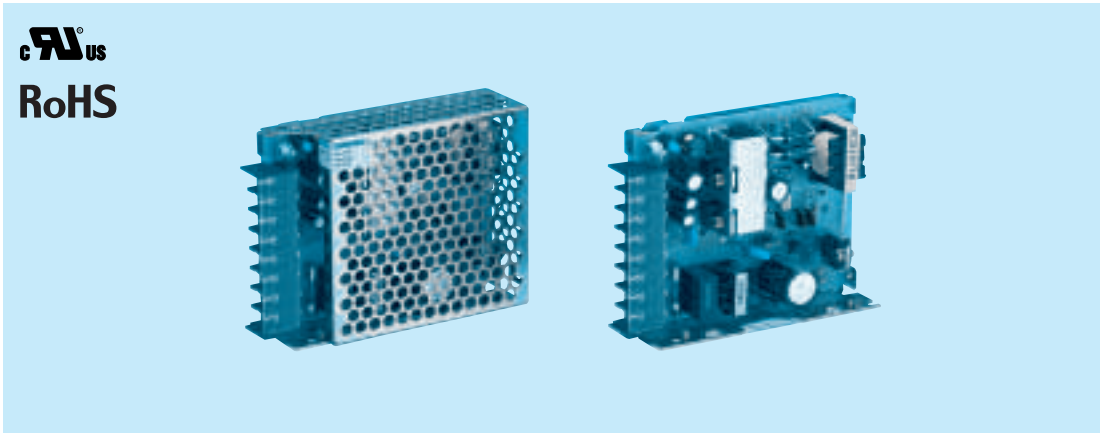
COSEL **Unit type**

# RMC15A

**Ordering information**

**RMC 15A -1 -□**

① ② ③ ④



①Series name
②Output wattage
③Output voltage combination
④Optional
C :with Coating
G :Low leakage current
J :Connector type
N :with Cover

RMC

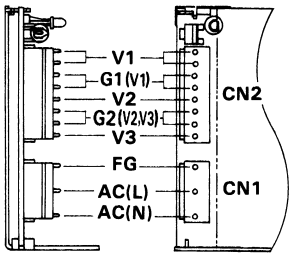
| MODEL | | RMC15A-1 | RMC15A-2 |
|---|---|---|---|
| DC OUTPUT | V1 | +5V 2.0A | +5V 2.0A |
| | V2 | +12V 0.3A | +15V 0.2A |
| | V3 | -12V 0.2A | -15V 0.2A |

## SPECIFICATIONS

| | MODEL | | RMC15A-1 | | | RMC15A-2 | | |
|---|---|---|---|---|---|---|---|---|
| INPUT | VOLTAGE[V] | | AC85 - 132 1φ or DC110 - 170 | | | | | |
| | CURRENT[A] | ACIN 100V | 0.45typ (Io=100%) | | | | | |
| | FREQUENCY[Hz] | | 47 - 440 or DC | | | | | |
| | EFFICIENCY[%] | ACIN 100V | 65typ (Io=100%) | | | | | |
| | INRUSH CURRENT[A] | ACIN 100V | 20typ (Io=100%) (At cold start) | | | | | |
| OUTPUT | VOLTAGE[V] | | +5 | +12 | -12 | +5 | +15 | -15 |
| | CURRENT[A] | | 0 - 2.0 | 0 - 0.3 | 0 - 0.2 | 0 - 2.0 | 0 - 0.2 | 0 - 0.2 |
| | LINE REGULATION[mV] | | 20max | 48max | 48max | 20max | 60max | 60max |
| | LOAD REGULATION[mV] | | 100max | 120max | 120max | 100max | 150max | 150max |
| | RIPPLE[mVp-p] | 0 to +50℃ *1 | 100max | 120max | 120max | 100max | 120max | 120max |
| | | -10 - 0℃ *1 | 150max | 160max | 160max | 150max | 160max | 160max |
| | RIPPLE NOISE[mVp-p] | 0 to +50℃ *1 | 120max | 150max | 150max | 120max | 150max | 150max |
| | | -10 - 0℃ *1 | 170max | 180max | 180max | 170max | 180max | 180max |
| | TEMPERATURE REGULATION[mV] | 0 to +50℃ | 50max | 350max | 350max | 50max | 350max | 350max |
| | | -10 to +50℃ | 60max | 420max | 420max | 60max | 420max | 420max |
| | START-UP TIME[ms] | | 100max (ACIN 85V, Io=100%) | | | | | |
| | HOLD-UP TIME[ms] | | 10typ (ACIN 85V, Io=100%, 0 to +50℃) 20typ (ACIN 100V, Io=100%, 0 to +50℃) | | | | | |
| | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | | 5.00 - 5.25 | Fixed | Fixed | 5.00 - 5.25 | Fixed | Fixed |
| | OUTPUT VOLTAGE SETTING[V] | | —— | 11.40 to 12.60 | -11.40 to -12.60 | —— | 14.25 to 15.74 | -14.25 to -15.75 |
| PROTECTION CIRCUIT | OVERCURRENT PROTECTION | | Works over 105% of rating and recovers automatically | | | | | |
| | OVERVOLTAGE PROTECTION | | By zerer diode clamping (+5V only) | | | | | |
| | OPERATING INDICATION | | LED (Green) | | | | | |
| ISOLATION | INPUT-OUTPUT | | AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | INPUT-FG, COVER | | AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | OUTPUT-FG, COVER | | AC500V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | OUTPUT-OUTPUT(V1-V2,V3) | | AC100V 1minute, DC100V 10MΩmin (At Room Temperature) | | | | | |
| ENVIRONMENT | OPERATING TEMP.,HUMID.AND ALTITUDE | | -10 to +60℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max | | | | | |
| | STORAGE TEMP.,HUMID.AND ALTITUDE | | -20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max | | | | | |
| | VIBRATION | | 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis | | | | | |
| | IMPACT | | 196.1m/s² (20G), 11ms, once each X, Y and Z axis | | | | | |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | | UL60950-1, C-UL Complies with DEN-AN | | | | | |
| | CONDUCTED NOISE | | Complies with FCC-B, VCCI-B | | | | | |
| OTHERS | CASE SIZE/WEIGHT | | 28×80×100mm (W×H×D) /250g max (without cover) | | | | | |
| | COOLING METHOD | | Convection | | | | | |

*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
* Series/Parallel operation with other model is not possible.
* When units are operated with chassis and cover, derating is required.

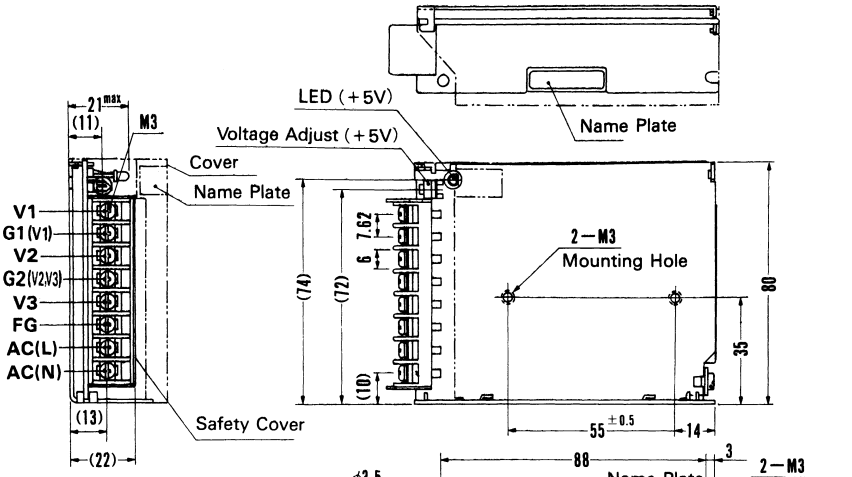
## External view




| I/O Connector | | Mating Connector | Terminal |
|---|---|---|---|
| CN1 | B3P5-VH | VHR-5N | Chain : SVH-21T-P1.1 |
| CN2 | B8P-VH | VHR-8N | Loose: BVH-21T-P1.1 |

(Mfr:J.S.T.)

Connector type

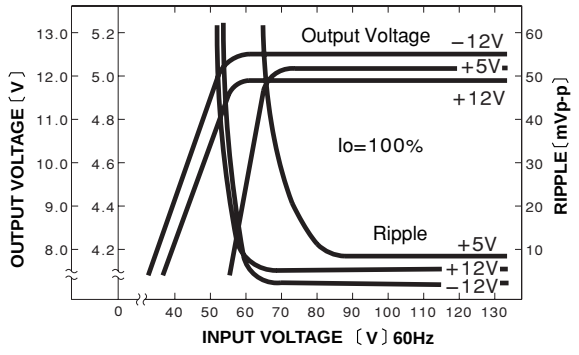



※Weight: 250 g or less (without cover)
※Cover is optional
※Tolerance: ±1
※Dimensions in mm.
※Mounting torque : 0.6N·m (6.3kgf·cm) max

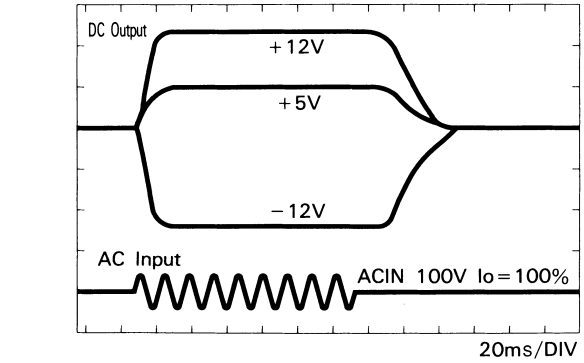
Barrier strip type

## Performance data

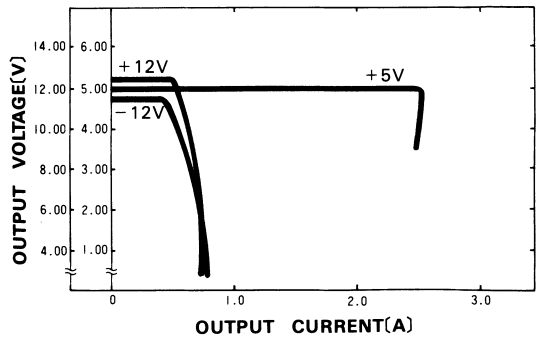
### ■STATIC CHARACTERISTICS (RMC15A-1)



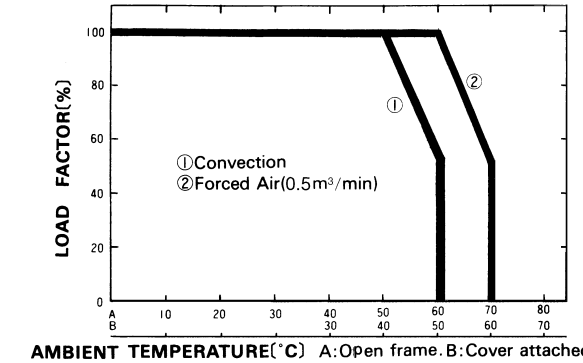

### ■RISE TIME & FALL TIME (RMC15A-1)




### ■OVERCURRENT CHARACTERISTICS (RMC15A-1)




### ■DERATING CURVE



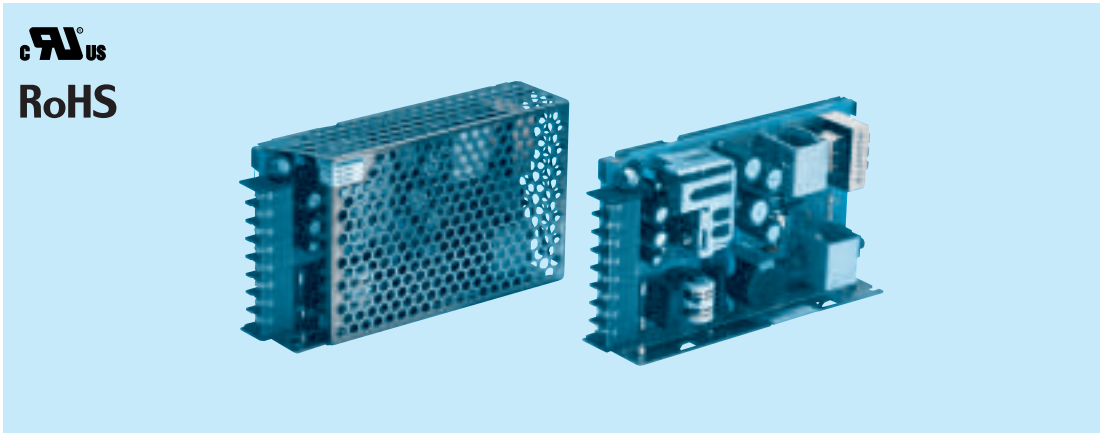
COSEL **Unit type**

# RMC30A

**Ordering information**

**RMC 30A -1 -□**

① ② ③ ④



①Series name
②Output wattage
③Output voltage combination
④Optional
G :Low leakage current
J :Connector type
N :with Cover

RMC

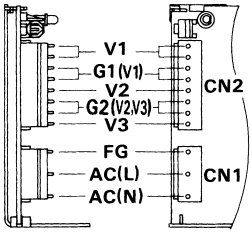
| MODEL | | RMC30A-1 | RMC30A-2 |
|---|---|---|---|
| DC OUTPUT | V1 | +5V 3.0A | +5V 3.0A |
| | V2 | +12V 1.2A | +15V 0.5A |
| | V3 | -12V 0.3A | -15V 0.5A |

## SPECIFICATIONS

| | MODEL | | RMC30A-1 | | | RMC30A-2 | | |
|---|---|---|---|---|---|---|---|---|
| INPUT | VOLTAGE[V] | | AC85 - 132 1φ or DC110 - 170 | | | | | |
| | CURRENT[A] | ACIN 100V | 0.9typ (Io=100%) | | | | | |
| | FREQUENCY[Hz] | | 47 - 440 or DC | | | | | |
| | EFFICIENCY[%] | ACIN 100V | 67typ (Io=100%) | | | | | |
| | INRUSH CURRENT[A] | ACIN 100V | 30typ (Io=100%) (At cold start) | | | | | |
| OUTPUT | VOLTAGE[V] | | +5 | +12 | -12 | +5 | +15 | -15 |
| | CURRENT[A] | | 0 - 3.0 | 0 - 1.2 | 0 - 0.3 | 0 - 3.0 | 0 - 0.5 | 0 - 0.5 |
| | LINE REGULATION[mV] | | 20max | 48max | 48max | 20max | 60max | 60max |
| | LOAD REGULATION[mV] | | 100max | 120max | 150max | 100max | 120max | 150max |
| | RIPPLE[mVp-p] | 0 to +50℃ *1 | 100max | 120max | 120max | 100max | 120max | 120max |
| | | -10 - 0℃ *1 | 150max | 160max | 160max | 150max | 160max | 160max |
| | RIPPLE NOISE[mVp-p] | 0 to +50℃ *1 | 120max | 150max | 150max | 120max | 150max | 150max |
| | | -10 - 0℃ *1 | 170max | 180max | 180max | 170max | 180max | 180max |
| | TEMPERATURE REGULATION[mV] | 0 to +50℃ | 50max | 350max | 350max | 50max | 350max | 350max |
| | | -10 to +50℃ | 60max | 420max | 420max | 60max | 420max | 420max |
| | START-UP TIME[ms] | | 100max (ACIN 85V, Io=100%) | | | | | |
| | HOLD-UP TIME[ms] | | 10typ (ACIN 85V, Io=100%, 0 to +50℃) 20typ (ACIN 100V, Io=100%, 0 to +50℃) | | | | | |
| | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | | 5.00 - 5.25 | Fixed | Fixed | 5.00 - 5.25 | Fixed | Fixed |
| | OUTPUT VOLTAGE SETTING[V] | | —— | 11.40 to 12.60 | -11.40 to -12.60 | —— | 14.25 to 15.75 | -14.25 to -15.75 |
| PROTECTION CIRCUIT | OVERCURRENT PROTECTION | | Works over 105% of rating and recovers automatically | | | | | |
| | OVERVOLTAGE PROTECTION | | Works at 115 - 140% of rating (+5V) | | | | | |
| | OPERATING INDICATION | | LED (Green) | | | | | |
| ISOLATION | INPUT-OUTPUT | | AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | INPUT-FG, COVER | | AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | OUTPUT-FG, COVER | | AC500V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | OUTPUT-OUTPUT(V1-V2,V3) | | AC100V 1minute, DC100V 10MΩmin (At Room Temperature) | | | | | |
| ENVIRONMENT | OPERATING TEMP.,HUMID.AND ALTITUDE | | -10 to +60℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max | | | | | |
| | STORAGE TEMP.,HUMID.AND ALTITUDE | | -20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max | | | | | |
| | VIBRATION | | 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis | | | | | |
| | IMPACT | | 196.1m/s² (20G), 11ms, once each X, Y and Z axis | | | | | |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | | UL60950-1, C-UL Complies with DEN-AN | | | | | |
| | CONDUCTED NOISE | | Complies with FCC-B, VCCI-B | | | | | |
| OTHERS | CASE SIZE/WEIGHT | | 31×80×135mm (W×H×D)/350g max (without cover) | | | | | |
| | COOLING METHOD | | Convection | | | | | |

*1 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
* Series/Parallel operation with other model is not possible.
* When units are operated with chassis and cover, derating is required.

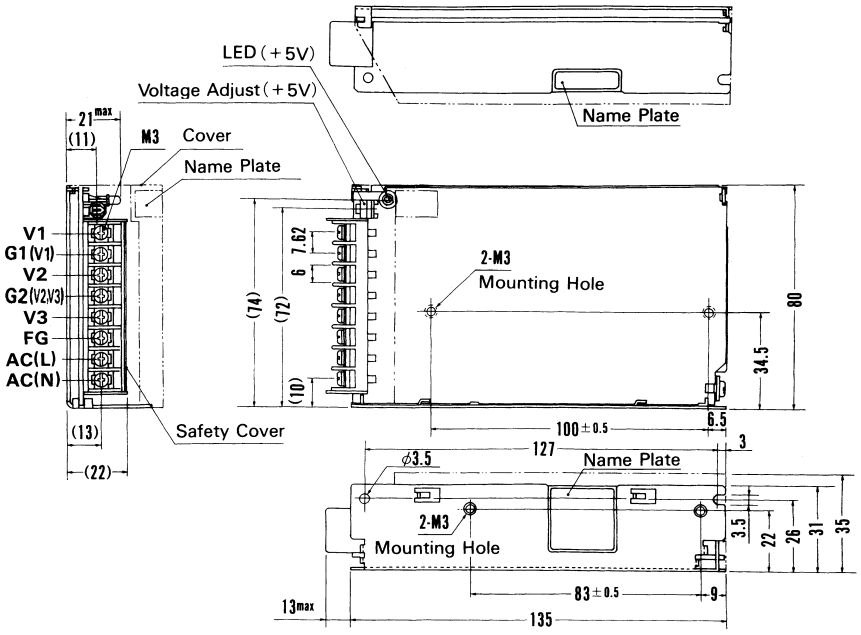
## External view




| I/O Connector | | Mating Connector | Terminal |
|---|---|---|---|
| CN1 | B3P5-VH | VHR-5N | Chain : SVH-21T-P1.1 |
| CN2 | B8P-VH | VHR-8N | Loose: BVH-21T-P1.1 |

(Mfr:J.S.T.)

Connector type

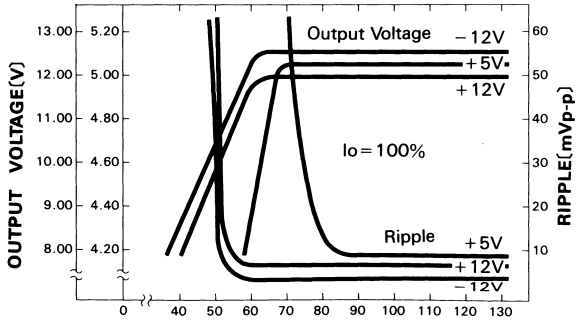



Barrier strip type

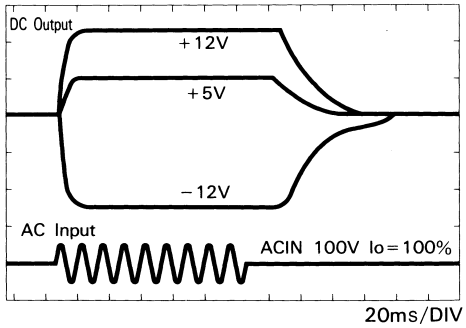
※Weight: 350g or less (without cover) ※Cover is optional
※Tolerance: ±1 ※Dimensions in mm.
※Mounting torque : 0.6N·m (6.3kgf·cm) max

## Performance data

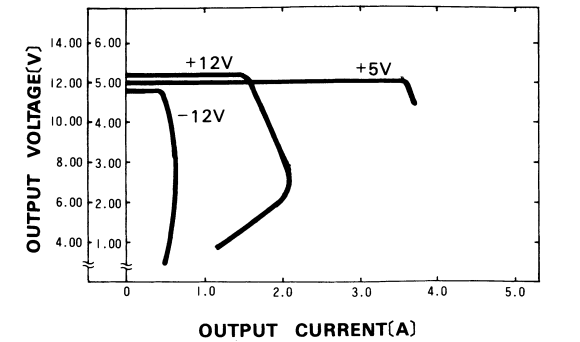
### ■STATIC CHARACTERISTICS (RMC30A-1)



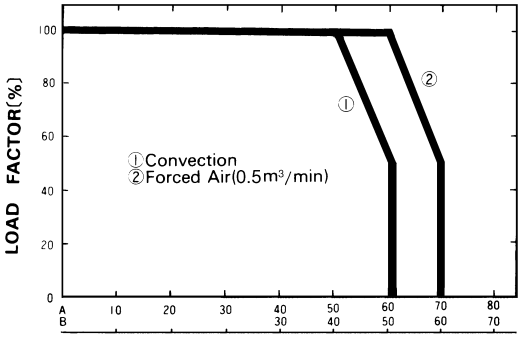

### ■RISE TIME & FALL TIME (RMC30A-1)




### ■OVERCURRENT CHARACTERISTICS (RMC30A-1)




### ■DERATING CURVE



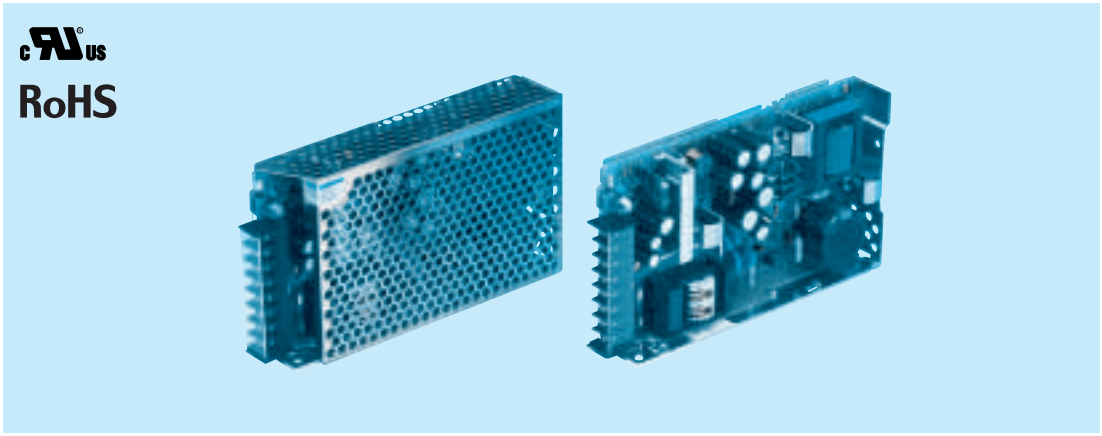
COSEL **Unit type**

# RMC50A

**Ordering information**

**RMC 50A -1 -□**

① ② ③ ④



①Series name
②Output wattage
③Output voltage combination
④Optional
C :with Coating
G :Low leakage current
J :Connector type
N :with Cover

RMC

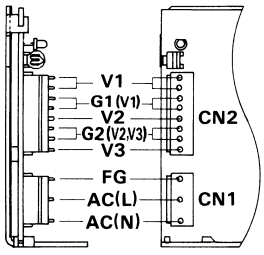
| MODEL | | RMC50A-1 | RMC50A-2 |
|---|---|---|---|
| DC OUTPUT | V1 | +5V 5.0A | +5V 5.0A |
| | V2 | +12V 1.5(Peak 2)A | +15V 1.2A |
| | V3 | -12V 0.5A | -15V 0.5A |

## SPECIFICATIONS

| | MODEL | | RMC50A-1 | | | RMC50A-2 | | |
|---|---|---|---|---|---|---|---|---|
| INPUT | VOLTAGE[V] | | AC85 - 132 1φ or DC110 - 170 | | | | | |
| | CURRENT[A] | ACIN 100V | 1.5typ (Io=100%) | | | | | |
| | FREQUENCY[Hz] | | 47 - 440 or DC | | | | | |
| | EFFICIENCY[%] | ACIN 100V | 70typ (Io=100%) | | | | | |
| | INRUSH CURRENT[A] | ACIN 100V | 30typ (Io=100%) (At cold start) | | | | | |
| OUTPUT | VOLTAGE[V] | | +5 | +12 | -12 | +5 | +15 | -15 |
| | CURRENT[A] | *1 | 0 - 5.0 | 0 - 1.5 (Peak 2) | 0 - 0.5 | 0 - 5.0 | 0 - 1.2 | 0 - 0.5 |
| | LINE REGULATION[mV] | | 20max | 48max | 48max | 20max | 60max | 60max |
| | LOAD REGULATION[mV] | | 40max | 150max | 150max | 40max | 150max | 150max |
| | RIPPLE[mVp-p] | 0 to +50℃ *2 | 80max | 120max | 120max | 80max | 120max | 120max |
| | | -10 - 0℃ *2 | 140max | 160max | 160max | 140max | 160max | 160max |
| | RIPPLE NOISE[mVp-p] | 0 to +50℃ *2 | 120max | 150max | 150max | 120max | 150max | 150max |
| | | -10 - 0℃ *2 | 160max | 180max | 180max | 160max | 180max | 180max |
| | TEMPERATURE REGULATION[mV] | 0 to +50℃ | 50max | 350max | 350max | 50max | 350max | 350max |
| | | -10 to +50℃ | 60max | 420max | 420max | 60max | 420max | 420max |
| | START-UP TIME[ms] | | 100max (ACIN 85V, Io=100%) | | | | | |
| | HOLD-UP TIME[ms] | | 10typ (ACIN 85V, Io=100%, 0 to +50℃) 20typ (ACIN 100V, Io=100%, 0 to +50℃) | | | | | |
| | OUTPUT VOLTAGE ADJUSTMENT RANGE[V] | | 5.00 - 5.25 | Fixed | Fixed | 5.00 - 5.25 | Fixed | Fixed |
| | OUTPUT VOLTAGE SETTING[V] | | —— | 11.40 to 12.60 | -11.40 to -12.60 | —— | 14.25 to 15.75 | -14.25 to -15.75 |
| PROTECTION CIRCUIT | OVERCURRENT PROTECTION | | Works over 105% of rating and recovers automatically | | | | | |
| | OVERVOLTAGE PROTECTION | | Works at 115 - 140% of rating (+5V) | | | | | |
| | OPERATING INDICATION | | LED (Green) | | | | | |
| ISOLATION | INPUT-OUTPUT | | AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | INPUT-FG, COVER | | AC2,000V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | OUTPUT-FG, COVER | | AC500V 1minute, DC500V 50MΩmin (At Room Temperature) | | | | | |
| | OUTPUT-OUTPUT(V1-V2,V3) | | AC100V 1minute, DC100V 10MΩmin (At Room Temperature) | | | | | |
| ENVIRONMENT | OPERATING TEMP.,HUMID.AND ALTITUDE | | -10 to +65℃, 20 - 90%RH (Non condensing) (Refer to DERATING CURVE), 3,000m (10,000feet) max | | | | | |
| | STORAGE TEMP.,HUMID.AND ALTITUDE | | -20 to +75℃, 20 - 90%RH (Non condensing), 9,000m (30,000feet) max | | | | | |
| | VIBRATION | | 10 - 55Hz, 19.6m/s² (2G), 3minutes period, 60minutes each along X, Y and Z axis | | | | | |
| | IMPACT | | 196.1m/s² (20G), 11ms, once each X, Y and Z axis | | | | | |
| SAFETY AND NOISE REGULATIONS | AGENCY APPROVALS | | UL60950-1, C-UL Complies with DEN-AN | | | | | |
| | CONDUCTED NOISE | | Complies with FCC-B, VCCI-B | | | | | |
| OTHERS | CASE SIZE/WEIGHT | | 31×93×155mm (W×H×D) /350g max (without cover) | | | | | |
| | COOLING METHOD | | Convection | | | | | |

*1 Peak load current of V2 for RMC50A-1 is possible to draw 30 seconds.
*2 Measured by 20MHz oscilloscope or Ripple-Noise meter(equivalent to KEISOKU-GIKEN : RM101).
* Series/Parallel operation with other model is not possible.
* When units are operated with chassis and cover, derating is required.

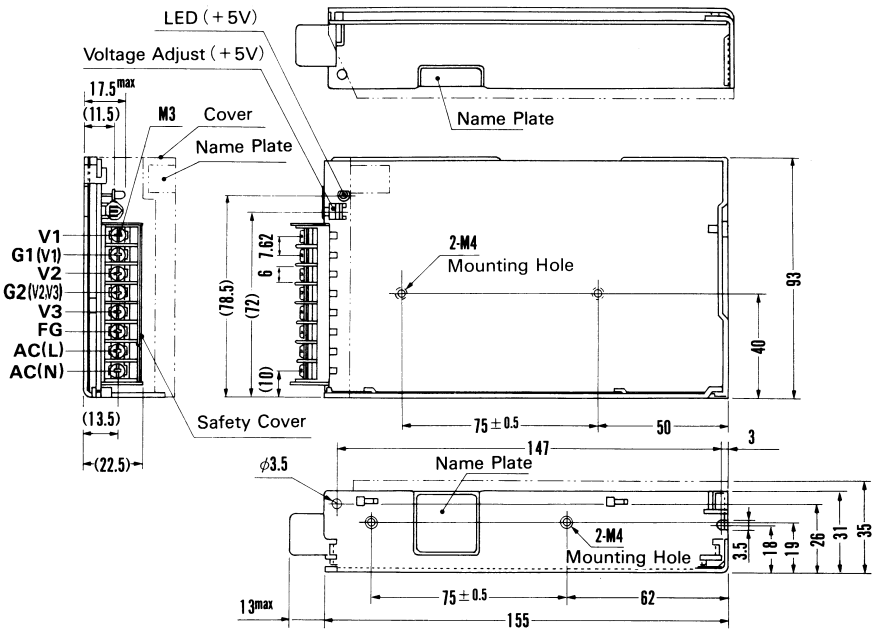
## External view




| I/O Connector | | Mating Connector | Terminal |
|---|---|---|---|
| CN1 | B3P5-VH | VHR-5N | Chain : SVH-21T-P1.1 |
| CN2 | B8P-VH | VHR-8N | Loose : BVH-21T-P1.1 |

(Mfr:J.S.T.)

Connector type

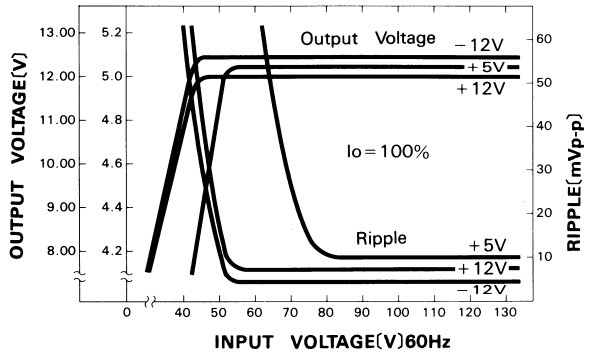



Barrier strip type

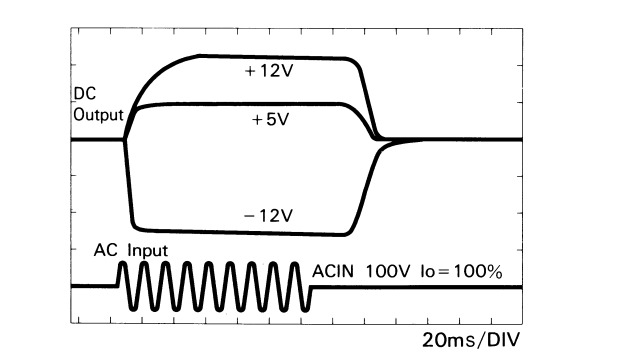
※Weight: 350g or less (without cover) ※Cover is optional
※Tolerance: ±1 ※Dimensions in mm.
※Mounting torque : 1.2N·m (12.8kgf·cm) max

## Performance data

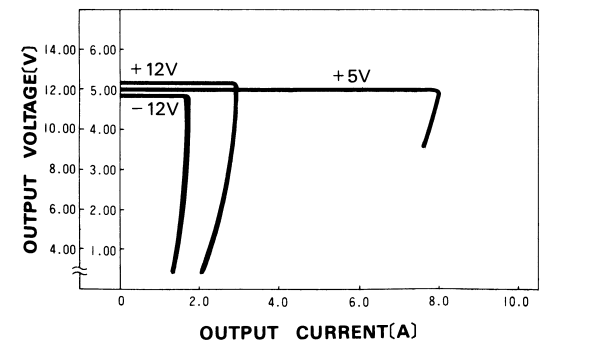
### ■STATIC CHARACTERISTICS (RMC50A-1)




### ■RISE TIME & FALL TIME (RMC50A-1)




### ■OVERCURRENT CHARACTERISTICS (RMC50A-1)




### ■DERATING CURVE