DAE Mechanical Time Delay Unit

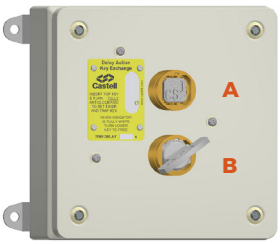
The DAE is a key controlled mechanical time delay unit designed to control access to dangerous machines which have a run-down time or where machinery must complete an operating cycle before access is permitted. The DAE is made for applications where the availability of the main power is limited or where the timer needs to be located in a potentially explosive atmosphere.

OPERATION

The Castell Mechanical Time Delay Units are used in various applications to control access to hazardous areas, where a run-down time of a machinery is required.

DAE Mechanical Time Delay, 30 sec

1 **Key B is trapped in the DAE, key A is held in a key switch while power is on**



When the machine is running, key A is trapped in the key switch controlling the power. Key B is trapped in the mechanical time delay unit. This key is used to access the machine area, once machine has stopped running.

2 **Insert and turn key A to initiate time run-down. Once completed, release key B**

Key A is released from the key switch and the power supply is switched off. Key A is then inserted and turned in the DAE unit. Once turned, the time delay begins. Key B is held in the DAE until time elapses. Once the time delay has elapsed the indicator bar on the DAE rotates from red to white. Key B can now be turned and removed.

3 **While key B is released, key A is trapped**

This traps key A in the DAE, key A cannot be released until key B is returned.

The DAE mechanical time delay unit is available with 30, 60 or 90 seconds time delay as standard versions.

Any time delay within a range betweeen 30 seconds and 15 minutes is available on request.

The time delay must be longer than the machine run-down time.

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USAGE

The DAE is designed to operate as part of an integrated safety system, controlling access to hazardous areas. A typical example of machine isolation, time delay and access control.

The DAE mechanical time delay unit is not designed for security purposes.

No hazardous substances were used in the manufacture of this product.

INSTALLATION

The housing of the DAE mechanical time delay unit should normally be mounted to a panel using suitable fasteners. Please refer to drawing on page 4 for more installation details.

IMPORTANT: The unit should be mounted using anti-tamper fasteners to prevent unauthorised removal.

The DAE mechanical time delay unit must be installed by a competent and qualified person who has read and understood these instructions. Please retain this document in your technical file.

The manufacturer should be consulted when use in a corrosive environment is planned.

MAINTENANCE

Periodic visual checks should be carried out by the site manager / safety officer.

Do not lubricate lock barrel with oil or grease, use CK dry powder graphite if necessary.

In case of defects being detected please contact your nearest Castell Support Department for further actions. Please see Contact section for contact details.

The interlock must be inspected every 6 months. Safety checks should include ensuring the keys can only be removed in the correct safety operating conditions (see page 1).

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TECHNICAL DATA

Temperature rating	Minimum: -40˚C [-40˚F] ice free for Q & FS lock type
	Maximum: 107˚C [224.6˚F] Q lock type / 140˚C [284˚F] FS lock type
Type of mounting	Surface mount using suitable fasteners (please refer to drawing on page 4 for more details)
Weight	3.0 kg
Material	Mild Steel
Shock & vibration	In accordance with BS EN 50155 & IEC 61373
PL rating	PLb
B10d	26,400

APPLICATION

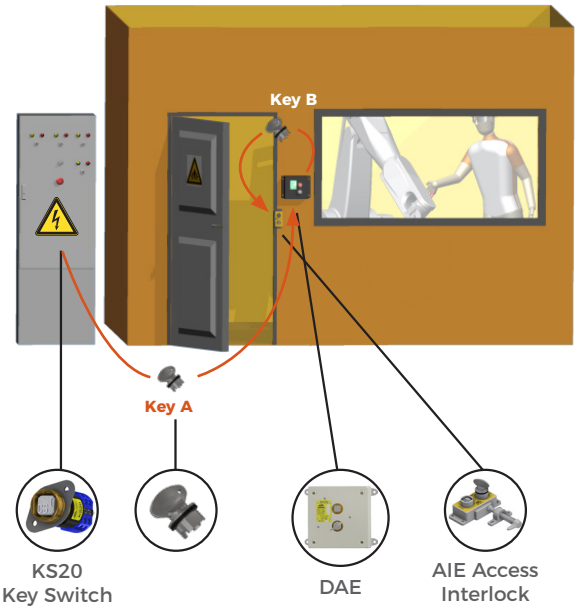
The DAE mechanical time delay safety component is used as part of an integrated safety system.

In a typical application, the DAE mechanical time delay is designed to operate as a part of an integrated safety system that controls access to hazardous areas.

The release of the isolation key (key A) from a key switch, e. g. KS20, changes the switch contacts and stops the machine.

Key A is then placed in the DAE time delay unit and turned, initiating the timer. After completion of the time out period key B can be released (the time delay must be longer than the machine run-down time).

Key B can then be taken to the AIE acess interlock and the door to the machine room can be opened.



EC-DECLARATION

We, the manufacturers, declare that the components detailed herein and placed on the market comply with all the essential health and safety requirements applying to them.

ISO 13849-1:2015 Safety of Machinery

2006/42/EC Machinery Directive

Empowered signatory:

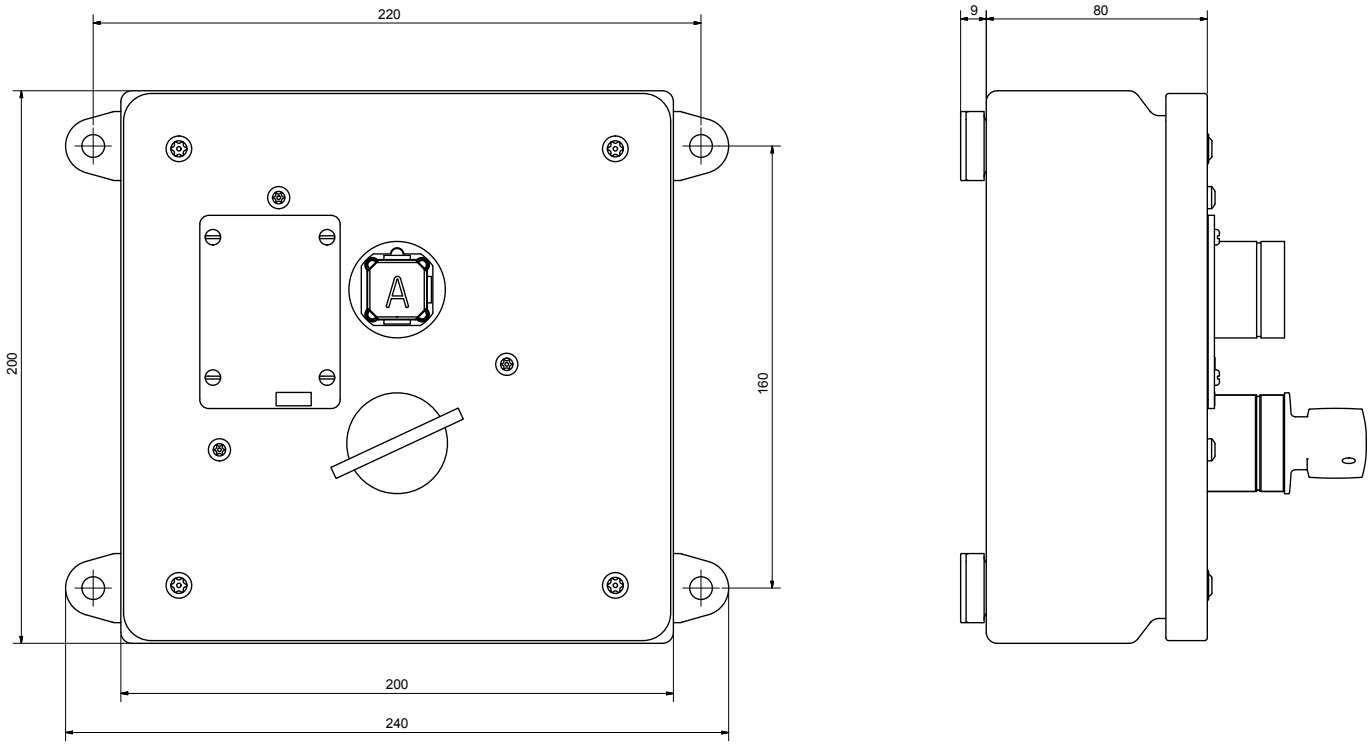
Kirstie Van Oerle
Business Unit Director

DRAWING

Dimensions: in mm

Note: For safe mounting, use security screws

DAE



DAE Mechanical Time Delay Unit

ORDER INFORMATION

	Component type	1	2	3	4	5
Part number	DAE	-	-	-	-	-
Example	DAE	- FS	B	- 30	- A	- B

1	**Lock portion type**	FS [1] / Q [1]
2	**Material**	B = Brass
3	**Time delay**	30, 60 or 90 sec (as standard) or as required (max.15 min)*
4	**Lock portion symbol:** Primary lock symbol (Free key symbol)	FS [1] up to 3 digits / Q [1] up to 6 digits
5	**Lock portion symbol:** Secondary lock symbol (Trapped key symbol)	FS [1] up to 3 digits / Q [1] up to 6 digits

(1)

FS - Lock type	**Q - Lock type**
Up to 3 characters	Up to 6 characters
	

* The time delay of the DAE unit must be longer than the machine run-down time

Special construction available upon enquiry

ACCESSORIES

	Product	**Part number**
	Flip Cap	FLIP-S

CONTACT INFORMATION

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