## Technical Datasheet MHld Steel Switch Disconnectors

## General Description

Switchgear housed in mild steel enclosures provides the user with a robust and cost effective assembly along with the added features offered by the 'i-switch' range. Sealing 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. External mounting feet in stainless steel are offered as an accessory sized to match each enclosure.

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 Ø6.4

## 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 | Cat. No. | Enclosure Size |
| :---: | :---: | :---: | :---: | :---: |
| 20A | 6P | GX20 | SDMG206 | A |
|  | 6P+2EB Aux | GX20 | SDMG206EB |  |
| 25A | 2 P | CS25 | SDMG252 | A |
|  | 3P | CS25 | SDMG253 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS25 | SDMG253NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS25 | SDMG253N |  |
|  | 3P+2EB Aux | CS25 | SDMG253EB |  |
| 32A | 2P | CS32 | SDMG322 | A |
|  | 3P | CS32 | SDMG323 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS32 | SDMG323NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS32 | SDMG323N |  |
|  | $3 P+2 E B A u x$ | CS32 | SDMG323EB |  |
| 40A | 2P | CS40R | SDMG402 | B |
|  | 3P | CS40R | SDMG403 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS40R | SDMG403NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS40R | SDMG403N |  |
|  | 3P+2EB Aux | CS40R | SDMG403EB |  |
|  | 6P | GX40 | SDMG406 |  |
|  | 6P+2EB Aux | GX40 | SDMG406EB |  |
| 63A | 2 P | CS63 | SDMG632 | B |
|  | 3P | CS63 | SDMG633 |  |
|  | $3 \mathrm{P}+\mathrm{NL}$ | CS63 | SDMG633NL |  |
|  | $3 \mathrm{P}+\mathrm{N}$ | CS63 | SDMG633N |  |
|  | 3P+2EB Aux | CS63 | SDMG633EB |  |

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

| Rating | Format | Interior Switch | Cat. No. | Enclosure Size |
| :---: | :---: | :---: | :---: | :---: |
| 20A | 2P | GX20 | SCODMG202 | A |
|  | 3P | GX20 | SCODMG203 |  |
|  | 4P | GX20 | SCODMG204 |  |
| 40A | 2P | GX40 | SCODMG402 | B |
|  | 3P | GX40 | SCODMG403 |  |
|  | 4P | GX40 | SCODMG404 |  |

## 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 |
| 25A Neutral (Switched) | SSP25 |
| 32A \& 40A Neutral (Switched) | SSP40 |
| 63A Neutral (Switched) | SSP63 |

## Technical Data sheet <br> MFld Steel Switch Disconnectors

## Design Features

## Enclosure

Material
Paint finish
Colour
Entries
Cover Screws
External Feet

Sheet steel，thickness 1.2 mm
Epoxy Powder Coated．
Enclosure－Grey RAL 7035
Size A Enclosure－ $2 \times \mathrm{M} 20$
Size B Enclosure－ $2 \times$ M20＋ $2 \times$ M25
Stainless Steel（Captive）
Size A enclosure－Cat．No．EFA
Size B enclosure－Cat．No．EFB

## Switch－Disconnectors

| $2 \& 3$ Pole | Type CS－base mounted． <br> （Accepts add－on Aux．blocks \＆Neutrals） <br> 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 continuity terminals are provided in the base and lid of each enclosure．

## 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 | $U_{i}$ | V |  | 690 | 690 | 690 | 690 | 690 | 690 | 690 | 690 | 690 | 1000 |
| Rated impulse voltage | $\mathrm{U}_{\text {imp }}$ | 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 |
| Max．fuse size for short |  |  | 10kA | 20 | 35 | 35 | 35 | 40 | 40 | 63 | 80 | 80 | 160 |
| circuit protection |  | kA | 25 kA | 16 | 32 | 35 | 32 | 35 | 32 | 63 | 63 | 63 | 160 |
| （gG Characteristic） |  |  | 50kA | － | 32 | － | 32 | － | 32 | 63 | 63 | 63 | 160 |
|  |  | － | Terminal type | 盆 | 留 | 菏 | 營 | 畕 | $\stackrel{9}{\square}$ | 票 | 啚 | 楟 | 楟 |
| 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


$\dagger$ Stainless steel enclosures are supplied without ＇raised dimples＇to allow flush mounting

|  | Overall Dims． |  |  | Internal Fixings |  |  | External EFA／EFB Fixings |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H | W | D | F1 | F2 | $\varnothing$ | F3 | F4 | F5 | ØØ |
| Size A | 135 | 100 | 80 | 51 | 86 | 5.5 | 126 | 140 | 16 | 6.35 |
| Size B | 175 | 130 | 100 | 81 | 126 | 5.5 | 155 | 178 | 16 | 6.35 |

