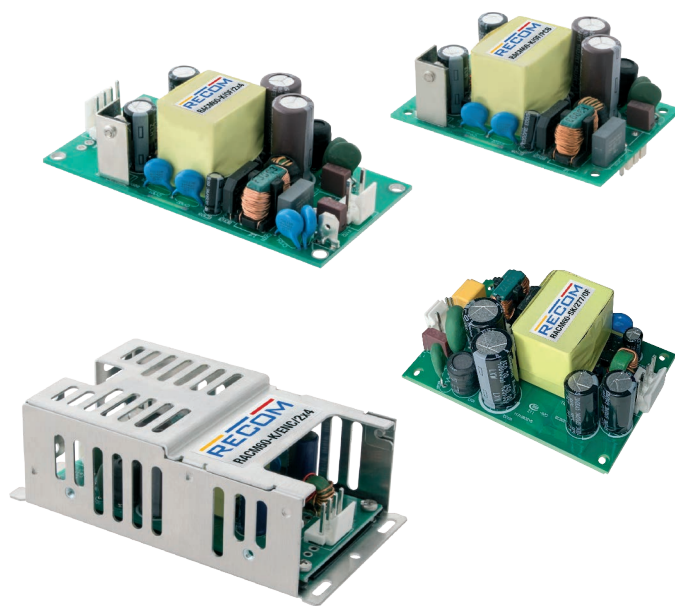


RACM60-K Series ◇ AC/DC Power Supply

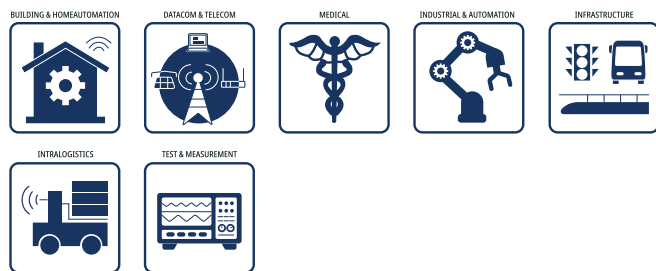
60W ◇ Input: 100V-240VAC or 100V-277VAC

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. ⁽¹⁾ [%]	Output Power continuous [W]
RACM60-05SK ^(3, 4, 5)	80-264 / 80-305	5	8000	89	40
RACM60-12SK ^(3, 4, 5)	80-264 / 80-305	12	5000	90	60
RACM60-15SK ^(3, 4, 5)	80-264 / 80-305	15	4000	90	60
RACM60-24SK ^(3, 4, 5)	80-264 / 80-305	24	2500	90	60
RACM60-36SK ^(3, 4)	80-264	36	1667	90	60
RACM60-48SK ^(3, 4, 5)	80-264 / 80-305	48	1250	90	60

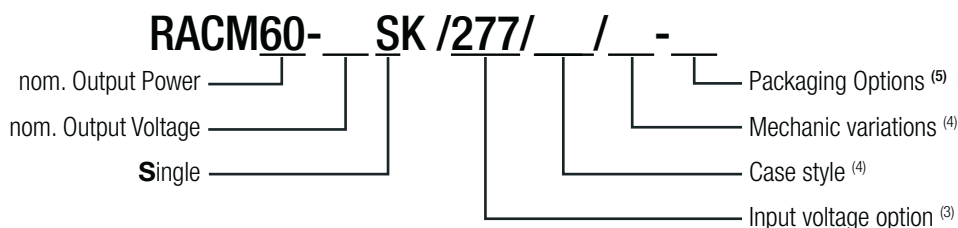
Note1: Efficiency is tested at nominal input (230VAC) and full load at +25°C ambient

Note2: Measured @ T_{AMB} = 25°C, nom. V_{IN}, 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**“ ⁽⁵⁾

For more information, refer to „**Input Voltage Range**“ ^(6, 7)

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

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

ORDERING INFORMATION ⁽⁵⁾

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_{AMB}= 25°C, nom. V_{IN}, 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 ^(6, 7)	standard version	47-63Hz DC	80VAC 120VDC		264VAC 370VAC
	"/277" version	47-63Hz DC	80VAC 120VDC		305VAC 430VAC
Input Current	V _{IN} = 115VAC V _{IN} = 230VAC V _{IN} = 277VAC				1400mA 600mA 500mA
Inrush Current	cold start at 25°C	V _{IN} = 115VAC V _{IN} = 230VAC V _{IN} = 277VAC			30A 60A 70A
ErP Standby Mode Conformity (Output Load Capability)	V _{IN} = 115/230/277VAC	Input Power:	0.5W 1.0W	0.3W 0.7W	
No Load Power Consumption	V _{IN} = 230VAC V _{IN} = 277VAC			100mW 120mW	
Input Frequency Range	AC Input		47Hz		63Hz
Minimum Load			0%		
Power Factor	V _{IN} = 115VAC V _{IN} = 230VAC V _{IN} = 277VAC		0.6 0.5 0.45		
Start-up time				150ms	
Rise time	V _{IN} = 115VAC V _{IN} = 230VAC V _{IN} = 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)

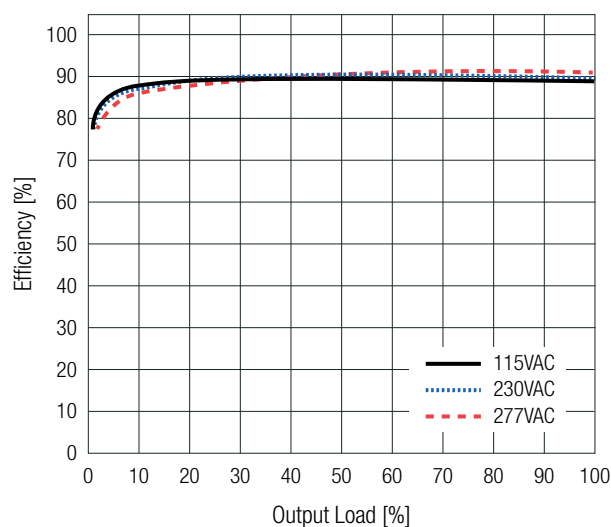
Parameter	Condition	Min.	Typ.	Max.
Hold-up time	$V_{IN} = 115\text{VAC}$ $V_{IN} = 230\text{VAC}$ $V_{IN} = 277\text{VAC}$	12ms 50ms 70ms		
Internal Operating Frequency	100% load at nominal V_{IN}		100kHz	
Output Ripple and Noise ⁽⁸⁾	20MHz BW	5Vout others		200mVp-p 1% of Vout

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 μF MLCC & 10 μF 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)

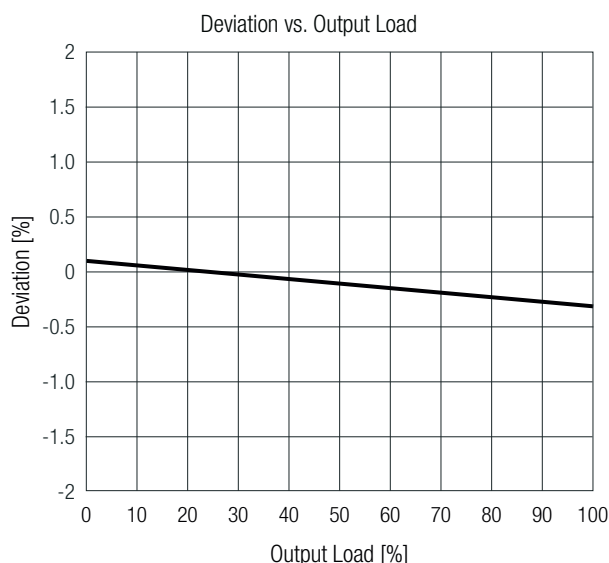
Parameter	Condition			Value
Output Accuracy	standard version		100% load	±2.0% typ.
	“/277” version		5Vout others	±3.0% typ. ±1.0% typ.
Line Regulation	standard version		low line to high line	±0.05% typ.
	“/277” version		5Vout others	±0.5% typ. ±0.05% typ.
Load Regulation ⁽⁹⁾	standard version	10% to 100% load	5VDC	±1.5% typ.
			12VDC, 15VDC 24VDC, 36VDC, 48VDC	±0.5% typ. ±0.1% typ.
	“/277” version	10% to 100% load	5VDC	±3.0% typ.
			12VDC, 15VDC 24VDC, 36VDC, 48VDC	±0.8% typ. ±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) ⁽¹⁰⁾	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) ⁽¹¹⁾	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 graphs below	-40°C to +85°C
Temperature Coefficient			±0.02%/K
Operating Altitude ⁽¹²⁾	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 ³ hours
		$T_{AMB} = +40^{\circ}\text{C}$	>726 x 10 ³ hours
Design Lifetime	nom. $V_{IN} = 230\text{VAC}$	$T_{AMB} = +40^{\circ}\text{C}$	>42 x 10 ³ 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

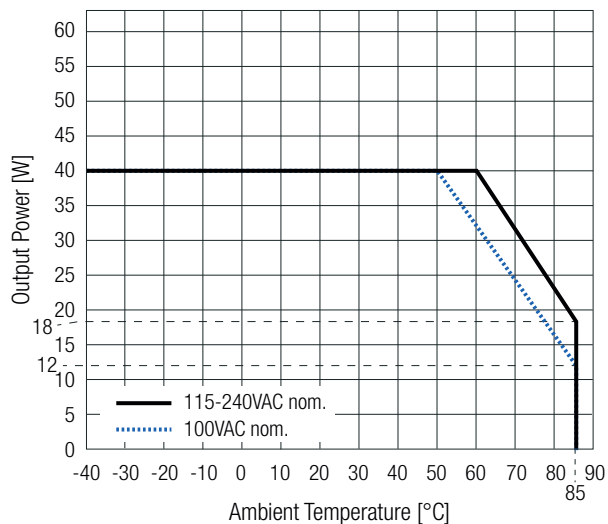
ENVIRONMENTAL (measured @ $T_{AMB} = 25^{\circ}\text{C}$, nom. V_{IN} , full load and after warm-up unless otherwise stated)

Derating Graph non-/277/OF Versions

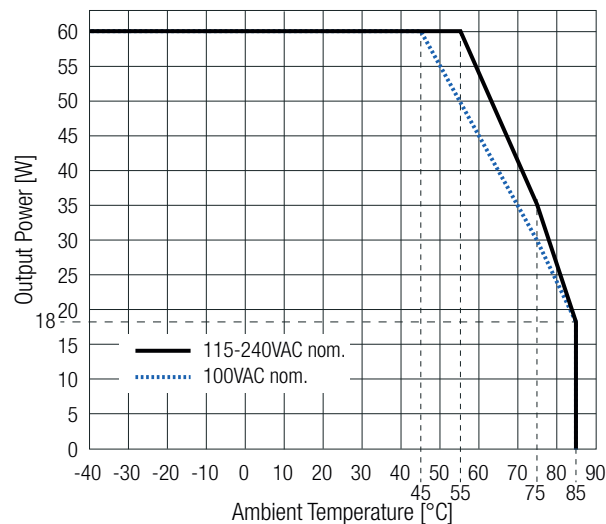
(@ Chamber and natural convection 0.1m/s)

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

RACM60-05SK



other

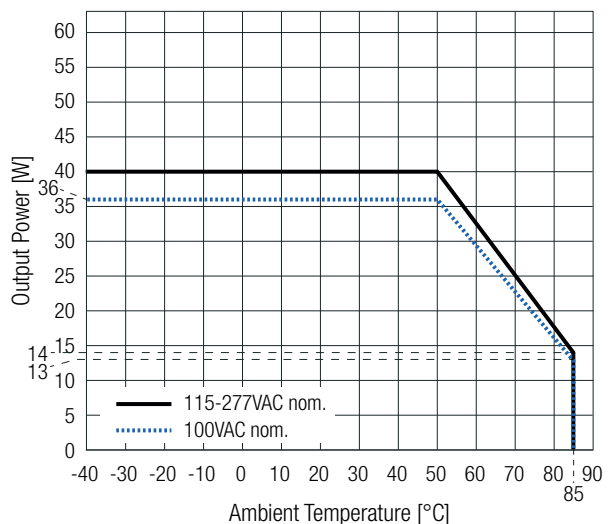


Derating Graph "/277/OF" Versions

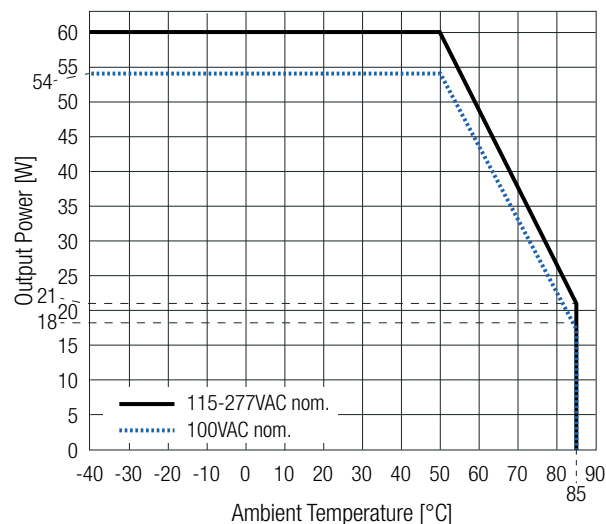
(@ Chamber and natural convection 0.1m/s)

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
Audio/Video, information and communication technology equipment - Part1: Safety requirements 2nd Edition (CB Scheme)	CN21PMDW-002	IEC62368-1:2014 2nd Edition
Audio/Video, information and communication technology equipment - Part1: Safety requirements 2nd Edition (LVD)		EN62368-1:2014+A11:2017
Audio/Video, information and communication technology equipment - Part1: Safety requirements 3rd Edition (UL)	E518942-A6002-UL (RACM60-12SK/ ENC/2x4 only)	UL62368-1:2019 3rd Edition CAN/CSA-C22.2 No. 62368-1-19 3rd Edition
Audio/Video, information and communication technology equipment - Part1: Safety requirements 4th Edition (CB Scheme)	CN255MQZ-001	IEC62368-1:2023 4th Edition
Audio/Video, information and communication technology equipment - Part1: Safety requirements 4th Edition		EN IEC 62368-1:2024
Medical electrical equipment Part 1: General requirements for basic safety and essential performance (UL)	E511305-D6004-UL	ANSI/AAMI ES60601-1:2005+A2:2021 Edition 3.2 CAN/CSA-C22.2 No. 60601-1-14+A2:2022 Edition 3.2
Household and similar electrical appliances – Safety – Part 1: General requirements (CB Scheme)	4943297.50	IEC60335-1:2010+A2:2016 5th Edition
Household and similar electrical appliances – Safety – Part 1: General requirements (LVD)		EN60335-1:2012+A16:2023
Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure (LVD)	4943297.50	EN62233:2008
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V 2nd Edition (CB Scheme)	50355750 002 (except "/277/OF modes")	IEC61558-1:2005+A1:2009 2nd Edition
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V 2nd Edition (LVD)		EN61558-1:2005+A1:2009
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+A1:2013 1st Edition
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V Part 2: Particular requirements(LVD)		EN61558-2-16:2009+A1:2013
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V 3rd Edition	CN255MQY-001 (except "/277/OF modes")	IEC61558-1:2017 3rd Edition
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V Part 2: Particular requirements		IEC61558-2-16:2021 2nd Edition
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V 3rd Edition (CB Scheme)	085-210569701- 100 ("/277/OF modes" only)	IEC61558-1:2017 3rd Edition
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V 3rd Edition (LVD)		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 (CB Scheme)		IEC61558-2-16:2009+A1:2013 1st Edition
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V Part 2: Particular requirements (LVD)		EN61558-2-16:2009+A1:2013
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V 3rd Edition (CB Scheme)	085-210569702- 000 ("/277/OF modes" only)	IEC61558-1:2017 3rd Edition
Safety of power transformers, power supplies, reactors and similar products for supply voltages up to 1100 V Part 2: Particular requirements (CB Scheme)		IEC61558-2-16:2021 2nd Edition
Standard for Class 2 Power Units (TÜV)	028-713283529- 000 (RACM60-12SK/ OF, RACM60-24SK/ OF only)	UL1310:2018/R:2020-06

RACM60-K Series ◇ AC/DC Power Supply

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

SAFETY & CERTIFICATIONS

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: $\pm 2, 4, 8, 15\text{kV}$ Contact: $\pm 2, 4, 8\text{kV}$	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

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

RACM60-K Series ◇ AC/DC Power Supply

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

SAFETY & CERTIFICATIONS

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

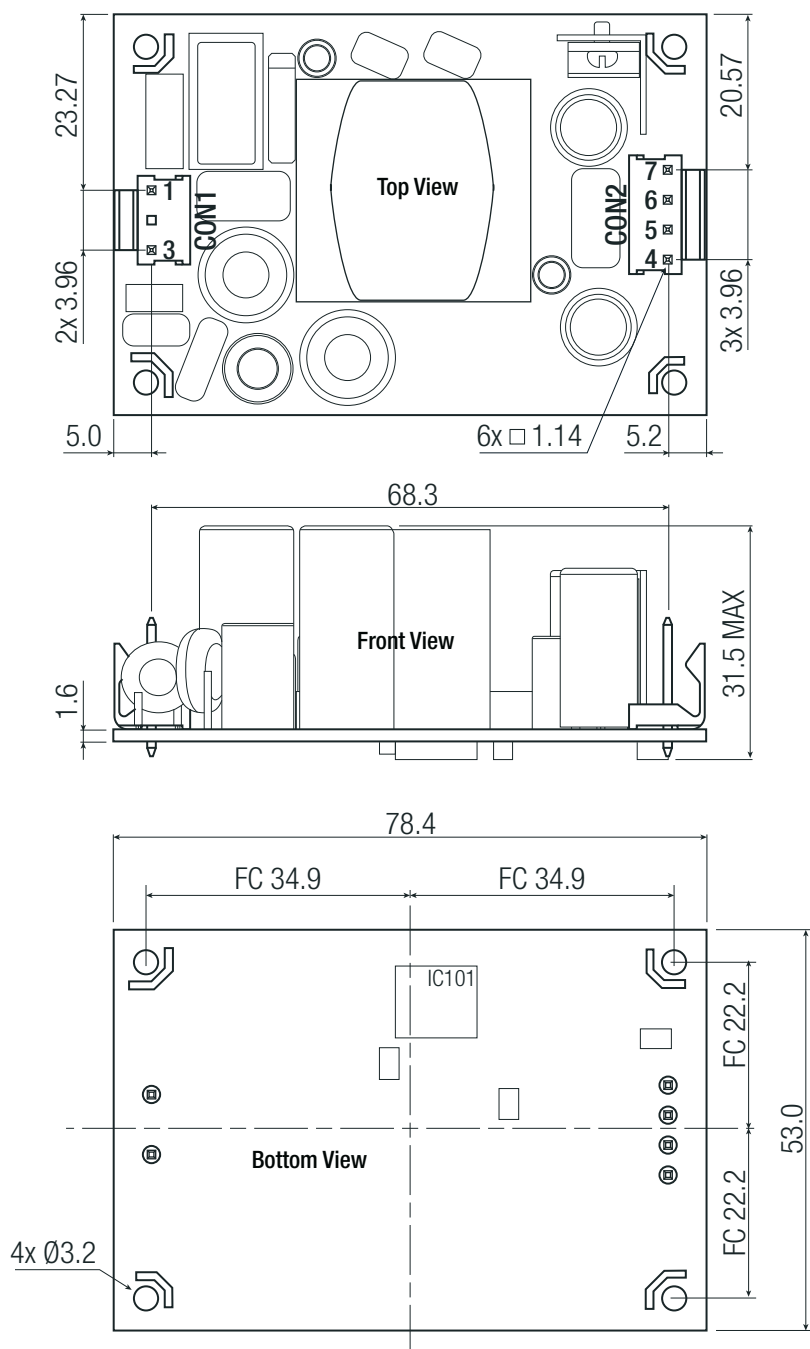
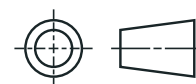
Parameter	Type	Value
Material	PCB	FR4, (UL94 V-0)
Dimension (LxWxH)	"/OF" and type	78.4 x 53.0 x 31.5mm
	"/277/OF" type	76.2 x 50.8 x 32.0mm
	"/OF/PCB" type	78.4 x 53.0 x 35.4mm
	"/OF/2x4" type	101.6 x 53.0 x 31.5mm
	"/ENC/2x4" type	118.3 x 62.7 x 38.7mm
Weight	"/OF", "/277/OF" and "/OF/PCB" types	111g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

RACM60-K Series ◇ AC/DC Power Supply

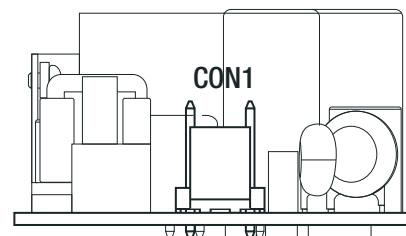
60W ◇ Input: 100V-240VAC or 100V-277VAC

DIMENSION & PHYSICAL CHARACTERISTICS

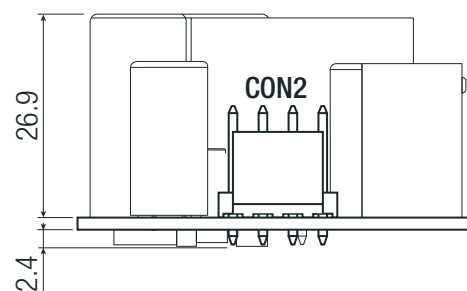
Dimension Drawing “/OF” (mm)



AC Input Side View



DC Output Side View



Connector Information - SINGLE/DUAL

#	Function	Terminal
AC Input (CON1)		
1	VAC in (N)	3 Pins (Pin2 removed)
3	VAC in (L)	with 3.96mm pitch
DC Output Connector (CON2)		
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)

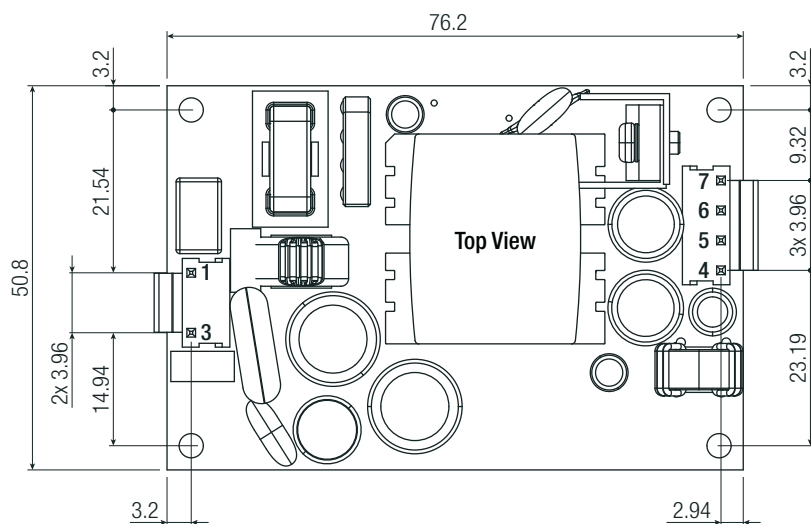
Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

RACM60-K Series ◇ AC/DC Power Supply

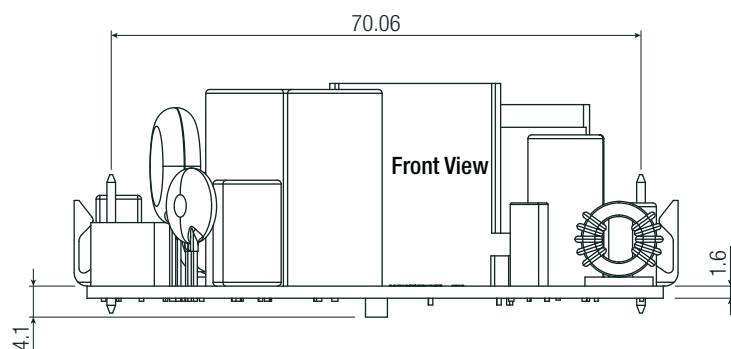
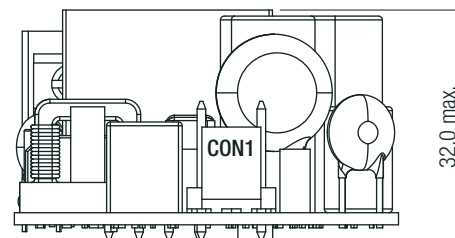
60W ◇ Input: 100V-240VAC or 100V-277VAC

DIMENSION & PHYSICAL CHARACTERISTICS

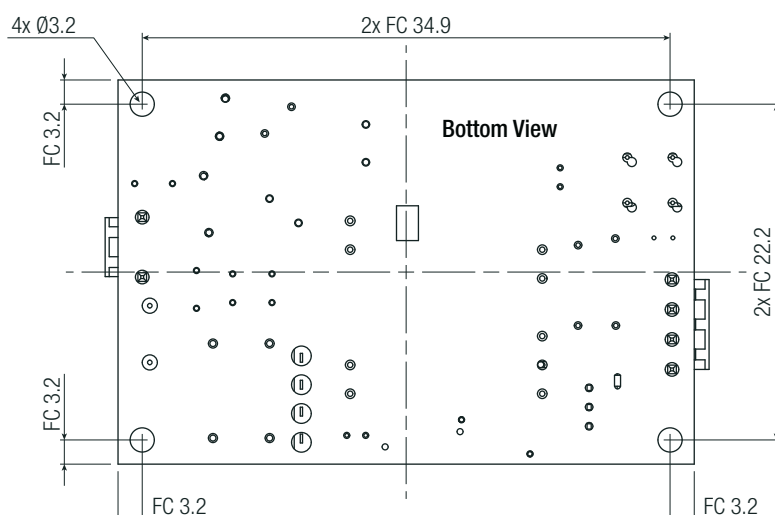
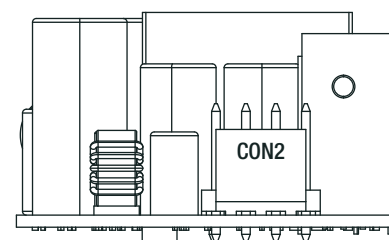
Dimension Drawing “/277/0F” (mm)



AC Input Side View



DC Output Side View



Connector Information

#	Function	Terminal
AC Input (CON1)		
1	VAC in (N)	3 Pins (Pin2 removed)
3	VAC in (L)	with 3.96mm pitch
DC Output (CON2)		
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)

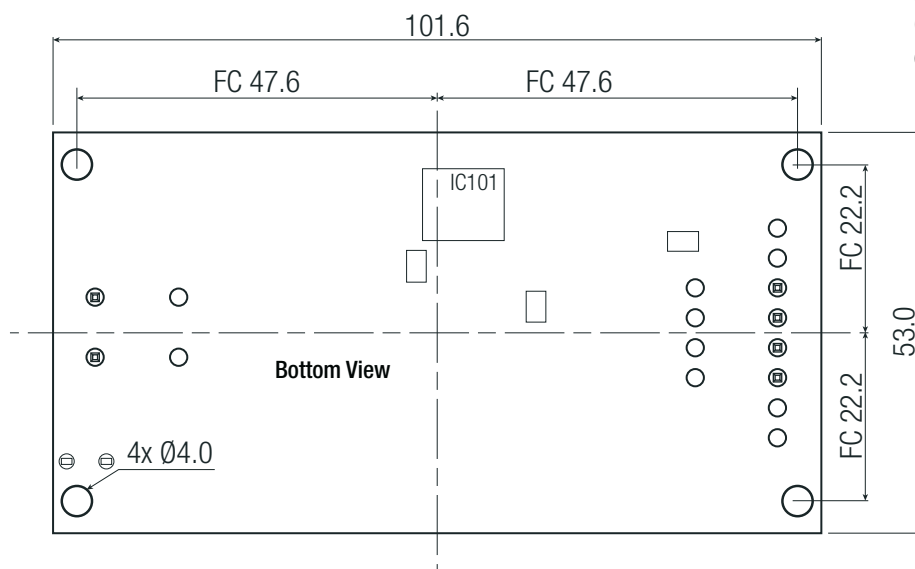
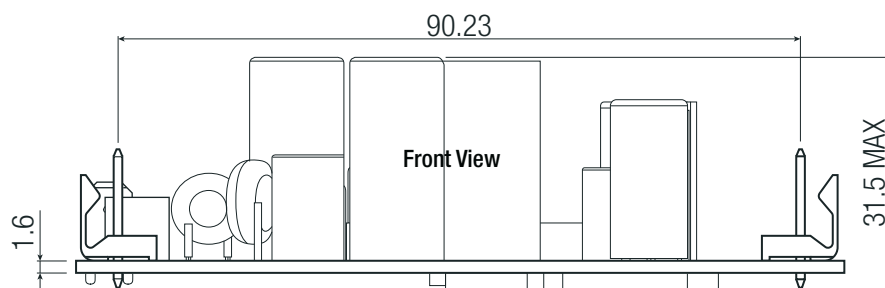
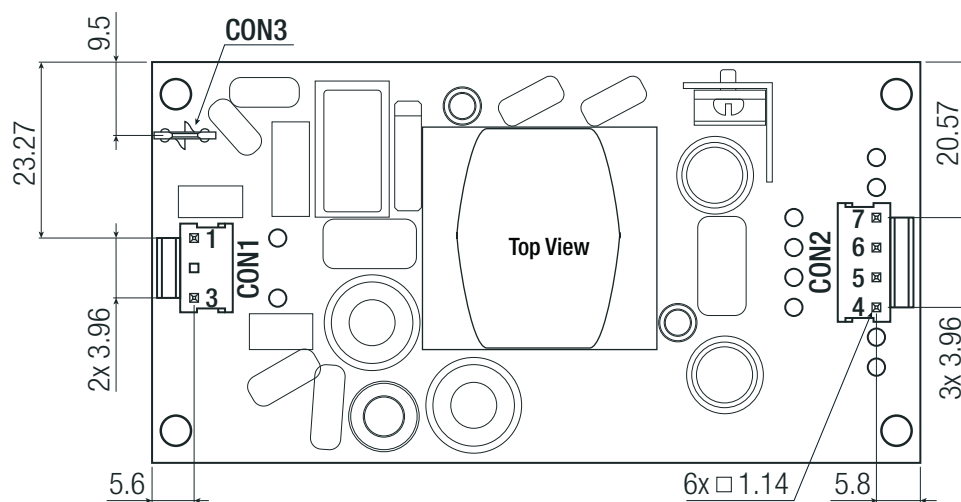
Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

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

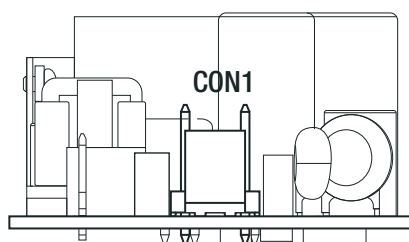
FC= fixing centers

Compatible connector please refer to “/OF” drawing

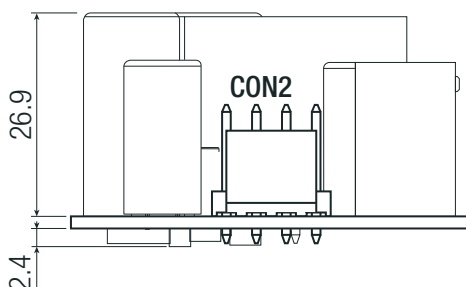
Compatible Connector

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

AC Input Side



DC Output Side



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

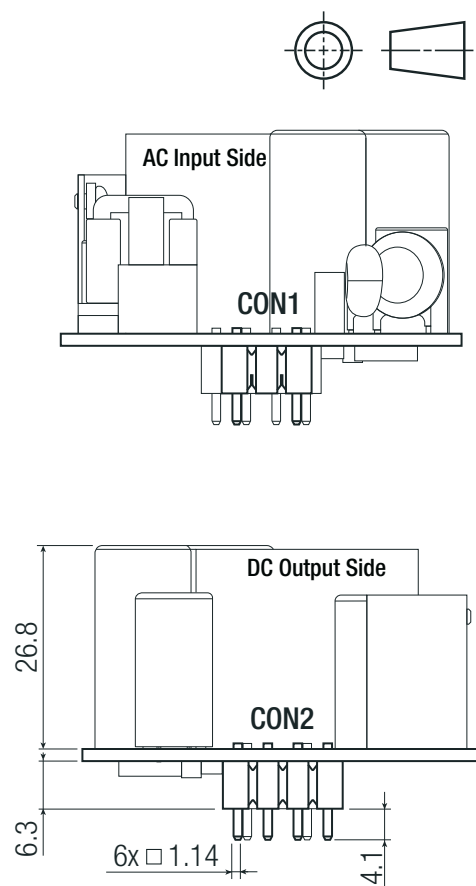
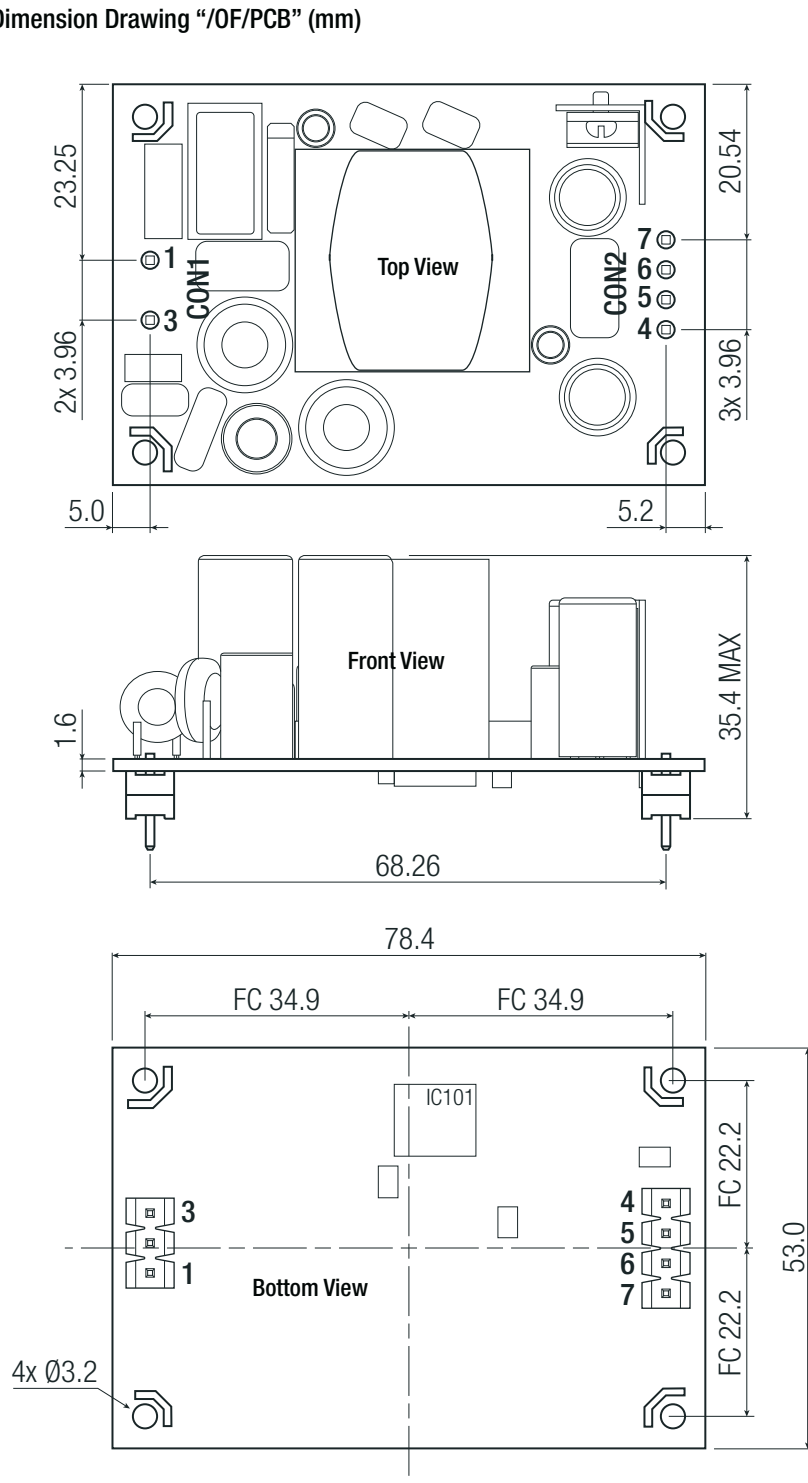
Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

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
AC Input (CON1)		
1	VAC in (N)	3 Pins (Pin2 removed)
3	VAC in (L)	with 3.96mm pitch
DC Output (CON2)		
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

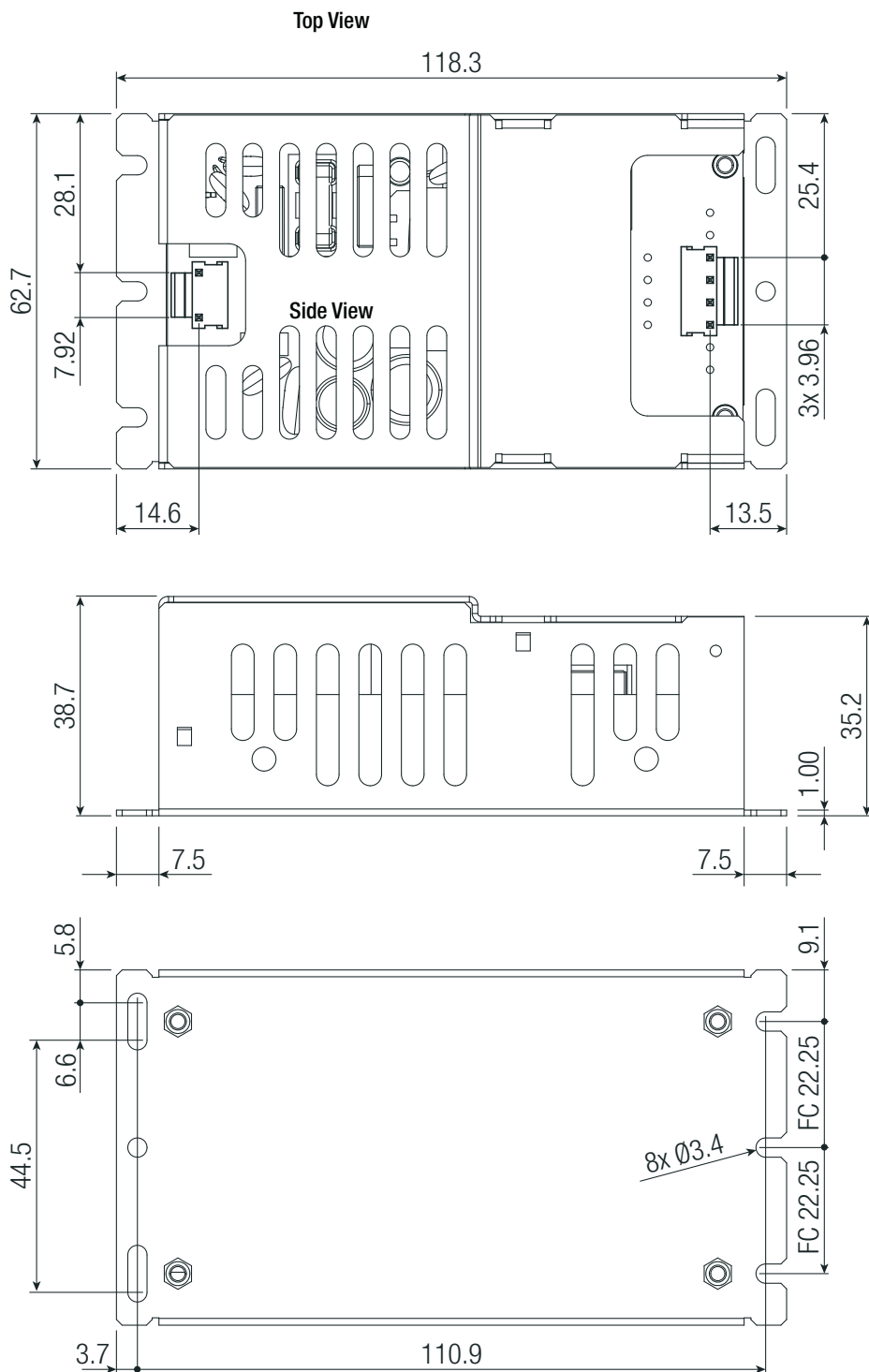
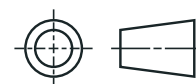
General tolerances according to ISO 2768-m (table for reference only)	
Dimension range	Tolerances
0.5 - 6 mm	±0.1 mm
6 - 30 mm	±0.2 mm
30 - 120 mm	±0.3 mm
120 - 400 mm	±0.5 mm

RACM60-K Series ◇ AC/DC Power Supply

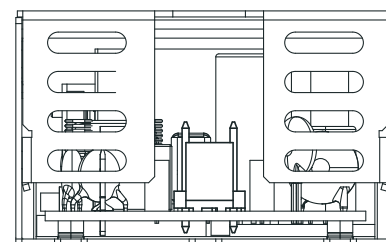
60W ◇ Input: 100V-240VAC or 100V-277VAC

DIMENSION & PHYSICAL CHARACTERISTICS

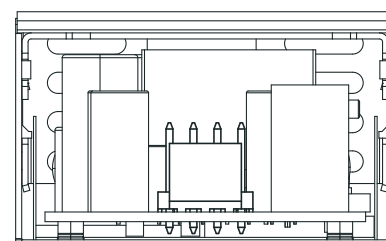
Dimension Drawing "/ENC" (mm)



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

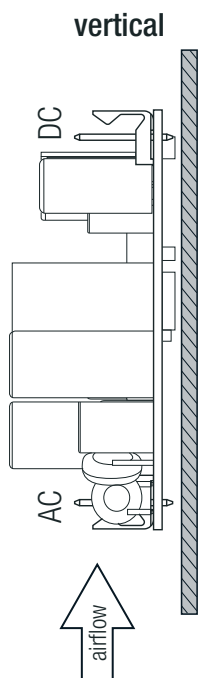
FC= fixing centers

RACM60-K Series ◇ AC/DC Power Supply

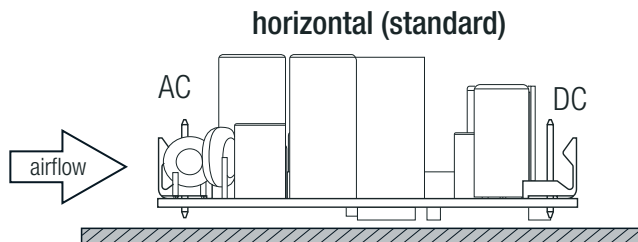
60W ◇ Input: 100V-240VAC or 100V-277VAC

INSTALLATION AND APPLICATION

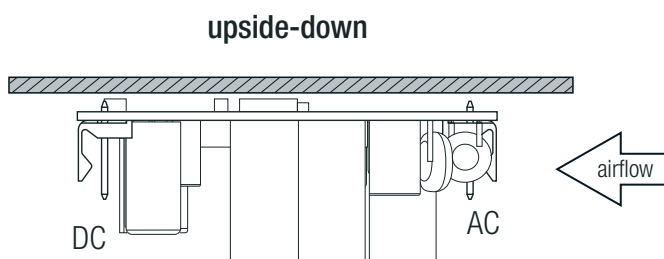
Mounting



Installation Instructions

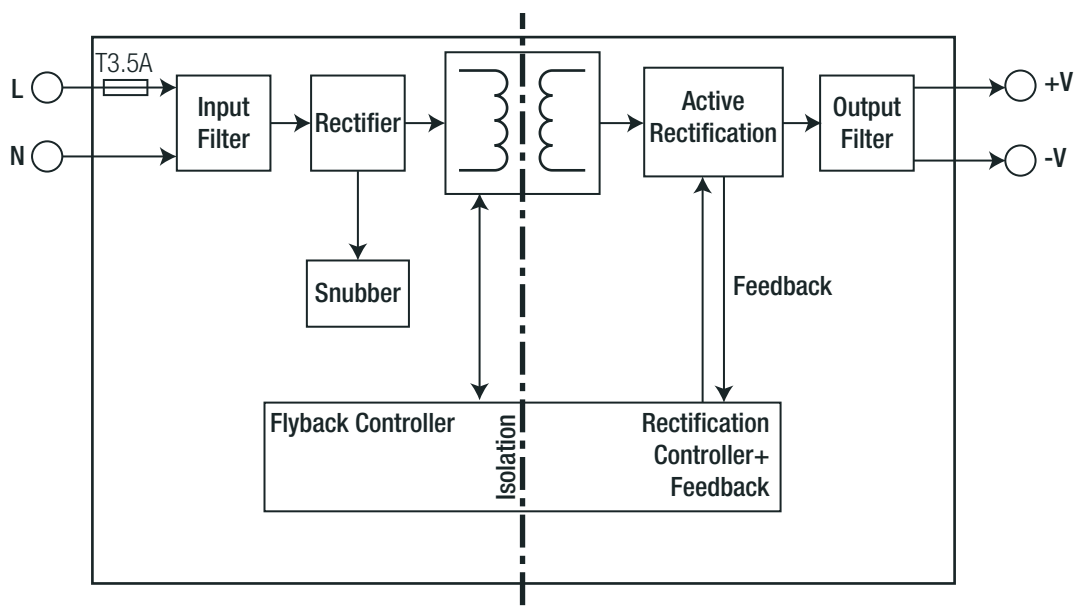


If module is mounted vertical or upside-down with natural convection cooling, the power must be derated $\geq 10\%$.



BLOCK DIAGRAM

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

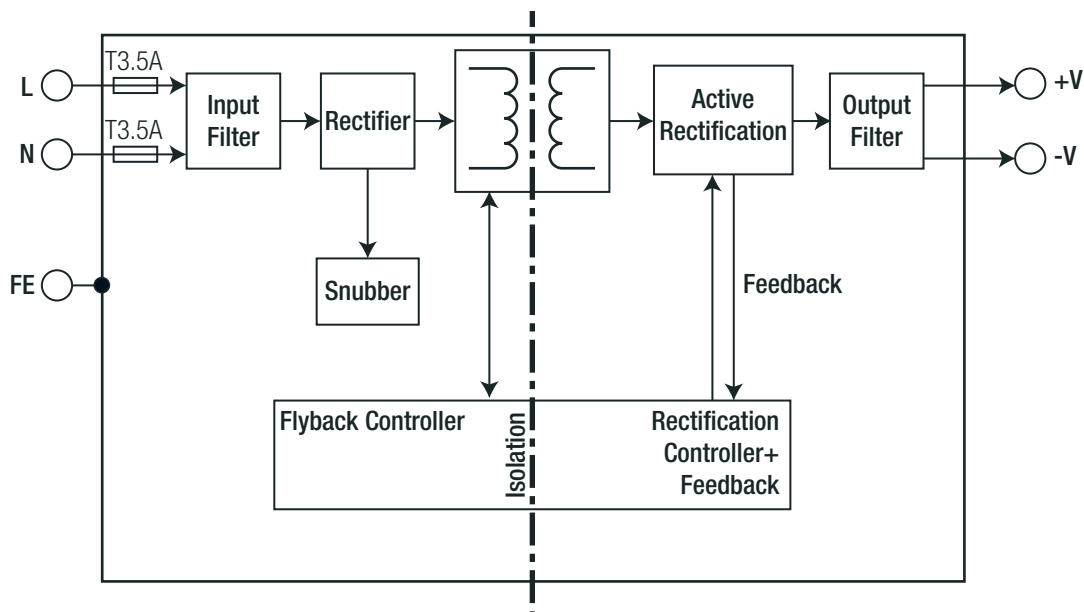


RACM60-K Series \diamond AC/DC Power Supply

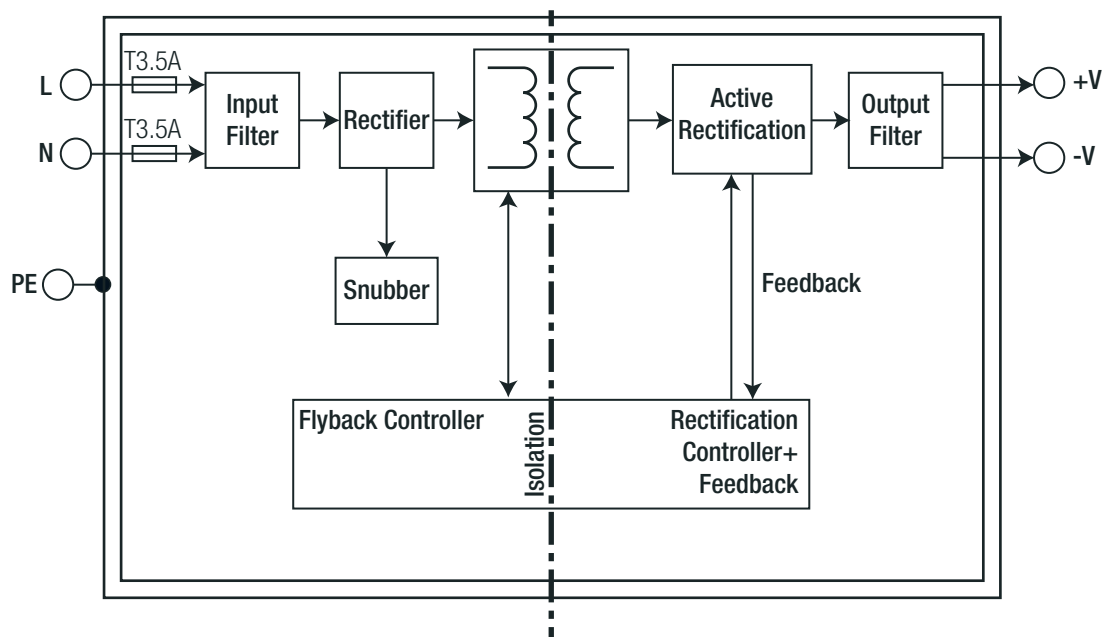
60W \diamond Input: 100V-240VAC or 100V-277VAC

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

The product information and specifications may be subject to changes even without prior written notice. The product has been designed for various applications; its suitability lies in the responsibility of each customer. The products are not authorized for use in safety-critical applications without RECOM's explicit written consent. A safety-critical application is an application where a failure may reasonably be expected to endanger or cause loss of life, inflict bodily harm or damage property. The applicant shall indemnify and hold harmless RECOM, its affiliated companies and its representatives against any damage claims in connection with the unauthorized use of RECOM products in such safety-critical applications.