

RWE Series

- Rated voltage range : 350 to 550V_{dc}
- Endurance with ripple current : 85°C 2,000 hours
- RoHS Compliant

RWF P300
↑
Longer life
RWE

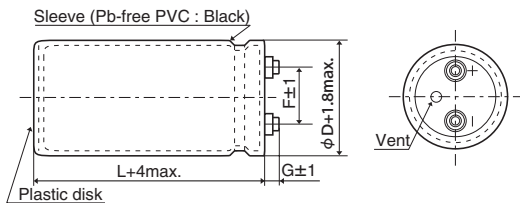


◆ SPECIFICATIONS

| Items | Characteristics | | | |
|---------------------------------|--|---------------------------------------|-------------|------------|
| Category | -25 to +85°C | | | |
| Temperature Range | -25 to +85°C | | | |
| Rated Voltage Range | 350 to 550V _{dc} | | | |
| Capacitance Tolerance | ±20% (M) (at 20°C, 120Hz) | | | |
| Leakage Current | I=0.02CV or 5mA, whichever is smaller. Where, I : Max. leakage current (μA), C : Nominal capacitance (μF), V : Rated voltage (V) (at 20°C after 5 minutes) | | | |
| Dissipation Factor (tan δ) | 0.25 max. (at 20°C, 120Hz) | | | |
| Low Temperature Characteristics | Capacitance change | Rated Voltage (V _{dc}) | 350 to 450V | 500 & 550V |
| | | C(-25°C)/C(+20°C) | ≥0.7 | ≥0.6 |
| (at 120Hz) | | | | |
| Insulation Resistance | When measured between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case by using an insulation resistance meter of 500V _{dc} , the insulation resistance shall not be less than 100MΩ. | | | |
| Insulation Withstanding Voltage | When a voltage of 2,000V _{ac} is applied for 1 minute between the terminals that are connected to each other and to the mounting clamp on the insulating sleeve covering the case, there shall not be electrical damage. | | | |
| Endurance | The following specifications shall be satisfied when the capacitors are restored to 20°C after subjected to DC voltage with the rated ripple current is applied (the peak voltage shall not exceed the rated voltage) for 2,000 hours at 85°C. | | | |
| | Capacitance change | ≤ ±20% of the initial value | | |
| | D.F. (tan δ) | ≤ 300% of the initial specified value | | |
| | Leakage current | ≤ The initial specified value | | |
| Shelf Life | The following specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 500 hours at 85°C without voltage applied. Before the measurement, the capacitor shall be preconditioned by applying voltage according to Item 4.1 of JIS C 5101-4. | | | |
| | Capacitance change | ≤ ±20% of the initial value | | |
| | D.F. (tan δ) | ≤ 300% of the initial specified value | | |
| | Leakage current | ≤ The initial specified value | | |

◆ DIMENSIONS (Screw-Mount) [mm]

- Terminal Code : LG



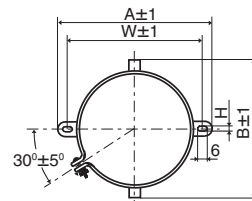
φ35 to φ63.5 : G=6
φ76.2 & φ89 : G=5

<Screw specifications>

Plus hexagon-headed screw : M5×0.8×10
Maximum screw tightening torque : 3.23Nm

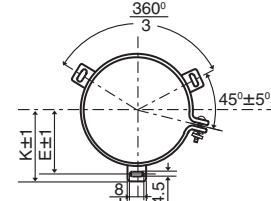
* The screw and the mounting clamp are separately supplied and not attached to the product.

- Mounting Clamp Code : B



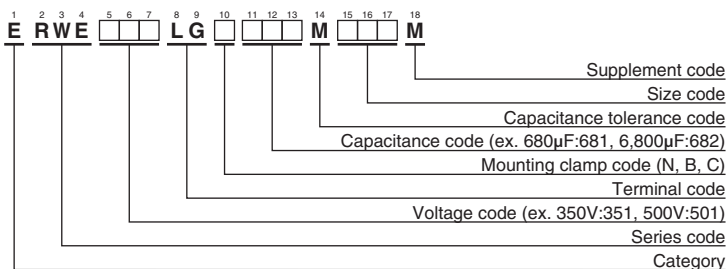
| φD | A | B | W | H | F |
|------|-------|------|------|-----|------|
| 35 | 58.0 | 44.0 | 48.0 | 3.5 | 12.7 |
| 50 | 78.0 | 64.0 | 68.0 | 4.5 | 22.4 |
| 63.5 | 90.0 | 76.0 | 80.0 | 4.5 | 28.0 |
| 76.2 | 104.5 | 90.0 | 93.5 | 4.5 | 31.5 |

- Mounting Clamp Code : C



| φD | E | K | F | J |
|------|------|------|------|------|
| 50 | 32.5 | 37.0 | 22.4 | 14.0 |
| 63.5 | 38.1 | 43.5 | 28.0 | 14.0 |
| 76.2 | 44.5 | 50.0 | 31.5 | 14.0 |
| 89 | 50.8 | 56.5 | 31.5 | 16.0 |

◆ PART NUMBERING SYSTEM



Please refer to "Product code guide (screw-mount terminal type)"

◆STANDARD RATINGS

| WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/85°C, 120Hz) | Part No. | WV (V _{dc}) | Cap (μF) | Case size φD×L(mm) | tan δ | Rated ripple current (Arms/85°C, 120Hz) | Part No. | |
|-----------------------|----------|--------------------|-------|---|--------------------|-----------------------|------------|--------------------|----------|---|--------------------|--------------------|
| 350 | 390 | 35 × 50 | 0.25 | 1.90 | ERWE351LGB391MA50M | 450 | 2,700 | 63.5 × 115 | 0.25 | 8.60 | ERWE451LGC272MDB5M | |
| | 680 | 35 × 80 | 0.25 | 2.90 | ERWE351LGB681MA80M | | 3,300 | 63.5 × 130 | 0.25 | 10.0 | ERWE451LGC332MDD0M | |
| | 1,000 | 35 × 100 | 0.25 | 3.80 | ERWE351LGB102MAA0M | | 3,300 | 76.2 × 96 | 0.25 | 9.80 | ERWE451LGC332ME96M | |
| | 1,200 | 35 × 120 | 0.25 | 4.20 | ERWE351LGB122MAC0M | | 3,900 | 76.2 × 115 | 0.25 | 11.5 | ERWE451LGC392MEB5M | |
| | 1,500 | 50 × 75 | 0.25 | 4.70 | ERWE351LGC152MC75M | | 4,700 | 76.2 × 130 | 0.25 | 13.3 | ERWE451LGC472MED0M | |
| | 2,200 | 50 × 96 | 0.25 | 6.30 | ERWE351LGC222MC96M | | 5,600 | 76.2 × 155 | 0.25 | 15.7 | ERWE451LGC562MEF5M | |
| | 3,300 | 50 × 130 | 0.25 | 8.80 | ERWE351LGC332MCD0M | | 8,200 | 89 × 155 | 0.25 | 18.6 | ERWE451LGC822MFF5M | |
| | 3,300 | 63.5 × 96 | 0.25 | 8.80 | ERWE351LGC332MD96M | | 500 | 120 | 35 × 50 | 0.25 | 0.70 | ERWE501LGB121MA50M |
| | 3,900 | 63.5 × 115 | 0.25 | 10.3 | ERWE351LGC392MDB5M | | | 270 | 35 × 80 | 0.25 | 1.20 | ERWE501LGB271MA80M |
| | 4,700 | 63.5 × 130 | 0.25 | 12.0 | ERWE351LGC472MDD0M | | | 330 | 35 × 100 | 0.25 | 1.40 | ERWE501LGB331MAA0M |
| | 4,700 | 76.2 × 96 | 0.25 | 11.7 | ERWE351LGC472ME96M | | | 390 | 35 × 120 | 0.25 | 1.70 | ERWE501LGB391MAC0M |
| | 5,600 | 76.2 × 115 | 0.25 | 12.6 | ERWE351LGC562MEB5M | | | 470 | 50 × 75 | 0.25 | 1.80 | ERWE501LGC471MC75M |
| | 6,800 | 76.2 × 130 | 0.25 | 15.9 | ERWE351LGC682MED0M | | | 680 | 50 × 96 | 0.25 | 2.50 | ERWE501LGC681MC96M |
| | 8,200 | 76.2 × 155 | 0.25 | 19.0 | ERWE351LGC822MEF5M | | | 820 | 50 × 115 | 0.25 | 2.90 | ERWE501LGC821MCB5M |
| 12,000 | 89 × 155 | 0.25 | 22.5 | ERWE351LGC123MFF5M | 1,000 | 50 × 130 | | 0.25 | 3.40 | ERWE501LGC102MCD0M | | |
| 400 | 330 | 35 × 50 | 0.25 | 1.70 | ERWE401LGB331MA50M | 1,000 | | 63.5 × 96 | 0.25 | 3.40 | ERWE501LGC102MD96M | |
| | 560 | 35 × 80 | 0.25 | 2.70 | ERWE401LGB561MA80M | 1,500 | | 63.5 × 115 | 0.25 | 4.50 | ERWE501LGC152MDB5M | |
| | 820 | 35 × 100 | 0.25 | 3.40 | ERWE401LGB821MAA0M | 1,500 | | 76.2 × 96 | 0.25 | 4.60 | ERWE501LGC152ME96M | |
| | 1,000 | 35 × 120 | 0.25 | 3.90 | ERWE401LGB102MAC0M | 1,800 | | 63.5 × 130 | 0.25 | 5.20 | ERWE501LGC182MDD0M | |
| | 1,200 | 50 × 75 | 0.25 | 4.20 | ERWE401LGC122MC75M | 2,200 | | 76.2 × 115 | 0.25 | 6.10 | ERWE501LGC222MEB5M | |
| | 1,800 | 50 × 96 | 0.25 | 5.70 | ERWE401LGC182MC96M | 2,700 | | 76.2 × 155 | 0.25 | 7.70 | ERWE501LGC272MEF5M | |
| | 2,200 | 50 × 130 | 0.25 | 7.20 | ERWE401LGC222MCD0M | 3,900 | 89 × 155 | 0.25 | 10.1 | ERWE501LGC392MFF5M | | |
| | 2,700 | 63.5 × 96 | 0.25 | 7.90 | ERWE401LGC272MD96M | 550 | 100 | 35 × 50 | 0.25 | 0.60 | ERWE501LGB101MA50M | |
| | 3,300 | 63.5 × 115 | 0.25 | 9.50 | ERWE401LGC332MDB5M | | 180 | 35 × 80 | 0.25 | 1.00 | ERWE551LGB181MA80M | |
| | 3,900 | 63.5 × 130 | 0.25 | 10.9 | ERWE401LGC392MDD0M | | 270 | 35 × 100 | 0.25 | 1.30 | ERWE551LGB271MAA0M | |
| | 3,900 | 76.2 × 96 | 0.25 | 10.6 | ERWE401LGC392ME96M | | 330 | 35 × 120 | 0.25 | 1.60 | ERWE551LGB331MAC0M | |
| | 4,700 | 76.2 × 115 | 0.25 | 12.6 | ERWE401LGC472MEB5M | | 390 | 50 × 75 | 0.25 | 1.70 | ERWE551LGC391MC75M | |
| | 5,600 | 76.2 × 130 | 0.25 | 14.5 | ERWE401LGC562MED0M | | 560 | 50 × 96 | 0.25 | 2.10 | ERWE551LGC561MC96M | |
| | 6,800 | 76.2 × 155 | 0.25 | 17.3 | ERWE401LGC682MEF5M | | 560 | 63.5 × 96 | 0.25 | 2.50 | ERWE551LGC561MD96M | |
| 10,000 | 89 × 155 | 0.25 | 20.5 | ERWE401LGC103MFF5M | 680 | | 50 × 115 | 0.25 | 2.70 | ERWE551LGC681MCB5M | | |
| 450 | 270 | 35 × 50 | 0.25 | 1.60 | ERWE451LGB271MA50M | | 680 | 63.5 × 115 | 0.25 | 3.00 | ERWE551LGC681MDB5M | |
| | 470 | 35 × 80 | 0.25 | 2.40 | ERWE451LGB471MA80M | | 820 | 50 × 130 | 0.25 | 3.10 | ERWE551LGC821MCD0M | |
| | 680 | 35 × 100 | 0.25 | 3.10 | ERWE451LGB681MAA0M | | 820 | 63.5 × 130 | 0.25 | 3.50 | ERWE551LGC821MDD0M | |
| | 820 | 35 × 120 | 0.25 | 3.50 | ERWE451LGB821MAC0M | | 1,200 | 76.2 × 96 | 0.25 | 4.20 | ERWE551LGC122ME96M | |
| | 1,000 | 50 × 75 | 0.25 | 3.90 | ERWE451LGC102MC75M | | 1,500 | 76.2 × 115 | 0.25 | 5.00 | ERWE551LGC152MEB5M | |
| | 1,200 | 50 × 96 | 0.25 | 4.70 | ERWE451LGC122MC96M | | 1,800 | 76.2 × 130 | 0.25 | 5.80 | ERWE551LGC182MED0M | |
| | 1,500 | 50 × 115 | 0.25 | 5.60 | ERWE451LGC152MCB5M | 2,200 | 76.2 × 155 | 0.25 | 7.00 | ERWE551LGC222MEF5M | | |
| | 1,800 | 50 × 130 | 0.25 | 6.50 | ERWE451LGC182MCD0M | 3,300 | 89 × 155 | 0.25 | 9.30 | ERWE551LGC332MFF5M | | |
| | 2,200 | 63.5 × 96 | 0.25 | 7.20 | ERWE451LGC222MD96M | | | | | | | |

◆RATED RIPPLE CURRENT MULTIPLIERS

●Frequency Multipliers

| Frequency (Hz) | 50 | 120 | 300 | 1k | 3k |
|----------------|-----|-----|-----|-----|-----|
| Coefficient | 0.8 | 1.0 | 1.1 | 1.3 | 1.4 |

Note : The endurance of capacitors is reduced with internal heating produced by ripple current at the rate of halving the lifetime with every 5 to 10°C rise. When long life performance is required in actual use, the rms ripple current has to be reduced. Also, for the RWE series capacitors, using them at operating voltage less than their rated voltage can extend their lifetime. For details, please contact a representative of Nippon Chemi-Con.