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Project 4790613956

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REPORT

on

CIRCUIT BREAKERS, MOLDED CASE, FOR USE WITH BATTERY POWER SUPPLIES

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DESCRIPTION

PRODUCT COVERED:

USL/CNL - Molded Case Circuit Breaker for Use with Battery Power Supplies, series B1B and Ex9BP U, followed by suffixes. See nomenclature for details.

GENERAL:

These devices are two-poles or four-poles DC circuit breakers. The poles are intended to be connected in series as noted in the installation instruction or wiring diagram. These devices operate trip free and can be manually reset. When these devices are tripped, the handle moves to the tripped position. They will remain tripped when the handle is held in the on position. These devices are provided with pressure wire connectors at line and/or load terminals. These devices can be used in conjunction with the complete sets of accessories, such as alarm switch AL3111N, auxiliary switch AX3111N, undervoltage trip UVT31 series and shunt trip SHT31 series to provide additional protection or functionality, referenced in E355392, Vol. 2, Sec. 1.

They were tested in a metal through-door Type 1 enclosure as follows:

Model/Frame Size	Height mm (in.)	Width mm (in.)	Depth mm (in.)
63A	296 (11.65)	196 (7.72)	96 (3.78)

Series B1B and Ex9BP U are identical in construction and differ only in name for marketing purposes.

ENGINEERING CONSIDERATION:

USL - Products designated USL have been investigated using US requirements as noted in the Test Record.

CNL - Products designated CNL have been investigated using Canadian requirements as noted in the Test Record.

RATINGS:

Series	B1B, Ex9BP U
Number of poles in series	2 or 4
Nominal Voltage - Vdc	384 (2P), 800 (4P)
Rated Maximum Voltage - Vdc	500 (2P), 1000 (4P)
Rated Current - A	25A to 63A
Instantaneous trip	C curve (9.6~14.4)In
Short circuit current - kA	10

NOMENCLATURE:

Catalog Designation for BPS molded case circuit breakers -


B1B	2	C	25
I	II	III	IV

I	BPS molded-case circuit breaker B1B series
II	Number of poles, 2 for 2-pole, 4 for 4-pole
III	Trip curve, C for C curve
IV	Current rating, 25 to 63 A

Ex9BP U	2	C	25
I	II	III	IV

I	BPS molded-case circuit breaker Ex9BP U series
II	Number of poles, 2 for 2-pole, 4 for 4-pole
III	Trip curve, C for C curve
IV	Current rating, 25 to 63 A

MARKINGS:

Marking	Location Category
Listee's name or trade name	B
Type designation and/or catalog number	B
Rated nominal and maximum dc voltage (Shall be marked with the DC  symbols or word "DC")	B
Ampere Rating	A
Open and Closed (On and Off)	A
A document shall be provided indicating the wiring configurations. The circuit shall be marked "For the proper configuration of connections of the terminals, refer to Publication No. _____ provided with this circuit breaker." The document shall include: a) The manufacturer's name and type designation or equivalent; b) Publication number and date or equivalent; c) The current ratings, voltage rating, number of poles; and d) A schematic of each of the intended wiring configurations.	B
For use on ungrounded systems only.	B
(Four-pole constructions) "For 800 V dc nominal 1000 V dc maximum rating the circuit breaker is suitable only for use with battery power supplies"	B
(Two-pole constructions) "For 384 V dc nominal 500 V dc maximum rating the circuit breaker is suitable only for use with battery power supplies"	B
Minimum enclosure size (on the user manual)	J
Manufacturer's data sheets or instruction book reference	B
"USE COPPER WIRE ONLY" or "CU ONLY"	C
60° C/75° C	C
The 10 kA interrupting rating shall be indicated and include either "Interrupting Rating(s)" or "Current Interrupting Rating(s)"	C
A circuit breaker provided with an accessory shall be marked to identify the installed accessory. The marking shall include type, proper connections (if not obvious), and the electrical rating of the accessory	C

Note: For products intended for use in Canada, markings shall be in English or in French and English; caution and warning markings shall be in French and English.

Markings required by this standard shall be permanent. A permanent marking shall be molded, die-stamped, or paint-stenciled; stamped or etched metal that is permanently secured; or indelibly stamped on a pressure-sensitive label secured by adhesive that complies with the Standard for Marking and Labeling Systems, UL 969.