

# Specifications

## Eaton 168103

Eaton Moeller® series SOL30 Safety Fireman's switch, for 4 strings, 25A, MV

### General specifications

<b>PRODUCT NAME</b>	Eaton Moeller® series SOL30 Safety Fireman's switch
<b>CATALOG NUMBER</b>	168103
<b>EAN</b>	4015081646807
<b>PRODUCT LENGTH/DEPTH</b>	150 mm
<b>PRODUCT HEIGHT</b>	405 mm
<b>PRODUCT WIDTH</b>	375 mm
<b>PRODUCT WEIGHT</b>	6.8 kg
<b>CERTIFICATIONS</b>	IEC/EN 60 947-3
<b>MODEL CODE</b>	SOL30X4-SAFETY-MV-U(230V50HZ)

## Product specifications

<b>APPLICATION</b>	<ul style="list-style-type: none"> <li>Residential buildings</li> <li>Utility buildings</li> </ul>
<b>PRODUCT CATEGORY</b>	<ul style="list-style-type: none"> <li>Fireman's Switch</li> <li>Switchgear for photovoltaic systems</li> </ul>
<b>FEATURES</b>	Complete device in housing
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.
<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	UV resistance only in connection with protective shield.

## Resources

### CATALOGUES

[eaton-feuerwehrschaalter-das-große-plus-an-sicherheit.pdf](#)

[Product Range Catalog Switching and protecting motors](#)

### CHARACTERISTIC CURVE

[eaton-manual-motor-starters-sol30-fireman's-switch-dimensions-004.eps](#)

[eaton-manual-motor-starters-sol30-fireman's-switch-3d-drawing-007.eps](#)

[eaton-motorstarters-undervoltage-sol30-fireman's-switch-characteristic-curve.eps](#)

[eaton-manual-motor-starters-sol30-fireman's-switch-3d-drawing-005.eps](#)

### DECLARATIONS OF CONFORMITY

[DA-DC-00004831.pdf](#)

[DA-DC-00004823.pdf](#)

### ECAD MODEL

[DA-CE-ETN.SOL30X4-SAFETY-MV-U\(230V50HZ\)](#)

### INSTALLATION INSTRUCTIONS

[IL03402053Z2021\\_10.pdf](#)

### MCAD MODEL

[sol30x4\\_safety\\_mv\\_u.dwg](#)

[sol30x4\\_safety\\_mv\\_u.stp](#)

<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.
<b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.
<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>FITTED WITH:</b>	0 (off) position Retraction in 0-position
<b>OPERATING FREQUENCY</b>	120 Operations/h
<b>POLLUTION DEGREE</b>	3
<b>CLIMATIC PROOFING</b>	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78
<b>ENCLOSURE MATERIAL</b>	Plastic
<b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>	8000 V
<b>UTILIZATION CATEGORY</b>	DC-21 A DC-PV1 (EN 60947-3) DC-PV2 (EN 60947-3)
<b>ACTUATOR TYPE</b>	Turn button

<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	60 °C
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C
<b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>	0
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b>	1
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>	1
<b>RATED SHORT-TIME WITHSTAND CURRENT (ICW)</b>	0.36 kA
<b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>	Screw connection
<b>CONNECTION TYPE</b>	M12, Inputs M12, Outputs
<b>OVERVOLTAGE CATEGORY</b>	III
<b>NUMBER OF POLES</b>	Two-pole
<b>DEGREE OF PROTECTION</b>	IP65
<b>MODEL</b>	On/Off switch
<b>DEGREE OF PROTECTION (FRONT SIDE)</b>	IP65 NEMA Other
<b>LIFESPAN, MECHANICAL</b>	100,000 Operations
<b>RATED OPERATIONAL CURRENT (IE)</b>	26 A at DC-PV1 10 A at DC-PV2
<b>LIFESPAN, ELECTRICAL</b>	1,500 Operations
<b>RESISTANCE</b>	7 mΩ (internal)
<b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V</b>	0 A
<b>SUITABLE FOR</b>	Ground mounting
<b>RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ</b>	0 kW
<b>RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX</b>	1000 V
<b>RATED UNINTERRUPTED CURRENT (IU)</b>	30 A
<b>RATED SHORT-CIRCUIT MAKING CAPACITY (ICM)</b>	0.32 kA (up to 440 V, 50/60 Hz)

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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