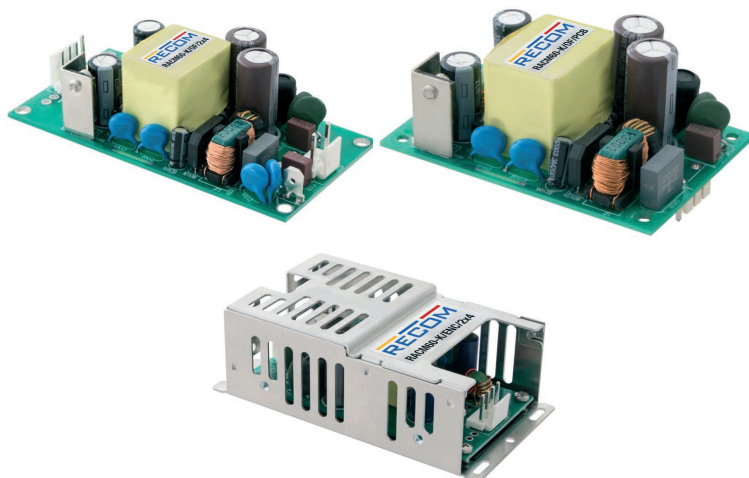


# RACM60-K Series ▾ AC/DC Power Supply

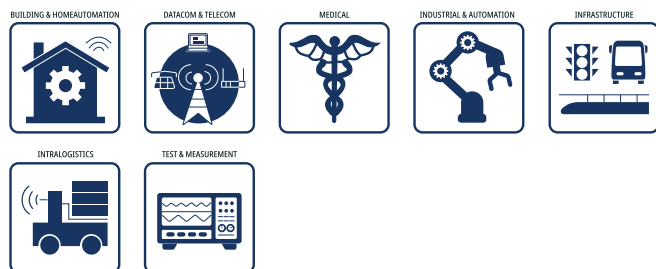
## 60W ▾ Input: 100V-240VAC or 100V-277VAC

### FEATURES

- 2"x3" & 2"x4" Open Frame, 2"x4" Enclosed
- Temperature rang: -40 to +85°C with derating
- Over voltage category OVC III
- 2MOPP medical certified
- Class B EMC filter built-in
- 2000/5000m (medical/ITE) operating altitude
- 3 year warranty



### APPLICATIONS



### SAFETY & EMC



### DESCRIPTION

The multi-purpose, industrial + household + medical grade AC/DC converter series RACM60-K/OF delivers 60 Watts of output power from -40°C to +55°C with natural air convection only, and up to +85°C with derating or forced cooling. With a clear focus on extended thermal performance for systems where space is limited, these 2" x 3" compact modules are designed to gain highest overall efficiency levels over the full output load range from universal AC inputs. The RACM60-K/OF has ANSI/AAMI ES60601-1 medical safety and EN 60601-1-2 medical EMC certifications and offers 4kVAC/1 min isolation, 2MOPP. It is additionally certified to IEC/EN62368-1(CB Report) and IEC61558-1/-2-16 for industrial applications and IEC/EN60335-1 for household appliances. The robust built-in Class B EMC filter has sufficient margin to allow both Installation Class II or Class I PELV with grounded output. A range of mechanical fixing options makes the RACM60 suitable for many different mounting conditions: the standard chassis mount part mates with Molex connectors and the /PCB option permits direct installation in printed circuit boards. Additionally, a 2" x 4" footprint for backwards-compatibility with legacy designs is available on request.

### SELECTION GUIDE

Part Number	Operating Input Range [VAC]	Output Voltage nom. [VDC]	Output Current nom. [mA]	Efficiency typ. <sup>(1)</sup> [%]	Output Power continuous [W]
RACM60-05SK <sup>(3, 4, 5)</sup>	80-264 / 80-305	5	8000	89	40
RACM60-12SK <sup>(3, 4, 5)</sup>	80-264 / 80-305	12	5000	90	60
RACM60-15SK <sup>(3, 4, 5)</sup>	80-264 / 80-305	15	4000	90	60
RACM60-24SK <sup>(3, 4, 5)</sup>	80-264 / 80-305	24	2500	90	60
RACM60-36SK <sup>(3, 4)</sup>	80-264	36	1667	90	60
RACM60-48SK <sup>(3, 4, 5)</sup>	80-264 / 80-305	48	1250	90	60

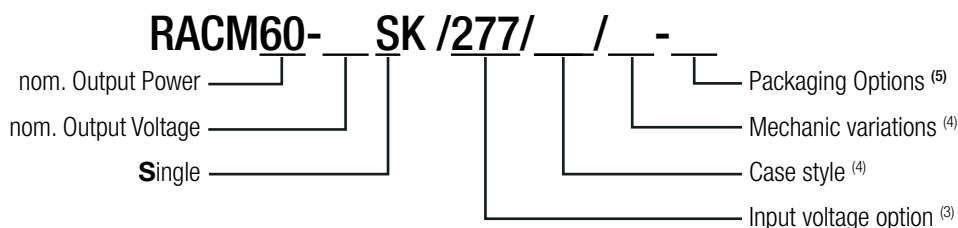
Note1: Efficiency is tested at nominal input (230VAC) and full load at +25°C ambient

Note2: Measured @ T<sub>AMB</sub> = 25°C, nom. V<sub>IN</sub>, full load and after warm-up unless otherwise stated

# RACM60-K Series ◇ AC/DC Power Supply

## 60W ◇ Input: 100V-240VAC or 100V-277VAC

### MODEL NUMBERING



Note3: Add suffix "/277/OF" for wider input voltage range (80-305VAC)

Without suffix= standard input range (80-264VAC), check „**ORDERING INFORMATION**“<sup>(5)</sup>

For more information, refer to „**Input Voltage Range**“<sup>(6,7)</sup>

Note4: "/OF" = standard 2"x3" open frame version with standard connectors

"/OF/PCB" = 2"x3" open frame with PCB mounting pins

"/OF/2x4" = 2"x4" open frame version with standard connectors

"/ENC/2x4" = 2"x4" version with metal enclosure and standard connectors (coming soon)

Note5: for packaging details refer to last page „**PACKAGING INFORMATION**“

### ORDERING INFORMATION <sup>(5)</sup>

Model	"/OF"	"/277/OF"	"/OF/PCB"	"/OF/2x4"	"/ENC/2x4"
RACM60-05SK	x	x	x	on request	on request
RACM60-12SK	x	x	x	x	x
RACM60-15SK	x	x	on request	on request	on request
RACM60-24SK	x	x	x	x	x
RACM60-36SK	x	on request	on request	on request	on request
RACM60-48SK	x	x	on request	on request	on request

x= standard portfolio / on request= MOQ may apply on project base / N/A= not available

### BASIC CHARACTERISTICS (measured @ T<sub>AMB</sub>= 25°C, nom. V<sub>IN</sub>, full load and after warm-up unless otherwise stated)

Parameter	Condition		Min.	Typ.	Max.
Internal Input Filter			Pi Type		
Nominal Input Voltage	50/60Hz	standard version "/277" version	100VAC		240VAC 277VAC
Input Voltage Range <sup>(6,7)</sup>	standard version	47-63Hz DC	80VAC 120VDC		264VAC 370VAC
	"/277" version	47-63Hz DC	80VAC 120VDC		305VAC 430VAC
Input Current	V <sub>IN</sub> = 115VAC V <sub>IN</sub> = 230VAC V <sub>IN</sub> = 277VAC				1400mA 600mA 500mA
Inrush Current	cold start at 25°C		V <sub>IN</sub> = 115VAC V <sub>IN</sub> = 230VAC V <sub>IN</sub> = 277VAC		30A 60A 70A
ErP Standby Mode Conformity (Output Load Capability)	V <sub>IN</sub> = 115/230/277VAC	Input Power:	0.5W 1.0W	0.3W 0.7W	
No Load Power Consumption	V <sub>IN</sub> = 230VAC V <sub>IN</sub> = 277VAC			100mW 120mW	
Input Frequency Range	AC Input		47Hz		63Hz
Minimum Load			0%		
Power Factor	V <sub>IN</sub> = 115VAC V <sub>IN</sub> = 230VAC V <sub>IN</sub> = 277VAC		0.6 0.5 0.45		
Start-up time				150ms	
Rise time	V <sub>IN</sub> = 115VAC V <sub>IN</sub> = 230VAC V <sub>IN</sub> = 277VAC			100ms	

# RACM60-K Series ◇ AC/DC Power Supply

## 60W ◇ Input: 100V-240VAC or 100V-277VAC

**BASIC CHARACTERISTICS** (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)

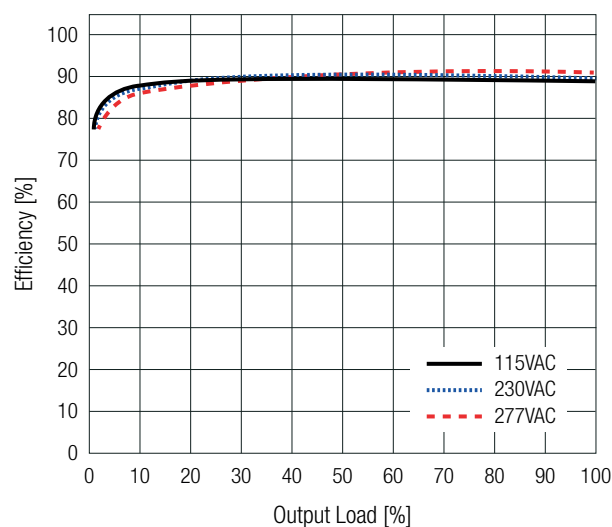
Parameter	Condition		Min.	Typ.	Max.
Hold-up time	$V_{IN} = 115\text{VAC}$		12ms		
	$V_{IN} = 230\text{VAC}$		50ms		
	$V_{IN} = 277\text{VAC}$		70ms		
Internal Operating Frequency	100% load at nominal $V_{IN}$			100kHz	
Output Ripple and Noise <sup>(8)</sup>	20MHz BW	5Vout others			200mVp-p 1% of Vout

Note6: The products were submitted for safety files at AC-Input operation (90-264VAC)

Note7: Output power derating for Line-input of less than 90VAC (derate linearly from 100% at 90VAC to 80% at 80VAC)

 Note8: Measurements are made with a 0.1  $\mu\text{F}$  MLCC & 10  $\mu\text{F}$  E-cap in parallel across output. (low ESR)

### Efficiency vs. Load


**REGULATIONS** (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)

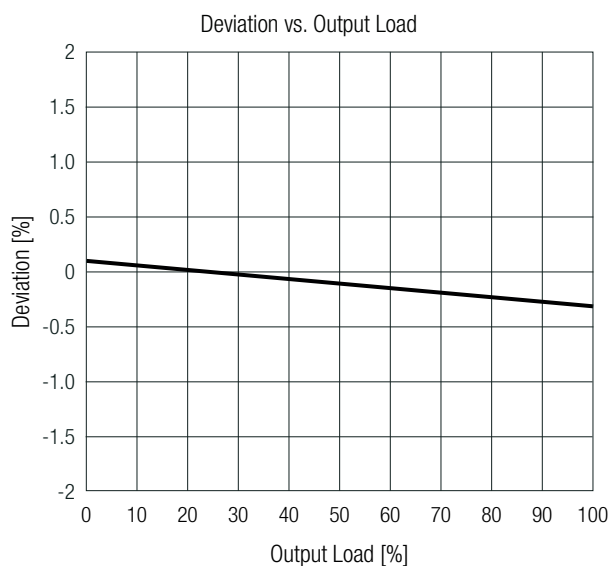
Parameter	Condition			Value
Output Accuracy	standard version		100% load	±2.0% typ.
	“/277” version		5Vout	±3.0% typ.
			others	±1.0% typ.
Line Regulation	standard version		low line to high line	±0.05% typ.
	“/277” version		5Vout	±0.5% typ.
			others	±0.05% typ.
Load Regulation <sup>(9)</sup>	standard version	10% to 100% load	5VDC	±1.5% typ.
			12VDC, 15VDC	±0.5% typ.
			24VDC, 36VDC, 48VDC	±0.1% typ.
	“/277” version	10% to 100% load	5VDC	±3.0% typ.
			12VDC, 15VDC	±0.8% typ.
			24VDC, 36VDC, 48VDC	±0.2% typ.
Transient Response	25% load step change			3.0% max.
	recovery time			500μs typ.

Note9: Operation below 10% load will not harm the converter, but specifications may not be met

# RACM60-K Series ◇ AC/DC Power Supply

## 60W ◇ Input: 100V-240VAC or 100V-277VAC

**REGULATIONS** (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)



**PROTECTIONS** (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)

Parameter	Type		Value
Input Fuse	internal		T3.15A, slow blow type
Short Circuit Protection (SCP)			hiccup, auto recovery
Over Voltage Protection (OVP)			105 - 120%, auto recovery
Output Reverse Voltage Protection			107 - 145%, auto recovery
Over Voltage Category (OVC) <sup>(10)</sup>	according to 62368-1, 61558-2-16, 60335-1, 60601-1		OVC II (up to 5000m)
	according to 61558-2-16		OVC III (up to 2000m)
Over Current Protection (OCP)			130% - 180%, hiccup mode
Thermal Shutdown	TC point IC 101		+130°C, restart after cool down
Class of Equipment			Class II
Isolation Voltage (safety certified) <sup>(11)</sup>	1 minute	I/P to O/P; according to 61558-2-16, 60601-1	4.2kVAC
Isolation Resistance	I/P to O/P, $V_{ISO} = 500\text{VDC}$		1GΩ min.
Isolation Capacitance	I/P to O/P, 100kHz/0.1V		100pF max.
Insulation Grade			reinforced
Means of Protection	319VAC working voltage		2MOPP

Note10: RACM60-xxK/277/OF models were submitted to safety agency for OVC III rating.

Note11: For repeat Hi-Pot testing, reduce the time and/or the test voltage

**ENVIRONMENTAL** (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)

Parameter	Condition		Value
Operating Temperature Range	@ natural convection (0.1m/s)	refer to <b>graphs below</b>	-40°C to +85°C
Temperature Coefficient			±0.02%/K
Operating Altitude <sup>(12)</sup>	according to 62368-1, 61558-2-16, 60335-1, 60601-1		5000m (OVC II)
	according to 61558-2-16		2000m (OVC III)
Operating Humidity	non-condensing		95% max.
Pollution Degree (PD)	safety report (UL/EN...)		PD2
Vibration	10-500Hz, 2G 10min./1cycle, period 60min. each along x,y,z axes		according to MIL-STD-202G
MTBF	according to MIL-HDBK-217, G.B.	$T_{AMB} = +25^{\circ}\text{C}$	>900 x 10 <sup>3</sup> hours
		$T_{AMB} = +40^{\circ}\text{C}$	>726 x 10 <sup>3</sup> hours
Design Lifetime	nom. $V_{IN} = 230\text{VAC}$	$T_{AMB} = +40^{\circ}\text{C}$	>42 x 10 <sup>3</sup> hours

Note12: Recognized by safety agency for safe operation up to 4000/5000m. High altitude operation may impact the performance and lifetime  
Please contact RECOM tech support for advice

# RACM60-K Series ◇ AC/DC Power Supply

## 60W ◇ Input: 100V-240VAC or 100V-277VAC

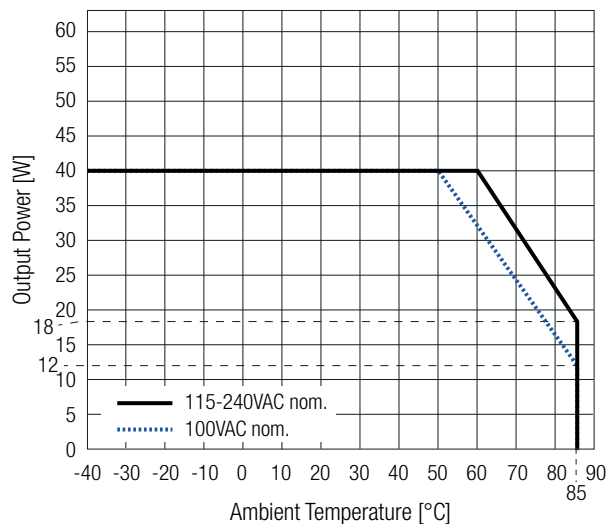
ENVIRONMENTAL (measured @  $T_{AMB} = 25^{\circ}\text{C}$ , nom.  $V_{IN}$ , full load and after warm-up unless otherwise stated)

### Derating Graph non-/277/OF Versions

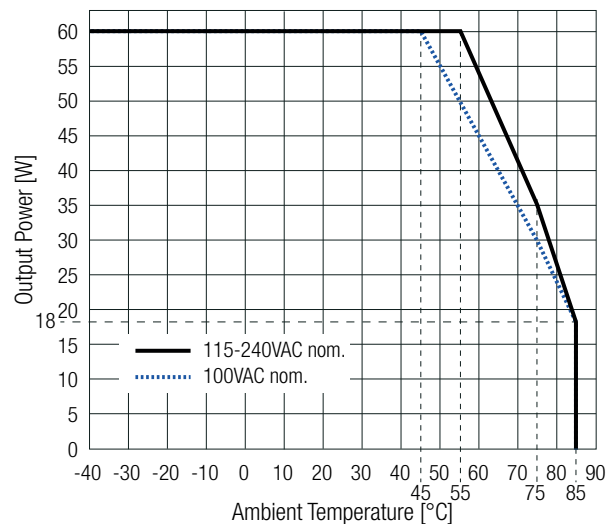
(@ Chamber and natural convection 0.1m/s)

Output power derating for line-input of less than 90VAC (derate linearly from 100% at 90VAC to 80% at 80VAC)

RACM60-05SK



other

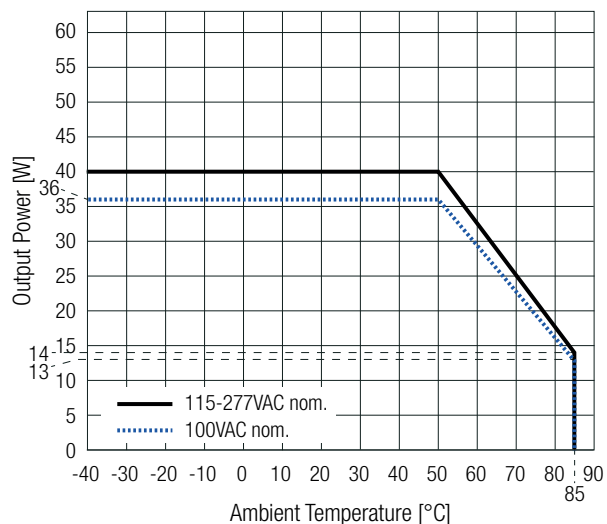


### Derating Graph "/277/OF" Versions

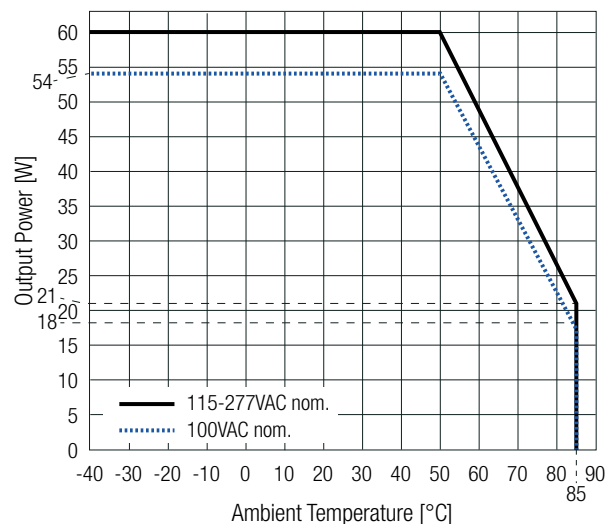
(@ Chamber and natural convection 0.1m/s)

Output power derating for Line-input of less than 90VAC (derate linearly from 100% at 90VAC to 80% at 80VAC)

RACM60-05SK/277/OF



other "/277/OF" Versions



# RACM60-K Series ◇ AC/DC Power Supply

## 60W ◇ Input: 100V-240VAC or 100V-277VAC

### SAFETY & CERTIFICATIONS

Certificate Type (Safety)	Report Number	Standard
Medical electrical equipment Part 1: General requirements for basic safety and essential performance	E511305-D6004-UL	CAN/CSA-C22.2 No. 60601-1:14, Edition 3.2 ANSI/AAMI ES60601-1:2005 + A2:2010/R2012
Audio/Video, information and communication technology equipment - Safety requirements (CB Scheme)	CN21PMDW-001	IEC62368-1:2014 2nd Edition
Audio/Video, information and communication technology equipment - Safety requirements (LVD)	50355749 001	EN62368-1:2014 + A11:2017
Household and similar electrical appliances – Safety – Part 1: General requirements (LVD)	4384104.50	IEC60335-1:2010 5th Edition + A2:2016 EN60335-1:2012 + A15:2021
Standard for Class 2 Power Units (TÜV)	(RACM60-12SK/OF, RACM60-24SK/OF only)	UL1310:2018 + R:2020-06
Safety of power transformers, power supplies, reactors & similar products for supply voltages up to 1100 V (CB Scheme)	50355750 001 (except "/277/OF" & "/ENC/2x4")	IEC61558-1:2005 2nd Edition + A1:2009
Safety of power transformers, power supplies, reactors & similar products for supply voltages up to 1100 V Part 2: Particular requirements (CB Scheme)		IEC61558-2-16:2009 1st Edition + A1:2013
Safety of power transformers, power supplies, reactors & similar products for supply voltages up to 1100V	50355751 001 (except "/277/OF" & "/ENC/2x4")	EN61558-1:2005 + A1:2009
Safety of power transformers, power supplies, reactors & similar products for supply voltages up to 1100 V Part 2: Particular requirements		EN61558-2-16:2009 + A1:2013
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V (CB Scheme)	085-210569701-000 (OVC III)	IEC61558-1:2017
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V Part 2: Particular requirements (CB Scheme)		IEC61558-2-16:2009 1st Edition + A1:2013
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V	64.210.21.05697.01 (OVC III)	EN IEC 61558-1:2019
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V Part 2: Particular requirements		EN61558-2-16:2009 + A1:2013
EMC Compliance (EN60601-1-2)	Condition	Standard / Criterion
Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral standard: Electromagnetic compatibility - Requirements and tests	LCS220321054BE	EN60601-1-2:2015+A1:2021 Class B, Group 1
ESD Electrostatic discharge immunity test	Air: ±2, 4, 8, 15kV Contact: ±2, 4, 8kV	EN61000-4-2:2009, Criteria B
Radiated, radio-frequency, electromagnetic field immunity test	9V/m (704-787MHz) 9V/m (5100-5800MHz) 10V/m (80-2700MHz) 27V/m (380-390MHz) 28V/m (430-470MHz) 28V/m (800-960MHz) 28V/m (1700-1990MHz) 28V/m (2400-2570MHz)	EN61000-4-3:2006+A2:2010, Criteria A
Fast Transient and Burst Immunity	AC Port: L-N 2kV	EN61000-4-4:2012, Criteria B
Surge Immunity	L-N: 1kV L (N)-PE: 2kV	EN61000-4-5:2014, Criteria B
Immunity to conducted disturbances, induced by radio-frequency fields	AC Port: 3Vrms: (0.15-80MHz) 6Vrms: (ISM and amateur radio bands according to table 9)	EN61000-4-6:2014, Criteria A
Power Magnetic Field Immunity	30A/m	EN61000-4-8:2010, Criteria A
Voltage Dips	100% (0.5P 1.0P), 30%	EN61000-4-11:2004, Criteria B
Voltage Interruptions	100%	EN61000-4-11:2004, Criteria B
Limits of Voltage Fluctuations & Flicker	LCS220321054BE	EN61000-3-3:2013

# RACM60-K Series ◇ AC/DC Power Supply

## 60W ◇ Input: 100V-240VAC or 100V-277VAC

### SAFETY & CERTIFICATIONS

EMC Compliance (EN55032)	Condition	Standard / Criterion
Electromagnetic compatibility of multimedia equipment - Emission requirements	LCS220321053BE	EN55032:2015+A1:2020, Class B
Electromagnetic compatibility of multimedia equipment - Immunity requirements		EN55035:2017+A11:2020
ESD Electrostatic discharge immunity test	Air: $\pm 2, 4, 8\text{kV}$ Contact: $\pm 2, 4\text{kV}$	EN61000-4-2:2009, Criteria B
Radiated, radio-frequency, electromagnetic field immunity test	3 V/m (80-5000MHz)	EN61000-4-3:2006+A2:2010, Criteria A
Fast Transient and Burst Immunity	AC Port: L-N 1kV	EN61000-4-4:2004+A1:2010, Criteria B
Surge Immunity	L-N: 1kV L (N)-PE: 2kV	EN61000-4-5:2014 + A1:2017, Criteria B
Immunity to conducted disturbances, induced by radio-frequency fields	AC Port: 3Vrms (0.15-10MHz) 3-1Vrms (10-30MHz) 1Vrms (30-80MHz)	EN61000-4-6:2014+A1:2015, Criteria A
Power Magnetic Field Immunity	1A/m	EN61000-4-8:2010, Criteria A
Voltage Dips and Interruptions	Dips: 100% 30% Interruptions: 100%	EN61000-4-11:2004+A1:2017, Criteria B EN61000-4-11:2004+A1:2017, Criteria C EN61000-4-11:2004+A1:2017, Criteria C
Limits of Voltage Fluctuations & Flicker	LCS220321053BE	EN61000-3-3:2013

EMC Compliance (EN61204-3)	Condition	Standard / Criterion
Low voltage power supplies, d.c. output Part 3: Electromagnetic compatibility (EMC)	LCS220321055BE	EN/IEC61204-3:2018, Class B
ESD Electrostatic discharge immunity test	Air: $\pm 2, 4, 8\text{kV}$ Contact: $\pm 2, 4\text{kV}$	EN61000-4-2:2009, Criteria B
Radiated, radio-frequency, electromagnetic field immunity test	10V/m (80-1000MHz) 3V/m (1400-2000MHz) 1V/m (2000-2700MHz)	EN61000-4-3:2006+A2:2010, Criteria A
Fast Transient and Burst Immunity	AC Port: L-N 2kV	EN61000-4-4:2012, Criteria B
Surge Immunity	L-N: 1kV L (N)-PE: 2kV	EN61000-4-5:2014 + A1:2017, Criteria B
Immunity to conducted disturbances, induced by radio-frequency fields	AC Port: 10Vrms (0.15-80MHz)	EN61000-4-6:2014+A1:2015, Criteria A
Power Magnetic Field Immunity	30A/m	EN61000-4-8:2010, Criteria A
Voltage Dips and Interruptions	Dips: 100% (0.5P, 1.0P) 30% or 20% Interruptions: 100%	EN61000-4-11:2004 +A1:2017, Criteria B EN61000-4-11:2004 +A1:2017, Criteria B EN61000-4-11:2004 +A1:2017, Criteria C
Limits of Voltage Fluctuations & Flicker	LCS220321055BE	EN61000-3-3:2013+A2:2021
Limitations on the amount of electromagnetic interference allowed from digital and electronic devices	WTD22D04060199E	FCC 47 CFR Part 15:2020 Subpart B
Limitations on the amount of electromagnetic interference allowed from digital and electronic devices, industrial, scientific, and medical equipment	WTD22D04060215E	FCC 47 CFR Part 18:2020

### DIMENSION & PHYSICAL CHARACTERISTICS

Parameter	Type	Value
Material	PCB	FR4, (UL94 V-0)
Dimension (LxWxH)	"/OF" and type	78.4 x 53.0 x 31.5mm
	"/277/OF" type	76.2 x 50.8 x 32.0mm
	"/OF/PCB" type	78.4 x 53.0 x 35.4mm
	"/OF/2x4" type	101.6 x 53.0 x 31.5mm
	"/ENC/2x4" type	118.3 x 62.7 x 38.7mm
Weight	"/OF", "/277/OF" and "/OF/PCB" types	111g typ.
	"/OF/2x4" type	120g typ.
	"/ENC/2x4" type	167g typ.

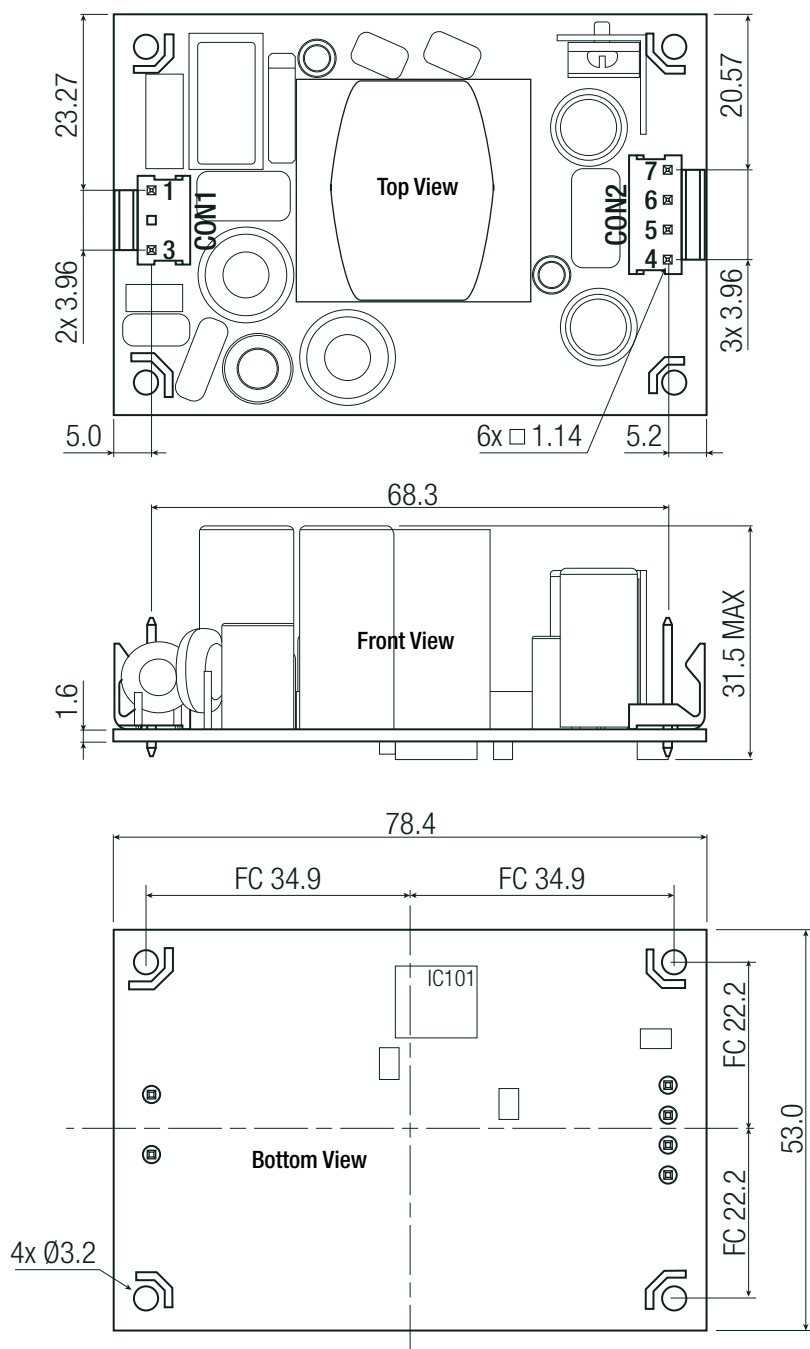
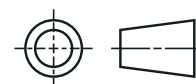


# RACM60-K Series ◇ AC/DC Power Supply

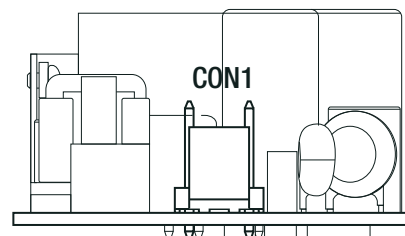
60W ◇ Input: 100V-240VAC or 100V-277VAC

## DIMENSION & PHYSICAL CHARACTERISTICS

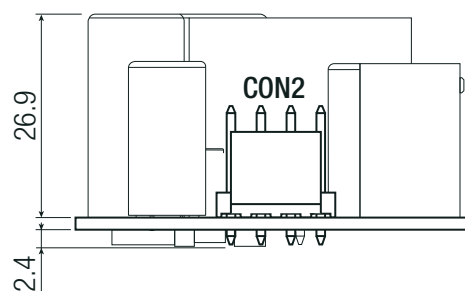
Dimension Drawing “/OF” (mm)



AC Input Side View



DC Output Side View



### Connector Information - SINGLE/DUAL

#	Function	Terminal
<b>AC Input (CON1)</b>		
1	VAC in (N)	3 Pins (Pin2 removed)
3	VAC in (L)	with 3.96mm pitch
<b>DC Output Connector (CON2)</b>		
4, 5	-VDC out	4 Pins
6, 7	+VDC out	with 3.96mm pitch

FC= fixing centers

### Compatible Connector

Housing
Molex 41695 Series or equivalent
Crimp Terminal
Molex 2478 Series or equivalent

### General tolerances according to ISO 2768-m (table for reference only)

Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

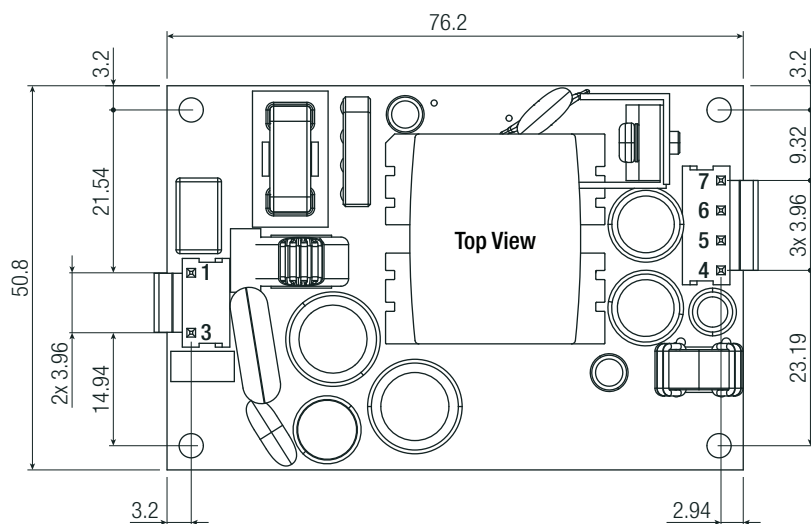


# RACM60-K Series ◇ AC/DC Power Supply

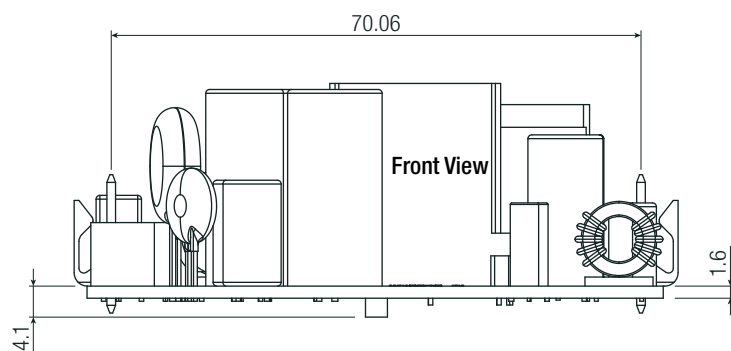
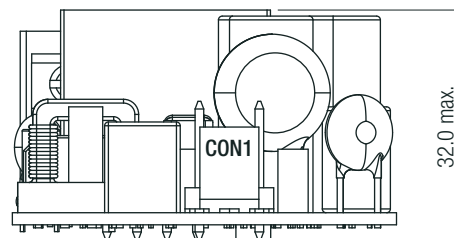
## 60W ◇ Input: 100V-240VAC or 100V-277VAC

### DIMENSION & PHYSICAL CHARACTERISTICS

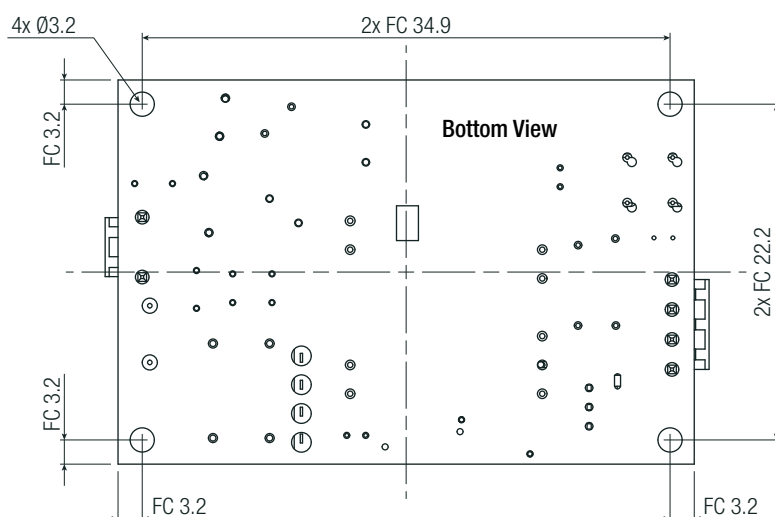
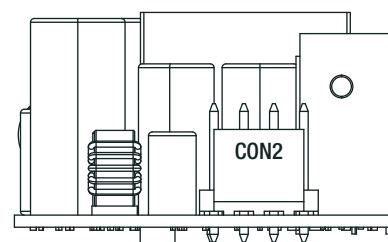
Dimension Drawing “/277/0F” (mm)



AC Input Side View



DC Output Side View



#### Connector Information

#	Function	Terminal
<b>AC Input (CON1)</b>		
1	VAC in (N)	3 Pins (Pin2 removed)
3	VAC in (L)	with 3.96mm pitch
<b>DC Output (CON2)</b>		
4, 5	-VDC out	4 Pins
6, 7	+VDC out	with 3.96mm pitch

FC= fixing centers

#### Compatible Connector

##### Housing

Molex 41695 Series or equivalent

##### Crimp Terminal

Molex 2478 Series or equivalent

#### General tolerances according to ISO 2768-m (table for reference only)

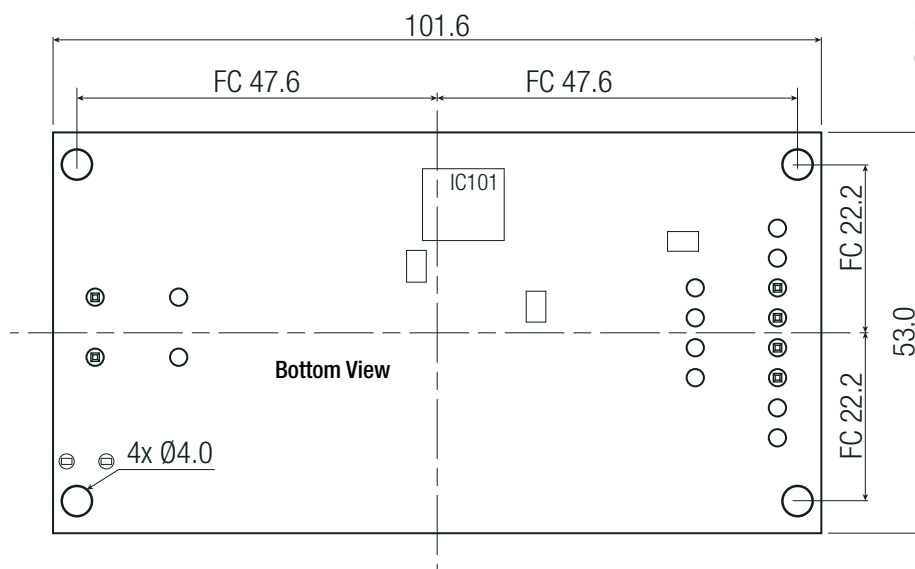
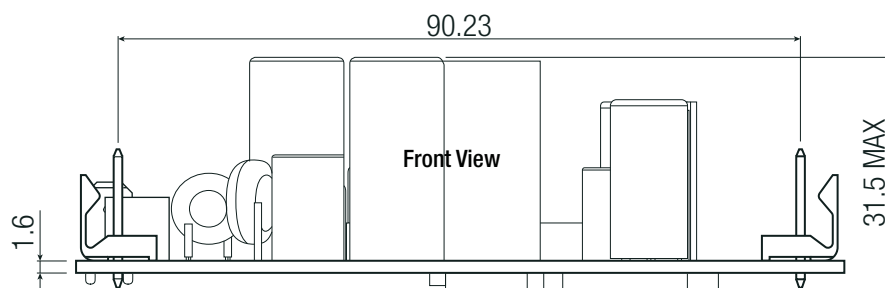
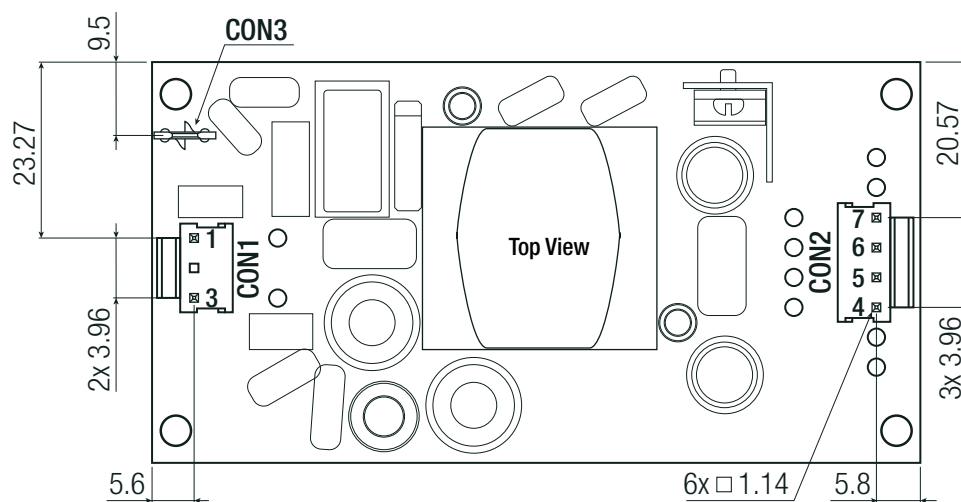
Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

# RACM60-K Series ◇ AC/DC Power Supply

60W ◇ Input: 100V-240VAC or 100V-277VAC

## DIMENSION & PHYSICAL CHARACTERISTICS

Dimension Drawing “/OF/2x4” (mm)



### Connector Information

#	Function	Terminal
<b>AC Input (CON1)</b>		
1	VAC in (N)	3 Pins (Pin2 removed)
3	VAC in (L)	with 3.96mm pitch
<b>DC Output (CON2)</b>		
4, 5	-VDC out	4 Pins
6, 7	+VDC out	with 3.96mm pitch
<b>FE (CON3)</b>		
8	functional earth	fast on

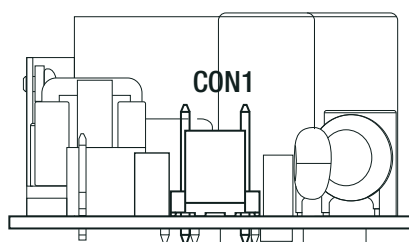
FC= fixing centers

Compatible connector please refer to “/OF” drawing

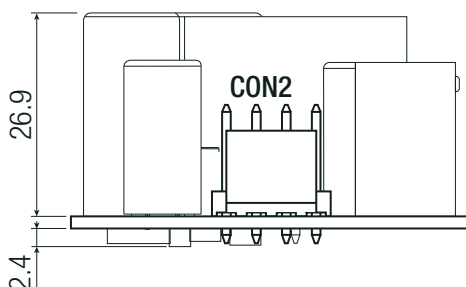
### Compatible Connector

<b>Housing</b>
Molex 41695 Series or equivalent
<b>Crimp Terminal</b>
Molex 2478 Series or equivalent

AC Input Side



DC Output Side



### General tolerances according to ISO 2768-m (table for reference only)

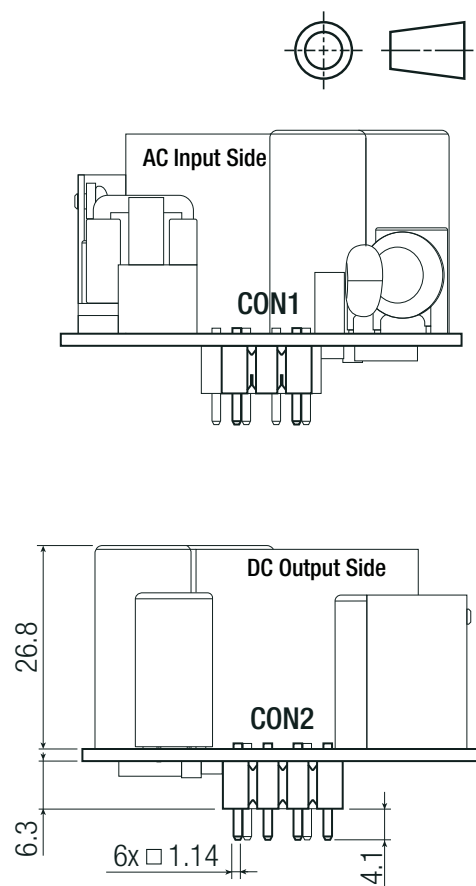
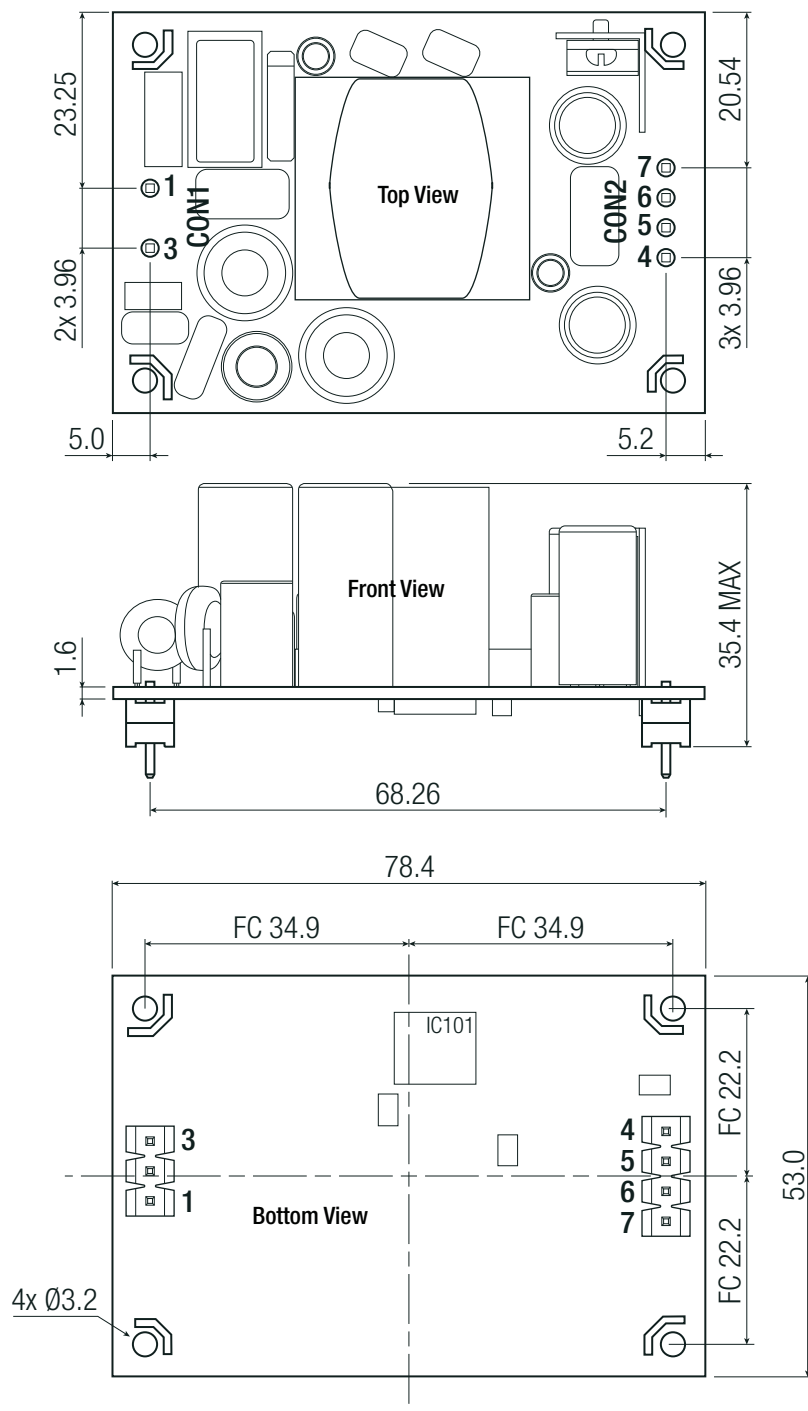
Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

# RACM60-K Series ◇ AC/DC Power Supply

## 60W ◇ Input: 100V-240VAC or 100V-277VAC

### DIMENSION & PHYSICAL CHARACTERISTICS

Dimension Drawing "/OF/PCB" (mm)



#### Connector Information

#	Function	Terminal
<b>AC Input (CON1)</b>		
1	VAC in (N)	3 Pins (Pin2 removed)
3	VAC in (L)	with 3.96mm pitch
<b>DC Output (CON2)</b>		
4, 5	-VDC out	4 Pins
6, 7	+VDC out	with 3.96mm pitch

FC= fixing centers

Color of the connector may alternatively appear black or white related to the batch of product

#### General tolerances according to ISO 2768-m (table for reference only)

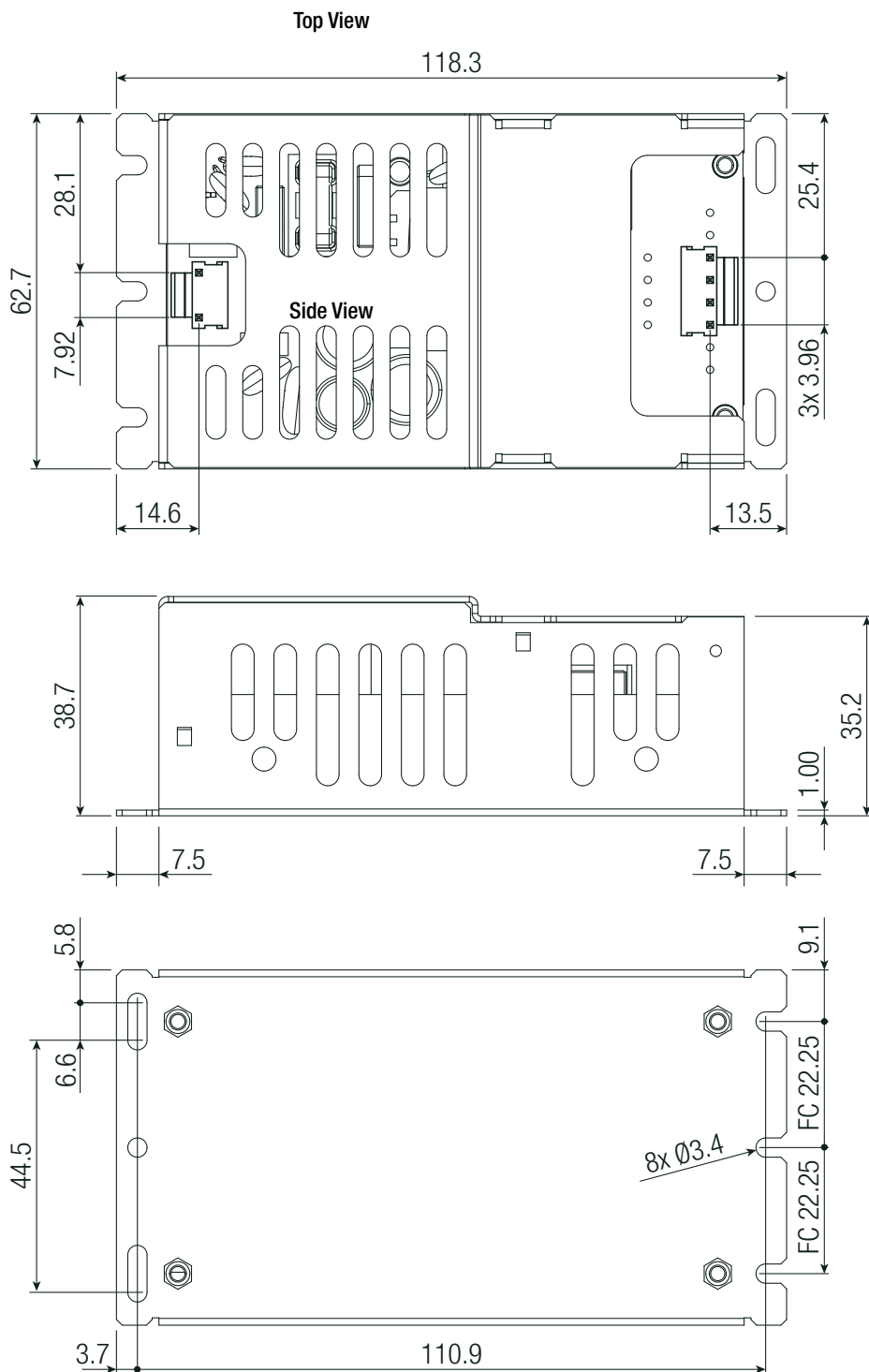
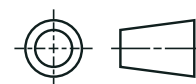
Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

# RACM60-K Series ◇ AC/DC Power Supply

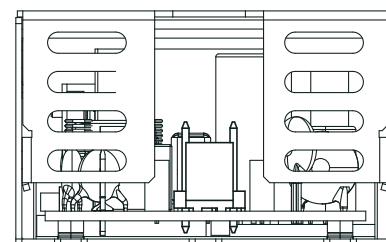
## 60W ◇ Input: 100V-240VAC or 100V-277VAC

### DIMENSION & PHYSICAL CHARACTERISTICS

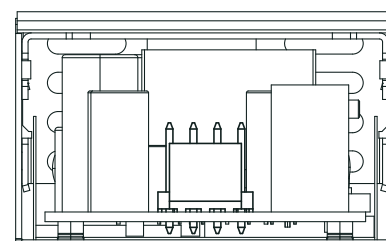
Dimension Drawing "/ENC" (mm)



AC Input Side



DC Output Side


General tolerances according to ISO 2768-m  
(table for reference only)

Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

### Connector Information

#	Function	Terminal
<b>AC Input (CON1)</b>		
1	VAC in (N)	3 Pins (Pin2 removed)
3	VAC in (L)	with 3.96mm pitch
<b>DC Output (CON2)</b>		
4, 5	-VDC out	4 Pins
6, 7	+VDC out	with 3.96mm pitch

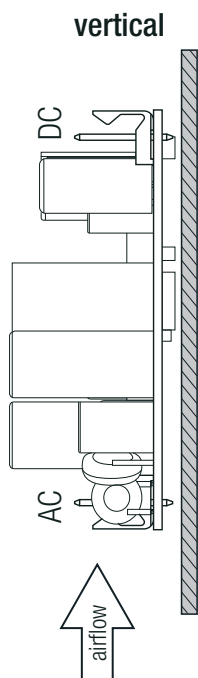
FC= fixing centers

# RACM60-K Series ◇ AC/DC Power Supply

60W ◇ Input: 100V-240VAC or 100V-277VAC

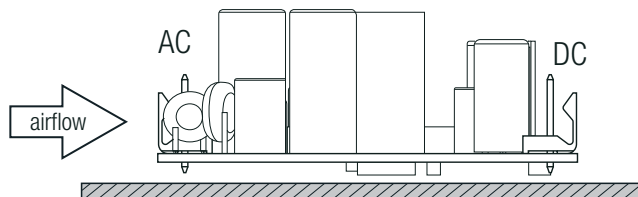
## INSTALLATION AND APPLICATION

### Mounting



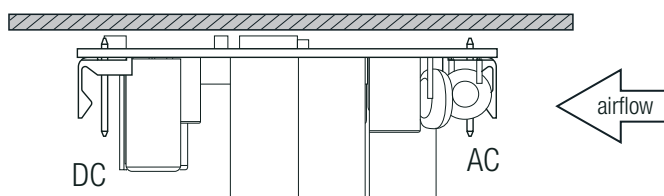
### Installation Instructions

#### horizontal (standard)



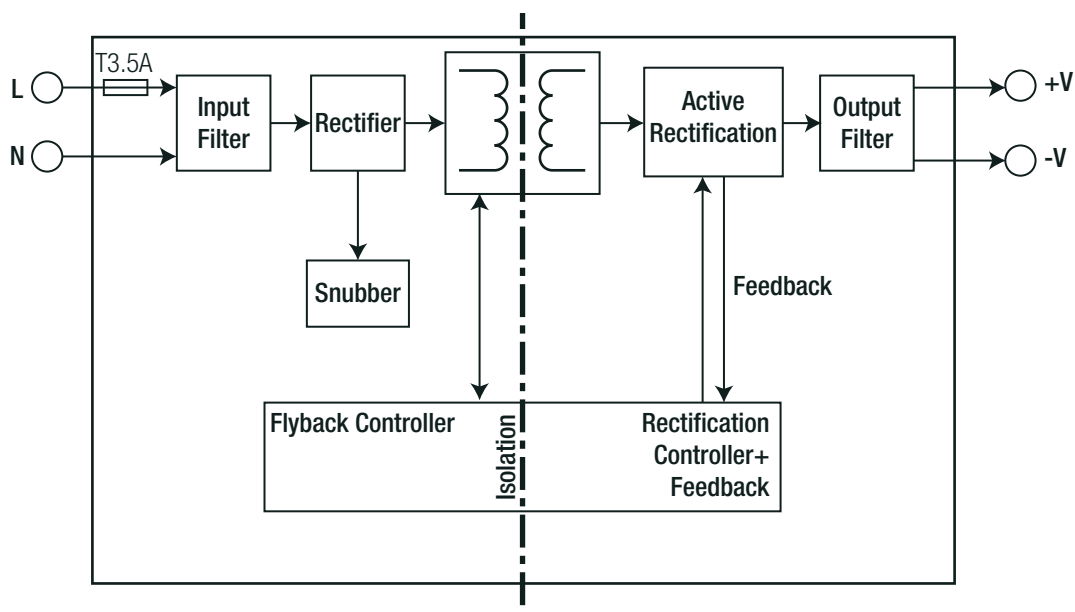
If module is mounted vertical or upside-down with natural convection cooling, the power must be derated  $\geq 10\%$ .

#### upside-down



## BLOCK DIAGRAM

### Blockdiagram (“/OF”, “/277/OF” and “/OF/PCB”)

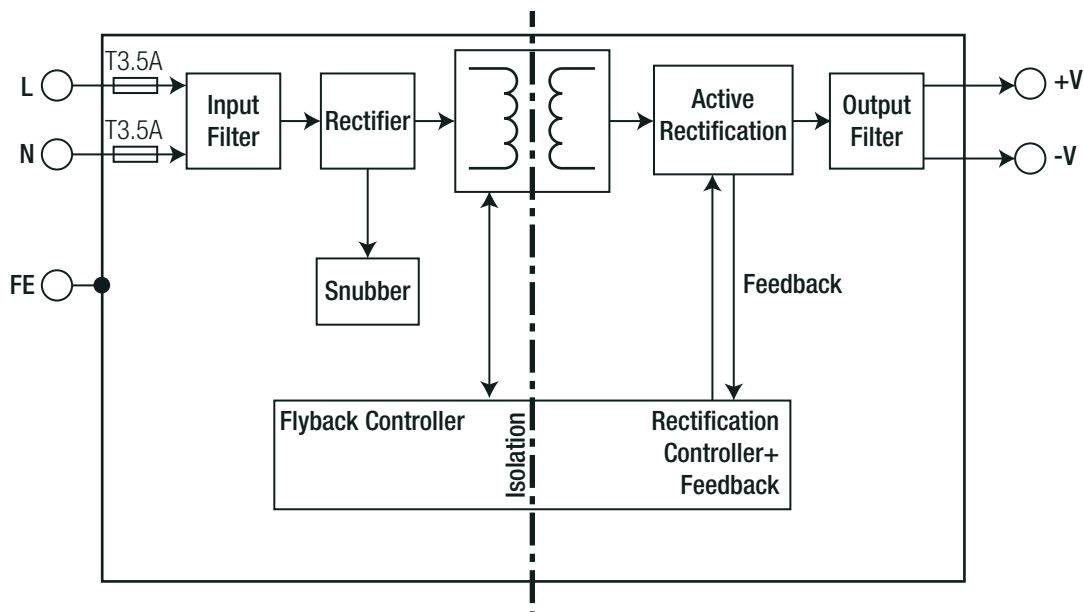


# RACM60-K Series $\diamond$ AC/DC Power Supply

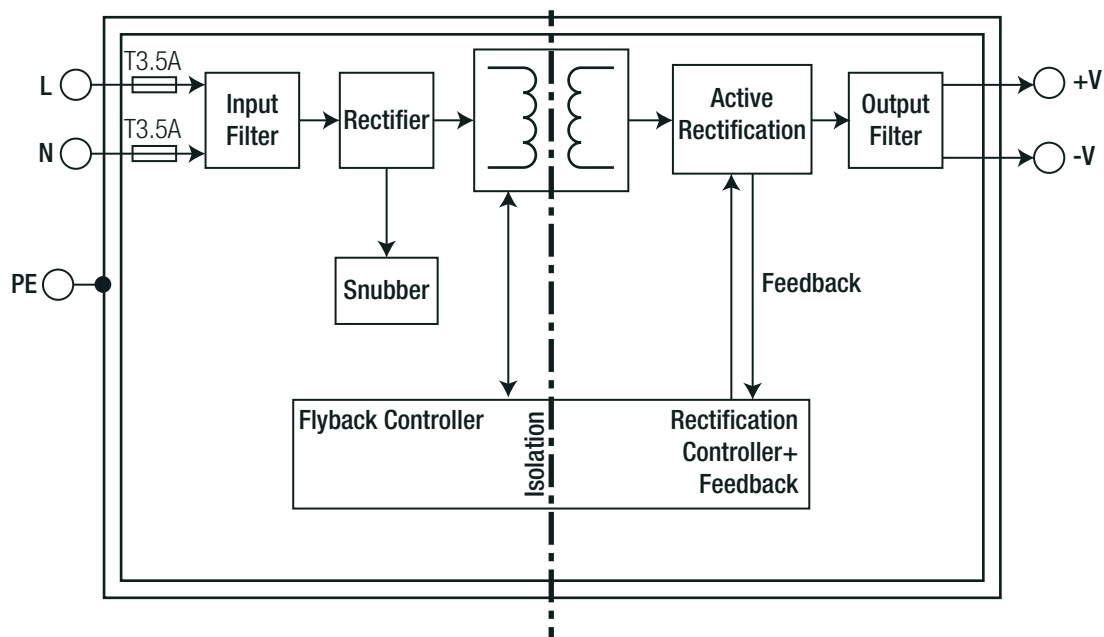
60W  $\diamond$  Input: 100V-240VAC or 100V-277VAC

## BLOCK DIAGRAM

Blockdiagram ("OF/2x4")



Blockdiagram ("ENC/2x4")



# RACM60-K Series ◇ AC/DC Power Supply

## 60W ◇ Input: 100V-240VAC or 100V-277VAC



### PACKAGING INFORMATION

Parameter	Type		Value
Packaging Dimension (LxWxH)	"/OF" type	cardboard box (single pack)	65.0 x 55.0 x 95.0mm
	"/OF/2x4" type		65.0 x 50.0 x 110.0mm
	"/277/OF-T" type	single tray (carton)	215.0 x 365.0 x 62.0mm
	"/OF/PCB-T" type		365.0 x 210.0 x 56.0mm
	"/ENC/2x4" type		405.0 x 360.0 x 85.0mm
	"/OF-CTN" type	tray in carton (project pack)	375.0 x 220.0 x 245.0mm
Packaging Quantity	"/OF" type and "/OF/2x4" type		1pcs
	"/277/OF-T" and "/OF/PCB-T" type		12pcs
	"/ENC/2x4" type		18pcs
	"/OF-CTN" type, MOQ= 1152pcs		48pcs
Storage Temperature Range			-40°C to +90°C
Storage Humidity	non-condensing		95% max.

### ORDERING EXAMPLES

Part Number	Input Voltage Range [VAC]	Output Voltage nom. [VDC]	Size	Type	Connection	Quantity	Packaging Type
RACM60-05SK/OF	80-264	5	2"x3"	open frame	standard connector	1pc	cardboard box
RACM60-24SK/OF/PCB-T	80-264	24	2"x3"	open frame	PCB mounting pins	12pcs	tray
RACM60-12SK/OF/2x4	80-264	12	2"x4"	open frame	standard connector	1pc	cardboard box
RACM60-05SK/277/OF-T	80-305	5	2"x3"	open frame	standard connector	12pcs	tray
RACM60-24SK/ENC/2x4	80-264	24	2"x4"	enclosed	standard connector	18pcs	tray
RACM60-12SK/OF-CTN	80-264	12	2"x4"	open frame	standard connector	48pcs (MOQ= 1152pcs)	carton

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