## KSD Switch Disconnector





The KSD is a key driven non fused switch disconnector for the isolation or switching of currents. The standard KSD comes with 4 or 6 poles plus 2 auxiliary early break contacts. The KSD is manufactured from either brass or stainless steel. The unit is supplied suitable for mounting into an existing panel or for surface mounting within its own IP65 rated lockable mild steel enclosure.

### **OPERATION**

The Castell KSD Switch Disconnector is typically used for machine isolation applications in order to protect the hazardous area from access while power is on.

#### **KSD Switch Disconnector**

1 Key is trapped, power is on.



While the power is on and a machine is running, the key is trapped in the KSD Switch Disconnector.

To switch power off turn and release the key.



To switch the power off turn and release the key from the KSD unit. This will alter the condition of the contacts within the switch, from closed to open.

3 Key is released, power is off.



The power is off until the key is replaced in the KSD Switch Disconnector.

The KSD is available for different switching loads as KSD32, KSD63, KSD125 and KSD160 as standard versions (with 32, 63, 125 and 160 amps power isolation respectively). Special versions, KSD250 and KSD315, are available upon special request.

Please refer to page 6 for more ordering details.





## **USAGE**

The KSD Switch Disconnector is designed to be part of a safety system and is used to isolate power.



The KSD Switch Disconnector is not designed for security purposes.

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

## **INSTALLATION**

The KSD unit should be mounted to a surface using suitable fasteners (please refer to drawing on page 4 for more details). The lock face should be sealed to the panel for ingress protection.

Cables should be connected to the switch in accordance with the applicable wiring diagrams. Ensure that the unit is bonded for earth continuity (please refer to drawing on page 4 for more installation details).



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



The KSD range of Switch Disconnectors 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.





## **TECHNICAL DATA**

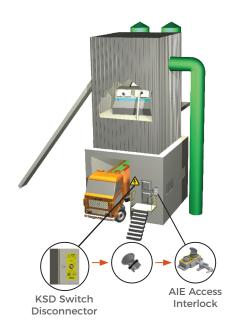
Minimum: -5°C [23°F]					
5°C [131°F]					
KS32 = 4.5kg KS63 = 4.5kg KS125 = TBA KS160 = TBA KS250 = TBA KS315 = TBA					
Brass or Stainless steel, IP65 steel enclosure					
32A, 63A, 125A, 160A, 250A and 315A options available					
11kW AC-3 7,5kW					
22kW AC-3 18,5kW					
A 45kW AC-3 37kW					
A 55kW AC-3 45kW					
PLe					
IEC 947-3					
,000,000 operations					

## **APPLICATION**

The KSD safety component is designed to operate as part of an integrated safety system, controlling access to hazardous areas. Typical machinery using the KSD range are motor driven, high risk applications where complete isolation of the power supply is required before access is granted.

The removal of the key in the KSD changes the condition of the electrical supply to the machine to a safe condition. This key can be removed and used to unlock the door via AIE access interlock.

The guard can only be opened when the electrical supply has been switched into a safe condition. The machine cannot be restarted until the door is closed and the key is removed and taken to the KSD.



## **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

3 of 6

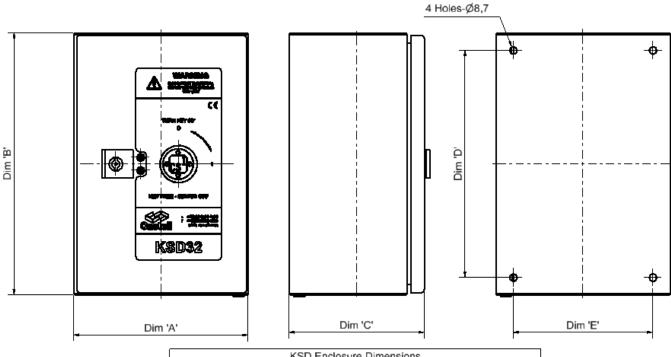




DRAWING Dimensions: in mm

Note: For safe mounting, use security screws

## **KSD**

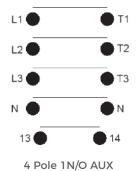


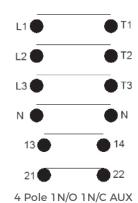
KSD Enclosure Dimensions								
Dim.	KSD32	KSD63	KSD125	KSD160	KSD250	KSD315		
'A'	200mm	200mm	300mm	300mm	380mm	380mm		
'B'	300mm	300mm	400mm	400mm	600mm	600mm		
'C'	155mm	155mm	210mm	210mm	210mm	210mm		
'D'	260mm	260mm	360mm 360mm		560mm	560mm		
'F'	160mm	160mm	260mm	260mm	340mm	340mm		

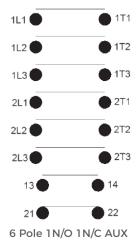




## **WIRING DIAGRAM**







# KSD Switch Disconnector



## **ORDER INFORMATION**

	Component type	1		2	3		4		5	6		7	8		9
Part number	KSD		] - [			-		-			-			-	
Example	KSD	32	] - [	FS	В	-	F	-	СС	6	-	C/O	2	] -	ТВА

1	Isolation	32 A (UL&CSA:30A), standard (63 A,125 A or 250 A available on request)		
2	Lock portion type	FS (1) / Q (1)		
3	Material	B = Brass / S = Stainless steel		
4	Mounting	P = Panel mount (back of board) F = Front of board mount, enclosure		
5	Main contacts arrangement in normal position (key in)	CC = NC arrangement (all contacts closed, standard)		
6	Number of main contacts	6, standard		
7	Auxiliary contacts arrangement in normal position	C/O = 1NO/1NC, standard		
8	Number of auxiliary contacts	2, standard		
9	Lock portion symbol	FS <sup>(1)</sup> up to 3 characters / Q <sup>(1)</sup> up to 6 characters		



Special construction available upon enquiry

## **ACCESSORIES**

	( Sep. )	Product	Part number					
6	6	Flip Cap	FLIP-S					

## **CONTACT INFORMATION**

## **Castell Safety**

The Castell Building 217 Kingsbury Road London, NW9 9PQ UK

t: +44 (0)20 8200 1200 f: +44 (0)20 8205 0055 e: sales@castell.com

## **Castell Safety**

Tower 185 60185 Frankfurt am Main Germany

t: +49 (0)69 50 50 47 310 f: +49 (0)69 50 50 47 450 e: vertrieb@castell.com

### Kirk Key Interlock

9048 Meridian Circle NW North Canton, OH 47720 USA

t: +1 800 438 2442 f: +1 330 497 4400 e: sales@kirkkey.com

### **SPS China**

2F, Building 63 No 421 Hongcao Road, Xuhui District Shangai PRC, 200233 China

t: +86 (0)21 6040 7398 f: +86 (0)21 5453 0630 e: chinasales@castell.com