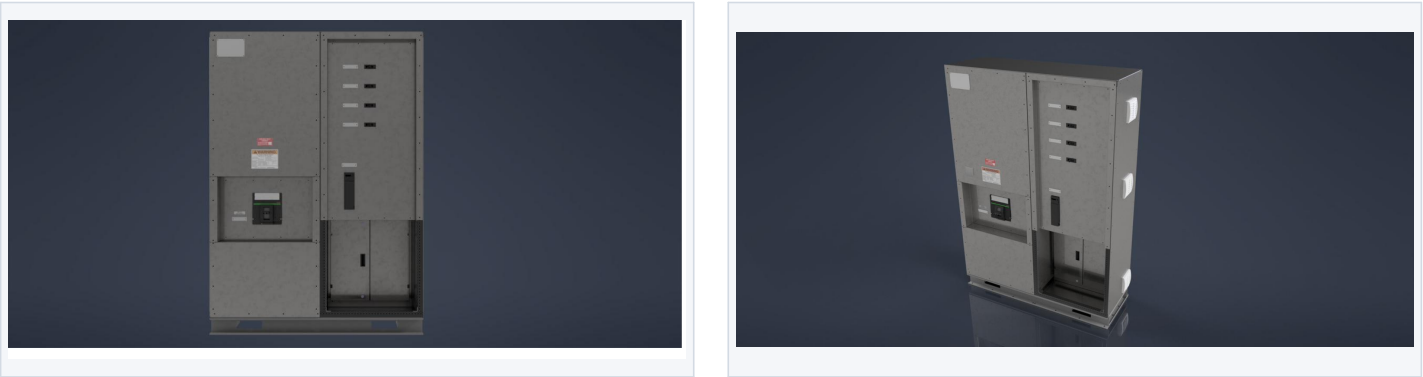


1200 A Industrial Control Panel

UL 508A LISTED

Enclosed service-equipment control panel · 480Y/277 VAC · 3-Phase, 60 Hz · 65 kA SCCR



Front elevation & top-angle views

1. GENERAL SPECIFICATIONS		2. SERVICE DISCONNECT & MAIN OCPD	
Panel type	Enclosed Industrial Control Panel — Service Equipment	Device	Noark M6N1200E3
Listing	UL 508A Listed · Suitable for Use as Service Equipment	Type	3-pole molded-case circuit breaker (MCCB)
UL file	E529270 (BITSINK LLC)	Frame / rating	1200 A frame, 600 VAC max
Supply voltage	480Y/277 VAC	Trip unit	LSIG (long-time / short-time / instantaneous / ground fault)
System configuration	3-Phase, 4-Wire + Ground, solidly grounded wye	Arc reduction	Integral Arc Reduction Maintenance System (ARMS)
Frequency	60 Hz	Ground fault protection	Integral residual ground fault protection (NEC 230.95)
Service rating	1200 A	GFP testing	Primary current injection test instructions included with documentation
Max. combined continuous load	960 A	Interrupting rating	65 kA @ 480 VAC (matches panel SCCR)
Short-circuit current rating (SCCR)	65 kA RMS symmetrical @ 480 VAC	Function	Service disconnecting means and main overcurrent protective device
Enclosure type	UL / NEMA Type 1 — indoor, general purpose		
Service-equipment bonding	Dedicated main bonding jumper installed		

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

6. 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	Control transformer 115 VAC secondary

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 panel space.

BRANCH DEVICES

Qty	Device	Rating & notes
4	Noark M2H250T3	250 A, 3-pole MCCB, 480 VAC, 100 kA @ 480 V
1	Class T Fuse Block	80 A Class T fuses (200 kA IR) — feeds VFD branch
1	AutomationDirect DURAPULSE GS23-4020	20 HP, 460 VAC, 3-phase sensorless vector VFD
1	100 A Class J Fused Output	3-pole, 480 VAC, Class J fuse protection

Branch protection selection reflects achievable SCCR: Class T fuse and listed Class J combinations support the panel's 65 kA SCCR per UL 508A Supplement SB.

5. 120 VAC CONTROL POWER

Control power is supplied by an internal industrial control transformer. The transformer secondary is protected and bussed to support up to five (5) UL 489 single-phase branch breakers.

CONTROL TRANSFORMER & SECONDARY

Transformer rating	3200 VA, single-phase
Primary	480 VAC
Secondary (configurable)	115 / 230 VAC dual-voltage
Secondary as configured	115 VAC only
Primary protection	15 A Class CC fused
Secondary protection	Eaton FAZ-D35-1-NA-SP — 35 A, 1-pole, D-curve, UL 489 listed
Continuous load capacity	22 A max continuous on the 115 V secondary
Secondary SCCR	200 kA (all secondary components rated ≥ 1 kA are protected)
Branch breaker capacity	Up to (5) UL 489 single-phase branch breakers

7. ENCLOSURE CONSTRUCTION	
Type rating	UL / NEMA Type 1 — indoor, general purpose
Service-equipment marking	Yes — marked per NEC 230.66
Door configuration	Hinged with quarter-turn / 3-point latching (as configured)
Door bonding	Bonding conductor installed per UL 508A §66.3.4
Conduit entry	Top / bottom / side as specified on drawing

8. STANDARDS, MARKINGS & REFERENCES	
Panel standard	UL 508A — Industrial Control Panels
Service-equipment section	UL 508A Sections 73–79
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	Single-phase 120 V branch breakers shall be UL 489 listed
Documentation package	BOM, single-line, layout drawings, GFP test instructions, FAT report