# Technical Data sheet Moulded Plastic Switch Disconnectors 

## General Description

Switchgear housed in moulded plastic enclosures provide the basis for most industrial applications and the added benefits offered by the 'i-switch' range provide the user with a wealth of opportunities when selecting the correct item for a specific application. Sealing up to IP66 is a standard feature as is the ability to add a selection of auxiliary blocks providing additional contacts and a choice of Neutral assemblies.

With the ' i -switch' range comes an important safety feature which prevents the enclosure cover being removed when the device has been padlocked in the 'Off' position. When combined with the excellent on-load breaking capacity of the 'i-switch' family this feature ensures that the term 'Safety Switch' is fully satisfied.


## Safety Features

## Padlocking

All items allow for the insertion of up to three padlocks in the 'Off' position thus preventing the isolator being switched to the 'On' position.

Standard shackle diameter $\varnothing 6.4$

## Safety Interlock

Screwed lid enclosures have always been open to abuse by having the lid removable when the isolator is 'Off' and padlocked. This would allow the switch shaft to be turned manually to the 'On' position, thus defeating the safety padlocking feature.

The 'i-switch' range now incorporates a mechanical interlock which when a padlock is inserted prevents the enclosure lid from being removed.

Switch-Disconnectors (O-I)
Catalogue Numbers

| Rating | Format | Interior Switch product range | Cat. No. | $\begin{aligned} & \text { Enclosure } \\ & \text { Size } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 20A | 6P | GX20 | SDP206 | $\begin{gathered} \text { A } \\ \text { (IP66) } \end{gathered}$ |
|  | 6P+2EB Aux | GX20 | SDP206EB |  |
| 25A | 2P | CS25 | SDP252 | $\begin{gathered} \text { A } \\ (\text { IP66) } \end{gathered}$ |
|  | 3P | CS25 | SDP253 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS25 | SDP253NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS25 | SDP253N |  |
|  | 3P+2EB Aux | CS25 | SDP253EB |  |
| 32A | 2P | CS32 | SDP322 | $\begin{gathered} \text { A } \\ \text { (IP66) } \end{gathered}$ |
|  | 3P | CS32 | SDP323 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS32 | SDP323NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS32 | SDP323N |  |
|  | $3 \mathrm{P}+2 \mathrm{~EB}$ Aux | CS32 | SDP323EB |  |
| 40A | 2P | CS40R | SDP402 | $\begin{gathered} \text { B } \\ \text { (IP66) } \end{gathered}$ |
|  | 3P | CS40R | SDP403 |  |
|  | 3P+NL | CS40R | SDP403NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS40R | SDP403N |  |
|  | 3P+2EB Aux | CS40R | SDP403EB |  |
|  | 6P | GX40 | SDP406 |  |
|  | 6P+2EB Aux | GX40 | SDP406EB |  |
| 63A | 2P | CS63 | SDP632 | $\begin{gathered} \text { B } \\ \text { (IP66) } \end{gathered}$ |
|  | 3P | CS63 | SDP633 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS63 | SDP633NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS63 | SDP633N |  |
|  | 3P+2EB Aux | CS63 | SDP633EB |  |
| 80A | 2P | CS80 | SDP802 | $\begin{gathered} C \\ (\mathrm{IP} 65) \end{gathered}$ |
|  | 3P | CS80 | SDP803 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS80 | SDP803NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS80 | SDP803N |  |
|  | 3P+2EB Aux | CS80 | SDP803EB |  |
| 100A | 2P | CS100 | SDP1002 | $\begin{gathered} D \\ (\text { IP65 }) \end{gathered}$ |
|  | 3P | CS100 | SDP1003 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS100 | SDP1003NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS100 | SDP1003N |  |
|  | 3P+2EB Aux | CS100 | SDP1003EB |  |

' N ' = switched neutral (Early make, late break)
NL' = Unswitched neutral
'EB' = Early break auxiliary contacts
Changeover Switch-Disconnectors (I-O-II)

## Catalogue Numbers

| Rating | Format | Interior Switch <br> product range | Cat. No. | Enclosure <br> Size |
| :---: | :---: | :---: | :---: | :---: |
| 20A | 2 P | GX20 | SCODP202 | A |
|  | $3 P$ | GX20 | SCODP203 |  |
|  | 4 P | GX20 | SCODP204 |  |
| 40 A | 2 P | GX40 | SCODP402 | B |
|  | $3 P$ | GX40 | SCODP403 |  |
|  | 4 P | GX40 | SCODP404 |  |

## Technical Datasheet <br> Moulded Plastic Switch Disconnectors

Design Features
Enclosure

| Material | 20A-63A PC/ABS |
| :--- | :--- |
|  | 80A-100A PC |
| Colour | Enclosure - Grey RAL 7035 |

Entries Size A Enclosure - $2 \times$ M20 knock-outs on top \& bottom faces.
Size B Enclosure - 2 x M20/25 knockouts on top \& bottom faces.

Back face - 2 x M20 knock-outs
Size C \& D Enclosures - Blank sides.
Cover Screws
Fixings
Stainless Steel (Captive)
Outside sealed cavity.

Switch-Disconnectors

| $2 \& 3$ Pole | Type CS - base mounted. <br> (Accepts add-on Aux. blocks \& Neutrals) |
| :--- | :--- |
| 6 Pole | Type GX - base mounted. <br> (also available with 2 E/B Aux.) |

## Changeover Switch-Disconnectors

2, 3 \& 4 Pole Type GX - base mounted.

## Earthing

Earth terminals are provided in the base of the enclosures.

## Accessories

Applicable to type 'CS' interiors only

| Description | Cat. No. |
| :--- | :---: |
| Auxiliary Contact - 2 Early Break | SAUX2EB |
| Auxiliary Contact - 1 N/O + 1 N/C | SAUXCO |
| 25A - 40A Compact Neutral (Unswitched) | SNLC40 |
| 63A Neutral (Unswitched) | SNL63 |
| 80A Neutral (Unswitched) | SNL80 |
| 100A Neutral (Unswitched) | SNL100 |
| 25A Neutral (Switched) | SSP25 |
| 32A \& 40A Neutral (Switched) | SSP40 |
| 63A Neutral (Switched) | SSP63 |
| 80A Neutral (Switched) | SSP80 |
| 100A Neutral (Switched) | SSP100 |




## Technical Datasheet Moulded Plastic Switch Disconnectors

## Technical Specification

| Data supplied against tests to IEC／BS EN 60947－3 |  |  |  | Rating |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Application | Sym． | Unit | Category | 20A | 25A | 32A |  | 40A |  | 63A |  | 80A | 100A |
| Switch product range | － | － |  | GX20 | CS25 | GX32 | CS32 | GX40 | CS40R | GN63 | CS63 | CS80 | CS100 |
| Rated thermal current | $\mathrm{I}_{\text {the }}$ | A |  | 20 | 25 | 32 | 32 | 40 | 40 | 63 | 63 | 80 | 100 |
| Rated insulation voltage | $\mathrm{U}_{\mathrm{i}}$ | V |  | 690 | 690 | 690 | 690 | 690 | 690 | 690 | 690 | 690 | 1000 |
| Rated impulse voltage | $\mathrm{U}_{\mathrm{imp}}$ | kV |  | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8.0 |
| Rated operational power（3 phase AC） |  | kW | 380／440－AC23 | 7.5 | 11 | 15 | 15 | 18.5 | 15 | 30 | 25 | 30 | 59 |
|  |  |  | 500V－AC23 | 7.5 | 15 | 15 | 15 | 15 | 15 | 30 | 30 | 37 | 63 |
|  |  |  | 690V－AC23 | 7.5 | 15 | 15 | 15 | 15 | 15 | 30 | 30 | 30 | 51 |
| Rated short time withstand current（1 sec） | $\mathrm{I}_{\mathrm{cw}}$ | A |  | 250 | 500 | 800 | 600 | 800 | 600 | 1600 | 1300 | 1400 | 2600 |
| Max．fuse size for short circuit protection （gG Characteristic） |  | kA | 10kA | 20 | 35 | 35 | 35 | 40 | 40 | 63 | 80 | 80 | 160 |
|  |  |  | 25kA | 16 | 32 | 35 | 32 | 35 | 32 | 63 | 63 | 63 | 160 |
|  |  |  | 50kA | － | 32 | － | 32 | － | 32 | 63 | 63 | 63 | 160 |
| Recommended connecting capacity |  | － | Terminal type | 畐 | 啚 | 票 | $\square$ |  | 啚 | 菅 | 啚 | 楟 | 啚 |
|  |  | $\mathrm{mm}^{2}$ | Flexible cable | $2.5 \times 2$ | 6 | $6 \times 2$ | 6 | $6 \times 2$ | 6 | 10 | 16 | 16 | 50 |
|  |  | $\mathrm{mm}^{2}$ | Rigid cable | $2.5 \times 2$ | 10 | $10 \times 2$ | 10 | $10 \times 2$ | 10 | 16 | 25 | 25 | 70 |
|  |  | Nm | Tightening torque | 1.0 | 1.2 | 1.0 | 1.2 | 1.0 | 1.2 | 1.2 | 1.2 | 1.2 | 2 |

## Dimensions






|  | Overall Dims． |  |  | Fixing details |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H | W | D | F1 | F2 | $\varnothing$ |
| Size A | 135 | 100 | 95 | 85 | 98.5 | 5.5 |
| Size B | 175 | 130 | 115 | 115 | 135 | 5.5 |
| Size C | 255 | 180 | 125 | 163.5 | 238.5 | 4.5 |
| Size D | 255 | 180 | 175 | 163.5 | 238.5 | 4.5 |

