

Branch Panel: MP-1

Location: Roof mechanical mezzanine	Volts: 480/277 Wye	A.I.C. Rating: 65,000
Supply From: MSB-1, ckt 3	Phases: 3	Mains Type: MCB
Mounting: Surface	Wires: 4	Mains Rating: 400 A
Enclosure: NEMA 3R	Ground Bus: Yes	Circuits: 42
	Neutral Bus: Yes	

Notes: Feeder and OCPD sized on the schedule below. Verify AIC against the available fault current at this panel.

CKT	Circuit Description	Trip	Poles	A		B		C		Poles	Trip	Circuit Description	CKT
1	RTU-1 — roof unit 4#8, 1#10 G., 3/4"C.	35 A	3	6,667 VA	10,000 VA					3	60 A	ELEV-1 — elevator 4#6, 1#10 G., 1"C.	2
3						6,667 VA	10,000 VA						4
5								6,667 VA	10,000 VA				6
7	RTU-2 — roof unit 4#8, 1#10 G., 3/4"C.	35 A	3	6,667 VA	6,400 VA					3	40 A	EVSE-1 — EV charger 4#8, 1#10 G., 3/4"C.	8
9						6,667 VA	6,400 VA						10
11								6,667 VA	6,400 VA				12
13	RTU-3 — roof unit 4#10, 1#10 G., 3/4"C.	25 A	3	4,667 VA	4,000 VA					3	30 A	SHOP-1 — shop panel feed 4#10, 1#10 G., 3/4"C.	14
15						4,667 VA	4,000 VA						16
17								4,667 VA	4,000 VA				18
19	RTU-4 — roof unit 4#10, 1#10 G., 3/4"C.	25 A	3	4,667 VA	2,667 VA					3	20 A	P-1 — condenser pump	20
21						4,667 VA	2,667 VA						22
23								4,667 VA	2,667 VA				24
25	AC-1 — air compressor 4#8, 1#10 G., 3/4"C.	45 A	3	8,333 VA	1,667 VA					3	15 A	EF-1 — exhaust fan	26
27						8,333 VA	1,667 VA						28
29								8,333 VA	1,667 VA				30
31	UH-1 — unit heater	30 A	3	7,000 VA	1,800 VA					1	20 A	LTG — mech room 277 V	32
33						7,000 VA	1,600 VA			1	20 A	LTG — roof / stair 277 V	34
35								7,000 VA	2,000 VA	1	20 A	LTG — exterior 277 V	36
37	UH-2 — unit heater	30 A	3	5,000 VA	1,800 VA					1	20 A	LTG — canopy 277 V	38
39						5,000 VA	--			1	--	SPACE	40
41								5,000 VA	--	1	--	SPACE	42

Total Load: 71,333 VA 69,333 VA 69,733 VA

Total Amps: 258 A 250 A 252 A

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Cooling	68,000 VA	100.00 %	68,000 VA	Total Conn. Load:	210,400 VA
Elevator	30,000 VA	100.00 %	30,000 VA	Total Est. Demand:	176,200 VA
EV Charger	19,200 VA	125.00 %	24,000 VA	Conn. current:	253 A
Heating	36,000 VA	noncoincident	—	Est. demand current:	212 A
Lighting	7,200 VA	125.00 %	9,000 VA	Min. feeder / OCPD:	212 A
Motor	38,000 VA	100.00 %	38,000 VA	Largest phase:	258 A on A
Shop Equipment	12,000 VA	60.00 %	7,200 VA		

Notes:

Prepared to NEC 2023. Article citations and calculated values verified against this edition.

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Ampsheet

Review of entries — 2 items

Automated checks against the values entered. Ampsheet cannot see the actual installation — confirm anything flagged here against the equipment and the code edition adopted in your jurisdiction.

CONSIDER CKT 31 — "UH-1 — unit heater" is at 84 % of a 30 A breaker. Over 80 % leaves nothing for a continuous load. 210.20(A)

NOTE Heating (36000 VA) is excluded from the total as the smaller half of a noncoincident pair with Cooling. 220.60