

Fail-Safe

DESCRIPTION

The Fail-Safe CFR is designed for use in horizontal or non-laminar air flow clean rooms. The enclosed and gasketed housing protect against infiltration of airborne bacteria. The extruded aluminum inset door and the hole-free design of the housing prevent air exchange between the fixture and plenum, allowing relamping without contamination of the clean areas. UL/cUL listed for wet locations, and manufactured in accordance with U.S.D.A., F.D.A., N.S.F. and Federal Standard 209E.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Application

The CFR is suitable for use in I.E.S. Class 100, 1,000, 10,000 and 100,000 clean room environments. Applications include clean rooms, technical and biomedical labs, food processing/testing centers and pharmaceutical labs.

Fasteners

Machine screws secure through captive cagenuts in housing and are spaced to compress gasketing on all sides.

Housing

Die-formed, 20 ga. CRS with tightly butted and spot welded, sealed end caps. Contains no holes that would allow air passage. Standard white high reflectance polyester powder coat finish. Gloss: 85%; Reflectance: 93%; Hardness: 2H; Salt Spray: 500 Hours.

Finish

High gloss, electrostatically applied, white powder coat finish, average minimum reflectance 92%. 1000 hour salt spray test.

Hinge

Two braided, stainless steel cables on one side of door provide hinging.

Door

Fully gasketed, rigid extruded aluminum, inset door with baked white polyester powder coat and mitered corners.

Gasket

White, closed cell, Flexiseal(TM) gasketing surrounds perimeter of lens to seal lens to door frame and around perimeter of door to seal door to housing.

Access

A gasketed access plate on top of the housing with two flattened, 7/8" diameter knockouts allows connection of vapor tight conduit fitting. Optional, above ceiling, top access door for luminaire maintenance is available and ideal for food processing and cleanroom applications.

Lens

Lens is clear Pattern 12 acrylic with prisms positioned inside fixture and smooth surface on the outside for easy cleaning.

Lamps

(By Others)

Lens Retention

Unique, Particlock(TM) lens retention system utilizes continuous, 18 ga. media clampdowns to sandwich gasketing and integrate lens and door frame for even environmental seal.

Ballast

Electronic Class P, CBM/ETL ballast.

Labels

UL/cUL listed for wet location under covered ceiling.



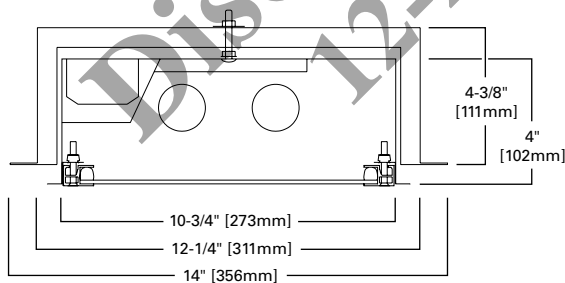
CFR12

1x2

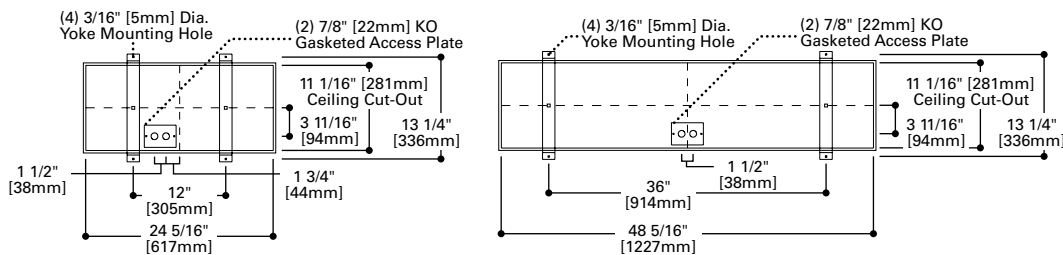
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Cleanroom

RECESSED FLANGE
Inset Flat door

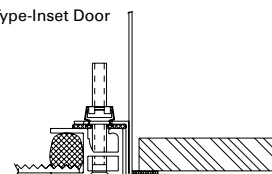


MOUNTING DIMENSIONS



DOOR FRAME

Flange Type-Inset Door



ENERGY DATA

Input Watts:

STD Ballasts & STD Lamps
(1) 40W Biaxial Fluorescent: 45W
(2) 40W Biaxial Fluorescent: 82W

ES Ballasts & STD Lamps
(1) 17W T8 Fluorescent: 23W
(2) 17W T8 Fluorescent: 45W
(3) 17W T8 Fluorescent: 68W
(1) 32W T8 Fluorescent: 37W
(2) 32W T8 Fluorescent: 71W
(3) 32W T8 Fluorescent: 108W

Electronic Ballast
Consult Cooper Lighting Solutions Representative

ORDERING INFORMATION

SAMPLE NUMBER: CFR-12-332-277-IK12-EB81-GLR

Product Family	Grid Size	Lamp Type	Voltage	Lens Type ³	Ballast	Inset Door/Finish Options	Options
CFR	12						
CFR=Fluorescent Flange Recessed	12= 12" (3 lamp max.)		120=120V 277=277V 347=347V UNV=120V-277V	IK12=Pattern 12 Prismatic Acrylic, 0.110" thick IP12=Pattern 12 Prismatic Polycarbonate, 0.110" thick 93=Prismatic Tempered Glass, 0.156" thick	Electronic Ballasts¹ EB51 = (1) Ballast for use with T5 Lamp EB52 = (2) Ballasts for use with T5 Lamp EB81 = (1) Ballast for use with T8 Lamp EB82 = (2) Ballasts for use with T8 Lamp EBX1 =EB1 Ballast for use with Biaxial Lamp EBX2 = (2) Ballast for use with Biaxial Lamps	Blank =Extruded Aluminum Door, white powdercoat paint ALX =Extruded Aluminum Door/Clear anodized finish	EL4 =EM Pack, T8, BX EL5 =EM Pack, T5, T5HO GLR =Fuse and Holder RIF =Radio Frequency Interference Filter TAD =Top Access Door ² AM =Anti-microbial matte white finish ⁴ Housing Options ALH =Die formed Aluminum, powder coat painted white SHN =Stainless Steel, Brushed finish SHP =Stainless Steel, powder coat painted white
2' Fixture Length T5 Fluorescent 114=(1) 14W Lamps 214=(2) 14W Lamps 314=(3) 14W Lamps 124=(1) 24W Lamps 224=(2) 24W Lamps T8 Fluorescent 117=(1) 17W Lamps 217=(2) 17W Lamps 317=(3) 17W Lamps Biaxial Fluorescent 140BX=(1) 40W Lamps 240BX=(2) 40W Lamps	4' Fixture Length T5 Fluorescent 128=(1) 28W Lamps 228=(2) 28W Lamps 328=(3) 28W Lamps 154=(1) 54W Lamps 254=(2) 54W Lamps T8 Fluorescent 132=(1) 32W Lamps 232=(2) 32W Lamps 332=(3) 32W Lamps						
NOTES: ¹ For specific electronic ballast, specify brand and catalog number. ² Contact your Cooper Lighting Solutions Representative for dimensional details. ³ Refer to Lens Ordering Guide for additional lens choices. ⁴ AM not available with ALX anodized finish.							

Discontinued
12-21-2022