SUBMITTAL / SHOP DRAWING REVIEW

This submittal/shop drawing review is for general conformance with drawings and specifications only.

Contractor is completely responsible for all dimensions, details, quantities, supply, installation and construction.

This review does not in any way relieve the Contractor of responsibility for compliance with the Contract Documents.

Client:	Catholic District School Board of Eastern Ontario
Project:	St. Mary Catholic School Carleton Place, Ontario
Submittal:	Electrical
Notes:	*- Light Fixtures - No comment* *- Alternate Wall Switch – No comment* *- Electrical panel – shall be 100A, 120/208V, 1PH, as discussed on site*

MORRIS ENGINEERING LTD.

68 William Street, Suite 200, Brockville, Ontario

(613)499-2077

Project:	ST MARY'S CATHOLIC SCHOOL
Type:	F1
Date:	JULY 11 2019
Product Code:	
Approval:	

Performance and style with LED technology.

BLR - SPECIFICATIONS MAY CHANGE WITHOUT NOTICE

Superior-grade, recessed low profile lay-in T-Bar luminaire. Its ideal for indoor use where aesthetics, energy-efficiency and T-Bar mounting is essential. Its low-profile body is ideally suited for shallow, or obstructed plenum installations.

FEATURES

- Available in 1x4, 2x4 and 2x2 dimensions
- 3000K, 3500K, 4000K and 5000K light colours available
- Diffuser provides a uniform lighting surface
- L70 of 120,000 hours
- Type IC

OPTIONS

- Various sizes available: 1x4, 2x4 and 2x2

APPLICATIONS

- Hospitals
- Offices
- Schools

APPROVALS

- ETL listed product

OPTICS

Pre-painted body in high-reflectance white. Frosted flat lens provides even light distribution.

ELECTRICAL

All components have met all regulatory approvals.
Fixture is available in 120 - 277VAC and 347V options.

MOUNTING

Holes provided for chain or hanger wire mounting support for T-Bar ceilings.
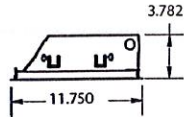
CONSTRUCTION

Pre-painted, high reflectance white body is precision bent for added strength and rigidity. 0.030" nominal thick steel. Hinged door frame with frosted flat acrylic lens for even light distribution. Shallow fixture design provides a clean appearance for many environments.

⚡ KEV-TEC ELECTRICAL INC.

P.O. Box 95 Carp, ON K0A 1L0
Phone: (613) 839-0575 Fax (613) 839-0266

BY	K MCWADE	DATE	JULY 11 2019
ST MARYS SCHOOL		CARLETON PLACE	
X	REVIEWED		
	REVIEWED AS NOTED		
	RESUBMIT SPECIFIED		
	REJECTED		
	RESUBMIT AS NOTED		
SIGNED	*Ken McWade*		

REVIEWED
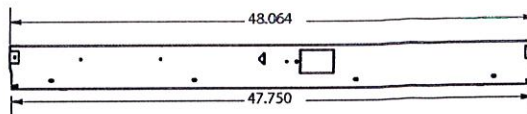By Farah Bano at 9:50 am, Jul 15, 2019

1. Matt to review alternate Legrand Occupancy Sensor.
2. Matt, TBIL & Lamarche Review Panel P1 Re & Re on site, c/w panel enclosure box size limitations.
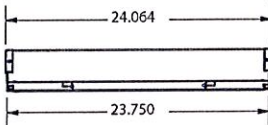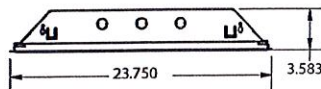3. Lamarche to ensure panel cover (NC32S) is lockable.
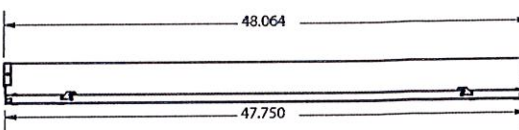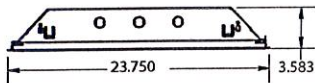
PRODUCT DIMENSIONS

End View

1x4

3.782

11.750

Side View

48.064

47.750

2x2

23.750   3.583

24.064

23.750

2x4

23.750   3.583

48.064

47.750

PRODUCT KEY   MISBLR2X44L840UNVL15   BLR2X44L840UNVL15 2X4 k12 led fixture

Fixture Type	Fixture Sizes	Lumen Output (in 1,000s)	Module Type	CRI & Colour Temperature	Driver Voltage	Options
BLR	2x4	4 L		840	unv	

	Fixture Sizes	Lumen Output	Module Type	CRI	Driver Voltage
	1x4	3	Factory Designated	830	UNV
	2x4	4		835	347
	2x2	6		840	
		8		850	

Wattage Chart

LENGTH	LUMENS	WATTAGE	LENGTH	LUMENS	WATTAGE	LENGTH	LUMENS	WATTAGE
1x4	3	27	2x2	3	27	2x4	4	39
	4	39		4	39		6	52
	6	51		6	51		8	77

OPTIONS

Flange

H14 -   Flange (integral) for Drywall Installation

Dimming

W23 -   0 - 10V No Leads (Standard)
W24 -   0 - 10V With Leads

Motion Sensor

W12 -   Motion Sensor - 10C

Lens

L19 -   Makrolon: LumenXT LC3 LED Frosted Lens
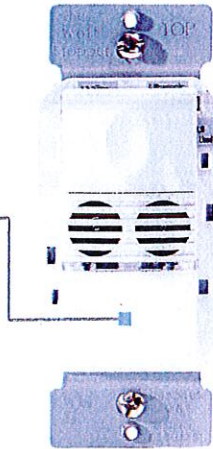L25 -   Eastman Chemicals Developmental Lens

DUAL TECHNOLOGY WALL SWITCH OCCUPANCY SENSOR | DW-100

High sensitivity and dense coverage for exceptional performance

Color-matched lens and low profile for appealing design

Selectable operation, walk-through, test and presentation modes for increased energy savings and convenience

Defaults to Manual-ON operation for maximum energy savings

Part of a comprehensive line of PIR, Ultrasonic and Dual Technology wall switch sensors

Description

The DW-100 dual technology wall switch sensor combines the benefits of passive infrared (PIR) and ultrasonic technologies, and can turn lights OFF and ON based on occupancy. It is characterized by high sensitivity to small and large movements, appealing aesthetics, and a variety of features.

Operation

The DW-100 fits in a single gang junction box. Once the lights are ON, detection by either technology holds lights ON until occupancy is no longer detected and the time delay elapses. DIP switch settings allow for a variety of control options including Auto-ON operation, walk-through and test mode. By default, Auto-ON turns lighting on when both PIR and ultrasonic technologies detect occupancy. Additional DIP switch settings allow the user to choose which sensing technologies turn ON and hold ON the lighting.

Manual-on Control

Factory default operation is for Manual-ON, so that users turn lights on only when needed. This control strategy is proven to save more energy than Auto-ON, and is required in ASHRAE 90.1-2010. If desired, the DW-100 may be reconfigured to turn lights on automatically.

Applications

Wattstopper's dual technology has the flexibility to work in a variety of applications where one technology alone may not be sufficient. Common applications include small and executive offices, small and medium conference rooms and lunch/break rooms. In addition, dual technology sensors are the perfect choice for ADA-compliant buildings due to lower mounting height requirements.

Features

- Complies with 2011 NEC requirements
- Detection Signature Processing eliminates false triggers and provides immunity to RFI and EMI
- Zero-crossing for long relay life
- Vandal resistant lens combines precise coverage with durability
- Choice of Manual-ON or Auto-ON operation
- Selectable walk-through mode turns lights off three minutes after the room is initially occupied if no motion is detected after the first 30 seconds
- Test mode allows quick and easy adjustments
- Selectable audible alert for impending shutoff

- In automatic mode, sensor returns automatically to Auto-ON after lights are turned off manually; ideal for presentations
- Four occupancy logic options give users the ability to customize control to meet application needs
- Optional light level sensing with simple setup
- Service mode allows sensor to operate as a service switch in the unlikely event of a failure
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- Compatible with decorator wall plates
- BAA/TAA-compliant models available

Specifications

- DW-100: 120/277 VAC; 50/60 Hz
  @ 120 VAC, 0-800 W ballast or tungsten, 1/6 hp
  @ 277 VAC, 0-1200 W ballast
- Time delays: 5, 15 or 30 minutes, walk-through, test-mode
- Coverage: Major motion, PIR 35' x 30', Ultrasonic 20' x 20'
  Minor motion, PIR 20' x 15', Ultrasonic 15' x 15'
- Ultrasonic Fequency: 40kHz

- Sensitivity adjustment: PIR (high/low), Ultrasonic (fully variable)
- Dimensions: 2.73" x 1.76" x 1.83"
  (69.3mm x 44.7mm x 46.5mm) L x W x D
- UL and cUL listed
- Five year warranty

Controls & Settings

Product Controls

- ON/OFF Button
- Ultrasonic Sensitivity Adjustment Trimpot
- DIP Switches
- Ultrasonic Cones
- Detection LEDs
  Red = PIR
  Green = Ultrasonic
- PIR Lens
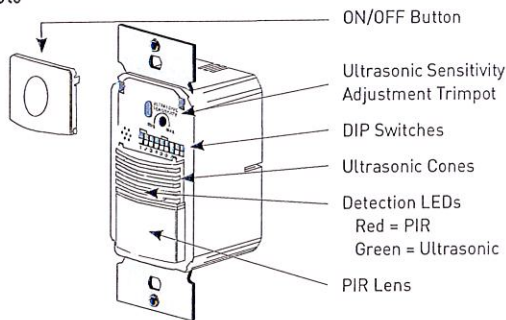
DIP Switch Settings

Time Delay	1	2
Test/20 min	↓	↓
5 minutes	↓	↑
15 minutes	↑	↓ ◄
30 minutes	↑	↑

Walk-Through	3
Enabled	↑
Disabled	↓ ◄

PIR Sensitivty	4
Low, 50%	↑
High	↓ ◄

Audible Alert	7
Enabled	↑ ◄
Disabled	↓

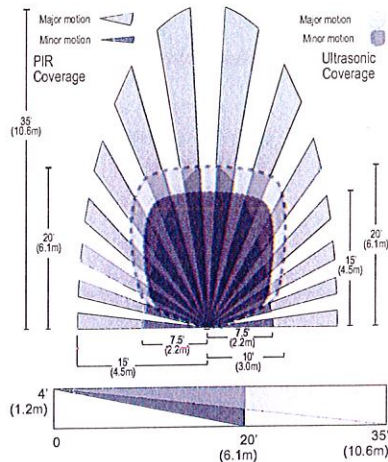| Trigger Mode	Initial Occupancy	Maintain Occupancy	Re-trigger	5	6
Standard	Both	Either	Either	↓	↓
Option A	PIR	Either	Either	↓	↑
Option B	PIR	PIR	PIR	↑	↓
Option C	Both	Both	Both	↑	↑

ON Mode	8
Manual On	↑ ◄
Auto On	↓

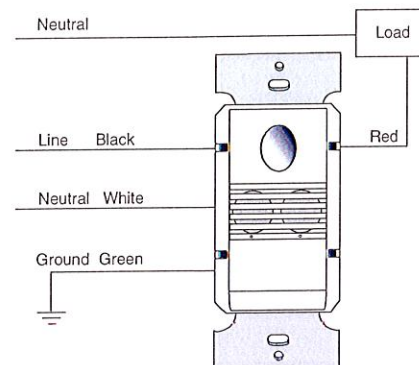Switch 9 is not used

↑ =ON ↓ =OFF
◄ =Factory Setting

Coverage & Wiring

Coverage Pattern

For best performance, Wattstopper recommends using this sensor in spaces no larger than 18' x 15'.

Wiring Diagram

Ordering Information

Catalog #	Color	Voltage	Load Rating
☑ DW-100-W	White	120/277 VAC; 50/60 Hz	@ 120 VAC, 0-800 W ballast or tungsten, 1/6 hp
☐ DW-100-W-U			@ 277 VAC, 0-1200 W ballast
☐ DW-100-LA	Lt. Almond		
☐ DW-100-I	Ivory		
☐ DW-100-I-U			
☐ DW-100-G	Grey		
☐ DW-100-B	Black		

Order wall plate separately. -U = BAA/TAA compliant; product is compliant with Buy American Act and Trade Agreement Act.

Green Premium

Main

Load center type	Main lugs
Circuit breaker type	QOB QOB-VH QHB
Material	Copper

Complementary

Number of spaces	30
Enclosure nominal height	32 in
Enclosure nominal width	20 in
Enclosure nominal depth	5.75 inFor NEMA 1 enclosure 6.5 inFor NEMA 3R/5/12 enclosure
Line Rated Current	100 A
Wiring configuration	4-wire
Phase	3 phases
System Voltage	240 V AC 48 V DC

Environment

standards	CSA UL

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 1419 - Schneider Electric declaration of conformity	Compliant - since 1419 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Need no specific recycling operations	Need no specific recycling operations

Contractual warranty

Warranty period	18 months

KEV-TEC=
ELECTRICAL INC.
P.O. Box 35 Carp, ON K0A 1L0
Phone: (613) 839-0575 Fax (613) 839-0266

| BY KEVIN MCWADE | DATE JULY 12 2019 |

X	REVIEWED
	REVIEWED AS NOTED
	RESUBMIT SPECIFIED
	REJECTED
	RESUBMIT AS NOTED
SIGNED	Kevin McWade

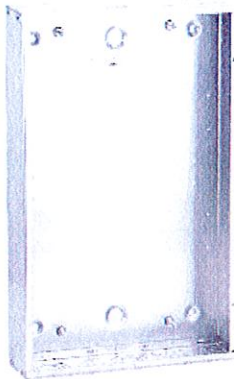Schneider Electric

MH32

NQNF Panelboard Enclosure Box, Type 1, 20 x 32 x 5.75 in

Product availability : Stock - Normally stocked in distribution facility

SQUARE D
by Schneider Electric

Price* : 113.00 USD

KEV-TEC ELECTRICAL INC.

P.O. Box 35 Carp, ON K0A 1L0
Phone: (613) 839-0575 Fax: (613) 839-0266

BY KEVIN MCWADE	DATE JULY 12 2019

X	REVIEWED
	REVIEWED AS NOTED
	RESUBMIT SPECIFIED
	REJECTED
	RESUBMIT AS NOTED
SIGNED	Kevin McWade

Main

Product	Enclosure

Complementary

Material	Steel
Width	20 in
Height	32 in
Depth	5.75 in

Environment

Enclosure Rating	NEMA 1
Product certifications	cULus

Ordering and shipping details

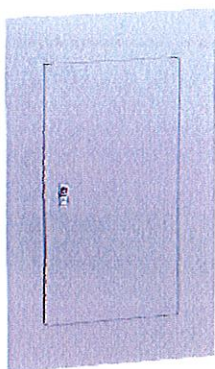|	
Category	07969 - RTA PANELBOARD BOX - STD NEMA 1
Discount Schedule	PE1A
GTIN	00785901027812
Nbr. of units in pkg.	1
Package weight(Lbs)	24.420000000000002
Returnability	Y
Country of origin	US

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1419 - Schneider Electric declaration of conformity
	Schneider Electric declaration of conformity

REACh	Reference not containing SVHC above the threshold
	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

Contractual warranty

| Warranty period | 18 months |

NC32S

NQNF Panelboard Enclosure Surface Cover, Type 1, 20 x 32 in

SQUARE D
by Schneider Electric

Green Premium

KEV-TEC ELECTRICAL INC.

P.O. Box 35 Carp, ON K0A 1L0
Phone: (613) 839-0575 Fax: (613) 839-0266

BY KEVIN MCWADE	DATE JULY 12 2019

X	REVIEWED	
	REVIEWED AS NOTED	
	RESUBMIT SPECIFIED	
	REJECTED	
	RESUBMIT AS NOTED	
SIGNED	_Kevin McWade_	

Main

Product	Surface cover
Color	Grey
Cover type	Surface cover

Complementary

Material	Steel
Width	20 in
Height	32 in

Environment

Enclosure Rating	NEMA 1
Product certifications	cULus

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1419 - Schneider Electric declaration of conformity
	Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations