Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Applications

- Can be installed in hazardous areas designated as Zone 1 and 2 21 and 22.
- For use in locations where a high degree of corrosion resistance is required.
- For indoor/outdoor use where protection against dirt, water and moisture is necessary.
- Typical applications include oil refineries, petrochemical facilities, pulp and paper mills, food processing plants, warehouses, underground tunnels and general manufacturing facilities, FPSO, FLNG, ...

Features

- Corrosion-resistant fiberglass reinforced polyester body and hinged polycarbonate lens.
- High impact resistance housing (20 Joules IK10) from -40°C to +55 °C ambient temperature and wind profile for use in extreme offshore and onshore environments.
- Latch assembly and elastomer gasket seals against water and dust ingress, IP66/67.
- Easily accessed for maintenance using Allen key or straight blade screwdriver.
- Central opening with unique patented release system to prevent damage.
- Can be horizontally or vertically mounted.
- Hinged parabolic reflector for high lumen output efficiency.
- Vibration resistant spring loaded lampholders for bi-pin (G13).
- Positive safety switch disconnects power to lamps and ballast to allow maintenance in hazardous locations.
- Electronic multi-tap ballast 110 to 254 Vac/Vdc +/- 10% 50/60 Hz, for global applications. High power factor electronic ballast (>0.95). EOL (End Of Life) protection in accordance to the latest EN/IEC 60079-7 standard.
- Two channel ballast prevents dark areas by allowing one lamp to remain lit if one fails.
- Ballast plug-in with Ex e connector for quick and error-free maintenance.
- Available in 3 hour or 90 minute emergency versions, including multi-tap ballast with built-in monthly self test. Test results through multi-colored LED.
- Ex e battery with plug-in connector.

Standard Materials

- Fiberglass reinforced polyester housing
- Polycarbonate lens
- Elastomer gasket
- · Highly reflective white polycarbonate internal reflector
- Mounting accessories available in different materials such as gray painted aluminum, zinc plated steel, galvanized steel or 316 stainless steel

Options

- Silicone coating for added protection in H₂S hydrogen sulfide environments.
- Available without safety switch.
- · Level gauge light fitting.
- 316 stainless steel fixing inserts.





2 x 18 W

Certifications and Compliances

ATEX/IECEx Certification

- Certification Type: FLe
 - Gas: Zones 1 and 2:
 - Conforming to ATEX 94/9/CE: 🐵 II 2 G
 - Type of Protection: Ex de IIC or Ex demb IIC (emergency version)
 - Temperature Class: T5 ⁽²⁾ to T4
 - Dust: Zone 21 and 22:
 - Conforming to ATEX 94/9/CE: 🐵 II 2 D
 - Type of Protection: Ex t IIIC Db
 - Surface Temperature: +75 °C
 - Ambient Temperature: -40 °C to +55 °C
 - CE Declaration of Conformity: 50201
 - ATEX Certificate: LCIE 07 ATEX 6017
 - IECEX Certificate: IECEX LCI 04.0017
 - Index of Protection according EN/IEC 60529: IP66/67
 - Impact Resistance (shock): IK10

EURASEC Certification

- EURASEC N° TC RU C-FR.гб05.В.00910

Others Certification

- INMETRO Certificate: BVC11.0276 ^①

Inmetro certification available on special request only. Contact your local sales for more information .
With ceiling position use at +40 °C ambient temperature.

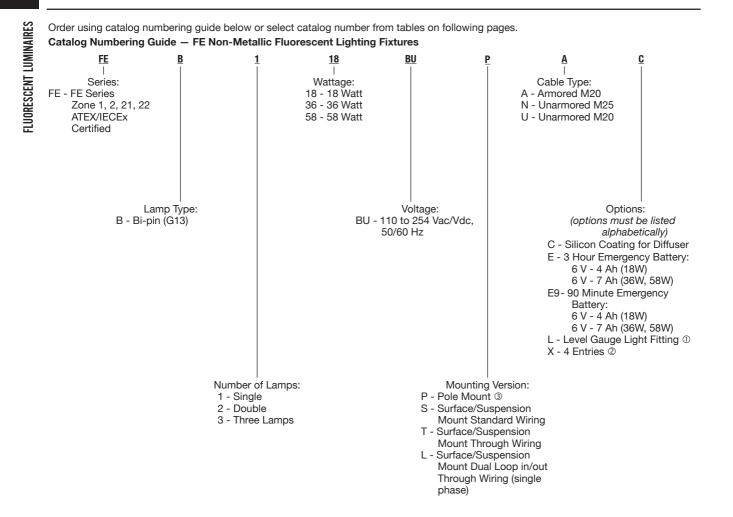
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FLUORESCENT LUMINAIRES

Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)



① Only for single standard versions.

2 Only for S, T and L mounting versions.

③ Only 2 x 18 W and 2 x 36 W with M25 entry versions.



Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Connection vi	ension Mountir a 1 x 6 termina ible/solid): 4 m	als.	d Wiring Version	<u> </u>		
Unarmored Ve Three M25 three polyamide cab						
Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm ³	Catalog Number
1	18	G13	110/254	5.5	32.3	FEB118BUSN
2	18	G13	110/254	5.5	32.3	FEB218BUSN
1	36	G13	110/254	7.9	54.2	FEB136BUSN
2	36	G13	110/254	7.9	54.2	FEB236BUSN
3	36	G13	110/254	9.9	54.2	FEB336BUSN
1	58	G13	110/254	9.0	65.0	FEB158BUSN
2	58	G13	110/254	9.0	65.0	FEB258BUSN
3	58	G13	110/254	11.0	65.0	FEB358BUSN

Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 plugged clearance entry, supplied with two M20 polyamide plugs.

Catalog Number	Volume dm³	Weight kg	Voltage (V)	Lamp Type	Power (W)	Number of Lamps
FEB118BUSA	32.3	5.5	110/254	G13	18	1
FEB218BUSA	32.3	5.5	110/254	G13	18	2
FEB136BUSA	54.2	7.9	110/254	G13	36	1
FEB236BUSA	54.2	7.9	110/254	G13	36	2
FEB336BUSA	54.2	9.9	110/254	G13	36	3
FEB158BUSA	65.0	9.0	110/254	G13	58	1
FEB258BUSA	65.0	9.0	110/254	G13	58	2
FEB358BUSA	65.0	11.0	110/254	G13	58	3

Shaded catalog numbers are normally stocked items. All other items are made to order.

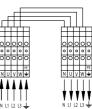


Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Surface/Suspension Mounting and Through Wiring								
Version (three phase)								
Connection via 2 x 5 terminals.								
Capacity (flexible/solid): 4 mm ² /6 mm ² .								





Unarmored Version - Bi-pin (G13)

Three M25 threaded entries, two at one end and one at opposite end, supplied with two M25 polyamide cable glands - 8 to 18.5 mm diameter - and one M25 polyamide plug.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm ³	Catalog Number
2	18	G13	110/254	5.5	32.3	FEB218BUTN
2	36	G13	110/254	7.9	54.2	FEB236BUTN
2	58	G13	110/254	9.0	65.0	FEB258BUTN

Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 threaded entry with brass earth continuity plate at opposite end, supplied with one M20 polyamide plug.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm ³	Catalog Number
2	18	G13	110/254	5.5	32.3	FEB218BUTA
2	36	G13	110/254	7.9	54.2	FEB236BUTA
2	58	G13	110/254	9.0	65.0	FEB258BUTA

Surface/Suspension Mounting and Dual Loop In/Out Through Wiring Version (single phase):

Connection via 1 x 6 terminals and 1 x 3 terminals. Capacity (flexible/solid): 4 mm²/6 mm².

Unarmored Version - Bi-pin (G13)

Three M25 entries, two at one end and one at opposite end, supplied with two M25 polyamide cable glands — 8 to 18.5 mm diameter — and one M25 polyamide plug.

Number	Power	Lamp	Voltage	Weight	Volume	
of Lamps	(W)	Туре	(V)	kg	dm ³	Catalog Number
2	18	G13	110/254	5.5	32.3	FEB218BULN
2	36	G13	110/254	7.9	54.2	FEB236BULN
2	58	G13	110/254	9.0	65.0	FEB258BULN

Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 threaded entry with brass earth continuity plate at opposite end, supplied with one M20 polyamide plug.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm ³	Catalog Number
2	18	G13	110/254	5.5	32.3	FEB218BULA
2	36	G13	110/254	7.9	54.2	FEB236BULA
2	58	G13	110/254	9.0	65.0	FEB258BULA

Shaded catalog numbers are normally stocked items. All other items are made to order.



Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Pole Mounting Version

Connection via 1 x 3 terminals. Capacity (flexible/solid): 4 mm²/6 mm².



For mounting on 42 mm diameter pole or tubular wallmounting support. Supplied with one integrated M25 polyamide cable gland — 8 to 18.5 mm diameter.

Number	Power	Lamp	Voltage	Weight	Volume	
of Lamps	(W)	Туре	(V)	kg	dm ³	Catalog Number
2	18	G13	110/254	6.2	34.1	FEB218BUPN
2	36	G13	110/254	8.7	54.2	FEB236BUPN

Level Gauge Tank Light -

Surface/Suspension Mounting with Standard Wiring Connection via 1 x 6 terminals. Capacity (flexible/solid): 4 mm²/6 mm².

Unarmored Version - Bi-pin (G13)

Three M25 entries, two at one end and one at opposite end, supplied with one M25 polyamide cable gland — 8 to 18.5 mm diameter — and two M25 polyamide plugs.

Number	Power	Lamp	Voltage	Weight	Volume	
of Lamps	(W)	Туре	(V)	kg	dm ³	Catalog Number
1	18	G13	110/254	5.5	32.3	FEB118BUSNL
1	36	G13	110/254	7.9	54.2	FEB136BUSNL
1	58	G13	110/254	9.0	65.0	FEB158BUSNL



Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Emergency Battery Backup

Surface/Suspension Mounting and Standard Wiring Connection via 1 x 4 terminals for 18 W version. Connection via 1 x 8 terminals for 36 W and 58 W versions. Capacity (flexible/solid): 4 mm²/6 mm².

Unarmored Version - Bi-pin (G13)

Three M25 entries, two at one end and one at opposite end, supplied with one M25 polyamide cable gland - 8 to 18.5 mm diameter - and two M25 polyamide plugs.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm ³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	G13	110/254	7.3	32.3	3 H	4Ah	FEB218BUSNE
2	36	G13	110/254	9.6	54.2	3 H	7Ah	FEB236BUSNE
3	36	G13	110/254	11.6	54.2	3 H	7Ah	FEB336BUSNE
2	58	G13	110/254	10.7	65.0	3 H	7Ah	FEB258BUSNE
3	58	G13	110/254	12.7	65.0	3 H	7Ah	FEB358BUSNE

Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 plugged clearance entry, supplied with two M20 polyamide plugs.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	G13	110/254	7.3	32.3	3 H	4Ah	FEB218BUSAE
2	36	G13	110/254	9.6	54.2	3 H	7Ah	FEB236BUSAE
3	36	G13	110/254	11.6	54.2	3 H	7Ah	FEB336BUSAE
2	58	G13	110/254	10.7	65.0	3 H	7Ah	FEB258BUSAE
3	58	G13	110/254	12.7	65.0	3 H	7Ah	FEB358BUSAE

Shaded catalog numbers are normally stocked items. All other items are made to order.



Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Emergency Battery Backup

Surface/Suspension Mounting and Through Wiring Version Connection via 2 x 4 terminals. Capacity (flexible/solid): 4 mm²/6 mm².

Unarmored Version - Bi-pin (G13):

Three M25 entries, two at one end and one at opposite end, supplied with two M25 polyamide cable glands - 8 to 18.5 mm diameter - and one M25 polyamide plug.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm ³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	Bi-pin	110/254	7.3	32.3	3 H	4Ah	FEB218BUTNE
2	36	Bi-pin	110/254	9.6	54.2	3 H	7Ah	FEB236BUTNE
2	58	Bi-pin	110/254	10.7	65.0	3 H	7Ah	FEB258BUTNE

Armored Version - Bi-pin (G13):

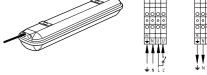
Two M20 threaded entries with brass earth continuity plate at one end and one M20 threaded entry with brass earth continuity plate at opposite end, supplied with one M20 polyamide plug.

Number	Power	Lamp	Voltage	Weight	Volume	Duration	Battery	
of Lamps	(W)	Туре	(V)	kg	dm ³	(Hours)	Capacity	Catalog Number
2	18	Bi-pin	110/254	7.3	32.3	3 H	4Ah	FEB218BUTAE
2	36	Bi-pin	110/254	9.6	54.2	3 H	7Ah	FEB236BUTAE
2	58	Bi-pin	110/254	10.7	65.0	3 H	7Ah	FEB258BUTAE



Lighting





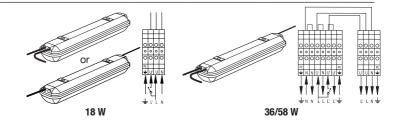


Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Emergency Battery Backup

Surface/Suspension Mounting and Dual Loop In/Out Through Wiring Version (single phase) Connection via 1 x 4 double deck terminals for 18 W version. Connection via 1 x 8 terminals and 1 x 4 terminals for 36 W and 58 W versions. Capacity (flexible/solid): 4 mm²/6 mm²



Unarmored Version - Bi-pin (G13)

Three M25 entries, two at one end and one at opposite end, supplied with two M25 polyamide cable glands - 8 to 18.5 mm diameter - and one M25 polyamide plug.

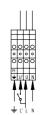
Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm ³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	Bi-pin	110/254	7.6	32.3	3 H	4Ah	FEB218BULNE
2	36	Bi-pin	110/254	9.9	54.2	3 H	7Ah	FEB236BULNE
2	58	Bi-pin	110/254	10.7	65.0	3 H	7Ah	FEB258BULNE

Armored Version - Bi-pin (G13)

Two M20 threaded entries with brass earth continuity plate at one end and one M20 threaded entry with brass earth continuity plate at opposite end, supplied with one M20 polyamide plug.

Number	Power	Lamp	Voltage	Weight	Volume	Duration	Battery	
of Lamps	(W)	Туре	(V)	kg	dm ³	(Hours)	Capacity	Catalog Number
2	18	Bi-pin	110/254	7.6	32.3	3 H	4Ah	FEB218BULAE
2	36	Bi-pin	110/254	9.9	54.2	3 H	7Ah	FEB236BULAE
2	58	Bi-pin	110/254	10.7	65.0	3 H	7Ah	FEB258BULAE





For mounting on diameter 42 mm pole or tubular wall-mounting support, supplied with one X M25 polyamide cable gland - 8 to 18.5 mm diameter.

Number of Lamps	Power (W)	Lamp Type	Voltage (V)	Weight kg	Volume dm ³	Duration (Hours)	Battery Capacity	Catalog Number
2	18	Bi-pin	110/254	10.0	54.2	3 H	4Ah	FEB218BUPNE ①
2	36	Bi-pin	110/254	10.4	54.2	3 H	7Ah	FEB236BUPNE

① 2 x 18 W is supplied with external battery pack (see dimensional data).

Shaded catalog numbers are normally stocked items. All other items are made to order.



4 mm²/6 mm².

Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

	Description	Catalog Number
Fixing Brackets		
	Set of two brackets for surface installation	
	Zinc plated steel	FEFBZ
	316 stainless steel	FEFBS
rackets for Surface Mounting		
6	Set of two	
Kara	Aluminium (gray painted)	FESBA
	316 stainless steel	FESBS
18 Ring Bolts		
	Set of two	
(\underline{O})	Zinc plated steel	FERBM8Z
lalf Clamps Brackets for Pole Mo	unting	
	Set of two	
	For 42 mm to 49 mm pole (1-1/4 to 1-1/2" tube)	
	Zinc plated steel	FEHC49Z
	316 stainless steel	FEHC49S
	For 60 mm pole (2" tube)	
	Zinc plated steel	FEHC60Z
	316 stainless steel	FEHC60S
Vall Mounting Adaptor		
	For pole mounting version	
	Diameter 42mm	
	Galvanized steel	FEWMG
linged Brackets		
P	Set of two brackets for adjusting luminaire	
De	Aluminium	FEHBA
6- 10	316 stainless steel	FEHBS
all Prevention Kit		
	Safety chain retains fixture temporarily to ease installation	
	For M25 cable entry	FESCM25
	For M20 cable entry	FESCM20

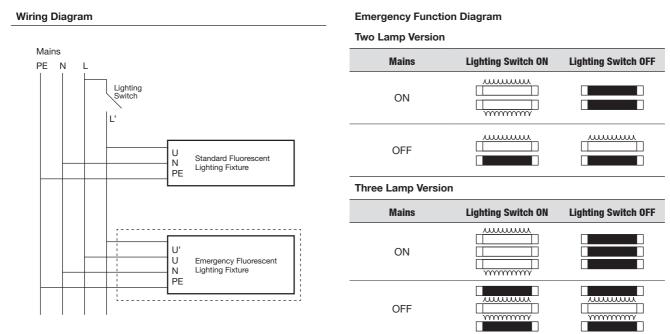
Shaded catalog numbers are normally stocked items. All other items are made to order.



FLUORESCENT LUMINAIRES

Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)



LED Status

Color	Indication	Function
Green	LED Blinking	Mains good – Battery charging
Green	LED Continuous	Mains good – Battery charged
	LED Blinking	No battery connected OR Something is defective
Red	LED Continuous	Mains faulty — Output ON
	LED Flashing	Mains faulty — Battery empty OR Lamp is defective
V-11	LED Blinking	Mains good – Performing self test
Yellow	LED Continuous	Self test was not okay
None (Off)	No Light Emitted	No mains — Battery completely empty

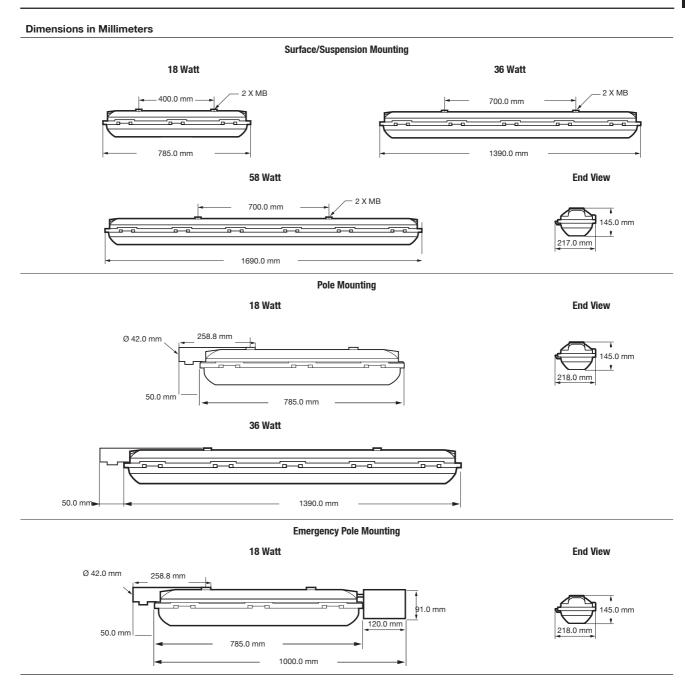
Emergency Light Duration

Version	Battery Capacity	Duration	Light Output
2 x 18 W	4 Ah – 6 V	90 minute	80%
2 X 18 W	4 Ah – 6 V	3 hour	40%
2 x 36 W	7 Ah – 6 V	90 minute	45%
2 X 30 W	7 Ah – 6 V	3 hour	25%
0 × 50 W	7 Ah – 6 V	90 minute	30%
2 x 58 W	7 Ah – 6 V	3 hour	15%



Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)





Standard and Emergency Battery Back-Up. Increased Safety

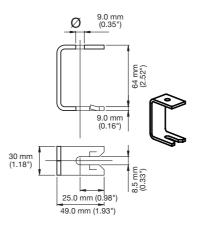
Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Liahtina

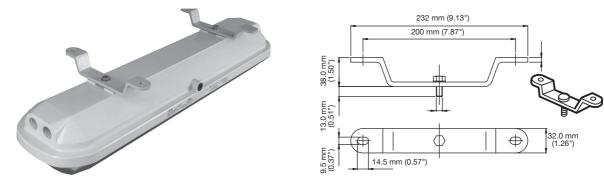


FEFBZ: zinc plated steel - Set of two quick fixing brackets for ease of surface mounting



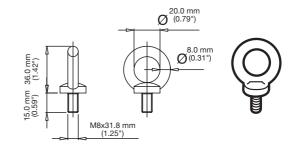


FESBS: 316 stainless steel - Set of two brackets for surface mounting



FERBM8Z: zinc plated steel - Set of two ring bolts





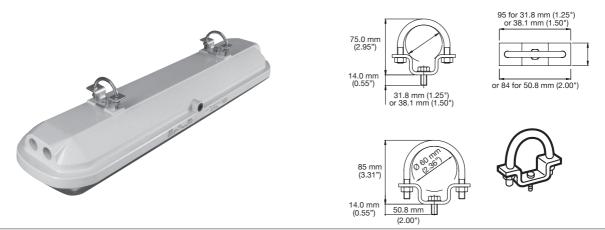


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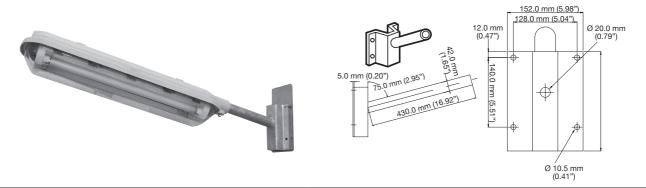
Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)

Mounting Data

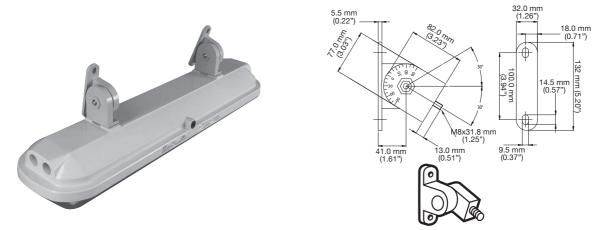
FEHC49Z: zinc plated steel or FEHC49S: 316 stainless steel - Set of two clamps for pole diameter 42 mm to 49 mm (for 1-1/4" to 1-1/2" pole). FEHC60Z: zinc plated steel or FEHC60S: 316 stainless steel - Set of two clamps for pole diameter 60 mm (for 2" pole).



FEWMG: galvanized steel - Wall mounting pole diameter 42 mm (1-1/4")



FEHBA: aluminum or FEHBS: 316 stainless steel - Set of two hinged brackets for adjusting luminaire.

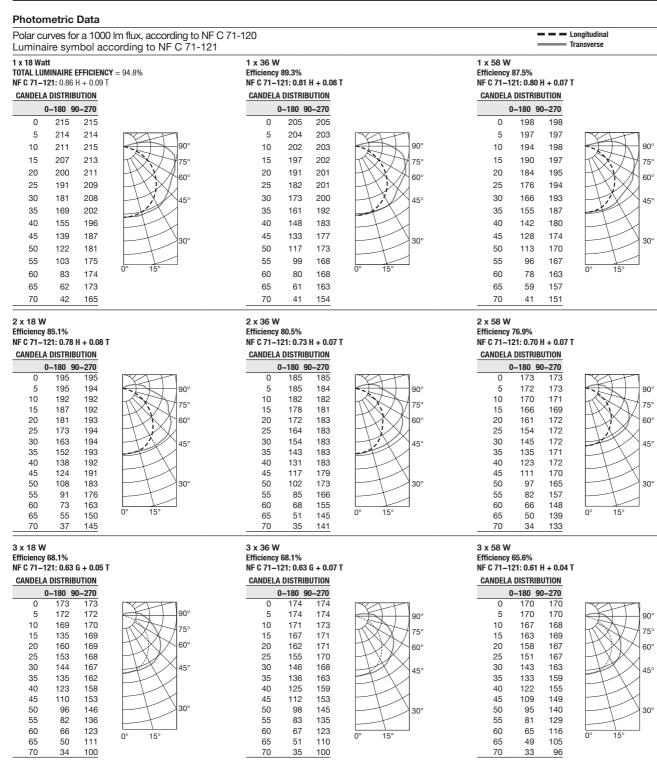


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Standard and Emergency Battery Back-Up. Increased Safety

Zone 1 and 2 - 21 and 22 Gas (G) and Dust (D)



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