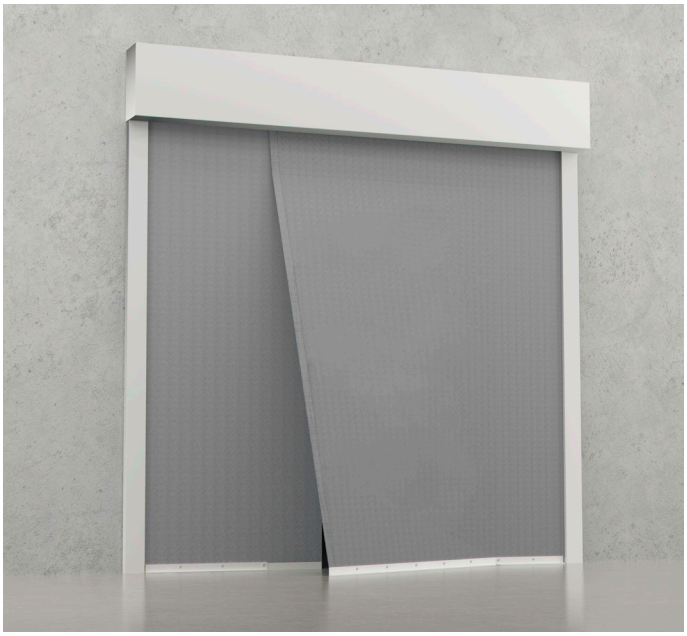
Automatic **Egress Fire Curtain**

Model: **NFC-SB100 & NFC-MB100** (Optional Egress Door)



FIRE RATED SMOKE RATED VERTICAL ACTING

Max. Height	Max. Width	E	EI	EW
6 meters	Unlimited	120	-	30

Fire Integrity

- Up to 120 min.

120mins

Fire containment systems prevent the spreading of smoke from one zone to another. NAFFCO curtain comprises of flexible heat resistant fabric with fire integrity up to 120mins.*. The tube contains a DC electric motor which holds the curtain retracted at ceiling level at all times and deploys upon the receipt of fire alarm signal. The bottom bar ensures safe and controlled descent of the curtain with gravity fail safe.

By utilizing an egress door that allows individuals to pass without retracting the curtain. NAFFCO automatic egress fire curtains provide fire separation without impeding the transit of occupants exiting the area.

Egress curtain can be used in elevator lobbies, cross corridors and various passage ways and escape routes.

System tested to

- EN 1634-1
- BS476 part 6 & 7**

Product Complies

- Certifire

*Egress
**Fabric tested.

Specifications

Fabric	PU-coated glass fabric, 700 g/m², color grey, Non - Flammable according to DIN 4102-1, A2.
Unwind	Controlled Gravity Descend
Windup	24 VDC motor integrated with planetary gear
Installation	Ceilling or wall mounted
System dimensions	System width ≤ 25000 mm Unwinding length ≤ 12000 mm
Head box	GI Sheet 1.2 mm powder-coated
End section	GI Sheet 2.5 mm powder-coated
Classification/Standard	EN 1634-1
Side guides (SFS)	Steel 2 mm powder-coated, dimensions (Wx D) 50 x 100 mm. The curtain material will be delivered with a restrain system. In this way, it prevents the curtain material being pulled out sideways from the tracks in case of deflection by pressurization (e.g. excess pressure by fire.)

Fabric Data Sheet

Model: **NF-WRGF0667/120**

Specification

NF-WRGF0667/120 is a high performance heavyweight stainless steel wire reinforced woven glass fabric coated with fire retardant aluminum-pigmented polyurethane on both sides. Fabrics are tested to BS476 –6 & BS 476 -7 for fire propagation and flame spread index respectively and rated to CLASS 0 rating.

NF-WRGF0667/120 provide high temperature resistance and reflectivity, which provides a heat-reflecting surface along with other properties to manufacture smoke curtains, fire curtains & Barriers

Fabric Data

Character	Unit	Value	Tolerance	Test Standard
Finished Fabric				
Weight	g/m²	700	±5%	
Thickness	mm	0.7	±5%	
Coating Weight	g/m²	50	±10%	
Coating Application		Both Side		
Base Fabric				
Weight	g/m²	640	±5%	
Weave Pattern		8H Satin		
Thread Count Warp	per CM	16	±5%	
Thread Count Weft	per CM	15	±5%	
Yarn Count Warp	Tex	EC9 68/2 V4A		
Yarn Count Weft	Tex	EC9 68/2 V4A		
Standard Color		Grey		
Reaction to Fire		CLASS 0		BS476 Part 6 & 7
Application Temp.		Up to 1100°C		
Tensile Strength Warp	N/cm	930		
Tensile Strength Weft	N/cm	640		

Fire Curtain **Group Controller**

NF-FGCP

The Fire Curtain Group Controller (NGC) is a central control unit designed to manage the deployment and retraction of up to six 20W or three 40W 24V permanent magnet motors. It operates fire curtains seamlessly under both standard and emergency conditions.

In normal operation, the NGC supplies 24V power to the motors, keeping the curtains securely retracted within their headboxes. During a fire alarm, the NGC cuts power, triggering a controlled “Gravity Fail Safe” descent to deploy the curtains. Once the fire alarm system is reset, the NGC restores power to retract the curtains.

For larger systems requiring synchronized operation of multiple curtains or more than six motors, Multi-Function GCPs can be linked together. Backup batteries ensure up to two hours of operation during power outages, guaranteeing reliable curtain deployment even during mains failure.

SECURITY SIGNALING
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S35507
TYPE: F

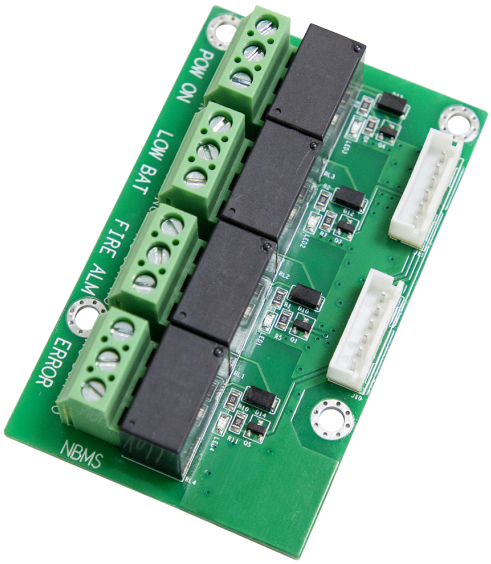
Technical Specifications

Descriptions	Ratings
Input Voltage	120V (5.0A) / 230V (3.75A)
Current	5.0 Amps / 3.75 Amps
Frequency	50Hz/60Hz
AC/DC Switchover	ON < 90%
Voltage	OFF < 85%
Ground impedance	0 Ohms
POWER OUT Circuit Voltage	24Vdc nominal output voltage (19.26-25.8Vdc), Non-Power Limited, Fail, Class D
POWER OUT Circuit Current	16Amps Max
Duty	50%
Maximum number of NMC’S	6 (20W) / 3 (40W)
Backup battery	24V / 7Ah
Stand by time	4hrs (Full load - 6/20W motor)
Battery Charging Voltage	27.0 – 27.5V
Battery Charging Current	Max 1.5A
Low Voltage Disconnect	80% of Nominal (19.2V) +/ - 5%
Fire Loop	N/C 5V 10Ma (Open Circuit Fault > 1MOhms), (Closed Circuit Fault > 1MOhms),
	(Restricted to same room, 20ft. in conduit), non-power limited, Class D
Test Switch	5V 5-10mA , Class D.
Alarm out Circuit	24 Vdc Nominal (19.22Vdc – 28.58Vdc), 300mA max current,
	Power Limited, restricted to same room, Class E
Max. cable size: Fire circuit	2 x 12 AWG / .01A (restricted to within Room)
Max. cable size: Mains Input	1 x 14 AWG / 5.0A
Max. cable size: NMC out	2 x 12 AWG / 15.0A
Max. cable size: Test Switch	2 x 12 AWG / .01 (Restricted to within Room)

Fire Curtain **BMS Controller**

NBMS

The BMS (Building Management System) Controller is a cutting-edge device designed for seamless integration with fire and smoke curtains. It ensures real-time monitoring, control, and communication with fire safety systems, providing enhanced protection for buildings and occupants.



The indications include four alerts as below.

- Power on
- Trouble Shoot
- Fire Alaram
- CPU Fault

Key Features

- **Compatibility:** Supports fire and smoke curtains with standard operating mechanisms.
- **Real-Time Monitoring:** Displays operational status, faults, and alarms.
- **Integration:** Compatible with most BMS protocols, including BACnet, Modbus, and KNX.
- **User Interface:** LED indicators.
- **Redundancy:** Dual power supply inputs for fail-safe operation.
- **Testing Functionality:** Built-in periodic testing features for maintenance.

Technical Specifications

Descriptions	Ratings
Operating voltage	24Vdc; 2.2A; Non-power limited; Fail Safe, Class D
Power factor	1
Terminal ratings	8A / 30VDC
	Power On - Green
	Low Battery - Yellow
	Fire Alarm - Red
	System Error - Red

Fire Curtain **Motor Controller**

NF-FMC

The Fire Curtain Motor Controller (NMC) works alongside the Group Controller to manage individual curtain motors with precision. It ensures the accurate deployment and retraction of each 24V permanent magnet motor. Current-limiting switches detect when the curtain is fully retracted, reducing motor voltage to a holding level to minimize energy consumption and extend motor life.

The NMC is essential for smooth and reliable operation, whether during normal conditions or in response to fire alarms. It ensures fire curtains respond effectively to commands from the Group Controller, maintaining both safety and operational integrity.

SECURITY SIGNALING
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S35507
TYPE: F

Technical Specifications

Descriptions	Ratings
POWER - Primary Operating Supply	24Vdc; 2.2A; Non-power limited; Fail Safe, Class D
MOTOR Output	24Vdc nominal, maximum one motor. Recorded voltage for compatibility: 16.22Vdc – 33.59Vdc Non-power limited
	Restricted to same room; Fail Safe, Class D
OVERRIDE	5V DC Rated Voltage; 5 mA Maximum (Current – Fail Safe)
	restricted to same room, (20 feet in Conduit), Class D
Delay Unwinding Time	0-60sec
Delay Rewinding Time	0-60sec
2 Stage Hold Time	0-60sec
Down/Unwinding Speed	0-60sec
Locked Current	250 -360
Max. cable size: Override	2 x 12 AWG /.01A (restricted to within Room)
Max. cable size: To motor	2 x 16 AWG /3.0A (restricted to within Room)

Fire Curtain **Motor**

NFGR42/40 (20W)

The 24V DC fire curtain motor is an in-house designed unit installed at one end of the roller tube, featuring a factory-fitted drive coupling for seamless integration. It supports clockwise or counterclockwise retraction. The opposite end houses a free-sliding shaft with two bearings for stability. Built with high-quality components, the motor ensures reliable, maintenance-free operation and a long service life.

SECURITY SIGNALING
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S35507
TYPE: F

Features

- Designed for Fire and Smoke Curtain Systems.
- Supports smooth, precise, and reliable operation.
- Compact and lightweight for ease of installation.
- High-efficiency motor with low energy consumption.
- Compatible with building management systems (BMS).
- Integrated fail-safe operation in case of power failure (battery backup compatibility).

Technical Specifications

Parameter	Details
Motor Type	24 VDC Brushless Motor
Power Output	18.5 W
Operating Voltage	24 VDC ± 10%
Torque	Mn 1400 Ncm
Speed	3100 RPM
Duty Cycle	Continuous Operation (100% Duty)
Temperature Range	-10°C to +60°C
Ingress Protection	IP54 (Dust and splash-resistant)

Fire Curtain **Motor**

NFGR53/30 (40W)

The 24V DC fire curtain motor is an in-house designed unit installed at one end of the roller tube, featuring a factory-fitted drive coupling for seamless integration. It supports clockwise or counterclockwise retraction. The opposite end houses a free-sliding shaft with two bearings for stability. Built with high-quality components, the motor ensures reliable, maintenance-free operation and a long service life.

SECURITY SIGNALING
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S35507
TYPE: F

Features

- Designed for Fire and Smoke Curtain Systems.
- Supports smooth, precise, and reliable operation.
- Compact and lightweight for ease of installation.
- High-efficiency motor with low energy consumption.
- Compatible with building management systems (BMS).
- Integrated fail-safe operation in case of power failure (battery backup compatibility).

Technical Specifications

Parameter	Details
Motor Type	24 VDC Brushless Motor
Power Output	37.7 W
Operating Voltage	24 VDC ± 10%
Torque	Mn 2400 Ncm
Speed	3600 RPM
Duty Cycle	Continuous Operation (100% Duty)
Temperature Range	-10°C to +60°C
Ingress Protection	IP54 (Dust and splash-resistant)