Westinghouse Electric Corporation
Low Voltage Breaker Division
Beaver, Pennsylvania 15009

250, 600 Volts Ac, 250 Volts Dc 30-1200 Amperes

March, 1978
Supersedes Price List 29-620,
pages 1-4 dated February 19, 1974,
and Supp. Page 01 dated September 26,1974.
Mailed to: E, D, C/1904/1928, 1929/PL

Technical Data

## Type FDP Fusible Panelboard Switches

## Ratings

30-1200 Amperes, 250 and 600 Volts
Ac, 250 Volts Dc, 2 and 3 Pole
Switch units rated 30-1200 amperes are UL Listed. Two pole, 30-600 amp switches, are UL Listed for use on 3 -phase Delta, grounded B phase applications as indicated in Hp table page 3.

## Application

Type FDP fusible panelboard switches are designed for commercial, industrial and service entrance applications to protect and switch feeder and branch circuits.

## Description

Type FDP fusible panelboard units incorporate special quick-make, quick-break open switches, housed in sheet steel enclosures. The units are designed for installation in conventional type CDP Distribution Panelboard chassis.

All standard FDP switches rated 30 thru 600 amperes are designed for use with the standard N.E.C. fuse. However, the latest design switches with catalog number suffix " $R$ " are adaptable for use with Class R, or Class J fuses as noted on page 4 . Switches rated 800-1200 amperes accept NEMA class L fuses as noted on page 3 .

These switches may be padlocked in either the ON or OFF position and, in addition, have a cover interlock which may be padlocked for optimum security.

## Capacitor Switching

For application of FDP switches for capacitor switching, refer to Westinghouse.

## Selection

Type FDP units are available in eight sizes.
In order to select a particular unit, the following data must be known.

1. Voltage rating.
2. Current or horsepower rating (refer to horsepower table on page 3.)

## 3. Number of poles.

Knowing the voltage and current ratings, the proper size switch can be found by referring to the Application Table and Layout Drawing below. Knowing the number of poles, the particular FDP switch can be selected from the following pages.

## Application Table

| Ampere Rating | Volts | Unit Required |
| :---: | :---: | :---: |
| 30 | 250 Ac or Dc 600 Ac | $512^{\prime \prime}$ Twin <br> 51/2" Twin |
| 60 | 250 Ac or Dc 600 Ac | $51 / 2^{\prime \prime}$ Twin <br> 5112" Twin |
| 100 | 250 Ac or Dc 600 Ac | $51 / 2^{\prime \prime}$ Twin <br> 6\%/" Single or Twin |
| 200 | 250 Ac or Dc 600 Ac | 8\%" Single <br> 81/:" Single |
| 400 | $\begin{aligned} & 250 \mathrm{Ac} \text { or } \mathrm{Dc} \\ & 600 \mathrm{Ac} \end{aligned}$ | $15 \%{ }^{\prime \prime}$ Single 15\%" Single |
| 600 | $\begin{aligned} & 250 \mathrm{Ac} \text { or } \mathrm{Dc} \\ & 600 \mathrm{Ac} \end{aligned}$ | $15 \%$ " Single 15\%" Single |
| 800 | 600 Ac | 22" Single |
| 1200 | 600 Ac | 22" Single |

## Layout Drawing

| $4 \times$ | 1004 | 1004 | $5 \frac{1}{2}$ |
| :---: | :---: | :---: | :---: |
| 5 x | 1004 |  | $6 \frac{7}{8}$ |
| $6 \times$ | 2004 |  | $8 \frac{1}{4}{ }^{\prime \prime}$ |
| 5 x | 100A | 1004 A $\frac{7}{81}^{17}$ |  |
| $11 \times$ | 400 or 600A |  | $15 \frac{1}{8}$ |
| 16x | 800 | 2004 | $22^{\prime \prime}$ |

Page 2

Switch Selection Guide
For List Prices, Refer to Price List 29-020
$51 / 2$ Inch Twin Unit
250, 600 Volts Ac, 250 Volts Dc, 100 Amps Max.


18 In. Wide, $4 X$ Units ( $51 / 2$ In.) High

Panelboard Connectors: Included
Class R Fuse Clip Conversion Kit: Page 4 xtension Wings: Page 4
Dimensions, Wire Range: DS 29-670, page 2
Current Limiting Fuse Provision: Page 4
Shipping Weights: 2 Pole, 18 Lbs. 3 Pole, 19 Lbs.
Horsepower Ratings: Page 3

| Ampere Rating |  | Catalog Numbers |  |
| :---: | :---: | :---: | :---: |
| Unit 1 | Unit 2 | 2 Poles | 3 Poles |
| 250 Volts Ac, 250 Volts Dc |  |  |  |
| 30 | 30 | FDPT2211 R | FDPT3211R |
| 30 | 60 | FDPT2212R | FDPT3212R |
| 30 | 100 | FDPT2213R | FDPT3213R |
| 60 | 60 | FDPT2222R | FDPT3222R |
| 60 | 100 | FDPT2223R | FDPT3223R |
| 100 | 100 | FDPT2233R | FDPT3233R |
| 600 Volts Ac |  |  |  |
| 30 | 30 | FDPT2611R | FDPT3611R |
| 30 | 60 | FDPT2612R | FDPT3612R |
| 60 | 60 | FDPT2622R | FDPT3622R |

6 \%/s Inch Single Units 600 Volts Ac, 100 Amps Max.


18 In. Wide, 5X Units ( $67 / 8$ In.) High
Panelboard Connectors: Included
Class R Fuse Clip Conversion Kit: Page 4 Extension Wings: Page 4
Dimensions, Wire Range: DS 29-670, Page 3
Current Limiting Fuse Provision: Page 4
Shipping Weights: 3 Pole, 17 Lbs.
Horsepower Ratings: Page 3

| Ampere <br> Rating | Catalog Numbers |  |
| :--- | :--- | :--- |
|  | 2 Poles | 3 Poles |
| 100 | FDPS263R | FDPS363R |

81/a Inch Single Unit
250, 600 Volts Ac, 250 Volts Dc,
200 Amps


18 In. Wide, $6 \times$ Units ( $81 / a$ In.) High

Panelboard Connectors: Page 4
Class R Fuse Clip Conversion Kit: Page 4
Extension Wings: Page 4
Dimensions, Wire Range: DS 29-670, page 4
Current Limiting Fuse Provision: Page 4
Current Limiting Fuse Provision: Page
Shipping Weights: 2 Pole, 23 Lbs.
Shipping Weights: 2 Pole, 23 Lbs.
Horsepower Ratings: Page 3

| Ampere <br> Rating | Catalog Numbers |  |
| :--- | :--- | :--- |
|  | 2 Poles | 3 Poles |

250 Volts Ac, 250 Volts Dc
200 FDPS224R
600 Volts Ac
200
FDPS324R
FDPS364R

67/8 Inch Twin Unit
600 Volts Ac, 100 Amps Max.


22 In. Wide, 5X Units (6\% In.) High
Panelboard Connectors: Included
Class R Fuse Clip Conversion Kit: Page 4 Dimensions, Wire Range: DS 29-670, Page 5 Current Limiting Fuse Provision: Page 4
Shipping Weights: 2 Pole, 21 Lbs
3 Pole, 22 Lbs
Horsepower Ratings: Page 3

| Ampere Rating |  | Catalog Numbers |  |
| :---: | :---: | :--- | :--- |
| Unit 1 | Unit 2 | 2 Poles | 3 Poles |
| 30 | 100 | FDPT2613R | FDPT3613R |
| 60 | 100 | FDPT2623R | FDPT3623R |
| 100 | 100 | FDPT2633R | FDPT3633R |

151/s Inch Single Unit
400 and 600 Amps
250, 600 Volts Ac, 250 Volts Dc,
Horizontal Design, Line Side of
Switch to Left


22 In. Wide, 11X Units (151/8 In.) High
Options: Page 4
Class R Fuse Clip Conversion Kit: Page 4
Panelboard Connectors: Page 4
Dimensions, Wire Range: DS 29-670, Page 6
Current Limiting Fuse Provision: Page 4
Shipping Weights: 2 Pole, 51 Lbs.
3 Pole, 52 Lbs

| Ampere <br> Rating | Catalog Numbers |  |
| :--- | :---: | :---: |
| 2 Poles | 3 Poles |  |
| $\mathbf{2 5 0}$ Volts Ac, $\mathbf{2 5 0}$ Volts Dc |  |  |
| 400 | FDP225R | FDP325R |
| 600 | FDP226R | FDP326R |
| $\mathbf{6 0 0}$ Volts Ac® |  |  |
| 400 | FDP265R | FDP365R |
| 600 | FDP266R | FDP366R |

(1) Class $R$ fuse rating is 480 volts Ac 100,000 amps. maximum.


Technical Data
29-620
Page 3

Switch Selection Guide, Continued For List Prices, Refer to Price List 29-020 400 and 600 Amps. 250, 600 (3) Volts Ac, 250 Volts Dc Vertical Design, Line Side of Switch at Top or Bottom
18 In . Wide, 16X Units (22 In.) High


Switch With Line Side at Top
Options: Page 4
Class R Fuse Clip Conversion Kit: Page 4
Dimensions; DS 29-670, Pages 6.1, 6.2
Current Limiting Fuse Provision: Page 4
Shipping Weights: 2 Pole, 51 lbs .
3 Pole, 52 lbs.

| pere | Line Side at | Top | Line Side at | Bottom |
| :---: | :---: | :---: | :---: | :---: |
| ing | 2 Poles | 3 Poles | 2 Poles | 3 Poles |
| 250 Volts Ac, 250 Volts Dc |  |  |  |  |
| $\begin{aligned} & 400 \\ & 600 \end{aligned}$ | FDP225TR FDP226TR | FDP325TR FDP326TR | FDP225BR FDP226BR | FDP325BR FDP326BR |
| 600 Volts Ac(3) |  |  |  |  |
| $\begin{aligned} & 400 \\ & 600 \end{aligned}$ | FDP265TR FDP266TR | FDP365TR FDP366TR | FDP265BR FDP266BR | FDP365BR FDP366BR |

## 800 and 1200 Amps

600 Volts Ac
Horizontal Design, Line Side of Switch at Left
22 In. Wide, 16X Units (22 In.) High

Switch with Line Side at Left
Panelboard Connectors: Page 4 (Must be ordered separately)
Terminals: See Below (Order Separately)
Options: Page 4
Dimensions, Wire Range: DS 29-670, Page 7 Shipping Weights: 2 Pole Units, 100 Lbs.


400 FDP265TR FDP365TR FDP265BR FDP365BR
600 FDP266TR FDP366TR FDP266BR FDP366BR

Horsepower Ratings, 600 Ampere Maximum Switches

| Max. Amps | Poles | 240 Volts Ac |  | 480 Volts Ac 600 Volts Ac |  |  |  | $\begin{aligned} & 240 \text { Volts } \\ & 3 \mathrm{Ph}(5) \end{aligned}$ |  | $\begin{aligned} & 480 \text { Volts } \\ & 3 \text { Ph(5) } \\ & \hline \end{aligned}$ |  | 250 <br> Volts <br> Dc |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Std. <br> NEC <br> Fuse | Max Time Delay Fuse | Std. <br> NEC <br> Fuse |  | Std. NEC Fuse | Max <br> Time Delay <br> Fuse | Std. <br> NEC <br> Fuse | Max <br> Time Delay Fuse | Std <br> NEC <br> Fuse | Max Time Delay Fuse |  |
| 30 | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | $3^{11 / 2}$ | $\begin{aligned} & 3 \\ & 71 / 2 \end{aligned}$ | 3 | $\begin{gathered} 71 \\ 15 \end{gathered}$ | $\begin{aligned} & 3 \\ & 71 / 2 \end{aligned}$ | $\begin{aligned} & 10 \\ & 20 \end{aligned}$ | 3 | 71/2 | 5 | 15 | 5 |
| 60 | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | $\begin{aligned} & 3 \\ & 71 / 2 \end{aligned}$ | $\begin{aligned} & 10 \\ & 15 \end{aligned}$ |  | $\begin{aligned} & 20 \\ & 30 \end{aligned}$ | $\begin{aligned} & 10 \\ & 15 \end{aligned}$ | $\begin{aligned} & 25 \\ & 50 \end{aligned}$ | $71 / 2$ | 15 | 15 | 30 | 10 |
| 100 | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ |  |  |  | $\begin{aligned} & 30 \\ & 60 \end{aligned}$ | $\begin{aligned} & 15 \\ & 30 \end{aligned}$ | $\begin{aligned} & 40 \\ & 75 \end{aligned}$ | 15 | 30 | 25 | 60 | 20 |
| 200 | 2 |  |  | $\begin{aligned} & 25 \\ & 50 \end{aligned}$ | $\begin{array}{r} 50 \\ 125 \end{array}$ | $\begin{aligned} & 30 \\ & 60 \end{aligned}$ | $\begin{array}{r} 50 \\ 150 \end{array}$ | 25 | 60 | 50 | 100 | 40 |
| 400 | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | 50 |  | 100 | 250 | 125 (6) | 350 (6) | (4) | (4) | (4) | (4) | $\cdots$ |
| 600 | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | 75 | 100 | 150 | 400 | 200 (6) | 500 (6) | (4) | (4) | (4) | (4) | $\cdots$ |

(2) Accepts following NEMA Class L fuses, suitable for 200,000 amps maximum available current.

Bussman "Hi-Cap" KRP-C
Bussman "Limitron" KTU
General Electric "CLF"
General Electric' CLF"
Federal Pacific Electric "Econolim" LCL.
(3) Class R fuse rating is 480 volts $\mathbf{A c}, 100,000 \mathrm{amps}$ maximum.
(4) UL listed as a general use, amp rated switch only when used on 3 phase Delta grounded B phase systems.
(5) Two pole switches used on 3-phase Delta grounded

B phase system.
(6) Not applicable to switches using Class R fuses. (7) Order as required for switch rating and conductor.

800 and 1200 Amps
600 Volts Ac
Vertical Design, Line Side of Switch at Top or Bottom
22 In . Wide, 16X Units ( 22 In .) High


Switch With Line Side at Top


Switch With Line Side at Bottom
Panelboard Connectors: Page 4 (Must be ordered separately)
Terminals: See Below (Order Separately)
Options: Page 4
Dimensions, Wire Range: DS 29-670, Pages 8, 9 Shipping Weights: 2 Pole Units, 100 Lbs. 3 Pole Units, 100 Lbs.

| Ampere Ratings | Fusing Arrangement | Catalog Numbers |  |
| :---: | :---: | :---: | :---: |
|  |  | 2 Pole | 3 Pole |
| Line Side at Top |  |  |  |
| $\begin{array}{r} 800 \\ 1200 \end{array}$ | Single(2) <br> Single(2) | $\begin{aligned} & \text { FDPS267T } \\ & \text { FDPS268T } \end{aligned}$ | FDPS367T FDPS368T |
| Line Side at Bottom |  |  |  |
| $\begin{array}{r} 800 \\ 1200 \end{array}$ | Single(2) | FDPS267B | FDPS367B |

Terminals for 800, 1200 Amp Switches
Terminals are required for line side of main switches and load side of branch switches. Order separately.

| Terminal <br> Catalog <br> Number | No., Size and Type of <br> Conductor Per Terminal | Max. <br> Terms. <br> Per. <br> Phase |
| :--- | :--- | :--- |

Page 4

## Panelboards Connectors

## Main Connector Kits

Kits include all connectors, mounting brackets and insulators, for one switch.

| Switch Amps | Catalog Numbers |  |
| :---: | :---: | :---: |
|  | 2 Poles | 3 Poles |
| 81/4 Inch Single Units |  |  |
| 200 | CM220FDP | CM320FDP |
| 151/8 Inch Single Units |  |  |
| 400 | CMA240FDP(4)(6) CMA240FDPJ(5)(6) | CMA340FDP(4)(6) <br> CMA340FDPJ(5)(6) |
| 600 | CMA260FDP(4) (6) CMA260FDPJ(5)(6) | CMA360FDP(4)(6) CMA360FDPJ(5)(6) |

Branch Connector Kits
Kits include all connectors, mounting brackets and insulators, for one switch.

| Switch Amps | Catalog Numbers |  |
| :---: | :---: | :---: |
|  | 2 Poles | 3 Poles |
| 81/4 Inch Single Units |  |  |
| 200 | CB220FDP | CB320FDP |
| 151/8 Inch Single Units |  |  |
| $\begin{aligned} & 400 \\ & 600 \end{aligned}$ | $\begin{aligned} & \text { CBA240FDP(6) } \\ & \text { CBA260FDP(6) } \end{aligned}$ | $\begin{aligned} & \text { CBA340FDP© } \\ & \text { CBA360FDP(6) } \end{aligned}$ |

## Center Connectors

Center connectors are used for sequence phasing of two pole switches on 3 phase, 3 wire or 3 phase, 4 wire panel-boards.

| Unit Used With | Ampere Rating | Style Number |
| :--- | :--- | :--- |
| 51/2 Inch Twin | All Ratings | 2603D19G06 |
| $61 / 2$ Inch Single | All Ratings | 2603D19G04 |
| 6 Inch Twin | All Ratings | 2603D19G06 |

## Branch or Main Connector Kits

For 800 and 1200 Amp. Switches only.
Kits include all connectors, mounting brackets and insulators for one switch.

| Switch <br> Amps | Catalog Numbers |  |
| :--- | :--- | :--- |
|  | 2 Pole |  |


| Horizontal Design Switches |  |  |
| :---: | :---: | :---: |
| 800 | CMB280FDP | CMB380FDP |
| 1200 | CMB2120FDP | CMB3120FDP |


| Vertical Design Switches |  |
| :---: | :---: |
| 800 | CMB280FDPV |
| 1200 | CMB2120FDPV |

(2) Field mounting does not void listing of U.L. Listed switch.
(3) Not Underwriters' Laboratories, Inc., listed
(4) Do not use with switches having class" $J$ " fuse clips.
(5) Use only with switches having class "J" fuse clips.
(6) Use with horizontal design switches only.
(7) Except 30 and 60 amp switches in $6 \%{ }^{\prime \prime}$ twin units.
(B) 480 volts Ac max.
(9) When ordered for use with Class R fuses, order Class R fuse conversion kit separately.

## Options

## Optional Terminals for $\mathbf{4 0 0}$ and $\mathbf{6 0 0}$

Ampere Switches (Factory Modification
Only-Kits are not available for field conversion of existing switches)
Will accommodate 600-750 MCM AI/Cu cable: one cable per pole on 400 amp , two cables per pole on 600 amp . For Branch switches, order switch as "special", specifying terminals for 600-750 MCM Al/Cu cable, and use standard branch connector kit. For Main switches, order standard switch and special connector kit for 600750 MCM AI/Cu cable.

## Extension Wings

Extension Wings are used with 18 in. wide switch units to fill in gap between switch and panelboard trim when used in panelboards designed for 22 in . wide switch units. Unit Used With Style Numbe $51 / 2$ Inch Twin $\quad 114 \mathrm{~B} 812 \mathrm{HO2}$ $\begin{array}{ll}6 \% \text { Inch Single } & 114 \mathrm{~B} 812 \mathrm{HO} \\ 81 / 4 \text { Inch Single } & 114 \mathrm{~B} 812 \mathrm{HO}\end{array}$ BRDER 2 PER UNIT
For 800 and 1200 Amp. Switches only.
Field Mtg. Shunt Trip Attachment
(Includes cut-off switch)
For use with ground fault protective devices.
Use on switches applied at 480 volts max.
120 volt, 60 Hz for field mounting.
Style Number: 5682D73G01 (2)

Field Mtg. Bell Alarm Contact Kit
For use with above shunt trip. Contact closes when switch is tripped.

Style Number:5682D73G05(3)
Field Mtg. Auxiliary Contact Kits
For use only with above shunt trip.
1 A and 1 B contacts.
Style Number: 5682D73G06(3)
For use on switches not equipped with optional shunt trip.(3)
Contacts Style Number
$2 A$ and $2 B \quad 5682 D 73 G 04$

## Factory Installed Shunt Trips - 120

## Volt 60 Hz

For use with Ground Fault Protective devices. Shunt trip is UL listed when supplied on a UL Listed switch. (Cut-off switch included.) 400 and 600 amp switches are listed for use with Class J current limiting or Class R fuses only.

## 400 and 600 Amp Switches

Order by adding suffix letters "DS" to catalog number.
Example: FDP366J + DS = FDP366JDS, or FDP366R + DS $=$ FDP366RDS 9

## 800 and 1200 Amp Switches

Suitable for use on switches applied at 480 volts maximum. Order by changing the 6th digit of catalog number (6) to 4 and add suffix letters "DS".
Example: FDPS368 becomes FDPS348 + DS $=$ FDPS348DS

## Optional Fuse Provisions <br> Class J Fuses

$30-600 \mathrm{amp}, 600$ volt FDP switches are available factory modified for use with NEMA Class " $J$ " fuses ${ }^{(7)}$ and are UL listed for applications up to 200,000 amps sym. available faults. Order switches by substituting (no price addition) suffix $J$ for suffix $R$ in the catalog number.

## Class R Fuses

To use NEMA Class R fuses with standard 30-600 amp FDP switches having suffix
" R " on the catalog number, order the following field mounting conversion kits. These kits do not void the UL Listing of UL Listed switches.

| Switch Rating Kits <br> Amps | Volts | Catalog <br> Number | Style <br> Number |
| :--- | :--- | :--- | :--- |
| 30 | 250 | RFK121 | 2609D97G01 |
| 30 | 600 | RFK161 | 2609D97G02 |
| 60 | 250 | RFK222 | 2609D97G03 |
| 60 | 600 | RFK262 | 2609D97G04 |
| 100 | $250 / 600$ | RFK464 | 750B249G01 |
| 200 | $250 / 600$ | RFK464 | 750B249G01 |
| 400 | $250 / 600$ | RFK666 | 750B427G01 |
| 600 | $250 / 600$ | RFK666 | 750B427G01 |

## FDP Fuse-Switch Application

Maximum switch-fuse application based on short circuit current withstand (symmetrical amperes).

| Switch Rating | Maximum Application at 240, 480 or 600 Volts Ac |  |  |
| :---: | :---: | :---: | :---: |
| Amps | Class R Fuses | Current Limit <br> Fuse Class J | Two Pole Switches With Class R Fuses on Three Phase Grounded B Phase |
| 30 | 200,000 | 200,000 | 100,00088 |
| 60 | 200,000 | 200,000 | 100,00088 |
| 100 | 200,000 | 200,000 | 100,00088 |
| 200 | 200,000 | 200,000 | 100,00088 |
| 400 | 100,000 ${ }^{8}$ | 200,000 |  |
| 600 | 100,00088 | 200,000 |  |

[^0]
[^0]:    Westinghouse Electric Corporation
    Low Voltage Breaker Division
    Beaver, Pennsylvania 15009

