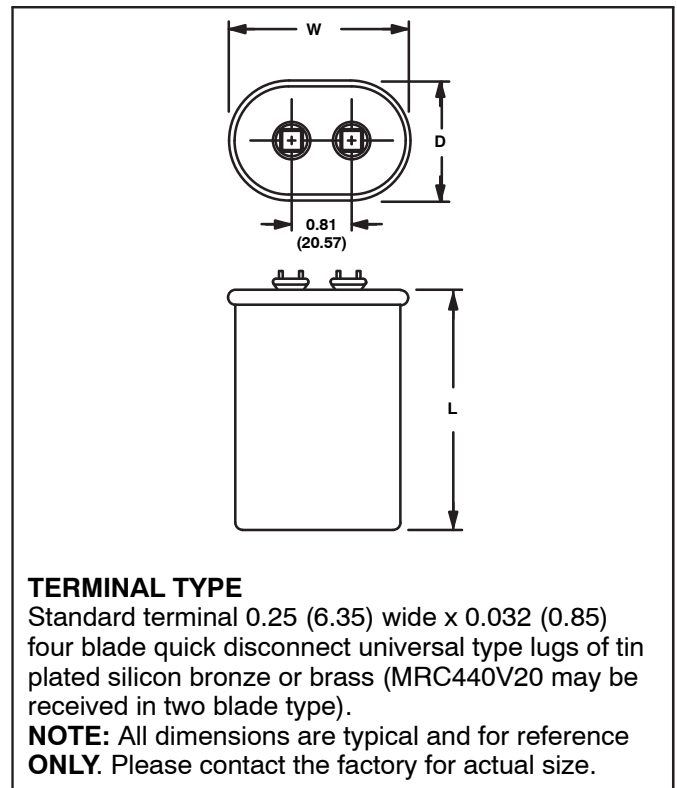
CAPACITOR CONSTRUCTION

Metallized electrodes on both sides of paper substrate are wound with polypropylene film as a dielectric. During vacuum fluid processing the paper acts as a wick for thorough fluid impregnation to SUPPRESS CORONA and to promote long life.

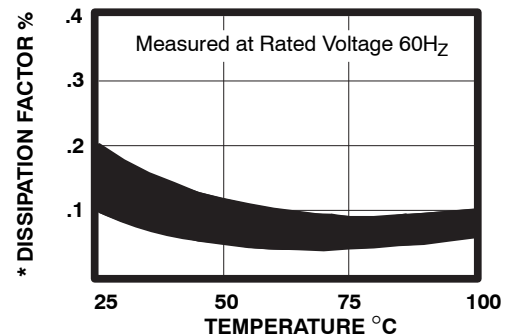
ORDERING INFORMATION



* EIA Standard is 60,000 hours

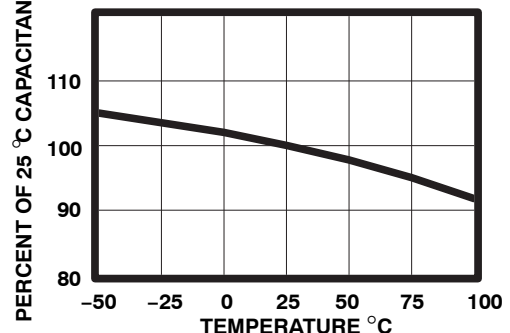


DISSIPATION FACTOR VS. TEMPERATURE



* NOTE - DF values after rated voltage is applied for 24 hours.

CAPACITANCE VS. TEMPERATURE



MOTOR RUN AC METALLIZED

MRC SERIES

370VAC Ratings and Dimensions @ 70° Case Temp.

NTE Type Number	Capacitance μF	Tolerance %	Case Dimensions – Inch (mm)			Case Style
			W	D	L	
MRC370V2	2	5	2.16 (54.86)	1.31 (33.27)	2.18 (55.37)	A
MRC370V3	3	10	2.16 (54.86)	1.31 (33.27)	1.85 (46.99)	A
MRC370V4	4	10	2.16 (54.86)	1.31 (33.27)	1.85 (46.99)	A
MRC370V5	5	10	2.16 (54.86)	1.31 (33.27)	2.18 (55.37)	A
MRC370V6	6	10	2.16 (54.86)	1.31 (33.27)	2.15 (54.61)	A
MRC370V7R5	7.5	10	2.16 (54.86)	1.31 (33.27)	2.36 (59.94)	A
MRC370V10	10	5	2.13 (54.10)	1.34 (34.00)	2.95 (75.00)	A
MRC370V12R5	12.5	10	2.16 (54.86)	1.31 (33.27)	2.88 (73.15)	A
MRC370V15	15	5	2.87 (72.89)	1.87 (47.50)	2.95 (74.93)	B
MRC370V17R5	17.5	5	2.16 (54.86)	1.31 (33.27)	3.95 (100.33)	A
MRC370V20	20	5	2.87 (72.89)	1.87 (47.50)	2.95 (74.93)	B
MRC370V25	25	5	2.16 (54.86)	1.31 (33.27)	3.75 (95.25)	A
MRC370V30	30	5	2.87 (72.89)	1.87 (47.50)	3.03 (76.96)	B
MRC370V35	35	5	2.87 (72.89)	1.87 (47.50)	3.94 (100.08)	B
MRC370V40	40	5	2.89 (73.41)	1.85 (46.99)	3.94 (100.08)	B
MRC370V45	45	5	2.87 (72.89)	1.87 (47.50)	3.95 (100.33)	B
MRC370V50	50	5	2.87 (72.89)	1.87 (47.50)	3.94 (100.08)	B

440VAC Ratings and Dimensions @ 70° Case Temp.

NTE Type Number	Capacitance μF	Tolerance %	Case Dimensions – Inch (mm)			Case Style
			W	D	L	
MRC440V2	2	10	2.16 (54.86)	1.31 (33.27)	1.85 (46.99)	A
MRC440V3	3	5	2.16 (54.86)	1.31 (33.27)	2.33 (59.18)	A
MRC440V4	4	10	2.16 (54.86)	1.31 (33.27)	2.23 (56.64)	A
MRC440V5	5	10	2.16 (54.86)	1.31 (33.27)	2.63 (66.80)	A
MRC440V6	6	10	2.16 (54.86)	1.31 (33.27)	2.63 (66.80)	A
MRC440V7R5	7.5	10	2.16 (54.86)	1.31 (33.27)	2.81 (71.37)	A
MRC440V10	10	5	2.87 (72.89)	1.87 (47.50)	2.95 (74.93)	B
MRC440V12R5	12.5	5	2.87 (72.89)	1.87 (47.50)	3.06 (77.72)	B
MRC440V15	15	5	2.13 (54.10)	1.34 (34.00)	2.95 (74.93)	A
MRC440V17R5	17.5	10	2.91 (73.91)	1.91 (48.51)	3.91 (99.31)	B
MRC440V20	20	5	2.87 (72.89)	1.87 (47.50)	2.95 (74.93)	B
MRC440V25	25	5	2.87 (72.89)	1.87 (47.50)	3.82 (97.03)	B
MRC440V30	30	5	2.87 (72.89)	1.87 (47.50)	3.94 (100.08)	B
MRC440V35	35	5	2.87 (72.89)	1.87 (47.50)	3.94 (100.08)	C
MRC440V40	40	5	2.87 (72.89)	1.87 (47.50)	4.92 (124.96)	B
MRC440V45	45	5	2.87 (72.89)	1.87 (47.50)	4.92 (124.96)	B
MRC440V50	50	5	2.87 (72.89)	1.87 (47.50)	3.94 (100.08)	B
MRC440V55	55	5	2.87 (72.89)	1.87 (47.50)	5.12 (130.05)	B
MRC440V60	60	5	2.87 (72.89)	1.87 (47.50)	5.12 (130.05)	B

ROUND MOTOR RUN AC ELECTROLYTIC

MRRC SERIES

The MRRC Series Motor Run Capacitors offer outstanding electrical characteristics, high capacitance stability over time and temperature, and very low internal power losses (Dissipation Factor). Possible applications include; electric motor, pumps, air conditioning, compressor, lighting, and general purpose AC applications.

FEATURES:

- Two .250" Quick Connect Terminals
- Low-Loss, Self-Healing Metallized Polypropylene Film Dielectric
- Round Aluminum Case
- 370VAC and 440VAC Types
- 10,000 AFC Protected

RATINGS

Capacitance Range:

370 Volts – 4 μ F to 70 μ F

440 Volts – 20 μ F to 70 μ F

PERFORMANCE SPECIFICATIONS

Operating Temperature Range:

4 μ F to 25 μ F – -25°C to +85°C

30 μ F to 70 μ F – -40°C to +70°C

Operating Frequency: 50 – 60Hz

Insulation Resistance: 2000M Ω min between terminals and case

Dissipation Factor:

4 μ F to 25 μ F – 0.15% Max at 60Hz, +25°C

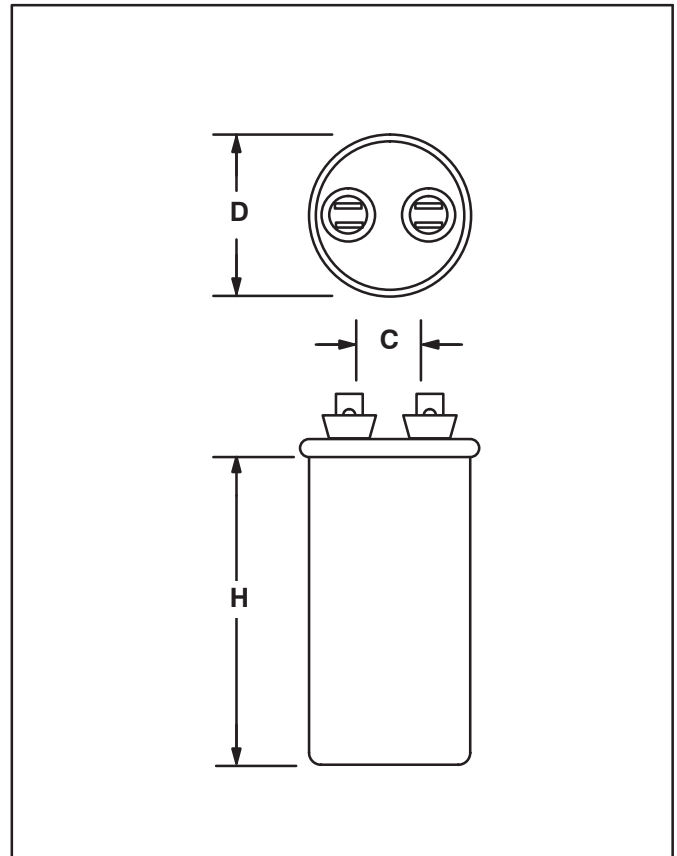
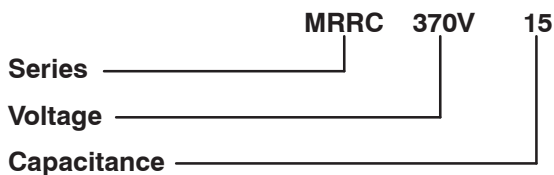
30 μ F to 70 μ F – 0.1% Max

Overvoltage: 175% of standard rated voltage for 10 seconds

CAPACITOR CONSTRUCTION

These devices feature a low-loss, self-healing metallized Polypropylene Film dielectric system, which is oil-filled, and is protected by a 10,000 AFC Safety Pressure Interrupter.

ORDERING INFORMATION



ROUND MOTOR RUN AC ELECTROLYTIC

MRRC SERIES

370VAC Ratings and Dimensions

NTE Type Number	Capacitance μF	Tolerance %	Case Dimensions – Inch (mm)		
			D	H	C
MRRC370V4	4	5	1.67 (42.0)	2.17 (55.0)	0.84 (21.3)
MRRC370V5	5	5	1.67 (42.0)	2.17 (55.0)	0.84 (21.3)
MRRC370V7R5	7.5	5	1.87 (47.0)	2.36 (60.0)	0.84 (21.3)
MRRC370V15	15	5	1.87 (47.0)	2.95 (75.0)	0.84 (21.3)
MRRC370V20	20	5	2.07 (52.6)	2.56 (65.0)	0.81 (20.6)
MRRC370V25	25	5	1.87 (47.0)	3.94 (100.0)	0.84 (21.3)
MRRC370V30	30	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC370V35	35	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC370V40	40	5	2.07 (52.6)	3.35 (85.0)	0.81 (20.6)
MRRC370V45	45	5	2.07 (52.6)	3.45 (90.0)	0.81 (20.6)
MRRC370V50	50	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC370V55	55	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC370V60	60	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC370V65	65	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC370V70	70	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)

440VAC Ratings and Dimensions

NTE Type Number	Capacitance μF	Tolerance %	Case Dimensions – Inch (mm)		
			D	H	C
MRRC440V20	20	5	1.87 (47.0)	3.94 (100.0)	0.84 (21.3)
MRRC440V25	25	5	1.87 (47.0)	3.94 (100.0)	0.84 (21.3)
MRRC440V30	30	5	2.07 (52.6)	3.35 (85.0)	0.81 (20.6)
MRRC440V35	35	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC440V40	40	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC440V45	45	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC440V50	50	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC440V55	55	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC440V60	60	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC440V65	65	5	2.46 (62.5)	4.33 (110.0)	0.81 (20.6)
MRRC440V70	70	5	2.46 (62.5)	4.92 (125.0)	0.81 (20.6)

DUAL ROUND MOTOR RUN AC ELECTROLYTIC

MRRC SERIES

The MRRC Series Dual Motor Run Capacitors offer outstanding electrical characteristics, high capacitance stability over time and temperature, and very low internal power losses (Dissipation Factor). Possible applications include; electric motor, pumps, air conditioning, compressor, lighting, and general purpose AC applications.

FEATURES:

- Dual Rated Values
- Three .250" Quick Connect Terminals
- Round Aluminum Case
- Aluminum Oil Filled Construction
- Plastic Dry Construction
- 370VAC and 440VAC Types
- 10,000 AFC Protected

RATINGS

Capacitance Range:

370 Volts – 5 μ F / 15 μ F to 5 μ F / 80 μ F

440 Volts – 5 μ F / 15 μ F to 7.5 μ F / 60 μ F

PERFORMANCE SPECIFICATIONS

Operating Temperature Range: -40°C to +70°C

Dissipation Factor: 0.1% Max

Leakage Current: 30 μ A Max

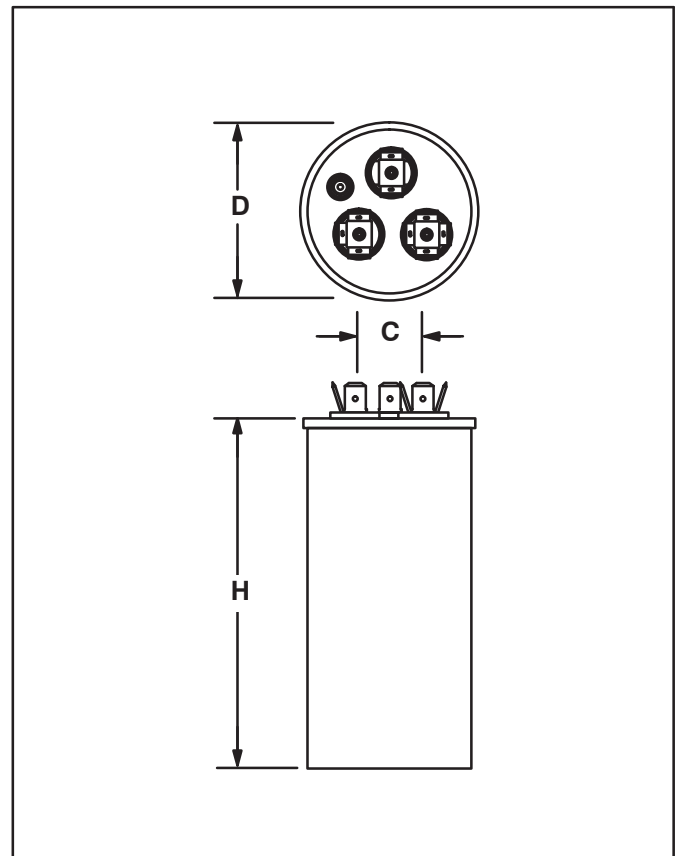
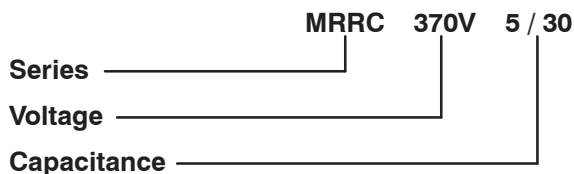
Operating Frequency: 50 – 60Hz

Operating Life: 60,000 hours with 94% survival

CAPACITOR CONSTRUCTION

These devices feature a low-loss, self-healing metallized Polypropylene Film dielectric system, which is oil-filled, and is protected by a 10,000 AFC Safety Pressure Interrupter.

ORDERING INFORMATION



DUAL ROUND MOTOR RUN AC ELECTROLYTIC

MRRC SERIES

370VAC Ratings and Dimensions

NTE Type Number	Capacitance μF	Tolerance %	Case Dimensions – Inch (mm)		
			D	H	C
MRRC370V5/15	5 / 15	5	2.07 (52.6)	2.17 (55.0)	0.81 (20.6)
MRRC370V7R5/15	7.5 / 15	5	2.07 (52.6)	2.75 (69.9)	0.81 (20.6)
MRRC370V5/20	5 / 20	5	2.07 (52.6)	2.56 (65.0)	0.81 (20.6)
MRRC370V7R5/20	7.5 / 20	5	2.07 (52.6)	2.75 (69.9)	0.81 (20.6)
MRRC370V10/20	10 / 20	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC370V5/25	5 / 25	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC370V7R5/25	7.5 / 25	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC370V10/25	10 / 25	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC370V3/30	3 / 30	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC370V5/30	5 / 30	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC370V7R5/30	7.5 / 30	5	2.07 (52.6)	3.35 (85.0)	0.81 (20.6)
MRRC370V10/30	10 / 30	5	2.07 (52.6)	3.54 (90.0)	0.81 (20.6)
MRRC370V5/35	5 / 35	5	2.07 (52.6)	3.35 (85.0)	0.81 (20.6)
MRRC370V7R5/35	7.5 / 35	5	2.07 (52.6)	3.35 (85.0)	0.81 (20.6)
MRRC370V5/40	5 / 40	5	2.07 (52.6)	3.54 (90.0)	0.81 (20.6)
MRRC370V7R5/40	7.5 / 40	5	2.07 (52.6)	3.54 (90.0)	0.81 (20.6)
MRRC370V10/40	10 / 40	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC370V5/45	5 / 45	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC370V7R5/45	7.5 / 45	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC370V10/45	10 / 45	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC370V5/50	5 / 50	5	2.07 (52.6)	4.92 (125.0)	0.81 (20.6)
MRRC370V7R5/50	7.5 / 50	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC370V10/50	10 / 50	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC370V5/55	5 / 55	5	2.07 (52.6)	4.92 (125.0)	0.81 (20.6)
MRRC370V7R5/55	7.5 / 55	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC370V10/55	10 / 55	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC370V5/60	5 / 60	5	2.07 (52.6)	4.92 (125.0)	0.81 (20.6)
MRRC370V7R5/60	7.5 / 60	5	2.07 (52.6)	4.92 (125.0)	0.81 (20.6)
MRRC370V5/80	5 / 80	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)

DUAL ROUND MOTOR RUN AC ELECTROLYTIC

MRRC SERIES

440VAC Ratings and Dimensions

NTE Type Number	Capacitance μF	Tolerance %	Case Dimensions – Inch (mm)		
			D	H	C
MRRC440V5/15	5 / 15	5	2.07 (52.6)	2.56 (65.0)	0.81 (20.6)
MRRC440V7R5/15	7.5 / 15	5	2.07 (52.6)	2.56 (65.0)	0.81 (20.6)
MRRC440V5/20	5 / 20	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC440V7R5/20	7.5 / 20	5	2.07 (52.6)	2.95 (75.0)	0.81 (20.6)
MRRC440V5/25	5 / 25	5	2.07 (52.6)	3.35 (85.0)	0.81 (20.6)
MRRC440V7R5/25	7.5 / 25	5	2.07 (52.6)	3.35 (85.0)	0.81 (20.6)
MRRC440V5/30	5 / 30	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC440V7R5/30	7.5 / 30	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC440V10/30	10 / 30	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC440V5/35	5 / 35	5	2.07 (52.6)	3.94 (100.0)	0.81 (20.6)
MRRC440V7R5/35	7.5 / 35	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC440V5/40	5 / 40	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC440V7R5/40	7.5 / 40	5	2.07 (52.6)	4.33 (110.0)	0.81 (20.6)
MRRC440V5/45	5 / 45	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC440V7R5/45	7.5 / 45	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC440V5/50	5 / 50	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC440V7R5/50	7.5 / 50	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC440V5/55	5 / 55	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC440V7R5/55	7.5 / 55	5	2.46 (62.5)	3.94 (100.0)	0.81 (20.6)
MRRC440V5/60	5 / 60	5	2.46 (62.5)	4.33 (110.0)	0.81 (20.6)
MRRC440V7R5/60	7.5 / 60	5	2.46 (62.5)	4.33 (110.0)	0.81 (20.6)