

1200 A Switchboard

UL 891 LISTED Service-equipment switchboard · 480Y/277 VAC · 3-Phase, 60 Hz · 65 kA SCCR



Front elevation & front-right isometric views

1. GENERAL SPECIFICATIONS	
Equipment type	Enclosed Switchboard — Service Equipment
Listing	UL 891 Listed · Suitable for Use as Service Equipment
UL file	E529270 (BITSINK LLC)
Supply voltage	480Y/277 VAC
System configuration	3-Phase, 4-Wire + Ground, solidly grounded wye
Frequency	60 Hz
Service rating	1200 A
Max. combined continuous load	960 A
Short-circuit current rating (SCCR)	65 kA RMS symmetrical @ 480 VAC
Enclosure type	UL / NEMA Type 1 — indoor, general purpose
Service-equipment bonding	Dedicated main bonding jumper installed

2. SERVICE DISCONNECT & MAIN OCPD	
Device	Noark M6N1200E3
Type	3-pole molded-case circuit breaker (MCCB)
Frame / rating	1200 A frame, 600 VAC max
Trip unit	LSIG (long-time / short-time / instantaneous / ground fault)
Arc reduction	Integral Arc Reduction Maintenance System (ARMS)
Ground fault protection	Integral residual ground fault protection (NEC 230.95)
GFP testing	Primary current injection test instructions included with documentation
Interrupting rating	65 kA @ 480 VAC (matches switchboard SCCR)
Function	Service disconnecting means and main overcurrent protective device

3. BUS, NEUTRAL & GROUNDING

Main power bus	1/4 in × 5 in silver-plated copper, 3-phase
Bus continuous rating	1250 A
Neutral bus	1/4 in × 5 in silver-plated copper
Neutral disconnect link	Installed — isolates neutral for insulation testing
Equipment ground bus	1/4 in × 2 in copper, UL-listed ground bar
Main bonding jumper	Dedicated, installed per NEC 250.28 (service equipment)
Bus bracing	Rated for 100 kA short-circuit withstand

4. 480 VAC BRANCH CIRCUITS

Branch circuits are fed directly from the main 1200 A bus. Combined continuous load is limited to 950 A. Branch positions are expandable / adjustable within the available bus capacity and switchboard space.

BRANCH DEVICES

Qty	Device	Rating & notes
12	Noark M2H125T3L	125 A, 3-pole MCCB, 480 VAC, 100 kA @ 480 V

Branch breaker selection reflects achievable SCCR: the listed Noark M2H-series molded-case circuit breakers support the switchboard's 65 kA SCCR per UL 891.

6. ENCLOSURE CONSTRUCTION

Type rating	UL / NEMA Type 1 — indoor, general purpose
Service-equipment marking	Yes — marked per NEC 230.66
Front access	Bolted dead-front covers (no hinged doors)
Cover bonding	Bonding conductor installed per UL 891
Conduit entry	Top / bottom / side as specified on drawing

5. ACTIVE THERMAL MANAGEMENT

System type	Active forced-air with filtered intake / exhaust
Cooling fans	(4) × 39 CFM, 120 VAC, axial
Control	Adjustable thermostat, 0 – 60 °C range
Factory preset	40 °C activation setpoint
Power source	120 VAC, field-supplied

7. STANDARDS, MARKINGS & REFERENCES

Equipment standard	UL 891 — Switchboards
Service-equipment provisions	UL 891, suitable for use as service equipment
Field marking — fault current	Available fault current label per NEC 110.24
Field marking — arc flash	Arc-flash hazard label per NFPA 70E (incident energy by installer)
GFP testing reference	NEC 230.95(C) — performance testing on installation
Branch breaker standard	UL 489 listed molded-case circuit breakers
Documentation package	BOM, single-line, layout drawings, GFP test instructions, FAT report