

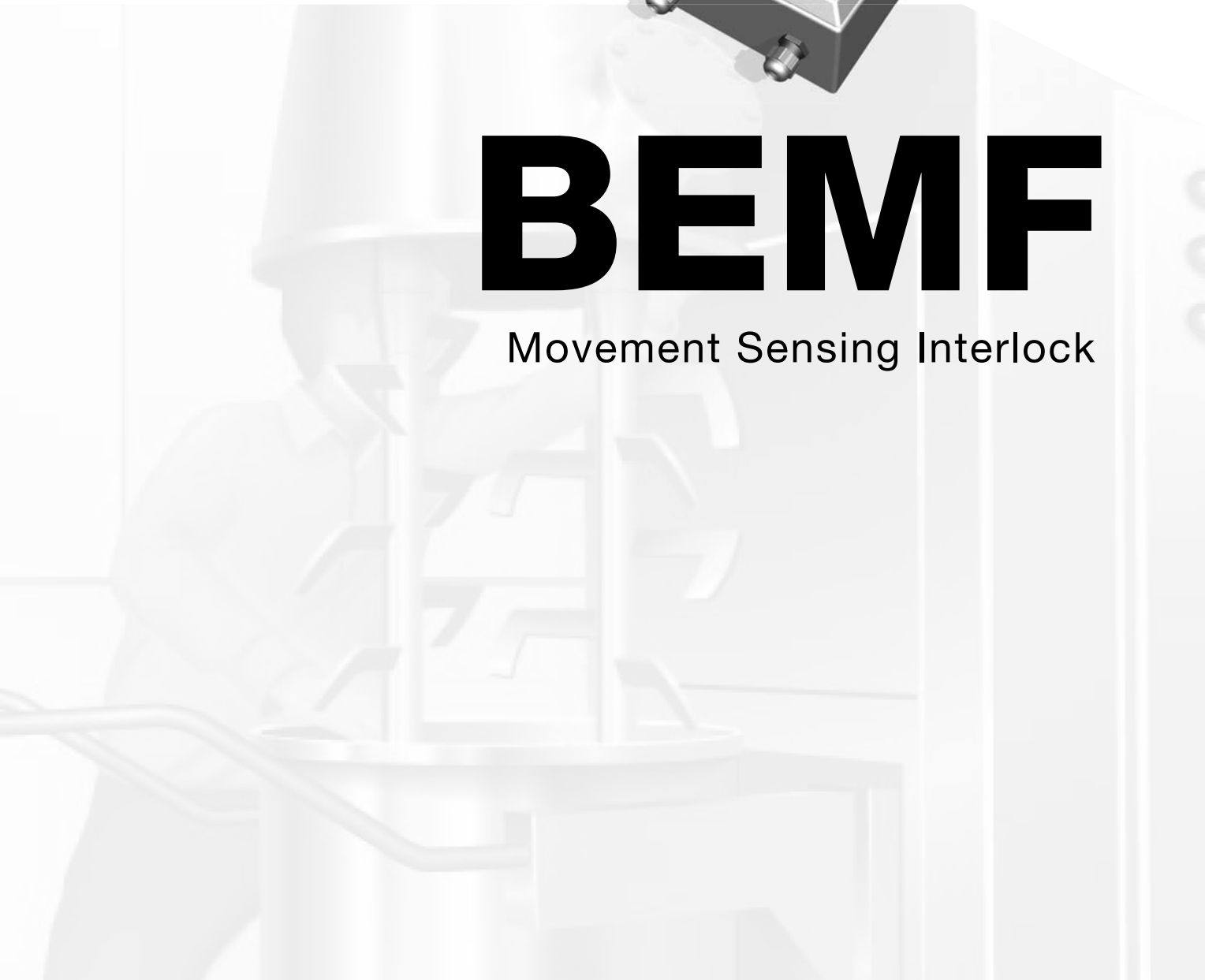


The Future of Safety is Here



# BEMF

Movement Sensing Interlock



# BEMF / MSI

## Movement Sensing Interlock



### Typical Application

The Castell BEMF and MSI units are designed to control access to machinery that have variable run-down times.

Current applications include:

- Mixers
- Blenders
- Hammermills
- Centrifuges
- Pellet Mills
- Size Reduction Mills
- Other Motor-Driven Equipment



### Your Advantage


#### Increase Productivity

No waiting time as with time delays.  
Gain entry the second the machine stops.


#### Prevents Access to Hazardous Areas

When the electrical motor of the machine is turning, the key to the Castell BEMF cannot be removed to unlock the machine's door.


# Operation

- 

1

  - Operator initiates motor stop cycle via the isolator switch. (Turn key to "off" position)
  - Key is retained until the motor reaches stand still position.
- 

2

  - Green release key light turns on, indicating motor has stopped.
  - Operator pushes button to energize the solenoid and release the key.
  - Turning and removal of the key then isolates control circuit.
- 

3

  - Operator inserts and turns key in the Castell lock fitted to the access door.
  - Door released and opened.
  - Castell key remains trapped in the lock while the door is open. This prevents machine startup until maintenance is complete and the door is locked closed.

## Attributes

- The BEMF measures the back electromotive force generated by the windings of an electric motor. Only when the motor has stopped will electromotive force (EMF) drop to zero and allow the release of the Castell key.
- The MSI relies on the detection of motion via 2 proximity sensors. Only when both sensors detect zero movement will a Castell key be released.

### Easy to Install

The BEMF and MSI units come with an easily mounted IP65 enclosure.





### Fits to Any Motor

The BEMF can detect "EMF" on motors up to 600 Volts. The MSI unit will protect machinery with 500V or higher!

## Technical Data

|                  |                             |
|------------------|-----------------------------|
| <b>Voltages</b>  | 24 VDC and 230 VAC, 110 VAC |
| <b>IP Rating</b> | IP65, NEMA 4 enclosure      |
| <b>Voltage</b>   | 600V                        |
| <b>Standards</b> | UL 508C                     |

## Part List

| Image   | Product       | Description   |
|---|---------------|---|
|  | <b>BEMF</b>   | Measures electromotive force generated by the windings of an electric motor to detect standstill. |
|  | <b>MSI</b>    | Uses proximity sensors on motor shaft to detect standstill.                                       |
|  | <b>AI</b>     | Single key access interlock.  |
|  | <b>FKW6-S</b> | Stainless steel figure style key.   |



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