

CEAG Products

CROUSE-HINDS
SERIES

Ex-d Motion detector EFS MS
for harsh & hazardous areas



EATON

Powering Business Worldwide

Ex-d Motion detector EFS MS

Light metal design, explosion-protected for Zone 1 and Zone 21

For use under harsh and hazardous conditions

The flameproof motion detector made of light metal are suitable for use in hazardous areas of zones 1, 2, 21 and 22. With its robust light metal housing of the EFS series with borosilicate glass viewing window, use in harsh environmental conditions is no problem.

With its 400 VA switching capacity, the motion detector is suitable for the demand-oriented control of even large lighting equipment in hazardous areas. The 3-pole terminal strip has pluggable clamp terminals with a connection cross section of up to 1.5 mm².

The high degree of protection IP 67 allows universal use in Ex areas.

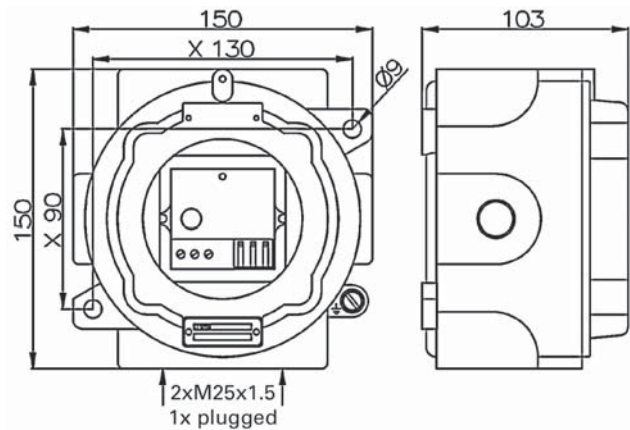
Various cable and line ducts, conduits or flameproof cable glands, can be realized.

Drilled holes, cable and line ducts, through which no lines are conducted, should be sealed with certified screw plugs.

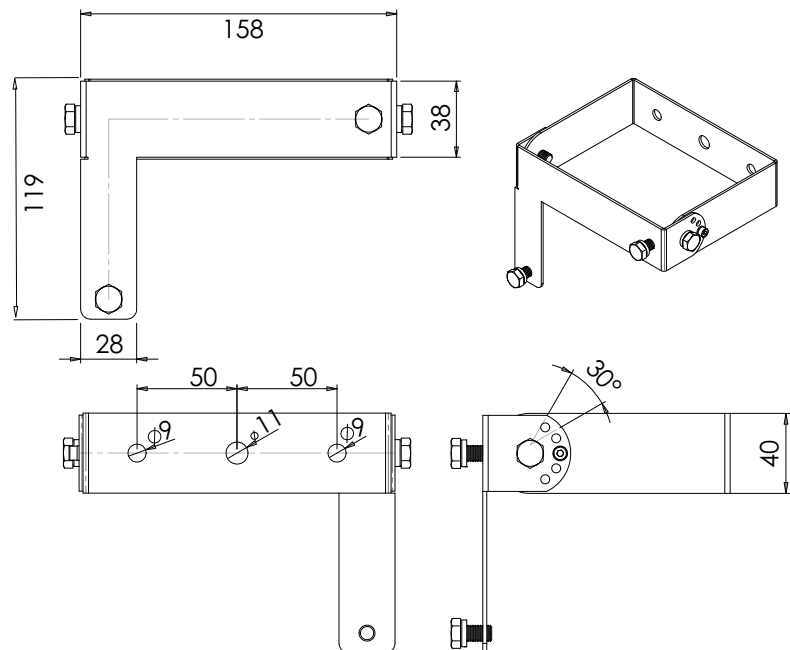
The housing is provided with an external earthing connection.

Dimension drawing

Motion detector



swivel bracket



Features

- High mechanical, chemical and thermal resistance
- High degree of protection IP67
- High switching capacity 400 VA



Technical data

Certifications and compliances

EFS MS 1

Marking accd. to 2014/34/EU	II 2 G Ex d IIC T6 Gb / II 2 D Ex t IIIC T85 °C Db
EC-Type Examination Certificate	LOM 03 ATEX 2034
Permissible ambient temperature	-20 °C bis +55 °C
Degree of protection accd. EN 60529	IP67

Sensor Ratings

Detection range	up to 15 m (frontal, wall mounted) up to 10 m (diameter, ceiling mounted)
Detection angle	ca. 120 °
Motion detection	0,3 up to 3m/s (1 up to 10 km/h)
Sensitivity	20 up to 100 %
Hold time	10 up to 1200 s
Brightness	1 up to ∞ Lux
Mounting height	max. 2,7 m (wall mounting) max. 4,0 m (ceiling mounting)

Electrical Ratings

Rated voltage	230 V AC +/- 10 % 50 Hz
Switching capacity (max.)	400 VA - for at least 300.000 Switching cycles: inrush current max. 20 A / 200 μs - for at least 100.000 Switching cycles: inrush current max. 60 A / 200 μs For a functional guarantee at switching cycles >20 A we offer a compatibility test
Standby power	<1,3 W
Connecting terminals	3-pole, pluggable clamp terminals for max. 1,5 mm² (N, L, L')
Sensor principle	HF motion detector
Frequency range	5,8 GHz +/- 75 MHz
Rated power	<5 mW

Ordering details

Type	Thread entries	Weight	Order No.
Type EFS			
EFS MS1 with motion sensor	2xM25x1.5, 1x screw plug, metallic	0.8 kg	NOR 000 114 110 745
EFS MS2 with motion sensor and relay	2xM25x1.5, 1x screw plug, metallic	1.0 kg	NOR 000 114 110 741
Accessories			
EFS MS A4 swivel bracket	2xM25x1.5, 1x screw plug, metallic	0.4 kg	NOR 000 114 110 742



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**U.S. (Global Headquarters):
Eaton's Crouse-Hinds
Business**

1201 Wolf Street
Syracuse, NY 13208

(866) 764-5454
FAX: (315) 477-5179
FAX Orders Only:
(866) 653-0640

CrouseCustomerCTR@Eaton.com

For more information:

If further assistance is required, please contact an authorized Eaton Distributor, Sales Office, or Customer Service Department.

Australia

Phone +61-2-8787-2777
Fax +61-2-9609-2342
crousehindsanz@eaton.com

China

Phone +86-21-2899-3600
Fax +86-21-2899-4055
ECHsales@eaton.com

Great Britain

Phone +44-247-630-89 30
Fax +44-247-630-10 27
sales5@eaton.com

India

Phone +91-124-4683888
Fax +91-124-4683899
cchindia@eaton.com

Canada

Toll Free +1-800-265-0502
Fax +1-800-263-9504
Fax orders only:
+1-866-653-0645

Korea

Phone +82-2-3484-6783
Fax +82-2-3484-6778
CCHK-sales@
cooperindustries.com

**Mexico/Latin America/
Caribbean**

Phone +52-555-804-4000
Fax +52-555-804-4020
mxmercadotecnia@cooperindustries.com

Spain

Phone +34-9-37362710
Fax +34-9-37835055
sales.CCH.es@cooperindustries.com

Middle East (Dubai)

Phone +971-4-427-2522 / 2500
Fax +971-4-429-8521
CHMEsales@Eaton.com

The Netherlands

Phone +31-10-2452145
Fax +31-10-2452121
CHRD_mail@Eaton.com

Norway

Phone +47-32-244600
Fax +47-32-244646
CHLloffice@eaton.com

Singapore:

Phone +65-6645-9888
Fax +65-6297-4819
CHSI-Sales@Eaton.com

Turkey

Phone +90-216-464-20-20
Fax +90-216-464-20-10
infoEGTurkey@eaton.com

Russia

Phone +7-495 510-24-27
Fax +7-495 510-24-28
info@cooper.ru.com
www.cooper-russia.ru

Eaton

Cooper Crouse-Hinds GmbH

Neuer Weg – Nord 49
D-69412 Eberbach

Phone +49 (0) 6271/806-500
Fax +49 (0) 6271/806-476
E-mail info-ex@eaton.com
Internet www.crouse-hinds.de

Eaton

1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

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Eaton's Crouse-Hinds Business

1201 Wolf Street
Syracuse, NY 13208
(866) 764-5454
CrouseCustomerCTR@Eaton.com

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