OPTIMA™
Overcurrent Protection Module
for 13/32″ × 1½″ (10mm × 38mm) Fuses

OPM-1038
Switch Series

Catalog Symbol: OPM-1038 _ _ _ _
Materials: Grey Thermoplastic
U.L. Flammability: U.L. 94 VO
Temperature Rating (RTI): 130°C
Horsepower Rating of Switch:

3PH	V	240	480	600
	HP	5	10	15

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

Physical Characteristics:
- Small size matches 45mm 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.
- 35mm DIN-rail or screw panel mounting (#8 screw, 1¼″ long).
- Dead front construction. No exposed contacts for added safety.
- Padlockable for lock-out, tag-out requirements.
- Option for remote "open fuse" status indication feature available (reduces down-time).
- Offered with Class CC rejection clips or European 10mm × 38mm clips to meet global needs.
- Wire ready: Saves time as terminals are ready to accept wires.

Catalog Number	Electrical Rating	SC Rating	Clips	Remote Open Fuse Indication	U.L. Information			IEC
					Std.	File	Guide	
OPM-1038SW	30A, 600V U.L./CSA (Max. 3 Watts per fuse) 32A, 660V IEC	*	Non-rejection	No	Recognized U.L. 508	E161278	NLRV2	IEC 947-3
OPM-1038RSW	30A, 600V U.L./CSA	100kA	Rejection	No	Listed U.L. 508	E161278	NLRV	
OPM-1038SWC	30A, 600V U.L./CSA (Max. 3 Watts per fuse) 32A, 660V IEC	*	Non-rejection	Yes	Recognized U.L. 508	E161278	NLRV2	IEC 947-3
OPM-1038RSWC	30A, 600V U.L./CSA	100kA	Rejection	Yes	Listed U.L. 508	E161278	NLRV	

*Rating varies depending on fuse used in module.

Recommended Fuse Types:

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

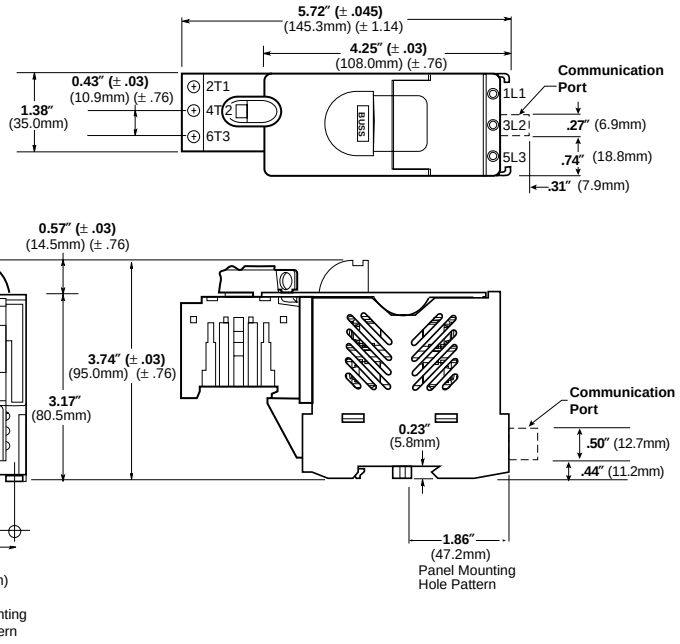
Spare Fuseholder: Part No. 5TPH

CE CE logo denotes compliance with European Union Low Voltage Directive (50-1000 Vac, 75-1500 Vdc). Refer to BIF document #8002 or contact Bussmann Application Engineering at 636-527-1270 for more information. Applies to OPM-1038SW and OPM-1038RSW.

OPTIMA™
Overcurrent Protection Module
for 13/32″ × 1½″ (10mm × 38mm) Fuses

OPM-1038
Switch Series

Dimensional Data



Selector Handles - for use with shafts ❑ .20 x .20" (❑ 5x5mm)

NEMA type	IEC type	Color	Defeatable	Padlockable	Weight (lbs)	Catalog number
All marked both O/I & Off/On						
1	IP54	Black	—	—	0.09	CDH1S
1	IP54	Red/Yel	—	—	0.09	CDH2S
1	IP54	Black	—	Yes	0.12	CDH15S
1	IP54	Red/Yel	—	Yes	0.12	CDH16S
1,3R,12	IP65	Black	—	Yes	0.16	CDH3S
1,3R,12	IP65	Red/Yel	—	Yes	0.16	CDH4S
1,3R,12	IP65	Black	Yes	Yes	0.16	CDH5S
1,3R,12	IP65	Red/Yel	Yes	Yes	0.16	CDH6S

Pistol Handles - for use with shafts ❑ .20 x .20" (❑ 5x5mm)

NEMA type	IEC type	Color	Marking	Length inches/mm	Defeatable	Padlockable	Weight (lbs)	Catalog number
All marked both O/I & Off/On								
1,3R,12	IP65	Black	O/I & Off/On	1.8/45	Yes	Yes	0.28	BDH104
1,3R,12	IP65	Red/Yel	O/I & Off/On	1.8/45	Yes	Yes	0.28	BDH105
1,3R,12	IP65	Black	O/I & Off/On	2.6/65	Yes	Yes	0.29	BDH106
1,3R,12	IP65	Red/Yel	O/I & Off/On	2.6/65	Yes	Yes	0.29	BDH107
1,3R,12,4,4X	IP66	Black	O/I & Off/On	2.6/65	Yes	Yes	0.29	CDHXB65
1,3R,12,4,4X	IP66	Red/Yel	O/I & Off/On	2.6/65	Yes	Yes	0.29	CDHXY65

Ordering Information for External Handle*:

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

1. Order Bussmann part number OPMRH.
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 (OPMBH). Bussmann part number OPMRH must be ordered for all through-the-door applications.

Extended Shafts (❑ 5mm × 5mm Shaft Dimension)

For Handle Type	Mounting Depth**	Shaft Length	Catalog Number
Selector	4.2 - 5.0″	3.3″ (85mm)	CDS85S
	5.0 - 5.8″	4.1″ (105mm)	CDS105S
	5.6 - 6.4″	4.7″ (120mm)	CDS120S
	6.0 - 6.7″	5.1″ (130mm)	CDS130S
	7.1 - 8.7″	7.1″ (180mm)	CDS180S
	10.7 - 11.5″	9.8″ (250mm)	CDS250S
	13.8 - 14.6″	13.0″ (330mm)	CDS330S
Pistol	6.2 - 6.7″	5.9″ (150mm)	CDS48P
	7.0 - 7.5″	6.7″ (170mm)	CDS67P
	10.7 - 11.3″	10.4″ (265mm)	CDS49P
	16.0 - 16.6″	15.8″ (400mm)	CDS50P
	20.0 - 20.5″	19.7″ (500mm)	CDS99P

**Mounting depth is the distance from the outside of the door to the disconnect switch. Shaft can be cut to desired length.

OPTIMA™
Overcurrent Protection Module
for 13/32" × 1½" (10mm × 38mm) Fuses

OPM-1038
Switch Series

OPEN FUSE INDICATION

Status Output Specifications:
*Minimum operating voltage: 460 Vac, 3-phase
*Maximum operating voltage: 620 Vac, 3-phase
Status output maximum conducting current: 40mA
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 5-35 Vdc, 300 Vac 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 volts 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:

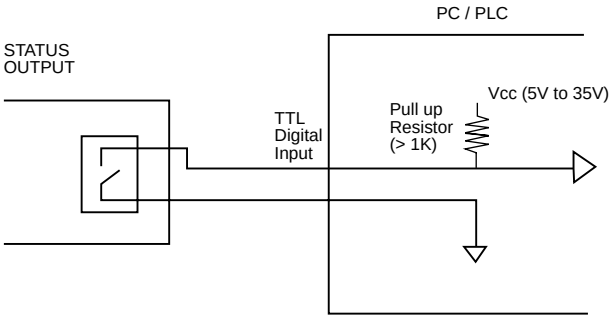
Fuse Good	NO - High Resistance, >10 mega-ohms
Opened Fuse	NC - Low Resistance, < 35 ohms

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

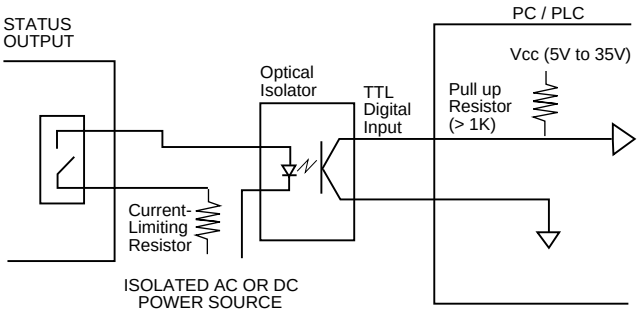
For applications requiring status output below a system voltage of 460V, contact Bussmann.

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

EXAMPLE 1: **DIRECT INTERFACE TO 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 .5mA maximum**.**

Example of Output Voltage with three open fuses or pullout module removed.

Catalog Number Types of Indication	OPM-1038RSW, OPM-1038SW Standard	OPM-1038-RSWC, OPM-1038SWC Communication
System Voltage (1L1-3L2-5L3)	Load Terminal Voltage (2T1-4T2-6T3)	
125 Vdc *	12 Vdc *	31 Vdc *
480 Vac, 3-phase	26 Vac	56 Vac
600 Vac, 3-phase	33 Vac	88 Vac

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 volts for the status indicating device to operate. Below 460 volts, but above 120 volts, the indicator lights will luminate, but there will not be any communication status output.

The only controlled copy of this BIF document is the electronic read-only version located on the 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. Bussmann reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. 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.