



Canadian Standards Association  
Mississauga, Ontario  
**To the Part I Committee**

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Subject No. 3165

Chair: T. Olechna

Date: August 30, 2004

Title: Request for an interpretation, Rule 6-202

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**Submitted by:** Len Elford, (403) 268-2319, e-mail: Len.Elford@calgary.ca on January 6, 2004

**Proposal:** Interpretation of Rule 6-202:

**Question:** Is a Central Distribution Panelboard (CDP) an acceptable piece of equipment for use to subdivide the main consumer's service? Example: Supplying metered feeders to individual bays in warehouses and similar types of occupancy's.

**Reasons for Request:** There is generally no means of sealing or locking off an individual feeder, although breaker lock off devices are available and can be installed. By removing the front cover of the CDP easy access is gained to all of the metered feeders. It appears that some municipalities and agencies are accepting this type of installation while others are not.

**Supporting Information:** The attached shows the different types of FPE equipment available for your information.

**Chair's Comments:** In Rule 6-202 there is a requirement that each subdivision of the main consumer's service shall be provided with a separate service box.

In looking at the CDP panel specifications, it does not seem to be certified for service entrance and therefore would not meet the Rule 6-202 requirements.

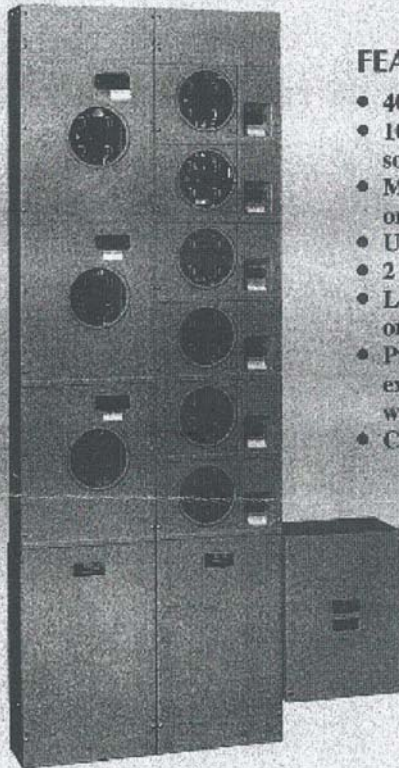
**Subcommittee Recommendation:** All subcommittee members agreed that the answer should be "NO".



DISTRIBUTION CATALOGUE  
**C-1-400** DECEMBER 1981  
SUPERSEDES JANUARY 1978

# M/S

**SUB-SERVICE  
SWITCHING  
AND  
METERING  
CENTRES**

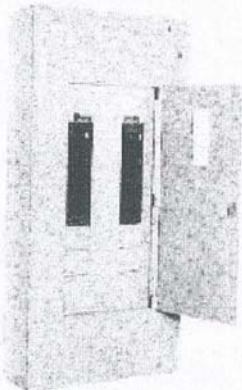


## FEATURES

- 400 A to 1200 A main bus capacity
- 100/125 A, and 200 A meter sockets with 4, 5, or 7 jaws
- Meter stacks rated at 240 V, single or three phase
- Up to 200 A sub-service capacity
- 2 or 3 pole sub-service circuit breakers
- Left-hand or right-hand entry available on all meter stacks
- Provision for top and/or bottom exiting of sub-service load wiring from all meter stacks
- CSA Type A "cold metering"

**FPE FEDERAL PIONEER LIMITED**  
19 Waterman Ave., Toronto, Ontario M4B 1Y2

# CDP



1200 AMP

600 VOLT

### LAYOUT INSTRUCTIONS

- 1 - Prepare a list of all circuit breakers and spaces for future circuit breakers required in panelboard.
- 2 - Draw a layout of panelboard containing all circuit breakers and spaces. (see note 1)
- 3 - If panelboard contains a main circuit breaker, consider it as a branch circuit in layout.
- 4 - Note that all circuit breakers of similar frame sizes up to and including 400A NJL can be placed opposite one another. M frame circuit breakers occupy the entire width of the panelboard chassis.
- 5 - Add the heights of the circuit breakers and spaces from dimensions shown on the layout to obtain total Branch Breaker Height. Add extra for bottom gutter if 600MCM sub-feed is required (see note 3).
- 6 - From table of Standard Cabinet Heights choose the exact or next larger Branch Breaker Height from that calculated and then select the Standard Cabinet Height of panelboard for correct mains capacity.
- 7 - If Branch Breaker Height exceeds maximum listed, estimate as two or more single panelboards and add sub-feed lugs to all but one panelboard.

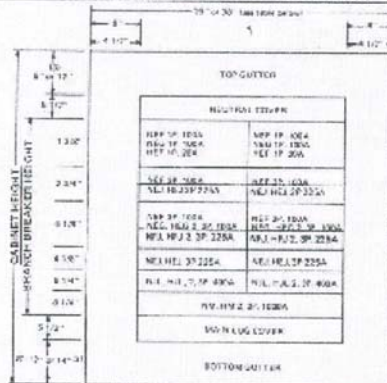
### PANELBOARD MAIN LUG SIZES (CDP and QMQB)

| Mains Capacity | Lug Size                                    |
|----------------|---|
| 225A           | 1 - #6 to 300 MCM                           |
| 400A           | 1 - #4 to 800 MCM Cu or 2: 1-0 to 250MCM Al |
| 600A           | 2 - 250 MCM to 600 MCM                      |
| 800A           | 3 - #2 to 600 MCM                           |
| 1200A          | 4 - #2 to 600 MCM                           |

CDP panelboards are designed to provide complete convertible arrangements for 1, 2 and 3 pole circuit breakers in any desired assembly arrangement for 600V AC or 750V DC applications. The panel box is constructed of cold rolled steel. The trim is available for either flush or surface mounting. This panel is ideal for use as a wall mounted distribution centre for all types of commercial, institutional and industrial applications.

- system voltage - 600V AC maximum  
250V DC maximum
- main lugs only - 1200A maximum
- main breaker - 1000A maximum
- branch breaker -

- NEF circuit breakers 15-100A 480V AC 1, 2 and 3 pole
- HEF circuit breakers 15-20A 277V 1 pole
- NEG and HEG circuit breakers 15-100A 600V AC 1, 2 and 3 pole
- NFJ circuit breakers 125-225A 240V AC 2 and 3 pole
- NFJ and HFJ circuit breakers 70-225A 600V AC 2 and 3 pole
- NJL and HJL circuit breakers 70-400A 600V AC 2 and 3 pole
- NM and HM circuit breakers 125-1000A 600V AC 2 and 3 pole



### STANDARD CABINET DIMENSIONS (CDP and QMQB)

| Branch Breaker or Switch Height | Cabinet Dimensions |                |                    |                |
|---------------------------------|--------------------|----------------|--------------------|----------------|
|                                 | 225A - 400A Mains  |                | 600A - 1200A Mains |                |
|                                 | Width(2)           | Height         | Width(2)           | Height         |
| 8-1/4" 210mm                    | 29"                | 43-3/8" 1102mm | 29"                | 43-3/8" 1102mm |
| 16-1/2" 419mm                   | 29"                | 43-3/8" 1102mm | 29"                | 58-7/8" 1521mm |
| 24-3/4" 628mm                   | 737mm              | 58-7/8" 1521mm | 737mm              | 58-7/8" 1521mm |
| 33" 838mm                       | 737mm              | 58-7/8" 1521mm | 737mm              | 76-3/8" 1940mm |
| 41-1/4" 1048mm                  | 737mm              | 76-3/8" 1940mm | 737mm              | 76-3/8" 1940mm |
| 49-1/2" 1257mm                  | 38-1/2"            | 76-3/8" 1940mm | 865mm              | 92-7/8" 2350mm |
| 57-5/8" 1467mm                  | 865mm              | 92-7/8" 2350mm | 865mm              | 92-7/8" 2350mm |
| 66" 1676mm                      | 865mm              | 92-7/8" 2350mm | 865mm              | 92-7/8" 2350mm |

Standard depth 9-1/2" 229 mm 12-1/2" 311 mm with door

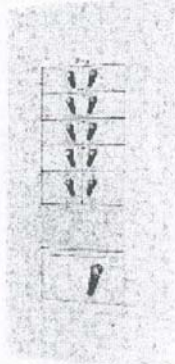
#### NOTES:

- 1) If breaker type is specified for future breakers, bus bars and components are provided; if space only (SH) requested, bus bars only supplied.
- 2) With branch ratings of 225A or less width can be reduced to 29" if cabling area adequate for cables used.
- 3) Gutters - 8" up to 400A; 12" for 600 to 1200A. If 600 MCM sub-feed is required bottom gutter must be 14".



# PANELBOARDS

## QMQB



**1200 AMP  
600 VOLT**

QMQB panelboards are designed to handle complete convertible arrangements for QMUB fusible switch units from 30 to 1200 amperes. The QMQB units feature visible blades, integral handle mechanisms, main lugs and quarters, interlocks, automatic, quick-break mechanisms, front operation, high pressure fuse case and recessed live parts. The panelboard is constructed of cold-rolled steel. The width is either 29" or 39" and the depth is 9" or 12-1/4" if the panel is equipped with a door. The form is available for either flush or surface mounting and can be equipped with a door and flush trim face.

|                     |  |
|---------------------|--|
| system voltage      | 600V AC maximum<br>250V DC maximum                   |
| main lugs only      | 1200A maximum  |
| main switch         | 1200A maximum  |
| branch switch units | QMUB units 30 - 1200A<br>250V and 600V, 2 and 3 pole |

### PRICING INSTRUCTIONS

1. Make layout from instructions on page 80.
2. Select base price using the exact or larger branch switch height than that calculated. If total BSU exceeds maximum, use two or more tubs of equal size and add base price for each tub.
3. Add for neutral if required for each tub.
4. Add for branch circuit switches.
5. For panels with main switch, price as a branch circuit switch.
6. Add price for space and "provision" if required.
7. Add for HRC fuse provision where necessary.
8. Add price for special features.
9. Total all prices to obtain total list price of panel.

### ACCESSORIES

| Description                                    |              |         | Catalog Number | List Price |
|--|--------------|---------|----------------|------------|
| Filter Plates                                  | Full         | 5-1/2"  | FF5            | \$12.50    |
|  | Fillet Plate | 6-7/8"  | FF6            | 14.00      |
|  |              | 8-5/8"  | FF8            | 24.00      |
|  |              | 12-1/2" | FF16           | 35.00      |
| Door is trim (increase panel depth to 12-1/4") |              |         |                | \$212.00   |

### NOTES

- (1) Base price — includes single tub, interior, trim, main lugs.
- (2) "Provision" includes bus connector and mounting means for future QMQB switch units. Where space only is specified bus only supplied at no extra charge.
- (3) Prices for 30, 60 and 100 amp units are for 1 switch only, "Provision" is for twin units.

### BASE LIST PRICE

| Total Branch switch lgt. | Main bus capacity |          |          |          |          |          |
|--------------------------|-------------------|----------|----------|----------|----------|----------|
|                          | 200A              | 400A     | 600A     | 800A     | 1000A    | 1200A    |
| 16 1/2"                  | \$619.00          | \$704.00 | \$794.00 | —        | —        | —        |
| 24 1/2"                  | \$45.00           | \$27.00  | \$59.00  | \$94.00  | \$96.00  | \$103.00 |
| 32"                      | \$58.00           | \$45.00  | \$38.00  | \$66.00  | \$126.00 | \$187.00 |
| 41 1/2"                  | \$80.00           | \$62.00  | \$52.00  | \$94.00  | \$196.00 | \$258.00 |
| 49 1/2"                  | \$82.00           | \$108.00 | \$178.00 | \$196.00 | \$258.00 | \$327.00 |
| 57 1/2"                  | \$102.00          | \$130.00 | \$178.00 | \$340.00 | \$380.00 | \$466.00 |
| 66"                      | \$141.00          | \$237.00 | —        | —        | —        | —        |
| Solid Neutral            | \$87.00           | \$119.00 | \$165.00 | \$225.00 | \$236.00 | \$286.00 |

Ground Terminals — see SPECIAL FEATURES section.

### BRANCH QMQB SWITCH LIST PRICES

| Voltage   | Branch or main switch (amps) | 2 pole    | 3 pole    | Provision (2) |
|-----------|------------------------------|-----------|-----------|---------------|
| 250 Volts | 30 (3)                       | \$ 135.00 | \$ 163.00 | \$ 41.00      |
|           | 60 (3)                       | 135.00    | 163.00    | 41.00         |
|           | 100 (3)                      | 202.00    | 251.00    | 60.00         |
|           | 200                          | 559.00    | 720.00    | 102.00        |
|           | 400                          | 1254.00   | 1668.00   | 183.00        |
|           | 600                          | 1607.00   | 2012.00   | 202.00        |
|           | 800                          | 2522.00   | 3011.00   | 225.00        |
| 600 Volts | 1200                         | 2848.00   | 3315.00   | 244.00        |
|           | 30 (3)                       | 185.00    | 202.00    | 41.00         |
|           | 60 (3)                       | 185.00    | 202.00    | 41.00         |
|           | 100 (3)                      | 251.00    | 313.00    | 60.00         |
|           | 200                          | 559.00    | 720.00    | 102.00        |
|           | 400                          | 1254.00   | 1668.00   | 183.00        |
|           | 600                          | 1607.00   | 2012.00   | 202.00        |
| 800       | 2522.00                      | 3011.00   | 225.00    |               |
| 1200      | 2848.00                      | 3315.00   | 244.00    |               |

Standard Cabinet Heights — see CDP page 77  
Panelboard Main Lug Sizes — see CDP page 77  
Special Features — see pages 81 and 82

QMQB 001 P12 2/82