# Technical Data sheet Die-Cast Aluminium Switch Disconnectors 

## General Description

The 'i-switch' die cast range provides the user with a product that will withstand a good deal of rough treatment. With sealing to IP66 these assemblies can be placed in environments where resistance to impacts, moisture and dust/dirt are a concern. The option to add a selection of auxiliary blocks providing additional contacts and a choice of Neutral assemblies increases the flexibility of the product range.


Size A \& Size B enclosures as Switch-Disconnectors in both Red \& Grey


20A Changeover SwitchDisconnector in a size A enclosure

Switch-Disconnectors (O-I)

| Catalogue Numbers |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Rating | Format | Interior Switch product range | Catalogue Nos. |  | $\begin{aligned} & \text { Enclosure } \\ & \text { Size } \\ & \text { (IP66) } \end{aligned}$ |
|  |  |  | Grey | Red |  |
| 20A | 6P | GX20 | SDDG206 | SDDR206 | A |
|  | 6P+2EB Aux | GX20 | SDDG206EB | SDDR206EB |  |
| 25A | 2P | CS25 | SDDG252 | SDDR252 | A |
|  | 3P | CS25 | SDDG253 | SDDR253 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS25 | SDDG253NL | SDDR253NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS25 | SDDG253N | SDDR253N |  |
|  | 3P+2EB Aux | CS25 | SDDG253EB | SDDR253EB |  |
| 32A | 2P | CS32 | SDDG322 | SDDR322 | A |
|  | 3P | CS32 | SDDG323 | SDDR323 |  |
|  | 3P+NL | CS32 | SDDG323NL | SDDR323NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS32 | SDDG323N | SDDR323N |  |
|  | 3P+2EB Aux | CS32 | SDDG323EB | SDDR323EB |  |
| 40A | 2P | CS40R | SDDG402X | SDDR402X | A |
|  | 3P | CS40R | SDDG403X | SDDR403X |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS40R | SDDG403NLX | SDDR403NLX |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS40R | SDDG403NX | SDDR403NX |  |
|  | $3 P+2 E B A u x$ | CS40R | SDDG403EBX | SDDR403EBX |  |
|  | 2P | CS40R | SDDG402 | SDDR402 | B |
|  | 3P | CS40R | SDDG403 | SDDR403 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS40R | SDDG403NL | SDDR403NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS40R | SDDG403N | SDDR403N |  |
|  | $3 \mathrm{P}+2 \mathrm{~EB}$ Aux | CS40R | SDDG403EB | SDDR403EB |  |
|  | 6P | GX40 | SDDG406 | SDDR406 |  |
|  | 6P+2EB Aux | GX40 | SDDG406EB | SDDR406EB |  |
| 63A | 2P | CS63 | SDDG632 | SDDR632 | B |
|  | 3P | CS63 | SDDG633 | SDDR633 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS63 | SDDG633NL | SDDR633NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS63 | SDDG633N | SDDR633N |  |
|  | 3P+2EB Aux | CS63 | SDDG633EB | SDDR633EB |  |
|  | 6P | CS63 | SDDG636 | SDDR636 |  |
|  | 6P+2EB Aux | CS63 | SDDG636EB | SDDR636EB |  |
| 80A | 3P | CS80 | SDDG803 | SDDR803 | B |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS80 | SDDG803NL | SDDR803NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS80 | SDDG803N | SDDR803N |  |


| Rating | Format | Interior Switch product range | Cat. No. | Enclosure Size (IP66) |
| :---: | :---: | :---: | :---: | :---: |
| 20A | 2P | GX20 | SCODDG202 | A |
|  | 3P | GX20 | SCODDG203 |  |
|  | 4P | GX20 | SCODDG204 |  |
| 40A | 2P | GX40 | SCODDG402 | B |
|  | 3P | GX40 | SCODDG403 |  |
|  | 4P | GX40 | SCODDG404 |  |

' N ' = switched neutral (Early make, late break)
'NL' = Unswitched neutral
'EB' = Early break auxiliary contacts
' $X$ ' = Bottom cable entries only. For top and bottom cable entries, replace ' $X$ ' with ' $Y$ ' in the catalogue reference. i.e. SDDG402Y

## 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 (Unswwitched) | SNL63 |
| 80A Neutral (Unswitched) | SNL80 |
| 25A Neutral (Switched) | SSP25 |
| 32A \& 40A Neutral (Switched) | SSP40 |
| 63A Neutral (Switched) | SSP63 |
| 80A Neutral (Switched) | SSP80 |

## Safety Features

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.

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## Enclosure

## Material

Die cast aluminium alloy LM24 (BS1490)
Paint finish
Grey - RAL 7035


## Entries

Size A
Std Cat No. : $2 x \mathrm{M} 20$ on bottom face
Suffix $X \quad: 2 \times M 25$ on bottom face
Suffix Y : 2xM25 on bottom face \& $2 x \mathrm{M} 25$ on top face

## Size A <br> 40A

Std Cat No. : $2 x \mathrm{M} 25$ on bottom face
Suffix $X \quad: 2 x M 25$ on bottom face
Suffix Y : 2xM25 on bottom face \& $2 x \mathrm{M} 25$ on top face

## Size B 40A

Std Cat No. : $2 \mathrm{xM} 25+1 \mathrm{xM} 20$ on bottom face

## Size B

63A
Std Cat No. : $2 \mathrm{xM} 25+1 \mathrm{xM} 20$ on bottom face
Suffix $X \quad: 2 x M 32+1 x M 16$ on bottom face
Suffix $Y \quad: 2 x$ M32 $+1 x$ M16 on bottom face $\& 2 x$ M32 on top face

## Size B

80A
Std Cat No. : $2 x \mathrm{M} 32+1 x \mathrm{M} 20$ on bottom face
Suffix $X \quad: 2 x M 32+1 \times M 16$ on bottom face
Suffix $Y: 2 x M 32+1 x M 16$ on bottom face $\& 2 x M 32$ on top face
Maximum number of possible entries:-
Size A - 4 (2 Top+2 Bottom).
Size B-6 (3 Top+3 Bottom).

## Cover Screws

Stainless Steel (Captive)

## Earthing

Terminals are provided on both lid and base to allow full earth continuity to be maintained.

## Mounting

All fixings are internal but outside of the IP66 sealed area. Guide channels are provided to assist with the fixing screw location.

## Switch-Disconnectors

| $2,3 \& 6$ Pole | Type CS - base mounted. <br> (Accepts add-on Aux. blocks \& Neutrals, |
| :--- | :--- |
| see page 13 for ratings) |  |
| 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.


The size ' $B$ ' enclosure is available with 'Start/Stop' or 'Start/Emergency Stop' pushbuttons.


# Technical Data sheet <br> Die－Cast Aluminium 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 |
|  |  |  | 380／440－AC23 | 7.5 | 11 | 15 | 15 | 18.5 | 15 | 30 | 25 | 30 | 59 |
| Rated operational power（3 phase AC） |  | kW | 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） | $\mathrm{I}_{\text {cw }}$ | A |  | 250 | 500 | 800 | 600 | 800 | 600 | 1600 | 1300 | 1400 | 2600 |
| ax．fuse size for short |  |  | 10kA | 20 | 35 | 35 | 35 | 40 | 40 | 63 | 80 | 80 | 160 |
| circuit protection |  | kA | 25kA | 16 | 32 | 35 | 32 | 35 | 32 | 63 | 63 | 63 | 160 |
| （gG Characteristic） |  |  | 50kA | － | 32 | － | 32 | － | 32 | 63 | 63 | 63 | 160 |
|  |  | － | Terminal type | 畐 | 啚 |  | 營 | 票 | 啚 | 覂 | 啚 | 唦 | 啚 |
| Recommended |  | $\mathrm{mm}^{2}$ | Flexible cable | $2.5 \times 2$ | 6 | $6 \times 2$ | 6 | $6 \times 2$ | 6 | 10 | 16 | 16 | 50 |
| connecting capacity |  | $\mathrm{mm}^{2}$ | 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

Size A


Size B



