

KEY MULTIPLIER, DOOR LOCK

type **KM, DL**

RAIL VEHICLES



GENERAL INFORMATION

The **Key Multiplier KM** is one of the elements of the safety key interlocking chain used on rail vehicles to guarantee the highest safety level to people accessing high voltage equipment for inspection or maintenance. We take a simple, step-by-step approach where one safety device is triggered only when the previous device in the traction chain has been locked in the earthed position. This principle is implemented through a cascade of security keys and associated locks.

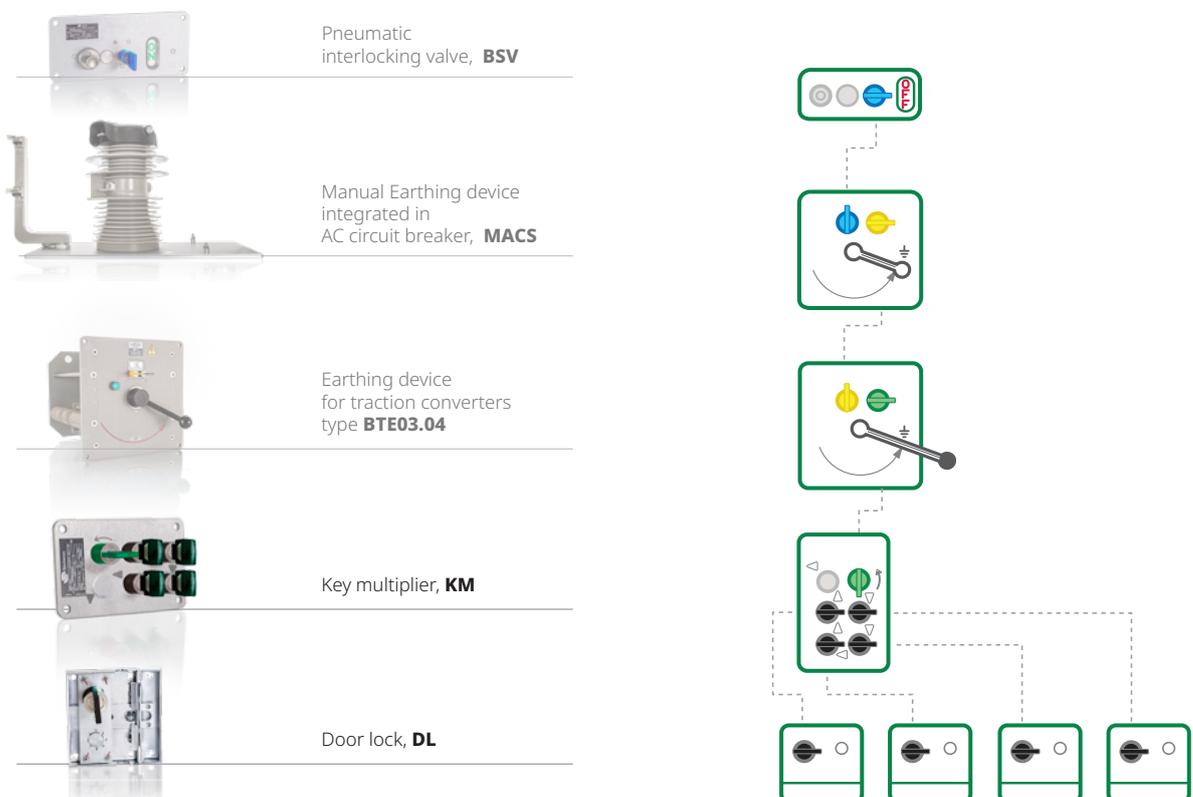
The Key Multiplier enables to collect the key/s (Master key/s) released from the upstream's Earthing device/es locked in the earthed position, to keep it/them captive, and then to release new keys (called Slave Keys) necessary to access the next step.

Based on the vehicle's safety interlocking scheme and the upstream Earthing device/es configuration, such Key Multiplier function can also sometimes be directly integrated in the Earthing device (for instance BTE0x.04 range).

The **Door Lock DL** is usually the ultimate key interlocking device of this safety interlocking chain. It is installed on the door of the high voltage compartment where the technician must access for performing his inspection or maintenance work. It guarantees all high voltage electrical equipment of the vehicle to be kept in the earthed position, as long as the ultimate key remains in the hand or pocket of the technician.

SAFETY INTERLOCKING SCHEME

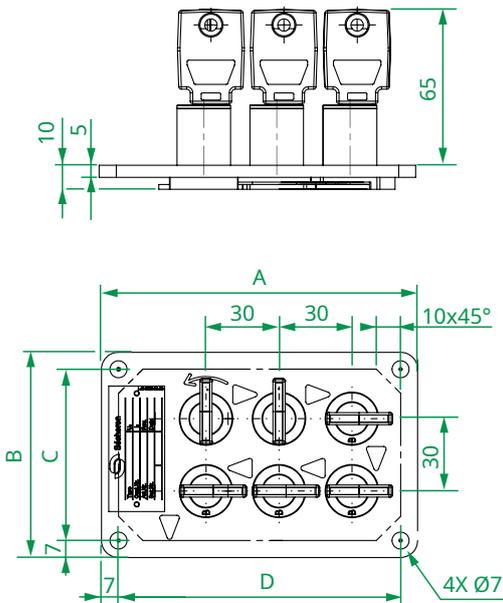
Example for AC rail vehicles



INFORMATION FOR PRODUCT INTEGRATION

MAIN DIMENSIONS

SEQUENTIAL KEY MULTIPLIER

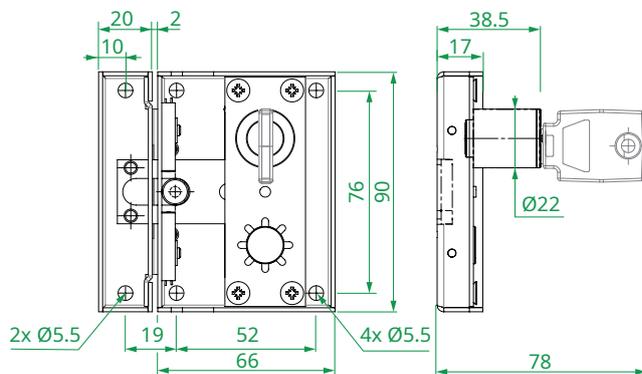


Key on the key multiplier has to be turned sequentially, one after the other following the indication engraved on the front plate.



Cylindre numbers	mm			
	A	B	C	D
2-4	100	85	71	86
5-6	130	85	71	116
7-10	190	85	71	176
11-12	190	115	101	176

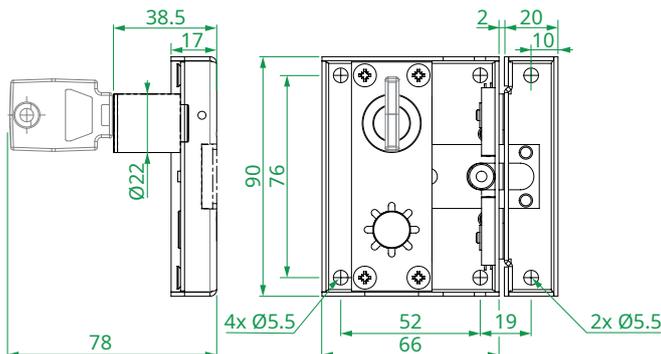
LOCK FOR RIGHT DOOR



Door Lock's counter part



LOCK FOR LEFT DOOR



DESIGNATION CODE FOR ORDERING

- Be sure to establish the designation code from the latest version of our brochure by downloading it from the website: www.secheron.com/products-solutions/ess/earthing-safety/key-multipliers-door-locks/
- Be careful to write down the complete alphanumeric designation code with 8 characters (**KM**) or 6 characters (**DL**) when placing your order.
- For technical reasons some variants and options indicated in the designation code might not be combined, therefore validate your configuration with Sécheron before ordering.
- For other configurations not described in the brochure, please contact Sécheron.
- The bold characters of the designation code define the device type

KEY MULTIPLIER KM Example of customer's choice: **KMS** | 1 | B | 04 | C | 1 |

Line: | 10 | 11 | 12 | 13 | 14 | 15 |

Line	Description	Designation	standard	Options	Customer's choice
10	Product type	Key Multiplier - KM	KMS		KMS
11	Quantity of Master locks	1 2 ... 6	1 2	... 6	
12	Master lock & key color	Blue Yellow Green Black White Red	B C D	A E F	
13	Quantity of Slave locks	1 2 ... 8 ... 12	01 02 ... 08	... 12	
14	Slave lock & key color	Blue Yellow Green Black White Red	C D E	A B F	
15	Individual key/lock codification per train unit ⁽¹⁾	No Yes	0	1	

DOOR LOCK DL Example of customer's choice: **DL** | R | Y | C | 1 |

Line: | 10 | 11 | 12 | 13 | 14 |

Line	Description	Designation	standard	Options	Customer's choice
10	Product type	Door lock - DL	DL		DL
11	Door opening	Right hand swing Left hand swing	R L		
12	With counter part	Yes No	Y	N	
13	Lock & key color	Blue Yellow Green Black White Red	C D E F	A B	
14	Individual key/lock codification per train unit ⁽¹⁾	No Yes	0	1	

⁽¹⁾ Codification is used on request, each code is unique, typically incremental numbering.



Sécheron SA
Rue du Pré-Bouvier 25
1242 Satigny - Geneva
CH-Switzerland

www.secheron.com
Tel: +41 22 739 41 11
Fax: +41 22 739 48 11
ess@secheron.com

Signature:

Name:

Place and date: