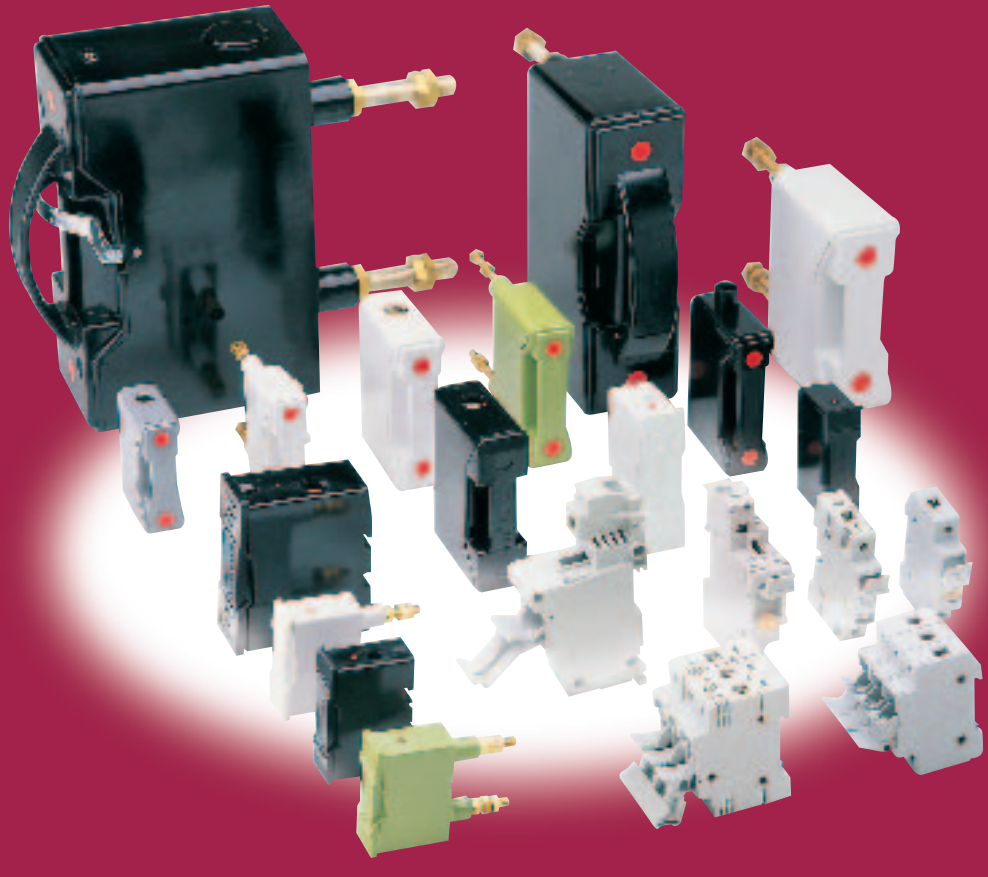
GE Power Controls

# Fuse Holders

## Low Voltage Industrial



RED SPOT / SAFECLIP / 'FM'

# *RED SPOT / SAFECLIP / 'FM'*

## Low Voltage Industrial Fuse Holders

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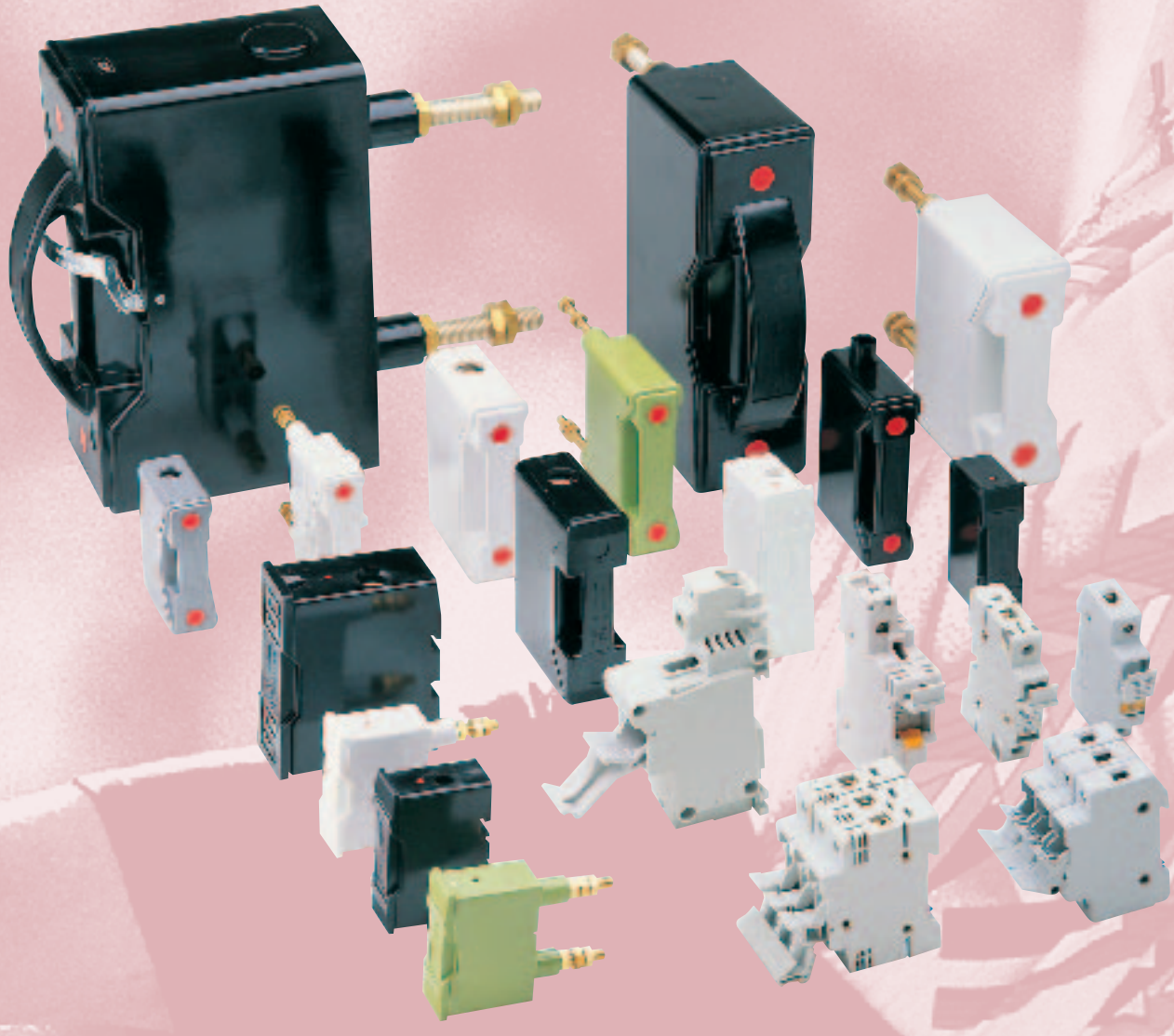
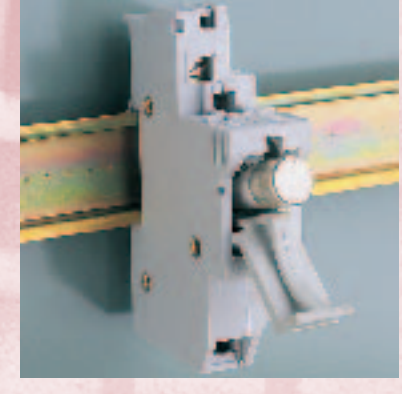


# "You're in safe hands"

RED SPOT

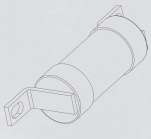
SAFECLIP



FM GE Modular

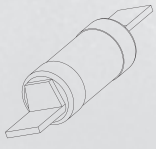
# For all applications

RED SPOT



*Bolted tag Fuse Links*

SAFECLIP



*Offset blade tag Fuse Links*

FM Modular

*Cylindrical Fuse Links*

Utilities

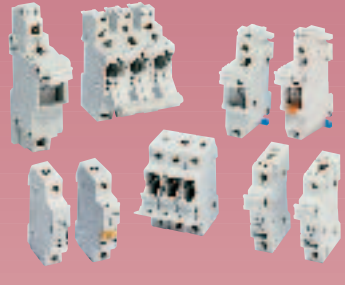
Commercial

# Low Voltage Industrial Fuse Holders

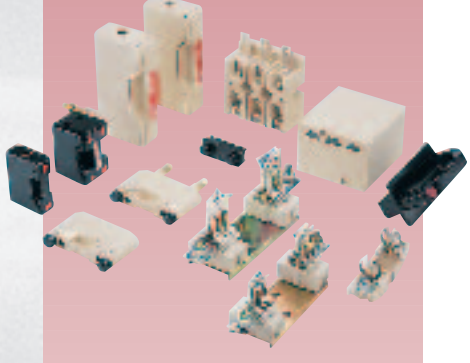
**RED SPOT**
660Vac
20 - 400A

**SAFECLIP**
up to 440Vac
20 - 125A

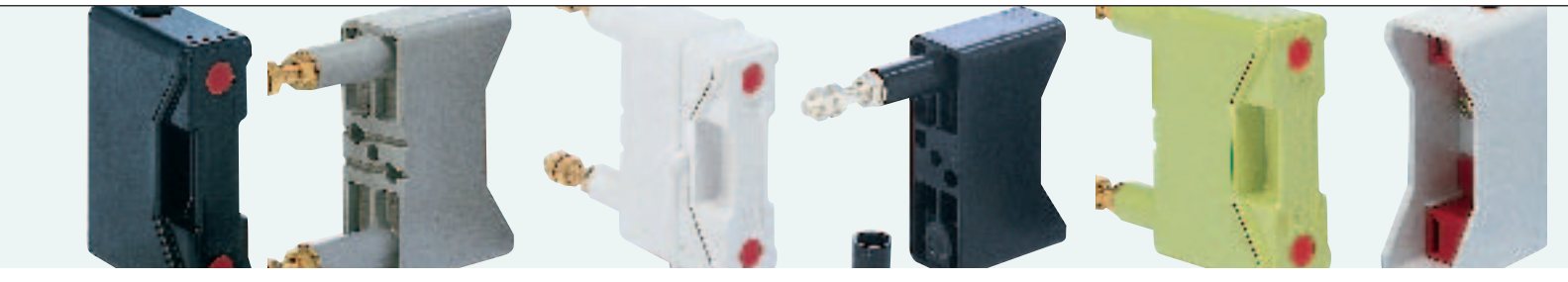
Industrial



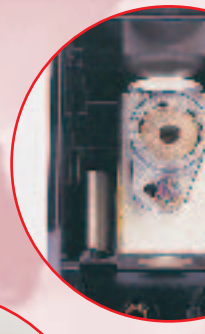
**'FM' Modular**
Up to 660Vac
32 - 125A



**Fuse Holders for other applications**
Double pole 'RSSL' for street lighting
Power Generation Spec. Type 'RST'
'RSL' 1500Vac/750Vdc rated
Shockproof Fittings
Admiralty Pattern Carriers and Bases
'NH' DIN Fuse Bases
**Details available on request**



## Safe and reliable

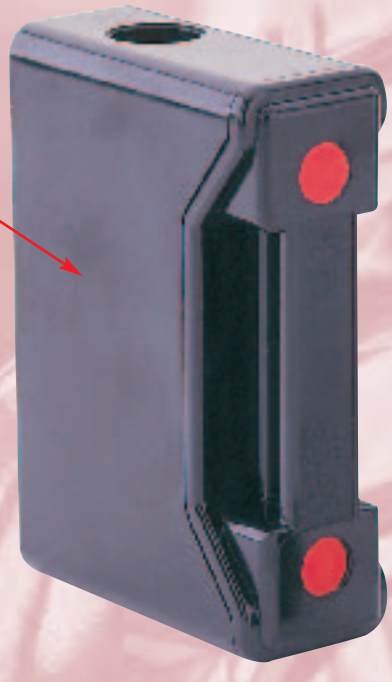


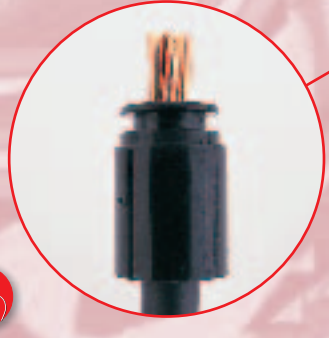
Perfect alignment of contacts with single screw fixing

Steel stirrup gives mechanical guidance to fuse carrier

Non-twist cable clamping screw

Base and carrier mouldings manufactured from flame retardant, non-hydroscopic, phenolic material



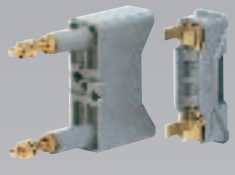


Insulating sleeves give increased protection against inadvertent contact at the cable entry point

Red, flame retardant nylon 66 safety shrouds with strength and flexibility

**200 and 400 Amp Fuse Holders have silver plated contacts and terminal screw locking device**

**Large contact area with anti-vibration feature**



## A complete range

- Current ratings
  20, 32, 63, 100, 200 and 400 Amp
- Connection variants

Front connected

Back stud connected

Front / Back stud connected

Back stud connected flush mounted

- Standard finish is black – other available colours include white, green and grey
- Time proven contact system – over 10 million in service
- The industry's acknowledged standard for over 25 years
- Complementary to the RED SPOT Standard and RED SPOT 400 Series HRC Fuse Links
- Accessories
  Padlockable inserts
  Red warning carriers
  Copper Links
  Fuse Link adaptors

*Provides optimum performance, quality and reliability*

# Fuse Holders: RED SPOT

**BS 88-1 and 2:1988**
**IEC 269-1 and 2**

*Total safety*

*Complete*

*High quality*

*Great design*

## Applications

## Approvals

**ASTA Certified**

## Application Notes

**Protection of personnel**
RED SPOT Fuse Holders are fully shrouded for personnel safety and complete compliance with the direct contact electric shock requirements of the IEE Wiring Regulations (BS 7671:1992).

**Cable protection**
Patented non-twist cable clamping screw of large diameter prevents damage occurring to cable cores during tightening. Front connected units comply with Powergen and National Power requirements for Category of Duty II, back connected configurations are approved for Categories of Duty I and II.

**Protection against inadvertent contact**
Insulated sleeves are fitted to front connected fuse bases to provide increased protection at the cable entry point.

## Associated Fusegear Equipment

- **RED SPOT Fusebanks**
- **RED SPOT Fuseboards**

## Associated Fuse Links

- **RED SPOT Standard**
- **RED SPOT 400 Series**

- **Contact the sales office for catalogues**

## Technical Data

| | | |
|---|---|---|
| **Current Rating** | (A) | 20-400 |
| **Voltage Rating ac** | (V) | 660* |
| **Voltage Rating dc** | (V) | 460* |
| **Breaking Capacity ac** | (kA) | 80 |
| **Breaking Capacity dc** | (kA) | 40 |
| **Max Operating Ambient Temperature** | (°C) | 40 |
| **Cable Connector Size** | ($mm^2$) | 10-240 |

* when fitted with RED SPOT Standard Fuse Links

## Performance

ASTA type test certified to BS 88: Parts 1 and 2 suitable for use on applications up to 660Vac and 460Vdc.

## Features

**Fully shrouded for personal safety**
Separate base contact insulating shrouds ensure that no 'live' metal is dangerously exposed when the fuse carrier is removed – this enables an out-going circuit to be cabled with complete safety to personnel and with continuity of supply to other circuits.

**Protection against vibration**
Anti-vibration features protect against the inadvertent release of the carrier due to vibration, the 400 Amp size is enhanced with an automatic safety catch which locks on insertion of the carrier.

**Most comprehensive range**
- 20, 32, 63, 100, 200 and 400 Amp ratings
- front, back stud and half front/back stud connection variants
- 20 Amp flush mounted (back connected) version
- standard black finish, available colours include white, green and grey.

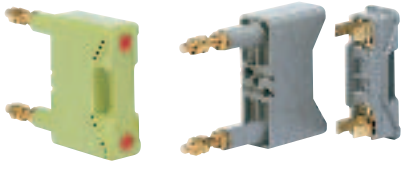
**High resistance material**
RED SPOT Fuse Holders are manufactured from tough phenolic, flame retardant, non-hydroscopic mouldings.

**Time proven contact system**
Mouldings designed to ensure perfect alignment of the carrier contacts with the base terminal/contact block, steel stirrups provide mechanical guidance whilst inserting the carrier into the base.

Provides optimum performance, quality and reliability.

## RED SPOT – 20 Amp

| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Front connected | RS20H | 402159 | Black | 10mm² | NIT / GNIT |
| | RS20HWH | 402162 | White | 10mm² | NIT / GNIT |
| | RS20HGN | 402160 | Green | 10mm² | NIT / GNIT |
| | RS20HGY | 402161 | Grey | 10mm² | NIT / GNIT |



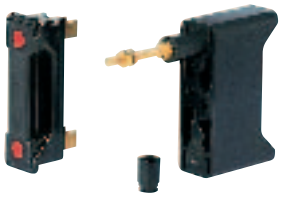
| | | | | | |
|---|---|---|---|---|---|
| Back stud connected | RS20P/G | 402165 | Black | 10mm² | NIT / GNIT |
| | RS20P/GWH | 402168 | White | 10mm² | NIT / GNIT |
| | RS20P/GGN | 402166 | Green | 10mm² | NIT / GNIT |
| | RS20P/GGY | 402167 | Grey | 10mm² | NIT / GNIT |

| | | | | | |
|---|---|---|---|---|---|
| Front / Back stud connected | RS20PH/G | 402169 | Black | 10mm² | NIT / GNIT |
| Back stud connected flush mounted | RS20F | 402155 | Black | 10mm² | NIT / GNIT |
| | RS20FWH | 402158 | White | 10mm² | NIT / GNIT |
| | RS20FGN | 402156 | Green | 10mm² | NIT / GNIT |
| | RS20FGY | 402157 | Grey | 10mm² | NIT / GNIT |

## RED SPOT – 32 Amp

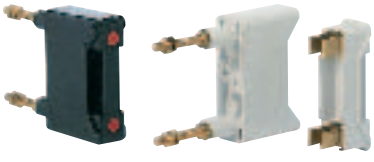
| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Front connected | RS32H | 402173 | Black | 16mm² | TIA / GTIA |
| | RS32HWH | 402175 | White | 16mm² | TIA / GTIA |
| | RS32HGN | 402174 | Green | 16mm² | TIA / GTIA |

| | | | | | |
|---|---|---|---|---|---|
| Back stud connected | RS32P | 402178 | Black | 16mm² | TIA / GTIA |
| | RS32PWH | 402180 | White | 16mm² | TIA / GTIA |
| | RS32PGN | 402179 | Green | 16mm² | TIA / GTIA |

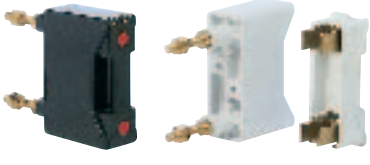
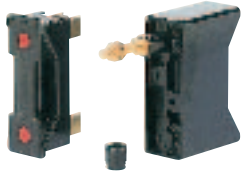


| | | | | | |
|---|---|---|---|---|---|
| Front / Back stud connected | RS32PH | 402181 | Black | 16mm² | TIA / GTIA |

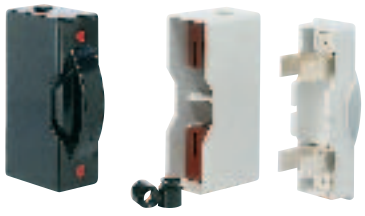
## RED SPOT – 63 Amp

| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
|  Front connected | RS63H | 402190 | Black | 50mm² | TIS / GTIS |
| | RS63HWH | 402191 | White | 50mm² | TIS / GTIS |
|  Back stud connected | RS63P | 402194 | Black | 50mm² | TIS / GTIS |
| | RS63PWH | 402195 | White | 50mm² | TIS / GTIS |
|  Front / Back stud connected | RS63PH | 402196 | Black | 50mm² | TIS / GTIS |
| | RS63PHWH | 402197 | White | 50mm² | TIS / GTIS |

## RED SPOT – 100 Amp

| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodation |
|---|---|---|---|---|---|
|  Front connected | RS100H | 402139 | Black | 70mm² | TCP / GTCP |
| | RS100HWH | 402140 | White | 70mm² | TCP / GTCP |
|  Back stud connected | RS100P | 402143 | Black | 70mm² | TCP / GTCP |
| | RS100PWH | 402144 | White | 70mm² | TCP / GTCP |
|  Front / Back stud connected | RS100PH | 402145 | Black | 70mm² | TCP / GTCP |

## RED SPOT – 200 Amp



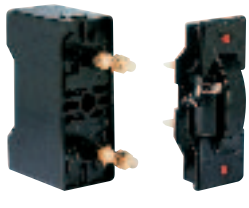
| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodation |
|---|---|---|---|---|---|
| Front connected | RS200H | 402148 | Black | 120mm² | TF / GTF |
| | RS200HWH | 402149 | White | 120mm² | TF / GTF |

| | | | | | |
|---|---|---|---|---|---|
| Back stud connected | RS200P | 402151 | Black | 120mm² | TF / GTF |
| | RS200PWH | 402152 | White | 120mm² | TF / GTF |

| | | | | | |
|---|---|---|---|---|---|
| Front / Back stud connected | RS200PH | 402153 | Black | 120mm² | TF / GTF |

## RED SPOT – 400 Amp

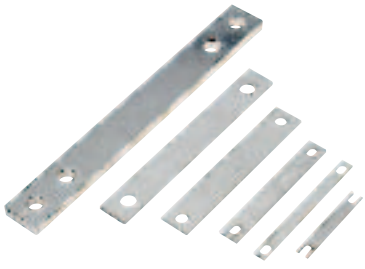
| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodation |
|---|---|---|---|---|---|
| Front connected | RS400H | 402184 | Black | 240mm² | TM / GTM |



| | | | | | |
|---|---|---|---|---|---|
| Back stud connected | RS400P | 402187 | Black | 240mm² | TM / GTM |

| | | | | | |
|---|---|---|---|---|---|
| Front / Back stud connected | RS400PH | 402188 | Black | 240mm² | TM / GTM |

## Accessories – RED SPOT Copper Links



| Part number | Code | Current rating | For use in |
|---|---|---|---|
| P110151-10 | 402129 | 20 Amp | RS20 |
| P110152-10 | 402130 | 32 Amp | RS32 |
| P110153-10 | 402131 | 63 Amp | RS63 |
| P110154-10 | 402132 | 100 Amp | RS100 |
| P110155-10 | 402133 | 200 Amp | RS200 |
| P110156-10 | 402134 | 400 Amp | RS400 |

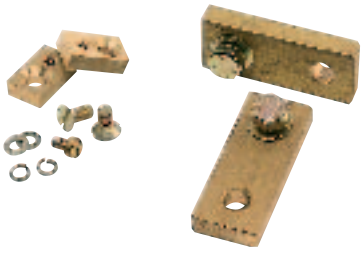
## Accessories – RED SPOT Padlockable Inserts

| Part number | Code | For use in | Suitable padlocks (not supplied) |
|---|---|---|---|
| RS20LOCK | 402164 | RS20 | YALE (P72) and SQUIRE (LP6. LN1 or No 20) |
| RS32LOCK | 402177 | RS32 | |
| RS63LOCK | 402193 | RS63 | |
| RS100LOCK | 402142 | RS100 | |

## Accessories – RED SPOT Red Warning Carriers

| Part number | Code | For use in |
|---|---|---|
| RS20RED | 402170 | RS20 |
| RS32RED | 402182 | RS32 |
| RS63RED | 402198 | RS63 |
| RS100RED | 402146 | RS100 |

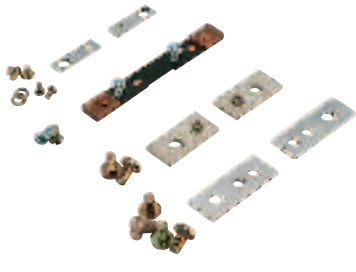
## Accessories – RED SPOT Fuse Link Adaptor Kits



| Part number | Code | For use with Fuse Link type | For use in |
|---|---|---|---|
| P5372/10 | 402135 | TIA / GTIA / TIS / GTIS | RS100 |
| TCA2 | 402222 | TBC / TC / TF / GTF | RS400 |

Note : One adaptor kit required per Fuse Link

## Accessories – RED SPOT Adaptor Kits for 'GS' Fuse LInks



| Part number | Code | For use with Fuse Link type | For use in |
|---|---|---|---|
| GRS32/A | 402108 | GSA 5 - 20 | RS32 |
| GRS63/A | 402109 | GSA 25 - 50 | RS63 |
| GRS100/B | 402107 | GSB 5 - 20 | RS100 |
| GRS100/A-B | 402106 | GSA 75 | RS100 |
| | | GSB 25 - 50 | |
| | | GSGB 16 - 45 | |

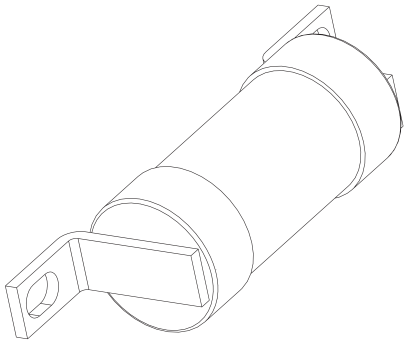
Note : One adaptor kit required per Fuse Link

# Fuse Link Selection

## HRC Fuse Links Accommodated – Selection Chart

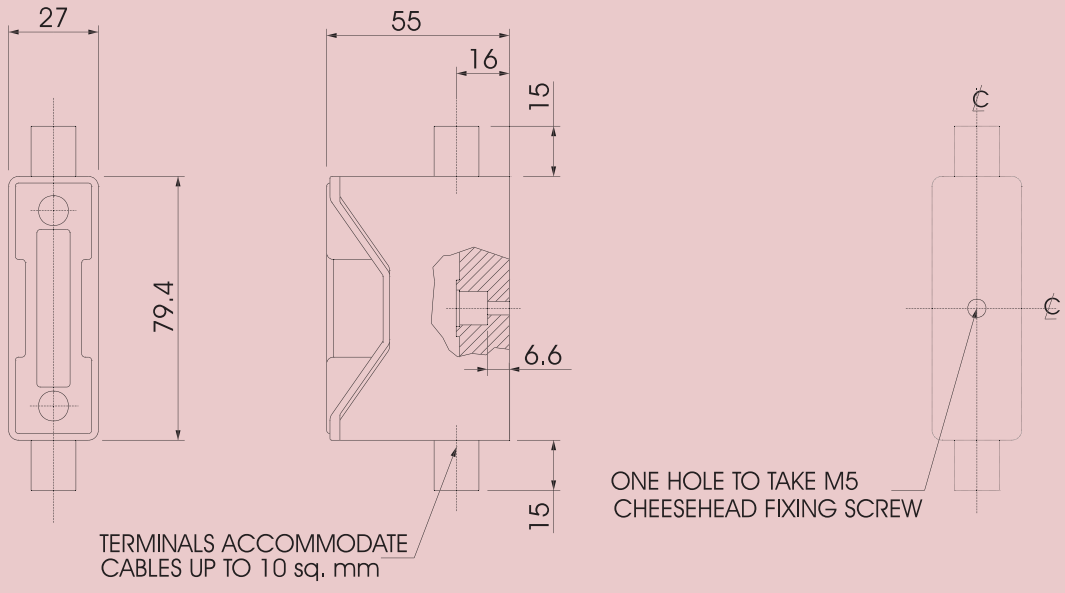
| Fuse Holder Rating | RED SPOT Standard HRC Fuse Links rated up to 660 Volt ac | RED SPOT 400 Series HRC Fuse Links rated up to 440 Volt ac | Extended range of RED SPOT Standard for motor circuit protection | | |
|---|---|---|---|---|---|
| | | | | Current rating | Rating for Motor Starting |
| Amp | Part number | Part number | Part number | Amp | Amp |
| **20** | NIT 2 – 20 | GNIT 2 – 20 | NIT20M25 | 20 | 25 |
| | | | NIT20M32 | 20 | 32 |
| **32** | TIA 2 – 32 | GTIA 2 – 32 | TIA32M35 | 32 | 35 |
| | | | TIA32M40 | 32 | 40 |
| | | | TIA32M50 | 32 | 50 |
| | | | TIA32M63 | 32 | 63 |
| **63** | TIS 35 – 63 | GTIS 35 – 63 | TIS63M80 | 63 | 80 |
| | TIA 2 – 32 | GTIA 2 – 32 | TIS63M100 | 63 | 100 |
| **100** | TCP 32 – 100 | GTCP 35 – 100 | TCP100M125 | 100 | 125 |
| | TIS 35 – 63 * | GTIS 35 – 63 * | TCP100M160 | 100 | 160 |
| | TIA 2 – 32 * | GTIA 2 – 32 * | TCP100M200 | 100 | 200 |
| **200** | TF 125 – 200 | GTF 125 – 200 | TF200M250 | 200 | 250 |
| | TC 80 & 100 | | TF200M315 | 200 | 315 |
| | TBC 2 – 63 | | | | |
| **400** | TM 355 – 400 | GTM 355 – 400 | TM400M450 | 400 | 450 |
| | TKM 250 & 315 | GTKM 250 & 315 | | | |
| | TF 125 – 200 • | GTF 125 – 200 • | | | |
| | TC 80 & 100 • | | | | |
| | TBC 2 – 63 • | | | | |

* adaptor kit required Part number P5372/10
• adaptor kit required Part number TCA2

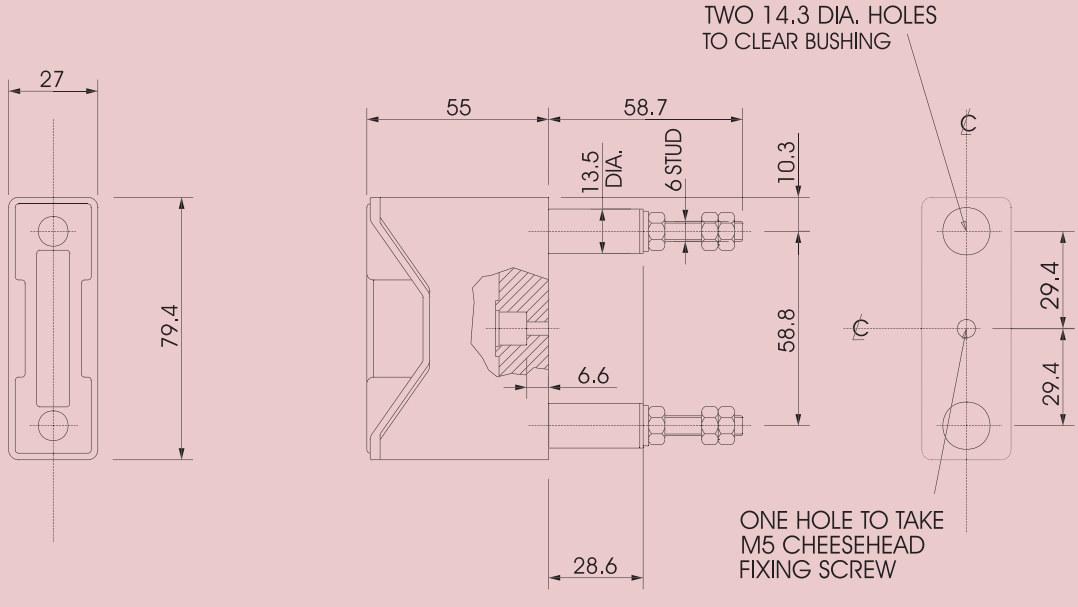


# Outline Dimensions

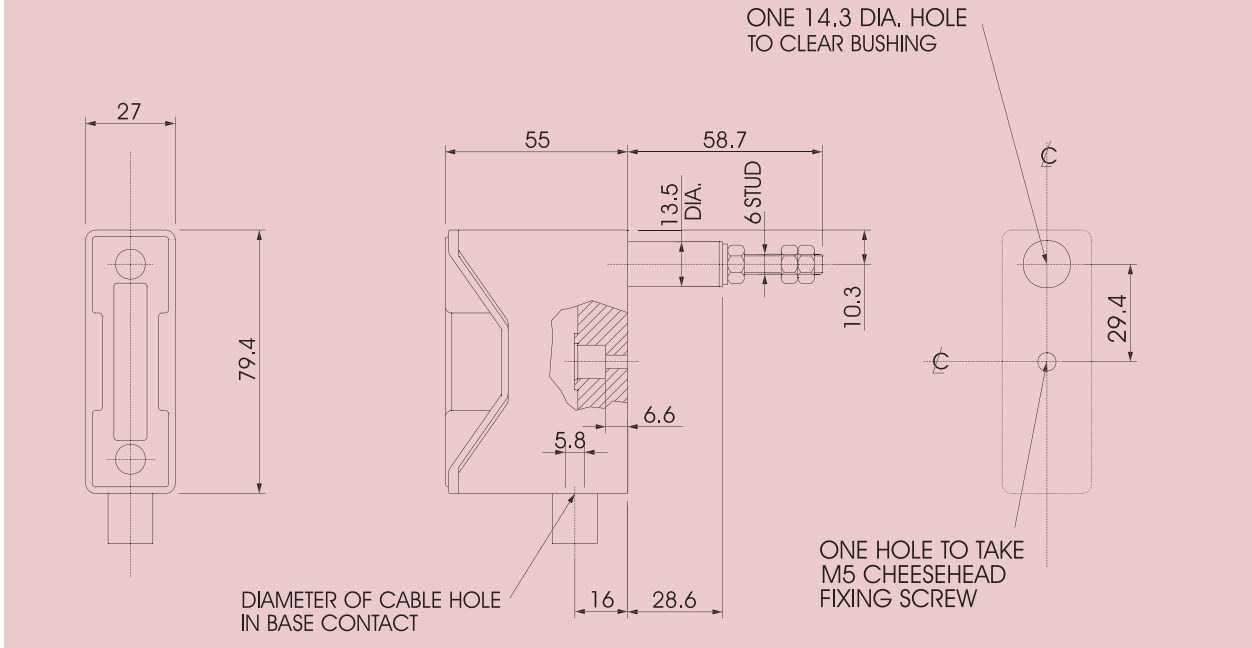
## RED SPOT Fuse Holders – 20 Amp front connected



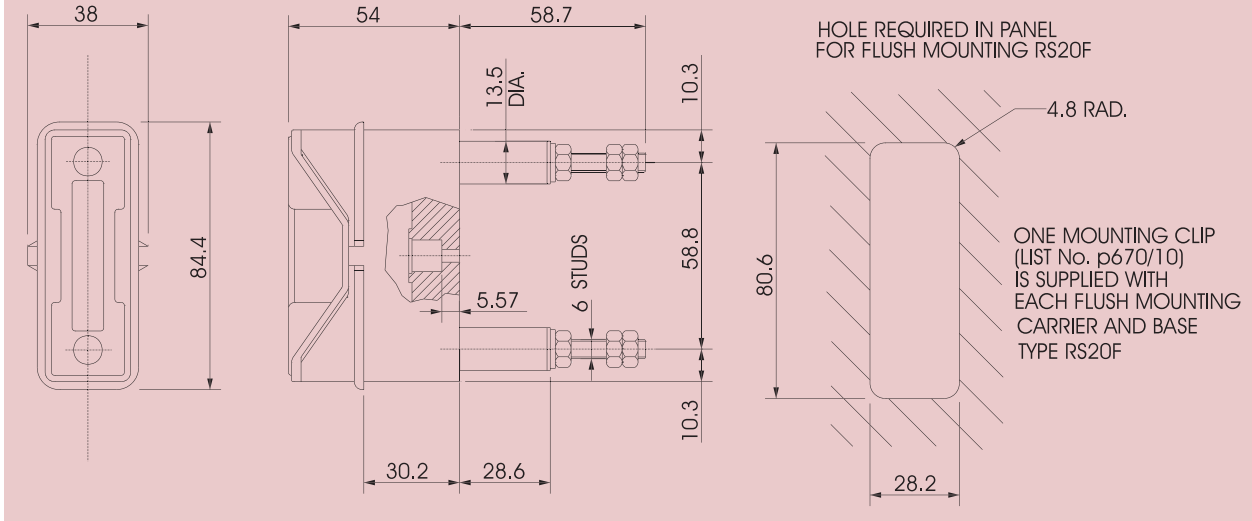

## RED SPOT Fuse Holders – 20 Amp back stud connected



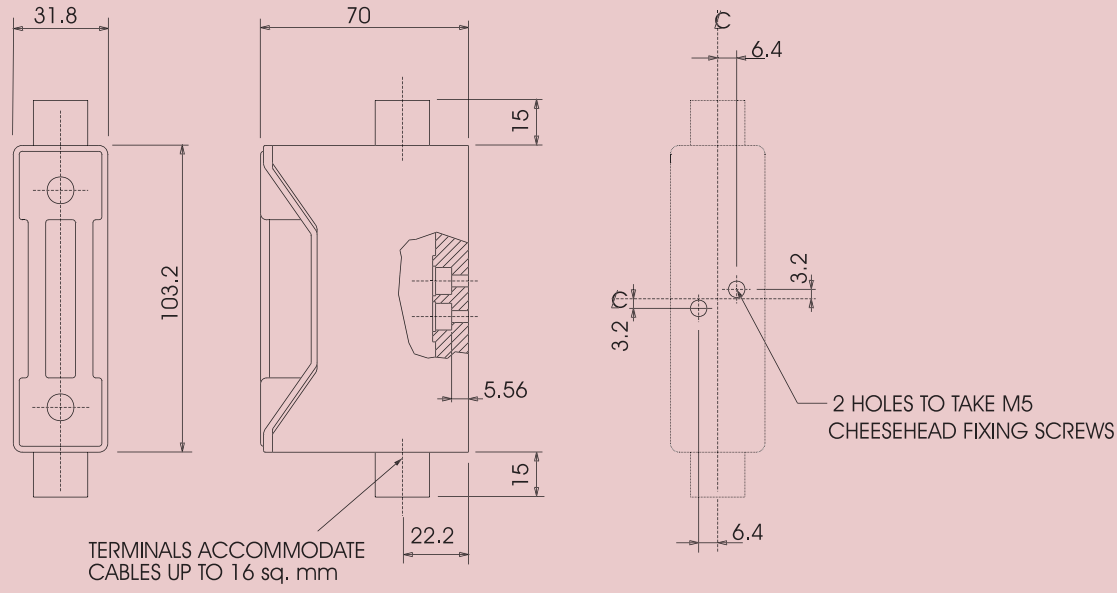
## RED SPOT Fuse Holders – 20 Amp front / back stud connected



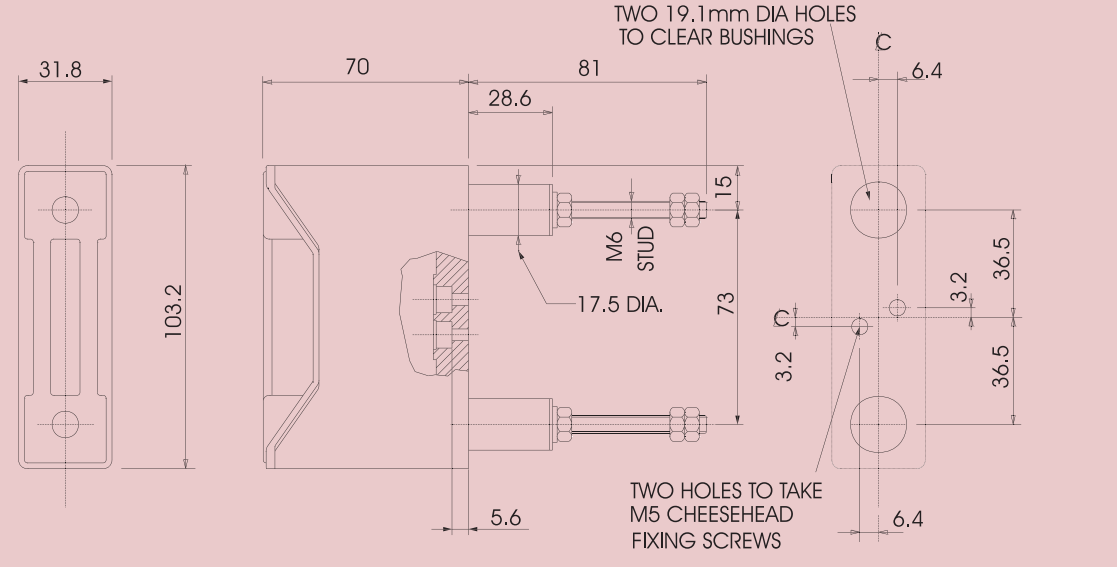

## RED SPOT Fuse Holders – 20 Amp back stud connected / flush mounted



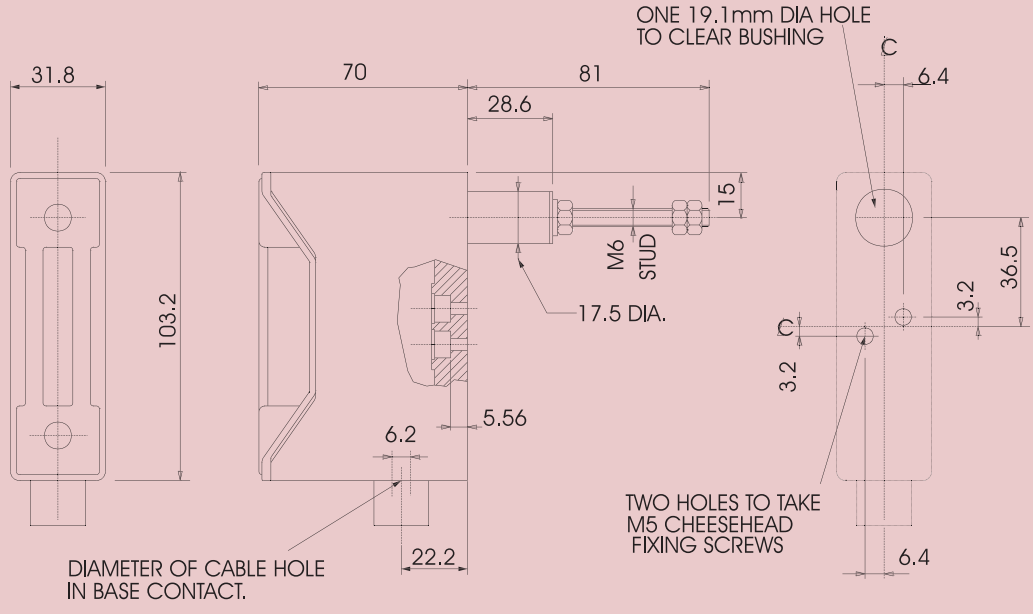
## RED SPOT Fuse Holders – 32 Amp front connected



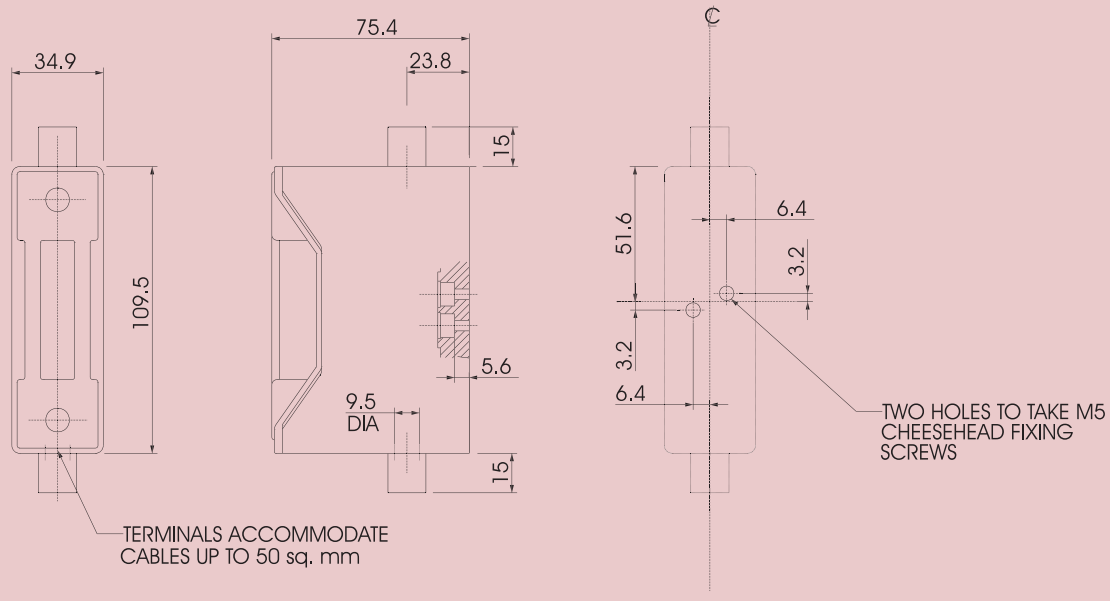

## RED SPOT Fuse Holders – 32 Amp back stud connected



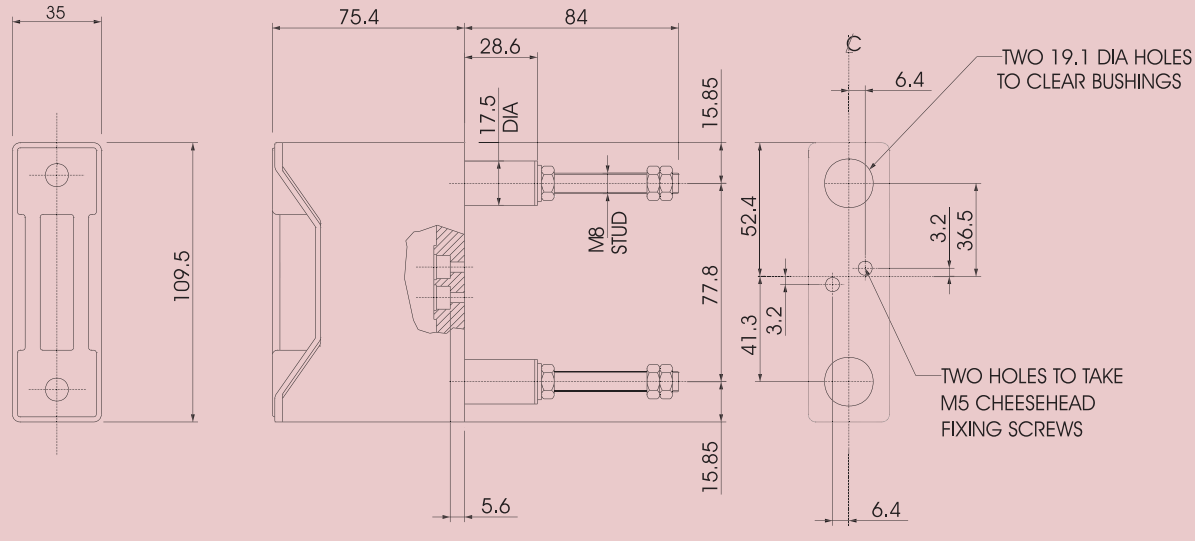
## RED SPOT Fuse Holders – 32 Amp front / back stud connected



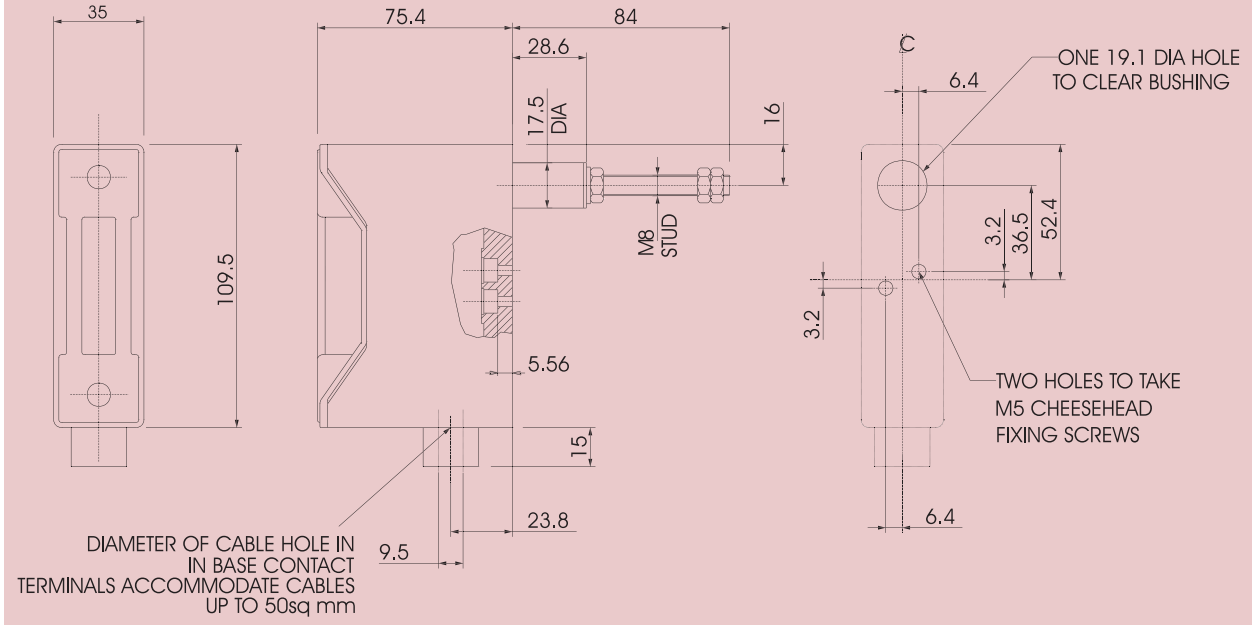
## RED SPOT Fuse Holders – 63 Amp front connected



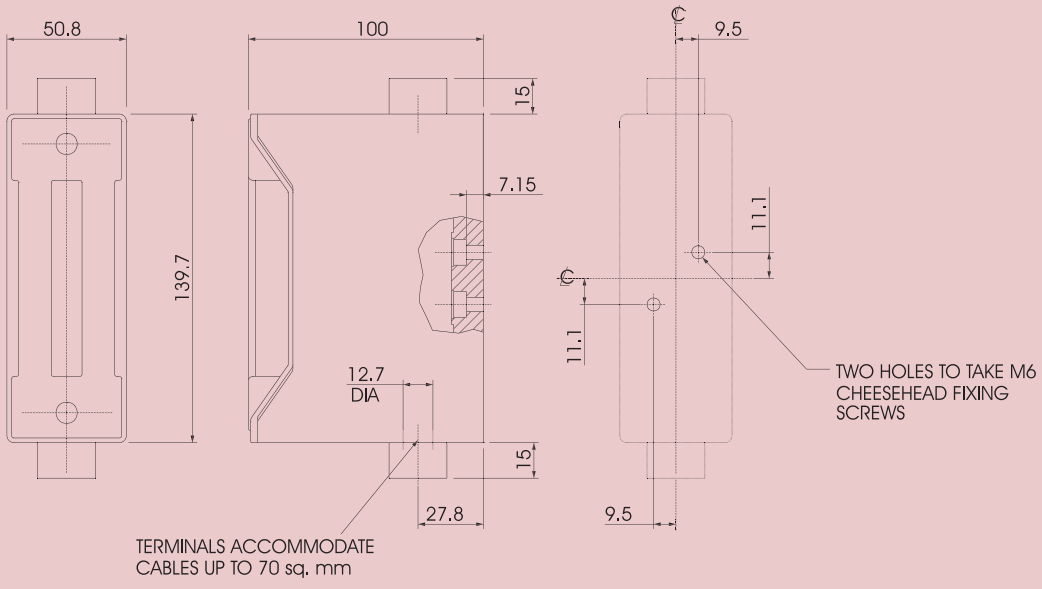

## RED SPOT Fuse Holders – 63 Amp back stud connected



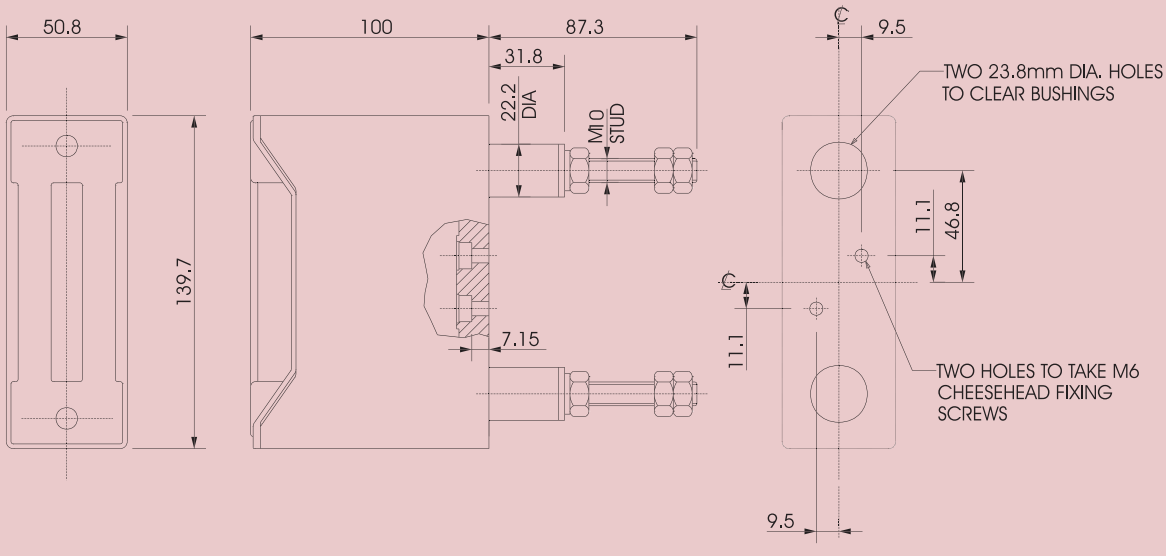
## RED SPOT Fuse Holders – 63 Amp front / back stud connected



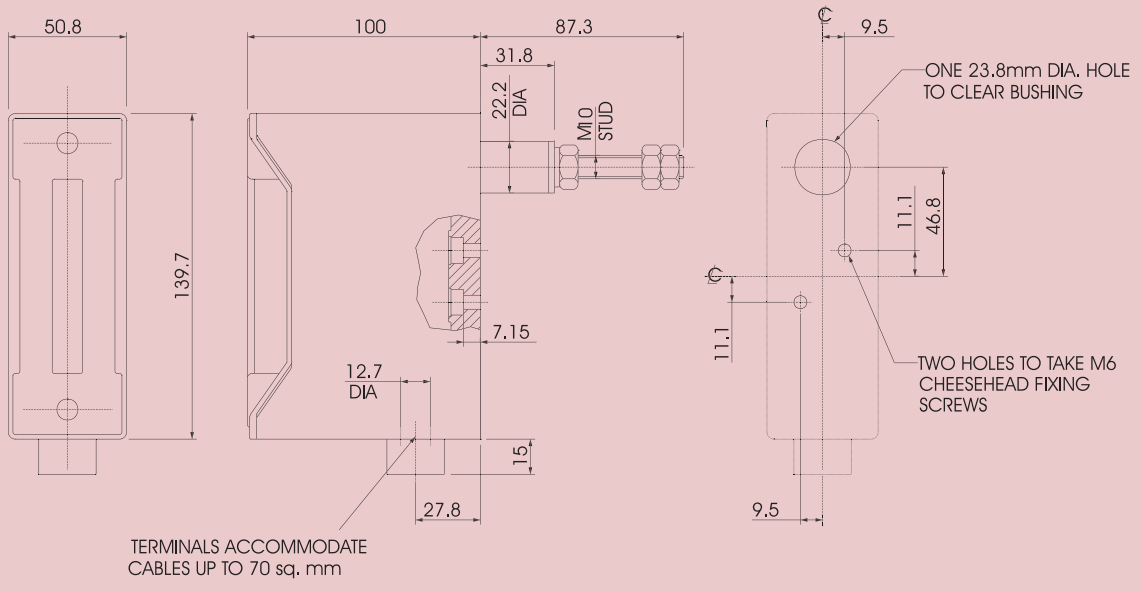
## RED SPOT Fuse Holders – 100 Amp front connected



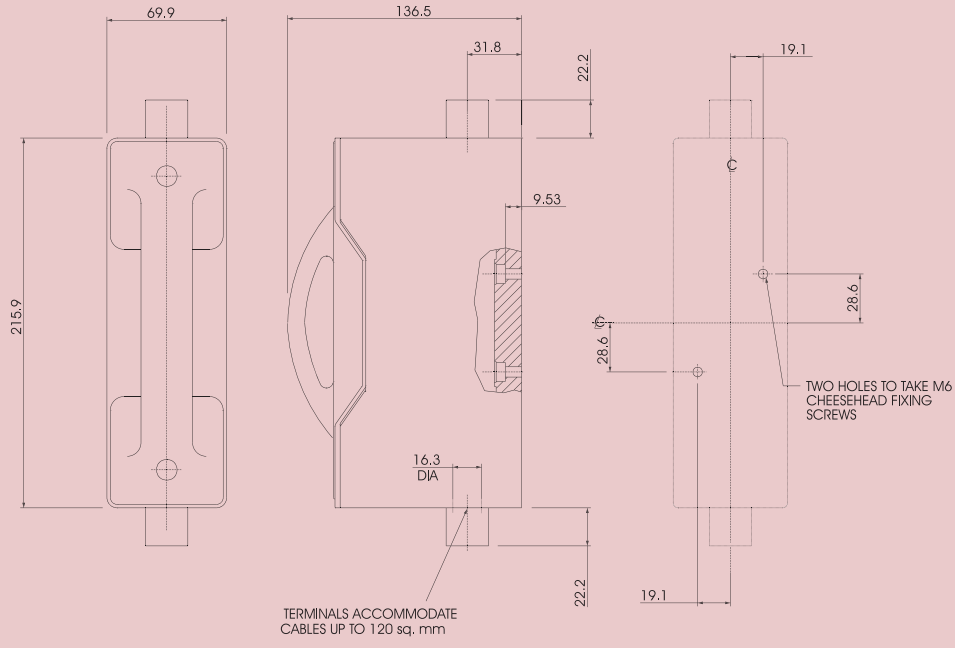

## RED SPOT Fuse Holders – 100 Amp back stud connected



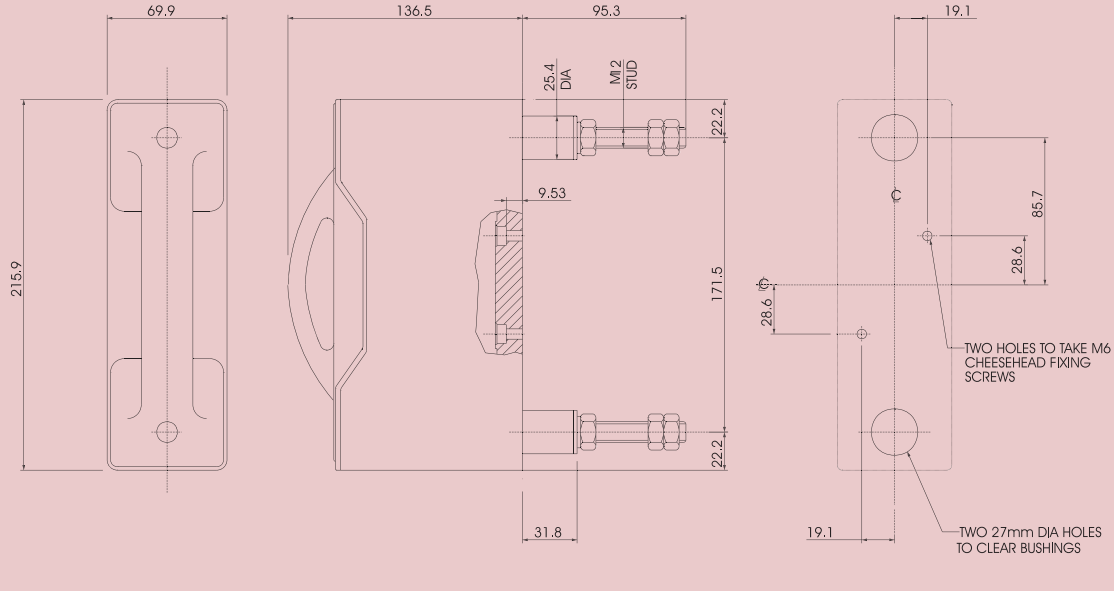
## RED SPOT Fuse Holders – 100 Amp front / back stud connected



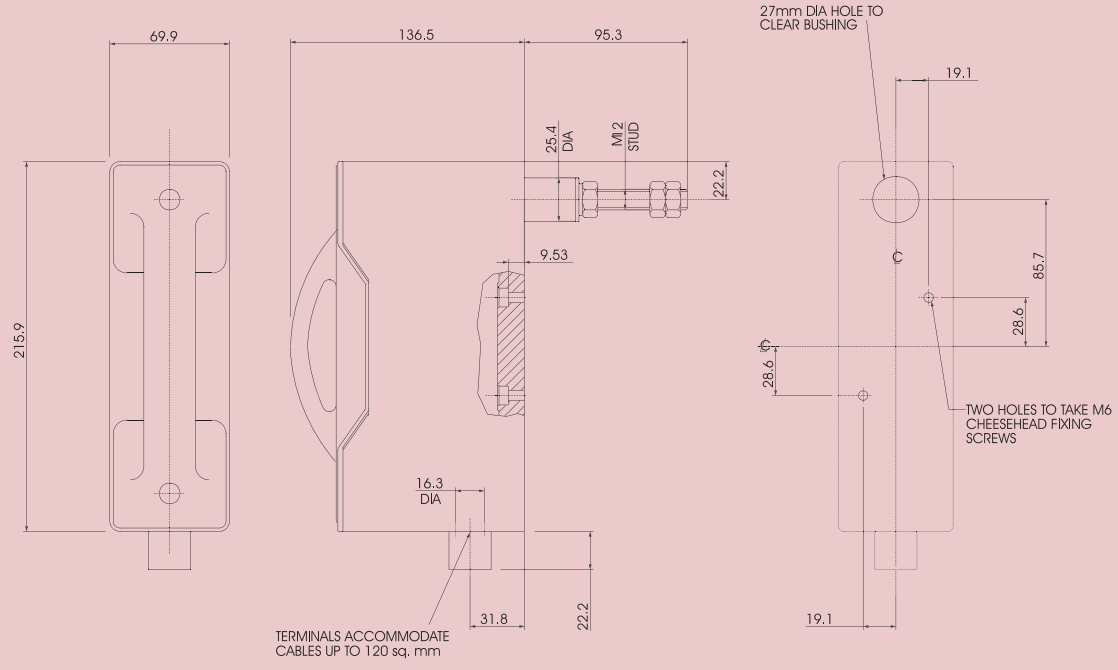
## RED SPOT Fuse Holders – 200 Amp front connected



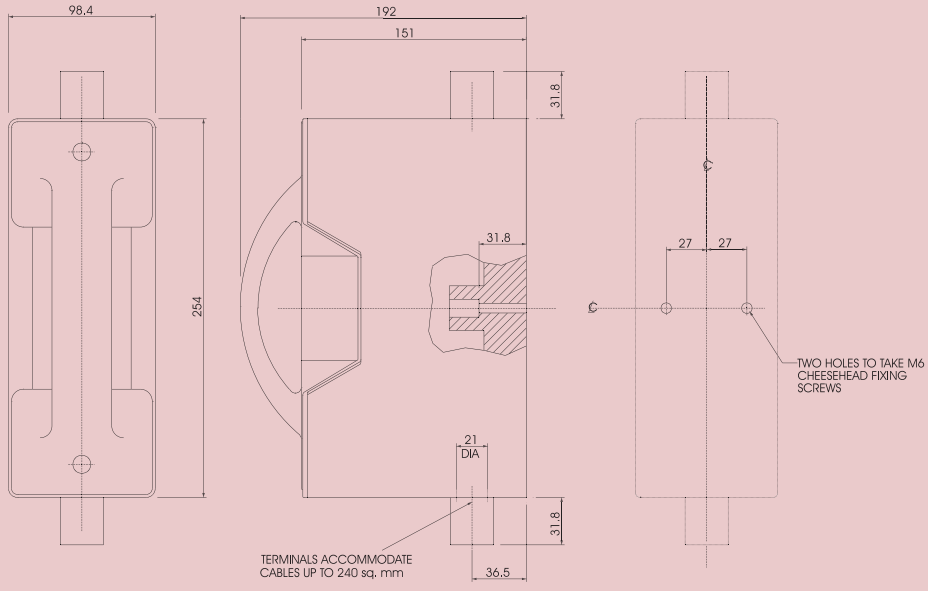

## RED SPOT Fuse Holders – 200 Amp back stud connected



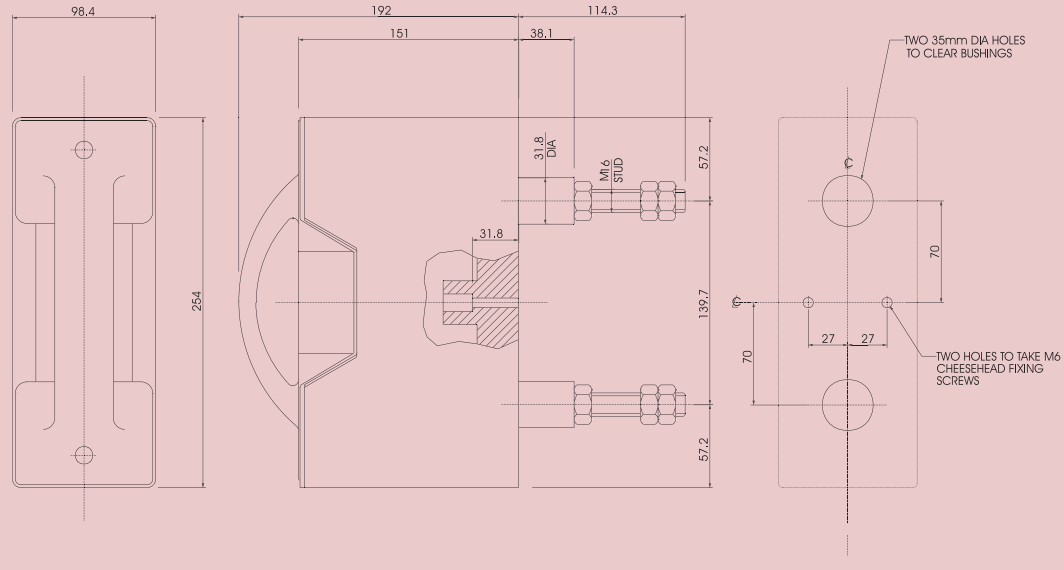
## RED SPOT Fuse Holders – 200 Amp front / back stud connected



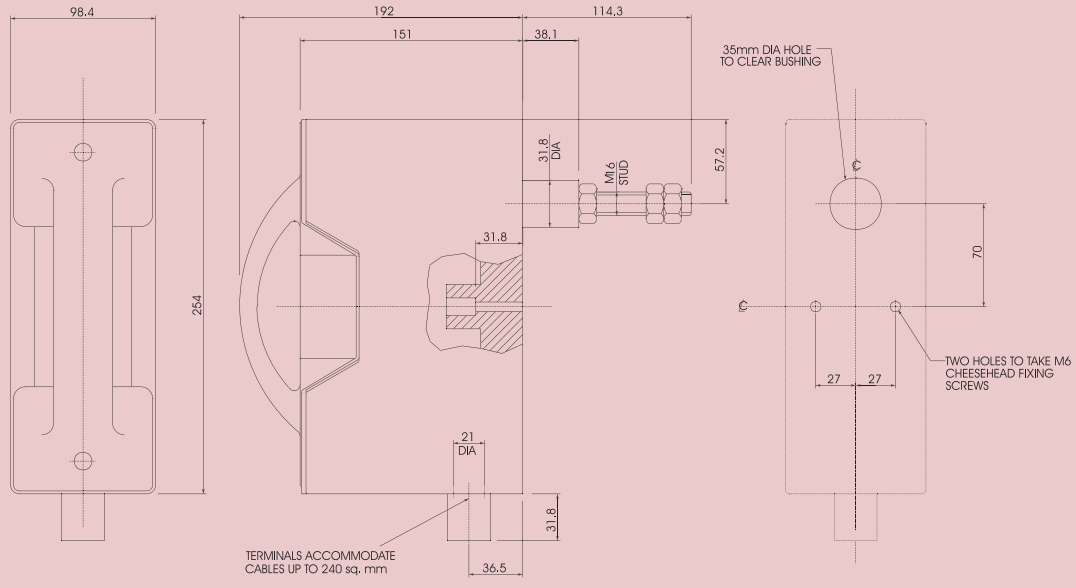
## RED SPOT Fuse Holders – 400 Amp front connected

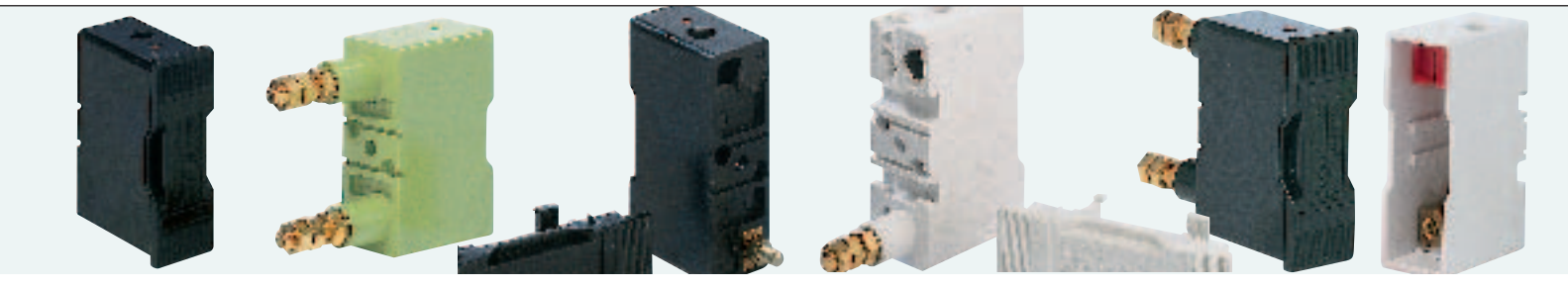



## RED SPOT Fuse Holders – 400 Amp back stud connected



## RED SPOT Fuse Holders – 400 Amp front / back stud connected

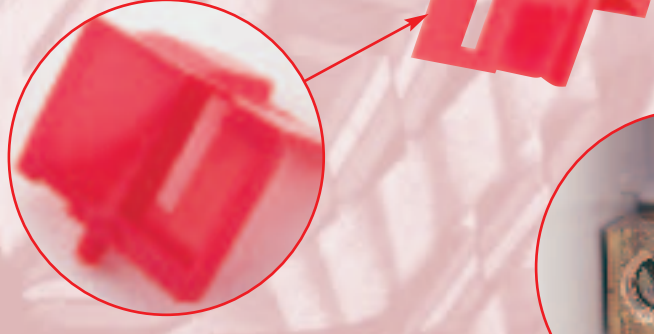


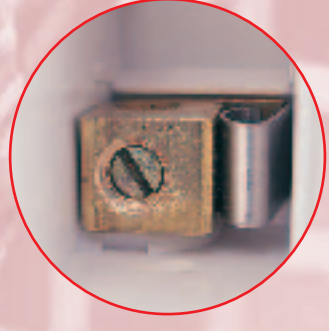


Base and carrier mouldings manufactured from tough, flame retardant material

Red, flame retardant nylon 66 safety shrouds with strength and flexibility

Integral DIN-rail mounting feature on 32, 63 and 125 Amp





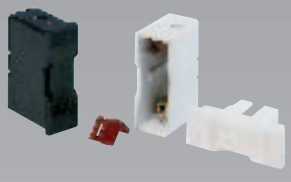
Unique ‘clip-action’ terminal shrouds

Self-cleaning, self-aligning base contacts with stainless steel contact reinforcing stirrups

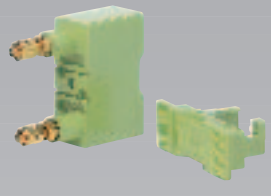
**Accommodates the 'clip-in' blade tag SAFECLIP HRC Fuse Link**

## A complete range

- Current ratings
  20, 32, 63, 100, and 125 Amp
- Connection variants



Front connected



Back stud connected

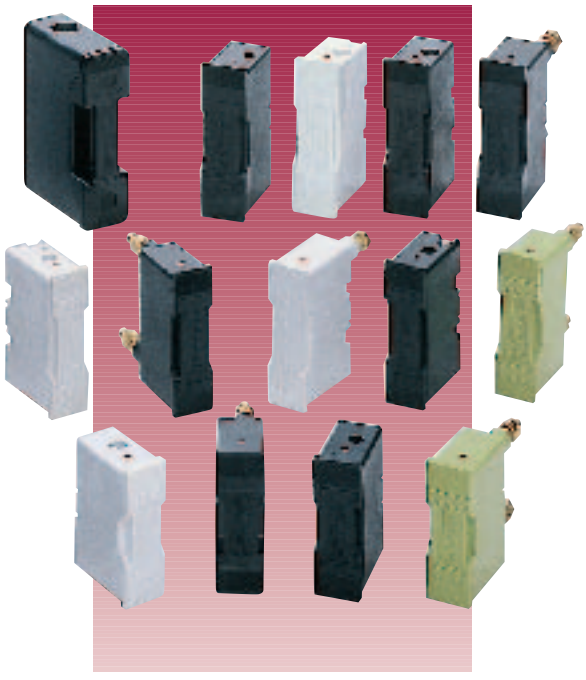
Busbar Front connected

Front / Back stud connected

- Standard finish is black – other available colours include white and green

- Designed for use in conjunction with the SAFECLIP range of Fuse Links
- Accessories
  Copper Links
  Padlockable inserts
  Adaptor carrier
  DIN-rail adaptor
  Sealing band

*Provides economies in size and installation time*



# Fuse Holders: SAFECLIP

**BS 88-1 and 6:1988**
**IEC 269-1**

- *Total safety*
- *Complete*
- *Important time-saving features*
- *High quality*
- *Great design*

## Applications

## Approvals

**ASTA Certified**

## Application Notes

**Protection of personnel**
SAFECLIP Fuse Holders are fully shrouded for personnel safety and complete compliance with the direct contact electric shock requirements of the IEE Wiring Regulations (BS 7671:1992).

## Associated Fusegear Equipment

- **SAFECLIP Fusebanks**
- **SAFECLIP Fuseboards**

## Associated Fuse Links

- **SAFECLIP**
- **Contact the sales office for catalogues**

## Technical Data

| | | |
|---|---|---|
| **Current Rating** | (A) | 20-125 |
| **Voltage Rating ac** | (V) | up to 550 |
| **Breaking Capacity ac** | (kA) | 80 |
| **Max Operating Ambient Temperature** | (°C) | 40 |
| **Cable Connector Size** | ($mm^2$) | 16-70 |

## Performance

ASTA type test certified to BS 88: Parts 1 and 6 suitable for use on applications up to 550Vac.

## Features

**Fully shrouded for personal safety**
Separate base contact insulating shrouds ensure that no 'live' metal is dangerously exposed when the fuse carrier is removed – this enables an out-going circuit to be cabled with complete safety to personnel and with continuity of supply to other circuits.

**Most comprehensive range**
- 20, 32, 63, 100 and 125 Amp ratings
- front, back stud and half front/back stud connection variants
- also available busbar/front connection in 20, 32 and 63 Amp
- standard black finish, available colours include white, green and grey.

**Ease of installation**
- unique clip-action terminal shrouds
- integral DIN-rail mounting feature on 32, 63 and 125 Amp
- accommodates the clip-in SAFECLIP HRC Fuse Link
- provides economies in cost, size and installation time.

**High resistance material**
Strength and long life assured in fuse carriers moulded from tough, flame retardant material.

**Time proven contact system**
Lower contact resistance and watts loss achieved by self-cleaning, self-aligning base contacts with stainless steel contact reinforcing stirrups.

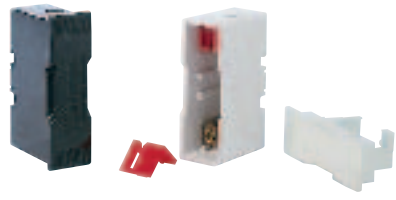
## SAFECLIP – 20 Amp

| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Front connected | SC20H | 402246 | Black | 16mm² | SS |
| | SC20HWH | 402249 | White | 16mm² | SS |
| | SC20HGN | 402248 | Green | 16mm² | SS |
| Back stud connected | SC20P | 402250 | Black | 16mm² | SS |
| | SC20PWH | 402252 | White | 16mm² | SS |
| | SC20PGN | 402251 | Green | 16mm² | SS |
| Busbar / Front connected | SC20BH | 402245 | Black | 16mm² | SS |

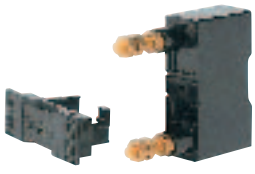
## SAFECLIP – 32 Amp

| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Front connected | SC32H-D | 402254 | Black | 16mm² | NS |
| | SC32H-DWH | 402256 | White | 16mm² | NS |
| | SC32H-DGN | 402255 | Green | 16mm² | NS |
| Back stud connected | SC32P | 402258 | Black | 16mm² | NS |
| | SC32PWH | 402260 | White | 16mm² | NS |
| | SC32PGN | 402259 | Green | 16mm² | NS |
| Busbar / Front connected | SC32BH | 402253 | Black | 16mm² | NS |
| Front / Back stud connected | SC32PH-D | 402261 | Black | 16mm² | NS |
| | SC32PH-DWH | 402262 | White | 16mm² | NS |

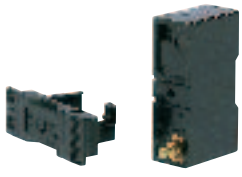
## SAFECLIP – 63 Amp



| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Front connected | SC63H-D | 402265 | Black | 25mm² | ES |
| | SC63H-DWH | 402266 | White | 25mm² | ES |

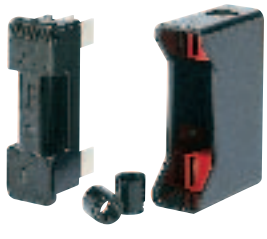


| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Back stud connected | SC63P | 402268 | Black | 25mm² | ES |



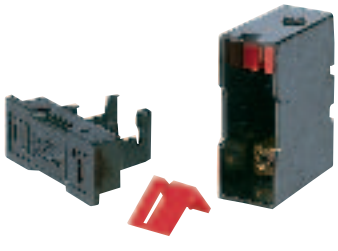
| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Busbar / Front connected | SC63BH | 402263 | Black | 25mm² | ES |

## SAFECLIP – 100 Amp



| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Front connected | SC100H | 402243 | Black | 50mm² | OS |

## SAFECLIP – 125 Amp



| | Part number | Code | Colour | Maximum cable size | Fuse Link accommodated |
|---|---|---|---|---|---|
| Front connected | SC125H-D | 402244 | Black | 70mm² | XS |

## Accessories – SAFECLIP Copper Links

| Part number | Code | Current rating | For use in |
|---|---|---|---|
| SSC-LINK | 402271 | 20 Amp | SC20 |
| NSC-LINK | 402241 | 32 Amp | SC32 |
| ESC-LINK | 402240 | 63 Amp | SC63 |
| OSC-LINK | 402242 | 100 Amp | SC100 |
| XSC-LINK | 402272 | 125 Amp | SC125 |

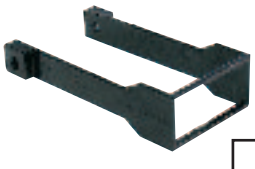
## Accessories – SAFECLIP Padlockable Inserts

| Part number | Code | For use in | Suitable padlocks (not supplied) |
|---|---|---|---|
| SC32LOCK | 402257 | SC32 | YALE (P72) and SQUIRE (LP6. LN1 or No 20) |
| SC63LOCK | 402267 | SC63 | |

## Accessories – SAFECLIP Adaptor Carrier

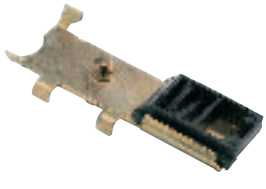
| Part number | Code | For use with Fuse Link type | For use in |
|---|---|---|---|
| SCA63CAR | 402269 | NS | SC63 |

## Accessories – SAFECLIP Sealing Band



| Part number | Code | For use with |
|---|---|---|
| SCSB20/32 | 402270 | SC20 and SC32 |

## Accessories – SAFECLIP DIN-rail Adaptor



| Part number | Code | For use with |
|---|---|---|
| DIN-20/32 | 402238 | SC20 and RS20 |

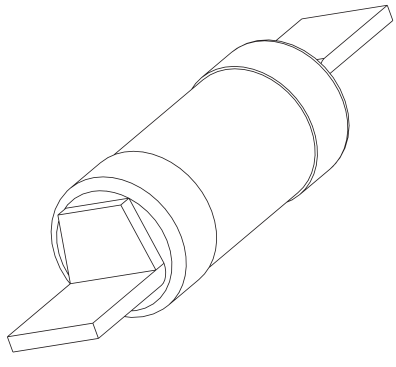
Note : SC32H-D, SC63H-D and SC125H-D have an integral DIN-rail feature as standard.

# Fuse Link Selection

## HRC Fuse Links Accommodated – Selection Chart

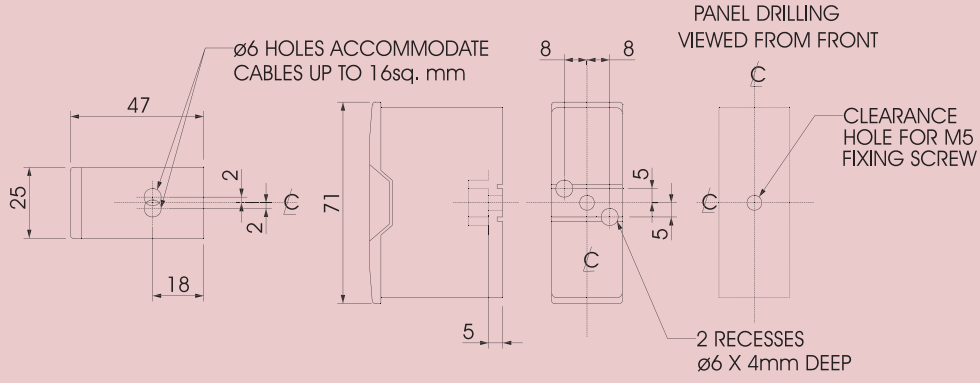
| Fuse Holder Rating | SAFECLIP HRC Fuse Links rated up to 440 Volt ac | Extended range of SAFECLIP for motor circuit protection | | |
|---|---|---|---|---|
| | | | Current rating | Rating for Motor Starting |
| Amp | Part number | Part number | Amp | Amp |
| 20 | SS 2 – 20 | | | |
| 32 | NS 2 – 32 | NS32M40 | 32 | 40 |
| 63 | ES 40 – 63<br>NS 2 – 32 * | ES63M80 | 63 | 80 |
| 100 | OS 80 & 100<br>TIS 35 – 63<br>TIA 2 – 32 | OS100M125<br>OS100M160 | 100<br>100 | 125<br>160 |
| 125 | XS 2 – 125 | | | |

* adaptor carrier required Part number SCA63CAR

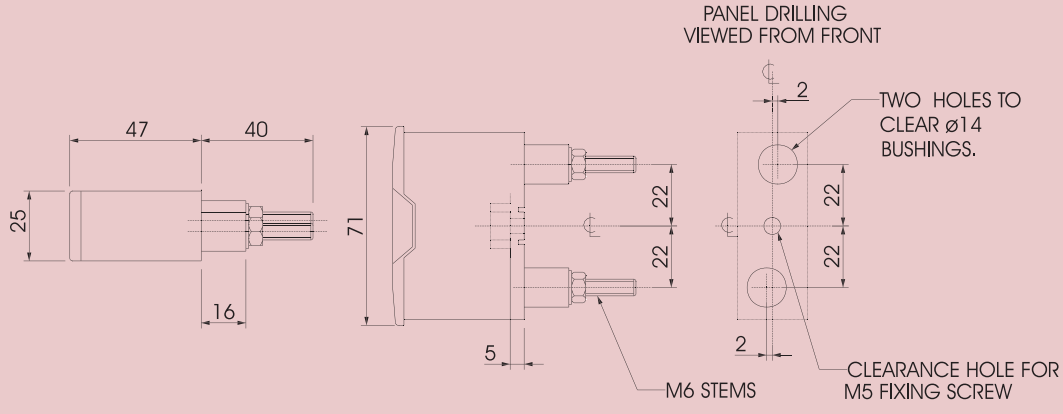


# Outline Dimensions

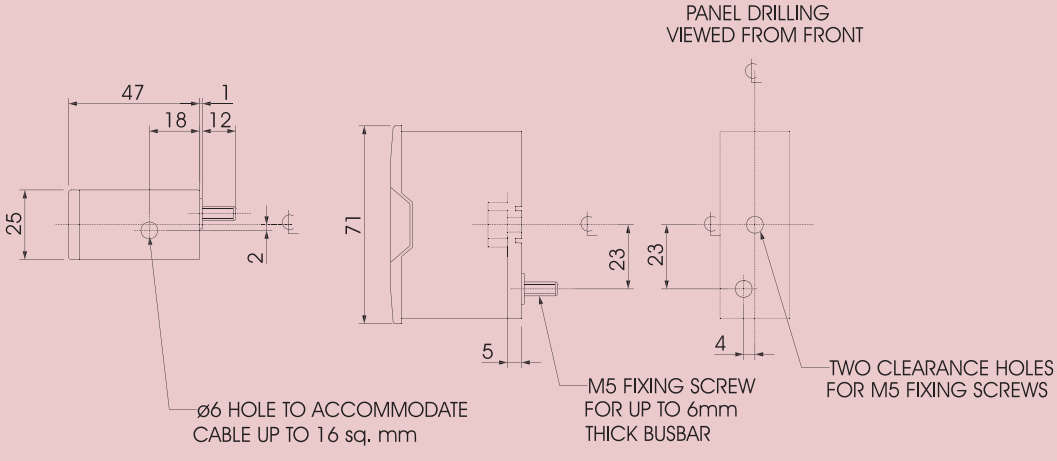
## SAFECLIP Fuse Holders – 20 Amp front connected



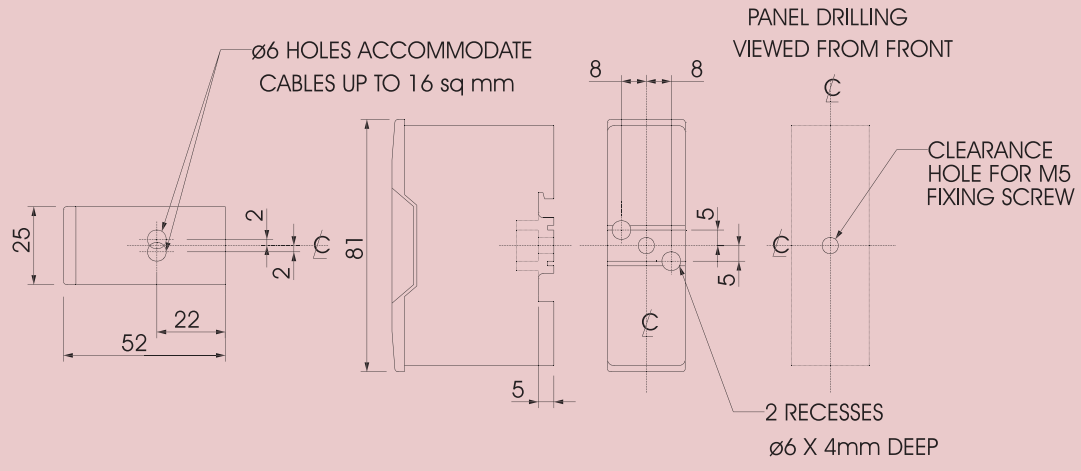

## SAFECLIP Fuse Holders – 20 Amp back stud connected



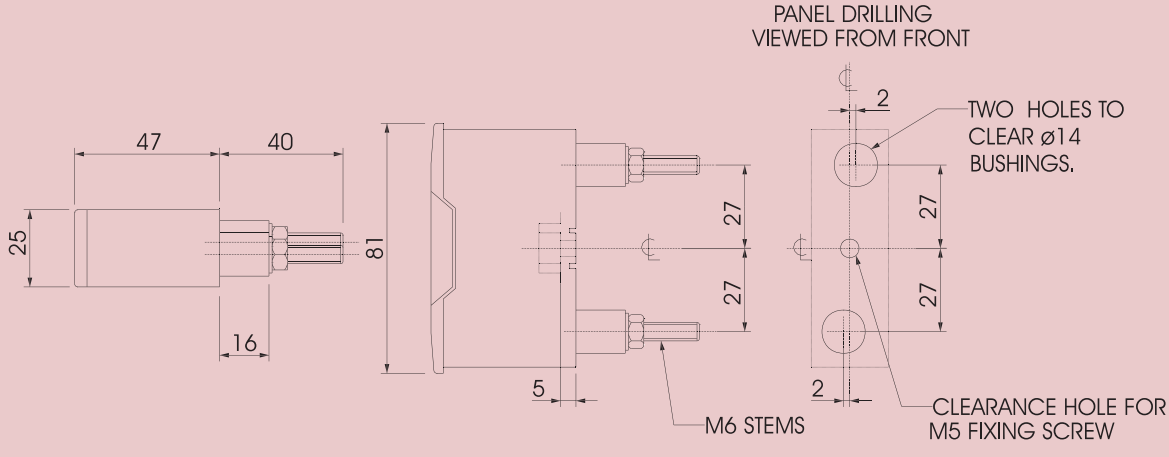

## SAFECLIP Fuse Holders – 20 Amp busbar / front connected



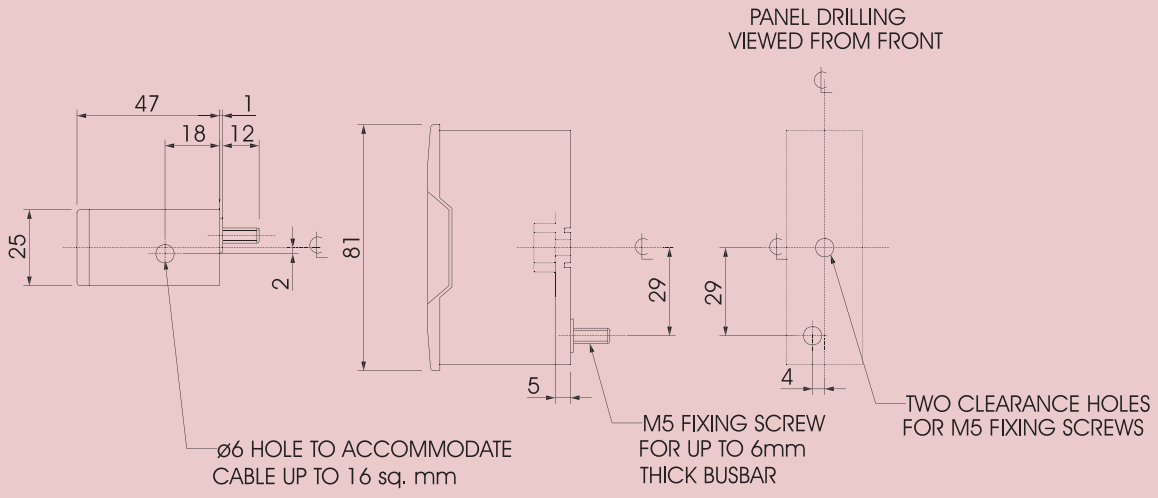
## SAFECLIP Fuse Holders – 32 Amp front connected



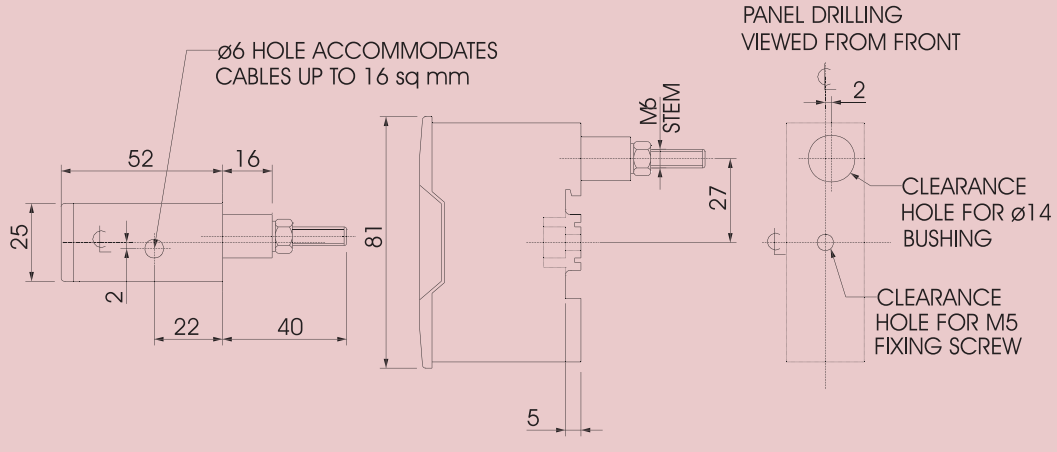

## SAFECLIP Fuse Holders – 32 Amp back stud connected



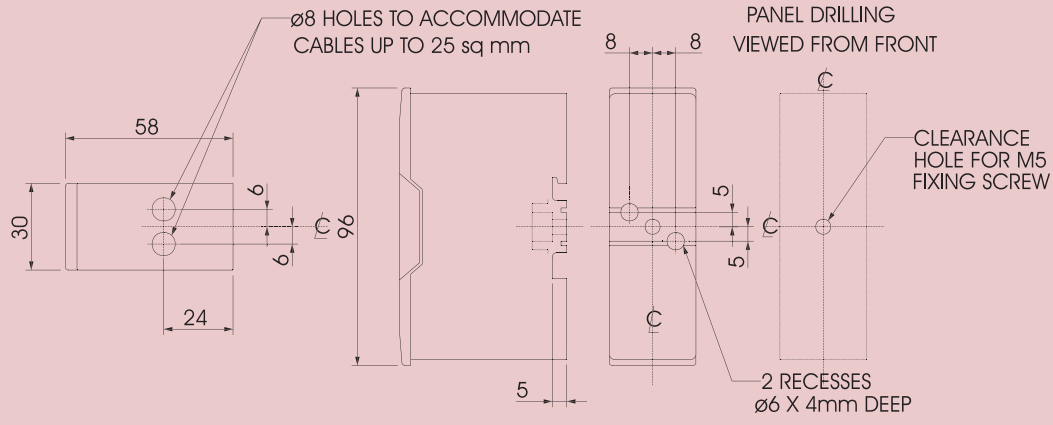
## SAFECLIP Fuse Holders – 32 Amp busbar / front connected



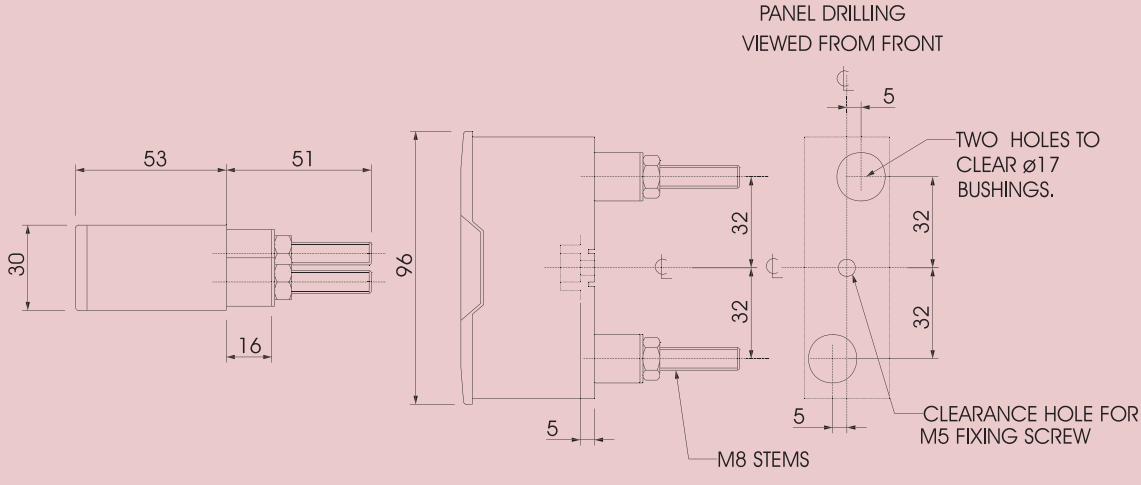

## SAFECLIP Fuse Holders – 32 Amp front / back stud connected



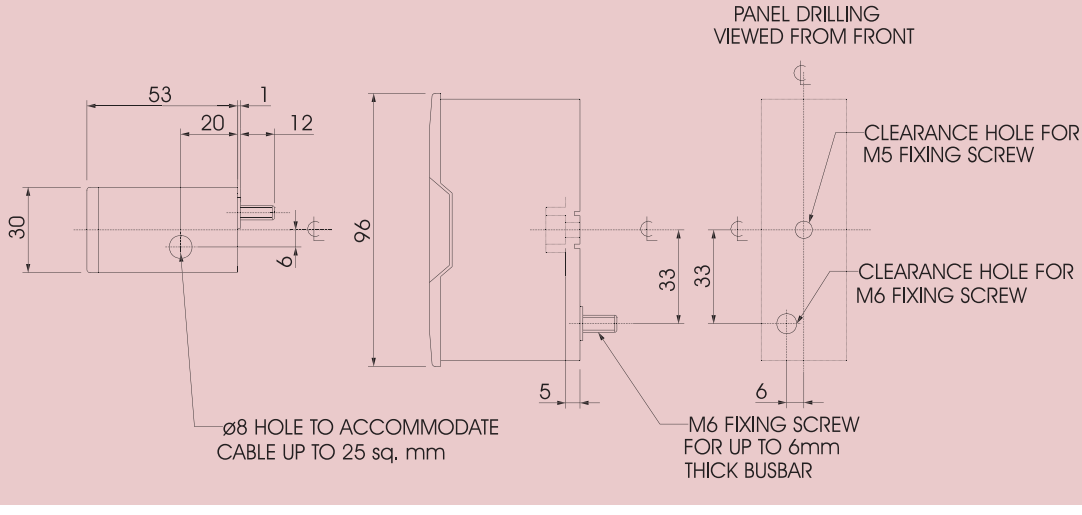
## SAFECLIP Fuse Holders – 63 Amp front connected



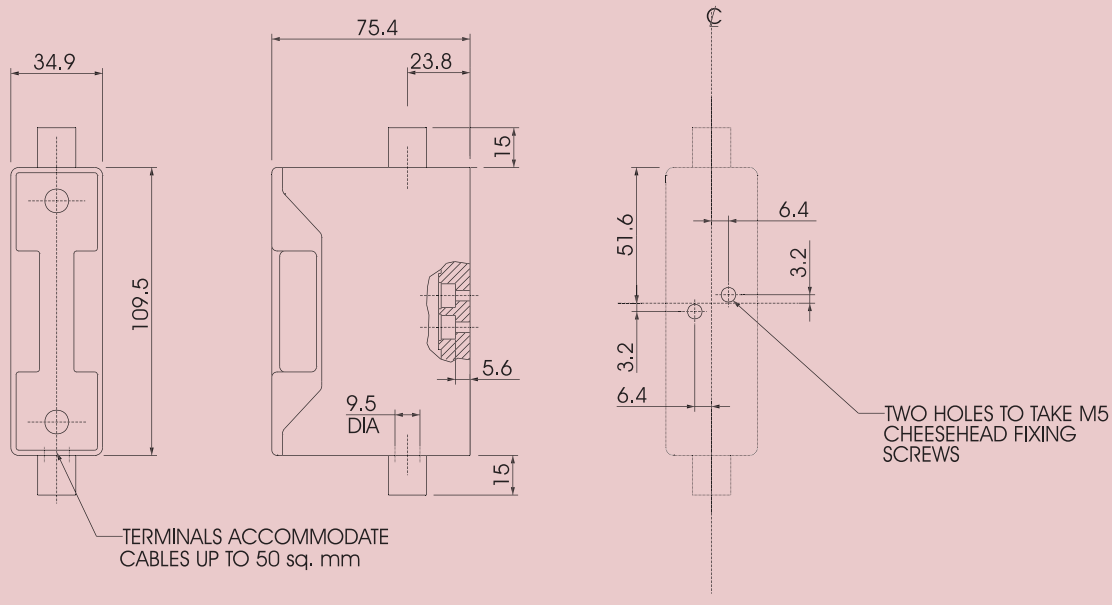

## SAFECLIP Fuse Holders – 63 Amp back stud connected



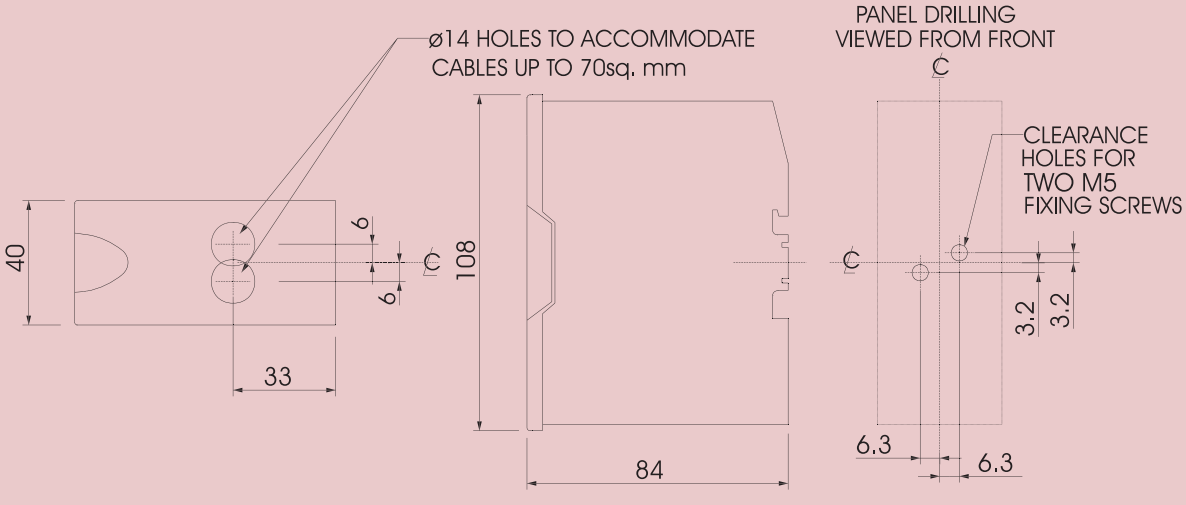

## SAFECLIP Fuse Holders – 63 Amp busbar / front connected



## SAFECLIP Fuse Holders – 100 Amp front connected




## SAFECLIP Fuse Holders – 125 Amp front connected



FM Modular

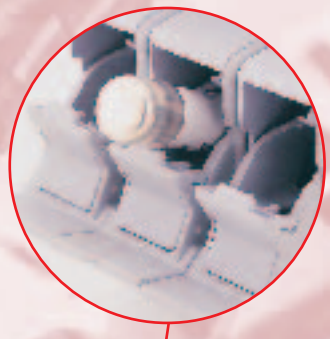
FM Modular

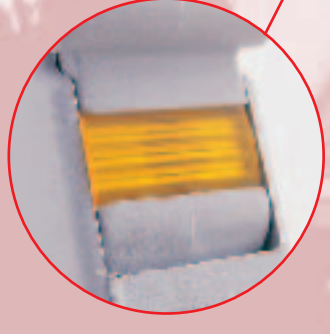
# Compact and easy to install

Operating handles for off load circuit disconnection and electrical isolation

Degree of protection to IP20

Constructed from high temperature resistant polyamide material





Version available with integral fuse blown indicator

Fuse Links easily installed and replaced without the use of tools

# A complete range

- Current ratings
  32, 50 and 125 Amp

- Variants

Single pole

Single pole with indicator

Triple pole

**Symmetrical DIN-rail or screw mount**

- Available in 3 standard frame sizes plus a compact 32 Amp version

- Accommodates cylindrical Fuse Links - 10 x 38, 14 x 51 and 22 x 51

- Accessories
  Copper Links
  Connector pins and handles to form multipole variants

*Cost effective solution*

# Fuse Holders: 'FM' Modular

**BS 88-2:1988**
**IEC 269-2**

*Total safety*

*Complete*

*Important time-saving features*

*High quality*

## Applications

## Approvals

**Bureau Veritas**
**Lloyd's Register**

## Standards

**VDE 0636 IEC 947 IEC 269**

## Associated Fuse Links

- **Industrial Cylindrical – page C.7.**

## Technical Data

| | | |
|---|---|---|
| **Current Rating** | (A) | 32-125 |
| **Voltage Rating ac** | (V) | 660 |
| **Breaking Capacity ac** | (kA) | up to 120 |
| **Max Operating Ambient Temperature** | (°C) | 40 |
| **Cable Connector Size** | ($mm^2$) | 16-35 |

## Performance

'FM' Modular Fuse Holders are VDE certified to IEC269-2.

## Features

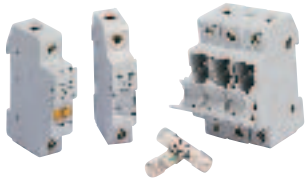
**Personnel safety**
- Degree of protection to IP20
- Parts under voltage are inaccessible
- Version available with integral fuse blown indicators
- Operating handles for off load circuit disconnection and electrical isolation.

**Comprehensive range**
- 32, 50 and 125 Amp standard ratings
- Compact 32 Amp version
- Available in both single pole and triple pole configurations
- Connection kits are available to form multipole variants.

**Ease of installation**
- Symmetrical DIN-rail or screw mount
- Easy to replace/install Fuse Links without the need for a tool
- Provides economies in cost, size and installation time.

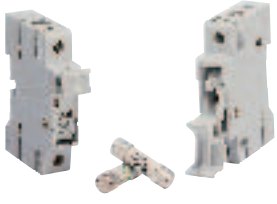
**High resistance material**
- Constructed from high temperature resistant polyamide material
- Silver plated contacts.

## Modular Fuse Holders - 32 Amp Compact



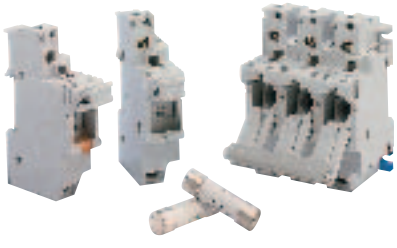
| | Part number | Code | Maximum cable size | Fuse Link size |
|---|---|---|---|---|
| Single pole | FMC101 | 402283 | 16mm² | 10 x 38 |
| Single pole with indicator | FMC101S | 402284 | 16mm² | 10 x 38 |
| Triple pole | FMC103 | 402285 | 16mm² | 10 x 38 |

## Modular Fuse Holders - 32 Amp



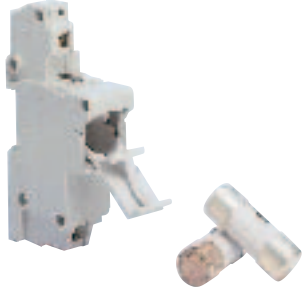
| | Part number | Code | Maximum cable size | Fuse Link size |
|---|---|---|---|---|
| Single pole | FM101 | 402276 | 16mm² | 10 x 38 |
| Single pole with indicator | FM101S | 402277 | 16mm² | 10 x 38 |

## Modular Fuse Holders - 50 Amp



| | Part number | Code | Maximum cable size | Fuse Link size |
|---|---|---|---|---|
| Single pole | FM141 | 402278 | 25mm² | 14 x 51 |
| Single pole with indicator | FM141S | 402279 | 25mm² | 14 x 51 |
| Triple pole | FM143 | 402280 | 25mm² | 14 x 51 |

## Modular Fuse Holders - 125 Amp

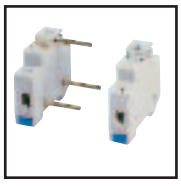


| | Part number | Code | Maximum cable size | Fuse Link size |
|---|---|---|---|---|
| Single pole | FM221 | 402281 | 35mm² | 22 x 58 |

## Accessories – Modular Copper Links

| Part number | Code | Current rating | For use in |
|---|---|---|---|
| **10ML** | 402273 | 32 Amp | FMC10 and FM10 |
| **14ML** | 402274 | 50 Amp | FM14 |
| **22ML** | 402275 | 125 Amp | FM22 |

## Accessories – Modular Connector Pins



| Part number | Code | For use with |
|---|---|---|
| **FMP3** | 402286 | FMC101 and FMC101S |

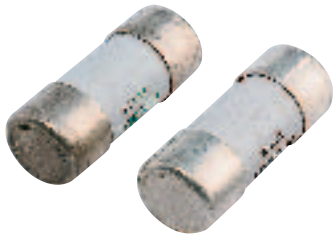
## Accessories – Modular Profil Handle Connector

| Part number | Code | For use with |
|---|---|---|
| **PROFIL** | 401611 | FM101 and FM101S |

## Industrial Cylindrical Fuse Links

| | Part number | Code | Current Rating Amp | Maximum voltage rating ac |
|---|---|---|---|---|
| **Body size 10 x 38 General purpose Class gL/gG** | **10G005** | 401533 | 0.5 | 500 |
| | **10G01** | 401534 | 1 | 500 |
| | **10G02** | 401535 | 2 | 500 |
| | **10G04** | 401536 | 4 | 500 |
| | **10G06** | 401537 | 6 | 500 |
| | **10G08** | 401538 | 8 | 500 |
| | **10G10** | 401539 | 10 | 500 |
| | **10G12** | 401540 | 12 | 500 |
| | **10G16** | 401541 | 16 | 500 |
| | **10G20** | 401542 | 20 | 500 |
| | **10G25** | 401543 | 25 | 500 |
| | **10G32** | 401544 | 32 | 400 |
| **Body size 10 x 38 Motor rated Class aM** | **10M005** | 401545 | 0.5 | 500 |
| | **10M01** | 401546 | 1 | 500 |
| | **10M02** | 401547 | 2 | 500 |
| | **10M04** | 401548 | 4 | 500 |
| | **10M06** | 401549 | 6 | 500 |
| | **10M08** | 401550 | 8 | 500 |
| | **10M10** | 401551 | 10 | 500 |
| | **10M12** | 401552 | 12 | 500 |
| | **10M16** | 401553 | 16 | 500 |
| | **10M20** | 401554 | 20 | 500 |
| | **10M25** | 401555 | 25 | 400 |

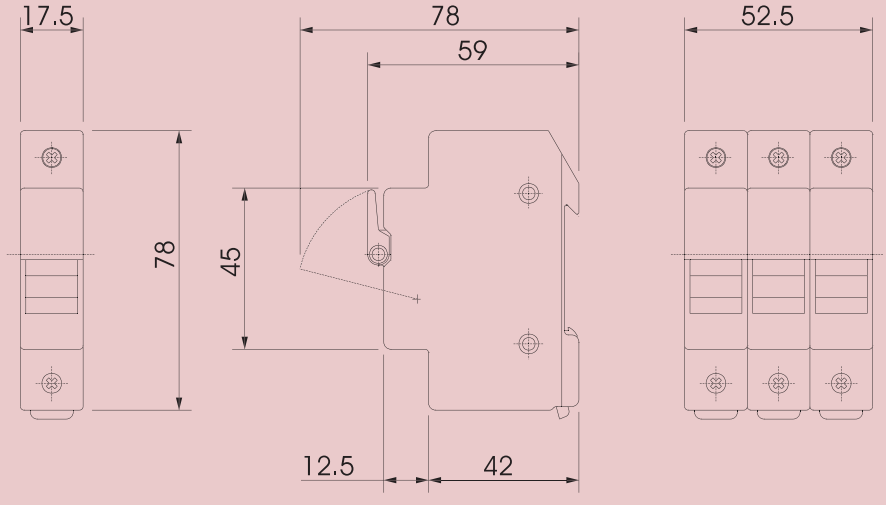
| | | | | |
|---|---|---|---|---|
| **Body size 14 x 51 General purpose Class gL/gG** | **14G02** | 401556 | 2 | 660 |
| | **14G04** | 401557 | 4 | 660 |
| | **14G06** | 401558 | 6 | 660 |
| | **14G08** | 401559 | 8 | 660 |
| | **14G10** | 401560 | 10 | 660 |
| | **14G12** | 401561 | 12 | 660 |
| | **14G16** | 401562 | 16 | 660 |
| | **14G20** | 401563 | 20 | 660 |
| | **14G25** | 401564 | 25 | 660 |
| | **14G32** | 401565 | 32 | 500 |
| | **14G40** | 401566 | 40 | 500 |
| | **14G50** | 401567 | 50 | 400 |
| **Body size 14 x 51 Motor rated Class aM** | **14M02** | 401568 | 2 | 660 |
| | **14M04** | 401569 | 4 | 660 |
| | **14M06** | 401570 | 6 | 660 |
| | **14M08** | 401571 | 8 | 660 |
| | **14M10** | 401572 | 10 | 660 |
| | **14M12** | 401573 | 12 | 660 |
| | **14M16** | 401574 | 16 | 660 |
| | **14M20** | 401575 | 20 | 660 |
| | **14M25** | 401576 | 25 | 660 |
| | **14M32** | 401577 | 32 | 500 |
| | **14M40** | 401578 | 40 | 500 |
| | **14M50** | 401580 | 50 | 400 |



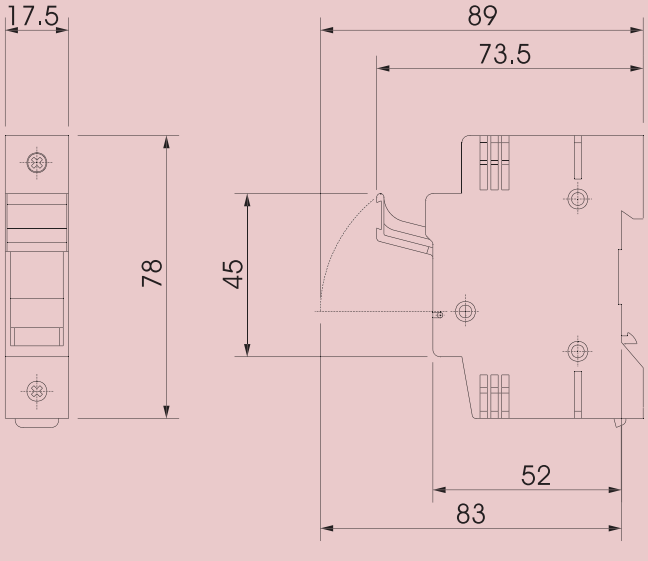
| | | | | |
|---|---|---|---|---|
| **Body size 22 x 58 General purpose Class gL/gG** | **22G04** | 401581 | 4 | 660 |
| | **22G06** | 401582 | 6 | 660 |
| | **22G08** | 401583 | 8 | 660 |
| | **22G10** | 401584 | 10 | 660 |
| | **22G12** | 401586 | 12 | 660 |
| | **22G16** | 401588 | 16 | 660 |
| | **22G20** | 401589 | 20 | 660 |
| | **22G25** | 401590 | 25 | 660 |
| | **22G32** | 401591 | 32 | 660 |
| | **22G40** | 401592 | 40 | 660 |
| | **22G50** | 401593 | 50 | 660 |
| | **22G63** | 401594 | 63 | 660 |
| | **22G80** | 401595 | 80 | 660 |
| | **22G100** | 401585 | 100 | 500 |
| | **22G125** | 401587 | 125 | 400 |
| **Body size 22 x 58 Motor rated Class aM** | **22M04** | 401596 | 4 | 660 |
| | **22M06** | 401597 | 6 | 660 |
| | **22M08** | 401598 | 8 | 660 |
| | **22M10** | 401599 | 10 | 660 |
| | **22M12** | 401601 | 12 | 660 |
| | **22M16** | 401603 | 16 | 660 |
| | **22M20** | 401604 | 20 | 660 |
| | **22M25** | 401605 | 25 | 660 |
| | **22M32** | 401606 | 32 | 660 |
| | **22M40** | 401607 | 40 | 660 |
| | **22M50** | 401608 | 50 | 660 |
| | **22M63** | 401609 | 63 | 660 |
| | **22M80** | 401610 | 80 | 660 |
| | **22M100** | 401600 | 100 | 500 |
| | **22M125** | 401602 | 125 | 400 |

# Outline Dimensions

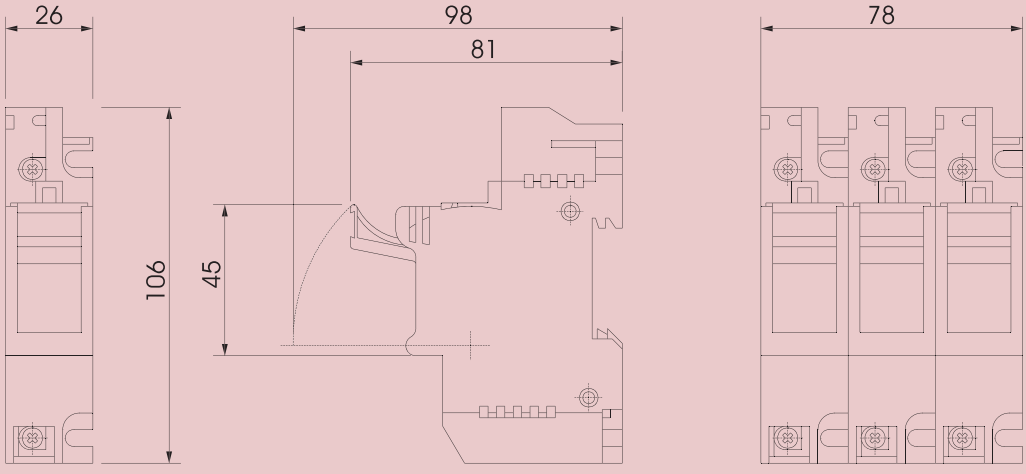
## Modular Fuse Holders – 32 Amp Compact Single Pole and Triple Pole



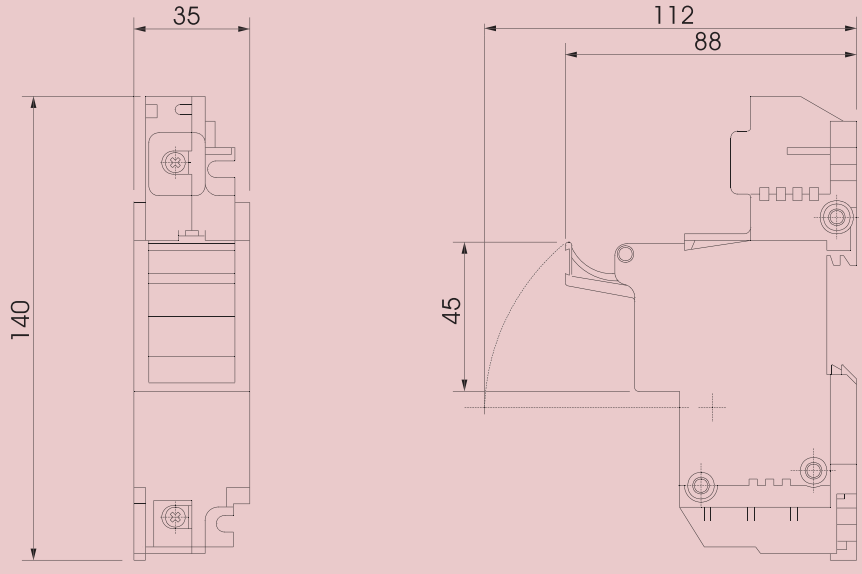

## Modular Fuse Holders – 32 Amp Single Pole

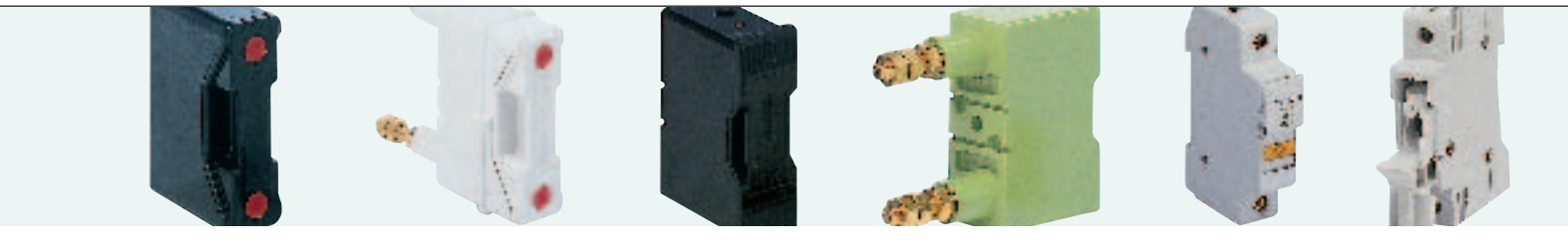


## Modular Fuse Holders – 50 Amp Single Pole and Triple Pole




## Modular Fuse Holders – 125 Amp Single Pole





# Installation

## Method of cabling

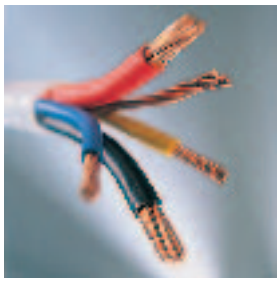
Front connected fuse holders

- Remove Red nylon insulating shroud to release cable sleeve.
- Remove cable sleeve.
- Fit cable sleeve over cable.
- Fit conductor into fuse base terminal and tighten cable clamping screw to secure.
- Replace Red nylon shroud taking care it holds the cable sleeve in position by locating the shroud in the groove provided by the sleeves.

## Cable selection and termination

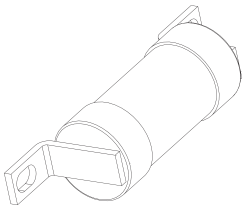
- Ensure cable sizes are correctly chosen in line with the IEE Wiring Regulations (BS 7671), making due allowance for :
  - i. Grouping of cables (correction factor Cg).
  - ii. Ambient temperature / internal enclosure temperature (correction factor Ca).
- Ensure that maximum cable core temperature is restricted to 70°C or less.
- Ensure adequate cable length is provided for interconnections between fuse holders or other components. This will prevent possible heat input to the fuse holder which could result in overheating.
- If using multi-stranded cables / Tri-rated cables the bared strands should be crimped in thin wall copper ferrules in order to consolidate the strands. The following points should be taken into account:
  - i. The inside diameter of the ferrules should match that of bared cable ends.
  - ii. The ferrule lengths should be the same length as the cable entry tunnel in the fuse base terminals.
  - iii. The termination screw should compress the wall of the ferrules, providing further consolidation of the cable strands within the ferrule.
- When used in banks, ensure that the diversity factors recommended in BS5486 Part 11, Factory Built Assemblies, are applied. If the number of fuse holders banked together exceeds 12 a 0.6 diversity factor may be used.
- For applications when there is insufficient or no diversity applied, adequate compensation should be made by a combination of some, or all, of the following:
  - i. Utilise higher standard current rated fuse links, or motor rated fuse links.
  - ii. Increase the cable size.
  - iii. Ensure that fuse holders in the bank are separated by at least 5mm.
  - iv. Ensure that there is adequate spacing between fuse banks if they are stacked vertically. Typically, depending on rating, this would be 30-50mm.
  - v. Incorporate natural or forced ventilation.

  These measures should ensure that the heat is adequately exported from the fuses.
- Sharp bends in cables, especially near termination points, should be avoided in order to prevent damage to cable cores or insulation and to ensure that no mechanical strain, is put on the contact block in the fuse base.
- The minimum torque values detailed in the attached table should be applied to cable terminal and fuse link fixing screws.



**Important note**

These products should be installed, commissioned and maintained by, or under the supervision of, a competent person, in accordance with current Electricity at Work Regulations, IEE Regulations for the Electrical Equipment of buildings, Statutory requirements and any other specific instructions issued by GE Power Controls Ltd. These notes assume throughout that the product is isolated from the supply during installation or maintenance. It is essential that this is done before commencement of any work. Any covers, or other safety measures which are removed during installation or maintenance must be replaced on completion.



## Fuse Link selection

- Select a rating of fuse link which is at least equal to the normal full load current of the circuit, including any allowances needed for harmonic currents, as in the case p.f. correction circuits.
- Ensure that the fuse link rating can withstand any over currents which may apply to the circuit, such as transformer in-rush currents, motor starting surges and repetitive cycle loads.
- When full cable protection is required, ensure that the fuse link rating is compatible with the selected cable, i.e. less than or equal to cable rating.

## Recommended minimum torque values

| Rating | Fuse Link fixing screw | | Cable terminal screw | | Back connected stud | |
|---|---|---|---|---|---|---|
| | Size | Torque | Size | Torque | Size | Torque |
| **RS20** | 4BA (Ø35mm) | 1.2Nm | 1/4" BSF grub screw | 2.0Nm | M6 | 3.0Nm |
| | Pan head | (11 lb.in) | (Slotted) | (18 lb.in) | | (27 lb.in) |
| **RS32** | 2BA (Ø45mm) | 2.0Nm | 1/4" BSF grub screw | 2.0Nm | M6 | 3.0Nm |
| | Pan head | (18 lb.in) | (Slotted) | (18 lb.in) | | (27 lb.in) |
| **RS63** | 2BA (Ø45mm) | 2.0Nm | 3/8" BSF grub screw | 3.5Nm | M8 | 6.0Nm |
| | Pan head | (18 lb.in) | (Slotted) | (31 lb.in) | | (53 lb.in) |
| **RS100** | M6 | 2.5Nm | 1/2" BSF grub screw | 4.0Nm | M10 | 10.0Nm |
| | Pan head | (22 lb.in) | (Slotted) | (35 lb.in) | | (89 lb.in) |
| **RS200** | M6 | 2.5Nm | 5/8" BSF hex head | 25.0Nm | M12 | 14.0Nm |
| | Pan head | (22 lb.in) | (18mm A/F) | (18.5 lb.ft) | | (10 lb.ft) |
| **RS400** | M8 | 6.0Nm | 5/8" BSF hex head | 25.0Nm | M16 | 25.0Nm |
| | Hex head | (53 lb.in) | (18mm A/F) | (18.5 lb.ft) | | (18.5 lb.ft) |
| Note: | Conversion from Nm to lb.in. | | | | | |
| | 1Nm = 8.85075 lb.in. | | | | | |

# *Maintenance*

## Guidelines

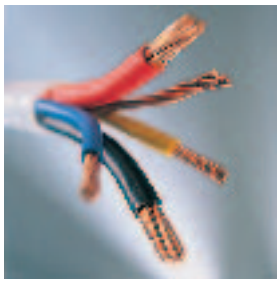
To ensure satisfactory operation of these fuse holders throughout their service life, it is recommended that the following procedure be carried out at regular intervals (at least once a year) as part of a planned maintenance schedule. Where the environment or service duty is severe there may be a need for inspection at shorter intervals.

## Procedure

- Isolate the supply.
- Withdraw the fuse carriers and inspect fuse tags and carrier contacts for any signs of damage.
- Check all cable terminal screws and fuse link fixing screws to ensure that the correct torque has been applied.
- Wipe clean and remove any oxidation from the carrier contacts.
- Apply a small amount of a proprietary electrical contact lubricating grease after ensuring that all contact areas are clean.
- Re-fit the fuse carriers and re-connect the supply.

**Important Note**

**The use to which these products are put and their service environment are outside our control. Therefore, particular care should be taken to follow these guidelines during installation or maintenance. No responsibility can be accepted by GE Power Controls Ltd if these guidelines are not followed.**



# Installation

## Method of cabling

Front connected fuse holders

- Remove Red insulating terminal shrouds and loosen the exposed cable clamping screws.
- Fit bared conductor end into fuse base terminal, and tighten cable clamping screw to secure.
- Replace clip action Red insulating terminal shroud.

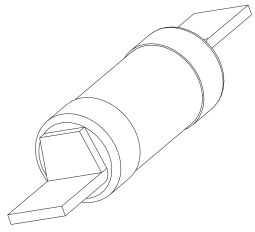
## Cable selection and termination

- Ensure cable sizes are correctly chosen in line with the IEE Wiring Regulations (BS 7671), making due allowance for :
  i. Grouping of cables (correction factor Cg).
  ii. Ambient temperature / internal enclosure temperature (correction factor Ca).
- Ensure that maximum cable core temperature is restricted to 70°C or less.
- Ensure adequate cable length is provided for interconnections between fuse holders or other components. This will prevent possible heat input to the fuse holder which could result in overheating.
- If flexible cables are used, their relatively fine strands must be given increased protection by the use of thin wall copper ferrules crimped over the conductor ends. The following should be taken into account:
  i. The inside diameter of the ferrule should match that of the bared cable ends.
  ii. The ferrule lengths should be the same length as the cable entry tunnel in the fuse base terminals.
  iii. The termination screw should compress the wall of the ferrules providing further consolidation of the cable strands within the ferrule.
- When used in banks, ensure that the diversity factors recommended in BS5486 Part 11, Factory Built Assemblies, are applied. If the number of fuse holders banked together exceeds 12 a 0.6 diversity factor may be used.
- For applications when there is insufficient or no diversity applied, adequate compensation should be made by a combination of some, or all, of the following:
  i. Utilise higher standard current rated fuse links, or motor rated fuse links.
  ii. Increase the cable size.
  iii. Ensure that fuse holders in the bank are separated by at least 5mm.
  iv. Ensure that there is adequate spacing between fuse banks if they are stacked vertically. Typically, depending on rating, this would be 30-50mm.
  v. Incorporate natural or forced ventilation.

  These measures should ensure that the heat is adequately exported from the fuses.
- Sharp bends in cables, especially near termination points, should be avoided in order to prevent damage to cable cores or insulation and to ensure that no mechanical strain, is put on the contact block in the fuse base.
- The minimum torque values detailed in the attached table should be applied to cable terminal and fuse link fixing screws.

**Important note**

These products should be installed, commissioned and maintained by, or under the supervision of a competent person, in accordance with current Electricity at Work Regulations, IEE Regulations for the Electrical Equipment of buildings, Statutory requirements and any other specific instructions issued by GE Power Controls Ltd. These notes assume throughout that the product is isolated from the supply during installation or maintenance. It is essential that this is done before commencement of any work. Any covers, or other safety measures which are removed during installation or maintenance must be replaced on completion.



## Fuse Link selection

- Select a rating of fuse link which is at least equal to the normal full load current of the circuit, including any allowances needed for harmonic currents, as in the case p.f. correction circuits.
- Ensure that the fuse link rating can withstand any over currents which may apply to the circuit, such as transformer in-rush currents, motor starting surges and repetitive cycle loads.
- When full cable protection is required, ensure that the fuse link rating is compatible with the selected cable, i.e. less than or equal to cable rating.

## Recommended minimum torque values

| Rating | Fuse Link fixing screw | | Cable terminal screw | | Back connected stud | |
|---|---|---|---|---|---|---|
| | Size | Torque | Size | Torque | Size | Torque |
| **SC20** | N/A | N/A | M6 grub screw (Slotted) | 2.0Nm (18 lb.in) | M6 | 3.0Nm (27 lb.in) |
| **SC32** | N/A | N/A | M6 grub screw (Slotted) | 2.0Nm (18 lb.in) | M6 | 3.0Nm (27 lb.in) |
| **SC63** | N/A | N/A | M8 grub screw (Slotted) | 3.0Nm (27 lb.in) | M8 | 6.0Nm (53 lb.in) |
| **SC100** | M6 Pan head | 2.5Nm (22 lb.in) | 3/8" grub screw (Slotted) | 3.5Nm (31 lb.in) | N/A | N/A |
| **SC125** | N/A | N/A | M12 grub screw (Slotted) | 4.0Nm (35 lb.in) | N/A | N/A |

Note: Conversion from Nm to lb.in.
1Nm = 8.85075 lb.in.

# Maintenance

## Guidelines

To ensure satisfactory operation of these fuse holders throughout their service life, it is recommended that the following procedure be carried out at regular intervals (at least once a year) as part of a planned maintenance schedule. Where the environment or service duty is severe there may be a need for inspection at shorter intervals.

## Procedure

- Isolate the supply.
- Withdraw the fuse carriers and inspect fuse tags and carrier contacts (SC100) for any signs of damage.
- Check all cable terminal screws and fuse link fixing screws (SC100) to ensure that the correct torque has been applied.
- Wipe clean and remove any oxidation from the fuse link blades or carrier contacts (SC100).
- Apply a small amount of a proprietary electrical contact lubricating grease after ensuring that all contact areas are clean.
- Re-fit the fuse carriers and re-connect the supply.

**Important Note**
The use to which these products are put and their service environment are outside our control. Therefore, particular care should be taken to follow these guidelines during installation or maintenance. No responsibility can be accepted by GE Power Controls Ltd if these guidelines are not followed.

# Installation

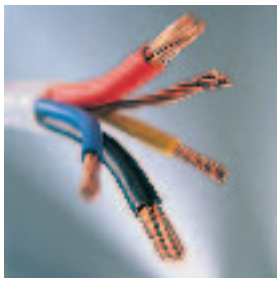
## Method of cabling

- Loosen base terminal screw.
- Fit conductor into fuse base terminal and tighten cable clamping screw to secure.
- Ensure that the correct torque has been applied to the cable clamping screw.

## Cable selection and termination

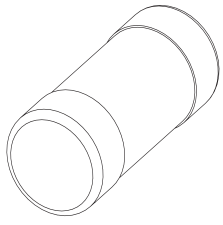
- Ensure cable sizes are correctly chosen in line with the IEE Wiring Regulations (BS 7671), making due allowance for :
  - i. Grouping of cables (correction factor Cg).
  - ii. Ambient temperature / internal enclosure temperature (correction factor Ca).
- Ensure that maximum cable core temperature is restricted to 70°C or less.
- Ensure adequate cable length is provided for interconnections between fuse holders or other components. This will prevent possible heat input to the fuse holder which could result in overheating.
- If flexible cables are used, their relatively fine strands must be given increased protection by the use of thin wall copper ferrules crimped over the conductor ends. The following should be taken into account:
  - i. The inside diameter of the ferrules should match that of the bared cable ends.
  - ii. The ferrule lengths should be the same length as the cable entry tunnel in the fuse base terminals.
  - iii. Tightening the terminal screw will clamp the crimped ferrule against the serrated plates within the box type terminal.
- For applications when there is insufficient or no diversity applied, adequate compensation should be made by a combination of some, or all, of the following:
  - i. Utilise higher standard current rated fuse links, or motor rated fuse links.
  - ii. Increase the cable size.
  - iii. Ensure that fuse holders in the bank are separated by at least 5mm.
  - iv. Ensure that there is adequate spacing between fuse banks if they are stacked vertically. Typically, depending on rating, this would be 30-50mm.
  - v. Incorporate natural or forced ventilation.

  These measures should ensure that the heat is adequately exported from the fuses.
- Sharp bends in cables, especially near termination points, should be avoided in order to prevent damage to cable cores or insulation and to ensure that no mechanical strain, is put on the contact block in the fuse base.
- The minimum torque values detailed in the attached table should be applied to cable terminal screws.



**Important note**

These products should be installed, commissioned and maintained by, or under the supervision of a competent person, in accordance with current Electricity at Work Regulations, IEE Regulations for the Electrical Equipment of buildings, Statutory requirements and any other specific instructions issued by GE Power Controls Ltd. These notes assume throughout that the product is isolated from the supply during installation or maintenance. It is essential that this is done before commencement of any work. Any covers, or other safety measures which are removed during installation or maintenance must be replaced on completion.



## Fuse Link selection

- Select a rating of fuse link which is at least equal to the normal full load current of the circuit, including any allowances needed for harmonic currents, as in the case p.f. correction circuits.
- Ensure that the fuse link rating can withstand any over currents which may apply to the circuit, such as transformer in-rush currents, motor starting surges and repetitive cycle loads.
- When full cable protection is required, ensure that the fuse link rating is compatible with the selected cable, i.e. less than or equal to cable rating.

## Recommended minimum torque values

| Rating | Cable terminal screw | |
|---|---|---|
| | Size | Torque |
| **FMC10** | M5 screw (Slotted) | 2.0Nm (18 lb.in) |
| **FM10** | M5 screw (Slotted) | 2.0Nm (18 lb.in) |
| **FM14** | M5 screw (Slotted) | 3.5Nm (31 lb.in) |
| **FM22** | M6 screw (Slotted) | 4.5Nm (40 lb.in) |
| Note: | Conversion from Nm to lb.in. 1Nm = 8.85075 lb.in. | |

# Maintenance

## Guidelines

To ensure satisfactory operation of these fuse holders throughout their service life, it is recommended that the following procedure be carried out at regular intervals (at least once a year) as part of a planned maintenance schedule. Where the environment or service duty is severe there may be a need for inspection at shorter intervals.

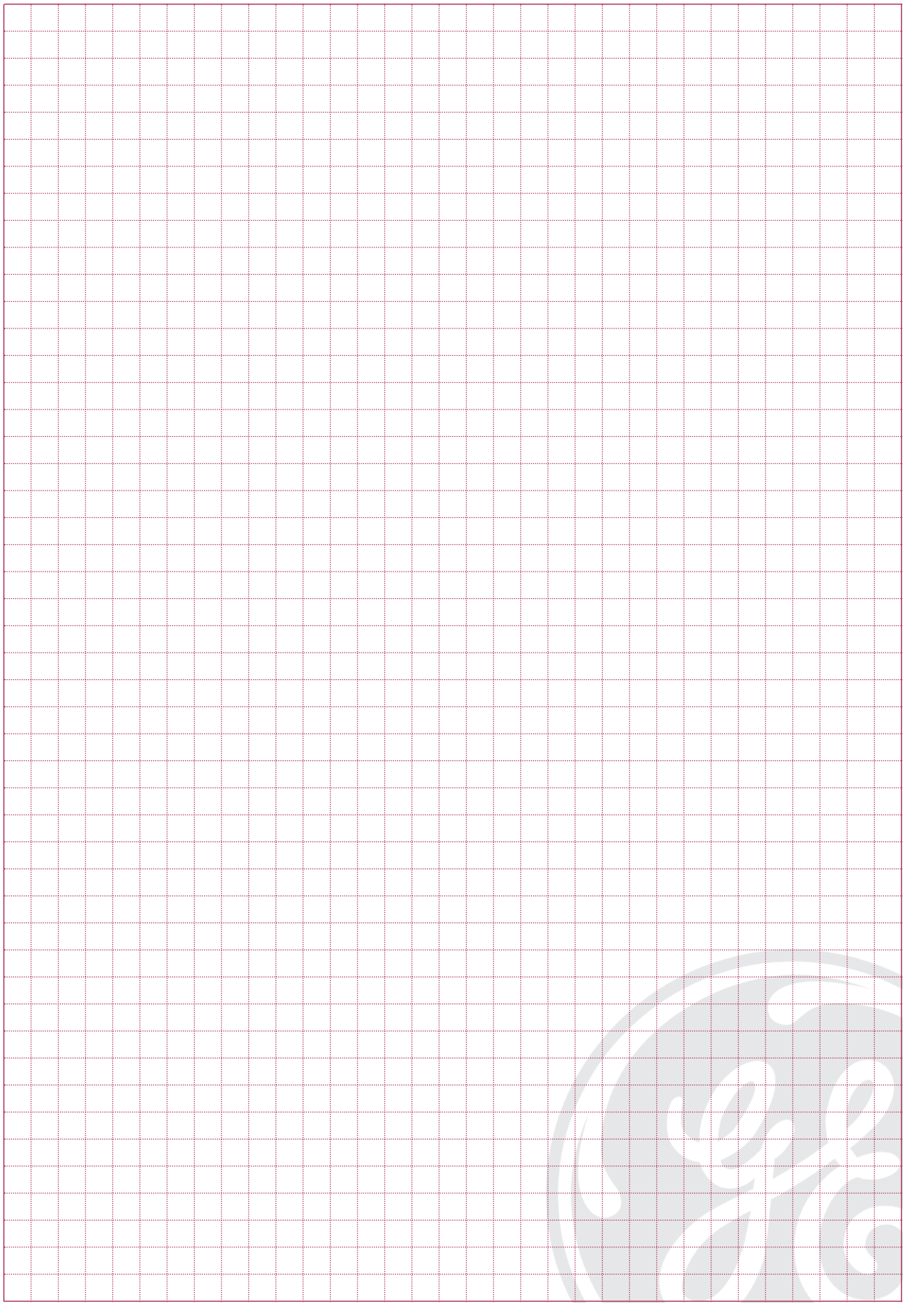
## Procedure

- Isolate the supply.
- Withdraw the fuse handle and inspect the fuse link end caps for any signs of damage.
- Check all cable terminal screws to ensure that the correct torque has been applied.
- Wipe clean and remove any oxidation from the fuse link end caps.
- Apply a small amount of proprietary electrical contact lubricating grease after ensuring that all contact areas are clean.
- Re-engage the fuse actuator and re-connect the supply.

**Important Note**

**The use to which these products are put and their service environment are outside our control. Therefore, particular care should be taken to follow these guidelines during installation or maintenance. No responsibility can be accepted by GE Power Controls Ltd if these guidelines are not followed.**

## Notes



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*GE Power Controls is a top class European supplier of low-voltage products including wiring devices, residential and industrial electrical distribution components, general purpose control products, enclosures and switchboards. Most of the global demand for the company's products comes from OEMs, wholesalers, installers and panel-board builders worldwide.*

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