

MASTERPACT® NW UL489 Listed Insulated Case Circuit Breakers

Full-featured Performance

To best meet the needs of today's market, the new MASTERPACT NW line boasts the following attributes:

- Complete product offering through 200kAIR without fuses at 240VAC
- 800A to 6000A frames available
- Rated for all AC voltage systems through 600V
- Short-time withstand ratings up to 100K amperes
- Available for mounting in fixed or drawout configurations
- Drawout breakers have four racking positions – connected, test, disconnected, removed – with status indicator on cradle
- Simple, visual contact wear indicators
- UL489 Listed
- Available in constructions that meet ANSI C37.13, UL1066 and IEC 947.2 standards
- Full complement of field installable devices
- Four interchangeable trip unit families to choose from
- POWERLOGIC® power metering and monitoring capabilities available in advanced trip units
- Most common relay functions as defined by ANSI C37.2 and C37.90 integrated into circuit breaker



Global Markets

To help customers with their global strategies, the MASTERPACT NW Circuit Breaker is also available to meet IEC 60947-2 and ANSI C37.13 standards. The design philosophy of the MASTERPACT NW Circuit Breaker is to optimize the circuit breaker for the application. Whatever the customer's application, this new circuit breaker provides unsurpassed performance, in the smallest available package, tested to the appropriate standard.

The Dependable, "Smart" Solution

The increasing demand for electrical system uptime and reliability has made more effective, dependable circuit protection a must. The next generation of MASTERPACT Circuit Breakers from Square D employs the latest technology to maximize electrical system performance. They offer the proven reliability you've come to expect from the MASTERPACT name with improved functionality and major new design and operational features.



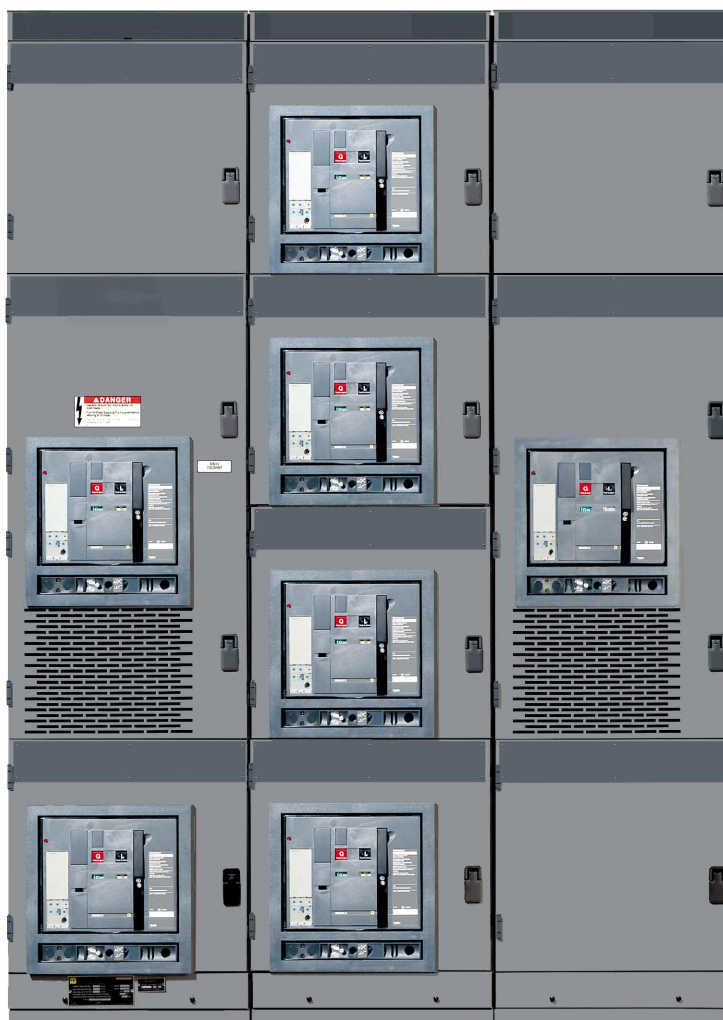
SQUARE D
Schneider Electric

MASTERPACT® NW UL489 Listed Insulated Case Circuit Breakers

Long, Reliable Operation

The new and improved MASTERPACT NW circuit breakers meet or exceed all of the rigorous design and testing standards required by UL489. They offer short-time withstand ratings up to 100,000 amperes and interrupting ratings up to 200,000 amperes – without fuses – to

prevent unnecessary outages and ensure continuity of service. Indeed, their state-of-the-art thermoset composite resin construction provides higher electrical ratings than traditional circuit breakers in a smaller, lighter, easier-to-install package. They have been tested to meet high levels of endurance.



Onboard Intelligence

A range of MICROLOGIC® Trip Units is available to make the breakers "smarter." These units provide the advanced functionality, such as a communications interface and power metering and monitoring capability, which allow for integration and coordination

of your electrical system. With the appropriate MICROLOGIC Trip Unit, you can communicate with breakers, gather power information, monitor events and remotely control breakers based on predetermined conditions – all of which can lead to substantial savings in electrical system operating costs.

***The new and improved
MASTERPACT
NW circuit
breakers meet
or exceed all
of the rigorous
design and
testing
standards
required by
UL489.***



Installation

UL489 Listed MASTERPACT NW Circuit Breakers are available for mounting in fixed and drawout configurations. The flexible design allows the breakers to be easily converted from one mounting type to the other in the field. Fixed mounting allows cost-effective use of this full-featured circuit breaker in an extremely small installed volume.

Drawout mounting provides additional features and flexibility. Using a simple racking mechanism, you can crank out breakers for inspection, replacement, testing and replacement of accessories, additional system controls by cradle position switches and additional locking options.

Simplified Upgrades and Maintenance

MASTERPACT NW Circuit Breaker accessories are field installable and upgradable (Refer to installation instructions for more details on installation). Because trip units are interchangeable and plug into breakers, it's also easy to upgrade breaker functions over time.

Ratings for UL489 Listed MASTERPACT® NW Circuit Breakers

Frame Rating		800/1200/1600/2000A			2500/3000A		4000/5000/6000A	
Interrupting Rating Code		N	H	L	H	L	H	L
Interrupting Current (kAIR RMS)	240 Vac 50/60 Hz	65	100	200	100	200	100	200
	480 Vac 50/60 Hz	65	100	150	100	150	100	150
	600 Vac 50/60 Hz	50	85	100	85	100	85	100
Short-time Withstand Current (kA RMS)	ac 50/60 Hz, 1s	42	65	30 (1)	65	65	85	100
Built-in Instantaneous Override (kA RMS=10%)		40 *	40	35*(1)	65	65	75	75
Close and Latch Ratings (kA RMS)	ac 50/60 Hz	40	40	25 (2)	40	40	40	40
Breaking Time		25 to 30 ms with no intentional delay (9 ms for L type)						
Closing Time		70 ms						
Sensor Rating		100 to 800A/600 to 1200A/ 800 to 1600A/1000 to 2000A			1200 to 2500A/ 1600 to 3000A		2000 to 4000A/2500 to 5000A/3000 to 6000A	
Endurance Rating (C/O) cycles (with no maintenance)	Mechanical	12,000◆	12,500◆	12,500◆	10,000	10,000	5000	5000
	Electrical	2800◆	2800◆	2800◆	1000	1000	1000	1000

*24 kA RMS for 800A circuit breaker frame with 100A or 250A sensor

(1) 65kA RMS for 2000A

(2) 40kA RMS for 2000A

◆ The endurance rating for 2000A, N/H/L is 10,000 for mechanical and 1000 for electrical

Ratings for UL489 Listed MASTERPACT® NW Automatic Switches

Frame Rating		800A	1200A	1600A	2000A	2500A	3000A	4000A	5000A	6000A
Withstand Rating Code		HF	HF	HF	HF	HF	HF	HF	HF	HF
Withstand Rating▲ (kA RMS)	240 Vac, 50/60 Hz	100	100	100	100	100	100	100	100	100
	480 Vac, 50/60 Hz	100	100	100	100	100	100	100	100	100
	600 Vac, 50/60 Hz	85	85	85	85	85	85	85	85	85
Instantaneous Override (kA RMS)		40	40	40	40	65	65	75	75	75

▲ The withstand rating is the fault current (at rated voltage) that the switch will withstand without damage when protected by a circuit breaker with an equal continuous-current rating

With MASTERPACT NW Circuit Breakers, you get full-featured performance – plus the proven track record for expertise in circuit protection and low voltage electrical distribution only Square D can offer. For more information about our MASTERPACT offering, call your local Square D sales office or nearby Square D authorized distributor. You can also visit our web site at www.SquareD.com

**Visit the Square D web site
at www.SquareD.com**



SQUARE D
Schneider Electric

Shop Drawing Submittal Review

Transmitted To: Cannon Design

Date: July 19, 2016

Attention: stl-cac@cannondesign.com

Contact Person / WTA Field Inspector:
Patrick Garner

Project Name: Webster University-**ISB**

Reviewed by: Bill Shaw

Project No. WT 14127.01

☐

UPS

☐

Courier

☒

Email

Copies	No.	Description
1 PDF	264000E01	(Submittal No. 264000-001) Electrical Distribution

Submittal Review Comments

Circuit breaker size and position shall match panel schedules on sheets E0503, 504, 505, & 506.

c: Kelvin Patel
Kpatel@cannondesign.com

☐ Furnish as Submitted

☐ Furnish as Noted

☐ Rejected

☒ ***Revise & Resubmit**

☐ Reviewed

☐

Corrections or comments made on shop drawings during this review do not relieve contractor from compliance with requirements of drawings and specifications. This check is only for review of general conformance with the design concept of project and general compliance with information given in contract documents. Contractor is responsible for: confirming and correlating all quantities and dimensions; selecting fabrication processes and techniques of construction; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.

WTASHOP - Webster ISB - 26 4000-001

From: STL-CAC <STL-CAC@CANNONDESIGN.COM>
To: 'Patrick Garner' <pgarner@wmtao.com>, WTASHOP <wtashop@wmtao.com>
Date: 7/5/2016 11:40 AM
Subject: Webster ISB - 26 4000-001
Cc: "Patel, Kelvin" <kpatel@CANNONDESIGN.COM>, "Grossman, Lynn" <lgrossman@C...>
Attachments: 264000-001 Electrical Distribution.pdf

Attached for review.

Melissa Pirtle
Construction Admin

CANNONDESIGN

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77 Westport Plaza
Suite 250
St. Louis, MO 63146

TRANSMITTAL

No. 15051-0114

Paric Corporation

PROJECT: 15051-Webster University Interdisciplinary Science Building

DATE: 07/05/2016

TO: Cannon Design
1100 Clark Ave
St Louis MO 63102

RE: Electrical Distribution

ATTN: Kelvin Patel

JOB: 15051

WE ARE SENDING:	SUBMITTED FOR:	ACTION TAKEN:
☐ Shop Drawings	☒ Approval	☐ Approved as Submitted
☐ Letter	☐ Your Use	☐ Approved as Noted
☐ Prints	☐ As Requested	☐ Returned After Loan
☐ Change Order	☐ Review and Comment	☐ Resubmit
☐ Plans		☐ Submit
☐ Samples	SENT VIA:	☐ Returned
☐ Specifications	☐ Attached	☐ Returned for Corrections
☒ Other: Product Data	☐ Separate Cover Via:	☐ Due Date:

Item	Package	Code	Rev.	Copies	Date	Description	Status
Submittal		264000-001	1		07/05/2016	Electrical Distribution	Submitted

NOTES:

CC: Paric Corporation, Kathy Bathe

Project Coordinator: Paric Corporation, Kathy Bathe

Signed: _____
Devin Gates

Transmittal

To Paric Corporation

Date 7/1/16

Job Number 11317

Job Name Webster Univ. ISB Building

Attention Devin Gates

Transmittal Number 11317-005

We are sending you:

☒ Attached

☐ Under separate cover, the following:

☐ Preliminary Drawings

☐ Samples

☐ Construction Drawings

☐ Copy of Letter

☐ Specifications

☐ Other _____

Quantity	Drawing #	Date/Revision	Description
1			Submittal for Distribution - Spec Section
			26 40 00

These are transmitted as checked:

☒ For Your Review & Comment

☐ Approved As Noted

☒ For Approval

☐ Returned For Corrections

☐ For Your File

☐ Approved As Submitted

☐ As Requested

☐

Copy:

Transmittal

Enclosure

Rick Branstetter

Signed: Rick Branstetter, Project Manager

Webster University ISB

Approval Drawing Package

Factory Order #: 37999262

06/13/2016

Distributor:
Graybar

Contractor/Installer:
Guarantee Electric / TD4

Consulting Engineer:
Wm Tao & Associates

Lou Feldhaus
Sales Representative

Jake Kaufman
Project Manager
North American Operating Division
(636) 329-2265
jacob.kaufman@schneider-electric.com

Life Is On



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Power Dry II- Dry-Type, Small Power Transformer Brochure

Model 98A Digital Temperature Controller For Medium Voltage Transformers

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PowerLogic PM8000 Series Intermediate Metering Technical Data Sheet

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Integrated Power Center 2 (IPC2)

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NF Panelboard Handout

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I-Line SPD

Internal Modular SPD Brochure

SurgeLoc SPD for NQ Panelboards

CONTACTORS AND STARTERS

BILL OF MATERIALS AND DRAWINGS

8538SCG

8538SCA - EF-1

8538SCA - KEF-1

2510FG

LITERATURE

Manual Starters - Type F

Manual Starters - Type M and T

8538 Combination Starter Catalog

SAFETY SWITCHES

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LPJ Fuses 1 - 60 Amps

LPJ Fuses 70 - 600 Amps