

General Specifications Outdoor Models

- MCV-ACPC-11**
- MCV-ACPC-13**
- MCV-ACPC-15**
- MCV-ACPC-17**



High-Efficiency, 50 kW and 100 kW Inverters

ACPC Power grid-tie central inverters offer a unique combination of ultra-high efficiencies, installer-friendly designs, long service life, and competitive initial acquisition costs; significantly increasing return on investment in solar-power installations.

Industry-Leading Features and Performance

- High efficiencies deliver more energy – up to 95.8% (95% CEC).
- Master/Slave configuration (100 kW model) minimizes module fault losses.
- Reduced acoustic noise (very low audible noise): switching frequency beyond audible range (18 kHz).

Unmatched Applications Flexibility

Full-rated power available up to high temperature. Wide MPPT operating range: 330 to 600 VDC.

Field-Proven Reliability

- IP20 rated enclosure.
- No additional cooling system required; employ only ambient airflow.
- Grid-connected operation according to international standards.
- Five-year warranty, optionally extendable to twenty years.

Installer Friendly

Reverse-polarity protection minimizes potential damage caused by miswiring during installation.

- Front-panel mounted LCD display provides real-time updates for all critical operating parameters.
- RS-485 communications interfaces.
- Integrated DC switch for each 50 kW module.
- AC and DC side integrated protection (fuses and OVR) easily replaceable.
- Integrated AC magnetic breaker.
- Anti-islanding protection.

<i>Models</i>	<i>AC Power</i>
MCV-ACPC-11	50kW
MCV-ACPC-13	50kW
MCV-ACPC-15	100kW
MCV-ACPC-17	100kW

Options

Detailed string monitoring available with string combiner
ACPCPower Central CVI simplifies monitoring via PC. ACPCPower Hyperlog datalogger available for remote control via Internet, modem or GSM

High Efficiencies Across a Broad Range of Operating Conditions

PVI-CENTRAL-100 inverter works with nominal output voltage, at up to 95.8% efficiency(CEC 95%). The graphs to the right illustrate the industry-leading performance of all models at three discrete MPPT-voltage reference points, and a continuous range of load conditions.

Unparalleled Performance

With their advanced system intelligence, next-generation Edge™ MPPT technology, and industrial-grade engineering, PowerGate Plus inverters maximize system uptime and power production, even in cloudy conditions.

MCV-ACPC-11

Power Level	Output Power	Efficiency
10%	10kW	93,2%
20%	20kW	96,1%
30%	30kW	96,5%
50%	50kW	96,7%
75%	75kW	96,5%
100%	100kW	96,1%

MCV-ACPC-13

Power Level	Output Power	Efficiency
10%	10kW	93,2%
20%	20kW	96,1%
30%	30kW	96,5%
50%	50kW	96,7%
75%	75kW	96,5%
100%	100kW	96,1%

MCV-ACPC-15

Power Level	Output Power	Efficiency
10%	10kW	93,2%
20%	20kW	96,1%
30%	30kW	96,5%
50%	50kW	96,7%
75%	75kW	96,5%
100%	100kW	96,1%

MCV-ACPC-17

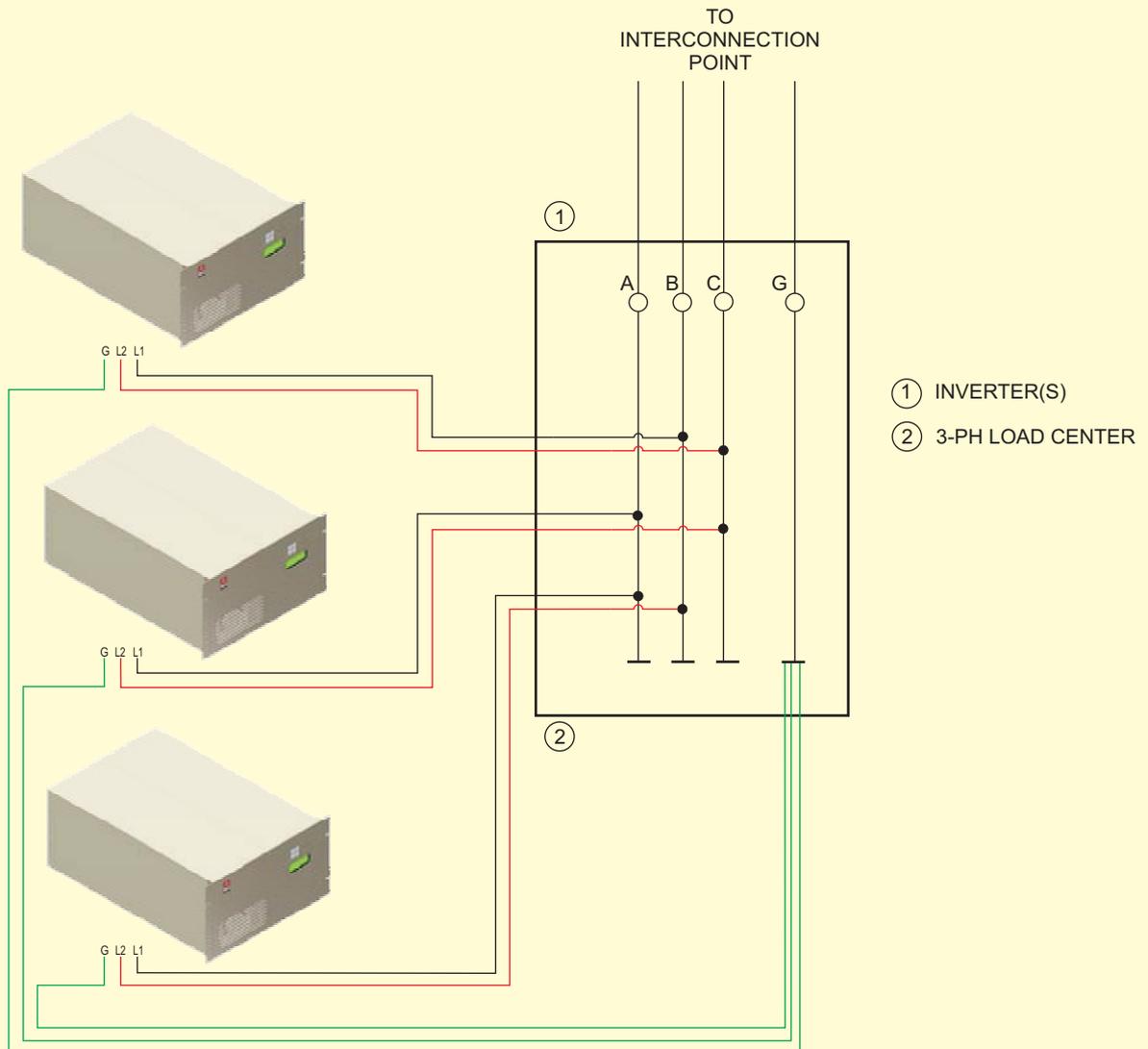
Power Level	Output Power	Efficiency
10%	10kW	93,2%
20%	20kW	96,1%
30%	30kW	96,5%
50%	50kW	96,7%
75%	75kW	96,5%
100%	100kW	96,1%

SPECIFICATIONS	MCV-ACPC-11	MCV-ACPC-13	MCV-ACPC-15	MCV-ACPC-17
INPUT PARAMETERS (DC Side)				
Nominal DC Power [kW]	11,5	13,65	15,75	17
Total Max. Recommended DC Power [kW]	12	14,3	16,5	17,85
Operating MPPT Input Voltage Range [V]	50 to 470 (320 nominal)			
Max. Input Voltage [V]	420			
Activation Voltage [V]	100			
No of Independent MPPT rackers	1			
No. of DC Inputs	1	1	2	2
Max. DC Current, ach MPPT [A]	80	80	80	80
Input Voltage Protection	1	1	2	2
DC Switch	2 (1 positive, 1 negative)	2 (1 positive, 1 negative)	2 (1 positive, 1 negative)	2 (1 positive, 1 negative)
DC Fuses				
DC Connections	1 (1 positive, 1 negative) Input connector size lug M10	1 (1 positive, 1 negative) Input connector size lug M10	1 (2 positive, 2 negative) Input connector size lug M10	1 (2 positive, 2 negative) Input connector size lug M10
OUTPUT PARAMETERS (AC Side)				
Nominal AC Power [kW]	11	13	15	17
AC Grid Connection	208,240,277 VAC	208,240,277 VAC	208,240,277 VAC	208,240, 277 VAC
Nominal AC Voltage Range [V]	-15%	-15%	-15%	-15%
Maximum AC Voltage Range [V]	10%	10%	10%	10%
Nominal AC Frequency [Hz]	60			
Max. AC Line Current [A]	53	63	73	82
AC Side Varistor	Yes between hot and neutral			
AC Connection	Output Connector Size: Phases - lug M10 + Neutral - lug M12			
Line Power Factor	> 0.99			
AC Current Distortion (THD)	< 5% at rated power with sine wave voltage			
Max. Efficiency	95.6%	95.8%	95.6%	95.8%
CEC Efficiency	95%			
Auxiliary Voltage Consumption [W]	< 0.4% of PAC nom.	< 0.4% of PAC nom.	< 0.3%	< 0.3%
Night time Consumption [W]	< 15	< 15	< 30	< 30
Inverter Switching Frequency [kHz]	18			
ENVIRONMENTAL PARAMETERS				
Required Ambient Air Cooling Flow (Cubic meter/ hour)	150CFM	150CFM	150CFM	150CFM
Ambient Temp. Range [°C]	-10 / + 50 (until 50 °C with derating)			
Operating Altitude [ft]	3000			
Acoustical Noise [dB _A]	54			
Environmental IP Rating	Ip20			
Relative Humidity	0-95%			
MECHANICAL				
Dimensions (HxWxD)	74,6 X 23,6 X 31,6 (H x W x D)			
Weight [lb]	70	70	85	85
OTHER				
Display	YES (Alphanumeric 4 lines)			
Communication	Rs485 (screw terminal block) "MCV-ACPC GMS" system remote (Optional)			

Standards and Codes

ACPCPower inverters comply with standards set for grid-tied operation, safety, and electromagnetic compatibility including: UL1741 & CSA -C22.2 N.107.1-01.

Block Diagram and Operating Configurations



TECHNICAL REVISIONS - The appearance of products, including safety agency certifications pictured on labels, may change depending on the date manufactured. Specifications are subject to change without notice.