

Cat® Double Conversion UPS Quick Reference Guide

UPS 40 - 130 kVA (208V-208V / 480V-208V / 480V-480V)



UPS Rating		UPS AC Input						Battery System			AC Output		Mechanical Data			
		Voltage		Current		Recommended Input AWG	Rec. OCPD	Nominal VDC	Battery kW	Current @ Nom. V	Current @ Full Load		Typical Dimensions WxHxD	Average Weight Lbs	Floor Loading Lbs/Ft ²	Heat Rejection BTU/Hr
kVA	kW	Input	Output	Full Load	Max.						Max.	OCPD				
40	36	208	208	111	136	2/0 AWG	175	432	39	90	111	150	56x75x34	1,110	78	16,850
40	36	480	208	48	59	4 AWG	80	432	39	90	111	150	56x75x34	1,415	99	13,050
40	36	480	480	48	59	4 AWG	80	432	39	90	48	70	28x75x34	882	124	9,250
50	45	208	208	136	162	4/0 AWG	225	432	49	113	138	175	56x75x34	1,110	78	21,060
50	45	480	208	59	70	3 AWG	90	432	49	113	138	175	56x75x34	1,415	99	16,310
50	45	480	480	59	70	3 AWG	90	432	49	113	60	80	28x75x34	882	124	11,560
60	54	208	208	164	203	250 kcmil	300	432	58	135	166	225	56x75x34	1,565	110	25,270
60	54	480	208	71	88	2 AWG	110	432	58	135	166	225	56x75x34	1,785	125	19,570
60	54	480	480	71	88	2 AWG	110	432	58	135	72	90	28x75x34	882	124	13,870
80	72	208	208	217	256	400 kcmil	350	432	78	180	222	300	56x75x34	1,565	110	33,700
80	72	480	208	94	111	1/0 AWG	150	432	78	180	222	300	56x75x34	1,785	125	26,100
80	72	480	480	94	111	1/0 AWG	150	432	78	180	96	125	28x75x34	882	124	18,500
100	90	208	208	270	332	600 kcmil	450	432	97	225	277	350	56x75x34	1,944	136	38,610
100	90	480	208	117	150	3/0 AWG	200	432	97	225	277	350	56x75x34	2,565	180	29,110
100	90	480	480	117	150	3/0 AWG	200	432	97	225	120	150	28x75x34	1,146	161	19,610
130	117	208	208	348	420	1000 kcmil	600	432	126	293	360	450	56x75x34	1,944	136	50,190
130	117	480	208	151	182	4/0 AWG	250	432	126	293	360	450	56x75x34	2,565	180	37,840
130	117	480	480	151	182	4/0 AWG	250	432	126	293	156	200	28x75x34	1,146	161	25,490

- Input current based on full rated output load.
- Maximum (Max.) current is for duration of battery recharge.
- Input and bypass cables must be run in separate conduits from output cables. Not more than three conductors in raceway assumed; ambient temperature of 86°F assumed.
- If initial load is less than UPS' rated output, it is recommended that AC input, battery, and AC output wiring and overcurrent protection be sized to UPS' full load rating to accommodate possible future expansion.
- Nominal battery voltage is shown at 2.0 volts/cell per NEC 480-2.
- DC cables should be sized for a total maximum of less than 1% of CB rating.
- OCPD = Overcurrent Protection Device. Recommended represents 125% of nominal full load current (continuous) per NEC 215.
- Minimum-sized grounding conductors to be per NEC 250-122. Parity-sized ground conductors are recommended. Neutral conductors to be sized for full capacity per NEC 310-15(b)(4).
- Wiring requirements:
 - AC Input/Output: 3Ø, 3 or 4 wire + ground, depending on UPS configuration. See Installation Manual and submittal drawings for specific instructions.
 - DC Input: 2 wire (positive and negative) + ground
- All wiring to be in accordance with all applicable national and/or local electrical codes.
- Minimum access clearance per UPS drawings.

- Top or bottom cable entry through removable access plates. Punch plates to suit conduit size, then replace.
- Control wiring and power wiring must be run in separate conduit.
- Weights and dimensions shown do not include battery cabinet(s), distribution cabinet(s), or other options.
- If site configuration requires an external maintenance bypass, phase parity between UPS input and UPS bypass must be ensured. Consult MGE applications engineer.
- References are per NEC 1999. Consult local codes for possible variations.

Additional Notes:

A. Temperature rating of conductors: 90°C (194°F). Reference NEC Table 310-16, 75°C column, using copper conductors. 75°C (167°F) cable terminal conductors assumed.

RATINGS OF CABLES AND OVERCURRENT DEVICES SUPPLIED FOR INFORMATION ONLY. USER TO CONSULT WITH THEIR ENGINEERING SERVICES BEFORE ADOPTING.

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