

# Technical Data Sheet

## Sheet Steel Flagged Switchgear Range

CDPD115  
Issue 2

### Sheet Steel Flagged Switchgear

The Flag Indicator is viewed through a 8mm thick polycarbonate window in the enclosure door providing the user with confirmation of the switch contact state. All assemblies are sealed to IP65 and are supplied with 2 C/O auxiliary blocks wired down to terminals. The range has a padlockable handle which allows for the insertion of up to three padlocks in the 'Off' position thus preventing the isolator being switched to the 'On' position. The door interlock handle can be defeated to enable emergency opening or for testing purposes. All assemblies are supplied with the switching element mounted on a removable internal 2mm galvanised steel chassis plate.

The standard range of Flag isolators are supplied with silver plated conductors but if the product is to be installed in an environment where there is a high amount of Hydrogen Sulfide and Sulphur dioxide we offer the option of Tin plated conductors in order to prevent the growth of Silver whiskers. Stainless Steel Grade 304 enclosures, Castell Lock options and EX Zone 22 versions are available on request. Contact your local Area Sales Manager for more information.

'N' = switched neutral | Add suffix 'T' to the beginning of any Cat. No. for tin plate contacts e.g. TSDS00323N/F

| Switch-Disconnectors (O-I)                                                         |        |        |              |            |                |           |                     |
|------------------------------------------------------------------------------------|--------|--------|--------------|------------|----------------|-----------|---------------------|
| Image                                                                              | Rating | Format | Cat. No.     | Encl. Size | Encl. Material | IP Rating | Encl. Colour        |
|   | 32A    | 3P+N   | SDG00323N/F  | 1F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 63A    | 3P+N   | SDG00633N/F  | 1F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 100A   | 3P+N   | SDG01003N/F  | 2F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 125A   | 3P+N   | SDG01253N/F  | 2F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 200A   | 3P+N   | SDG02003N/F  | 4F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 250A   | 3P+N   | SDG02503N/F  | 4F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 400A   | 3P+N   | SDG04003N/F  | 5F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
| Fuse Combination Units (O-I)                                                       |        |        |              |            |                |           |                     |
|  | 32A    | 3P+N   | SDFG00323N/F | 1F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 63A    | 3P+N   | SDFG00633N/F | 1F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 100A   | 3P+N   | SDFG01003N/F | 2F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 125A   | 3P+N   | SDFG01253N/F | 2F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 160A   | 3P+N   | SDFG01603N/F | 3F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 200A   | 3P+N   | SDFG02003N/F | 4F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |
|                                                                                    | 250A   | 3P+N   | SDFG02503N/F | 4F         | Sheet Steel    | IP65      | Light Grey RAL 7035 |

### Hinged Door Accessories

Add-on auxiliary blocks are available for all hinged door products. All auxiliaries are supplied as 1 N/O+1 N/C pair. All N/O auxiliary contacts are early break with respect to the main poles when switching from 'On' to 'Off'.

All of the Fuse Combination Units are supplied fitted with a set of fully rated IEC/BS EN 60269 (BS88) fuse links. Replacements can be supplied as individual fuse links and can be fitted to a lower rating to suit a particular load: please refer to the rating table below to maintain the correct size/tag format.

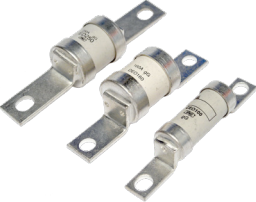
Terminal protection is provided on all items for live incoming terminals; spare terminal covers are available for replacement or extending the protection to the outgoing terminals. (Not available for 800A & 1000A switch-disconnectors.)

| Auxiliary Contacts                                                                                                                                                                                                                                          |                                                                                        |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|----------|
| Image                                                                                                                                                                                                                                                       | Description                                                                            | Cat. No. |
|    | Auxiliary Contact for 32A- 200A Switch-Disconnectors (Type A)                          | SAUXCO   |
|                                                                                                                                                                                                                                                             | Auxiliary Contact for 63A- 160A Fuse Combination (Type B)                              | SAUXKITA |
|                                                                                                                                                                                                                                                             | Auxiliary Contact for 250A Switch-Disconnectors (Type C)                               | SAUXKITB |
|                                                                                                                                                                                                                                                             | Auxiliary Contact for 400A Switch-Disconnectors & 200A- 250A Fuse Combination (Type C) | SAUXKITC |
| Terminal Covers                                                                                                                                                                                                                                             |                                                                                        |          |
|                                                                                                                                                                          | Individual Spare Terminal Cover for 200A Switch-Disconnectors & Fuse Combination       | STS1     |
|                                                                                                                                                                                                                                                             | Individual Spare Terminal Cover for 250A- 400A Switch-Disconnectors & Fuse Combination | STS2     |

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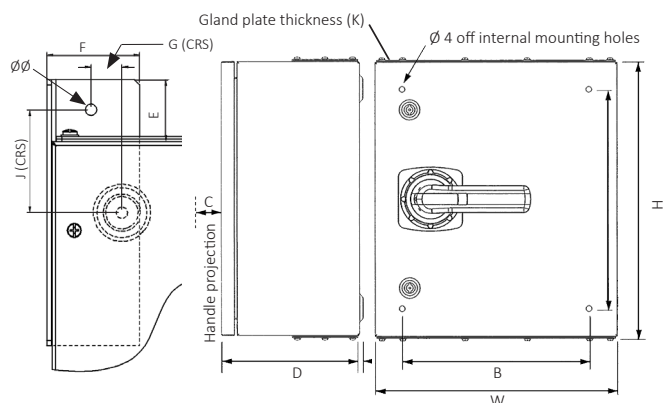
| Fuse Links                                                                        |                                                                      |          |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------|----------|
| Image                                                                             | Description                                                          | Cat. No. |
|  | 32A Fuse Link. BS Fuse format A2, A3. Fuse Fixing CRS (mm) 73 nom.   | SFL32    |
|                                                                                   | 63A Fuse Link. BS Fuse format A2, A3. Fuse Fixing CRS (mm) 73 nom.   | SFL63    |
|                                                                                   | 100A Fuse Link. BS Fuse format A4. Fuse Fixing CRS (mm) 94 nom.      | SFL100   |
|                                                                                   | 125A Fuse Link. BS Fuse format A4. Fuse Fixing CRS (mm) 94 nom.      | SFL125   |
|                                                                                   | 160A Fuse Link. BS Fuse format B1, B2. Fuse Fixing CRS (mm) 111 nom. | SFL160   |
|                                                                                   | 200A Fuse Link. BS Fuse format B1-B2. Fuse Fixing CRS (mm) 111 nom.  | SFL200   |
|                                                                                   | 250A Fuse Link. BS Fuse format B1-B2. Fuse Fixing CRS (mm) 111 nom.  | SFL250   |

### Technical Specification

Data supplied against tests to IEC/BS EN 60947-3

| Application                             | Sym       | Unit            | Category           | 32                                                                                  | 63                                                                                   | 100                                                                                   | 125                                                                                   | 160                                                                                   | 200                                                                                   | 250                                                                                   |
|-----------------------------------------|-----------|-----------------|--------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Rated thermal current                   | $I_{the}$ | A               |                    | 32                                                                                  | 63                                                                                   | 100                                                                                   | 125                                                                                   | 160                                                                                   | 200                                                                                   | 250                                                                                   |
| Rated insulation voltage                | $U_i$     | V               |                    | 750                                                                                 | 750                                                                                  | 750                                                                                   | 750                                                                                   | 750                                                                                   | 750                                                                                   | 750                                                                                   |
| Rated impulse voltage                   | $U_{imp}$ | kV              |                    | 12                                                                                  | 12                                                                                   | 12                                                                                    | 12                                                                                    | 12                                                                                    | 12                                                                                    | 12                                                                                    |
| Rated operational current               | $I_e$     | A               | 415V- AC23A        | 32                                                                                  | 63                                                                                   | 100                                                                                   | 125                                                                                   | 160                                                                                   | 200                                                                                   | 250                                                                                   |
|                                         |           |                 | 220V- DC23A        | -                                                                                   | -                                                                                    | 100                                                                                   | 125                                                                                   | 160                                                                                   | 200                                                                                   | 250                                                                                   |
| Rated making capacity (AC23A)           |           | A               | 415V, 0.35 pf      | 320                                                                                 | 630                                                                                  | 1,000                                                                                 | 1,250                                                                                 | 1,600                                                                                 | 2,000                                                                                 | 2,500                                                                                 |
| Rated breaking capacity (AC23A)         |           | A               | 415V, 0.35 pf      | 256                                                                                 | 504                                                                                  | 800                                                                                   | 1,000                                                                                 | 1,280                                                                                 | 1,600                                                                                 | 2,000                                                                                 |
| Rated Conditional (Fused) short circuit |           | kA              | S/C current rms    | 80                                                                                  | 80                                                                                   | 80                                                                                    | 80                                                                                    | 80                                                                                    | 80                                                                                    | 80                                                                                    |
|                                         |           | A               | back-up fuse       | 32                                                                                  | 63                                                                                   | 100                                                                                   | 125                                                                                   | 160                                                                                   | 200                                                                                   | 250                                                                                   |
| Min. mechanical endurance               |           | -               | Operations         | 25,000                                                                              | 25,000                                                                               | 15,000                                                                                | 15,000                                                                                | 15,000                                                                                | 10,000                                                                                | 10,000                                                                                |
| Min. electrical endurance               |           | -               | 415V- at 0.65 pf   | 1,500                                                                               | 1,500                                                                                | 1,000                                                                                 | 1,000                                                                                 | 1,000                                                                                 | 1,000                                                                                 | 1,000                                                                                 |
| BS fuse format                          |           |                 |                    | A2                                                                                  | A2                                                                                   | A4                                                                                    | A4                                                                                    | B1, B2                                                                                | B1, B2                                                                                | B1, B2                                                                                |
| Connecting capacity                     |           | -               | Terminal type      |  |  |  |  |  |  |  |
|                                         |           | mm <sup>2</sup> | Min/Max            | 16                                                                                  | 25                                                                                   | 95                                                                                    | 95                                                                                    | 120                                                                                   | 240                                                                                   | 240                                                                                   |
|                                         |           | mm              | Stud/Cu palm width | -                                                                                   | -                                                                                    | 8x20                                                                                  | 8x20                                                                                  | 8x20                                                                                  | 10x25                                                                                 | 10x25                                                                                 |
|                                         |           | Nm              | Tightening torque  | 2.5                                                                                 | 2.5                                                                                  | 10                                                                                    | 10                                                                                    | 10                                                                                    | 30                                                                                    | 30                                                                                    |

### Dimensions



| Encl. Size | H   | W   | D   | A   | B   | C  | K   | Ø   | E  | F  | G  | J  | Ø Ø |
|------------|-----|-----|-----|-----|-----|----|-----|-----|----|----|----|----|-----|
| 1F         | 250 | 350 | 163 | 170 | 270 | 67 | 1.5 | 6.5 | 35 | 53 | 18 | 58 | 6.5 |
| 2F         | 400 | 350 | 163 | 320 | 270 | 67 | 1.5 | 6.5 | 35 | 58 | 18 | 58 | 6.5 |
| 3F         | 500 | 400 | 163 | 420 | 320 | 67 | 1.5 | 6.5 | 35 | 58 | 13 | 58 | 8.5 |
| 4F         | 600 | 450 | 220 | 520 | 370 | 67 | 2   | 6.5 | 35 | 58 | 13 | 58 | 8.5 |
| 5F         | 750 | 450 | 220 | 670 | 370 | 67 | 2   | 6.5 | 35 | 52 | 13 | 58 | 8.5 |



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