

Features

Regulated Converter

- Input Range: 80-264VAC or 80-305VAC
- Temperature rang: -40 to +85°C with derating
- Over voltage category OVC III
- 2MOPP medical certified B and BF compliant
- Class B EMC filter built-in
- 4000/5000m (medical/ITE) operating altitude



RACM60-K

60 Watt



Open Frame

2"x3" & 2"x4"

Enclosed 2"x4"



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/IEC 60601-1 medical safety and EN 60601-1-2 medical EMC certifications and offers 4kVAC/1 min isolation, 2MOPP and designed to meet B and BF requirements. 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.

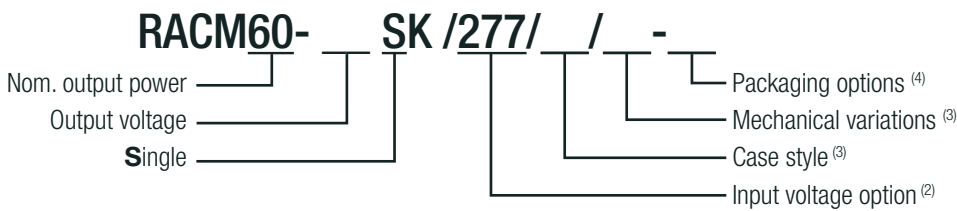
Selection Guide

| Part Number | Input Voltage Range [VAC] | Output Voltage [VDC] | Output Current [mA] | Output Power [W] | Efficiency typ. (1) [%] |
|-----------------------|---------------------------|----------------------|---------------------|------------------|-------------------------|
| RACM60-05SK (2, 3, 4) | 80-264/ 80-305 | 5 | 8000 | 40 | 89 |
| RACM60-12SK (2, 3, 4) | 80-264/ 80-305 | 12 | 5000 | 60 | 90 |
| RACM60-15SK (2, 3, 4) | 80-264/ 80-305 | 15 | 4000 | 60 | 90 |
| RACM60-24SK (2, 3, 4) | 80-264/ 80-305 | 24 | 2500 | 60 | 90 |
| RACM60-36SK (2, 3) | 80-264 | 36 | 1667 | 60 | 90 |
| RACM60-48SK (2, 3, 4) | 80-264/ 80-305 | 48 | 1250 | 60 | 90 |

Notes:

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

Model Numbering



Notes:

Note2: Add suffix "/277/OF" for wider input voltage range (80-305VAC) without suffix= standard input range (80-264VAC), check "Model Matrix (4)" For more information, refer to "Input Voltage Range (5,6)"

Note3: "/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

Note4: for packaging details refer to last page "PACKAGING INFORMATION"

| 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

IEC/EN62368-1 certified
 ANSI/AAMI ES60601-1 Ed. 3.1 certified
 CSA/CAN-C22.2 No. 60601-1:14 certified
 IEC/EN60335-1 certified
 IEC/EN61558-1 certified
 IEC/EN61558-2-16 certified
 EN60601-1-2 compliant
 EN55032 compliant
 EN55035 compliant
 CB Report

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

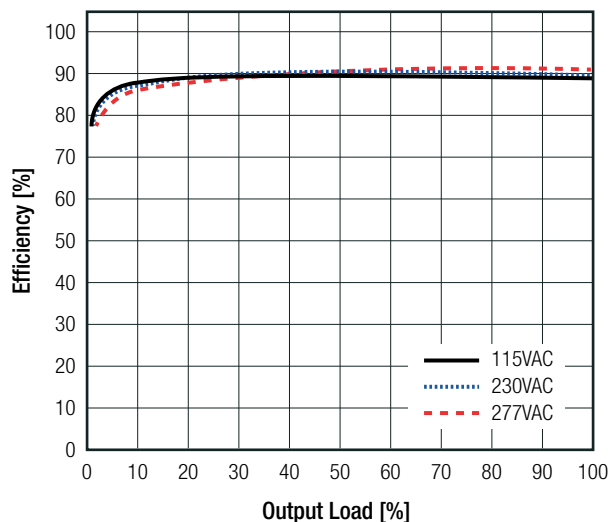
BASIC CHARACTERISTICS

| 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 ^(5,6) | standard version | 47-63Hz DC | 80VAC 120VDC | | 264VAC 370VDC |
| | "/277" version | 47-63Hz DC | 80VAC 120VDC | | 305VAC 430VDC |
| Input Current | 115VAC 230VAC 277VAC | | | | 1400mA 600mA 500mA |
| Inrush Current | cold start | 115VAC 230VAC 277VAC | | | 30A 60A 70A |
| ErP Standby Mode Conformity (Output Load Capability) | 115/230/277VAC | Input Power: | 0.5W 1.0W | 0.3W 0.7W | |
| No load Power Consumption | 230VAC 277VAC | | | 100mW 120mW | |
| Input Frequency Range | AC Input | | 47Hz | | 63Hz |
| Minimum Load | | | 0% | | |
| Power Factor | 115VAC 230VAC 277VAC | | 0.6 0.5 0.45 | | |
| Start-up Time | | | | 150ms | |
| Rise Time | | | | 100ms | |
| Hold-up Time | 115VAC 230VAC 277VAC | | 12ms 50ms 70ms | | |
| Internal Operating Frequency | 100% load at nominal Vin | | | 100kHz | |
| Output Ripple and Noise ⁽⁷⁾ | 20MHz BW | 5Vout others | | | 200mVp-p 1% of Vout |

Notes:

- Note5: The products were submitted for safety files at AC-Input operation (90-264VAC)
- Note6: Output power derating for Line-input of less than 90VAC (derate linearly from 100% at 90VAC to 80% at 80VAC)
- Note7: Measurements are made with a 0.1µF MLCC & 10µF E-cap in parallel across output. (low ESR)

Efficiency vs. Load



Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

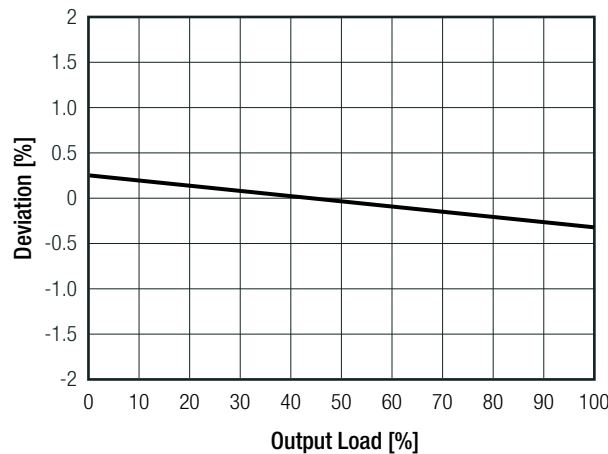
REGULATIONS

| 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 ⁽⁸⁾ | standard version | 10% to 100% load | 5VDC 12VDC, 15VDC 24VDC, 36VDC, 48VDC ±1.5% typ. ±0.5% typ. ±0.1% typ. |
| | “/277” version | 10% to 100% load | 5VDC 12VDC, 15VDC 24VDC, 36VDC, 48VDC ±3.0% typ. ±0.8% typ. ±0.2% typ. |
| Transient Response | 25% load step change | | 3.0% max. |
| | recovery time | | 500µs max. |

Notes:

Note8: Operation below 10% load will not harm the converter, but specifications may not be met

Deviation vs. Load



PROTECTIONS

| 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) ⁽⁹⁾ | according to 62368-1, 61558-2-16 & 60335-1 | OVCII |
| | according to 61558-2-16 | OVCIII (up to 2000m) |
| Over Current Protection (OCP) | | 130% - 180%, hiccup mode |
| Thermal Shutdown | TC point IC 101 | +130°C, restart after cool down |

Notes:

Note9: RACM60-xxK/277/OF models were submitted to safety agency for OVC III rating.

continued on next page

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

| Parameter | Type | | | Value |
|--|---------------------------------------|------------|----------------------|------------|
| Class of Equipment | | | | Class II |
| Isolation Voltage (safety certified) ⁽¹⁰⁾ | 1 minute | I/P to O/P | according to 60601-1 | 4.8kVAC |
| Isolation Resistance | I/P to O/P, V _{iso} = 500VDC | | | 1GΩ min. |
| Isolation Capacitance | I/P to O/P, 100kHz/0.1V | | | 100pF max. |
| Insulation Grade | | | | reinforced |
| Means of Protection | 319VAC working voltage | | | 2MOPP |

Notes:

Note10: For repeat Hi-Pot testing, reduce the time and/or the test voltage

ENVIRONMENTAL

| 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 ⁽¹¹⁾ | according to 62368-1, 61558-2-16 & 60335-1 | | 5000m |
| | according to 60601-1 | | 4000m |
| Operating Humidity | non-condensing | | 95% max. |
| Pollution Degree | | | PD2 |
| Vibration | according to MIL-STD-202G | | 10-500Hz, 2G 10min./1cycle, period 60min. along x,y,z axes |
| MTBF | according to MIL-HDBK-217F, G.B. | +25°C | >900 x 10 ³ hours |
| | | +40°C | >726 x 10 ³ hours |
| Design Lifetime | nom. Vin= 230VAC | +40°C | >42 x 10 ³ hours |

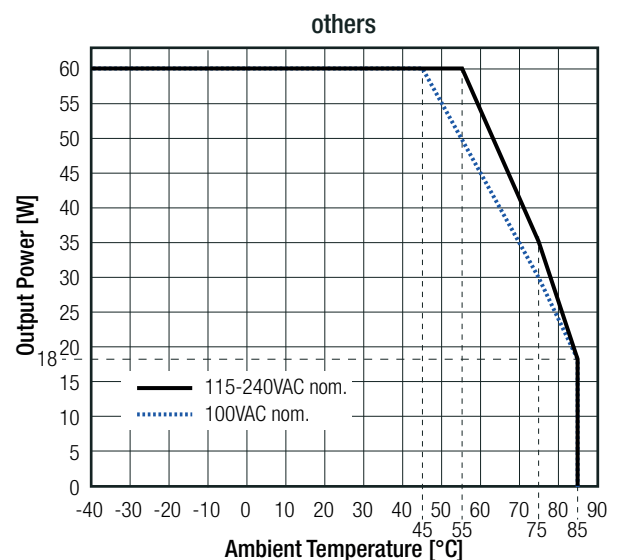
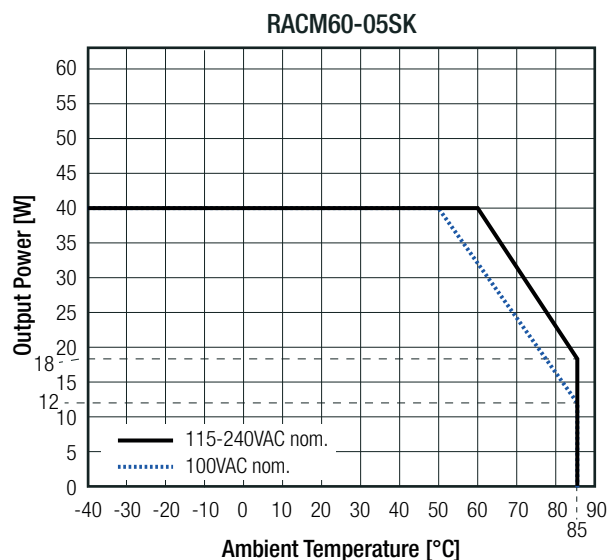
Notes:

Note11: 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

Derating Graph non-/277/0F 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)



continued on next page

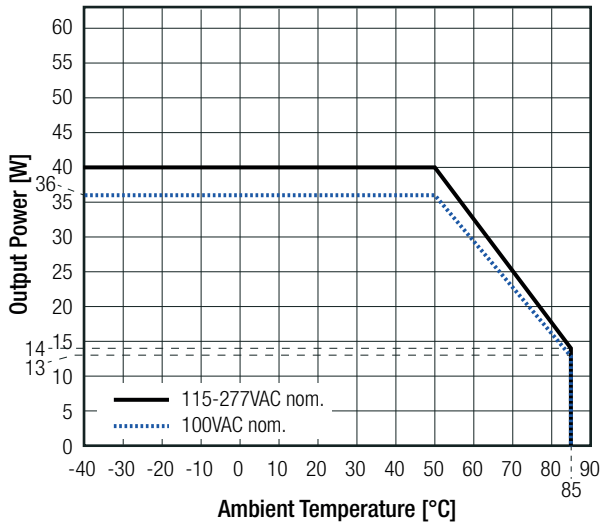
Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

Derating Graph “/277/OF” Version

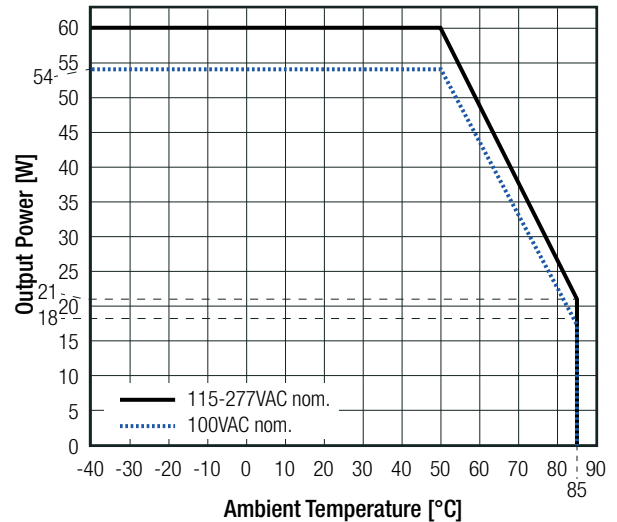
(@ Chamber and natural convection 0.1m/s)

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



SAFETY AND CERTIFICATIONS

| Certificate Type (Safety) | Report Number | Standard |
|--|-----------------------------|---|
| Medical electrical equipment Part 1: General requirements for basic safety and essential performance | E511305-D1000-1/A1/C0-UL | CAN/CSA-C22.2 No. 60601-1:14, 3rd Ed. 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 |
| Safety of power transformers, power supplies, reactors & similar products for supply voltages up to 1100 V (CB Scheme) | 50355750 001 | 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) | (except /277/OF & /ENC/2x4) | 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 | 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 | (except /277/OF & /ENC/2x4) | 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 | 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) | (OVCIII) | 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 | 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 | (OVCIII) | EN61558-2-16:2009 + A1:2013 |

continued on next page

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

| 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 and Interruptions | Dips: 100% (0.5P 1.0P) 30% Interruptions: 100% | EN61000-4-11:2004, Criteria B |
| Limits of Voltage Fluctuations & Flicker | LCS220321054BE | EN61000-3-3:2013 |
| EMC Compliance (EN55032) | | |
| 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: ±2, 4, 8kV Contact: ±2, 4kV | 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) | | |
| 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: ±2, 4, 8kV Contact: ±2, 4kV | EN61000-4-2:2009, Criteria B |

continued on next page

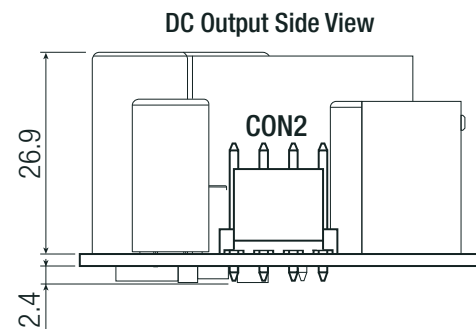
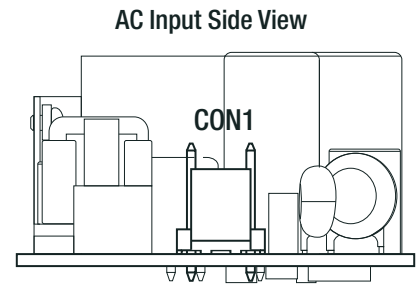
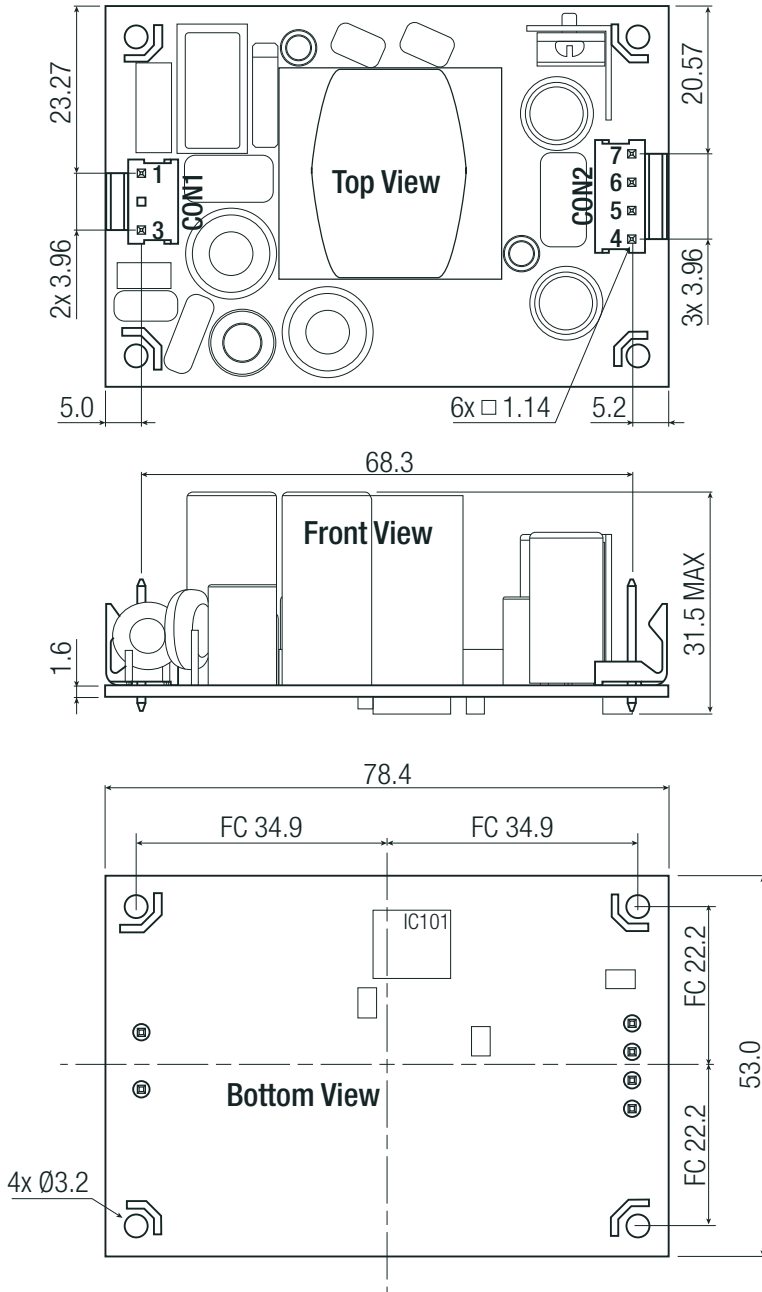
Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

| EMC Compliance (EN61204-3) | Condition | Standard / Criterion |
|--|--|--|
| 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 AND PHYSICAL CHARACTERISTICS | | |
|--|--------------------------------------|-----------------------|
| Parameter | Type | Value |
| Material | PCB | FR4 (UL94-V0) |
| 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. |
| continued on next page | | |

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

Dimension Drawing "/OF" (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

Compatible Connector

Housing

Molex 41695 Series or equivalent

Crimp Terminal

Molex 2478 Series or equivalent

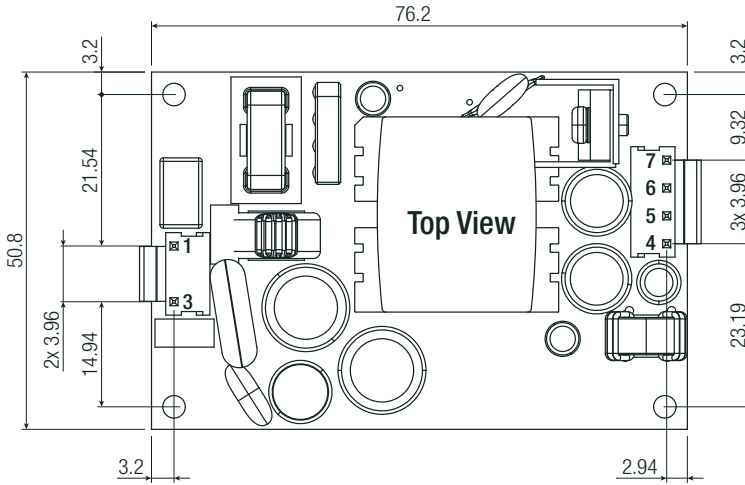
General tolerances according to ISO 2768-m (table for reference only)

| 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 |

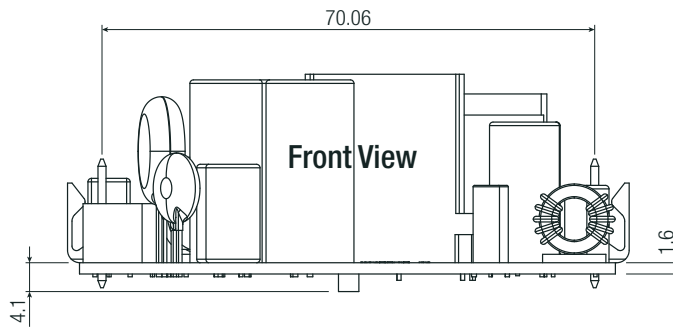
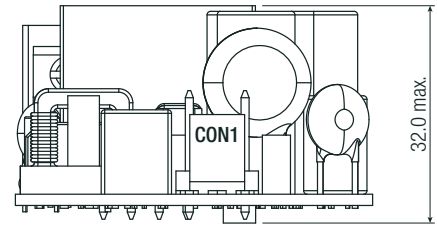
continued on next page

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

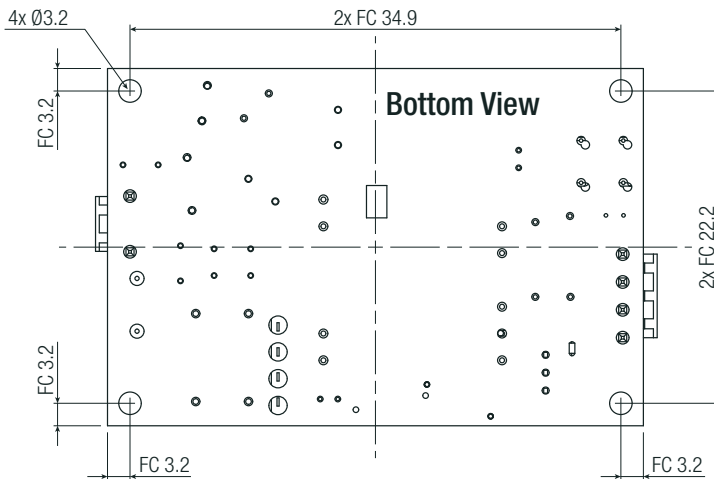
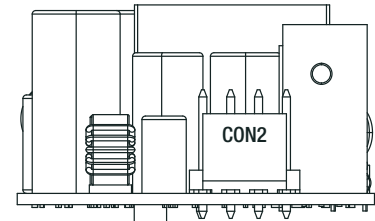
Dimension Drawing "277/OF" (mm)



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

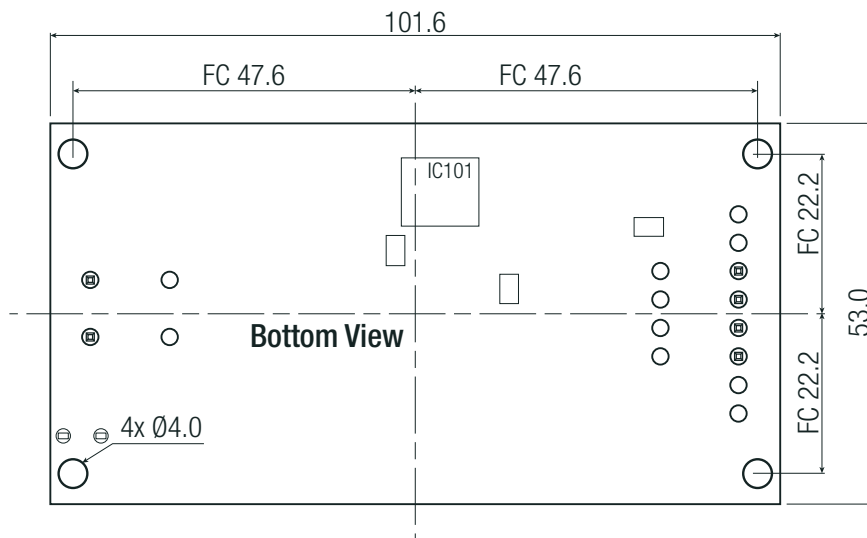
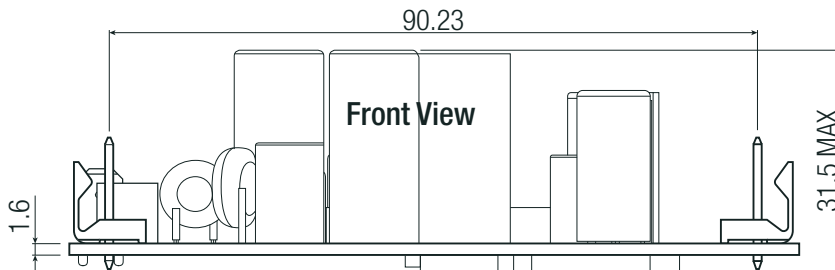
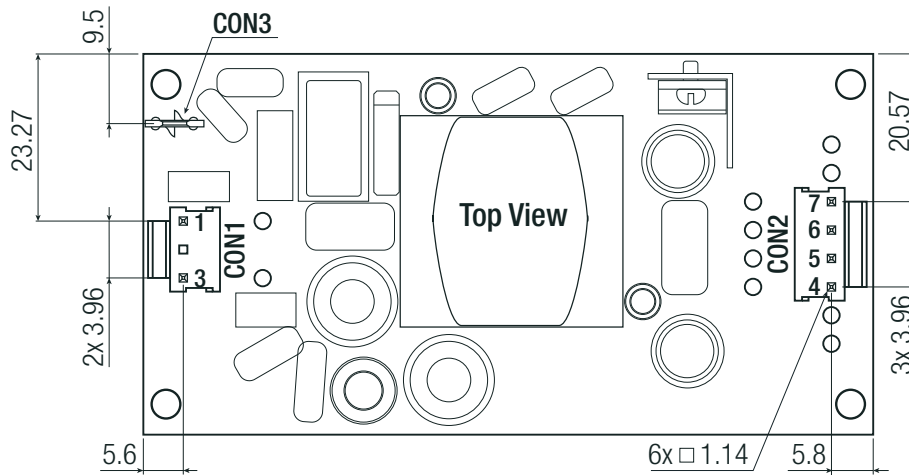
General tolerances according to ISO 2768-m (table for reference only)

| 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 |

continued on next page

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

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

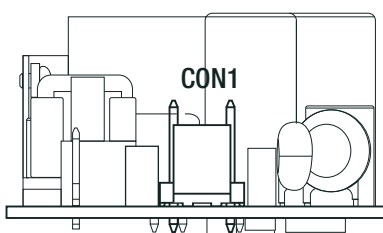
Housing

Molex 41695 Series or equivalent

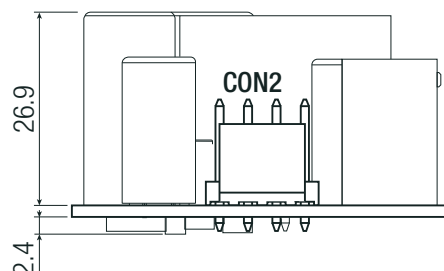
Crimp Terminal

Molex 2478 Series or equivalent

AC Input Side View



DC Output Side View



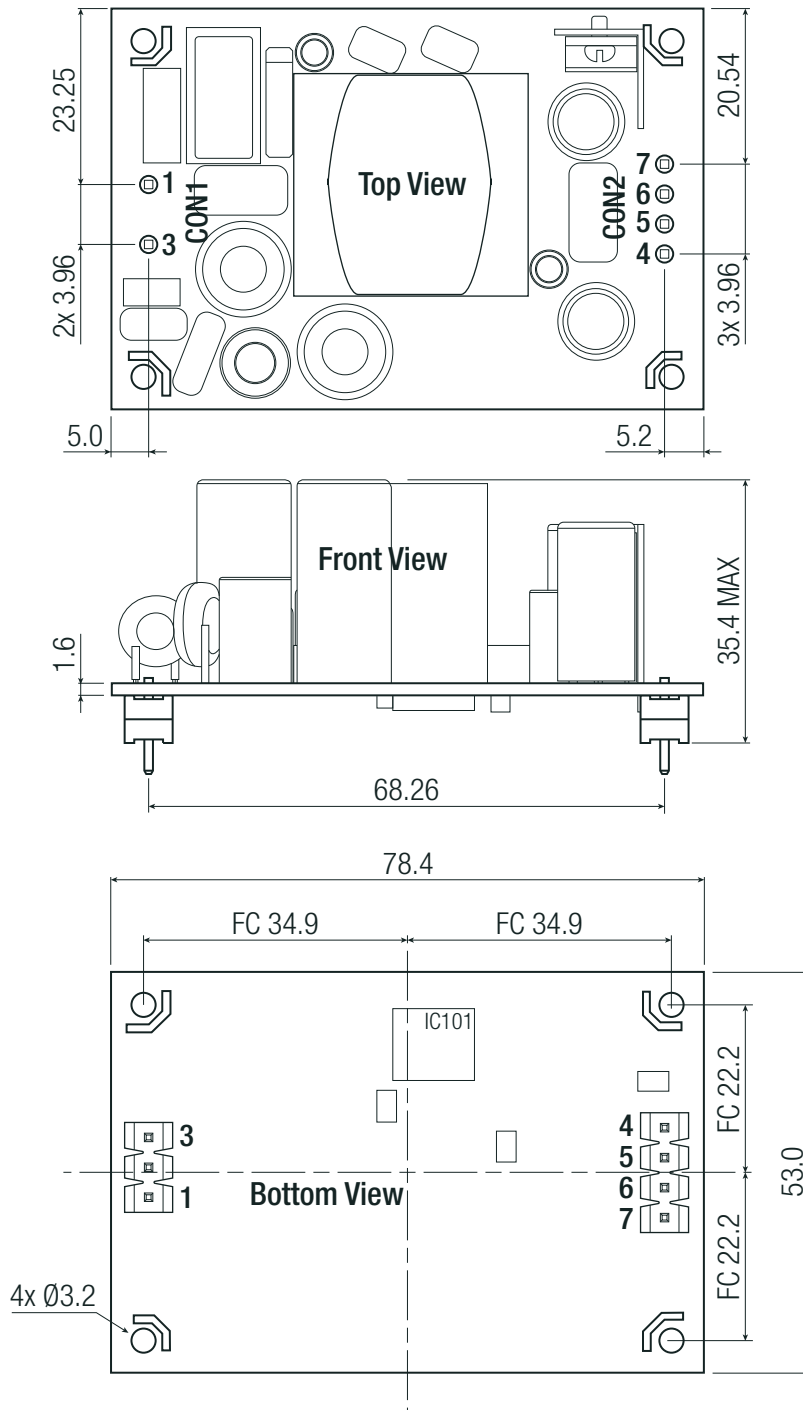
General tolerances according to ISO 2768-m (table for reference only)

| 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 |

continued on next page

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

Dimension Drawing "/OF/PCB" (mm)



Pin-header 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 |

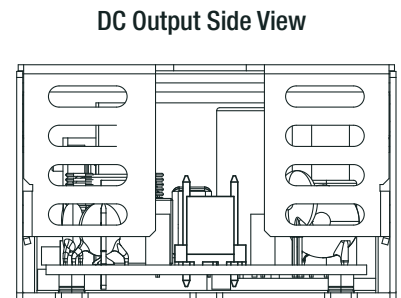
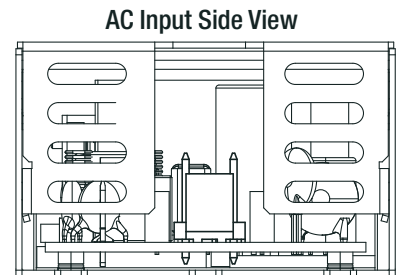
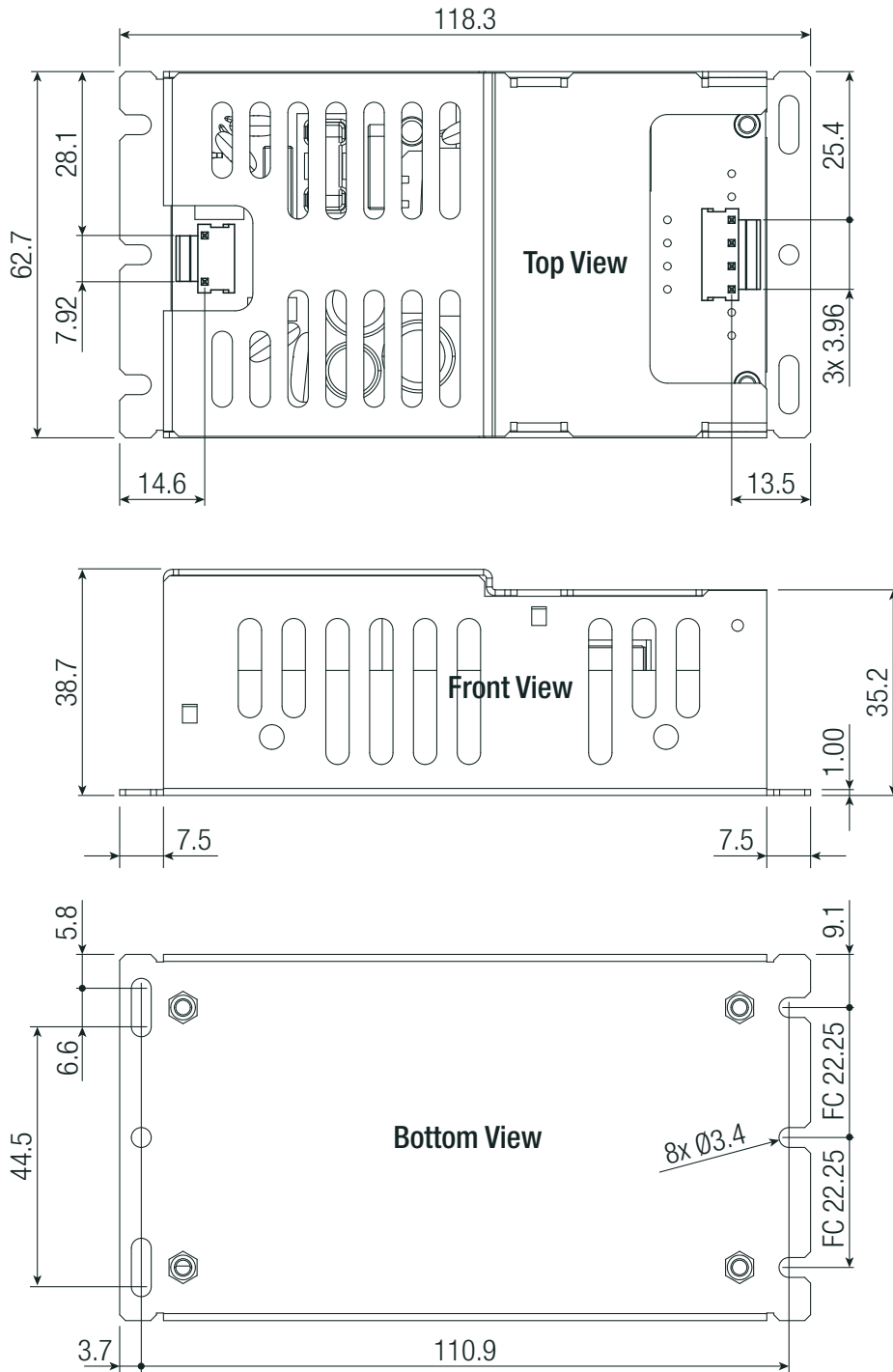
FC= fixing centers

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 |

Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

Dimension Drawing "/ENC" (mm)



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

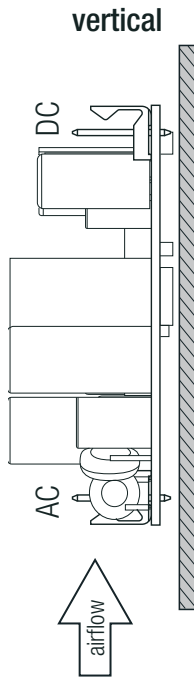
| # | Function | Terminal |
|-------------------------|------------|-----------------------|
| AC Input (CON1) | | |
| 1 | VAC in (N) | 3 Pins (Pin2 removed) |
| 3 | VAC in (L) | with 3.96mm pitch |
| DC Output (CON2) | | |
| 4,5 | -VDC out | 4 Pins |
| 6,7 | +VDC out | with 3.96mm pitch |

FC= fixing centers

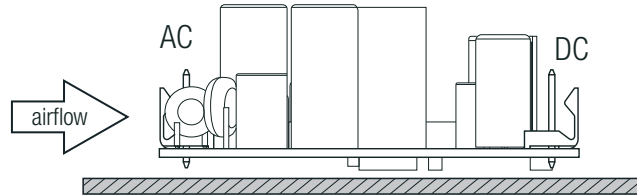
Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

APPLICATION AND INSTALLATION

Mounting

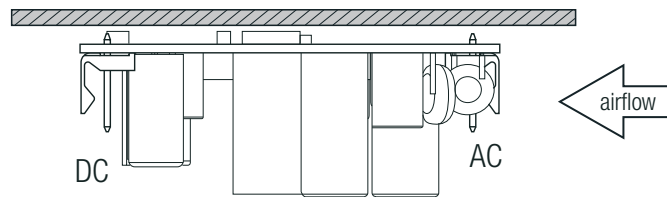


horizontal (standard)

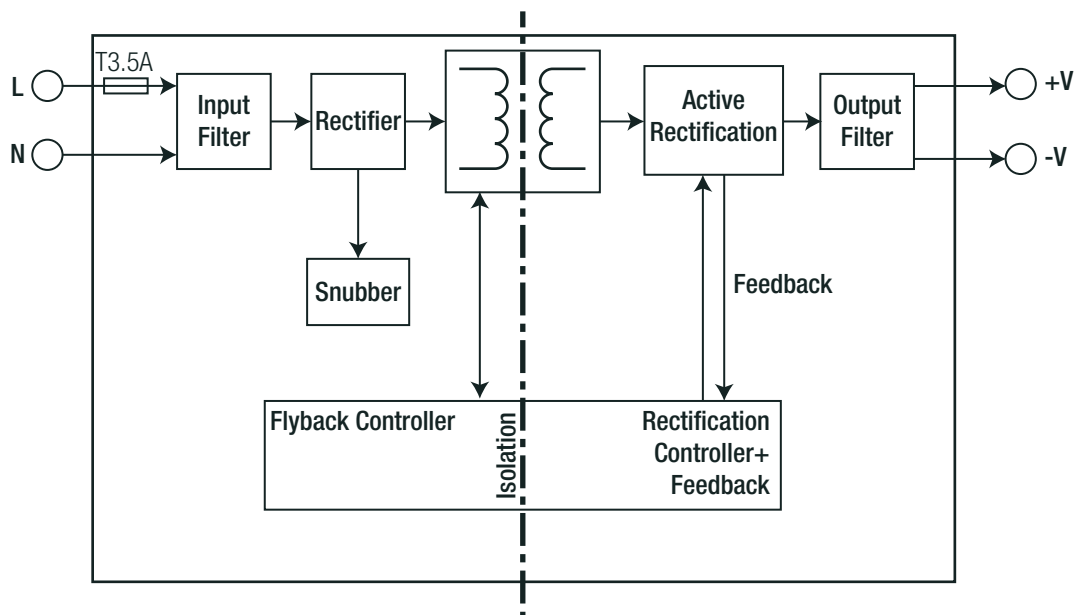


If module is mounted vertical or upside-down with natural convection cooling, the power must be derated $\geq 10\%$.

upside-down



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

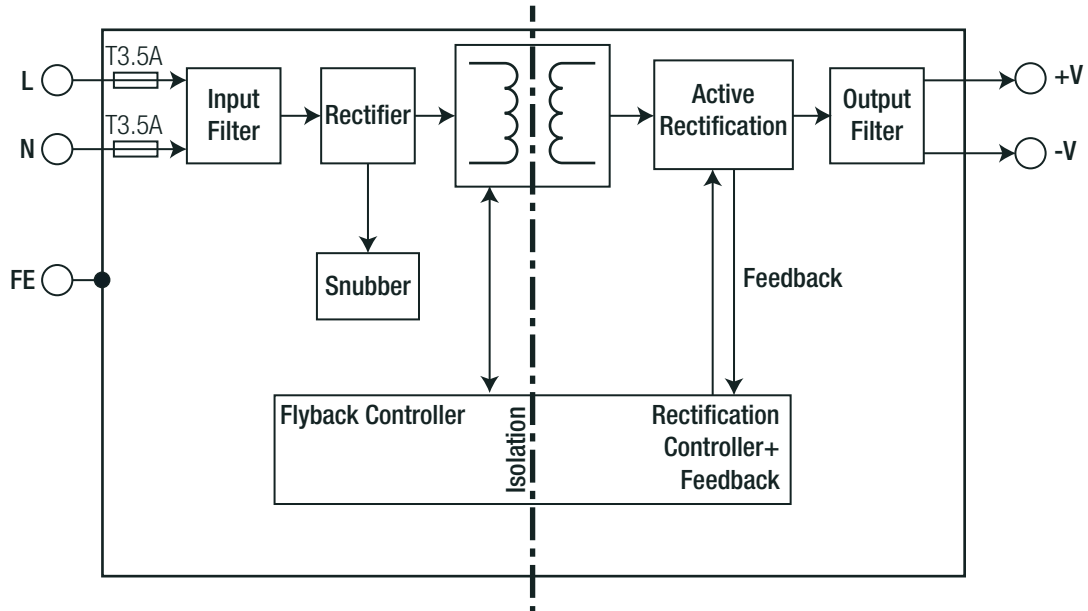


continued on next page

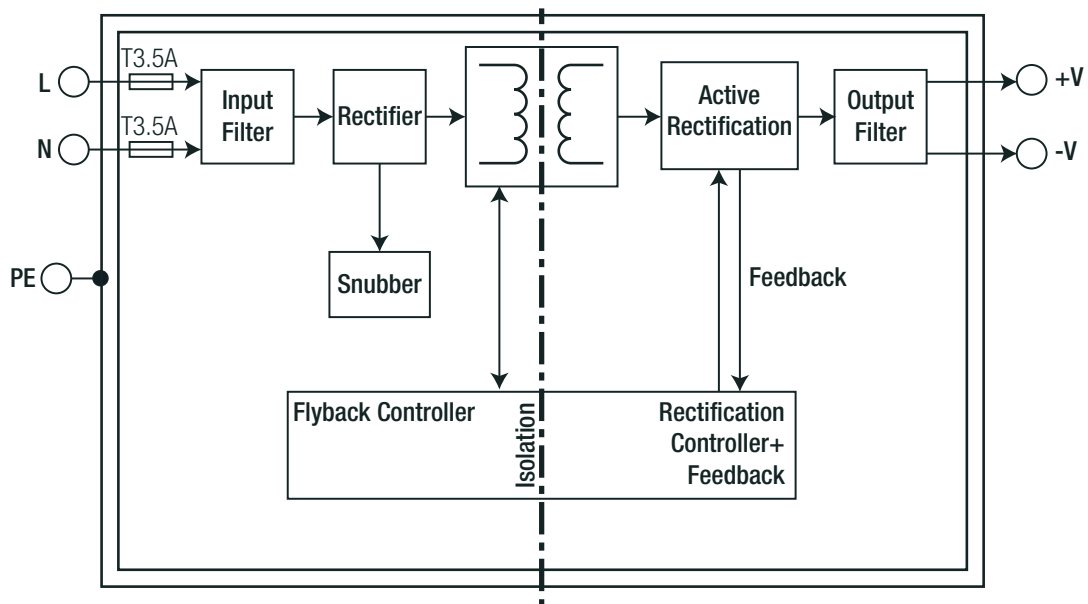
Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

APPLICATION AND INSTALLATION

Blockdiagram (“/OF/2x4”)



Blockdiagram (“/ENC/2x4”)



Specifications (measured @ Ta= 25°C, nom. Vin, full load and after warm-up unless otherwise stated)

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 |
| Package Unit | "/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 EXAMPLE

| Model-number | Output Voltage | Input Range | Size | Type | Connection | Quantity | Packaging Type |
|----------------------|----------------|-------------|---------|------------|--------------------|----------------------|----------------|
| RACM60-05SK/OF | 5Vout | 80-264VAC | 2" x 3" | open frame | standard connector | 1pc | cardboard box |
| RACM60-24SK/OF/PCB-T | 24Vout | 80-264VAC | 2" x 3" | open frame | PCB mounting pins | 12pcs | tray |
| RACM60-12SK/OF/2x4 | 12Vout | 80-264VAC | 2" x 4" | open frame | standard connector | 1pc | cardboard box |
| RACM60-05SK/277/OF-T | 5Vout | 80-305VAC | 2" x 3" | open frame | standard connector | 12pcs | tray |
| RACM60-24SK/ENC/2x4 | 24Vout | 80-264VAC | 2" x 4" | enclosed | standard connector | 18pcs | tray |
| RACM60-12SK/OF-CTN | 12Vout | 80-264VAC | 2" x 4" | 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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [AC/DC Power Modules](#) category:

Click to view products by [RECOM POWER](#) manufacturer:

Other Similar products are found below :

[HP01S0500WI](#) [HP01S1200WI](#) [HP01S2400WI](#) [HP03S1200WJ](#) [HP03S2400WJ](#) [ZP03S1200WE](#) [ZP05S2400WB](#) [AMEOF550-24SHAMJZ-FB](#)
[AMEOF550-48SHAMJZ-FB](#) [AMEOFL10-3S480PEVZ-B](#) [AMEOFL10-9S480PEVZ-B](#) [AMEOFL5-3S480HANZ-B](#) [AMEOFL5-9S480HANZ-B](#) [HP02S1200WI](#) [AME30-9S480JZ-B](#) [AME30-3S480JZ-B](#) [ZP05S1800WB](#) [ZP10S2400W](#) [ZP03S0500WE](#) [AMEOF450-48SHAMJZ-FB](#) [AMEL15-3S277HAVZ-B](#) [AME30-48S480JZ-B](#) [AME30-15S480JZ-B](#) [CFM36SB480-T](#) [EZAC-R11-QE8](#) [LD10-20B12](#)
[LHE05-20D0524-01](#) [LD10-23B24R2](#) [LD05-23B12](#) [LDE10-20B12](#) [LDE20-20B12](#) [LD10-23B12R2](#) [IRM-20-12](#) [LH10-23B05R2](#) [LHE05-20D0505-01](#) [LHE20-20D0524-03](#) [IRM-5-24](#) [IRM-10-12](#) [LH10-10D0524-02](#) [LH10-10B24](#) [LH10-10B12](#) [LH10-23B12R2](#) [LHE10-20D0512-02](#) [LH10-23B24R2](#) [LHE20-20D0512-06](#) [LH25-23B12R2](#) [IRM-10-24](#) [IRM-5-12](#) [LD10-20B24](#) [LD10-20B05](#)