## OPM-1038 <br> Switch Series

Overcurrent Protection Module - Fuseholder and

## Disconnect Switch for ${ }^{13 / 32}$ " $\times 11 / 2{ }^{12}(10 \mathrm{~mm} \times 38 \mathrm{~mm})$ Fuses

## Physical Characteristics:

- Small size matches 45 mm IEC starter width.
- Fits \#8-18 AWG stranded wire, \#10-18 AWG solid wire.
- 3-pole version.
- Handle and shaft required for through-the-door operation. (See ordering information on page 2).


## Product Features:

- "Open" fuse indication lights.
- Finger-safe terminals. (Qualified as IP2O per IEC529)
- Cam action handle for easy module removal.
- 35 mm DIN-rail or screw panel mounting (\#8 screw, 1 1/4" long).
- Dead front construction. No exposed contacts for added safety.
- Option for remote "open fuse" status indication feature available (reduces downtime).
- Offered with Class CC rejection clips or European $10 \mathrm{~mm} \times$ 38mm clips to meet global needs.
- Wire ready: Saves time as terminals are ready to accept wires.


## Agency Information:

UL (see table below)
CSA Certified, C22.2 No. 39, Class 6225-01, File 47235
IEC (see table below)
Shipping Weight: Approx. 335 g (. 74 lb .)
Carton Quantity: 1

| Catalog Number | Electrical Rating | SC <br> Rating | Clips | Remote Open Fuse Indication | UL Information |  |  | IEC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Std. | File | Guide |  |
| OPM-1038SW | 30A, 600Vac UL/CSA (Max. 3 Watts per fuse) 32A, 660Vac IEC | * | Non-rejection $10 \times 38 \mathrm{~mm}$ or $13 / 32^{\prime \prime} \times 1-1 / 2^{\prime \prime}$ | No | Recognized <br> UL 508 | E161278 | NLRV2 | IEC 947-3 |
| OPM-1038RSW | 30A, 600Vac UL/CSA | 100kA | Rejection | No | Listed <br> UL 508 | E161278 | NLRV |  |
| OPM-1038SWC | 30A, 600V UL/CSA <br> (Max. 3 Watts per fuse) 32A, 660Vac IEC | * | Non-rejection $10 \times 38 \mathrm{~mm}$ or $13 / 32^{\prime \prime} \times 1-1 / 2^{\prime \prime}$ | Yes | Recognized <br> UL 508 | E161278 | NLRV2 | IEC 947-3 |
| OPM-1038RSWC | 30A, 600Vac UL/CSA | 100kA | Rejection Class CC | Yes | Listed UL 508 | E161278 | NLRV |  |

*Rating varies depending on fuse used in module, 100kA maximum..

## Recommended Fuse Types:

| Class CC | Midget (non-rejection) |
| :---: | :---: |
| LP-CC | KTK |
| KTK-R | FNM |
| FNQ-R | FNQ |

Spare Fuseholder: Part No. 5TPH

[^0]


| Selector Handles - for use with shafts $0.24^{\prime \prime} \times 0.24^{\prime \prime}$ ( $6 \times 6 \mathrm{~mm}$ ) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEMA type | $\begin{gathered} \text { IEC } \\ \text { type } \\ \hline \end{gathered}$ | Color | Defeatable | Padlockable | Weight (lbs) | Catalog number |
| All marked both O/I \& Off/On |  |  |  |  |  |  |
| 1 | IP54 | Black | - | - | 0.09 | CBDH1S |
| 1 | IP54 | Red/Yel | - | - | 0.09 | CBDH2S |
| 1 | IP54 | Black | - | Yes | 0.12 | CBDH15S |
| 1 | IP54 | Red/Yel | - | Yes | 0.12 | CBDH16S |
| 1,3R,12 | IP65 | Black | - | Yes | 0.16 | CBDH3S |
| 1,3R,12 | IP65 | Red/Yel | - | Yes | 0.16 | CBDH4S |
| 1,3R,12 | IP65 | Black | Yes | Yes | 0.16 | CBDH5S |
| 1,3R,12 | IP65 | Red/Yel | Yes | Yes | 0.16 | CBDH6S |

Pistol Handles - for use with shafts $0.24^{\prime \prime} \times 0.24^{\prime \prime}(\square 6 \times 6 \mathrm{~mm})$

| NEMA type | $\left\lvert\, \begin{aligned} & \text { IEC } \\ & \text { type } \end{aligned}\right.$ | Color | Marking | Length inches $/ \mathrm{mm}$ | Defeatable | Padlockable | Weight (lbs) | Catalog number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

## All marked both O/I \& Off/On

| 1,3R,12 | IP65 | Black | O/ \& Off/On | $1.8 / 45$ | Yes | Yes | 0.28 | BDH56 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $1,3 R, 12$ | IP65 | Red/Yel | O/ \& Off/On | $1.8 / 45$ | Yes | Yes | 0.28 | BDH57 |
| $1,3 R, 12$ | IP65 | Black | O/ \& Off/On | $2.6 / 65$ | Yes | Yes | 0.29 | BDH58 |
| $1,3 R, 12$ | IP65 | Red/Yel | O/ \& Off/On | $2.6 / 65$ | Yes | Yes | 0.29 | BDH55 |
| 1,3R,12,4,4X | IP66 | Black | O/ \& Off/On | $2.6 / 65$ | Yes | Yes | 0.29 | CDHXB65L6 |
| $1,3 R, 12,4,4 X$ | IP66 | Red/Yel | O/ \& Off/On | $2.6 / 65$ | Yes | Yes | 0.29 | CDHXY65L6 |

Extended Shafts - Shaft Dimension ( $\square$ 6x6mm )

## Ordering Information for External Handle*:

```
OPTIMA Module + CDRKBS12 + Handle + Shaft = Complete Disconnect Switch (without fuses)
```

1. Order Cooper Bussmann part number CDRKBS12.
2. Select the appropriate handle style (Selector or Pistol).
3. Select the shaft corresponding to the handle type and mounting depth required.
*All switchable OPM-1038 modules come standard with a small black handle Cooper Bussmann part number CDRKBS12 must be ordered for all through-the-door applications.

| For Handle Type | Mounting Depth** | Shaft Length | Catalog Number |
| :---: | :---: | :---: | :---: |
| Selector | $\begin{gathered} \hline 4.2-5.0^{\prime \prime} \\ 5.0-5.8^{\prime \prime} \\ 5.6-6.4^{\prime \prime} \\ 6.0-6.7^{\prime \prime} \\ 7.1-8.7^{\prime \prime} \\ 10.7-11.5^{\prime \prime} \\ 13.8-14.6^{\prime \prime} \end{gathered}$ | $\begin{gathered} \hline 3.3^{\prime \prime}(85 \mathrm{~mm}) \\ 4.1^{\prime \prime}(105 \mathrm{~mm}) \\ 4.7^{\prime \prime}(120 \mathrm{~mm}) \\ 5.1^{\prime \prime}(130 \mathrm{~mm}) \\ 7.1^{\prime \prime}(180 \mathrm{~mm}) \\ 9.8^{\prime \prime}(250 \mathrm{~mm}) \\ 13.0^{\prime \prime}(330 \mathrm{~mm}) \end{gathered}$ | BDS85S BDS105S BDS120S BDS130S BDS180S BDS250S BDS330S |
| Pistol | $\begin{gathered} \hline 6.2-6.7^{\prime \prime} \\ 7.0-7.5^{\prime \prime} \\ 10.7-11.3^{\prime \prime} \\ 16.0-16.6^{\prime \prime} \\ 20.0-20.5^{\prime \prime} \end{gathered}$ | $\begin{aligned} & \hline 5.9^{\prime \prime}(150 \mathrm{~mm}) \\ & 6.7^{\prime \prime}(170 \mathrm{~mm}) \\ & 10.4^{\prime \prime}(265 \mathrm{~mm}) \\ & 15.8^{\prime \prime}(400 \mathrm{~mm}) \\ & 19.7^{\prime \prime}(500 \mathrm{~mm}) \end{aligned}$ | BDS150 BDS170 BDS265 BDS400 BDS500 |
| $*$ Mounting depth is the distance from the outside of the door to the disconnect switch. Shaft can be cut to desired length. |  |  |  |

## OPEN FUSE INDICATION

## Status Output Specifications:

*Minimum operating voltage: 460Vac, 3-phase
*Maximum operating voltage: 620Vac, 3-phase
Status output maximum conducting current: 40 mA
Status output maximum on resistance: 35 ohms @ 40mA
Status output typical off resistance: >10 Mohm
Status output maximum turn-on and
turn-off delay: 850 milli-second

## Status Output Interface Specifications:

Rated Voltage: Recommended 5-35Vdc, 300Vac max.
Rated Current: 40mA max.
Wire Size: \#28-14 AWG
Torque: 2.25 lb . in.

## Open Fuse Indicator Status Output Description:

The open fuse indicator status output acts very much like an on/off switch. With all three fuses in place and operating properly, this status output has a high resistance value of greater than ten mega-ohms. When one or more of the fuses are open, the status output becomes turned-on with a resistance value less than 35 ohms. This status output withstands voltage (ac or dc) up to 35 V at off-state and conducts current up to 40 milli-amps at on-state. Applying voltage and current exceeding these limits will result in damage to the components inside this status output device permanently. There is some time-delay when the status output changes on/off state. The open fuse communications or status output device includes optical isolators within the unit.

Communications output states:

| Fuse Good | NO - High Resistance, $>10$ megohms |
| :--- | :--- |
| Opened Fuse | NC - Low Resistance, $<35$ ohms |

Note: Operating this device beyond the above limits will cause permanent damage to the components on the board.

For applications requiring status output below a system voltage of 460 V , contact Bussmann.

The examples shown below illustrate typical interface to Programmable Logic Controllers.

EXAMPLE 1: DIRECT INTERFACE TO PC/PLC
PC / PLC


EXAMPLE 2: INTERFACE TO PC / PLC WITH OPTICAL ISOLATION


Note: When energized (switch in the "on" position), a low load terminal voltage will be present when fuses are open or when pullout module is removed. The leakage current is limited to .5 mA maximum.

| Example of Output Voltage with three open fuses or pullout module removed. |  |  |  |
| :---: | :---: | :---: | :---: |
| Catalog Number <br> Types of Indication | OPM-1038RSW, OPM-1038SW <br> Standard | OPM-1038-RSWC, OPM-1038SWC <br> Communication |  |
| System Voltage | Load Terminal Voltage <br> (1L1-3L2-5L3) |  |  |
| 125Vdc * | $(2 \mathrm{T1}-4 \mathrm{~T} 2-6 \mathrm{~T} 3)$ |  |  |

There is no voltage at the load terminals (2T1-4T2-6T3) on the switch version (SW suffix) when the switch is in the "off" position.
*The communication device requires a minimum circuit voltage (1L1-3L2-5L3) of 460 V for the status indicating device to operate. Below 460V, but above 120V, the indicator lights will luminate, but there will not be any communication status output.

The only controlled copy of this Data Sheet is the electronic read-only version located on the Cooper Bussmann Network Drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Cooper Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Cooper Bussmann also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

[^1]www.cooperbussmann.com

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components
Click to view similar products for Fuse Holder category:
Click to view products by Eaton manufacturer:
Other Similar products are found below :
570-290-741P40 570-290-751P40 0031.1351.01 020417G 020418E $80910030 \underline{8601.2020} \underline{9-3557-G P ~ R E V ~ A ~ 15600-08-10 ~ B K 1-H T C-45 M ~}$ BK/FHN19G BK/HJM-HH BK/HKP-CCHH BK/HKP-E-CC BK/HKP-E-HH BK/HKP-EH-HH BK/HKP-U-HH BK/HTJ-LES-FUSE HMG-241 2086-1 2193 RTMF-SC 26022650 FHN31G1 G4PB8 26602799 CQ-209V 345621A 379442024408441344234482 45324537 TSD1404-12 BK/FHN31G1 BK/HKP-H-CC BK/HKP-JQ-BB BK/HKP-JQW-BB BK/HKP-N-HH BK/HKP-S-CC BK/HKP-WBBHH BP/HHS BPHHU 55900008011 C1933


[^0]:    C $€$ CE logo denotes compliance with European Union Low Voltage Directive (50-1000Vac, $75-1500 \mathrm{Vdc}$ ). Refer to Data Sheet: 8002 or contact Bussmann Application Engineering at 636-527-1270 for more information. Applies to OPM-1038SW and OPM-1038RSW.

[^1]:    © 2010 Cooper Bussmann
    St. Louis, M0 63178

